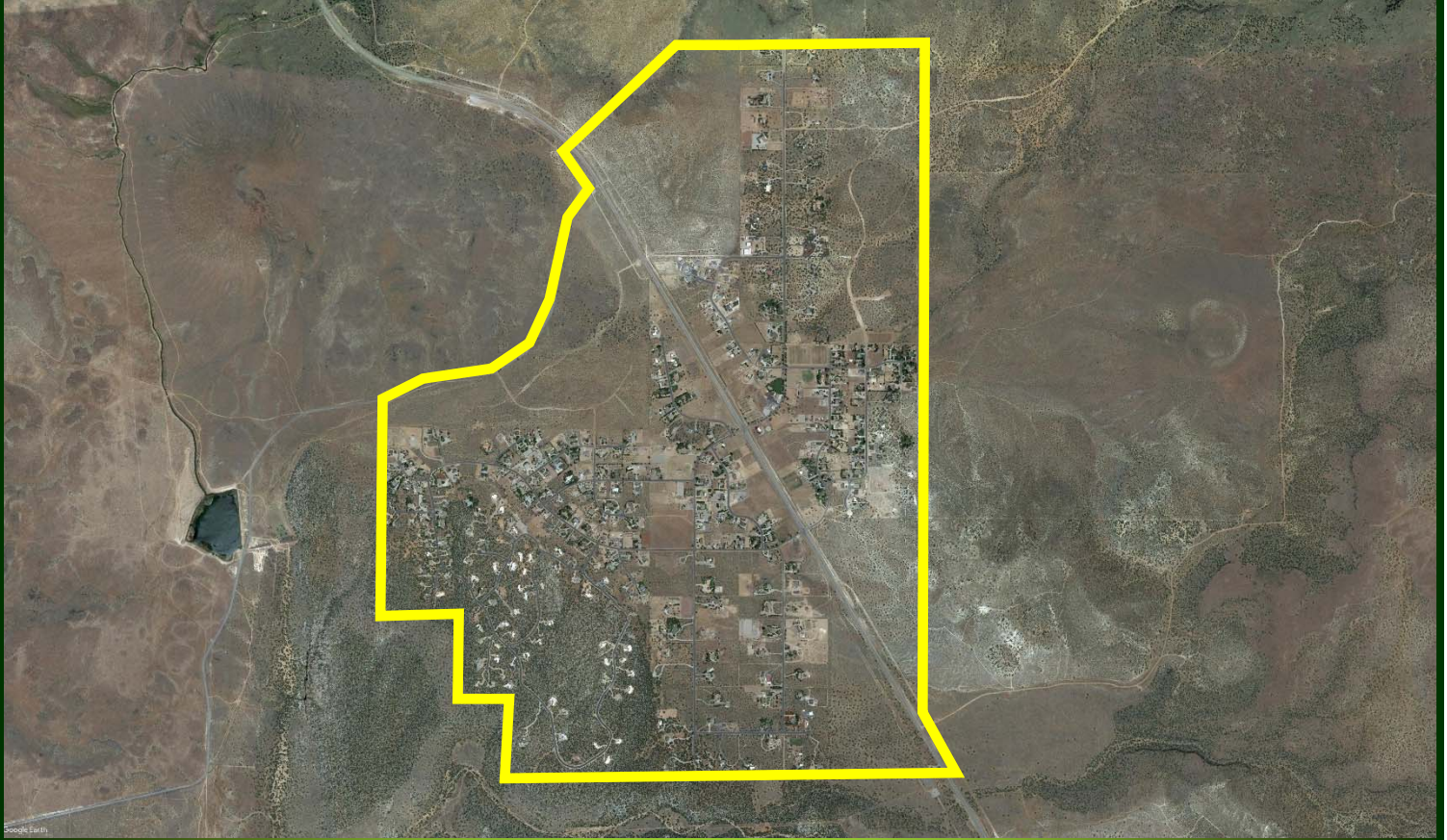


DAMMERON VALLEY



Master Plan Report

Prepared for:

DAMMERON CORPORATION
1137 Dammeron Valley Ranch Rd
Dammeron Valley, Utah 84783

May 2019



43 South 100 East, Suite 100 • St George, Utah 84770
T: 435.628.6500 • F: 435.628.6553 • alphaengineering.com

Table of Contents

Appendices..... ii

- A. Water Network Analysis ii
- B. Traffic Impact Study..... ii
- C. Master Drainage Plan ii
- D. Maps ii

Section 1 Executive Summary 1

Section 2 Introduction..... 2

Section 3 Demographics..... 3

- A. Current Population..... 3
- B. Projected Land Use..... 3

Section 4 Culinary Water System 4

- Facilities Plan 4
 - A. Service Standard 4
 - B. Inventory of Existing Facilities 4
 - C. Culinary Water Requirements for SITLA Land Development 5
 - D. Water Model Results..... 6
 - E. Proposed developments 6

Section 5 Wastewater System..... 7

- Facilities Plan 7
 - A. Service, Design, and Construction Standards 7
 - B. Inventory of Existing Facilities 8
 - C. Facilities Needed 9
 - D. Financing of Proposed Facilities 11

Section 6 Other Utilities 13

- Power and Gas 13

Section 7 Storm Water System..... 14

Section 8 Roadways..... 15

Appendices

- A. Water Network Analysis**
- B. Traffic Impact Study**
- C. Master Drainage Plan**
- D. Maps**

Section 1 Executive Summary

This *Master Plan Report* has been prepared for Dammeron Corporation (DC) for future development of 224 residential lots and small commercial area on School and Institutional Trust Lands Administration (SITLA) in Dammeron Valley, Utah, and to give direction in the development of future utilities, drainage and roadways throughout the Valley.

The *Report* was prepared to address the following:

- Traffic
- Water
- Wastewater
- Storm Water
- Gas
- Power

Dammeron Valley Water Works provides culinary water service to Dammeron Valley. Wastewater service is administered by the Washington County Water Conservancy District. Power service is provided by Rocky Mountain Power, and gas service is provided by Dominion Energy. Roadways and drainage are administered by Washington County. This study will analyze all services that are available to land owners and developers in Dammeron Valley.

The following steps have been followed in preparing the *Master Plan*.

- Inventory existing facilities
- Determine additional facilities needed at SITLA buildout

Section 2 Introduction

This *Master Plan Report* has been prepared for the Dammeron Valley area. Input required for the analysis includes:

- Establishment of a service standard. The service standard set forth in the *Title R309, Environmental Quality, Drinking Water (Effective 2018)* published by the *Utah Department of Environmental Quality, Division of Drinking Water* was used in this study. Also, the service standard set forth in the *Title 317, Environmental Quality, Water Quality (Effective 2018)* published by the *Utah Department of Environmental Quality, Division of Water Quality* was used in this study. *Washington County Design Standards and Specifications, August 18, 2009*, were also referenced for compliance. Additional references are provided in individual studies within the *Master Plan Report*.
- Establishment of a service area. The County desires to evaluate the Dammeron Valley area for future traffic, power, gas, culinary water and wastewater needs. The area is expected to have mostly residential development with minor commercial development. The main infrastructure will be sized based on this analysis. The service area is shown on Figure 1 in Appendix D.
- Inventory of existing facilities. This inventory evaluates existing facilities including delivery, storage and distribution for culinary water, and sewer. This does not evaluate power and gas existing facilities.
- Determining facilities and traffic improvements required for development of SITLA property as shown in Figure 1. The number of power, gas, water, sewer connections and storm drainage infrastructure required for development was determined in cooperation with Dammeron Valley, Washington County, and property owners based on current and future land use and zoning.

Section 3 Demographics

Current and population estimates from developed land have been prepared to assist in the evaluation of development impacts on the existing infrastructure.

A. Current Population

Population for Dammeron Valley for 2000 was 228 persons based on the 2000 census as reported by the U.S. Census Bureau. Dammeron Valley population was reported to be 803 in 2010 by the U.S. Census Bureau. There were 292 residential units in 2010 implying that there were approximately 2.75 people per residence in 2010. Currently there are 435 residential units, and using 2.75 people per residence, would imply that there are approximately 1,196 residents of Dammeron Valley. The additional 224 lots would provide approximately 616 residents to the valley.

B. Projected Land Use

Washington County General Plan map shows that Dammeron Valley will develop primarily as residential units. Small commercial along SR-18 with C-2 designation will be requested through general plan amendments and rezoning in the future.

Section 4 Culinary Water System

Facilities Plan

A. SERVICE STANDARD

Dammeron Valley Water Works has chosen to use the service standard set forth in the *Title R309. Environmental Quality, Drinking Water (Effective 2018)* published by the *Utah Department of Environmental Quality, Division of Drinking Water*. The Company currently serves 435 developed lots and over 50 acres of irrigated pasture, vineyards, vegetable gardens and orchards.

The rules contain provisions for both culinary and irrigation (secondary) water. The service standard is briefly summarized below.

Source: Available water sources must be able to legally (water rights) and physically provide a *peak day demand* of 800 GPD/ERU and an *average yearly demand* of 146,000 gallons/ERU for indoor use. For outdoor use, the requirement for this area (Irrigated Crop Consumptive Use Zone 4) for *peak day demand* is 3.96 gpm per irrigated acre and the *average yearly demand* is 1.87 acre-feet per year per irrigated acre. These requirements may be modified to reflect actual demand if adequate records are available. Dammeron Valley has no records of culinary water use (indoor and outdoor) to establish source requirements.

Storage: Includes *equalization storage*, *fire suppression storage*, and *emergency storage*.

- Equalization storage: A Minimum 400 gallons/ERU for indoor use and 2,848 gallons per irrigated acre for outdoor use. The State standard will be used to determine the combined indoor and outdoor use requirement.
- Fire suppression storage: Minimum 120,000 gallons (1,000 gpm for 2 hours), or quantity determined by the local fire suppression authority, whichever is greater.
- Emergency storage: May be required by the *Executive Secretary* of the *Drinking Water Board*. Emergency storage is mentioned but will not be fully evaluated in this analysis.

Distribution: The distribution system shall be designed to insure that a minimum of 20 psi exists at all points within the system during simultaneous fire flow and peak day demand; 40 psi during peak day demand; and 30 psi during instantaneous peak demand. The fire flow includes 1,000 gpm at one point in the system as the worst case scenerio.

B. INVENTORY OF EXISTING FACILITIES

Water Rights: Dammeron Valley Water Works has the following water rights:

<u>WATER USER CLAIM NUMBER</u>	<u>ACRE FEET</u>
81-480	10
81-1045	487
81-1487	81

81-2167	61
81-2276	200
81-2715	<u>163</u>
TOTAL	1,002

Source – Delivery: Two active wells serve the development, one that pumps 600 gallons per minute, and the other that pumps 1000 gpm. A third well that pumps 150 gpm is plumbed to the system but only used in case of emergency. An additional well that can deliver 1500 to 2000 gpm is planned for the near future. This well will be 3500 feet east of the existing wells so as not to interfere with their ability to pump their full potential. Each well is drilled to 600 feet and encased and grouted, and pumps water from the Iron Springs Aquifer with a pumping level of 180 feet.

Storage: Dammeron Valley Water Works has one million gallons of storage capacity in three concrete tanks (two 250,000 gallon tanks and one 500,000 gallon tank). They have a backup generator that can run the 600 gpm pump. Their telemetry system allows their employees to monitor and run the system remotely. A 9,000 foot long 10 inch line delivers water from the pumps to the tanks and to the community.

Distribution: Dammeron Valley Water Works owns all distribution facilities (including hydrants, pipelines, and meters) throughout the valley.

C. CULINARY WATER REQUIREMENTS FOR SITLA LAND DEVELOPMENT

Equivalent Residential Units: In order to determine what Facilities will be required for the development of the SITLA property, it is necessary to estimate the approximate number of *equivalent residential connections* (ERCs) for 224 lots. Calculations for ERCs for the additional 224 lots are summarized below.

TABLE 1 – DAMMERON VALLEY ESTIMATED SITLA ERCs

SITLA PROPERTY	TOTAL ACREAGE	EFFECTIVE ACREAGE (80%)	PLANNED DENSITY	ESTIMATED ERU'S
INDOOR USE				
EXISTING RESIDENTIAL				435
<i>NEWRE-40</i>	<i>431</i>	<i>345</i>	<i>0.65</i>	<i>224</i>
<i>A-10</i>	<i>18</i>	<i>14</i>	<i>0.1</i>	<i>2</i>
<i>OSC-20</i>				
IRRIGATED LAND	50			50
COMMERCIAL	16	--	--	16
CHURCH				3
TOTAL ERU'S				730

The Dammeron Valley Water Works currently own water rights to supply the needs of the additional 224 lots.

D. WATER MODEL RESULTS

In order to supply the anticipated demand at buildout, including fire flow, the proposed culinary water system was sized using WaterGEMS, a hydraulic network modeling software marketed by Bentley Solutions, and is provided in Appendix A. All of the pipe within the system will be PVC culinary water pipe and was modeled with a Hazen-Williams coefficient of 130 to account for mineral deposits. The culinary water system consists of 6-inch, 8-inch, 10-inch, and 12-inch nominal diameter pipe and adequately passes the flow requirements outlined in this report. The proposed system is shown in the appendix with associated pipe diameters needed to pass the required flow.

E. PROPOSED DEVELOPMENTS

It is recommended that the culinary water system for the Dammeron Valley be installed according to the following phases:

Phase 1 – Dammeron Valley Distribution Lines

Distribution lines need to be extended and looped through the proposed developments. Distribution lines should be a minimum of DR-25 PVC to meet County requirements. It is recommended that the proposed development's distribution system consist of a minimum of 8-inch diameter PVC pipe.

Phase 2 – Highway Crossings

As development occurs in Wuchim, White Knolls, and East Meadows area, water lines will need to cross SR-18 to provide looping to meet minimum fire flows and pressures.

Summary

The Dammeron Valley Service Area has been analyzed in the areas of source supply, storage, and distribution. It is believed that three culinary water tanks, with a capacity of 1.0 MG is sufficient for buildout. Analysis of the distribution lines, as shown in Figure 1 to 3 of Appendix A, has verified proposed pipe diameters and locations. It is imperative that White Knolls distribution line crosses SR-18 and connects to the Wuchim system. Also, the High Ground Subdivision line crosses SR-18 and connects with the East Meadows system.

Section 5 Wastewater System

Facilities Plan

The Washington County Water Conservancy District (WCWCD) owns and operates the Pinion Hills Wastewater Treatment System (PHWTS) in the Dammeron Valley area. The PHWTS currently (May 2019) serves 96 lots in the Pinion Hills Subdivision with an additional 39 lots for which standby fees are being collected. It is proposed that the PHWTS also provide service to an additional 7 lots in Pinion Hills Phase 7 and the proposed 224 SITLA lots. The wastewater system will be expanded, as capacity is approached, to serve all the new SITLA parcels.

There are 441 platted lots and approximately 23 individual parcels in the Dammeron Valley. 135 platted lots are committed to the PHWTS, leaving 329 lots potentially served by individual septic systems.

Currently there are approximately 350 residential structures in Dammeron Valley (2019). Of the 350 constructed units, 96 residences are served by the PHWTS and approximately 254 residences use individual septic systems.

Ultimate buildout of 695 residences (441 platted lots, plus 23 individual parcels, 7 proposed Pinion Hills Phase 7 lots, and 224 proposed SITLA lots) is assumed. Additional future development in the Dammeron Valley may be possible, but is currently not proposed. If proposed in the future, any additional development, including commercial development, will be evaluated for feasibility and facilities needs.

A. SERVICE, DESIGN, AND CONSTRUCTION STANDARDS

The need for future wastewater facilities was evaluated according to Rule R317-3: Design Requirements for Wastewater Collection, Treatment and Disposal Systems as set forth in Utah Administrative Code.

Collection System

The rule requires that the sewer capacity be determined on the basis of maximum hourly domestic sewage flow, additional maximum flow from industrial plants, inflow, ground water infiltration, potential for sulfide generation, topography of area, location of sewage treatment plant, depth of excavation, and pumping requirements.

The rule requires that collector lines be capable of conveying four hundred gallons per capita per day (400 gpcd). Larger trunk lines and outfall lines are required to convey two hundred and fifty gallons per capita per day (250 gpcd). These flow rate criteria were established by the State of Utah Division of Water Quality (DWQ) to account for the peaks in flow that occur in a typical wastewater conveyance system and should be used unless measured flow data is available.

The rule also requires sewers to be sloped sufficiently to provide a velocity of not less than 2 feet per second when flowing full, based on Manning's formula using an 'n' value of 0.013.

The developer will comply with all state, county, and WCWCD standards and specifications, and rules and regulations for wastewater collection and treatment.

The developer will be expected to grant or obtain permanent and construction easements as necessary. Pipeline easements should be located in roads that will ultimately be dedicated as public roads. In cases where the development will not have public roads, pipeline easements should be located in private roads servicing the development. If pipelines are allowed outside of roadways, larger permanent easements may be required.

Treatment System

Previous studies on the existing wastewater collection system found an average daily wastewater flow of 117 gallons per day (gpd) per connection and peak day flow of 202 gpd per connection were generated in the system. (Bowen Collins & Associates, June 2006). Design flows for the treatment facilities were determined in consultation with the Utah Division of Water Quality as follows:

Average Daily Flow: 125 gpd per connection
Peak Daily Flow 200 gpd per connection

Disposal System

Final disposal of wastewater from the PHWTS is by Large Underground Wastewater Disposal System (LUWDS), or absorption bed, according to Utah Rule R317-5. Design flow rate determined in consultation with the Utah Division of Water Quality is 300 gpd per connection with 30% reduction in absorption bed area permitted for pre-treated wastewaters.

Effluent Nitrogen Load Limit

The Dammeron Valley area has an established limit of total nitrogen allowed to be discharged into the ground from wastewater systems. The limit is 48.9 pounds per day and is based on recommendations in *Determination of Recommended Septic System Densities for Groundwater Quality Protection* (Hansen, Allen and Luce, 1997). The Dammeron Valley area subject to this limit is 4,030 acres and includes existing development, proposed SITLA developments, future Pinion Hills phases and the Sand Cove property owned by the developer. The boundaries of this area shown in the Pinion Hills Boundary map in Appendix D.

B. INVENTORY OF EXISTING FACILITIES

Existing Collector and Outfall Sewer Lines

Sewer lines now extend from the treatment system into the developed Pinion Hills subdivision as shown on Figure 1, Appendix D. There currently are 96 residences connected to the system, and the remaining 46 lots are committed to connect to the system in the future. Existing sewer lines are not expected to be utilized in extending service to the proposed SITLA parcels.

Existing Treatment Capacity:

The WCWCD recently upgraded the PHWTS with an Orenco AdvanTex system that has a design capacity of 200 connections based on an average flowrate of 125 gallons per day (gpd) per connection or a total average daily flowrate of 25,000 gpd. The system is designed for a peak flowrate of 40,000 gpd. 96 residential connections currently flow to the treatment facility with another 46 future connections committed. Uncommitted capacity remains for another 58 residential connections.

Effluent Nitrogen

It is estimated that current and future individual septic systems (329 total) will discharge 43.9 pounds of effluent nitrogen per day into the ground, which would allow 5.0 pounds of nitrogen to be discharged from the PHWTS without violating the nitrogen limit.

The current PHWTS effluent contains 25 mg/l total nitrogen. It is estimated to discharge 2.5 pounds of nitrogen per day when treating wastewater from the current 96 connections.

The WCWCD is working to reduce the Orenco AdvanTex treatment system effluent nitrogen to less than 20 mg/l, which would result in a discharge of 4.2 pounds per day at its 25,000 gallon per day capacity (200 connections).

Existing Absorption Bed Capacity

The PHWTS existing absorption bed has been approved by the DWQ for 124 connections. This approval is based on an absorption area of 24,000 square feet, a flow rate of 300 gpd per connection, and a hydraulic loading rate of 1.55 gpd/sf (calculated using the formula in effect at the time of the approval and on a 30% area reduction allowance for pre-treated effluent).

There is also an identical, duplicate absorption bed which meets the requirement to provide duplicate capacity (two independent systems) (R317-5-3.12.A). The PHWTS site also has sufficient land area (24,000 sf) to provide for a third absorption system in conformance with the State regulations (R317-5-3.12.B).

In letters to the WCWCD, the DWQ determined that additional absorption bed capacity for 76 connections will be required in order for the PHWTS to serve the 200 connections the Orenco Advantex system is rated for. Construction of the new absorption bed must commence when 110 connections are being treated.

C. FACILITIES NEEDED

New facilities will be required as development occurs. Prior to WCWCD approving a subdivision, the developer must provide financing for new facilities and WCWCD must approve the design of new facilities.

Collector and Outfall Sewer Lines

The developer proposes a system of pipelines which will collect flow from new residential and commercial customers and convey the flow to the Orenco AdvanTex treatment facility. Proposed collector and outfall facilities are shown on Figure 1, Appendix D.

For the wastewater system analysis, the elevation of each pipeline was determined by use of a two-foot contour map produced from flown contour data. It should be noted that the elevations used to determine the feasibility of the outfall lines are natural ground elevations, not actual sewer invert elevations.

For each area in the wastewater conveyance system, a flow contribution was determined by estimating how many connections contributed to each trunk line and then multiplying those connections by a peak flow. A typical residential connection was used as a basis for flow calculation and all other types of connections are scaled to match the ERC (equivalent residential connection).

The proposed conveyance system will be able to support the demand placed on the system from both existing and future development.

The collector sewer lines needed for proposed SITLA land development are exclusive to the proposed development. Survey and modeling will verify adequate topography. Design and construction of these collector sewer lines will be done at each phase of subdivision development.

Outfall sewer lines will be constructed as development occurs on the SITLA parcels. It is anticipated that the Wuchim parcel will be developed first and requires a short outfall section of sewer. The other four areas require a substantial amount of outfall sewer line.

Titled lands or rights-of-way for sewer trunk lines will be required where the pipelines cannot be located within public roadways. For the proposed Wuchim parcel, optimum pipeline routing is through property on the north edge of the Dammeron Valley Homesteads subdivision to the treatment facility. This property is currently owned by Utah Power & Light Company (PacifiCorp) and is listed as Parcel # 7248-SA-DVF by the Washington County Recorder's Office. It contains 28.61 acres. Purchase of the property, or a portion thereof by the developer or by WCWCD is the preferred option to allow construction of the sewer outfall. Acquisition of a right-of-way across the PacifiCorp parcel or a Dammeron Valley Homestead lot line is a second option for the sewer outfall. The least preferred option for the Wuchim subdivision would be to pump wastewater from the lower portions to Wild Herb Road where a pipeline could be constructed within the public roadway.

It should be noted that purchase of the Utah Power & Light Company parcel would also facilitate construction of a needed disposal system expansion (see below).

Treatment

The current Orenco AdvanTex system has uncommitted capacity for 58 residential lots, which will be utilized by the proposed SITLA developments. The remaining 166 SITLA connections proposed by the developer would add an average daily flowrate of 21,000 gpd in excess of current capacity. The developer proposes to connect lots to the current treatment facility, and to provide financing for WCWCD to expand the treatment system as the existing facility approaches capacity. It is anticipated that design and construction of the expansion of the treatment facility should occur when approximately 160 (80% capacity) connections are served.

Effluent Nitrogen

At buildout conditions, 329 lots would use individual septic systems and 366 lots (142 Pinion Hills and 224 SITLA) would receive treatment at the PHWTS. Buildout daily nitrogen contribution, based on treated wastewater effluent strength, is tabulated below:

TABLE 1 – ESTIMATED NITROGEN CONTRIBUTION AT BUILD-OUT

<i>Effluent Strength</i>	<i>25 mg/l</i>	<i>20 mg/l</i>	<i>15 mg/l</i>	<i>10 mg/l</i>
PHWTS Contribution (366 conn)(lbs)	9.54	7.63	7.72	3.82
Septic Systems (329 conn)(lbs) ¹	43.90	43.90	43.90	43.90
Total (lbs)	53.44	51.53	49.62	47.72

¹ Septic effluent based on 400 gpd/connection, 40 mg/l total nitrogen

Operation records and sampling from the treatment system support a low nitrogen contribution of 0.026 pounds per day per connection (125 gpd, 25 mg/l N). The WCWCD is working on adjustments to the treatment system and considering process enhancements to further reduce effluent nitrogen. Nitrogen removal processes, in addition to the Oreno AdvanTex system, may be needed to serve the proposed 224 SITLA lots.

It must be noted that the contribution from individual septic systems is based on assumed residential flow rates of 400 gpd and total nitrogen concentrations of 40 mg/l. Flow measurements into the PHWTS have averaged 125 gpd per connection and influent total nitrogen concentration have averaged 50 mg/l. Further study of water usage by homes served by individual septic systems, such as winter culinary meter readings, may indicate lower individual system flow rates and corresponding nitrogen contributions.

Because the bulk of the nitrogen load in the Dammeron Valley is from individual septic systems, connecting homes served by individual septic systems to the PHWTS could significantly reduce the nitrogen load and allow for some or all of the proposed development to connect without additional nitrogen removal processes being added to the PHWTS.

Disposal

The existing absorption bed must be expanded by 24,000 square feet when there are 110 connections to the treatment system. The expansion will provide a total capacity for 200 connections. This expansion will utilize essentially all the area of the existing treatment and disposal site.

When the expansion of the treatment system occurs beyond 200 connections, additional land must be acquired to dispose of treated effluent. A new absorption bed totaling 53,000 square feet will be required for a 46,800 gpd expansion (156 connections x 300 gpd per connection), based upon current design standards, for the remainder of the proposed SITLA developments. Land for a duplicate disposal system and reserve area may also be required by DWQ. See above discussion of purchase of Utah Power & Light Company parcel.

D. FINANCING OF PROPOSED FACILITIES

The developer will finance facilities to serve the proposed SITLA property. The developer’s funding may come from a combination of revenues including lot premiums, grants, and loans.

Impact fees on new lots may be considered to pay for the required expansion of the absorption bed to serve 200 connections. Additionally, impact fees to pay for expansion of the treatment facility and additional absorption bed for all new lots beyond 200 connections could be considered.

Total Estimated Cost

The total estimated cost of additional facilities needed as based upon the assumptions in this document is summarized below. The developer will be responsible for any additional costs that accrue as the facilities are developed to serve any new development, including the 224 proposed lots.

Costs for additional treatment capacity and collection lines to serve existing residences and lots should be paid by the new users through connection fees or through other means.

One additional cost that the total estimated cost does not include is the cost of property or rights-of-way needed for facilities. If facilities cannot be located in public easements, the developer will also be responsible for the costs-of-right of way acquisition, including, but not limited to purchase and condemnation costs.

TABLE 2 – ESTIMATED COST OF ADDITIONAL FACILITIES NEEDED

Item	Cost
Outfall sewer lines	\$1,500,000
Land Acquisition (28.61 Ac)	150,000
Orenco Advantex treatment expansion	\$950,000
Nitrogen removal process addition	\$200,000
Absorption bed expansion ¹	\$210,357
Total	\$3,010,357

¹ Cost Basis: 24,000 sf

- Mobilization @ \$8,820
- 8,000 lf of 36” wide chambers @ \$10/ft
- 8,000 lf of 2” Sch 40 PVC distribution pipe @ \$1.50/ft
- 2,000 cy of earthwork @ \$10/cy
- 1,250 T of drain gravels @ \$15/T
- Pumps, electrical, valves, misc. @\$16,250
- 20% Contingency @\$31,164
- Engineering, Construction Management, Testing @ \$23,373

Section 6 Other Utilities

Power and Gas

Power and Gas facilities will be provided by Rocky Mountain Power (RMP) and Dominion Energy (DE). Facilities for these entities are located near each proposed SITLA parcel and will be coordinated as needed.

RMP has indicated that upgrades to their distribution system in the area will need to be performed as development occurs on each parcel. A power study will need to be performed for each proposed subdivision prior to construction to determine the upgrades needed.

Figures 4 to 6 in Appendix D show the existing facilities for each entity.

Section 7 Storm Water System

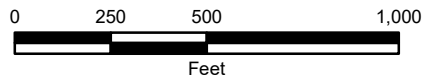
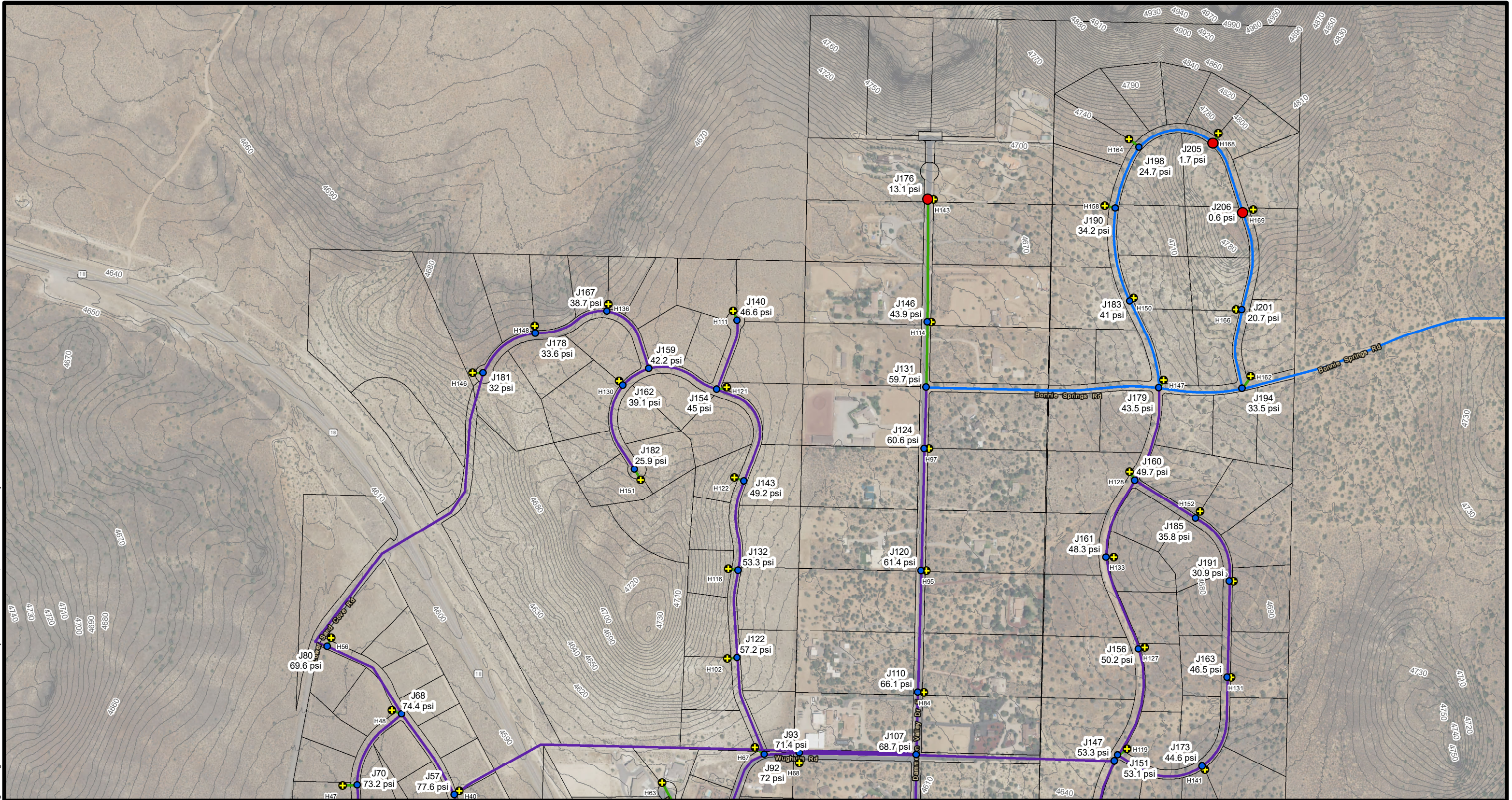
See Appendix B for the Master Drainage Plan

Section 8 Roadways

See Appendix C for Traffic Impact Study

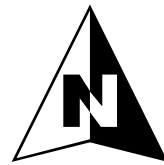
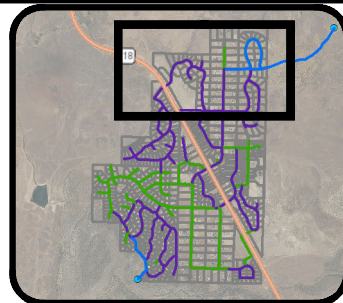
Appendix A. Water Network Analysis

P:\007-16 Dammeron Valley Master Planning\Drawings\GIS\007-16 WaterModel-PeakDayFire - Scenario2.mxd, 04/10/18 9:40:52 AM jheward



Legend

- TFNCLCRESP
- Does Not Meet Min. Pressure
- Satisfies Min. Pressure
- Existing Tank
- Fire Hydrant
- 6"
- 8"
- 10"
- Property Lines
- 5' Contours



1 of 3

**Peak Day Demand w/ Fire Flow (1,000 gpm)
Master Plan Water Model Results**

Dammeron Valley, Utah

Spatial Reference: Utah State Plane NAD 83, feet

Drawn By: JRH

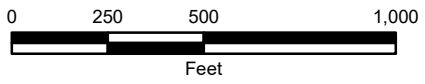
Scale: 1 inch = 500 feet

Date: April 2018

ALPHA ENGINEERING
43 South 100 East, Suite 100 • St George, Utah 84770
T: 435.628.6500 • F: 435.628.6553 • alphaengineering.com

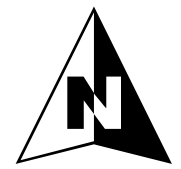
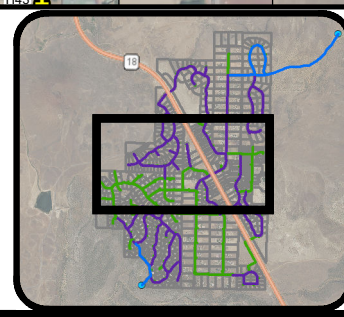


P:\007-16 Dammeron Valley Master Planning Drawings\GIS\007-16 WaterModel-PeakDayFire - Scenario2.mxd, 04/10/18 9:41:42 AM jheward



Legend

- TFNCLCRESP
- Does Not Meet Min. Pressure
- Satisfies Min. Pressure
- Existing Tank
- Fire Hydrant
- 6"
- 8"
- 10"
- Property Lines
- 5' Contours



2 of 3

**Peak Day Demand w/ Fire Flow (1,000 gpm)
Master Plan Water Model Results**

Dammeron Valley, Utah

Spatial Reference: Utah State Plane NAD 83, feet

Drawn By: JRH

Scale: 1 inch = 500 feet

Date: April 2018

ALPHA ENGINEERING
43 South 100 East, Suite 100 • St George, Utah 84770
T: 435.628.6500 • F: 435.628.6553 • alphaengineering.com

Fire Flow Node FlexTable: Fire Flow Report (007-16 PeakDayFire.wtg)

Current Time: 0.000 hours

Label	Elevation (ft)	Satisfies Fire Flow Constraints?	Flow (Total Needed) (gpm)	Pressure (Calculated Residual @ Total Flow Needed) (psi)	Flow (Total Available) (gpm)	Pressure (Calculated Residual) (psi)
H1	4,523.35	True	1,000.00	73.2	1,562.18	20.0
H2	4,533.62	True	1,000.00	88.3	2,015.68	31.0
H3	4,538.65	True	1,000.00	86.3	1,386.17	69.7
H4	4,539.39	True	1,000.00	87.0	1,876.19	42.3
H5	4,539.46	True	1,000.00	76.2	1,733.77	20.0
H6	4,544.24	True	1,000.00	86.3	1,386.53	71.7
H7	4,546.66	True	1,000.00	70.5	1,642.33	20.0
H8	4,550.00	True	1,000.00	84.6	1,383.76	70.9
H9	4,551.59	True	1,000.00	90.7	2,564.15	31.4
H10	4,553.24	True	1,000.00	83.2	1,392.10	69.1
H11	4,554.22	True	1,000.00	75.7	1,830.48	20.0
H12	4,554.98	True	1,000.00	88.0	1,674.13	68.0
H13	4,555.57	True	1,000.00	82.9	1,380.67	69.7
H14	4,555.63	True	1,000.00	81.9	1,488.96	62.8
H15	4,558.41	True	1,000.00	93.9	2,714.08	57.4
H16	4,558.59	True	1,000.00	81.7	1,378.55	68.7
H17	4,559.20	True	1,000.00	81.1	1,397.35	67.2
H18	4,560.13	True	1,000.00	79.8	1,379.00	65.7
H19	4,560.13	True	1,000.00	84.8	2,474.28	20.0
H20	4,562.24	True	1,000.00	92.0	2,688.10	54.7
H21	4,562.25	True	1,000.00	79.3	2,110.55	20.0
H22	4,562.89	True	1,000.00	80.4	1,403.44	66.9
H23	4,565.13	True	1,000.00	91.5	2,741.53	56.2
H24	4,565.56	True	1,000.00	77.9	1,570.94	54.8
H25	4,565.85	True	1,000.00	79.8	1,374.27	67.9
H26	4,566.76	True	1,000.00	76.9	1,387.03	62.6
H27	4,566.97	True	1,000.00	70.4	1,427.21	48.3
H28	4,567.49	True	1,000.00	77.8	1,394.88	64.2
H29	4,569.40	True	1,000.00	88.1	2,738.98	45.1
H30	4,570.07	True	1,000.00	75.2	1,522.72	53.9
H31	4,570.92	True	1,000.00	81.1	1,876.91	52.3
H32	4,571.07	True	1,000.00	89.5	2,622.19	61.1
H33	4,571.25	True	1,000.00	78.1	1,374.02	66.8
H34	4,572.30	True	1,000.00	75.5	1,387.00	61.9
H35	4,573.24	True	1,000.00	73.5	1,395.04	58.3
H36	4,574.53	True	1,000.00	75.8	1,380.23	63.4
H37	4,576.97	True	1,000.00	85.8	2,818.93	44.2
H38	4,577.00	True	1,000.00	60.2	1,460.73	30.3
H39	4,577.03	True	1,000.00	86.7	2,749.34	52.8
H40	4,579.15	True	1,000.00	76.1	1,358.41	66.3
H41	4,579.44	True	1,000.00	38.2	1,180.61	20.0
H42	4,580.00	True	1,000.00	65.4	1,460.74	42.1
H43	4,582.94	True	1,000.00	78.2	1,967.14	51.0
H44	4,583.40	True	1,000.00	71.7	1,480.26	55.1
H45	4,583.73	True	1,000.00	83.5	2,879.98	43.4
H46	4,584.03	True	1,000.00	72.3	1,367.10	60.9
H47	4,585.00	True	1,000.00	70.5	1,361.74	58.3
H48	4,585.00	True	1,000.00	72.3	1,357.59	61.5
H49	4,585.59	True	1,000.00	59.6	1,606.85	20.0

Fire Flow Node FlexTable: Fire Flow Report (007-16 PeakDayFire.wtg)

Current Time: 0.000 hours

Label	Elevation (ft)	Satisfies Fire Flow Constraints?	Flow (Total Needed) (gpm)	Pressure (Calculated Residual @ Total Flow Needed) (psi)	Flow (Total Available) (gpm)	Pressure (Calculated Residual) (psi)
H50	4,586.20	True	1,000.00	65.0	1,457.32	44.1
H51	4,586.47	True	1,000.00	82.9	2,851.87	47.2
H52	4,588.31	True	1,000.00	81.0	2,724.25	41.5
H53	4,588.94	True	1,000.00	72.0	1,449.47	59.4
H54	4,589.49	True	1,000.00	70.4	1,466.47	55.8
H55	4,591.78	True	1,000.00	69.5	1,453.42	55.6
H56	4,592.35	True	1,000.00	68.0	1,347.92	56.7
H57	4,593.09	True	1,000.00	70.8	1,294.65	63.1
H58	4,594.37	True	1,000.00	66.2	1,484.55	48.8
H59	4,594.62	True	1,000.00	70.4	1,310.90	62.4
H60	4,595.00	True	1,000.00	77.7	2,630.76	38.6
H61	4,595.00	True	1,000.00	67.5	1,454.20	53.1
H62	4,595.00	True	1,000.00	70.2	1,304.38	62.4
H63	4,595.00	True	1,000.00	58.4	1,294.06	43.7
H64	4,595.81	True	1,000.00	69.8	1,322.66	61.4
H65	4,598.13	True	1,000.00	66.9	1,536.08	50.0
H66	4,598.30	True	1,000.00	77.5	2,970.15	35.8
H67	4,598.38	True	1,000.00	69.7	1,285.62	62.9
H68	4,599.22	True	1,000.00	69.9	1,282.18	63.4
H69	4,599.47	True	1,000.00	74.4	2,878.91	20.0
H70	4,601.73	True	1,000.00	68.4	2,263.80	20.0
H71	4,603.49	True	1,000.00	61.8	1,397.94	47.3
H72	4,603.55	True	1,000.00	73.9	2,640.40	33.9
H73	4,604.77	True	1,000.00	50.5	1,509.95	20.0
H74	4,604.81	True	1,000.00	65.4	1,398.13	54.5
H75	4,604.92	True	1,000.00	58.8	1,729.63	20.0
H76	4,605.00	True	1,000.00	67.2	1,349.20	59.2
H77	4,605.73	True	1,000.00	60.0	1,483.05	41.5
H78	4,606.46	True	1,000.00	41.2	1,291.62	20.0
H79	4,606.75	True	1,000.00	35.2	1,187.03	20.0
H80	4,608.89	True	1,000.00	29.8	1,112.08	20.0
H81	4,610.00	True	1,000.00	65.6	1,314.54	58.6
H82	4,610.14	True	1,000.00	66.3	1,282.72	60.6
H83	4,612.63	True	1,000.00	69.7	2,602.87	29.6
H84	4,615.00	True	1,000.00	65.0	1,237.32	60.5
H85	4,615.36	True	1,000.00	57.8	1,444.65	43.1
H86	4,617.66	True	1,000.00	67.5	2,779.60	24.3
H87	4,619.24	True	1,000.00	52.9	1,413.68	36.7
H88	4,619.42	True	1,000.00	24.8	1,055.48	20.0
H89	4,619.69	True	1,000.00	66.0	2,591.64	23.2
H90	4,621.46	True	1,000.00	53.8	1,406.14	39.4
H91	4,621.93	True	1,000.00	51.9	1,415.25	35.8
H92	4,622.06	True	1,000.00	51.8	1,411.44	35.7
H93	4,624.24	True	1,000.00	40.6	1,348.16	20.0
H94	4,624.63	True	1,000.00	65.0	2,872.64	20.2
H95	4,625.00	True	1,000.00	60.5	1,192.71	56.6
H96	4,626.60	True	1,000.00	31.3	1,159.60	20.0
H97	4,627.94	True	1,000.00	59.9	1,156.35	56.9
H98	4,628.08	True	1,000.00	22.2	1,026.63	20.0

Fire Flow Node FlexTable: Fire Flow Report (007-16 PeakDayFire.wtg)

Current Time: 0.000 hours

Label	Elevation (ft)	Satisfies Fire Flow Constraints?	Flow (Total Needed) (gpm)	Pressure (Calculated Residual @ Total Flow Needed) (psi)	Flow (Total Available) (gpm)	Pressure (Calculated Residual) (psi)
H99	4,628.37	True	1,000.00	49.6	1,418.41	33.8
H100	4,628.69	True	1,000.00	62.9	2,607.12	23.6
H101	4,630.10	True	1,000.00	61.6	2,668.28	20.0
H102	4,630.88	True	1,000.00	53.7	1,290.55	45.7
H103	4,631.61	True	1,000.00	49.6	1,424.13	34.9
H104	4,631.99	True	1,000.00	57.4	2,138.66	20.0
H105	4,632.53	True	1,000.00	37.9	1,314.45	20.0
H106	4,632.73	True	1,000.00	23.3	1,041.86	20.0
H107	4,633.05	True	1,000.00	51.9	1,183.06	46.5
H108	4,634.71	True	1,000.00	54.4	1,949.98	20.0
H109	4,634.93	True	1,000.00	39.8	1,378.67	20.0
H110	4,639.19	True	1,000.00	59.0	2,764.17	20.0
H111	4,635.43	True	1,000.00	44.9	1,306.89	32.1
H112	4,636.52	True	1,000.00	37.7	1,325.89	20.0
H113	4,639.58	False	1,000.00	0.8	813.95	20.0
H114	4,640.85	True	1,000.00	43.5	1,139.25	38.0
H115	4,641.21	True	1,000.00	43.1	1,420.49	26.4
H116	4,642.00	True	1,000.00	47.4	1,295.44	38.4
H117	4,642.82	True	1,000.00	42.9	1,420.81	26.7
H118	4,643.03	False	1,000.00	18.7	983.20	20.0
H119	4,643.43	True	1,000.00	51.6	1,180.52	47.8
H120	4,643.58	True	1,000.00	57.3	2,646.84	20.0
H121	4,644.22	True	1,000.00	44.2	1,307.67	33.4
H122	4,644.63	True	1,000.00	45.1	1,300.35	35.3
H123	4,645.55	True	1,000.00	43.9	1,423.42	29.5
H124	4,647.80	True	1,000.00	41.1	1,420.62	25.3
H125	4,648.90	False	1,000.00	-7.1	745.28	20.0
H126	4,649.15	False	1,000.00	-9.4	730.75	20.0
H127	4,650.45	True	1,000.00	48.6	1,164.89	45.1
H128	4,653.11	True	1,000.00	48.4	1,148.62	45.4
H129	4,654.17	True	1,000.00	52.6	2,551.49	20.0
H130	4,655.05	True	1,000.00	38.5	1,311.73	26.9
H131	4,656.82	True	1,000.00	45.4	1,161.75	41.8
H132	4,656.94	False	1,000.00	-11.5	702.17	20.0
H133	4,657.39	True	1,000.00	45.7	1,156.49	42.3
H134	4,659.90	True	1,000.00	36.1	1,421.30	20.3
H135	4,660.00	False	1,000.00	-14.2	680.02	20.0
H136	4,660.57	True	1,000.00	36.9	1,315.97	25.8
H137	4,660.66	True	1,000.00	36.7	1,422.81	21.7
H138	4,661.91	True	1,000.00	49.2	2,361.19	20.0
H139	4,662.46	True	1,000.00	48.2	2,227.96	20.0
H140	4,663.01	False	1,000.00	-15.9	664.32	20.0
H141	4,663.07	True	1,000.00	43.1	1,169.14	39.4
H142	4,663.75	True	1,000.00	34.3	1,183.46	27.2
H143	4,664.20	False	1,000.00	11.7	888.43	20.0
H144	4,668.16	True	1,000.00	48.3	2,583.71	20.0
H145	4,671.75	True	1,000.00	31.7	1,336.75	20.0
H146	4,672.78	True	1,000.00	31.0	1,300.47	20.0
H147	4,674.42	True	1,000.00	41.3	1,118.46	39.4

Fire Flow Node FlexTable: Fire Flow Report (007-16 PeakDayFire.wtg)

Current Time: 0.000 hours

Label	Elevation (ft)	Satisfies Fire Flow Constraints?	Flow (Total Needed) (gpm)	Pressure (Calculated Residual @ Total Flow Needed) (psi)	Flow (Total Available) (gpm)	Pressure (Calculated Residual) (psi)
H148	4,675.31	True	1,000.00	30.4	1,293.45	20.0
H149	4,677.86	True	1,000.00	28.0	1,223.86	20.0
H150	4,679.57	True	1,000.00	39.2	1,093.46	37.8
H151	4,679.81	True	1,000.00	22.6	1,058.17	20.0
H152	4,680.12	True	1,000.00	35.7	1,155.26	32.3
H153	4,682.24	True	1,000.00	39.9	1,954.93	20.0
H154	4,688.72	True	1,000.00	37.4	1,882.25	20.0
H155	4,688.75	True	1,000.00	22.0	1,054.88	20.0
H156	4,685.00	True	1,000.00	23.7	1,101.31	20.0
H157	4,689.00	True	1,000.00	23.7	1,108.42	20.0
H158	4,690.75	True	1,000.00	33.2	1,072.84	31.8
H159	4,693.38	True	1,000.00	29.8	1,157.26	26.3
H160	4,695.98	True	1,000.00	37.3	2,271.98	20.0
H161	4,700.06	False	1,000.00	18.5	962.68	20.0
H162	4,702.76	True	1,000.00	28.4	1,113.33	26.4
H163	4,718.77	True	1,000.00	28.4	1,750.74	20.0
H164	4,720.05	False	1,000.00	20.0	999.52	20.0
H165	4,716.99	True	1,000.00	27.2	1,517.95	20.0
H166	4,725.00	False	1,000.00	19.8	986.10	20.0
H167	4,753.74	False	1,000.00	11.6	0.00	19.2
H168	4,770.33	False	1,000.00	-1.4	0.00	10.8
H169	4,771.17	False	1,000.00	-1.5	0.00	10.4
J1	4,525.21	True	1,004.97	75.1	1,617.76	20.0
J2	4,531.15	True	1,004.97	92.0	2,117.19	35.0
J3	4,532.00	True	1,004.97	71.1	1,569.66	20.0
J4	4,533.92	True	1,004.97	90.6	2,020.66	39.6
J5	4,537.18	True	1,004.97	78.0	1,785.98	20.0
J6	4,538.63	True	1,004.97	91.0	2,276.45	29.5
J7	4,539.31	True	1,004.97	86.4	1,391.08	70.3
J8	4,539.78	True	1,004.97	89.5	1,881.20	50.8
J9	4,540.00	True	1,004.97	77.6	1,788.92	20.0
J10	4,540.00	True	1,004.97	71.9	1,628.22	20.0
J11	4,542.17	True	1,004.97	89.8	1,820.13	57.3
J12	4,544.49	True	1,004.97	88.1	1,391.45	75.1
J13	4,545.73	True	1,004.97	83.9	1,391.11	67.9
J14	4,545.95	True	1,004.97	73.2	1,719.47	20.0
J15	4,548.41	True	1,004.97	66.5	1,560.17	20.0
J16	4,550.00	True	1,004.97	85.8	1,388.72	72.9
J17	4,550.00	True	1,004.97	91.6	1,663.01	74.8
J18	4,551.04	True	1,004.97	92.6	2,569.12	41.4
J19	4,554.45	True	1,004.97	84.2	1,397.05	71.3
J20	4,554.71	True	1,004.97	89.8	1,679.07	72.5
J21	4,555.50	True	1,004.97	83.7	1,385.66	71.3
J22	4,555.51	True	1,004.97	89.6	2,646.71	28.4
J23	4,556.14	True	1,004.97	83.9	1,494.10	67.3
J24	4,556.50	True	1,004.97	92.5	2,646.86	48.1
J25	4,557.38	True	1,004.97	83.2	1,384.34	71.1
J26	4,557.52	True	1,004.97	76.7	1,917.76	20.0
J27	4,558.37	True	1,004.97	83.2	1,383.51	71.3

Fire Flow Node FlexTable: Fire Flow Report (007-16 PeakDayFire.wtg)

Current Time: 0.000 hours

Label	Elevation (ft)	Satisfies Fire Flow Constraints?	Flow (Total Needed) (gpm)	Pressure (Calculated Residual @ Total Flow Needed) (psi)	Flow (Total Available) (gpm)	Pressure (Calculated Residual) (psi)
J28	4,559.08	True	1,004.97	82.9	1,402.31	70.4
J29	4,559.93	True	1,004.97	95.1	2,719.07	68.3
J30	4,560.00	True	1,004.97	82.0	2,239.58	20.0
J31	4,560.01	True	1,004.97	80.3	1,383.93	66.7
J32	4,560.68	True	1,004.97	88.5	1,708.53	72.2
J33	4,561.60	True	1,004.97	78.0	2,042.48	20.0
J34	4,562.75	True	1,004.97	81.4	1,432.70	67.8
J35	4,563.68	True	1,004.97	81.8	1,408.43	69.9
J36	4,564.93	True	1,004.97	93.8	2,693.10	71.8
J37	4,566.22	True	1,004.97	92.7	2,746.45	66.7
J38	4,566.62	True	1,004.97	81.4	1,379.46	71.1
J39	4,567.01	True	1,004.97	72.1	1,432.71	51.5
J40	4,567.36	True	1,004.97	77.2	1,392.01	63.2
J41	4,567.78	True	1,004.97	91.2	2,743.93	61.1
J42	4,568.25	True	1,004.97	79.4	1,400.25	67.3
J43	4,568.48	True	1,004.97	78.9	1,575.97	58.7
J44	4,569.55	True	1,004.97	84.5	1,882.15	61.9
J45	4,570.00	True	1,004.97	64.1	1,432.67	37.4
J46	4,570.32	True	1,004.97	91.5	2,627.13	71.4
J47	4,570.41	True	1,004.97	80.1	1,379.21	70.1
J48	4,571.34	True	1,004.97	77.9	1,392.35	66.1
J49	4,571.44	True	1,004.97	76.9	1,527.74	58.4
J50	4,571.88	True	1,004.97	91.2	2,573.30	74.3
J51	4,572.73	True	1,004.97	74.2	1,400.00	59.4
J52	4,574.17	True	1,004.97	77.3	1,385.17	66.0
J53	4,576.86	True	1,004.97	89.4	2,754.83	70.0
J54	4,577.34	True	1,004.97	41.0	1,218.94	20.0
J55	4,577.69	True	1,004.97	61.0	1,465.69	32.3
J56	4,578.23	True	1,004.97	60.2	1,465.70	30.9
J57	4,578.30	True	1,004.97	77.6	1,363.57	68.6
J58	4,578.84	True	1,004.97	86.2	2,142.99	70.6
J59	4,580.00	True	1,004.97	75.3	1,499.97	60.4
J60	4,580.61	True	1,004.97	66.4	1,465.66	44.2
J61	4,580.89	True	1,004.97	86.9	2,884.95	59.6
J62	4,581.33	True	1,004.97	29.8	1,092.95	20.0
J63	4,581.85	True	1,004.97	85.5	2,823.97	55.0
J64	4,582.05	True	1,004.97	81.2	1,971.90	60.8
J65	4,582.33	True	1,004.97	67.2	1,465.74	46.6
J66	4,582.84	True	1,004.97	73.8	1,372.03	63.1
J67	4,583.68	True	1,004.97	73.5	1,485.28	59.0
J68	4,584.44	True	1,004.97	74.4	1,362.60	65.0
J69	4,584.64	True	1,004.97	67.0	1,462.32	47.4
J70	4,584.78	True	1,004.97	73.2	1,367.09	62.9
J71	4,585.00	True	1,004.97	77.7	1,905.81	54.3
J72	4,585.04	True	1,004.97	61.9	1,682.42	20.0
J73	4,585.27	True	1,004.97	85.2	2,856.81	60.4
J74	4,588.11	True	1,004.97	74.0	1,471.18	62.6
J75	4,590.00	True	1,004.97	81.3	2,766.65	49.2
J76	4,590.00	True	1,004.97	82.7	2,729.19	56.2

Fire Flow Node FlexTable: Fire Flow Report (007-16 PeakDayFire.wtg)

Current Time: 0.000 hours

Label	Elevation (ft)	Satisfies Fire Flow Constraints?	Flow (Total Needed) (gpm)	Pressure (Calculated Residual @ Total Flow Needed) (psi)	Flow (Total Available) (gpm)	Pressure (Calculated Residual) (psi)
J77	4,590.11	True	1,004.97	74.0	1,454.58	63.9
J78	4,592.00	True	1,004.97	79.1	2,884.55	33.9
J79	4,592.21	True	1,004.97	73.5	1,299.00	67.2
J80	4,592.49	True	1,004.97	69.6	1,353.28	59.5
J81	4,593.57	True	1,004.97	71.0	1,457.96	59.5
J82	4,593.85	True	1,004.97	72.3	1,315.87	65.4
J83	4,594.05	True	1,004.97	68.1	1,489.61	52.5
J84	4,594.64	True	1,004.97	80.8	2,975.14	50.2
J85	4,594.65	True	1,004.97	72.0	1,440.19	62.2
J86	4,595.00	True	1,004.97	69.9	1,458.85	57.8
J87	4,595.00	True	1,004.97	71.9	1,309.58	65.1
J88	4,595.00	True	1,004.97	79.0	2,635.69	46.3
J89	4,595.00	True	1,004.97	72.0	1,327.04	64.9
J90	4,596.17	True	1,004.97	72.3	2,475.16	20.0
J91	4,597.02	True	1,004.97	69.6	1,541.14	55.4
J92	4,597.72	True	1,004.97	72.0	1,290.58	66.4
J93	4,599.68	True	1,004.97	71.3	1,287.18	65.9
J94	4,603.42	True	1,004.97	53.5	1,515.54	25.6
J95	4,603.85	True	1,004.97	60.4	1,793.57	20.0
J96	4,604.14	True	1,004.97	69.1	1,354.35	62.2
J97	4,604.32	True	1,004.97	67.8	1,402.74	58.8
J98	4,605.00	True	1,004.97	38.2	1,238.55	20.0
J99	4,605.30	True	1,004.97	44.0	1,350.42	20.0
J100	4,605.53	True	1,004.97	62.8	1,488.11	47.0
J101	4,605.76	True	1,004.97	74.7	2,645.38	43.8
J102	4,606.91	True	1,004.97	68.3	1,362.88	61.6
J103	4,607.02	True	1,004.97	73.4	2,608.09	39.6
J104	4,610.00	True	1,004.97	66.7	1,319.51	60.5
J105	4,610.00	True	1,004.97	67.6	1,287.69	62.5
J106	4,610.13	True	1,004.97	32.1	1,151.39	20.0
J107	4,610.30	True	1,004.97	68.7	1,272.31	64.5
J108	4,612.71	True	1,004.97	62.2	1,455.50	50.4
J109	4,613.92	True	1,004.97	61.1	1,449.74	49.0
J110	4,615.00	True	1,004.97	66.1	1,241.77	62.1
J111	4,618.25	True	1,004.97	27.3	1,092.41	20.0
J112	4,618.27	True	1,004.97	68.7	2,596.63	36.1
J113	4,618.35	True	1,004.97	70.0	2,877.73	39.0
J114	4,621.04	True	1,004.97	55.4	1,410.90	42.3
J115	4,621.73	True	1,004.97	54.1	1,418.11	39.9
J116	4,623.22	True	1,004.97	67.1	2,784.83	35.2
J117	4,623.47	True	1,004.97	53.5	1,420.25	39.4
J118	4,623.64	True	1,004.97	66.1	2,735.72	31.6
J119	4,623.66	True	1,004.97	53.4	1,416.48	39.4
J120	4,625.00	True	1,004.97	61.4	1,197.71	57.9
J121	4,625.00	True	1,004.97	42.0	1,395.48	20.0
J122	4,626.75	True	1,004.97	57.2	1,295.40	50.2
J123	4,627.37	True	1,004.97	60.8	2,338.19	20.0
J124	4,627.99	True	1,004.97	60.6	1,161.31	57.9
J125	4,628.04	True	1,004.97	32.5	1,187.96	20.0

Fire Flow Node FlexTable: Fire Flow Report (007-16 PeakDayFire.wtg)

Current Time: 0.000 hours

Label	Elevation (ft)	Satisfies Fire Flow Constraints?	Flow (Total Needed) (gpm)	Pressure (Calculated Residual @ Total Flow Needed) (psi)	Flow (Total Available) (gpm)	Pressure (Calculated Residual) (psi)
J126	4,628.14	True	1,004.97	23.9	1,053.22	20.0
J127	4,629.07	True	1,004.97	52.6	1,429.12	39.5
J128	4,629.32	True	1,004.97	64.1	2,612.15	32.1
J129	4,629.70	True	1,004.97	51.4	1,422.90	37.7
J130	4,629.84	True	1,004.97	22.6	1,037.57	20.0
J131	4,631.59	True	1,004.97	59.7	1,144.20	57.5
J132	4,632.39	True	1,004.97	53.3	1,300.53	45.4
J133	4,632.48	True	1,004.97	31.8	1,181.57	20.0
J134	4,632.60	True	1,004.97	42.9	1,416.71	23.1
J135	4,632.63	True	1,004.97	52.3	1,188.01	46.9
J136	4,632.65	True	1,004.97	52.6	1,188.24	47.3
J137	4,633.46	True	1,004.97	24.7	1,066.91	20.0
J138	4,633.77	True	1,004.97	50.0	1,424.86	36.5
J139	4,634.04	True	1,004.97	39.6	1,374.37	20.0
J140	4,635.44	True	1,004.97	46.6	1,312.66	35.0
J141	4,637.90	True	1,004.97	39.4	1,389.55	20.0
J142	4,638.11	True	1,004.97	62.2	3,106.81	28.2
J143	4,639.21	True	1,004.97	49.2	1,305.38	40.4
J144	4,639.56	False	1,004.97	2.8	833.92	20.0
J145	4,641.30	True	1,004.97	45.1	1,424.69	30.4
J146	4,641.67	True	1,004.97	43.9	1,144.24	38.5
J147	4,644.15	True	1,004.97	53.3	1,187.94	50.0
J148	4,644.15	True	1,004.97	20.7	1,014.93	20.0
J149	4,644.28	True	1,004.97	58.5	2,789.49	29.2
J150	4,644.43	True	1,004.97	45.1	1,428.04	31.4
J151	4,644.70	True	1,004.97	53.1	1,185.65	49.9
J152	4,645.00	True	1,004.97	43.4	1,425.72	28.5
J153	4,645.78	True	1,004.97	58.1	2,821.39	29.0
J154	4,646.41	True	1,004.97	45.0	1,312.19	35.4
J155	4,649.00	False	1,004.97	-5.4	760.60	20.0
J156	4,649.40	True	1,004.97	50.2	1,169.92	47.0
J157	4,650.26	False	1,004.97	-7.6	744.43	20.0
J158	4,650.64	True	1,004.97	40.9	1,425.98	25.9
J159	4,651.94	True	1,004.97	42.2	1,316.71	32.1
J160	4,654.26	True	1,004.97	49.7	1,153.76	47.2
J161	4,654.46	True	1,004.97	48.3	1,161.55	45.3
J162	4,655.99	True	1,004.97	39.0	1,316.71	28.1
J163	4,656.10	True	1,004.97	46.4	1,167.10	43.0
J164	4,656.99	True	1,004.97	54.0	2,883.35	27.3
J165	4,657.40	False	1,004.97	-10.6	711.27	20.0
J166	4,659.26	True	1,004.97	51.6	2,565.21	22.6
J167	4,659.35	True	1,004.97	38.7	1,320.32	28.3
J168	4,659.37	True	1,004.97	38.1	1,427.61	23.9
J169	4,659.47	False	1,004.97	-12.3	696.95	20.0
J170	4,659.53	True	1,004.97	53.8	3,234.00	22.4
J171	4,660.15	True	1,004.97	36.8	1,426.23	21.7
J172	4,660.82	False	1,004.97	-12.9	690.40	20.0
J173	4,661.51	True	1,004.97	44.6	1,174.44	41.2
J174	4,662.49	True	1,004.97	50.0	2,576.51	20.0

Fire Flow Node FlexTable: Fire Flow Report (007-16 PeakDayFire.wtg)

Current Time: 0.000 hours

Label	Elevation (ft)	Satisfies Fire Flow Constraints?	Flow (Total Needed) (gpm)	Pressure (Calculated Residual @ Total Flow Needed) (psi)	Flow (Total Available) (gpm)	Pressure (Calculated Residual) (psi)
J175	4,662.68	True	1,004.97	35.0	1,188.42	28.0
J176	4,663.17	False	1,004.97	13.1	910.92	20.0
J177	4,670.41	True	1,004.97	32.9	1,384.61	20.0
J178	4,670.88	True	1,004.97	33.6	1,325.13	23.0
J179	4,672.94	True	1,004.97	43.5	1,122.95	42.0
J180	4,673.69	True	1,004.97	47.8	2,977.34	24.8
J181	4,674.67	True	1,004.97	32.0	1,329.40	21.3
J182	4,677.14	True	1,004.97	25.9	1,148.44	20.0
J183	4,677.56	True	1,004.97	41.0	1,098.45	39.7
J184	4,677.69	True	1,004.97	29.5	1,288.50	20.0
J185	4,682.98	True	1,004.97	35.8	1,160.26	32.8
J186	4,685.00	True	1,004.97	24.0	1,114.65	20.0
J187	4,686.68	True	1,004.97	40.0	2,214.80	20.0
J188	4,687.78	True	1,004.97	24.8	1,151.30	20.0
J189	4,689.00	True	1,004.97	24.4	1,140.67	20.0
J190	4,692.59	True	1,004.97	34.2	1,077.71	33.2
J191	4,692.63	True	1,004.97	30.9	1,161.96	27.6
J192	4,693.37	True	1,004.97	28.6	1,284.58	20.0
J193	4,695.35	True	1,004.97	37.3	2,238.75	20.0
J194	4,697.09	True	1,004.97	33.5	1,118.46	32.1
J195	4,702.36	True	1,004.97	36.4	2,814.03	20.0
J196	4,702.88	False	1,004.97	19.3	984.46	20.0
J198	4,714.42	True	1,004.97	24.7	1,064.27	23.9
J199	4,717.90	True	1,004.97	28.1	1,713.17	20.0
J200	4,719.83	True	1,004.97	29.7	2,448.42	20.0
J201	4,725.00	True	1,004.97	20.7	1,059.04	20.0
J202	4,730.36	True	1,004.97	25.7	2,032.66	20.0
J203	4,737.09	True	1,004.97	23.7	1,831.03	20.0
J204	4,763.21	False	1,004.97	10.2	4.97	15.1
J205	4,767.58	False	1,004.97	1.7	4.97	12.0
J206	4,770.55	False	1,004.97	0.6	4.97	10.7

FlexTable: Pipe Table (007-16 PeakDayFire.wtg)

Current Time: 0.000 hours

Label	Length (Scaled) (ft)	Start Node	Stop Node	Diameter (in)	Material	Hazen-Williams C	Flow (gpm)	Velocity (ft/s)
P1	4,210	NORTHRID GE TANK	J194	10.0	Ductile Iron	130.0	399.31	1.63
P2	631	PINION HILLS TANK	J203	10.0	Ductile Iron	130.0	620.12	2.53
P3	400	J177	J184	10.0	Ductile Iron	130.0	21.11	0.09
P4	491	J184	J189	10.0	Ductile Iron	130.0	16.13	0.07
P5	662	J146	J176	6.0	Ductile Iron	130.0	4.97	0.06
P6	506	J150	J168	10.0	Ductile Iron	130.0	31.06	0.13
P7	412	J191	J185	8.0	Ductile Iron	130.0	-82.14	0.52
P8	518	J163	J191	8.0	Ductile Iron	130.0	-77.17	0.49
P9	330	J124	J131	8.0	Ductile Iron	130.0	-152.60	0.97
P10	374	J171	J158	10.0	Ductile Iron	130.0	-3.76	0.02
P11	520	J173	J163	8.0	Ductile Iron	130.0	-72.19	0.46
P12	208	J21	J25	8.0	Ductile Iron	130.0	-7.29	0.05
P13	486	J168	J177	10.0	Ductile Iron	130.0	26.08	0.11
P14	516	J183	J190	10.0	Ductile Iron	130.0	-87.69	0.36
P397	579	J189	J188	10.0	Ductile Iron	130.0	11.16	0.05
P16	659	J120	J124	8.0	Ductile Iron	130.0	-147.62	0.94
P17	496	J66	J70	8.0	Ductile Iron	130.0	-12.28	0.08
P18	301	J158	J152	10.0	Ductile Iron	130.0	-8.73	0.04
P19	501	J162	J182	8.0	Ductile Iron	130.0	4.97	0.03
P20	656	J110	J120	8.0	Ductile Iron	130.0	-142.65	0.91
P21	817	J55	J60	8.0	Ductile Iron	130.0	-9.94	0.06
P22	528	J156	J161	8.0	Ductile Iron	130.0	-94.96	0.61
P23	482	J165	J172	8.0	Ductile Iron	130.0	5.04	0.03
P24	2,566	J57	J107	8.0	Ductile Iron	130.0	-68.75	0.44
P25	520	J57	J68	8.0	Ductile Iron	130.0	32.39	0.21
P26	643	J104	J105	8.0	Ductile Iron	130.0	-85.32	0.54
P27	413	J16	J21	8.0	Ductile Iron	130.0	-2.31	0.01
P28	334	J105	J107	8.0	Ductile Iron	130.0	-90.30	0.58
P29	193	J60	J65	8.0	Ductile Iron	130.0	-14.92	0.10
P30	415	J167	J178	8.0	Ductile Iron	130.0	4.75	0.03
P31	373	J166	J112	8.0	Ductile Iron	130.0	77.02	0.49
P32	209	J69	J65	6.0	Ductile Iron	130.0	-4.40	0.05
P33	373	J178	J181	8.0	Ductile Iron	130.0	-0.22	0.00
P34	628	J88	J76	8.0	Ductile Iron	130.0	57.13	0.36
P35	504	J103	J88	8.0	Ductile Iron	130.0	62.10	0.40
P36	452	J161	J160	8.0	Ductile Iron	130.0	-99.93	0.64
P37	549	J27	J38	8.0	Ductile Iron	130.0	-22.20	0.14
P38	432	J52	J47	8.0	Ductile Iron	130.0	-6.54	0.04
P39	412	J123	H108	8.0	Ductile Iron	130.0	0.00	0.00
P40	386	J185	J160	8.0	Ductile Iron	130.0	-87.11	0.56
P41	374	J152	J145	10.0	Ductile Iron	130.0	-13.71	0.06
P42	537	J114	J134	6.0	Ductile Iron	130.0	25.17	0.29
P43	391	J128	J101	8.0	Ductile Iron	130.0	68.58	0.44
P44	686	J96	J89	8.0	Ductile Iron	130.0	-26.64	0.17
P45	372	J78	J61	8.0	Ductile Iron	130.0	-4.97	0.03
P46	401	J19	J28	8.0	Ductile Iron	130.0	-22.55	0.14
P47	267	J90	J95	6.0	Ductile Iron	130.0	4.97	0.06
P48	244	J82	J87	8.0	Ductile Iron	130.0	-36.59	0.23
P49	497	J179	J183	10.0	Ductile Iron	130.0	-82.71	0.34

FlexTable: Pipe Table (007-16 PeakDayFire.wtg)

Current Time: 0.000 hours

Label	Length (Scaled) (ft)	Start Node	Stop Node	Diameter (in)	Material	Hazen-Williams C	Flow (gpm)	Velocity (ft/s)
P50	1,257	J179	J131	10.0	Ductile Iron	130.0	167.51	0.68
P51	415	J87	J79	8.0	Ductile Iron	130.0	-41.56	0.27
P52	1,883	J80	J181	8.0	Ductile Iron	130.0	5.20	0.03
P53	662	J47	J57	8.0	Ductile Iron	130.0	-31.39	0.20
P54	273	J46	J50	8.0	Ductile Iron	130.0	54.29	0.35
P55	205	J39	J45	6.0	Ductile Iron	130.0	4.97	0.06
P56	630	J93	J107	8.0	Ductile Iron	130.0	-105.99	0.68
P57	464	J37	J63	8.0	Ductile Iron	130.0	-96.15	0.61
P58	155	J126	J130	6.0	Ductile Iron	130.0	14.08	0.16
P59	427	J83	J74	6.0	Ductile Iron	130.0	18.82	0.21
P60	140	J18	J24	6.0	Ductile Iron	130.0	-110.35	1.25
P61	233	J118	J149	8.0	Ductile Iron	130.0	-130.24	0.83
P62	255	J20	J32	6.0	Ductile Iron	130.0	-44.88	0.51
P63	681	J121	J125	6.0	Ductile Iron	130.0	28.99	0.33
P64	620	J137	J126	6.0	Ductile Iron	130.0	19.05	0.22
P65	389	J9	J6	6.0	Ductile Iron	130.0	-9.94	0.11
P66	357	J28	J35	8.0	Ductile Iron	130.0	-27.53	0.18
P67	436	J169	J157	8.0	Ductile Iron	130.0	-4.90	0.03
P68	376	J155	J165	8.0	Ductile Iron	130.0	10.01	0.06
P69	385	J30	J41	6.0	Ductile Iron	130.0	-9.94	0.11
P70	473	J122	J132	8.0	Ductile Iron	130.0	44.53	0.28
P71	683	J125	J137	6.0	Ductile Iron	130.0	24.02	0.27
P72	635	J143	J154	8.0	Ductile Iron	130.0	34.59	0.22
P73	492	J132	J143	8.0	Ductile Iron	130.0	39.56	0.25
P75	382	J35	J42	8.0	Ductile Iron	130.0	18.33	0.12
P74	620	J35	J34	8.0	Ductile Iron	130.0	-50.83	0.32
P76	391	J154	J140	8.0	Ductile Iron	130.0	4.97	0.03
P77	397	J154	J159	8.0	Ductile Iron	130.0	24.64	0.16
P78	474	J101	J76	8.0	Ductile Iron	130.0	63.61	0.41
P79	524	J160	J179	8.0	Ductile Iron	130.0	-192.01	1.23
P80	296	J29	J36	8.0	Ductile Iron	130.0	-26.93	0.17
P82	496	J127	J138	8.0	Ductile Iron	130.0	10.84	0.07
P81	522	J127	J150	10.0	Ductile Iron	130.0	36.03	0.15
P83	409	J89	J82	8.0	Ductile Iron	130.0	-31.61	0.20
P84	357	J115	J119	8.0	Ductile Iron	130.0	-27.42	0.18
P85	566	J68	J80	8.0	Ductile Iron	130.0	10.17	0.06
P86	431	J201	J194	10.0	Ductile Iron	130.0	-112.55	0.46
P87	441	J63	J113	8.0	Ductile Iron	130.0	-101.12	0.65
P88	523	J174	J128	8.0	Ductile Iron	130.0	73.55	0.47
P89	408	J42	J51	8.0	Ductile Iron	130.0	4.97	0.03
P90	445	J42	J48	8.0	Ductile Iron	130.0	8.38	0.05
P91	291	J54	J62	6.0	Ductile Iron	130.0	4.97	0.06
P92	537	J206	J201	10.0	Ductile Iron	130.0	-107.58	0.44
P93	355	J190	J198	10.0	Ductile Iron	130.0	-92.66	0.38
P94	866	J195	J180	10.0	Ductile Iron	130.0	274.04	1.12
P95	302	J67	J59	6.0	Ductile Iron	130.0	-32.84	0.37
P96	459	J196	J164	6.0	Ductile Iron	130.0	-4.97	0.06
P97	543	J12	J19	8.0	Ductile Iron	130.0	-17.58	0.11
P98	318	J12	J16	8.0	Ductile Iron	130.0	2.66	0.02
P99	494	J151	J173	8.0	Ductile Iron	130.0	-67.22	0.43
P100	603	J151	J156	8.0	Ductile Iron	130.0	-89.98	0.57
P101	413	J205	J206	10.0	Ductile Iron	130.0	-102.61	0.42

FlexTable: Pipe Table (007-16 PeakDayFire.wtg)

Current Time: 0.000 hours

Label	Length (Scaled) (ft)	Start Node	Stop Node	Diameter (in)	Material	Hazen-Williams C	Flow (gpm)	Velocity (ft/s)
P103	569	J38	J66	8.0	Ductile Iron	130.0	-7.30	0.05
P102	397	J38	J47	8.0	Ductile Iron	130.0	-19.88	0.13
P104	347	J116	J149	8.0	Ductile Iron	130.0	-12.85	0.08
P106	62	J111	H88	6.0	Ductile Iron	130.0	0.00	0.00
P105	629	J111	J106	6.0	Ductile Iron	130.0	-25.71	0.29
P107	504	J144	J155	8.0	Ductile Iron	130.0	24.86	0.16
P108	488	J72	J71	6.0	Ductile Iron	130.0	-4.97	0.06
P109	640	J145	J141	6.0	Ductile Iron	130.0	-0.31	0.00
P110	547	J92	J122	8.0	Ductile Iron	130.0	49.50	0.32
P111	189	J92	J93	8.0	Ductile Iron	130.0	-101.02	0.64
P112	241	J187	J174	8.0	Ductile Iron	130.0	78.53	0.50
P113	460	J172	J169	8.0	Ductile Iron	130.0	0.07	0.00
P114	506	J48	J52	8.0	Ductile Iron	130.0	-1.56	0.01
P115	443	J61	J53	8.0	Ductile Iron	130.0	105.81	0.68
P117	368	J112	J103	8.0	Ductile Iron	130.0	67.07	0.43
P116	498	J112	J123	8.0	Ductile Iron	130.0	4.98	0.03
P119	344	J134	J133	6.0	Ductile Iron	130.0	4.97	0.06
P118	530	J134	J148	6.0	Ductile Iron	130.0	4.97	0.06
P120	804	J97	J102	8.0	Ductile Iron	130.0	-34.50	0.22
P121	675	J43	J32	6.0	Ductile Iron	130.0	-72.04	0.82
P122	654	J91	J83	6.0	Ductile Iron	130.0	23.80	0.27
P123	577	J91	J100	6.0	Ductile Iron	130.0	49.95	0.57
P124	378	J117	J115	8.0	Ductile Iron	130.0	-22.45	0.14
P125	506	J23	J34	6.0	Ductile Iron	130.0	75.69	0.86
P126	630	J113	J180	8.0	Ductile Iron	130.0	-106.09	0.68
P127	831	J141	J139	6.0	Ductile Iron	130.0	-5.28	0.06
P128	390	J129	J117	8.0	Ductile Iron	130.0	-17.47	0.11
P129	445	J198	J205	10.0	Ductile Iron	130.0	-97.63	0.40
P130	597	J119	J114	8.0	Ductile Iron	130.0	-32.40	0.21
P131	405	J157	J155	8.0	Ductile Iron	130.0	-9.87	0.06
P132	469	J79	J92	8.0	Ductile Iron	130.0	-46.54	0.30
P133	485	J139	J134	6.0	Ductile Iron	130.0	-10.25	0.12
P134	403	J49	J59	6.0	Ductile Iron	130.0	62.09	0.70
P135	648	J49	J43	6.0	Ductile Iron	130.0	-67.06	0.76
P136	542	J81	J77	8.0	Ductile Iron	130.0	-60.72	0.39
P137	347	J86	J81	8.0	Ductile Iron	130.0	-55.75	0.36
P138	671	J94	J91	6.0	Ductile Iron	130.0	-45.60	0.52
P140	345	J4	J2	6.0	Ductile Iron	130.0	-80.53	0.91
P139	344	J4	J5	6.0	Ductile Iron	130.0	4.97	0.06
P141	207	J202	J200	10.0	Ductile Iron	130.0	424.80	1.74
P142	352	J41	J75	8.0	Ductile Iron	130.0	7.04	0.04
P143	290	J41	J29	8.0	Ductile Iron	130.0	-21.96	0.14
P144	343	J76	J61	8.0	Ductile Iron	130.0	115.76	0.74
P145	459	J14	J11	6.0	Ductile Iron	130.0	-9.94	0.11
P146	195	J26	J30	6.0	Ductile Iron	130.0	-4.97	0.06
P147	312	J77	J85	8.0	Ductile Iron	130.0	-23.98	0.15
P148	472	J70	J68	8.0	Ductile Iron	130.0	-17.25	0.11
P149	451	J194	J179	10.0	Ductile Iron	130.0	281.78	1.15
P150	414	J100	J108	6.0	Ductile Iron	130.0	44.98	0.51
P151	570	J204	J199	8.0	Ductile Iron	130.0	180.41	1.15
P152	234	J53	J50	8.0	Ductile Iron	130.0	221.76	1.42
P153	602	J1	J2	6.0	Ductile Iron	130.0	-4.97	0.06

FlexTable: Pipe Table (007-16 PeakDayFire.wtg)

Current Time: 0.000 hours

Label	Length (Scaled) (ft)	Start Node	Stop Node	Diameter (in)	Material	Hazen-Williams C	Flow (gpm)	Velocity (ft/s)
P154	172	J64	J71	6.0	Ductile Iron	130.0	134.27	1.52
P156	845	J109	J127	8.0	Ductile Iron	130.0	51.85	0.33
P155	761	J109	J121	6.0	Ductile Iron	130.0	33.97	0.39
P157	526	J8	J4	6.0	Ductile Iron	130.0	-65.62	0.74
P158	411	J193	J166	8.0	Ductile Iron	130.0	81.99	0.52
P159	340	J193	J187	8.0	Ductile Iron	130.0	88.47	0.56
P160	103	J22	J24	6.0	Ductile Iron	130.0	-9.94	0.11
P161	558	J44	J58	6.0	Ductile Iron	130.0	-126.86	1.44
P162	767	J106	J98	6.0	Ductile Iron	130.0	-30.68	0.35
P164	364	J36	J46	8.0	Ductile Iron	130.0	59.26	0.38
P163	239	J36	J37	8.0	Ductile Iron	130.0	-91.17	0.58
P165	633	J74	J77	8.0	Ductile Iron	130.0	41.72	0.27
P166	357	J74	J67	6.0	Ductile Iron	130.0	-27.86	0.32
P167	276	J33	J22	6.0	Ductile Iron	130.0	-4.97	0.06
P168	1,150	J71	J91	6.0	Ductile Iron	130.0	124.33	1.41
P169	179	J58	J64	6.0	Ductile Iron	130.0	139.25	1.58
P170	557	J24	J118	8.0	Ductile Iron	130.0	-125.26	0.80
P171	217	J17	J20	6.0	Ductile Iron	130.0	-39.91	0.45
P172	709	J17	J23	6.0	Ductile Iron	130.0	80.67	0.92
P173	264	J192	J187	6.0	Ductile Iron	130.0	-4.97	0.06
P174	438	J32	J44	6.0	Ductile Iron	130.0	-121.89	1.38
P175	352	J131	J146	6.0	Ductile Iron	130.0	9.95	0.11
P177	229	J34	J39	6.0	Ductile Iron	130.0	9.94	0.11
P176	1,043	J34	J54	6.0	Ductile Iron	130.0	9.94	0.11
P178	431	J75	J116	8.0	Ductile Iron	130.0	-7.88	0.05
P179	193	J75	J90	6.0	Ductile Iron	130.0	9.95	0.11
P180	460	J130	J144	6.0	Ductile Iron	130.0	29.84	0.34
P181	691	J130	J111	6.0	Ductile Iron	130.0	-20.73	0.24
P182	517	J11	J17	6.0	Ductile Iron	130.0	45.73	0.52
P183	224	J11	J8	6.0	Ductile Iron	130.0	-60.64	0.69
P184	257	J164	J180	8.0	Ductile Iron	130.0	-162.98	1.04
P185	331	J164	J153	8.0	Ductile Iron	130.0	153.03	0.98
P186	505	J2	J6	6.0	Ductile Iron	130.0	-90.47	1.03
P187	176	J10	J9	6.0	Ductile Iron	130.0	-4.97	0.06
P188	691	J6	J18	6.0	Ductile Iron	130.0	-105.38	1.20
P189	173	J15	J14	6.0	Ductile Iron	130.0	-4.97	0.06
P190	626	J3	J4	6.0	Ductile Iron	130.0	-4.97	0.06
P192	259	J108	J109	8.0	Ductile Iron	130.0	90.78	0.58
P191	1,081	J108	J86	8.0	Ductile Iron	130.0	-50.77	0.32
P193	704	J85	J97	8.0	Ductile Iron	130.0	-29.53	0.19
P194	790	J85	J69	6.0	Ductile Iron	130.0	0.58	0.01
P196	162	J102	J96	8.0	Ductile Iron	130.0	-21.67	0.14
P197	733	J102	J104	8.0	Ductile Iron	130.0	-80.35	0.51
P195	690	J102	J114	6.0	Ductile Iron	130.0	62.54	0.71
P198	174	J138	J129	8.0	Ductile Iron	130.0	-12.50	0.08
P199	362	J138	J145	6.0	Ductile Iron	130.0	18.37	0.21
P200	24	J135	H107	8.0	Ductile Iron	130.0	0.00	0.00
P201	575	J175	J136	8.0	Ductile Iron	130.0	-4.97	0.03
P202	33	J136	J135	8.0	Ductile Iron	130.0	4.97	0.03
P203	700	J136	J147	8.0	Ductile Iron	130.0	-14.92	0.10
P205	444	J188	J171	10.0	Ductile Iron	130.0	1.22	0.00
P204	254	J188	J186	8.0	Ductile Iron	130.0	4.97	0.03

FlexTable: Pipe Table (007-16 PeakDayFire.wtg)

Current Time: 0.000 hours

Label	Length (Scaled) (ft)	Start Node	Stop Node	Diameter (in)	Material	Hazen-Williams C	Flow (gpm)	Velocity (ft/s)
P206	490	J7	J12	8.0	Ductile Iron	130.0	-4.97	0.03
P207	315	J40	J48	8.0	Ductile Iron	130.0	-4.97	0.03
P209	65	J31	H18	8.0	Ductile Iron	130.0	0.00	0.00
P208	223	J31	J25	8.0	Ductile Iron	130.0	-4.97	0.03
P211	409	J159	J167	8.0	Ductile Iron	130.0	9.72	0.06
P210	169	J159	J162	8.0	Ductile Iron	130.0	9.95	0.06
P212	170	J25	J27	8.0	Ductile Iron	130.0	-17.23	0.11
P213	443	J50	J58	8.0	Ductile Iron	130.0	271.08	1.73
P214	275	J73	J53	8.0	Ductile Iron	130.0	120.92	0.77
P216	1,070	J107	J147	8.0	Ductile Iron	130.0	-132.34	0.84
P215	338	J107	J110	8.0	Ductile Iron	130.0	-137.67	0.88
P217	400	J84	J73	8.0	Ductile Iron	130.0	125.90	0.80
P218	461	J13	J12	8.0	Ductile Iron	130.0	-4.97	0.03
P220	515	J200	J170	8.0	Ductile Iron	130.0	140.81	0.90
P219	414	J200	J195	10.0	Ductile Iron	130.0	279.02	1.14
P221	539	J170	J142	8.0	Ductile Iron	130.0	135.84	0.87
P222	537	J142	J84	8.0	Ductile Iron	130.0	130.87	0.84
P224	383	J203	J204	8.0	Ductile Iron	130.0	185.38	1.18
P223	232	J203	J202	10.0	Ductile Iron	130.0	429.77	1.76
P225	37	J147	J151	8.0	Ductile Iron	130.0	-152.23	0.97
P226	73	J56	J55	8.0	Ductile Iron	130.0	-4.97	0.03
P227	1,330	J65	J59	6.0	Ductile Iron	130.0	-24.29	0.28
P228	59	H169	J206	6.0	Ductile Iron	130.0	0.00	0.00
P229	75	H155	J188	6.0	Ductile Iron	130.0	0.00	0.00
P230	43	H152	J185	6.0	Ductile Iron	130.0	0.00	0.00
P231	68	H151	J182	6.0	Ductile Iron	130.0	0.00	0.00
P232	28	H150	J183	6.0	Ductile Iron	130.0	0.00	0.00
P233	44	H149	J184	6.0	Ductile Iron	130.0	0.00	0.00
P234	39	H148	J178	6.0	Ductile Iron	130.0	0.00	0.00
P235	49	H147	J179	6.0	Ductile Iron	130.0	0.00	0.00
P236	56	H146	J181	6.0	Ductile Iron	130.0	0.00	0.00
P237	18	H145	J177	6.0	Ductile Iron	130.0	0.00	0.00
P238	31	H142	J175	8.0	Ductile Iron	130.0	0.00	0.00
P239	61	H168	J205	6.0	Ductile Iron	130.0	0.00	0.00
P240	26	H141	J173	6.0	Ductile Iron	130.0	0.00	0.00
P241	27	H137	J168	6.0	Ductile Iron	130.0	0.00	0.00
P242	38	H136	J167	6.0	Ductile Iron	130.0	0.00	0.00
P243	25	H134	J171	6.0	Ductile Iron	130.0	0.00	0.00
P244	23	H131	J163	6.0	Ductile Iron	130.0	0.00	0.00
P245	31	H130	J162	6.0	Ductile Iron	130.0	0.00	0.00
P246	55	H128	J160	6.0	Ductile Iron	130.0	0.00	0.00
P247	34	H127	J156	6.0	Ductile Iron	130.0	0.00	0.00
P248	22	H123	J150	6.0	Ductile Iron	130.0	0.00	0.00
P249	31	H124	J158	6.0	Ductile Iron	130.0	0.00	0.00
P250	29	H166	J201	6.0	Ductile Iron	130.0	0.00	0.00
P251	54	H122	J143	6.0	Ductile Iron	130.0	0.00	0.00
P252	55	H121	J154	6.0	Ductile Iron	130.0	0.00	0.00
P253	61	H119	J151	6.0	Ductile Iron	130.0	0.00	0.00
P254	54	H116	J132	6.0	Ductile Iron	130.0	0.00	0.00
P255	55	H111	J140	6.0	Ductile Iron	130.0	0.00	0.00
P256	57	H103	J127	6.0	Ductile Iron	130.0	0.00	0.00
P257	54	H102	J122	6.0	Ductile Iron	130.0	0.00	0.00

FlexTable: Pipe Table (007-16 PeakDayFire.wtg)

Current Time: 0.000 hours

Label	Length (Scaled) (ft)	Start Node	Stop Node	Diameter (in)	Material	Hazen-Williams C	Flow (gpm)	Velocity (ft/s)
P258	46	H90	J114	6.0	Ductile Iron	130.0	0.00	0.00
P259	64	H67	J92	6.0	Ductile Iron	130.0	0.00	0.00
P260	71	H164	J198	6.0	Ductile Iron	130.0	0.00	0.00
P261	51	H56	J80	6.0	Ductile Iron	130.0	0.00	0.00
P262	57	H48	J68	6.0	Ductile Iron	130.0	0.00	0.00
P263	79	H47	J70	6.0	Ductile Iron	130.0	0.00	0.00
P264	30	H46	J66	6.0	Ductile Iron	130.0	0.00	0.00
P265	35	H40	J57	6.0	Ductile Iron	130.0	0.00	0.00
P266	42	H36	J52	6.0	Ductile Iron	130.0	0.00	0.00
P267	60	H35	J51	8.0	Ductile Iron	130.0	0.00	0.00
P268	65	H34	J48	6.0	Ductile Iron	130.0	0.00	0.00
P269	52	H33	J47	6.0	Ductile Iron	130.0	0.00	0.00
P270	58	H28	J42	6.0	Ductile Iron	130.0	0.00	0.00
P271	81	H162	J194	6.0	Ductile Iron	130.0	0.00	0.00
P272	59	H26	J40	8.0	Ductile Iron	130.0	0.00	0.00
P273	62	H25	J38	6.0	Ductile Iron	130.0	0.00	0.00
P274	55	H22	J35	6.0	Ductile Iron	130.0	0.00	0.00
P275	53	H17	J28	6.0	Ductile Iron	130.0	0.00	0.00
P276	26	H13	J21	6.0	Ductile Iron	130.0	0.00	0.00
P277	47	H10	J19	6.0	Ductile Iron	130.0	0.00	0.00
P278	35	H8	J16	6.0	Ductile Iron	130.0	0.00	0.00
P279	61	H6	J12	6.0	Ductile Iron	130.0	0.00	0.00
P280	55	H3	J7	8.0	Ductile Iron	130.0	0.00	0.00
P281	23	H159	J191	6.0	Ductile Iron	130.0	0.00	0.00
P282	47	H69	J78	6.0	Ductile Iron	130.0	0.00	0.00
P283	63	H113	J144	6.0	Ductile Iron	130.0	0.00	0.00
P284	72	H126	J157	6.0	Ductile Iron	130.0	0.00	0.00
P285	53	H125	J155	6.0	Ductile Iron	130.0	0.00	0.00
P286	34	H132	J165	6.0	Ductile Iron	130.0	0.00	0.00
P287	64	H140	J172	6.0	Ductile Iron	130.0	0.00	0.00
P288	53	H135	J169	6.0	Ductile Iron	130.0	0.00	0.00
P289	40	H60	J88	6.0	Ductile Iron	130.0	0.00	0.00
P290	40	H83	J103	6.0	Ductile Iron	130.0	0.00	0.00
P291	66	H89	J112	6.0	Ductile Iron	130.0	0.00	0.00
P292	59	H158	J190	6.0	Ductile Iron	130.0	0.00	0.00
P293	42	H104	J123	6.0	Ductile Iron	130.0	0.00	0.00
P294	39	H138	J166	6.0	Ductile Iron	130.0	0.00	0.00
P295	56	H51	J73	6.0	Ductile Iron	130.0	0.00	0.00
P296	54	H66	J84	6.0	Ductile Iron	130.0	0.00	0.00
P297	79	H120	J142	6.0	Ductile Iron	130.0	0.00	0.00
P298	55	H144	J170	6.0	Ductile Iron	130.0	0.00	0.00
P299	24	H157	J189	6.0	Ductile Iron	130.0	0.00	0.00
P300	33	H156	J186	8.0	Ductile Iron	130.0	0.00	0.00
P301	41	H133	J161	6.0	Ductile Iron	130.0	0.00	0.00
P302	53	H68	J93	6.0	Ductile Iron	130.0	0.00	0.00
P303	431	H63	J79	6.0	Ductile Iron	130.0	0.00	0.00
P304	72	H57	J79	6.0	Ductile Iron	130.0	0.00	0.00
P305	52	H62	J87	6.0	Ductile Iron	130.0	0.00	0.00
P306	49	H59	J82	6.0	Ductile Iron	130.0	0.00	0.00
P307	58	H64	J89	6.0	Ductile Iron	130.0	0.00	0.00
P308	47	H76	J96	6.0	Ductile Iron	130.0	0.00	0.00
P309	63	H86	J116	6.0	Ductile Iron	130.0	0.00	0.00

FlexTable: Pipe Table (007-16 PeakDayFire.wtg)

Current Time: 0.000 hours

Label	Length (Scaled) (ft)	Start Node	Stop Node	Diameter (in)	Material	Hazen-Williams C	Flow (gpm)	Velocity (ft/s)
P310	36	H75	J95	6.0	Ductile Iron	130.0	0.00	0.00
P311	48	H70	J90	6.0	Ductile Iron	130.0	0.00	0.00
P312	30	H143	J176	6.0	Ductile Iron	130.0	0.00	0.00
P313	78	H11	J26	6.0	Ductile Iron	130.0	0.00	0.00
P314	54	H21	J30	6.0	Ductile Iron	130.0	0.00	0.00
P315	74	H29	J41	6.0	Ductile Iron	130.0	0.00	0.00
P316	57	H15	J29	6.0	Ductile Iron	130.0	0.00	0.00
P317	71	H94	J113	6.0	Ductile Iron	130.0	0.00	0.00
P318	59	H37	J63	6.0	Ductile Iron	130.0	0.00	0.00
P319	91	H20	J36	6.0	Ductile Iron	130.0	0.00	0.00
P320	53	H23	J37	6.0	Ductile Iron	130.0	0.00	0.00
P321	52	H32	J46	6.0	Ductile Iron	130.0	0.00	0.00
P322	82	H39	J53	6.0	Ductile Iron	130.0	0.00	0.00
P323	22	H114	J146	6.0	Ductile Iron	130.0	0.00	0.00
P324	66	H45	J61	6.0	Ductile Iron	130.0	0.00	0.00
P325	75	H52	J76	6.0	Ductile Iron	130.0	0.00	0.00
P326	56	H72	J101	6.0	Ductile Iron	130.0	0.00	0.00
P327	46	H100	J128	6.0	Ductile Iron	130.0	0.00	0.00
P328	59	H139	J174	6.0	Ductile Iron	130.0	0.00	0.00
P329	64	H153	J187	6.0	Ductile Iron	130.0	0.00	0.00
P330	85	H154	J193	6.0	Ductile Iron	130.0	0.00	0.00
P331	41	H165	J199	6.0	Ductile Iron	130.0	0.00	0.00
P332	82	H167	J204	6.0	Ductile Iron	130.0	0.00	0.00
P333	200	H71	J97	6.0	Ductile Iron	130.0	0.00	0.00
P334	24	H97	J124	6.0	Ductile Iron	130.0	0.00	0.00
P335	68	H74	J97	6.0	Ductile Iron	130.0	0.00	0.00
P336	74	H163	J202	6.0	Ductile Iron	130.0	0.00	0.00
P337	59	H160	J195	6.0	Ductile Iron	130.0	0.00	0.00
P338	61	H161	J196	6.0	Ductile Iron	130.0	0.00	0.00
P339	79	H129	J164	6.0	Ductile Iron	130.0	0.00	0.00
P340	62	H110	J153	6.0	Ductile Iron	130.0	0.00	0.00
P341	53	H101	J118	6.0	Ductile Iron	130.0	0.00	0.00
P342	85	H19	J22	6.0	Ductile Iron	130.0	0.00	0.00
P343	53	H9	J18	6.0	Ductile Iron	130.0	0.00	0.00
P344	53	H5	J9	6.0	Ductile Iron	130.0	0.00	0.00
P345	29	H95	J120	6.0	Ductile Iron	130.0	0.00	0.00
P346	84	H1	J1	6.0	Ductile Iron	130.0	0.00	0.00
P347	74	H2	J4	6.0	Ductile Iron	130.0	0.00	0.00
P348	85	H4	J8	6.0	Ductile Iron	130.0	0.00	0.00
P349	75	H7	J14	6.0	Ductile Iron	130.0	0.00	0.00
P350	63	H49	J72	6.0	Ductile Iron	130.0	0.00	0.00
P351	84	H43	J64	6.0	Ductile Iron	130.0	0.00	0.00
P352	87	H31	J44	6.0	Ductile Iron	130.0	0.00	0.00
P353	53	H12	J20	6.0	Ductile Iron	130.0	0.00	0.00
P354	70	H14	J23	6.0	Ductile Iron	130.0	0.00	0.00
P355	69	H24	J43	6.0	Ductile Iron	130.0	0.00	0.00
P356	33	H84	J110	6.0	Ductile Iron	130.0	0.00	0.00
P357	59	H41	J54	6.0	Ductile Iron	130.0	0.00	0.00
P358	53	H27	J39	6.0	Ductile Iron	130.0	0.00	0.00
P359	73	H30	J49	6.0	Ductile Iron	130.0	0.00	0.00
P360	60	H44	J67	6.0	Ductile Iron	130.0	0.00	0.00
P361	64	H115	J145	6.0	Ductile Iron	130.0	0.00	0.00

FlexTable: Pipe Table (007-16 PeakDayFire.wtg)

Current Time: 0.000 hours

Label	Length (Scaled) (ft)	Start Node	Stop Node	Diameter (in)	Material	Hazen-Williams C	Flow (gpm)	Velocity (ft/s)
P362	79	H118	J148	6.0	Ductile Iron	130.0	0.00	0.00
P363	67	H109	J134	6.0	Ductile Iron	130.0	0.00	0.00
P364	72	H105	J139	6.0	Ductile Iron	130.0	0.00	0.00
P365	71	H112	J141	6.0	Ductile Iron	130.0	0.00	0.00
P366	72	H92	J119	6.0	Ductile Iron	130.0	0.00	0.00
P367	36	H82	J105	6.0	Ductile Iron	130.0	0.00	0.00
P368	69	H87	J115	6.0	Ductile Iron	130.0	0.00	0.00
P369	70	H91	J117	6.0	Ductile Iron	130.0	0.00	0.00
P370	35	H38	J55	6.0	Ductile Iron	130.0	0.00	0.00
P371	37	H42	J60	6.0	Ductile Iron	130.0	0.00	0.00
P372	40	H50	J69	6.0	Ductile Iron	130.0	0.00	0.00
P373	73	H55	J81	6.0	Ductile Iron	130.0	0.00	0.00
P374	73	H61	J86	6.0	Ductile Iron	130.0	0.00	0.00
P375	72	H99	J129	6.0	Ductile Iron	130.0	0.00	0.00
P376	78	H53	J77	6.0	Ductile Iron	130.0	0.00	0.00
P377	95	H54	J74	6.0	Ductile Iron	130.0	0.00	0.00
P378	35	H81	J104	6.0	Ductile Iron	130.0	0.00	0.00
P379	53	H58	J83	6.0	Ductile Iron	130.0	0.00	0.00
P380	82	H77	J100	6.0	Ductile Iron	130.0	0.00	0.00
P381	69	H65	J91	6.0	Ductile Iron	130.0	0.00	0.00
P382	74	H73	J94	6.0	Ductile Iron	130.0	0.00	0.00
P383	70	H78	J99	6.0	Ductile Iron	130.0	0.00	0.00
P384	71	H79	J98	6.0	Ductile Iron	130.0	0.00	0.00
P385	89	H80	J106	6.0	Ductile Iron	130.0	0.00	0.00
P386	84	H85	J109	6.0	Ductile Iron	130.0	0.00	0.00
P387	53	H93	J121	6.0	Ductile Iron	130.0	0.00	0.00
P388	55	H96	J125	6.0	Ductile Iron	130.0	0.00	0.00
P389	45	H117	J152	6.0	Ductile Iron	130.0	0.00	0.00
P390	53	H106	J137	6.0	Ductile Iron	130.0	0.00	0.00
P391	53	H98	J126	6.0	Ductile Iron	130.0	0.00	0.00
P392	42	H16	J27	6.0	Ductile Iron	130.0	0.00	0.00
P393	221	J153	J149	8.0	Ductile Iron	130.0	148.06	0.95
P394	686	J98	J99	6.0	Ductile Iron	130.0	-35.65	0.40
P395	363	J199	J193	8.0	Ductile Iron	130.0	175.44	1.12
P396	679	J99	J94	6.0	Ductile Iron	130.0	-40.63	0.46

FlexTable: Tank Table (007-16 PeakDayFire.wtg)

Current Time: 0.000 hours

ID	Label	Elevation (Base) (ft)	Elevation (Minimum) (ft)	Elevation (Initial) (ft)	Elevation (Maximum) (ft)	Flow (Out net) (gpm)
85	NORTHRIDGE TANK	4,800.00	4,800.00	4,800.10	4,820.00	399.31
109	PINION HILLS TANK	4,800.00	4,800.00	4,800.10	4,820.00	620.12

Appendix B. Master Drainage Plan

Hydrology Study

Master Drainage Plan

Dammeron Valley, Utah

May 2019

Table of Contents

Section 1	Introduction	1
A.	Purpose	1
B.	Scope	2
C.	Existing Conditions	2
D.	Proposed Subdivisions	3
Section 2	Methodology	5
A.	Software	5
B.	Sub-Basin Area	5
C.	SCS Curve Numbers	5
D.	Time of Concentration	6
E.	Precipitation	6
F.	Time Distribution of Rainfall	6
Section 3	Hydrologic Analysis	7
A.	Existing Conditions	7
1.	Model Input – Existing Conditions	7
2.	Flows – Existing Conditions	7
3.	Culvert Capacities – Existing Conditions	8
4.	Existing Culverts – Recommendations	9
5.	Future Drainage – Recommendations	10
B.	Proposed Subdivisions	10
1.	Model Input – Proposed with Subdivisions	10
2.	Flows – Proposed with Subdivisions	11
3.	New Detention – Proposed with Subdivisions	12
4.	New Channels – Proposed with Subdivisions	13
5.	New Culverts – Proposed with Subdivisions	14
Section 4	Conclusions	16

Appendix A - Figures

- Figure 1 – Hydrologic Study Area
- Figure 2 – FEMA Exhibit
- Figure 3 – Soil Exhibit
- Figure 4 – Existing Hydrology Exhibit
- Figure 5 – Existing Culverts
- Figure 6 – Proposed Storm Drain Routing
- Figure 7 – Proposed Hydrology Exhibit
- Figure 8 – Proposed Culverts
- Figure 9 – Wuchim Subdivision Drainage Plan
- Figure 10 – White Knolls Subdivision Drainage Plan

Figure 11 – Juniper Ridge Subdivision Drainage Plan
Figure 12 – High Ground Subdivision Drainage Plan
Figure 13 – East Meadows Subdivision Drainage Plan

Appendix B - Tables

Table B-1 – SCS Curve Numbers
Table B-2 – Composite Curve Number Calculations
Table B-3 – Time of Concentration Calculations Pre-Development
Table B-4 – Time of Concentration Calculations Post-Development
Table B-5 – Precipitation Values (NOAA)

Appendix C – Channel and Culvert Calculator Reports

Channel Reports
Culvert Reports

Appendix D - HEC1 Output

Existing Conditions
Proposed Conditions

Section 1 Introduction

This drainage report is prepared to address storm water runoff as part of the 2019 Dammeron Valley Master Plan (Master Plan).

Dammeron Valley is a small community located approximately 15 miles north of St. George, Utah on State Route 18. Development of the Dammeron Valley began in the 1970's with the subdivision of properties into ranchette type lots. Gradually as development continued, lot sizes were reduced for smaller residential style uses. There are currently approximately 450 platted parcels ranging in size from 5-acre to ½ acre lots. Infrastructure for culinary water, wastewater, power, natural gas, roads, and storm water were extended as development advanced.

A large development of 5 separate subdivisions consisting of a total of approximately 224 residential lots is currently proposed within the Dammeron Valley. County officials have required that adequate infrastructure be provided to support the existing and proposed development within the valley, including storm water facilities.

Washington County has directed that a Master Plan be prepared that will provide a logical and systematic basis for construction of new infrastructure facilities and improvement of existing facilities to protect the welfare and safety of the valley residents.

On the afternoon of July 11, 2018, a major rainstorm occurred at Dammeron Valley, with rainfall estimated at 2.5 inches to 3.5 inches at various locations within a two hour period. The NOAA Atlas 14 Point Precipitation Frequency website suggests that event to be between a 500 year and 1000 year occurrence. Widespread flooding occurred within the community with an estimated 300 residences sustaining some kind of damage (St. George Spectrum, July 13, 2018). Following the flooding, Washington County constructed drainage improvements, including ditches, channels, and culverts, to direct runoff within the development away from the residential structures. It also became evident, based on the large volume of runoff from the foothills east of the community, that additional flood control facilities should be developed where the drainage enters the developed area.

A. Purpose

This study will serve as a common and uniform guide document for existing and future hydrologic facilities in the Dammeron Valley.

This report evaluates drainage within the existing and proposed developments. The study defines the locations and sizes of drainage facilities that will be constructed in conjunction with the proposed subdivisions. The study also proposes alignment and facilities within the existing developed areas of the valley, although it is expected that those improvements will be gradually

undertaken as future development increases runoff or as problems become severe enough to warrant action.

The hydrologic study area is shown in **Figure 1, Appendix A**.

Dammeron Valley is located within the limits of FEMA map number 49053C0525G, dated April 2, 2009, and is located outside of the 0.2% annual chance floodplain, as shown in **Figure 2, Appendix A**. No flood map is available for the eastern portion of the watershed, but due to the elevation and topography of the area, it is assumed no flood hazards are within that area.

B. Scope

This study includes the following tasks to define general parameters for designing drainage culverts, channels, retention basins, and hydraulic structures for the proposed subdivisions and for future drainage improvements:

- Identify drainage basins and sub-basins
- Determine 3-hour storm precipitation for rainfall 10-yr, and 100-yr rainfall intensity for each sub-basin
- Determine hydrologic characteristics of drainage sub-basins
- Quantify flows from each sub-basin for the 10-year and 100- year 3-hour storm

The study also includes recommendations for short and long term future drainage improvements:

- Size culverts and channels for the proposed subdivisions
- Recommend storm water routing and upsizing for culverts across State Highway 18, to efficiently handle high runoff volumes and reduce impacts on existing development.
- Recommend future routing of drainage and culverts within the existing development

C. Existing Conditions

As the Dammeron Valley developed, roads and other utilities were extended as development advanced. However, few provisions were made to handle storm water. Storm runoff was carried in side ditches along roadways and depressed crossings were made to carry water across the roadways as needed. Several homes were constructed in the natural drainage ways, and runoff was diverted along lot lines to the roadways. Until the flood in July 2018 there are few culverts and defined drainage ways in the developed areas of Dammeron Valley. Since the flood, Washington County has worked to improve drainage routing within the developed area.

Existing development in Dammeron Valley consists primarily of residential lots varying in size from approximately ½ acre to 5 acres. Limited commercial development exists along State Highway 18. Lots in the western portion of the valley are located on sloping mountainous terrain with forested land use, and those on the valley floor are gently sloping with residential and agricultural land uses. Roadways within the developed areas are asphalt paved.

The Dammeron Valley generally slopes from east to west, with approximately 60% of the drainage area undeveloped on the high east side. Runoff from the east side is collected to washes which carry the water toward the developed portions of the valley. Existing drainage basins are shown on **Figure 4, Appendix A**.

Four of the washes cross the developed area where the runoff is routed between lots and along roadways. Some culverts have been installed where drainage crosses roadways. Existing drainage routes within the developed areas, including those recently improved by Washington County, are shown of **Figure 5, Appendix A**.

State Highway 18 bisects the valley and separates the higher east area from the lower west area. Seventeen culverts have been identified that carry runoff under the highway within the Dammeron Valley study area. During heavy storm events, runoff has been noted to backup and pond against the highway, indicating that several of the existing culverts are not adequate or are performing poorly due to plugging.

Washington County embraces the use of State Highway 18 to divert high runoff from the east foothills to existing drainages north and south of the developed area, which, in effect, helps protect the residential structures west of the highway. During minor events, runoff can cross the highway and can be handled in existing ditches.

This report estimates peak discharges from a design storm (3-hour duration 100-year frequency) and compares those flows against the computed capacity of the existing culverts across the highway. Existing culverts are shown on **Figure 6, Appendix A**.

West of the highway, most of the terrain is nearly flat with considerable developed area. Routing of runoff is along roadways and between lots. Several culverts have been installed where drainage crosses roadways. As the storm water flows westerly out of the developed area, the drainage washes become more defined.

The southwest corner of the study area is steep terrain with mountain type residential lots. Storm runoff is directed along roadways and into small washes. No other drainage structures exist. Runoff collects to the washes on the western valley floor.

D. Proposed Subdivisions

Dammeron Valley has five major future subdivisions currently proposed. The subdivisions include a total of approximately 224 residential lots located on moderately sloping terrain and commercial developments adjacent to State Highway 18.

The proposed drainage routing and facilities presented in this study for the subdivisions are based on preliminary layout of lots and roadways and are subject to change. The proposed routing is considered the best practicable option at the time of the study preparation. Final routing of storm runoff will be designed based upon finished topography that may present other options for routing the runoff.

Drainage originating within the future subdivisions is proposed to generally flow in roadway borrow ditches and cross intersections in culverts, and to be routed as quickly as possible to existing drainage channels.

Drainage originating outside of the White Knolls, High Ground and East Meadows subdivisions is proposed to be routed in channels around the exterior of the subdivisions.

The Juniper Ridge subdivision will have to route outside drainage through the development because of significant terrain limitations. Off-site retention of runoff above the subdivision is proposed to reduce flow volumes to manageable levels.

The Wuchim Subdivision has two existing primary watercourses pass through it. Channeling flow around the subdivision is impractical because of large flow volume and terrain limitations. Two box culverts and other large circular culverts are proposed for roadway crossings of within the subdivision.

Future development beyond the proposed subdivisions should be handled on a case-by-case basis for drainage improvements, but should fit into the general recommendations herein to preserve drainage ways and provide means to tie into a possible future piped storm drain system.

Proposed subdivisions and drainage conditions are shown on **Figures 9 through 13, Appendix A.**

Section 2 Methodology

A. Software

The *HEC-1 Flood Hydrograph Package* developed by the United States Army Corps of Engineers (June 1, 1988 revision) was used to determine the flows for this study. The HEC-1 model uses the following parameters to model the peak runoff values for each sub-basin:

- Sub-Basin Area
- SCS Curve Number
- SCS Lag Time
- Rainfall Depth
- Time Distribution of Rainfall

B. Sub-Basin Area

Dammeron Valley is comprised of a 1,466 acre watershed on the south side of the valley and a 6,547 acre watershed on the north side. Drainage generally flows from east to west in several sub-basins, following natural terrain, within the watersheds. The two watersheds eventually meet outside the study area, then drain into the Santa Clara River approximately 6.5 miles to the west.

The sub-basins and flow paths for the existing and proposed conditions with the five new subdivisions were delineated based on existing and proposed topography, and are shown in **Figure 4** and **Figure 7, Appendix A**, respectively. For the existing conditions, the site was divided into 19 sub-basins. For the proposed development, the site was divided into 17 sub-basins.

C. SCS Curve Numbers

Soils within a drainage basin affect the amount of rainfall that will infiltrate or run off and can vary significantly. The USDA Natural Resource Conservation Service has developed Runoff Curve Numbers to estimate the amount of runoff from various soil types. The curve numbers are based on soil characteristics including their hydrologic soil group (infiltration capacity), cover type, and cover condition.

Hydrologic soil groups in the Dammeron Valley were obtained from the Soil Survey of Washington County Area, Utah, published by the U.S. Soil Conservation Service. The watersheds contain many soil types, most of which are of the hydrologic soil group D, as shown in **Figure 3, Appendix A**.

The SCS Curve Numbers used in this drainage study are from Table 2-2a through 2-2d of NRCS Technical Release 55 (*Urban Hydrology for Small Watersheds*, June 1986), and are shown in **Table B-1, Appendix B**. In sub-basins where two or more land cover conditions are present, an area-weighted curve number was calculated. The calculation for each sub-basin's curve number is shown in **Table B-2, Appendix B**.

D. Time of Concentration

The time of concentration for each sub-basin was calculated using equations from the NRCS *Urban Hydrology for Small Watersheds* manual. The calculations were iteratively calibrated with flows generated in the HEC-1 model and are summarized in **Table B-3, Appendix B** for existing conditions and **Table B-4, Appendix B** for proposed conditions.

E. Precipitation

Precipitation values for a 3-hour duration storm with average recurrence intervals of 10 years and 100 years were determined for each sub-basin using the National Oceanic and Atmospheric Administration Atlas 14 Precipitation Frequency Data Server, and are shown in **Table B-5, Appendix B**. The average precipitation values for the 100-year and 10-year events for the study area are 2.13 and 1.29 inches, respectively, which will be used globally for precipitation in all sub-basins in the HEC-1 computations.

F. Time Distribution of Rainfall

This study uses the Farmer-Fletcher rainfall distribution for the 3-hour 100-year event, which is in accordance with the *City of St. George Drainage Manual*.

Section 3 Hydrologic Analysis

A. Existing Conditions

1. Model Input – Existing Conditions

The precipitation value for the 3-hour 100-year storm is globally input as 2.13 inches for all sub-basins in the computer model. Similarly, the precipitation value of 1.29 inches (0.61 ratio) is used for all sub-basins for the 3-hour 10-year storm. Both storms are distributed according to Farmer-Fletcher criterion.

Existing drainage sub-basins are shown on **Figure 4, Appendix A**, and the hydrologic input for individual drainage sub-basins is shown in **Table A**.

Table A: HEC-1 Input Data – Existing Conditions

BASIN	AREA (sq.mi.)	CURVE NUMBER	LAG TIME (hr)	ROUTING					
				LENGTH (ft)	SLOPE (ft/ft)	'n'	CHANNEL		
							H:V	BTM	H:V
BE1	0.19995	77	0.3357	8972	0.010	0.040	7	0	7
BE2	0.03036	71	0.2634	8575	0.010	0.040	7	0	7
BE3	0.01125	77	0.3623	8234	0.010	0.040	7	0	7
BE4	0.00984	77	0.1202	7937	0.010	0.040	7	0	7
BE5	0.02122	77	0.1388	7260	0.010	0.040	7	0	7
BE6	0.95091	73	0.3672	6111	0.011	0.040	7	0	7
BE7	4.0780	75	1.0903	6265	0.010	0.040	7	0	7
BE8	0.53884	74	0.3762	7515	0.010	0.040	7	0	7
BE9	0.11647	76	0.3915	8004	0.009	0.040	7	0	7
BE10	0.04728	76	0.1965	9322	0.010	0.040	7	0	7
BE11	0.03667	76	0.1875	9819	0.011	0.040	7	0	7
BE12	0.02189	77	0.1521	10659	0.012	0.040	7	0	7
BE13	0.03981	77	0.1587	11067	0.012	0.040	7	0	7
BE14	1.7930	74	1.0218	11670	0.012	0.040	7	0	7
BE15	0.01003	77	0.2165	3253	0.020	0.040	7	0	7
BE16	0.03117	77	0.3101	3067	0.022	0.040	7	0	7
BE17	2.0538	77	1.0868	2983	0.024	0.040	7	0	7
OE1	2.3349	76	0.7020						
OE2	0.19600	76	0.3531						

2. Flows – Existing Conditions

The peak flows calculated in the HEC-1 analysis are summarized in **Table B** and shown on **Figure 4, Appendix A**. The computer simulation output from the HEC-1 model is contained in **Appendix D**. Each sub-basin represents a point where water passes under State Highway 18 through an existing culvert.

Table B: Peak Flows Summary – Existing Conditions

BASIN	CURVE NUMBER	AREA (acres)	100 YR. RUNOFF (cfs)	10 YR. RUNOFF (cfs)
Existing Basins				
BE1	77	127.97	78	18
BE2	71	19.43	8	1
BE3	77	7.20	4	1
BE4	77	6.30	6	1
BE5	77	13.58	12	3
BE6	73	608.58	250	41
BE7	75	2609.95	638	133
BE8	74	344.86	153	28
BE9	76	74.54	39	8
BE10	76	30.26	22	4
BE11	76	23.47	17	3
BE12	77	14.01	12	3
BE13	77	25.48	21	5
BE14	74	1147.50	346	83
OE1	76	1494.32	545	121
Total Northern Watershed		6547.45	1613	325
BE15	77	6.42	5	1
BE16	77	19.61	13	3
BE17	77	1314.42	378	90
OE2	76	125.44	69	14
Total Southern Watershed		1465.89	394	95

3. Culvert Capacities – Existing Conditions

Existing culverts crossing State Highway 18 are shown on **Figure 6, Appendix A**. Pipe lengths and invert elevations were determined by field measurements, and field observations were made of inlet and outlet conditions.

The design capacity of existing culverts has been computed using Bentley CulvertMaster software, and the calculation reports are contained in **Appendix C. Table C** summarizes the results of the calculations and compares the design capacity of each culvert with the peak flow from a 3-hour 100-year storm. Peak flows greater than the culvert capacity are noted in red

It must be noted that the design capacities shown in the table *do not* consider adverse inlet and outlet conditions caused by debris, soil deposition, or pipe damage. Field observation of each pipe’s outlet condition is noted in **Figure 6, Appendix A. Table C** notes the pipe outlet opening dimension and those pipes with a reduced dimension, usually due to soil deposition, are shown in boldface black.

Table C: CulvertMaster Data

BASIN	NUMBER OF CULVERTS	TYPE	SIZE (ft)	DESIGN CULVERT CAPACITY (cfs)	100-YR RUNOFF (cfs)	OUTLET CLEARANCE (ft)
Existing Basins						
BE1	1	Circular	4	101	78	2.5
BE2	1	Circular	2	22	8	1.5
BE3	1	Circular	2	25	4	2
BE4	1	Circular	2	22	6	2
BE5	1	Circular	2	24	12	1.5
BE6	2	Circular	3	135	250	3
BE7	2	Circular	3	124	638	3
BE8	1	Circular	3	59	153	2.3
BE9	1	Circular	3	57	39	2.3
BE10	1	Circular	2	26	22	0.5
BE11	1	Circular	2	29	17	0
BE12	1	Circular	2	17	12	2
BE13	1	Circular	2	27	21	2
BE14	1	Circular	5	190	346	5
BE15	1	Circular	2	20	5	1.6
BE16	1	Circular	2	24	13	1.4
BE17	1	Circular	6	432	378	6

4. Existing Culverts – Recommendations

As shown in **Table C** there are four culverts with capacity less than the peak flow of the design storm.

Consultation with Washington County indicates that major storm water should be routed to Culvert BE6 where it can enter a large natural drainage and reduce potential damage on the west side of SR-18. Specifically, the large flows developed in Basins BE7 and BE8 are recommended to pass under the highway at the BE6 culvert location. Flood retention higher in Drainage Basins BE6, BE7, and BE8 should be considered to mitigate flow to the culverts.

It is recommended that Culverts BE7 and BE8 remain in current condition, and that Culvert BE6 be replaced (UDOT or County funded) with a large box culvert capable of passing the combined flow of the three drainages. The drainage channel along the east side of SR-18 should be sized, along with associated side culverts, to handle the routed flow. Sizing of facilities should be in accordance with UDOT practices.

It is recommended that water passing through the existing culverts be routed in a channel along the west edge of the highway to natural drainages, or otherwise handled in the drainage system within the development.

Washington County also indicates that major storm flow thorough Culvert BE14 would threaten structures on the west side of SR-18. It is recommended that the culvert remain in current condition, and that flood retention higher in Drainage Basin DE14 be considered to mitigate flow to the culvert.

Table C also shows nine culverts to be partially or fully plugged, which exacerbates ponding against the roadway. It is recommended that the plugged culverts be cleaned out to allow proper flow and that they be regularly maintained. The outlets of the plugged culverts may need some grading as well to allow escape of the tailwater.

5. Future Drainage – Recommendations

Drainage within the existing developed areas of Dammeron Valley has evolved without comprehensive planning. Routing of runoff along lot boundaries and within roadways presents flooding problems during high intensity rainfall events (July 11, 2018 storm). Washington County has made improvements following the 2018 event, and it is anticipated that, as development continues and improvements are made on existing vacant lots, flooding frequency and magnitude will increase. Planning for future infrastructure improvements to route runoff and to eventually pipe it within public rights-of-way should be undertaken to assure the protection and safety of property and residents of the valleys.

It is recommended that further study of flood control detention basins be constructed on major washes east of the Dammeron Valley developed area, as shown on **Figure 7, Appendix A**. Design of the flood control basins is beyond the scope of this report.

B. Proposed Subdivisions

1. Model Input – Proposed with Subdivisions

Rainfall data is globally input for all sub-basins in the computer model the same as for existing conditions.

The proposed drainage routing and facilities are based on preliminary layout of lots and roadways within the five proposed subdivisions and are subject to change based upon final designs. Sub-basins for proposed conditions are shown on **Figure 7, Appendix A**, and the hydrologic input for individual proposed drainage sub-basins is shown in **Table E**.

For the purpose of consistency within the report, the sub-basin numbering utilizes, to the extent practicable, the same numbers as listed in **Table A** and shown on **Figure 4, Appendix A**, except as described below:

BP1 combines sub-basins BE1, BE2, BE3, BE4, BE5, and a north portion of EO1

BP10 includes sub-basins BE10 and parts of BE11 and BE12

BP11 includes parts of BE11 and BE12

BP18, BP19, and BP20 are added to size culverts within the proposed Wuchim Subdivision

Table E: HEC-1 Input Data – Proposed with Subdivisions

BASIN	AREA (sq.mi.)	CURVE NUMBER	LAG TIME (hr)	ROUTING					
				LENGTH (ft)	SLOPE (ft/ft)	'n'	CHANNEL		
							H:V	BTM	H:V
BP1	0.40017	76	0.3820	3268	0.008	0.040	7	0	7
BP6	0.95091	73	0.3672	2925	0.008	0.040	7	0	7
BP7	4.0780	75	1.0903	2652	0.008	0.040	7	0	7
BP8	0.53884	73	0.3817	2933	0.007	0.040	7	0	7
BP9	0.11647	76	0.3915	4372	0.007	0.040	7	0	7
BP10	0.09392	80	0.1186	5785	0.009	0.040	7	0	7
BP11	0.01381	77	0.0994	8374	0.018	0.040	7	0	7
BP13	0.03731	77	0.0160	11025	0.012	0.040	7	0	7
BP14	1.7930	75	1.0218	11777	0.012	0.040	7	0	7
BP15	0.01003	77	0.0190	3253	0.017	0.040	7	0	7
BP16	0.03117	77	0.3101	3067	0.022	0.040	7	0	7
BP17	2.0538	77	1.0868	2983	0.022	0.040	7	0	7
BP18	0.28747	77	0.1175	3285	0.006	0.040	7	0	7
BP19	0.07483	77	0.5848	2900	0.006	0.040	7	0	7
BP20	0.04486	78	0.1980	5419	0.008	0.040	7	0	7
OP1	1.9726	76	0.7568						
OP2	0.1600	78	0.3491						

2. Flows – Proposed with Subdivisions

The peak flows calculated in the HEC-1 analysis are summarized in **Table F**. The computer simulation output from the HEC-1 model is contained in **Appendix D**. Each sub-basin represents a point where water passes under State Highway 18 through an existing culvert or through a new proposed culvert.

Table F: Peak Flows Summary – Proposed with Subdivisions

BASIN	CURVE NUMBER	AREA (acres)	100 YR. RUNOFF (cfs)	10 YR. RUNOFF (cfs)
Future Basins				
BP1	76	256.11	134	28
BP6	73	608.58	250	41
BP7	75	2609.95	638	133
BP8	75	344.86	153	28
Combined BP6 + BP7 + BP8 for Culvert under SR-18 ¹		3563.39	949	112
BP20	79	28.71	24	6
Combined BP20 + BP8 for Culvert ²		373.57	83	34
BP19	78	47.89	21	5
BP9	77	74.54	39	8
BP10	81	60.11	71	18
BP11	77	8.84	9	2

BP13	77	23.88	30	6
BP14	76	1147.50	346	83
BP18	77	183.98	170	36
OP1	76	1262.45	438	97
Total Northern Watershed		6547.45	1742	352
BP15	77	6.42	5	1
BP16	77	19.61	13	3
BP17	77	1314.42	378	90
OP2	78	125.44	69	14
Total Southern Watershed		1465.89	394	95

NOTES

¹ For the BP6 culvert capacity, it is assumed that the culverts at BP7 and BP8 operate at 50% of their capacity as shown in Table C.

² For the BP20 culvert capacity, it is assumed that culvert BP8 operates at full capacity as shown in Table C.

For the 3-hour 100-year storm, total peak flow from the northern watershed increased from 1613 cubic feet per second for existing conditions to 1742 cubic feet per second for proposed conditions. Total peak flow from the southern watershed is unchanged.

Similarly, for the 3-hour 10-year storm, total peak flow from the northern watershed increased from 325 cubic feet per second to 352 cubic feet per second. Total peak flow from the southern watershed is unchanged.

3. New Detention – Proposed with Subdivisions

Peak flow from the eastern portion (176 acres) of Sub-Basin BP6 during the design storm is estimated to be 72 cubic feet per second, which is routed through the Juniper Ridge Subdivision. This flow would require a large channel and culverts to pass that volume of water through the subdivision. Additionally, Washington County has indicated that there is limited flow capacity along Wughim Road, below the subdivision.

It is proposed that a flood detention basin be constructed along the east boundary of the Juniper Ridge Subdivision to reduce peak flow to 20 cubic feet per second. Design of the detention basin is beyond the scope of this report, but should be included in the design of the subdivision's drainage system.

4. New Channels – Proposed with Subdivisions

It is proposed to construct channels within the proposed Wuchim Subdivision to route three existing washes along lot lines and roadway shoulders as shown on **Figure 9, Appendix A**. Subdivision platting should be modified, as necessary, to accommodate terrain and roadway alignment and provide easements to maintain the channels. The main channel will have a peak flow from Culvert BP6, estimated to be 949 cubic feet per second. The trapezoidal channel will have a bottom width of 20 feet and side slope ratio of 2 horizontal to 1 vertical with a depth of 6 feet. Slope of the channel will vary from 1.0% to 1.5% with peak flow depth between 5.1 feet and 5.7 feet. The second channel will have a peak flow from the Culvert BP7 estimated to be 124 cubic feet per second. The trapezoidal channel will have a bottom width of 10 feet and side slope ratio of 2 horizontal to 1 vertical with a depth of 4 feet. Slope of the channel will vary from 1.0% to 1.5% with peak flow depth between 2.3 feet and 2.6 feet. The third channel will have a peak flow from the Culvert BP8 estimated to be 59 cubic feet per second. The trapezoidal channel will have a bottom width of 5 feet and side slope ratio of 2 horizontal to 1 vertical with a depth of 4 feet. Slope of the channel will vary from 1.0% to 1.5% with peak flow depth between 2.1 feet and 2.3 feet. The three channels combine at a common point where the combined peak flow is estimated to be 1156 cubic feet per second. This outfall trapezoidal channel will have a bottom width of 25 feet and side slope ratio of 2 horizontal to 1 vertical with a depth of 6 feet. Slope of the channel will vary from 1.0% to 1.5% with peak flow depth between 5.2 feet and 5.9 feet. Large channels should be armored with rip-rap to minimize erosion.

A small trapezoidal channel is proposed to be constructed near the west end Wuchim Subdivision to carry on-site drainage to the main wash. It will have a bottom width of 5 feet and side slope ratio of 2 horizontal to 1 vertical with a depth of 2 feet. Slope of the channel will be approximately 0.5% with peak flow depth approximately 1.3 feet.

It is proposed to construct a channel to carry off-site drainage from the area north of Wuchim Subdivision along the north side of the subdivision. The trapezoidal channel will have a bottom width of 8 feet and side slope ratio of 2 horizontal to 1 vertical with a depth of 3 feet. Slope of the channel will vary from 0.7% to 1.5% with peak flow depth between 1.6 feet and 2.2 feet.

Following the 2018 flood, Washington County constructed a drainage channel on the west side of the Dammeron Valley Ranches Subdivision, which is the east boundary of the White Knolls Subdivision as shown on **Figure 10, Appendix A**. The trapezoidal channel has a bottom width of 4 feet and side slope ratio of 2 horizontal to 1 vertical with a depth of 2 feet. Slope of the channel is approximately 0.5% and has a capacity of 55 cubic feet per second.

Storm runoff from Sub-Basin BP6 above the proposed Juniper Ridge Subdivision must be routed through the subdivision in a new channel, as shown on **Figure 11, Appendix A**. Peak flow from the eastern portion (176 acres) of Sub-Basin BP6 during the design storm is estimated to be 72 cubic feet per second. A storm water detention basin is proposed with a design discharge of 20 cubic feet per second. The trapezoidal channel will have a bottom width of 3 feet and side slope

ratio of 2 horizontal to 1 vertical with a depth of 2 feet. Slope of the channel will vary from 1.5% to 2.5% with peak flow depth between 0.9 feet and 1.0 feet.

It is proposed that storm water from Sub-Basins BP11 be routed around the east and north sides of the proposed High Ground Subdivision (located east of SR-18) in a new channel, as shown on **Figure 12 Appendix A**. Peak flow from the design storm is estimated at 9 cubic feet per second. The trapezoidal channel will have a bottom width of 3 feet and side slope ratio of 2 horizontal to 1 vertical with a depth of 2 feet. Slope of the channel on the east side of the subdivision will vary from 0.5% to 1.0% with peak flow depth between 0.7 feet and 1.0 feet. Slope of the channel on the north side of the subdivision will vary from 1.0% to 4.0% with peak flow depth between 0.5 feet and .0.7 feet.

Storm runoff from Sub-basin BP16, having a peak flow of 13 cubic feet per second, is discharged through a culvert under SR-18 near the east boundary of the proposed East Meadows Subdivision. It is proposed to route the runoff along the east boundary of the subdivision to a nearby wash as shown on **Figure 13, Appendix A**. The trapezoidal channel will have a bottom width of 3 feet and side slope ratio of 2 horizontal to 1 vertical with a depth of 2 feet. Slope of the channel will vary from 0.25% to 1.0% with peak flow depth between 0.9 feet and 1.3 feet.

Drainage originating within the proposed subdivisions will be routed in side ditches along roadways, as shown on **Figures 9 through 13, Appendix A**. Drainage will be routed across roadways at intersections in 24-inch pipes, as needed.

5. New Culverts – Proposed with Subdivisions

It is proposed that nine major (>24”) culverts be installed as listed in **Table G** and shown on **Figures 9 through 13, Appendix A**. The culverts will provide drainage crossings under new roadways within the proposed subdivisions.

Drainage originating within the proposed subdivisions will be routed in side ditches along roadways, as shown on **Figures 9 through 13, Appendix A**. Drainage will be routed across roadways at intersections in 24-inch pipes, as needed.

Calculation reports are contained in **Appendix C**.

Table G: CulvertMaster Data

BASIN	NUMBER OF CULVERTS	TYPE	SIZE (ft)	DESIGN CULVERT CAPACITY (cfs)	100-YR RUNOFF (cfs)	OUTLET CLEARANCE (ft)
Future Basins						
BP1(1) Wuchim	1	Circular	4	80	134	N/A
BP1(2) Wuchim	1	Circular	4	80	134	N/A
BP6 Wuchim	Double	Box	9X5	600	949	N/A
BP7 Wuchim	Double	Circular	4	125	124	N/A
BP8(1) Wuchim	Double	Circular	3	60	59	N/A

BP8(2) Wichum	Double	Circular	3	60	59	N/A
BP6 White Knolls	1	Circular	3	25	50	N/A
BP6(1) Juniper	1	Circular	2.5	20	20 ¹	N/A
BP6(2) Juniper	1	Circular	2.5	20	20 ¹	N/A

NOTES

¹ Runoff limited by proposed detention pond discharge rate

A new 48” culvert will be required across Lower Sand Cove Road to route water from BP1 to the existing drainage which parallels the roadway. Another 48” culvert will be required parallel to Lower Sand Cover Road for the access roadway to the Wuchim Subdivision.

A new double 9’ x 5’ box culvert will be required within the Wuchim Subdivision to carry flow passing under SR-18 from the BP6 Culvert.

A new double 48” pipe culvert will be required within the Wuchim Subdivision to carry flow passing under SR-18 from the BP7 Culvert.

A new double 36” pipe culvert will be required within the Wuchim Subdivision to carry flow passing under SR-18 from the BP8 Culvert. An additional double 36” pipe culvert will be required on the same channel at a crossing of a subdivision roadway. It is noted that Washington County has constructed channels to gather local flows to a location draining through these culverts.

A new 36” pipe culvert (BP6) will be required along Wughim Road where the White Knolls Subdivision roadway intersects.

Two new culverts will be required on the new roads in Juniper Ridge Subdivision, each with a capacity of 20 cubic feet per second. It is proposed to install 30-inch pipes to match the proposed channel at each location (BP6(1) and BP6(2)).

Section 4 Conclusions

A hydrologic analysis has been performed for Dammeron Valley to determine runoff from the 100-year and 10-year design storms. Evaluation was made for existing conditions and for proposed future conditions. The peak discharges computed for the various drainage sub-basins should be used for designing future drainage facilities and for programming improvements to the existing facilities.

As part of the study, seventeen existing culverts were identified and evaluated to determine each culvert's capacity, and compared with the estimated peak discharge at each culvert. The study determined that four of the culverts were undersized base on existing conditions. Field observations also found several of the culverts were partially to fully plugged and should have regular maintenance to keep them operating at full capacity.

A major storm event occurred in the Dammeron drainage study area in July 2018 which resulted in overtopping SR-18 and damage to numerous residences. Washington County is desirous to channel flows originating in the eastern foothills along the east side of SR-18 to locations north and south of the developed areas, where it can cross the highway without jeopardizing the residences on the west side of the highway. This study has assumed the flood routing along the highway as envisioned by the County.

Five major subdivisions, encompassing a total of approximately 224 residential lots, have been proposed in the Dammeron Valley. New drainage facilities, including routing channels and culverts, are documented in this study as part of the proposed developments to handle runoff that originates outside the subdivisions. Runoff that originates within the subdivisions will be routed in side ditches of roadways and in 24-inch pipes where water must cross the proposed roadways.

Appendix A. Figures

Figure 1 – Hydrologic Study Area

Figure 2 – FEMA Exhibit

Figure 3 – Soil Exhibit

Figure 4 – Existing Hydrology Exhibit

Figure 5 – Existing Culverts

Figure 6 – Proposed Storm Drain Routing

Figure 7 – Proposed Hydrology Exhibit

Figure 8 – Proposed Culverts

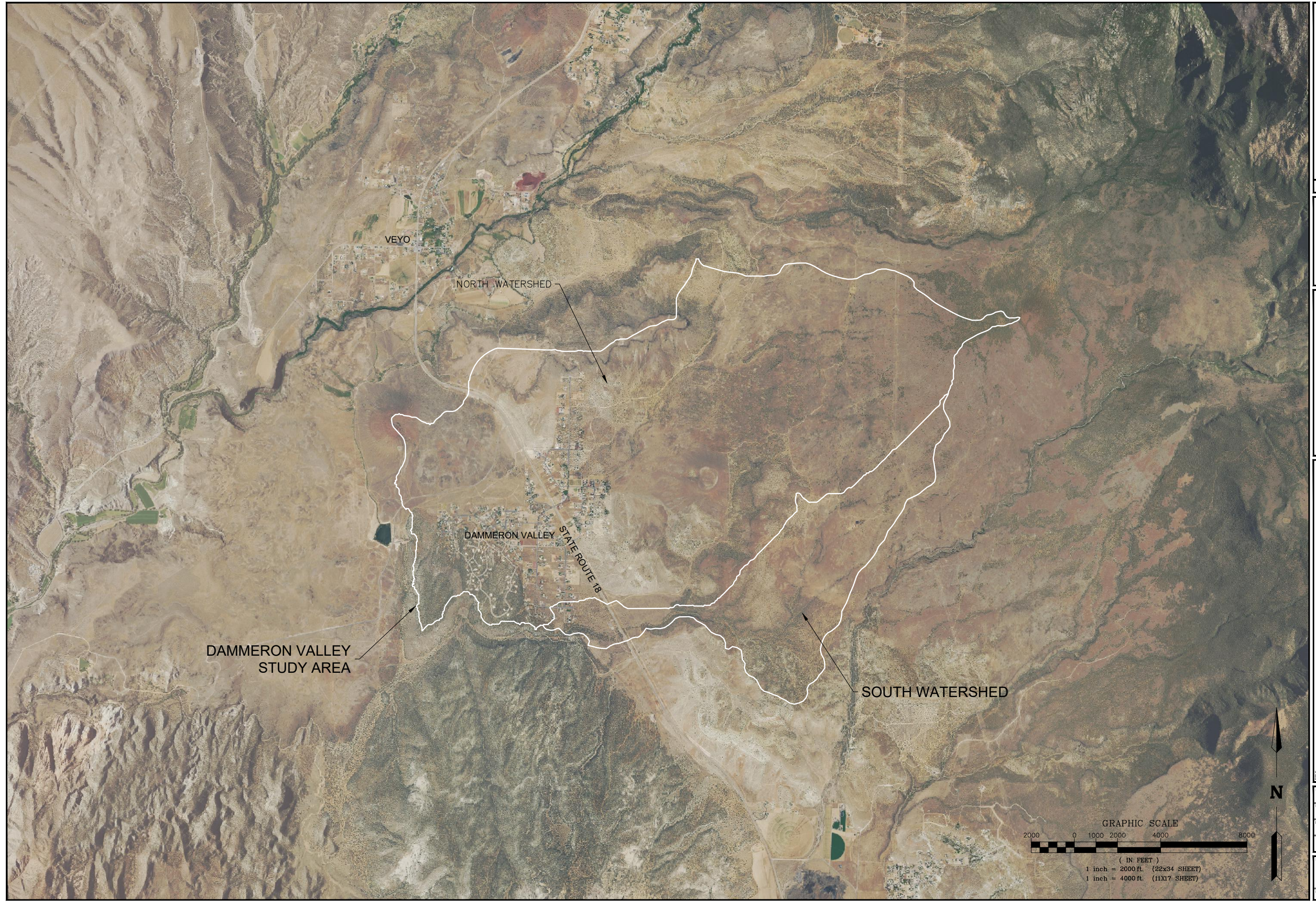
Figure 9 – Wuchim Subdivision Proposed Drainage Plan

Figure 10 – White Knolls Subdivision Proposed Drainage Plan

Figure 11 – Juniper Ridge Subdivision Proposed Drainage Plan

Figure 12 – High Ground Subdivision Proposed Drainage Plan

Figure 13 – East Meadows Subdivision Proposed Drainage Plan



DAMMERON VALLEY STUDY AREA

NORTH WATERSHED

DAMMERON VALLEY

STATE ROUTE 18

SOUTH WATERSHED



NO.	DATE	BY	DESCRIPTION

REVISIONS

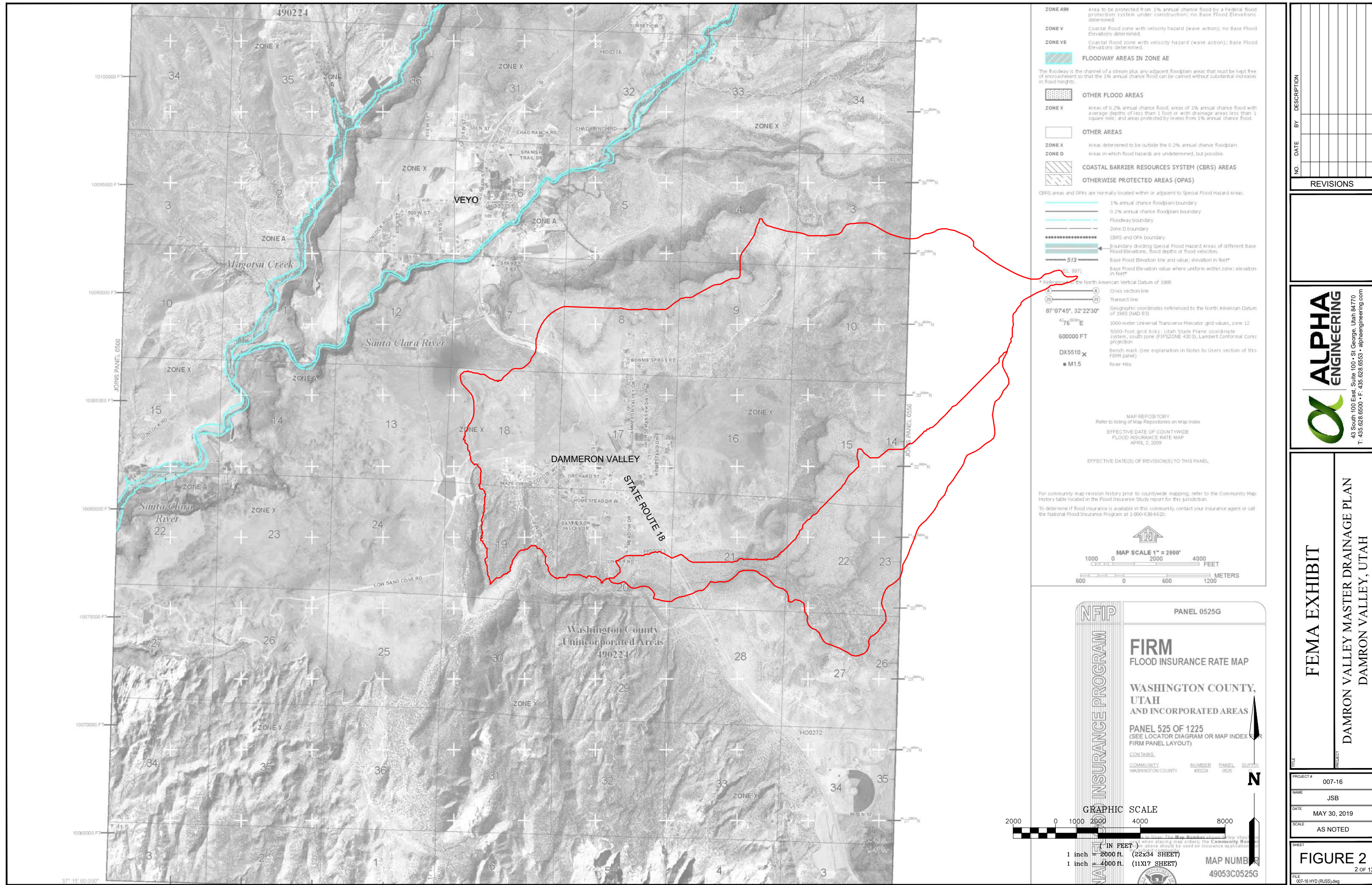
ALPHA ENGINEERING
 43 South 100 East, Suite 100 • St. George, Utah 84770
 T: 435.628.6500 • F: 435.628.6553 • alphaengineering.com

TITLE
 HYDROLOGIC STUDY AREA

PROJECT
 DAMMERON VALLEY MASTER DRAINAGE PLAN
 DAMMERON VALLEY, UTAH

PROJECT #	007-16
NAME	JSB
DATE	MAY 30, 2019
SCALE	AS NOTED

SHEET
 FIGURE 1
 1 OF 13



NO.	DATE	BY	DESCRIPTION
REVISIONS			

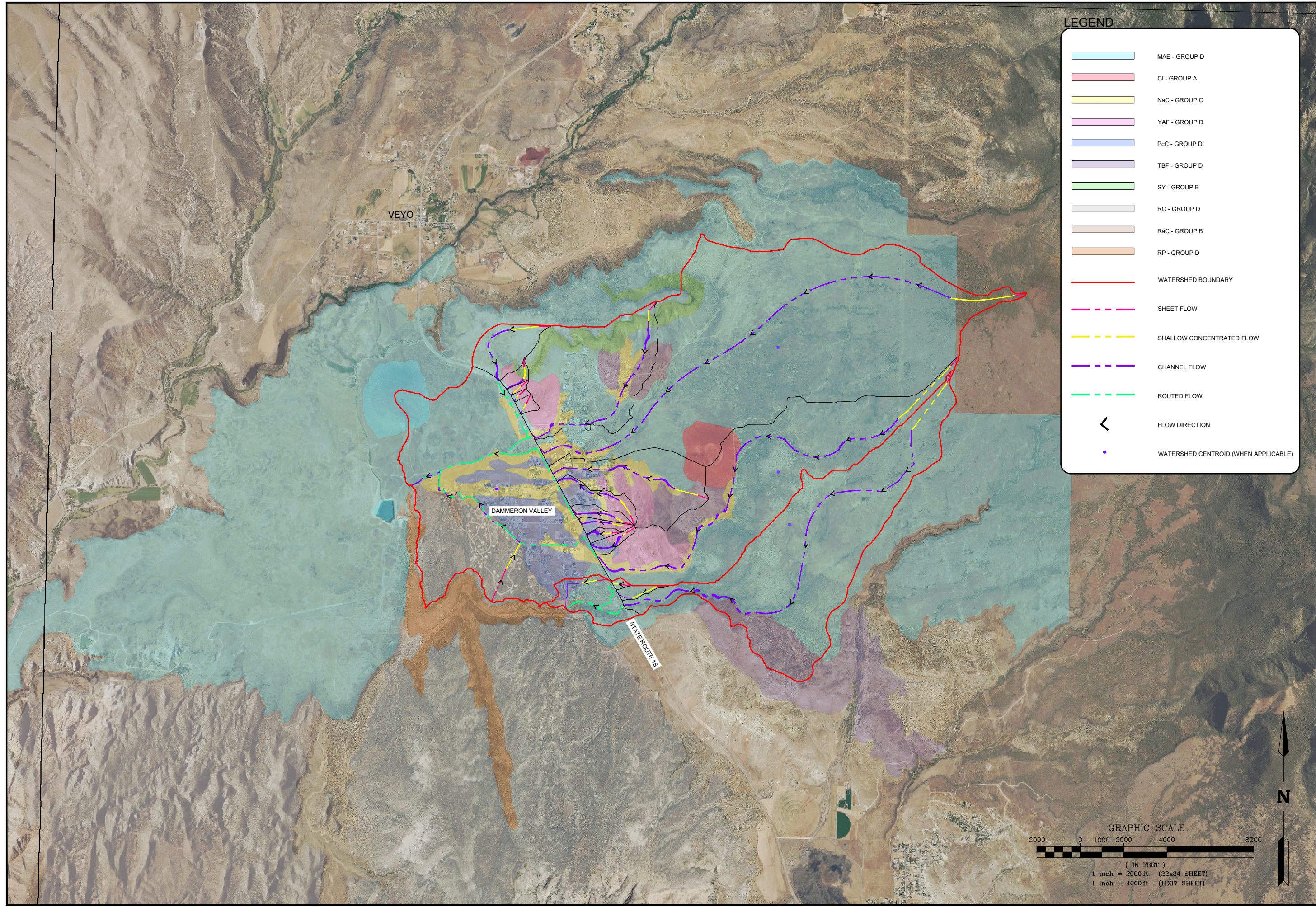
ALPHA ENGINEERING
 43 South 100 East, Suite 100 • St. George, Utah 84770
 T: 435.628.6500 • F: 435.628.6553 • alphaengineering.com

FEMA EXHIBIT

DAMRON VALLEY MASTER DRAINAGE PLAN
DAMRON VALLEY, UTAH

PROJECT # 007-16
 NAME JSB
 DATE MAY 30, 2019
 SCALE AS NOTED

FIGURE 2
 2 OF 13



LEGEND

- MAE - GROUP D
- CI - GROUP A
- NaC - GROUP C
- YAF - GROUP D
- PcC - GROUP D
- TBF - GROUP D
- SY - GROUP B
- RO - GROUP D
- RaC - GROUP B
- RP - GROUP D
- WATERSHED BOUNDARY
- SHEET FLOW
- SHALLOW CONCENTRATED FLOW
- CHANNEL FLOW
- ROUTED FLOW
- FLOW DIRECTION
- WATERSHED CENTROID (WHEN APPLICABLE)

GRAPHIC SCALE

2000 0 1000 2000 4000 8000

(IN FEET)

1 inch = 2000 ft. (22x34 SHEET)

1 inch = 4000 ft. (11x17 SHEET)

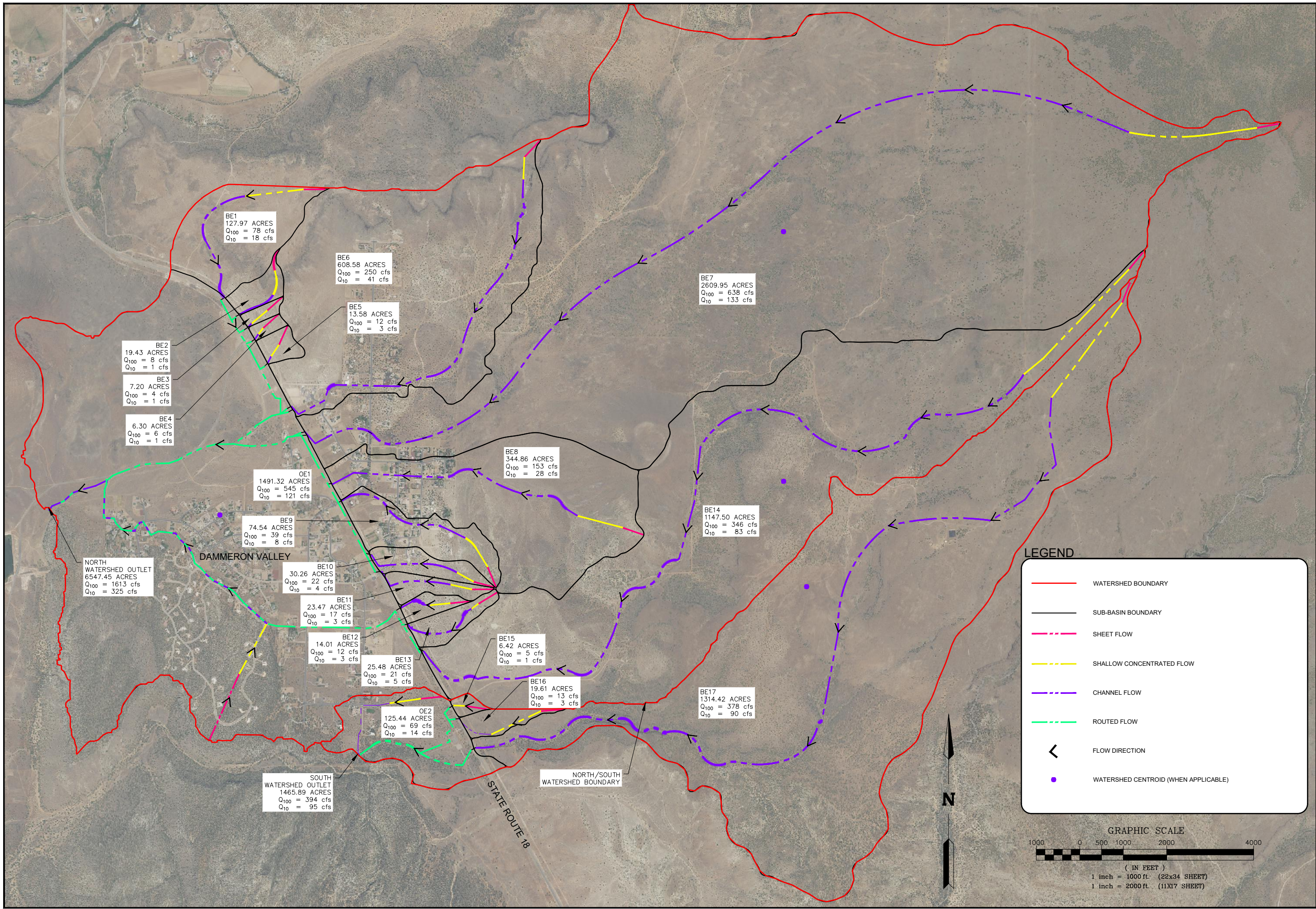
NO.	DATE	BY	DESCRIPTION

REVISIONS

ALPHA
ENGINEERING

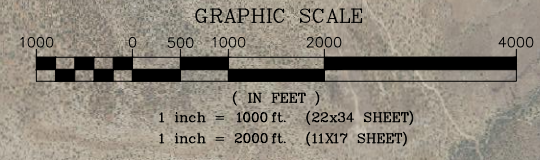
43 South 100 East, Suite 100 • St. George, Utah 84770
T: 435.628.6500 • F: 435.628.6553 • alphaengineering.com

SOIL EXHIBIT	DAMRON VALLEY MASTER DRAINAGE PLAN DAMRON VALLEY, UTAH
PROJECT #	007-16
NAME	JSB
DATE	MAY 30, 2019
SCALE	AS NOTED
SHEET	FIGURE 3
FILE	007-16 HYD (RUSS).dwg
	3 OF 13



LEGEND

- WATERSHED BOUNDARY
- SUB-BASIN BOUNDARY
- - - SHEET FLOW
- - - SHALLOW CONCENTRATED FLOW
- - - CHANNEL FLOW
- - - ROUTED FLOW
- < FLOW DIRECTION
- WATERSHED CENTROID (WHEN APPLICABLE)



NO.	DATE	BY	DESCRIPTION
REVISIONS			

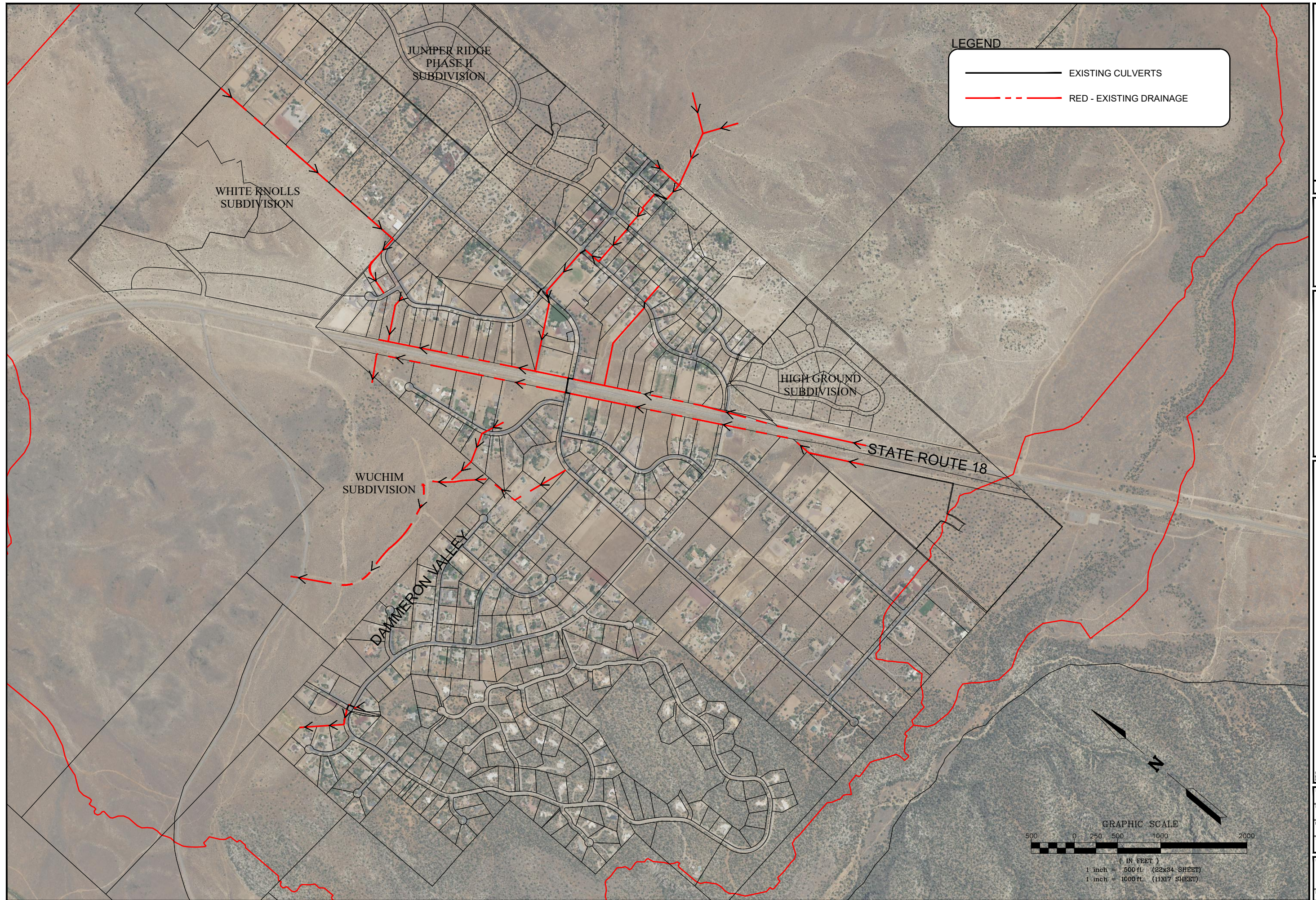
ALPHA ENGINEERING
 43 South 100 East, Suite 100 • St. George, Utah 84770
 T: 435.628.6500 • F: 435.628.6553 • alphaengineering.com

EXISTING HYDROGY EXHIBIT
 DAMRON VALLEY MASTER DRAINAGE PLAN
 DAMRON VALLEY, UTAH

TITLE PROJECT # 007-16
 NAME JSB
 DATE MAY 30, 2019
 SCALE AS NOTED

SHEET **FIGURE 4**
 4 OF 13
 FILE 007-16 HYD (RUSS).dwg

P:\007-16 Dammeron Valley Master Planning\Drawings\Exhibit Drawings\007-16 HYD (RUSS).dwg, 6/5/2019 7:10:58 PM



LEGEND

- EXISTING CULVERTS
- - - RED - EXISTING DRAINAGE

NO.	DATE	BY	DESCRIPTION

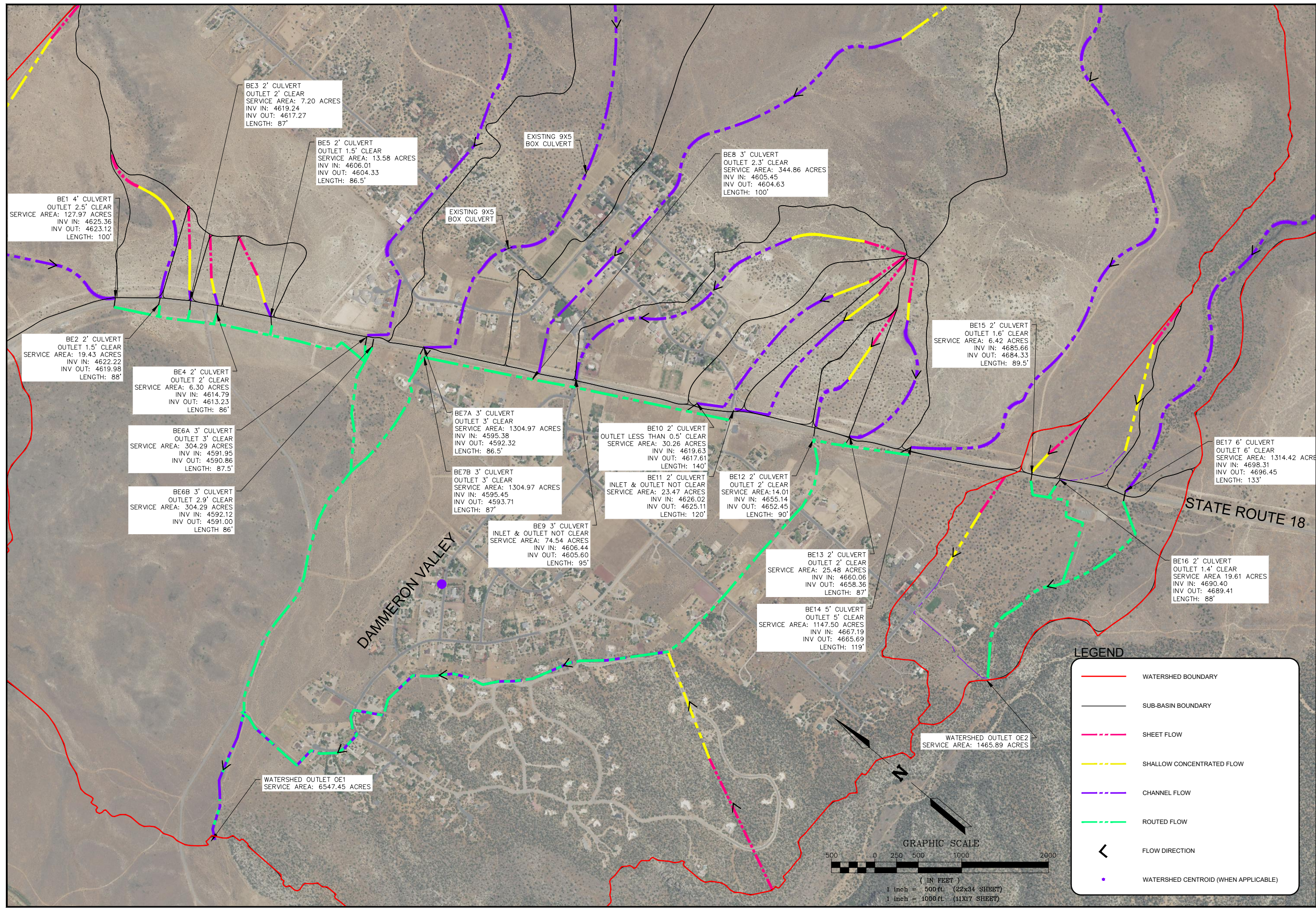
REVISIONS

ALPHA ENGINEERING
 43 South 100 East, Suite 100 • St. George, Utah 84770
 T: 435.628.6500 • F: 435.628.6553 • alphaengineering.com

CURRENT STORM DRAIN ROUTING
 DAMRON VALLEY MASTER DRAINAGE PLAN
 DAMRON VALLEY, UTAH

TITLE	
PROJECT #	007-16
NAME	JSB
DATE	MAY 30, 2019
SCALE	AS NOTED
SHEET	FIGURE 5
FILE	007-16 HYD (RUSS).dwg

5 OF 13



BE3 2' CULVERT
OUTLET 2' CLEAR
SERVICE AREA: 7.20 ACRES
INV IN: 4619.24
INV OUT: 4617.27
LENGTH: 87'

BE5 2' CULVERT
OUTLET 1.5' CLEAR
SERVICE AREA: 13.58 ACRES
INV IN: 4606.01
INV OUT: 4604.33
LENGTH: 86.5'

EXISTING 9X5
BOX CULVERT

BE8 3' CULVERT
OUTLET 2.3' CLEAR
SERVICE AREA: 344.86 ACRES
INV IN: 4605.45
INV OUT: 4604.63
LENGTH: 100'

EXISTING 9X5
BOX CULVERT

BE1 4' CULVERT
OUTLET 2.5' CLEAR
SERVICE AREA: 127.97 ACRES
INV IN: 4625.36
INV OUT: 4623.12
LENGTH: 100'

BE15 2' CULVERT
OUTLET 1.6' CLEAR
SERVICE AREA: 6.42 ACRES
INV IN: 4685.66
INV OUT: 4684.33
LENGTH: 89.5'

BE2 2' CULVERT
OUTLET 1.5' CLEAR
SERVICE AREA: 19.43 ACRES
INV IN: 4622.22
INV OUT: 4619.98
LENGTH: 88'

BE4 2' CULVERT
OUTLET 2' CLEAR
SERVICE AREA: 6.30 ACRES
INV IN: 4614.79
INV OUT: 4613.23
LENGTH: 86'

BE6A 3' CULVERT
OUTLET 3' CLEAR
SERVICE AREA: 304.29 ACRES
INV IN: 4591.95
INV OUT: 4590.86
LENGTH: 87.5'

BE6B 3' CULVERT
OUTLET 2.9' CLEAR
SERVICE AREA: 304.29 ACRES
INV IN: 4592.12
INV OUT: 4591.00
LENGTH 86'

BE7A 3' CULVERT
OUTLET 3' CLEAR
SERVICE AREA: 1304.97 ACRES
INV IN: 4595.38
INV OUT: 4592.32
LENGTH: 86.5'

BE7B 3' CULVERT
OUTLET 3' CLEAR
SERVICE AREA: 1304.97 ACRES
INV IN: 4595.45
INV OUT: 4593.71
LENGTH: 87'

BE10 2' CULVERT
OUTLET LESS THAN 0.5' CLEAR
SERVICE AREA: 30.26 ACRES
INV IN: 4619.63
INV OUT: 4617.61
LENGTH: 140'

BE11 2' CULVERT
INLET & OUTLET NOT CLEAR
SERVICE AREA: 23.47 ACRES
INV IN: 4626.02
INV OUT: 4625.11
LENGTH: 120'

BE12 2' CULVERT
OUTLET 2' CLEAR
SERVICE AREA: 14.01 ACRES
INV IN: 4655.14
INV OUT: 4652.45
LENGTH: 90'

BE17 6' CULVERT
OUTLET 6' CLEAR
SERVICE AREA: 1314.42 ACRES
INV IN: 4698.31
INV OUT: 4696.45
LENGTH: 133'

BE9 3' CULVERT
INLET & OUTLET NOT CLEAR
SERVICE AREA: 74.54 ACRES
INV IN: 4606.44
INV OUT: 4605.60
LENGTH: 95'

BE13 2' CULVERT
OUTLET 2' CLEAR
SERVICE AREA: 25.48 ACRES
INV IN: 4660.06
INV OUT: 4658.36
LENGTH: 87'

BE14 5' CULVERT
OUTLET 5' CLEAR
SERVICE AREA: 1147.50 ACRES
INV IN: 4667.19
INV OUT: 4665.69
LENGTH: 119'

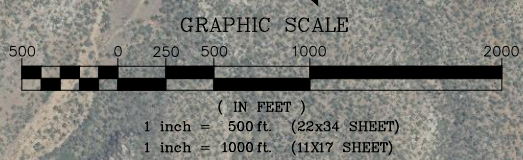
BE16 2' CULVERT
OUTLET 1.4' CLEAR
SERVICE AREA 19.61 ACRES
INV IN: 4690.40
INV OUT: 4689.41
LENGTH: 88'

WATERSHED OUTLET OE1
SERVICE AREA: 6547.45 ACRES

WATERSHED OUTLET OE2
SERVICE AREA: 1465.89 ACRES

LEGEND

- WATERSHED BOUNDARY
- SUB-BASIN BOUNDARY
- - - SHEET FLOW
- - - SHALLOW CONCENTRATED FLOW
- - - CHANNEL FLOW
- - - ROUTED FLOW
- < FLOW DIRECTION
- WATERSHED CENTROID (WHEN APPLICABLE)



NO.	DATE	BY	DESCRIPTION

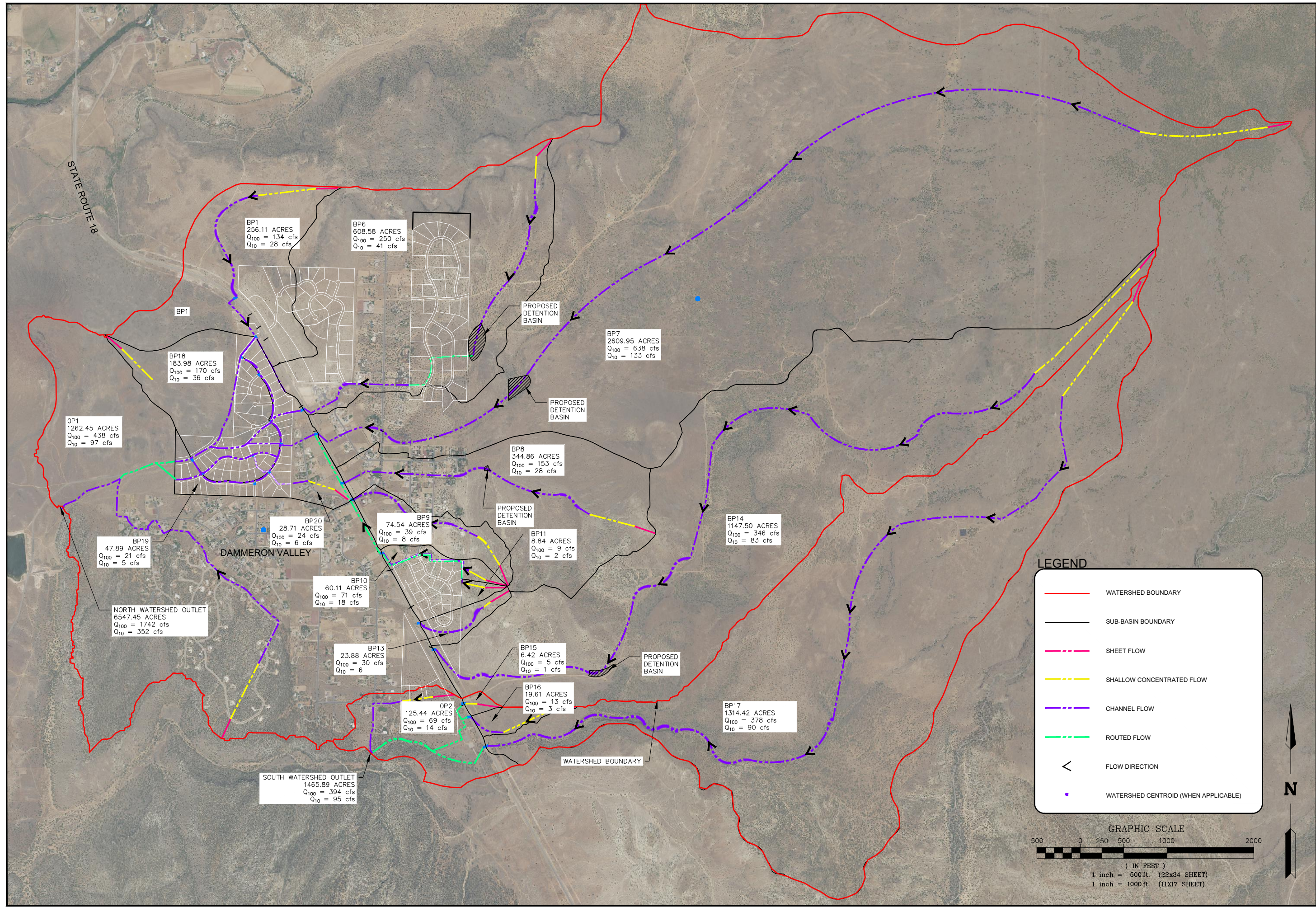
REVISIONS

ALPHA ENGINEERING
 43 South 100 East, Suite 100 • St. George, Utah 84770
 T: 435.628.6500 • F: 435.628.6553 • alphaengineering.com

EXISTING CULVERTS
 DAMRON VALLEY MASTER DRAINAGE PLAN
 DAMRON VALLEY, UTAH

PROJECT #	007-16
NAME	JSB
DATE	MAY 30, 2019
SCALE	AS NOTED
SHEET	FIGURE 6 6 OF 13
FILE	007-16 HYD (RUSS).dwg

P:\007-16 Dammeron Valley Master Planning\Drawings\Exhibit Drawings\007-16 HYD (RUSS).dwg, 6/5/19 7:11:05 PM



STATE ROUTE 18

DAMMERON VALLEY

WATERSHED BOUNDARY

LEGEND

- WATERSHED BOUNDARY
- SUB-BASIN BOUNDARY
- - - SHEET FLOW
- - - SHALLOW CONCENTRATED FLOW
- - - CHANNEL FLOW
- - - ROUTED FLOW
- < FLOW DIRECTION
- WATERSHED CENTROID (WHEN APPLICABLE)

GRAPHIC SCALE

(IN FEET)

1 inch = 500 ft. (22x34 SHEET)

1 inch = 1000 ft. (11x17 SHEET)

NO.	DATE	BY	DESCRIPTION
REVISIONS			

ALPHA ENGINEERING

43 South 100 East, Suite 100 • St. George, Utah 84770
 T: 435.628.6500 • F: 435.628.6553 • alphaengineering.com

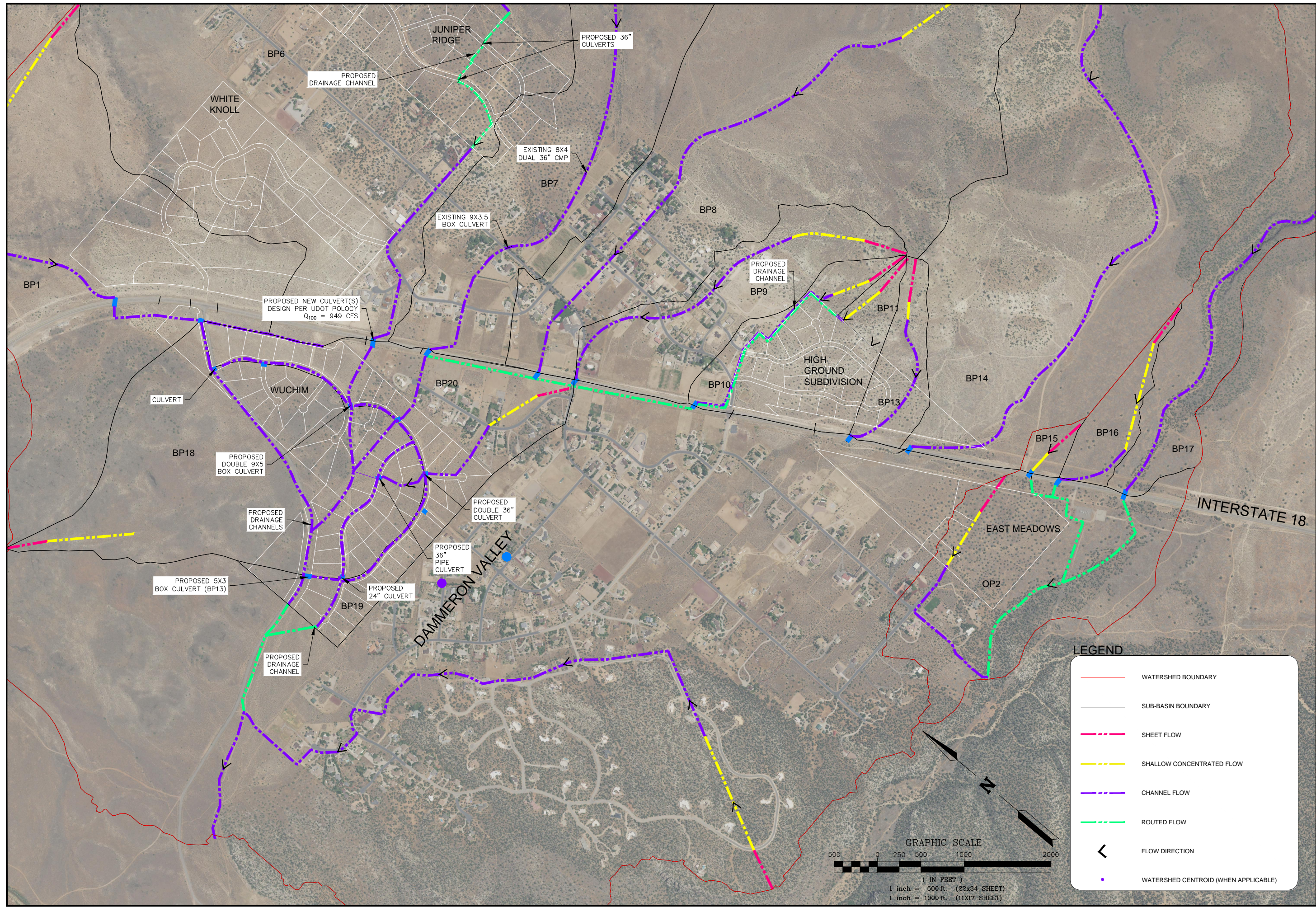
PROPOSED HYDROLOGY EXHIBIT

DAMRON VALLEY MASTER DRAINAGE PLAN
 DAMRON VALLEY, UTAH

PROJECT # 007-16
 NAME JSB
 DATE MAY 30, 2019
 SCALE AS NOTED

FIGURE 7
 7 OF 13

P:\007-16 Dammeron Valley Master Planning\Drawings\Exhibit Drawings\007-16 HYD (RUSS).dwg, 6/6/2019 8:02:14 AM



NO.	DATE	BY	DESCRIPTION

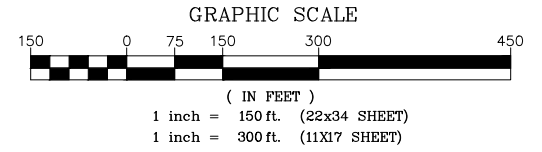
REVISIONS

ALPHA ENGINEERING
 43 South 100 East, Suite 100 • St. George, Utah 84770
 T: 435.628.6500 • F: 435.628.6553 • alphaengineering.com

PROPOSED CULVERTS
 DAMRON VALLEY MASTER DRAINAGE PLAN
 DAMRON VALLEY, UTAH

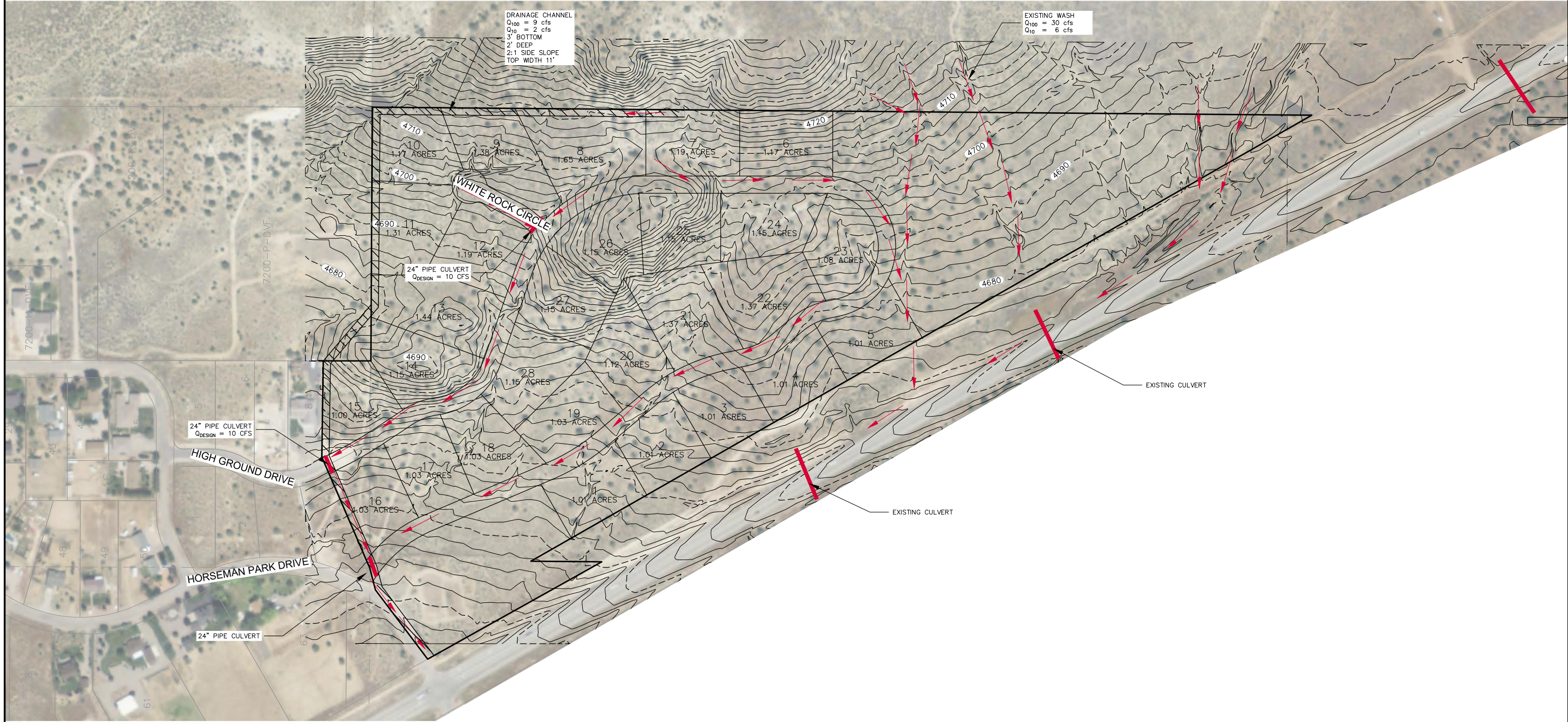
PROJECT #	007-16
NAME	JSB
DATE	MAY 30, 2019
SCALE	AS NOTED
SHEET	FIGURE 8
FILE	007-16 HYD (RUSS).dwg

P:\007-16 Dammeron Valley Master Planning\Drawings\Exhibit Drawings\007-12 Master Plan_7-20-16\Dammeron Valley Master Plan.dwg, 6/5/2019 7:11:22 PM



DRAINAGE CHANNEL
 $Q_{100} = 9$ cfs
 $Q_{10} = 2$ cfs
 3' BOTTOM
 2' DEEP
 2:1 SIDE SLOPE
 TOP WIDTH 11"

EXISTING WASH
 $Q_{100} = 30$ cfs
 $Q_{10} = 6$ cfs



NO.	DATE	BY	DESCRIPTION

REVISIONS

ALPHA ENGINEERING

 43 South 100 East, Suite 100 • St George, Utah 84770
 T: 435.628.6500 • F: 435.628.6553 • alphaengineering.com

TITLE
 HIGH GROUND SUBDIVISION
 DRAINAGE PLAN

PROJECT
 DAMRON VALLEY MASTER DRAINAGE PLAN
 DAMRON VALLEY, UTAH

PROJECT #	007-16
NAME	JSB
DATE	MAY 30, 2019
SCALE	AS NOTED

SHEET
FIGURE 12
 12 OF 13
 FILE: DAMMERON VALLEY MASTER PLAN.dwg

Appendix B. Calculations

Table B-1 – SCS Curve Numbers

Table B-2 – Composite Curve Number Calculations

Table B-3 – Time of Concentration Calculations Pre-Development

Table B-4 – Time of Concentration Calculations Post-Development

Table B-5 – Precipitation Values (NOAA)

TABLE B-1
SCS Curve Numbers ¹

<i>URBAN AREAS</i>					
COVER DESCRIPTION		HYDROLOGIC SOIL GROUP			
COVER TYPE AND HYDROLOGIC CONDITION	% IMPERVIOUS AREA	A	B	C	D
OPEN SPACE (lawns, parks, golf courses, etc.): Poor condition (grass cover < 50%) Fair condition (grass cover 50% to 75%) Good condition (grass cover > 75%)		68 49 39	79 69 61	86 79 74	89 84 80
IMPERVIOUS AREAS: Paved parking lots, roofs, driveways, etc. Streets and Roads: Paved; curbs & storm sewers Paved; open ditches Gravel Dirt		98 98 83 76 72	98 98 89 85 82	98 98 92 89 87	98 98 93 91 89
WESTERN DESERT URBAN AREAS: Natural desert landscaping Artificial desert landscaping		63 96	77 96	85 96	88 96
URBAN DISTRICTS: Commercial and business Industrial	85 72	89 81	92 88	94 91	95 93
RESIDENTIAL DISTRICTS: 1/8 acre or less 1/4 acre or less 1/3 acre or less 1/2 acre or less 1 acre 2 acres	65 38 30 25 20 12	77 61 57 54 51 46	85 75 72 70 68 65	90 83 81 80 79 77	92 87 86 85 84 82
OTHER AGRICULTURAL LANDS – Pasture, grasslands, or range Poor Condition Fair Condition Good Condition		68 49 39	79 69 61	86 79 74	89 84 80
NEWLY GRADED AREAS (no vegetation)		77	86	91	94

CULTIVATED AGRICULTURAL LANDS					
COVER DESCRIPTION		HYDROLOGIC SOIL GROUP			
COVER TYPE AND TREATMENT	HYDROLOGIC CONDITION	A	B	C	D
FALLOW Bare soil Crop residue cover (CR)		77	86	91	94
	Poor: factors impair infiltration	76	85	90	93
	Good: factors aid infiltration	74	83	88	90
ROW CROPS Straight Row (SR) SR + CR Contoured (C) C + CR Contoured and terraced (C&T) C&T + CR	Poor	72	81	88	91
	Good	67	78	85	89
	Poor	71	80	87	90
	Good	64	75	82	85
	Poor	70	79	84	88
	Good	65	75	82	86
	Poor	69	78	83	87
	Good	64	74	81	85
	Poor	66	74	80	82
	Good	62	71	78	81
	Poor	65	73	79	81
	Good	61	70	77	80
SMALL GRAIN SR SR + CR C C + CR C&T C&T + CR	Poor	65	76	84	88
	Good	63	75	83	87
	Poor	64	75	83	86
	Good	60	72	80	84
	Poor	63	74	82	85
	Good	61	73	81	84
	Poor	62	73	81	84
	Good	60	72	80	83
	Poor	61	72	79	82
	Good	59	70	78	81
	Poor	60	71	78	81
	Good	58	69	77	80
CLOSE-SEEDED OR BROADCAST LEGUMES OR ROTATION MEADOW SR C C&T	Poor	66	77	85	89
	Good	58	72	81	85
	Poor	64	75	83	85
	Good	55	69	78	83
	Poor	63	73	80	83
	Good	51	67	76	80

OTHER AGRICULTURAL LANDS					
COVER DESCRIPTION		HYDROLOGIC SOIL GROUP			
COVER TYPE	HYDROLOGIC CONDITION	A	B	C	D
PASTURE, GRASSLAND OR RANGE Continuous forage for grazing	Poor: <50% ground cover	68	79	86	89
	Fair: 50% - 70% ground cover	49	69	79	84
	Good: >75% ground cover	39	61	74	80
MEADOW Continuous grass, protected from grazing and generally mowed for hay		30	58	71	78
BRUSH Brush-weed-grass mixture with brush the major element	Poor: <50% ground cover	48	67	77	83
	Fair: 50% - 70% ground cover	35	56	70	77
	Good: >75% ground cover	30	48	65	73
WOODS Woods-grass combination (orchard or tree farm)	Poor: factors impair infiltration	57	73	82	86
	Fair	43	65	76	82
	Good: factors aid infiltration	32	58	72	79
WOODS	Poor: heavily grazed or burned	45	66	77	83
	Fair: grazed but not burned	36	60	73	79
	Good: no grazing or burned	30	55	70	77
FARMSTEADS Buildings, lanes, driveways, and surrounding lots		59	74	82	86

ARID AND SEMI-ARID RANGELANDS					
COVER DESCRIPTION		HYDROLOGIC SOIL GROUP			
COVER TYPE	HYDROLOGIC CONDITON	A	B	C	D
HERBACEOUS Mixture of grass, weeds, and low-growing brush, with brush the minor element	Poor: <30% ground cover Fair: 30% - 70% ground cover Good: >70% ground cover		80 71 62	87 81 74	93 89 85
OAK-ASPEN Mountain brush mixture of oak brush, aspen, mountain mahogany, bitter brush, maple, and other brush	Poor: <30% ground cover Fair: 30% - 70% ground cover Good: >70% ground cover		66 48 30	74 57 41	79 63 48
PINYON-JUNIPER Pinyon, juniper, or both; grass understory	Poor: <30% ground cover Fair: 30% - 70% ground cover Good: >70% ground cover		75 58 41	85 73 61	89 80 71
SAGEBRUSH With grass understory	Poor: <30% ground cover Fair: 30% - 70% ground cover Good: >70% ground cover		67 51 35	80 63 47	85 70 55
DESERT SHRUB Major plans include saltbush, greasewood, creosotebush, blackbrush, bursage, palo verde, mesquite, and cactus	Poor: <30% ground cover Fair: 30% - 70% ground cover Good: >70% ground cover	63 55 49	77 72 68	85 81 79	88 86 84

1. Curve numbers taken from NRCS Technical Release 55 'Urban Hydrology for Small Watersheds', Tables 2-2a through 2-2d, June 1986.

TABLE B-2
SCS Composite Curve Numbers

Pre-Development

BASIN	SOIL SYMBOL	SOIL DESCRIPTION	HYDROLOGIC SOIL TYPE	AREA (ACRES)	AREA (Square Mi.)	LANDCOVER	CN
BE1							
	MAE	Magotsu-Pastura Complex	D	119.67	0.18698	Brush, Fair Condition	77
	YAF	Yaki Very Cobbly Loam	D	6.39	0.00998	Brush, Fair Condition	77
	SY	Stony Colluvial	B	1.91	0.00298	Brush, Fair Condition	56
		Area Total		127.97	0.19995	Curve Number=	77
BE2							
	YAF	Yaki Very Cobbly Loam	D	10.21	0.01595	Brush, Fair Condition	77
	SY	Stony Colluvial	B	5.86	0.00916	Brush, Fair Condition	56
	MAE	Magotsu-Pastura Complex	D	3.36	0.00525	Brush, Fair Condition	77
		Area Total		19.43	0.03036	Curve Number=	71
BE3							
	YAF	Yaki Very Cobbly Loam	D	5.70	0.00891	Brush, Fair Condition	77
	MAE	Magotsu-Pastura Complex	D	1.50	0.00234	Brush, Fair Condition	77
		Area Total		7.20	0.01125	Curve Number=	77
BE4							
	YAF	Yaki Very Cobbly Loam	D	4.79	0.00748	Brush, Fair Condition	77
	MAE	Magotsu-Pastura Complex	D	1.51	0.00236	Brush, Fair Condition	77
		Area Total		6.30	0.00984	Curve Number=	77
BE5							
	YAF	Yaki Very Cobbly Loam	D	10.50	0.01641	Brush, Fair Condition	77
	MAE	Magotsu-Pastura Complex	D	3.08	0.00481	Brush, Fair Condition	77
		Area Total		13.58	0.02122	Curve Number=	77
BE6							
	MAE	Magotsu-Pastura Complex	D	271.08	0.42356	Brush, Fair Condition	77
	SY	Stony Colluvial	B	117.44	0.18350	Brush, Fair Condition	56
	TBF	Tobish Very Cobbly Clay Loam	D	72.94	0.11397	Brush, Fair Condition	77
	NaC	Naplene Silt Loam	C	69.30	0.10828	Brush, Fair Condition	70
	YAF	Yaki Very Cobbly Loam	D	64.02	0.10003	Brush, Fair Condition	77
	MAE	Magotsu-Pastura Complex	D	13.80	0.02156	Impervious	98
		Area Total		608.58	0.95091	Curve Number=	73
BE7							
	MAE	Magotsu-Pastura Complex	D	2325.30	3.63328	Brush, Fair Condition	77
	CI	Cinder	A	73.63	0.11505	Brush, Fair Condition	35
	MAE	Magotsu-Pastura Complex	D	59.44	0.09288	Pinyon-Juniper, Fair Condition	80
	SY	Stony Colluvial	B	58.74	0.09178	Brush, Fair Condition	56
	NaC	Naplene Silt Loam	C	49.84	0.07788	Brush, Fair Condition	70
	TBF	Tobish Very Cobbly Clay Loam	D	37.64	0.05881	Brush, Fair Condition	77
	NaC	Naplene Silt Loam	C	2.98	0.00466	Impervious	98
	PcC	Pastura Loam	D	1.56	0.00244	Brush, Fair Condition	77
	MAE	Magotsu-Pastura Complex	D	0.82	0.00128	Impervious	98
		Area Total		2609.95	4.07805	Curve Number=	75
BE8							
	NaC	Naplene Silt Loam	C	89.99	0.14061	Brush, Fair Condition	70
	TBF	Tobish Very Cobbly Clay Loam	D	76.24	0.11913	Brush, Fair Condition	77
	MAE	Magotsu-Pastura Complex	D	73.16	0.11431	Brush, Fair Condition	77
	YAF	Yaki Very Cobbly Loam	D	62.33	0.09739	Brush, Fair Condition	77
	CI	Cinder	A	19.49	0.03045	Brush, Fair Condition	56
	PcC	Pastura Loam	D	17.19	0.02686	Brush, Fair Condition	77
	NaC	Naplene Silt Loam	C	6.46	0.01009	Impervious	98
		Area Total		344.86	0.53884	Curve Number=	74
BE9							
	PcC	Pastura Loam	D	31.14	0.04866	Brush, Fair Condition	77
	YAF	Yaki Very Cobbly Loam	D	29.27	0.04573	Brush, Fair Condition	77
	NaC	Naplene Silt Loam	C	13.32	0.02081	Brush, Fair Condition	70
	NaC	Naplene Silt Loam	C	0.81	0.00127	Impervious	98
		Area Total		74.54	0.11647	Curve Number=	76

BASIN	SOIL SYMBOL	SOIL DESCRIPTION	HYDROLOGIC SOIL TYPE	AREA (ACRES)	AREA (Square Mi.)	LANDCOVER	CN
BE10							
	YAF	Yaki Very Cobbly Loam	D	14.00	0.02188	Brush, Fair Condition	77
	PcC	Pastura Loam	D	8.95	0.01398	Brush, Fair Condition	77
	NaC	Naplene Silt Loam	C	6.51	0.01017	Brush, Fair Condition	70
	NaC	Naplene Silt Loam	C	0.80	0.00125	Impervious	98
		Area Total		30.26	0.04728	Curve Number=	76
BE11							
	YAF	Yaki Very Cobbly Loam	D	12.66	0.01978	Brush, Fair Condition	77
	NaC	Naplene Silt Loam	C	3.00	0.00469	Brush, Fair Condition	70
	PcC	Pastura Loam	D	7.81	0.01220	Brush, Fair Condition	77
		Area Total		23.47	0.03667	Curve Number=	76
BE12							
	PcC	Pastura Loam	D	7.71	0.01205	Brush, Fair Condition	77
	YAF	Yaki Very Cobbly Loam	D	6.30	0.00984	Brush, Fair Condition	77
		Area Total		14.01	0.02189	Curve Number=	77
BE13							
	PcC	Pastura Loam	D	12.30	0.01922	Brush, Fair Condition	77
	YAF	Yaki Very Cobbly Loam	D	11.87	0.01855	Brush, Fair Condition	77
	NaC	Naplene Silt Loam	C	1.31	0.00205	Brush, Fair Condition	70
		Area Total		25.48	0.03981	Curve Number=	77
BE14							
	MAE	Magotsu-Pastura Complex	D	888.64	1.38850	Brush, Fair Condition	77
	NaC	Naplene Silt Loam	C	71.64	0.11194	Brush, Fair Condition	70
	TBF	Tobish Very Cobbly Clay Loam	D	65.60	0.10250	Brush, Fair Condition	77
	YAF	Yaki Very Cobbly Loam	D	62.33	0.09739	Brush, Fair Condition	77
	Cl	Cinder	A	57.21	0.08939	Brush, Fair Condition	35
	PcC	Pastura Loam	D	2.08	0.00325	Brush, Fair Condition	77
		Area Total		1147.50	1.79297	Curve Number=	74
Outlet BE1							
	MAE	Magotsu-Pastura Complex	D	415.03	0.64848	Brush, Fair Condition	77
	RO	Rock Land	D	414.01	0.64689	Pinyon-Juniper, Fair Condition	80
	PcC	Pastura Loam	D	330.58	0.51653	Brush, Fair Condition	77
	NaC	Naplene Silt Loam	C	239.72	0.37456	Brush, Fair Condition	70
	SY	Stony Colluvial	B	58.74	0.09178	Brush, Fair Condition	56
	RaC	Redbank Loamy Fine Sand, Hummocky	B	20.73	0.03239	Brush, Fair Condition	56
	RO	Rock Land	D	8.05	0.01258	Impervious	98
	NaC	Naplene Silt Loam	C	4.37	0.00683	Impervious	98
	RaC	Redbank Loamy Fine Sand, Hummocky	B	3.09	0.00483	Impervious	98
		Area Total		1494.32	2.33488	Curve Number=	76
BE15							
	MAE	Magotsu-Pastura Complex	D	6.42	0.01003	Brush, Fair Condition	77
		Area Total		6.42	0.01003	Curve Number=	77
BE16							
	MAE	Magotsu-Pastura Complex	D	19.61	0.03064	Brush, Fair Condition	77
		Area Total		19.61	0.03064	Curve Number=	77
BE17							
	MAE	Magotsu-Pastura Complex	D	1146.55	1.79148	Brush, Fair Condition	77
	TBF	Tobish Very Cobbly Clay Loam	D	167.87	0.26230	Brush, Fair Condition	77
		Area Total		1314.42	2.05378	Curve Number=	77
OE2							
	MAE	Magotsu-Pastura Complex	D	125.44	0.19600	Brush, Fair Condition	77
		Area Total		125.44	0.19600	Curve Number=	77
BP1							
	MAE	Magotsu-Pastura Complex	D	208.43	0.32567	Brush, Fair Condition	77
	SY	Stony Colluvial	B	7.90	0.01234	Brush, Fair Condition	56
	YAF	Yaki Very Cobbly Loam	D	39.78	0.06216	Brush, Fair Condition	77
		Area Total		256.11	0.40017	Curve Number=	76
BP2							
	MAE	Magotsu-Pastura Complex	D	267.46	0.41791	Brush, Fair Condition	77
	SY	Stony Colluvial	B	117.44	0.18350	Brush, Fair Condition	56
	TBF	Tobish Very Cobbly Clay Loam	D	72.94	0.11397	Brush, Fair Condition	77
	NaC	Naplene Silt Loam	C	69.30	0.10828	Brush, Fair Condition	70
	YAF	Yaki Very Cobbly Loam	D	64.02	0.10003	Brush, Fair Condition	77
	MAE	Magotsu-Pastura Complex	D	17.42	0.02722	Impervious	98
		Area Total		608.58	0.95091	Curve Number=	73

BASIN	SOIL SYMBOL	SOIL DESCRIPTION	HYDROLOGIC SOIL TYPE	AREA (ACRES)	AREA (Square Mi.)	LANDCOVER	CN
BP3							
	MAE	Magotsu-Pastura Complex	D	2325.30	3.63328	Brush, Fair Condition	77
	CI	Cinder	A	73.63	0.11505	Brush, Fair Condition	35
	MAE	Magotsu-Pastura Complex	D	59.44	0.09288	Pinyon-Juniper, Fair Condition	80
	SY	Stony Colluvial	B	58.74	0.09178	Brush, Fair Condition	56
	NaC	Naplene Silt Loam	C	49.84	0.07788	Brush, Fair Condition	70
	TBF	Tobish Very Cobbly Clay Loam	D	37.64	0.05881	Brush, Fair Condition	77
	NaC	Naplene Silt Loam	C	2.98	0.00466	Impervious	98
	PcC	Pastura Loam	D	1.56	0.00244	Brush, Fair Condition	77
	MAE	Magotsu-Pastura Complex	D	0.82	0.00128	Impervious	98
		Area Total		2609.95	4.07805	Curve Number=	75
BP4							
	NaC	Naplene Silt Loam	C	89.99	0.14061	Brush, Fair Condition	70
	TBF	Tobish Very Cobbly Clay Loam	D	76.24	0.11913	Brush, Fair Condition	77
	MAE	Magotsu-Pastura Complex	D	73.16	0.11431	Brush, Fair Condition	77
	YAF	Yaki Very Cobbly Loam	D	62.33	0.09739	Brush, Fair Condition	77
	CI	Cinder	A	19.49	0.03045	Brush, Fair Condition	35
	PcC	Pastura Loam	D	17.19	0.02686	Brush, Fair Condition	77
	NaC	Naplene Silt Loam	C	6.46	0.01009	Impervious	98
		Area Total		344.86	0.53884	Curve Number=	73
BP5							
	PcC	Pastura Loam	D	31.14	0.04866	Brush, Fair Condition	77
	YAF	Yaki Very Cobbly Loam	D	29.27	0.04573	Brush, Fair Condition	77
	NaC	Naplene Silt Loam	C	13.32	0.02081	Brush, Fair Condition	70
	NaC	Naplene Silt Loam	C	0.81	0.00127	Impervious	98
		Area Total		74.54	0.11647	Curve Number=	76
BP6							
	YAF	Yaki Very Cobbly Loam	D	20.96	0.03275	Brush, Fair Condition	77
	PcC	Pastura Loam	D	16.76	0.02619	Brush, Fair Condition	77
	NaC	Naplene Silt Loam	C	9.42	0.01472	Brush, Fair Condition	70
	PcC	Pastura Loam	D	6.74	0.01053	Impervious	98
	YAF	Yaki Very Cobbly Loam	D	6.23	0.00973	Impervious	98
		Area Total		60.11	0.09392	Curve Number=	80
BP7							
	YAF	Yaki Very Cobbly Loam	D	8.84	0.01381	Brush, Fair Condition	77
		Area Total		8.84	0.01381	Curve Number=	77
BP8							
	YAF	Yaki Very Cobbly Loam	D	12.20	0.01906	Brush, Fair Condition	77
	PcC	Pastura Loam	D	10.37	0.01620	Brush, Fair Condition	77
	NaC	Naplene Silt Loam	C	1.31	0.00205	Brush, Fair Condition	70
		Area Total		23.88	0.03731	Curve Number=	77
BP9							
	MAE	Magotsu-Pastura Complex	D	888.64	1.38850	Brush, Fair Condition	77
	NaC	Naplene Silt Loam	C	71.64	0.11194	Brush, Fair Condition	73
	TBF	Tobish Very Cobbly Clay Loam	D	65.60	0.10250	Brush, Fair Condition	77
	YAF	Yaki Very Cobbly Loam	D	62.33	0.09739	Brush, Fair Condition	77
	CI	Cinder	A	57.21	0.08939	Brush, Fair Condition	35
	PcC	Pastura Loam	D	2.08	0.00325	Brush, Fair Condition	77
		Area Total		1147.50	1.79297	Curve Number=	75
BP13							
	MAE	Magotsu-Pastura Complex	D	136.26	0.21291	Brush, Fair Condition	77
	NaC	Naplene Silt Loam	C	24.12	0.03769	Brush, Fair Condition	70
	PcC	Pastura Loam	D	11.43	0.01786	Brush, Fair Condition	77
	MAE	Magotsu-Pastura Complex	D	7.47	0.01167	Impervious	98
	NaC	Naplene Silt Loam	C	4.37	0.00683	Impervious	98
	PcC	Pastura Loam	D	0.33	0.00052	Impervious	98
		Area Total		183.98	0.28747	Curve Number=	77
BP14							
	PcC	Pastura Loam	D	21.85	0.03414	Brush, Fair Condition	77
	NaC	Naplene Silt Loam	C	15.99	0.02498	Brush, Fair Condition	70
	MAE	Magotsu-Pastura Complex	D	4.21	0.00658	Brush, Fair Condition	77
	NaC	Naplene Silt Loam	C	3.38	0.00528	Impervious	98
	PcC	Pastura Loam	D	2.17	0.00339	Impervious	98
	MAE	Magotsu-Pastura Complex	D	0.29	0.00045	Impervious	98
		Area Total		47.89	0.07483	Curve Number=	77

BASIN	SOIL SYMBOL	SOIL DESCRIPTION	HYDROLOGIC SOIL TYPE	AREA (ACRES)	AREA (Square Mi.)	LANDCOVER	CN
BP15							
	PcC	Pastura Loam	D	13.23	0.02067	Brush, Fair Condition	77
	NaC	Naplene Silt Loam	C	7.30	0.01141	Brush, Fair Condition	70
	MAE	Magotsu-Pastura Complex	D	4.65	0.00727	Brush, Fair Condition	77
	NaC	Naplene Silt Loam	C	2.27	0.00355	Impervious	98
	PcC	Pastura Loam	D	1.13	0.00177	Impervious	98
	MAE	Magotsu-Pastura Complex	D	0.13	0.00020	Impervious	98
			Area Total	28.71	0.04486	Curve Number=	78
OP1							
	MAE	Magotsu-Pastura Complex	D	266.80	0.41688	Brush, Fair Condition	77
	RO	Rock Land	D	414.01	0.64689	Pinyon-Juniper, Fair Condition	80
	PcC	Pastura Loam	D	294.80	0.46063	Brush, Fair Condition	77
	NaC	Naplene Silt Loam	C	191.86	0.29978	Brush, Fair Condition	70
	SY	Stony Colluvial	B	58.74	0.09178	Brush, Fair Condition	56
	RaC	Redbank Loamy Fine Sand, Hummocky	B	20.73	0.03239	Brush, Fair Condition	56
	RO	Rock Land	D	8.05	0.01258	Impervious	98
	NaC	Naplene Silt Loam	C	4.37	0.00683	Impervious	98
	RaC	Redbank Loamy Fine Sand, Hummocky	B	3.09	0.00483	Impervious	98
			Area Total	1262.45	1.97258	Curve Number=	76
BP10							
	MAE	Magotsu-Pastura Complex	D	6.42	0.01003	Brush, Fair Condition	77
			Area Total	6.42	0.01003	Curve Number=	77
BP11							
	MAE	Magotsu-Pastura Complex	D	19.61	0.03064	Brush, Fair Condition	77
			Area Total	19.61	0.03064	Curve Number=	77
BP12							
	MAE	Magotsu-Pastura Complex	D	1146.55	1.79148	Brush, Fair Condition	77
	TBF	Tobish Very Cobbly Clay Loam	D	167.87	0.26230	Brush, Fair Condition	77
			Area Total	1314.42	2.05378	Curve Number=	77
OP2							
	MAE	Magotsu-Pastura Complex	D	118.10	0.18453	Brush, Fair Condition	77
	MAE	Magotsu-Pastura Complex	D	7.34	0.01147	Impervious	98
			Area Total	125.44	0.19600	Curve Number=	78

TABLE B-3
Time of Concentration Calculations Pre-Development

Sub-Basin Data		Precip in.		Flow Path	Flows			Sheet Flow Time (t _s)				Channel Flow Time (t _c)										Final (t _c)	Lag Time (t _l)						
Area	CN	3 hr	24 hr		Q _i	Q _r	Q _{ave}	Length	n	Slope	t _s	Length	Slope	Bank Slope L	Bank Slope R	Bottom Width	n	Y _n	Area	Hydraulic Radius	Velocity	t _c	t _c	t _l					
ac					cfs	cfs	cfs	ft	-	%	min	ft	%	H:V	H:V	ft		ft	ft ²	ft	fps	min	min	min					
BE1	127.97	77	1.27	2.30	Sheet	0.0	8.0	4.0	500	0.050	6.2%	13.29																	
			2.09	3.42	Shallow	4.0	29.4	16.7						1343	3.6%	Shallow Concentrated Flow - Unpaved*										3.1	7.3	7.3	4.4
					Channel	4.0	78.0*	41.0						3043	3.4%	7	7	0.00	0.050	1.22	10.49	0.61	3.9	13.0	13.0	7.8			
																							Total =	33.6	20.1				
BE2	19.43	71	1.28	2.29	Sheet	0.0	2.0	1.0	500	0.050	3.0%	17.75																	
			2.10	3.41	Shallow	1.0	4.3	2.6						570	3.6%	Shallow Concentrated Flow - Unpaved*										3.0	3.1	3.1	1.9
					Channel	1.0	8.0*	4.5						927	6.2%	7	7	0.00	0.050	0.48	1.59	0.24	2.8	5.5	5.5	3.3			
																							Total =	26.3	15.8				
BE3	7.20	77	1.28	2.29	Sheet	0.0	1.8	0.9	500	0.050	0.6%	33.90																	
			2.10	3.41	Shallow	0.9	3.6	2.2						474	9.5%	Shallow Concentrated Flow - Unpaved*										5.0	1.6	1.6	1.0
					Channel	0.9	4.0*	2.5						115	7.5%	7	7	0.00	0.050	0.37	0.94	0.18	2.6	0.7	0.7	0.4			
																							Total =	36.2	21.7				
BE4	6.30	77	1.28	2.29	Sheet	0.0	3.7	1.9	500	0.050	10.8%	10.66																	
			2.10	3.41	Shallow	1.9	5.0	3.4						178	9.5%	Shallow Concentrated Flow - Unpaved*										5.0	0.6	0.6	0.4
					Channel	1.9	6.0*	3.9						132	7.2%	7	7	0.00	0.050	0.44	1.36	0.22	2.9	0.8	0.8	0.5			
																							Total =	12.0	7.2				
BE5	13.58	77	1.28	2.29	Sheet	0.0	6.0	3.0	500	0.050	7.9%	12.11																	
			2.10	3.41	Shallow	3.0	9.9	6.5						325	13.8%	Shallow Concentrated Flow - Unpaved*										6.0	0.9	0.9	0.5
					Channel	3.0	12.0*	7.5						173	6.9%	7	7	0.00	0.050	0.57	2.25	0.28	3.3	0.9	0.9	0.5			
																							Total =	13.9	8.3				
BE6	608.58	73	1.28	2.31	Sheet	0.0	13.0	6.5	500	0.050	6.6%	13.02																	
			2.11	3.44	Shallow	6.5	21.5	14.0						325	38.4%	Shallow Concentrated Flow - Unpaved*										10.0	0.5	0.5	0.3
					Channel	6.5	250.0*	128.3						8756	5.7%	7	7	0.00	0.050	1.70	20.35	0.84	6.3	23.2	23.2	13.9			
																							Total =	36.7	22.0				
BE7	2609.95	75	1.33	2.41	Sheet	0.0	12.5	6.3	500	0.050	2.3%	19.82																	
			2.17	3.59	Shallow	6.3	86.7	46.5						2964	7.9%	Use Equation from U.S Bureau of Reclamation Flood Hydrology Manual (1989) T _{lag} =26Kn(L*L _c /S ^{0.5}) ^{0.33}										L _c =	12467.0		
					Channel	6.3	638.0*	322.1						22041	7.2%														
BE8	344.86	74	1.29	2.32	Sheet	0.0	10.0	5.0	500	0.050	8.9%	11.55																	
			2.13	3.46	Shallow	5.0	31.6	18.3						1077	9.8%	Shallow Concentrated Flow - Unpaved*										5.1	3.5	3.5	2.1
					Channel	5.0	153.0*	79.0						6049	2.5%	7	7	0.00	0.045	1.59	17.65	0.79	4.5	22.5	22.5	13.5			
																							Total =	37.6	22.6				
BE9	74.54	76	1.28	2.29	Sheet	0.0	2.9	1.5	500	0.050	8.9%	11.55																	
			2.11	3.40	Shallow	1.5	20.3	10.9						2964	9.8%	Shallow Concentrated Flow - Unpaved*										5.1	9.8	9.8	5.9
					Channel	1.5	39.0*	20.2						3176	2.6%	7	7	0.00	0.050	0.99	6.82	0.49	3.0	17.8	17.8	10.7			
																							Total =	39.1	23.5				
BE10	30.26	76	1.28	2.29	Sheet	0.0	3.5	1.8	500	0.050	32.1%	6.90																	
			2.11	3.40	Shallow	1.8	6.7	4.2						445	12.8%	Shallow Concentrated Flow - Unpaved*										5.8	1.3	1.3	0.8
					Channel	1.8	22.0*	11.9						2174	4.4%	7	7	0.00	0.050	0.73	3.76	0.36	3.2	11.5	11.5	6.9			
																							Total =	19.6	11.8				
BE11	23.47	76	1.28	2.29	Sheet	0.0	3.0	1.5	500	0.050	32.5%	6.87																	
			2.11	3.40	Shallow	1.5	6.1	3.8						510	6.9%	Shallow Concentrated Flow - Unpaved*										4.2	2.0	2.0	1.2
					Channel	1.5	17.0*	9.3						1799	4.7%	7	7	0.00	0.050	0.66	3.05	0.33	3.0	9.9	9.9	5.9			

					Shallow	4.1	0.0	2.0					2724	11.5%	Use Equation from U.S Bureau of Reclamation Flood Hydrology Manual (1989)										Lc=	12026.0		
					Channel	4.1	378.0*	191.0					20021	4.7%	Tlag=26Kn(L*Lc/S*0.5)^0.33													
																						Total =	0.0	65.2				
BP13	183.98	77			Sheet	0.0	18.3	9.2	500	0.050	11.5%	10.40																
					Shallow	9.2	205.7	107.4					996	13.0%	Shallow Concentrated Flow - Unpaved*										5.8	2.9	2.9	1.7
					Channel	9.2	170.0*	89.6					3145	6.0%	7	7	0.00	0.050	1.47	15.21	0.73	5.9	8.9	8.9	5.3			
																						Total =	11.8	7.1				
BP14	47.89	77			Sheet	0.0	1.7	0.8	496	0.050	1.3%	24.71																
					Channel	0.8	21.0*	10.9					5733	0.8%	7	7	0.00	0.050	0.98	6.68	0.48	1.6	58.5	58.5	35.1			
																						Total =	58.5	35.1				
BP15	28.71	78			Sheet	0.0	3.4	1.7	374	0.050	0.6%	26.88																
					Shallow	1.7	249.7	125.7					651	1.1%	Shallow Concentrated Flow - Unpaved*										1.7	6.4	6.4	3.8
					Channel	1.7	24.0*	12.9					1594	1.2%	7	7	0.00	0.050	0.96	6.48	0.48	2.0	13.4	13.4	8.0			
																						Total =	19.8	11.9				
OP1	1262.45	76			Sheet	0.0	20.8	10.4	500	0.050	2.3%	19.82																
					Shallow	10.4	116.8	63.6					1429	8.7%	Use Equation from U.S Bureau of Reclamation Flood Hydrology Manual (1989)										Lc=	5822.0		
					Channel	10.4	438.0*	224.2					8606	1.4%	Tlag=26Kn(L*Lc/S*0.5)^0.33													
																						Total =		45.4				
OP2	125.44	78			Sheet	0.0	13.3	6.6	500	0.050	2.3%	19.81																
					Shallow	6.6	32.5	19.5					724	1.8%	Shallow Concentrated Flow - Unpaved*										2.2	5.6	5.6	3.3
					Channel	6.6	81.0*	43.8					1831	1.9%	7	7	0.00	0.050	1.40	13.68	0.69	3.2	9.5	9.5	5.7			
																						Total =	34.9	20.9				

TABLE B-5
Point Precipitation Frequency Estimates (NOAA)
Dammeron Valley

SUB-BASIN	AREA (acres)	PRECIPITATION	
		3-HOUR / 10 YEAR (inches)	3-HOUR / 100 YEAR (inches)
BE1	128.0	1.27	2.09
BE2	19.4	1.28	2.10
BE3	7.2	1.28	2.10
BE4	6.3	1.28	2.10
BE5	13.6	1.28	2.10
BE6	608.6	1.28	2.10
BE7	2610.0	1.33	2.17
BE8	344.9	1.29	2.13
BE9	74.5	1.28	2.11
BE10	30.3	1.28	2.11
BE11	23.5	1.28	2.11
BE12	14.0	1.28	2.11
BE13	25.5	1.29	2.12
BE14	1147.5	1.30	2.19
BE15	6.4	1.33	2.12
BE16	19.6	1.32	2.17
BE17	1314.4	1.27	2.30
OE1	1494.3	1.27	2.30
OE2	125.4	1.32	2.16
Total	8013.40	24.51	40.69
Study Area Average		1.29	2.14

Appendix C.

Channel and Culvert Calculator Reports

Channel Reports

Culvert Reports

Worksheet for Wuchim Channel 1

Project Description

Friction Method	Manning Formula
Solve For	Normal Depth

Input Data

Roughness Coefficient	0.069
Channel Slope	0.01194 ft/ft
Left Side Slope	50.00 %
Right Side Slope	50.00 %
Bottom Width	20.00 ft
Discharge	950.00 ft ³ /s

Results

Normal Depth	5.41 ft
Flow Area	166.63 ft ²
Wetted Perimeter	44.18 ft
Hydraulic Radius	3.77 ft
Top Width	41.63 ft
Critical Depth	3.63 ft
Critical Slope	0.05210 ft/ft
Velocity	5.70 ft/s
Velocity Head	0.51 ft
Specific Energy	5.91 ft
Froude Number	0.50
Flow Type	Subcritical

GVF Input Data

Downstream Depth	0.00 ft
Length	0.00 ft
Number Of Steps	0

GVF Output Data

Upstream Depth	0.00 ft
Profile Description	
Profile Headloss	0.00 ft
Downstream Velocity	Infinity ft/s
Upstream Velocity	Infinity ft/s
Normal Depth	5.41 ft
Critical Depth	3.63 ft
Channel Slope	0.01194 ft/ft
Critical Slope	0.05210 ft/ft

Worksheet for Wuchim Channel 2

Project Description

Friction Method Manning Formula
Solve For Normal Depth

Input Data

Roughness Coefficient	0.069
Channel Slope	0.01435 ft/ft
Left Side Slope	50.00 %
Right Side Slope	50.00 %
Bottom Width	10.00 ft
Discharge	125.00 ft ³ /s

Results

Normal Depth	2.34 ft
Flow Area	34.32 ft ²
Wetted Perimeter	20.46 ft
Hydraulic Radius	1.68 ft
Top Width	19.35 ft
Critical Depth	1.52 ft
Critical Slope	0.06857 ft/ft
Velocity	3.64 ft/s
Velocity Head	0.21 ft
Specific Energy	2.54 ft
Froude Number	0.48
Flow Type	Subcritical

GVF Input Data

Downstream Depth	0.00 ft
Length	0.00 ft
Number Of Steps	0

GVF Output Data

Upstream Depth	0.00 ft
Profile Description	
Profile Headloss	0.00 ft
Downstream Velocity	Infinity ft/s
Upstream Velocity	Infinity ft/s
Normal Depth	2.34 ft
Critical Depth	1.52 ft
Channel Slope	0.01435 ft/ft
Critical Slope	0.06857 ft/ft

Worksheet for Wuchim Channel 3

Project Description

Friction Method	Manning Formula
Solve For	Normal Depth

Input Data

Roughness Coefficient	0.069
Channel Slope	0.01154 ft/ft
Left Side Slope	50.00 %
Right Side Slope	50.00 %
Bottom Width	5.00 ft
Discharge	60.00 ft ³ /s

Results

Normal Depth	2.21 ft
Flow Area	20.76 ft ²
Wetted Perimeter	14.86 ft
Hydraulic Radius	1.40 ft
Top Width	13.82 ft
Critical Depth	1.36 ft
Critical Slope	0.07494 ft/ft
Velocity	2.89 ft/s
Velocity Head	0.13 ft
Specific Energy	2.34 ft
Froude Number	0.42
Flow Type	Subcritical

GVF Input Data

Downstream Depth	0.00 ft
Length	0.00 ft
Number Of Steps	0

GVF Output Data

Upstream Depth	0.00 ft
Profile Description	
Profile Headloss	0.00 ft
Downstream Velocity	Infinity ft/s
Upstream Velocity	Infinity ft/s
Normal Depth	2.21 ft
Critical Depth	1.36 ft
Channel Slope	0.01154 ft/ft
Critical Slope	0.07494 ft/ft

Worksheet for Wuchim Channel 4

Project Description

Friction Method Manning Formula
Solve For Normal Depth

Input Data

Roughness Coefficient	0.069	
Channel Slope	0.01013	ft/ft
Left Side Slope	50.00	%
Right Side Slope	50.00	%
Bottom Width	25.00	ft
Discharge	1200.00	ft ³ /s

Results

Normal Depth	5.82	ft
Flow Area	213.35	ft ²
Wetted Perimeter	51.04	ft
Hydraulic Radius	4.18	ft
Top Width	48.29	ft
Critical Depth	3.74	ft
Critical Slope	0.05074	ft/ft
Velocity	5.62	ft/s
Velocity Head	0.49	ft
Specific Energy	6.31	ft
Froude Number	0.47	
Flow Type	Subcritical	

GVF Input Data

Downstream Depth	0.00	ft
Length	0.00	ft
Number Of Steps	0	

GVF Output Data

Upstream Depth	0.00	ft
Profile Description		
Profile Headloss	0.00	ft
Downstream Velocity	Infinity	ft/s
Upstream Velocity	Infinity	ft/s
Normal Depth	5.82	ft
Critical Depth	3.74	ft
Channel Slope	0.01013	ft/ft
Critical Slope	0.05074	ft/ft

Worksheet for Wuchim Channel 5

Project Description

Friction Method	Manning Formula
Solve For	Normal Depth

Input Data

Roughness Coefficient	0.035
Channel Slope	0.00500 ft/ft
Left Side Slope	50.00 %
Right Side Slope	50.00 %
Bottom Width	5.00 ft
Discharge	25.00 ft ³ /s

Results

Normal Depth	1.23 ft
Flow Area	9.13 ft ²
Wetted Perimeter	10.48 ft
Hydraulic Radius	0.87 ft
Top Width	9.90 ft
Critical Depth	0.82 ft
Critical Slope	0.02182 ft/ft
Velocity	2.74 ft/s
Velocity Head	0.12 ft
Specific Energy	1.34 ft
Froude Number	0.50
Flow Type	Subcritical

GVF Input Data

Downstream Depth	0.00 ft
Length	0.00 ft
Number Of Steps	0

GVF Output Data

Upstream Depth	0.00 ft
Profile Description	
Profile Headloss	0.00 ft
Downstream Velocity	Infinity ft/s
Upstream Velocity	Infinity ft/s
Normal Depth	1.23 ft
Critical Depth	0.82 ft
Channel Slope	0.00500 ft/ft
Critical Slope	0.02182 ft/ft

Worksheet for Wuchim Channel 6

Project Description

Friction Method	Manning Formula
Solve For	Normal Depth

Input Data

Roughness Coefficient	0.035
Channel Slope	0.00800 ft/ft
Left Side Slope	50.00 %
Right Side Slope	50.00 %
Bottom Width	8.00 ft
Discharge	134.00 ft ³ /s

Results

Normal Depth	2.17 ft
Flow Area	26.78 ft ²
Wetted Perimeter	17.71 ft
Hydraulic Radius	1.51 ft
Top Width	16.68 ft
Critical Depth	1.76 ft
Critical Slope	0.01735 ft/ft
Velocity	5.00 ft/s
Velocity Head	0.39 ft
Specific Energy	2.56 ft
Froude Number	0.70
Flow Type	Subcritical

GVF Input Data

Downstream Depth	0.00 ft
Length	0.00 ft
Number Of Steps	0

GVF Output Data

Upstream Depth	0.00 ft
Profile Description	
Profile Headloss	0.00 ft
Downstream Velocity	Infinity ft/s
Upstream Velocity	Infinity ft/s
Normal Depth	2.17 ft
Critical Depth	1.76 ft
Channel Slope	0.00800 ft/ft
Critical Slope	0.01735 ft/ft

Worksheet for White Knolls Channel

Project Description

Friction Method	Manning Formula
Solve For	Discharge

Input Data

Roughness Coefficient	0.035
Channel Slope	0.00500 ft/ft
Normal Depth	2.00 ft
Left Side Slope	50.00 %
Right Side Slope	50.00 %
Bottom Width	4.00 ft

Results

Discharge	55.32 ft ³ /s
Flow Area	16.00 ft ²
Wetted Perimeter	12.94 ft
Hydraulic Radius	1.24 ft
Top Width	12.00 ft
Critical Depth	1.42 ft
Critical Slope	0.01949 ft/ft
Velocity	3.46 ft/s
Velocity Head	0.19 ft
Specific Energy	2.19 ft
Froude Number	0.53
Flow Type	Subcritical

GVF Input Data

Downstream Depth	0.00 ft
Length	0.00 ft
Number Of Steps	0

GVF Output Data

Upstream Depth	0.00 ft
Profile Description	
Profile Headloss	0.00 ft
Downstream Velocity	Infinity ft/s
Upstream Velocity	Infinity ft/s
Normal Depth	2.00 ft
Critical Depth	1.42 ft
Channel Slope	0.00500 ft/ft
Critical Slope	0.01949 ft/ft

Worksheet for Juniper Ridge Channel

Project Description

Friction Method	Manning Formula
Solve For	Normal Depth

Input Data

Roughness Coefficient	0.035
Channel Slope	0.02000 ft/ft
Left Side Slope	50.00 %
Right Side Slope	50.00 %
Bottom Width	3.00 ft
Discharge	20.00 ft ³ /s

Results

Normal Depth	0.93 ft
Flow Area	4.53 ft ²
Wetted Perimeter	7.16 ft
Hydraulic Radius	0.63 ft
Top Width	6.72 ft
Critical Depth	0.90 ft
Critical Slope	0.02232 ft/ft
Velocity	4.42 ft/s
Velocity Head	0.30 ft
Specific Energy	1.23 ft
Froude Number	0.95
Flow Type	Subcritical

GVF Input Data

Downstream Depth	0.00 ft
Length	0.00 ft
Number Of Steps	0

GVF Output Data

Upstream Depth	0.00 ft
Profile Description	
Profile Headloss	0.00 ft
Downstream Velocity	Infinity ft/s
Upstream Velocity	Infinity ft/s
Normal Depth	0.93 ft
Critical Depth	0.90 ft
Channel Slope	0.02000 ft/ft
Critical Slope	0.02232 ft/ft

Worksheet for High Ground East Channel

Project Description

Friction Method Manning Formula
Solve For Normal Depth

Input Data

Roughness Coefficient	0.035
Channel Slope	0.00740 ft/ft
Left Side Slope	50.00 %
Right Side Slope	50.00 %
Bottom Width	3.00 ft
Discharge	9.00 ft ³ /s

Results

Normal Depth	0.79 ft
Flow Area	3.64 ft ²
Wetted Perimeter	6.55 ft
Hydraulic Radius	0.56 ft
Top Width	6.18 ft
Critical Depth	0.57 ft
Critical Slope	0.02493 ft/ft
Velocity	2.47 ft/s
Velocity Head	0.09 ft
Specific Energy	0.89 ft
Froude Number	0.57
Flow Type	Subcritical

GVF Input Data

Downstream Depth	0.00 ft
Length	0.00 ft
Number Of Steps	0

GVF Output Data

Upstream Depth	0.00 ft
Profile Description	
Profile Headloss	0.00 ft
Downstream Velocity	Infinity ft/s
Upstream Velocity	Infinity ft/s
Normal Depth	0.79 ft
Critical Depth	0.57 ft
Channel Slope	0.00740 ft/ft
Critical Slope	0.02493 ft/ft

Worksheet for High Ground North Channel

Project Description

Friction Method Manning Formula
Solve For Normal Depth

Input Data

Roughness Coefficient	0.035
Channel Slope	0.04000 ft/ft
Left Side Slope	50.00 %
Right Side Slope	50.00 %
Bottom Width	3.00 ft
Discharge	9.00 ft ³ /s

Results

Normal Depth	0.50 ft
Flow Area	2.01 ft ²
Wetted Perimeter	5.24 ft
Hydraulic Radius	0.38 ft
Top Width	5.01 ft
Critical Depth	0.57 ft
Critical Slope	0.02493 ft/ft
Velocity	4.48 ft/s
Velocity Head	0.31 ft
Specific Energy	0.81 ft
Froude Number	1.25
Flow Type	Supercritical

GVF Input Data

Downstream Depth	0.00 ft
Length	0.00 ft
Number Of Steps	0

GVF Output Data

Upstream Depth	0.00 ft
Profile Description	
Profile Headloss	0.00 ft
Downstream Velocity	Infinity ft/s
Upstream Velocity	Infinity ft/s
Normal Depth	0.50 ft
Critical Depth	0.57 ft
Channel Slope	0.04000 ft/ft
Critical Slope	0.02493 ft/ft

Worksheet for East Meadow Channel

Project Description

Friction Method	Manning Formula
Solve For	Normal Depth

Input Data

Roughness Coefficient	0.035
Channel Slope	0.00500 ft/ft
Left Side Slope	50.00 %
Right Side Slope	50.00 %
Bottom Width	3.00 ft
Discharge	13.00 ft ³ /s

Results

Normal Depth	1.07 ft
Flow Area	5.47 ft ²
Wetted Perimeter	7.77 ft
Hydraulic Radius	0.70 ft
Top Width	7.26 ft
Critical Depth	0.71 ft
Critical Slope	0.02367 ft/ft
Velocity	2.38 ft/s
Velocity Head	0.09 ft
Specific Energy	1.15 ft
Froude Number	0.48
Flow Type	Subcritical

GVF Input Data

Downstream Depth	0.00 ft
Length	0.00 ft
Number Of Steps	0

GVF Output Data

Upstream Depth	0.00 ft
Profile Description	
Profile Headloss	0.00 ft
Downstream Velocity	Infinity ft/s
Upstream Velocity	Infinity ft/s
Normal Depth	1.07 ft
Critical Depth	0.71 ft
Channel Slope	0.00500 ft/ft
Critical Slope	0.02367 ft/ft

Culvert Calculator Report

Dammeron Valley BE1

Solve For: Discharge

Culvert Summary			
Allowable HW Elevation	4,630.67 ft	Headwater Depth/Height	1.33
Computed Headwater Elevation	4,630.67 ft	Discharge	101.21 cfs
Inlet Control HW Elev.	4,630.58 ft	Tailwater Elevation	0.00 ft
Outlet Control HW Elev.	4,630.67 ft	Control Type	Entrance Control

Grades			
Upstream Invert	4,625.36 ft	Downstream Invert	4,623.12 ft
Length	100.00 ft	Constructed Slope	0.022400 ft/ft

Hydraulic Profile			
Profile	S2	Depth, Downstream	2.13 ft
Slope Type	Steep	Normal Depth	1.93 ft
Flow Regime	Supercritical	Critical Depth	3.05 ft
Velocity Downstream	14.88 ft/s	Critical Slope	0.005758 ft/ft

Section			
Section Shape	Circular	Mannings Coefficient	0.013
Section Material	Concrete	Span	4.00 ft
Section Size	48 inch	Rise	4.00 ft
Number Sections	1		

Outlet Control Properties			
Outlet Control HW Elev.	4,630.67 ft	Upstream Velocity Head	1.51 ft
Ke	0.50	Entrance Loss	0.75 ft

Inlet Control Properties			
Inlet Control HW Elev.	4,630.58 ft	Flow Control	N/A
Inlet Type	Square edge w/headwall	Area Full	12.6 ft ²
K	0.00980	HDS 5 Chart	1
M	2.00000	HDS 5 Scale	1
C	0.03980	Equation Form	1
Y	0.67000		

Culvert Calculator Report

Dammeron Valley BE2

Solve For: Discharge

Culvert Summary			
Allowable HW Elevation	4,625.57 ft	Headwater Depth/Height	1.68
Computed Headwater Elevation	4,625.57 ft	Discharge	22.44 cfs
Inlet Control HW Elev.	4,625.57 ft	Tailwater Elevation	0.00 ft
Outlet Control HW Elev.	4,625.37 ft	Control Type	Inlet Control

Grades			
Upstream Invert	4,622.22 ft	Downstream Invert	4,619.98 ft
Length	88.00 ft	Constructed Slope	0.020364 ft/ft

Hydraulic Profile			
Profile	S2	Depth, Downstream	1.26 ft
Slope Type	Steep	Normal Depth	1.23 ft
Flow Regime	Supercritical	Critical Depth	1.69 ft
Velocity Downstream	10.77 ft/s	Critical Slope	0.009357 ft/ft

Section			
Section Shape	Circular	Mannings Coefficient	0.013
Section Material	Concrete	Span	2.00 ft
Section Size	24 inch	Rise	2.00 ft
Number Sections	1		

Outlet Control Properties			
Outlet Control HW Elev.	4,625.37 ft	Upstream Velocity Head	0.98 ft
Ke	0.50	Entrance Loss	0.49 ft

Inlet Control Properties			
Inlet Control HW Elev.	4,625.57 ft	Flow Control	N/A
Inlet Type	Square edge w/headwall	Area Full	3.1 ft ²
K	0.00980	HDS 5 Chart	1
M	2.00000	HDS 5 Scale	1
C	0.03980	Equation Form	1
Y	0.67000		

Culvert Calculator Report

Dammeron Valley BE3

Solve For: Discharge

Culvert Summary			
Allowable HW Elevation	4,623.11 ft	Headwater Depth/Height	1.94
Computed Headwater Elevation	4,623.11 ft	Discharge	25.16 cfs
Inlet Control HW Elev.	4,623.11 ft	Tailwater Elevation	0.00 ft
Outlet Control HW Elev.	4,622.72 ft	Control Type	Inlet Control

Grades			
Upstream Invert	4,619.24 ft	Downstream Invert	4,617.27 ft
Length	87.00 ft	Constructed Slope	0.022644 ft/ft

Hydraulic Profile			
Profile	S2	Depth, Downstream	1.32 ft
Slope Type	Steep	Normal Depth	1.28 ft
Flow Regime	Supercritical	Critical Depth	1.77 ft
Velocity Downstream	11.44 ft/s	Critical Slope	0.011089 ft/ft

Section			
Section Shape	Circular	Mannings Coefficient	0.013
Section Material	Concrete	Span	2.00 ft
Section Size	24 inch	Rise	2.00 ft
Number Sections	1		

Outlet Control Properties			
Outlet Control HW Elev.	4,622.72 ft	Upstream Velocity Head	1.14 ft
Ke	0.50	Entrance Loss	0.57 ft

Inlet Control Properties			
Inlet Control HW Elev.	4,623.11 ft	Flow Control	N/A
Inlet Type	Square edge w/headwall	Area Full	3.1 ft ²
K	0.00980	HDS 5 Chart	1
M	2.00000	HDS 5 Scale	1
C	0.03980	Equation Form	1
Y	0.67000		

Culvert Calculator Report

Dammeron Valley BE4

Solve For: Discharge

Culvert Summary			
Allowable HW Elevation	4,617.98 ft	Headwater Depth/Height	1.60
Computed Headwater Elevation	4,617.98 ft	Discharge	21.52 cfs
Inlet Control HW Elev.	4,617.98 ft	Tailwater Elevation	0.00 ft
Outlet Control HW Elev.	4,617.84 ft	Control Type	Inlet Control
Grades			
Upstream Invert	4,614.79 ft	Downstream Invert	4,613.23 ft
Length	86.00 ft	Constructed Slope	0.018140 ft/ft
Hydraulic Profile			
Profile	S2	Depth, Downstream	1.27 ft
Slope Type	Steep	Normal Depth	1.24 ft
Flow Regime	Supercritical	Critical Depth	1.66 ft
Velocity Downstream	10.24 ft/s	Critical Slope	0.008860 ft/ft
Section			
Section Shape	Circular	Mannings Coefficient	0.013
Section Material	Concrete	Span	2.00 ft
Section Size	24 inch	Rise	2.00 ft
Number Sections	1		
Outlet Control Properties			
Outlet Control HW Elev.	4,617.84 ft	Upstream Velocity Head	0.93 ft
Ke	0.50	Entrance Loss	0.46 ft
Inlet Control Properties			
Inlet Control HW Elev.	4,617.98 ft	Flow Control	N/A
Inlet Type	Square edge w/headwall	Area Full	3.1 ft ²
K	0.00980	HDS 5 Chart	1
M	2.00000	HDS 5 Scale	1
C	0.03980	Equation Form	1
Y	0.67000		

Culvert Calculator Report

Dammeron Valley BE5

Solve For: Discharge

Culvert Summary			
Allowable HW Elevation	4,609.65 ft	Headwater Depth/Height	1.82
Computed Headwater Elevation	4,609.65 ft	Discharge	23.98 cfs
Inlet Control HW Elev.	4,609.65 ft	Tailwater Elevation	0.00 ft
Outlet Control HW Elev.	4,609.35 ft	Control Type	Inlet Control

Grades			
Upstream Invert	4,606.01 ft	Downstream Invert	4,604.33 ft
Length	86.50 ft	Constructed Slope	0.019422 ft/ft

Hydraulic Profile			
Profile	S2	Depth, Downstream	1.34 ft
Slope Type	Steep	Normal Depth	1.31 ft
Flow Regime	Supercritical	Critical Depth	1.73 ft
Velocity Downstream	10.73 ft/s	Critical Slope	0.010292 ft/ft

Section			
Section Shape	Circular	Mannings Coefficient	0.013
Section Material	Concrete	Span	2.00 ft
Section Size	24 inch	Rise	2.00 ft
Number Sections	1		

Outlet Control Properties			
Outlet Control HW Elev.	4,609.35 ft	Upstream Velocity Head	1.07 ft
Ke	0.50	Entrance Loss	0.53 ft

Inlet Control Properties			
Inlet Control HW Elev.	4,609.65 ft	Flow Control	N/A
Inlet Type	Square edge w/headwall	Area Full	3.1 ft ²
K	0.00980	HDS 5 Chart	1
M	2.00000	HDS 5 Scale	1
C	0.03980	Equation Form	1
Y	0.67000		

Culvert Calculator Report

Dammeron Valley BE6

Solve For: Discharge

Culvert Summary			
Allowable HW Elevation	4,597.59 ft	Headwater Depth/Height	1.88
Computed Headwater Elevation	4,597.59 ft	Discharge	135.37 cfs
Inlet Control HW Elev.	4,597.59 ft	Tailwater Elevation	0.00 ft
Outlet Control HW Elev.	4,597.06 ft	Control Type	Inlet Control

Grades			
Upstream Invert	4,591.95 ft	Downstream Invert	4,590.86 ft
Length	86.00 ft	Constructed Slope	0.012674 ft/ft

Hydraulic Profile			
Profile	S2	Depth, Downstream	2.29 ft
Slope Type	Steep	Normal Depth	2.23 ft
Flow Regime	Supercritical	Critical Depth	2.63 ft
Velocity Downstream	11.70 ft/s	Critical Slope	0.009325 ft/ft

Section			
Section Shape	Circular	Mannings Coefficient	0.013
Section Material	Concrete	Span	3.00 ft
Section Size	36 inch	Rise	3.00 ft
Number Sections	2		

Outlet Control Properties			
Outlet Control HW Elev.	4,597.06 ft	Upstream Velocity Head	1.65 ft
Ke	0.50	Entrance Loss	0.83 ft

Inlet Control Properties			
Inlet Control HW Elev.	4,597.59 ft	Flow Control	N/A
Inlet Type	Square edge w/headwall	Area Full	14.1 ft ²
K	0.00980	HDS 5 Chart	1
M	2.00000	HDS 5 Scale	1
C	0.03980	Equation Form	1
Y	0.67000		

Culvert Calculator Report

Dammeron Valley BE7

Solve For: Discharge

Culvert Summary			
Allowable HW Elevation	4,600.39 ft	Headwater Depth/Height	1.67
Computed Headwater Elevation	4,600.39 ft	Discharge	123.81 cfs
Inlet Control HW Elev.	4,600.39 ft	Tailwater Elevation	0.00 ft
Outlet Control HW Elev.	4,600.12 ft	Control Type	Inlet Control

Grades			
Upstream Invert	4,595.38 ft	Downstream Invert	4,592.32 ft
Length	87.00 ft	Constructed Slope	0.035172 ft/ft

Hydraulic Profile			
Profile	S2	Depth, Downstream	1.64 ft
Slope Type	Steep	Normal Depth	1.49 ft
Flow Regime	Supercritical	Critical Depth	2.54 ft
Velocity Downstream	15.61 ft/s	Critical Slope	0.008187 ft/ft

Section			
Section Shape	Circular	Mannings Coefficient	0.013
Section Material	Concrete	Span	3.00 ft
Section Size	36 inch	Rise	3.00 ft
Number Sections	2		

Outlet Control Properties			
Outlet Control HW Elev.	4,600.12 ft	Upstream Velocity Head	1.47 ft
Ke	0.50	Entrance Loss	0.73 ft

Inlet Control Properties			
Inlet Control HW Elev.	4,600.39 ft	Flow Control	N/A
Inlet Type	Square edge w/headwall	Area Full	14.1 ft ²
K	0.00980	HDS 5 Chart	1
M	2.00000	HDS 5 Scale	1
C	0.03980	Equation Form	1
Y	0.67000		

Culvert Calculator Report

Dammeron Valley BE8

Solve For: Discharge

Culvert Summary			
Allowable HW Elevation	4,610.26 ft	Headwater Depth/Height	1.60
Computed Headwater Elevation	4,610.26 ft	Discharge	59.42 cfs
Inlet Control HW Elev.	4,610.26 ft	Tailwater Elevation	0.00 ft
Outlet Control HW Elev.	4,610.03 ft	Control Type	Inlet Control
Grades			
Upstream Invert	4,605.45 ft	Downstream Invert	4,604.63 ft
Length	100.00 ft	Constructed Slope	0.008200 ft/ft
Hydraulic Profile			
Profile	S2	Depth, Downstream	2.42 ft
Slope Type	Steep	Normal Depth	2.42 ft
Flow Regime	Supercritical	Critical Depth	2.49 ft
Velocity Downstream	9.74 ft/s	Critical Slope	0.007757 ft/ft
Section			
Section Shape	Circular	Mannings Coefficient	0.013
Section Material	Concrete	Span	3.00 ft
Section Size	36 inch	Rise	3.00 ft
Number Sections	1		
Outlet Control Properties			
Outlet Control HW Elev.	4,610.03 ft	Upstream Velocity Head	1.39 ft
Ke	0.50	Entrance Loss	0.70 ft
Inlet Control Properties			
Inlet Control HW Elev.	4,610.26 ft	Flow Control	N/A
Inlet Type	Square edge w/headwall	Area Full	7.1 ft ²
K	0.00980	HDS 5 Chart	1
M	2.00000	HDS 5 Scale	1
C	0.03980	Equation Form	1
Y	0.67000		

Culvert Calculator Report

Dammeron Valley BE9

Solve For: Discharge

Culvert Summary			
Allowable HW Elevation	4,611.01 ft	Headwater Depth/Height	1.52
Computed Headwater Elevation	4,611.01 ft	Discharge	56.84 cfs
Inlet Control HW Elev.	4,611.01 ft	Tailwater Elevation	0.00 ft
Outlet Control HW Elev.	4,610.86 ft	Control Type	Inlet Control

Grades			
Upstream Invert	4,606.44 ft	Downstream Invert	4,605.60 ft
Length	95.00 ft	Constructed Slope	0.008842 ft/ft

Hydraulic Profile			
Profile	S2	Depth, Downstream	2.25 ft
Slope Type	Steep	Normal Depth	2.24 ft
Flow Regime	Supercritical	Critical Depth	2.44 ft
Velocity Downstream	10.01 ft/s	Critical Slope	0.007347 ft/ft

Section			
Section Shape	Circular	Mannings Coefficient	0.013
Section Material	Concrete	Span	3.00 ft
Section Size	36 inch	Rise	3.00 ft
Number Sections	1		

Outlet Control Properties			
Outlet Control HW Elev.	4,610.86 ft	Upstream Velocity Head	1.32 ft
Ke	0.50	Entrance Loss	0.66 ft

Inlet Control Properties			
Inlet Control HW Elev.	4,611.01 ft	Flow Control	N/A
Inlet Type	Square edge w/headwall	Area Full	7.1 ft ²
K	0.00980	HDS 5 Chart	1
M	2.00000	HDS 5 Scale	1
C	0.03980	Equation Form	1
Y	0.67000		

Culvert Calculator Report

Dammeron Valley BE10

Solve For: Discharge

Culvert Summary			
Allowable HW Elevation	4,623.70 ft	Headwater Depth/Height	2.04
Computed Headwater Elevation	4,623.70 ft	Discharge	26.09 cfs
Inlet Control HW Elev.	4,623.70 ft	Tailwater Elevation	0.00 ft
Outlet Control HW Elev.	4,623.22 ft	Control Type	Inlet Control

Grades			
Upstream Invert	4,619.63 ft	Downstream Invert	4,617.61 ft
Length	140.00 ft	Constructed Slope	0.014429 ft/ft

Hydraulic Profile			
Profile	S2	Depth, Downstream	1.57 ft
Slope Type	Steep	Normal Depth	1.57 ft
Flow Regime	Supercritical	Critical Depth	1.79 ft
Velocity Downstream	9.85 ft/s	Critical Slope	0.011775 ft/ft

Section			
Section Shape	Circular	Mannings Coefficient	0.013
Section Material	Concrete	Span	2.00 ft
Section Size	24 inch	Rise	2.00 ft
Number Sections	1		

Outlet Control Properties			
Outlet Control HW Elev.	4,623.22 ft	Upstream Velocity Head	1.20 ft
Ke	0.50	Entrance Loss	0.60 ft

Inlet Control Properties			
Inlet Control HW Elev.	4,623.70 ft	Flow Control	N/A
Inlet Type	Square edge w/headwall	Area Full	3.1 ft ²
K	0.00980	HDS 5 Chart	1
M	2.00000	HDS 5 Scale	1
C	0.03980	Equation Form	1
Y	0.67000		

Culvert Calculator Report

Dammeron Valley BE11

Solve For: Discharge

Culvert Summary			
Allowable HW Elevation	4,631.11 ft	Headwater Depth/Height	2.54
Computed Headwater Elevation	4,631.11 ft	Discharge	29.38 cfs
Inlet Control HW Elev.	4,630.83 ft	Tailwater Elevation	0.00 ft
Outlet Control HW Elev.	4,631.11 ft	Control Type	Outlet Control

Grades			
Upstream Invert	4,626.02 ft	Downstream Invert	4,625.11 ft
Length	120.00 ft	Constructed Slope	0.007583 ft/ft

Hydraulic Profile			
Profile	CompositeM2PressureProfile	Depth, Downstream	1.85 ft
Slope Type	Mild	Normal Depth	N/A ft
Flow Regime	Subcritical	Critical Depth	1.85 ft
Velocity Downstream	9.67 ft/s	Critical Slope	0.014606 ft/ft

Section			
Section Shape	Circular	Mannings Coefficient	0.013
Section Material	Concrete	Span	2.00 ft
Section Size	24 inch	Rise	2.00 ft
Number Sections	1		

Outlet Control Properties			
Outlet Control HW Elev.	4,631.11 ft	Upstream Velocity Head	1.36 ft
Ke	0.50	Entrance Loss	0.68 ft

Inlet Control Properties			
Inlet Control HW Elev.	4,630.83 ft	Flow Control	N/A
Inlet Type	Square edge w/headwall	Area Full	3.1 ft ²
K	0.00980	HDS 5 Chart	1
M	2.00000	HDS 5 Scale	1
C	0.03980	Equation Form	1
Y	0.67000		

Culvert Calculator Report

Dammeron Valley BE12

Solve For: Discharge

Culvert Summary			
Allowable HW Elevation	4,657.70 ft	Headwater Depth/Height	1.28
Computed Headwater Elevation	4,657.70 ft	Discharge	16.99 cfs
Inlet Control HW Elev.	4,657.62 ft	Tailwater Elevation	0.00 ft
Outlet Control HW Elev.	4,657.70 ft	Control Type	Entrance Control

Grades			
Upstream Invert	4,655.14 ft	Downstream Invert	4,652.45 ft
Length	90.00 ft	Constructed Slope	0.029889 ft/ft

Hydraulic Profile			
Profile	S2	Depth, Downstream	0.95 ft
Slope Type	Steep	Normal Depth	0.92 ft
Flow Regime	Supercritical	Critical Depth	1.49 ft
Velocity Downstream	11.63 ft/s	Critical Slope	0.006933 ft/ft

Section			
Section Shape	Circular	Mannings Coefficient	0.013
Section Material	Concrete	Span	2.00 ft
Section Size	24 inch	Rise	2.00 ft
Number Sections	1		

Outlet Control Properties			
Outlet Control HW Elev.	4,657.70 ft	Upstream Velocity Head	0.72 ft
Ke	0.50	Entrance Loss	0.36 ft

Inlet Control Properties			
Inlet Control HW Elev.	4,657.62 ft	Flow Control	N/A
Inlet Type	Square edge w/headwall	Area Full	3.1 ft ²
K	0.00980	HDS 5 Chart	1
M	2.00000	HDS 5 Scale	1
C	0.03980	Equation Form	1
Y	0.67000		

Culvert Calculator Report

Dammeron Valley BE13

Solve For: Discharge

Culvert Summary			
Allowable HW Elevation	4,664.28 ft	Headwater Depth/Height	2.11
Computed Headwater Elevation	4,664.28 ft	Discharge	26.81 cfs
Inlet Control HW Elev.	4,664.28 ft	Tailwater Elevation	0.00 ft
Outlet Control HW Elev.	4,663.75 ft	Control Type	Inlet Control

Grades			
Upstream Invert	4,660.06 ft	Downstream Invert	4,658.36 ft
Length	87.00 ft	Constructed Slope	0.019540 ft/ft

Hydraulic Profile			
Profile	S2	Depth, Downstream	1.45 ft
Slope Type	Steep	Normal Depth	1.41 ft
Flow Regime	Supercritical	Critical Depth	1.80 ft
Velocity Downstream	11.01 ft/s	Critical Slope	0.012346 ft/ft

Section			
Section Shape	Circular	Mannings Coefficient	0.013
Section Material	Concrete	Span	2.00 ft
Section Size	24 inch	Rise	2.00 ft
Number Sections	1		

Outlet Control Properties			
Outlet Control HW Elev.	4,663.75 ft	Upstream Velocity Head	1.26 ft
Ke	0.50	Entrance Loss	0.63 ft

Inlet Control Properties			
Inlet Control HW Elev.	4,664.28 ft	Flow Control	N/A
Inlet Type	Square edge w/headwall	Area Full	3.1 ft ²
K	0.00980	HDS 5 Chart	1
M	2.00000	HDS 5 Scale	1
C	0.03980	Equation Form	1
Y	0.67000		

Culvert Calculator Report

Dammeron Valley BE14

Solve For: Discharge

Culvert Summary			
Allowable HW Elevation	4,674.25 ft	Headwater Depth/Height	1.41
Computed Headwater Elevation	4,674.25 ft	Discharge	190.38 cfs
Inlet Control HW Elev.	4,674.25 ft	Tailwater Elevation	0.00 ft
Outlet Control HW Elev.	4,674.19 ft	Control Type	Inlet Control
Grades			
Upstream Invert	4,667.19 ft	Downstream Invert	4,665.69 ft
Length	119.00 ft	Constructed Slope	0.012605 ft/ft
Hydraulic Profile			
Profile	S2	Depth, Downstream	3.16 ft
Slope Type	Steep	Normal Depth	2.94 ft
Flow Regime	Supercritical	Critical Depth	3.95 ft
Velocity Downstream	14.58 ft/s	Critical Slope	0.005746 ft/ft
Section			
Section Shape	Circular	Mannings Coefficient	0.013
Section Material	Concrete	Span	5.00 ft
Section Size	60 inch	Rise	5.00 ft
Number Sections	1		
Outlet Control Properties			
Outlet Control HW Elev.	4,674.19 ft	Upstream Velocity Head	2.04 ft
Ke	0.50	Entrance Loss	1.02 ft
Inlet Control Properties			
Inlet Control HW Elev.	4,674.25 ft	Flow Control	Submerged
Inlet Type	Square edge w/headwall	Area Full	19.6 ft ²
K	0.00980	HDS 5 Chart	1
M	2.00000	HDS 5 Scale	1
C	0.03980	Equation Form	1
Y	0.67000		

Culvert Calculator Report

Dammeron Valley BE15

Solve For: Discharge

Culvert Summary			
Allowable HW Elevation	4,688.65 ft	Headwater Depth/Height	1.49
Computed Headwater Elevation	4,688.65 ft	Discharge	20.32 cfs
Inlet Control HW Elev.	4,688.65 ft	Tailwater Elevation	0.00 ft
Outlet Control HW Elev.	4,688.58 ft	Control Type	Inlet Control

Grades			
Upstream Invert	4,685.66 ft	Downstream Invert	4,684.33 ft
Length	89.50 ft	Constructed Slope	0.014860 ft/ft

Hydraulic Profile			
Profile	S2	Depth, Downstream	1.29 ft
Slope Type	Steep	Normal Depth	1.28 ft
Flow Regime	Supercritical	Critical Depth	1.62 ft
Velocity Downstream	9.46 ft/s	Critical Slope	0.008266 ft/ft

Section			
Section Shape	Circular	Mannings Coefficient	0.013
Section Material	Concrete	Span	2.00 ft
Section Size	24 inch	Rise	2.00 ft
Number Sections	1		

Outlet Control Properties			
Outlet Control HW Elev.	4,688.58 ft	Upstream Velocity Head	0.87 ft
Ke	0.50	Entrance Loss	0.43 ft

Inlet Control Properties			
Inlet Control HW Elev.	4,688.65 ft	Flow Control	N/A
Inlet Type	Square edge w/headwall	Area Full	3.1 ft ²
K	0.00980	HDS 5 Chart	1
M	2.00000	HDS 5 Scale	1
C	0.03980	Equation Form	1
Y	0.67000		

Culvert Calculator Report

Dammeron Valley BE16

Solve For: Discharge

Culvert Summary			
Allowable HW Elevation	4,694.07 ft	Headwater Depth/Height	1.83
Computed Headwater Elevation	4,694.07 ft	Discharge	24.10 cfs
Inlet Control HW Elev.	4,694.07 ft	Tailwater Elevation	0.00 ft
Outlet Control HW Elev.	4,693.75 ft	Control Type	Inlet Control

Grades			
Upstream Invert	4,690.40 ft	Downstream Invert	4,689.41 ft
Length	88.00 ft	Constructed Slope	0.011250 ft/ft

Hydraulic Profile			
Profile	S2	Depth, Downstream	1.65 ft
Slope Type	Steep	Normal Depth	1.65 ft
Flow Regime	Supercritical	Critical Depth	1.74 ft
Velocity Downstream	8.71 ft/s	Critical Slope	0.010364 ft/ft

Section			
Section Shape	Circular	Mannings Coefficient	0.013
Section Material	Concrete	Span	2.00 ft
Section Size	24 inch	Rise	2.00 ft
Number Sections	1		

Outlet Control Properties			
Outlet Control HW Elev.	4,693.75 ft	Upstream Velocity Head	1.07 ft
Ke	0.50	Entrance Loss	0.54 ft

Inlet Control Properties			
Inlet Control HW Elev.	4,694.07 ft	Flow Control	N/A
Inlet Type	Square edge w/headwall	Area Full	3.1 ft ²
K	0.00980	HDS 5 Chart	1
M	2.00000	HDS 5 Scale	1
C	0.03980	Equation Form	1
Y	0.67000		

Culvert Calculator Report

Dammeron Valley BE17

Solve For: Discharge

Culvert Summary			
Allowable HW Elevation	4,711.57 ft	Headwater Depth/Height	2.21
Computed Headwater Elevation	4,711.57 ft	Discharge	431.79 cfs
Inlet Control HW Elev.	4,711.57 ft	Tailwater Elevation	0.00 ft
Outlet Control HW Elev.	4,709.72 ft	Control Type	Inlet Control
Grades			
Upstream Invert	4,698.31 ft	Downstream Invert	4,696.45 ft
Length	133.00 ft	Constructed Slope	0.013985 ft/ft
Hydraulic Profile			
Profile	S2	Depth, Downstream	4.66 ft
Slope Type	Steep	Normal Depth	4.30 ft
Flow Regime	Supercritical	Critical Depth	5.47 ft
Velocity Downstream	18.33 ft/s	Critical Slope	0.009070 ft/ft
Section			
Section Shape	Circular	Mannings Coefficient	0.013
Section Material	Concrete	Span	6.00 ft
Section Size	72 inch	Rise	6.00 ft
Number Sections	1		
Outlet Control Properties			
Outlet Control HW Elev.	4,709.72 ft	Upstream Velocity Head	3.96 ft
Ke	0.50	Entrance Loss	1.98 ft
Inlet Control Properties			
Inlet Control HW Elev.	4,711.57 ft	Flow Control	N/A
Inlet Type	Square edge w/headwall	Area Full	28.3 ft ²
K	0.00980	HDS 5 Chart	1
M	2.00000	HDS 5 Scale	1
C	0.03980	Equation Form	1
Y	0.67000		

Culvert Calculator Report

Dammeron Valley BP13

Solve For: Section Size

Culvert Summary			
Allowable HW Elevation	4,546.00 ft	Headwater Depth/Height	2.63
Computed Headwater Elevation	4,545.88 ft	Discharge	170.00 cfs
Inlet Control HW Elev.	4,545.88 ft	Tailwater Elevation	0.00 ft
Outlet Control HW Elev.	4,544.39 ft	Control Type	Inlet Control

Grades			
Upstream Invert	4,538.00 ft	Downstream Invert	4,537.10 ft
Length	79.00 ft	Constructed Slope	0.011392 ft/ft

Hydraulic Profile			
Profile	S2	Depth, Downstream	2.63 ft
Slope Type	Steep	Normal Depth	2.43 ft
Flow Regime	Supercritical	Critical Depth	3.00 ft
Velocity Downstream	12.92 ft/s	Critical Slope	0.010715 ft/ft

Section			
Section Shape	Box	Mannings Coefficient	0.013
Section Material	Concrete	Span	5.00 ft
Section Size	5 x 3 ft	Rise	3.00 ft
Number Sections	1		

Outlet Control Properties			
Outlet Control HW Elev.	4,544.39 ft	Upstream Velocity Head	2.00 ft
Ke	0.70	Entrance Loss	1.40 ft

Inlet Control Properties			
Inlet Control HW Elev.	4,545.88 ft	Flow Control	Submerged
Inlet Type	0° wingwall flares	Area Full	15.0 ft ²
K	0.06100	HDS 5 Chart	8
M	0.75000	HDS 5 Scale	3
C	0.04230	Equation Form	1
Y	0.82000		

Culvert Calculator Report

Dammeron Valley BP15

Solve For: Section Size

Culvert Summary			
Allowable HW Elevation	4,570.00 ft	Headwater Depth/Height	1.97
Computed Headwater Elevation	4,569.87 ft	Discharge	937.00 cfs
Inlet Control HW Elev.	4,569.87 ft	Tailwater Elevation	0.00 ft
Outlet Control HW Elev.	4,568.77 ft	Control Type	Inlet Control

Grades			
Upstream Invert	4,560.00 ft	Downstream Invert	4,559.00 ft
Length	79.00 ft	Constructed Slope	0.012658 ft/ft

Hydraulic Profile			
Profile	S2	Depth, Downstream	3.70 ft
Slope Type	Steep	Normal Depth	3.13 ft
Flow Regime	Supercritical	Critical Depth	4.74 ft
Velocity Downstream	15.81 ft/s	Critical Slope	0.004157 ft/ft

Section			
Section Shape	Box	Mannings Coefficient	0.013
Section Material	Concrete	Span	8.00 ft
Section Size	8 x 5 ft	Rise	5.00 ft
Number Sections	2		

Outlet Control Properties			
Outlet Control HW Elev.	4,568.77 ft	Upstream Velocity Head	2.37 ft
Ke	0.70	Entrance Loss	1.66 ft

Inlet Control Properties			
Inlet Control HW Elev.	4,569.87 ft	Flow Control	Submerged
Inlet Type	0° wingwall flares	Area Full	80.0 ft ²
K	0.06100	HDS 5 Chart	8
M	0.75000	HDS 5 Scale	3
C	0.04230	Equation Form	1
Y	0.82000		

Culvert Calculator Report

Dammeron Valley BE6 Recommended

Solve For: Section Size

Culvert Summary			
Allowable HW Elevation	4,597.59 ft	Headwater Depth/Height	1.07
Computed Headwater Elevation	4,597.29 ft	Discharge	250.00 cfs
Inlet Control HW Elev.	4,596.85 ft	Tailwater Elevation	0.00 ft
Outlet Control HW Elev.	4,597.29 ft	Control Type	Entrance Control

Grades			
Upstream Invert	4,591.95 ft	Downstream Invert	4,590.86 ft
Length	86.00 ft	Constructed Slope	0.012674 ft/ft

Hydraulic Profile			
Profile	S2	Depth, Downstream	2.08 ft
Slope Type	Steep	Normal Depth	1.82 ft
Flow Regime	Supercritical	Critical Depth	2.88 ft
Velocity Downstream	13.33 ft/s	Critical Slope	0.003348 ft/ft

Section			
Section Shape	Box	Mannings Coefficient	0.013
Section Material	Concrete	Span	9.00 ft
Section Size	9 x 5 ft	Rise	5.00 ft
Number Sections	1		

Outlet Control Properties			
Outlet Control HW Elev.	4,597.29 ft	Upstream Velocity Head	1.44 ft
Ke	0.70	Entrance Loss	1.01 ft

Inlet Control Properties			
Inlet Control HW Elev.	4,596.85 ft	Flow Control	Unsubmerged
Inlet Type	0° wingwall flares	Area Full	45.0 ft ²
K	0.06100	HDS 5 Chart	8
M	0.75000	HDS 5 Scale	3
C	0.04230	Equation Form	1
Y	0.82000		

Culvert Calculator Report

Dammeron Valley BE7 Recommended

Solve For: Section Size

Culvert Summary			
Allowable HW Elevation	4,600.39 ft	Headwater Depth/Height	0.96
Computed Headwater Elevation	4,600.17 ft	Discharge	638.00 cfs
Inlet Control HW Elev.	4,599.71 ft	Tailwater Elevation	0.00 ft
Outlet Control HW Elev.	4,600.17 ft	Control Type	Entrance Control

Grades			
Upstream Invert	4,595.38 ft	Downstream Invert	4,592.32 ft
Length	87.00 ft	Constructed Slope	0.035172 ft/ft

Hydraulic Profile			
Profile	S2	Depth, Downstream	1.40 ft
Slope Type	Steep	Normal Depth	1.16 ft
Flow Regime	Supercritical	Critical Depth	2.59 ft
Velocity Downstream	16.85 ft/s	Critical Slope	0.003287 ft/ft

Section			
Section Shape	Box	Mannings Coefficient	0.013
Section Material	Concrete	Span	9.00 ft
Section Size	9 x 5 ft	Rise	5.00 ft
Number Sections	3		

Outlet Control Properties			
Outlet Control HW Elev.	4,600.17 ft	Upstream Velocity Head	1.29 ft
Ke	0.70	Entrance Loss	0.91 ft

Inlet Control Properties			
Inlet Control HW Elev.	4,599.71 ft	Flow Control	Unsubmerged
Inlet Type	0° wingwall flares	Area Full	135.0 ft ²
K	0.06100	HDS 5 Chart	8
M	0.75000	HDS 5 Scale	3
C	0.04230	Equation Form	1
Y	0.82000		

Culvert Calculator Report

Dammeron Valley BE8 Recommended

Solve For: Section Size

Culvert Summary			
Allowable HW Elevation	4,610.26 ft	Headwater Depth/Height	1.14
Computed Headwater Elevation	4,610.00 ft	Discharge	153.00 cfs
Inlet Control HW Elev.	4,609.64 ft	Tailwater Elevation	0.00 ft
Outlet Control HW Elev.	4,610.00 ft	Control Type	Entrance Control

Grades			
Upstream Invert	4,605.45 ft	Downstream Invert	4,604.63 ft
Length	100.00 ft	Constructed Slope	0.008200 ft/ft

Hydraulic Profile			
Profile	S2	Depth, Downstream	1.95 ft
Slope Type	Steep	Normal Depth	1.86 ft
Flow Regime	Supercritical	Critical Depth	2.46 ft
Velocity Downstream	11.20 ft/s	Critical Slope	0.003709 ft/ft

Section			
Section Shape	Box	Mannings Coefficient	0.013
Section Material	Concrete	Span	7.00 ft
Section Size	7 x 4 ft	Rise	4.00 ft
Number Sections	1		

Outlet Control Properties			
Outlet Control HW Elev.	4,610.00 ft	Upstream Velocity Head	1.23 ft
Ke	0.70	Entrance Loss	0.86 ft

Inlet Control Properties			
Inlet Control HW Elev.	4,609.64 ft	Flow Control	Unsubmerged
Inlet Type	0° wingwall flares	Area Full	28.0 ft ²
K	0.06100	HDS 5 Chart	8
M	0.75000	HDS 5 Scale	3
C	0.04230	Equation Form	1
Y	0.82000		

Culvert Calculator Report

Dammeron Valley BE14 Recommended

Solve For: Section Size

Culvert Summary			
Allowable HW Elevation	4,674.25 ft	Headwater Depth/Height	1.73
Computed Headwater Elevation	4,674.10 ft	Discharge	130.00 cfs
Inlet Control HW Elev.	4,674.10 ft	Tailwater Elevation	0.00 ft
Outlet Control HW Elev.	4,673.62 ft	Control Type	Inlet Control

Grades			
Upstream Invert	4,667.19 ft	Downstream Invert	4,665.69 ft
Length	119.00 ft	Constructed Slope	0.012605 ft/ft

Hydraulic Profile			
Profile	S2	Depth, Downstream	2.84 ft
Slope Type	Steep	Normal Depth	2.72 ft
Flow Regime	Supercritical	Critical Depth	3.41 ft
Velocity Downstream	13.63 ft/s	Critical Slope	0.007676 ft/ft

Section			
Section Shape	Circular	Mannings Coefficient	0.013
Section Material	Concrete	Span	4.00 ft
Section Size	48 inch	Rise	4.00 ft
Number Sections	1		

Outlet Control Properties			
Outlet Control HW Elev.	4,673.62 ft	Upstream Velocity Head	2.01 ft
Ke	0.50	Entrance Loss	1.01 ft

Inlet Control Properties			
Inlet Control HW Elev.	4,674.10 ft	Flow Control	Submerged
Inlet Type	Square edge w/headwall	Area Full	12.6 ft ²
K	0.00980	HDS 5 Chart	1
M	2.00000	HDS 5 Scale	1
C	0.03980	Equation Form	1
Y	0.67000		

Culvert Calculator Report

Dammeron Valley BE17 Recommended

Solve For: Section Size

Culvert Summary			
Allowable HW Elevation	4,711.57 ft	Headwater Depth/Height	2.59
Computed Headwater Elevation	4,704.78 ft	Discharge	54.00 cfs
Inlet Control HW Elev.	4,704.78 ft	Tailwater Elevation	0.00 ft
Outlet Control HW Elev.	4,703.97 ft	Control Type	Inlet Control

Grades			
Upstream Invert	4,698.31 ft	Downstream Invert	4,696.45 ft
Length	133.00 ft	Constructed Slope	0.013985 ft/ft

Hydraulic Profile			
Profile	CompositeM2PressureProfile	Depth, Downstream	2.34 ft
Slope Type	Mild	Normal Depth	N/A ft
Flow Regime	Subcritical	Critical Depth	2.34 ft
Velocity Downstream	11.29 ft/s	Critical Slope	0.014980 ft/ft

Section			
Section Shape	Circular	Mannings Coefficient	0.013
Section Material	Concrete	Span	2.50 ft
Section Size	30 inch	Rise	2.50 ft
Number Sections	1		

Outlet Control Properties			
Outlet Control HW Elev.	4,703.97 ft	Upstream Velocity Head	1.88 ft
Ke	0.50	Entrance Loss	0.94 ft

Inlet Control Properties			
Inlet Control HW Elev.	4,704.78 ft	Flow Control	Submerged
Inlet Type	Square edge w/headwall	Area Full	4.9 ft ²
K	0.00980	HDS 5 Chart	1
M	2.00000	HDS 5 Scale	1
C	0.03980	Equation Form	1
Y	0.67000		

Culvert Calculator Report

Wuchim 48" Pipe Culvert

Solve For: Discharge

Culvert Summary			
Allowable HW Elevation	4,598.20 ft	Headwater Depth/Height	1.05
Computed Headwater Elev.	4,598.20 ft	Discharge	81.12 cfs
Inlet Control HW Elev.	4,598.00 ft	Tailwater Elevation	4,592.90 ft
Outlet Control HW Elev.	4,598.20 ft	Control Type	Entrance Control

Grades			
Upstream Invert	4,594.00 ft	Downstream Invert	4,593.00 ft
Length	60.00 ft	Constructed Slope	0.016667 ft/ft

Hydraulic Profile			
Profile	S2	Depth, Downstream	2.08 ft
Slope Type	Steep	Normal Depth	1.85 ft
Flow Regime	Supercritical	Critical Depth	2.73 ft
Velocity Downstream	12.28 ft/s	Critical Slope	0.004872 ft/ft

Section			
Section Shape	Circular	Mannings Coefficient	0.013
Section Material	Concrete	Span	4.00 ft
Section Size	48 inch	Rise	4.00 ft
Number Sections	1		

Outlet Control Properties			
Outlet Control HW Elev.	4,598.20 ft	Upstream Velocity Head	1.23 ft
Ke	0.20	Entrance Loss	0.25 ft

Inlet Control Properties			
Inlet Control HW Elev.	4,598.00 ft	Flow Control	Unsubmerged
Inlet Type	Groove end w/headwall	Area Full	12.6 ft ²
K	0.00180	HDS 5 Chart	1
M	2.00000	HDS 5 Scale	2
C	0.02920	Equation Form	1
Y	0.74000		

Culvert Calculator Report

Wuchim Double 9'x5' Culverts

Solve For: Discharge

Culvert Summary			
Allowable HW Elevation	4,589.20 ft	Headwater Depth/Height	1.07
Computed Headwater Elev.	4,589.20 ft	Discharge	624.27 cfs
Inlet Control HW Elev.	4,589.12 ft	Tailwater Elevation	4,582.50 ft
Outlet Control HW Elev.	4,589.20 ft	Control Type	Entrance Control

Grades			
Upstream Invert	4,583.85 ft	Downstream Invert	4,582.55 ft
Length	60.00 ft	Constructed Slope	0.021667 ft/ft

Hydraulic Profile			
Profile	S2	Depth, Downstream	2.29 ft
Slope Type	Steep	Normal Depth	1.76 ft
Flow Regime	Supercritical	Critical Depth	3.34 ft
Velocity Downstream	15.18 ft/s	Critical Slope	0.003455 ft/ft

Section			
Section Shape	Box	Mannings Coefficient	0.013
Section Material	Concrete	Span	9.00 ft
Section Size	9 x 5 ft	Rise	5.00 ft
Number Sections	2		

Outlet Control Properties			
Outlet Control HW Elev.	4,589.20 ft	Upstream Velocity Head	1.67 ft
Ke	0.20	Entrance Loss	0.33 ft

Inlet Control Properties			
Inlet Control HW Elev.	4,589.12 ft	Flow Control	Unsubmerged
Inlet Type	90° headwall w 45° bevels	Area Full	90.0 ft²
K	0.49500	HDS 5 Chart	10
M	0.66700	HDS 5 Scale	2
C	0.03140	Equation Form	2
Y	0.82000		

Culvert Calculator Report

Wuchim Double 48" Pipe Culvert CFS

Solve For: Discharge

Culvert Summary			
Allowable HW Elevation	4,586.00 ft	Headwater Depth/Height	1.00
Computed Headwater Elev:	4,586.00 ft	Discharge	150.10 cfs
Inlet Control HW Elev.	4,585.80 ft	Tailwater Elevation	4,580.90 ft
Outlet Control HW Elev.	4,586.00 ft	Control Type	Entrance Control

Grades			
Upstream Invert	4,582.00 ft	Downstream Invert	4,581.00 ft
Length	60.00 ft	Constructed Slope	0.016667 ft/ft

Hydraulic Profile			
Profile	S2	Depth, Downstream	1.99 ft
Slope Type	Steep	Normal Depth	1.77 ft
Flow Regime	Supercritical	Critical Depth	2.62 ft
Velocity Downstream	12.05 ft/s	Critical Slope	0.004658 ft/ft

Section			
Section Shape	Circular	Mannings Coefficient	0.013
Section Material	Concrete	Span	4.00 ft
Section Size	48 inch	Rise	4.00 ft
Number Sections	2		

Outlet Control Properties			
Outlet Control HW Elev.	4,586.00 ft	Upstream Velocity Head	1.15 ft
Ke	0.20	Entrance Loss	0.23 ft

Inlet Control Properties			
Inlet Control HW Elev.	4,585.80 ft	Flow Control	Unsubmerged
Inlet Type	Groove end w/headwall	Area Full	25.1 ft ²
K	0.00180	HDS 5 Chart	1
M	2.00000	HDS 5 Scale	2
C	0.02920	Equation Form	1
Y	0.74000		

Culvert Calculator Report

Wuchim Double 36" Pipe Culvert

Solve For: Discharge

Culvert Summary			
Allowable HW Elevation	4,581.00 ft	Headwater Depth/Height	0.92
Computed Headwater Elev.	4,581.00 ft	Discharge	63.42 cfs
Inlet Control HW Elev.	4,580.87 ft	Tailwater Elevation	4,577.50 ft
Outlet Control HW Elev.	4,581.00 ft	Control Type	Entrance Control

Grades			
Upstream Invert	4,578.25 ft	Downstream Invert	4,577.75 ft
Length	60.00 ft	Constructed Slope	0.008333 ft/ft

Hydraulic Profile			
Profile	S2	Depth, Downstream	1.57 ft
Slope Type	Steep	Normal Depth	1.54 ft
Flow Regime	Supercritical	Critical Depth	1.83 ft
Velocity Downstream	8.45 ft/s	Critical Slope	0.004789 ft/ft

Section			
Section Shape	Circular	Mannings Coefficient	0.013
Section Material	Concrete	Span	3.00 ft
Section Size	36 inch	Rise	3.00 ft
Number Sections	2		

Outlet Control Properties			
Outlet Control HW Elev.	4,581.00 ft	Upstream Velocity Head	0.77 ft
Ke	0.20	Entrance Loss	0.15 ft

Inlet Control Properties			
Inlet Control HW Elev.	4,580.87 ft	Flow Control	Unsubmerged
Inlet Type	Groove end w/headwall	Area Full	14.1 ft ²
K	0.00180	HDS 5 Chart	1
M	2.00000	HDS 5 Scale	2
C	0.02920	Equation Form	1
Y	0.74000		

Culvert Calculator Report

White Knolls Pipe Culvert

Solve For: Discharge

Culvert Summary			
Allowable HW Elevation	4,609.00 ft	Headwater Depth/Height	1.17
Computed Headwater Elev.	4,609.00 ft	Discharge	40.83 cfs
Inlet Control HW Elev.	4,608.83 ft	Tailwater Elevation	4,604.45 ft
Outlet Control HW Elev.	4,609.00 ft	Control Type	Entrance Control

Grades			
Upstream Invert	4,605.50 ft	Downstream Invert	4,604.50 ft
Length	60.00 ft	Constructed Slope	0.016667 ft/ft

Hydraulic Profile			
Profile	S2	Depth, Downstream	1.57 ft
Slope Type	Steep	Normal Depth	1.45 ft
Flow Regime	Supercritical	Critical Depth	2.08 ft
Velocity Downstream	10.89 ft/s	Critical Slope	0.005475 ft/ft

Section			
Section Shape	Circular	Mannings Coefficient	0.013
Section Material	Concrete	Span	3.00 ft
Section Size	36 inch	Rise	3.00 ft
Number Sections	1		

Outlet Control Properties			
Outlet Control HW Elev.	4,609.00 ft	Upstream Velocity Head	0.95 ft
Ke	0.50	Entrance Loss	0.47 ft

Inlet Control Properties			
Inlet Control HW Elev.	4,608.83 ft	Flow Control	Unsubmerged
Inlet Type	Square edge w/headwall	Area Full	7.1 ft ²
K	0.00980	HDS 5 Chart	1
M	2.00000	HDS 5 Scale	1
C	0.03980	Equation Form	1
Y	0.67000		

Culvert Calculator Report

Juniper Ridge Pipe Culvert

Solve For: Discharge

Culvert Summary			
Allowable HW Elevation	4,656.00 ft	Headwater Depth/Height	1.00
Computed Headwater Elev.	4,656.00 ft	Discharge	23.18 cfs
Inlet Control HW Elev.	4,655.91 ft	Tailwater Elevation	4,652.40 ft
Outlet Control HW Elev.	4,656.00 ft	Control Type	Entrance Control
Grades			
Upstream Invert	4,653.50 ft	Downstream Invert	4,652.50 ft
Length	60.00 ft	Constructed Slope	0.016667 ft/ft
Hydraulic Profile			
Profile	S2	Depth, Downstream	1.22 ft
Slope Type	Steep	Normal Depth	1.16 ft
Flow Regime	Supercritical	Critical Depth	1.64 ft
Velocity Downstream	9.73 ft/s	Critical Slope	0.005447 ft/ft
Section			
Section Shape	Circular	Mannings Coefficient	0.013
Section Material	Concrete	Span	2.50 ft
Section Size	30 inch	Rise	2.50 ft
Number Sections	1		
Outlet Control Properties			
Outlet Control HW Elev.	4,656.00 ft	Upstream Velocity Head	0.72 ft
Ke	0.20	Entrance Loss	0.14 ft
Inlet Control Properties			
Inlet Control HW Elev.	4,655.91 ft	Flow Control	Unsubmerged
Inlet Type	Beveled ring, 33.7° bevels	Area Full	4.9 ft²
K	0.00180	HDS 5 Chart	3
M	2.50000	HDS 5 Scale	B
C	0.02430	Equation Form	1
Y	0.83000		

Appendix D. HEC1 Output

Existing Conditions

Proposed Conditions

Existing Conditions

```

1*****
*
* FLOOD HYDROGRAPH PACKAGE (HEC-1)
* JUN 1998
* VERSION 4.1
*
* RUN DATE 19APR17 TIME 14:30:46
*
*****

```

pre.out

```

*****
*
* U.S. ARMY CORPS OF ENGINEERS
* HYDROLOGIC ENGINEERING CENTER
* 609 SECOND STREET
* DAVIS, CALIFORNIA 95616
* (916) 756-1104
*
*****

```

```

X X XXXXXXX XXXXX X
X X X X X XX
X X X X X
XXXXXXXX XXXX X XXXXX X
X X X X X
X X X X X
X X XXXXXXX XXXXX XXX

```

THIS PROGRAM REPLACES ALL PREVIOUS VERSIONS OF HEC-1 KNOWN AS HEC1 (JAN 73), HEC1GS, HEC1DB, AND HEC1KW.

THE DEFINITIONS OF VARIABLES -RTIMP- AND -RTIOR- HAVE CHANGED FROM THOSE USED WITH THE 1973-STYLE INPUT STRUCTURE. THE DEFINITION OF -AMSKK- ON RM-CARD WAS CHANGED WITH REVISIONS DATED 28 SEP 81. THIS IS THE FORTRAN77 VERSION NEW OPTIONS: DAMBREAK OUTFLOW SUBMERGENCE , SINGLE EVENT DAMAGE CALCULATION, DSS:WRITE STAGE FREQUENCY, DSS:READ TIME SERIES AT DESIRED CALCULATION INTERVAL LOSS RATE:GREEN AND AMPT INFILTRATION KINEMATIC WAVE: NEW FINITE DIFFERENCE ALGORITHM

1 HEC-1 INPUT PAGE 1

```

LINE ID.....1.....2.....3.....4.....5.....6.....7.....8.....9.....10
1 ID HYDROLOGY STUDY for
2 ID Dammeron Valley Master Hydrology Plan
3 ID Current Conditions
4 ID Located in Dammeron Valley, Utah
5 ID
6 ID February 2017
7 ID
8 ID PREPARED BY ALPHA ENGINEERING
9 ID 43 SOUTH 100 EAST
10 ID ST. GEORGE, UTAH 84770
11 ID TEL: (435) 628-6500
12 ID FAX: (435) 628-6553
13 ID
14 ID 100-YEAR & 10-YEAR, 3-HOUR STORM EVENT
15 ID
16 *Diagram
JR PREC 1.0 0.606
17 IT 1 0 0 181
18 IO 0
19 IN 5
* BEGIN BASIN DEFINITIONS
20 KK BE1
21 KM BE1
22 BA .19995
23 PB 2.13
24 PC 0 0.0033 0.0066 0.0099 0.0132 0.0165 0.0198 0.2822 0.4894 0.6340
25 PC 0.7261 0.7814 0.8238 0.8550 0.8790 0.8974 0.9140 0.9288 0.9407 0.9440
26 PC 0.9473 0.9506 0.9539 0.9572 0.9605 0.9638 0.9671 0.9704 0.9737 0.9769
27 PC 0.9802 0.9835 0.9868 0.9901 0.9934 0.9967 1.0000
28 LS 0 77
29 UD .3357
*
30 KK RE1
31 KM Route BE1 in channel to Outlet OE1
32 RD 8972 .010 0.040 TRAP 0 7
*
33 KK BE2
34 KM BE2
35 BA .03036
36 LS 0 71
37 UD 0.2634
*
38 KK RE2
39 KM Route BE2 in channel to Outlet OE1
40 RD 8575 .010 0.040 TRAP 0 7
*

```

1 HEC-1 INPUT PAGE 2

pre.out

LINE	ID	1	2	3	4	5	6	7	8	9	10
41	KK	BE3									
42	KM	BE3									
43	BA	.01125									
44	LS	0	77								
45	UD	0.3623									
	*										
46	KK	RE3									
47	KM	Route BE3 in channel to Outlet OE1									
48	RD	8234 .010 0.040					TRAP	0		7	
	*										
49	KK	BE4									
50	KM	BE4									
51	BA	.00984									
52	LS	0	77								
53	UD	0.1202									
	*										
54	KK	RE4									
55	KM	Route BE4 in channel to Outlet OE1									
56	RD	7937 .010 0.040					TRAP	0		7	
	*										
57	KK	BE5									
58	KM	BE5									
59	BA	.02122									
60	LS	0	77								
61	UD	0.1388									
	*										
62	KK	RE5									
63	KM	Route BE5 in channel to Outlet OE1									
64	RD	7260 .010 0.040					TRAP	0		7	
	*										
65	KK	C1									
66	KM	COMBINE RE1 - RE5									
67	HC	5									
	*										
68	KK	BE6									
69	KM	BE6									
70	BA	.95091									
71	LS	0	73								
72	UD	0.3672									
	*										
73	KK	RE6									
74	KM	Route BE6 in channel to Outlet OE1									
75	RD	6111 .011 0.040					TRAP	0		7	
	*										

1

HEC-1 INPUT

PAGE 3

LINE	ID	1	2	3	4	5	6	7	8	9	10
76	KK	BE7									
77	KM	BE7									
78	BA	4.0780									
79	LS	0	75								
80	UD	1.0903									
	*										
81	KK	RE7									
82	KM	Route BE7 in channel to Outlet OE1									
83	RD	6265 .010 0.040					TRAP	0		7	
	*										
84	KK	BE8									
85	KM	BE8									
86	BA	.53884									
87	LS	0	74								
88	UD	0.3762									
	*										
89	KK	RE8									
90	KM	Route BE8 in channel to Outlet OE1									
91	RD	7515 .010 0.040					TRAP	0		7	
	*										
92	KK	BE9									
93	KM	BE9									
94	BA	.11647									
95	LS	0	76								
96	UD	0.3915									
	*										

pre.out

97 KK RE9
 98 KM Route BE9 in channel to Outlet OE1
 99 RD 8004 .009 0.040 TRAP 0 7
 *

100 KK BE10
 101 KM BE10
 102 BA .04728
 103 LS 0 76
 104 UD 0.1965
 *

105 KK RE10
 106 KM Route BE10 in channel to Outlet OE1
 107 RD 9322 .010 0.040 TRAP 0 7
 *

108 KK BE11
 109 KM BE11
 110 BA .03667
 111 LS 0 76
 112 UD 0.1875
 *

1

HEC-1 INPUT

PAGE 4

LINE ID.....1.....2.....3.....4.....5.....6.....7.....8.....9.....10

113 KK RE11
 114 KM Route BE11 in channel to Outlet OE1
 115 RD 9819 .011 0.040 TRAP 0 7
 *

116 KK C2
 117 KM COMBINE RE6 - RE11
 118 HC 6
 *

119 KK BE12
 120 KM BE12
 121 BA .02189
 122 LS 0 77
 123 UD 0.1521
 *

124 KK RE12
 125 KM Route BE12 in channel to Outlet OE1
 126 RD 10659 .012 0.040 TRAP 0 7
 *

127 KK BE13
 128 KM BE13
 129 BA .03981
 130 LS 0 77
 131 UD 0.1587
 *

132 KK RE13
 133 KM Route BE13 in channel to Outlet OE1
 134 RD 11067 .012 0.040 TRAP 0 7
 *

135 KK BE14
 136 KM BE14
 137 BA 1.7930
 138 LS 0 77
 139 UD 1.0218
 *

140 KK RE14
 141 KM Route BE14 in channel to Outlet OE1
 142 RD 11670 .012 0.040 TRAP 0 7
 *

143 KK C3
 144 KM COMBINE RE12 - RE14
 145 HC 3
 *

1

HEC-1 INPUT

PAGE 5

LINE ID.....1.....2.....3.....4.....5.....6.....7.....8.....9.....10

146 KK OE1
 147 KM OE1
 148 BA 2.3349
 149 LS 0 76
 150 UD 0.7020
 *

pre.out

151	KK	C4							
152	KM	COMBINE	C1-C3 & OE1						
153	HC	4							
	*								
154	KK	BE15							
155	KM	BE15							
156	BA	.01003							
157	LS	0	77						
158	UD	0.2165							
	*								
159	KK	RE15							
160	KM	Route	BE15 in channel to Outlet OE1						
161	RD	3253	.020 0.040	TRAP	0	7			
	*								
162	KK	BE16							
163	KM	BE16							
164	BA	.03117							
165	LS	0	77						
166	UD	0.3101							
	*								
167	KK	RE16							
168	KM	Route	BE16 in channel to Outlet OE1						
169	RD	3067	.022 0.040	TRAP	0	7			
	*								
170	KK	BE17							
171	KM	BE17							
172	BA	2.0538							
173	LS	0	77						
174	UD	1.0868							
	*								
175	KK	RE17							
176	KM	Route	BE17 in channel to Outlet OE1						
177	RD	2983	.024 0.040	TRAP	0	7			
	*								
178	KK	OE2							
179	KM	OE2							
180	BA	.19600							
181	LS	0	76						
182	UD	0.3531							
	*								

1 HEC-1 INPUT PAGE 6

LINE ID.....1.....2.....3.....4.....5.....6.....7.....8.....9.....10

183	KK	C5							
184	KM	COMBINE	RE15 - RE17 & OE2						
185	HC	4							
	*								
186	ZZ								

1 SCHEMATIC DIAGRAM OF STREAM NETWORK

INPUT LINE (V) ROUTING (--->) DIVERSION OR PUMP FLOW

NO. (.) CONNECTOR (<---) RETURN OF DIVERTED OR PUMPED FLOW

20	BE1								
	V								
	V								
30	RE1								
	.								
	.								
33	BE2								
	V								
	V								
38	RE2								
	.								
	.								
41	.	BE3							
	.	V							
	.	V							
46	.	RE3							
	.	.							
	.	.							
49	.	.	BE4						
	.	.	V						
	.	.	V						
54	.	.	RE4						
	.	.	.						
	.	.	.						
57	.	.	.	BE5					

pre.out

```
. . . . V
. . . . V
62 . . . . RE5
. . . .
65 C1-----
.
68 . BE6
. V
. V
73 . RE6
.
.
76 . BE7
. V
. V
81 . RE7
.
.
84 . BE8
. V
. V
89 . RE8
.
.
92 . BE9
. V
. V
97 . RE9
.
.
100 . BE10
. V
. V
105 . RE10
.
.
108 . BE11
. V
. V
113 . RE11
.
.
116 C2-----
.
119 . BE12
. V
. V
124 . RE12
.
.
127 . BE13
. V
. V
132 . RE13
.
.
135 . BE14
. V
. V
140 . RE14
.
.
143 C3-----
.
146 . OE1
.
.
151 C4-----
.
154 . BE15
. V
. V
159 . RE15
.
.
162 . BE16
. V
. V
167 . RE16
.
.
170 . BE17
. V
. V
175 . RE17
```

pre.out

```

      .      .      .      .
178      .      .      .      .      OE2
      .      .      .      .
183      .      C5.....

```

(***) RUNOFF ALSO COMPUTED AT THIS LOCATION

```

1*****
*
* FLOOD HYDROGRAPH PACKAGE (HEC-1) *
*   JUN 1998                      *
*   VERSION 4.1                    *
*
* RUN DATE 19APR17 TIME 14:30:46  *
*
*****

```

```

*****
*
* U.S. ARMY CORPS OF ENGINEERS *
* HYDROLOGIC ENGINEERING CENTER *
*   609 SECOND STREET          *
*   DAVIS, CALIFORNIA 95616    *
*   (916) 756-1104            *
*
*****

```

HYDROLOGY STUDY for
 Dammeron Valley Master Hydrology Plan
 Current Conditions
 Located in Dammeron Valley, Utah

February 2017

PREPARED BY ALPHA ENGINEERING
 43 SOUTH 100 EAST
 ST. GEORGE, UTAH 84770
 TEL: (435) 628-6500
 FAX: (435) 628-6553

100-YEAR & 10-YEAR, 3-HOUR STORM EVENT

```

18 IO      OUTPUT CONTROL VARIABLES
          IPRNT      0      PRINT CONTROL
          IPLOT      0      PLOT CONTROL
          QSCAL      0.    HYDROGRAPH PLOT SCALE

```

```

IT      HYDROGRAPH TIME DATA
          NMIN      1      MINUTES IN COMPUTATION INTERVAL
          IDATE      1  0    STARTING DATE
          ITIME      0000   STARTING TIME
          NQ         181    NUMBER OF HYDROGRAPH ORDINATES
          NDDATE     1  0    ENDING DATE
          NDTIME     0300   ENDING TIME
          ICENT      19    CENTURY MARK

```

```

          COMPUTATION INTERVAL .02 HOURS
          TOTAL TIME BASE      3.00 HOURS

```

```

ENGLISH UNITS
DRAINAGE AREA      SQUARE MILES
PRECIPITATION DEPTH INCHES
LENGTH, ELEVATION FEET
FLOW               CUBIC FEET PER SECOND
STORAGE VOLUME    ACRE-FEET
SURFACE AREA      ACRES
TEMPERATURE       DEGREES FAHRENHEIT

```

```

JP      MULTI-PLAN OPTION
          NPLAN      1      NUMBER OF PLANS

```

```

JR      MULTI-RATIO OPTION
          RATIOS OF PRECIPITATION
          1.00      .61

```

*** ** ** ** **

```

*****
*
*      BE1 *
*      *
*****

```

BE1

```

19 IN      TIME DATA FOR INPUT TIME SERIES
          JXMIN      5      TIME INTERVAL IN MINUTES
          JXDATE     1  0    STARTING DATE
          JXTIME     0      STARTING TIME

```

SUBBASIN RUNOFF DATA

pre.out														
1	0031	32	.11	.11	.00	0.	*	1	0202	123	.00	.00	.00	13.
1	0032	33	.11	.11	.00	0.	*	1	0203	124	.00	.00	.00	12.
1	0033	34	.11	.11	.00	0.	*	1	0204	125	.00	.00	.00	12.
1	0034	35	.11	.11	.00	0.	*	1	0205	126	.00	.00	.00	11.
1	0035	36	.11	.11	.00	0.	*	1	0206	127	.00	.00	.00	11.
1	0036	37	.09	.09	.00	0.	*	1	0207	128	.00	.00	.00	11.
1	0037	38	.09	.08	.01	0.	*	1	0208	129	.00	.00	.00	10.
1	0038	39	.09	.08	.01	0.	*	1	0209	130	.00	.00	.00	10.
1	0039	40	.09	.07	.02	0.	*	1	0210	131	.00	.00	.00	10.
1	0040	41	.09	.07	.02	1.	*	1	0211	132	.00	.00	.00	9.
1	0041	42	.06	.05	.02	1.	*	1	0212	133	.00	.00	.00	9.
1	0042	43	.06	.04	.02	2.	*	1	0213	134	.00	.00	.00	9.
1	0043	44	.06	.04	.02	3.	*	1	0214	135	.00	.00	.00	9.
1	0044	45	.06	.04	.02	4.	*	1	0215	136	.00	.00	.00	8.
1	0045	46	.06	.04	.02	6.	*	1	0216	137	.00	.00	.00	8.
1	0046	47	.04	.02	.01	8.	*	1	0217	138	.00	.00	.00	8.
1	0047	48	.04	.02	.01	10.	*	1	0218	139	.00	.00	.00	8.
1	0048	49	.04	.02	.02	13.	*	1	0219	140	.00	.00	.00	8.
1	0049	50	.04	.02	.02	16.	*	1	0220	141	.00	.00	.00	8.
1	0050	51	.04	.02	.02	20.	*	1	0221	142	.00	.00	.00	7.
1	0051	52	.02	.01	.01	23.	*	1	0222	143	.00	.00	.00	7.
1	0052	53	.02	.01	.01	28.	*	1	0223	144	.00	.00	.00	7.
1	0053	54	.02	.01	.01	32.	*	1	0224	145	.00	.00	.00	7.
1	0054	55	.02	.01	.01	36.	*	1	0225	146	.00	.00	.00	7.
1	0055	56	.02	.01	.01	41.	*	1	0226	147	.00	.00	.00	7.
1	0056	57	.02	.01	.01	45.	*	1	0227	148	.00	.00	.00	7.
1	0057	58	.02	.01	.01	50.	*	1	0228	149	.00	.00	.00	7.
1	0058	59	.02	.01	.01	54.	*	1	0229	150	.00	.00	.00	7.
1	0059	60	.02	.01	.01	58.	*	1	0230	151	.00	.00	.00	7.
1	0100	61	.02	.01	.01	62.	*	1	0231	152	.00	.00	.00	7.
1	0101	62	.01	.01	.01	65.	*	1	0232	153	.00	.00	.00	7.
1	0102	63	.01	.01	.01	68.	*	1	0233	154	.00	.00	.00	6.
1	0103	64	.01	.01	.01	70.	*	1	0234	155	.00	.00	.00	6.
1	0104	65	.01	.01	.01	73.	*	1	0235	156	.00	.00	.00	6.
1	0105	66	.01	.01	.01	75.	*	1	0236	157	.00	.00	.00	6.
1	0106	67	.01	.01	.01	76.	*	1	0237	158	.00	.00	.00	6.
1	0107	68	.01	.01	.01	77.	*	1	0238	159	.00	.00	.00	6.
1	0108	69	.01	.01	.01	78.	*	1	0239	160	.00	.00	.00	6.
1	0109	70	.01	.01	.01	78.	*	1	0240	161	.00	.00	.00	6.
1	0110	71	.01	.01	.01	78.	*	1	0241	162	.00	.00	.00	6.
1	0111	72	.01	.00	.00	78.	*	1	0242	163	.00	.00	.00	6.
1	0112	73	.01	.00	.00	77.	*	1	0243	164	.00	.00	.00	6.
1	0113	74	.01	.00	.00	76.	*	1	0244	165	.00	.00	.00	6.
1	0114	75	.01	.00	.00	75.	*	1	0245	166	.00	.00	.00	6.
1	0115	76	.01	.00	.00	74.	*	1	0246	167	.00	.00	.00	6.
1	0116	77	.01	.00	.00	72.	*	1	0247	168	.00	.00	.00	6.
1	0117	78	.01	.00	.00	71.	*	1	0248	169	.00	.00	.00	6.
1	0118	79	.01	.00	.00	69.	*	1	0249	170	.00	.00	.00	6.
1	0119	80	.01	.00	.00	67.	*	1	0250	171	.00	.00	.00	6.
1	0120	81	.01	.00	.00	66.	*	1	0251	172	.00	.00	.00	6.
1	0121	82	.01	.00	.00	64.	*	1	0252	173	.00	.00	.00	6.
1	0122	83	.01	.00	.00	62.	*	1	0253	174	.00	.00	.00	6.
1	0123	84	.01	.00	.00	61.	*	1	0254	175	.00	.00	.00	6.
1	0124	85	.01	.00	.00	59.	*	1	0255	176	.00	.00	.00	6.
1	0125	86	.01	.00	.00	57.	*	1	0256	177	.00	.00	.00	6.
1	0126	87	.01	.00	.00	56.	*	1	0257	178	.00	.00	.00	6.
1	0127	88	.01	.00	.00	54.	*	1	0258	179	.00	.00	.00	6.
1	0128	89	.01	.00	.00	52.	*	1	0259	180	.00	.00	.00	6.
1	0129	90	.01	.00	.00	51.	*	1	0300	181	.00	.00	.00	6.
1	0130	91	.01	.00	.00	49.	*							

TOTAL RAINFALL = 2.13, TOTAL LOSS = 1.61, TOTAL EXCESS = .52

PEAK FLOW + (CFS)	TIME (HR)	MAXIMUM AVERAGE FLOW				
		6-HR	24-HR	72-HR	3.00-HR	
+ 78.	1.15	21.	21.	21.	21.	
		(INCHES)	.499	.499	.499	.499
		(AC-FT)	5.	5.	5.	5.

CUMULATIVE AREA = .20 SQ MI

HYDROGRAPH AT STATION BE1
PLAN 1, RATIO = 1.00

DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	*	DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
1	0000	1	.00	.00	.00	0.	*		1	0131	92	.00	.00	.00	48.	
1	0001	2	.00	.00	.00	0.	*		1	0132	93	.00	.00	.00	46.	
1	0002	3	.00	.00	.00	0.	*		1	0133	94	.00	.00	.00	45.	
1	0003	4	.00	.00	.00	0.	*		1	0134	95	.00	.00	.00	43.	
1	0004	5	.00	.00	.00	0.	*		1	0135	96	.00	.00	.00	42.	

														pre.out			
1	0005	6	.00	.00	.00	0.	*	1	0136	97	.00	.00	.00	41.			
1	0006	7	.00	.00	.00	0.	*	1	0137	98	.00	.00	.00	39.			
1	0007	8	.00	.00	.00	0.	*	1	0138	99	.00	.00	.00	38.			
1	0008	9	.00	.00	.00	0.	*	1	0139	100	.00	.00	.00	37.			
1	0009	10	.00	.00	.00	0.	*	1	0140	101	.00	.00	.00	36.			
1	0010	11	.00	.00	.00	0.	*	1	0141	102	.00	.00	.00	34.			
1	0011	12	.00	.00	.00	0.	*	1	0142	103	.00	.00	.00	33.			
1	0012	13	.00	.00	.00	0.	*	1	0143	104	.00	.00	.00	32.			
1	0013	14	.00	.00	.00	0.	*	1	0144	105	.00	.00	.00	30.			
1	0014	15	.00	.00	.00	0.	*	1	0145	106	.00	.00	.00	29.			
1	0015	16	.00	.00	.00	0.	*	1	0146	107	.00	.00	.00	28.			
1	0016	17	.00	.00	.00	0.	*	1	0147	108	.00	.00	.00	27.			
1	0017	18	.00	.00	.00	0.	*	1	0148	109	.00	.00	.00	25.			
1	0018	19	.00	.00	.00	0.	*	1	0149	110	.00	.00	.00	24.			
1	0019	20	.00	.00	.00	0.	*	1	0150	111	.00	.00	.00	23.			
1	0020	21	.00	.00	.00	0.	*	1	0151	112	.00	.00	.00	22.			
1	0021	22	.00	.00	.00	0.	*	1	0152	113	.00	.00	.00	21.			
1	0022	23	.00	.00	.00	0.	*	1	0153	114	.00	.00	.00	20.			
1	0023	24	.00	.00	.00	0.	*	1	0154	115	.00	.00	.00	19.			
1	0024	25	.00	.00	.00	0.	*	1	0155	116	.00	.00	.00	18.			
1	0025	26	.00	.00	.00	0.	*	1	0156	117	.00	.00	.00	17.			
1	0026	27	.00	.00	.00	0.	*	1	0157	118	.00	.00	.00	16.			
1	0027	28	.00	.00	.00	0.	*	1	0158	119	.00	.00	.00	15.			
1	0028	29	.00	.00	.00	0.	*	1	0159	120	.00	.00	.00	15.			
1	0029	30	.00	.00	.00	0.	*	1	0200	121	.00	.00	.00	14.			
1	0030	31	.00	.00	.00	0.	*	1	0201	122	.00	.00	.00	13.			
1	0031	32	.11	.11	.00	0.	*	1	0202	123	.00	.00	.00	13.			
1	0032	33	.11	.11	.00	0.	*	1	0203	124	.00	.00	.00	12.			
1	0033	34	.11	.11	.00	0.	*	1	0204	125	.00	.00	.00	12.			
1	0034	35	.11	.11	.00	0.	*	1	0205	126	.00	.00	.00	11.			
1	0035	36	.11	.11	.00	0.	*	1	0206	127	.00	.00	.00	11.			
1	0036	37	.09	.09	.00	0.	*	1	0207	128	.00	.00	.00	11.			
1	0037	38	.09	.08	.01	0.	*	1	0208	129	.00	.00	.00	10.			
1	0038	39	.09	.08	.01	0.	*	1	0209	130	.00	.00	.00	10.			
1	0039	40	.09	.07	.02	0.	*	1	0210	131	.00	.00	.00	10.			
1	0040	41	.09	.07	.02	1.	*	1	0211	132	.00	.00	.00	9.			
1	0041	42	.06	.05	.02	1.	*	1	0212	133	.00	.00	.00	9.			
1	0042	43	.06	.04	.02	2.	*	1	0213	134	.00	.00	.00	9.			
1	0043	44	.06	.04	.02	3.	*	1	0214	135	.00	.00	.00	9.			
1	0044	45	.06	.04	.02	4.	*	1	0215	136	.00	.00	.00	8.			
1	0045	46	.06	.04	.02	6.	*	1	0216	137	.00	.00	.00	8.			
1	0046	47	.04	.02	.01	8.	*	1	0217	138	.00	.00	.00	8.			
1	0047	48	.04	.02	.01	10.	*	1	0218	139	.00	.00	.00	8.			
1	0048	49	.04	.02	.02	13.	*	1	0219	140	.00	.00	.00	8.			
1	0049	50	.04	.02	.02	16.	*	1	0220	141	.00	.00	.00	8.			
1	0050	51	.04	.02	.02	20.	*	1	0221	142	.00	.00	.00	7.			
1	0051	52	.02	.01	.01	23.	*	1	0222	143	.00	.00	.00	7.			
1	0052	53	.02	.01	.01	28.	*	1	0223	144	.00	.00	.00	7.			
1	0053	54	.02	.01	.01	32.	*	1	0224	145	.00	.00	.00	7.			
1	0054	55	.02	.01	.01	36.	*	1	0225	146	.00	.00	.00	7.			
1	0055	56	.02	.01	.01	41.	*	1	0226	147	.00	.00	.00	7.			
1	0056	57	.02	.01	.01	45.	*	1	0227	148	.00	.00	.00	7.			
1	0057	58	.02	.01	.01	50.	*	1	0228	149	.00	.00	.00	7.			
1	0058	59	.02	.01	.01	54.	*	1	0229	150	.00	.00	.00	7.			
1	0059	60	.02	.01	.01	58.	*	1	0230	151	.00	.00	.00	7.			
1	0100	61	.02	.01	.01	62.	*	1	0231	152	.00	.00	.00	7.			
1	0101	62	.01	.01	.01	65.	*	1	0232	153	.00	.00	.00	7.			
1	0102	63	.01	.01	.01	68.	*	1	0233	154	.00	.00	.00	6.			
1	0103	64	.01	.01	.01	70.	*	1	0234	155	.00	.00	.00	6.			
1	0104	65	.01	.01	.01	73.	*	1	0235	156	.00	.00	.00	6.			
1	0105	66	.01	.01	.01	75.	*	1	0236	157	.00	.00	.00	6.			
1	0106	67	.01	.01	.01	76.	*	1	0237	158	.00	.00	.00	6.			
1	0107	68	.01	.01	.01	77.	*	1	0238	159	.00	.00	.00	6.			
1	0108	69	.01	.01	.01	78.	*	1	0239	160	.00	.00	.00	6.			
1	0109	70	.01	.01	.01	78.	*	1	0240	161	.00	.00	.00	6.			
1	0110	71	.01	.01	.01	78.	*	1	0241	162	.00	.00	.00	6.			
1	0111	72	.01	.00	.00	78.	*	1	0242	163	.00	.00	.00	6.			
1	0112	73	.01	.00	.00	77.	*	1	0243	164	.00	.00	.00	6.			
1	0113	74	.01	.00	.00	76.	*	1	0244	165	.00	.00	.00	6.			
1	0114	75	.01	.00	.00	75.	*	1	0245	166	.00	.00	.00	6.			
1	0115	76	.01	.00	.00	74.	*	1	0246	167	.00	.00	.00	6.			
1	0116	77	.01	.00	.00	72.	*	1	0247	168	.00	.00	.00	6.			
1	0117	78	.01	.00	.00	71.	*	1	0248	169	.00	.00	.00	6.			
1	0118	79	.01	.00	.00	69.	*	1	0249	170	.00	.00	.00	6.			
1	0119	80	.01	.00	.00	67.	*	1	0250	171	.00	.00	.00	6.			
1	0120	81	.01	.00	.00	66.	*	1	0251	172	.00	.00	.00	6.			
1	0121	82	.01	.00	.00	64.	*	1	0252	173	.00	.00	.00	6.			
1	0122	83	.01	.00	.00	62.	*	1	0253	174	.00	.00	.00	6.			
1	0123	84	.01	.00	.00	61.	*	1	0254	175	.00	.00	.00	6.			
1	0124	85	.01	.00	.00	59.	*	1	0255	176	.00	.00	.00	6.			
1	0125	86	.01	.00	.00	57.	*	1	0256	177	.00	.00	.00	6.			
1	0126	87	.01	.00	.00	56.	*	1	0257	178	.00	.00	.00	6.			
1	0127	88	.01	.00	.00	54.	*	1	0258	179	.00	.00	.00	6.			
1	0128	89	.01	.00	.00	52.	*	1	0259	180	.00	.00	.00	6.			
1	0129	90	.01	.00	.00	51.	*	1	0300	181	.00	.00	.00	6.			
1	0130	91	.01	.00	.00	49.	*										

TOTAL RAINFALL = 2.13, TOTAL LOSS = 1.61, TOTAL EXCESS = .52

pre.out

PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
+ (CFS)	(HR)		6-HR	24-HR	72-HR	3.00-HR
		(CFS)				
+ 78.	1.15		21.	21.	21.	21.
		(INCHES)	.499	.499	.499	.499
		(AC-FT)	5.	5.	5.	5.
CUMULATIVE AREA =			.20 SQ MI			

HYDROGRAPH AT STATION BE1
 PLAN 1, RATIO = .61

DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	*	DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
1	0000	1	.00	.00	.00	0.	*	1	0131	92	.00	.00	.00	.00	14.	
1	0001	2	.00	.00	.00	0.	*	1	0132	93	.00	.00	.00	.00	14.	
1	0002	3	.00	.00	.00	0.	*	1	0133	94	.00	.00	.00	.00	13.	
1	0003	4	.00	.00	.00	0.	*	1	0134	95	.00	.00	.00	.00	13.	
1	0004	5	.00	.00	.00	0.	*	1	0135	96	.00	.00	.00	.00	13.	
1	0005	6	.00	.00	.00	0.	*	1	0136	97	.00	.00	.00	.00	12.	
1	0006	7	.00	.00	.00	0.	*	1	0137	98	.00	.00	.00	.00	12.	
1	0007	8	.00	.00	.00	0.	*	1	0138	99	.00	.00	.00	.00	12.	
1	0008	9	.00	.00	.00	0.	*	1	0139	100	.00	.00	.00	.00	11.	
1	0009	10	.00	.00	.00	0.	*	1	0140	101	.00	.00	.00	.00	11.	
1	0010	11	.00	.00	.00	0.	*	1	0141	102	.00	.00	.00	.00	11.	
1	0011	12	.00	.00	.00	0.	*	1	0142	103	.00	.00	.00	.00	10.	
1	0012	13	.00	.00	.00	0.	*	1	0143	104	.00	.00	.00	.00	10.	
1	0013	14	.00	.00	.00	0.	*	1	0144	105	.00	.00	.00	.00	10.	
1	0014	15	.00	.00	.00	0.	*	1	0145	106	.00	.00	.00	.00	9.	
1	0015	16	.00	.00	.00	0.	*	1	0146	107	.00	.00	.00	.00	9.	
1	0016	17	.00	.00	.00	0.	*	1	0147	108	.00	.00	.00	.00	8.	
1	0017	18	.00	.00	.00	0.	*	1	0148	109	.00	.00	.00	.00	8.	
1	0018	19	.00	.00	.00	0.	*	1	0149	110	.00	.00	.00	.00	8.	
1	0019	20	.00	.00	.00	0.	*	1	0150	111	.00	.00	.00	.00	7.	
1	0020	21	.00	.00	.00	0.	*	1	0151	112	.00	.00	.00	.00	7.	
1	0021	22	.00	.00	.00	0.	*	1	0152	113	.00	.00	.00	.00	7.	
1	0022	23	.00	.00	.00	0.	*	1	0153	114	.00	.00	.00	.00	6.	
1	0023	24	.00	.00	.00	0.	*	1	0154	115	.00	.00	.00	.00	6.	
1	0024	25	.00	.00	.00	0.	*	1	0155	116	.00	.00	.00	.00	6.	
1	0025	26	.00	.00	.00	0.	*	1	0156	117	.00	.00	.00	.00	6.	
1	0026	27	.00	.00	.00	0.	*	1	0157	118	.00	.00	.00	.00	5.	
1	0027	28	.00	.00	.00	0.	*	1	0158	119	.00	.00	.00	.00	5.	
1	0028	29	.00	.00	.00	0.	*	1	0159	120	.00	.00	.00	.00	5.	
1	0029	30	.00	.00	.00	0.	*	1	0200	121	.00	.00	.00	.00	5.	
1	0030	31	.00	.00	.00	0.	*	1	0201	122	.00	.00	.00	.00	4.	
1	0031	32	.07	.07	.00	0.	*	1	0202	123	.00	.00	.00	.00	4.	
1	0032	33	.07	.07	.00	0.	*	1	0203	124	.00	.00	.00	.00	4.	
1	0033	34	.07	.07	.00	0.	*	1	0204	125	.00	.00	.00	.00	4.	
1	0034	35	.07	.07	.00	0.	*	1	0205	126	.00	.00	.00	.00	4.	
1	0035	36	.07	.07	.00	0.	*	1	0206	127	.00	.00	.00	.00	4.	
1	0036	37	.05	.05	.00	0.	*	1	0207	128	.00	.00	.00	.00	4.	
1	0037	38	.05	.05	.00	0.	*	1	0208	129	.00	.00	.00	.00	3.	
1	0038	39	.05	.05	.00	0.	*	1	0209	130	.00	.00	.00	.00	3.	
1	0039	40	.05	.05	.00	0.	*	1	0210	131	.00	.00	.00	.00	3.	
1	0040	41	.05	.05	.00	0.	*	1	0211	132	.00	.00	.00	.00	3.	
1	0041	42	.04	.04	.00	0.	*	1	0212	133	.00	.00	.00	.00	3.	
1	0042	43	.04	.04	.00	0.	*	1	0213	134	.00	.00	.00	.00	3.	
1	0043	44	.04	.03	.00	0.	*	1	0214	135	.00	.00	.00	.00	3.	
1	0044	45	.04	.03	.00	0.	*	1	0215	136	.00	.00	.00	.00	3.	
1	0045	46	.04	.03	.00	0.	*	1	0216	137	.00	.00	.00	.00	3.	
1	0046	47	.02	.02	.00	0.	*	1	0217	138	.00	.00	.00	.00	3.	
1	0047	48	.02	.02	.00	1.	*	1	0218	139	.00	.00	.00	.00	3.	
1	0048	49	.02	.02	.00	1.	*	1	0219	140	.00	.00	.00	.00	3.	
1	0049	50	.02	.02	.00	1.	*	1	0220	141	.00	.00	.00	.00	3.	
1	0050	51	.02	.02	.00	2.	*	1	0221	142	.00	.00	.00	.00	3.	
1	0051	52	.01	.01	.00	2.	*	1	0222	143	.00	.00	.00	.00	3.	
1	0052	53	.01	.01	.00	3.	*	1	0223	144	.00	.00	.00	.00	3.	
1	0053	54	.01	.01	.00	3.	*	1	0224	145	.00	.00	.00	.00	2.	
1	0054	55	.01	.01	.00	4.	*	1	0225	146	.00	.00	.00	.00	2.	
1	0055	56	.01	.01	.00	5.	*	1	0226	147	.00	.00	.00	.00	2.	
1	0056	57	.01	.01	.00	6.	*	1	0227	148	.00	.00	.00	.00	2.	
1	0057	58	.01	.01	.00	6.	*	1	0228	149	.00	.00	.00	.00	2.	
1	0058	59	.01	.01	.00	7.	*	1	0229	150	.00	.00	.00	.00	2.	
1	0059	60	.01	.01	.00	8.	*	1	0230	151	.00	.00	.00	.00	2.	
1	0100	61	.01	.01	.00	9.	*	1	0231	152	.00	.00	.00	.00	2.	
1	0101	62	.01	.01	.00	10.	*	1	0232	153	.00	.00	.00	.00	2.	
1	0102	63	.01	.01	.00	11.	*	1	0233	154	.00	.00	.00	.00	2.	
1	0103	64	.01	.01	.00	12.	*	1	0234	155	.00	.00	.00	.00	2.	
1	0104	65	.01	.01	.00	13.	*	1	0235	156	.00	.00	.00	.00	2.	
1	0105	66	.01	.01	.00	14.	*	1	0236	157	.00	.00	.00	.00	2.	
1	0106	67	.01	.00	.00	14.	*	1	0237	158	.00	.00	.00	.00	2.	
1	0107	68	.01	.00	.00	15.	*	1	0238	159	.00	.00	.00	.00	2.	
1	0108	69	.01	.00	.00	16.	*	1	0239	160	.00	.00	.00	.00	2.	

pre.out

1	0000	1	0.	*	1	0046	47	0.	*	1	0132	93	0.	*	1	0218	139	37.
1	0001	2	0.	*	1	0047	48	0.	*	1	0133	94	0.	*	1	0219	140	36.
1	0002	3	0.	*	1	0048	49	0.	*	1	0134	95	0.	*	1	0220	141	35.
1	0003	4	0.	*	1	0049	50	0.	*	1	0135	96	0.	*	1	0221	142	34.
1	0004	5	0.	*	1	0050	51	0.	*	1	0136	97	9.	*	1	0222	143	33.
1	0005	6	0.	*	1	0051	52	0.	*	1	0137	98	54.	*	1	0223	144	32.
1	0006	7	0.	*	1	0052	53	0.	*	1	0138	99	78.	*	1	0224	145	31.
1	0007	8	0.	*	1	0053	54	0.	*	1	0139	100	75.	*	1	0225	146	30.
1	0008	9	0.	*	1	0054	55	0.	*	1	0140	101	75.	*	1	0226	147	30.
1	0009	10	0.	*	1	0055	56	0.	*	1	0141	102	77.	*	1	0227	148	29.
1	0010	11	0.	*	1	0056	57	0.	*	1	0142	103	77.	*	1	0228	149	28.
1	0011	12	0.	*	1	0057	58	0.	*	1	0143	104	77.	*	1	0229	150	27.
1	0012	13	0.	*	1	0058	59	0.	*	1	0144	105	76.	*	1	0230	151	26.
1	0013	14	0.	*	1	0059	60	0.	*	1	0145	106	76.	*	1	0231	152	25.
1	0014	15	0.	*	1	0100	61	0.	*	1	0146	107	75.	*	1	0232	153	25.
1	0015	16	0.	*	1	0101	62	0.	*	1	0147	108	74.	*	1	0233	154	24.
1	0016	17	0.	*	1	0102	63	0.	*	1	0148	109	73.	*	1	0234	155	23.
1	0017	18	0.	*	1	0103	64	0.	*	1	0149	110	72.	*	1	0235	156	22.
1	0018	19	0.	*	1	0104	65	0.	*	1	0150	111	71.	*	1	0236	157	22.
1	0019	20	0.	*	1	0105	66	0.	*	1	0151	112	70.	*	1	0237	158	21.
1	0020	21	0.	*	1	0106	67	0.	*	1	0152	113	68.	*	1	0238	159	20.
1	0021	22	0.	*	1	0107	68	0.	*	1	0153	114	67.	*	1	0239	160	20.
1	0022	23	0.	*	1	0108	69	0.	*	1	0154	115	66.	*	1	0240	161	19.
1	0023	24	0.	*	1	0109	70	0.	*	1	0155	116	64.	*	1	0241	162	19.
1	0024	25	0.	*	1	0110	71	0.	*	1	0156	117	63.	*	1	0242	163	18.
1	0025	26	0.	*	1	0111	72	0.	*	1	0157	118	61.	*	1	0243	164	17.
1	0026	27	0.	*	1	0112	73	0.	*	1	0158	119	60.	*	1	0244	165	17.
1	0027	28	0.	*	1	0113	74	0.	*	1	0159	120	59.	*	1	0245	166	16.
1	0028	29	0.	*	1	0114	75	0.	*	1	0200	121	57.	*	1	0246	167	16.
1	0029	30	0.	*	1	0115	76	0.	*	1	0201	122	56.	*	1	0247	168	15.
1	0030	31	0.	*	1	0116	77	0.	*	1	0202	123	55.	*	1	0248	169	15.
1	0031	32	0.	*	1	0117	78	0.	*	1	0203	124	54.	*	1	0249	170	14.
1	0032	33	0.	*	1	0118	79	0.	*	1	0204	125	52.	*	1	0250	171	14.
1	0033	34	0.	*	1	0119	80	0.	*	1	0205	126	51.	*	1	0251	172	14.
1	0034	35	0.	*	1	0120	81	0.	*	1	0206	127	50.	*	1	0252	173	13.
1	0035	36	0.	*	1	0121	82	0.	*	1	0207	128	49.	*	1	0253	174	13.
1	0036	37	0.	*	1	0122	83	0.	*	1	0208	129	48.	*	1	0254	175	13.
1	0037	38	0.	*	1	0123	84	0.	*	1	0209	130	46.	*	1	0255	176	12.
1	0038	39	0.	*	1	0124	85	0.	*	1	0210	131	45.	*	1	0256	177	12.
1	0039	40	0.	*	1	0125	86	0.	*	1	0211	132	44.	*	1	0257	178	12.
1	0040	41	0.	*	1	0126	87	0.	*	1	0212	133	43.	*	1	0258	179	11.
1	0041	42	0.	*	1	0127	88	0.	*	1	0213	134	42.	*	1	0259	180	11.
1	0042	43	0.	*	1	0128	89	0.	*	1	0214	135	41.	*	1	0300	181	11.
1	0043	44	0.	*	1	0129	90	0.	*	1	0215	136	40.	*				
1	0044	45	0.	*	1	0130	91	0.	*	1	0216	137	39.	*				
1	0045	46	0.	*	1	0131	92	0.	*	1	0217	138	38.	*				

PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
(CFS)	(HR)		6-HR	24-HR	72-HR	3.00-HR
+	78.	(CFS)	19.	19.	19.	19.
+		(INCHES)	.436	.436	.436	.436
		(AC-FT)	5.	5.	5.	5.

CUMULATIVE AREA = .20 SQ MI

COMPUTED MUSKINGUM-CUNGE PARAMETERS

ELEMENT	ALPHA	COMPUTATION TIME STEP			PEAK	TIME TO PEAK	VOLUME	MAXIMUM CELERITY
		M	DT	DX				
		(MIN)	(FT)	(CFS)	(MIN)	(IN)	(FPS)	
MAIN	1.22	1.33	1.00	94.44	19.67	122.00	.09	2.66

INTERPOLATED TO SPECIFIED COMPUTATION INTERVAL

MAIN	1.22	1.33	1.00	19.67	122.00	.09
------	------	------	------	-------	--------	-----

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1315E+01 EXCESS= .0000E+00 OUTFLOW= .9567E+00 BASIN STORAGE= .4028E+00 PERCENT ERROR= -3.4

HYDROGRAPH AT STATION RE1
PLAN 1, RATIO = .61

DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW
1	0000	1	0.	*	1	0046	47	0.	*	1	0132	93	0.	*	1	0218	139	15.				
1	0001	2	0.	*	1	0047	48	0.	*	1	0133	94	0.	*	1	0219	140	14.				
1	0002	3	0.	*	1	0048	49	0.	*	1	0134	95	0.	*	1	0220	141	14.				

pre.out																		
1	0003	4	0.	*	1	0049	50	0.	*	1	0135	96	0.	*	1	0221	142	14.
1	0004	5	0.	*	1	0050	51	0.	*	1	0136	97	0.	*	1	0222	143	14.
1	0005	6	0.	*	1	0051	52	0.	*	1	0137	98	0.	*	1	0223	144	13.
1	0006	7	0.	*	1	0052	53	0.	*	1	0138	99	0.	*	1	0224	145	13.
1	0007	8	0.	*	1	0053	54	0.	*	1	0139	100	0.	*	1	0225	146	13.
1	0008	9	0.	*	1	0054	55	0.	*	1	0140	101	0.	*	1	0226	147	13.
1	0009	10	0.	*	1	0055	56	0.	*	1	0141	102	0.	*	1	0227	148	12.
1	0010	11	0.	*	1	0056	57	0.	*	1	0142	103	0.	*	1	0228	149	12.
1	0011	12	0.	*	1	0057	58	0.	*	1	0143	104	0.	*	1	0229	150	12.
1	0012	13	0.	*	1	0058	59	0.	*	1	0144	105	0.	*	1	0230	151	12.
1	0013	14	0.	*	1	0059	60	0.	*	1	0145	106	0.	*	1	0231	152	11.
1	0014	15	0.	*	1	0100	61	0.	*	1	0146	107	0.	*	1	0232	153	11.
1	0015	16	0.	*	1	0101	62	0.	*	1	0147	108	0.	*	1	0233	154	11.
1	0016	17	0.	*	1	0102	63	0.	*	1	0148	109	0.	*	1	0234	155	11.
1	0017	18	0.	*	1	0103	64	0.	*	1	0149	110	0.	*	1	0235	156	10.
1	0018	19	0.	*	1	0104	65	0.	*	1	0150	111	0.	*	1	0236	157	10.
1	0019	20	0.	*	1	0105	66	0.	*	1	0151	112	0.	*	1	0237	158	10.
1	0020	21	0.	*	1	0106	67	0.	*	1	0152	113	0.	*	1	0238	159	10.
1	0021	22	0.	*	1	0107	68	0.	*	1	0153	114	0.	*	1	0239	160	10.
1	0022	23	0.	*	1	0108	69	0.	*	1	0154	115	0.	*	1	0240	161	9.
1	0023	24	0.	*	1	0109	70	0.	*	1	0155	116	0.	*	1	0241	162	9.
1	0024	25	0.	*	1	0110	71	0.	*	1	0156	117	0.	*	1	0242	163	9.
1	0025	26	0.	*	1	0111	72	0.	*	1	0157	118	0.	*	1	0243	164	9.
1	0026	27	0.	*	1	0112	73	0.	*	1	0158	119	0.	*	1	0244	165	8.
1	0027	28	0.	*	1	0113	74	0.	*	1	0159	120	0.	*	1	0245	166	8.
1	0028	29	0.	*	1	0114	75	0.	*	1	0200	121	1.	*	1	0246	167	8.
1	0029	30	0.	*	1	0115	76	0.	*	1	0201	122	12.	*	1	0247	168	8.
1	0030	31	0.	*	1	0116	77	0.	*	1	0202	123	20.	*	1	0248	169	8.
1	0031	32	0.	*	1	0117	78	0.	*	1	0203	124	18.	*	1	0249	170	7.
1	0032	33	0.	*	1	0118	79	0.	*	1	0204	125	17.	*	1	0250	171	7.
1	0033	34	0.	*	1	0119	80	0.	*	1	0205	126	17.	*	1	0251	172	7.
1	0034	35	0.	*	1	0120	81	0.	*	1	0206	127	17.	*	1	0252	173	7.
1	0035	36	0.	*	1	0121	82	0.	*	1	0207	128	17.	*	1	0253	174	7.
1	0036	37	0.	*	1	0122	83	0.	*	1	0208	129	17.	*	1	0254	175	6.
1	0037	38	0.	*	1	0123	84	0.	*	1	0209	130	17.	*	1	0255	176	6.
1	0038	39	0.	*	1	0124	85	0.	*	1	0210	131	16.	*	1	0256	177	6.
1	0039	40	0.	*	1	0125	86	0.	*	1	0211	132	16.	*	1	0257	178	6.
1	0040	41	0.	*	1	0126	87	0.	*	1	0212	133	16.	*	1	0258	179	6.
1	0041	42	0.	*	1	0127	88	0.	*	1	0213	134	16.	*	1	0259	180	6.
1	0042	43	0.	*	1	0128	89	0.	*	1	0214	135	16.	*	1	0300	181	5.
1	0043	44	0.	*	1	0129	90	0.	*	1	0215	136	15.	*				
1	0044	45	0.	*	1	0130	91	0.	*	1	0216	137	15.	*				
1	0045	46	0.	*	1	0131	92	0.	*	1	0217	138	15.	*				

PEAK FLOW	TIME	MAXIMUM AVERAGE FLOW			
(CFS)	(HR)	6-HR	24-HR	72-HR	3.00-HR
+	20.	2.03	4.	4.	4.
			(INCHES)	.089	.089
			(AC-FT)	1.	1.
			CUMULATIVE AREA =	.20	SQ MI

*** **

 * *
 33 KK * BE2 *
 * *

BE2

SUBBASIN RUNOFF DATA

35 BA SUBBASIN CHARACTERISTICS
 TAREA .03 SUBBASIN AREA

PRECIPITATION DATA

23 PB STORM 2.13 BASIN TOTAL PRECIPITATION

24 PI	INCREMENTAL PRECIPITATION PATTERN									
	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	.05	.05	.05	.05	.05	.04	.04	.04	.04	.04
	.03	.03	.03	.03	.03	.02	.02	.02	.02	.02
	.01	.01	.01	.01	.01	.01	.01	.01	.01	.01
	.01	.01	.01	.01	.01	.00	.00	.00	.00	.00
	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00


```

pre.out
.00 .00 .00 .00 .00 .00 .00 .00 .00 .00
.00 .00 .00 .00 .00 .00 .00 .00 .00 .00
.00 .00 .00 .00 .00 .00 .00 .00 .00 .00
.00 .00 .00 .00 .00 .00 .00 .00 .00 .00
.00 .00 .00 .00 .00 .00 .00 .00 .00 .00
.00 .00 .00 .00 .00 .00 .00 .00 .00 .00

```

```

36 LS SCS LOSS RATE
      STRTL .82 INITIAL ABSTRACTION
      CRVNR 71.00 CURVE NUMBER
      RTIMP .00 PERCENT IMPERVIOUS AREA

```

```

37 UD SCS DIMENSIONLESS UNITGRAPH
      TLAG .26 LAG

```

UNIT HYDROGRAPH
81 END-OF-PERIOD ORDINATES

1.	2.	5.	8.	11.	15.	19.	25.	31.	37.
42.	46.	50.	52.	54.	54.	54.	53.	51.	49.
47.	44.	42.	38.	35.	31.	27.	24.	22.	20.
18.	16.	15.	13.	12.	11.	10.	9.	8.	7.
7.	6.	5.	5.	4.	4.	4.	3.	3.	3.
2.	2.	2.	2.	2.	1.	1.	1.	1.	1.
1.	1.	1.	1.	1.	1.	1.	0.	0.	0.
0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
0.									

HYDROGRAPH AT STATION BE2

DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	*	DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
1	0000	1	.00	.00	.00	0.	*	1	0131	92	.00	.00	.00	4.		
1	0001	2	.00	.00	.00	0.	*	1	0132	93	.00	.00	.00	4.		
1	0002	3	.00	.00	.00	0.	*	1	0133	94	.00	.00	.00	4.		
1	0003	4	.00	.00	.00	0.	*	1	0134	95	.00	.00	.00	4.		
1	0004	5	.00	.00	.00	0.	*	1	0135	96	.00	.00	.00	4.		
1	0005	6	.00	.00	.00	0.	*	1	0136	97	.00	.00	.00	4.		
1	0006	7	.00	.00	.00	0.	*	1	0137	98	.00	.00	.00	3.		
1	0007	8	.00	.00	.00	0.	*	1	0138	99	.00	.00	.00	3.		
1	0008	9	.00	.00	.00	0.	*	1	0139	100	.00	.00	.00	3.		
1	0009	10	.00	.00	.00	0.	*	1	0140	101	.00	.00	.00	3.		
1	0010	11	.00	.00	.00	0.	*	1	0141	102	.00	.00	.00	3.		
1	0011	12	.00	.00	.00	0.	*	1	0142	103	.00	.00	.00	3.		
1	0012	13	.00	.00	.00	0.	*	1	0143	104	.00	.00	.00	3.		
1	0013	14	.00	.00	.00	0.	*	1	0144	105	.00	.00	.00	3.		
1	0014	15	.00	.00	.00	0.	*	1	0145	106	.00	.00	.00	2.		
1	0015	16	.00	.00	.00	0.	*	1	0146	107	.00	.00	.00	2.		
1	0016	17	.00	.00	.00	0.	*	1	0147	108	.00	.00	.00	2.		
1	0017	18	.00	.00	.00	0.	*	1	0148	109	.00	.00	.00	2.		
1	0018	19	.00	.00	.00	0.	*	1	0149	110	.00	.00	.00	2.		
1	0019	20	.00	.00	.00	0.	*	1	0150	111	.00	.00	.00	2.		
1	0020	21	.00	.00	.00	0.	*	1	0151	112	.00	.00	.00	2.		
1	0021	22	.00	.00	.00	0.	*	1	0152	113	.00	.00	.00	2.		
1	0022	23	.00	.00	.00	0.	*	1	0153	114	.00	.00	.00	1.		
1	0023	24	.00	.00	.00	0.	*	1	0154	115	.00	.00	.00	1.		
1	0024	25	.00	.00	.00	0.	*	1	0155	116	.00	.00	.00	1.		
1	0025	26	.00	.00	.00	0.	*	1	0156	117	.00	.00	.00	1.		
1	0026	27	.00	.00	.00	0.	*	1	0157	118	.00	.00	.00	1.		
1	0027	28	.00	.00	.00	0.	*	1	0158	119	.00	.00	.00	1.		
1	0028	29	.00	.00	.00	0.	*	1	0159	120	.00	.00	.00	1.		
1	0029	30	.00	.00	.00	0.	*	1	0200	121	.00	.00	.00	1.		
1	0030	31	.00	.00	.00	0.	*	1	0201	122	.00	.00	.00	1.		
1	0031	32	.11	.11	.00	0.	*	1	0202	123	.00	.00	.00	1.		
1	0032	33	.11	.11	.00	0.	*	1	0203	124	.00	.00	.00	1.		
1	0033	34	.11	.11	.00	0.	*	1	0204	125	.00	.00	.00	1.		
1	0034	35	.11	.11	.00	0.	*	1	0205	126	.00	.00	.00	1.		
1	0035	36	.11	.11	.00	0.	*	1	0206	127	.00	.00	.00	1.		
1	0036	37	.09	.09	.00	0.	*	1	0207	128	.00	.00	.00	1.		
1	0037	38	.09	.09	.00	0.	*	1	0208	129	.00	.00	.00	1.		
1	0038	39	.09	.09	.00	0.	*	1	0209	130	.00	.00	.00	1.		
1	0039	40	.09	.08	.00	0.	*	1	0210	131	.00	.00	.00	1.		
1	0040	41	.09	.08	.01	0.	*	1	0211	132	.00	.00	.00	1.		
1	0041	42	.06	.05	.01	0.	*	1	0212	133	.00	.00	.00	1.		
1	0042	43	.06	.05	.01	0.	*	1	0213	134	.00	.00	.00	1.		
1	0043	44	.06	.05	.01	0.	*	1	0214	135	.00	.00	.00	1.		
1	0044	45	.06	.05	.01	0.	*	1	0215	136	.00	.00	.00	1.		
1	0045	46	.06	.05	.01	0.	*	1	0216	137	.00	.00	.00	1.		
1	0046	47	.04	.03	.01	1.	*	1	0217	138	.00	.00	.00	1.		
1	0047	48	.04	.03	.01	1.	*	1	0218	139	.00	.00	.00	1.		
1	0048	49	.04	.03	.01	1.	*	1	0219	140	.00	.00	.00	1.		
1	0049	50	.04	.03	.01	2.	*	1	0220	141	.00	.00	.00	1.		
1	0050	51	.04	.03	.01	2.	*	1	0221	142	.00	.00	.00	1.		
1	0051	52	.02	.02	.01	2.	*	1	0222	143	.00	.00	.00	1.		

pre.out														
1	0052	53	.02	.02	.01	3.	*	1	0223	144	.00	.00	.00	1.
1	0053	54	.02	.02	.01	3.	*	1	0224	145	.00	.00	.00	1.
1	0054	55	.02	.02	.01	4.	*	1	0225	146	.00	.00	.00	1.
1	0055	56	.02	.02	.01	4.	*	1	0226	147	.00	.00	.00	1.
1	0056	57	.02	.01	.01	5.	*	1	0227	148	.00	.00	.00	1.
1	0057	58	.02	.01	.01	5.	*	1	0228	149	.00	.00	.00	1.
1	0058	59	.02	.01	.01	6.	*	1	0229	150	.00	.00	.00	1.
1	0059	60	.02	.01	.01	6.	*	1	0230	151	.00	.00	.00	1.
1	0100	61	.02	.01	.01	7.	*	1	0231	152	.00	.00	.00	1.
1	0101	62	.01	.01	.00	7.	*	1	0232	153	.00	.00	.00	1.
1	0102	63	.01	.01	.00	7.	*	1	0233	154	.00	.00	.00	1.
1	0103	64	.01	.01	.00	7.	*	1	0234	155	.00	.00	.00	1.
1	0104	65	.01	.01	.00	7.	*	1	0235	156	.00	.00	.00	1.
1	0105	66	.01	.01	.00	8.	*	1	0236	157	.00	.00	.00	1.
1	0106	67	.01	.01	.00	8.	*	1	0237	158	.00	.00	.00	1.
1	0107	68	.01	.01	.00	8.	*	1	0238	159	.00	.00	.00	1.
1	0108	69	.01	.01	.00	8.	*	1	0239	160	.00	.00	.00	1.
1	0109	70	.01	.01	.00	8.	*	1	0240	161	.00	.00	.00	1.
1	0110	71	.01	.01	.00	7.	*	1	0241	162	.00	.00	.00	1.
1	0111	72	.01	.00	.00	7.	*	1	0242	163	.00	.00	.00	1.
1	0112	73	.01	.00	.00	7.	*	1	0243	164	.00	.00	.00	1.
1	0113	74	.01	.00	.00	7.	*	1	0244	165	.00	.00	.00	1.
1	0114	75	.01	.00	.00	7.	*	1	0245	166	.00	.00	.00	1.
1	0115	76	.01	.00	.00	7.	*	1	0246	167	.00	.00	.00	1.
1	0116	77	.01	.00	.00	7.	*	1	0247	168	.00	.00	.00	1.
1	0117	78	.01	.00	.00	6.	*	1	0248	169	.00	.00	.00	1.
1	0118	79	.01	.00	.00	6.	*	1	0249	170	.00	.00	.00	1.
1	0119	80	.01	.00	.00	6.	*	1	0250	171	.00	.00	.00	1.
1	0120	81	.01	.00	.00	6.	*	1	0251	172	.00	.00	.00	1.
1	0121	82	.01	.00	.00	6.	*	1	0252	173	.00	.00	.00	1.
1	0122	83	.01	.00	.00	6.	*	1	0253	174	.00	.00	.00	1.
1	0123	84	.01	.00	.00	5.	*	1	0254	175	.00	.00	.00	1.
1	0124	85	.01	.00	.00	5.	*	1	0255	176	.00	.00	.00	1.
1	0125	86	.01	.00	.00	5.	*	1	0256	177	.00	.00	.00	1.
1	0126	87	.01	.00	.00	5.	*	1	0257	178	.00	.00	.00	1.
1	0127	88	.01	.00	.00	5.	*	1	0258	179	.00	.00	.00	1.
1	0128	89	.01	.00	.00	5.	*	1	0259	180	.00	.00	.00	1.
1	0129	90	.01	.00	.00	4.	*	1	0300	181	.00	.00	.00	1.
1	0130	91	.01	.00	.00	4.	*							

TOTAL RAINFALL = 2.13, TOTAL LOSS = 1.81, TOTAL EXCESS = .32

PEAK FLOW	TIME	MAXIMUM AVERAGE FLOW			
(CFS)	(HR)	6-HR	24-HR	72-HR	3.00-HR
+ 8.	1.12	2.	2.	2.	2.
	(CFS)				
	(INCHES)	.307	.307	.307	.307
	(AC-FT)	0.	0.	0.	0.
CUMULATIVE AREA =		.03 SQ MI			

HYDROGRAPH AT STATION BE2
PLAN 1, RATIO = 1.00

DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	*	DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
1	0000	1	.00	.00	.00	0.	0.	*	1	0131	92	.00	.00	.00	4.	
1	0001	2	.00	.00	.00	0.	0.	*	1	0132	93	.00	.00	.00	4.	
1	0002	3	.00	.00	.00	0.	0.	*	1	0133	94	.00	.00	.00	4.	
1	0003	4	.00	.00	.00	0.	0.	*	1	0134	95	.00	.00	.00	4.	
1	0004	5	.00	.00	.00	0.	0.	*	1	0135	96	.00	.00	.00	4.	
1	0005	6	.00	.00	.00	0.	0.	*	1	0136	97	.00	.00	.00	4.	
1	0006	7	.00	.00	.00	0.	0.	*	1	0137	98	.00	.00	.00	3.	
1	0007	8	.00	.00	.00	0.	0.	*	1	0138	99	.00	.00	.00	3.	
1	0008	9	.00	.00	.00	0.	0.	*	1	0139	100	.00	.00	.00	3.	
1	0009	10	.00	.00	.00	0.	0.	*	1	0140	101	.00	.00	.00	3.	
1	0010	11	.00	.00	.00	0.	0.	*	1	0141	102	.00	.00	.00	3.	
1	0011	12	.00	.00	.00	0.	0.	*	1	0142	103	.00	.00	.00	3.	
1	0012	13	.00	.00	.00	0.	0.	*	1	0143	104	.00	.00	.00	3.	
1	0013	14	.00	.00	.00	0.	0.	*	1	0144	105	.00	.00	.00	3.	
1	0014	15	.00	.00	.00	0.	0.	*	1	0145	106	.00	.00	.00	2.	
1	0015	16	.00	.00	.00	0.	0.	*	1	0146	107	.00	.00	.00	2.	
1	0016	17	.00	.00	.00	0.	0.	*	1	0147	108	.00	.00	.00	2.	
1	0017	18	.00	.00	.00	0.	0.	*	1	0148	109	.00	.00	.00	2.	
1	0018	19	.00	.00	.00	0.	0.	*	1	0149	110	.00	.00	.00	2.	
1	0019	20	.00	.00	.00	0.	0.	*	1	0150	111	.00	.00	.00	2.	
1	0020	21	.00	.00	.00	0.	0.	*	1	0151	112	.00	.00	.00	2.	
1	0021	22	.00	.00	.00	0.	0.	*	1	0152	113	.00	.00	.00	2.	
1	0022	23	.00	.00	.00	0.	0.	*	1	0153	114	.00	.00	.00	1.	
1	0023	24	.00	.00	.00	0.	0.	*	1	0154	115	.00	.00	.00	1.	
1	0024	25	.00	.00	.00	0.	0.	*	1	0155	116	.00	.00	.00	1.	
1	0025	26	.00	.00	.00	0.	0.	*	1	0156	117	.00	.00	.00	1.	

pre.out														
1	0026	27	.00	.00	.00	0.	*	1	0157	118	.00	.00	.00	1.
1	0027	28	.00	.00	.00	0.	*	1	0158	119	.00	.00	.00	1.
1	0028	29	.00	.00	.00	0.	*	1	0159	120	.00	.00	.00	1.
1	0029	30	.00	.00	.00	0.	*	1	0200	121	.00	.00	.00	1.
1	0030	31	.00	.00	.00	0.	*	1	0201	122	.00	.00	.00	1.
1	0031	32	.11	.11	.00	0.	*	1	0202	123	.00	.00	.00	1.
1	0032	33	.11	.11	.00	0.	*	1	0203	124	.00	.00	.00	1.
1	0033	34	.11	.11	.00	0.	*	1	0204	125	.00	.00	.00	1.
1	0034	35	.11	.11	.00	0.	*	1	0205	126	.00	.00	.00	1.
1	0035	36	.11	.11	.00	0.	*	1	0206	127	.00	.00	.00	1.
1	0036	37	.09	.09	.00	0.	*	1	0207	128	.00	.00	.00	1.
1	0037	38	.09	.09	.00	0.	*	1	0208	129	.00	.00	.00	1.
1	0038	39	.09	.09	.00	0.	*	1	0209	130	.00	.00	.00	1.
1	0039	40	.09	.08	.00	0.	*	1	0210	131	.00	.00	.00	1.
1	0040	41	.09	.08	.01	0.	*	1	0211	132	.00	.00	.00	1.
1	0041	42	.06	.05	.01	0.	*	1	0212	133	.00	.00	.00	1.
1	0042	43	.06	.05	.01	0.	*	1	0213	134	.00	.00	.00	1.
1	0043	44	.06	.05	.01	0.	*	1	0214	135	.00	.00	.00	1.
1	0044	45	.06	.05	.01	0.	*	1	0215	136	.00	.00	.00	1.
1	0045	46	.06	.05	.01	0.	*	1	0216	137	.00	.00	.00	1.
1	0046	47	.04	.03	.01	1.	*	1	0217	138	.00	.00	.00	1.
1	0047	48	.04	.03	.01	1.	*	1	0218	139	.00	.00	.00	1.
1	0048	49	.04	.03	.01	1.	*	1	0219	140	.00	.00	.00	1.
1	0049	50	.04	.03	.01	2.	*	1	0220	141	.00	.00	.00	1.
1	0050	51	.04	.03	.01	2.	*	1	0221	142	.00	.00	.00	1.
1	0051	52	.02	.02	.01	2.	*	1	0222	143	.00	.00	.00	1.
1	0052	53	.02	.02	.01	3.	*	1	0223	144	.00	.00	.00	1.
1	0053	54	.02	.02	.01	3.	*	1	0224	145	.00	.00	.00	1.
1	0054	55	.02	.02	.01	4.	*	1	0225	146	.00	.00	.00	1.
1	0055	56	.02	.02	.01	4.	*	1	0226	147	.00	.00	.00	1.
1	0056	57	.02	.01	.01	5.	*	1	0227	148	.00	.00	.00	1.
1	0057	58	.02	.01	.01	5.	*	1	0228	149	.00	.00	.00	1.
1	0058	59	.02	.01	.01	6.	*	1	0229	150	.00	.00	.00	1.
1	0059	60	.02	.01	.01	6.	*	1	0230	151	.00	.00	.00	1.
1	0100	61	.02	.01	.01	7.	*	1	0231	152	.00	.00	.00	1.
1	0101	62	.01	.01	.00	7.	*	1	0232	153	.00	.00	.00	1.
1	0102	63	.01	.01	.00	7.	*	1	0233	154	.00	.00	.00	1.
1	0103	64	.01	.01	.00	7.	*	1	0234	155	.00	.00	.00	1.
1	0104	65	.01	.01	.00	7.	*	1	0235	156	.00	.00	.00	1.
1	0105	66	.01	.01	.00	8.	*	1	0236	157	.00	.00	.00	1.
1	0106	67	.01	.01	.00	8.	*	1	0237	158	.00	.00	.00	1.
1	0107	68	.01	.01	.00	8.	*	1	0238	159	.00	.00	.00	1.
1	0108	69	.01	.01	.00	8.	*	1	0239	160	.00	.00	.00	1.
1	0109	70	.01	.01	.00	8.	*	1	0240	161	.00	.00	.00	1.
1	0110	71	.01	.01	.00	7.	*	1	0241	162	.00	.00	.00	1.
1	0111	72	.01	.00	.00	7.	*	1	0242	163	.00	.00	.00	1.
1	0112	73	.01	.00	.00	7.	*	1	0243	164	.00	.00	.00	1.
1	0113	74	.01	.00	.00	7.	*	1	0244	165	.00	.00	.00	1.
1	0114	75	.01	.00	.00	7.	*	1	0245	166	.00	.00	.00	1.
1	0115	76	.01	.00	.00	7.	*	1	0246	167	.00	.00	.00	1.
1	0116	77	.01	.00	.00	7.	*	1	0247	168	.00	.00	.00	1.
1	0117	78	.01	.00	.00	6.	*	1	0248	169	.00	.00	.00	1.
1	0118	79	.01	.00	.00	6.	*	1	0249	170	.00	.00	.00	1.
1	0119	80	.01	.00	.00	6.	*	1	0250	171	.00	.00	.00	1.
1	0120	81	.01	.00	.00	6.	*	1	0251	172	.00	.00	.00	1.
1	0121	82	.01	.00	.00	6.	*	1	0252	173	.00	.00	.00	1.
1	0122	83	.01	.00	.00	6.	*	1	0253	174	.00	.00	.00	1.
1	0123	84	.01	.00	.00	5.	*	1	0254	175	.00	.00	.00	1.
1	0124	85	.01	.00	.00	5.	*	1	0255	176	.00	.00	.00	1.
1	0125	86	.01	.00	.00	5.	*	1	0256	177	.00	.00	.00	1.
1	0126	87	.01	.00	.00	5.	*	1	0257	178	.00	.00	.00	1.
1	0127	88	.01	.00	.00	5.	*	1	0258	179	.00	.00	.00	1.
1	0128	89	.01	.00	.00	5.	*	1	0259	180	.00	.00	.00	1.
1	0129	90	.01	.00	.00	4.	*	1	0300	181	.00	.00	.00	1.
1	0130	91	.01	.00	.00	4.	*							

TOTAL RAINFALL = 2.13, TOTAL LOSS = 1.81, TOTAL EXCESS = .32

PEAK FLOW + (CFS)	TIME (HR)	MAXIMUM AVERAGE FLOW			
		6-HR	24-HR	72-HR	3.00-HR
+ 8.	1.12	2.	2.	2.	2.
		(INCHES)	.307	.307	.307
		(AC-FT)	0.	0.	0.

CUMULATIVE AREA = .03 SQ MI

HYDROGRAPH AT STATION BE2
PLAN 1, RATIO = .61

DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	*	DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
								*								
								*								

														pre.out			
1	0000	1	.00	.00	.00	0.	*	1	0131	92	.00	.00	.00	1.			
1	0001	2	.00	.00	.00	0.	*	1	0132	93	.00	.00	.00	1.			
1	0002	3	.00	.00	.00	0.	*	1	0133	94	.00	.00	.00	1.			
1	0003	4	.00	.00	.00	0.	*	1	0134	95	.00	.00	.00	1.			
1	0004	5	.00	.00	.00	0.	*	1	0135	96	.00	.00	.00	1.			
1	0005	6	.00	.00	.00	0.	*	1	0136	97	.00	.00	.00	1.			
1	0006	7	.00	.00	.00	0.	*	1	0137	98	.00	.00	.00	1.			
1	0007	8	.00	.00	.00	0.	*	1	0138	99	.00	.00	.00	1.			
1	0008	9	.00	.00	.00	0.	*	1	0139	100	.00	.00	.00	1.			
1	0009	10	.00	.00	.00	0.	*	1	0140	101	.00	.00	.00	1.			
1	0010	11	.00	.00	.00	0.	*	1	0141	102	.00	.00	.00	1.			
1	0011	12	.00	.00	.00	0.	*	1	0142	103	.00	.00	.00	1.			
1	0012	13	.00	.00	.00	0.	*	1	0143	104	.00	.00	.00	1.			
1	0013	14	.00	.00	.00	0.	*	1	0144	105	.00	.00	.00	1.			
1	0014	15	.00	.00	.00	0.	*	1	0145	106	.00	.00	.00	1.			
1	0015	16	.00	.00	.00	0.	*	1	0146	107	.00	.00	.00	1.			
1	0016	17	.00	.00	.00	0.	*	1	0147	108	.00	.00	.00	0.			
1	0017	18	.00	.00	.00	0.	*	1	0148	109	.00	.00	.00	0.			
1	0018	19	.00	.00	.00	0.	*	1	0149	110	.00	.00	.00	0.			
1	0019	20	.00	.00	.00	0.	*	1	0150	111	.00	.00	.00	0.			
1	0020	21	.00	.00	.00	0.	*	1	0151	112	.00	.00	.00	0.			
1	0021	22	.00	.00	.00	0.	*	1	0152	113	.00	.00	.00	0.			
1	0022	23	.00	.00	.00	0.	*	1	0153	114	.00	.00	.00	0.			
1	0023	24	.00	.00	.00	0.	*	1	0154	115	.00	.00	.00	0.			
1	0024	25	.00	.00	.00	0.	*	1	0155	116	.00	.00	.00	0.			
1	0025	26	.00	.00	.00	0.	*	1	0156	117	.00	.00	.00	0.			
1	0026	27	.00	.00	.00	0.	*	1	0157	118	.00	.00	.00	0.			
1	0027	28	.00	.00	.00	0.	*	1	0158	119	.00	.00	.00	0.			
1	0028	29	.00	.00	.00	0.	*	1	0159	120	.00	.00	.00	0.			
1	0029	30	.00	.00	.00	0.	*	1	0200	121	.00	.00	.00	0.			
1	0030	31	.00	.00	.00	0.	*	1	0201	122	.00	.00	.00	0.			
1	0031	32	.07	.07	.00	0.	*	1	0202	123	.00	.00	.00	0.			
1	0032	33	.07	.07	.00	0.	*	1	0203	124	.00	.00	.00	0.			
1	0033	34	.07	.07	.00	0.	*	1	0204	125	.00	.00	.00	0.			
1	0034	35	.07	.07	.00	0.	*	1	0205	126	.00	.00	.00	0.			
1	0035	36	.07	.07	.00	0.	*	1	0206	127	.00	.00	.00	0.			
1	0036	37	.05	.05	.00	0.	*	1	0207	128	.00	.00	.00	0.			
1	0037	38	.05	.05	.00	0.	*	1	0208	129	.00	.00	.00	0.			
1	0038	39	.05	.05	.00	0.	*	1	0209	130	.00	.00	.00	0.			
1	0039	40	.05	.05	.00	0.	*	1	0210	131	.00	.00	.00	0.			
1	0040	41	.05	.05	.00	0.	*	1	0211	132	.00	.00	.00	0.			
1	0041	42	.04	.04	.00	0.	*	1	0212	133	.00	.00	.00	0.			
1	0042	43	.04	.04	.00	0.	*	1	0213	134	.00	.00	.00	0.			
1	0043	44	.04	.04	.00	0.	*	1	0214	135	.00	.00	.00	0.			
1	0044	45	.04	.04	.00	0.	*	1	0215	136	.00	.00	.00	0.			
1	0045	46	.04	.04	.00	0.	*	1	0216	137	.00	.00	.00	0.			
1	0046	47	.02	.02	.00	0.	*	1	0217	138	.00	.00	.00	0.			
1	0047	48	.02	.02	.00	0.	*	1	0218	139	.00	.00	.00	0.			
1	0048	49	.02	.02	.00	0.	*	1	0219	140	.00	.00	.00	0.			
1	0049	50	.02	.02	.00	0.	*	1	0220	141	.00	.00	.00	0.			
1	0050	51	.02	.02	.00	0.	*	1	0221	142	.00	.00	.00	0.			
1	0051	52	.01	.01	.00	0.	*	1	0222	143	.00	.00	.00	0.			
1	0052	53	.01	.01	.00	0.	*	1	0223	144	.00	.00	.00	0.			
1	0053	54	.01	.01	.00	0.	*	1	0224	145	.00	.00	.00	0.			
1	0054	55	.01	.01	.00	0.	*	1	0225	146	.00	.00	.00	0.			
1	0055	56	.01	.01	.00	0.	*	1	0226	147	.00	.00	.00	0.			
1	0056	57	.01	.01	.00	0.	*	1	0227	148	.00	.00	.00	0.			
1	0057	58	.01	.01	.00	0.	*	1	0228	149	.00	.00	.00	0.			
1	0058	59	.01	.01	.00	0.	*	1	0229	150	.00	.00	.00	0.			
1	0059	60	.01	.01	.00	0.	*	1	0230	151	.00	.00	.00	0.			
1	0100	61	.01	.01	.00	0.	*	1	0231	152	.00	.00	.00	0.			
1	0101	62	.01	.01	.00	0.	*	1	0232	153	.00	.00	.00	0.			
1	0102	63	.01	.01	.00	0.	*	1	0233	154	.00	.00	.00	0.			
1	0103	64	.01	.01	.00	0.	*	1	0234	155	.00	.00	.00	0.			
1	0104	65	.01	.01	.00	1.	*	1	0235	156	.00	.00	.00	0.			
1	0105	66	.01	.01	.00	1.	*	1	0236	157	.00	.00	.00	0.			
1	0106	67	.01	.01	.00	1.	*	1	0237	158	.00	.00	.00	0.			
1	0107	68	.01	.01	.00	1.	*	1	0238	159	.00	.00	.00	0.			
1	0108	69	.01	.01	.00	1.	*	1	0239	160	.00	.00	.00	0.			
1	0109	70	.01	.01	.00	1.	*	1	0240	161	.00	.00	.00	0.			
1	0110	71	.01	.01	.00	1.	*	1	0241	162	.00	.00	.00	0.			
1	0111	72	.00	.00	.00	1.	*	1	0242	163	.00	.00	.00	0.			
1	0112	73	.00	.00	.00	1.	*	1	0243	164	.00	.00	.00	0.			
1	0113	74	.00	.00	.00	1.	*	1	0244	165	.00	.00	.00	0.			
1	0114	75	.00	.00	.00	1.	*	1	0245	166	.00	.00	.00	0.			
1	0115	76	.00	.00	.00	1.	*	1	0246	167	.00	.00	.00	0.			
1	0116	77	.00	.00	.00	1.	*	1	0247	168	.00	.00	.00	0.			
1	0117	78	.00	.00	.00	1.	*	1	0248	169	.00	.00	.00	0.			
1	0118	79	.00	.00	.00	1.	*	1	0249	170	.00	.00	.00	0.			
1	0119	80	.00	.00	.00	1.	*	1	0250	171	.00	.00	.00	0.			
1	0120	81	.00	.00	.00	1.	*	1	0251	172	.00	.00	.00	0.			
1	0121	82	.00	.00	.00	1.	*	1	0252	173	.00	.00	.00	0.			
1	0122	83	.00	.00	.00	1.	*	1	0253	174	.00	.00	.00	0.			
1	0123	84	.00	.00	.00	1.	*	1	0254	175	.00	.00	.00	0.			
1	0124	85	.00	.00	.00	1.	*	1	0255	176	.00	.00	.00	0.			
1	0125	86	.00	.00	.00	1.	*	1	0256	177	.00	.00	.00	0.			
1	0126	87	.00	.00	.00	1.	*	1	0257	178	.00	.00	.00	0.			
1	0127	88	.00	.00	.00	1.	*	1	0258	179	.00	.00	.00	0.			
1	0128	89	.00	.00	.00	1.	*	1	0259	180	.00	.00	.00	0.			
1	0129	90	.00	.00	.00	1.	*	1	0300	181	.00	.00	.00	0.			

1 0130 91 .00 .00 .00 1. * pre.out
*

TOTAL RAINFALL = 1.29, TOTAL LOSS = 1.24, TOTAL EXCESS = .05

PEAK FLOW TIME MAXIMUM AVERAGE FLOW
 + (CFS) (HR) 6-HR 24-HR 72-HR 3.00-HR
 + 1. 1.30 (CFS) 0. 0. 0. 0.
 (INCHES) .046 .046 .046 .046
 (AC-FT) 0. 0. 0. 0.
 CUMULATIVE AREA = .03 SQ MI

*** ** ** ** **

 * *
 38 KK * RE2 *
 * *

Route BE2 in channel to Outlet OE1

HYDROGRAPH ROUTING DATA

40 RD MUSKINGUM-CUNGE CHANNEL ROUTING
 L 8575. CHANNEL LENGTH
 S .0100 SLOPE
 N .040 CHANNEL ROUGHNESS COEFFICIENT
 CA .00 CONTRIBUTING AREA
 SHAPE TRAP CHANNEL SHAPE
 WD .00 BOTTOM WIDTH OR DIAMETER
 Z 7.00 SIDE SLOPE

 COMPUTED MUSKINGUM-CUNGE PARAMETERS

ELEMENT	ALPHA	M	DT (MIN)	DX (FT)	PEAK (CFS)	TIME TO PEAK (MIN)	VOLUME (IN)	MAXIMUM CELERITY (FPS)
MAIN	1.22	1.33	1.00	75.88	8.55	127.00	.21	2.16

INTERPOLATED TO SPECIFIED COMPUTATION INTERVAL

MAIN	1.22	1.33	1.00		8.55	127.00	.21	
------	------	------	------	--	------	--------	-----	--

CONTINUITY SUMMARY (AC-FT) - INFLOW= .4979E+00 EXCESS= .0000E+00 OUTFLOW= .3485E+00 BASIN STORAGE= .1751E+00 PERCENT ERROR= -5.2

HYDROGRAPH AT STATION RE2
 PLAN 1, RATIO = 1.00

DA	MON	HRMN	ORD	FLOW	DA	MON	HRMN	ORD	FLOW	DA	MON	HRMN	ORD	FLOW	DA	MON	HRMN	ORD	FLOW
1	0000	1	0.	*	1	0046	47	0.	*	1	0132	93	0.	*	1	0218	139	6.	
1	0001	2	0.	*	1	0047	48	0.	*	1	0133	94	0.	*	1	0219	140	6.	
1	0002	3	0.	*	1	0048	49	0.	*	1	0134	95	0.	*	1	0220	141	6.	
1	0003	4	0.	*	1	0049	50	0.	*	1	0135	96	0.	*	1	0221	142	6.	
1	0004	5	0.	*	1	0050	51	0.	*	1	0136	97	0.	*	1	0222	143	6.	
1	0005	6	0.	*	1	0051	52	0.	*	1	0137	98	0.	*	1	0223	144	5.	
1	0006	7	0.	*	1	0052	53	0.	*	1	0138	99	0.	*	1	0224	145	5.	
1	0007	8	0.	*	1	0053	54	0.	*	1	0139	100	0.	*	1	0225	146	5.	
1	0008	9	0.	*	1	0054	55	0.	*	1	0140	101	0.	*	1	0226	147	5.	
1	0009	10	0.	*	1	0055	56	0.	*	1	0141	102	0.	*	1	0227	148	5.	
1	0010	11	0.	*	1	0056	57	0.	*	1	0142	103	0.	*	1	0228	149	5.	
1	0011	12	0.	*	1	0057	58	0.	*	1	0143	104	0.	*	1	0229	150	5.	
1	0012	13	0.	*	1	0058	59	0.	*	1	0144	105	0.	*	1	0230	151	5.	
1	0013	14	0.	*	1	0059	60	0.	*	1	0145	106	0.	*	1	0231	152	5.	
1	0014	15	0.	*	1	0100	61	0.	*	1	0146	107	0.	*	1	0232	153	5.	
1	0015	16	0.	*	1	0101	62	0.	*	1	0147	108	0.	*	1	0233	154	4.	
1	0016	17	0.	*	1	0102	63	0.	*	1	0148	109	0.	*	1	0234	155	4.	
1	0017	18	0.	*	1	0103	64	0.	*	1	0149	110	0.	*	1	0235	156	4.	
1	0018	19	0.	*	1	0104	65	0.	*	1	0150	111	0.	*	1	0236	157	4.	
1	0019	20	0.	*	1	0105	66	0.	*	1	0151	112	0.	*	1	0237	158	4.	
1	0020	21	0.	*	1	0106	67	0.	*	1	0152	113	0.	*	1	0238	159	4.	

pre.out																		
1	0021	22	0.	*	1	0107	68	0.	*	1	0153	114	0.	*	1	0239	160	4.
1	0022	23	0.	*	1	0108	69	0.	*	1	0154	115	0.	*	1	0240	161	4.
1	0023	24	0.	*	1	0109	70	0.	*	1	0155	116	0.	*	1	0241	162	4.
1	0024	25	0.	*	1	0110	71	0.	*	1	0156	117	0.	*	1	0242	163	4.
1	0025	26	0.	*	1	0111	72	0.	*	1	0157	118	0.	*	1	0243	164	4.
1	0026	27	0.	*	1	0112	73	0.	*	1	0158	119	0.	*	1	0244	165	4.
1	0027	28	0.	*	1	0113	74	0.	*	1	0159	120	0.	*	1	0245	166	3.
1	0028	29	0.	*	1	0114	75	0.	*	1	0200	121	0.	*	1	0246	167	3.
1	0029	30	0.	*	1	0115	76	0.	*	1	0201	122	0.	*	1	0247	168	3.
1	0030	31	0.	*	1	0116	77	0.	*	1	0202	123	0.	*	1	0248	169	3.
1	0031	32	0.	*	1	0117	78	0.	*	1	0203	124	0.	*	1	0249	170	3.
1	0032	33	0.	*	1	0118	79	0.	*	1	0204	125	0.	*	1	0250	171	3.
1	0033	34	0.	*	1	0119	80	0.	*	1	0205	126	0.	*	1	0251	172	3.
1	0034	35	0.	*	1	0120	81	0.	*	1	0206	127	5.	*	1	0252	173	3.
1	0035	36	0.	*	1	0121	82	0.	*	1	0207	128	9.	*	1	0253	174	3.
1	0036	37	0.	*	1	0122	83	0.	*	1	0208	129	8.	*	1	0254	175	3.
1	0037	38	0.	*	1	0123	84	0.	*	1	0209	130	7.	*	1	0255	176	3.
1	0038	39	0.	*	1	0124	85	0.	*	1	0210	131	7.	*	1	0256	177	3.
1	0039	40	0.	*	1	0125	86	0.	*	1	0211	132	7.	*	1	0257	178	3.
1	0040	41	0.	*	1	0126	87	0.	*	1	0212	133	7.	*	1	0258	179	2.
1	0041	42	0.	*	1	0127	88	0.	*	1	0213	134	7.	*	1	0259	180	2.
1	0042	43	0.	*	1	0128	89	0.	*	1	0214	135	7.	*	1	0300	181	2.
1	0043	44	0.	*	1	0129	90	0.	*	1	0215	136	6.	*				
1	0044	45	0.	*	1	0130	91	0.	*	1	0216	137	6.	*				
1	0045	46	0.	*	1	0131	92	0.	*	1	0217	138	6.	*				

PEAK FLOW	TIME	MAXIMUM AVERAGE FLOW			
(CFS)	(HR)	6-HR	24-HR	72-HR	3.00-HR
+	9.	1.	1.	1.	1.
	2.12	.214	.214	.214	.214
		(INCHES)			
		(AC-FT)			

CUMULATIVE AREA = .03 SQ MI

COMPUTED MUSKINGUM-CUNGE PARAMETERS									
ELEMENT	ALPHA	COMPUTATION TIME STEP			PEAK	TIME TO PEAK	VOLUME	MAXIMUM CELERITY	
		M	DT	DX					
		(MIN)	(FT)	(CFS)	(MIN)	(IN)	(FPS)		
MAIN	1.22	1.33	1.00	43.75	.00	180.00	.00	1.29	

INTERPOLATED TO SPECIFIED COMPUTATION INTERVAL

MAIN	1.22	1.33	1.00	.00	180.00	.00
------	------	------	------	-----	--------	-----

CONTINUITY SUMMARY (AC-FT) - INFLOW= .7442E-01 EXCESS= .0000E+00 OUTFLOW= .1790E-05 BASIN STORAGE= .8099E-01 PERCENT ERROR= -8.8

HYDROGRAPH AT STATION RE2
PLAN 1, RATIO = .61

DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*
1	0000	1	0.	*	1	0046	47	0.	*	1	0132	93	0.	*	1	0218	139	0.					
1	0001	2	0.	*	1	0047	48	0.	*	1	0133	94	0.	*	1	0219	140	0.					
1	0002	3	0.	*	1	0048	49	0.	*	1	0134	95	0.	*	1	0220	141	0.					
1	0003	4	0.	*	1	0049	50	0.	*	1	0135	96	0.	*	1	0221	142	0.					
1	0004	5	0.	*	1	0050	51	0.	*	1	0136	97	0.	*	1	0222	143	0.					
1	0005	6	0.	*	1	0051	52	0.	*	1	0137	98	0.	*	1	0223	144	0.					
1	0006	7	0.	*	1	0052	53	0.	*	1	0138	99	0.	*	1	0224	145	0.					
1	0007	8	0.	*	1	0053	54	0.	*	1	0139	100	0.	*	1	0225	146	0.					
1	0008	9	0.	*	1	0054	55	0.	*	1	0140	101	0.	*	1	0226	147	0.					
1	0009	10	0.	*	1	0055	56	0.	*	1	0141	102	0.	*	1	0227	148	0.					
1	0010	11	0.	*	1	0056	57	0.	*	1	0142	103	0.	*	1	0228	149	0.					
1	0011	12	0.	*	1	0057	58	0.	*	1	0143	104	0.	*	1	0229	150	0.					
1	0012	13	0.	*	1	0058	59	0.	*	1	0144	105	0.	*	1	0230	151	0.					
1	0013	14	0.	*	1	0059	60	0.	*	1	0145	106	0.	*	1	0231	152	0.					
1	0014	15	0.	*	1	0100	61	0.	*	1	0146	107	0.	*	1	0232	153	0.					
1	0015	16	0.	*	1	0101	62	0.	*	1	0147	108	0.	*	1	0233	154	0.					
1	0016	17	0.	*	1	0102	63	0.	*	1	0148	109	0.	*	1	0234	155	0.					
1	0017	18	0.	*	1	0103	64	0.	*	1	0149	110	0.	*	1	0235	156	0.					
1	0018	19	0.	*	1	0104	65	0.	*	1	0150	111	0.	*	1	0236	157	0.					
1	0019	20	0.	*	1	0105	66	0.	*	1	0151	112	0.	*	1	0237	158	0.					
1	0020	21	0.	*	1	0106	67	0.	*	1	0152	113	0.	*	1	0238	159	0.					
1	0021	22	0.	*	1	0107	68	0.	*	1	0153	114	0.	*	1	0239	160	0.					
1	0022	23	0.	*	1	0108	69	0.	*	1	0154	115	0.	*	1	0240	161	0.					
1	0023	24	0.	*	1	0109	70	0.	*	1	0155	116	0.	*	1	0241	162	0.					

7.	8.	9.	10.	11.	12.	pre.out	13.	14.	14.	15.
15.	15.	15.	15.	14.	14.		13.	13.	13.	12.
12.	11.	10.	9.	9.	8.		7.	7.	6.	6.
5.	5.	5.	4.	4.	4.		3.	3.	3.	3.
3.	2.	2.	2.	2.	2.		2.	2.	1.	1.
1.	1.	1.	1.	1.	1.		1.	1.	1.	1.
1.	1.	1.	0.	0.	0.		0.	0.	0.	0.
0.	0.	0.	0.	0.	0.		0.	0.	0.	0.
0.	0.	0.	0.	0.	0.		0.	0.	0.	0.
0.	0.	0.	0.	0.	0.		0.	0.	0.	0.

HYDROGRAPH AT STATION BE3

DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	*	DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
1	0000	1	.00	.00	.00	0.	*	1	0131	92	.00	.00	.00	3.		
1	0001	2	.00	.00	.00	0.	*	1	0132	93	.00	.00	.00	3.		
1	0002	3	.00	.00	.00	0.	*	1	0133	94	.00	.00	.00	3.		
1	0003	4	.00	.00	.00	0.	*	1	0134	95	.00	.00	.00	3.		
1	0004	5	.00	.00	.00	0.	*	1	0135	96	.00	.00	.00	3.		
1	0005	6	.00	.00	.00	0.	*	1	0136	97	.00	.00	.00	2.		
1	0006	7	.00	.00	.00	0.	*	1	0137	98	.00	.00	.00	2.		
1	0007	8	.00	.00	.00	0.	*	1	0138	99	.00	.00	.00	2.		
1	0008	9	.00	.00	.00	0.	*	1	0139	100	.00	.00	.00	2.		
1	0009	10	.00	.00	.00	0.	*	1	0140	101	.00	.00	.00	2.		
1	0010	11	.00	.00	.00	0.	*	1	0141	102	.00	.00	.00	2.		
1	0011	12	.00	.00	.00	0.	*	1	0142	103	.00	.00	.00	2.		
1	0012	13	.00	.00	.00	0.	*	1	0143	104	.00	.00	.00	2.		
1	0013	14	.00	.00	.00	0.	*	1	0144	105	.00	.00	.00	2.		
1	0014	15	.00	.00	.00	0.	*	1	0145	106	.00	.00	.00	2.		
1	0015	16	.00	.00	.00	0.	*	1	0146	107	.00	.00	.00	2.		
1	0016	17	.00	.00	.00	0.	*	1	0147	108	.00	.00	.00	2.		
1	0017	18	.00	.00	.00	0.	*	1	0148	109	.00	.00	.00	2.		
1	0018	19	.00	.00	.00	0.	*	1	0149	110	.00	.00	.00	1.		
1	0019	20	.00	.00	.00	0.	*	1	0150	111	.00	.00	.00	1.		
1	0020	21	.00	.00	.00	0.	*	1	0151	112	.00	.00	.00	1.		
1	0021	22	.00	.00	.00	0.	*	1	0152	113	.00	.00	.00	1.		
1	0022	23	.00	.00	.00	0.	*	1	0153	114	.00	.00	.00	1.		
1	0023	24	.00	.00	.00	0.	*	1	0154	115	.00	.00	.00	1.		
1	0024	25	.00	.00	.00	0.	*	1	0155	116	.00	.00	.00	1.		
1	0025	26	.00	.00	.00	0.	*	1	0156	117	.00	.00	.00	1.		
1	0026	27	.00	.00	.00	0.	*	1	0157	118	.00	.00	.00	1.		
1	0027	28	.00	.00	.00	0.	*	1	0158	119	.00	.00	.00	1.		
1	0028	29	.00	.00	.00	0.	*	1	0159	120	.00	.00	.00	1.		
1	0029	30	.00	.00	.00	0.	*	1	0200	121	.00	.00	.00	1.		
1	0030	31	.00	.00	.00	0.	*	1	0201	122	.00	.00	.00	1.		
1	0031	32	.11	.11	.00	0.	*	1	0202	123	.00	.00	.00	1.		
1	0032	33	.11	.11	.00	0.	*	1	0203	124	.00	.00	.00	1.		
1	0033	34	.11	.11	.00	0.	*	1	0204	125	.00	.00	.00	1.		
1	0034	35	.11	.11	.00	0.	*	1	0205	126	.00	.00	.00	1.		
1	0035	36	.11	.11	.00	0.	*	1	0206	127	.00	.00	.00	1.		
1	0036	37	.09	.09	.00	0.	*	1	0207	128	.00	.00	.00	1.		
1	0037	38	.09	.08	.01	0.	*	1	0208	129	.00	.00	.00	1.		
1	0038	39	.09	.08	.01	0.	*	1	0209	130	.00	.00	.00	1.		
1	0039	40	.09	.07	.02	0.	*	1	0210	131	.00	.00	.00	1.		
1	0040	41	.09	.07	.02	0.	*	1	0211	132	.00	.00	.00	1.		
1	0041	42	.06	.05	.02	0.	*	1	0212	133	.00	.00	.00	1.		
1	0042	43	.06	.04	.02	0.	*	1	0213	134	.00	.00	.00	1.		
1	0043	44	.06	.04	.02	0.	*	1	0214	135	.00	.00	.00	1.		
1	0044	45	.06	.04	.02	0.	*	1	0215	136	.00	.00	.00	1.		
1	0045	46	.06	.04	.02	0.	*	1	0216	137	.00	.00	.00	1.		
1	0046	47	.04	.02	.01	0.	*	1	0217	138	.00	.00	.00	0.		
1	0047	48	.04	.02	.01	0.	*	1	0218	139	.00	.00	.00	0.		
1	0048	49	.04	.02	.02	1.	*	1	0219	140	.00	.00	.00	0.		
1	0049	50	.04	.02	.02	1.	*	1	0220	141	.00	.00	.00	0.		
1	0050	51	.04	.02	.02	1.	*	1	0221	142	.00	.00	.00	0.		
1	0051	52	.02	.01	.01	1.	*	1	0222	143	.00	.00	.00	0.		
1	0052	53	.02	.01	.01	1.	*	1	0223	144	.00	.00	.00	0.		
1	0053	54	.02	.01	.01	1.	*	1	0224	145	.00	.00	.00	0.		
1	0054	55	.02	.01	.01	2.	*	1	0225	146	.00	.00	.00	0.		
1	0055	56	.02	.01	.01	2.	*	1	0226	147	.00	.00	.00	0.		
1	0056	57	.02	.01	.01	2.	*	1	0227	148	.00	.00	.00	0.		
1	0057	58	.02	.01	.01	2.	*	1	0228	149	.00	.00	.00	0.		
1	0058	59	.02	.01	.01	3.	*	1	0229	150	.00	.00	.00	0.		
1	0059	60	.02	.01	.01	3.	*	1	0230	151	.00	.00	.00	0.		
1	0100	61	.02	.01	.01	3.	*	1	0231	152	.00	.00	.00	0.		
1	0101	62	.01	.01	.01	3.	*	1	0232	153	.00	.00	.00	0.		
1	0102	63	.01	.01	.01	3.	*	1	0233	154	.00	.00	.00	0.		
1	0103	64	.01	.01	.01	4.	*	1	0234	155	.00	.00	.00	0.		
1	0104	65	.01	.01	.01	4.	*	1	0235	156	.00	.00	.00	0.		
1	0105	66	.01	.01	.01	4.	*	1	0236	157	.00	.00	.00	0.		
1	0106	67	.01	.01	.01	4.	*	1	0237	158	.00	.00	.00	0.		
1	0107	68	.01	.01	.01	4.	*	1	0238	159	.00	.00	.00	0.		
1	0108	69	.01	.01	.01	4.	*	1	0239	160	.00	.00	.00	0.		
1	0109	70	.01	.01	.01	4.	*	1	0240	161	.00	.00	.00	0.		

pre.out														
1	0110	71	.01	.01	.01	4.	*	1	0241	162	.00	.00	.00	0.
1	0111	72	.01	.00	.00	4.	*	1	0242	163	.00	.00	.00	0.
1	0112	73	.01	.00	.00	4.	*	1	0243	164	.00	.00	.00	0.
1	0113	74	.01	.00	.00	4.	*	1	0244	165	.00	.00	.00	0.
1	0114	75	.01	.00	.00	4.	*	1	0245	166	.00	.00	.00	0.
1	0115	76	.01	.00	.00	4.	*	1	0246	167	.00	.00	.00	0.
1	0116	77	.01	.00	.00	4.	*	1	0247	168	.00	.00	.00	0.
1	0117	78	.01	.00	.00	4.	*	1	0248	169	.00	.00	.00	0.
1	0118	79	.01	.00	.00	4.	*	1	0249	170	.00	.00	.00	0.
1	0119	80	.01	.00	.00	4.	*	1	0250	171	.00	.00	.00	0.
1	0120	81	.01	.00	.00	4.	*	1	0251	172	.00	.00	.00	0.
1	0121	82	.01	.00	.00	4.	*	1	0252	173	.00	.00	.00	0.
1	0122	83	.01	.00	.00	4.	*	1	0253	174	.00	.00	.00	0.
1	0123	84	.01	.00	.00	4.	*	1	0254	175	.00	.00	.00	0.
1	0124	85	.01	.00	.00	3.	*	1	0255	176	.00	.00	.00	0.
1	0125	86	.01	.00	.00	3.	*	1	0256	177	.00	.00	.00	0.
1	0126	87	.01	.00	.00	3.	*	1	0257	178	.00	.00	.00	0.
1	0127	88	.01	.00	.00	3.	*	1	0258	179	.00	.00	.00	0.
1	0128	89	.01	.00	.00	3.	*	1	0259	180	.00	.00	.00	0.
1	0129	90	.01	.00	.00	3.	*	1	0300	181	.00	.00	.00	0.
1	0130	91	.01	.00	.00	3.	*							

TOTAL RAINFALL = 2.13, TOTAL LOSS = 1.61, TOTAL EXCESS = .52

PEAK FLOW (CFS)	TIME (HR)	MAXIMUM AVERAGE FLOW			
		6-HR	24-HR	72-HR	3.00-HR
4.	1.18	1.	1.	1.	1.
		(INCHES)	.498	.498	.498
		(AC-FT)	0.	0.	0.

CUMULATIVE AREA = .01 SQ MI

HYDROGRAPH AT STATION BE3
PLAN 1, RATIO = 1.00

DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	*	DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
1	0000	1	.00	.00	.00	0.	0.	*	1	0131	92	.00	.00	.00	3.	
1	0001	2	.00	.00	.00	0.	0.	*	1	0132	93	.00	.00	.00	3.	
1	0002	3	.00	.00	.00	0.	0.	*	1	0133	94	.00	.00	.00	3.	
1	0003	4	.00	.00	.00	0.	0.	*	1	0134	95	.00	.00	.00	3.	
1	0004	5	.00	.00	.00	0.	0.	*	1	0135	96	.00	.00	.00	3.	
1	0005	6	.00	.00	.00	0.	0.	*	1	0136	97	.00	.00	.00	2.	
1	0006	7	.00	.00	.00	0.	0.	*	1	0137	98	.00	.00	.00	2.	
1	0007	8	.00	.00	.00	0.	0.	*	1	0138	99	.00	.00	.00	2.	
1	0008	9	.00	.00	.00	0.	0.	*	1	0139	100	.00	.00	.00	2.	
1	0009	10	.00	.00	.00	0.	0.	*	1	0140	101	.00	.00	.00	2.	
1	0010	11	.00	.00	.00	0.	0.	*	1	0141	102	.00	.00	.00	2.	
1	0011	12	.00	.00	.00	0.	0.	*	1	0142	103	.00	.00	.00	2.	
1	0012	13	.00	.00	.00	0.	0.	*	1	0143	104	.00	.00	.00	2.	
1	0013	14	.00	.00	.00	0.	0.	*	1	0144	105	.00	.00	.00	2.	
1	0014	15	.00	.00	.00	0.	0.	*	1	0145	106	.00	.00	.00	2.	
1	0015	16	.00	.00	.00	0.	0.	*	1	0146	107	.00	.00	.00	2.	
1	0016	17	.00	.00	.00	0.	0.	*	1	0147	108	.00	.00	.00	2.	
1	0017	18	.00	.00	.00	0.	0.	*	1	0148	109	.00	.00	.00	2.	
1	0018	19	.00	.00	.00	0.	0.	*	1	0149	110	.00	.00	.00	1.	
1	0019	20	.00	.00	.00	0.	0.	*	1	0150	111	.00	.00	.00	1.	
1	0020	21	.00	.00	.00	0.	0.	*	1	0151	112	.00	.00	.00	1.	
1	0021	22	.00	.00	.00	0.	0.	*	1	0152	113	.00	.00	.00	1.	
1	0022	23	.00	.00	.00	0.	0.	*	1	0153	114	.00	.00	.00	1.	
1	0023	24	.00	.00	.00	0.	0.	*	1	0154	115	.00	.00	.00	1.	
1	0024	25	.00	.00	.00	0.	0.	*	1	0155	116	.00	.00	.00	1.	
1	0025	26	.00	.00	.00	0.	0.	*	1	0156	117	.00	.00	.00	1.	
1	0026	27	.00	.00	.00	0.	0.	*	1	0157	118	.00	.00	.00	1.	
1	0027	28	.00	.00	.00	0.	0.	*	1	0158	119	.00	.00	.00	1.	
1	0028	29	.00	.00	.00	0.	0.	*	1	0159	120	.00	.00	.00	1.	
1	0029	30	.00	.00	.00	0.	0.	*	1	0200	121	.00	.00	.00	1.	
1	0030	31	.00	.00	.00	0.	0.	*	1	0201	122	.00	.00	.00	1.	
1	0031	32	.11	.11	.00	0.	0.	*	1	0202	123	.00	.00	.00	1.	
1	0032	33	.11	.11	.00	0.	0.	*	1	0203	124	.00	.00	.00	1.	
1	0033	34	.11	.11	.00	0.	0.	*	1	0204	125	.00	.00	.00	1.	
1	0034	35	.11	.11	.00	0.	0.	*	1	0205	126	.00	.00	.00	1.	
1	0035	36	.11	.11	.00	0.	0.	*	1	0206	127	.00	.00	.00	1.	
1	0036	37	.09	.09	.00	0.	0.	*	1	0207	128	.00	.00	.00	1.	
1	0037	38	.09	.08	.01	0.	0.	*	1	0208	129	.00	.00	.00	1.	
1	0038	39	.09	.08	.01	0.	0.	*	1	0209	130	.00	.00	.00	1.	
1	0039	40	.09	.07	.02	0.	0.	*	1	0210	131	.00	.00	.00	1.	
1	0040	41	.09	.07	.02	0.	0.	*	1	0211	132	.00	.00	.00	1.	
1	0041	42	.06	.05	.02	0.	0.	*	1	0212	133	.00	.00	.00	1.	
1	0042	43	.06	.04	.02	0.	0.	*	1	0213	134	.00	.00	.00	1.	
1	0043	44	.06	.04	.02	0.	0.	*	1	0214	135	.00	.00	.00	1.	

pre.out														
1	0044	45	.06	.04	.02	0.	*	1	0215	136	.00	.00	.00	1.
1	0045	46	.06	.04	.02	0.	*	1	0216	137	.00	.00	.00	1.
1	0046	47	.04	.02	.01	0.	*	1	0217	138	.00	.00	.00	0.
1	0047	48	.04	.02	.01	0.	*	1	0218	139	.00	.00	.00	0.
1	0048	49	.04	.02	.02	1.	*	1	0219	140	.00	.00	.00	0.
1	0049	50	.04	.02	.02	1.	*	1	0220	141	.00	.00	.00	0.
1	0050	51	.04	.02	.02	1.	*	1	0221	142	.00	.00	.00	0.
1	0051	52	.02	.01	.01	1.	*	1	0222	143	.00	.00	.00	0.
1	0052	53	.02	.01	.01	1.	*	1	0223	144	.00	.00	.00	0.
1	0053	54	.02	.01	.01	1.	*	1	0224	145	.00	.00	.00	0.
1	0054	55	.02	.01	.01	2.	*	1	0225	146	.00	.00	.00	0.
1	0055	56	.02	.01	.01	2.	*	1	0226	147	.00	.00	.00	0.
1	0056	57	.02	.01	.01	2.	*	1	0227	148	.00	.00	.00	0.
1	0057	58	.02	.01	.01	2.	*	1	0228	149	.00	.00	.00	0.
1	0058	59	.02	.01	.01	3.	*	1	0229	150	.00	.00	.00	0.
1	0059	60	.02	.01	.01	3.	*	1	0230	151	.00	.00	.00	0.
1	0100	61	.02	.01	.01	3.	*	1	0231	152	.00	.00	.00	0.
1	0101	62	.01	.01	.01	3.	*	1	0232	153	.00	.00	.00	0.
1	0102	63	.01	.01	.01	3.	*	1	0233	154	.00	.00	.00	0.
1	0103	64	.01	.01	.01	4.	*	1	0234	155	.00	.00	.00	0.
1	0104	65	.01	.01	.01	4.	*	1	0235	156	.00	.00	.00	0.
1	0105	66	.01	.01	.01	4.	*	1	0236	157	.00	.00	.00	0.
1	0106	67	.01	.01	.01	4.	*	1	0237	158	.00	.00	.00	0.
1	0107	68	.01	.01	.01	4.	*	1	0238	159	.00	.00	.00	0.
1	0108	69	.01	.01	.01	4.	*	1	0239	160	.00	.00	.00	0.
1	0109	70	.01	.01	.01	4.	*	1	0240	161	.00	.00	.00	0.
1	0110	71	.01	.01	.01	4.	*	1	0241	162	.00	.00	.00	0.
1	0111	72	.01	.00	.00	4.	*	1	0242	163	.00	.00	.00	0.
1	0112	73	.01	.00	.00	4.	*	1	0243	164	.00	.00	.00	0.
1	0113	74	.01	.00	.00	4.	*	1	0244	165	.00	.00	.00	0.
1	0114	75	.01	.00	.00	4.	*	1	0245	166	.00	.00	.00	0.
1	0115	76	.01	.00	.00	4.	*	1	0246	167	.00	.00	.00	0.
1	0116	77	.01	.00	.00	4.	*	1	0247	168	.00	.00	.00	0.
1	0117	78	.01	.00	.00	4.	*	1	0248	169	.00	.00	.00	0.
1	0118	79	.01	.00	.00	4.	*	1	0249	170	.00	.00	.00	0.
1	0119	80	.01	.00	.00	4.	*	1	0250	171	.00	.00	.00	0.
1	0120	81	.01	.00	.00	4.	*	1	0251	172	.00	.00	.00	0.
1	0121	82	.01	.00	.00	4.	*	1	0252	173	.00	.00	.00	0.
1	0122	83	.01	.00	.00	4.	*	1	0253	174	.00	.00	.00	0.
1	0123	84	.01	.00	.00	4.	*	1	0254	175	.00	.00	.00	0.
1	0124	85	.01	.00	.00	3.	*	1	0255	176	.00	.00	.00	0.
1	0125	86	.01	.00	.00	3.	*	1	0256	177	.00	.00	.00	0.
1	0126	87	.01	.00	.00	3.	*	1	0257	178	.00	.00	.00	0.
1	0127	88	.01	.00	.00	3.	*	1	0258	179	.00	.00	.00	0.
1	0128	89	.01	.00	.00	3.	*	1	0259	180	.00	.00	.00	0.
1	0129	90	.01	.00	.00	3.	*	1	0300	181	.00	.00	.00	0.
1	0130	91	.01	.00	.00	3.	*							

TOTAL RAINFALL = 2.13, TOTAL LOSS = 1.61, TOTAL EXCESS = .52

PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
(CFS)	(HR)	(CFS)	6-HR	24-HR	72-HR	3.00-HR
+	4.	1.18	1.	1.	1.	1.
		(INCHES)	.498	.498	.498	.498
		(AC-FT)	0.	0.	0.	0.

CUMULATIVE AREA = .01 SQ MI

HYDROGRAPH AT STATION BE3
PLAN 1, RATIO = .61

DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	*	DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
1	0000	1	.00	.00	.00	0.	*		1	0131	92	.00	.00	.00	1.	
1	0001	2	.00	.00	.00	0.	*		1	0132	93	.00	.00	.00	1.	
1	0002	3	.00	.00	.00	0.	*		1	0133	94	.00	.00	.00	1.	
1	0003	4	.00	.00	.00	0.	*		1	0134	95	.00	.00	.00	1.	
1	0004	5	.00	.00	.00	0.	*		1	0135	96	.00	.00	.00	1.	
1	0005	6	.00	.00	.00	0.	*		1	0136	97	.00	.00	.00	1.	
1	0006	7	.00	.00	.00	0.	*		1	0137	98	.00	.00	.00	1.	
1	0007	8	.00	.00	.00	0.	*		1	0138	99	.00	.00	.00	1.	
1	0008	9	.00	.00	.00	0.	*		1	0139	100	.00	.00	.00	1.	
1	0009	10	.00	.00	.00	0.	*		1	0140	101	.00	.00	.00	1.	
1	0010	11	.00	.00	.00	0.	*		1	0141	102	.00	.00	.00	1.	
1	0011	12	.00	.00	.00	0.	*		1	0142	103	.00	.00	.00	1.	
1	0012	13	.00	.00	.00	0.	*		1	0143	104	.00	.00	.00	1.	
1	0013	14	.00	.00	.00	0.	*		1	0144	105	.00	.00	.00	1.	
1	0014	15	.00	.00	.00	0.	*		1	0145	106	.00	.00	.00	1.	
1	0015	16	.00	.00	.00	0.	*		1	0146	107	.00	.00	.00	1.	
1	0016	17	.00	.00	.00	0.	*		1	0147	108	.00	.00	.00	1.	
1	0017	18	.00	.00	.00	0.	*		1	0148	109	.00	.00	.00	0.	

pre.out														
1	0018	19	.00	.00	.00	0.	*	1	0149	110	.00	.00	.00	0.
1	0019	20	.00	.00	.00	0.	*	1	0150	111	.00	.00	.00	0.
1	0020	21	.00	.00	.00	0.	*	1	0151	112	.00	.00	.00	0.
1	0021	22	.00	.00	.00	0.	*	1	0152	113	.00	.00	.00	0.
1	0022	23	.00	.00	.00	0.	*	1	0153	114	.00	.00	.00	0.
1	0023	24	.00	.00	.00	0.	*	1	0154	115	.00	.00	.00	0.
1	0024	25	.00	.00	.00	0.	*	1	0155	116	.00	.00	.00	0.
1	0025	26	.00	.00	.00	0.	*	1	0156	117	.00	.00	.00	0.
1	0026	27	.00	.00	.00	0.	*	1	0157	118	.00	.00	.00	0.
1	0027	28	.00	.00	.00	0.	*	1	0158	119	.00	.00	.00	0.
1	0028	29	.00	.00	.00	0.	*	1	0159	120	.00	.00	.00	0.
1	0029	30	.00	.00	.00	0.	*	1	0200	121	.00	.00	.00	0.
1	0030	31	.00	.00	.00	0.	*	1	0201	122	.00	.00	.00	0.
1	0031	32	.07	.07	.00	0.	*	1	0202	123	.00	.00	.00	0.
1	0032	33	.07	.07	.00	0.	*	1	0203	124	.00	.00	.00	0.
1	0033	34	.07	.07	.00	0.	*	1	0204	125	.00	.00	.00	0.
1	0034	35	.07	.07	.00	0.	*	1	0205	126	.00	.00	.00	0.
1	0035	36	.07	.07	.00	0.	*	1	0206	127	.00	.00	.00	0.
1	0036	37	.05	.05	.00	0.	*	1	0207	128	.00	.00	.00	0.
1	0037	38	.05	.05	.00	0.	*	1	0208	129	.00	.00	.00	0.
1	0038	39	.05	.05	.00	0.	*	1	0209	130	.00	.00	.00	0.
1	0039	40	.05	.05	.00	0.	*	1	0210	131	.00	.00	.00	0.
1	0040	41	.05	.05	.00	0.	*	1	0211	132	.00	.00	.00	0.
1	0041	42	.04	.04	.00	0.	*	1	0212	133	.00	.00	.00	0.
1	0042	43	.04	.04	.00	0.	*	1	0213	134	.00	.00	.00	0.
1	0043	44	.04	.03	.00	0.	*	1	0214	135	.00	.00	.00	0.
1	0044	45	.04	.03	.00	0.	*	1	0215	136	.00	.00	.00	0.
1	0045	46	.04	.03	.00	0.	*	1	0216	137	.00	.00	.00	0.
1	0046	47	.02	.02	.00	0.	*	1	0217	138	.00	.00	.00	0.
1	0047	48	.02	.02	.00	0.	*	1	0218	139	.00	.00	.00	0.
1	0048	49	.02	.02	.00	0.	*	1	0219	140	.00	.00	.00	0.
1	0049	50	.02	.02	.00	0.	*	1	0220	141	.00	.00	.00	0.
1	0050	51	.02	.02	.00	0.	*	1	0221	142	.00	.00	.00	0.
1	0051	52	.01	.01	.00	0.	*	1	0222	143	.00	.00	.00	0.
1	0052	53	.01	.01	.00	0.	*	1	0223	144	.00	.00	.00	0.
1	0053	54	.01	.01	.00	0.	*	1	0224	145	.00	.00	.00	0.
1	0054	55	.01	.01	.00	0.	*	1	0225	146	.00	.00	.00	0.
1	0055	56	.01	.01	.00	0.	*	1	0226	147	.00	.00	.00	0.
1	0056	57	.01	.01	.00	0.	*	1	0227	148	.00	.00	.00	0.
1	0057	58	.01	.01	.00	0.	*	1	0228	149	.00	.00	.00	0.
1	0058	59	.01	.01	.00	0.	*	1	0229	150	.00	.00	.00	0.
1	0059	60	.01	.01	.00	0.	*	1	0230	151	.00	.00	.00	0.
1	0100	61	.01	.01	.00	0.	*	1	0231	152	.00	.00	.00	0.
1	0101	62	.01	.01	.00	0.	*	1	0232	153	.00	.00	.00	0.
1	0102	63	.01	.01	.00	1.	*	1	0233	154	.00	.00	.00	0.
1	0103	64	.01	.01	.00	1.	*	1	0234	155	.00	.00	.00	0.
1	0104	65	.01	.01	.00	1.	*	1	0235	156	.00	.00	.00	0.
1	0105	66	.01	.01	.00	1.	*	1	0236	157	.00	.00	.00	0.
1	0106	67	.01	.00	.00	1.	*	1	0237	158	.00	.00	.00	0.
1	0107	68	.01	.00	.00	1.	*	1	0238	159	.00	.00	.00	0.
1	0108	69	.01	.00	.00	1.	*	1	0239	160	.00	.00	.00	0.
1	0109	70	.01	.00	.00	1.	*	1	0240	161	.00	.00	.00	0.
1	0110	71	.01	.00	.00	1.	*	1	0241	162	.00	.00	.00	0.
1	0111	72	.00	.00	.00	1.	*	1	0242	163	.00	.00	.00	0.
1	0112	73	.00	.00	.00	1.	*	1	0243	164	.00	.00	.00	0.
1	0113	74	.00	.00	.00	1.	*	1	0244	165	.00	.00	.00	0.
1	0114	75	.00	.00	.00	1.	*	1	0245	166	.00	.00	.00	0.
1	0115	76	.00	.00	.00	1.	*	1	0246	167	.00	.00	.00	0.
1	0116	77	.00	.00	.00	1.	*	1	0247	168	.00	.00	.00	0.
1	0117	78	.00	.00	.00	1.	*	1	0248	169	.00	.00	.00	0.
1	0118	79	.00	.00	.00	1.	*	1	0249	170	.00	.00	.00	0.
1	0119	80	.00	.00	.00	1.	*	1	0250	171	.00	.00	.00	0.
1	0120	81	.00	.00	.00	1.	*	1	0251	172	.00	.00	.00	0.
1	0121	82	.00	.00	.00	1.	*	1	0252	173	.00	.00	.00	0.
1	0122	83	.00	.00	.00	1.	*	1	0253	174	.00	.00	.00	0.
1	0123	84	.00	.00	.00	1.	*	1	0254	175	.00	.00	.00	0.
1	0124	85	.00	.00	.00	1.	*	1	0255	176	.00	.00	.00	0.
1	0125	86	.00	.00	.00	1.	*	1	0256	177	.00	.00	.00	0.
1	0126	87	.00	.00	.00	1.	*	1	0257	178	.00	.00	.00	0.
1	0127	88	.00	.00	.00	1.	*	1	0258	179	.00	.00	.00	0.
1	0128	89	.00	.00	.00	1.	*	1	0259	180	.00	.00	.00	0.
1	0129	90	.00	.00	.00	1.	*	1	0300	181	.00	.00	.00	0.
1	0130	91	.00	.00	.00	1.	*							

TOTAL RAINFALL = 1.29, TOTAL LOSS = 1.16, TOTAL EXCESS = .13

PEAK FLOW (CFS)	TIME (HR)	6-HR (CFS)	MAXIMUM 24-HR (INCHES)	AVERAGE 72-HR (AC-FT)	3.00-HR
+	1.	1.28	0.	0.	0.
+			.123	.123	.123
			0.	0.	0.

CUMULATIVE AREA = .01 SQ MI

*** **

*
* RE3 *
*

Route BE3 in channel to Outlet OE1

HYDROGRAPH ROUTING DATA

48 RD MUSKINGUM-CUNGE CHANNEL ROUTING
L 8234. CHANNEL LENGTH
S .0100 SLOPE
N .040 CHANNEL ROUGHNESS COEFFICIENT
CA .00 CONTRIBUTING AREA
SHAPE TRAP CHANNEL SHAPE
WD .00 BOTTOM WIDTH OR DIAMETER
Z 7.00 SIDE SLOPE

COMPUTED MUSKINGUM-CUNGE PARAMETERS

Table with 9 columns: ELEMENT, ALPHA, M, DT, DX, PEAK, TIME TO PEAK, VOLUME, MAXIMUM CELERITY. Row 1: MAIN, 1.22, 1.33, 1.00, 64.83, 4.93, 137.00, .30, 1.87

INTERPOLATED TO SPECIFIED COMPUTATION INTERVAL

Table with 9 columns: ELEMENT, ALPHA, M, DT, DX, PEAK, TIME TO PEAK, VOLUME, MAXIMUM CELERITY. Row 1: MAIN, 1.22, 1.33, 1.00, 4.93, 137.00, .30

CONTINUITY SUMMARY (AC-FT) - INFLOW= .2987E+00 EXCESS= .0000E+00 OUTFLOW= .1824E+00 BASIN STORAGE= .1331E+00 PERCENT ERROR= -5.6

HYDROGRAPH AT STATION RE3
PLAN 1, RATIO = 1.00

Large table with 17 columns: DA, MON, HRMN, ORD, FLOW, * (repeated 4 times). Rows 1-39 showing time-series data for station RE3.

pre.out																		
1	0039	40	0.	*	1	0125	86	0.	*	1	0211	132	0.	*	1	0257	178	2.
1	0040	41	0.	*	1	0126	87	0.	*	1	0212	133	0.	*	1	0258	179	2.
1	0041	42	0.	*	1	0127	88	0.	*	1	0213	134	0.	*	1	0259	180	2.
1	0042	43	0.	*	1	0128	89	0.	*	1	0214	135	0.	*	1	0300	181	2.
1	0043	44	0.	*	1	0129	90	0.	*	1	0215	136	0.	*				
1	0044	45	0.	*	1	0130	91	0.	*	1	0216	137	3.	*				
1	0045	46	0.	*	1	0131	92	0.	*	1	0217	138	5.	*				

PEAK FLOW	TIME	MAXIMUM AVERAGE FLOW				
(CFS)	(HR)	6-HR	24-HR	72-HR	3.00-HR	
5.	2.28	1.	1.	1.	1.	
		(INCHES)	.302	.302	.302	.302
		(AC-FT)	0.	0.	0.	0.

CUMULATIVE AREA = .01 SQ MI

COMPUTED MUSKINGUM-CUNGE PARAMETERS								
ELEMENT	ALPHA	COMPUTATION TIME STEP		PEAK	TIME TO PEAK	VOLUME	MAXIMUM CELERITY	
		M	DT					
MAIN	1.22	1.33	1.00	43.57	1.06	177.00	.01	1.29

INTERPOLATED TO SPECIFIED COMPUTATION INTERVAL

MAIN	1.22	1.33	1.00	1.06	177.00	.01
------	------	------	------	------	--------	-----

CONTINUITY SUMMARY (AC-FT) - INFLOW= .7361E-01 EXCESS= .0000E+00 OUTFLOW= .5589E-02 BASIN STORAGE= .7505E-01 PERCENT ERROR= -9.5

HYDROGRAPH AT STATION RE3
PLAN 1, RATIO = .61

DA	MON	HRMN	ORD	FLOW	DA	MON	HRMN	ORD	FLOW	DA	MON	HRMN	ORD	FLOW	DA	MON	HRMN	ORD	FLOW
1	0000	1	0.	*	1	0046	47	0.	*	1	0132	93	0.	*	1	0218	139	0.	
1	0001	2	0.	*	1	0047	48	0.	*	1	0133	94	0.	*	1	0219	140	0.	
1	0002	3	0.	*	1	0048	49	0.	*	1	0134	95	0.	*	1	0220	141	0.	
1	0003	4	0.	*	1	0049	50	0.	*	1	0135	96	0.	*	1	0221	142	0.	
1	0004	5	0.	*	1	0050	51	0.	*	1	0136	97	0.	*	1	0222	143	0.	
1	0005	6	0.	*	1	0051	52	0.	*	1	0137	98	0.	*	1	0223	144	0.	
1	0006	7	0.	*	1	0052	53	0.	*	1	0138	99	0.	*	1	0224	145	0.	
1	0007	8	0.	*	1	0053	54	0.	*	1	0139	100	0.	*	1	0225	146	0.	
1	0008	9	0.	*	1	0054	55	0.	*	1	0140	101	0.	*	1	0226	147	0.	
1	0009	10	0.	*	1	0055	56	0.	*	1	0141	102	0.	*	1	0227	148	0.	
1	0010	11	0.	*	1	0056	57	0.	*	1	0142	103	0.	*	1	0228	149	0.	
1	0011	12	0.	*	1	0057	58	0.	*	1	0143	104	0.	*	1	0229	150	0.	
1	0012	13	0.	*	1	0058	59	0.	*	1	0144	105	0.	*	1	0230	151	0.	
1	0013	14	0.	*	1	0059	60	0.	*	1	0145	106	0.	*	1	0231	152	0.	
1	0014	15	0.	*	1	0100	61	0.	*	1	0146	107	0.	*	1	0232	153	0.	
1	0015	16	0.	*	1	0101	62	0.	*	1	0147	108	0.	*	1	0233	154	0.	
1	0016	17	0.	*	1	0102	63	0.	*	1	0148	109	0.	*	1	0234	155	0.	
1	0017	18	0.	*	1	0103	64	0.	*	1	0149	110	0.	*	1	0235	156	0.	
1	0018	19	0.	*	1	0104	65	0.	*	1	0150	111	0.	*	1	0236	157	0.	
1	0019	20	0.	*	1	0105	66	0.	*	1	0151	112	0.	*	1	0237	158	0.	
1	0020	21	0.	*	1	0106	67	0.	*	1	0152	113	0.	*	1	0238	159	0.	
1	0021	22	0.	*	1	0107	68	0.	*	1	0153	114	0.	*	1	0239	160	0.	
1	0022	23	0.	*	1	0108	69	0.	*	1	0154	115	0.	*	1	0240	161	0.	
1	0023	24	0.	*	1	0109	70	0.	*	1	0155	116	0.	*	1	0241	162	0.	
1	0024	25	0.	*	1	0110	71	0.	*	1	0156	117	0.	*	1	0242	163	0.	
1	0025	26	0.	*	1	0111	72	0.	*	1	0157	118	0.	*	1	0243	164	0.	
1	0026	27	0.	*	1	0112	73	0.	*	1	0158	119	0.	*	1	0244	165	0.	
1	0027	28	0.	*	1	0113	74	0.	*	1	0159	120	0.	*	1	0245	166	0.	
1	0028	29	0.	*	1	0114	75	0.	*	1	0200	121	0.	*	1	0246	167	0.	
1	0029	30	0.	*	1	0115	76	0.	*	1	0201	122	0.	*	1	0247	168	0.	
1	0030	31	0.	*	1	0116	77	0.	*	1	0202	123	0.	*	1	0248	169	0.	
1	0031	32	0.	*	1	0117	78	0.	*	1	0203	124	0.	*	1	0249	170	0.	
1	0032	33	0.	*	1	0118	79	0.	*	1	0204	125	0.	*	1	0250	171	0.	
1	0033	34	0.	*	1	0119	80	0.	*	1	0205	126	0.	*	1	0251	172	0.	
1	0034	35	0.	*	1	0120	81	0.	*	1	0206	127	0.	*	1	0252	173	0.	
1	0035	36	0.	*	1	0121	82	0.	*	1	0207	128	0.	*	1	0253	174	0.	
1	0036	37	0.	*	1	0122	83	0.	*	1	0208	129	0.	*	1	0254	175	0.	
1	0037	38	0.	*	1	0123	84	0.	*	1	0209	130	0.	*	1	0255	176	0.	
1	0038	39	0.	*	1	0124	85	0.	*	1	0210	131	0.	*	1	0256	177	0.	
1	0039	40	0.	*	1	0125	86	0.	*	1	0211	132	0.	*	1	0257	178	1.	
1	0040	41	0.	*	1	0126	87	0.	*	1	0212	133	0.	*	1	0258	179	1.	
1	0041	42	0.	*	1	0127	88	0.	*	1	0213	134	0.	*	1	0259	180	1.	

```

pre.out
1 0042 43 0. * 1 0128 89 0. * 1 0214 135 0. * 1 0300 181 1.
1 0043 44 0. * 1 0129 90 0. * 1 0215 136 0. *
1 0044 45 0. * 1 0130 91 0. * 1 0216 137 0. *
1 0045 46 0. * 1 0131 92 0. * 1 0217 138 0. *
* * * * *

```

```

PEAK FLOW      TIME          MAXIMUM AVERAGE FLOW
(CFS)          (HR)          6-HR      24-HR      72-HR      3.00-HR
+ 1.          2.95          0.        0.        0.        0.
              (INCHES)    .008     .008     .008     .008
              (AC-FT)    0.       0.       0.       0.
CUMULATIVE AREA = .01 SQ MI

```

*** ** ** ** **

```

*****
* *
49 KK * BE4 *
* *
*****

```

BE4

SUBBASIN RUNOFF DATA

```

51 BA SUBBASIN CHARACTERISTICS
TAREA .01 SUBBASIN AREA

```

PRECIPITATION DATA

```

23 PB STORM 2.13 BASIN TOTAL PRECIPITATION

```

```

24 PI INCREMENTAL PRECIPITATION PATTERN
.00 .00 .00 .00 .00 .00 .00 .00 .00 .00
.00 .00 .00 .00 .00 .00 .00 .00 .00 .00
.00 .00 .00 .00 .00 .00 .00 .00 .00 .00
.05 .05 .05 .05 .05 .04 .04 .04 .04 .04
.03 .03 .03 .03 .03 .02 .02 .02 .02 .02
.01 .01 .01 .01 .01 .01 .01 .01 .01 .01
.01 .01 .01 .01 .01 .00 .00 .00 .00 .00
.00 .00 .00 .00 .00 .00 .00 .00 .00 .00
.00 .00 .00 .00 .00 .00 .00 .00 .00 .00
.00 .00 .00 .00 .00 .00 .00 .00 .00 .00
.00 .00 .00 .00 .00 .00 .00 .00 .00 .00
.00 .00 .00 .00 .00 .00 .00 .00 .00 .00
.00 .00 .00 .00 .00 .00 .00 .00 .00 .00
.00 .00 .00 .00 .00 .00 .00 .00 .00 .00
.00 .00 .00 .00 .00 .00 .00 .00 .00 .00
.00 .00 .00 .00 .00 .00 .00 .00 .00 .00
.00 .00 .00 .00 .00 .00 .00 .00 .00 .00
.00 .00 .00 .00 .00 .00 .00 .00 .00 .00
.00 .00 .00 .00 .00 .00 .00 .00 .00 .00
.00 .00 .00 .00 .00 .00 .00 .00 .00 .00
.00 .00 .00 .00 .00 .00 .00 .00 .00 .00

```

```

52 LS SCS LOSS RATE
STRTL .60 INITIAL ABSTRACTION
CRVNBR 77.00 CURVE NUMBER
RTIMP .00 PERCENT IMPERVIOUS AREA

```

```

53 UD SCS DIMENSIONLESS UNITGRAPH
TLAG .12 LAG

```

UNIT HYDROGRAPH
38 END-OF-PERIOD ORDINATES

```

2. 6. 11. 19. 27. 34. 37. 37. 35. 32.
28. 23. 18. 14. 11. 9. 8. 6. 5. 4.
3. 3. 2. 2. 1. 1. 1. 1. 1. 0.
0. 0. 0. 0. 0. 0. 0. 0. 0. 0.

```

HYDROGRAPH AT STATION BE4

```

DA MON HRMN ORD RAIN LOSS EXCESS COMP Q      *
1 0000 1 .00 .00 .00 0. *
1 0001 2 .00 .00 .00 0. *
1 0002 3 .00 .00 .00 0. *
1 0003 4 .00 .00 .00 0. *
1 0004 5 .00 .00 .00 0. *
1 0005 6 .00 .00 .00 0. *
DA MON HRMN ORD RAIN LOSS EXCESS COMP Q
1 0131 92 .00 .00 .00 1.
1 0132 93 .00 .00 .00 1.
1 0133 94 .00 .00 .00 1.
1 0134 95 .00 .00 .00 1.
1 0135 96 .00 .00 .00 1.
1 0136 97 .00 .00 .00 1.

```


1	0006	7	.00	.00	.00	0.	*	pre.out	1	0137	98	.00	.00	.00	1.
1	0007	8	.00	.00	.00	0.	*	1	0138	99	.00	.00	.00	.00	1.
1	0008	9	.00	.00	.00	0.	*	1	0139	100	.00	.00	.00	.00	1.
1	0009	10	.00	.00	.00	0.	*	1	0140	101	.00	.00	.00	.00	1.
1	0010	11	.00	.00	.00	0.	*	1	0141	102	.00	.00	.00	.00	1.
1	0011	12	.00	.00	.00	0.	*	1	0142	103	.00	.00	.00	.00	0.
1	0012	13	.00	.00	.00	0.	*	1	0143	104	.00	.00	.00	.00	0.
1	0013	14	.00	.00	.00	0.	*	1	0144	105	.00	.00	.00	.00	0.
1	0014	15	.00	.00	.00	0.	*	1	0145	106	.00	.00	.00	.00	0.
1	0015	16	.00	.00	.00	0.	*	1	0146	107	.00	.00	.00	.00	0.
1	0016	17	.00	.00	.00	0.	*	1	0147	108	.00	.00	.00	.00	0.
1	0017	18	.00	.00	.00	0.	*	1	0148	109	.00	.00	.00	.00	0.
1	0018	19	.00	.00	.00	0.	*	1	0149	110	.00	.00	.00	.00	0.
1	0019	20	.00	.00	.00	0.	*	1	0150	111	.00	.00	.00	.00	0.
1	0020	21	.00	.00	.00	0.	*	1	0151	112	.00	.00	.00	.00	0.
1	0021	22	.00	.00	.00	0.	*	1	0152	113	.00	.00	.00	.00	0.
1	0022	23	.00	.00	.00	0.	*	1	0153	114	.00	.00	.00	.00	0.
1	0023	24	.00	.00	.00	0.	*	1	0154	115	.00	.00	.00	.00	0.
1	0024	25	.00	.00	.00	0.	*	1	0155	116	.00	.00	.00	.00	0.
1	0025	26	.00	.00	.00	0.	*	1	0156	117	.00	.00	.00	.00	0.
1	0026	27	.00	.00	.00	0.	*	1	0157	118	.00	.00	.00	.00	0.
1	0027	28	.00	.00	.00	0.	*	1	0158	119	.00	.00	.00	.00	0.
1	0028	29	.00	.00	.00	0.	*	1	0159	120	.00	.00	.00	.00	0.
1	0029	30	.00	.00	.00	0.	*	1	0200	121	.00	.00	.00	.00	0.
1	0030	31	.00	.00	.00	0.	*	1	0201	122	.00	.00	.00	.00	0.
1	0031	32	.11	.11	.00	0.	*	1	0202	123	.00	.00	.00	.00	0.
1	0032	33	.11	.11	.00	0.	*	1	0203	124	.00	.00	.00	.00	0.
1	0033	34	.11	.11	.00	0.	*	1	0204	125	.00	.00	.00	.00	0.
1	0034	35	.11	.11	.00	0.	*	1	0205	126	.00	.00	.00	.00	0.
1	0035	36	.11	.11	.00	0.	*	1	0206	127	.00	.00	.00	.00	0.
1	0036	37	.09	.09	.00	0.	*	1	0207	128	.00	.00	.00	.00	0.
1	0037	38	.09	.08	.01	0.	*	1	0208	129	.00	.00	.00	.00	0.
1	0038	39	.09	.08	.01	0.	*	1	0209	130	.00	.00	.00	.00	0.
1	0039	40	.09	.07	.02	0.	*	1	0210	131	.00	.00	.00	.00	0.
1	0040	41	.09	.07	.02	0.	*	1	0211	132	.00	.00	.00	.00	0.
1	0041	42	.06	.05	.02	1.	*	1	0212	133	.00	.00	.00	.00	0.
1	0042	43	.06	.04	.02	1.	*	1	0213	134	.00	.00	.00	.00	0.
1	0043	44	.06	.04	.02	2.	*	1	0214	135	.00	.00	.00	.00	0.
1	0044	45	.06	.04	.02	3.	*	1	0215	136	.00	.00	.00	.00	0.
1	0045	46	.06	.04	.02	3.	*	1	0216	137	.00	.00	.00	.00	0.
1	0046	47	.04	.02	.01	4.	*	1	0217	138	.00	.00	.00	.00	0.
1	0047	48	.04	.02	.01	4.	*	1	0218	139	.00	.00	.00	.00	0.
1	0048	49	.04	.02	.02	5.	*	1	0219	140	.00	.00	.00	.00	0.
1	0049	50	.04	.02	.02	5.	*	1	0220	141	.00	.00	.00	.00	0.
1	0050	51	.04	.02	.02	5.	*	1	0221	142	.00	.00	.00	.00	0.
1	0051	52	.02	.01	.01	6.	*	1	0222	143	.00	.00	.00	.00	0.
1	0052	53	.02	.01	.01	6.	*	1	0223	144	.00	.00	.00	.00	0.
1	0053	54	.02	.01	.01	6.	*	1	0224	145	.00	.00	.00	.00	0.
1	0054	55	.02	.01	.01	6.	*	1	0225	146	.00	.00	.00	.00	0.
1	0055	56	.02	.01	.01	6.	*	1	0226	147	.00	.00	.00	.00	0.
1	0056	57	.02	.01	.01	5.	*	1	0227	148	.00	.00	.00	.00	0.
1	0057	58	.02	.01	.01	5.	*	1	0228	149	.00	.00	.00	.00	0.
1	0058	59	.02	.01	.01	5.	*	1	0229	150	.00	.00	.00	.00	0.
1	0059	60	.02	.01	.01	5.	*	1	0230	151	.00	.00	.00	.00	0.
1	0100	61	.02	.01	.01	5.	*	1	0231	152	.00	.00	.00	.00	0.
1	0101	62	.01	.01	.01	4.	*	1	0232	153	.00	.00	.00	.00	0.
1	0102	63	.01	.01	.01	4.	*	1	0233	154	.00	.00	.00	.00	0.
1	0103	64	.01	.01	.01	4.	*	1	0234	155	.00	.00	.00	.00	0.
1	0104	65	.01	.01	.01	4.	*	1	0235	156	.00	.00	.00	.00	0.
1	0105	66	.01	.01	.01	4.	*	1	0236	157	.00	.00	.00	.00	0.
1	0106	67	.01	.01	.01	3.	*	1	0237	158	.00	.00	.00	.00	0.
1	0107	68	.01	.01	.01	3.	*	1	0238	159	.00	.00	.00	.00	0.
1	0108	69	.01	.01	.01	3.	*	1	0239	160	.00	.00	.00	.00	0.
1	0109	70	.01	.01	.01	3.	*	1	0240	161	.00	.00	.00	.00	0.
1	0110	71	.01	.01	.01	3.	*	1	0241	162	.00	.00	.00	.00	0.
1	0111	72	.01	.00	.00	3.	*	1	0242	163	.00	.00	.00	.00	0.
1	0112	73	.01	.00	.00	3.	*	1	0243	164	.00	.00	.00	.00	0.
1	0113	74	.01	.00	.00	2.	*	1	0244	165	.00	.00	.00	.00	0.
1	0114	75	.01	.00	.00	2.	*	1	0245	166	.00	.00	.00	.00	0.
1	0115	76	.01	.00	.00	2.	*	1	0246	167	.00	.00	.00	.00	0.
1	0116	77	.01	.00	.00	2.	*	1	0247	168	.00	.00	.00	.00	0.
1	0117	78	.01	.00	.00	2.	*	1	0248	169	.00	.00	.00	.00	0.
1	0118	79	.01	.00	.00	2.	*	1	0249	170	.00	.00	.00	.00	0.
1	0119	80	.01	.00	.00	2.	*	1	0250	171	.00	.00	.00	.00	0.
1	0120	81	.01	.00	.00	2.	*	1	0251	172	.00	.00	.00	.00	0.
1	0121	82	.01	.00	.00	2.	*	1	0252	173	.00	.00	.00	.00	0.
1	0122	83	.01	.00	.00	2.	*	1	0253	174	.00	.00	.00	.00	0.
1	0123	84	.01	.00	.00	2.	*	1	0254	175	.00	.00	.00	.00	0.
1	0124	85	.01	.00	.00	2.	*	1	0255	176	.00	.00	.00	.00	0.
1	0125	86	.01	.00	.00	2.	*	1	0256	177	.00	.00	.00	.00	0.
1	0126	87	.01	.00	.00	1.	*	1	0257	178	.00	.00	.00	.00	0.
1	0127	88	.01	.00	.00	1.	*	1	0258	179	.00	.00	.00	.00	0.
1	0128	89	.01	.00	.00	1.	*	1	0259	180	.00	.00	.00	.00	0.
1	0129	90	.01	.00	.00	1.	*	1	0300	181	.00	.00	.00	.00	0.
1	0130	91	.01	.00	.00	1.	*								

TOTAL RAINFALL = 2.13, TOTAL LOSS = 1.61, TOTAL EXCESS = .52

PEAK FLOW TIME pre.out
 + (CFS) (HR) 6-HR 24-HR 72-HR 3.00-HR
 + 6. .88 (CFS) 1. 1. 1. 1.
 (INCHES) .512 .512 .512 .512
 (AC-FT) 0. 0. 0. 0.
 CUMULATIVE AREA = .01 SQ MI

HYDROGRAPH AT STATION BE4
 PLAN 1, RATIO = 1.00

DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	*	DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
1	0000	1	.00	.00	.00	0.	*	1	0131	92	.00	.00	.00	1.		
1	0001	2	.00	.00	.00	0.	*	1	0132	93	.00	.00	.00	1.		
1	0002	3	.00	.00	.00	0.	*	1	0133	94	.00	.00	.00	1.		
1	0003	4	.00	.00	.00	0.	*	1	0134	95	.00	.00	.00	1.		
1	0004	5	.00	.00	.00	0.	*	1	0135	96	.00	.00	.00	1.		
1	0005	6	.00	.00	.00	0.	*	1	0136	97	.00	.00	.00	1.		
1	0006	7	.00	.00	.00	0.	*	1	0137	98	.00	.00	.00	1.		
1	0007	8	.00	.00	.00	0.	*	1	0138	99	.00	.00	.00	1.		
1	0008	9	.00	.00	.00	0.	*	1	0139	100	.00	.00	.00	1.		
1	0009	10	.00	.00	.00	0.	*	1	0140	101	.00	.00	.00	1.		
1	0010	11	.00	.00	.00	0.	*	1	0141	102	.00	.00	.00	1.		
1	0011	12	.00	.00	.00	0.	*	1	0142	103	.00	.00	.00	0.		
1	0012	13	.00	.00	.00	0.	*	1	0143	104	.00	.00	.00	0.		
1	0013	14	.00	.00	.00	0.	*	1	0144	105	.00	.00	.00	0.		
1	0014	15	.00	.00	.00	0.	*	1	0145	106	.00	.00	.00	0.		
1	0015	16	.00	.00	.00	0.	*	1	0146	107	.00	.00	.00	0.		
1	0016	17	.00	.00	.00	0.	*	1	0147	108	.00	.00	.00	0.		
1	0017	18	.00	.00	.00	0.	*	1	0148	109	.00	.00	.00	0.		
1	0018	19	.00	.00	.00	0.	*	1	0149	110	.00	.00	.00	0.		
1	0019	20	.00	.00	.00	0.	*	1	0150	111	.00	.00	.00	0.		
1	0020	21	.00	.00	.00	0.	*	1	0151	112	.00	.00	.00	0.		
1	0021	22	.00	.00	.00	0.	*	1	0152	113	.00	.00	.00	0.		
1	0022	23	.00	.00	.00	0.	*	1	0153	114	.00	.00	.00	0.		
1	0023	24	.00	.00	.00	0.	*	1	0154	115	.00	.00	.00	0.		
1	0024	25	.00	.00	.00	0.	*	1	0155	116	.00	.00	.00	0.		
1	0025	26	.00	.00	.00	0.	*	1	0156	117	.00	.00	.00	0.		
1	0026	27	.00	.00	.00	0.	*	1	0157	118	.00	.00	.00	0.		
1	0027	28	.00	.00	.00	0.	*	1	0158	119	.00	.00	.00	0.		
1	0028	29	.00	.00	.00	0.	*	1	0159	120	.00	.00	.00	0.		
1	0029	30	.00	.00	.00	0.	*	1	0200	121	.00	.00	.00	0.		
1	0030	31	.00	.00	.00	0.	*	1	0201	122	.00	.00	.00	0.		
1	0031	32	.11	.11	.00	0.	*	1	0202	123	.00	.00	.00	0.		
1	0032	33	.11	.11	.00	0.	*	1	0203	124	.00	.00	.00	0.		
1	0033	34	.11	.11	.00	0.	*	1	0204	125	.00	.00	.00	0.		
1	0034	35	.11	.11	.00	0.	*	1	0205	126	.00	.00	.00	0.		
1	0035	36	.11	.11	.00	0.	*	1	0206	127	.00	.00	.00	0.		
1	0036	37	.09	.09	.00	0.	*	1	0207	128	.00	.00	.00	0.		
1	0037	38	.09	.08	.01	0.	*	1	0208	129	.00	.00	.00	0.		
1	0038	39	.09	.08	.01	0.	*	1	0209	130	.00	.00	.00	0.		
1	0039	40	.09	.07	.02	0.	*	1	0210	131	.00	.00	.00	0.		
1	0040	41	.09	.07	.02	0.	*	1	0211	132	.00	.00	.00	0.		
1	0041	42	.06	.05	.02	1.	*	1	0212	133	.00	.00	.00	0.		
1	0042	43	.06	.04	.02	1.	*	1	0213	134	.00	.00	.00	0.		
1	0043	44	.06	.04	.02	2.	*	1	0214	135	.00	.00	.00	0.		
1	0044	45	.06	.04	.02	3.	*	1	0215	136	.00	.00	.00	0.		
1	0045	46	.06	.04	.02	3.	*	1	0216	137	.00	.00	.00	0.		
1	0046	47	.04	.02	.01	4.	*	1	0217	138	.00	.00	.00	0.		
1	0047	48	.04	.02	.01	4.	*	1	0218	139	.00	.00	.00	0.		
1	0048	49	.04	.02	.02	5.	*	1	0219	140	.00	.00	.00	0.		
1	0049	50	.04	.02	.02	5.	*	1	0220	141	.00	.00	.00	0.		
1	0050	51	.04	.02	.02	5.	*	1	0221	142	.00	.00	.00	0.		
1	0051	52	.02	.01	.01	6.	*	1	0222	143	.00	.00	.00	0.		
1	0052	53	.02	.01	.01	6.	*	1	0223	144	.00	.00	.00	0.		
1	0053	54	.02	.01	.01	6.	*	1	0224	145	.00	.00	.00	0.		
1	0054	55	.02	.01	.01	6.	*	1	0225	146	.00	.00	.00	0.		
1	0055	56	.02	.01	.01	6.	*	1	0226	147	.00	.00	.00	0.		
1	0056	57	.02	.01	.01	5.	*	1	0227	148	.00	.00	.00	0.		
1	0057	58	.02	.01	.01	5.	*	1	0228	149	.00	.00	.00	0.		
1	0058	59	.02	.01	.01	5.	*	1	0229	150	.00	.00	.00	0.		
1	0059	60	.02	.01	.01	5.	*	1	0230	151	.00	.00	.00	0.		
1	0100	61	.02	.01	.01	5.	*	1	0231	152	.00	.00	.00	0.		
1	0101	62	.01	.01	.01	4.	*	1	0232	153	.00	.00	.00	0.		
1	0102	63	.01	.01	.01	4.	*	1	0233	154	.00	.00	.00	0.		
1	0103	64	.01	.01	.01	4.	*	1	0234	155	.00	.00	.00	0.		
1	0104	65	.01	.01	.01	4.	*	1	0235	156	.00	.00	.00	0.		
1	0105	66	.01	.01	.01	4.	*	1	0236	157	.00	.00	.00	0.		
1	0106	67	.01	.01	.01	3.	*	1	0237	158	.00	.00	.00	0.		
1	0107	68	.01	.01	.01	3.	*	1	0238	159	.00	.00	.00	0.		
1	0108	69	.01	.01	.01	3.	*	1	0239	160	.00	.00	.00	0.		
1	0109	70	.01	.01	.01	3.	*	1	0240	161	.00	.00	.00	0.		

														pre.out			
1	0110	71	.01	.01	.01	3.	*	1	0241	162	.00	.00	.00	0.			
1	0111	72	.01	.00	.00	3.	*	1	0242	163	.00	.00	.00	0.			
1	0112	73	.01	.00	.00	3.	*	1	0243	164	.00	.00	.00	0.			
1	0113	74	.01	.00	.00	2.	*	1	0244	165	.00	.00	.00	0.			
1	0114	75	.01	.00	.00	2.	*	1	0245	166	.00	.00	.00	0.			
1	0115	76	.01	.00	.00	2.	*	1	0246	167	.00	.00	.00	0.			
1	0116	77	.01	.00	.00	2.	*	1	0247	168	.00	.00	.00	0.			
1	0117	78	.01	.00	.00	2.	*	1	0248	169	.00	.00	.00	0.			
1	0118	79	.01	.00	.00	2.	*	1	0249	170	.00	.00	.00	0.			
1	0119	80	.01	.00	.00	2.	*	1	0250	171	.00	.00	.00	0.			
1	0120	81	.01	.00	.00	2.	*	1	0251	172	.00	.00	.00	0.			
1	0121	82	.01	.00	.00	2.	*	1	0252	173	.00	.00	.00	0.			
1	0122	83	.01	.00	.00	2.	*	1	0253	174	.00	.00	.00	0.			
1	0123	84	.01	.00	.00	2.	*	1	0254	175	.00	.00	.00	0.			
1	0124	85	.01	.00	.00	2.	*	1	0255	176	.00	.00	.00	0.			
1	0125	86	.01	.00	.00	2.	*	1	0256	177	.00	.00	.00	0.			
1	0126	87	.01	.00	.00	1.	*	1	0257	178	.00	.00	.00	0.			
1	0127	88	.01	.00	.00	1.	*	1	0258	179	.00	.00	.00	0.			
1	0128	89	.01	.00	.00	1.	*	1	0259	180	.00	.00	.00	0.			
1	0129	90	.01	.00	.00	1.	*	1	0300	181	.00	.00	.00	0.			
1	0130	91	.01	.00	.00	1.	*										

TOTAL RAINFALL = 2.13, TOTAL LOSS = 1.61, TOTAL EXCESS = .52

PEAK FLOW (CFS)	TIME (HR)	MAXIMUM AVERAGE FLOW			
		6-HR	24-HR	72-HR	3.00-HR
+ 6.	.88	1.	1.	1.	1.
		(INCHES)	.512	.512	.512
		(AC-FT)	0.	0.	0.

CUMULATIVE AREA = .01 SQ MI

HYDROGRAPH AT STATION BE4
PLAN 1, RATIO = .61

DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	*	DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
1	0000	1	.00	.00	.00	0.	0.	*	1	0131	92	.00	.00	.00	0.	
1	0001	2	.00	.00	.00	0.	0.	*	1	0132	93	.00	.00	.00	0.	
1	0002	3	.00	.00	.00	0.	0.	*	1	0133	94	.00	.00	.00	0.	
1	0003	4	.00	.00	.00	0.	0.	*	1	0134	95	.00	.00	.00	0.	
1	0004	5	.00	.00	.00	0.	0.	*	1	0135	96	.00	.00	.00	0.	
1	0005	6	.00	.00	.00	0.	0.	*	1	0136	97	.00	.00	.00	0.	
1	0006	7	.00	.00	.00	0.	0.	*	1	0137	98	.00	.00	.00	0.	
1	0007	8	.00	.00	.00	0.	0.	*	1	0138	99	.00	.00	.00	0.	
1	0008	9	.00	.00	.00	0.	0.	*	1	0139	100	.00	.00	.00	0.	
1	0009	10	.00	.00	.00	0.	0.	*	1	0140	101	.00	.00	.00	0.	
1	0010	11	.00	.00	.00	0.	0.	*	1	0141	102	.00	.00	.00	0.	
1	0011	12	.00	.00	.00	0.	0.	*	1	0142	103	.00	.00	.00	0.	
1	0012	13	.00	.00	.00	0.	0.	*	1	0143	104	.00	.00	.00	0.	
1	0013	14	.00	.00	.00	0.	0.	*	1	0144	105	.00	.00	.00	0.	
1	0014	15	.00	.00	.00	0.	0.	*	1	0145	106	.00	.00	.00	0.	
1	0015	16	.00	.00	.00	0.	0.	*	1	0146	107	.00	.00	.00	0.	
1	0016	17	.00	.00	.00	0.	0.	*	1	0147	108	.00	.00	.00	0.	
1	0017	18	.00	.00	.00	0.	0.	*	1	0148	109	.00	.00	.00	0.	
1	0018	19	.00	.00	.00	0.	0.	*	1	0149	110	.00	.00	.00	0.	
1	0019	20	.00	.00	.00	0.	0.	*	1	0150	111	.00	.00	.00	0.	
1	0020	21	.00	.00	.00	0.	0.	*	1	0151	112	.00	.00	.00	0.	
1	0021	22	.00	.00	.00	0.	0.	*	1	0152	113	.00	.00	.00	0.	
1	0022	23	.00	.00	.00	0.	0.	*	1	0153	114	.00	.00	.00	0.	
1	0023	24	.00	.00	.00	0.	0.	*	1	0154	115	.00	.00	.00	0.	
1	0024	25	.00	.00	.00	0.	0.	*	1	0155	116	.00	.00	.00	0.	
1	0025	26	.00	.00	.00	0.	0.	*	1	0156	117	.00	.00	.00	0.	
1	0026	27	.00	.00	.00	0.	0.	*	1	0157	118	.00	.00	.00	0.	
1	0027	28	.00	.00	.00	0.	0.	*	1	0158	119	.00	.00	.00	0.	
1	0028	29	.00	.00	.00	0.	0.	*	1	0159	120	.00	.00	.00	0.	
1	0029	30	.00	.00	.00	0.	0.	*	1	0200	121	.00	.00	.00	0.	
1	0030	31	.00	.00	.00	0.	0.	*	1	0201	122	.00	.00	.00	0.	
1	0031	32	.07	.07	.00	0.	0.	*	1	0202	123	.00	.00	.00	0.	
1	0032	33	.07	.07	.00	0.	0.	*	1	0203	124	.00	.00	.00	0.	
1	0033	34	.07	.07	.00	0.	0.	*	1	0204	125	.00	.00	.00	0.	
1	0034	35	.07	.07	.00	0.	0.	*	1	0205	126	.00	.00	.00	0.	
1	0035	36	.07	.07	.00	0.	0.	*	1	0206	127	.00	.00	.00	0.	
1	0036	37	.05	.05	.00	0.	0.	*	1	0207	128	.00	.00	.00	0.	
1	0037	38	.05	.05	.00	0.	0.	*	1	0208	129	.00	.00	.00	0.	
1	0038	39	.05	.05	.00	0.	0.	*	1	0209	130	.00	.00	.00	0.	
1	0039	40	.05	.05	.00	0.	0.	*	1	0210	131	.00	.00	.00	0.	
1	0040	41	.05	.05	.00	0.	0.	*	1	0211	132	.00	.00	.00	0.	
1	0041	42	.04	.04	.00	0.	0.	*	1	0212	133	.00	.00	.00	0.	
1	0042	43	.04	.04	.00	0.	0.	*	1	0213	134	.00	.00	.00	0.	
1	0043	44	.04	.03	.00	0.	0.	*	1	0214	135	.00	.00	.00	0.	

pre.out														
1	0044	45	.04	.03	.00	0.	*	1	0215	136	.00	.00	.00	0.
1	0045	46	.04	.03	.00	0.	*	1	0216	137	.00	.00	.00	0.
1	0046	47	.02	.02	.00	0.	*	1	0217	138	.00	.00	.00	0.
1	0047	48	.02	.02	.00	0.	*	1	0218	139	.00	.00	.00	0.
1	0048	49	.02	.02	.00	0.	*	1	0219	140	.00	.00	.00	0.
1	0049	50	.02	.02	.00	1.	*	1	0220	141	.00	.00	.00	0.
1	0050	51	.02	.02	.00	1.	*	1	0221	142	.00	.00	.00	0.
1	0051	52	.01	.01	.00	1.	*	1	0222	143	.00	.00	.00	0.
1	0052	53	.01	.01	.00	1.	*	1	0223	144	.00	.00	.00	0.
1	0053	54	.01	.01	.00	1.	*	1	0224	145	.00	.00	.00	0.
1	0054	55	.01	.01	.00	1.	*	1	0225	146	.00	.00	.00	0.
1	0055	56	.01	.01	.00	1.	*	1	0226	147	.00	.00	.00	0.
1	0056	57	.01	.01	.00	1.	*	1	0227	148	.00	.00	.00	0.
1	0057	58	.01	.01	.00	1.	*	1	0228	149	.00	.00	.00	0.
1	0058	59	.01	.01	.00	1.	*	1	0229	150	.00	.00	.00	0.
1	0059	60	.01	.01	.00	1.	*	1	0230	151	.00	.00	.00	0.
1	0100	61	.01	.01	.00	1.	*	1	0231	152	.00	.00	.00	0.
1	0101	62	.01	.01	.00	1.	*	1	0232	153	.00	.00	.00	0.
1	0102	63	.01	.01	.00	1.	*	1	0233	154	.00	.00	.00	0.
1	0103	64	.01	.01	.00	1.	*	1	0234	155	.00	.00	.00	0.
1	0104	65	.01	.01	.00	1.	*	1	0235	156	.00	.00	.00	0.
1	0105	66	.01	.01	.00	1.	*	1	0236	157	.00	.00	.00	0.
1	0106	67	.01	.00	.00	1.	*	1	0237	158	.00	.00	.00	0.
1	0107	68	.01	.00	.00	1.	*	1	0238	159	.00	.00	.00	0.
1	0108	69	.01	.00	.00	1.	*	1	0239	160	.00	.00	.00	0.
1	0109	70	.01	.00	.00	1.	*	1	0240	161	.00	.00	.00	0.
1	0110	71	.01	.00	.00	1.	*	1	0241	162	.00	.00	.00	0.
1	0111	72	.00	.00	.00	1.	*	1	0242	163	.00	.00	.00	0.
1	0112	73	.00	.00	.00	1.	*	1	0243	164	.00	.00	.00	0.
1	0113	74	.00	.00	.00	1.	*	1	0244	165	.00	.00	.00	0.
1	0114	75	.00	.00	.00	1.	*	1	0245	166	.00	.00	.00	0.
1	0115	76	.00	.00	.00	1.	*	1	0246	167	.00	.00	.00	0.
1	0116	77	.00	.00	.00	1.	*	1	0247	168	.00	.00	.00	0.
1	0117	78	.00	.00	.00	1.	*	1	0248	169	.00	.00	.00	0.
1	0118	79	.00	.00	.00	1.	*	1	0249	170	.00	.00	.00	0.
1	0119	80	.00	.00	.00	1.	*	1	0250	171	.00	.00	.00	0.
1	0120	81	.00	.00	.00	1.	*	1	0251	172	.00	.00	.00	0.
1	0121	82	.00	.00	.00	1.	*	1	0252	173	.00	.00	.00	0.
1	0122	83	.00	.00	.00	1.	*	1	0253	174	.00	.00	.00	0.
1	0123	84	.00	.00	.00	1.	*	1	0254	175	.00	.00	.00	0.
1	0124	85	.00	.00	.00	1.	*	1	0255	176	.00	.00	.00	0.
1	0125	86	.00	.00	.00	1.	*	1	0256	177	.00	.00	.00	0.
1	0126	87	.00	.00	.00	1.	*	1	0257	178	.00	.00	.00	0.
1	0127	88	.00	.00	.00	0.	*	1	0258	179	.00	.00	.00	0.
1	0128	89	.00	.00	.00	0.	*	1	0259	180	.00	.00	.00	0.
1	0129	90	.00	.00	.00	0.	*	1	0300	181	.00	.00	.00	0.
1	0130	91	.00	.00	.00	0.	*							

TOTAL RAINFALL = 1.29, TOTAL LOSS = 1.16, TOTAL EXCESS = .13

PEAK FLOW	TIME	MAXIMUM AVERAGE FLOW			
(CFS)	(HR)	6-HR	24-HR	72-HR	3.00-HR
+	1.	0.	0.	0.	0.
	.95	.128	.128	.128	.128
		(INCHES)			
		(AC-FT)			

CUMULATIVE AREA = .01 SQ MI

*** **

```

*****
*           *
*      RE4  *
*           *
*****

```

Route BE4 in channel to Outlet OE1

HYDROGRAPH ROUTING DATA

```

56 RD      MUSKINGUM-CUNGE CHANNEL ROUTING
           L      7937. CHANNEL LENGTH
           S      .0100 SLOPE
           N      .040  CHANNEL ROUGHNESS COEFFICIENT
           CA     .00  CONTRIBUTING AREA
           SHAPE  TRAP  CHANNEL SHAPE
           WD     .00  BOTTOM WIDTH OR DIAMETER
           Z      7.00 SIDE SLOPE

```

COMPUTED MUSKINGUM-CUNGE PARAMETERS
COMPUTATION TIME STEP

ELEMENT	ALPHA	M	DT	DX	PEAK	TIME TO	VOLUME	MAXIMUM
---------	-------	---	----	----	------	---------	--------	---------

pre.out

	(MIN)	(FT)	(CFS)	PEAK (MIN)	(IN)	CELERITY (FPS)		
MAIN	1.22	1.33	.95	67.26	5.51	117.80	.39	2.02

INTERPOLATED TO SPECIFIED COMPUTATION INTERVAL

MAIN	1.22	1.33	1.00	5.34	118.00	.39
------	------	------	------	------	--------	-----

CONTINUITY SUMMARY (AC-FT) - INFLOW= .2688E+00 EXCESS= .0000E+00 OUTFLOW= .2068E+00 BASIN STORAGE= .8105E-01 PERCENT ERROR= -7.1

HYDROGRAPH AT STATION RE4
PLAN 1, RATIO = 1.00

DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	
1	0000	1	0.	*	1	0046	47	0.	*	1	0132	93	0.	*	1	0218	139	3.						
1	0001	2	0.	*	1	0047	48	0.	*	1	0133	94	0.	*	1	0219	140	3.						
1	0002	3	0.	*	1	0048	49	0.	*	1	0134	95	0.	*	1	0220	141	3.						
1	0003	4	0.	*	1	0049	50	0.	*	1	0135	96	0.	*	1	0221	142	2.						
1	0004	5	0.	*	1	0050	51	0.	*	1	0136	97	0.	*	1	0222	143	2.						
1	0005	6	0.	*	1	0051	52	0.	*	1	0137	98	0.	*	1	0223	144	2.						
1	0006	7	0.	*	1	0052	53	0.	*	1	0138	99	0.	*	1	0224	145	2.						
1	0007	8	0.	*	1	0053	54	0.	*	1	0139	100	0.	*	1	0225	146	2.						
1	0008	9	0.	*	1	0054	55	0.	*	1	0140	101	0.	*	1	0226	147	2.						
1	0009	10	0.	*	1	0055	56	0.	*	1	0141	102	0.	*	1	0227	148	2.						
1	0010	11	0.	*	1	0056	57	0.	*	1	0142	103	0.	*	1	0228	149	2.						
1	0011	12	0.	*	1	0057	58	0.	*	1	0143	104	0.	*	1	0229	150	2.						
1	0012	13	0.	*	1	0058	59	0.	*	1	0144	105	0.	*	1	0230	151	2.						
1	0013	14	0.	*	1	0059	60	0.	*	1	0145	106	0.	*	1	0231	152	2.						
1	0014	15	0.	*	1	0100	61	0.	*	1	0146	107	0.	*	1	0232	153	2.						
1	0015	16	0.	*	1	0101	62	0.	*	1	0147	108	0.	*	1	0233	154	2.						
1	0016	17	0.	*	1	0102	63	0.	*	1	0148	109	0.	*	1	0234	155	2.						
1	0017	18	0.	*	1	0103	64	0.	*	1	0149	110	0.	*	1	0235	156	2.						
1	0018	19	0.	*	1	0104	65	0.	*	1	0150	111	0.	*	1	0236	157	2.						
1	0019	20	0.	*	1	0105	66	0.	*	1	0151	112	0.	*	1	0237	158	2.						
1	0020	21	0.	*	1	0106	67	0.	*	1	0152	113	0.	*	1	0238	159	2.						
1	0021	22	0.	*	1	0107	68	0.	*	1	0153	114	0.	*	1	0239	160	2.						
1	0022	23	0.	*	1	0108	69	0.	*	1	0154	115	0.	*	1	0240	161	2.						
1	0023	24	0.	*	1	0109	70	0.	*	1	0155	116	0.	*	1	0241	162	2.						
1	0024	25	0.	*	1	0110	71	0.	*	1	0156	117	1.	*	1	0242	163	2.						
1	0025	26	0.	*	1	0111	72	0.	*	1	0157	118	3.	*	1	0243	164	1.						
1	0026	27	0.	*	1	0112	73	0.	*	1	0158	119	5.	*	1	0244	165	1.						
1	0027	28	0.	*	1	0113	74	0.	*	1	0159	120	5.	*	1	0245	166	1.						
1	0028	29	0.	*	1	0114	75	0.	*	1	0200	121	4.	*	1	0246	167	1.						
1	0029	30	0.	*	1	0115	76	0.	*	1	0201	122	4.	*	1	0247	168	1.						
1	0030	31	0.	*	1	0116	77	0.	*	1	0202	123	4.	*	1	0248	169	1.						
1	0031	32	0.	*	1	0117	78	0.	*	1	0203	124	4.	*	1	0249	170	1.						
1	0032	33	0.	*	1	0118	79	0.	*	1	0204	125	4.	*	1	0250	171	1.						
1	0033	34	0.	*	1	0119	80	0.	*	1	0205	126	4.	*	1	0251	172	1.						
1	0034	35	0.	*	1	0120	81	0.	*	1	0206	127	4.	*	1	0252	173	1.						
1	0035	36	0.	*	1	0121	82	0.	*	1	0207	128	4.	*	1	0253	174	1.						
1	0036	37	0.	*	1	0122	83	0.	*	1	0208	129	4.	*	1	0254	175	1.						
1	0037	38	0.	*	1	0123	84	0.	*	1	0209	130	3.	*	1	0255	176	1.						
1	0038	39	0.	*	1	0124	85	0.	*	1	0210	131	3.	*	1	0256	177	1.						
1	0039	40	0.	*	1	0125	86	0.	*	1	0211	132	3.	*	1	0257	178	1.						
1	0040	41	0.	*	1	0126	87	0.	*	1	0212	133	3.	*	1	0258	179	1.						
1	0041	42	0.	*	1	0127	88	0.	*	1	0213	134	3.	*	1	0259	180	1.						
1	0042	43	0.	*	1	0128	89	0.	*	1	0214	135	3.	*	1	0300	181	1.						
1	0043	44	0.	*	1	0129	90	0.	*	1	0215	136	3.	*										
1	0044	45	0.	*	1	0130	91	0.	*	1	0216	137	3.	*										
1	0045	46	0.	*	1	0131	92	0.	*	1	0217	138	3.	*										

PEAK FLOW	TIME	MAXIMUM AVERAGE FLOW			
(CFS)	(HR)	6-HR	24-HR	72-HR	3.00-HR
5.	1.97	1.	1.	1.	1.
		(INCHES)	.394	.394	.394
		(AC-FT)	0.	0.	0.

CUMULATIVE AREA = .01 SQ MI

COMPUTED MUSKINGUM-CUNGE PARAMETERS

ELEMENT	ALPHA	COMPUTATION TIME STEP			PEAK (CFS)	TIME TO PEAK (MIN)	VOLUME (IN)	MAXIMUM CELERITY (FPS)
		M	DT (MIN)	DX (FT)				

pre.out
 MAIN 1.22 1.33 .90 42.22 1.09 156.60 .05 1.36

INTERPOLATED TO SPECIFIED COMPUTATION INTERVAL

MAIN 1.22 1.33 1.00 .99 157.00 .05

CONTINUITY SUMMARY (AC-FT) - INFLOW= .6718E-01 EXCESS= .0000E+00 OUTFLOW= .2560E-01 BASIN STORAGE= .4907E-01 PERCENT ERROR= -11.1

HYDROGRAPH AT STATION RE4
 PLAN 1, RATIO = .61

DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*
1	0000	1	0.	*	1	0046	47	0.	*	1	0132	93	0.	*	1	0218	139	0.					
1	0001	2	0.	*	1	0047	48	0.	*	1	0133	94	0.	*	1	0219	140	0.					
1	0002	3	0.	*	1	0048	49	0.	*	1	0134	95	0.	*	1	0220	141	0.					
1	0003	4	0.	*	1	0049	50	0.	*	1	0135	96	0.	*	1	0221	142	0.					
1	0004	5	0.	*	1	0050	51	0.	*	1	0136	97	0.	*	1	0222	143	0.					
1	0005	6	0.	*	1	0051	52	0.	*	1	0137	98	0.	*	1	0223	144	0.					
1	0006	7	0.	*	1	0052	53	0.	*	1	0138	99	0.	*	1	0224	145	0.					
1	0007	8	0.	*	1	0053	54	0.	*	1	0139	100	0.	*	1	0225	146	0.					
1	0008	9	0.	*	1	0054	55	0.	*	1	0140	101	0.	*	1	0226	147	0.					
1	0009	10	0.	*	1	0055	56	0.	*	1	0141	102	0.	*	1	0227	148	0.					
1	0010	11	0.	*	1	0056	57	0.	*	1	0142	103	0.	*	1	0228	149	0.					
1	0011	12	0.	*	1	0057	58	0.	*	1	0143	104	0.	*	1	0229	150	0.					
1	0012	13	0.	*	1	0058	59	0.	*	1	0144	105	0.	*	1	0230	151	0.					
1	0013	14	0.	*	1	0059	60	0.	*	1	0145	106	0.	*	1	0231	152	0.					
1	0014	15	0.	*	1	0100	61	0.	*	1	0146	107	0.	*	1	0232	153	0.					
1	0015	16	0.	*	1	0101	62	0.	*	1	0147	108	0.	*	1	0233	154	0.					
1	0016	17	0.	*	1	0102	63	0.	*	1	0148	109	0.	*	1	0234	155	0.					
1	0017	18	0.	*	1	0103	64	0.	*	1	0149	110	0.	*	1	0235	156	0.					
1	0018	19	0.	*	1	0104	65	0.	*	1	0150	111	0.	*	1	0236	157	1.					
1	0019	20	0.	*	1	0105	66	0.	*	1	0151	112	0.	*	1	0237	158	1.					
1	0020	21	0.	*	1	0106	67	0.	*	1	0152	113	0.	*	1	0238	159	1.					
1	0021	22	0.	*	1	0107	68	0.	*	1	0153	114	0.	*	1	0239	160	1.					
1	0022	23	0.	*	1	0108	69	0.	*	1	0154	115	0.	*	1	0240	161	1.					
1	0023	24	0.	*	1	0109	70	0.	*	1	0155	116	0.	*	1	0241	162	1.					
1	0024	25	0.	*	1	0110	71	0.	*	1	0156	117	0.	*	1	0242	163	1.					
1	0025	26	0.	*	1	0111	72	0.	*	1	0157	118	0.	*	1	0243	164	1.					
1	0026	27	0.	*	1	0112	73	0.	*	1	0158	119	0.	*	1	0244	165	1.					
1	0027	28	0.	*	1	0113	74	0.	*	1	0159	120	0.	*	1	0245	166	1.					
1	0028	29	0.	*	1	0114	75	0.	*	1	0200	121	0.	*	1	0246	167	1.					
1	0029	30	0.	*	1	0115	76	0.	*	1	0201	122	0.	*	1	0247	168	1.					
1	0030	31	0.	*	1	0116	77	0.	*	1	0202	123	0.	*	1	0248	169	1.					
1	0031	32	0.	*	1	0117	78	0.	*	1	0203	124	0.	*	1	0249	170	1.					
1	0032	33	0.	*	1	0118	79	0.	*	1	0204	125	0.	*	1	0250	171	1.					
1	0033	34	0.	*	1	0119	80	0.	*	1	0205	126	0.	*	1	0251	172	1.					
1	0034	35	0.	*	1	0120	81	0.	*	1	0206	127	0.	*	1	0252	173	1.					
1	0035	36	0.	*	1	0121	82	0.	*	1	0207	128	0.	*	1	0253	174	1.					
1	0036	37	0.	*	1	0122	83	0.	*	1	0208	129	0.	*	1	0254	175	1.					
1	0037	38	0.	*	1	0123	84	0.	*	1	0209	130	0.	*	1	0255	176	1.					
1	0038	39	0.	*	1	0124	85	0.	*	1	0210	131	0.	*	1	0256	177	1.					
1	0039	40	0.	*	1	0125	86	0.	*	1	0211	132	0.	*	1	0257	178	1.					
1	0040	41	0.	*	1	0126	87	0.	*	1	0212	133	0.	*	1	0258	179	1.					
1	0041	42	0.	*	1	0127	88	0.	*	1	0213	134	0.	*	1	0259	180	1.					
1	0042	43	0.	*	1	0128	89	0.	*	1	0214	135	0.	*	1	0300	181	1.					
1	0043	44	0.	*	1	0129	90	0.	*	1	0215	136	0.	*									
1	0044	45	0.	*	1	0130	91	0.	*	1	0216	137	0.	*									
1	0045	46	0.	*	1	0131	92	0.	*	1	0217	138	0.	*									

PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
(CFS)	(HR)		6-HR	24-HR	72-HR	3.00-HR
+	1.	2.62	0.	0.	0.	0.
		(CFS)				
		(INCHES)	.048	.048	.048	.048
		(AC-FT)	0.	0.	0.	0.
CUMULATIVE AREA =			.01 SQ MI			

*** **

 * *
 57 KK * BE5 *

*

BES

SUBBASIN RUNOFF DATA

59 BA SUBBASIN CHARACTERISTICS
TAREA .02 SUBBASIN AREA

PRECIPITATION DATA

23 PB STORM 2.13 BASIN TOTAL PRECIPITATION

24 PI INCREMENTAL PRECIPITATION PATTERN

Table with 10 columns of precipitation data values ranging from .00 to .05.

60 LS SCS LOSS RATE
STRTL .60 INITIAL ABSTRACTION
CRVNR 77.00 CURVE NUMBER
RTIMP .00 PERCENT IMPERVIOUS AREA

61 UD SCS DIMENSIONLESS UNITGRAPH
TLAG .14 LAG

UNIT HYDROGRAPH
44 END-OF-PERIOD ORDINATES

Table with 10 columns of unit hydrograph ordinates values.

HYDROGRAPH AT STATION BES

Main hydrograph data table with columns: DA, MON, HRMN, ORD, RAIN, LOSS, EXCESS, COMP Q, and a separator column with asterisks.

pre.out														
1	0031	32	.11	.11	.00	0.	*	1	0202	123	.00	.00	.00	1.
1	0032	33	.11	.11	.00	0.	*	1	0203	124	.00	.00	.00	1.
1	0033	34	.11	.11	.00	0.	*	1	0204	125	.00	.00	.00	1.
1	0034	35	.11	.11	.00	0.	*	1	0205	126	.00	.00	.00	1.
1	0035	36	.11	.11	.00	0.	*	1	0206	127	.00	.00	.00	1.
1	0036	37	.09	.09	.00	0.	*	1	0207	128	.00	.00	.00	1.
1	0037	38	.09	.08	.01	0.	*	1	0208	129	.00	.00	.00	1.
1	0038	39	.09	.08	.01	0.	*	1	0209	130	.00	.00	.00	1.
1	0039	40	.09	.07	.02	0.	*	1	0210	131	.00	.00	.00	1.
1	0040	41	.09	.07	.02	1.	*	1	0211	132	.00	.00	.00	1.
1	0041	42	.06	.05	.02	1.	*	1	0212	133	.00	.00	.00	1.
1	0042	43	.06	.04	.02	2.	*	1	0213	134	.00	.00	.00	1.
1	0043	44	.06	.04	.02	3.	*	1	0214	135	.00	.00	.00	1.
1	0044	45	.06	.04	.02	4.	*	1	0215	136	.00	.00	.00	1.
1	0045	46	.06	.04	.02	5.	*	1	0216	137	.00	.00	.00	1.
1	0046	47	.04	.02	.01	7.	*	1	0217	138	.00	.00	.00	1.
1	0047	48	.04	.02	.01	8.	*	1	0218	139	.00	.00	.00	1.
1	0048	49	.04	.02	.02	9.	*	1	0219	140	.00	.00	.00	1.
1	0049	50	.04	.02	.02	10.	*	1	0220	141	.00	.00	.00	1.
1	0050	51	.04	.02	.02	11.	*	1	0221	142	.00	.00	.00	1.
1	0051	52	.02	.01	.01	11.	*	1	0222	143	.00	.00	.00	1.
1	0052	53	.02	.01	.01	12.	*	1	0223	144	.00	.00	.00	1.
1	0053	54	.02	.01	.01	12.	*	1	0224	145	.00	.00	.00	1.
1	0054	55	.02	.01	.01	12.	*	1	0225	146	.00	.00	.00	1.
1	0055	56	.02	.01	.01	12.	*	1	0226	147	.00	.00	.00	1.
1	0056	57	.02	.01	.01	12.	*	1	0227	148	.00	.00	.00	1.
1	0057	58	.02	.01	.01	11.	*	1	0228	149	.00	.00	.00	1.
1	0058	59	.02	.01	.01	11.	*	1	0229	150	.00	.00	.00	1.
1	0059	60	.02	.01	.01	11.	*	1	0230	151	.00	.00	.00	1.
1	0100	61	.02	.01	.01	10.	*	1	0231	152	.00	.00	.00	1.
1	0101	62	.01	.01	.01	10.	*	1	0232	153	.00	.00	.00	1.
1	0102	63	.01	.01	.01	9.	*	1	0233	154	.00	.00	.00	1.
1	0103	64	.01	.01	.01	9.	*	1	0234	155	.00	.00	.00	1.
1	0104	65	.01	.01	.01	9.	*	1	0235	156	.00	.00	.00	1.
1	0105	66	.01	.01	.01	8.	*	1	0236	157	.00	.00	.00	1.
1	0106	67	.01	.01	.01	8.	*	1	0237	158	.00	.00	.00	1.
1	0107	68	.01	.01	.01	8.	*	1	0238	159	.00	.00	.00	1.
1	0108	69	.01	.01	.01	7.	*	1	0239	160	.00	.00	.00	1.
1	0109	70	.01	.01	.01	7.	*	1	0240	161	.00	.00	.00	1.
1	0110	71	.01	.01	.01	7.	*	1	0241	162	.00	.00	.00	1.
1	0111	72	.01	.00	.00	6.	*	1	0242	163	.00	.00	.00	1.
1	0112	73	.01	.00	.00	6.	*	1	0243	164	.00	.00	.00	1.
1	0113	74	.01	.00	.00	6.	*	1	0244	165	.00	.00	.00	1.
1	0114	75	.01	.00	.00	5.	*	1	0245	166	.00	.00	.00	1.
1	0115	76	.01	.00	.00	5.	*	1	0246	167	.00	.00	.00	1.
1	0116	77	.01	.00	.00	5.	*	1	0247	168	.00	.00	.00	1.
1	0117	78	.01	.00	.00	5.	*	1	0248	169	.00	.00	.00	1.
1	0118	79	.01	.00	.00	5.	*	1	0249	170	.00	.00	.00	1.
1	0119	80	.01	.00	.00	4.	*	1	0250	171	.00	.00	.00	1.
1	0120	81	.01	.00	.00	4.	*	1	0251	172	.00	.00	.00	1.
1	0121	82	.01	.00	.00	4.	*	1	0252	173	.00	.00	.00	1.
1	0122	83	.01	.00	.00	4.	*	1	0253	174	.00	.00	.00	1.
1	0123	84	.01	.00	.00	4.	*	1	0254	175	.00	.00	.00	1.
1	0124	85	.01	.00	.00	4.	*	1	0255	176	.00	.00	.00	1.
1	0125	86	.01	.00	.00	3.	*	1	0256	177	.00	.00	.00	1.
1	0126	87	.01	.00	.00	3.	*	1	0257	178	.00	.00	.00	1.
1	0127	88	.01	.00	.00	3.	*	1	0258	179	.00	.00	.00	1.
1	0128	89	.01	.00	.00	3.	*	1	0259	180	.00	.00	.00	1.
1	0129	90	.01	.00	.00	3.	*	1	0300	181	.00	.00	.00	1.
1	0130	91	.01	.00	.00	3.	*							

TOTAL RAINFALL = 2.13, TOTAL LOSS = 1.61, TOTAL EXCESS = .52

PEAK FLOW	TIME	MAXIMUM AVERAGE FLOW			
(CFS)	(HR)	6-HR	24-HR	72-HR	3.00-HR
12.	.90	2.	2.	2.	2.
		(INCHES)	.511	.511	.511
		(AC-FT)	1.	1.	1.

CUMULATIVE AREA = .02 SQ MI

HYDROGRAPH AT STATION BE5
PLAN 1, RATIO = 1.00

DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	*	DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
1	0000	1	.00	.00	.00	0.	*		1	0131	92	.00	.00	.00	3.	
1	0001	2	.00	.00	.00	0.	*		1	0132	93	.00	.00	.00	3.	
1	0002	3	.00	.00	.00	0.	*		1	0133	94	.00	.00	.00	3.	
1	0003	4	.00	.00	.00	0.	*		1	0134	95	.00	.00	.00	3.	
1	0004	5	.00	.00	.00	0.	*		1	0135	96	.00	.00	.00	2.	

														pre.out		
1	0005	6	.00	.00	.00	0.	*	1	0136	97	.00	.00	.00	2.		
1	0006	7	.00	.00	.00	0.	*	1	0137	98	.00	.00	.00	2.		
1	0007	8	.00	.00	.00	0.	*	1	0138	99	.00	.00	.00	2.		
1	0008	9	.00	.00	.00	0.	*	1	0139	100	.00	.00	.00	2.		
1	0009	10	.00	.00	.00	0.	*	1	0140	101	.00	.00	.00	2.		
1	0010	11	.00	.00	.00	0.	*	1	0141	102	.00	.00	.00	1.		
1	0011	12	.00	.00	.00	0.	*	1	0142	103	.00	.00	.00	1.		
1	0012	13	.00	.00	.00	0.	*	1	0143	104	.00	.00	.00	1.		
1	0013	14	.00	.00	.00	0.	*	1	0144	105	.00	.00	.00	1.		
1	0014	15	.00	.00	.00	0.	*	1	0145	106	.00	.00	.00	1.		
1	0015	16	.00	.00	.00	0.	*	1	0146	107	.00	.00	.00	1.		
1	0016	17	.00	.00	.00	0.	*	1	0147	108	.00	.00	.00	1.		
1	0017	18	.00	.00	.00	0.	*	1	0148	109	.00	.00	.00	1.		
1	0018	19	.00	.00	.00	0.	*	1	0149	110	.00	.00	.00	1.		
1	0019	20	.00	.00	.00	0.	*	1	0150	111	.00	.00	.00	1.		
1	0020	21	.00	.00	.00	0.	*	1	0151	112	.00	.00	.00	1.		
1	0021	22	.00	.00	.00	0.	*	1	0152	113	.00	.00	.00	1.		
1	0022	23	.00	.00	.00	0.	*	1	0153	114	.00	.00	.00	1.		
1	0023	24	.00	.00	.00	0.	*	1	0154	115	.00	.00	.00	1.		
1	0024	25	.00	.00	.00	0.	*	1	0155	116	.00	.00	.00	1.		
1	0025	26	.00	.00	.00	0.	*	1	0156	117	.00	.00	.00	1.		
1	0026	27	.00	.00	.00	0.	*	1	0157	118	.00	.00	.00	1.		
1	0027	28	.00	.00	.00	0.	*	1	0158	119	.00	.00	.00	1.		
1	0028	29	.00	.00	.00	0.	*	1	0159	120	.00	.00	.00	1.		
1	0029	30	.00	.00	.00	0.	*	1	0200	121	.00	.00	.00	1.		
1	0030	31	.00	.00	.00	0.	*	1	0201	122	.00	.00	.00	1.		
1	0031	32	.11	.11	.00	0.	*	1	0202	123	.00	.00	.00	1.		
1	0032	33	.11	.11	.00	0.	*	1	0203	124	.00	.00	.00	1.		
1	0033	34	.11	.11	.00	0.	*	1	0204	125	.00	.00	.00	1.		
1	0034	35	.11	.11	.00	0.	*	1	0205	126	.00	.00	.00	1.		
1	0035	36	.11	.11	.00	0.	*	1	0206	127	.00	.00	.00	1.		
1	0036	37	.09	.09	.00	0.	*	1	0207	128	.00	.00	.00	1.		
1	0037	38	.09	.08	.01	0.	*	1	0208	129	.00	.00	.00	1.		
1	0038	39	.09	.08	.01	0.	*	1	0209	130	.00	.00	.00	1.		
1	0039	40	.09	.07	.02	0.	*	1	0210	131	.00	.00	.00	1.		
1	0040	41	.09	.07	.02	1.	*	1	0211	132	.00	.00	.00	1.		
1	0041	42	.06	.05	.02	1.	*	1	0212	133	.00	.00	.00	1.		
1	0042	43	.06	.04	.02	2.	*	1	0213	134	.00	.00	.00	1.		
1	0043	44	.06	.04	.02	3.	*	1	0214	135	.00	.00	.00	1.		
1	0044	45	.06	.04	.02	4.	*	1	0215	136	.00	.00	.00	1.		
1	0045	46	.06	.04	.02	5.	*	1	0216	137	.00	.00	.00	1.		
1	0046	47	.04	.02	.01	7.	*	1	0217	138	.00	.00	.00	1.		
1	0047	48	.04	.02	.01	8.	*	1	0218	139	.00	.00	.00	1.		
1	0048	49	.04	.02	.02	9.	*	1	0219	140	.00	.00	.00	1.		
1	0049	50	.04	.02	.02	10.	*	1	0220	141	.00	.00	.00	1.		
1	0050	51	.04	.02	.02	11.	*	1	0221	142	.00	.00	.00	1.		
1	0051	52	.02	.01	.01	11.	*	1	0222	143	.00	.00	.00	1.		
1	0052	53	.02	.01	.01	12.	*	1	0223	144	.00	.00	.00	1.		
1	0053	54	.02	.01	.01	12.	*	1	0224	145	.00	.00	.00	1.		
1	0054	55	.02	.01	.01	12.	*	1	0225	146	.00	.00	.00	1.		
1	0055	56	.02	.01	.01	12.	*	1	0226	147	.00	.00	.00	1.		
1	0056	57	.02	.01	.01	12.	*	1	0227	148	.00	.00	.00	1.		
1	0057	58	.02	.01	.01	11.	*	1	0228	149	.00	.00	.00	1.		
1	0058	59	.02	.01	.01	11.	*	1	0229	150	.00	.00	.00	1.		
1	0059	60	.02	.01	.01	11.	*	1	0230	151	.00	.00	.00	1.		
1	0100	61	.02	.01	.01	10.	*	1	0231	152	.00	.00	.00	1.		
1	0101	62	.01	.01	.01	10.	*	1	0232	153	.00	.00	.00	1.		
1	0102	63	.01	.01	.01	9.	*	1	0233	154	.00	.00	.00	1.		
1	0103	64	.01	.01	.01	9.	*	1	0234	155	.00	.00	.00	1.		
1	0104	65	.01	.01	.01	9.	*	1	0235	156	.00	.00	.00	1.		
1	0105	66	.01	.01	.01	8.	*	1	0236	157	.00	.00	.00	1.		
1	0106	67	.01	.01	.01	8.	*	1	0237	158	.00	.00	.00	1.		
1	0107	68	.01	.01	.01	8.	*	1	0238	159	.00	.00	.00	1.		
1	0108	69	.01	.01	.01	7.	*	1	0239	160	.00	.00	.00	1.		
1	0109	70	.01	.01	.01	7.	*	1	0240	161	.00	.00	.00	1.		
1	0110	71	.01	.01	.01	7.	*	1	0241	162	.00	.00	.00	1.		
1	0111	72	.01	.00	.00	6.	*	1	0242	163	.00	.00	.00	1.		
1	0112	73	.01	.00	.00	6.	*	1	0243	164	.00	.00	.00	1.		
1	0113	74	.01	.00	.00	6.	*	1	0244	165	.00	.00	.00	1.		
1	0114	75	.01	.00	.00	5.	*	1	0245	166	.00	.00	.00	1.		
1	0115	76	.01	.00	.00	5.	*	1	0246	167	.00	.00	.00	1.		
1	0116	77	.01	.00	.00	5.	*	1	0247	168	.00	.00	.00	1.		
1	0117	78	.01	.00	.00	5.	*	1	0248	169	.00	.00	.00	1.		
1	0118	79	.01	.00	.00	5.	*	1	0249	170	.00	.00	.00	1.		
1	0119	80	.01	.00	.00	4.	*	1	0250	171	.00	.00	.00	1.		
1	0120	81	.01	.00	.00	4.	*	1	0251	172	.00	.00	.00	1.		
1	0121	82	.01	.00	.00	4.	*	1	0252	173	.00	.00	.00	1.		
1	0122	83	.01	.00	.00	4.	*	1	0253	174	.00	.00	.00	1.		
1	0123	84	.01	.00	.00	4.	*	1	0254	175	.00	.00	.00	1.		
1	0124	85	.01	.00	.00	4.	*	1	0255	176	.00	.00	.00	1.		
1	0125	86	.01	.00	.00	3.	*	1	0256	177	.00	.00	.00	1.		
1	0126	87	.01	.00	.00	3.	*	1	0257	178	.00	.00	.00	1.		
1	0127	88	.01	.00	.00	3.	*	1	0258	179	.00	.00	.00	1.		
1	0128	89	.01	.00	.00	3.	*	1	0259	180	.00	.00	.00	1.		
1	0129	90	.01	.00	.00	3.	*	1	0300	181	.00	.00	.00	1.		
1	0130	91	.01	.00	.00	3.	*									

TOTAL RAINFALL = 2.13, TOTAL LOSS = 1.61, TOTAL EXCESS = .52

pre.out

PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
+ (CFS)	(HR)		6-HR	24-HR	72-HR	3.00-HR
		(CFS)				
+ 12.	.90		2.	2.	2.	2.
		(INCHES)	.511	.511	.511	.511
		(AC-FT)	1.	1.	1.	1.
CUMULATIVE AREA =			.02 SQ MI			

HYDROGRAPH AT STATION BE5
 PLAN 1, RATIO = .61

DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	*	DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
1	0000	1	.00	.00	.00	.00	0.	*	1	0131	92	.00	.00	.00	1.	
1	0001	2	.00	.00	.00	.00	0.	*	1	0132	93	.00	.00	.00	1.	
1	0002	3	.00	.00	.00	.00	0.	*	1	0133	94	.00	.00	.00	1.	
1	0003	4	.00	.00	.00	.00	0.	*	1	0134	95	.00	.00	.00	1.	
1	0004	5	.00	.00	.00	.00	0.	*	1	0135	96	.00	.00	.00	1.	
1	0005	6	.00	.00	.00	.00	0.	*	1	0136	97	.00	.00	.00	1.	
1	0006	7	.00	.00	.00	.00	0.	*	1	0137	98	.00	.00	.00	1.	
1	0007	8	.00	.00	.00	.00	0.	*	1	0138	99	.00	.00	.00	1.	
1	0008	9	.00	.00	.00	.00	0.	*	1	0139	100	.00	.00	.00	1.	
1	0009	10	.00	.00	.00	.00	0.	*	1	0140	101	.00	.00	.00	1.	
1	0010	11	.00	.00	.00	.00	0.	*	1	0141	102	.00	.00	.00	0.	
1	0011	12	.00	.00	.00	.00	0.	*	1	0142	103	.00	.00	.00	0.	
1	0012	13	.00	.00	.00	.00	0.	*	1	0143	104	.00	.00	.00	0.	
1	0013	14	.00	.00	.00	.00	0.	*	1	0144	105	.00	.00	.00	0.	
1	0014	15	.00	.00	.00	.00	0.	*	1	0145	106	.00	.00	.00	0.	
1	0015	16	.00	.00	.00	.00	0.	*	1	0146	107	.00	.00	.00	0.	
1	0016	17	.00	.00	.00	.00	0.	*	1	0147	108	.00	.00	.00	0.	
1	0017	18	.00	.00	.00	.00	0.	*	1	0148	109	.00	.00	.00	0.	
1	0018	19	.00	.00	.00	.00	0.	*	1	0149	110	.00	.00	.00	0.	
1	0019	20	.00	.00	.00	.00	0.	*	1	0150	111	.00	.00	.00	0.	
1	0020	21	.00	.00	.00	.00	0.	*	1	0151	112	.00	.00	.00	0.	
1	0021	22	.00	.00	.00	.00	0.	*	1	0152	113	.00	.00	.00	0.	
1	0022	23	.00	.00	.00	.00	0.	*	1	0153	114	.00	.00	.00	0.	
1	0023	24	.00	.00	.00	.00	0.	*	1	0154	115	.00	.00	.00	0.	
1	0024	25	.00	.00	.00	.00	0.	*	1	0155	116	.00	.00	.00	0.	
1	0025	26	.00	.00	.00	.00	0.	*	1	0156	117	.00	.00	.00	0.	
1	0026	27	.00	.00	.00	.00	0.	*	1	0157	118	.00	.00	.00	0.	
1	0027	28	.00	.00	.00	.00	0.	*	1	0158	119	.00	.00	.00	0.	
1	0028	29	.00	.00	.00	.00	0.	*	1	0159	120	.00	.00	.00	0.	
1	0029	30	.00	.00	.00	.00	0.	*	1	0200	121	.00	.00	.00	0.	
1	0030	31	.00	.00	.00	.00	0.	*	1	0201	122	.00	.00	.00	0.	
1	0031	32	.07	.07	.00	.00	0.	*	1	0202	123	.00	.00	.00	0.	
1	0032	33	.07	.07	.00	.00	0.	*	1	0203	124	.00	.00	.00	0.	
1	0033	34	.07	.07	.00	.00	0.	*	1	0204	125	.00	.00	.00	0.	
1	0034	35	.07	.07	.00	.00	0.	*	1	0205	126	.00	.00	.00	0.	
1	0035	36	.07	.07	.00	.00	0.	*	1	0206	127	.00	.00	.00	0.	
1	0036	37	.05	.05	.00	.00	0.	*	1	0207	128	.00	.00	.00	0.	
1	0037	38	.05	.05	.00	.00	0.	*	1	0208	129	.00	.00	.00	0.	
1	0038	39	.05	.05	.00	.00	0.	*	1	0209	130	.00	.00	.00	0.	
1	0039	40	.05	.05	.00	.00	0.	*	1	0210	131	.00	.00	.00	0.	
1	0040	41	.05	.05	.00	.00	0.	*	1	0211	132	.00	.00	.00	0.	
1	0041	42	.04	.04	.00	.00	0.	*	1	0212	133	.00	.00	.00	0.	
1	0042	43	.04	.04	.00	.00	0.	*	1	0213	134	.00	.00	.00	0.	
1	0043	44	.04	.03	.00	.00	0.	*	1	0214	135	.00	.00	.00	0.	
1	0044	45	.04	.03	.00	.00	0.	*	1	0215	136	.00	.00	.00	0.	
1	0045	46	.04	.03	.00	.00	0.	*	1	0216	137	.00	.00	.00	0.	
1	0046	47	.02	.02	.00	.00	0.	*	1	0217	138	.00	.00	.00	0.	
1	0047	48	.02	.02	.00	.00	1.	*	1	0218	139	.00	.00	.00	0.	
1	0048	49	.02	.02	.00	.00	1.	*	1	0219	140	.00	.00	.00	0.	
1	0049	50	.02	.02	.00	.00	1.	*	1	0220	141	.00	.00	.00	0.	
1	0050	51	.02	.02	.00	.00	1.	*	1	0221	142	.00	.00	.00	0.	
1	0051	52	.01	.01	.00	.00	2.	*	1	0222	143	.00	.00	.00	0.	
1	0052	53	.01	.01	.00	.00	2.	*	1	0223	144	.00	.00	.00	0.	
1	0053	54	.01	.01	.00	.00	2.	*	1	0224	145	.00	.00	.00	0.	
1	0054	55	.01	.01	.00	.00	2.	*	1	0225	146	.00	.00	.00	0.	
1	0055	56	.01	.01	.00	.00	2.	*	1	0226	147	.00	.00	.00	0.	
1	0056	57	.01	.01	.00	.00	2.	*	1	0227	148	.00	.00	.00	0.	
1	0057	58	.01	.01	.00	.00	2.	*	1	0228	149	.00	.00	.00	0.	
1	0058	59	.01	.01	.00	.00	3.	*	1	0229	150	.00	.00	.00	0.	
1	0059	60	.01	.01	.00	.00	3.	*	1	0230	151	.00	.00	.00	0.	
1	0100	61	.01	.01	.00	.00	3.	*	1	0231	152	.00	.00	.00	0.	
1	0101	62	.01	.01	.00	.00	2.	*	1	0232	153	.00	.00	.00	0.	
1	0102	63	.01	.01	.00	.00	2.	*	1	0233	154	.00	.00	.00	0.	
1	0103	64	.01	.01	.00	.00	2.	*	1	0234	155	.00	.00	.00	0.	
1	0104	65	.01	.01	.00	.00	2.	*	1	0235	156	.00	.00	.00	0.	
1	0105	66	.01	.01	.00	.00	2.	*	1	0236	157	.00	.00	.00	0.	
1	0106	67	.01	.00	.00	.00	2.	*	1	0237	158	.00	.00	.00	0.	
1	0107	68	.01	.00	.00	.00	2.	*	1	0238	159	.00	.00	.00	0.	
1	0108	69	.01	.00	.00	.00	2.	*	1	0239	160	.00	.00	.00	0.	

pre.out														
1	0109	70	.01	.00	.00	2.	*	1	0240	161	.00	.00	.00	0.
1	0110	71	.01	.00	.00	2.	*	1	0241	162	.00	.00	.00	0.
1	0111	72	.00	.00	.00	2.	*	1	0242	163	.00	.00	.00	0.
1	0112	73	.00	.00	.00	2.	*	1	0243	164	.00	.00	.00	0.
1	0113	74	.00	.00	.00	2.	*	1	0244	165	.00	.00	.00	0.
1	0114	75	.00	.00	.00	2.	*	1	0245	166	.00	.00	.00	0.
1	0115	76	.00	.00	.00	2.	*	1	0246	167	.00	.00	.00	0.
1	0116	77	.00	.00	.00	2.	*	1	0247	168	.00	.00	.00	0.
1	0117	78	.00	.00	.00	2.	*	1	0248	169	.00	.00	.00	0.
1	0118	79	.00	.00	.00	1.	*	1	0249	170	.00	.00	.00	0.
1	0119	80	.00	.00	.00	1.	*	1	0250	171	.00	.00	.00	0.
1	0120	81	.00	.00	.00	1.	*	1	0251	172	.00	.00	.00	0.
1	0121	82	.00	.00	.00	1.	*	1	0252	173	.00	.00	.00	0.
1	0122	83	.00	.00	.00	1.	*	1	0253	174	.00	.00	.00	0.
1	0123	84	.00	.00	.00	1.	*	1	0254	175	.00	.00	.00	0.
1	0124	85	.00	.00	.00	1.	*	1	0255	176	.00	.00	.00	0.
1	0125	86	.00	.00	.00	1.	*	1	0256	177	.00	.00	.00	0.
1	0126	87	.00	.00	.00	1.	*	1	0257	178	.00	.00	.00	0.
1	0127	88	.00	.00	.00	1.	*	1	0258	179	.00	.00	.00	0.
1	0128	89	.00	.00	.00	1.	*	1	0259	180	.00	.00	.00	0.
1	0129	90	.00	.00	.00	1.	*	1	0300	181	.00	.00	.00	0.
1	0130	91	.00	.00	.00	1.	*							

TOTAL RAINFALL = 1.29, TOTAL LOSS = 1.16, TOTAL EXCESS = .13

PEAK FLOW	TIME		MAXIMUM	AVERAGE	FLOW	
+	(CFS)	(HR)	6-HR	24-HR	72-HR	3.00-HR
+	3.	.98	(CFS)	1.	1.	1.
			(INCHES)	.127	.127	.127
			(AC-FT)	0.	0.	0.
			CUMULATIVE AREA =	.02 SQ MI		

*** ** **

 * *
 62 KK * RES *
 * *

Route BE5 in channel to Outlet OE1

HYDROGRAPH ROUTING DATA

64 RD MUSKINGUM-CUNGE CHANNEL ROUTING
 L 7260. CHANNEL LENGTH
 S .0100 SLOPE
 N .040 CHANNEL ROUGHNESS COEFFICIENT
 CA .00 CONTRIBUTING AREA
 SHAPE TRAP CHANNEL SHAPE
 WD .00 BOTTOM WIDTH OR DIAMETER
 Z 7.00 SIDE SLOPE

COMPUTED MUSKINGUM-CUNGE PARAMETERS								
ELEMENT	ALPHA	M	DT	DX	PEAK	TIME TO PEAK	VOLUME	MAXIMUM CELERITY
			(MIN)	(FT)	(CFS)	(MIN)	(IN)	(FPS)
MAIN	1.22	1.33	1.00	85.41	12.05	102.00	.44	2.42

INTERPOLATED TO SPECIFIED COMPUTATION INTERVAL

MAIN	1.22	1.33	1.00		12.05	102.00	.44	
------	------	------	------	--	-------	--------	-----	--

CONTINUITY SUMMARY (AC-FT) - INFLOW= .5789E+00 EXCESS= .0000E+00 OUTFLOW= .4978E+00 BASIN STORAGE= .1092E+00 PERCENT ERROR= -4.9

HYDROGRAPH AT STATION RE5
 PLAN 1, RATIO = 1.00

 * * * * *
 DA MON HRMN ORD FLOW * DA MON HRMN ORD FLOW * DA MON HRMN ORD FLOW * DA MON HRMN ORD FLOW
 * * * * *

pre.out																		
1	0000	1	0.	*	1	0046	47	0.	*	1	0132	93	0.	*	1	0218	139	4.
1	0001	2	0.	*	1	0047	48	0.	*	1	0133	94	0.	*	1	0219	140	4.
1	0002	3	0.	*	1	0048	49	0.	*	1	0134	95	0.	*	1	0220	141	4.
1	0003	4	0.	*	1	0049	50	0.	*	1	0135	96	0.	*	1	0221	142	4.
1	0004	5	0.	*	1	0050	51	0.	*	1	0136	97	0.	*	1	0222	143	4.
1	0005	6	0.	*	1	0051	52	0.	*	1	0137	98	0.	*	1	0223	144	3.
1	0006	7	0.	*	1	0052	53	0.	*	1	0138	99	0.	*	1	0224	145	3.
1	0007	8	0.	*	1	0053	54	0.	*	1	0139	100	0.	*	1	0225	146	3.
1	0008	9	0.	*	1	0054	55	0.	*	1	0140	101	4.	*	1	0226	147	3.
1	0009	10	0.	*	1	0055	56	0.	*	1	0141	102	11.	*	1	0227	148	3.
1	0010	11	0.	*	1	0056	57	0.	*	1	0142	103	12.	*	1	0228	149	3.
1	0011	12	0.	*	1	0057	58	0.	*	1	0143	104	10.	*	1	0229	150	3.
1	0012	13	0.	*	1	0058	59	0.	*	1	0144	105	10.	*	1	0230	151	3.
1	0013	14	0.	*	1	0059	60	0.	*	1	0145	106	10.	*	1	0231	152	3.
1	0014	15	0.	*	1	0100	61	0.	*	1	0146	107	10.	*	1	0232	153	3.
1	0015	16	0.	*	1	0101	62	0.	*	1	0147	108	9.	*	1	0233	154	3.
1	0016	17	0.	*	1	0102	63	0.	*	1	0148	109	9.	*	1	0234	155	3.
1	0017	18	0.	*	1	0103	64	0.	*	1	0149	110	9.	*	1	0235	156	3.
1	0018	19	0.	*	1	0104	65	0.	*	1	0150	111	9.	*	1	0236	157	3.
1	0019	20	0.	*	1	0105	66	0.	*	1	0151	112	8.	*	1	0237	158	2.
1	0020	21	0.	*	1	0106	67	0.	*	1	0152	113	8.	*	1	0238	159	2.
1	0021	22	0.	*	1	0107	68	0.	*	1	0153	114	8.	*	1	0239	160	2.
1	0022	23	0.	*	1	0108	69	0.	*	1	0154	115	8.	*	1	0240	161	2.
1	0023	24	0.	*	1	0109	70	0.	*	1	0155	116	7.	*	1	0241	162	2.
1	0024	25	0.	*	1	0110	71	0.	*	1	0156	117	7.	*	1	0242	163	2.
1	0025	26	0.	*	1	0111	72	0.	*	1	0157	118	7.	*	1	0243	164	2.
1	0026	27	0.	*	1	0112	73	0.	*	1	0158	119	7.	*	1	0244	165	2.
1	0027	28	0.	*	1	0113	74	0.	*	1	0159	120	7.	*	1	0245	166	2.
1	0028	29	0.	*	1	0114	75	0.	*	1	0200	121	6.	*	1	0246	167	2.
1	0029	30	0.	*	1	0115	76	0.	*	1	0201	122	6.	*	1	0247	168	2.
1	0030	31	0.	*	1	0116	77	0.	*	1	0202	123	6.	*	1	0248	169	2.
1	0031	32	0.	*	1	0117	78	0.	*	1	0203	124	6.	*	1	0249	170	2.
1	0032	33	0.	*	1	0118	79	0.	*	1	0204	125	6.	*	1	0250	171	2.
1	0033	34	0.	*	1	0119	80	0.	*	1	0205	126	6.	*	1	0251	172	2.
1	0034	35	0.	*	1	0120	81	0.	*	1	0206	127	5.	*	1	0252	173	1.
1	0035	36	0.	*	1	0121	82	0.	*	1	0207	128	5.	*	1	0253	174	1.
1	0036	37	0.	*	1	0122	83	0.	*	1	0208	129	5.	*	1	0254	175	1.
1	0037	38	0.	*	1	0123	84	0.	*	1	0209	130	5.	*	1	0255	176	1.
1	0038	39	0.	*	1	0124	85	0.	*	1	0210	131	5.	*	1	0256	177	1.
1	0039	40	0.	*	1	0125	86	0.	*	1	0211	132	5.	*	1	0257	178	1.
1	0040	41	0.	*	1	0126	87	0.	*	1	0212	133	5.	*	1	0258	179	1.
1	0041	42	0.	*	1	0127	88	0.	*	1	0213	134	4.	*	1	0259	180	1.
1	0042	43	0.	*	1	0128	89	0.	*	1	0214	135	4.	*	1	0300	181	1.
1	0043	44	0.	*	1	0129	90	0.	*	1	0215	136	4.	*				
1	0044	45	0.	*	1	0130	91	0.	*	1	0216	137	4.	*				
1	0045	46	0.	*	1	0131	92	0.	*	1	0217	138	4.	*				

PEAK FLOW	TIME	MAXIMUM AVERAGE FLOW			
(CFS)	(HR)	6-HR	24-HR	72-HR	3.00-HR
12.	1.70	2.	2.	2.	2.
		(INCHES)	.439	.439	.439
		(AC-FT)	0.	0.	0.

CUMULATIVE AREA = .02 SQ MI

COMPUTED MUSKINGUM-CUNGE PARAMETERS									
ELEMENT	ALPHA	COMPUTATION TIME STEP			PEAK	TIME TO PEAK	VOLUME	MAXIMUM CELERITY	
		M	DT	DX					
MAIN	1.22	1.33	1.00	56.28	2.58	132.00	.08	1.64	

INTERPOLATED TO SPECIFIED COMPUTATION INTERVAL

MAIN	1.22	1.33	1.00	2.58	132.00	.08
------	------	------	------	------	--------	-----

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1444E+00 EXCESS= .0000E+00 OUTFLOW= .9444E-01 BASIN STORAGE= .6053E-01 PERCENT ERROR= -7.3

HYDROGRAPH AT STATION RE5
PLAN 1, RATIO = .61

DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW
1	0000	1	0.	*	1	0046	47	0.	*	1	0132	93	0.	*	1	0218	139	2.				
1	0001	2	0.	*	1	0047	48	0.	*	1	0133	94	0.	*	1	0219	140	2.				
1	0002	3	0.	*	1	0048	49	0.	*	1	0134	95	0.	*	1	0220	141	2.				

pre.out																		
1	0003	4	0.	*	1	0049	50	0.	*	1	0135	96	0.	*	1	0221	142	2.
1	0004	5	0.	*	1	0050	51	0.	*	1	0136	97	0.	*	1	0222	143	2.
1	0005	6	0.	*	1	0051	52	0.	*	1	0137	98	0.	*	1	0223	144	2.
1	0006	7	0.	*	1	0052	53	0.	*	1	0138	99	0.	*	1	0224	145	2.
1	0007	8	0.	*	1	0053	54	0.	*	1	0139	100	0.	*	1	0225	146	2.
1	0008	9	0.	*	1	0054	55	0.	*	1	0140	101	0.	*	1	0226	147	2.
1	0009	10	0.	*	1	0055	56	0.	*	1	0141	102	0.	*	1	0227	148	2.
1	0010	11	0.	*	1	0056	57	0.	*	1	0142	103	0.	*	1	0228	149	2.
1	0011	12	0.	*	1	0057	58	0.	*	1	0143	104	0.	*	1	0229	150	1.
1	0012	13	0.	*	1	0058	59	0.	*	1	0144	105	0.	*	1	0230	151	1.
1	0013	14	0.	*	1	0059	60	0.	*	1	0145	106	0.	*	1	0231	152	1.
1	0014	15	0.	*	1	0100	61	0.	*	1	0146	107	0.	*	1	0232	153	1.
1	0015	16	0.	*	1	0101	62	0.	*	1	0147	108	0.	*	1	0233	154	1.
1	0016	17	0.	*	1	0102	63	0.	*	1	0148	109	0.	*	1	0234	155	1.
1	0017	18	0.	*	1	0103	64	0.	*	1	0149	110	0.	*	1	0235	156	1.
1	0018	19	0.	*	1	0104	65	0.	*	1	0150	111	0.	*	1	0236	157	1.
1	0019	20	0.	*	1	0105	66	0.	*	1	0151	112	0.	*	1	0237	158	1.
1	0020	21	0.	*	1	0106	67	0.	*	1	0152	113	0.	*	1	0238	159	1.
1	0021	22	0.	*	1	0107	68	0.	*	1	0153	114	0.	*	1	0239	160	1.
1	0022	23	0.	*	1	0108	69	0.	*	1	0154	115	0.	*	1	0240	161	1.
1	0023	24	0.	*	1	0109	70	0.	*	1	0155	116	0.	*	1	0241	162	1.
1	0024	25	0.	*	1	0110	71	0.	*	1	0156	117	0.	*	1	0242	163	1.
1	0025	26	0.	*	1	0111	72	0.	*	1	0157	118	0.	*	1	0243	164	1.
1	0026	27	0.	*	1	0112	73	0.	*	1	0158	119	0.	*	1	0244	165	1.
1	0027	28	0.	*	1	0113	74	0.	*	1	0159	120	0.	*	1	0245	166	1.
1	0028	29	0.	*	1	0114	75	0.	*	1	0200	121	0.	*	1	0246	167	1.
1	0029	30	0.	*	1	0115	76	0.	*	1	0201	122	0.	*	1	0247	168	1.
1	0030	31	0.	*	1	0116	77	0.	*	1	0202	123	0.	*	1	0248	169	1.
1	0031	32	0.	*	1	0117	78	0.	*	1	0203	124	0.	*	1	0249	170	1.
1	0032	33	0.	*	1	0118	79	0.	*	1	0204	125	0.	*	1	0250	171	1.
1	0033	34	0.	*	1	0119	80	0.	*	1	0205	126	0.	*	1	0251	172	1.
1	0034	35	0.	*	1	0120	81	0.	*	1	0206	127	0.	*	1	0252	173	1.
1	0035	36	0.	*	1	0121	82	0.	*	1	0207	128	0.	*	1	0253	174	1.
1	0036	37	0.	*	1	0122	83	0.	*	1	0208	129	0.	*	1	0254	175	1.
1	0037	38	0.	*	1	0123	84	0.	*	1	0209	130	0.	*	1	0255	176	1.
1	0038	39	0.	*	1	0124	85	0.	*	1	0210	131	0.	*	1	0256	177	1.
1	0039	40	0.	*	1	0125	86	0.	*	1	0211	132	2.	*	1	0257	178	1.
1	0040	41	0.	*	1	0126	87	0.	*	1	0212	133	3.	*	1	0258	179	1.
1	0041	42	0.	*	1	0127	88	0.	*	1	0213	134	2.	*	1	0259	180	1.
1	0042	43	0.	*	1	0128	89	0.	*	1	0214	135	2.	*	1	0300	181	1.
1	0043	44	0.	*	1	0129	90	0.	*	1	0215	136	2.	*				
1	0044	45	0.	*	1	0130	91	0.	*	1	0216	137	2.	*				
1	0045	46	0.	*	1	0131	92	0.	*	1	0217	138	2.	*				

PEAK FLOW	TIME	MAXIMUM AVERAGE FLOW			
(CFS)	(HR)	6-HR	24-HR	72-HR	3.00-HR
+	3.	2.20	0.	0.	0.
		(CFS)	0.	0.	0.
		(INCHES)	.083	.083	.083
		(AC-FT)	0.	0.	0.
CUMULATIVE AREA =		.02 SQ MI			

*** **

```

*****
*          *
65 KK    * C1 *
*          *
*****
COMBINE RE1 - RE5

```

```

67 HC    HYDROGRAPH COMBINATION
        ICOMP      5  NUMBER OF HYDROGRAPHS TO COMBINE

```

```

HYDROGRAPH AT STATION      C1
SUM OF 5 HYDROGRAPHS
PLAN 1,  RATIO = 1.00

```

DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*
1	0000	1	0.	*	1	0046	47	0.	*	1	0132	93	0.	*	1	0218	139	54.					
1	0001	2	0.	*	1	0047	48	0.	*	1	0133	94	0.	*	1	0219	140	52.					
1	0002	3	0.	*	1	0048	49	0.	*	1	0134	95	0.	*	1	0220	141	51.					
1	0003	4	0.	*	1	0049	50	0.	*	1	0135	96	0.	*	1	0221	142	50.					
1	0004	5	0.	*	1	0050	51	0.	*	1	0136	97	9.	*	1	0222	143	49.					
1	0005	6	0.	*	1	0051	52	0.	*	1	0137	98	54.	*	1	0223	144	47.					

pre.out																		
1	0006	7	0.	*	1	0052	53	0.	*	1	0138	99	78.	*	1	0224	145	46.
1	0007	8	0.	*	1	0053	54	0.	*	1	0139	100	75.	*	1	0225	146	45.
1	0008	9	0.	*	1	0054	55	0.	*	1	0140	101	79.	*	1	0226	147	44.
1	0009	10	0.	*	1	0055	56	0.	*	1	0141	102	88.	*	1	0227	148	43.
1	0010	11	0.	*	1	0056	57	0.	*	1	0142	103	89.	*	1	0228	149	41.
1	0011	12	0.	*	1	0057	58	0.	*	1	0143	104	87.	*	1	0229	150	40.
1	0012	13	0.	*	1	0058	59	0.	*	1	0144	105	86.	*	1	0230	151	39.
1	0013	14	0.	*	1	0059	60	0.	*	1	0145	106	86.	*	1	0231	152	38.
1	0014	15	0.	*	1	0100	61	0.	*	1	0146	107	85.	*	1	0232	153	37.
1	0015	16	0.	*	1	0101	62	0.	*	1	0147	108	84.	*	1	0233	154	36.
1	0016	17	0.	*	1	0102	63	0.	*	1	0148	109	82.	*	1	0234	155	35.
1	0017	18	0.	*	1	0103	64	0.	*	1	0149	110	81.	*	1	0235	156	34.
1	0018	19	0.	*	1	0104	65	0.	*	1	0150	111	79.	*	1	0236	157	33.
1	0019	20	0.	*	1	0105	66	0.	*	1	0151	112	78.	*	1	0237	158	32.
1	0020	21	0.	*	1	0106	67	0.	*	1	0152	113	76.	*	1	0238	159	31.
1	0021	22	0.	*	1	0107	68	0.	*	1	0153	114	75.	*	1	0239	160	30.
1	0022	23	0.	*	1	0108	69	0.	*	1	0154	115	73.	*	1	0240	161	30.
1	0023	24	0.	*	1	0109	70	0.	*	1	0155	116	72.	*	1	0241	162	29.
1	0024	25	0.	*	1	0110	71	0.	*	1	0156	117	71.	*	1	0242	163	28.
1	0025	26	0.	*	1	0111	72	0.	*	1	0157	118	72.	*	1	0243	164	27.
1	0026	27	0.	*	1	0112	73	0.	*	1	0158	119	72.	*	1	0244	165	26.
1	0027	28	0.	*	1	0113	74	0.	*	1	0159	120	70.	*	1	0245	166	26.
1	0028	29	0.	*	1	0114	75	0.	*	1	0200	121	68.	*	1	0246	167	25.
1	0029	30	0.	*	1	0115	76	0.	*	1	0201	122	67.	*	1	0247	168	24.
1	0030	31	0.	*	1	0116	77	0.	*	1	0202	123	65.	*	1	0248	169	24.
1	0031	32	0.	*	1	0117	78	0.	*	1	0203	124	63.	*	1	0249	170	23.
1	0032	33	0.	*	1	0118	79	0.	*	1	0204	125	62.	*	1	0250	171	22.
1	0033	34	0.	*	1	0119	80	0.	*	1	0205	126	61.	*	1	0251	172	22.
1	0034	35	0.	*	1	0120	81	0.	*	1	0206	127	64.	*	1	0252	173	21.
1	0035	36	0.	*	1	0121	82	0.	*	1	0207	128	66.	*	1	0253	174	21.
1	0036	37	0.	*	1	0122	83	0.	*	1	0208	129	64.	*	1	0254	175	20.
1	0037	38	0.	*	1	0123	84	0.	*	1	0209	130	61.	*	1	0255	176	19.
1	0038	39	0.	*	1	0124	85	0.	*	1	0210	131	60.	*	1	0256	177	19.
1	0039	40	0.	*	1	0125	86	0.	*	1	0211	132	59.	*	1	0257	178	18.
1	0040	41	0.	*	1	0126	87	0.	*	1	0212	133	58.	*	1	0258	179	18.
1	0041	42	0.	*	1	0127	88	0.	*	1	0213	134	56.	*	1	0259	180	18.
1	0042	43	0.	*	1	0128	89	0.	*	1	0214	135	55.	*	1	0300	181	17.
1	0043	44	0.	*	1	0129	90	0.	*	1	0215	136	54.	*				
1	0044	45	0.	*	1	0130	91	0.	*	1	0216	137	55.	*				
1	0045	46	0.	*	1	0131	92	0.	*	1	0217	138	56.	*				

PEAK FLOW + (CFS)	TIME (HR)	MAXIMUM AVERAGE FLOW			
		6-HR	24-HR	72-HR	3.00-HR
+ 89.	1.70	24.	24.	24.	24.
		(INCHES) .404	.404	.404	.404
		(AC-FT) 6.	6.	6.	6.
CUMULATIVE AREA =		.27 SQ MI			

HYDROGRAPH AT STATION C1
SUM OF 5 HYDROGRAPHS
PLAN 1, RATIO = .61

DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*
1	0000	1	0.	*	1	0046	47	0.	*	1	0132	93	0.	*	1	0218	139	16.					
1	0001	2	0.	*	1	0047	48	0.	*	1	0133	94	0.	*	1	0219	140	16.					
1	0002	3	0.	*	1	0048	49	0.	*	1	0134	95	0.	*	1	0220	141	16.					
1	0003	4	0.	*	1	0049	50	0.	*	1	0135	96	0.	*	1	0221	142	16.					
1	0004	5	0.	*	1	0050	51	0.	*	1	0136	97	0.	*	1	0222	143	15.					
1	0005	6	0.	*	1	0051	52	0.	*	1	0137	98	0.	*	1	0223	144	15.					
1	0006	7	0.	*	1	0052	53	0.	*	1	0138	99	0.	*	1	0224	145	15.					
1	0007	8	0.	*	1	0053	54	0.	*	1	0139	100	0.	*	1	0225	146	15.					
1	0008	9	0.	*	1	0054	55	0.	*	1	0140	101	0.	*	1	0226	147	14.					
1	0009	10	0.	*	1	0055	56	0.	*	1	0141	102	0.	*	1	0227	148	14.					
1	0010	11	0.	*	1	0056	57	0.	*	1	0142	103	0.	*	1	0228	149	14.					
1	0011	12	0.	*	1	0057	58	0.	*	1	0143	104	0.	*	1	0229	150	13.					
1	0012	13	0.	*	1	0058	59	0.	*	1	0144	105	0.	*	1	0230	151	13.					
1	0013	14	0.	*	1	0059	60	0.	*	1	0145	106	0.	*	1	0231	152	13.					
1	0014	15	0.	*	1	0100	61	0.	*	1	0146	107	0.	*	1	0232	153	13.					
1	0015	16	0.	*	1	0101	62	0.	*	1	0147	108	0.	*	1	0233	154	12.					
1	0016	17	0.	*	1	0102	63	0.	*	1	0148	109	0.	*	1	0234	155	12.					
1	0017	18	0.	*	1	0103	64	0.	*	1	0149	110	0.	*	1	0235	156	12.					
1	0018	19	0.	*	1	0104	65	0.	*	1	0150	111	0.	*	1	0236	157	12.					
1	0019	20	0.	*	1	0105	66	0.	*	1	0151	112	0.	*	1	0237	158	12.					
1	0020	21	0.	*	1	0106	67	0.	*	1	0152	113	0.	*	1	0238	159	12.					
1	0021	22	0.	*	1	0107	68	0.	*	1	0153	114	0.	*	1	0239	160	12.					
1	0022	23	0.	*	1	0108	69	0.	*	1	0154	115	0.	*	1	0240	161	11.					
1	0023	24	0.	*	1	0109	70	0.	*	1	0155	116	0.	*	1	0241	162	11.					
1	0024	25	0.	*	1	0110	71	0.	*	1	0156	117	0.	*	1	0242	163	11.					
1	0025	26	0.	*	1	0111	72	0.	*	1	0157	118	0.	*	1	0243	164	11.					

978.	929.	875.	819.	753.	688.	634.	579.	536.	498.
463.	430.	399.	371.	344.	324.	304.	284.	265.	246.
230.	214.	197.	181.	170.	159.	148.	137.	127.	119.
111.	103.	95.	89.	83.	77.	71.	66.	62.	57.
53.	49.	46.	43.	40.	37.	35.	32.	30.	28.
26.	24.	23.	21.	19.	18.	17.	16.	15.	14.
13.	12.	12.	11.	10.	10.	9.	8.	8.	7.
6.	6.	5.	5.	4.	4.	3.	3.	2.	1.
1.	0.								

pre.out

HYDROGRAPH AT STATION BE6

DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	*	DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
1		0000	1	.00	.00	.00	0.	*	1		0131	92	.00	.00	.00	184.
1		0001	2	.00	.00	.00	0.	*	1		0132	93	.00	.00	.00	179.
1		0002	3	.00	.00	.00	0.	*	1		0133	94	.00	.00	.00	175.
1		0003	4	.00	.00	.00	0.	*	1		0134	95	.00	.00	.00	170.
1		0004	5	.00	.00	.00	0.	*	1		0135	96	.00	.00	.00	166.
1		0005	6	.00	.00	.00	0.	*	1		0136	97	.00	.00	.00	161.
1		0006	7	.00	.00	.00	0.	*	1		0137	98	.00	.00	.00	156.
1		0007	8	.00	.00	.00	0.	*	1		0138	99	.00	.00	.00	152.
1		0008	9	.00	.00	.00	0.	*	1		0139	100	.00	.00	.00	147.
1		0009	10	.00	.00	.00	0.	*	1		0140	101	.00	.00	.00	143.
1		0010	11	.00	.00	.00	0.	*	1		0141	102	.00	.00	.00	138.
1		0011	12	.00	.00	.00	0.	*	1		0142	103	.00	.00	.00	134.
1		0012	13	.00	.00	.00	0.	*	1		0143	104	.00	.00	.00	129.
1		0013	14	.00	.00	.00	0.	*	1		0144	105	.00	.00	.00	125.
1		0014	15	.00	.00	.00	0.	*	1		0145	106	.00	.00	.00	120.
1		0015	16	.00	.00	.00	0.	*	1		0146	107	.00	.00	.00	115.
1		0016	17	.00	.00	.00	0.	*	1		0147	108	.00	.00	.00	111.
1		0017	18	.00	.00	.00	0.	*	1		0148	109	.00	.00	.00	106.
1		0018	19	.00	.00	.00	0.	*	1		0149	110	.00	.00	.00	102.
1		0019	20	.00	.00	.00	0.	*	1		0150	111	.00	.00	.00	98.
1		0020	21	.00	.00	.00	0.	*	1		0151	112	.00	.00	.00	94.
1		0021	22	.00	.00	.00	0.	*	1		0152	113	.00	.00	.00	89.
1		0022	23	.00	.00	.00	0.	*	1		0153	114	.00	.00	.00	86.
1		0023	24	.00	.00	.00	0.	*	1		0154	115	.00	.00	.00	82.
1		0024	25	.00	.00	.00	0.	*	1		0155	116	.00	.00	.00	78.
1		0025	26	.00	.00	.00	0.	*	1		0156	117	.00	.00	.00	74.
1		0026	27	.00	.00	.00	0.	*	1		0157	118	.00	.00	.00	71.
1		0027	28	.00	.00	.00	0.	*	1		0158	119	.00	.00	.00	68.
1		0028	29	.00	.00	.00	0.	*	1		0159	120	.00	.00	.00	65.
1		0029	30	.00	.00	.00	0.	*	1		0200	121	.00	.00	.00	62.
1		0030	31	.00	.00	.00	0.	*	1		0201	122	.00	.00	.00	59.
1		0031	32	.11	.11	.00	0.	*	1		0202	123	.00	.00	.00	57.
1		0032	33	.11	.11	.00	0.	*	1		0203	124	.00	.00	.00	54.
1		0033	34	.11	.11	.00	0.	*	1		0204	125	.00	.00	.00	52.
1		0034	35	.11	.11	.00	0.	*	1		0205	126	.00	.00	.00	50.
1		0035	36	.11	.11	.00	0.	*	1		0206	127	.00	.00	.00	48.
1		0036	37	.09	.09	.00	0.	*	1		0207	128	.00	.00	.00	46.
1		0037	38	.09	.09	.00	0.	*	1		0208	129	.00	.00	.00	45.
1		0038	39	.09	.08	.00	0.	*	1		0209	130	.00	.00	.00	43.
1		0039	40	.09	.08	.01	0.	*	1		0210	131	.00	.00	.00	42.
1		0040	41	.09	.08	.01	1.	*	1		0211	132	.00	.00	.00	41.
1		0041	42	.06	.05	.01	1.	*	1		0212	133	.00	.00	.00	40.
1		0042	43	.06	.05	.01	3.	*	1		0213	134	.00	.00	.00	38.
1		0043	44	.06	.05	.01	4.	*	1		0214	135	.00	.00	.00	37.
1		0044	45	.06	.05	.01	7.	*	1		0215	136	.00	.00	.00	36.
1		0045	46	.06	.05	.02	10.	*	1		0216	137	.00	.00	.00	36.
1		0046	47	.04	.03	.01	13.	*	1		0217	138	.00	.00	.00	35.
1		0047	48	.04	.03	.01	18.	*	1		0218	139	.00	.00	.00	34.
1		0048	49	.04	.03	.01	23.	*	1		0219	140	.00	.00	.00	33.
1		0049	50	.04	.03	.01	30.	*	1		0220	141	.00	.00	.00	33.
1		0050	51	.04	.03	.01	38.	*	1		0221	142	.00	.00	.00	32.
1		0051	52	.02	.02	.01	47.	*	1		0222	143	.00	.00	.00	31.
1		0052	53	.02	.02	.01	57.	*	1		0223	144	.00	.00	.00	31.
1		0053	54	.02	.02	.01	67.	*	1		0224	145	.00	.00	.00	30.
1		0054	55	.02	.02	.01	79.	*	1		0225	146	.00	.00	.00	30.
1		0055	56	.02	.02	.01	92.	*	1		0226	147	.00	.00	.00	29.
1		0056	57	.02	.01	.01	104.	*	1		0227	148	.00	.00	.00	29.
1		0057	58	.02	.01	.01	118.	*	1		0228	149	.00	.00	.00	29.
1		0058	59	.02	.01	.01	131.	*	1		0229	150	.00	.00	.00	28.
1		0059	60	.02	.01	.01	144.	*	1		0230	151	.00	.00	.00	28.
1		0100	61	.02	.01	.01	157.	*	1		0231	152	.00	.00	.00	28.
1		0101	62	.01	.01	.01	169.	*	1		0232	153	.00	.00	.00	27.
1		0102	63	.01	.01	.01	181.	*	1		0233	154	.00	.00	.00	27.
1		0103	64	.01	.01	.01	192.	*	1		0234	155	.00	.00	.00	27.
1		0104	65	.01	.01	.01	202.	*	1		0235	156	.00	.00	.00	26.
1		0105	66	.01	.01	.01	211.	*	1		0236	157	.00	.00	.00	26.
1		0106	67	.01	.01	.00	219.	*	1		0237	158	.00	.00	.00	26.
1		0107	68	.01	.01	.00	227.	*	1		0238	159	.00	.00	.00	26.
1		0108	69	.01	.01	.00	233.	*	1		0239	160	.00	.00	.00	26.
1		0109	70	.01	.01	.00	238.	*	1		0240	161	.00	.00	.00	25.
1		0110	71	.01	.01	.00	243.	*	1		0241	162	.00	.00	.00	25.
1		0111	72	.01	.00	.00	246.	*	1		0242	163	.00	.00	.00	25.

pre.out														
1	0112	73	.01	.00	.00	248.	*	1	0243	164	.00	.00	.00	25.
1	0113	74	.01	.00	.00	250.	*	1	0244	165	.00	.00	.00	25.
1	0114	75	.01	.00	.00	250.	*	1	0245	166	.00	.00	.00	25.
1	0115	76	.01	.00	.00	249.	*	1	0246	167	.00	.00	.00	25.
1	0116	77	.01	.00	.00	248.	*	1	0247	168	.00	.00	.00	25.
1	0117	78	.01	.00	.00	245.	*	1	0248	169	.00	.00	.00	25.
1	0118	79	.01	.00	.00	243.	*	1	0249	170	.00	.00	.00	25.
1	0119	80	.01	.00	.00	239.	*	1	0250	171	.00	.00	.00	24.
1	0120	81	.01	.00	.00	235.	*	1	0251	172	.00	.00	.00	24.
1	0121	82	.01	.00	.00	231.	*	1	0252	173	.00	.00	.00	24.
1	0122	83	.01	.00	.00	227.	*	1	0253	174	.00	.00	.00	24.
1	0123	84	.01	.00	.00	222.	*	1	0254	175	.00	.00	.00	24.
1	0124	85	.01	.00	.00	218.	*	1	0255	176	.00	.00	.00	24.
1	0125	86	.01	.00	.00	213.	*	1	0256	177	.00	.00	.00	24.
1	0126	87	.01	.00	.00	208.	*	1	0257	178	.00	.00	.00	24.
1	0127	88	.01	.00	.00	203.	*	1	0258	179	.00	.00	.00	24.
1	0128	89	.01	.00	.00	198.	*	1	0259	180	.00	.00	.00	24.
1	0129	90	.01	.00	.00	194.	*	1	0300	181	.00	.00	.00	24.
1	0130	91	.01	.00	.00	189.	*							

TOTAL RAINFALL = 2.13, TOTAL LOSS = 1.75, TOTAL EXCESS = .38

PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW		
(CFS)	(HR)	(CFS)	6-HR	24-HR	72-HR
250.	1.23		74.	74.	74.
		(INCHES)	.361	.361	.361
		(AC-FT)	18.	18.	18.

CUMULATIVE AREA = .95 SQ MI

HYDROGRAPH AT STATION BE6
PLAN 1, RATIO = 1.00

DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	*	DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
1	0000	1	.00	.00	.00	0.	0.	*	1	0131	92	.00	.00	.00	184.	
1	0001	2	.00	.00	.00	0.	0.	*	1	0132	93	.00	.00	.00	179.	
1	0002	3	.00	.00	.00	0.	0.	*	1	0133	94	.00	.00	.00	175.	
1	0003	4	.00	.00	.00	0.	0.	*	1	0134	95	.00	.00	.00	170.	
1	0004	5	.00	.00	.00	0.	0.	*	1	0135	96	.00	.00	.00	166.	
1	0005	6	.00	.00	.00	0.	0.	*	1	0136	97	.00	.00	.00	161.	
1	0006	7	.00	.00	.00	0.	0.	*	1	0137	98	.00	.00	.00	156.	
1	0007	8	.00	.00	.00	0.	0.	*	1	0138	99	.00	.00	.00	152.	
1	0008	9	.00	.00	.00	0.	0.	*	1	0139	100	.00	.00	.00	147.	
1	0009	10	.00	.00	.00	0.	0.	*	1	0140	101	.00	.00	.00	143.	
1	0010	11	.00	.00	.00	0.	0.	*	1	0141	102	.00	.00	.00	138.	
1	0011	12	.00	.00	.00	0.	0.	*	1	0142	103	.00	.00	.00	134.	
1	0012	13	.00	.00	.00	0.	0.	*	1	0143	104	.00	.00	.00	129.	
1	0013	14	.00	.00	.00	0.	0.	*	1	0144	105	.00	.00	.00	125.	
1	0014	15	.00	.00	.00	0.	0.	*	1	0145	106	.00	.00	.00	120.	
1	0015	16	.00	.00	.00	0.	0.	*	1	0146	107	.00	.00	.00	115.	
1	0016	17	.00	.00	.00	0.	0.	*	1	0147	108	.00	.00	.00	111.	
1	0017	18	.00	.00	.00	0.	0.	*	1	0148	109	.00	.00	.00	106.	
1	0018	19	.00	.00	.00	0.	0.	*	1	0149	110	.00	.00	.00	102.	
1	0019	20	.00	.00	.00	0.	0.	*	1	0150	111	.00	.00	.00	98.	
1	0020	21	.00	.00	.00	0.	0.	*	1	0151	112	.00	.00	.00	94.	
1	0021	22	.00	.00	.00	0.	0.	*	1	0152	113	.00	.00	.00	89.	
1	0022	23	.00	.00	.00	0.	0.	*	1	0153	114	.00	.00	.00	86.	
1	0023	24	.00	.00	.00	0.	0.	*	1	0154	115	.00	.00	.00	82.	
1	0024	25	.00	.00	.00	0.	0.	*	1	0155	116	.00	.00	.00	78.	
1	0025	26	.00	.00	.00	0.	0.	*	1	0156	117	.00	.00	.00	74.	
1	0026	27	.00	.00	.00	0.	0.	*	1	0157	118	.00	.00	.00	71.	
1	0027	28	.00	.00	.00	0.	0.	*	1	0158	119	.00	.00	.00	68.	
1	0028	29	.00	.00	.00	0.	0.	*	1	0159	120	.00	.00	.00	65.	
1	0029	30	.00	.00	.00	0.	0.	*	1	0200	121	.00	.00	.00	62.	
1	0030	31	.00	.00	.00	0.	0.	*	1	0201	122	.00	.00	.00	59.	
1	0031	32	.11	.11	.00	0.	0.	*	1	0202	123	.00	.00	.00	57.	
1	0032	33	.11	.11	.00	0.	0.	*	1	0203	124	.00	.00	.00	54.	
1	0033	34	.11	.11	.00	0.	0.	*	1	0204	125	.00	.00	.00	52.	
1	0034	35	.11	.11	.00	0.	0.	*	1	0205	126	.00	.00	.00	50.	
1	0035	36	.11	.11	.00	0.	0.	*	1	0206	127	.00	.00	.00	48.	
1	0036	37	.09	.09	.00	0.	0.	*	1	0207	128	.00	.00	.00	46.	
1	0037	38	.09	.09	.00	0.	0.	*	1	0208	129	.00	.00	.00	45.	
1	0038	39	.09	.08	.00	0.	0.	*	1	0209	130	.00	.00	.00	43.	
1	0039	40	.09	.08	.01	0.	0.	*	1	0210	131	.00	.00	.00	42.	
1	0040	41	.09	.08	.01	1.	1.	*	1	0211	132	.00	.00	.00	41.	
1	0041	42	.06	.05	.01	1.	1.	*	1	0212	133	.00	.00	.00	40.	
1	0042	43	.06	.05	.01	3.	3.	*	1	0213	134	.00	.00	.00	38.	
1	0043	44	.06	.05	.01	4.	4.	*	1	0214	135	.00	.00	.00	37.	
1	0044	45	.06	.05	.01	7.	7.	*	1	0215	136	.00	.00	.00	36.	
1	0045	46	.06	.05	.02	10.	10.	*	1	0216	137	.00	.00	.00	36.	

pre.out														
1	0046	47	.04	.03	.01	13.	*	1	0217	138	.00	.00	.00	35.
1	0047	48	.04	.03	.01	18.	*	1	0218	139	.00	.00	.00	34.
1	0048	49	.04	.03	.01	23.	*	1	0219	140	.00	.00	.00	33.
1	0049	50	.04	.03	.01	30.	*	1	0220	141	.00	.00	.00	33.
1	0050	51	.04	.03	.01	38.	*	1	0221	142	.00	.00	.00	32.
1	0051	52	.02	.02	.01	47.	*	1	0222	143	.00	.00	.00	31.
1	0052	53	.02	.02	.01	57.	*	1	0223	144	.00	.00	.00	31.
1	0053	54	.02	.02	.01	67.	*	1	0224	145	.00	.00	.00	30.
1	0054	55	.02	.02	.01	79.	*	1	0225	146	.00	.00	.00	30.
1	0055	56	.02	.02	.01	92.	*	1	0226	147	.00	.00	.00	29.
1	0056	57	.02	.01	.01	104.	*	1	0227	148	.00	.00	.00	29.
1	0057	58	.02	.01	.01	118.	*	1	0228	149	.00	.00	.00	29.
1	0058	59	.02	.01	.01	131.	*	1	0229	150	.00	.00	.00	28.
1	0059	60	.02	.01	.01	144.	*	1	0230	151	.00	.00	.00	28.
1	0100	61	.02	.01	.01	157.	*	1	0231	152	.00	.00	.00	28.
1	0101	62	.01	.01	.01	169.	*	1	0232	153	.00	.00	.00	27.
1	0102	63	.01	.01	.01	181.	*	1	0233	154	.00	.00	.00	27.
1	0103	64	.01	.01	.01	192.	*	1	0234	155	.00	.00	.00	27.
1	0104	65	.01	.01	.01	202.	*	1	0235	156	.00	.00	.00	26.
1	0105	66	.01	.01	.01	211.	*	1	0236	157	.00	.00	.00	26.
1	0106	67	.01	.01	.00	219.	*	1	0237	158	.00	.00	.00	26.
1	0107	68	.01	.01	.00	227.	*	1	0238	159	.00	.00	.00	26.
1	0108	69	.01	.01	.00	233.	*	1	0239	160	.00	.00	.00	26.
1	0109	70	.01	.01	.00	238.	*	1	0240	161	.00	.00	.00	25.
1	0110	71	.01	.01	.00	243.	*	1	0241	162	.00	.00	.00	25.
1	0111	72	.01	.00	.00	246.	*	1	0242	163	.00	.00	.00	25.
1	0112	73	.01	.00	.00	248.	*	1	0243	164	.00	.00	.00	25.
1	0113	74	.01	.00	.00	250.	*	1	0244	165	.00	.00	.00	25.
1	0114	75	.01	.00	.00	250.	*	1	0245	166	.00	.00	.00	25.
1	0115	76	.01	.00	.00	249.	*	1	0246	167	.00	.00	.00	25.
1	0116	77	.01	.00	.00	248.	*	1	0247	168	.00	.00	.00	25.
1	0117	78	.01	.00	.00	245.	*	1	0248	169	.00	.00	.00	25.
1	0118	79	.01	.00	.00	243.	*	1	0249	170	.00	.00	.00	25.
1	0119	80	.01	.00	.00	239.	*	1	0250	171	.00	.00	.00	24.
1	0120	81	.01	.00	.00	235.	*	1	0251	172	.00	.00	.00	24.
1	0121	82	.01	.00	.00	231.	*	1	0252	173	.00	.00	.00	24.
1	0122	83	.01	.00	.00	227.	*	1	0253	174	.00	.00	.00	24.
1	0123	84	.01	.00	.00	222.	*	1	0254	175	.00	.00	.00	24.
1	0124	85	.01	.00	.00	218.	*	1	0255	176	.00	.00	.00	24.
1	0125	86	.01	.00	.00	213.	*	1	0256	177	.00	.00	.00	24.
1	0126	87	.01	.00	.00	208.	*	1	0257	178	.00	.00	.00	24.
1	0127	88	.01	.00	.00	203.	*	1	0258	179	.00	.00	.00	24.
1	0128	89	.01	.00	.00	198.	*	1	0259	180	.00	.00	.00	24.
1	0129	90	.01	.00	.00	194.	*	1	0300	181	.00	.00	.00	24.
1	0130	91	.01	.00	.00	189.	*							

TOTAL RAINFALL = 2.13, TOTAL LOSS = 1.75, TOTAL EXCESS = .38

PEAK FLOW	TIME	MAXIMUM AVERAGE FLOW			
(CFS)	(HR)	6-HR	24-HR	72-HR	3.00-HR
+	250.	74.	74.	74.	74.
	1.23	.361	.361	.361	.361
		(INCHES)			
		(AC-FT)	18.	18.	18.

CUMULATIVE AREA = .95 SQ MI

HYDROGRAPH AT STATION BE6
PLAN 1, RATIO = .61

DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	*	DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
1	0000	1	.00	.00	.00	0.	*		1	0131	92	.00	.00	.00	39.	
1	0001	2	.00	.00	.00	0.	*		1	0132	93	.00	.00	.00	38.	
1	0002	3	.00	.00	.00	0.	*		1	0133	94	.00	.00	.00	38.	
1	0003	4	.00	.00	.00	0.	*		1	0134	95	.00	.00	.00	37.	
1	0004	5	.00	.00	.00	0.	*		1	0135	96	.00	.00	.00	37.	
1	0005	6	.00	.00	.00	0.	*		1	0136	97	.00	.00	.00	36.	
1	0006	7	.00	.00	.00	0.	*		1	0137	98	.00	.00	.00	35.	
1	0007	8	.00	.00	.00	0.	*		1	0138	99	.00	.00	.00	35.	
1	0008	9	.00	.00	.00	0.	*		1	0139	100	.00	.00	.00	34.	
1	0009	10	.00	.00	.00	0.	*		1	0140	101	.00	.00	.00	33.	
1	0010	11	.00	.00	.00	0.	*		1	0141	102	.00	.00	.00	33.	
1	0011	12	.00	.00	.00	0.	*		1	0142	103	.00	.00	.00	32.	
1	0012	13	.00	.00	.00	0.	*		1	0143	104	.00	.00	.00	31.	
1	0013	14	.00	.00	.00	0.	*		1	0144	105	.00	.00	.00	30.	
1	0014	15	.00	.00	.00	0.	*		1	0145	106	.00	.00	.00	29.	
1	0015	16	.00	.00	.00	0.	*		1	0146	107	.00	.00	.00	28.	
1	0016	17	.00	.00	.00	0.	*		1	0147	108	.00	.00	.00	27.	
1	0017	18	.00	.00	.00	0.	*		1	0148	109	.00	.00	.00	26.	
1	0018	19	.00	.00	.00	0.	*		1	0149	110	.00	.00	.00	25.	
1	0019	20	.00	.00	.00	0.	*		1	0150	111	.00	.00	.00	24.	

														pre.out			
1	0020	21	.00	.00	.00	0.	*	1	0151	112	.00	.00	.00	23.			
1	0021	22	.00	.00	.00	0.	*	1	0152	113	.00	.00	.00	23.			
1	0022	23	.00	.00	.00	0.	*	1	0153	114	.00	.00	.00	22.			
1	0023	24	.00	.00	.00	0.	*	1	0154	115	.00	.00	.00	21.			
1	0024	25	.00	.00	.00	0.	*	1	0155	116	.00	.00	.00	20.			
1	0025	26	.00	.00	.00	0.	*	1	0156	117	.00	.00	.00	19.			
1	0026	27	.00	.00	.00	0.	*	1	0157	118	.00	.00	.00	18.			
1	0027	28	.00	.00	.00	0.	*	1	0158	119	.00	.00	.00	18.			
1	0028	29	.00	.00	.00	0.	*	1	0159	120	.00	.00	.00	17.			
1	0029	30	.00	.00	.00	0.	*	1	0200	121	.00	.00	.00	16.			
1	0030	31	.00	.00	.00	0.	*	1	0201	122	.00	.00	.00	15.			
1	0031	32	.07	.07	.00	0.	*	1	0202	123	.00	.00	.00	15.			
1	0032	33	.07	.07	.00	0.	*	1	0203	124	.00	.00	.00	14.			
1	0033	34	.07	.07	.00	0.	*	1	0204	125	.00	.00	.00	14.			
1	0034	35	.07	.07	.00	0.	*	1	0205	126	.00	.00	.00	13.			
1	0035	36	.07	.07	.00	0.	*	1	0206	127	.00	.00	.00	13.			
1	0036	37	.05	.05	.00	0.	*	1	0207	128	.00	.00	.00	12.			
1	0037	38	.05	.05	.00	0.	*	1	0208	129	.00	.00	.00	12.			
1	0038	39	.05	.05	.00	0.	*	1	0209	130	.00	.00	.00	12.			
1	0039	40	.05	.05	.00	0.	*	1	0210	131	.00	.00	.00	11.			
1	0040	41	.05	.05	.00	0.	*	1	0211	132	.00	.00	.00	11.			
1	0041	42	.04	.04	.00	0.	*	1	0212	133	.00	.00	.00	11.			
1	0042	43	.04	.04	.00	0.	*	1	0213	134	.00	.00	.00	11.			
1	0043	44	.04	.04	.00	0.	*	1	0214	135	.00	.00	.00	10.			
1	0044	45	.04	.04	.00	0.	*	1	0215	136	.00	.00	.00	10.			
1	0045	46	.04	.04	.00	0.	*	1	0216	137	.00	.00	.00	10.			
1	0046	47	.02	.02	.00	0.	*	1	0217	138	.00	.00	.00	10.			
1	0047	48	.02	.02	.00	0.	*	1	0218	139	.00	.00	.00	9.			
1	0048	49	.02	.02	.00	0.	*	1	0219	140	.00	.00	.00	9.			
1	0049	50	.02	.02	.00	1.	*	1	0220	141	.00	.00	.00	9.			
1	0050	51	.02	.02	.00	1.	*	1	0221	142	.00	.00	.00	9.			
1	0051	52	.01	.01	.00	1.	*	1	0222	143	.00	.00	.00	9.			
1	0052	53	.01	.01	.00	2.	*	1	0223	144	.00	.00	.00	9.			
1	0053	54	.01	.01	.00	2.	*	1	0224	145	.00	.00	.00	9.			
1	0054	55	.01	.01	.00	3.	*	1	0225	146	.00	.00	.00	9.			
1	0055	56	.01	.01	.00	4.	*	1	0226	147	.00	.00	.00	8.			
1	0056	57	.01	.01	.00	5.	*	1	0227	148	.00	.00	.00	8.			
1	0057	58	.01	.01	.00	6.	*	1	0228	149	.00	.00	.00	8.			
1	0058	59	.01	.01	.00	8.	*	1	0229	150	.00	.00	.00	8.			
1	0059	60	.01	.01	.00	9.	*	1	0230	151	.00	.00	.00	8.			
1	0100	61	.01	.01	.00	11.	*	1	0231	152	.00	.00	.00	8.			
1	0101	62	.01	.01	.00	13.	*	1	0232	153	.00	.00	.00	8.			
1	0102	63	.01	.01	.00	14.	*	1	0233	154	.00	.00	.00	8.			
1	0103	64	.01	.01	.00	16.	*	1	0234	155	.00	.00	.00	8.			
1	0104	65	.01	.01	.00	18.	*	1	0235	156	.00	.00	.00	8.			
1	0105	66	.01	.01	.00	20.	*	1	0236	157	.00	.00	.00	8.			
1	0106	67	.01	.01	.00	22.	*	1	0237	158	.00	.00	.00	8.			
1	0107	68	.01	.01	.00	24.	*	1	0238	159	.00	.00	.00	8.			
1	0108	69	.01	.01	.00	26.	*	1	0239	160	.00	.00	.00	8.			
1	0109	70	.01	.01	.00	28.	*	1	0240	161	.00	.00	.00	8.			
1	0110	71	.01	.01	.00	30.	*	1	0241	162	.00	.00	.00	8.			
1	0111	72	.00	.00	.00	31.	*	1	0242	163	.00	.00	.00	8.			
1	0112	73	.00	.00	.00	33.	*	1	0243	164	.00	.00	.00	8.			
1	0113	74	.00	.00	.00	34.	*	1	0244	165	.00	.00	.00	7.			
1	0114	75	.00	.00	.00	35.	*	1	0245	166	.00	.00	.00	7.			
1	0115	76	.00	.00	.00	37.	*	1	0246	167	.00	.00	.00	7.			
1	0116	77	.00	.00	.00	38.	*	1	0247	168	.00	.00	.00	7.			
1	0117	78	.00	.00	.00	38.	*	1	0248	169	.00	.00	.00	7.			
1	0118	79	.00	.00	.00	39.	*	1	0249	170	.00	.00	.00	7.			
1	0119	80	.00	.00	.00	40.	*	1	0250	171	.00	.00	.00	7.			
1	0120	81	.00	.00	.00	40.	*	1	0251	172	.00	.00	.00	7.			
1	0121	82	.00	.00	.00	41.	*	1	0252	173	.00	.00	.00	7.			
1	0122	83	.00	.00	.00	41.	*	1	0253	174	.00	.00	.00	7.			
1	0123	84	.00	.00	.00	41.	*	1	0254	175	.00	.00	.00	7.			
1	0124	85	.00	.00	.00	41.	*	1	0255	176	.00	.00	.00	7.			
1	0125	86	.00	.00	.00	41.	*	1	0256	177	.00	.00	.00	7.			
1	0126	87	.00	.00	.00	40.	*	1	0257	178	.00	.00	.00	7.			
1	0127	88	.00	.00	.00	40.	*	1	0258	179	.00	.00	.00	7.			
1	0128	89	.00	.00	.00	40.	*	1	0259	180	.00	.00	.00	7.			
1	0129	90	.00	.00	.00	40.	*	1	0300	181	.00	.00	.00	7.			
1	0130	91	.00	.00	.00	39.	*										

TOTAL RAINFALL = 1.29, TOTAL LOSS = 1.22, TOTAL EXCESS = .07

+ (CFS)	TIME (HR)	(CFS)	MAXIMUM AVERAGE FLOW			
			6-HR	24-HR	72-HR	3.00-HR
+ 41.	1.38		13.	13.	13.	13.
		(INCHES)	.066	.066	.066	.066
		(AC-FT)	3.	3.	3.	3.

CUMULATIVE AREA = .95 SQ MI

*** **

pre.out

73 KK *****
* RE6 *

Route BE6 in channel to Outlet OE1

HYDROGRAPH ROUTING DATA

75 RD MUSKINGUM-CUNGE CHANNEL ROUTING
L 6111. CHANNEL LENGTH
S .0110 SLOPE
N .040 CHANNEL ROUGHNESS COEFFICIENT
CA .00 CONTRIBUTING AREA
SHAPE TRAP CHANNEL SHAPE
WD .00 BOTTOM WIDTH OR DIAMETER
Z 7.00 SIDE SLOPE

COMPUTED MUSKINGUM-CUNGE PARAMETERS
COMPUTATION TIME STEP

ELEMENT	ALPHA	M	DT (MIN)	DX (FT)	PEAK (CFS)	TIME TO PEAK (MIN)	VOLUME (IN)	MAXIMUM CELERITY (FPS)
MAIN	1.28	1.33	1.00	197.13	248.07	90.00	.34	5.36

INTERPOLATED TO SPECIFIED COMPUTATION INTERVAL

MAIN	1.28	1.33	1.00		248.07	90.00	.34	
------	------	------	------	--	--------	-------	-----	--

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1833E+02 EXCESS= .0000E+00 OUTFLOW= .1716E+02 BASIN STORAGE= .1309E+01 PERCENT ERROR= -.8

HYDROGRAPH AT STATION RE6
PLAN 1, RATIO = 1.00

DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*
1	0000	1	0.	*	1	0046	47	0.	*	1	0132	93	246.	*	1	0218	139	74.					
1	0001	2	0.	*	1	0047	48	0.	*	1	0133	94	244.	*	1	0219	140	71.					
1	0002	3	0.	*	1	0048	49	0.	*	1	0134	95	242.	*	1	0220	141	68.					
1	0003	4	0.	*	1	0049	50	0.	*	1	0135	96	239.	*	1	0221	142	66.					
1	0004	5	0.	*	1	0050	51	0.	*	1	0136	97	236.	*	1	0222	143	64.					
1	0005	6	0.	*	1	0051	52	0.	*	1	0137	98	232.	*	1	0223	144	61.					
1	0006	7	0.	*	1	0052	53	0.	*	1	0138	99	228.	*	1	0224	145	59.					
1	0007	8	0.	*	1	0053	54	0.	*	1	0139	100	224.	*	1	0225	146	57.					
1	0008	9	0.	*	1	0054	55	0.	*	1	0140	101	220.	*	1	0226	147	55.					
1	0009	10	0.	*	1	0055	56	0.	*	1	0141	102	215.	*	1	0227	148	53.					
1	0010	11	0.	*	1	0056	57	0.	*	1	0142	103	211.	*	1	0228	149	52.					
1	0011	12	0.	*	1	0057	58	0.	*	1	0143	104	207.	*	1	0229	150	50.					
1	0012	13	0.	*	1	0058	59	0.	*	1	0144	105	202.	*	1	0230	151	49.					
1	0013	14	0.	*	1	0059	60	0.	*	1	0145	106	198.	*	1	0231	152	47.					
1	0014	15	0.	*	1	0100	61	0.	*	1	0146	107	194.	*	1	0232	153	46.					
1	0015	16	0.	*	1	0101	62	0.	*	1	0147	108	189.	*	1	0233	154	44.					
1	0016	17	0.	*	1	0102	63	0.	*	1	0148	109	185.	*	1	0234	155	43.					
1	0017	18	0.	*	1	0103	64	0.	*	1	0149	110	181.	*	1	0235	156	42.					
1	0018	19	0.	*	1	0104	65	0.	*	1	0150	111	177.	*	1	0236	157	41.					
1	0019	20	0.	*	1	0105	66	0.	*	1	0151	112	173.	*	1	0237	158	40.					
1	0020	21	0.	*	1	0106	67	0.	*	1	0152	113	168.	*	1	0238	159	39.					
1	0021	22	0.	*	1	0107	68	0.	*	1	0153	114	164.	*	1	0239	160	38.					
1	0022	23	0.	*	1	0108	69	0.	*	1	0154	115	160.	*	1	0240	161	37.					
1	0023	24	0.	*	1	0109	70	0.	*	1	0155	116	156.	*	1	0241	162	36.					
1	0024	25	0.	*	1	0110	71	0.	*	1	0156	117	152.	*	1	0242	163	36.					
1	0025	26	0.	*	1	0111	72	0.	*	1	0157	118	148.	*	1	0243	164	35.					
1	0026	27	0.	*	1	0112	73	0.	*	1	0158	119	144.	*	1	0244	165	34.					
1	0027	28	0.	*	1	0113	74	0.	*	1	0159	120	140.	*	1	0245	166	34.					
1	0028	29	0.	*	1	0114	75	0.	*	1	0200	121	136.	*	1	0246	167	33.					
1	0029	30	0.	*	1	0115	76	0.	*	1	0201	122	132.	*	1	0247	168	32.					
1	0030	31	0.	*	1	0116	77	60.	*	1	0202	123	128.	*	1	0248	169	32.					
1	0031	32	0.	*	1	0117	78	133.	*	1	0203	124	125.	*	1	0249	170	31.					
1	0032	33	0.	*	1	0118	79	154.	*	1	0204	125	121.	*	1	0250	171	31.					
1	0033	34	0.	*	1	0119	80	171.	*	1	0205	126	117.	*	1	0251	172	30.					
1	0034	35	0.	*	1	0120	81	187.	*	1	0206	127	113.	*	1	0252	173	30.					
1	0035	36	0.	*	1	0121	82	200.	*	1	0207	128	109.	*	1	0253	174	30.					
1	0036	37	0.	*	1	0122	83	212.	*	1	0208	129	106.	*	1	0254	175	29.					
1	0037	38	0.	*	1	0123	84	221.	*	1	0209	130	102.	*	1	0255	176	29.					
1	0038	39	0.	*	1	0124	85	229.	*	1	0210	131	99.	*	1	0256	177	28.					
1	0039	40	0.	*	1	0125	86	235.	*	1	0211	132	95.	*	1	0257	178	28.					
1	0040	41	0.	*	1	0126	87	240.	*	1	0212	133	92.	*	1	0258	179	28.					


```

pre.out
1 0041 42 0. * 1 0127 88 244. * 1 0213 134 88. * 1 0259 180 27.
1 0042 43 0. * 1 0128 89 246. * 1 0214 135 85. * 1 0300 181 27.
1 0043 44 0. * 1 0129 90 248. * 1 0215 136 82. *
1 0044 45 0. * 1 0130 91 248. * 1 0216 137 79. *
1 0045 46 0. * 1 0131 92 248. * 1 0217 138 76. *
*

```

```

PEAK FLOW      TIME
+ (CFS)        (HR)
+ 248.         1.50
(CFS)
(INCHES)      .338
(AC-FT)       17.
6-HR          69.
24-HR         69.
72-HR         69.
3.00-HR      69.

```

CUMULATIVE AREA = .95 SQ MI

COMPUTED MUSKINGUM-CUNGE PARAMETERS

```

COMPUTATION TIME STEP
ELEMENT  ALPHA  M      DT      DX      PEAK  TIME TO  VOLUME  MAXIMUM
              (MIN) (FT)  (CFS)  (MIN)
              (MIN) (FT)
MAIN      1.28  1.33  1.00  119.82  40.62  109.00  .06     3.41

```

INTERPOLATED TO SPECIFIED COMPUTATION INTERVAL

```

MAIN      1.28  1.33  1.00  40.62  109.00  .06

```

CONTINUITY SUMMARY (AC-FT) - INFLOW= .3336E+01 EXCESS= .0000E+00 OUTFLOW= .2836E+01 BASIN STORAGE= .5424E+00 PERCENT ERROR= -1.3

HYDROGRAPH AT STATION RE6
PLAN 1, RATIO = .61

```

DA MON HRMN ORD  FLOW *  DA MON HRMN ORD  FLOW *  DA MON HRMN ORD  FLOW *  DA MON HRMN ORD  FLOW
*      *      *      *      *      *      *      *      *      *      *      *      *      *      *
1 0000 1 0. * 1 0046 47 0. * 1 0132 93 0. * 1 0218 139 25.
1 0001 2 0. * 1 0047 48 0. * 1 0133 94 0. * 1 0219 140 24.
1 0002 3 0. * 1 0048 49 0. * 1 0134 95 0. * 1 0220 141 23.
1 0003 4 0. * 1 0049 50 0. * 1 0135 96 0. * 1 0221 142 23.
1 0004 5 0. * 1 0050 51 0. * 1 0136 97 2. * 1 0222 143 22.
1 0005 6 0. * 1 0051 52 0. * 1 0137 98 20. * 1 0223 144 21.
1 0006 7 0. * 1 0052 53 0. * 1 0138 99 34. * 1 0224 145 21.
1 0007 8 0. * 1 0053 54 0. * 1 0139 100 33. * 1 0225 146 20.
1 0008 9 0. * 1 0054 55 0. * 1 0140 101 34. * 1 0226 147 19.
1 0009 10 0. * 1 0055 56 0. * 1 0141 102 37. * 1 0227 148 19.
1 0010 11 0. * 1 0056 57 0. * 1 0142 103 37. * 1 0228 149 18.
1 0011 12 0. * 1 0057 58 0. * 1 0143 104 38. * 1 0229 150 18.
1 0012 13 0. * 1 0058 59 0. * 1 0144 105 39. * 1 0230 151 17.
1 0013 14 0. * 1 0059 60 0. * 1 0145 106 40. * 1 0231 152 17.
1 0014 15 0. * 1 0100 61 0. * 1 0146 107 40. * 1 0232 153 16.
1 0015 16 0. * 1 0101 62 0. * 1 0147 108 40. * 1 0233 154 16.
1 0016 17 0. * 1 0102 63 0. * 1 0148 109 41. * 1 0234 155 15.
1 0017 18 0. * 1 0103 64 0. * 1 0149 110 41. * 1 0235 156 15.
1 0018 19 0. * 1 0104 65 0. * 1 0150 111 41. * 1 0236 157 14.
1 0019 20 0. * 1 0105 66 0. * 1 0151 112 40. * 1 0237 158 14.
1 0020 21 0. * 1 0106 67 0. * 1 0152 113 40. * 1 0238 159 13.
1 0021 22 0. * 1 0107 68 0. * 1 0153 114 40. * 1 0239 160 13.
1 0022 23 0. * 1 0108 69 0. * 1 0154 115 40. * 1 0240 161 13.
1 0023 24 0. * 1 0109 70 0. * 1 0155 116 39. * 1 0241 162 12.
1 0024 25 0. * 1 0110 71 0. * 1 0156 117 39. * 1 0242 163 12.
1 0025 26 0. * 1 0111 72 0. * 1 0157 118 38. * 1 0243 164 12.
1 0026 27 0. * 1 0112 73 0. * 1 0158 119 38. * 1 0244 165 12.
1 0027 28 0. * 1 0113 74 0. * 1 0159 120 38. * 1 0245 166 11.
1 0028 29 0. * 1 0114 75 0. * 1 0200 121 37. * 1 0246 167 11.
1 0029 30 0. * 1 0115 76 0. * 1 0201 122 37. * 1 0247 168 11.
1 0030 31 0. * 1 0116 77 0. * 1 0202 123 36. * 1 0248 169 11.
1 0031 32 0. * 1 0117 78 0. * 1 0203 124 35. * 1 0249 170 10.
1 0032 33 0. * 1 0118 79 0. * 1 0204 125 35. * 1 0250 171 10.
1 0033 34 0. * 1 0119 80 0. * 1 0205 126 34. * 1 0251 172 10.
1 0034 35 0. * 1 0120 81 0. * 1 0206 127 34. * 1 0252 173 10.
1 0035 36 0. * 1 0121 82 0. * 1 0207 128 33. * 1 0253 174 10.
1 0036 37 0. * 1 0122 83 0. * 1 0208 129 32. * 1 0254 175 10.
1 0037 38 0. * 1 0123 84 0. * 1 0209 130 32. * 1 0255 176 9.
1 0038 39 0. * 1 0124 85 0. * 1 0210 131 31. * 1 0256 177 9.
1 0039 40 0. * 1 0125 86 0. * 1 0211 132 30. * 1 0257 178 9.
1 0040 41 0. * 1 0126 87 0. * 1 0212 133 29. * 1 0258 179 9.
1 0041 42 0. * 1 0127 88 0. * 1 0213 134 29. * 1 0259 180 9.
1 0042 43 0. * 1 0128 89 0. * 1 0214 135 28. * 1 0300 181 9.
1 0043 44 0. * 1 0129 90 0. * 1 0215 136 27. *

```

```

pre.out
1 0044 45 0. * 1 0130 91 0. * 1 0216 137 26. *
1 0045 46 0. * 1 0131 92 0. * 1 0217 138 26. *
*

```

```

PEAK FLOW      TIME      MAXIMUM AVERAGE FLOW
+ (CFS)        (HR)          6-HR      24-HR      72-HR      3.00-HR
+ 41.          1.82      (CFS)
              (INCHES)  11.       11.       11.       11.
              (AC-FT)  .056      .056      .056      .056
              CUMULATIVE AREA = .95 SQ MI

```

*** ** ** ** **

```

*****
*
76 KK * BE7 *
*
*****

```

BE7

SUBBASIN RUNOFF DATA

```

78 BA SUBBASIN CHARACTERISTICS
      TAREA 4.08 SUBBASIN AREA

```

PRECIPITATION DATA

```

23 PB STORM 2.13 BASIN TOTAL PRECIPITATION

```

```

24 PI INCREMENTAL PRECIPITATION PATTERN
      .00 .00 .00 .00 .00 .00 .00 .00 .00 .00
      .00 .00 .00 .00 .00 .00 .00 .00 .00 .00
      .00 .00 .00 .00 .00 .00 .00 .00 .00 .00
      .05 .05 .05 .05 .05 .04 .04 .04 .04 .04
      .03 .03 .03 .03 .03 .02 .02 .02 .02 .02
      .01 .01 .01 .01 .01 .01 .01 .01 .01 .01
      .01 .01 .01 .01 .01 .00 .00 .00 .00 .00
      .00 .00 .00 .00 .00 .00 .00 .00 .00 .00
      .00 .00 .00 .00 .00 .00 .00 .00 .00 .00
      .00 .00 .00 .00 .00 .00 .00 .00 .00 .00
      .00 .00 .00 .00 .00 .00 .00 .00 .00 .00
      .00 .00 .00 .00 .00 .00 .00 .00 .00 .00
      .00 .00 .00 .00 .00 .00 .00 .00 .00 .00
      .00 .00 .00 .00 .00 .00 .00 .00 .00 .00
      .00 .00 .00 .00 .00 .00 .00 .00 .00 .00
      .00 .00 .00 .00 .00 .00 .00 .00 .00 .00

```

```

79 LS SCS LOSS RATE
      STRTL .67 INITIAL ABSTRACTION
      CRVNBR 75.00 CURVE NUMBER
      RTIMP .00 PERCENT IMPERVIOUS AREA

```

```

80 UD SCS DIMENSIONLESS UNITGRAPH
      TLAG 1.09 LAG

```

*** WARNING *** UNIT HYDROGRAPH TRUNCATED FROM 329 TO 300 INTERVALS

UNIT HYDROGRAPH
300 END-OF-PERIOD ORDINATES
VOLUME = 1.00

8.	16.	24.	33.	41.	49.	62.	81.	100.	119.
138.	157.	176.	199.	224.	248.	273.	297.	322.	348.
381.	414.	446.	479.	512.	544.	584.	627.	671.	714.
758.	802.	845.	897.	949.	1001.	1052.	1104.	1156.	1204.
1247.	1291.	1334.	1378.	1422.	1465.	1497.	1527.	1557.	1587.
1617.	1647.	1673.	1689.	1706.	1722.	1738.	1755.	1771.	1778.
1781.	1784.	1786.	1789.	1792.	1794.	1791.	1789.	1786.	1783.
1781.	1778.	1768.	1752.	1736.	1719.	1703.	1687.	1670.	1652.
1633.	1614.	1594.	1575.	1556.	1536.	1515.	1493.	1471.	1449.
1428.	1406.	1380.	1353.	1326.	1298.	1271.	1244.	1216.	1183.
1151.	1118.	1085.	1053.	1020.	990.	963.	936.	909.	881.
854.	827.	808.	788.	769.	750.	731.	712.	694.	678.
661.	645.	629.	612.	596.	582.	568.	555.	541.	527.
514.	501.	491.	481.	471.	461.	451.	441.	431.	421.
411.	401.	391.	382.	372.	363.	355.	347.	339.	331.
323.	314.	306.	298.	290.	282.	274.	265.	259.	254.
249.	243.	238.	232.	227.	221.	216.	210.	205.	200.

194.	189.	185.	181.	177.	173.	169.	165.	161.	157.
153.	149.	145.	140.	137.	134.	131.	128.	125.	122.
119.	116.	113.	110.	107.	104.	101.	98.	96.	94.
92.	90.	88.	86.	84.	82.	80.	78.	76.	74.
72.	70.	69.	67.	66.	64.	63.	61.	60.	58.
57.	55.	54.	52.	51.	50.	49.	48.	47.	46.
45.	43.	42.	41.	40.	39.	38.	37.	36.	35.
35.	34.	33.	32.	31.	31.	30.	29.	28.	27.
27.	26.	26.	25.	24.	24.	23.	23.	22.	22.
21.	21.	20.	20.	19.	19.	19.	18.	18.	18.
17.	17.	17.	16.	16.	16.	15.	15.	15.	14.
14.	14.	13.	13.	13.	12.	12.	12.	11.	11.
11.	10.	10.	10.	10.	9.	9.	9.	8.	8.

pre.out

HYDROGRAPH AT STATION BE7

DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	*	DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
1	0000	1	.00	.00	.00	.00	0.	*	1	0131	92	.00	.00	.00	407.	
1	0001	2	.00	.00	.00	.00	0.	*	1	0132	93	.00	.00	.00	420.	
1	0002	3	.00	.00	.00	.00	0.	*	1	0133	94	.00	.00	.00	433.	
1	0003	4	.00	.00	.00	.00	0.	*	1	0134	95	.00	.00	.00	446.	
1	0004	5	.00	.00	.00	.00	0.	*	1	0135	96	.00	.00	.00	459.	
1	0005	6	.00	.00	.00	.00	0.	*	1	0136	97	.00	.00	.00	471.	
1	0006	7	.00	.00	.00	.00	0.	*	1	0137	98	.00	.00	.00	483.	
1	0007	8	.00	.00	.00	.00	0.	*	1	0138	99	.00	.00	.00	494.	
1	0008	9	.00	.00	.00	.00	0.	*	1	0139	100	.00	.00	.00	505.	
1	0009	10	.00	.00	.00	.00	0.	*	1	0140	101	.00	.00	.00	516.	
1	0010	11	.00	.00	.00	.00	0.	*	1	0141	102	.00	.00	.00	526.	
1	0011	12	.00	.00	.00	.00	0.	*	1	0142	103	.00	.00	.00	536.	
1	0012	13	.00	.00	.00	.00	0.	*	1	0143	104	.00	.00	.00	545.	
1	0013	14	.00	.00	.00	.00	0.	*	1	0144	105	.00	.00	.00	554.	
1	0014	15	.00	.00	.00	.00	0.	*	1	0145	106	.00	.00	.00	563.	
1	0015	16	.00	.00	.00	.00	0.	*	1	0146	107	.00	.00	.00	571.	
1	0016	17	.00	.00	.00	.00	0.	*	1	0147	108	.00	.00	.00	578.	
1	0017	18	.00	.00	.00	.00	0.	*	1	0148	109	.00	.00	.00	586.	
1	0018	19	.00	.00	.00	.00	0.	*	1	0149	110	.00	.00	.00	593.	
1	0019	20	.00	.00	.00	.00	0.	*	1	0150	111	.00	.00	.00	599.	
1	0020	21	.00	.00	.00	.00	0.	*	1	0151	112	.00	.00	.00	605.	
1	0021	22	.00	.00	.00	.00	0.	*	1	0152	113	.00	.00	.00	610.	
1	0022	23	.00	.00	.00	.00	0.	*	1	0153	114	.00	.00	.00	615.	
1	0023	24	.00	.00	.00	.00	0.	*	1	0154	115	.00	.00	.00	620.	
1	0024	25	.00	.00	.00	.00	0.	*	1	0155	116	.00	.00	.00	624.	
1	0025	26	.00	.00	.00	.00	0.	*	1	0156	117	.00	.00	.00	627.	
1	0026	27	.00	.00	.00	.00	0.	*	1	0157	118	.00	.00	.00	630.	
1	0027	28	.00	.00	.00	.00	0.	*	1	0158	119	.00	.00	.00	632.	
1	0028	29	.00	.00	.00	.00	0.	*	1	0159	120	.00	.00	.00	634.	
1	0029	30	.00	.00	.00	.00	0.	*	1	0200	121	.00	.00	.00	636.	
1	0030	31	.00	.00	.00	.00	0.	*	1	0201	122	.00	.00	.00	637.	
1	0031	32	.11	.11	.00	0.	0.	*	1	0202	123	.00	.00	.00	638.	
1	0032	33	.11	.11	.00	0.	0.	*	1	0203	124	.00	.00	.00	638.	
1	0033	34	.11	.11	.00	0.	0.	*	1	0204	125	.00	.00	.00	638.	
1	0034	35	.11	.11	.00	0.	0.	*	1	0205	126	.00	.00	.00	637.	
1	0035	36	.11	.11	.00	0.	0.	*	1	0206	127	.00	.00	.00	636.	
1	0036	37	.09	.09	.00	0.	0.	*	1	0207	128	.00	.00	.00	635.	
1	0037	38	.09	.08	.00	0.	0.	*	1	0208	129	.00	.00	.00	633.	
1	0038	39	.09	.08	.01	0.	0.	*	1	0209	130	.00	.00	.00	631.	
1	0039	40	.09	.08	.01	0.	0.	*	1	0210	131	.00	.00	.00	629.	
1	0040	41	.09	.07	.02	1.	0.	*	1	0211	132	.00	.00	.00	626.	
1	0041	42	.06	.05	.01	1.	0.	*	1	0212	133	.00	.00	.00	623.	
1	0042	43	.06	.05	.01	2.	0.	*	1	0213	134	.00	.00	.00	619.	
1	0043	44	.06	.05	.02	2.	0.	*	1	0214	135	.00	.00	.00	615.	
1	0044	45	.06	.04	.02	3.	0.	*	1	0215	136	.00	.00	.00	611.	
1	0045	46	.06	.04	.02	4.	0.	*	1	0216	137	.00	.00	.00	607.	
1	0046	47	.04	.03	.01	6.	0.	*	1	0217	138	.00	.00	.00	602.	
1	0047	48	.04	.03	.01	7.	0.	*	1	0218	139	.00	.00	.00	597.	
1	0048	49	.04	.03	.01	9.	0.	*	1	0219	140	.00	.00	.00	591.	
1	0049	50	.04	.03	.01	11.	0.	*	1	0220	141	.00	.00	.00	585.	
1	0050	51	.04	.02	.01	14.	0.	*	1	0221	142	.00	.00	.00	579.	
1	0051	52	.02	.01	.01	17.	0.	*	1	0222	143	.00	.00	.00	572.	
1	0052	53	.02	.01	.01	20.	0.	*	1	0223	144	.00	.00	.00	566.	
1	0053	54	.02	.01	.01	23.	0.	*	1	0224	145	.00	.00	.00	558.	
1	0054	55	.02	.01	.01	27.	0.	*	1	0225	146	.00	.00	.00	551.	
1	0055	56	.02	.01	.01	31.	0.	*	1	0226	147	.00	.00	.00	544.	
1	0056	57	.02	.01	.01	35.	0.	*	1	0227	148	.00	.00	.00	536.	
1	0057	58	.02	.01	.01	39.	0.	*	1	0228	149	.00	.00	.00	529.	
1	0058	59	.02	.01	.01	44.	0.	*	1	0229	150	.00	.00	.00	521.	
1	0059	60	.02	.01	.01	50.	0.	*	1	0230	151	.00	.00	.00	513.	
1	0100	61	.02	.01	.01	55.	0.	*	1	0231	152	.00	.00	.00	505.	
1	0101	62	.01	.01	.01	61.	0.	*	1	0232	153	.00	.00	.00	497.	
1	0102	63	.01	.01	.01	68.	0.	*	1	0233	154	.00	.00	.00	489.	
1	0103	64	.01	.01	.01	74.	0.	*	1	0234	155	.00	.00	.00	482.	
1	0104	65	.01	.01	.01	81.	0.	*	1	0235	156	.00	.00	.00	474.	
1	0105	66	.01	.01	.01	89.	0.	*	1	0236	157	.00	.00	.00	466.	
1	0106	67	.01	.01	.00	97.	0.	*	1	0237	158	.00	.00	.00	459.	
1	0107	68	.01	.01	.00	105.	0.	*	1	0238	159	.00	.00	.00	451.	

pre.out														
1	0108	69	.01	.01	.00	114.	*	1	0239	160	.00	.00	.00	444.
1	0109	70	.01	.01	.00	123.	*	1	0240	161	.00	.00	.00	436.
1	0110	71	.01	.01	.00	132.	*	1	0241	162	.00	.00	.00	429.
1	0111	72	.01	.00	.00	142.	*	1	0242	163	.00	.00	.00	422.
1	0112	73	.01	.00	.00	153.	*	1	0243	164	.00	.00	.00	415.
1	0113	74	.01	.00	.00	164.	*	1	0244	165	.00	.00	.00	408.
1	0114	75	.01	.00	.00	175.	*	1	0245	166	.00	.00	.00	401.
1	0115	76	.01	.00	.00	187.	*	1	0246	167	.00	.00	.00	394.
1	0116	77	.01	.00	.00	200.	*	1	0247	168	.00	.00	.00	388.
1	0117	78	.01	.00	.00	212.	*	1	0248	169	.00	.00	.00	381.
1	0118	79	.01	.00	.00	226.	*	1	0249	170	.00	.00	.00	375.
1	0119	80	.01	.00	.00	239.	*	1	0250	171	.00	.00	.00	369.
1	0120	81	.01	.00	.00	252.	*	1	0251	172	.00	.00	.00	363.
1	0121	82	.01	.00	.00	266.	*	1	0252	173	.00	.00	.00	357.
1	0122	83	.01	.00	.00	280.	*	1	0253	174	.00	.00	.00	351.
1	0123	84	.01	.00	.00	294.	*	1	0254	175	.00	.00	.00	345.
1	0124	85	.01	.00	.00	309.	*	1	0255	176	.00	.00	.00	340.
1	0125	86	.01	.00	.00	323.	*	1	0256	177	.00	.00	.00	334.
1	0126	87	.01	.00	.00	337.	*	1	0257	178	.00	.00	.00	329.
1	0127	88	.01	.00	.00	351.	*	1	0258	179	.00	.00	.00	324.
1	0128	89	.01	.00	.00	365.	*	1	0259	180	.00	.00	.00	319.
1	0129	90	.01	.00	.00	379.	*	1	0300	181	.00	.00	.00	314.
1	0130	91	.01	.00	.00	393.	*							

TOTAL RAINFALL = 2.13, TOTAL LOSS = 1.68, TOTAL EXCESS = .45

PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
(CFS)	(HR)	(CFS)	6-HR	24-HR	72-HR	3.00-HR
+	638.	2.05	294.	294.	294.	294.
		(INCHES)	.335	.335	.335	.335
		(AC-FT)	73.	73.	73.	73.

CUMULATIVE AREA = 4.08 SQ MI

*** WARNING *** UNIT HYDROGRAPH TRUNCATED FROM 329 TO 300 INTERVALS

HYDROGRAPH AT STATION BE7
PLAN 1, RATIO = 1.00

DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	*	DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
1	0000	1	.00	.00	.00	0.	0.	*	1	0131	92	.00	.00	.00	407.	
1	0001	2	.00	.00	.00	0.	0.	*	1	0132	93	.00	.00	.00	420.	
1	0002	3	.00	.00	.00	0.	0.	*	1	0133	94	.00	.00	.00	433.	
1	0003	4	.00	.00	.00	0.	0.	*	1	0134	95	.00	.00	.00	446.	
1	0004	5	.00	.00	.00	0.	0.	*	1	0135	96	.00	.00	.00	459.	
1	0005	6	.00	.00	.00	0.	0.	*	1	0136	97	.00	.00	.00	471.	
1	0006	7	.00	.00	.00	0.	0.	*	1	0137	98	.00	.00	.00	483.	
1	0007	8	.00	.00	.00	0.	0.	*	1	0138	99	.00	.00	.00	494.	
1	0008	9	.00	.00	.00	0.	0.	*	1	0139	100	.00	.00	.00	505.	
1	0009	10	.00	.00	.00	0.	0.	*	1	0140	101	.00	.00	.00	516.	
1	0010	11	.00	.00	.00	0.	0.	*	1	0141	102	.00	.00	.00	526.	
1	0011	12	.00	.00	.00	0.	0.	*	1	0142	103	.00	.00	.00	536.	
1	0012	13	.00	.00	.00	0.	0.	*	1	0143	104	.00	.00	.00	545.	
1	0013	14	.00	.00	.00	0.	0.	*	1	0144	105	.00	.00	.00	554.	
1	0014	15	.00	.00	.00	0.	0.	*	1	0145	106	.00	.00	.00	563.	
1	0015	16	.00	.00	.00	0.	0.	*	1	0146	107	.00	.00	.00	571.	
1	0016	17	.00	.00	.00	0.	0.	*	1	0147	108	.00	.00	.00	578.	
1	0017	18	.00	.00	.00	0.	0.	*	1	0148	109	.00	.00	.00	586.	
1	0018	19	.00	.00	.00	0.	0.	*	1	0149	110	.00	.00	.00	593.	
1	0019	20	.00	.00	.00	0.	0.	*	1	0150	111	.00	.00	.00	599.	
1	0020	21	.00	.00	.00	0.	0.	*	1	0151	112	.00	.00	.00	605.	
1	0021	22	.00	.00	.00	0.	0.	*	1	0152	113	.00	.00	.00	610.	
1	0022	23	.00	.00	.00	0.	0.	*	1	0153	114	.00	.00	.00	615.	
1	0023	24	.00	.00	.00	0.	0.	*	1	0154	115	.00	.00	.00	620.	
1	0024	25	.00	.00	.00	0.	0.	*	1	0155	116	.00	.00	.00	624.	
1	0025	26	.00	.00	.00	0.	0.	*	1	0156	117	.00	.00	.00	627.	
1	0026	27	.00	.00	.00	0.	0.	*	1	0157	118	.00	.00	.00	630.	
1	0027	28	.00	.00	.00	0.	0.	*	1	0158	119	.00	.00	.00	632.	
1	0028	29	.00	.00	.00	0.	0.	*	1	0159	120	.00	.00	.00	634.	
1	0029	30	.00	.00	.00	0.	0.	*	1	0200	121	.00	.00	.00	636.	
1	0030	31	.00	.00	.00	0.	0.	*	1	0201	122	.00	.00	.00	637.	
1	0031	32	.11	.11	.00	0.	0.	*	1	0202	123	.00	.00	.00	638.	
1	0032	33	.11	.11	.00	0.	0.	*	1	0203	124	.00	.00	.00	638.	
1	0033	34	.11	.11	.00	0.	0.	*	1	0204	125	.00	.00	.00	638.	
1	0034	35	.11	.11	.00	0.	0.	*	1	0205	126	.00	.00	.00	637.	
1	0035	36	.11	.11	.00	0.	0.	*	1	0206	127	.00	.00	.00	636.	
1	0036	37	.09	.09	.00	0.	0.	*	1	0207	128	.00	.00	.00	635.	
1	0037	38	.09	.08	.00	0.	0.	*	1	0208	129	.00	.00	.00	633.	
1	0038	39	.09	.08	.01	0.	0.	*	1	0209	130	.00	.00	.00	631.	

pre.out														
1	0039	40	.09	.08	.01	0.	*	1	0210	131	.00	.00	.00	629.
1	0040	41	.09	.07	.02	1.	*	1	0211	132	.00	.00	.00	626.
1	0041	42	.06	.05	.01	1.	*	1	0212	133	.00	.00	.00	623.
1	0042	43	.06	.05	.01	2.	*	1	0213	134	.00	.00	.00	619.
1	0043	44	.06	.05	.02	2.	*	1	0214	135	.00	.00	.00	615.
1	0044	45	.06	.04	.02	3.	*	1	0215	136	.00	.00	.00	611.
1	0045	46	.06	.04	.02	4.	*	1	0216	137	.00	.00	.00	607.
1	0046	47	.04	.03	.01	6.	*	1	0217	138	.00	.00	.00	602.
1	0047	48	.04	.03	.01	7.	*	1	0218	139	.00	.00	.00	597.
1	0048	49	.04	.03	.01	9.	*	1	0219	140	.00	.00	.00	591.
1	0049	50	.04	.03	.01	11.	*	1	0220	141	.00	.00	.00	585.
1	0050	51	.04	.02	.01	14.	*	1	0221	142	.00	.00	.00	579.
1	0051	52	.02	.01	.01	17.	*	1	0222	143	.00	.00	.00	572.
1	0052	53	.02	.01	.01	20.	*	1	0223	144	.00	.00	.00	566.
1	0053	54	.02	.01	.01	23.	*	1	0224	145	.00	.00	.00	558.
1	0054	55	.02	.01	.01	27.	*	1	0225	146	.00	.00	.00	551.
1	0055	56	.02	.01	.01	31.	*	1	0226	147	.00	.00	.00	544.
1	0056	57	.02	.01	.01	35.	*	1	0227	148	.00	.00	.00	536.
1	0057	58	.02	.01	.01	39.	*	1	0228	149	.00	.00	.00	529.
1	0058	59	.02	.01	.01	44.	*	1	0229	150	.00	.00	.00	521.
1	0059	60	.02	.01	.01	50.	*	1	0230	151	.00	.00	.00	513.
1	0100	61	.02	.01	.01	55.	*	1	0231	152	.00	.00	.00	505.
1	0101	62	.01	.01	.01	61.	*	1	0232	153	.00	.00	.00	497.
1	0102	63	.01	.01	.01	68.	*	1	0233	154	.00	.00	.00	489.
1	0103	64	.01	.01	.01	74.	*	1	0234	155	.00	.00	.00	482.
1	0104	65	.01	.01	.01	81.	*	1	0235	156	.00	.00	.00	474.
1	0105	66	.01	.01	.01	89.	*	1	0236	157	.00	.00	.00	466.
1	0106	67	.01	.01	.00	97.	*	1	0237	158	.00	.00	.00	459.
1	0107	68	.01	.01	.00	105.	*	1	0238	159	.00	.00	.00	451.
1	0108	69	.01	.01	.00	114.	*	1	0239	160	.00	.00	.00	444.
1	0109	70	.01	.01	.00	123.	*	1	0240	161	.00	.00	.00	436.
1	0110	71	.01	.01	.00	132.	*	1	0241	162	.00	.00	.00	429.
1	0111	72	.01	.00	.00	142.	*	1	0242	163	.00	.00	.00	422.
1	0112	73	.01	.00	.00	153.	*	1	0243	164	.00	.00	.00	415.
1	0113	74	.01	.00	.00	164.	*	1	0244	165	.00	.00	.00	408.
1	0114	75	.01	.00	.00	175.	*	1	0245	166	.00	.00	.00	401.
1	0115	76	.01	.00	.00	187.	*	1	0246	167	.00	.00	.00	394.
1	0116	77	.01	.00	.00	200.	*	1	0247	168	.00	.00	.00	388.
1	0117	78	.01	.00	.00	212.	*	1	0248	169	.00	.00	.00	381.
1	0118	79	.01	.00	.00	226.	*	1	0249	170	.00	.00	.00	375.
1	0119	80	.01	.00	.00	239.	*	1	0250	171	.00	.00	.00	369.
1	0120	81	.01	.00	.00	252.	*	1	0251	172	.00	.00	.00	363.
1	0121	82	.01	.00	.00	266.	*	1	0252	173	.00	.00	.00	357.
1	0122	83	.01	.00	.00	280.	*	1	0253	174	.00	.00	.00	351.
1	0123	84	.01	.00	.00	294.	*	1	0254	175	.00	.00	.00	345.
1	0124	85	.01	.00	.00	309.	*	1	0255	176	.00	.00	.00	340.
1	0125	86	.01	.00	.00	323.	*	1	0256	177	.00	.00	.00	334.
1	0126	87	.01	.00	.00	337.	*	1	0257	178	.00	.00	.00	329.
1	0127	88	.01	.00	.00	351.	*	1	0258	179	.00	.00	.00	324.
1	0128	89	.01	.00	.00	365.	*	1	0259	180	.00	.00	.00	319.
1	0129	90	.01	.00	.00	379.	*	1	0300	181	.00	.00	.00	314.
1	0130	91	.01	.00	.00	393.	*							

TOTAL RAINFALL = 2.13, TOTAL LOSS = 1.68, TOTAL EXCESS = .45

PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
(CFS)	(HR)	(CFS)	6-HR	24-HR	72-HR	3.00-HR
+	638.	2.05	294.	294.	294.	294.
		(INCHES)	.335	.335	.335	.335
		(AC-FT)	73.	73.	73.	73.

CUMULATIVE AREA = 4.08 SQ MI

*** WARNING *** UNIT HYDROGRAPH TRUNCATED FROM 329 TO 300 INTERVALS

HYDROGRAPH AT STATION BE7
PLAN 1, RATIO = .61

DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	*	DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
1	0000	1	.00	.00	.00	0.	*		1	0131	92	.00	.00	.00	64.	
1	0001	2	.00	.00	.00	0.	*		1	0132	93	.00	.00	.00	67.	
1	0002	3	.00	.00	.00	0.	*		1	0133	94	.00	.00	.00	70.	
1	0003	4	.00	.00	.00	0.	*		1	0134	95	.00	.00	.00	72.	
1	0004	5	.00	.00	.00	0.	*		1	0135	96	.00	.00	.00	75.	
1	0005	6	.00	.00	.00	0.	*		1	0136	97	.00	.00	.00	78.	
1	0006	7	.00	.00	.00	0.	*		1	0137	98	.00	.00	.00	81.	
1	0007	8	.00	.00	.00	0.	*		1	0138	99	.00	.00	.00	84.	
1	0008	9	.00	.00	.00	0.	*		1	0139	100	.00	.00	.00	86.	
1	0009	10	.00	.00	.00	0.	*		1	0140	101	.00	.00	.00	89.	

													pre.out	
1	0010	11	.00	.00	.00	0.	*	1	0141	102	.00	.00	.00	92.
1	0011	12	.00	.00	.00	0.	*	1	0142	103	.00	.00	.00	94.
1	0012	13	.00	.00	.00	0.	*	1	0143	104	.00	.00	.00	97.
1	0013	14	.00	.00	.00	0.	*	1	0144	105	.00	.00	.00	99.
1	0014	15	.00	.00	.00	0.	*	1	0145	106	.00	.00	.00	101.
1	0015	16	.00	.00	.00	0.	*	1	0146	107	.00	.00	.00	104.
1	0016	17	.00	.00	.00	0.	*	1	0147	108	.00	.00	.00	106.
1	0017	18	.00	.00	.00	0.	*	1	0148	109	.00	.00	.00	108.
1	0018	19	.00	.00	.00	0.	*	1	0149	110	.00	.00	.00	110.
1	0019	20	.00	.00	.00	0.	*	1	0150	111	.00	.00	.00	112.
1	0020	21	.00	.00	.00	0.	*	1	0151	112	.00	.00	.00	114.
1	0021	22	.00	.00	.00	0.	*	1	0152	113	.00	.00	.00	116.
1	0022	23	.00	.00	.00	0.	*	1	0153	114	.00	.00	.00	117.
1	0023	24	.00	.00	.00	0.	*	1	0154	115	.00	.00	.00	119.
1	0024	25	.00	.00	.00	0.	*	1	0155	116	.00	.00	.00	121.
1	0025	26	.00	.00	.00	0.	*	1	0156	117	.00	.00	.00	122.
1	0026	27	.00	.00	.00	0.	*	1	0157	118	.00	.00	.00	124.
1	0027	28	.00	.00	.00	0.	*	1	0158	119	.00	.00	.00	125.
1	0028	29	.00	.00	.00	0.	*	1	0159	120	.00	.00	.00	126.
1	0029	30	.00	.00	.00	0.	*	1	0200	121	.00	.00	.00	127.
1	0030	31	.00	.00	.00	0.	*	1	0201	122	.00	.00	.00	128.
1	0031	32	.07	.07	.00	0.	*	1	0202	123	.00	.00	.00	129.
1	0032	33	.07	.07	.00	0.	*	1	0203	124	.00	.00	.00	130.
1	0033	34	.07	.07	.00	0.	*	1	0204	125	.00	.00	.00	130.
1	0034	35	.07	.07	.00	0.	*	1	0205	126	.00	.00	.00	131.
1	0035	36	.07	.07	.00	0.	*	1	0206	127	.00	.00	.00	131.
1	0036	37	.05	.05	.00	0.	*	1	0207	128	.00	.00	.00	132.
1	0037	38	.05	.05	.00	0.	*	1	0208	129	.00	.00	.00	132.
1	0038	39	.05	.05	.00	0.	*	1	0209	130	.00	.00	.00	132.
1	0039	40	.05	.05	.00	0.	*	1	0210	131	.00	.00	.00	133.
1	0040	41	.05	.05	.00	0.	*	1	0211	132	.00	.00	.00	133.
1	0041	42	.04	.04	.00	0.	*	1	0212	133	.00	.00	.00	133.
1	0042	43	.04	.04	.00	0.	*	1	0213	134	.00	.00	.00	132.
1	0043	44	.04	.04	.00	0.	*	1	0214	135	.00	.00	.00	132.
1	0044	45	.04	.04	.00	0.	*	1	0215	136	.00	.00	.00	132.
1	0045	46	.04	.03	.00	0.	*	1	0216	137	.00	.00	.00	132.
1	0046	47	.02	.02	.00	0.	*	1	0217	138	.00	.00	.00	131.
1	0047	48	.02	.02	.00	0.	*	1	0218	139	.00	.00	.00	131.
1	0048	49	.02	.02	.00	0.	*	1	0219	140	.00	.00	.00	130.
1	0049	50	.02	.02	.00	1.	*	1	0220	141	.00	.00	.00	129.
1	0050	51	.02	.02	.00	1.	*	1	0221	142	.00	.00	.00	129.
1	0051	52	.01	.01	.00	1.	*	1	0222	143	.00	.00	.00	128.
1	0052	53	.01	.01	.00	1.	*	1	0223	144	.00	.00	.00	127.
1	0053	54	.01	.01	.00	2.	*	1	0224	145	.00	.00	.00	126.
1	0054	55	.01	.01	.00	2.	*	1	0225	146	.00	.00	.00	125.
1	0055	56	.01	.01	.00	2.	*	1	0226	147	.00	.00	.00	124.
1	0056	57	.01	.01	.00	3.	*	1	0227	148	.00	.00	.00	123.
1	0057	58	.01	.01	.00	3.	*	1	0228	149	.00	.00	.00	122.
1	0058	59	.01	.01	.00	4.	*	1	0229	150	.00	.00	.00	121.
1	0059	60	.01	.01	.00	5.	*	1	0230	151	.00	.00	.00	119.
1	0100	61	.01	.01	.00	5.	*	1	0231	152	.00	.00	.00	118.
1	0101	62	.01	.01	.00	6.	*	1	0232	153	.00	.00	.00	117.
1	0102	63	.01	.01	.00	7.	*	1	0233	154	.00	.00	.00	115.
1	0103	64	.01	.01	.00	8.	*	1	0234	155	.00	.00	.00	114.
1	0104	65	.01	.01	.00	9.	*	1	0235	156	.00	.00	.00	113.
1	0105	66	.01	.01	.00	10.	*	1	0236	157	.00	.00	.00	111.
1	0106	67	.01	.00	.00	11.	*	1	0237	158	.00	.00	.00	110.
1	0107	68	.01	.00	.00	12.	*	1	0238	159	.00	.00	.00	108.
1	0108	69	.01	.00	.00	13.	*	1	0239	160	.00	.00	.00	107.
1	0109	70	.01	.00	.00	15.	*	1	0240	161	.00	.00	.00	105.
1	0110	71	.01	.00	.00	16.	*	1	0241	162	.00	.00	.00	104.
1	0111	72	.00	.00	.00	17.	*	1	0242	163	.00	.00	.00	103.
1	0112	73	.00	.00	.00	19.	*	1	0243	164	.00	.00	.00	101.
1	0113	74	.00	.00	.00	21.	*	1	0244	165	.00	.00	.00	100.
1	0114	75	.00	.00	.00	22.	*	1	0245	166	.00	.00	.00	98.
1	0115	76	.00	.00	.00	24.	*	1	0246	167	.00	.00	.00	97.
1	0116	77	.00	.00	.00	26.	*	1	0247	168	.00	.00	.00	96.
1	0117	78	.00	.00	.00	28.	*	1	0248	169	.00	.00	.00	94.
1	0118	79	.00	.00	.00	30.	*	1	0249	170	.00	.00	.00	93.
1	0119	80	.00	.00	.00	32.	*	1	0250	171	.00	.00	.00	92.
1	0120	81	.00	.00	.00	35.	*	1	0251	172	.00	.00	.00	90.
1	0121	82	.00	.00	.00	37.	*	1	0252	173	.00	.00	.00	89.
1	0122	83	.00	.00	.00	39.	*	1	0253	174	.00	.00	.00	88.
1	0123	84	.00	.00	.00	42.	*	1	0254	175	.00	.00	.00	87.
1	0124	85	.00	.00	.00	44.	*	1	0255	176	.00	.00	.00	86.
1	0125	86	.00	.00	.00	47.	*	1	0256	177	.00	.00	.00	84.
1	0126	87	.00	.00	.00	50.	*	1	0257	178	.00	.00	.00	83.
1	0127	88	.00	.00	.00	53.	*	1	0258	179	.00	.00	.00	82.
1	0128	89	.00	.00	.00	55.	*	1	0259	180	.00	.00	.00	81.
1	0129	90	.00	.00	.00	58.	*	1	0300	181	.00	.00	.00	80.
1	0130	91	.00	.00	.00	61.	*							

TOTAL RAINFALL = 1.29, TOTAL LOSS = 1.19, TOTAL EXCESS = .10

PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW	
+ (CFS)	(HR)	(CFS)	6-HR	24-HR
			72-HR	3.00-HR

```

+ 133.    2.18    59.    59.    59.    pre.out
              (INCHES) .067 .067 .067 .067
              (AC-FT)  15.  15.  15.  15.

CUMULATIVE AREA = 4.08 SQ MI

```

*** ** ** ** **

```

*****
*           *
81 KK *     RE7 *
*           *
*****

Route BE7 in channel to Outlet OE1

```

HYDROGRAPH ROUTING DATA

```

83 RD MUSKINGUM-CUNGE CHANNEL ROUTING
      L 6265. CHANNEL LENGTH
      S .0100 SLOPE
      N .040 CHANNEL ROUGHNESS COEFFICIENT
      CA .00 CONTRIBUTING AREA
      SHAPE TRAP CHANNEL SHAPE
      WD .00 BOTTOM WIDTH OR DIAMETER
      Z 7.00 SIDE SLOPE

```

COMPUTED MUSKINGUM-CUNGE PARAMETERS
COMPUTATION TIME STEP

ELEMENT	ALPHA	M	DT (MIN)	DX (FT)	PEAK (CFS)	TIME TO PEAK (MIN)	VOLUME (IN)	MAXIMUM CELERITY (FPS)
MAIN	1.22	1.33	1.00	250.60	636.94	137.00	.29	6.54

INTERPOLATED TO SPECIFIED COMPUTATION INTERVAL

MAIN	1.22	1.33	1.00		636.94	137.00	.29	
------	------	------	------	--	--------	--------	-----	--

CONTINUITY SUMMARY (AC-FT) - INFLOW= .7309E+02 EXCESS= .0000E+00 OUTFLOW= .6328E+02 BASIN STORAGE= .1021E+02 PERCENT ERROR= -.5

HYDROGRAPH AT STATION RE7
PLAN 1, RATIO = 1.00

DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*
1	0000	1	0.	*	1	0046	47	0.	*	1	0132	93	167.	*	1	0218	139	637.	*				
1	0001	2	0.	*	1	0047	48	0.	*	1	0133	94	184.	*	1	0219	140	636.	*				
1	0002	3	0.	*	1	0048	49	0.	*	1	0134	95	201.	*	1	0220	141	635.	*				
1	0003	4	0.	*	1	0049	50	0.	*	1	0135	96	218.	*	1	0221	142	633.	*				
1	0004	5	0.	*	1	0050	51	0.	*	1	0136	97	236.	*	1	0222	143	631.	*				
1	0005	6	0.	*	1	0051	52	0.	*	1	0137	98	253.	*	1	0223	144	629.	*				
1	0006	7	0.	*	1	0052	53	0.	*	1	0138	99	271.	*	1	0224	145	627.	*				
1	0007	8	0.	*	1	0053	54	0.	*	1	0139	100	289.	*	1	0225	146	624.	*				
1	0008	9	0.	*	1	0054	55	0.	*	1	0140	101	306.	*	1	0226	147	620.	*				
1	0009	10	0.	*	1	0055	56	0.	*	1	0141	102	323.	*	1	0227	148	617.	*				
1	0010	11	0.	*	1	0056	57	0.	*	1	0142	103	340.	*	1	0228	149	613.	*				
1	0011	12	0.	*	1	0057	58	0.	*	1	0143	104	357.	*	1	0229	150	609.	*				
1	0012	13	0.	*	1	0058	59	0.	*	1	0144	105	374.	*	1	0230	151	604.	*				
1	0013	14	0.	*	1	0059	60	0.	*	1	0145	106	390.	*	1	0231	152	599.	*				
1	0014	15	0.	*	1	0100	61	0.	*	1	0146	107	405.	*	1	0232	153	594.	*				
1	0015	16	0.	*	1	0101	62	0.	*	1	0147	108	420.	*	1	0233	154	589.	*				
1	0016	17	0.	*	1	0102	63	0.	*	1	0148	109	435.	*	1	0234	155	583.	*				
1	0017	18	0.	*	1	0103	64	0.	*	1	0149	110	449.	*	1	0235	156	577.	*				
1	0018	19	0.	*	1	0104	65	0.	*	1	0150	111	463.	*	1	0236	157	570.	*				
1	0019	20	0.	*	1	0105	66	0.	*	1	0151	112	476.	*	1	0237	158	564.	*				
1	0020	21	0.	*	1	0106	67	0.	*	1	0152	113	489.	*	1	0238	159	557.	*				
1	0021	22	0.	*	1	0107	68	0.	*	1	0153	114	501.	*	1	0239	160	550.	*				
1	0022	23	0.	*	1	0108	69	0.	*	1	0154	115	513.	*	1	0240	161	543.	*				
1	0023	24	0.	*	1	0109	70	0.	*	1	0155	116	524.	*	1	0241	162	536.	*				
1	0024	25	0.	*	1	0110	71	0.	*	1	0156	117	535.	*	1	0242	163	529.	*				
1	0025	26	0.	*	1	0111	72	0.	*	1	0157	118	545.	*	1	0243	164	522.	*				
1	0026	27	0.	*	1	0112	73	0.	*	1	0158	119	554.	*	1	0244	165	514.	*				
1	0027	28	0.	*	1	0113	74	1.	*	1	0159	120	563.	*	1	0245	166	507.	*				
1	0028	29	0.	*	1	0114	75	1.	*	1	0200	121	571.	*	1	0246	167	499.	*				
1	0029	30	0.	*	1	0115	76	2.	*	1	0201	122	579.	*	1	0247	168	492.	*				
1	0030	31	0.	*	1	0116	77	4.	*	1	0202	123	587.	*	1	0248	169	485.	*				

pre.out																		
1	0031	32	0.	*	1	0117	78	5.	*	1	0203	124	594.	*	1	0249	170	477.
1	0032	33	0.	*	1	0118	79	7.	*	1	0204	125	600.	*	1	0250	171	470.
1	0033	34	0.	*	1	0119	80	10.	*	1	0205	126	606.	*	1	0251	172	463.
1	0034	35	0.	*	1	0120	81	12.	*	1	0206	127	611.	*	1	0252	173	456.
1	0035	36	0.	*	1	0121	82	16.	*	1	0207	128	616.	*	1	0253	174	449.
1	0036	37	0.	*	1	0122	83	20.	*	1	0208	129	621.	*	1	0254	175	442.
1	0037	38	0.	*	1	0123	84	30.	*	1	0209	130	624.	*	1	0255	176	435.
1	0038	39	0.	*	1	0124	85	44.	*	1	0210	131	628.	*	1	0256	177	428.
1	0039	40	0.	*	1	0125	86	59.	*	1	0211	132	630.	*	1	0257	178	421.
1	0040	41	0.	*	1	0126	87	75.	*	1	0212	133	633.	*	1	0258	179	415.
1	0041	42	0.	*	1	0127	88	90.	*	1	0213	134	634.	*	1	0259	180	408.
1	0042	43	0.	*	1	0128	89	104.	*	1	0214	135	636.	*	1	0300	181	402.
1	0043	44	0.	*	1	0129	90	120.	*	1	0215	136	636.	*				
1	0044	45	0.	*	1	0130	91	135.	*	1	0216	137	637.	*				
1	0045	46	0.	*	1	0131	92	151.	*	1	0217	138	637.	*				

PEAK FLOW	TIME	MAXIMUM AVERAGE FLOW			
(CFS)	(HR)	6-HR	24-HR	72-HR	3.00-HR
637.	2.28	254.	254.	254.	254.
		(INCHES)	.290	.290	.290
		(AC-FT)	63.	63.	63.

CUMULATIVE AREA = 4.08 SQ MI

COMPUTED MUSKINGUM-CUNGE PARAMETERS									
ELEMENT	ALPHA	M	COMPUTATION TIME STEP		PEAK	TIME TO PEAK	VOLUME	MAXIMUM CELERITY	
			DT	DX					
			(MIN)	(FT)	(CFS)	(MIN)	(IN)	(FPS)	
MAIN	1.22	1.33	1.00	164.87	132.35	151.00	.05	4.42	

INTERPOLATED TO SPECIFIED COMPUTATION INTERVAL

MAIN	1.22	1.33	1.00	132.35	151.00	.05
------	------	------	------	--------	--------	-----

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1473E+02 EXCESS= .0000E+00 OUTFLOW= .1112E+02 BASIN STORAGE= .3728E+01 PERCENT ERROR= -.8

HYDROGRAPH AT STATION RE7
PLAN 1, RATIO = .61

DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*
1	0000	1	0.	*	1	0046	47	0.	*	1	0132	93	0.	*	1	0218	139	124.					
1	0001	2	0.	*	1	0047	48	0.	*	1	0133	94	0.	*	1	0219	140	126.					
1	0002	3	0.	*	1	0048	49	0.	*	1	0134	95	0.	*	1	0220	141	127.					
1	0003	4	0.	*	1	0049	50	0.	*	1	0135	96	0.	*	1	0221	142	128.					
1	0004	5	0.	*	1	0050	51	0.	*	1	0136	97	0.	*	1	0222	143	129.					
1	0005	6	0.	*	1	0051	52	0.	*	1	0137	98	1.	*	1	0223	144	129.					
1	0006	7	0.	*	1	0052	53	0.	*	1	0138	99	1.	*	1	0224	145	130.					
1	0007	8	0.	*	1	0053	54	0.	*	1	0139	100	2.	*	1	0225	146	131.					
1	0008	9	0.	*	1	0054	55	0.	*	1	0140	101	2.	*	1	0226	147	131.					
1	0009	10	0.	*	1	0055	56	0.	*	1	0141	102	3.	*	1	0227	148	132.					
1	0010	11	0.	*	1	0056	57	0.	*	1	0142	103	4.	*	1	0228	149	132.					
1	0011	12	0.	*	1	0057	58	0.	*	1	0143	104	10.	*	1	0229	150	132.					
1	0012	13	0.	*	1	0058	59	0.	*	1	0144	105	16.	*	1	0230	151	132.					
1	0013	14	0.	*	1	0059	60	0.	*	1	0145	106	22.	*	1	0231	152	132.					
1	0014	15	0.	*	1	0100	61	0.	*	1	0146	107	27.	*	1	0232	153	132.					
1	0015	16	0.	*	1	0101	62	0.	*	1	0147	108	31.	*	1	0233	154	132.					
1	0016	17	0.	*	1	0102	63	0.	*	1	0148	109	35.	*	1	0234	155	132.					
1	0017	18	0.	*	1	0103	64	0.	*	1	0149	110	40.	*	1	0235	156	132.					
1	0018	19	0.	*	1	0104	65	0.	*	1	0150	111	44.	*	1	0236	157	131.					
1	0019	20	0.	*	1	0105	66	0.	*	1	0151	112	48.	*	1	0237	158	131.					
1	0020	21	0.	*	1	0106	67	0.	*	1	0152	113	52.	*	1	0238	159	130.					
1	0021	22	0.	*	1	0107	68	0.	*	1	0153	114	56.	*	1	0239	160	130.					
1	0022	23	0.	*	1	0108	69	0.	*	1	0154	115	60.	*	1	0240	161	129.					
1	0023	24	0.	*	1	0109	70	0.	*	1	0155	116	64.	*	1	0241	162	129.					
1	0024	25	0.	*	1	0110	71	0.	*	1	0156	117	68.	*	1	0242	163	128.					
1	0025	26	0.	*	1	0111	72	0.	*	1	0157	118	72.	*	1	0243	164	127.					
1	0026	27	0.	*	1	0112	73	0.	*	1	0158	119	75.	*	1	0244	165	126.					
1	0027	28	0.	*	1	0113	74	0.	*	1	0159	120	79.	*	1	0245	166	125.					
1	0028	29	0.	*	1	0114	75	0.	*	1	0200	121	82.	*	1	0246	167	124.					
1	0029	30	0.	*	1	0115	76	0.	*	1	0201	122	86.	*	1	0247	168	123.					
1	0030	31	0.	*	1	0116	77	0.	*	1	0202	123	89.	*	1	0248	169	122.					
1	0031	32	0.	*	1	0117	78	0.	*	1	0203	124	92.	*	1	0249	170	121.					
1	0032	33	0.	*	1	0118	79	0.	*	1	0204	125	95.	*	1	0250	171	120.					
1	0033	34	0.	*	1	0119	80	0.	*	1	0205	126	98.	*	1	0251	172	119.					

													pre.out					
1	0034	35	0.	*	1	0120	81	0.	*	1	0206	127	100.	*	1	0252	173	117.
1	0035	36	0.	*	1	0121	82	0.	*	1	0207	128	103.	*	1	0253	174	116.
1	0036	37	0.	*	1	0122	83	0.	*	1	0208	129	105.	*	1	0254	175	115.
1	0037	38	0.	*	1	0123	84	0.	*	1	0209	130	108.	*	1	0255	176	114.
1	0038	39	0.	*	1	0124	85	0.	*	1	0210	131	110.	*	1	0256	177	112.
1	0039	40	0.	*	1	0125	86	0.	*	1	0211	132	112.	*	1	0257	178	111.
1	0040	41	0.	*	1	0126	87	0.	*	1	0212	133	114.	*	1	0258	179	110.
1	0041	42	0.	*	1	0127	88	0.	*	1	0213	134	116.	*	1	0259	180	108.
1	0042	43	0.	*	1	0128	89	0.	*	1	0214	135	118.	*	1	0300	181	107.
1	0043	44	0.	*	1	0129	90	0.	*	1	0215	136	120.	*				
1	0044	45	0.	*	1	0130	91	0.	*	1	0216	137	121.	*				
1	0045	46	0.	*	1	0131	92	0.	*	1	0217	138	123.	*				

PEAK FLOW + (CFS)	TIME (HR)		MAXIMUM AVERAGE FLOW			
			6-HR	24-HR	72-HR	3.00-HR
132.	2.52	(CFS)	45.	45.	45.	45.
		(INCHES)	.051	.051	.051	.051
		(AC-FT)	11.	11.	11.	11.

CUMULATIVE AREA = 4.08 SQ MI

*** ** **

```

*****
*         *
84 KK *   BE8 *
*         *
*****

```

BE8

SUBBASIN RUNOFF DATA

86 BA	SUBBASIN CHARACTERISTICS	TAREA	.54	SUBBASIN AREA
-------	--------------------------	-------	-----	---------------

PRECIPITATION DATA

23 PB	STORM	2.13	BASIN TOTAL PRECIPITATION
-------	-------	------	---------------------------

24 PI	INCREMENTAL PRECIPITATION PATTERN									
	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	.05	.05	.05	.05	.05	.04	.04	.04	.04	.04
	.03	.03	.03	.03	.03	.02	.02	.02	.02	.02
	.01	.01	.01	.01	.01	.01	.01	.01	.01	.01
	.01	.01	.01	.01	.01	.00	.00	.00	.00	.00
	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00

87 LS	SCS LOSS RATE	STRTL	.70	INITIAL ABSTRACTION
	CRVNBR	74.00	CURVE NUMBER	
	RTIMP	.00	PERCENT IMPERVIOUS AREA	

88 UD	SCS DIMENSIONLESS UNITGRAPH	TLAG	.38	LAG
-------	-----------------------------	------	-----	-----

UNIT HYDROGRAPH
115 END-OF-PERIOD ORDINATES

9.	18.	35.	55.	78.	104.	131.	167.	202.	246.
293.	344.	400.	454.	501.	548.	583.	615.	639.	657.
671.	674.	677.	674.	671.	659.	642.	623.	603.	582.
559.	535.	507.	478.	447.	411.	377.	347.	318.	295.
275.	256.	238.	221.	206.	192.	180.	170.	159.	148.
138.	129.	120.	112.	103.	96.	90.	84.	78.	72.
68.	64.	59.	55.	51.	48.	44.	41.	38.	36.
33.	31.	29.	27.	25.	24.	22.	20.	19.	18.
17.	15.	14.	13.	13.	12.	11.	10.	9.	9.
8.	8.	7.	7.	6.	6.	6.	5.	5.	5.
4.	4.	4.	3.	3.	3.	2.	2.	2.	2.

1. 1. 1. 0. 0.

HYDROGRAPH AT STATION BE8

DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	*	DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
1	0000	1	.00	.00	.00	0.	*	1	0131	92	.00	.00	.00	113.		
1	0001	2	.00	.00	.00	0.	*	1	0132	93	.00	.00	.00	110.		
1	0002	3	.00	.00	.00	0.	*	1	0133	94	.00	.00	.00	108.		
1	0003	4	.00	.00	.00	0.	*	1	0134	95	.00	.00	.00	105.		
1	0004	5	.00	.00	.00	0.	*	1	0135	96	.00	.00	.00	102.		
1	0005	6	.00	.00	.00	0.	*	1	0136	97	.00	.00	.00	99.		
1	0006	7	.00	.00	.00	0.	*	1	0137	98	.00	.00	.00	96.		
1	0007	8	.00	.00	.00	0.	*	1	0138	99	.00	.00	.00	93.		
1	0008	9	.00	.00	.00	0.	*	1	0139	100	.00	.00	.00	91.		
1	0009	10	.00	.00	.00	0.	*	1	0140	101	.00	.00	.00	88.		
1	0010	11	.00	.00	.00	0.	*	1	0141	102	.00	.00	.00	85.		
1	0011	12	.00	.00	.00	0.	*	1	0142	103	.00	.00	.00	82.		
1	0012	13	.00	.00	.00	0.	*	1	0143	104	.00	.00	.00	80.		
1	0013	14	.00	.00	.00	0.	*	1	0144	105	.00	.00	.00	77.		
1	0014	15	.00	.00	.00	0.	*	1	0145	106	.00	.00	.00	74.		
1	0015	16	.00	.00	.00	0.	*	1	0146	107	.00	.00	.00	71.		
1	0016	17	.00	.00	.00	0.	*	1	0147	108	.00	.00	.00	69.		
1	0017	18	.00	.00	.00	0.	*	1	0148	109	.00	.00	.00	66.		
1	0018	19	.00	.00	.00	0.	*	1	0149	110	.00	.00	.00	63.		
1	0019	20	.00	.00	.00	0.	*	1	0150	111	.00	.00	.00	61.		
1	0020	21	.00	.00	.00	0.	*	1	0151	112	.00	.00	.00	58.		
1	0021	22	.00	.00	.00	0.	*	1	0152	113	.00	.00	.00	56.		
1	0022	23	.00	.00	.00	0.	*	1	0153	114	.00	.00	.00	53.		
1	0023	24	.00	.00	.00	0.	*	1	0154	115	.00	.00	.00	51.		
1	0024	25	.00	.00	.00	0.	*	1	0155	116	.00	.00	.00	49.		
1	0025	26	.00	.00	.00	0.	*	1	0156	117	.00	.00	.00	46.		
1	0026	27	.00	.00	.00	0.	*	1	0157	118	.00	.00	.00	44.		
1	0027	28	.00	.00	.00	0.	*	1	0158	119	.00	.00	.00	42.		
1	0028	29	.00	.00	.00	0.	*	1	0159	120	.00	.00	.00	41.		
1	0029	30	.00	.00	.00	0.	*	1	0200	121	.00	.00	.00	39.		
1	0030	31	.00	.00	.00	0.	*	1	0201	122	.00	.00	.00	37.		
1	0031	32	.11	.11	.00	0.	*	1	0202	123	.00	.00	.00	35.		
1	0032	33	.11	.11	.00	0.	*	1	0203	124	.00	.00	.00	34.		
1	0033	34	.11	.11	.00	0.	*	1	0204	125	.00	.00	.00	33.		
1	0034	35	.11	.11	.00	0.	*	1	0205	126	.00	.00	.00	31.		
1	0035	36	.11	.11	.00	0.	*	1	0206	127	.00	.00	.00	30.		
1	0036	37	.09	.09	.00	0.	*	1	0207	128	.00	.00	.00	29.		
1	0037	38	.09	.09	.00	0.	*	1	0208	129	.00	.00	.00	28.		
1	0038	39	.09	.08	.01	0.	*	1	0209	130	.00	.00	.00	27.		
1	0039	40	.09	.08	.01	0.	*	1	0210	131	.00	.00	.00	26.		
1	0040	41	.09	.08	.01	1.	*	1	0211	132	.00	.00	.00	25.		
1	0041	42	.06	.05	.01	1.	*	1	0212	133	.00	.00	.00	24.		
1	0042	43	.06	.05	.01	2.	*	1	0213	134	.00	.00	.00	24.		
1	0043	44	.06	.05	.01	3.	*	1	0214	135	.00	.00	.00	23.		
1	0044	45	.06	.05	.02	4.	*	1	0215	136	.00	.00	.00	23.		
1	0045	46	.06	.04	.02	6.	*	1	0216	137	.00	.00	.00	22.		
1	0046	47	.04	.03	.01	9.	*	1	0217	138	.00	.00	.00	21.		
1	0047	48	.04	.03	.01	12.	*	1	0218	139	.00	.00	.00	21.		
1	0048	49	.04	.03	.01	15.	*	1	0219	140	.00	.00	.00	20.		
1	0049	50	.04	.03	.01	19.	*	1	0220	141	.00	.00	.00	20.		
1	0050	51	.04	.03	.01	24.	*	1	0221	142	.00	.00	.00	20.		
1	0051	52	.02	.02	.01	29.	*	1	0222	143	.00	.00	.00	19.		
1	0052	53	.02	.02	.01	36.	*	1	0223	144	.00	.00	.00	19.		
1	0053	54	.02	.01	.01	42.	*	1	0224	145	.00	.00	.00	19.		
1	0054	55	.02	.01	.01	49.	*	1	0225	146	.00	.00	.00	18.		
1	0055	56	.02	.01	.01	57.	*	1	0226	147	.00	.00	.00	18.		
1	0056	57	.02	.01	.01	65.	*	1	0227	148	.00	.00	.00	18.		
1	0057	58	.02	.01	.01	73.	*	1	0228	149	.00	.00	.00	17.		
1	0058	59	.02	.01	.01	81.	*	1	0229	150	.00	.00	.00	17.		
1	0059	60	.02	.01	.01	88.	*	1	0230	151	.00	.00	.00	17.		
1	0100	61	.02	.01	.01	96.	*	1	0231	152	.00	.00	.00	17.		
1	0101	62	.01	.01	.01	104.	*	1	0232	153	.00	.00	.00	17.		
1	0102	63	.01	.01	.01	111.	*	1	0233	154	.00	.00	.00	16.		
1	0103	64	.01	.01	.01	117.	*	1	0234	155	.00	.00	.00	16.		
1	0104	65	.01	.01	.01	124.	*	1	0235	156	.00	.00	.00	16.		
1	0105	66	.01	.01	.01	129.	*	1	0236	157	.00	.00	.00	16.		
1	0106	67	.01	.01	.00	134.	*	1	0237	158	.00	.00	.00	16.		
1	0107	68	.01	.01	.00	139.	*	1	0238	159	.00	.00	.00	16.		
1	0108	69	.01	.01	.00	143.	*	1	0239	160	.00	.00	.00	15.		
1	0109	70	.01	.01	.00	146.	*	1	0240	161	.00	.00	.00	15.		
1	0110	71	.01	.01	.00	149.	*	1	0241	162	.00	.00	.00	15.		
1	0111	72	.01	.00	.00	151.	*	1	0242	163	.00	.00	.00	15.		
1	0112	73	.01	.00	.00	152.	*	1	0243	164	.00	.00	.00	15.		
1	0113	74	.01	.00	.00	153.	*	1	0244	165	.00	.00	.00	15.		
1	0114	75	.01	.00	.00	153.	*	1	0245	166	.00	.00	.00	15.		
1	0115	76	.01	.00	.00	153.	*	1	0246	167	.00	.00	.00	15.		
1	0116	77	.01	.00	.00	152.	*	1	0247	168	.00	.00	.00	15.		
1	0117	78	.01	.00	.00	151.	*	1	0248	169	.00	.00	.00	15.		
1	0118	79	.01	.00	.00	149.	*	1	0249	170	.00	.00	.00	15.		
1	0119	80	.01	.00	.00	147.	*	1	0250	171	.00	.00	.00	15.		

														pre.out			
1	0120	81	.01	.00	.00	145.	*	1	0251	172	.00	.00	.00	15.			
1	0121	82	.01	.00	.00	142.	*	1	0252	173	.00	.00	.00	15.			
1	0122	83	.01	.00	.00	140.	*	1	0253	174	.00	.00	.00	15.			
1	0123	84	.01	.00	.00	137.	*	1	0254	175	.00	.00	.00	15.			
1	0124	85	.01	.00	.00	134.	*	1	0255	176	.00	.00	.00	14.			
1	0125	86	.01	.00	.00	131.	*	1	0256	177	.00	.00	.00	14.			
1	0126	87	.01	.00	.00	128.	*	1	0257	178	.00	.00	.00	14.			
1	0127	88	.01	.00	.00	125.	*	1	0258	179	.00	.00	.00	14.			
1	0128	89	.01	.00	.00	122.	*	1	0259	180	.00	.00	.00	14.			
1	0129	90	.01	.00	.00	119.	*	1	0300	181	.00	.00	.00	14.			
1	0130	91	.01	.00	.00	116.	*										

TOTAL RAINFALL = 2.13, TOTAL LOSS = 1.72, TOTAL EXCESS = .41

PEAK FLOW	TIME	MAXIMUM AVERAGE FLOW			
(CFS)	(HR)	6-HR	24-HR	72-HR	3.00-HR
+ 153.	1.23	45.	45.	45.	45.
		(INCHES)	.392	.392	.392
		(AC-FT)	11.	11.	11.

CUMULATIVE AREA = .54 SQ MI

HYDROGRAPH AT STATION BE8
PLAN 1, RATIO = 1.00

DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	*	DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
1	0000	1	.00	.00	.00	.00	0.	*	1	0131	92	.00	.00	.00	.00	113.
1	0001	2	.00	.00	.00	.00	0.	*	1	0132	93	.00	.00	.00	.00	110.
1	0002	3	.00	.00	.00	.00	0.	*	1	0133	94	.00	.00	.00	.00	108.
1	0003	4	.00	.00	.00	.00	0.	*	1	0134	95	.00	.00	.00	.00	105.
1	0004	5	.00	.00	.00	.00	0.	*	1	0135	96	.00	.00	.00	.00	102.
1	0005	6	.00	.00	.00	.00	0.	*	1	0136	97	.00	.00	.00	.00	99.
1	0006	7	.00	.00	.00	.00	0.	*	1	0137	98	.00	.00	.00	.00	96.
1	0007	8	.00	.00	.00	.00	0.	*	1	0138	99	.00	.00	.00	.00	93.
1	0008	9	.00	.00	.00	.00	0.	*	1	0139	100	.00	.00	.00	.00	91.
1	0009	10	.00	.00	.00	.00	0.	*	1	0140	101	.00	.00	.00	.00	88.
1	0010	11	.00	.00	.00	.00	0.	*	1	0141	102	.00	.00	.00	.00	85.
1	0011	12	.00	.00	.00	.00	0.	*	1	0142	103	.00	.00	.00	.00	82.
1	0012	13	.00	.00	.00	.00	0.	*	1	0143	104	.00	.00	.00	.00	80.
1	0013	14	.00	.00	.00	.00	0.	*	1	0144	105	.00	.00	.00	.00	77.
1	0014	15	.00	.00	.00	.00	0.	*	1	0145	106	.00	.00	.00	.00	74.
1	0015	16	.00	.00	.00	.00	0.	*	1	0146	107	.00	.00	.00	.00	71.
1	0016	17	.00	.00	.00	.00	0.	*	1	0147	108	.00	.00	.00	.00	69.
1	0017	18	.00	.00	.00	.00	0.	*	1	0148	109	.00	.00	.00	.00	66.
1	0018	19	.00	.00	.00	.00	0.	*	1	0149	110	.00	.00	.00	.00	63.
1	0019	20	.00	.00	.00	.00	0.	*	1	0150	111	.00	.00	.00	.00	61.
1	0020	21	.00	.00	.00	.00	0.	*	1	0151	112	.00	.00	.00	.00	58.
1	0021	22	.00	.00	.00	.00	0.	*	1	0152	113	.00	.00	.00	.00	56.
1	0022	23	.00	.00	.00	.00	0.	*	1	0153	114	.00	.00	.00	.00	53.
1	0023	24	.00	.00	.00	.00	0.	*	1	0154	115	.00	.00	.00	.00	51.
1	0024	25	.00	.00	.00	.00	0.	*	1	0155	116	.00	.00	.00	.00	49.
1	0025	26	.00	.00	.00	.00	0.	*	1	0156	117	.00	.00	.00	.00	46.
1	0026	27	.00	.00	.00	.00	0.	*	1	0157	118	.00	.00	.00	.00	44.
1	0027	28	.00	.00	.00	.00	0.	*	1	0158	119	.00	.00	.00	.00	42.
1	0028	29	.00	.00	.00	.00	0.	*	1	0159	120	.00	.00	.00	.00	41.
1	0029	30	.00	.00	.00	.00	0.	*	1	0200	121	.00	.00	.00	.00	39.
1	0030	31	.00	.00	.00	.00	0.	*	1	0201	122	.00	.00	.00	.00	37.
1	0031	32	.11	.11	.00	0.	*	1	0202	123	.00	.00	.00	.00	35.	
1	0032	33	.11	.11	.00	0.	*	1	0203	124	.00	.00	.00	.00	34.	
1	0033	34	.11	.11	.00	0.	*	1	0204	125	.00	.00	.00	.00	33.	
1	0034	35	.11	.11	.00	0.	*	1	0205	126	.00	.00	.00	.00	31.	
1	0035	36	.11	.11	.00	0.	*	1	0206	127	.00	.00	.00	.00	30.	
1	0036	37	.09	.09	.00	0.	*	1	0207	128	.00	.00	.00	.00	29.	
1	0037	38	.09	.09	.00	0.	*	1	0208	129	.00	.00	.00	.00	28.	
1	0038	39	.09	.08	.01	0.	*	1	0209	130	.00	.00	.00	.00	27.	
1	0039	40	.09	.08	.01	0.	*	1	0210	131	.00	.00	.00	.00	26.	
1	0040	41	.09	.08	.01	1.	*	1	0211	132	.00	.00	.00	.00	25.	
1	0041	42	.06	.05	.01	1.	*	1	0212	133	.00	.00	.00	.00	24.	
1	0042	43	.06	.05	.01	2.	*	1	0213	134	.00	.00	.00	.00	24.	
1	0043	44	.06	.05	.01	3.	*	1	0214	135	.00	.00	.00	.00	23.	
1	0044	45	.06	.05	.02	4.	*	1	0215	136	.00	.00	.00	.00	23.	
1	0045	46	.06	.04	.02	6.	*	1	0216	137	.00	.00	.00	.00	22.	
1	0046	47	.04	.03	.01	9.	*	1	0217	138	.00	.00	.00	.00	21.	
1	0047	48	.04	.03	.01	12.	*	1	0218	139	.00	.00	.00	.00	21.	
1	0048	49	.04	.03	.01	15.	*	1	0219	140	.00	.00	.00	.00	20.	
1	0049	50	.04	.03	.01	19.	*	1	0220	141	.00	.00	.00	.00	20.	
1	0050	51	.04	.03	.01	24.	*	1	0221	142	.00	.00	.00	.00	20.	
1	0051	52	.02	.02	.01	29.	*	1	0222	143	.00	.00	.00	.00	19.	
1	0052	53	.02	.02	.01	36.	*	1	0223	144	.00	.00	.00	.00	19.	
1	0053	54	.02	.01	.01	42.	*	1	0224	145	.00	.00	.00	.00	19.	

pre.out														
1	0054	55	.02	.01	.01	49.	*	1	0225	146	.00	.00	.00	18.
1	0055	56	.02	.01	.01	57.	*	1	0226	147	.00	.00	.00	18.
1	0056	57	.02	.01	.01	65.	*	1	0227	148	.00	.00	.00	18.
1	0057	58	.02	.01	.01	73.	*	1	0228	149	.00	.00	.00	17.
1	0058	59	.02	.01	.01	81.	*	1	0229	150	.00	.00	.00	17.
1	0059	60	.02	.01	.01	88.	*	1	0230	151	.00	.00	.00	17.
1	0100	61	.02	.01	.01	96.	*	1	0231	152	.00	.00	.00	17.
1	0101	62	.01	.01	.01	104.	*	1	0232	153	.00	.00	.00	17.
1	0102	63	.01	.01	.01	111.	*	1	0233	154	.00	.00	.00	16.
1	0103	64	.01	.01	.01	117.	*	1	0234	155	.00	.00	.00	16.
1	0104	65	.01	.01	.01	124.	*	1	0235	156	.00	.00	.00	16.
1	0105	66	.01	.01	.01	129.	*	1	0236	157	.00	.00	.00	16.
1	0106	67	.01	.01	.00	134.	*	1	0237	158	.00	.00	.00	16.
1	0107	68	.01	.01	.00	139.	*	1	0238	159	.00	.00	.00	16.
1	0108	69	.01	.01	.00	143.	*	1	0239	160	.00	.00	.00	15.
1	0109	70	.01	.01	.00	146.	*	1	0240	161	.00	.00	.00	15.
1	0110	71	.01	.01	.00	149.	*	1	0241	162	.00	.00	.00	15.
1	0111	72	.01	.00	.00	151.	*	1	0242	163	.00	.00	.00	15.
1	0112	73	.01	.00	.00	152.	*	1	0243	164	.00	.00	.00	15.
1	0113	74	.01	.00	.00	153.	*	1	0244	165	.00	.00	.00	15.
1	0114	75	.01	.00	.00	153.	*	1	0245	166	.00	.00	.00	15.
1	0115	76	.01	.00	.00	153.	*	1	0246	167	.00	.00	.00	15.
1	0116	77	.01	.00	.00	152.	*	1	0247	168	.00	.00	.00	15.
1	0117	78	.01	.00	.00	151.	*	1	0248	169	.00	.00	.00	15.
1	0118	79	.01	.00	.00	149.	*	1	0249	170	.00	.00	.00	15.
1	0119	80	.01	.00	.00	147.	*	1	0250	171	.00	.00	.00	15.
1	0120	81	.01	.00	.00	145.	*	1	0251	172	.00	.00	.00	15.
1	0121	82	.01	.00	.00	142.	*	1	0252	173	.00	.00	.00	15.
1	0122	83	.01	.00	.00	140.	*	1	0253	174	.00	.00	.00	15.
1	0123	84	.01	.00	.00	137.	*	1	0254	175	.00	.00	.00	15.
1	0124	85	.01	.00	.00	134.	*	1	0255	176	.00	.00	.00	14.
1	0125	86	.01	.00	.00	131.	*	1	0256	177	.00	.00	.00	14.
1	0126	87	.01	.00	.00	128.	*	1	0257	178	.00	.00	.00	14.
1	0127	88	.01	.00	.00	125.	*	1	0258	179	.00	.00	.00	14.
1	0128	89	.01	.00	.00	122.	*	1	0259	180	.00	.00	.00	14.
1	0129	90	.01	.00	.00	119.	*	1	0300	181	.00	.00	.00	14.
1	0130	91	.01	.00	.00	116.	*							

TOTAL RAINFALL = 2.13, TOTAL LOSS = 1.72, TOTAL EXCESS = .41

PEAK FLOW	TIME	MAXIMUM AVERAGE FLOW			
(CFS)	(HR)	6-HR	24-HR	72-HR	3.00-HR
+ 153.	1.23	45.	45.	45.	45.
	(INCHES)	.392	.392	.392	.392
	(AC-FT)	11.	11.	11.	11.
CUMULATIVE AREA =		.54 SQ MI			

HYDROGRAPH AT STATION BE8
PLAN 1, RATIO = .61

DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q		DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
1	0000	1	.00	.00	.00	0.	*		1	0131	92	.00	.00	.00	26.	
1	0001	2	.00	.00	.00	0.	*		1	0132	93	.00	.00	.00	25.	
1	0002	3	.00	.00	.00	0.	*		1	0133	94	.00	.00	.00	25.	
1	0003	4	.00	.00	.00	0.	*		1	0134	95	.00	.00	.00	25.	
1	0004	5	.00	.00	.00	0.	*		1	0135	96	.00	.00	.00	24.	
1	0005	6	.00	.00	.00	0.	*		1	0136	97	.00	.00	.00	24.	
1	0006	7	.00	.00	.00	0.	*		1	0137	98	.00	.00	.00	23.	
1	0007	8	.00	.00	.00	0.	*		1	0138	99	.00	.00	.00	23.	
1	0008	9	.00	.00	.00	0.	*		1	0139	100	.00	.00	.00	22.	
1	0009	10	.00	.00	.00	0.	*		1	0140	101	.00	.00	.00	22.	
1	0010	11	.00	.00	.00	0.	*		1	0141	102	.00	.00	.00	21.	
1	0011	12	.00	.00	.00	0.	*		1	0142	103	.00	.00	.00	21.	
1	0012	13	.00	.00	.00	0.	*		1	0143	104	.00	.00	.00	20.	
1	0013	14	.00	.00	.00	0.	*		1	0144	105	.00	.00	.00	20.	
1	0014	15	.00	.00	.00	0.	*		1	0145	106	.00	.00	.00	19.	
1	0015	16	.00	.00	.00	0.	*		1	0146	107	.00	.00	.00	19.	
1	0016	17	.00	.00	.00	0.	*		1	0147	108	.00	.00	.00	18.	
1	0017	18	.00	.00	.00	0.	*		1	0148	109	.00	.00	.00	17.	
1	0018	19	.00	.00	.00	0.	*		1	0149	110	.00	.00	.00	17.	
1	0019	20	.00	.00	.00	0.	*		1	0150	111	.00	.00	.00	16.	
1	0020	21	.00	.00	.00	0.	*		1	0151	112	.00	.00	.00	15.	
1	0021	22	.00	.00	.00	0.	*		1	0152	113	.00	.00	.00	15.	
1	0022	23	.00	.00	.00	0.	*		1	0153	114	.00	.00	.00	14.	
1	0023	24	.00	.00	.00	0.	*		1	0154	115	.00	.00	.00	14.	
1	0024	25	.00	.00	.00	0.	*		1	0155	116	.00	.00	.00	13.	
1	0025	26	.00	.00	.00	0.	*		1	0156	117	.00	.00	.00	13.	
1	0026	27	.00	.00	.00	0.	*		1	0157	118	.00	.00	.00	12.	
1	0027	28	.00	.00	.00	0.	*		1	0158	119	.00	.00	.00	12.	

pre.out														
1	0028	29	.00	.00	.00	0.	*	1	0159	120	.00	.00	.00	11.
1	0029	30	.00	.00	.00	0.	*	1	0200	121	.00	.00	.00	11.
1	0030	31	.00	.00	.00	0.	*	1	0201	122	.00	.00	.00	10.
1	0031	32	.07	.07	.00	0.	*	1	0202	123	.00	.00	.00	10.
1	0032	33	.07	.07	.00	0.	*	1	0203	124	.00	.00	.00	9.
1	0033	34	.07	.07	.00	0.	*	1	0204	125	.00	.00	.00	9.
1	0034	35	.07	.07	.00	0.	*	1	0205	126	.00	.00	.00	9.
1	0035	36	.07	.07	.00	0.	*	1	0206	127	.00	.00	.00	8.
1	0036	37	.05	.05	.00	0.	*	1	0207	128	.00	.00	.00	8.
1	0037	38	.05	.05	.00	0.	*	1	0208	129	.00	.00	.00	8.
1	0038	39	.05	.05	.00	0.	*	1	0209	130	.00	.00	.00	8.
1	0039	40	.05	.05	.00	0.	*	1	0210	131	.00	.00	.00	7.
1	0040	41	.05	.05	.00	0.	*	1	0211	132	.00	.00	.00	7.
1	0041	42	.04	.04	.00	0.	*	1	0212	133	.00	.00	.00	7.
1	0042	43	.04	.04	.00	0.	*	1	0213	134	.00	.00	.00	7.
1	0043	44	.04	.04	.00	0.	*	1	0214	135	.00	.00	.00	7.
1	0044	45	.04	.04	.00	0.	*	1	0215	136	.00	.00	.00	7.
1	0045	46	.04	.04	.00	0.	*	1	0216	137	.00	.00	.00	6.
1	0046	47	.02	.02	.00	0.	*	1	0217	138	.00	.00	.00	6.
1	0047	48	.02	.02	.00	0.	*	1	0218	139	.00	.00	.00	6.
1	0048	49	.02	.02	.00	0.	*	1	0219	140	.00	.00	.00	6.
1	0049	50	.02	.02	.00	1.	*	1	0220	141	.00	.00	.00	6.
1	0050	51	.02	.02	.00	1.	*	1	0221	142	.00	.00	.00	6.
1	0051	52	.01	.01	.00	1.	*	1	0222	143	.00	.00	.00	6.
1	0052	53	.01	.01	.00	2.	*	1	0223	144	.00	.00	.00	6.
1	0053	54	.01	.01	.00	2.	*	1	0224	145	.00	.00	.00	6.
1	0054	55	.01	.01	.00	3.	*	1	0225	146	.00	.00	.00	5.
1	0055	56	.01	.01	.00	3.	*	1	0226	147	.00	.00	.00	5.
1	0056	57	.01	.01	.00	4.	*	1	0227	148	.00	.00	.00	5.
1	0057	58	.01	.01	.00	5.	*	1	0228	149	.00	.00	.00	5.
1	0058	59	.01	.01	.00	6.	*	1	0229	150	.00	.00	.00	5.
1	0059	60	.01	.01	.00	7.	*	1	0230	151	.00	.00	.00	5.
1	0100	61	.01	.01	.00	8.	*	1	0231	152	.00	.00	.00	5.
1	0101	62	.01	.01	.00	10.	*	1	0232	153	.00	.00	.00	5.
1	0102	63	.01	.01	.00	11.	*	1	0233	154	.00	.00	.00	5.
1	0103	64	.01	.01	.00	12.	*	1	0234	155	.00	.00	.00	5.
1	0104	65	.01	.01	.00	13.	*	1	0235	156	.00	.00	.00	5.
1	0105	66	.01	.01	.00	15.	*	1	0236	157	.00	.00	.00	5.
1	0106	67	.01	.00	.00	16.	*	1	0237	158	.00	.00	.00	5.
1	0107	68	.01	.00	.00	17.	*	1	0238	159	.00	.00	.00	5.
1	0108	69	.01	.00	.00	19.	*	1	0239	160	.00	.00	.00	5.
1	0109	70	.01	.00	.00	20.	*	1	0240	161	.00	.00	.00	5.
1	0110	71	.01	.00	.00	21.	*	1	0241	162	.00	.00	.00	5.
1	0111	72	.00	.00	.00	22.	*	1	0242	163	.00	.00	.00	5.
1	0112	73	.00	.00	.00	23.	*	1	0243	164	.00	.00	.00	5.
1	0113	74	.00	.00	.00	24.	*	1	0244	165	.00	.00	.00	5.
1	0114	75	.00	.00	.00	25.	*	1	0245	166	.00	.00	.00	5.
1	0115	76	.00	.00	.00	25.	*	1	0246	167	.00	.00	.00	5.
1	0116	77	.00	.00	.00	26.	*	1	0247	168	.00	.00	.00	5.
1	0117	78	.00	.00	.00	26.	*	1	0248	169	.00	.00	.00	5.
1	0118	79	.00	.00	.00	27.	*	1	0249	170	.00	.00	.00	5.
1	0119	80	.00	.00	.00	27.	*	1	0250	171	.00	.00	.00	5.
1	0120	81	.00	.00	.00	27.	*	1	0251	172	.00	.00	.00	5.
1	0121	82	.00	.00	.00	27.	*	1	0252	173	.00	.00	.00	5.
1	0122	83	.00	.00	.00	28.	*	1	0253	174	.00	.00	.00	5.
1	0123	84	.00	.00	.00	28.	*	1	0254	175	.00	.00	.00	5.
1	0124	85	.00	.00	.00	27.	*	1	0255	176	.00	.00	.00	5.
1	0125	86	.00	.00	.00	27.	*	1	0256	177	.00	.00	.00	5.
1	0126	87	.00	.00	.00	27.	*	1	0257	178	.00	.00	.00	5.
1	0127	88	.00	.00	.00	27.	*	1	0258	179	.00	.00	.00	5.
1	0128	89	.00	.00	.00	27.	*	1	0259	180	.00	.00	.00	5.
1	0129	90	.00	.00	.00	26.	*	1	0300	181	.00	.00	.00	5.
1	0130	91	.00	.00	.00	26.	*							

TOTAL RAINFALL = 1.29, TOTAL LOSS = 1.21, TOTAL EXCESS = .08

PEAK FLOW + (CFS)	TIME (HR)	MAXIMUM AVERAGE FLOW			
		6-HR	24-HR	72-HR	3.00-HR
+ 28.	1.37	9.	9.	9.	9.
	(INCHES)	.078	.078	.078	.078
	(AC-FT)	2.	2.	2.	2.

CUMULATIVE AREA = .54 SQ MI

*** ** *

```

*****
*           *
89 KK      *   RES *
*           *
*****

```

Route BE8 in channel to Outlet OE1

HYDROGRAPH ROUTING DATA

91 RD MUSKINGUM-CUNGE CHANNEL ROUTING
 L 7515. CHANNEL LENGTH
 S .0100 SLOPE
 N .040 CHANNEL ROUGHNESS COEFFICIENT
 CA .00 CONTRIBUTING AREA
 SHAPE TRAP CHANNEL SHAPE
 WD .00 BOTTOM WIDTH OR DIAMETER
 Z 7.00 SIDE SLOPE

 COMPUTED MUSKINGUM-CUNGE PARAMETERS

ELEMENT	ALPHA	COMPUTATION TIME STEP		PEAK (CFS)	TIME TO PEAK (MIN)	VOLUME (IN)	MAXIMUM CELERITY (FPS)
		M	DT (MIN)				
MAIN	1.22	1.33	1.00	170.80	151.59	97.00	.36

INTERPOLATED TO SPECIFIED COMPUTATION INTERVAL

MAIN	1.22	1.33	1.00	151.59	97.00	.36
------	------	------	------	--------	-------	-----

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1128E+02 EXCESS= .0000E+00 OUTFLOW= .1023E+02 BASIN STORAGE= .1188E+01 PERCENT ERROR= -1.2

 HYDROGRAPH AT STATION RE8
 PLAN 1, RATIO = 1.00

DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*
1	0000	1	0.	*	1	0046	47	0.	*	1	0132	93	142.	*	1	0218	139	63.					
1	0001	2	0.	*	1	0047	48	0.	*	1	0133	94	146.	*	1	0219	140	61.					
1	0002	3	0.	*	1	0048	49	0.	*	1	0134	95	148.	*	1	0220	141	59.					
1	0003	4	0.	*	1	0049	50	0.	*	1	0135	96	150.	*	1	0221	142	57.					
1	0004	5	0.	*	1	0050	51	0.	*	1	0136	97	151.	*	1	0222	143	55.					
1	0005	6	0.	*	1	0051	52	0.	*	1	0137	98	152.	*	1	0223	144	53.					
1	0006	7	0.	*	1	0052	53	0.	*	1	0138	99	151.	*	1	0224	145	51.					
1	0007	8	0.	*	1	0053	54	0.	*	1	0139	100	151.	*	1	0225	146	50.					
1	0008	9	0.	*	1	0054	55	0.	*	1	0140	101	150.	*	1	0226	147	48.					
1	0009	10	0.	*	1	0055	56	0.	*	1	0141	102	148.	*	1	0227	148	47.					
1	0010	11	0.	*	1	0056	57	0.	*	1	0142	103	147.	*	1	0228	149	45.					
1	0011	12	0.	*	1	0057	58	0.	*	1	0143	104	145.	*	1	0229	150	44.					
1	0012	13	0.	*	1	0058	59	0.	*	1	0144	105	143.	*	1	0230	151	42.					
1	0013	14	0.	*	1	0059	60	0.	*	1	0145	106	141.	*	1	0231	152	41.					
1	0014	15	0.	*	1	0100	61	0.	*	1	0146	107	138.	*	1	0232	153	39.					
1	0015	16	0.	*	1	0101	62	0.	*	1	0147	108	136.	*	1	0233	154	38.					
1	0016	17	0.	*	1	0102	63	0.	*	1	0148	109	133.	*	1	0234	155	37.					
1	0017	18	0.	*	1	0103	64	0.	*	1	0149	110	131.	*	1	0235	156	36.					
1	0018	19	0.	*	1	0104	65	0.	*	1	0150	111	128.	*	1	0236	157	35.					
1	0019	20	0.	*	1	0105	66	0.	*	1	0151	112	126.	*	1	0237	158	34.					
1	0020	21	0.	*	1	0106	67	0.	*	1	0152	113	123.	*	1	0238	159	33.					
1	0021	22	0.	*	1	0107	68	0.	*	1	0153	114	120.	*	1	0239	160	32.					
1	0022	23	0.	*	1	0108	69	0.	*	1	0154	115	118.	*	1	0240	161	31.					
1	0023	24	0.	*	1	0109	70	0.	*	1	0155	116	115.	*	1	0241	162	30.					
1	0024	25	0.	*	1	0110	71	0.	*	1	0156	117	113.	*	1	0242	163	29.					
1	0025	26	0.	*	1	0111	72	0.	*	1	0157	118	110.	*	1	0243	164	28.					
1	0026	27	0.	*	1	0112	73	0.	*	1	0158	119	108.	*	1	0244	165	27.					
1	0027	28	0.	*	1	0113	74	0.	*	1	0159	120	105.	*	1	0245	166	27.					
1	0028	29	0.	*	1	0114	75	0.	*	1	0200	121	103.	*	1	0246	167	26.					
1	0029	30	0.	*	1	0115	76	0.	*	1	0201	122	101.	*	1	0247	168	25.					
1	0030	31	0.	*	1	0116	77	0.	*	1	0202	123	98.	*	1	0248	169	25.					
1	0031	32	0.	*	1	0117	78	0.	*	1	0203	124	96.	*	1	0249	170	24.					
1	0032	33	0.	*	1	0118	79	0.	*	1	0204	125	94.	*	1	0250	171	24.					
1	0033	34	0.	*	1	0119	80	0.	*	1	0205	126	91.	*	1	0251	172	23.					
1	0034	35	0.	*	1	0120	81	0.	*	1	0206	127	89.	*	1	0252	173	23.					
1	0035	36	0.	*	1	0121	82	0.	*	1	0207	128	87.	*	1	0253	174	22.					
1	0036	37	0.	*	1	0122	83	0.	*	1	0208	129	84.	*	1	0254	175	22.					
1	0037	38	0.	*	1	0123	84	0.	*	1	0209	130	82.	*	1	0255	176	21.					
1	0038	39	0.	*	1	0124	85	0.	*	1	0210	131	80.	*	1	0256	177	21.					
1	0039	40	0.	*	1	0125	86	0.	*	1	0211	132	78.	*	1	0257	178	21.					
1	0040	41	0.	*	1	0126	87	32.	*	1	0212	133	75.	*	1	0258	179	20.					
1	0041	42	0.	*	1	0127	88	99.	*	1	0213	134	73.	*	1	0259	180	20.					
1	0042	43	0.	*	1	0128	89	121.	*	1	0214	135	71.	*	1	0300	181	20.					
1	0043	44	0.	*	1	0129	90	125.	*	1	0215	136	69.	*									
1	0044	45	0.	*	1	0130	91	132.	*	1	0216	137	67.	*									
1	0045	46	0.	*	1	0131	92	138.	*	1	0217	138	65.	*									

pre.out
 PEAK FLOW TIME MAXIMUM AVERAGE FLOW
 + (CFS) (HR) 6-HR 24-HR 72-HR 3.00-HR
 + 152. 1.62 (CFS) 41. 41. 41. 41.
 (INCHES) .355 .355 .355 .355
 (AC-FT) 10. 10. 10. 10.

CUMULATIVE AREA = .54 SQ MI

COMPUTED MUSKINGUM-CUNGE PARAMETERS
 COMPUTATION TIME STEP
 ELEMENT ALPHA M DT DX PEAK TIME TO VOLUME MAXIMUM
 (MIN) (FT) (CFS) (MIN) (IN) CELERITY
 (FPS)
 MAIN 1.22 1.33 1.00 107.36 27.32 118.00 .06 2.98

INTERPOLATED TO SPECIFIED COMPUTATION INTERVAL

MAIN 1.22 1.33 1.00 27.32 118.00 .06

CONTINUITY SUMMARY (AC-FT) - INFLOW= .2239E+01 EXCESS= .0000E+00 OUTFLOW= .1761E+01 BASIN STORAGE= .5236E+00 PERCENT ERROR= -2.1

HYDROGRAPH AT STATION RE8
 PLAN 1, RATIO = .61

DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW
1	0000	1	0.	*	1	0046	47	0.	*	1	0132	93	0.	*	1	0218	139	22.				
1	0001	2	0.	*	1	0047	48	0.	*	1	0133	94	0.	*	1	0219	140	21.				
1	0002	3	0.	*	1	0048	49	0.	*	1	0134	95	0.	*	1	0220	141	21.				
1	0003	4	0.	*	1	0049	50	0.	*	1	0135	96	0.	*	1	0221	142	20.				
1	0004	5	0.	*	1	0050	51	0.	*	1	0136	97	0.	*	1	0222	143	20.				
1	0005	6	0.	*	1	0051	52	0.	*	1	0137	98	0.	*	1	0223	144	19.				
1	0006	7	0.	*	1	0052	53	0.	*	1	0138	99	0.	*	1	0224	145	19.				
1	0007	8	0.	*	1	0053	54	0.	*	1	0139	100	0.	*	1	0225	146	19.				
1	0008	9	0.	*	1	0054	55	0.	*	1	0140	101	0.	*	1	0226	147	18.				
1	0009	10	0.	*	1	0055	56	0.	*	1	0141	102	0.	*	1	0227	148	18.				
1	0010	11	0.	*	1	0056	57	0.	*	1	0142	103	0.	*	1	0228	149	17.				
1	0011	12	0.	*	1	0057	58	0.	*	1	0143	104	0.	*	1	0229	150	17.				
1	0012	13	0.	*	1	0058	59	0.	*	1	0144	105	0.	*	1	0230	151	16.				
1	0013	14	0.	*	1	0059	60	0.	*	1	0145	106	0.	*	1	0231	152	16.				
1	0014	15	0.	*	1	0100	61	0.	*	1	0146	107	0.	*	1	0232	153	15.				
1	0015	16	0.	*	1	0101	62	0.	*	1	0147	108	0.	*	1	0233	154	15.				
1	0016	17	0.	*	1	0102	63	0.	*	1	0148	109	0.	*	1	0234	155	15.				
1	0017	18	0.	*	1	0103	64	0.	*	1	0149	110	1.	*	1	0235	156	14.				
1	0018	19	0.	*	1	0104	65	0.	*	1	0150	111	14.	*	1	0236	157	14.				
1	0019	20	0.	*	1	0105	66	0.	*	1	0151	112	27.	*	1	0237	158	13.				
1	0020	21	0.	*	1	0106	67	0.	*	1	0152	113	26.	*	1	0238	159	13.				
1	0021	22	0.	*	1	0107	68	0.	*	1	0153	114	25.	*	1	0239	160	13.				
1	0022	23	0.	*	1	0108	69	0.	*	1	0154	115	27.	*	1	0240	161	12.				
1	0023	24	0.	*	1	0109	70	0.	*	1	0155	116	27.	*	1	0241	162	12.				
1	0024	25	0.	*	1	0110	71	0.	*	1	0156	117	27.	*	1	0242	163	12.				
1	0025	26	0.	*	1	0111	72	0.	*	1	0157	118	27.	*	1	0243	164	11.				
1	0026	27	0.	*	1	0112	73	0.	*	1	0158	119	27.	*	1	0244	165	11.				
1	0027	28	0.	*	1	0113	74	0.	*	1	0159	120	27.	*	1	0245	166	11.				
1	0028	29	0.	*	1	0114	75	0.	*	1	0200	121	27.	*	1	0246	167	10.				
1	0029	30	0.	*	1	0115	76	0.	*	1	0201	122	27.	*	1	0247	168	10.				
1	0030	31	0.	*	1	0116	77	0.	*	1	0202	123	27.	*	1	0248	169	10.				
1	0031	32	0.	*	1	0117	78	0.	*	1	0203	124	27.	*	1	0249	170	10.				
1	0032	33	0.	*	1	0118	79	0.	*	1	0204	125	26.	*	1	0250	171	9.				
1	0033	34	0.	*	1	0119	80	0.	*	1	0205	126	26.	*	1	0251	172	9.				
1	0034	35	0.	*	1	0120	81	0.	*	1	0206	127	26.	*	1	0252	173	9.				
1	0035	36	0.	*	1	0121	82	0.	*	1	0207	128	26.	*	1	0253	174	9.				
1	0036	37	0.	*	1	0122	83	0.	*	1	0208	129	25.	*	1	0254	175	8.				
1	0037	38	0.	*	1	0123	84	0.	*	1	0209	130	25.	*	1	0255	176	8.				
1	0038	39	0.	*	1	0124	85	0.	*	1	0210	131	25.	*	1	0256	177	8.				
1	0039	40	0.	*	1	0125	86	0.	*	1	0211	132	24.	*	1	0257	178	8.				
1	0040	41	0.	*	1	0126	87	0.	*	1	0212	133	24.	*	1	0258	179	8.				
1	0041	42	0.	*	1	0127	88	0.	*	1	0213	134	24.	*	1	0259	180	7.				
1	0042	43	0.	*	1	0128	89	0.	*	1	0214	135	23.	*	1	0300	181	7.				
1	0043	44	0.	*	1	0129	90	0.	*	1	0215	136	23.	*								
1	0044	45	0.	*	1	0130	91	0.	*	1	0216	137	22.	*								
1	0045	46	0.	*	1	0131	92	0.	*	1	0217	138	22.	*								

PEAK FLOW TIME MAXIMUM AVERAGE FLOW
 + (CFS) (HR) 6-HR 24-HR 72-HR 3.00-HR

pre.out

(CFS) 7. 7. 7. 7.
 + 27. 1.97 (INCHES) .061 .061 .061 .061
 (AC-FT) 2. 2. 2. 2.
 CUMULATIVE AREA = .54 SQ MI

*** ** ** ** **

 * *
 92 KK * BE9 *
 * *

 BE9

SUBBASIN RUNOFF DATA

94 BA SUBBASIN CHARACTERISTICS
 TAREA .12 SUBBASIN AREA

PRECIPITATION DATA

23 PB STORM 2.13 BASIN TOTAL PRECIPITATION

24 PI INCREMENTAL PRECIPITATION PATTERN

.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.05	.05	.05	.05	.05	.04	.04	.04	.04	.04	.04
.03	.03	.03	.03	.03	.02	.02	.02	.02	.02	.02
.01	.01	.01	.01	.01	.01	.01	.01	.01	.01	.01
.01	.01	.01	.01	.01	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00

95 LS SCS LOSS RATE
 STRTL .63 INITIAL ABSTRACTION
 CRVNR 76.00 CURVE NUMBER
 RTIMP .00 PERCENT IMPERVIOUS AREA

96 UD SCS DIMENSIONLESS UNITGRAPH
 TLAG .39 LAG

UNIT HYDROGRAPH
119 END-OF-PERIOD ORDINATES

2.	4.	7.	11.	15.	20.	26.	32.	39.	47.
57.	66.	77.	88.	99.	108.	117.	123.	130.	134.
137.	140.	140.	141.	140.	140.	137.	134.	130.	126.
122.	117.	113.	107.	101.	96.	89.	82.	75.	69.
64.	60.	56.	52.	48.	45.	42.	39.	37.	35.
33.	31.	29.	27.	25.	23.	22.	20.	19.	18.
17.	15.	15.	14.	13.	12.	11.	10.	10.	9.
8.	8.	7.	7.	6.	6.	6.	5.	5.	5.
4.	4.	4.	4.	3.	3.	3.	3.	2.	2.
2.	2.	2.	2.	2.	2.	1.	1.	1.	1.
1.	1.	1.	1.	1.	1.	1.	1.	1.	1.
1.	0.	0.	0.	0.	0.	0.	0.	0.	0.

HYDROGRAPH AT STATION BE9

DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	*	DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
1	0000	1	.00	.00	.00	0.	*	1	0131	92	.00	.00	.00	29.		
1	0001	2	.00	.00	.00	0.	*	1	0132	93	.00	.00	.00	28.		
1	0002	3	.00	.00	.00	0.	*	1	0133	94	.00	.00	.00	27.		
1	0003	4	.00	.00	.00	0.	*	1	0134	95	.00	.00	.00	26.		
1	0004	5	.00	.00	.00	0.	*	1	0135	96	.00	.00	.00	26.		
1	0005	6	.00	.00	.00	0.	*	1	0136	97	.00	.00	.00	25.		
1	0006	7	.00	.00	.00	0.	*	1	0137	98	.00	.00	.00	24.		
1	0007	8	.00	.00	.00	0.	*	1	0138	99	.00	.00	.00	24.		

pre.out
 + (CFS) (HR)
 + 39. 1.23 (CFS) 12. 12. 12. 12.
 (INCHES) .459 .459 .459 .459
 (AC-FT) 3. 3. 3. 3.
 CUMULATIVE AREA = .12 SQ MI

HYDROGRAPH AT STATION BE9
 PLAN 1, RATIO = 1.00

DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	*	DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
1	0000	1	.00	.00	.00	.00	0.	*	1	0131	92	.00	.00	.00	29.	
1	0001	2	.00	.00	.00	.00	0.	*	1	0132	93	.00	.00	.00	28.	
1	0002	3	.00	.00	.00	.00	0.	*	1	0133	94	.00	.00	.00	27.	
1	0003	4	.00	.00	.00	.00	0.	*	1	0134	95	.00	.00	.00	26.	
1	0004	5	.00	.00	.00	.00	0.	*	1	0135	96	.00	.00	.00	26.	
1	0005	6	.00	.00	.00	.00	0.	*	1	0136	97	.00	.00	.00	25.	
1	0006	7	.00	.00	.00	.00	0.	*	1	0137	98	.00	.00	.00	24.	
1	0007	8	.00	.00	.00	.00	0.	*	1	0138	99	.00	.00	.00	24.	
1	0008	9	.00	.00	.00	.00	0.	*	1	0139	100	.00	.00	.00	23.	
1	0009	10	.00	.00	.00	.00	0.	*	1	0140	101	.00	.00	.00	22.	
1	0010	11	.00	.00	.00	.00	0.	*	1	0141	102	.00	.00	.00	22.	
1	0011	12	.00	.00	.00	.00	0.	*	1	0142	103	.00	.00	.00	21.	
1	0012	13	.00	.00	.00	.00	0.	*	1	0143	104	.00	.00	.00	20.	
1	0013	14	.00	.00	.00	.00	0.	*	1	0144	105	.00	.00	.00	19.	
1	0014	15	.00	.00	.00	.00	0.	*	1	0145	106	.00	.00	.00	19.	
1	0015	16	.00	.00	.00	.00	0.	*	1	0146	107	.00	.00	.00	18.	
1	0016	17	.00	.00	.00	.00	0.	*	1	0147	108	.00	.00	.00	17.	
1	0017	18	.00	.00	.00	.00	0.	*	1	0148	109	.00	.00	.00	17.	
1	0018	19	.00	.00	.00	.00	0.	*	1	0149	110	.00	.00	.00	16.	
1	0019	20	.00	.00	.00	.00	0.	*	1	0150	111	.00	.00	.00	15.	
1	0020	21	.00	.00	.00	.00	0.	*	1	0151	112	.00	.00	.00	15.	
1	0021	22	.00	.00	.00	.00	0.	*	1	0152	113	.00	.00	.00	14.	
1	0022	23	.00	.00	.00	.00	0.	*	1	0153	114	.00	.00	.00	14.	
1	0023	24	.00	.00	.00	.00	0.	*	1	0154	115	.00	.00	.00	13.	
1	0024	25	.00	.00	.00	.00	0.	*	1	0155	116	.00	.00	.00	12.	
1	0025	26	.00	.00	.00	.00	0.	*	1	0156	117	.00	.00	.00	12.	
1	0026	27	.00	.00	.00	.00	0.	*	1	0157	118	.00	.00	.00	11.	
1	0027	28	.00	.00	.00	.00	0.	*	1	0158	119	.00	.00	.00	11.	
1	0028	29	.00	.00	.00	.00	0.	*	1	0159	120	.00	.00	.00	10.	
1	0029	30	.00	.00	.00	.00	0.	*	1	0200	121	.00	.00	.00	10.	
1	0030	31	.00	.00	.00	.00	0.	*	1	0201	122	.00	.00	.00	10.	
1	0031	32	.11	.11	.00	.00	0.	*	1	0202	123	.00	.00	.00	9.	
1	0032	33	.11	.11	.00	.00	0.	*	1	0203	124	.00	.00	.00	9.	
1	0033	34	.11	.11	.00	.00	0.	*	1	0204	125	.00	.00	.00	8.	
1	0034	35	.11	.11	.00	.00	0.	*	1	0205	126	.00	.00	.00	8.	
1	0035	36	.11	.11	.00	.00	0.	*	1	0206	127	.00	.00	.00	8.	
1	0036	37	.09	.09	.00	.00	0.	*	1	0207	128	.00	.00	.00	7.	
1	0037	38	.09	.08	.01	.00	0.	*	1	0208	129	.00	.00	.00	7.	
1	0038	39	.09	.08	.01	.00	0.	*	1	0209	130	.00	.00	.00	7.	
1	0039	40	.09	.07	.01	.00	0.	*	1	0210	131	.00	.00	.00	7.	
1	0040	41	.09	.07	.02	.00	0.	*	1	0211	132	.00	.00	.00	6.	
1	0041	42	.06	.05	.01	.00	0.	*	1	0212	133	.00	.00	.00	6.	
1	0042	43	.06	.05	.02	1.	0.	*	1	0213	134	.00	.00	.00	6.	
1	0043	44	.06	.04	.02	1.	0.	*	1	0214	135	.00	.00	.00	6.	
1	0044	45	.06	.04	.02	1.	0.	*	1	0215	136	.00	.00	.00	6.	
1	0045	46	.06	.04	.02	2.	0.	*	1	0216	137	.00	.00	.00	6.	
1	0046	47	.04	.03	.01	3.	0.	*	1	0217	138	.00	.00	.00	5.	
1	0047	48	.04	.03	.01	3.	0.	*	1	0218	139	.00	.00	.00	5.	
1	0048	49	.04	.02	.01	4.	0.	*	1	0219	140	.00	.00	.00	5.	
1	0049	50	.04	.02	.01	5.	0.	*	1	0220	141	.00	.00	.00	5.	
1	0050	51	.04	.02	.02	7.	0.	*	1	0221	142	.00	.00	.00	5.	
1	0051	52	.02	.01	.01	8.	0.	*	1	0222	143	.00	.00	.00	5.	
1	0052	53	.02	.01	.01	9.	0.	*	1	0223	144	.00	.00	.00	5.	
1	0053	54	.02	.01	.01	11.	0.	*	1	0224	145	.00	.00	.00	5.	
1	0054	55	.02	.01	.01	13.	0.	*	1	0225	146	.00	.00	.00	5.	
1	0055	56	.02	.01	.01	15.	0.	*	1	0226	147	.00	.00	.00	4.	
1	0056	57	.02	.01	.01	17.	0.	*	1	0227	148	.00	.00	.00	4.	
1	0057	58	.02	.01	.01	19.	0.	*	1	0228	149	.00	.00	.00	4.	
1	0058	59	.02	.01	.01	21.	0.	*	1	0229	150	.00	.00	.00	4.	
1	0059	60	.02	.01	.01	23.	0.	*	1	0230	151	.00	.00	.00	4.	
1	0100	61	.02	.01	.01	24.	0.	*	1	0231	152	.00	.00	.00	4.	
1	0101	62	.01	.01	.01	26.	0.	*	1	0232	153	.00	.00	.00	4.	
1	0102	63	.01	.01	.01	28.	0.	*	1	0233	154	.00	.00	.00	4.	
1	0103	64	.01	.01	.01	30.	0.	*	1	0234	155	.00	.00	.00	4.	
1	0104	65	.01	.01	.01	31.	0.	*	1	0235	156	.00	.00	.00	4.	
1	0105	66	.01	.01	.01	33.	0.	*	1	0236	157	.00	.00	.00	4.	
1	0106	67	.01	.01	.00	34.	0.	*	1	0237	158	.00	.00	.00	4.	
1	0107	68	.01	.01	.00	35.	0.	*	1	0238	159	.00	.00	.00	4.	
1	0108	69	.01	.01	.00	36.	0.	*	1	0239	160	.00	.00	.00	4.	
1	0109	70	.01	.01	.00	37.	0.	*	1	0240	161	.00	.00	.00	4.	
1	0110	71	.01	.01	.00	37.	0.	*	1	0241	162	.00	.00	.00	4.	
1	0111	72	.01	.00	.00	38.	0.	*	1	0242	163	.00	.00	.00	4.	

pre.out														
1	0112	73	.01	.00	.00	38.	*	1	0243	164	.00	.00	.00	4.
1	0113	74	.01	.00	.00	39.	*	1	0244	165	.00	.00	.00	4.
1	0114	75	.01	.00	.00	39.	*	1	0245	166	.00	.00	.00	4.
1	0115	76	.01	.00	.00	39.	*	1	0246	167	.00	.00	.00	4.
1	0116	77	.01	.00	.00	38.	*	1	0247	168	.00	.00	.00	4.
1	0117	78	.01	.00	.00	38.	*	1	0248	169	.00	.00	.00	4.
1	0118	79	.01	.00	.00	38.	*	1	0249	170	.00	.00	.00	4.
1	0119	80	.01	.00	.00	37.	*	1	0250	171	.00	.00	.00	4.
1	0120	81	.01	.00	.00	37.	*	1	0251	172	.00	.00	.00	4.
1	0121	82	.01	.00	.00	36.	*	1	0252	173	.00	.00	.00	3.
1	0122	83	.01	.00	.00	35.	*	1	0253	174	.00	.00	.00	3.
1	0123	84	.01	.00	.00	35.	*	1	0254	175	.00	.00	.00	3.
1	0124	85	.01	.00	.00	34.	*	1	0255	176	.00	.00	.00	3.
1	0125	86	.01	.00	.00	33.	*	1	0256	177	.00	.00	.00	3.
1	0126	87	.01	.00	.00	32.	*	1	0257	178	.00	.00	.00	3.
1	0127	88	.01	.00	.00	32.	*	1	0258	179	.00	.00	.00	3.
1	0128	89	.01	.00	.00	31.	*	1	0259	180	.00	.00	.00	3.
1	0129	90	.01	.00	.00	30.	*	1	0300	181	.00	.00	.00	3.
1	0130	91	.01	.00	.00	29.	*							

TOTAL RAINFALL = 2.13, TOTAL LOSS = 1.65, TOTAL EXCESS = .48

PEAK FLOW	TIME		6-HR	24-HR	72-HR	3.00-HR
(CFS)	(HR)	(CFS)				
39.	1.23	(INCHES)	12.	12.	12.	12.
		(AC-FT)	.459	.459	.459	.459
			3.	3.	3.	3.
CUMULATIVE AREA =			.12 SQ MI			

HYDROGRAPH AT STATION BE9
PLAN 1, RATIO = .61

DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	*	DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
1	0000	1	.00	.00	.00	0.	*		1	0131	92	.00	.00	.00	7.	
1	0001	2	.00	.00	.00	0.	*		1	0132	93	.00	.00	.00	7.	
1	0002	3	.00	.00	.00	0.	*		1	0133	94	.00	.00	.00	7.	
1	0003	4	.00	.00	.00	0.	*		1	0134	95	.00	.00	.00	7.	
1	0004	5	.00	.00	.00	0.	*		1	0135	96	.00	.00	.00	7.	
1	0005	6	.00	.00	.00	0.	*		1	0136	97	.00	.00	.00	7.	
1	0006	7	.00	.00	.00	0.	*		1	0137	98	.00	.00	.00	7.	
1	0007	8	.00	.00	.00	0.	*		1	0138	99	.00	.00	.00	7.	
1	0008	9	.00	.00	.00	0.	*		1	0139	100	.00	.00	.00	6.	
1	0009	10	.00	.00	.00	0.	*		1	0140	101	.00	.00	.00	6.	
1	0010	11	.00	.00	.00	0.	*		1	0141	102	.00	.00	.00	6.	
1	0011	12	.00	.00	.00	0.	*		1	0142	103	.00	.00	.00	6.	
1	0012	13	.00	.00	.00	0.	*		1	0143	104	.00	.00	.00	6.	
1	0013	14	.00	.00	.00	0.	*		1	0144	105	.00	.00	.00	6.	
1	0014	15	.00	.00	.00	0.	*		1	0145	106	.00	.00	.00	5.	
1	0015	16	.00	.00	.00	0.	*		1	0146	107	.00	.00	.00	5.	
1	0016	17	.00	.00	.00	0.	*		1	0147	108	.00	.00	.00	5.	
1	0017	18	.00	.00	.00	0.	*		1	0148	109	.00	.00	.00	5.	
1	0018	19	.00	.00	.00	0.	*		1	0149	110	.00	.00	.00	5.	
1	0019	20	.00	.00	.00	0.	*		1	0150	111	.00	.00	.00	5.	
1	0020	21	.00	.00	.00	0.	*		1	0151	112	.00	.00	.00	4.	
1	0021	22	.00	.00	.00	0.	*		1	0152	113	.00	.00	.00	4.	
1	0022	23	.00	.00	.00	0.	*		1	0153	114	.00	.00	.00	4.	
1	0023	24	.00	.00	.00	0.	*		1	0154	115	.00	.00	.00	4.	
1	0024	25	.00	.00	.00	0.	*		1	0155	116	.00	.00	.00	4.	
1	0025	26	.00	.00	.00	0.	*		1	0156	117	.00	.00	.00	4.	
1	0026	27	.00	.00	.00	0.	*		1	0157	118	.00	.00	.00	3.	
1	0027	28	.00	.00	.00	0.	*		1	0158	119	.00	.00	.00	3.	
1	0028	29	.00	.00	.00	0.	*		1	0159	120	.00	.00	.00	3.	
1	0029	30	.00	.00	.00	0.	*		1	0200	121	.00	.00	.00	3.	
1	0030	31	.00	.00	.00	0.	*		1	0201	122	.00	.00	.00	3.	
1	0031	32	.07	.07	.00	0.	*		1	0202	123	.00	.00	.00	3.	
1	0032	33	.07	.07	.00	0.	*		1	0203	124	.00	.00	.00	3.	
1	0033	34	.07	.07	.00	0.	*		1	0204	125	.00	.00	.00	3.	
1	0034	35	.07	.07	.00	0.	*		1	0205	126	.00	.00	.00	2.	
1	0035	36	.07	.07	.00	0.	*		1	0206	127	.00	.00	.00	2.	
1	0036	37	.05	.05	.00	0.	*		1	0207	128	.00	.00	.00	2.	
1	0037	38	.05	.05	.00	0.	*		1	0208	129	.00	.00	.00	2.	
1	0038	39	.05	.05	.00	0.	*		1	0209	130	.00	.00	.00	2.	
1	0039	40	.05	.05	.00	0.	*		1	0210	131	.00	.00	.00	2.	
1	0040	41	.05	.05	.00	0.	*		1	0211	132	.00	.00	.00	2.	
1	0041	42	.04	.04	.00	0.	*		1	0212	133	.00	.00	.00	2.	
1	0042	43	.04	.04	.00	0.	*		1	0213	134	.00	.00	.00	2.	
1	0043	44	.04	.04	.00	0.	*		1	0214	135	.00	.00	.00	2.	
1	0044	45	.04	.03	.00	0.	*		1	0215	136	.00	.00	.00	2.	
1	0045	46	.04	.03	.00	0.	*		1	0216	137	.00	.00	.00	2.	

pre.out														
1	0046	47	.02	.02	.00	0.	*	1	0217	138	.00	.00	.00	2.
1	0047	48	.02	.02	.00	0.	*	1	0218	139	.00	.00	.00	2.
1	0048	49	.02	.02	.00	0.	*	1	0219	140	.00	.00	.00	2.
1	0049	50	.02	.02	.00	0.	*	1	0220	141	.00	.00	.00	2.
1	0050	51	.02	.02	.00	0.	*	1	0221	142	.00	.00	.00	2.
1	0051	52	.01	.01	.00	1.	*	1	0222	143	.00	.00	.00	2.
1	0052	53	.01	.01	.00	1.	*	1	0223	144	.00	.00	.00	2.
1	0053	54	.01	.01	.00	1.	*	1	0224	145	.00	.00	.00	2.
1	0054	55	.01	.01	.00	1.	*	1	0225	146	.00	.00	.00	1.
1	0055	56	.01	.01	.00	1.	*	1	0226	147	.00	.00	.00	1.
1	0056	57	.01	.01	.00	2.	*	1	0227	148	.00	.00	.00	1.
1	0057	58	.01	.01	.00	2.	*	1	0228	149	.00	.00	.00	1.
1	0058	59	.01	.01	.00	2.	*	1	0229	150	.00	.00	.00	1.
1	0059	60	.01	.01	.00	3.	*	1	0230	151	.00	.00	.00	1.
1	0100	61	.01	.01	.00	3.	*	1	0231	152	.00	.00	.00	1.
1	0101	62	.01	.01	.00	3.	*	1	0232	153	.00	.00	.00	1.
1	0102	63	.01	.01	.00	4.	*	1	0233	154	.00	.00	.00	1.
1	0103	64	.01	.01	.00	4.	*	1	0234	155	.00	.00	.00	1.
1	0104	65	.01	.01	.00	5.	*	1	0235	156	.00	.00	.00	1.
1	0105	66	.01	.01	.00	5.	*	1	0236	157	.00	.00	.00	1.
1	0106	67	.01	.00	.00	5.	*	1	0237	158	.00	.00	.00	1.
1	0107	68	.01	.00	.00	6.	*	1	0238	159	.00	.00	.00	1.
1	0108	69	.01	.00	.00	6.	*	1	0239	160	.00	.00	.00	1.
1	0109	70	.01	.00	.00	6.	*	1	0240	161	.00	.00	.00	1.
1	0110	71	.01	.00	.00	7.	*	1	0241	162	.00	.00	.00	1.
1	0111	72	.00	.00	.00	7.	*	1	0242	163	.00	.00	.00	1.
1	0112	73	.00	.00	.00	7.	*	1	0243	164	.00	.00	.00	1.
1	0113	74	.00	.00	.00	7.	*	1	0244	165	.00	.00	.00	1.
1	0114	75	.00	.00	.00	8.	*	1	0245	166	.00	.00	.00	1.
1	0115	76	.00	.00	.00	8.	*	1	0246	167	.00	.00	.00	1.
1	0116	77	.00	.00	.00	8.	*	1	0247	168	.00	.00	.00	1.
1	0117	78	.00	.00	.00	8.	*	1	0248	169	.00	.00	.00	1.
1	0118	79	.00	.00	.00	8.	*	1	0249	170	.00	.00	.00	1.
1	0119	80	.00	.00	.00	8.	*	1	0250	171	.00	.00	.00	1.
1	0120	81	.00	.00	.00	8.	*	1	0251	172	.00	.00	.00	1.
1	0121	82	.00	.00	.00	8.	*	1	0252	173	.00	.00	.00	1.
1	0122	83	.00	.00	.00	8.	*	1	0253	174	.00	.00	.00	1.
1	0123	84	.00	.00	.00	8.	*	1	0254	175	.00	.00	.00	1.
1	0124	85	.00	.00	.00	8.	*	1	0255	176	.00	.00	.00	1.
1	0125	86	.00	.00	.00	8.	*	1	0256	177	.00	.00	.00	1.
1	0126	87	.00	.00	.00	8.	*	1	0257	178	.00	.00	.00	1.
1	0127	88	.00	.00	.00	8.	*	1	0258	179	.00	.00	.00	1.
1	0128	89	.00	.00	.00	8.	*	1	0259	180	.00	.00	.00	1.
1	0129	90	.00	.00	.00	8.	*	1	0300	181	.00	.00	.00	1.
1	0130	91	.00	.00	.00	8.	*							

TOTAL RAINFALL = 1.29, TOTAL LOSS = 1.18, TOTAL EXCESS = .11

PEAK FLOW	TIME	MAXIMUM AVERAGE FLOW			
(CFS)	(HR)	6-HR	24-HR	72-HR	3.00-HR
+ 8.	1.35	3.	3.	3.	3.
		(INCHES)	.106	.106	.106
		(AC-FT)	1.	1.	1.

CUMULATIVE AREA = .12 SQ MI

*** **

 * *
 97 KK RE9 *
 * *

Route BE9 in channel to Outlet OE1

HYDROGRAPH ROUTING DATA

99 RD MUSKINGUM-CUNGE CHANNEL ROUTING
 L 8004. CHANNEL LENGTH
 S .0090 SLOPE
 N .040 CHANNEL ROUGHNESS COEFFICIENT
 CA .00 CONTRIBUTING AREA
 SHAPE TRAP CHANNEL SHAPE
 WD .00 BOTTOM WIDTH OR DIAMETER
 Z 7.00 SIDE SLOPE

COMPUTED MUSKINGUM-CUNGE PARAMETERS

ELEMENT	ALPHA	M	DT	DX	PEAK	TIME TO PEAK	VOLUME	MAXIMUM CELERITY
			(MIN)	(FT)	(CFS)	(MIN)	(IN)	(FPS)

pre.out

MAIN 1.16 1.33 1.00 116.00 38.00 111.00 .38 3.12

INTERPOLATED TO SPECIFIED COMPUTATION INTERVAL

MAIN 1.16 1.33 1.00 38.00 111.00 .38

CONTINUITY SUMMARY (AC-FT) - INFLOW= .2855E+01 EXCESS= .0000E+00 OUTFLOW= .2390E+01 BASIN STORAGE= .5263E+00 PERCENT ERROR= -2.1

HYDROGRAPH AT STATION RE9
PLAN 1, RATIO = 1.00

Table with 16 columns: DA, MON, HRMN, ORD, FLOW, * (repeated 4 times). Rows 1-46 showing hydrograph data for station RE9.

Summary table with columns: PEAK FLOW, TIME, MAXIMUM AVERAGE FLOW (6-HR, 24-HR, 72-HR, 3.00-HR). Values in CFS and INCHES (AC-FT).

CUMULATIVE AREA = .12 SQ MI

COMPUTED MUSKINGUM-CUNGE PARAMETERS

Table with columns: ELEMENT, ALPHA, M, DT, DX, PEAK, TIME TO PEAK, VOLUME, MAXIMUM CELERITY. Row for MAIN element.

INTERPOLATED TO SPECIFIED COMPUTATION INTERVAL

MAIN 1.16 1.33 1.00 8.98 133.00 .07

CONTINUITY SUMMARY (AC-FT) - INFLOW= .6578E+00 EXCESS= .0000E+00 OUTFLOW= .4159E+00 BASIN STORAGE= .2661E+00 PERCENT ERROR= -3.7

HYDROGRAPH AT STATION RE9
PLAN 1, RATIO = .61

DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*
1	0000	1	0.	*	1	0046	47	0.	*	1	0132	93	0.	*	1	0218	139	8.					
1	0001	2	0.	*	1	0047	48	0.	*	1	0133	94	0.	*	1	0219	140	8.					
1	0002	3	0.	*	1	0048	49	0.	*	1	0134	95	0.	*	1	0220	141	8.					
1	0003	4	0.	*	1	0049	50	0.	*	1	0135	96	0.	*	1	0221	142	8.					
1	0004	5	0.	*	1	0050	51	0.	*	1	0136	97	0.	*	1	0222	143	8.					
1	0005	6	0.	*	1	0051	52	0.	*	1	0137	98	0.	*	1	0223	144	8.					
1	0006	7	0.	*	1	0052	53	0.	*	1	0138	99	0.	*	1	0224	145	8.					
1	0007	8	0.	*	1	0053	54	0.	*	1	0139	100	0.	*	1	0225	146	7.					
1	0008	9	0.	*	1	0054	55	0.	*	1	0140	101	0.	*	1	0226	147	7.					
1	0009	10	0.	*	1	0055	56	0.	*	1	0141	102	0.	*	1	0227	148	7.					
1	0010	11	0.	*	1	0056	57	0.	*	1	0142	103	0.	*	1	0228	149	7.					
1	0011	12	0.	*	1	0057	58	0.	*	1	0143	104	0.	*	1	0229	150	7.					
1	0012	13	0.	*	1	0058	59	0.	*	1	0144	105	0.	*	1	0230	151	7.					
1	0013	14	0.	*	1	0059	60	0.	*	1	0145	106	0.	*	1	0231	152	7.					
1	0014	15	0.	*	1	0100	61	0.	*	1	0146	107	0.	*	1	0232	153	7.					
1	0015	16	0.	*	1	0101	62	0.	*	1	0147	108	0.	*	1	0233	154	7.					
1	0016	17	0.	*	1	0102	63	0.	*	1	0148	109	0.	*	1	0234	155	7.					
1	0017	18	0.	*	1	0103	64	0.	*	1	0149	110	0.	*	1	0235	156	6.					
1	0018	19	0.	*	1	0104	65	0.	*	1	0150	111	0.	*	1	0236	157	6.					
1	0019	20	0.	*	1	0105	66	0.	*	1	0151	112	0.	*	1	0237	158	6.					
1	0020	21	0.	*	1	0106	67	0.	*	1	0152	113	0.	*	1	0238	159	6.					
1	0021	22	0.	*	1	0107	68	0.	*	1	0153	114	0.	*	1	0239	160	6.					
1	0022	23	0.	*	1	0108	69	0.	*	1	0154	115	0.	*	1	0240	161	6.					
1	0023	24	0.	*	1	0109	70	0.	*	1	0155	116	0.	*	1	0241	162	6.					
1	0024	25	0.	*	1	0110	71	0.	*	1	0156	117	0.	*	1	0242	163	6.					
1	0025	26	0.	*	1	0111	72	0.	*	1	0157	118	0.	*	1	0243	164	5.					
1	0026	27	0.	*	1	0112	73	0.	*	1	0158	119	0.	*	1	0244	165	5.					
1	0027	28	0.	*	1	0113	74	0.	*	1	0159	120	0.	*	1	0245	166	5.					
1	0028	29	0.	*	1	0114	75	0.	*	1	0200	121	0.	*	1	0246	167	5.					
1	0029	30	0.	*	1	0115	76	0.	*	1	0201	122	0.	*	1	0247	168	5.					
1	0030	31	0.	*	1	0116	77	0.	*	1	0202	123	0.	*	1	0248	169	5.					
1	0031	32	0.	*	1	0117	78	0.	*	1	0203	124	0.	*	1	0249	170	5.					
1	0032	33	0.	*	1	0118	79	0.	*	1	0204	125	0.	*	1	0250	171	5.					
1	0033	34	0.	*	1	0119	80	0.	*	1	0205	126	0.	*	1	0251	172	5.					
1	0034	35	0.	*	1	0120	81	0.	*	1	0206	127	0.	*	1	0252	173	4.					
1	0035	36	0.	*	1	0121	82	0.	*	1	0207	128	0.	*	1	0253	174	4.					
1	0036	37	0.	*	1	0122	83	0.	*	1	0208	129	0.	*	1	0254	175	4.					
1	0037	38	0.	*	1	0123	84	0.	*	1	0209	130	0.	*	1	0255	176	4.					
1	0038	39	0.	*	1	0124	85	0.	*	1	0210	131	0.	*	1	0256	177	4.					
1	0039	40	0.	*	1	0125	86	0.	*	1	0211	132	1.	*	1	0257	178	4.					
1	0040	41	0.	*	1	0126	87	0.	*	1	0212	133	6.	*	1	0258	179	4.					
1	0041	42	0.	*	1	0127	88	0.	*	1	0213	134	9.	*	1	0259	180	4.					
1	0042	43	0.	*	1	0128	89	0.	*	1	0214	135	8.	*	1	0300	181	4.					
1	0043	44	0.	*	1	0129	90	0.	*	1	0215	136	8.	*									
1	0044	45	0.	*	1	0130	91	0.	*	1	0216	137	8.	*									
1	0045	46	0.	*	1	0131	92	0.	*	1	0217	138	8.	*									

PEAK FLOW	TIME	MAXIMUM AVERAGE FLOW			
(CFS)	(HR)	6-HR	24-HR	72-HR	3.00-HR
9.	2.22	2.	2.	2.	2.
		(INCHES)	.067	.067	.067
		(AC-FT)	0.	0.	0.
CUMULATIVE AREA =		.12 SQ MI			

*** **

```

*****
*      *
100 KK *    BE10 *
*      *
*****

```


pre.out														
1	0031	32	.11	.11	.00	0.	*	1	0202	123	.00	.00	.00	2.
1	0032	33	.11	.11	.00	0.	*	1	0203	124	.00	.00	.00	2.
1	0033	34	.11	.11	.00	0.	*	1	0204	125	.00	.00	.00	1.
1	0034	35	.11	.11	.00	0.	*	1	0205	126	.00	.00	.00	1.
1	0035	36	.11	.11	.00	0.	*	1	0206	127	.00	.00	.00	1.
1	0036	37	.09	.09	.00	0.	*	1	0207	128	.00	.00	.00	1.
1	0037	38	.09	.08	.01	0.	*	1	0208	129	.00	.00	.00	1.
1	0038	39	.09	.08	.01	0.	*	1	0209	130	.00	.00	.00	1.
1	0039	40	.09	.07	.01	0.	*	1	0210	131	.00	.00	.00	1.
1	0040	41	.09	.07	.02	0.	*	1	0211	132	.00	.00	.00	1.
1	0041	42	.06	.05	.01	1.	*	1	0212	133	.00	.00	.00	1.
1	0042	43	.06	.05	.02	1.	*	1	0213	134	.00	.00	.00	1.
1	0043	44	.06	.04	.02	2.	*	1	0214	135	.00	.00	.00	1.
1	0044	45	.06	.04	.02	3.	*	1	0215	136	.00	.00	.00	1.
1	0045	46	.06	.04	.02	5.	*	1	0216	137	.00	.00	.00	1.
1	0046	47	.04	.03	.01	6.	*	1	0217	138	.00	.00	.00	1.
1	0047	48	.04	.03	.01	8.	*	1	0218	139	.00	.00	.00	1.
1	0048	49	.04	.02	.01	10.	*	1	0219	140	.00	.00	.00	1.
1	0049	50	.04	.02	.01	11.	*	1	0220	141	.00	.00	.00	1.
1	0050	51	.04	.02	.02	13.	*	1	0221	142	.00	.00	.00	1.
1	0051	52	.02	.01	.01	15.	*	1	0222	143	.00	.00	.00	1.
1	0052	53	.02	.01	.01	16.	*	1	0223	144	.00	.00	.00	1.
1	0053	54	.02	.01	.01	18.	*	1	0224	145	.00	.00	.00	1.
1	0054	55	.02	.01	.01	19.	*	1	0225	146	.00	.00	.00	1.
1	0055	56	.02	.01	.01	20.	*	1	0226	147	.00	.00	.00	1.
1	0056	57	.02	.01	.01	21.	*	1	0227	148	.00	.00	.00	1.
1	0057	58	.02	.01	.01	21.	*	1	0228	149	.00	.00	.00	1.
1	0058	59	.02	.01	.01	21.	*	1	0229	150	.00	.00	.00	1.
1	0059	60	.02	.01	.01	22.	*	1	0230	151	.00	.00	.00	1.
1	0100	61	.02	.01	.01	21.	*	1	0231	152	.00	.00	.00	1.
1	0101	62	.01	.01	.01	21.	*	1	0232	153	.00	.00	.00	1.
1	0102	63	.01	.01	.01	21.	*	1	0233	154	.00	.00	.00	1.
1	0103	64	.01	.01	.01	20.	*	1	0234	155	.00	.00	.00	1.
1	0104	65	.01	.01	.01	20.	*	1	0235	156	.00	.00	.00	1.
1	0105	66	.01	.01	.01	19.	*	1	0236	157	.00	.00	.00	1.
1	0106	67	.01	.01	.00	19.	*	1	0237	158	.00	.00	.00	1.
1	0107	68	.01	.01	.00	18.	*	1	0238	159	.00	.00	.00	1.
1	0108	69	.01	.01	.00	18.	*	1	0239	160	.00	.00	.00	1.
1	0109	70	.01	.01	.00	17.	*	1	0240	161	.00	.00	.00	1.
1	0110	71	.01	.01	.00	16.	*	1	0241	162	.00	.00	.00	1.
1	0111	72	.01	.00	.00	16.	*	1	0242	163	.00	.00	.00	1.
1	0112	73	.01	.00	.00	15.	*	1	0243	164	.00	.00	.00	1.
1	0113	74	.01	.00	.00	15.	*	1	0244	165	.00	.00	.00	1.
1	0114	75	.01	.00	.00	14.	*	1	0245	166	.00	.00	.00	1.
1	0115	76	.01	.00	.00	13.	*	1	0246	167	.00	.00	.00	1.
1	0116	77	.01	.00	.00	13.	*	1	0247	168	.00	.00	.00	1.
1	0117	78	.01	.00	.00	12.	*	1	0248	169	.00	.00	.00	1.
1	0118	79	.01	.00	.00	12.	*	1	0249	170	.00	.00	.00	1.
1	0119	80	.01	.00	.00	11.	*	1	0250	171	.00	.00	.00	1.
1	0120	81	.01	.00	.00	11.	*	1	0251	172	.00	.00	.00	1.
1	0121	82	.01	.00	.00	10.	*	1	0252	173	.00	.00	.00	1.
1	0122	83	.01	.00	.00	10.	*	1	0253	174	.00	.00	.00	1.
1	0123	84	.01	.00	.00	10.	*	1	0254	175	.00	.00	.00	1.
1	0124	85	.01	.00	.00	9.	*	1	0255	176	.00	.00	.00	1.
1	0125	86	.01	.00	.00	9.	*	1	0256	177	.00	.00	.00	1.
1	0126	87	.01	.00	.00	9.	*	1	0257	178	.00	.00	.00	1.
1	0127	88	.01	.00	.00	8.	*	1	0258	179	.00	.00	.00	1.
1	0128	89	.01	.00	.00	8.	*	1	0259	180	.00	.00	.00	1.
1	0129	90	.01	.00	.00	8.	*	1	0300	181	.00	.00	.00	1.
1	0130	91	.01	.00	.00	8.	*							

TOTAL RAINFALL = 2.13, TOTAL LOSS = 1.65, TOTAL EXCESS = .48

PEAK FLOW + (CFS)	TIME (HR)	MAXIMUM AVERAGE FLOW			
		6-HR	24-HR	72-HR	3.00-HR
+ 22.	.98	5.	5.	5.	5.
		(INCHES) .471	.471	.471	.471
		(AC-FT) 1.	1.	1.	1.

CUMULATIVE AREA = .05 SQ MI

HYDROGRAPH AT STATION BE10
PLAN 1, RATIO = 1.00

DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	*	DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
1	0000	1	.00	.00	.00	0.	*		1	0131	92	.00	.00	.00	7.	
1	0001	2	.00	.00	.00	0.	*		1	0132	93	.00	.00	.00	7.	
1	0002	3	.00	.00	.00	0.	*		1	0133	94	.00	.00	.00	7.	
1	0003	4	.00	.00	.00	0.	*		1	0134	95	.00	.00	.00	7.	
1	0004	5	.00	.00	.00	0.	*		1	0135	96	.00	.00	.00	6.	

pre.out														
1	0005	6	.00	.00	.00	0.	*	1	0136	97	.00	.00	.00	6.
1	0006	7	.00	.00	.00	0.	*	1	0137	98	.00	.00	.00	6.
1	0007	8	.00	.00	.00	0.	*	1	0138	99	.00	.00	.00	5.
1	0008	9	.00	.00	.00	0.	*	1	0139	100	.00	.00	.00	5.
1	0009	10	.00	.00	.00	0.	*	1	0140	101	.00	.00	.00	5.
1	0010	11	.00	.00	.00	0.	*	1	0141	102	.00	.00	.00	4.
1	0011	12	.00	.00	.00	0.	*	1	0142	103	.00	.00	.00	4.
1	0012	13	.00	.00	.00	0.	*	1	0143	104	.00	.00	.00	4.
1	0013	14	.00	.00	.00	0.	*	1	0144	105	.00	.00	.00	4.
1	0014	15	.00	.00	.00	0.	*	1	0145	106	.00	.00	.00	3.
1	0015	16	.00	.00	.00	0.	*	1	0146	107	.00	.00	.00	3.
1	0016	17	.00	.00	.00	0.	*	1	0147	108	.00	.00	.00	3.
1	0017	18	.00	.00	.00	0.	*	1	0148	109	.00	.00	.00	3.
1	0018	19	.00	.00	.00	0.	*	1	0149	110	.00	.00	.00	2.
1	0019	20	.00	.00	.00	0.	*	1	0150	111	.00	.00	.00	2.
1	0020	21	.00	.00	.00	0.	*	1	0151	112	.00	.00	.00	2.
1	0021	22	.00	.00	.00	0.	*	1	0152	113	.00	.00	.00	2.
1	0022	23	.00	.00	.00	0.	*	1	0153	114	.00	.00	.00	2.
1	0023	24	.00	.00	.00	0.	*	1	0154	115	.00	.00	.00	2.
1	0024	25	.00	.00	.00	0.	*	1	0155	116	.00	.00	.00	2.
1	0025	26	.00	.00	.00	0.	*	1	0156	117	.00	.00	.00	2.
1	0026	27	.00	.00	.00	0.	*	1	0157	118	.00	.00	.00	2.
1	0027	28	.00	.00	.00	0.	*	1	0158	119	.00	.00	.00	2.
1	0028	29	.00	.00	.00	0.	*	1	0159	120	.00	.00	.00	2.
1	0029	30	.00	.00	.00	0.	*	1	0200	121	.00	.00	.00	2.
1	0030	31	.00	.00	.00	0.	*	1	0201	122	.00	.00	.00	2.
1	0031	32	.11	.11	.00	0.	*	1	0202	123	.00	.00	.00	2.
1	0032	33	.11	.11	.00	0.	*	1	0203	124	.00	.00	.00	2.
1	0033	34	.11	.11	.00	0.	*	1	0204	125	.00	.00	.00	1.
1	0034	35	.11	.11	.00	0.	*	1	0205	126	.00	.00	.00	1.
1	0035	36	.11	.11	.00	0.	*	1	0206	127	.00	.00	.00	1.
1	0036	37	.09	.09	.00	0.	*	1	0207	128	.00	.00	.00	1.
1	0037	38	.09	.08	.01	0.	*	1	0208	129	.00	.00	.00	1.
1	0038	39	.09	.08	.01	0.	*	1	0209	130	.00	.00	.00	1.
1	0039	40	.09	.07	.01	0.	*	1	0210	131	.00	.00	.00	1.
1	0040	41	.09	.07	.02	0.	*	1	0211	132	.00	.00	.00	1.
1	0041	42	.06	.05	.01	1.	*	1	0212	133	.00	.00	.00	1.
1	0042	43	.06	.05	.02	1.	*	1	0213	134	.00	.00	.00	1.
1	0043	44	.06	.04	.02	2.	*	1	0214	135	.00	.00	.00	1.
1	0044	45	.06	.04	.02	3.	*	1	0215	136	.00	.00	.00	1.
1	0045	46	.06	.04	.02	5.	*	1	0216	137	.00	.00	.00	1.
1	0046	47	.04	.03	.01	6.	*	1	0217	138	.00	.00	.00	1.
1	0047	48	.04	.03	.01	8.	*	1	0218	139	.00	.00	.00	1.
1	0048	49	.04	.02	.01	10.	*	1	0219	140	.00	.00	.00	1.
1	0049	50	.04	.02	.01	11.	*	1	0220	141	.00	.00	.00	1.
1	0050	51	.04	.02	.02	13.	*	1	0221	142	.00	.00	.00	1.
1	0051	52	.02	.01	.01	15.	*	1	0222	143	.00	.00	.00	1.
1	0052	53	.02	.01	.01	16.	*	1	0223	144	.00	.00	.00	1.
1	0053	54	.02	.01	.01	18.	*	1	0224	145	.00	.00	.00	1.
1	0054	55	.02	.01	.01	19.	*	1	0225	146	.00	.00	.00	1.
1	0055	56	.02	.01	.01	20.	*	1	0226	147	.00	.00	.00	1.
1	0056	57	.02	.01	.01	21.	*	1	0227	148	.00	.00	.00	1.
1	0057	58	.02	.01	.01	21.	*	1	0228	149	.00	.00	.00	1.
1	0058	59	.02	.01	.01	21.	*	1	0229	150	.00	.00	.00	1.
1	0059	60	.02	.01	.01	22.	*	1	0230	151	.00	.00	.00	1.
1	0100	61	.02	.01	.01	21.	*	1	0231	152	.00	.00	.00	1.
1	0101	62	.01	.01	.01	21.	*	1	0232	153	.00	.00	.00	1.
1	0102	63	.01	.01	.01	21.	*	1	0233	154	.00	.00	.00	1.
1	0103	64	.01	.01	.01	20.	*	1	0234	155	.00	.00	.00	1.
1	0104	65	.01	.01	.01	20.	*	1	0235	156	.00	.00	.00	1.
1	0105	66	.01	.01	.01	19.	*	1	0236	157	.00	.00	.00	1.
1	0106	67	.01	.01	.00	19.	*	1	0237	158	.00	.00	.00	1.
1	0107	68	.01	.01	.00	18.	*	1	0238	159	.00	.00	.00	1.
1	0108	69	.01	.01	.00	18.	*	1	0239	160	.00	.00	.00	1.
1	0109	70	.01	.01	.00	17.	*	1	0240	161	.00	.00	.00	1.
1	0110	71	.01	.01	.00	16.	*	1	0241	162	.00	.00	.00	1.
1	0111	72	.01	.00	.00	16.	*	1	0242	163	.00	.00	.00	1.
1	0112	73	.01	.00	.00	15.	*	1	0243	164	.00	.00	.00	1.
1	0113	74	.01	.00	.00	15.	*	1	0244	165	.00	.00	.00	1.
1	0114	75	.01	.00	.00	14.	*	1	0245	166	.00	.00	.00	1.
1	0115	76	.01	.00	.00	13.	*	1	0246	167	.00	.00	.00	1.
1	0116	77	.01	.00	.00	13.	*	1	0247	168	.00	.00	.00	1.
1	0117	78	.01	.00	.00	12.	*	1	0248	169	.00	.00	.00	1.
1	0118	79	.01	.00	.00	12.	*	1	0249	170	.00	.00	.00	1.
1	0119	80	.01	.00	.00	11.	*	1	0250	171	.00	.00	.00	1.
1	0120	81	.01	.00	.00	11.	*	1	0251	172	.00	.00	.00	1.
1	0121	82	.01	.00	.00	10.	*	1	0252	173	.00	.00	.00	1.
1	0122	83	.01	.00	.00	10.	*	1	0253	174	.00	.00	.00	1.
1	0123	84	.01	.00	.00	10.	*	1	0254	175	.00	.00	.00	1.
1	0124	85	.01	.00	.00	9.	*	1	0255	176	.00	.00	.00	1.
1	0125	86	.01	.00	.00	9.	*	1	0256	177	.00	.00	.00	1.
1	0126	87	.01	.00	.00	9.	*	1	0257	178	.00	.00	.00	1.
1	0127	88	.01	.00	.00	8.	*	1	0258	179	.00	.00	.00	1.
1	0128	89	.01	.00	.00	8.	*	1	0259	180	.00	.00	.00	1.
1	0129	90	.01	.00	.00	8.	*	1	0300	181	.00	.00	.00	1.
1	0130	91	.01	.00	.00	8.	*							

TOTAL RAINFALL = 2.13, TOTAL LOSS = 1.65, TOTAL EXCESS = .48

pre.out

PEAK FLOW + (CFS)	TIME (HR)	(CFS)	MAXIMUM AVERAGE FLOW			
			6-HR	24-HR	72-HR	3.00-HR
22.	.98	5.	5.	5.	5.	
		(INCHES)	.471	.471	.471	.471
		(AC-FT)	1.	1.	1.	1.

CUMULATIVE AREA = .05 SQ MI

HYDROGRAPH AT STATION BE10
PLAN 1, RATIO = .61

DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	*	DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
1	0000	1	.00	.00	.00	0.	*	1	0131	92	.00	.00	.00	.00	2.	
1	0001	2	.00	.00	.00	0.	*	1	0132	93	.00	.00	.00	.00	2.	
1	0002	3	.00	.00	.00	0.	*	1	0133	94	.00	.00	.00	.00	2.	
1	0003	4	.00	.00	.00	0.	*	1	0134	95	.00	.00	.00	.00	2.	
1	0004	5	.00	.00	.00	0.	*	1	0135	96	.00	.00	.00	.00	2.	
1	0005	6	.00	.00	.00	0.	*	1	0136	97	.00	.00	.00	.00	2.	
1	0006	7	.00	.00	.00	0.	*	1	0137	98	.00	.00	.00	.00	2.	
1	0007	8	.00	.00	.00	0.	*	1	0138	99	.00	.00	.00	.00	2.	
1	0008	9	.00	.00	.00	0.	*	1	0139	100	.00	.00	.00	.00	2.	
1	0009	10	.00	.00	.00	0.	*	1	0140	101	.00	.00	.00	.00	2.	
1	0010	11	.00	.00	.00	0.	*	1	0141	102	.00	.00	.00	.00	1.	
1	0011	12	.00	.00	.00	0.	*	1	0142	103	.00	.00	.00	.00	1.	
1	0012	13	.00	.00	.00	0.	*	1	0143	104	.00	.00	.00	.00	1.	
1	0013	14	.00	.00	.00	0.	*	1	0144	105	.00	.00	.00	.00	1.	
1	0014	15	.00	.00	.00	0.	*	1	0145	106	.00	.00	.00	.00	1.	
1	0015	16	.00	.00	.00	0.	*	1	0146	107	.00	.00	.00	.00	1.	
1	0016	17	.00	.00	.00	0.	*	1	0147	108	.00	.00	.00	.00	1.	
1	0017	18	.00	.00	.00	0.	*	1	0148	109	.00	.00	.00	.00	1.	
1	0018	19	.00	.00	.00	0.	*	1	0149	110	.00	.00	.00	.00	1.	
1	0019	20	.00	.00	.00	0.	*	1	0150	111	.00	.00	.00	.00	1.	
1	0020	21	.00	.00	.00	0.	*	1	0151	112	.00	.00	.00	.00	1.	
1	0021	22	.00	.00	.00	0.	*	1	0152	113	.00	.00	.00	.00	1.	
1	0022	23	.00	.00	.00	0.	*	1	0153	114	.00	.00	.00	.00	1.	
1	0023	24	.00	.00	.00	0.	*	1	0154	115	.00	.00	.00	.00	1.	
1	0024	25	.00	.00	.00	0.	*	1	0155	116	.00	.00	.00	.00	1.	
1	0025	26	.00	.00	.00	0.	*	1	0156	117	.00	.00	.00	.00	1.	
1	0026	27	.00	.00	.00	0.	*	1	0157	118	.00	.00	.00	.00	1.	
1	0027	28	.00	.00	.00	0.	*	1	0158	119	.00	.00	.00	.00	1.	
1	0028	29	.00	.00	.00	0.	*	1	0159	120	.00	.00	.00	.00	1.	
1	0029	30	.00	.00	.00	0.	*	1	0200	121	.00	.00	.00	.00	1.	
1	0030	31	.00	.00	.00	0.	*	1	0201	122	.00	.00	.00	.00	1.	
1	0031	32	.07	.07	.00	0.	*	1	0202	123	.00	.00	.00	.00	1.	
1	0032	33	.07	.07	.00	0.	*	1	0203	124	.00	.00	.00	.00	1.	
1	0033	34	.07	.07	.00	0.	*	1	0204	125	.00	.00	.00	.00	1.	
1	0034	35	.07	.07	.00	0.	*	1	0205	126	.00	.00	.00	.00	0.	
1	0035	36	.07	.07	.00	0.	*	1	0206	127	.00	.00	.00	.00	0.	
1	0036	37	.05	.05	.00	0.	*	1	0207	128	.00	.00	.00	.00	0.	
1	0037	38	.05	.05	.00	0.	*	1	0208	129	.00	.00	.00	.00	0.	
1	0038	39	.05	.05	.00	0.	*	1	0209	130	.00	.00	.00	.00	0.	
1	0039	40	.05	.05	.00	0.	*	1	0210	131	.00	.00	.00	.00	0.	
1	0040	41	.05	.05	.00	0.	*	1	0211	132	.00	.00	.00	.00	0.	
1	0041	42	.04	.04	.00	0.	*	1	0212	133	.00	.00	.00	.00	0.	
1	0042	43	.04	.04	.00	0.	*	1	0213	134	.00	.00	.00	.00	0.	
1	0043	44	.04	.04	.00	0.	*	1	0214	135	.00	.00	.00	.00	0.	
1	0044	45	.04	.03	.00	0.	*	1	0215	136	.00	.00	.00	.00	0.	
1	0045	46	.04	.03	.00	0.	*	1	0216	137	.00	.00	.00	.00	0.	
1	0046	47	.02	.02	.00	0.	*	1	0217	138	.00	.00	.00	.00	0.	
1	0047	48	.02	.02	.00	0.	*	1	0218	139	.00	.00	.00	.00	0.	
1	0048	49	.02	.02	.00	1.	*	1	0219	140	.00	.00	.00	.00	0.	
1	0049	50	.02	.02	.00	1.	*	1	0220	141	.00	.00	.00	.00	0.	
1	0050	51	.02	.02	.00	1.	*	1	0221	142	.00	.00	.00	.00	0.	
1	0051	52	.01	.01	.00	1.	*	1	0222	143	.00	.00	.00	.00	0.	
1	0052	53	.01	.01	.00	2.	*	1	0223	144	.00	.00	.00	.00	0.	
1	0053	54	.01	.01	.00	2.	*	1	0224	145	.00	.00	.00	.00	0.	
1	0054	55	.01	.01	.00	2.	*	1	0225	146	.00	.00	.00	.00	0.	
1	0055	56	.01	.01	.00	3.	*	1	0226	147	.00	.00	.00	.00	0.	
1	0056	57	.01	.01	.00	3.	*	1	0227	148	.00	.00	.00	.00	0.	
1	0057	58	.01	.01	.00	3.	*	1	0228	149	.00	.00	.00	.00	0.	
1	0058	59	.01	.01	.00	4.	*	1	0229	150	.00	.00	.00	.00	0.	
1	0059	60	.01	.01	.00	4.	*	1	0230	151	.00	.00	.00	.00	0.	
1	0100	61	.01	.01	.00	4.	*	1	0231	152	.00	.00	.00	.00	0.	
1	0101	62	.01	.01	.00	4.	*	1	0232	153	.00	.00	.00	.00	0.	
1	0102	63	.01	.01	.00	4.	*	1	0233	154	.00	.00	.00	.00	0.	
1	0103	64	.01	.01	.00	4.	*	1	0234	155	.00	.00	.00	.00	0.	
1	0104	65	.01	.01	.00	4.	*	1	0235	156	.00	.00	.00	.00	0.	
1	0105	66	.01	.01	.00	4.	*	1	0236	157	.00	.00	.00	.00	0.	
1	0106	67	.01	.00	.00	4.	*	1	0237	158	.00	.00	.00	.00	0.	
1	0107	68	.01	.00	.00	4.	*	1	0238	159	.00	.00	.00	.00	0.	
1	0108	69	.01	.00	.00	4.	*	1	0239	160	.00	.00	.00	.00	0.	

pre.out														
1	0109	70	.01	.00	.00	4.	*	1	0240	161	.00	.00	.00	0.
1	0110	71	.01	.00	.00	4.	*	1	0241	162	.00	.00	.00	0.
1	0111	72	.00	.00	.00	4.	*	1	0242	163	.00	.00	.00	0.
1	0112	73	.00	.00	.00	4.	*	1	0243	164	.00	.00	.00	0.
1	0113	74	.00	.00	.00	4.	*	1	0244	165	.00	.00	.00	0.
1	0114	75	.00	.00	.00	4.	*	1	0245	166	.00	.00	.00	0.
1	0115	76	.00	.00	.00	4.	*	1	0246	167	.00	.00	.00	0.
1	0116	77	.00	.00	.00	4.	*	1	0247	168	.00	.00	.00	0.
1	0117	78	.00	.00	.00	3.	*	1	0248	169	.00	.00	.00	0.
1	0118	79	.00	.00	.00	3.	*	1	0249	170	.00	.00	.00	0.
1	0119	80	.00	.00	.00	3.	*	1	0250	171	.00	.00	.00	0.
1	0120	81	.00	.00	.00	3.	*	1	0251	172	.00	.00	.00	0.
1	0121	82	.00	.00	.00	3.	*	1	0252	173	.00	.00	.00	0.
1	0122	83	.00	.00	.00	3.	*	1	0253	174	.00	.00	.00	0.
1	0123	84	.00	.00	.00	3.	*	1	0254	175	.00	.00	.00	0.
1	0124	85	.00	.00	.00	3.	*	1	0255	176	.00	.00	.00	0.
1	0125	86	.00	.00	.00	3.	*	1	0256	177	.00	.00	.00	0.
1	0126	87	.00	.00	.00	3.	*	1	0257	178	.00	.00	.00	0.
1	0127	88	.00	.00	.00	3.	*	1	0258	179	.00	.00	.00	0.
1	0128	89	.00	.00	.00	3.	*	1	0259	180	.00	.00	.00	0.
1	0129	90	.00	.00	.00	2.	*	1	0300	181	.00	.00	.00	0.
1	0130	91	.00	.00	.00	2.	*							

TOTAL RAINFALL = 1.29, TOTAL LOSS = 1.18, TOTAL EXCESS = .11

PEAK FLOW + (CFS)	TIME (HR)	MAXIMUM 6-HR	AVERAGE 24-HR	FLOW 72-HR	3.00-HR
+ 4.	1.08	1.	1.	1.	1.
	(INCHES)	.110	.110	.110	.110
	(AC-FT)	0.	0.	0.	0.
CUMULATIVE AREA =		.05 SQ MI			

*** **

* RE10 *
* *

Route BE10 in channel to Outlet OE1

HYDROGRAPH ROUTING DATA

107 RD MUSKINGUM-CUNGE CHANNEL ROUTING
 L 9322. CHANNEL LENGTH
 S .0100 SLOPE
 N .040 CHANNEL ROUGHNESS COEFFICIENT
 CA .00 CONTRIBUTING AREA
 SHAPE TRAP CHANNEL SHAPE
 WD .00 BOTTOM WIDTH OR DIAMETER
 Z 7.00 SIDE SLOPE

ELEMENT	ALPHA	COMPUTED MUSKINGUM-CUNGE PARAMETERS			PEAK (CFS)	TIME TO PEAK (MIN)	VOLUME (IN)	MAXIMUM CELERITY (FPS)
		M	DT (MIN)	DX (FT)				
MAIN	1.22	1.33	1.00	100.24	22.10	111.00	.38	

INTERPOLATED TO SPECIFIED COMPUTATION INTERVAL

MAIN	1.22	1.33	1.00	22.10	111.00	.38
------	------	------	------	-------	--------	-----

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1188E+01 EXCESS= .0000E+00 OUTFLOW= .9702E+00 BASIN STORAGE= .2719E+00 PERCENT ERROR= -4.6

HYDROGRAPH AT STATION RE10
 PLAN 1, RATIO = 1.00

 DA MON HRMN ORD FLOW * DA MON HRMN ORD FLOW * DA MON HRMN ORD FLOW * DA MON HRMN ORD FLOW *
 * * * * *

pre.out

1	0000	1	0.	*	1	0046	47	0.	*	1	0132	93	0.	*	1	0218	139	10.
1	0001	2	0.	*	1	0047	48	0.	*	1	0133	94	0.	*	1	0219	140	10.
1	0002	3	0.	*	1	0048	49	0.	*	1	0134	95	0.	*	1	0220	141	10.
1	0003	4	0.	*	1	0049	50	0.	*	1	0135	96	0.	*	1	0221	142	9.
1	0004	5	0.	*	1	0050	51	0.	*	1	0136	97	0.	*	1	0222	143	9.
1	0005	6	0.	*	1	0051	52	0.	*	1	0137	98	0.	*	1	0223	144	9.
1	0006	7	0.	*	1	0052	53	0.	*	1	0138	99	0.	*	1	0224	145	9.
1	0007	8	0.	*	1	0053	54	0.	*	1	0139	100	0.	*	1	0225	146	9.
1	0008	9	0.	*	1	0054	55	0.	*	1	0140	101	0.	*	1	0226	147	8.
1	0009	10	0.	*	1	0055	56	0.	*	1	0141	102	0.	*	1	0227	148	8.
1	0010	11	0.	*	1	0056	57	0.	*	1	0142	103	0.	*	1	0228	149	8.
1	0011	12	0.	*	1	0057	58	0.	*	1	0143	104	0.	*	1	0229	150	8.
1	0012	13	0.	*	1	0058	59	0.	*	1	0144	105	0.	*	1	0230	151	8.
1	0013	14	0.	*	1	0059	60	0.	*	1	0145	106	0.	*	1	0231	152	8.
1	0014	15	0.	*	1	0100	61	0.	*	1	0146	107	0.	*	1	0232	153	7.
1	0015	16	0.	*	1	0101	62	0.	*	1	0147	108	0.	*	1	0233	154	7.
1	0016	17	0.	*	1	0102	63	0.	*	1	0148	109	0.	*	1	0234	155	7.
1	0017	18	0.	*	1	0103	64	0.	*	1	0149	110	7.	*	1	0235	156	7.
1	0018	19	0.	*	1	0104	65	0.	*	1	0150	111	20.	*	1	0236	157	7.
1	0019	20	0.	*	1	0105	66	0.	*	1	0151	112	22.	*	1	0237	158	7.
1	0020	21	0.	*	1	0106	67	0.	*	1	0152	113	19.	*	1	0238	159	6.
1	0021	22	0.	*	1	0107	68	0.	*	1	0153	114	19.	*	1	0239	160	6.
1	0022	23	0.	*	1	0108	69	0.	*	1	0154	115	19.	*	1	0240	161	6.
1	0023	24	0.	*	1	0109	70	0.	*	1	0155	116	18.	*	1	0241	162	6.
1	0024	25	0.	*	1	0110	71	0.	*	1	0156	117	18.	*	1	0242	163	6.
1	0025	26	0.	*	1	0111	72	0.	*	1	0157	118	18.	*	1	0243	164	6.
1	0026	27	0.	*	1	0112	73	0.	*	1	0158	119	17.	*	1	0244	165	5.
1	0027	28	0.	*	1	0113	74	0.	*	1	0159	120	17.	*	1	0245	166	5.
1	0028	29	0.	*	1	0114	75	0.	*	1	0200	121	16.	*	1	0246	167	5.
1	0029	30	0.	*	1	0115	76	0.	*	1	0201	122	16.	*	1	0247	168	5.
1	0030	31	0.	*	1	0116	77	0.	*	1	0202	123	16.	*	1	0248	169	5.
1	0031	32	0.	*	1	0117	78	0.	*	1	0203	124	15.	*	1	0249	170	5.
1	0032	33	0.	*	1	0118	79	0.	*	1	0204	125	15.	*	1	0250	171	4.
1	0033	34	0.	*	1	0119	80	0.	*	1	0205	126	14.	*	1	0251	172	4.
1	0034	35	0.	*	1	0120	81	0.	*	1	0206	127	14.	*	1	0252	173	4.
1	0035	36	0.	*	1	0121	82	0.	*	1	0207	128	14.	*	1	0253	174	4.
1	0036	37	0.	*	1	0122	83	0.	*	1	0208	129	13.	*	1	0254	175	4.
1	0037	38	0.	*	1	0123	84	0.	*	1	0209	130	13.	*	1	0255	176	4.
1	0038	39	0.	*	1	0124	85	0.	*	1	0210	131	13.	*	1	0256	177	4.
1	0039	40	0.	*	1	0125	86	0.	*	1	0211	132	12.	*	1	0257	178	4.
1	0040	41	0.	*	1	0126	87	0.	*	1	0212	133	12.	*	1	0258	179	3.
1	0041	42	0.	*	1	0127	88	0.	*	1	0213	134	12.	*	1	0259	180	3.
1	0042	43	0.	*	1	0128	89	0.	*	1	0214	135	11.	*	1	0300	181	3.
1	0043	44	0.	*	1	0129	90	0.	*	1	0215	136	11.	*				
1	0044	45	0.	*	1	0130	91	0.	*	1	0216	137	11.	*				
1	0045	46	0.	*	1	0131	92	0.	*	1	0217	138	10.	*				

PEAK FLOW + (CFS)	TIME (HR)	MAXIMUM AVERAGE FLOW			
		6-HR	24-HR	72-HR	3.00-HR
		(CFS)			
+ 22.	1.85	4.	4.	4.	4.
		(INCHES)	.384	.384	.384
		(AC-FT)	1.	1.	1.

CUMULATIVE AREA = .05 SQ MI

COMPUTED MUSKINGUM-CUNGE PARAMETERS

ELEMENT	ALPHA	COMPUTATION TIME STEP			PEAK (CFS)	TIME TO PEAK (MIN)	VOLUME (IN)	MAXIMUM CELERITY (FPS)
		M	DT (MIN)	DX (FT)				
MAIN	1.22	1.33	1.00	65.19	4.50	145.00	.06	1.88

INTERPOLATED TO SPECIFIED COMPUTATION INTERVAL

MAIN	1.22	1.33	1.00	4.50	145.00	.06
------	------	------	------	------	--------	-----

CONTINUITY SUMMARY (AC-FT) - INFLOW= .2771E+00 EXCESS= .0000E+00 OUTFLOW= .1437E+00 BASIN STORAGE= .1535E+00 PERCENT ERROR= -7.3

HYDROGRAPH AT STATION RE10
PLAN 1, RATIO = .61

DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	
1	0000	1	0.	*	1	0046	47	0.	*	1	0132	93	0.	*	1	0218	139	0.						
1	0001	2	0.	*	1	0047	48	0.	*	1	0133	94	0.	*	1	0219	140	0.						
1	0002	3	0.	*	1	0048	49	0.	*	1	0134	95	0.	*	1	0220	141	0.						

pre.out																		
1	0003	4	0.	*	1	0049	50	0.	*	1	0135	96	0.	*	1	0221	142	0.
1	0004	5	0.	*	1	0050	51	0.	*	1	0136	97	0.	*	1	0222	143	0.
1	0005	6	0.	*	1	0051	52	0.	*	1	0137	98	0.	*	1	0223	144	0.
1	0006	7	0.	*	1	0052	53	0.	*	1	0138	99	0.	*	1	0224	145	2.
1	0007	8	0.	*	1	0053	54	0.	*	1	0139	100	0.	*	1	0225	146	4.
1	0008	9	0.	*	1	0054	55	0.	*	1	0140	101	0.	*	1	0226	147	4.
1	0009	10	0.	*	1	0055	56	0.	*	1	0141	102	0.	*	1	0227	148	3.
1	0010	11	0.	*	1	0056	57	0.	*	1	0142	103	0.	*	1	0228	149	4.
1	0011	12	0.	*	1	0057	58	0.	*	1	0143	104	0.	*	1	0229	150	4.
1	0012	13	0.	*	1	0058	59	0.	*	1	0144	105	0.	*	1	0230	151	3.
1	0013	14	0.	*	1	0059	60	0.	*	1	0145	106	0.	*	1	0231	152	3.
1	0014	15	0.	*	1	0100	61	0.	*	1	0146	107	0.	*	1	0232	153	3.
1	0015	16	0.	*	1	0101	62	0.	*	1	0147	108	0.	*	1	0233	154	3.
1	0016	17	0.	*	1	0102	63	0.	*	1	0148	109	0.	*	1	0234	155	3.
1	0017	18	0.	*	1	0103	64	0.	*	1	0149	110	0.	*	1	0235	156	3.
1	0018	19	0.	*	1	0104	65	0.	*	1	0150	111	0.	*	1	0236	157	3.
1	0019	20	0.	*	1	0105	66	0.	*	1	0151	112	0.	*	1	0237	158	3.
1	0020	21	0.	*	1	0106	67	0.	*	1	0152	113	0.	*	1	0238	159	3.
1	0021	22	0.	*	1	0107	68	0.	*	1	0153	114	0.	*	1	0239	160	3.
1	0022	23	0.	*	1	0108	69	0.	*	1	0154	115	0.	*	1	0240	161	3.
1	0023	24	0.	*	1	0109	70	0.	*	1	0155	116	0.	*	1	0241	162	3.
1	0024	25	0.	*	1	0110	71	0.	*	1	0156	117	0.	*	1	0242	163	3.
1	0025	26	0.	*	1	0111	72	0.	*	1	0157	118	0.	*	1	0243	164	3.
1	0026	27	0.	*	1	0112	73	0.	*	1	0158	119	0.	*	1	0244	165	3.
1	0027	28	0.	*	1	0113	74	0.	*	1	0159	120	0.	*	1	0245	166	3.
1	0028	29	0.	*	1	0114	75	0.	*	1	0200	121	0.	*	1	0246	167	3.
1	0029	30	0.	*	1	0115	76	0.	*	1	0201	122	0.	*	1	0247	168	3.
1	0030	31	0.	*	1	0116	77	0.	*	1	0202	123	0.	*	1	0248	169	2.
1	0031	32	0.	*	1	0117	78	0.	*	1	0203	124	0.	*	1	0249	170	2.
1	0032	33	0.	*	1	0118	79	0.	*	1	0204	125	0.	*	1	0250	171	2.
1	0033	34	0.	*	1	0119	80	0.	*	1	0205	126	0.	*	1	0251	172	2.
1	0034	35	0.	*	1	0120	81	0.	*	1	0206	127	0.	*	1	0252	173	2.
1	0035	36	0.	*	1	0121	82	0.	*	1	0207	128	0.	*	1	0253	174	2.
1	0036	37	0.	*	1	0122	83	0.	*	1	0208	129	0.	*	1	0254	175	2.
1	0037	38	0.	*	1	0123	84	0.	*	1	0209	130	0.	*	1	0255	176	2.
1	0038	39	0.	*	1	0124	85	0.	*	1	0210	131	0.	*	1	0256	177	2.
1	0039	40	0.	*	1	0125	86	0.	*	1	0211	132	0.	*	1	0257	178	2.
1	0040	41	0.	*	1	0126	87	0.	*	1	0212	133	0.	*	1	0258	179	2.
1	0041	42	0.	*	1	0127	88	0.	*	1	0213	134	0.	*	1	0259	180	2.
1	0042	43	0.	*	1	0128	89	0.	*	1	0214	135	0.	*	1	0300	181	2.
1	0043	44	0.	*	1	0129	90	0.	*	1	0215	136	0.	*				
1	0044	45	0.	*	1	0130	91	0.	*	1	0216	137	0.	*				
1	0045	46	0.	*	1	0131	92	0.	*	1	0217	138	0.	*				

PEAK FLOW	TIME	MAXIMUM AVERAGE FLOW			
(CFS)	(HR)	6-HR	24-HR	72-HR	3.00-HR
+	4.	2.42	1.	1.	1.
		(INCHES)	.056	.056	.056
		(AC-FT)	0.	0.	0.
CUMULATIVE AREA =		.05 SQ MI			

*** **

 * *
 108 KK * BE11 *
 * *

BE11

SUBBASIN RUNOFF DATA

110 BA SUBBASIN CHARACTERISTICS
 TAREA .04 SUBBASIN AREA

PRECIPITATION DATA

23 PB STORM 2.13 BASIN TOTAL PRECIPITATION

24 PI INCREMENTAL PRECIPITATION PATTERN

.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.05	.05	.05	.05	.05	.04	.04	.04	.04	.04
.03	.03	.03	.03	.03	.02	.02	.02	.02	.02
.01	.01	.01	.01	.01	.01	.01	.01	.01	.01
.01	.01	.01	.01	.01	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00

.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00

111 LS SCS LOSS RATE
 STRTL .63 INITIAL ABSTRACTION
 CRVNBR 76.00 CURVE NUMBER
 RTIMP .00 PERCENT IMPERVIOUS AREA

112 UD SCS DIMENSIONLESS UNITGRAPH
 TLAG .19 LAG

UNIT HYDROGRAPH
 58 END-OF-PERIOD ORDINATES

2.	7.	14.	22.	32.	44.	59.	71.	81.	87.
90.	90.	89.	85.	79.	73.	66.	58.	49.	41.
36.	31.	27.	24.	21.	18.	16.	14.	12.	11.
9.	8.	7.	6.	5.	5.	4.	3.	3.	3.
2.	2.	2.	2.	1.	1.	1.	1.	1.	1.
1.	1.	0.	0.	0.	0.	0.	0.		

HYDROGRAPH AT STATION BE11

DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP	Q	*	DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP	Q	*
1		0000	1	.00	.00	.00	0.	*		1		0131	92	.00	.00	.00	6.	*	
1		0001	2	.00	.00	.00	0.	*		1		0132	93	.00	.00	.00	5.	*	
1		0002	3	.00	.00	.00	0.	*		1		0133	94	.00	.00	.00	5.	*	
1		0003	4	.00	.00	.00	0.	*		1		0134	95	.00	.00	.00	5.	*	
1		0004	5	.00	.00	.00	0.	*		1		0135	96	.00	.00	.00	5.	*	
1		0005	6	.00	.00	.00	0.	*		1		0136	97	.00	.00	.00	5.	*	
1		0006	7	.00	.00	.00	0.	*		1		0137	98	.00	.00	.00	4.	*	
1		0007	8	.00	.00	.00	0.	*		1		0138	99	.00	.00	.00	4.	*	
1		0008	9	.00	.00	.00	0.	*		1		0139	100	.00	.00	.00	4.	*	
1		0009	10	.00	.00	.00	0.	*		1		0140	101	.00	.00	.00	4.	*	
1		0010	11	.00	.00	.00	0.	*		1		0141	102	.00	.00	.00	3.	*	
1		0011	12	.00	.00	.00	0.	*		1		0142	103	.00	.00	.00	3.	*	
1		0012	13	.00	.00	.00	0.	*		1		0143	104	.00	.00	.00	3.	*	
1		0013	14	.00	.00	.00	0.	*		1		0144	105	.00	.00	.00	3.	*	
1		0014	15	.00	.00	.00	0.	*		1		0145	106	.00	.00	.00	2.	*	
1		0015	16	.00	.00	.00	0.	*		1		0146	107	.00	.00	.00	2.	*	
1		0016	17	.00	.00	.00	0.	*		1		0147	108	.00	.00	.00	2.	*	
1		0017	18	.00	.00	.00	0.	*		1		0148	109	.00	.00	.00	2.	*	
1		0018	19	.00	.00	.00	0.	*		1		0149	110	.00	.00	.00	2.	*	
1		0019	20	.00	.00	.00	0.	*		1		0150	111	.00	.00	.00	2.	*	
1		0020	21	.00	.00	.00	0.	*		1		0151	112	.00	.00	.00	2.	*	
1		0021	22	.00	.00	.00	0.	*		1		0152	113	.00	.00	.00	2.	*	
1		0022	23	.00	.00	.00	0.	*		1		0153	114	.00	.00	.00	1.	*	
1		0023	24	.00	.00	.00	0.	*		1		0154	115	.00	.00	.00	1.	*	
1		0024	25	.00	.00	.00	0.	*		1		0155	116	.00	.00	.00	1.	*	
1		0025	26	.00	.00	.00	0.	*		1		0156	117	.00	.00	.00	1.	*	
1		0026	27	.00	.00	.00	0.	*		1		0157	118	.00	.00	.00	1.	*	
1		0027	28	.00	.00	.00	0.	*		1		0158	119	.00	.00	.00	1.	*	
1		0028	29	.00	.00	.00	0.	*		1		0159	120	.00	.00	.00	1.	*	
1		0029	30	.00	.00	.00	0.	*		1		0200	121	.00	.00	.00	1.	*	
1		0030	31	.00	.00	.00	0.	*		1		0201	122	.00	.00	.00	1.	*	
1		0031	32	.11	.11	.00	0.	*		1		0202	123	.00	.00	.00	1.	*	
1		0032	33	.11	.11	.00	0.	*		1		0203	124	.00	.00	.00	1.	*	
1		0033	34	.11	.11	.00	0.	*		1		0204	125	.00	.00	.00	1.	*	
1		0034	35	.11	.11	.00	0.	*		1		0205	126	.00	.00	.00	1.	*	
1		0035	36	.11	.11	.00	0.	*		1		0206	127	.00	.00	.00	1.	*	
1		0036	37	.09	.09	.00	0.	*		1		0207	128	.00	.00	.00	1.	*	
1		0037	38	.09	.08	.01	0.	*		1		0208	129	.00	.00	.00	1.	*	
1		0038	39	.09	.08	.01	0.	*		1		0209	130	.00	.00	.00	1.	*	
1		0039	40	.09	.07	.01	0.	*		1		0210	131	.00	.00	.00	1.	*	
1		0040	41	.09	.07	.02	0.	*		1		0211	132	.00	.00	.00	1.	*	
1		0041	42	.06	.05	.01	1.	*		1		0212	133	.00	.00	.00	1.	*	
1		0042	43	.06	.05	.02	1.	*		1		0213	134	.00	.00	.00	1.	*	
1		0043	44	.06	.04	.02	2.	*		1		0214	135	.00	.00	.00	1.	*	
1		0044	45	.06	.04	.02	3.	*		1		0215	136	.00	.00	.00	1.	*	
1		0045	46	.06	.04	.02	4.	*		1		0216	137	.00	.00	.00	1.	*	
1		0046	47	.04	.03	.01	5.	*		1		0217	138	.00	.00	.00	1.	*	
1		0047	48	.04	.03	.01	7.	*		1		0218	139	.00	.00	.00	1.	*	
1		0048	49	.04	.02	.01	8.	*		1		0219	140	.00	.00	.00	1.	*	
1		0049	50	.04	.02	.01	10.	*		1		0220	141	.00	.00	.00	1.	*	
1		0050	51	.04	.02	.02	11.	*		1		0221	142	.00	.00	.00	1.	*	
1		0051	52	.02	.01	.01	12.	*		1		0222	143	.00	.00	.00	1.	*	
1		0052	53	.02	.01	.01	14.	*		1		0223	144	.00	.00	.00	1.	*	
1		0053	54	.02	.01	.01	15.	*		1		0224	145	.00	.00	.00	1.	*	
1		0054	55	.02	.01	.01	16.	*		1		0225	146	.00	.00	.00	1.	*	

														pre.out			
1	0055	56	.02	.01	.01	16.	*	1	0226	147	.00	.00	.00	1.			
1	0056	57	.02	.01	.01	17.	*	1	0227	148	.00	.00	.00	1.			
1	0057	58	.02	.01	.01	17.	*	1	0228	149	.00	.00	.00	1.			
1	0058	59	.02	.01	.01	17.	*	1	0229	150	.00	.00	.00	1.			
1	0059	60	.02	.01	.01	17.	*	1	0230	151	.00	.00	.00	1.			
1	0100	61	.02	.01	.01	17.	*	1	0231	152	.00	.00	.00	1.			
1	0101	62	.01	.01	.01	17.	*	1	0232	153	.00	.00	.00	1.			
1	0102	63	.01	.01	.01	16.	*	1	0233	154	.00	.00	.00	1.			
1	0103	64	.01	.01	.01	16.	*	1	0234	155	.00	.00	.00	1.			
1	0104	65	.01	.01	.01	15.	*	1	0235	156	.00	.00	.00	1.			
1	0105	66	.01	.01	.01	15.	*	1	0236	157	.00	.00	.00	1.			
1	0106	67	.01	.01	.00	14.	*	1	0237	158	.00	.00	.00	1.			
1	0107	68	.01	.01	.00	14.	*	1	0238	159	.00	.00	.00	1.			
1	0108	69	.01	.01	.00	13.	*	1	0239	160	.00	.00	.00	1.			
1	0109	70	.01	.01	.00	13.	*	1	0240	161	.00	.00	.00	1.			
1	0110	71	.01	.01	.00	12.	*	1	0241	162	.00	.00	.00	1.			
1	0111	72	.01	.00	.00	12.	*	1	0242	163	.00	.00	.00	1.			
1	0112	73	.01	.00	.00	12.	*	1	0243	164	.00	.00	.00	1.			
1	0113	74	.01	.00	.00	11.	*	1	0244	165	.00	.00	.00	1.			
1	0114	75	.01	.00	.00	11.	*	1	0245	166	.00	.00	.00	1.			
1	0115	76	.01	.00	.00	10.	*	1	0246	167	.00	.00	.00	1.			
1	0116	77	.01	.00	.00	10.	*	1	0247	168	.00	.00	.00	1.			
1	0117	78	.01	.00	.00	9.	*	1	0248	169	.00	.00	.00	1.			
1	0118	79	.01	.00	.00	9.	*	1	0249	170	.00	.00	.00	1.			
1	0119	80	.01	.00	.00	9.	*	1	0250	171	.00	.00	.00	1.			
1	0120	81	.01	.00	.00	8.	*	1	0251	172	.00	.00	.00	1.			
1	0121	82	.01	.00	.00	8.	*	1	0252	173	.00	.00	.00	1.			
1	0122	83	.01	.00	.00	8.	*	1	0253	174	.00	.00	.00	1.			
1	0123	84	.01	.00	.00	7.	*	1	0254	175	.00	.00	.00	1.			
1	0124	85	.01	.00	.00	7.	*	1	0255	176	.00	.00	.00	1.			
1	0125	86	.01	.00	.00	7.	*	1	0256	177	.00	.00	.00	1.			
1	0126	87	.01	.00	.00	7.	*	1	0257	178	.00	.00	.00	1.			
1	0127	88	.01	.00	.00	6.	*	1	0258	179	.00	.00	.00	1.			
1	0128	89	.01	.00	.00	6.	*	1	0259	180	.00	.00	.00	1.			
1	0129	90	.01	.00	.00	6.	*	1	0300	181	.00	.00	.00	1.			
1	0130	91	.01	.00	.00	6.	*										

TOTAL RAINFALL = 2.13, TOTAL LOSS = 1.65, TOTAL EXCESS = .48

PEAK FLOW	TIME	MAXIMUM AVERAGE FLOW			
(CFS)	(HR)	6-HR	24-HR	72-HR	3.00-HR
+ 17.	.97	4.	4.	4.	4.
		(INCHES)	.471	.471	.471
		(AC-FT)	1.	1.	1.

CUMULATIVE AREA = .04 SQ MI

HYDROGRAPH AT STATION BE11
PLAN 1, RATIO = 1.00

DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	*	DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
1	0000	1	.00	.00	.00	0.	*	1	0131	92	.00	.00	.00	6.		
1	0001	2	.00	.00	.00	0.	*	1	0132	93	.00	.00	.00	5.		
1	0002	3	.00	.00	.00	0.	*	1	0133	94	.00	.00	.00	5.		
1	0003	4	.00	.00	.00	0.	*	1	0134	95	.00	.00	.00	5.		
1	0004	5	.00	.00	.00	0.	*	1	0135	96	.00	.00	.00	5.		
1	0005	6	.00	.00	.00	0.	*	1	0136	97	.00	.00	.00	5.		
1	0006	7	.00	.00	.00	0.	*	1	0137	98	.00	.00	.00	4.		
1	0007	8	.00	.00	.00	0.	*	1	0138	99	.00	.00	.00	4.		
1	0008	9	.00	.00	.00	0.	*	1	0139	100	.00	.00	.00	4.		
1	0009	10	.00	.00	.00	0.	*	1	0140	101	.00	.00	.00	4.		
1	0010	11	.00	.00	.00	0.	*	1	0141	102	.00	.00	.00	3.		
1	0011	12	.00	.00	.00	0.	*	1	0142	103	.00	.00	.00	3.		
1	0012	13	.00	.00	.00	0.	*	1	0143	104	.00	.00	.00	3.		
1	0013	14	.00	.00	.00	0.	*	1	0144	105	.00	.00	.00	3.		
1	0014	15	.00	.00	.00	0.	*	1	0145	106	.00	.00	.00	2.		
1	0015	16	.00	.00	.00	0.	*	1	0146	107	.00	.00	.00	2.		
1	0016	17	.00	.00	.00	0.	*	1	0147	108	.00	.00	.00	2.		
1	0017	18	.00	.00	.00	0.	*	1	0148	109	.00	.00	.00	2.		
1	0018	19	.00	.00	.00	0.	*	1	0149	110	.00	.00	.00	2.		
1	0019	20	.00	.00	.00	0.	*	1	0150	111	.00	.00	.00	2.		
1	0020	21	.00	.00	.00	0.	*	1	0151	112	.00	.00	.00	2.		
1	0021	22	.00	.00	.00	0.	*	1	0152	113	.00	.00	.00	2.		
1	0022	23	.00	.00	.00	0.	*	1	0153	114	.00	.00	.00	1.		
1	0023	24	.00	.00	.00	0.	*	1	0154	115	.00	.00	.00	1.		
1	0024	25	.00	.00	.00	0.	*	1	0155	116	.00	.00	.00	1.		
1	0025	26	.00	.00	.00	0.	*	1	0156	117	.00	.00	.00	1.		
1	0026	27	.00	.00	.00	0.	*	1	0157	118	.00	.00	.00	1.		
1	0027	28	.00	.00	.00	0.	*	1	0158	119	.00	.00	.00	1.		
1	0028	29	.00	.00	.00	0.	*	1	0159	120	.00	.00	.00	1.		

pre.out														
1	0029	30	.00	.00	.00	0.	*	1	0200	121	.00	.00	.00	1.
1	0030	31	.00	.00	.00	0.	*	1	0201	122	.00	.00	.00	1.
1	0031	32	.11	.11	.00	0.	*	1	0202	123	.00	.00	.00	1.
1	0032	33	.11	.11	.00	0.	*	1	0203	124	.00	.00	.00	1.
1	0033	34	.11	.11	.00	0.	*	1	0204	125	.00	.00	.00	1.
1	0034	35	.11	.11	.00	0.	*	1	0205	126	.00	.00	.00	1.
1	0035	36	.11	.11	.00	0.	*	1	0206	127	.00	.00	.00	1.
1	0036	37	.09	.09	.00	0.	*	1	0207	128	.00	.00	.00	1.
1	0037	38	.09	.08	.01	0.	*	1	0208	129	.00	.00	.00	1.
1	0038	39	.09	.08	.01	0.	*	1	0209	130	.00	.00	.00	1.
1	0039	40	.09	.07	.01	0.	*	1	0210	131	.00	.00	.00	1.
1	0040	41	.09	.07	.02	0.	*	1	0211	132	.00	.00	.00	1.
1	0041	42	.06	.05	.01	1.	*	1	0212	133	.00	.00	.00	1.
1	0042	43	.06	.05	.02	1.	*	1	0213	134	.00	.00	.00	1.
1	0043	44	.06	.04	.02	2.	*	1	0214	135	.00	.00	.00	1.
1	0044	45	.06	.04	.02	3.	*	1	0215	136	.00	.00	.00	1.
1	0045	46	.06	.04	.02	4.	*	1	0216	137	.00	.00	.00	1.
1	0046	47	.04	.03	.01	5.	*	1	0217	138	.00	.00	.00	1.
1	0047	48	.04	.03	.01	7.	*	1	0218	139	.00	.00	.00	1.
1	0048	49	.04	.02	.01	8.	*	1	0219	140	.00	.00	.00	1.
1	0049	50	.04	.02	.01	10.	*	1	0220	141	.00	.00	.00	1.
1	0050	51	.04	.02	.02	11.	*	1	0221	142	.00	.00	.00	1.
1	0051	52	.02	.01	.01	12.	*	1	0222	143	.00	.00	.00	1.
1	0052	53	.02	.01	.01	14.	*	1	0223	144	.00	.00	.00	1.
1	0053	54	.02	.01	.01	15.	*	1	0224	145	.00	.00	.00	1.
1	0054	55	.02	.01	.01	16.	*	1	0225	146	.00	.00	.00	1.
1	0055	56	.02	.01	.01	16.	*	1	0226	147	.00	.00	.00	1.
1	0056	57	.02	.01	.01	17.	*	1	0227	148	.00	.00	.00	1.
1	0057	58	.02	.01	.01	17.	*	1	0228	149	.00	.00	.00	1.
1	0058	59	.02	.01	.01	17.	*	1	0229	150	.00	.00	.00	1.
1	0059	60	.02	.01	.01	17.	*	1	0230	151	.00	.00	.00	1.
1	0100	61	.02	.01	.01	17.	*	1	0231	152	.00	.00	.00	1.
1	0101	62	.01	.01	.01	17.	*	1	0232	153	.00	.00	.00	1.
1	0102	63	.01	.01	.01	16.	*	1	0233	154	.00	.00	.00	1.
1	0103	64	.01	.01	.01	16.	*	1	0234	155	.00	.00	.00	1.
1	0104	65	.01	.01	.01	15.	*	1	0235	156	.00	.00	.00	1.
1	0105	66	.01	.01	.01	15.	*	1	0236	157	.00	.00	.00	1.
1	0106	67	.01	.01	.00	14.	*	1	0237	158	.00	.00	.00	1.
1	0107	68	.01	.01	.00	14.	*	1	0238	159	.00	.00	.00	1.
1	0108	69	.01	.01	.00	13.	*	1	0239	160	.00	.00	.00	1.
1	0109	70	.01	.01	.00	13.	*	1	0240	161	.00	.00	.00	1.
1	0110	71	.01	.01	.00	12.	*	1	0241	162	.00	.00	.00	1.
1	0111	72	.01	.00	.00	12.	*	1	0242	163	.00	.00	.00	1.
1	0112	73	.01	.00	.00	12.	*	1	0243	164	.00	.00	.00	1.
1	0113	74	.01	.00	.00	11.	*	1	0244	165	.00	.00	.00	1.
1	0114	75	.01	.00	.00	11.	*	1	0245	166	.00	.00	.00	1.
1	0115	76	.01	.00	.00	10.	*	1	0246	167	.00	.00	.00	1.
1	0116	77	.01	.00	.00	10.	*	1	0247	168	.00	.00	.00	1.
1	0117	78	.01	.00	.00	9.	*	1	0248	169	.00	.00	.00	1.
1	0118	79	.01	.00	.00	9.	*	1	0249	170	.00	.00	.00	1.
1	0119	80	.01	.00	.00	9.	*	1	0250	171	.00	.00	.00	1.
1	0120	81	.01	.00	.00	8.	*	1	0251	172	.00	.00	.00	1.
1	0121	82	.01	.00	.00	8.	*	1	0252	173	.00	.00	.00	1.
1	0122	83	.01	.00	.00	8.	*	1	0253	174	.00	.00	.00	1.
1	0123	84	.01	.00	.00	7.	*	1	0254	175	.00	.00	.00	1.
1	0124	85	.01	.00	.00	7.	*	1	0255	176	.00	.00	.00	1.
1	0125	86	.01	.00	.00	7.	*	1	0256	177	.00	.00	.00	1.
1	0126	87	.01	.00	.00	7.	*	1	0257	178	.00	.00	.00	1.
1	0127	88	.01	.00	.00	6.	*	1	0258	179	.00	.00	.00	1.
1	0128	89	.01	.00	.00	6.	*	1	0259	180	.00	.00	.00	1.
1	0129	90	.01	.00	.00	6.	*	1	0300	181	.00	.00	.00	1.
1	0130	91	.01	.00	.00	6.	*							

TOTAL RAINFALL = 2.13, TOTAL LOSS = 1.65, TOTAL EXCESS = .48

PEAK FLOW (CFS)	TIME (HR)	MAXIMUM AVERAGE FLOW			
		6-HR	24-HR	72-HR	3.00-HR
+ 17.	.97	4.	4.	4.	4.
		(INCHES)	.471	.471	.471
		(AC-FT)	1.	1.	1.

CUMULATIVE AREA = .04 SQ MI

HYDROGRAPH AT STATION BE11
PLAN 1, RATIO = .61

DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	*	DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
1	0000	1	.00	.00	.00	0.	*		1	0131	92	.00	.00	.00	2.	
1	0001	2	.00	.00	.00	0.	*		1	0132	93	.00	.00	.00	2.	
1	0002	3	.00	.00	.00	0.	*		1	0133	94	.00	.00	.00	2.	

pre.out														
1	0003	4	.00	.00	.00	0.	*	1	0134	95	.00	.00	.00	2.
1	0004	5	.00	.00	.00	0.	*	1	0135	96	.00	.00	.00	2.
1	0005	6	.00	.00	.00	0.	*	1	0136	97	.00	.00	.00	1.
1	0006	7	.00	.00	.00	0.	*	1	0137	98	.00	.00	.00	1.
1	0007	8	.00	.00	.00	0.	*	1	0138	99	.00	.00	.00	1.
1	0008	9	.00	.00	.00	0.	*	1	0139	100	.00	.00	.00	1.
1	0009	10	.00	.00	.00	0.	*	1	0140	101	.00	.00	.00	1.
1	0010	11	.00	.00	.00	0.	*	1	0141	102	.00	.00	.00	1.
1	0011	12	.00	.00	.00	0.	*	1	0142	103	.00	.00	.00	1.
1	0012	13	.00	.00	.00	0.	*	1	0143	104	.00	.00	.00	1.
1	0013	14	.00	.00	.00	0.	*	1	0144	105	.00	.00	.00	1.
1	0014	15	.00	.00	.00	0.	*	1	0145	106	.00	.00	.00	1.
1	0015	16	.00	.00	.00	0.	*	1	0146	107	.00	.00	.00	1.
1	0016	17	.00	.00	.00	0.	*	1	0147	108	.00	.00	.00	1.
1	0017	18	.00	.00	.00	0.	*	1	0148	109	.00	.00	.00	1.
1	0018	19	.00	.00	.00	0.	*	1	0149	110	.00	.00	.00	1.
1	0019	20	.00	.00	.00	0.	*	1	0150	111	.00	.00	.00	1.
1	0020	21	.00	.00	.00	0.	*	1	0151	112	.00	.00	.00	1.
1	0021	22	.00	.00	.00	0.	*	1	0152	113	.00	.00	.00	1.
1	0022	23	.00	.00	.00	0.	*	1	0153	114	.00	.00	.00	0.
1	0023	24	.00	.00	.00	0.	*	1	0154	115	.00	.00	.00	0.
1	0024	25	.00	.00	.00	0.	*	1	0155	116	.00	.00	.00	0.
1	0025	26	.00	.00	.00	0.	*	1	0156	117	.00	.00	.00	0.
1	0026	27	.00	.00	.00	0.	*	1	0157	118	.00	.00	.00	0.
1	0027	28	.00	.00	.00	0.	*	1	0158	119	.00	.00	.00	0.
1	0028	29	.00	.00	.00	0.	*	1	0159	120	.00	.00	.00	0.
1	0029	30	.00	.00	.00	0.	*	1	0200	121	.00	.00	.00	0.
1	0030	31	.00	.00	.00	0.	*	1	0201	122	.00	.00	.00	0.
1	0031	32	.07	.07	.00	0.	*	1	0202	123	.00	.00	.00	0.
1	0032	33	.07	.07	.00	0.	*	1	0203	124	.00	.00	.00	0.
1	0033	34	.07	.07	.00	0.	*	1	0204	125	.00	.00	.00	0.
1	0034	35	.07	.07	.00	0.	*	1	0205	126	.00	.00	.00	0.
1	0035	36	.07	.07	.00	0.	*	1	0206	127	.00	.00	.00	0.
1	0036	37	.05	.05	.00	0.	*	1	0207	128	.00	.00	.00	0.
1	0037	38	.05	.05	.00	0.	*	1	0208	129	.00	.00	.00	0.
1	0038	39	.05	.05	.00	0.	*	1	0209	130	.00	.00	.00	0.
1	0039	40	.05	.05	.00	0.	*	1	0210	131	.00	.00	.00	0.
1	0040	41	.05	.05	.00	0.	*	1	0211	132	.00	.00	.00	0.
1	0041	42	.04	.04	.00	0.	*	1	0212	133	.00	.00	.00	0.
1	0042	43	.04	.04	.00	0.	*	1	0213	134	.00	.00	.00	0.
1	0043	44	.04	.04	.00	0.	*	1	0214	135	.00	.00	.00	0.
1	0044	45	.04	.03	.00	0.	*	1	0215	136	.00	.00	.00	0.
1	0045	46	.04	.03	.00	0.	*	1	0216	137	.00	.00	.00	0.
1	0046	47	.02	.02	.00	0.	*	1	0217	138	.00	.00	.00	0.
1	0047	48	.02	.02	.00	0.	*	1	0218	139	.00	.00	.00	0.
1	0048	49	.02	.02	.00	0.	*	1	0219	140	.00	.00	.00	0.
1	0049	50	.02	.02	.00	1.	*	1	0220	141	.00	.00	.00	0.
1	0050	51	.02	.02	.00	1.	*	1	0221	142	.00	.00	.00	0.
1	0051	52	.01	.01	.00	1.	*	1	0222	143	.00	.00	.00	0.
1	0052	53	.01	.01	.00	1.	*	1	0223	144	.00	.00	.00	0.
1	0053	54	.01	.01	.00	2.	*	1	0224	145	.00	.00	.00	0.
1	0054	55	.01	.01	.00	2.	*	1	0225	146	.00	.00	.00	0.
1	0055	56	.01	.01	.00	2.	*	1	0226	147	.00	.00	.00	0.
1	0056	57	.01	.01	.00	2.	*	1	0227	148	.00	.00	.00	0.
1	0057	58	.01	.01	.00	3.	*	1	0228	149	.00	.00	.00	0.
1	0058	59	.01	.01	.00	3.	*	1	0229	150	.00	.00	.00	0.
1	0059	60	.01	.01	.00	3.	*	1	0230	151	.00	.00	.00	0.
1	0100	61	.01	.01	.00	3.	*	1	0231	152	.00	.00	.00	0.
1	0101	62	.01	.01	.00	3.	*	1	0232	153	.00	.00	.00	0.
1	0102	63	.01	.01	.00	3.	*	1	0233	154	.00	.00	.00	0.
1	0103	64	.01	.01	.00	3.	*	1	0234	155	.00	.00	.00	0.
1	0104	65	.01	.01	.00	3.	*	1	0235	156	.00	.00	.00	0.
1	0105	66	.01	.01	.00	3.	*	1	0236	157	.00	.00	.00	0.
1	0106	67	.01	.00	.00	3.	*	1	0237	158	.00	.00	.00	0.
1	0107	68	.01	.00	.00	3.	*	1	0238	159	.00	.00	.00	0.
1	0108	69	.01	.00	.00	3.	*	1	0239	160	.00	.00	.00	0.
1	0109	70	.01	.00	.00	3.	*	1	0240	161	.00	.00	.00	0.
1	0110	71	.01	.00	.00	3.	*	1	0241	162	.00	.00	.00	0.
1	0111	72	.00	.00	.00	3.	*	1	0242	163	.00	.00	.00	0.
1	0112	73	.00	.00	.00	3.	*	1	0243	164	.00	.00	.00	0.
1	0113	74	.00	.00	.00	3.	*	1	0244	165	.00	.00	.00	0.
1	0114	75	.00	.00	.00	3.	*	1	0245	166	.00	.00	.00	0.
1	0115	76	.00	.00	.00	3.	*	1	0246	167	.00	.00	.00	0.
1	0116	77	.00	.00	.00	3.	*	1	0247	168	.00	.00	.00	0.
1	0117	78	.00	.00	.00	3.	*	1	0248	169	.00	.00	.00	0.
1	0118	79	.00	.00	.00	3.	*	1	0249	170	.00	.00	.00	0.
1	0119	80	.00	.00	.00	2.	*	1	0250	171	.00	.00	.00	0.
1	0120	81	.00	.00	.00	2.	*	1	0251	172	.00	.00	.00	0.
1	0121	82	.00	.00	.00	2.	*	1	0252	173	.00	.00	.00	0.
1	0122	83	.00	.00	.00	2.	*	1	0253	174	.00	.00	.00	0.
1	0123	84	.00	.00	.00	2.	*	1	0254	175	.00	.00	.00	0.
1	0124	85	.00	.00	.00	2.	*	1	0255	176	.00	.00	.00	0.
1	0125	86	.00	.00	.00	2.	*	1	0256	177	.00	.00	.00	0.
1	0126	87	.00	.00	.00	2.	*	1	0257	178	.00	.00	.00	0.
1	0127	88	.00	.00	.00	2.	*	1	0258	179	.00	.00	.00	0.
1	0128	89	.00	.00	.00	2.	*	1	0259	180	.00	.00	.00	0.
1	0129	90	.00	.00	.00	2.	*	1	0300	181	.00	.00	.00	0.
1	0130	91	.00	.00	.00	2.	*							

pre.out

TOTAL RAINFALL = 1.29, TOTAL LOSS = 1.18, TOTAL EXCESS = .11

PEAK FLOW (CFS)	TIME (HR)	6-HR (CFS)	24-HR (INCHES)	72-HR (INCHES)	3.00-HR (INCHES)
3.	1.07	1.	.110	.110	.110
		(AC-FT)	0.	0.	0.

CUMULATIVE AREA = .04 SQ MI

*** ** ** ** **

```

*****
*      *
113 KK * RE11 *
*      *
*****

```

Route BE11 in channel to Outlet OE1

HYDROGRAPH ROUTING DATA

115 RD MUSKINGUM-CUNGE CHANNEL ROUTING

L	9819.	CHANNEL LENGTH
S	.0110	SLOPE
N	.040	CHANNEL ROUGHNESS COEFFICIENT
CA	.00	CONTRIBUTING AREA
SHAPE	TRAP	CHANNEL SHAPE
WD	.00	BOTTOM WIDTH OR DIAMETER
Z	7.00	SIDE SLOPE

ELEMENT	ALPHA	COMPUTED MUSKINGUM-CUNGE PARAMETERS			PEAK (CFS)	TIME TO PEAK (MIN)	VOLUME (IN)	MAXIMUM CELERITY (FPS)
		M	DT (MIN)	DX (FT)				
MAIN	1.28	1.33	1.00	95.33	18.26	115.00	.37	

INTERPOLATED TO SPECIFIED COMPUTATION INTERVAL

MAIN	1.28	1.33	1.00	18.26	115.00	.37
------	------	------	------	-------	--------	-----

CONTINUITY SUMMARY (AC-FT) - INFLOW= .9221E+00 EXCESS= .0000E+00 OUTFLOW= .7346E+00 BASIN STORAGE= .2393E+00 PERCENT ERROR= -5.6

HYDROGRAPH AT STATION RE11
PLAN 1, RATIO = 1.00

DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*
1	0000	1	0.	*	1	0046	47	0.	*	1	0132	93	0.	*	1	0218	139	9.					
1	0001	2	0.	*	1	0047	48	0.	*	1	0133	94	0.	*	1	0219	140	9.					
1	0002	3	0.	*	1	0048	49	0.	*	1	0134	95	0.	*	1	0220	141	8.					
1	0003	4	0.	*	1	0049	50	0.	*	1	0135	96	0.	*	1	0221	142	8.					
1	0004	5	0.	*	1	0050	51	0.	*	1	0136	97	0.	*	1	0222	143	8.					
1	0005	6	0.	*	1	0051	52	0.	*	1	0137	98	0.	*	1	0223	144	8.					
1	0006	7	0.	*	1	0052	53	0.	*	1	0138	99	0.	*	1	0224	145	8.					
1	0007	8	0.	*	1	0053	54	0.	*	1	0139	100	0.	*	1	0225	146	7.					
1	0008	9	0.	*	1	0054	55	0.	*	1	0140	101	0.	*	1	0226	147	7.					
1	0009	10	0.	*	1	0055	56	0.	*	1	0141	102	0.	*	1	0227	148	7.					
1	0010	11	0.	*	1	0056	57	0.	*	1	0142	103	0.	*	1	0228	149	7.					
1	0011	12	0.	*	1	0057	58	0.	*	1	0143	104	0.	*	1	0229	150	7.					
1	0012	13	0.	*	1	0058	59	0.	*	1	0144	105	0.	*	1	0230	151	7.					
1	0013	14	0.	*	1	0059	60	0.	*	1	0145	106	0.	*	1	0231	152	6.					
1	0014	15	0.	*	1	0100	61	0.	*	1	0146	107	0.	*	1	0232	153	6.					
1	0015	16	0.	*	1	0101	62	0.	*	1	0147	108	0.	*	1	0233	154	6.					
1	0016	17	0.	*	1	0102	63	0.	*	1	0148	109	0.	*	1	0234	155	6.					
1	0017	18	0.	*	1	0103	64	0.	*	1	0149	110	0.	*	1	0235	156	6.					
1	0018	19	0.	*	1	0104	65	0.	*	1	0150	111	0.	*	1	0236	157	6.					
1	0019	20	0.	*	1	0105	66	0.	*	1	0151	112	0.	*	1	0237	158	6.					
1	0020	21	0.	*	1	0106	67	0.	*	1	0152	113	0.	*	1	0238	159	5.					
1	0021	22	0.	*	1	0107	68	0.	*	1	0153	114	3.	*	1	0239	160	5.					
1	0022	23	0.	*	1	0108	69	0.	*	1	0154	115	15.	*	1	0240	161	5.					
1	0023	24	0.	*	1	0109	70	0.	*	1	0155	116	18.	*	1	0241	162	5.					

pre.out																		
1	0024	25	0.	*	1	0110	71	0.	*	1	0156	117	15.	*	1	0242	163	5.
1	0025	26	0.	*	1	0111	72	0.	*	1	0157	118	14.	*	1	0243	164	5.
1	0026	27	0.	*	1	0112	73	0.	*	1	0158	119	15.	*	1	0244	165	5.
1	0027	28	0.	*	1	0113	74	0.	*	1	0159	120	14.	*	1	0245	166	5.
1	0028	29	0.	*	1	0114	75	0.	*	1	0200	121	14.	*	1	0246	167	5.
1	0029	30	0.	*	1	0115	76	0.	*	1	0201	122	13.	*	1	0247	168	4.
1	0030	31	0.	*	1	0116	77	0.	*	1	0202	123	13.	*	1	0248	169	4.
1	0031	32	0.	*	1	0117	78	0.	*	1	0203	124	13.	*	1	0249	170	4.
1	0032	33	0.	*	1	0118	79	0.	*	1	0204	125	13.	*	1	0250	171	4.
1	0033	34	0.	*	1	0119	80	0.	*	1	0205	126	12.	*	1	0251	172	4.
1	0034	35	0.	*	1	0120	81	0.	*	1	0206	127	12.	*	1	0252	173	4.
1	0035	36	0.	*	1	0121	82	0.	*	1	0207	128	12.	*	1	0253	174	4.
1	0036	37	0.	*	1	0122	83	0.	*	1	0208	129	11.	*	1	0254	175	4.
1	0037	38	0.	*	1	0123	84	0.	*	1	0209	130	11.	*	1	0255	176	3.
1	0038	39	0.	*	1	0124	85	0.	*	1	0210	131	11.	*	1	0256	177	3.
1	0039	40	0.	*	1	0125	86	0.	*	1	0211	132	10.	*	1	0257	178	3.
1	0040	41	0.	*	1	0126	87	0.	*	1	0212	133	10.	*	1	0258	179	3.
1	0041	42	0.	*	1	0127	88	0.	*	1	0213	134	10.	*	1	0259	180	3.
1	0042	43	0.	*	1	0128	89	0.	*	1	0214	135	10.	*	1	0300	181	3.
1	0043	44	0.	*	1	0129	90	0.	*	1	0215	136	9.	*				
1	0044	45	0.	*	1	0130	91	0.	*	1	0216	137	9.	*				
1	0045	46	0.	*	1	0131	92	0.	*	1	0217	138	9.	*				

PEAK FLOW + (CFS)	TIME (HR)	MAXIMUM AVERAGE FLOW				
		6-HR	24-HR	72-HR	3.00-HR	
+ 18.	1.92	3.	3.	3.	3.	
		(INCHES)	.375	.375	.375	.375
		(AC-FT)	1.	1.	1.	1.

CUMULATIVE AREA = .04 SQ MI

COMPUTED MUSKINGUM-CUNGE PARAMETERS

ELEMENT	ALPHA	M	COMPUTATION TIME STEP		PEAK (CFS)	TIME TO PEAK (MIN)	VOLUME (IN)	MAXIMUM CELERITY (FPS)
			DT (MIN)	DX (FT)				
MAIN	1.28	1.33	1.00	62.15	3.66	152.00	.05	1.83

INTERPOLATED TO SPECIFIED COMPUTATION INTERVAL

MAIN	1.28	1.33	1.00		3.66	152.00	.05	
------	------	------	------	--	------	--------	-----	--

CONTINUITY SUMMARY (AC-FT) - INFLOW= .2153E+00 EXCESS= .0000E+00 OUTFLOW= .9521E-01 BASIN STORAGE= .1385E+00 PERCENT ERROR= -8.6

HYDROGRAPH AT STATION RE11
PLAN 1, RATIO = .61

DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*
1	0000	1	0.	*	1	0046	47	0.	*	1	0132	93	0.	*	1	0218	139	0.					
1	0001	2	0.	*	1	0047	48	0.	*	1	0133	94	0.	*	1	0219	140	0.					
1	0002	3	0.	*	1	0048	49	0.	*	1	0134	95	0.	*	1	0220	141	0.					
1	0003	4	0.	*	1	0049	50	0.	*	1	0135	96	0.	*	1	0221	142	0.					
1	0004	5	0.	*	1	0050	51	0.	*	1	0136	97	0.	*	1	0222	143	0.					
1	0005	6	0.	*	1	0051	52	0.	*	1	0137	98	0.	*	1	0223	144	0.					
1	0006	7	0.	*	1	0052	53	0.	*	1	0138	99	0.	*	1	0224	145	0.					
1	0007	8	0.	*	1	0053	54	0.	*	1	0139	100	0.	*	1	0225	146	0.					
1	0008	9	0.	*	1	0054	55	0.	*	1	0140	101	0.	*	1	0226	147	0.					
1	0009	10	0.	*	1	0055	56	0.	*	1	0141	102	0.	*	1	0227	148	0.					
1	0010	11	0.	*	1	0056	57	0.	*	1	0142	103	0.	*	1	0228	149	0.					
1	0011	12	0.	*	1	0057	58	0.	*	1	0143	104	0.	*	1	0229	150	0.					
1	0012	13	0.	*	1	0058	59	0.	*	1	0144	105	0.	*	1	0230	151	0.					
1	0013	14	0.	*	1	0059	60	0.	*	1	0145	106	0.	*	1	0231	152	3.					
1	0014	15	0.	*	1	0100	61	0.	*	1	0146	107	0.	*	1	0232	153	4.					
1	0015	16	0.	*	1	0101	62	0.	*	1	0147	108	0.	*	1	0233	154	3.					
1	0016	17	0.	*	1	0102	63	0.	*	1	0148	109	0.	*	1	0234	155	3.					
1	0017	18	0.	*	1	0103	64	0.	*	1	0149	110	0.	*	1	0235	156	3.					
1	0018	19	0.	*	1	0104	65	0.	*	1	0150	111	0.	*	1	0236	157	3.					
1	0019	20	0.	*	1	0105	66	0.	*	1	0151	112	0.	*	1	0237	158	3.					
1	0020	21	0.	*	1	0106	67	0.	*	1	0152	113	0.	*	1	0238	159	3.					
1	0021	22	0.	*	1	0107	68	0.	*	1	0153	114	0.	*	1	0239	160	3.					
1	0022	23	0.	*	1	0108	69	0.	*	1	0154	115	0.	*	1	0240	161	3.					
1	0023	24	0.	*	1	0109	70	0.	*	1	0155	116	0.	*	1	0241	162	2.					
1	0024	25	0.	*	1	0110	71	0.	*	1	0156	117	0.	*	1	0242	163	2.					
1	0025	26	0.	*	1	0111	72	0.	*	1	0157	118	0.	*	1	0243	164	2.					
1	0026	27	0.	*	1	0112	73	0.	*	1	0158	119	0.	*	1	0244	165	2.					

														pre.out				
1	0027	28	0.	*	1	0113	74	0.	*	1	0159	120	0.	*	1	0245	166	2.
1	0028	29	0.	*	1	0114	75	0.	*	1	0200	121	0.	*	1	0246	167	2.
1	0029	30	0.	*	1	0115	76	0.	*	1	0201	122	0.	*	1	0247	168	2.
1	0030	31	0.	*	1	0116	77	0.	*	1	0202	123	0.	*	1	0248	169	2.
1	0031	32	0.	*	1	0117	78	0.	*	1	0203	124	0.	*	1	0249	170	2.
1	0032	33	0.	*	1	0118	79	0.	*	1	0204	125	0.	*	1	0250	171	2.
1	0033	34	0.	*	1	0119	80	0.	*	1	0205	126	0.	*	1	0251	172	2.
1	0034	35	0.	*	1	0120	81	0.	*	1	0206	127	0.	*	1	0252	173	2.
1	0035	36	0.	*	1	0121	82	0.	*	1	0207	128	0.	*	1	0253	174	2.
1	0036	37	0.	*	1	0122	83	0.	*	1	0208	129	0.	*	1	0254	175	2.
1	0037	38	0.	*	1	0123	84	0.	*	1	0209	130	0.	*	1	0255	176	2.
1	0038	39	0.	*	1	0124	85	0.	*	1	0210	131	0.	*	1	0256	177	2.
1	0039	40	0.	*	1	0125	86	0.	*	1	0211	132	0.	*	1	0257	178	2.
1	0040	41	0.	*	1	0126	87	0.	*	1	0212	133	0.	*	1	0258	179	2.
1	0041	42	0.	*	1	0127	88	0.	*	1	0213	134	0.	*	1	0259	180	2.
1	0042	43	0.	*	1	0128	89	0.	*	1	0214	135	0.	*	1	0300	181	2.
1	0043	44	0.	*	1	0129	90	0.	*	1	0215	136	0.	*				
1	0044	45	0.	*	1	0130	91	0.	*	1	0216	137	0.	*				
1	0045	46	0.	*	1	0131	92	0.	*	1	0217	138	0.	*				

PEAK FLOW (CFS)	TIME (HR)	MAXIMUM AVERAGE FLOW			
		6-HR	24-HR	72-HR	3.00-HR
		(CFS)	(INCHES)	(AC-FT)	
4.	2.53	0.	0.	0.	0.
		.048	.048	.048	.048
		0.	0.	0.	0.

CUMULATIVE AREA = .04 SQ MI

*** ** ** ** **

* *
116 KK * C2 *
* *

COMBINE RE6 - RE11

118 HC HYDROGRAPH COMBINATION
ICOMP 6 NUMBER OF HYDROGRAPHS TO COMBINE

HYDROGRAPH AT STATION C2
SUM OF 6 HYDROGRAPHS
PLAN 1, RATIO = 1.00

DA	MON	HRMN	ORD	FLOW	DA	MON	HRMN	ORD	FLOW	DA	MON	HRMN	ORD	FLOW	DA	MON	HRMN	ORD	FLOW
1	0000	1	0.	*	1	0046	47	0.	*	1	0132	93	556.	*	1	0218	139	816.	
1	0001	2	0.	*	1	0047	48	0.	*	1	0133	94	574.	*	1	0219	140	809.	
1	0002	3	0.	*	1	0048	49	0.	*	1	0134	95	591.	*	1	0220	141	803.	
1	0003	4	0.	*	1	0049	50	0.	*	1	0135	96	607.	*	1	0221	142	796.	
1	0004	5	0.	*	1	0050	51	0.	*	1	0136	97	623.	*	1	0222	143	789.	
1	0005	6	0.	*	1	0051	52	0.	*	1	0137	98	637.	*	1	0223	144	782.	
1	0006	7	0.	*	1	0052	53	0.	*	1	0138	99	651.	*	1	0224	145	774.	
1	0007	8	0.	*	1	0053	54	0.	*	1	0139	100	663.	*	1	0225	146	767.	
1	0008	9	0.	*	1	0054	55	0.	*	1	0140	101	676.	*	1	0226	147	759.	
1	0009	10	0.	*	1	0055	56	0.	*	1	0141	102	687.	*	1	0227	148	751.	
1	0010	11	0.	*	1	0056	57	0.	*	1	0142	103	698.	*	1	0228	149	743.	
1	0011	12	0.	*	1	0057	58	0.	*	1	0143	104	711.	*	1	0229	150	735.	
1	0012	13	0.	*	1	0058	59	0.	*	1	0144	105	739.	*	1	0230	151	727.	
1	0013	14	0.	*	1	0059	60	0.	*	1	0145	106	764.	*	1	0231	152	718.	
1	0014	15	0.	*	1	0100	61	0.	*	1	0146	107	774.	*	1	0232	153	710.	
1	0015	16	0.	*	1	0101	62	0.	*	1	0147	108	782.	*	1	0233	154	701.	
1	0016	17	0.	*	1	0102	63	0.	*	1	0148	109	791.	*	1	0234	155	692.	
1	0017	18	0.	*	1	0103	64	0.	*	1	0149	110	806.	*	1	0235	156	683.	
1	0018	19	0.	*	1	0104	65	0.	*	1	0150	111	827.	*	1	0236	157	674.	
1	0019	20	0.	*	1	0105	66	0.	*	1	0151	112	835.	*	1	0237	158	664.	
1	0020	21	0.	*	1	0106	67	0.	*	1	0152	113	838.	*	1	0238	159	655.	
1	0021	22	0.	*	1	0107	68	0.	*	1	0153	114	846.	*	1	0239	160	646.	
1	0022	23	0.	*	1	0108	69	0.	*	1	0154	115	862.	*	1	0240	161	636.	
1	0023	24	0.	*	1	0109	70	0.	*	1	0155	116	869.	*	1	0241	162	627.	
1	0024	25	0.	*	1	0110	71	0.	*	1	0156	117	869.	*	1	0242	163	617.	
1	0025	26	0.	*	1	0111	72	0.	*	1	0157	118	871.	*	1	0243	164	608.	
1	0026	27	0.	*	1	0112	73	0.	*	1	0158	119	874.	*	1	0244	165	598.	
1	0027	28	0.	*	1	0113	74	1.	*	1	0159	120	875.	*	1	0245	166	589.	
1	0028	29	0.	*	1	0114	75	1.	*	1	0200	121	875.	*	1	0246	167	579.	
1	0029	30	0.	*	1	0115	76	3.	*	1	0201	122	876.	*	1	0247	168	570.	

pre.out																		
ID	TIME	FLOW	DATE	TIME	FLOW	DATE	TIME	FLOW	DATE	TIME	FLOW	DATE	TIME	FLOW				
1	0030	31	0.	*	1	0116	77	63.	*	1	0202	123	876.	*	1	0248	169	561.
1	0031	32	0.	*	1	0117	78	138.	*	1	0203	124	875.	*	1	0249	170	552.
1	0032	33	0.	*	1	0118	79	161.	*	1	0204	125	874.	*	1	0250	171	543.
1	0033	34	0.	*	1	0119	80	181.	*	1	0205	126	872.	*	1	0251	172	535.
1	0034	35	0.	*	1	0120	81	200.	*	1	0206	127	870.	*	1	0252	173	526.
1	0035	36	0.	*	1	0121	82	216.	*	1	0207	128	868.	*	1	0253	174	518.
1	0036	37	0.	*	1	0122	83	232.	*	1	0208	129	865.	*	1	0254	175	509.
1	0037	38	0.	*	1	0123	84	251.	*	1	0209	130	861.	*	1	0255	176	501.
1	0038	39	0.	*	1	0124	85	272.	*	1	0210	131	858.	*	1	0256	177	493.
1	0039	40	0.	*	1	0125	86	294.	*	1	0211	132	854.	*	1	0257	178	485.
1	0040	41	0.	*	1	0126	87	346.	*	1	0212	133	849.	*	1	0258	179	478.
1	0041	42	0.	*	1	0127	88	432.	*	1	0213	134	844.	*	1	0259	180	470.
1	0042	43	0.	*	1	0128	89	471.	*	1	0214	135	839.	*	1	0300	181	463.
1	0043	44	0.	*	1	0129	90	492.	*	1	0215	136	834.	*				
1	0044	45	0.	*	1	0130	91	515.	*	1	0216	137	828.	*				
1	0045	46	0.	*	1	0131	92	537.	*	1	0217	138	822.	*				

PEAK FLOW (CFS)	TIME (HR)	MAXIMUM AVERAGE FLOW			
		6-HR	24-HR	72-HR	3.00-HR
876.	2.02	381.	381.	381.	381.
		.307	.307	.307	.307
		94.	94.	94.	94.

CUMULATIVE AREA = 5.77 SQ MI

HYDROGRAPH AT STATION C2
SUM OF 6 HYDROGRAPHS
PLAN 1, RATIO = .61

DA	MON	HRMN	ORD	FLOW	DA	MON	HRMN	ORD	FLOW	DA	MON	HRMN	ORD	FLOW	DA	MON	HRMN	ORD	FLOW
1	0000	1	0.	*	1	0046	47	0.	*	1	0132	93	0.	*	1	0218	139	179.	
1	0001	2	0.	*	1	0047	48	0.	*	1	0133	94	0.	*	1	0219	140	179.	
1	0002	3	0.	*	1	0048	49	0.	*	1	0134	95	0.	*	1	0220	141	179.	
1	0003	4	0.	*	1	0049	50	0.	*	1	0135	96	0.	*	1	0221	142	178.	
1	0004	5	0.	*	1	0050	51	0.	*	1	0136	97	2.	*	1	0222	143	178.	
1	0005	6	0.	*	1	0051	52	0.	*	1	0137	98	21.	*	1	0223	144	178.	
1	0006	7	0.	*	1	0052	53	0.	*	1	0138	99	36.	*	1	0224	145	179.	
1	0007	8	0.	*	1	0053	54	0.	*	1	0139	100	34.	*	1	0225	146	181.	
1	0008	9	0.	*	1	0054	55	0.	*	1	0140	101	36.	*	1	0226	147	180.	
1	0009	10	0.	*	1	0055	56	0.	*	1	0141	102	39.	*	1	0227	148	179.	
1	0010	11	0.	*	1	0056	57	0.	*	1	0142	103	42.	*	1	0228	149	178.	
1	0011	12	0.	*	1	0057	58	0.	*	1	0143	104	48.	*	1	0229	150	177.	
1	0012	13	0.	*	1	0058	59	0.	*	1	0144	105	56.	*	1	0230	151	176.	
1	0013	14	0.	*	1	0059	60	0.	*	1	0145	106	62.	*	1	0231	152	177.	
1	0014	15	0.	*	1	0100	61	0.	*	1	0146	107	67.	*	1	0232	153	177.	
1	0015	16	0.	*	1	0101	62	0.	*	1	0147	108	72.	*	1	0233	154	175.	
1	0016	17	0.	*	1	0102	63	0.	*	1	0148	109	76.	*	1	0234	155	174.	
1	0017	18	0.	*	1	0103	64	0.	*	1	0149	110	81.	*	1	0235	156	173.	
1	0018	19	0.	*	1	0104	65	0.	*	1	0150	111	99.	*	1	0236	157	172.	
1	0019	20	0.	*	1	0105	66	0.	*	1	0151	112	115.	*	1	0237	158	170.	
1	0020	21	0.	*	1	0106	67	0.	*	1	0152	113	118.	*	1	0238	159	169.	
1	0021	22	0.	*	1	0107	68	0.	*	1	0153	114	122.	*	1	0239	160	167.	
1	0022	23	0.	*	1	0108	69	0.	*	1	0154	115	126.	*	1	0240	161	166.	
1	0023	24	0.	*	1	0109	70	0.	*	1	0155	116	130.	*	1	0241	162	164.	
1	0024	25	0.	*	1	0110	71	0.	*	1	0156	117	134.	*	1	0242	163	162.	
1	0025	26	0.	*	1	0111	72	0.	*	1	0157	118	137.	*	1	0243	164	161.	
1	0026	27	0.	*	1	0112	73	0.	*	1	0158	119	141.	*	1	0244	165	159.	
1	0027	28	0.	*	1	0113	74	0.	*	1	0159	120	144.	*	1	0245	166	157.	
1	0028	29	0.	*	1	0114	75	0.	*	1	0200	121	146.	*	1	0246	167	156.	
1	0029	30	0.	*	1	0115	76	0.	*	1	0201	122	149.	*	1	0247	168	154.	
1	0030	31	0.	*	1	0116	77	0.	*	1	0202	123	152.	*	1	0248	169	152.	
1	0031	32	0.	*	1	0117	78	0.	*	1	0203	124	154.	*	1	0249	170	150.	
1	0032	33	0.	*	1	0118	79	0.	*	1	0204	125	156.	*	1	0250	171	148.	
1	0033	34	0.	*	1	0119	80	0.	*	1	0205	126	158.	*	1	0251	172	147.	
1	0034	35	0.	*	1	0120	81	0.	*	1	0206	127	160.	*	1	0252	173	145.	
1	0035	36	0.	*	1	0121	82	0.	*	1	0207	128	162.	*	1	0253	174	143.	
1	0036	37	0.	*	1	0122	83	0.	*	1	0208	129	163.	*	1	0254	175	141.	
1	0037	38	0.	*	1	0123	84	0.	*	1	0209	130	164.	*	1	0255	176	139.	
1	0038	39	0.	*	1	0124	85	0.	*	1	0210	131	166.	*	1	0256	177	138.	
1	0039	40	0.	*	1	0125	86	0.	*	1	0211	132	168.	*	1	0257	178	136.	
1	0040	41	0.	*	1	0126	87	0.	*	1	0212	133	174.	*	1	0258	179	134.	
1	0041	42	0.	*	1	0127	88	0.	*	1	0213	134	177.	*	1	0259	180	132.	
1	0042	43	0.	*	1	0128	89	0.	*	1	0214	135	177.	*	1	0300	181	130.	
1	0043	44	0.	*	1	0129	90	0.	*	1	0215	136	178.	*					
1	0044	45	0.	*	1	0130	91	0.	*	1	0216	137	178.	*					
1	0045	46	0.	*	1	0131	92	0.	*	1	0217	138	179.	*					

PEAK FLOW TIME MAXIMUM AVERAGE FLOW

pre.out
3.00-HR
+ (CFS) (HR)
+ 181. 2.42
(CFS)
(INCHES)
(AC-FT)
66. 66. 66. 66.
.053 .053 .053 .053
16. 16. 16. 16.
CUMULATIVE AREA = 5.77 SQ MI

*** ** **

119 KK

*
* BE12 *
*

BE12

SUBBASIN RUNOFF DATA

121 BA SUBBASIN CHARACTERISTICS
TAREA .02 SUBBASIN AREA

PRECIPITATION DATA

23 PB STORM 2.13 BASIN TOTAL PRECIPITATION

24 PI INCREMENTAL PRECIPITATION PATTERN
.00 .00 .00 .00 .00 .00 .00 .00 .00 .00
.00 .00 .00 .00 .00 .00 .00 .00 .00 .00
.00 .00 .00 .00 .00 .00 .00 .00 .00 .00
.05 .05 .05 .05 .05 .04 .04 .04 .04 .04
.03 .03 .03 .03 .03 .02 .02 .02 .02 .02
.01 .01 .01 .01 .01 .01 .01 .01 .01 .01
.01 .01 .01 .01 .01 .00 .00 .00 .00 .00
.00 .00 .00 .00 .00 .00 .00 .00 .00 .00
.00 .00 .00 .00 .00 .00 .00 .00 .00 .00
.00 .00 .00 .00 .00 .00 .00 .00 .00 .00
.00 .00 .00 .00 .00 .00 .00 .00 .00 .00
.00 .00 .00 .00 .00 .00 .00 .00 .00 .00
.00 .00 .00 .00 .00 .00 .00 .00 .00 .00
.00 .00 .00 .00 .00 .00 .00 .00 .00 .00
.00 .00 .00 .00 .00 .00 .00 .00 .00 .00
.00 .00 .00 .00 .00 .00 .00 .00 .00 .00

122 LS SCS LOSS RATE
STRTL .60 INITIAL ABSTRACTION
CRVNBR 77.00 CURVE NUMBER
RTIMP .00 PERCENT IMPERVIOUS AREA

123 UD SCS DIMENSIONLESS UNITGRAPH
TLAG .15 LAG

UNIT HYDROGRAPH

48 END-OF-PERIOD ORDINATES
2. 7. 13. 22. 33. 46. 56. 63. 66. 66.
64. 59. 54. 48. 40. 33. 27. 23. 19. 17.
14. 12. 10. 8. 7. 6. 5. 4. 4. 3.
3. 2. 2. 2. 1. 1. 1. 1. 1. 1.
1. 0. 0. 0. 0. 0. 0. 0. 0. 0.

HYDROGRAPH AT STATION BE12

Table with columns: DA MON HRMN ORD RAIN LOSS EXCESS COMP Q and DA MON HRMN ORD RAIN LOSS EXCESS COMP Q. Rows 1-13.

pre.out														
1	0013	14	.00	.00	.00	0.	*	1	0144	105	.00	.00	.00	1.
1	0014	15	.00	.00	.00	0.	*	1	0145	106	.00	.00	.00	1.
1	0015	16	.00	.00	.00	0.	*	1	0146	107	.00	.00	.00	1.
1	0016	17	.00	.00	.00	0.	*	1	0147	108	.00	.00	.00	1.
1	0017	18	.00	.00	.00	0.	*	1	0148	109	.00	.00	.00	1.
1	0018	19	.00	.00	.00	0.	*	1	0149	110	.00	.00	.00	1.
1	0019	20	.00	.00	.00	0.	*	1	0150	111	.00	.00	.00	1.
1	0020	21	.00	.00	.00	0.	*	1	0151	112	.00	.00	.00	1.
1	0021	22	.00	.00	.00	0.	*	1	0152	113	.00	.00	.00	1.
1	0022	23	.00	.00	.00	0.	*	1	0153	114	.00	.00	.00	1.
1	0023	24	.00	.00	.00	0.	*	1	0154	115	.00	.00	.00	1.
1	0024	25	.00	.00	.00	0.	*	1	0155	116	.00	.00	.00	1.
1	0025	26	.00	.00	.00	0.	*	1	0156	117	.00	.00	.00	1.
1	0026	27	.00	.00	.00	0.	*	1	0157	118	.00	.00	.00	1.
1	0027	28	.00	.00	.00	0.	*	1	0158	119	.00	.00	.00	1.
1	0028	29	.00	.00	.00	0.	*	1	0159	120	.00	.00	.00	1.
1	0029	30	.00	.00	.00	0.	*	1	0200	121	.00	.00	.00	1.
1	0030	31	.00	.00	.00	0.	*	1	0201	122	.00	.00	.00	1.
1	0031	32	.11	.11	.00	0.	*	1	0202	123	.00	.00	.00	1.
1	0032	33	.11	.11	.00	0.	*	1	0203	124	.00	.00	.00	1.
1	0033	34	.11	.11	.00	0.	*	1	0204	125	.00	.00	.00	1.
1	0034	35	.11	.11	.00	0.	*	1	0205	126	.00	.00	.00	1.
1	0035	36	.11	.11	.00	0.	*	1	0206	127	.00	.00	.00	1.
1	0036	37	.09	.09	.00	0.	*	1	0207	128	.00	.00	.00	1.
1	0037	38	.09	.08	.01	0.	*	1	0208	129	.00	.00	.00	1.
1	0038	39	.09	.08	.01	0.	*	1	0209	130	.00	.00	.00	1.
1	0039	40	.09	.07	.02	0.	*	1	0210	131	.00	.00	.00	1.
1	0040	41	.09	.07	.02	1.	*	1	0211	132	.00	.00	.00	1.
1	0041	42	.06	.05	.02	1.	*	1	0212	133	.00	.00	.00	1.
1	0042	43	.06	.04	.02	2.	*	1	0213	134	.00	.00	.00	1.
1	0043	44	.06	.04	.02	2.	*	1	0214	135	.00	.00	.00	1.
1	0044	45	.06	.04	.02	3.	*	1	0215	136	.00	.00	.00	1.
1	0045	46	.06	.04	.02	5.	*	1	0216	137	.00	.00	.00	1.
1	0046	47	.04	.02	.01	6.	*	1	0217	138	.00	.00	.00	1.
1	0047	48	.04	.02	.01	7.	*	1	0218	139	.00	.00	.00	1.
1	0048	49	.04	.02	.02	8.	*	1	0219	140	.00	.00	.00	1.
1	0049	50	.04	.02	.02	9.	*	1	0220	141	.00	.00	.00	1.
1	0050	51	.04	.02	.02	10.	*	1	0221	142	.00	.00	.00	1.
1	0051	52	.02	.01	.01	11.	*	1	0222	143	.00	.00	.00	1.
1	0052	53	.02	.01	.01	11.	*	1	0223	144	.00	.00	.00	1.
1	0053	54	.02	.01	.01	12.	*	1	0224	145	.00	.00	.00	1.
1	0054	55	.02	.01	.01	12.	*	1	0225	146	.00	.00	.00	1.
1	0055	56	.02	.01	.01	12.	*	1	0226	147	.00	.00	.00	1.
1	0056	57	.02	.01	.01	12.	*	1	0227	148	.00	.00	.00	1.
1	0057	58	.02	.01	.01	12.	*	1	0228	149	.00	.00	.00	1.
1	0058	59	.02	.01	.01	11.	*	1	0229	150	.00	.00	.00	1.
1	0059	60	.02	.01	.01	11.	*	1	0230	151	.00	.00	.00	1.
1	0100	61	.02	.01	.01	11.	*	1	0231	152	.00	.00	.00	1.
1	0101	62	.01	.01	.01	10.	*	1	0232	153	.00	.00	.00	1.
1	0102	63	.01	.01	.01	10.	*	1	0233	154	.00	.00	.00	1.
1	0103	64	.01	.01	.01	10.	*	1	0234	155	.00	.00	.00	1.
1	0104	65	.01	.01	.01	9.	*	1	0235	156	.00	.00	.00	1.
1	0105	66	.01	.01	.01	9.	*	1	0236	157	.00	.00	.00	1.
1	0106	67	.01	.01	.01	9.	*	1	0237	158	.00	.00	.00	1.
1	0107	68	.01	.01	.01	8.	*	1	0238	159	.00	.00	.00	1.
1	0108	69	.01	.01	.01	8.	*	1	0239	160	.00	.00	.00	1.
1	0109	70	.01	.01	.01	7.	*	1	0240	161	.00	.00	.00	1.
1	0110	71	.01	.01	.01	7.	*	1	0241	162	.00	.00	.00	1.
1	0111	72	.01	.00	.00	7.	*	1	0242	163	.00	.00	.00	1.
1	0112	73	.01	.00	.00	7.	*	1	0243	164	.00	.00	.00	1.
1	0113	74	.01	.00	.00	6.	*	1	0244	165	.00	.00	.00	1.
1	0114	75	.01	.00	.00	6.	*	1	0245	166	.00	.00	.00	1.
1	0115	76	.01	.00	.00	6.	*	1	0246	167	.00	.00	.00	1.
1	0116	77	.01	.00	.00	5.	*	1	0247	168	.00	.00	.00	1.
1	0117	78	.01	.00	.00	5.	*	1	0248	169	.00	.00	.00	1.
1	0118	79	.01	.00	.00	5.	*	1	0249	170	.00	.00	.00	1.
1	0119	80	.01	.00	.00	5.	*	1	0250	171	.00	.00	.00	1.
1	0120	81	.01	.00	.00	5.	*	1	0251	172	.00	.00	.00	1.
1	0121	82	.01	.00	.00	4.	*	1	0252	173	.00	.00	.00	1.
1	0122	83	.01	.00	.00	4.	*	1	0253	174	.00	.00	.00	1.
1	0123	84	.01	.00	.00	4.	*	1	0254	175	.00	.00	.00	1.
1	0124	85	.01	.00	.00	4.	*	1	0255	176	.00	.00	.00	1.
1	0125	86	.01	.00	.00	4.	*	1	0256	177	.00	.00	.00	1.
1	0126	87	.01	.00	.00	4.	*	1	0257	178	.00	.00	.00	1.
1	0127	88	.01	.00	.00	4.	*	1	0258	179	.00	.00	.00	1.
1	0128	89	.01	.00	.00	3.	*	1	0259	180	.00	.00	.00	1.
1	0129	90	.01	.00	.00	3.	*	1	0300	181	.00	.00	.00	1.
1	0130	91	.01	.00	.00	3.	*							

TOTAL RAINFALL = 2.13, TOTAL LOSS = 1.61, TOTAL EXCESS = .52

PEAK FLOW + (CFS)	TIME (HR)	MAXIMUM AVERAGE FLOW			
		6-HR	24-HR	72-HR	3.00-HR
+ 12.	.92	2.	2.	2.	2.
	(INCHES)	.510	.510	.510	.510
	(AC-FT)	1.	1.	1.	1.

pre.out

CUMULATIVE AREA = .02 SQ MI

HYDROGRAPH AT STATION BE12
PLAN 1, RATIO = 1.00

DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	*	DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
1	0000	1	.00	.00	.00	0.	*	1	0131	92	.00	.00	.00	3.		
1	0001	2	.00	.00	.00	0.	*	1	0132	93	.00	.00	.00	3.		
1	0002	3	.00	.00	.00	0.	*	1	0133	94	.00	.00	.00	3.		
1	0003	4	.00	.00	.00	0.	*	1	0134	95	.00	.00	.00	3.		
1	0004	5	.00	.00	.00	0.	*	1	0135	96	.00	.00	.00	3.		
1	0005	6	.00	.00	.00	0.	*	1	0136	97	.00	.00	.00	2.		
1	0006	7	.00	.00	.00	0.	*	1	0137	98	.00	.00	.00	2.		
1	0007	8	.00	.00	.00	0.	*	1	0138	99	.00	.00	.00	2.		
1	0008	9	.00	.00	.00	0.	*	1	0139	100	.00	.00	.00	2.		
1	0009	10	.00	.00	.00	0.	*	1	0140	101	.00	.00	.00	2.		
1	0010	11	.00	.00	.00	0.	*	1	0141	102	.00	.00	.00	2.		
1	0011	12	.00	.00	.00	0.	*	1	0142	103	.00	.00	.00	1.		
1	0012	13	.00	.00	.00	0.	*	1	0143	104	.00	.00	.00	1.		
1	0013	14	.00	.00	.00	0.	*	1	0144	105	.00	.00	.00	1.		
1	0014	15	.00	.00	.00	0.	*	1	0145	106	.00	.00	.00	1.		
1	0015	16	.00	.00	.00	0.	*	1	0146	107	.00	.00	.00	1.		
1	0016	17	.00	.00	.00	0.	*	1	0147	108	.00	.00	.00	1.		
1	0017	18	.00	.00	.00	0.	*	1	0148	109	.00	.00	.00	1.		
1	0018	19	.00	.00	.00	0.	*	1	0149	110	.00	.00	.00	1.		
1	0019	20	.00	.00	.00	0.	*	1	0150	111	.00	.00	.00	1.		
1	0020	21	.00	.00	.00	0.	*	1	0151	112	.00	.00	.00	1.		
1	0021	22	.00	.00	.00	0.	*	1	0152	113	.00	.00	.00	1.		
1	0022	23	.00	.00	.00	0.	*	1	0153	114	.00	.00	.00	1.		
1	0023	24	.00	.00	.00	0.	*	1	0154	115	.00	.00	.00	1.		
1	0024	25	.00	.00	.00	0.	*	1	0155	116	.00	.00	.00	1.		
1	0025	26	.00	.00	.00	0.	*	1	0156	117	.00	.00	.00	1.		
1	0026	27	.00	.00	.00	0.	*	1	0157	118	.00	.00	.00	1.		
1	0027	28	.00	.00	.00	0.	*	1	0158	119	.00	.00	.00	1.		
1	0028	29	.00	.00	.00	0.	*	1	0159	120	.00	.00	.00	1.		
1	0029	30	.00	.00	.00	0.	*	1	0200	121	.00	.00	.00	1.		
1	0030	31	.00	.00	.00	0.	*	1	0201	122	.00	.00	.00	1.		
1	0031	32	.11	.11	.00	0.	*	1	0202	123	.00	.00	.00	1.		
1	0032	33	.11	.11	.00	0.	*	1	0203	124	.00	.00	.00	1.		
1	0033	34	.11	.11	.00	0.	*	1	0204	125	.00	.00	.00	1.		
1	0034	35	.11	.11	.00	0.	*	1	0205	126	.00	.00	.00	1.		
1	0035	36	.11	.11	.00	0.	*	1	0206	127	.00	.00	.00	1.		
1	0036	37	.09	.09	.00	0.	*	1	0207	128	.00	.00	.00	1.		
1	0037	38	.09	.08	.01	0.	*	1	0208	129	.00	.00	.00	1.		
1	0038	39	.09	.08	.01	0.	*	1	0209	130	.00	.00	.00	1.		
1	0039	40	.09	.07	.02	0.	*	1	0210	131	.00	.00	.00	1.		
1	0040	41	.09	.07	.02	1.	*	1	0211	132	.00	.00	.00	1.		
1	0041	42	.06	.05	.02	1.	*	1	0212	133	.00	.00	.00	1.		
1	0042	43	.06	.04	.02	2.	*	1	0213	134	.00	.00	.00	1.		
1	0043	44	.06	.04	.02	2.	*	1	0214	135	.00	.00	.00	1.		
1	0044	45	.06	.04	.02	3.	*	1	0215	136	.00	.00	.00	1.		
1	0045	46	.06	.04	.02	5.	*	1	0216	137	.00	.00	.00	1.		
1	0046	47	.04	.02	.01	6.	*	1	0217	138	.00	.00	.00	1.		
1	0047	48	.04	.02	.01	7.	*	1	0218	139	.00	.00	.00	1.		
1	0048	49	.04	.02	.02	8.	*	1	0219	140	.00	.00	.00	1.		
1	0049	50	.04	.02	.02	9.	*	1	0220	141	.00	.00	.00	1.		
1	0050	51	.04	.02	.02	10.	*	1	0221	142	.00	.00	.00	1.		
1	0051	52	.02	.01	.01	11.	*	1	0222	143	.00	.00	.00	1.		
1	0052	53	.02	.01	.01	11.	*	1	0223	144	.00	.00	.00	1.		
1	0053	54	.02	.01	.01	12.	*	1	0224	145	.00	.00	.00	1.		
1	0054	55	.02	.01	.01	12.	*	1	0225	146	.00	.00	.00	1.		
1	0055	56	.02	.01	.01	12.	*	1	0226	147	.00	.00	.00	1.		
1	0056	57	.02	.01	.01	12.	*	1	0227	148	.00	.00	.00	1.		
1	0057	58	.02	.01	.01	12.	*	1	0228	149	.00	.00	.00	1.		
1	0058	59	.02	.01	.01	11.	*	1	0229	150	.00	.00	.00	1.		
1	0059	60	.02	.01	.01	11.	*	1	0230	151	.00	.00	.00	1.		
1	0100	61	.02	.01	.01	11.	*	1	0231	152	.00	.00	.00	1.		
1	0101	62	.01	.01	.01	10.	*	1	0232	153	.00	.00	.00	1.		
1	0102	63	.01	.01	.01	10.	*	1	0233	154	.00	.00	.00	1.		
1	0103	64	.01	.01	.01	10.	*	1	0234	155	.00	.00	.00	1.		
1	0104	65	.01	.01	.01	9.	*	1	0235	156	.00	.00	.00	1.		
1	0105	66	.01	.01	.01	9.	*	1	0236	157	.00	.00	.00	1.		
1	0106	67	.01	.01	.01	9.	*	1	0237	158	.00	.00	.00	1.		
1	0107	68	.01	.01	.01	8.	*	1	0238	159	.00	.00	.00	1.		
1	0108	69	.01	.01	.01	8.	*	1	0239	160	.00	.00	.00	1.		
1	0109	70	.01	.01	.01	7.	*	1	0240	161	.00	.00	.00	1.		
1	0110	71	.01	.01	.01	7.	*	1	0241	162	.00	.00	.00	1.		
1	0111	72	.01	.00	.00	7.	*	1	0242	163	.00	.00	.00	1.		
1	0112	73	.01	.00	.00	7.	*	1	0243	164	.00	.00	.00	1.		
1	0113	74	.01	.00	.00	6.	*	1	0244	165	.00	.00	.00	1.		
1	0114	75	.01	.00	.00	6.	*	1	0245	166	.00	.00	.00	1.		
1	0115	76	.01	.00	.00	6.	*	1	0246	167	.00	.00	.00	1.		
1	0116	77	.01	.00	.00	5.	*	1	0247	168	.00	.00	.00	1.		

pre.out														
1	0117	78	.01	.00	.00	5.	*	1	0248	169	.00	.00	.00	1.
1	0118	79	.01	.00	.00	5.	*	1	0249	170	.00	.00	.00	1.
1	0119	80	.01	.00	.00	5.	*	1	0250	171	.00	.00	.00	1.
1	0120	81	.01	.00	.00	5.	*	1	0251	172	.00	.00	.00	1.
1	0121	82	.01	.00	.00	4.	*	1	0252	173	.00	.00	.00	1.
1	0122	83	.01	.00	.00	4.	*	1	0253	174	.00	.00	.00	1.
1	0123	84	.01	.00	.00	4.	*	1	0254	175	.00	.00	.00	1.
1	0124	85	.01	.00	.00	4.	*	1	0255	176	.00	.00	.00	1.
1	0125	86	.01	.00	.00	4.	*	1	0256	177	.00	.00	.00	1.
1	0126	87	.01	.00	.00	4.	*	1	0257	178	.00	.00	.00	1.
1	0127	88	.01	.00	.00	4.	*	1	0258	179	.00	.00	.00	1.
1	0128	89	.01	.00	.00	3.	*	1	0259	180	.00	.00	.00	1.
1	0129	90	.01	.00	.00	3.	*	1	0300	181	.00	.00	.00	1.
1	0130	91	.01	.00	.00	3.	*							

TOTAL RAINFALL = 2.13, TOTAL LOSS = 1.61, TOTAL EXCESS = .52

PEAK FLOW (CFS)	TIME (HR)	MAXIMUM AVERAGE FLOW			
		6-HR	24-HR	72-HR	3.00-HR
+ 12.	.92	2.	2.	2.	2.
		(INCHES) .510	.510	.510	.510
		(AC-FT) 1.	1.	1.	1.

CUMULATIVE AREA = .02 SQ MI

HYDROGRAPH AT STATION BE12
PLAN 1, RATIO = .61

DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	*	DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
1	0000	1	.00	.00	.00	0.	0.	*	1	0131	92	.00	.00	.00	1.	
1	0001	2	.00	.00	.00	0.	0.	*	1	0132	93	.00	.00	.00	1.	
1	0002	3	.00	.00	.00	0.	0.	*	1	0133	94	.00	.00	.00	1.	
1	0003	4	.00	.00	.00	0.	0.	*	1	0134	95	.00	.00	.00	1.	
1	0004	5	.00	.00	.00	0.	0.	*	1	0135	96	.00	.00	.00	1.	
1	0005	6	.00	.00	.00	0.	0.	*	1	0136	97	.00	.00	.00	1.	
1	0006	7	.00	.00	.00	0.	0.	*	1	0137	98	.00	.00	.00	1.	
1	0007	8	.00	.00	.00	0.	0.	*	1	0138	99	.00	.00	.00	1.	
1	0008	9	.00	.00	.00	0.	0.	*	1	0139	100	.00	.00	.00	1.	
1	0009	10	.00	.00	.00	0.	0.	*	1	0140	101	.00	.00	.00	1.	
1	0010	11	.00	.00	.00	0.	0.	*	1	0141	102	.00	.00	.00	1.	
1	0011	12	.00	.00	.00	0.	0.	*	1	0142	103	.00	.00	.00	1.	
1	0012	13	.00	.00	.00	0.	0.	*	1	0143	104	.00	.00	.00	0.	
1	0013	14	.00	.00	.00	0.	0.	*	1	0144	105	.00	.00	.00	0.	
1	0014	15	.00	.00	.00	0.	0.	*	1	0145	106	.00	.00	.00	0.	
1	0015	16	.00	.00	.00	0.	0.	*	1	0146	107	.00	.00	.00	0.	
1	0016	17	.00	.00	.00	0.	0.	*	1	0147	108	.00	.00	.00	0.	
1	0017	18	.00	.00	.00	0.	0.	*	1	0148	109	.00	.00	.00	0.	
1	0018	19	.00	.00	.00	0.	0.	*	1	0149	110	.00	.00	.00	0.	
1	0019	20	.00	.00	.00	0.	0.	*	1	0150	111	.00	.00	.00	0.	
1	0020	21	.00	.00	.00	0.	0.	*	1	0151	112	.00	.00	.00	0.	
1	0021	22	.00	.00	.00	0.	0.	*	1	0152	113	.00	.00	.00	0.	
1	0022	23	.00	.00	.00	0.	0.	*	1	0153	114	.00	.00	.00	0.	
1	0023	24	.00	.00	.00	0.	0.	*	1	0154	115	.00	.00	.00	0.	
1	0024	25	.00	.00	.00	0.	0.	*	1	0155	116	.00	.00	.00	0.	
1	0025	26	.00	.00	.00	0.	0.	*	1	0156	117	.00	.00	.00	0.	
1	0026	27	.00	.00	.00	0.	0.	*	1	0157	118	.00	.00	.00	0.	
1	0027	28	.00	.00	.00	0.	0.	*	1	0158	119	.00	.00	.00	0.	
1	0028	29	.00	.00	.00	0.	0.	*	1	0159	120	.00	.00	.00	0.	
1	0029	30	.00	.00	.00	0.	0.	*	1	0200	121	.00	.00	.00	0.	
1	0030	31	.00	.00	.00	0.	0.	*	1	0201	122	.00	.00	.00	0.	
1	0031	32	.07	.07	.00	0.	0.	*	1	0202	123	.00	.00	.00	0.	
1	0032	33	.07	.07	.00	0.	0.	*	1	0203	124	.00	.00	.00	0.	
1	0033	34	.07	.07	.00	0.	0.	*	1	0204	125	.00	.00	.00	0.	
1	0034	35	.07	.07	.00	0.	0.	*	1	0205	126	.00	.00	.00	0.	
1	0035	36	.07	.07	.00	0.	0.	*	1	0206	127	.00	.00	.00	0.	
1	0036	37	.05	.05	.00	0.	0.	*	1	0207	128	.00	.00	.00	0.	
1	0037	38	.05	.05	.00	0.	0.	*	1	0208	129	.00	.00	.00	0.	
1	0038	39	.05	.05	.00	0.	0.	*	1	0209	130	.00	.00	.00	0.	
1	0039	40	.05	.05	.00	0.	0.	*	1	0210	131	.00	.00	.00	0.	
1	0040	41	.05	.05	.00	0.	0.	*	1	0211	132	.00	.00	.00	0.	
1	0041	42	.04	.04	.00	0.	0.	*	1	0212	133	.00	.00	.00	0.	
1	0042	43	.04	.04	.00	0.	0.	*	1	0213	134	.00	.00	.00	0.	
1	0043	44	.04	.03	.00	0.	0.	*	1	0214	135	.00	.00	.00	0.	
1	0044	45	.04	.03	.00	0.	0.	*	1	0215	136	.00	.00	.00	0.	
1	0045	46	.04	.03	.00	0.	0.	*	1	0216	137	.00	.00	.00	0.	
1	0046	47	.02	.02	.00	0.	0.	*	1	0217	138	.00	.00	.00	0.	
1	0047	48	.02	.02	.00	0.	0.	*	1	0218	139	.00	.00	.00	0.	
1	0048	49	.02	.02	.00	1.	1.	*	1	0219	140	.00	.00	.00	0.	
1	0049	50	.02	.02	.00	1.	1.	*	1	0220	141	.00	.00	.00	0.	
1	0050	51	.02	.02	.00	1.	1.	*	1	0221	142	.00	.00	.00	0.	

pre.out														
1	0051	52	.01	.01	.00	1.	*	1	0222	143	.00	.00	.00	0.
1	0052	53	.01	.01	.00	2.	*	1	0223	144	.00	.00	.00	0.
1	0053	54	.01	.01	.00	2.	*	1	0224	145	.00	.00	.00	0.
1	0054	55	.01	.01	.00	2.	*	1	0225	146	.00	.00	.00	0.
1	0055	56	.01	.01	.00	2.	*	1	0226	147	.00	.00	.00	0.
1	0056	57	.01	.01	.00	2.	*	1	0227	148	.00	.00	.00	0.
1	0057	58	.01	.01	.00	2.	*	1	0228	149	.00	.00	.00	0.
1	0058	59	.01	.01	.00	2.	*	1	0229	150	.00	.00	.00	0.
1	0059	60	.01	.01	.00	3.	*	1	0230	151	.00	.00	.00	0.
1	0100	61	.01	.01	.00	3.	*	1	0231	152	.00	.00	.00	0.
1	0101	62	.01	.01	.00	3.	*	1	0232	153	.00	.00	.00	0.
1	0102	63	.01	.01	.00	3.	*	1	0233	154	.00	.00	.00	0.
1	0103	64	.01	.01	.00	2.	*	1	0234	155	.00	.00	.00	0.
1	0104	65	.01	.01	.00	2.	*	1	0235	156	.00	.00	.00	0.
1	0105	66	.01	.01	.00	2.	*	1	0236	157	.00	.00	.00	0.
1	0106	67	.01	.00	.00	2.	*	1	0237	158	.00	.00	.00	0.
1	0107	68	.01	.00	.00	2.	*	1	0238	159	.00	.00	.00	0.
1	0108	69	.01	.00	.00	2.	*	1	0239	160	.00	.00	.00	0.
1	0109	70	.01	.00	.00	2.	*	1	0240	161	.00	.00	.00	0.
1	0110	71	.01	.00	.00	2.	*	1	0241	162	.00	.00	.00	0.
1	0111	72	.00	.00	.00	2.	*	1	0242	163	.00	.00	.00	0.
1	0112	73	.00	.00	.00	2.	*	1	0243	164	.00	.00	.00	0.
1	0113	74	.00	.00	.00	2.	*	1	0244	165	.00	.00	.00	0.
1	0114	75	.00	.00	.00	2.	*	1	0245	166	.00	.00	.00	0.
1	0115	76	.00	.00	.00	2.	*	1	0246	167	.00	.00	.00	0.
1	0116	77	.00	.00	.00	2.	*	1	0247	168	.00	.00	.00	0.
1	0117	78	.00	.00	.00	2.	*	1	0248	169	.00	.00	.00	0.
1	0118	79	.00	.00	.00	2.	*	1	0249	170	.00	.00	.00	0.
1	0119	80	.00	.00	.00	2.	*	1	0250	171	.00	.00	.00	0.
1	0120	81	.00	.00	.00	1.	*	1	0251	172	.00	.00	.00	0.
1	0121	82	.00	.00	.00	1.	*	1	0252	173	.00	.00	.00	0.
1	0122	83	.00	.00	.00	1.	*	1	0253	174	.00	.00	.00	0.
1	0123	84	.00	.00	.00	1.	*	1	0254	175	.00	.00	.00	0.
1	0124	85	.00	.00	.00	1.	*	1	0255	176	.00	.00	.00	0.
1	0125	86	.00	.00	.00	1.	*	1	0256	177	.00	.00	.00	0.
1	0126	87	.00	.00	.00	1.	*	1	0257	178	.00	.00	.00	0.
1	0127	88	.00	.00	.00	1.	*	1	0258	179	.00	.00	.00	0.
1	0128	89	.00	.00	.00	1.	*	1	0259	180	.00	.00	.00	0.
1	0129	90	.00	.00	.00	1.	*	1	0300	181	.00	.00	.00	0.
1	0130	91	.00	.00	.00	1.	*							

TOTAL RAINFALL = 1.29, TOTAL LOSS = 1.16, TOTAL EXCESS = .13

PEAK FLOW	TIME	MAXIMUM AVERAGE FLOW			
(CFS)	(HR)	6-HR	24-HR	72-HR	3.00-HR
+	3.	1.00	1.127	1.127	1.127
		(INCHES)	.127	.127	.127
		(AC-FT)	0.	0.	0.

CUMULATIVE AREA = .02 SQ MI

*** **

```

*****
*      *
124 KK * RE12 *
*      *
*****

```

Route BE12 in channel to Outlet OE1

HYDROGRAPH ROUTING DATA

```

126 RD      MUSKINGUM-CUNGE CHANNEL ROUTING
            L      10659. CHANNEL LENGTH
            S      .0120 SLOPE
            N      .040  CHANNEL ROUGHNESS COEFFICIENT
            CA     .00   CONTRIBUTING AREA
            SHAPE  TRAP  CHANNEL SHAPE
            WD     .00   BOTTOM WIDTH OR DIAMETER
            Z      7.00  SIDE SLOPE

```

COMPUTED MUSKINGUM-CUNGE PARAMETERS								
ELEMENT	ALPHA	COMPUTATION TIME STEP		PEAK	TIME TO PEAK	VOLUME	MAXIMUM CELERITY	
		M	DT					
MAIN	1.34	1.33	1.00	88.09	11.89	122.00	.38	2.59

INTERPOLATED TO SPECIFIED COMPUTATION INTERVAL

pre.out

MAIN 1.34 1.33 1.00 11.89 122.00 .38

CONTINUITY SUMMARY (AC-FT) - INFLOW= .5962E+00 EXCESS= .0000E+00 OUTFLOW= .4457E+00 BASIN STORAGE= .1968E+00 PERCENT ERROR= -7.8

HYDROGRAPH AT STATION RE12
PLAN 1, RATIO = 1.00

DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*		
1		0000	1	0.	*	1		0046	47	0.	*	1		0132	93	0.	*	1		0218	139	7.	*		
1		0001	2	0.	*	1		0047	48	0.	*	1		0133	94	0.	*	1		0219	140	7.	*		
1		0002	3	0.	*	1		0048	49	0.	*	1		0134	95	0.	*	1		0220	141	6.	*		
1		0003	4	0.	*	1		0049	50	0.	*	1		0135	96	0.	*	1		0221	142	6.	*		
1		0004	5	0.	*	1		0050	51	0.	*	1		0136	97	0.	*	1		0222	143	6.	*		
1		0005	6	0.	*	1		0051	52	0.	*	1		0137	98	0.	*	1		0223	144	6.	*		
1		0006	7	0.	*	1		0052	53	0.	*	1		0138	99	0.	*	1		0224	145	6.	*		
1		0007	8	0.	*	1		0053	54	0.	*	1		0139	100	0.	*	1		0225	146	6.	*		
1		0008	9	0.	*	1		0054	55	0.	*	1		0140	101	0.	*	1		0226	147	5.	*		
1		0009	10	0.	*	1		0055	56	0.	*	1		0141	102	0.	*	1		0227	148	5.	*		
1		0010	11	0.	*	1		0056	57	0.	*	1		0142	103	0.	*	1		0228	149	5.	*		
1		0011	12	0.	*	1		0057	58	0.	*	1		0143	104	0.	*	1		0229	150	5.	*		
1		0012	13	0.	*	1		0058	59	0.	*	1		0144	105	0.	*	1		0230	151	5.	*		
1		0013	14	0.	*	1		0059	60	0.	*	1		0145	106	0.	*	1		0231	152	5.	*		
1		0014	15	0.	*	1		0100	61	0.	*	1		0146	107	0.	*	1		0232	153	5.	*		
1		0015	16	0.	*	1		0101	62	0.	*	1		0147	108	0.	*	1		0233	154	5.	*		
1		0016	17	0.	*	1		0102	63	0.	*	1		0148	109	0.	*	1		0234	155	4.	*		
1		0017	18	0.	*	1		0103	64	0.	*	1		0149	110	0.	*	1		0235	156	4.	*		
1		0018	19	0.	*	1		0104	65	0.	*	1		0150	111	0.	*	1		0236	157	4.	*		
1		0019	20	0.	*	1		0105	66	0.	*	1		0151	112	0.	*	1		0237	158	4.	*		
1		0020	21	0.	*	1		0106	67	0.	*	1		0152	113	0.	*	1		0238	159	4.	*		
1		0021	22	0.	*	1		0107	68	0.	*	1		0153	114	0.	*	1		0239	160	4.	*		
1		0022	23	0.	*	1		0108	69	0.	*	1		0154	115	0.	*	1		0240	161	4.	*		
1		0023	24	0.	*	1		0109	70	0.	*	1		0155	116	0.	*	1		0241	162	4.	*		
1		0024	25	0.	*	1		0110	71	0.	*	1		0156	117	0.	*	1		0242	163	4.	*		
1		0025	26	0.	*	1		0111	72	0.	*	1		0157	118	0.	*	1		0243	164	4.	*		
1		0026	27	0.	*	1		0112	73	0.	*	1		0158	119	0.	*	1		0244	165	4.	*		
1		0027	28	0.	*	1		0113	74	0.	*	1		0159	120	0.	*	1		0245	166	4.	*		
1		0028	29	0.	*	1		0114	75	0.	*	1		0200	121	0.	*	1		0246	167	3.	*		
1		0029	30	0.	*	1		0115	76	0.	*	1		0201	122	4.	*	1		0247	168	3.	*		
1		0030	31	0.	*	1		0116	77	0.	*	1		0202	123	12.	*	1		0248	169	3.	*		
1		0031	32	0.	*	1		0117	78	0.	*	1		0203	124	11.	*	1		0249	170	3.	*		
1		0032	33	0.	*	1		0118	79	0.	*	1		0204	125	9.	*	1		0250	171	3.	*		
1		0033	34	0.	*	1		0119	80	0.	*	1		0205	126	9.	*	1		0251	172	3.	*		
1		0034	35	0.	*	1		0120	81	0.	*	1		0206	127	10.	*	1		0252	173	3.	*		
1		0035	36	0.	*	1		0121	82	0.	*	1		0207	128	9.	*	1		0253	174	3.	*		
1		0036	37	0.	*	1		0122	83	0.	*	1		0208	129	9.	*	1		0254	175	3.	*		
1		0037	38	0.	*	1		0123	84	0.	*	1		0209	130	8.	*	1		0255	176	3.	*		
1		0038	39	0.	*	1		0124	85	0.	*	1		0210	131	8.	*	1		0256	177	3.	*		
1		0039	40	0.	*	1		0125	86	0.	*	1		0211	132	8.	*	1		0257	178	3.	*		
1		0040	41	0.	*	1		0126	87	0.	*	1		0212	133	8.	*	1		0258	179	3.	*		
1		0041	42	0.	*	1		0127	88	0.	*	1		0213	134	8.	*	1		0259	180	3.	*		
1		0042	43	0.	*	1		0128	89	0.	*	1		0214	135	7.	*	1		0300	181	3.	*		
1		0043	44	0.	*	1		0129	90	0.	*	1		0215	136	7.	*								
1		0044	45	0.	*	1		0130	91	0.	*	1		0216	137	7.	*								
1		0045	46	0.	*	1		0131	92	0.	*	1		0217	138	7.	*								

PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
(CFS)	(HR)	(CFS)	6-HR	24-HR	72-HR	3.00-HR
12.	2.03	.380	2.	2.	2.	2.
		(AC-FT)	0.	.380	.380	.380
			0.	0.	0.	0.

CUMULATIVE AREA = .02 SQ MI

COMPUTED MUSKINGUM-CUNGE PARAMETERS

ELEMENT	ALPHA	COMPUTATION TIME STEP				PEAK (CFS)	TIME TO PEAK (MIN)	VOLUME (IN)	MAXIMUM CELERITY (FPS)
		M	DT	DX					
		(MIN)	(FT)						
MAIN	1.34	1.33	1.00	58.57	2.44	162.00	.04	1.76	

INTERPOLATED TO SPECIFIED COMPUTATION INTERVAL

MAIN 1.34 1.33 1.00 2.44 162.00 .04

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1486E+00 EXCESS= .0000E+00 OUTFLOW= .4545E-01 BASIN STORAGE= .1200E+00 PERCENT ERROR= -11.3

HYDROGRAPH AT STATION RE12
PLAN 1, RATIO = .61

DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	
1		0000	1	0.	*	1		0046	47	0.	*	1		0132	93	0.	*	1		0218	139	0.	*	
1		0001	2	0.	*	1		0047	48	0.	*	1		0133	94	0.	*	1		0219	140	0.	*	
1		0002	3	0.	*	1		0048	49	0.	*	1		0134	95	0.	*	1		0220	141	0.	*	
1		0003	4	0.	*	1		0049	50	0.	*	1		0135	96	0.	*	1		0221	142	0.	*	
1		0004	5	0.	*	1		0050	51	0.	*	1		0136	97	0.	*	1		0222	143	0.	*	
1		0005	6	0.	*	1		0051	52	0.	*	1		0137	98	0.	*	1		0223	144	0.	*	
1		0006	7	0.	*	1		0052	53	0.	*	1		0138	99	0.	*	1		0224	145	0.	*	
1		0007	8	0.	*	1		0053	54	0.	*	1		0139	100	0.	*	1		0225	146	0.	*	
1		0008	9	0.	*	1		0054	55	0.	*	1		0140	101	0.	*	1		0226	147	0.	*	
1		0009	10	0.	*	1		0055	56	0.	*	1		0141	102	0.	*	1		0227	148	0.	*	
1		0010	11	0.	*	1		0056	57	0.	*	1		0142	103	0.	*	1		0228	149	0.	*	
1		0011	12	0.	*	1		0057	58	0.	*	1		0143	104	0.	*	1		0229	150	0.	*	
1		0012	13	0.	*	1		0058	59	0.	*	1		0144	105	0.	*	1		0230	151	0.	*	
1		0013	14	0.	*	1		0059	60	0.	*	1		0145	106	0.	*	1		0231	152	0.	*	
1		0014	15	0.	*	1		0100	61	0.	*	1		0146	107	0.	*	1		0232	153	0.	*	
1		0015	16	0.	*	1		0101	62	0.	*	1		0147	108	0.	*	1		0233	154	0.	*	
1		0016	17	0.	*	1		0102	63	0.	*	1		0148	109	0.	*	1		0234	155	0.	*	
1		0017	18	0.	*	1		0103	64	0.	*	1		0149	110	0.	*	1		0235	156	0.	*	
1		0018	19	0.	*	1		0104	65	0.	*	1		0150	111	0.	*	1		0236	157	0.	*	
1		0019	20	0.	*	1		0105	66	0.	*	1		0151	112	0.	*	1		0237	158	0.	*	
1		0020	21	0.	*	1		0106	67	0.	*	1		0152	113	0.	*	1		0238	159	0.	*	
1		0021	22	0.	*	1		0107	68	0.	*	1		0153	114	0.	*	1		0239	160	0.	*	
1		0022	23	0.	*	1		0108	69	0.	*	1		0154	115	0.	*	1		0240	161	0.	*	
1		0023	24	0.	*	1		0109	70	0.	*	1		0155	116	0.	*	1		0241	162	1.	*	
1		0024	25	0.	*	1		0110	71	0.	*	1		0156	117	0.	*	1		0242	163	2.	*	
1		0025	26	0.	*	1		0111	72	0.	*	1		0157	118	0.	*	1		0243	164	2.	*	
1		0026	27	0.	*	1		0112	73	0.	*	1		0158	119	0.	*	1		0244	165	2.	*	
1		0027	28	0.	*	1		0113	74	0.	*	1		0159	120	0.	*	1		0245	166	2.	*	
1		0028	29	0.	*	1		0114	75	0.	*	1		0200	121	0.	*	1		0246	167	2.	*	
1		0029	30	0.	*	1		0115	76	0.	*	1		0201	122	0.	*	1		0247	168	2.	*	
1		0030	31	0.	*	1		0116	77	0.	*	1		0202	123	0.	*	1		0248	169	2.	*	
1		0031	32	0.	*	1		0117	78	0.	*	1		0203	124	0.	*	1		0249	170	2.	*	
1		0032	33	0.	*	1		0118	79	0.	*	1		0204	125	0.	*	1		0250	171	2.	*	
1		0033	34	0.	*	1		0119	80	0.	*	1		0205	126	0.	*	1		0251	172	2.	*	
1		0034	35	0.	*	1		0120	81	0.	*	1		0206	127	0.	*	1		0252	173	2.	*	
1		0035	36	0.	*	1		0121	82	0.	*	1		0207	128	0.	*	1		0253	174	2.	*	
1		0036	37	0.	*	1		0122	83	0.	*	1		0208	129	0.	*	1		0254	175	2.	*	
1		0037	38	0.	*	1		0123	84	0.	*	1		0209	130	0.	*	1		0255	176	2.	*	
1		0038	39	0.	*	1		0124	85	0.	*	1		0210	131	0.	*	1		0256	177	2.	*	
1		0039	40	0.	*	1		0125	86	0.	*	1		0211	132	0.	*	1		0257	178	1.	*	
1		0040	41	0.	*	1		0126	87	0.	*	1		0212	133	0.	*	1		0258	179	1.	*	
1		0041	42	0.	*	1		0127	88	0.	*	1		0213	134	0.	*	1		0259	180	1.	*	
1		0042	43	0.	*	1		0128	89	0.	*	1		0214	135	0.	*	1		0300	181	1.	*	
1		0043	44	0.	*	1		0129	90	0.	*	1		0215	136	0.	*							*
1		0044	45	0.	*	1		0130	91	0.	*	1		0216	137	0.	*							*
1		0045	46	0.	*	1		0131	92	0.	*	1		0217	138	0.	*							*

PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
(CFS)	(HR)	(CFS)	6-HR	24-HR	72-HR	3.00-HR
+	2.	2.70	0.	0.	0.	0.
		(INCHES)	.038	.038	.038	.038
		(AC-FT)	0.	0.	0.	0.
CUMULATIVE AREA =			.02 SQ MI			

*** **

```

*****
*           *
127 KK    *   BE13 *
*           *
*****

```

BE13

SUBBASIN RUNOFF DATA

129 BA SUBBASIN CHARACTERISTICS

TAREA .04 SUBBASIN AREA

pre.out

PRECIPITATION DATA

23 PB STORM 2.13 BASIN TOTAL PRECIPITATION

24 PI INCREMENTAL PRECIPITATION PATTERN

.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.05	.05	.05	.05	.05	.05	.04	.04	.04	.04	.04
.03	.03	.03	.03	.03	.03	.02	.02	.02	.02	.02
.01	.01	.01	.01	.01	.01	.01	.01	.01	.01	.01
.01	.01	.01	.01	.01	.01	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00

130 LS SCS LOSS RATE
 STRTL .60 INITIAL ABSTRACTION
 CRVNB 77.00 CURVE NUMBER
 RTIMP .00 PERCENT IMPERVIOUS AREA

131 UD SCS DIMENSIONLESS UNITGRAPH
 TLAG .16 LAG

UNIT HYDROGRAPH
 50 END-OF-PERIOD ORDINATES

3.	11.	22.	36.	54.	76.	94.	107.	114.	115.
114.	107.	99.	90.	79.	65.	53.	45.	38.	32.
28.	24.	21.	17.	15.	12.	11.	9.	8.	6.
6.	5.	4.	3.	3.	2.	2.	2.	2.	1.
1.	1.	1.	1.	1.	0.	0.	0.	0.	0.

HYDROGRAPH AT STATION BE13

DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP	Q	*	DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP	Q	*
1	0000	1	.00	.00	.00	0.	*	1	0131	92	.00	.00	.00	6.					
1	0001	2	.00	.00	.00	0.	*	1	0132	93	.00	.00	.00	6.					
1	0002	3	.00	.00	.00	0.	*	1	0133	94	.00	.00	.00	5.					
1	0003	4	.00	.00	.00	0.	*	1	0134	95	.00	.00	.00	5.					
1	0004	5	.00	.00	.00	0.	*	1	0135	96	.00	.00	.00	5.					
1	0005	6	.00	.00	.00	0.	*	1	0136	97	.00	.00	.00	5.					
1	0006	7	.00	.00	.00	0.	*	1	0137	98	.00	.00	.00	4.					
1	0007	8	.00	.00	.00	0.	*	1	0138	99	.00	.00	.00	4.					
1	0008	9	.00	.00	.00	0.	*	1	0139	100	.00	.00	.00	4.					
1	0009	10	.00	.00	.00	0.	*	1	0140	101	.00	.00	.00	3.					
1	0010	11	.00	.00	.00	0.	*	1	0141	102	.00	.00	.00	3.					
1	0011	12	.00	.00	.00	0.	*	1	0142	103	.00	.00	.00	3.					
1	0012	13	.00	.00	.00	0.	*	1	0143	104	.00	.00	.00	3.					
1	0013	14	.00	.00	.00	0.	*	1	0144	105	.00	.00	.00	2.					
1	0014	15	.00	.00	.00	0.	*	1	0145	106	.00	.00	.00	2.					
1	0015	16	.00	.00	.00	0.	*	1	0146	107	.00	.00	.00	2.					
1	0016	17	.00	.00	.00	0.	*	1	0147	108	.00	.00	.00	2.					
1	0017	18	.00	.00	.00	0.	*	1	0148	109	.00	.00	.00	2.					
1	0018	19	.00	.00	.00	0.	*	1	0149	110	.00	.00	.00	2.					
1	0019	20	.00	.00	.00	0.	*	1	0150	111	.00	.00	.00	2.					
1	0020	21	.00	.00	.00	0.	*	1	0151	112	.00	.00	.00	2.					
1	0021	22	.00	.00	.00	0.	*	1	0152	113	.00	.00	.00	1.					
1	0022	23	.00	.00	.00	0.	*	1	0153	114	.00	.00	.00	1.					
1	0023	24	.00	.00	.00	0.	*	1	0154	115	.00	.00	.00	1.					
1	0024	25	.00	.00	.00	0.	*	1	0155	116	.00	.00	.00	1.					
1	0025	26	.00	.00	.00	0.	*	1	0156	117	.00	.00	.00	1.					
1	0026	27	.00	.00	.00	0.	*	1	0157	118	.00	.00	.00	1.					
1	0027	28	.00	.00	.00	0.	*	1	0158	119	.00	.00	.00	1.					
1	0028	29	.00	.00	.00	0.	*	1	0159	120	.00	.00	.00	1.					
1	0029	30	.00	.00	.00	0.	*	1	0200	121	.00	.00	.00	1.					
1	0030	31	.00	.00	.00	0.	*	1	0201	122	.00	.00	.00	1.					
1	0031	32	.11	.11	.00	0.	*	1	0202	123	.00	.00	.00	1.					
1	0032	33	.11	.11	.00	0.	*	1	0203	124	.00	.00	.00	1.					
1	0033	34	.11	.11	.00	0.	*	1	0204	125	.00	.00	.00	1.					
1	0034	35	.11	.11	.00	0.	*	1	0205	126	.00	.00	.00	1.					
1	0035	36	.11	.11	.00	0.	*	1	0206	127	.00	.00	.00	1.					
1	0036	37	.09	.09	.00	0.	*	1	0207	128	.00	.00	.00	1.					
1	0037	38	.09	.08	.01	0.	*	1	0208	129	.00	.00	.00	1.					

pre.out														
1	0038	39	.09	.08	.01	0.	*	1	0209	130	.00	.00	.00	1.
1	0039	40	.09	.07	.02	0.	*	1	0210	131	.00	.00	.00	1.
1	0040	41	.09	.07	.02	1.	*	1	0211	132	.00	.00	.00	1.
1	0041	42	.06	.05	.02	2.	*	1	0212	133	.00	.00	.00	1.
1	0042	43	.06	.04	.02	3.	*	1	0213	134	.00	.00	.00	1.
1	0043	44	.06	.04	.02	4.	*	1	0214	135	.00	.00	.00	1.
1	0044	45	.06	.04	.02	6.	*	1	0215	136	.00	.00	.00	1.
1	0045	46	.06	.04	.02	8.	*	1	0216	137	.00	.00	.00	1.
1	0046	47	.04	.02	.01	10.	*	1	0217	138	.00	.00	.00	1.
1	0047	48	.04	.02	.01	12.	*	1	0218	139	.00	.00	.00	1.
1	0048	49	.04	.02	.02	14.	*	1	0219	140	.00	.00	.00	1.
1	0049	50	.04	.02	.02	16.	*	1	0220	141	.00	.00	.00	1.
1	0050	51	.04	.02	.02	17.	*	1	0221	142	.00	.00	.00	1.
1	0051	52	.02	.01	.01	19.	*	1	0222	143	.00	.00	.00	1.
1	0052	53	.02	.01	.01	20.	*	1	0223	144	.00	.00	.00	1.
1	0053	54	.02	.01	.01	21.	*	1	0224	145	.00	.00	.00	1.
1	0054	55	.02	.01	.01	21.	*	1	0225	146	.00	.00	.00	1.
1	0055	56	.02	.01	.01	21.	*	1	0226	147	.00	.00	.00	1.
1	0056	57	.02	.01	.01	21.	*	1	0227	148	.00	.00	.00	1.
1	0057	58	.02	.01	.01	21.	*	1	0228	149	.00	.00	.00	1.
1	0058	59	.02	.01	.01	21.	*	1	0229	150	.00	.00	.00	1.
1	0059	60	.02	.01	.01	20.	*	1	0230	151	.00	.00	.00	1.
1	0100	61	.02	.01	.01	20.	*	1	0231	152	.00	.00	.00	1.
1	0101	62	.01	.01	.01	19.	*	1	0232	153	.00	.00	.00	1.
1	0102	63	.01	.01	.01	18.	*	1	0233	154	.00	.00	.00	1.
1	0103	64	.01	.01	.01	18.	*	1	0234	155	.00	.00	.00	1.
1	0104	65	.01	.01	.01	17.	*	1	0235	156	.00	.00	.00	1.
1	0105	66	.01	.01	.01	16.	*	1	0236	157	.00	.00	.00	1.
1	0106	67	.01	.01	.01	16.	*	1	0237	158	.00	.00	.00	1.
1	0107	68	.01	.01	.01	15.	*	1	0238	159	.00	.00	.00	1.
1	0108	69	.01	.01	.01	15.	*	1	0239	160	.00	.00	.00	1.
1	0109	70	.01	.01	.01	14.	*	1	0240	161	.00	.00	.00	1.
1	0110	71	.01	.01	.01	13.	*	1	0241	162	.00	.00	.00	1.
1	0111	72	.01	.00	.00	13.	*	1	0242	163	.00	.00	.00	1.
1	0112	73	.01	.00	.00	12.	*	1	0243	164	.00	.00	.00	1.
1	0113	74	.01	.00	.00	12.	*	1	0244	165	.00	.00	.00	1.
1	0114	75	.01	.00	.00	11.	*	1	0245	166	.00	.00	.00	1.
1	0115	76	.01	.00	.00	11.	*	1	0246	167	.00	.00	.00	1.
1	0116	77	.01	.00	.00	10.	*	1	0247	168	.00	.00	.00	1.
1	0117	78	.01	.00	.00	10.	*	1	0248	169	.00	.00	.00	1.
1	0118	79	.01	.00	.00	9.	*	1	0249	170	.00	.00	.00	1.
1	0119	80	.01	.00	.00	9.	*	1	0250	171	.00	.00	.00	1.
1	0120	81	.01	.00	.00	8.	*	1	0251	172	.00	.00	.00	1.
1	0121	82	.01	.00	.00	8.	*	1	0252	173	.00	.00	.00	1.
1	0122	83	.01	.00	.00	8.	*	1	0253	174	.00	.00	.00	1.
1	0123	84	.01	.00	.00	8.	*	1	0254	175	.00	.00	.00	1.
1	0124	85	.01	.00	.00	7.	*	1	0255	176	.00	.00	.00	1.
1	0125	86	.01	.00	.00	7.	*	1	0256	177	.00	.00	.00	1.
1	0126	87	.01	.00	.00	7.	*	1	0257	178	.00	.00	.00	1.
1	0127	88	.01	.00	.00	7.	*	1	0258	179	.00	.00	.00	1.
1	0128	89	.01	.00	.00	6.	*	1	0259	180	.00	.00	.00	1.
1	0129	90	.01	.00	.00	6.	*	1	0300	181	.00	.00	.00	1.
1	0130	91	.01	.00	.00	6.	*							

TOTAL RAINFALL = 2.13, TOTAL LOSS = 1.61, TOTAL EXCESS = .52

PEAK FLOW	TIME	MAXIMUM AVERAGE FLOW			
(CFS)	(HR)	6-HR	24-HR	72-HR	3.00-HR
+	21.	.92	4.	4.	4.
		(INCHES)	.510	.510	.510
		(AC-FT)	1.	1.	1.

CUMULATIVE AREA = .04 SQ MI

HYDROGRAPH AT STATION BE13
PLAN 1, RATIO = 1.00

DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	*	DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
1	0000	1	.00	.00	.00	0.	*		1	0131	92	.00	.00	.00	6.	
1	0001	2	.00	.00	.00	0.	*		1	0132	93	.00	.00	.00	6.	
1	0002	3	.00	.00	.00	0.	*		1	0133	94	.00	.00	.00	5.	
1	0003	4	.00	.00	.00	0.	*		1	0134	95	.00	.00	.00	5.	
1	0004	5	.00	.00	.00	0.	*		1	0135	96	.00	.00	.00	5.	
1	0005	6	.00	.00	.00	0.	*		1	0136	97	.00	.00	.00	5.	
1	0006	7	.00	.00	.00	0.	*		1	0137	98	.00	.00	.00	4.	
1	0007	8	.00	.00	.00	0.	*		1	0138	99	.00	.00	.00	4.	
1	0008	9	.00	.00	.00	0.	*		1	0139	100	.00	.00	.00	4.	
1	0009	10	.00	.00	.00	0.	*		1	0140	101	.00	.00	.00	3.	
1	0010	11	.00	.00	.00	0.	*		1	0141	102	.00	.00	.00	3.	
1	0011	12	.00	.00	.00	0.	*		1	0142	103	.00	.00	.00	3.	

pre.out														
1	0012	13	.00	.00	.00	0.	*	1	0143	104	.00	.00	.00	3.
1	0013	14	.00	.00	.00	0.	*	1	0144	105	.00	.00	.00	2.
1	0014	15	.00	.00	.00	0.	*	1	0145	106	.00	.00	.00	2.
1	0015	16	.00	.00	.00	0.	*	1	0146	107	.00	.00	.00	2.
1	0016	17	.00	.00	.00	0.	*	1	0147	108	.00	.00	.00	2.
1	0017	18	.00	.00	.00	0.	*	1	0148	109	.00	.00	.00	2.
1	0018	19	.00	.00	.00	0.	*	1	0149	110	.00	.00	.00	2.
1	0019	20	.00	.00	.00	0.	*	1	0150	111	.00	.00	.00	2.
1	0020	21	.00	.00	.00	0.	*	1	0151	112	.00	.00	.00	2.
1	0021	22	.00	.00	.00	0.	*	1	0152	113	.00	.00	.00	1.
1	0022	23	.00	.00	.00	0.	*	1	0153	114	.00	.00	.00	1.
1	0023	24	.00	.00	.00	0.	*	1	0154	115	.00	.00	.00	1.
1	0024	25	.00	.00	.00	0.	*	1	0155	116	.00	.00	.00	1.
1	0025	26	.00	.00	.00	0.	*	1	0156	117	.00	.00	.00	1.
1	0026	27	.00	.00	.00	0.	*	1	0157	118	.00	.00	.00	1.
1	0027	28	.00	.00	.00	0.	*	1	0158	119	.00	.00	.00	1.
1	0028	29	.00	.00	.00	0.	*	1	0159	120	.00	.00	.00	1.
1	0029	30	.00	.00	.00	0.	*	1	0200	121	.00	.00	.00	1.
1	0030	31	.00	.00	.00	0.	*	1	0201	122	.00	.00	.00	1.
1	0031	32	.11	.11	.00	0.	*	1	0202	123	.00	.00	.00	1.
1	0032	33	.11	.11	.00	0.	*	1	0203	124	.00	.00	.00	1.
1	0033	34	.11	.11	.00	0.	*	1	0204	125	.00	.00	.00	1.
1	0034	35	.11	.11	.00	0.	*	1	0205	126	.00	.00	.00	1.
1	0035	36	.11	.11	.00	0.	*	1	0206	127	.00	.00	.00	1.
1	0036	37	.09	.09	.00	0.	*	1	0207	128	.00	.00	.00	1.
1	0037	38	.09	.08	.01	0.	*	1	0208	129	.00	.00	.00	1.
1	0038	39	.09	.08	.01	0.	*	1	0209	130	.00	.00	.00	1.
1	0039	40	.09	.07	.02	0.	*	1	0210	131	.00	.00	.00	1.
1	0040	41	.09	.07	.02	1.	*	1	0211	132	.00	.00	.00	1.
1	0041	42	.06	.05	.02	2.	*	1	0212	133	.00	.00	.00	1.
1	0042	43	.06	.04	.02	3.	*	1	0213	134	.00	.00	.00	1.
1	0043	44	.06	.04	.02	4.	*	1	0214	135	.00	.00	.00	1.
1	0044	45	.06	.04	.02	6.	*	1	0215	136	.00	.00	.00	1.
1	0045	46	.06	.04	.02	8.	*	1	0216	137	.00	.00	.00	1.
1	0046	47	.04	.02	.01	10.	*	1	0217	138	.00	.00	.00	1.
1	0047	48	.04	.02	.01	12.	*	1	0218	139	.00	.00	.00	1.
1	0048	49	.04	.02	.02	14.	*	1	0219	140	.00	.00	.00	1.
1	0049	50	.04	.02	.02	16.	*	1	0220	141	.00	.00	.00	1.
1	0050	51	.04	.02	.02	17.	*	1	0221	142	.00	.00	.00	1.
1	0051	52	.02	.01	.01	19.	*	1	0222	143	.00	.00	.00	1.
1	0052	53	.02	.01	.01	20.	*	1	0223	144	.00	.00	.00	1.
1	0053	54	.02	.01	.01	21.	*	1	0224	145	.00	.00	.00	1.
1	0054	55	.02	.01	.01	21.	*	1	0225	146	.00	.00	.00	1.
1	0055	56	.02	.01	.01	21.	*	1	0226	147	.00	.00	.00	1.
1	0056	57	.02	.01	.01	21.	*	1	0227	148	.00	.00	.00	1.
1	0057	58	.02	.01	.01	21.	*	1	0228	149	.00	.00	.00	1.
1	0058	59	.02	.01	.01	21.	*	1	0229	150	.00	.00	.00	1.
1	0059	60	.02	.01	.01	20.	*	1	0230	151	.00	.00	.00	1.
1	0100	61	.02	.01	.01	20.	*	1	0231	152	.00	.00	.00	1.
1	0101	62	.01	.01	.01	19.	*	1	0232	153	.00	.00	.00	1.
1	0102	63	.01	.01	.01	18.	*	1	0233	154	.00	.00	.00	1.
1	0103	64	.01	.01	.01	18.	*	1	0234	155	.00	.00	.00	1.
1	0104	65	.01	.01	.01	17.	*	1	0235	156	.00	.00	.00	1.
1	0105	66	.01	.01	.01	16.	*	1	0236	157	.00	.00	.00	1.
1	0106	67	.01	.01	.01	16.	*	1	0237	158	.00	.00	.00	1.
1	0107	68	.01	.01	.01	15.	*	1	0238	159	.00	.00	.00	1.
1	0108	69	.01	.01	.01	15.	*	1	0239	160	.00	.00	.00	1.
1	0109	70	.01	.01	.01	14.	*	1	0240	161	.00	.00	.00	1.
1	0110	71	.01	.01	.01	13.	*	1	0241	162	.00	.00	.00	1.
1	0111	72	.01	.00	.00	13.	*	1	0242	163	.00	.00	.00	1.
1	0112	73	.01	.00	.00	12.	*	1	0243	164	.00	.00	.00	1.
1	0113	74	.01	.00	.00	12.	*	1	0244	165	.00	.00	.00	1.
1	0114	75	.01	.00	.00	11.	*	1	0245	166	.00	.00	.00	1.
1	0115	76	.01	.00	.00	11.	*	1	0246	167	.00	.00	.00	1.
1	0116	77	.01	.00	.00	10.	*	1	0247	168	.00	.00	.00	1.
1	0117	78	.01	.00	.00	10.	*	1	0248	169	.00	.00	.00	1.
1	0118	79	.01	.00	.00	9.	*	1	0249	170	.00	.00	.00	1.
1	0119	80	.01	.00	.00	9.	*	1	0250	171	.00	.00	.00	1.
1	0120	81	.01	.00	.00	8.	*	1	0251	172	.00	.00	.00	1.
1	0121	82	.01	.00	.00	8.	*	1	0252	173	.00	.00	.00	1.
1	0122	83	.01	.00	.00	8.	*	1	0253	174	.00	.00	.00	1.
1	0123	84	.01	.00	.00	8.	*	1	0254	175	.00	.00	.00	1.
1	0124	85	.01	.00	.00	7.	*	1	0255	176	.00	.00	.00	1.
1	0125	86	.01	.00	.00	7.	*	1	0256	177	.00	.00	.00	1.
1	0126	87	.01	.00	.00	7.	*	1	0257	178	.00	.00	.00	1.
1	0127	88	.01	.00	.00	7.	*	1	0258	179	.00	.00	.00	1.
1	0128	89	.01	.00	.00	6.	*	1	0259	180	.00	.00	.00	1.
1	0129	90	.01	.00	.00	6.	*	1	0300	181	.00	.00	.00	1.
1	0130	91	.01	.00	.00	6.	*							

TOTAL RAINFALL = 2.13, TOTAL LOSS = 1.61, TOTAL EXCESS = .52

PEAK FLOW + (CFS)	TIME (HR)	MAXIMUM AVERAGE FLOW			
		6-HR	24-HR	72-HR	3.00-HR
+ 21.	.92	4. (INCHES)	4. .510	4. .510	4. .510

(AC-FT) 1. 1. 1. pre.out
 1.
 CUMULATIVE AREA = .04 SQ MI

HYDROGRAPH AT STATION BE13
 PLAN 1, RATIO = .61

DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	*	DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
1		0000	1	.00	.00	.00	0.	*	1		0131	92	.00	.00	.00	2.
1		0001	2	.00	.00	.00	0.	*	1		0132	93	.00	.00	.00	2.
1		0002	3	.00	.00	.00	0.	*	1		0133	94	.00	.00	.00	2.
1		0003	4	.00	.00	.00	0.	*	1		0134	95	.00	.00	.00	2.
1		0004	5	.00	.00	.00	0.	*	1		0135	96	.00	.00	.00	2.
1		0005	6	.00	.00	.00	0.	*	1		0136	97	.00	.00	.00	2.
1		0006	7	.00	.00	.00	0.	*	1		0137	98	.00	.00	.00	1.
1		0007	8	.00	.00	.00	0.	*	1		0138	99	.00	.00	.00	1.
1		0008	9	.00	.00	.00	0.	*	1		0139	100	.00	.00	.00	1.
1		0009	10	.00	.00	.00	0.	*	1		0140	101	.00	.00	.00	1.
1		0010	11	.00	.00	.00	0.	*	1		0141	102	.00	.00	.00	1.
1		0011	12	.00	.00	.00	0.	*	1		0142	103	.00	.00	.00	1.
1		0012	13	.00	.00	.00	0.	*	1		0143	104	.00	.00	.00	1.
1		0013	14	.00	.00	.00	0.	*	1		0144	105	.00	.00	.00	1.
1		0014	15	.00	.00	.00	0.	*	1		0145	106	.00	.00	.00	1.
1		0015	16	.00	.00	.00	0.	*	1		0146	107	.00	.00	.00	1.
1		0016	17	.00	.00	.00	0.	*	1		0147	108	.00	.00	.00	1.
1		0017	18	.00	.00	.00	0.	*	1		0148	109	.00	.00	.00	1.
1		0018	19	.00	.00	.00	0.	*	1		0149	110	.00	.00	.00	1.
1		0019	20	.00	.00	.00	0.	*	1		0150	111	.00	.00	.00	1.
1		0020	21	.00	.00	.00	0.	*	1		0151	112	.00	.00	.00	1.
1		0021	22	.00	.00	.00	0.	*	1		0152	113	.00	.00	.00	1.
1		0022	23	.00	.00	.00	0.	*	1		0153	114	.00	.00	.00	1.
1		0023	24	.00	.00	.00	0.	*	1		0154	115	.00	.00	.00	0.
1		0024	25	.00	.00	.00	0.	*	1		0155	116	.00	.00	.00	0.
1		0025	26	.00	.00	.00	0.	*	1		0156	117	.00	.00	.00	0.
1		0026	27	.00	.00	.00	0.	*	1		0157	118	.00	.00	.00	0.
1		0027	28	.00	.00	.00	0.	*	1		0158	119	.00	.00	.00	0.
1		0028	29	.00	.00	.00	0.	*	1		0159	120	.00	.00	.00	0.
1		0029	30	.00	.00	.00	0.	*	1		0200	121	.00	.00	.00	0.
1		0030	31	.00	.00	.00	0.	*	1		0201	122	.00	.00	.00	0.
1		0031	32	.07	.07	.00	0.	*	1		0202	123	.00	.00	.00	0.
1		0032	33	.07	.07	.00	0.	*	1		0203	124	.00	.00	.00	0.
1		0033	34	.07	.07	.00	0.	*	1		0204	125	.00	.00	.00	0.
1		0034	35	.07	.07	.00	0.	*	1		0205	126	.00	.00	.00	0.
1		0035	36	.07	.07	.00	0.	*	1		0206	127	.00	.00	.00	0.
1		0036	37	.05	.05	.00	0.	*	1		0207	128	.00	.00	.00	0.
1		0037	38	.05	.05	.00	0.	*	1		0208	129	.00	.00	.00	0.
1		0038	39	.05	.05	.00	0.	*	1		0209	130	.00	.00	.00	0.
1		0039	40	.05	.05	.00	0.	*	1		0210	131	.00	.00	.00	0.
1		0040	41	.05	.05	.00	0.	*	1		0211	132	.00	.00	.00	0.
1		0041	42	.04	.04	.00	0.	*	1		0212	133	.00	.00	.00	0.
1		0042	43	.04	.04	.00	0.	*	1		0213	134	.00	.00	.00	0.
1		0043	44	.04	.03	.00	0.	*	1		0214	135	.00	.00	.00	0.
1		0044	45	.04	.03	.00	0.	*	1		0215	136	.00	.00	.00	0.
1		0045	46	.04	.03	.00	0.	*	1		0216	137	.00	.00	.00	0.
1		0046	47	.02	.02	.00	1.	*	1		0217	138	.00	.00	.00	0.
1		0047	48	.02	.02	.00	1.	*	1		0218	139	.00	.00	.00	0.
1		0048	49	.02	.02	.00	1.	*	1		0219	140	.00	.00	.00	0.
1		0049	50	.02	.02	.00	1.	*	1		0220	141	.00	.00	.00	0.
1		0050	51	.02	.02	.00	2.	*	1		0221	142	.00	.00	.00	0.
1		0051	52	.01	.01	.00	2.	*	1		0222	143	.00	.00	.00	0.
1		0052	53	.01	.01	.00	3.	*	1		0223	144	.00	.00	.00	0.
1		0053	54	.01	.01	.00	3.	*	1		0224	145	.00	.00	.00	0.
1		0054	55	.01	.01	.00	4.	*	1		0225	146	.00	.00	.00	0.
1		0055	56	.01	.01	.00	4.	*	1		0226	147	.00	.00	.00	0.
1		0056	57	.01	.01	.00	4.	*	1		0227	148	.00	.00	.00	0.
1		0057	58	.01	.01	.00	4.	*	1		0228	149	.00	.00	.00	0.
1		0058	59	.01	.01	.00	4.	*	1		0229	150	.00	.00	.00	0.
1		0059	60	.01	.01	.00	5.	*	1		0230	151	.00	.00	.00	0.
1		0100	61	.01	.01	.00	5.	*	1		0231	152	.00	.00	.00	0.
1		0101	62	.01	.01	.00	5.	*	1		0232	153	.00	.00	.00	0.
1		0102	63	.01	.01	.00	5.	*	1		0233	154	.00	.00	.00	0.
1		0103	64	.01	.01	.00	4.	*	1		0234	155	.00	.00	.00	0.
1		0104	65	.01	.01	.00	4.	*	1		0235	156	.00	.00	.00	0.
1		0105	66	.01	.01	.00	4.	*	1		0236	157	.00	.00	.00	0.
1		0106	67	.01	.00	.00	4.	*	1		0237	158	.00	.00	.00	0.
1		0107	68	.01	.00	.00	4.	*	1		0238	159	.00	.00	.00	0.
1		0108	69	.01	.00	.00	4.	*	1		0239	160	.00	.00	.00	0.
1		0109	70	.01	.00	.00	4.	*	1		0240	161	.00	.00	.00	0.
1		0110	71	.01	.00	.00	4.	*	1		0241	162	.00	.00	.00	0.
1		0111	72	.00	.00	.00	4.	*	1		0242	163	.00	.00	.00	0.
1		0112	73	.00	.00	.00	4.	*	1		0243	164	.00	.00	.00	0.
1		0113	74	.00	.00	.00	3.	*	1		0244	165	.00	.00	.00	0.
1		0114	75	.00	.00	.00	3.	*	1		0245	166	.00	.00	.00	0.
1		0115	76	.00	.00	.00	3.	*	1		0246	167	.00	.00	.00	0.

pre.out														
1	0116	77	.00	.00	.00	3.	*	1	0247	168	.00	.00	.00	0.
1	0117	78	.00	.00	.00	3.	*	1	0248	169	.00	.00	.00	0.
1	0118	79	.00	.00	.00	3.	*	1	0249	170	.00	.00	.00	0.
1	0119	80	.00	.00	.00	3.	*	1	0250	171	.00	.00	.00	0.
1	0120	81	.00	.00	.00	3.	*	1	0251	172	.00	.00	.00	0.
1	0121	82	.00	.00	.00	3.	*	1	0252	173	.00	.00	.00	0.
1	0122	83	.00	.00	.00	3.	*	1	0253	174	.00	.00	.00	0.
1	0123	84	.00	.00	.00	2.	*	1	0254	175	.00	.00	.00	0.
1	0124	85	.00	.00	.00	2.	*	1	0255	176	.00	.00	.00	0.
1	0125	86	.00	.00	.00	2.	*	1	0256	177	.00	.00	.00	0.
1	0126	87	.00	.00	.00	2.	*	1	0257	178	.00	.00	.00	0.
1	0127	88	.00	.00	.00	2.	*	1	0258	179	.00	.00	.00	0.
1	0128	89	.00	.00	.00	2.	*	1	0259	180	.00	.00	.00	0.
1	0129	90	.00	.00	.00	2.	*	1	0300	181	.00	.00	.00	0.
1	0130	91	.00	.00	.00	2.	*							

TOTAL RAINFALL = 1.29, TOTAL LOSS = 1.16, TOTAL EXCESS = .13

PEAK FLOW	TIME	MAXIMUM AVERAGE FLOW			
(CFS)	(HR)	6-HR	24-HR	72-HR	3.00-HR
+	5.	1.	1.	1.	1.
		(INCHES)	.127	.127	.127
		(AC-FT)	0.	0.	0.
CUMULATIVE AREA =		.04 SQ MI			

*** **

 * *
 132 KK * RE13 *
 * *

Route BE13 in channel to Outlet OE1

HYDROGRAPH ROUTING DATA

134 RD MUSKINGUM-CUNGE CHANNEL ROUTING
 L 11067. CHANNEL LENGTH
 S .0120 SLOPE
 N .040 CHANNEL ROUGHNESS COEFFICIENT
 CA .00 CONTRIBUTING AREA
 SHAPE TRAP CHANNEL SHAPE
 WD .00 BOTTOM WIDTH OR DIAMETER
 Z 7.00 SIDE SLOPE

 COMPUTED MUSKINGUM-CUNGE PARAMETERS

ELEMENT	ALPHA	COMPUTATION TIME STEP			PEAK (CFS)	TIME TO PEAK (MIN)	VOLUME (IN)	MAXIMUM CELERITY (FPS)
		M	DT (MIN)	DX (FT)				
MAIN	1.34	1.33	1.00	102.47	23.38	115.00	.41	

INTERPOLATED TO SPECIFIED COMPUTATION INTERVAL

MAIN	1.34	1.33	1.00	23.38	115.00	.41
------	------	------	------	-------	--------	-----

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1083E+01 EXCESS= .0000E+00 OUTFLOW= .8644E+00 BASIN STORAGE= .2896E+00 PERCENT ERROR= -6.5

HYDROGRAPH AT STATION RE13
 PLAN 1, RATIO = 1.00

DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	
1	0000	1	0.	*	1	0046	47	0.	*	1	0132	93	0.	*	1	0218	139	10.
1	0001	2	0.	*	1	0047	48	0.	*	1	0133	94	0.	*	1	0219	140	10.
1	0002	3	0.	*	1	0048	49	0.	*	1	0134	95	0.	*	1	0220	141	10.
1	0003	4	0.	*	1	0049	50	0.	*	1	0135	96	0.	*	1	0221	142	9.
1	0004	5	0.	*	1	0050	51	0.	*	1	0136	97	0.	*	1	0222	143	9.
1	0005	6	0.	*	1	0051	52	0.	*	1	0137	98	0.	*	1	0223	144	9.
1	0006	7	0.	*	1	0052	53	0.	*	1	0138	99	0.	*	1	0224	145	9.

pre.out																		
1	0007	8	0.	*	1	0053	54	0.	*	1	0139	100	0.	*	1	0225	146	9.
1	0008	9	0.	*	1	0054	55	0.	*	1	0140	101	0.	*	1	0226	147	8.
1	0009	10	0.	*	1	0055	56	0.	*	1	0141	102	0.	*	1	0227	148	8.
1	0010	11	0.	*	1	0056	57	0.	*	1	0142	103	0.	*	1	0228	149	8.
1	0011	12	0.	*	1	0057	58	0.	*	1	0143	104	0.	*	1	0229	150	8.
1	0012	13	0.	*	1	0058	59	0.	*	1	0144	105	0.	*	1	0230	151	8.
1	0013	14	0.	*	1	0059	60	0.	*	1	0145	106	0.	*	1	0231	152	7.
1	0014	15	0.	*	1	0100	61	0.	*	1	0146	107	0.	*	1	0232	153	7.
1	0015	16	0.	*	1	0101	62	0.	*	1	0147	108	0.	*	1	0233	154	7.
1	0016	17	0.	*	1	0102	63	0.	*	1	0148	109	0.	*	1	0234	155	7.
1	0017	18	0.	*	1	0103	64	0.	*	1	0149	110	0.	*	1	0235	156	7.
1	0018	19	0.	*	1	0104	65	0.	*	1	0150	111	0.	*	1	0236	157	7.
1	0019	20	0.	*	1	0105	66	0.	*	1	0151	112	0.	*	1	0237	158	7.
1	0020	21	0.	*	1	0106	67	0.	*	1	0152	113	0.	*	1	0238	159	6.
1	0021	22	0.	*	1	0107	68	0.	*	1	0153	114	1.	*	1	0239	160	6.
1	0022	23	0.	*	1	0108	69	0.	*	1	0154	115	15.	*	1	0240	161	6.
1	0023	24	0.	*	1	0109	70	0.	*	1	0155	116	23.	*	1	0241	162	6.
1	0024	25	0.	*	1	0110	71	0.	*	1	0156	117	18.	*	1	0242	163	6.
1	0025	26	0.	*	1	0111	72	0.	*	1	0157	118	16.	*	1	0243	164	6.
1	0026	27	0.	*	1	0112	73	0.	*	1	0158	119	18.	*	1	0244	165	6.
1	0027	28	0.	*	1	0113	74	0.	*	1	0159	120	17.	*	1	0245	166	5.
1	0028	29	0.	*	1	0114	75	0.	*	1	0200	121	16.	*	1	0246	167	5.
1	0029	30	0.	*	1	0115	76	0.	*	1	0201	122	16.	*	1	0247	168	5.
1	0030	31	0.	*	1	0116	77	0.	*	1	0202	123	16.	*	1	0248	169	5.
1	0031	32	0.	*	1	0117	78	0.	*	1	0203	124	15.	*	1	0249	170	5.
1	0032	33	0.	*	1	0118	79	0.	*	1	0204	125	15.	*	1	0250	171	5.
1	0033	34	0.	*	1	0119	80	0.	*	1	0205	126	15.	*	1	0251	172	5.
1	0034	35	0.	*	1	0120	81	0.	*	1	0206	127	14.	*	1	0252	173	5.
1	0035	36	0.	*	1	0121	82	0.	*	1	0207	128	14.	*	1	0253	174	4.
1	0036	37	0.	*	1	0122	83	0.	*	1	0208	129	13.	*	1	0254	175	4.
1	0037	38	0.	*	1	0123	84	0.	*	1	0209	130	13.	*	1	0255	176	4.
1	0038	39	0.	*	1	0124	85	0.	*	1	0210	131	13.	*	1	0256	177	4.
1	0039	40	0.	*	1	0125	86	0.	*	1	0211	132	12.	*	1	0257	178	4.
1	0040	41	0.	*	1	0126	87	0.	*	1	0212	133	12.	*	1	0258	179	4.
1	0041	42	0.	*	1	0127	88	0.	*	1	0213	134	12.	*	1	0259	180	4.
1	0042	43	0.	*	1	0128	89	0.	*	1	0214	135	11.	*	1	0300	181	4.
1	0043	44	0.	*	1	0129	90	0.	*	1	0215	136	11.	*				
1	0044	45	0.	*	1	0130	91	0.	*	1	0216	137	11.	*				
1	0045	46	0.	*	1	0131	92	0.	*	1	0217	138	11.	*				

PEAK FLOW	TIME	MAXIMUM AVERAGE FLOW			
(CFS)	(HR)	6-HR	24-HR	72-HR	3.00-HR
+	23.	3.	3.	3.	3.
		(INCHES)	.406	.406	.406
		(AC-FT)	1.	1.	1.

CUMULATIVE AREA = .04 SQ MI

COMPUTED MUSKINGUM-CUNGE PARAMETERS

ELEMENT	ALPHA	COMPUTATION TIME STEP			PEAK	TIME TO PEAK	VOLUME	MAXIMUM CELERITY
		M	DT	DX				
		(MIN)	(FT)	(CFS)	(MIN)	(IN)	(FPS)	
MAIN	1.34	1.33	1.00	68.31	4.85	151.00	.06	2.04

INTERPOLATED TO SPECIFIED COMPUTATION INTERVAL

MAIN	1.34	1.33	1.00	4.85	151.00	.06
------	------	------	------	------	--------	-----

CONTINUITY SUMMARY (AC-FT) - INFLOW= .2700E+00 EXCESS= .0000E+00 OUTFLOW= .1221E+00 BASIN STORAGE= .1737E+00 PERCENT ERROR= -9.5

HYDROGRAPH AT STATION RE13
PLAN 1, RATIO = .61

DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	
1	0000	1	0.	*	1	0046	47	0.	*	1	0132	93	0.	*	1	0218	139	0.						
1	0001	2	0.	*	1	0047	48	0.	*	1	0133	94	0.	*	1	0219	140	0.						
1	0002	3	0.	*	1	0048	49	0.	*	1	0134	95	0.	*	1	0220	141	0.						
1	0003	4	0.	*	1	0049	50	0.	*	1	0135	96	0.	*	1	0221	142	0.						
1	0004	5	0.	*	1	0050	51	0.	*	1	0136	97	0.	*	1	0222	143	0.						
1	0005	6	0.	*	1	0051	52	0.	*	1	0137	98	0.	*	1	0223	144	0.						
1	0006	7	0.	*	1	0052	53	0.	*	1	0138	99	0.	*	1	0224	145	0.						
1	0007	8	0.	*	1	0053	54	0.	*	1	0139	100	0.	*	1	0225	146	0.						
1	0008	9	0.	*	1	0054	55	0.	*	1	0140	101	0.	*	1	0226	147	0.						
1	0009	10	0.	*	1	0055	56	0.	*	1	0141	102	0.	*	1	0227	148	0.						

pre.out

138 LS SCS LOSS RATE
 STRTL .60 INITIAL ABSTRACTION
 CRVNBR 77.00 CURVE NUMBER
 RTIMP .00 PERCENT IMPERVIOUS AREA

139 UD SCS DIMENSIONLESS UNITGRAPH
 TLAG 1.02 LAG

*** WARNING *** UNIT HYDROGRAPH TRUNCATED FROM 309 TO 300 INTERVALS

UNIT HYDROGRAPH
 300 END-OF-PERIOD ORDINATES
 VOLUME = 1.00

4.	8.	12.	16.	20.	24.	33.	43.	52.	62.
71.	81.	92.	104.	116.	129.	141.	153.	167.	184.
200.	216.	233.	249.	267.	288.	310.	332.	354.	376.
398.	424.	449.	475.	501.	527.	553.	575.	597.	618.
640.	662.	684.	700.	715.	730.	745.	760.	775.	787.
795.	803.	811.	819.	827.	833.	834.	836.	837.	838.
840.	841.	839.	838.	836.	835.	834.	832.	824.	816.
808.	800.	792.	783.	774.	765.	755.	746.	736.	726.
716.	705.	694.	683.	673.	662.	649.	636.	622.	609.
595.	581.	567.	551.	534.	518.	502.	485.	469.	456.
442.	429.	415.	401.	388.	378.	368.	359.	349.	340.
330.	322.	314.	306.	297.	289.	281.	274.	267.	260.
253.	246.	240.	234.	229.	224.	219.	214.	209.	204.
199.	194.	189.	184.	179.	174.	170.	166.	162.	158.
154.	149.	145.	141.	137.	133.	129.	125.	122.	119.
116.	114.	111.	108.	105.	103.	100.	97.	95.	92.
89.	87.	85.	83.	81.	79.	77.	75.	73.	71.
69.	67.	65.	63.	62.	60.	59.	57.	56.	54.
53.	51.	50.	48.	47.	46.	45.	44.	43.	42.
41.	40.	39.	37.	36.	35.	34.	33.	33.	32.
31.	30.	30.	29.	28.	27.	27.	26.	25.	24.
24.	23.	23.	22.	22.	21.	21.	20.	20.	19.
18.	18.	17.	17.	17.	16.	16.	15.	15.	15.
14.	14.	13.	13.	13.	12.	12.	12.	11.	11.
11.	11.	10.	10.	10.	10.	9.	9.	9.	9.
9.	8.	8.	8.	8.	8.	8.	7.	7.	7.
7.	7.	7.	7.	6.	6.	6.	6.	6.	6.
5.	5.	5.	5.	5.	5.	4.	4.	4.	4.
4.	4.	4.	3.	3.	3.	3.	3.	3.	3.
2.	2.	2.	2.	2.	2.	2.	2.	1.	1.

HYDROGRAPH AT STATION BE14

DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	*	DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
1	0000	1	.00	.00	.00	.00	0.	*	1	0131	92	.00	.00	.00	.00	249.
1	0001	2	.00	.00	.00	.00	0.	*	1	0132	93	.00	.00	.00	.00	256.
1	0002	3	.00	.00	.00	.00	0.	*	1	0133	94	.00	.00	.00	.00	262.
1	0003	4	.00	.00	.00	.00	0.	*	1	0134	95	.00	.00	.00	.00	269.
1	0004	5	.00	.00	.00	.00	0.	*	1	0135	96	.00	.00	.00	.00	275.
1	0005	6	.00	.00	.00	.00	0.	*	1	0136	97	.00	.00	.00	.00	281.
1	0006	7	.00	.00	.00	.00	0.	*	1	0137	98	.00	.00	.00	.00	287.
1	0007	8	.00	.00	.00	.00	0.	*	1	0138	99	.00	.00	.00	.00	293.
1	0008	9	.00	.00	.00	.00	0.	*	1	0139	100	.00	.00	.00	.00	298.
1	0009	10	.00	.00	.00	.00	0.	*	1	0140	101	.00	.00	.00	.00	303.
1	0010	11	.00	.00	.00	.00	0.	*	1	0141	102	.00	.00	.00	.00	308.
1	0011	12	.00	.00	.00	.00	0.	*	1	0142	103	.00	.00	.00	.00	312.
1	0012	13	.00	.00	.00	.00	0.	*	1	0143	104	.00	.00	.00	.00	316.
1	0013	14	.00	.00	.00	.00	0.	*	1	0144	105	.00	.00	.00	.00	320.
1	0014	15	.00	.00	.00	.00	0.	*	1	0145	106	.00	.00	.00	.00	324.
1	0015	16	.00	.00	.00	.00	0.	*	1	0146	107	.00	.00	.00	.00	328.
1	0016	17	.00	.00	.00	.00	0.	*	1	0147	108	.00	.00	.00	.00	331.
1	0017	18	.00	.00	.00	.00	0.	*	1	0148	109	.00	.00	.00	.00	333.
1	0018	19	.00	.00	.00	.00	0.	*	1	0149	110	.00	.00	.00	.00	336.
1	0019	20	.00	.00	.00	.00	0.	*	1	0150	111	.00	.00	.00	.00	338.
1	0020	21	.00	.00	.00	.00	0.	*	1	0151	112	.00	.00	.00	.00	340.
1	0021	22	.00	.00	.00	.00	0.	*	1	0152	113	.00	.00	.00	.00	342.
1	0022	23	.00	.00	.00	.00	0.	*	1	0153	114	.00	.00	.00	.00	343.
1	0023	24	.00	.00	.00	.00	0.	*	1	0154	115	.00	.00	.00	.00	344.
1	0024	25	.00	.00	.00	.00	0.	*	1	0155	116	.00	.00	.00	.00	345.
1	0025	26	.00	.00	.00	.00	0.	*	1	0156	117	.00	.00	.00	.00	346.
1	0026	27	.00	.00	.00	.00	0.	*	1	0157	118	.00	.00	.00	.00	346.
1	0027	28	.00	.00	.00	.00	0.	*	1	0158	119	.00	.00	.00	.00	346.
1	0028	29	.00	.00	.00	.00	0.	*	1	0159	120	.00	.00	.00	.00	346.
1	0029	30	.00	.00	.00	.00	0.	*	1	0200	121	.00	.00	.00	.00	345.
1	0030	31	.00	.00	.00	.00	0.	*	1	0201	122	.00	.00	.00	.00	345.
1	0031	32	.11	.11	.00	.00	0.	*	1	0202	123	.00	.00	.00	.00	344.
1	0032	33	.11	.11	.00	.00	0.	*	1	0203	124	.00	.00	.00	.00	343.
1	0033	34	.11	.11	.00	.00	0.	*	1	0204	125	.00	.00	.00	.00	341.

														pre.out			
1	0034	35	.11	.11	.00	0.	*	1	0205	126	.00	.00	.00	340.			
1	0035	36	.11	.11	.00	0.	*	1	0206	127	.00	.00	.00	338.			
1	0036	37	.09	.09	.00	0.	*	1	0207	128	.00	.00	.00	336.			
1	0037	38	.09	.08	.01	0.	*	1	0208	129	.00	.00	.00	334.			
1	0038	39	.09	.08	.01	0.	*	1	0209	130	.00	.00	.00	331.			
1	0039	40	.09	.07	.02	0.	*	1	0210	131	.00	.00	.00	328.			
1	0040	41	.09	.07	.02	1.	*	1	0211	132	.00	.00	.00	326.			
1	0041	42	.06	.05	.02	1.	*	1	0212	133	.00	.00	.00	322.			
1	0042	43	.06	.04	.02	1.	*	1	0213	134	.00	.00	.00	319.			
1	0043	44	.06	.04	.02	2.	*	1	0214	135	.00	.00	.00	316.			
1	0044	45	.06	.04	.02	2.	*	1	0215	136	.00	.00	.00	312.			
1	0045	46	.06	.04	.02	3.	*	1	0216	137	.00	.00	.00	308.			
1	0046	47	.04	.02	.01	4.	*	1	0217	138	.00	.00	.00	304.			
1	0047	48	.04	.02	.01	5.	*	1	0218	139	.00	.00	.00	300.			
1	0048	49	.04	.02	.02	7.	*	1	0219	140	.00	.00	.00	295.			
1	0049	50	.04	.02	.02	8.	*	1	0220	141	.00	.00	.00	291.			
1	0050	51	.04	.02	.02	10.	*	1	0221	142	.00	.00	.00	286.			
1	0051	52	.02	.01	.01	12.	*	1	0222	143	.00	.00	.00	282.			
1	0052	53	.02	.01	.01	14.	*	1	0223	144	.00	.00	.00	277.			
1	0053	54	.02	.01	.01	16.	*	1	0224	145	.00	.00	.00	273.			
1	0054	55	.02	.01	.01	18.	*	1	0225	146	.00	.00	.00	268.			
1	0055	56	.02	.01	.01	21.	*	1	0226	147	.00	.00	.00	264.			
1	0056	57	.02	.01	.01	24.	*	1	0227	148	.00	.00	.00	259.			
1	0057	58	.02	.01	.01	27.	*	1	0228	149	.00	.00	.00	255.			
1	0058	59	.02	.01	.01	30.	*	1	0229	150	.00	.00	.00	250.			
1	0059	60	.02	.01	.01	33.	*	1	0230	151	.00	.00	.00	246.			
1	0100	61	.02	.01	.01	37.	*	1	0231	152	.00	.00	.00	242.			
1	0101	62	.01	.01	.01	41.	*	1	0232	153	.00	.00	.00	237.			
1	0102	63	.01	.01	.01	45.	*	1	0233	154	.00	.00	.00	233.			
1	0103	64	.01	.01	.01	49.	*	1	0234	155	.00	.00	.00	229.			
1	0104	65	.01	.01	.01	54.	*	1	0235	156	.00	.00	.00	225.			
1	0105	66	.01	.01	.01	59.	*	1	0236	157	.00	.00	.00	221.			
1	0106	67	.01	.01	.01	64.	*	1	0237	158	.00	.00	.00	217.			
1	0107	68	.01	.01	.01	69.	*	1	0238	159	.00	.00	.00	213.			
1	0108	69	.01	.01	.01	75.	*	1	0239	160	.00	.00	.00	209.			
1	0109	70	.01	.01	.01	81.	*	1	0240	161	.00	.00	.00	205.			
1	0110	71	.01	.01	.01	87.	*	1	0241	162	.00	.00	.00	201.			
1	0111	72	.01	.00	.00	94.	*	1	0242	163	.00	.00	.00	198.			
1	0112	73	.01	.00	.00	101.	*	1	0243	164	.00	.00	.00	194.			
1	0113	74	.01	.00	.00	108.	*	1	0244	165	.00	.00	.00	191.			
1	0114	75	.01	.00	.00	115.	*	1	0245	166	.00	.00	.00	187.			
1	0115	76	.01	.00	.00	122.	*	1	0246	167	.00	.00	.00	184.			
1	0116	77	.01	.00	.00	130.	*	1	0247	168	.00	.00	.00	181.			
1	0117	78	.01	.00	.00	138.	*	1	0248	169	.00	.00	.00	177.			
1	0118	79	.01	.00	.00	146.	*	1	0249	170	.00	.00	.00	174.			
1	0119	80	.01	.00	.00	154.	*	1	0250	171	.00	.00	.00	171.			
1	0120	81	.01	.00	.00	162.	*	1	0251	172	.00	.00	.00	168.			
1	0121	82	.01	.00	.00	170.	*	1	0252	173	.00	.00	.00	165.			
1	0122	83	.01	.00	.00	179.	*	1	0253	174	.00	.00	.00	163.			
1	0123	84	.01	.00	.00	187.	*	1	0254	175	.00	.00	.00	160.			
1	0124	85	.01	.00	.00	195.	*	1	0255	176	.00	.00	.00	157.			
1	0125	86	.01	.00	.00	203.	*	1	0256	177	.00	.00	.00	154.			
1	0126	87	.01	.00	.00	211.	*	1	0257	178	.00	.00	.00	152.			
1	0127	88	.01	.00	.00	219.	*	1	0258	179	.00	.00	.00	149.			
1	0128	89	.01	.00	.00	226.	*	1	0259	180	.00	.00	.00	147.			
1	0129	90	.01	.00	.00	234.	*	1	0300	181	.00	.00	.00	144.			
1	0130	91	.01	.00	.00	241.	*										

TOTAL RAINFALL = 2.13, TOTAL LOSS = 1.61, TOTAL EXCESS = .52

PEAK FLOW + (CFS)	TIME (HR)	MAXIMUM AVERAGE FLOW (CFS)	6-HR 24-HR 72-HR 3.00-HR			
			6-HR	24-HR	72-HR	3.00-HR
+ 346.	1.97	(INCHES) (AC-FT)	158. 39.	158. 39.	158. 39.	158. 39.

CUMULATIVE AREA = 1.79 SQ MI

*** WARNING *** UNIT HYDROGRAPH TRUNCATED FROM 309 TO 300 INTERVALS

HYDROGRAPH AT STATION BE14
PLAN 1, RATIO = 1.00

DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	*	DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
1	0000	1	.00	.00	.00	0.	*		1	0131	92	.00	.00	.00	249.	
1	0001	2	.00	.00	.00	0.	*		1	0132	93	.00	.00	.00	256.	
1	0002	3	.00	.00	.00	0.	*		1	0133	94	.00	.00	.00	262.	
1	0003	4	.00	.00	.00	0.	*		1	0134	95	.00	.00	.00	269.	
1	0004	5	.00	.00	.00	0.	*		1	0135	96	.00	.00	.00	275.	

													pre.out			
1	0005	6	.00	.00	.00	0.	*	1	0136	97	.00	.00	.00	281.		
1	0006	7	.00	.00	.00	0.	*	1	0137	98	.00	.00	.00	287.		
1	0007	8	.00	.00	.00	0.	*	1	0138	99	.00	.00	.00	293.		
1	0008	9	.00	.00	.00	0.	*	1	0139	100	.00	.00	.00	298.		
1	0009	10	.00	.00	.00	0.	*	1	0140	101	.00	.00	.00	303.		
1	0010	11	.00	.00	.00	0.	*	1	0141	102	.00	.00	.00	308.		
1	0011	12	.00	.00	.00	0.	*	1	0142	103	.00	.00	.00	312.		
1	0012	13	.00	.00	.00	0.	*	1	0143	104	.00	.00	.00	316.		
1	0013	14	.00	.00	.00	0.	*	1	0144	105	.00	.00	.00	320.		
1	0014	15	.00	.00	.00	0.	*	1	0145	106	.00	.00	.00	324.		
1	0015	16	.00	.00	.00	0.	*	1	0146	107	.00	.00	.00	328.		
1	0016	17	.00	.00	.00	0.	*	1	0147	108	.00	.00	.00	331.		
1	0017	18	.00	.00	.00	0.	*	1	0148	109	.00	.00	.00	333.		
1	0018	19	.00	.00	.00	0.	*	1	0149	110	.00	.00	.00	336.		
1	0019	20	.00	.00	.00	0.	*	1	0150	111	.00	.00	.00	338.		
1	0020	21	.00	.00	.00	0.	*	1	0151	112	.00	.00	.00	340.		
1	0021	22	.00	.00	.00	0.	*	1	0152	113	.00	.00	.00	342.		
1	0022	23	.00	.00	.00	0.	*	1	0153	114	.00	.00	.00	343.		
1	0023	24	.00	.00	.00	0.	*	1	0154	115	.00	.00	.00	344.		
1	0024	25	.00	.00	.00	0.	*	1	0155	116	.00	.00	.00	345.		
1	0025	26	.00	.00	.00	0.	*	1	0156	117	.00	.00	.00	346.		
1	0026	27	.00	.00	.00	0.	*	1	0157	118	.00	.00	.00	346.		
1	0027	28	.00	.00	.00	0.	*	1	0158	119	.00	.00	.00	346.		
1	0028	29	.00	.00	.00	0.	*	1	0159	120	.00	.00	.00	346.		
1	0029	30	.00	.00	.00	0.	*	1	0200	121	.00	.00	.00	345.		
1	0030	31	.00	.00	.00	0.	*	1	0201	122	.00	.00	.00	345.		
1	0031	32	.11	.11	.00	0.	*	1	0202	123	.00	.00	.00	344.		
1	0032	33	.11	.11	.00	0.	*	1	0203	124	.00	.00	.00	343.		
1	0033	34	.11	.11	.00	0.	*	1	0204	125	.00	.00	.00	341.		
1	0034	35	.11	.11	.00	0.	*	1	0205	126	.00	.00	.00	340.		
1	0035	36	.11	.11	.00	0.	*	1	0206	127	.00	.00	.00	338.		
1	0036	37	.09	.09	.00	0.	*	1	0207	128	.00	.00	.00	336.		
1	0037	38	.09	.08	.01	0.	*	1	0208	129	.00	.00	.00	334.		
1	0038	39	.09	.08	.01	0.	*	1	0209	130	.00	.00	.00	331.		
1	0039	40	.09	.07	.02	0.	*	1	0210	131	.00	.00	.00	328.		
1	0040	41	.09	.07	.02	1.	*	1	0211	132	.00	.00	.00	326.		
1	0041	42	.06	.05	.02	1.	*	1	0212	133	.00	.00	.00	322.		
1	0042	43	.06	.04	.02	1.	*	1	0213	134	.00	.00	.00	319.		
1	0043	44	.06	.04	.02	2.	*	1	0214	135	.00	.00	.00	316.		
1	0044	45	.06	.04	.02	2.	*	1	0215	136	.00	.00	.00	312.		
1	0045	46	.06	.04	.02	3.	*	1	0216	137	.00	.00	.00	308.		
1	0046	47	.04	.02	.01	4.	*	1	0217	138	.00	.00	.00	304.		
1	0047	48	.04	.02	.01	5.	*	1	0218	139	.00	.00	.00	300.		
1	0048	49	.04	.02	.02	7.	*	1	0219	140	.00	.00	.00	295.		
1	0049	50	.04	.02	.02	8.	*	1	0220	141	.00	.00	.00	291.		
1	0050	51	.04	.02	.02	10.	*	1	0221	142	.00	.00	.00	286.		
1	0051	52	.02	.01	.01	12.	*	1	0222	143	.00	.00	.00	282.		
1	0052	53	.02	.01	.01	14.	*	1	0223	144	.00	.00	.00	277.		
1	0053	54	.02	.01	.01	16.	*	1	0224	145	.00	.00	.00	273.		
1	0054	55	.02	.01	.01	18.	*	1	0225	146	.00	.00	.00	268.		
1	0055	56	.02	.01	.01	21.	*	1	0226	147	.00	.00	.00	264.		
1	0056	57	.02	.01	.01	24.	*	1	0227	148	.00	.00	.00	259.		
1	0057	58	.02	.01	.01	27.	*	1	0228	149	.00	.00	.00	255.		
1	0058	59	.02	.01	.01	30.	*	1	0229	150	.00	.00	.00	250.		
1	0059	60	.02	.01	.01	33.	*	1	0230	151	.00	.00	.00	246.		
1	0100	61	.02	.01	.01	37.	*	1	0231	152	.00	.00	.00	242.		
1	0101	62	.01	.01	.01	41.	*	1	0232	153	.00	.00	.00	237.		
1	0102	63	.01	.01	.01	45.	*	1	0233	154	.00	.00	.00	233.		
1	0103	64	.01	.01	.01	49.	*	1	0234	155	.00	.00	.00	229.		
1	0104	65	.01	.01	.01	54.	*	1	0235	156	.00	.00	.00	225.		
1	0105	66	.01	.01	.01	59.	*	1	0236	157	.00	.00	.00	221.		
1	0106	67	.01	.01	.01	64.	*	1	0237	158	.00	.00	.00	217.		
1	0107	68	.01	.01	.01	69.	*	1	0238	159	.00	.00	.00	213.		
1	0108	69	.01	.01	.01	75.	*	1	0239	160	.00	.00	.00	209.		
1	0109	70	.01	.01	.01	81.	*	1	0240	161	.00	.00	.00	205.		
1	0110	71	.01	.01	.01	87.	*	1	0241	162	.00	.00	.00	201.		
1	0111	72	.01	.00	.00	94.	*	1	0242	163	.00	.00	.00	198.		
1	0112	73	.01	.00	.00	101.	*	1	0243	164	.00	.00	.00	194.		
1	0113	74	.01	.00	.00	108.	*	1	0244	165	.00	.00	.00	191.		
1	0114	75	.01	.00	.00	115.	*	1	0245	166	.00	.00	.00	187.		
1	0115	76	.01	.00	.00	122.	*	1	0246	167	.00	.00	.00	184.		
1	0116	77	.01	.00	.00	130.	*	1	0247	168	.00	.00	.00	181.		
1	0117	78	.01	.00	.00	138.	*	1	0248	169	.00	.00	.00	177.		
1	0118	79	.01	.00	.00	146.	*	1	0249	170	.00	.00	.00	174.		
1	0119	80	.01	.00	.00	154.	*	1	0250	171	.00	.00	.00	171.		
1	0120	81	.01	.00	.00	162.	*	1	0251	172	.00	.00	.00	168.		
1	0121	82	.01	.00	.00	170.	*	1	0252	173	.00	.00	.00	165.		
1	0122	83	.01	.00	.00	179.	*	1	0253	174	.00	.00	.00	163.		
1	0123	84	.01	.00	.00	187.	*	1	0254	175	.00	.00	.00	160.		
1	0124	85	.01	.00	.00	195.	*	1	0255	176	.00	.00	.00	157.		
1	0125	86	.01	.00	.00	203.	*	1	0256	177	.00	.00	.00	154.		
1	0126	87	.01	.00	.00	211.	*	1	0257	178	.00	.00	.00	152.		
1	0127	88	.01	.00	.00	219.	*	1	0258	179	.00	.00	.00	149.		
1	0128	89	.01	.00	.00	226.	*	1	0259	180	.00	.00	.00	147.		
1	0129	90	.01	.00	.00	234.	*	1	0300	181	.00	.00	.00	144.		
1	0130	91	.01	.00	.00	241.	*									

TOTAL RAINFALL = 2.13, TOTAL LOSS = 1.61, TOTAL EXCESS = .52

pre.out

PEAK FLOW + (CFS)	TIME (HR)	MAXIMUM AVERAGE FLOW			
		6-HR	24-HR	72-HR	3.00-HR
346.	1.97	158.	158.	158.	158.
		(INCHES) .409	.409	.409	.409
		(AC-FT) 39.	39.	39.	39.

CUMULATIVE AREA = 1.79 SQ MI

*** WARNING *** UNIT HYDROGRAPH TRUNCATED FROM 309 TO 300 INTERVALS

HYDROGRAPH AT STATION BE14
PLAN 1, RATIO = .61

DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	*	DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
1	0000	1	.00	.00	.00	.00	0.	*	1	0131	92	.00	.00	.00	.00	48.
1	0001	2	.00	.00	.00	.00	0.	*	1	0132	93	.00	.00	.00	.00	50.
1	0002	3	.00	.00	.00	.00	0.	*	1	0133	94	.00	.00	.00	.00	52.
1	0003	4	.00	.00	.00	.00	0.	*	1	0134	95	.00	.00	.00	.00	54.
1	0004	5	.00	.00	.00	.00	0.	*	1	0135	96	.00	.00	.00	.00	56.
1	0005	6	.00	.00	.00	.00	0.	*	1	0136	97	.00	.00	.00	.00	57.
1	0006	7	.00	.00	.00	.00	0.	*	1	0137	98	.00	.00	.00	.00	59.
1	0007	8	.00	.00	.00	.00	0.	*	1	0138	99	.00	.00	.00	.00	61.
1	0008	9	.00	.00	.00	.00	0.	*	1	0139	100	.00	.00	.00	.00	62.
1	0009	10	.00	.00	.00	.00	0.	*	1	0140	101	.00	.00	.00	.00	64.
1	0010	11	.00	.00	.00	.00	0.	*	1	0141	102	.00	.00	.00	.00	65.
1	0011	12	.00	.00	.00	.00	0.	*	1	0142	103	.00	.00	.00	.00	67.
1	0012	13	.00	.00	.00	.00	0.	*	1	0143	104	.00	.00	.00	.00	68.
1	0013	14	.00	.00	.00	.00	0.	*	1	0144	105	.00	.00	.00	.00	69.
1	0014	15	.00	.00	.00	.00	0.	*	1	0145	106	.00	.00	.00	.00	71.
1	0015	16	.00	.00	.00	.00	0.	*	1	0146	107	.00	.00	.00	.00	72.
1	0016	17	.00	.00	.00	.00	0.	*	1	0147	108	.00	.00	.00	.00	73.
1	0017	18	.00	.00	.00	.00	0.	*	1	0148	109	.00	.00	.00	.00	74.
1	0018	19	.00	.00	.00	.00	0.	*	1	0149	110	.00	.00	.00	.00	75.
1	0019	20	.00	.00	.00	.00	0.	*	1	0150	111	.00	.00	.00	.00	76.
1	0020	21	.00	.00	.00	.00	0.	*	1	0151	112	.00	.00	.00	.00	77.
1	0021	22	.00	.00	.00	.00	0.	*	1	0152	113	.00	.00	.00	.00	78.
1	0022	23	.00	.00	.00	.00	0.	*	1	0153	114	.00	.00	.00	.00	79.
1	0023	24	.00	.00	.00	.00	0.	*	1	0154	115	.00	.00	.00	.00	79.
1	0024	25	.00	.00	.00	.00	0.	*	1	0155	116	.00	.00	.00	.00	80.
1	0025	26	.00	.00	.00	.00	0.	*	1	0156	117	.00	.00	.00	.00	81.
1	0026	27	.00	.00	.00	.00	0.	*	1	0157	118	.00	.00	.00	.00	81.
1	0027	28	.00	.00	.00	.00	0.	*	1	0158	119	.00	.00	.00	.00	81.
1	0028	29	.00	.00	.00	.00	0.	*	1	0159	120	.00	.00	.00	.00	82.
1	0029	30	.00	.00	.00	.00	0.	*	1	0200	121	.00	.00	.00	.00	82.
1	0030	31	.00	.00	.00	.00	0.	*	1	0201	122	.00	.00	.00	.00	82.
1	0031	32	.07	.07	.00	0.	0.	*	1	0202	123	.00	.00	.00	.00	83.
1	0032	33	.07	.07	.00	0.	0.	*	1	0203	124	.00	.00	.00	.00	83.
1	0033	34	.07	.07	.00	0.	0.	*	1	0204	125	.00	.00	.00	.00	83.
1	0034	35	.07	.07	.00	0.	0.	*	1	0205	126	.00	.00	.00	.00	83.
1	0035	36	.07	.07	.00	0.	0.	*	1	0206	127	.00	.00	.00	.00	83.
1	0036	37	.05	.05	.00	0.	0.	*	1	0207	128	.00	.00	.00	.00	82.
1	0037	38	.05	.05	.00	0.	0.	*	1	0208	129	.00	.00	.00	.00	82.
1	0038	39	.05	.05	.00	0.	0.	*	1	0209	130	.00	.00	.00	.00	82.
1	0039	40	.05	.05	.00	0.	0.	*	1	0210	131	.00	.00	.00	.00	82.
1	0040	41	.05	.05	.00	0.	0.	*	1	0211	132	.00	.00	.00	.00	81.
1	0041	42	.04	.04	.00	0.	0.	*	1	0212	133	.00	.00	.00	.00	81.
1	0042	43	.04	.04	.00	0.	0.	*	1	0213	134	.00	.00	.00	.00	81.
1	0043	44	.04	.03	.00	0.	0.	*	1	0214	135	.00	.00	.00	.00	80.
1	0044	45	.04	.03	.00	0.	0.	*	1	0215	136	.00	.00	.00	.00	80.
1	0045	46	.04	.03	.00	0.	0.	*	1	0216	137	.00	.00	.00	.00	79.
1	0046	47	.02	.02	.00	0.	0.	*	1	0217	138	.00	.00	.00	.00	78.
1	0047	48	.02	.02	.00	0.	0.	*	1	0218	139	.00	.00	.00	.00	78.
1	0048	49	.02	.02	.00	0.	0.	*	1	0219	140	.00	.00	.00	.00	77.
1	0049	50	.02	.02	.00	1.	0.	*	1	0220	141	.00	.00	.00	.00	76.
1	0050	51	.02	.02	.00	1.	0.	*	1	0221	142	.00	.00	.00	.00	75.
1	0051	52	.01	.01	.00	1.	0.	*	1	0222	143	.00	.00	.00	.00	74.
1	0052	53	.01	.01	.00	1.	0.	*	1	0223	144	.00	.00	.00	.00	73.
1	0053	54	.01	.01	.00	2.	0.	*	1	0224	145	.00	.00	.00	.00	72.
1	0054	55	.01	.01	.00	2.	0.	*	1	0225	146	.00	.00	.00	.00	72.
1	0055	56	.01	.01	.00	2.	0.	*	1	0226	147	.00	.00	.00	.00	71.
1	0056	57	.01	.01	.00	3.	0.	*	1	0227	148	.00	.00	.00	.00	70.
1	0057	58	.01	.01	.00	3.	0.	*	1	0228	149	.00	.00	.00	.00	69.
1	0058	59	.01	.01	.00	4.	0.	*	1	0229	150	.00	.00	.00	.00	68.
1	0059	60	.01	.01	.00	4.	0.	*	1	0230	151	.00	.00	.00	.00	67.
1	0100	61	.01	.01	.00	5.	0.	*	1	0231	152	.00	.00	.00	.00	66.
1	0101	62	.01	.01	.00	5.	0.	*	1	0232	153	.00	.00	.00	.00	65.
1	0102	63	.01	.01	.00	6.	0.	*	1	0233	154	.00	.00	.00	.00	64.
1	0103	64	.01	.01	.00	7.	0.	*	1	0234	155	.00	.00	.00	.00	63.
1	0104	65	.01	.01	.00	8.	0.	*	1	0235	156	.00	.00	.00	.00	62.
1	0105	66	.01	.01	.00	8.	0.	*	1	0236	157	.00	.00	.00	.00	61.

pre.out														
1	0106	67	.01	.00	.00	9.	*	1	0237	158	.00	.00	.00	60.
1	0107	68	.01	.00	.00	10.	*	1	0238	159	.00	.00	.00	59.
1	0108	69	.01	.00	.00	11.	*	1	0239	160	.00	.00	.00	58.
1	0109	70	.01	.00	.00	12.	*	1	0240	161	.00	.00	.00	57.
1	0110	71	.01	.00	.00	13.	*	1	0241	162	.00	.00	.00	56.
1	0111	72	.00	.00	.00	15.	*	1	0242	163	.00	.00	.00	55.
1	0112	73	.00	.00	.00	16.	*	1	0243	164	.00	.00	.00	54.
1	0113	74	.00	.00	.00	17.	*	1	0244	165	.00	.00	.00	53.
1	0114	75	.00	.00	.00	19.	*	1	0245	166	.00	.00	.00	53.
1	0115	76	.00	.00	.00	20.	*	1	0246	167	.00	.00	.00	52.
1	0116	77	.00	.00	.00	21.	*	1	0247	168	.00	.00	.00	51.
1	0117	78	.00	.00	.00	23.	*	1	0248	169	.00	.00	.00	50.
1	0118	79	.00	.00	.00	25.	*	1	0249	170	.00	.00	.00	49.
1	0119	80	.00	.00	.00	26.	*	1	0250	171	.00	.00	.00	49.
1	0120	81	.00	.00	.00	28.	*	1	0251	172	.00	.00	.00	48.
1	0121	82	.00	.00	.00	30.	*	1	0252	173	.00	.00	.00	47.
1	0122	83	.00	.00	.00	32.	*	1	0253	174	.00	.00	.00	46.
1	0123	84	.00	.00	.00	33.	*	1	0254	175	.00	.00	.00	46.
1	0124	85	.00	.00	.00	35.	*	1	0255	176	.00	.00	.00	45.
1	0125	86	.00	.00	.00	37.	*	1	0256	177	.00	.00	.00	44.
1	0126	87	.00	.00	.00	39.	*	1	0257	178	.00	.00	.00	44.
1	0127	88	.00	.00	.00	41.	*	1	0258	179	.00	.00	.00	43.
1	0128	89	.00	.00	.00	43.	*	1	0259	180	.00	.00	.00	42.
1	0129	90	.00	.00	.00	45.	*	1	0300	181	.00	.00	.00	42.
1	0130	91	.00	.00	.00	47.	*							

TOTAL RAINFALL = 1.29, TOTAL LOSS = 1.16, TOTAL EXCESS = .13

PEAK FLOW	TIME		MAXIMUM	AVERAGE	FLOW	
(CFS)	(HR)		6-HR	24-HR	72-HR	3.00-HR
83.	2.07	(CFS)	37.	37.	37.	37.
		(INCHES)	.096	.096	.096	.096
		(AC-FT)	9.	9.	9.	9.

CUMULATIVE AREA = 1.79 SQ MI

*** **

 * *
 140 KK * RE14 *
 * *

Route BE14 in channel to Outlet OE1

HYDROGRAPH ROUTING DATA

142 RD MUSKINGUM-CUNGE CHANNEL ROUTING
 L 11670. CHANNEL LENGTH
 S .0120 SLOPE
 N .040 CHANNEL ROUGHNESS COEFFICIENT
 CA .00 CONTRIBUTING AREA
 SHAPE TRAP CHANNEL SHAPE
 WD .00 BOTTOM WIDTH OR DIAMETER
 Z 7.00 SIDE SLOPE

 COMPUTED MUSKINGUM-CUNGE PARAMETERS

ELEMENT	ALPHA	COMPUTATION TIME STEP			PEAK (CFS)	TIME TO PEAK (MIN)	VOLUME (IN)	MAXIMUM CELERITY (FPS)
		M	DT	DX				
MAIN	1.34	1.33	1.00	216.11	345.13	145.00	6.01	

INTERPOLATED TO SPECIFIED COMPUTATION INTERVAL

MAIN	1.34	1.33	1.00	345.13	145.00	.30
------	------	------	------	--------	--------	-----

CONTINUITY SUMMARY (AC-FT) - INFLOW= .3922E+02 EXCESS= .0000E+00 OUTFLOW= .2851E+02 BASIN STORAGE= .1114E+02 PERCENT ERROR= -1.1

HYDROGRAPH AT STATION RE14
 PLAN 1, RATIO = 1.00

pre.out																								
DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	
1	0000	1	0.	*	1	0046	47	0.	*	1	0132	93	0.	*	1	0218	139	339.						
1	0001	2	0.	*	1	0047	48	0.	*	1	0133	94	0.	*	1	0219	140	340.						
1	0002	3	0.	*	1	0048	49	0.	*	1	0134	95	0.	*	1	0220	141	342.						
1	0003	4	0.	*	1	0049	50	0.	*	1	0135	96	0.	*	1	0221	142	343.						
1	0004	5	0.	*	1	0050	51	0.	*	1	0136	97	0.	*	1	0222	143	344.						
1	0005	6	0.	*	1	0051	52	0.	*	1	0137	98	0.	*	1	0223	144	345.						
1	0006	7	0.	*	1	0052	53	0.	*	1	0138	99	0.	*	1	0224	145	345.						
1	0007	8	0.	*	1	0053	54	0.	*	1	0139	100	0.	*	1	0225	146	345.						
1	0008	9	0.	*	1	0054	55	0.	*	1	0140	101	0.	*	1	0226	147	345.						
1	0009	10	0.	*	1	0055	56	0.	*	1	0141	102	0.	*	1	0227	148	345.						
1	0010	11	0.	*	1	0056	57	0.	*	1	0142	103	0.	*	1	0228	149	344.						
1	0011	12	0.	*	1	0057	58	0.	*	1	0143	104	0.	*	1	0229	150	343.						
1	0012	13	0.	*	1	0058	59	0.	*	1	0144	105	0.	*	1	0230	151	342.						
1	0013	14	0.	*	1	0059	60	0.	*	1	0145	106	0.	*	1	0231	152	341.						
1	0014	15	0.	*	1	0100	61	0.	*	1	0146	107	0.	*	1	0232	153	340.						
1	0015	16	0.	*	1	0101	62	0.	*	1	0147	108	1.	*	1	0233	154	338.						
1	0016	17	0.	*	1	0102	63	0.	*	1	0148	109	20.	*	1	0234	155	336.						
1	0017	18	0.	*	1	0103	64	0.	*	1	0149	110	93.	*	1	0235	156	334.						
1	0018	19	0.	*	1	0104	65	0.	*	1	0150	111	118.	*	1	0236	157	332.						
1	0019	20	0.	*	1	0105	66	0.	*	1	0151	112	132.	*	1	0237	158	329.						
1	0020	21	0.	*	1	0106	67	0.	*	1	0152	113	148.	*	1	0238	159	327.						
1	0021	22	0.	*	1	0107	68	0.	*	1	0153	114	162.	*	1	0239	160	324.						
1	0022	23	0.	*	1	0108	69	0.	*	1	0154	115	176.	*	1	0240	161	321.						
1	0023	24	0.	*	1	0109	70	0.	*	1	0155	116	188.	*	1	0241	162	318.						
1	0024	25	0.	*	1	0110	71	0.	*	1	0156	117	200.	*	1	0242	163	314.						
1	0025	26	0.	*	1	0111	72	0.	*	1	0157	118	212.	*	1	0243	164	311.						
1	0026	27	0.	*	1	0112	73	0.	*	1	0158	119	222.	*	1	0244	165	308.						
1	0027	28	0.	*	1	0113	74	0.	*	1	0159	120	232.	*	1	0245	166	304.						
1	0028	29	0.	*	1	0114	75	0.	*	1	0200	121	242.	*	1	0246	167	300.						
1	0029	30	0.	*	1	0115	76	0.	*	1	0201	122	251.	*	1	0247	168	296.						
1	0030	31	0.	*	1	0116	77	0.	*	1	0202	123	260.	*	1	0248	169	292.						
1	0031	32	0.	*	1	0117	78	0.	*	1	0203	124	268.	*	1	0249	170	288.						
1	0032	33	0.	*	1	0118	79	0.	*	1	0204	125	275.	*	1	0250	171	284.						
1	0033	34	0.	*	1	0119	80	0.	*	1	0205	126	282.	*	1	0251	172	280.						
1	0034	35	0.	*	1	0120	81	0.	*	1	0206	127	289.	*	1	0252	173	276.						
1	0035	36	0.	*	1	0121	82	0.	*	1	0207	128	295.	*	1	0253	174	272.						
1	0036	37	0.	*	1	0122	83	0.	*	1	0208	129	301.	*	1	0254	175	268.						
1	0037	38	0.	*	1	0123	84	0.	*	1	0209	130	307.	*	1	0255	176	264.						
1	0038	39	0.	*	1	0124	85	0.	*	1	0210	131	312.	*	1	0256	177	260.						
1	0039	40	0.	*	1	0125	86	0.	*	1	0211	132	316.	*	1	0257	178	256.						
1	0040	41	0.	*	1	0126	87	0.	*	1	0212	133	320.	*	1	0258	179	252.						
1	0041	42	0.	*	1	0127	88	0.	*	1	0213	134	324.	*	1	0259	180	248.						
1	0042	43	0.	*	1	0128	89	0.	*	1	0214	135	328.	*	1	0300	181	245.						
1	0043	44	0.	*	1	0129	90	0.	*	1	0215	136	331.	*										
1	0044	45	0.	*	1	0130	91	0.	*	1	0216	137	334.	*										
1	0045	46	0.	*	1	0131	92	0.	*	1	0217	138	336.	*										

PEAK FLOW	TIME	MAXIMUM AVERAGE FLOW			
(CFS)	(HR)	6-HR	24-HR	72-HR	3.00-HR
345.	2.42	114.	114.	114.	114.
		(INCHES)	.296	.296	.296
		(AC-FT)	28.	28.	28.

CUMULATIVE AREA = 1.79 SQ MI

COMPUTED MUSKINGUM-CUNGE PARAMETERS								
ELEMENT	ALPHA	COMPUTATION TIME STEP			PEAK	TIME TO PEAK	VOLUME	MAXIMUM CELERITY
		M	DT	DX				
		(MIN)	(FT)	(CFS)	(MIN)	(IN)	(FPS)	
MAIN	1.34	1.33	1.00	147.72	82.47	163.00	.05	4.20

INTERPOLATED TO SPECIFIED COMPUTATION INTERVAL

MAIN	1.34	1.33	1.00	82.47	163.00	.05		
------	------	------	------	-------	--------	-----	--	--

CONTINUITY SUMMARY (AC-FT) - INFLOW= .9219E+01 EXCESS= .0000E+00 OUTFLOW= .4814E+01 BASIN STORAGE= .4565E+01 PERCENT ERROR= -1.7

HYDROGRAPH AT STATION RE14
PLAN 1, RATIO = .61

DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*
----	-----	------	-----	------	---	----	-----	------	-----	------	---	----	-----	------	-----	------	---	----	-----	------	-----	------	---

pre.out																		
1	0000	1	0.	*	1	0046	47	0.	*	1	0132	93	0.	*	1	0218	139	55.
1	0001	2	0.	*	1	0047	48	0.	*	1	0133	94	0.	*	1	0219	140	58.
1	0002	3	0.	*	1	0048	49	0.	*	1	0134	95	0.	*	1	0220	141	60.
1	0003	4	0.	*	1	0049	50	0.	*	1	0135	96	0.	*	1	0221	142	62.
1	0004	5	0.	*	1	0050	51	0.	*	1	0136	97	0.	*	1	0222	143	64.
1	0005	6	0.	*	1	0051	52	0.	*	1	0137	98	0.	*	1	0223	144	66.
1	0006	7	0.	*	1	0052	53	0.	*	1	0138	99	0.	*	1	0224	145	68.
1	0007	8	0.	*	1	0053	54	0.	*	1	0139	100	0.	*	1	0225	146	70.
1	0008	9	0.	*	1	0054	55	0.	*	1	0140	101	0.	*	1	0226	147	71.
1	0009	10	0.	*	1	0055	56	0.	*	1	0141	102	0.	*	1	0227	148	73.
1	0010	11	0.	*	1	0056	57	0.	*	1	0142	103	0.	*	1	0228	149	74.
1	0011	12	0.	*	1	0057	58	0.	*	1	0143	104	0.	*	1	0229	150	75.
1	0012	13	0.	*	1	0058	59	0.	*	1	0144	105	0.	*	1	0230	151	76.
1	0013	14	0.	*	1	0059	60	0.	*	1	0145	106	0.	*	1	0231	152	77.
1	0014	15	0.	*	1	0100	61	0.	*	1	0146	107	0.	*	1	0232	153	78.
1	0015	16	0.	*	1	0101	62	0.	*	1	0147	108	0.	*	1	0233	154	79.
1	0016	17	0.	*	1	0102	63	0.	*	1	0148	109	0.	*	1	0234	155	80.
1	0017	18	0.	*	1	0103	64	0.	*	1	0149	110	0.	*	1	0235	156	80.
1	0018	19	0.	*	1	0104	65	0.	*	1	0150	111	0.	*	1	0236	157	81.
1	0019	20	0.	*	1	0105	66	0.	*	1	0151	112	0.	*	1	0237	158	81.
1	0020	21	0.	*	1	0106	67	0.	*	1	0152	113	0.	*	1	0238	159	82.
1	0021	22	0.	*	1	0107	68	0.	*	1	0153	114	0.	*	1	0239	160	82.
1	0022	23	0.	*	1	0108	69	0.	*	1	0154	115	0.	*	1	0240	161	82.
1	0023	24	0.	*	1	0109	70	0.	*	1	0155	116	0.	*	1	0241	162	82.
1	0024	25	0.	*	1	0110	71	0.	*	1	0156	117	0.	*	1	0242	163	82.
1	0025	26	0.	*	1	0111	72	0.	*	1	0157	118	0.	*	1	0243	164	82.
1	0026	27	0.	*	1	0112	73	0.	*	1	0158	119	0.	*	1	0244	165	82.
1	0027	28	0.	*	1	0113	74	0.	*	1	0159	120	0.	*	1	0245	166	82.
1	0028	29	0.	*	1	0114	75	0.	*	1	0200	121	0.	*	1	0246	167	82.
1	0029	30	0.	*	1	0115	76	0.	*	1	0201	122	0.	*	1	0247	168	82.
1	0030	31	0.	*	1	0116	77	0.	*	1	0202	123	0.	*	1	0248	169	82.
1	0031	32	0.	*	1	0117	78	0.	*	1	0203	124	0.	*	1	0249	170	82.
1	0032	33	0.	*	1	0118	79	0.	*	1	0204	125	0.	*	1	0250	171	81.
1	0033	34	0.	*	1	0119	80	0.	*	1	0205	126	0.	*	1	0251	172	81.
1	0034	35	0.	*	1	0120	81	0.	*	1	0206	127	0.	*	1	0252	173	80.
1	0035	36	0.	*	1	0121	82	0.	*	1	0207	128	0.	*	1	0253	174	80.
1	0036	37	0.	*	1	0122	83	0.	*	1	0208	129	0.	*	1	0254	175	80.
1	0037	38	0.	*	1	0123	84	0.	*	1	0209	130	0.	*	1	0255	176	79.
1	0038	39	0.	*	1	0124	85	0.	*	1	0210	131	0.	*	1	0256	177	78.
1	0039	40	0.	*	1	0125	86	0.	*	1	0211	132	0.	*	1	0257	178	78.
1	0040	41	0.	*	1	0126	87	0.	*	1	0212	133	0.	*	1	0258	179	77.
1	0041	42	0.	*	1	0127	88	0.	*	1	0213	134	20.	*	1	0259	180	76.
1	0042	43	0.	*	1	0128	89	0.	*	1	0214	135	48.	*	1	0300	181	76.
1	0043	44	0.	*	1	0129	90	0.	*	1	0215	136	47.	*				
1	0044	45	0.	*	1	0130	91	0.	*	1	0216	137	48.	*				
1	0045	46	0.	*	1	0131	92	0.	*	1	0217	138	53.	*				

PEAK FLOW	TIME	MAXIMUM AVERAGE FLOW			
(CFS)	(HR)	6-HR	24-HR	72-HR	3.00-HR
82.	2.72	19.	19.	19.	19.
		(INCHES)	.050	.050	.050
		(AC-FT)	5.	5.	5.
CUMULATIVE AREA =		1.79 SQ MI			

*** **

```

*****
*           *
143 KK    *   C3   *
*           *
*****
COMBINE RE12 - RE14

145 HC    HYDROGRAPH COMBINATION
          ICOMP          3  NUMBER OF HYDROGRAPHS TO COMBINE

```

HYDROGRAPH AT STATION C3
SUM OF 3 HYDROGRAPHS
PLAN 1, RATIO = 1.00

DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*
1	0000	1	0.	*	1	0046	47	0.	*	1	0132	93	0.	*	1	0218	139	356.					
1	0001	2	0.	*	1	0047	48	0.	*	1	0133	94	0.	*	1	0219	140	357.					
1	0002	3	0.	*	1	0048	49	0.	*	1	0134	95	0.	*	1	0220	141	358.					

pre.out																		
1	0003	4	0.	*	1	0049	50	0.	*	1	0135	96	0.	*	1	0221	142	359.
1	0004	5	0.	*	1	0050	51	0.	*	1	0136	97	0.	*	1	0222	143	359.
1	0005	6	0.	*	1	0051	52	0.	*	1	0137	98	0.	*	1	0223	144	360.
1	0006	7	0.	*	1	0052	53	0.	*	1	0138	99	0.	*	1	0224	145	360.
1	0007	8	0.	*	1	0053	54	0.	*	1	0139	100	0.	*	1	0225	146	359.
1	0008	9	0.	*	1	0054	55	0.	*	1	0140	101	0.	*	1	0226	147	359.
1	0009	10	0.	*	1	0055	56	0.	*	1	0141	102	0.	*	1	0227	148	358.
1	0010	11	0.	*	1	0056	57	0.	*	1	0142	103	0.	*	1	0228	149	357.
1	0011	12	0.	*	1	0057	58	0.	*	1	0143	104	0.	*	1	0229	150	356.
1	0012	13	0.	*	1	0058	59	0.	*	1	0144	105	0.	*	1	0230	151	355.
1	0013	14	0.	*	1	0059	60	0.	*	1	0145	106	0.	*	1	0231	152	353.
1	0014	15	0.	*	1	0100	61	0.	*	1	0146	107	0.	*	1	0232	153	351.
1	0015	16	0.	*	1	0101	62	0.	*	1	0147	108	1.	*	1	0233	154	350.
1	0016	17	0.	*	1	0102	63	0.	*	1	0148	109	20.	*	1	0234	155	347.
1	0017	18	0.	*	1	0103	64	0.	*	1	0149	110	93.	*	1	0235	156	345.
1	0018	19	0.	*	1	0104	65	0.	*	1	0150	111	118.	*	1	0236	157	343.
1	0019	20	0.	*	1	0105	66	0.	*	1	0151	112	132.	*	1	0237	158	340.
1	0020	21	0.	*	1	0106	67	0.	*	1	0152	113	148.	*	1	0238	159	337.
1	0021	22	0.	*	1	0107	68	0.	*	1	0153	114	164.	*	1	0239	160	334.
1	0022	23	0.	*	1	0108	69	0.	*	1	0154	115	190.	*	1	0240	161	331.
1	0023	24	0.	*	1	0109	70	0.	*	1	0155	116	212.	*	1	0241	162	328.
1	0024	25	0.	*	1	0110	71	0.	*	1	0156	117	218.	*	1	0242	163	324.
1	0025	26	0.	*	1	0111	72	0.	*	1	0157	118	228.	*	1	0243	164	321.
1	0026	27	0.	*	1	0112	73	0.	*	1	0158	119	240.	*	1	0244	165	317.
1	0027	28	0.	*	1	0113	74	0.	*	1	0159	120	250.	*	1	0245	166	313.
1	0028	29	0.	*	1	0114	75	0.	*	1	0200	121	258.	*	1	0246	167	309.
1	0029	30	0.	*	1	0115	76	0.	*	1	0201	122	271.	*	1	0247	168	305.
1	0030	31	0.	*	1	0116	77	0.	*	1	0202	123	287.	*	1	0248	169	301.
1	0031	32	0.	*	1	0117	78	0.	*	1	0203	124	294.	*	1	0249	170	297.
1	0032	33	0.	*	1	0118	79	0.	*	1	0204	125	299.	*	1	0250	171	292.
1	0033	34	0.	*	1	0119	80	0.	*	1	0205	126	306.	*	1	0251	172	288.
1	0034	35	0.	*	1	0120	81	0.	*	1	0206	127	313.	*	1	0252	173	284.
1	0035	36	0.	*	1	0121	82	0.	*	1	0207	128	318.	*	1	0253	174	280.
1	0036	37	0.	*	1	0122	83	0.	*	1	0208	129	323.	*	1	0254	175	276.
1	0037	38	0.	*	1	0123	84	0.	*	1	0209	130	328.	*	1	0255	176	271.
1	0038	39	0.	*	1	0124	85	0.	*	1	0210	131	333.	*	1	0256	177	267.
1	0039	40	0.	*	1	0125	86	0.	*	1	0211	132	337.	*	1	0257	178	263.
1	0040	41	0.	*	1	0126	87	0.	*	1	0212	133	340.	*	1	0258	179	259.
1	0041	42	0.	*	1	0127	88	0.	*	1	0213	134	344.	*	1	0259	180	255.
1	0042	43	0.	*	1	0128	89	0.	*	1	0214	135	347.	*	1	0300	181	251.
1	0043	44	0.	*	1	0129	90	0.	*	1	0215	136	350.	*				
1	0044	45	0.	*	1	0130	91	0.	*	1	0216	137	352.	*				
1	0045	46	0.	*	1	0131	92	0.	*	1	0217	138	354.	*				

PEAK FLOW	TIME	MAXIMUM AVERAGE FLOW			
(CFS)	(HR)	6-HR	24-HR	72-HR	3.00-HR
360.	2.38	120.	120.	120.	120.
		.300	.300	.300	.300
		30.	30.	30.	30.
CUMULATIVE AREA =		1.85 SQ MI			

HYDROGRAPH AT STATION C3
SUM OF 3 HYDROGRAPHS
PLAN 1, RATIO = .61

DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*
1	0000	1	0.	*	1	0046	47	0.	*	1	0132	93	0.	*	1	0218	139	55.					
1	0001	2	0.	*	1	0047	48	0.	*	1	0133	94	0.	*	1	0219	140	58.					
1	0002	3	0.	*	1	0048	49	0.	*	1	0134	95	0.	*	1	0220	141	60.					
1	0003	4	0.	*	1	0049	50	0.	*	1	0135	96	0.	*	1	0221	142	62.					
1	0004	5	0.	*	1	0050	51	0.	*	1	0136	97	0.	*	1	0222	143	64.					
1	0005	6	0.	*	1	0051	52	0.	*	1	0137	98	0.	*	1	0223	144	66.					
1	0006	7	0.	*	1	0052	53	0.	*	1	0138	99	0.	*	1	0224	145	68.					
1	0007	8	0.	*	1	0053	54	0.	*	1	0139	100	0.	*	1	0225	146	70.					
1	0008	9	0.	*	1	0054	55	0.	*	1	0140	101	0.	*	1	0226	147	71.					
1	0009	10	0.	*	1	0055	56	0.	*	1	0141	102	0.	*	1	0227	148	73.					
1	0010	11	0.	*	1	0056	57	0.	*	1	0142	103	0.	*	1	0228	149	74.					
1	0011	12	0.	*	1	0057	58	0.	*	1	0143	104	0.	*	1	0229	150	75.					
1	0012	13	0.	*	1	0058	59	0.	*	1	0144	105	0.	*	1	0230	151	79.					
1	0013	14	0.	*	1	0059	60	0.	*	1	0145	106	0.	*	1	0231	152	82.					
1	0014	15	0.	*	1	0100	61	0.	*	1	0146	107	0.	*	1	0232	153	82.					
1	0015	16	0.	*	1	0101	62	0.	*	1	0147	108	0.	*	1	0233	154	82.					
1	0016	17	0.	*	1	0102	63	0.	*	1	0148	109	0.	*	1	0234	155	83.					
1	0017	18	0.	*	1	0103	64	0.	*	1	0149	110	0.	*	1	0235	156	84.					
1	0018	19	0.	*	1	0104	65	0.	*	1	0150	111	0.	*	1	0236	157	84.					
1	0019	20	0.	*	1	0105	66	0.	*	1	0151	112	0.	*	1	0237	158	84.					
1	0020	21	0.	*	1	0106	67	0.	*	1	0152	113	0.	*	1	0238	159	85.					
1	0021	22	0.	*	1	0107	68	0.	*	1	0153	114	0.	*	1	0239	160	85.					
1	0022	23	0.	*	1	0108	69	0.	*	1	0154	115	0.	*	1	0240	161	85.					

pre.out																		
1	0023	24	0.	*	1	0109	70	0.	*	1	0155	116	0.	*	1	0241	162	86.
1	0024	25	0.	*	1	0110	71	0.	*	1	0156	117	0.	*	1	0242	163	88.
1	0025	26	0.	*	1	0111	72	0.	*	1	0157	118	0.	*	1	0243	164	88.
1	0026	27	0.	*	1	0112	73	0.	*	1	0158	119	0.	*	1	0244	165	87.
1	0027	28	0.	*	1	0113	74	0.	*	1	0159	120	0.	*	1	0245	166	87.
1	0028	29	0.	*	1	0114	75	0.	*	1	0200	121	0.	*	1	0246	167	87.
1	0029	30	0.	*	1	0115	76	0.	*	1	0201	122	0.	*	1	0247	168	87.
1	0030	31	0.	*	1	0116	77	0.	*	1	0202	123	0.	*	1	0248	169	86.
1	0031	32	0.	*	1	0117	78	0.	*	1	0203	124	0.	*	1	0249	170	86.
1	0032	33	0.	*	1	0118	79	0.	*	1	0204	125	0.	*	1	0250	171	86.
1	0033	34	0.	*	1	0119	80	0.	*	1	0205	126	0.	*	1	0251	172	85.
1	0034	35	0.	*	1	0120	81	0.	*	1	0206	127	0.	*	1	0252	173	85.
1	0035	36	0.	*	1	0121	82	0.	*	1	0207	128	0.	*	1	0253	174	84.
1	0036	37	0.	*	1	0122	83	0.	*	1	0208	129	0.	*	1	0254	175	83.
1	0037	38	0.	*	1	0123	84	0.	*	1	0209	130	0.	*	1	0255	176	83.
1	0038	39	0.	*	1	0124	85	0.	*	1	0210	131	0.	*	1	0256	177	82.
1	0039	40	0.	*	1	0125	86	0.	*	1	0211	132	0.	*	1	0257	178	81.
1	0040	41	0.	*	1	0126	87	0.	*	1	0212	133	0.	*	1	0258	179	81.
1	0041	42	0.	*	1	0127	88	0.	*	1	0213	134	20.	*	1	0259	180	80.
1	0042	43	0.	*	1	0128	89	0.	*	1	0214	135	48.	*	1	0300	181	79.
1	0043	44	0.	*	1	0129	90	0.	*	1	0215	136	47.	*				
1	0044	45	0.	*	1	0130	91	0.	*	1	0216	137	48.	*				
1	0045	46	0.	*	1	0131	92	0.	*	1	0217	138	53.	*				

PEAK FLOW	TIME	MAXIMUM AVERAGE FLOW			
(CFS)	(HR)	6-HR	24-HR	72-HR	3.00-HR
88.	2.70	20.	20.	20.	20.
		.050	.050	.050	.050
		(INCHES)	(INCHES)	(INCHES)	(INCHES)
		(AC-FT)	(AC-FT)	(AC-FT)	(AC-FT)
		5.	5.	5.	5.

CUMULATIVE AREA = 1.85 SQ MI

*** **

 * *
 146 KK * OE1 *
 * *

OE1

SUBBASIN RUNOFF DATA

148 BA SUBBASIN CHARACTERISTICS
 TAREA 2.33 SUBBASIN AREA

PRECIPITATION DATA

23 PB STORM 2.13 BASIN TOTAL PRECIPITATION

24 PI INCREMENTAL PRECIPITATION PATTERN

.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.05	.05	.05	.05	.05	.04	.04	.04	.04	.04	.04
.03	.03	.03	.03	.03	.02	.02	.02	.02	.02	.02
.01	.01	.01	.01	.01	.01	.01	.01	.01	.01	.01
.01	.01	.01	.01	.01	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00

149 LS SCS LOSS RATE
 STRTL .63 INITIAL ABSTRACTION
 CRVNBR 76.00 CURVE NUMBER
 RTIMP .00 PERCENT IMPERVIOUS AREA

150 UD SCS DIMENSIONLESS UNITGRAPH
 TLAG .70 LAG

UNIT HYDROGRAPH
 213 END-OF-PERIOD ORDINATES

11.	22.	34.	45.	67.	93.	pre.out	119.	145.	175.	208.
242.	275.	311.	356.	401.	445.		490.	549.	609.	668.
728.	795.	866.	937.	1007.	1073.		1133.	1193.	1252.	1309.
1350.	1391.	1432.	1473.	1497.	1519.		1542.	1564.	1574.	1578.
1582.	1586.	1586.	1583.	1579.	1575.		1569.	1547.	1525.	1502.
1480.	1454.	1428.	1402.	1376.	1348.		1318.	1288.	1258.	1226.
1189.	1152.	1114.	1077.	1032.	987.		942.	898.	859.	822.
785.	747.	716.	690.	664.	638.		613.	591.	568.	546.
524.	505.	486.	468.	449.	434.		421.	407.	393.	380.
366.	353.	339.	326.	315.	304.		293.	281.	270.	259.
248.	237.	228.	221.	213.	206.		198.	191.	183.	176.
169.	163.	158.	152.	146.	141.		135.	130.	124.	120.
115.	111.	107.	103.	99.	95.		91.	87.	84.	81.
79.	76.	73.	70.	67.	65.		62.	60.	58.	56.
54.	52.	50.	48.	46.	44.		43.	41.	40.	38.
37.	35.	34.	33.	32.	30.		29.	28.	27.	26.
25.	24.	23.	22.	22.	21.		20.	19.	19.	18.
17.	17.	16.	16.	15.	15.		15.	14.	14.	13.
13.	12.	12.	11.	11.	11.		10.	10.	9.	9.
8.	8.	7.	7.	7.	6.		6.	6.	5.	5.
5.	4.	4.	3.	3.	3.		2.	2.	2.	1.
1.	0.	0.								

HYDROGRAPH AT STATION OE1

DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	*	DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
1	0000	1	.00	.00	.00	.00	0.	*	1	0131	92	.00	.00	.00	531.	
1	0001	2	.00	.00	.00	.00	0.	*	1	0132	93	.00	.00	.00	535.	
1	0002	3	.00	.00	.00	.00	0.	*	1	0133	94	.00	.00	.00	539.	
1	0003	4	.00	.00	.00	.00	0.	*	1	0134	95	.00	.00	.00	542.	
1	0004	5	.00	.00	.00	.00	0.	*	1	0135	96	.00	.00	.00	544.	
1	0005	6	.00	.00	.00	.00	0.	*	1	0136	97	.00	.00	.00	545.	
1	0006	7	.00	.00	.00	.00	0.	*	1	0137	98	.00	.00	.00	545.	
1	0007	8	.00	.00	.00	.00	0.	*	1	0138	99	.00	.00	.00	545.	
1	0008	9	.00	.00	.00	.00	0.	*	1	0139	100	.00	.00	.00	544.	
1	0009	10	.00	.00	.00	.00	0.	*	1	0140	101	.00	.00	.00	542.	
1	0010	11	.00	.00	.00	.00	0.	*	1	0141	102	.00	.00	.00	540.	
1	0011	12	.00	.00	.00	.00	0.	*	1	0142	103	.00	.00	.00	537.	
1	0012	13	.00	.00	.00	.00	0.	*	1	0143	104	.00	.00	.00	533.	
1	0013	14	.00	.00	.00	.00	0.	*	1	0144	105	.00	.00	.00	529.	
1	0014	15	.00	.00	.00	.00	0.	*	1	0145	106	.00	.00	.00	524.	
1	0015	16	.00	.00	.00	.00	0.	*	1	0146	107	.00	.00	.00	518.	
1	0016	17	.00	.00	.00	.00	0.	*	1	0147	108	.00	.00	.00	512.	
1	0017	18	.00	.00	.00	.00	0.	*	1	0148	109	.00	.00	.00	505.	
1	0018	19	.00	.00	.00	.00	0.	*	1	0149	110	.00	.00	.00	497.	
1	0019	20	.00	.00	.00	.00	0.	*	1	0150	111	.00	.00	.00	490.	
1	0020	21	.00	.00	.00	.00	0.	*	1	0151	112	.00	.00	.00	482.	
1	0021	22	.00	.00	.00	.00	0.	*	1	0152	113	.00	.00	.00	474.	
1	0022	23	.00	.00	.00	.00	0.	*	1	0153	114	.00	.00	.00	465.	
1	0023	24	.00	.00	.00	.00	0.	*	1	0154	115	.00	.00	.00	456.	
1	0024	25	.00	.00	.00	.00	0.	*	1	0155	116	.00	.00	.00	448.	
1	0025	26	.00	.00	.00	.00	0.	*	1	0156	117	.00	.00	.00	439.	
1	0026	27	.00	.00	.00	.00	0.	*	1	0157	118	.00	.00	.00	430.	
1	0027	28	.00	.00	.00	.00	0.	*	1	0158	119	.00	.00	.00	421.	
1	0028	29	.00	.00	.00	.00	0.	*	1	0159	120	.00	.00	.00	412.	
1	0029	30	.00	.00	.00	.00	0.	*	1	0200	121	.00	.00	.00	403.	
1	0030	31	.00	.00	.00	.00	0.	*	1	0201	122	.00	.00	.00	394.	
1	0031	32	.11	.11	.00	0.	0.	*	1	0202	123	.00	.00	.00	385.	
1	0032	33	.11	.11	.00	0.	0.	*	1	0203	124	.00	.00	.00	376.	
1	0033	34	.11	.11	.00	0.	0.	*	1	0204	125	.00	.00	.00	367.	
1	0034	35	.11	.11	.00	0.	0.	*	1	0205	126	.00	.00	.00	359.	
1	0035	36	.11	.11	.00	0.	0.	*	1	0206	127	.00	.00	.00	350.	
1	0036	37	.09	.09	.00	0.	0.	*	1	0207	128	.00	.00	.00	342.	
1	0037	38	.09	.08	.01	0.	0.	*	1	0208	129	.00	.00	.00	333.	
1	0038	39	.09	.08	.01	0.	0.	*	1	0209	130	.00	.00	.00	325.	
1	0039	40	.09	.07	.01	1.	0.	*	1	0210	131	.00	.00	.00	317.	
1	0040	41	.09	.07	.02	1.	0.	*	1	0211	132	.00	.00	.00	309.	
1	0041	42	.06	.05	.01	2.	0.	*	1	0212	133	.00	.00	.00	302.	
1	0042	43	.06	.05	.02	3.	0.	*	1	0213	134	.00	.00	.00	294.	
1	0043	44	.06	.04	.02	4.	0.	*	1	0214	135	.00	.00	.00	287.	
1	0044	45	.06	.04	.02	6.	0.	*	1	0215	136	.00	.00	.00	279.	
1	0045	46	.06	.04	.02	9.	0.	*	1	0216	137	.00	.00	.00	272.	
1	0046	47	.04	.03	.01	12.	0.	*	1	0217	138	.00	.00	.00	265.	
1	0047	48	.04	.03	.01	15.	0.	*	1	0218	139	.00	.00	.00	258.	
1	0048	49	.04	.02	.01	19.	0.	*	1	0219	140	.00	.00	.00	252.	
1	0049	50	.04	.02	.01	23.	0.	*	1	0220	141	.00	.00	.00	245.	
1	0050	51	.04	.02	.02	28.	0.	*	1	0221	142	.00	.00	.00	239.	
1	0051	52	.02	.01	.01	34.	0.	*	1	0222	143	.00	.00	.00	233.	
1	0052	53	.02	.01	.01	40.	0.	*	1	0223	144	.00	.00	.00	227.	
1	0053	54	.02	.01	.01	47.	0.	*	1	0224	145	.00	.00	.00	221.	
1	0054	55	.02	.01	.01	54.	0.	*	1	0225	146	.00	.00	.00	215.	
1	0055	56	.02	.01	.01	63.	0.	*	1	0226	147	.00	.00	.00	210.	
1	0056	57	.02	.01	.01	72.	0.	*	1	0227	148	.00	.00	.00	204.	
1	0057	58	.02	.01	.01	82.	0.	*	1	0228	149	.00	.00	.00	199.	
1	0058	59	.02	.01	.01	92.	0.	*	1	0229	150	.00	.00	.00	194.	

pre.out														
1	0059	60	.02	.01	.01	104.	*	1	0230	151	.00	.00	.00	189.
1	0100	61	.02	.01	.01	116.	*	1	0231	152	.00	.00	.00	185.
1	0101	62	.01	.01	.01	129.	*	1	0232	153	.00	.00	.00	180.
1	0102	63	.01	.01	.01	143.	*	1	0233	154	.00	.00	.00	176.
1	0103	64	.01	.01	.01	158.	*	1	0234	155	.00	.00	.00	172.
1	0104	65	.01	.01	.01	174.	*	1	0235	156	.00	.00	.00	167.
1	0105	66	.01	.01	.01	190.	*	1	0236	157	.00	.00	.00	164.
1	0106	67	.01	.01	.00	206.	*	1	0237	158	.00	.00	.00	160.
1	0107	68	.01	.01	.00	223.	*	1	0238	159	.00	.00	.00	156.
1	0108	69	.01	.01	.00	240.	*	1	0239	160	.00	.00	.00	153.
1	0109	70	.01	.01	.00	258.	*	1	0240	161	.00	.00	.00	150.
1	0110	71	.01	.01	.00	275.	*	1	0241	162	.00	.00	.00	147.
1	0111	72	.01	.00	.00	292.	*	1	0242	163	.00	.00	.00	144.
1	0112	73	.01	.00	.00	310.	*	1	0243	164	.00	.00	.00	141.
1	0113	74	.01	.00	.00	327.	*	1	0244	165	.00	.00	.00	138.
1	0114	75	.01	.00	.00	343.	*	1	0245	166	.00	.00	.00	135.
1	0115	76	.01	.00	.00	360.	*	1	0246	167	.00	.00	.00	133.
1	0116	77	.01	.00	.00	375.	*	1	0247	168	.00	.00	.00	130.
1	0117	78	.01	.00	.00	391.	*	1	0248	169	.00	.00	.00	128.
1	0118	79	.01	.00	.00	405.	*	1	0249	170	.00	.00	.00	126.
1	0119	80	.01	.00	.00	419.	*	1	0250	171	.00	.00	.00	123.
1	0120	81	.01	.00	.00	433.	*	1	0251	172	.00	.00	.00	121.
1	0121	82	.01	.00	.00	445.	*	1	0252	173	.00	.00	.00	119.
1	0122	83	.01	.00	.00	458.	*	1	0253	174	.00	.00	.00	117.
1	0123	84	.01	.00	.00	469.	*	1	0254	175	.00	.00	.00	115.
1	0124	85	.01	.00	.00	480.	*	1	0255	176	.00	.00	.00	114.
1	0125	86	.01	.00	.00	489.	*	1	0256	177	.00	.00	.00	112.
1	0126	87	.01	.00	.00	498.	*	1	0257	178	.00	.00	.00	110.
1	0127	88	.01	.00	.00	507.	*	1	0258	179	.00	.00	.00	109.
1	0128	89	.01	.00	.00	514.	*	1	0259	180	.00	.00	.00	107.
1	0129	90	.01	.00	.00	521.	*	1	0300	181	.00	.00	.00	106.
1	0130	91	.01	.00	.00	526.	*							

TOTAL RAINFALL = 2.13, TOTAL LOSS = 1.65, TOTAL EXCESS = .48

PEAK FLOW	TIME		MAXIMUM	AVERAGE	FLOW	
(CFS)	(HR)	(CFS)	6-HR	24-HR	72-HR	3.00-HR
+	545.	1.62	216.	216.	216.	216.
		(INCHES)	.431	.431	.431	.431
		(AC-FT)	54.	54.	54.	54.

CUMULATIVE AREA = 2.33 SQ MI

HYDROGRAPH AT STATION OE1
PLAN 1, RATIO = 1.00

DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	*	DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
1	0000	1	.00	.00	.00	0.	0.	*	1	0131	92	.00	.00	.00	531.	
1	0001	2	.00	.00	.00	0.	0.	*	1	0132	93	.00	.00	.00	535.	
1	0002	3	.00	.00	.00	0.	0.	*	1	0133	94	.00	.00	.00	539.	
1	0003	4	.00	.00	.00	0.	0.	*	1	0134	95	.00	.00	.00	542.	
1	0004	5	.00	.00	.00	0.	0.	*	1	0135	96	.00	.00	.00	544.	
1	0005	6	.00	.00	.00	0.	0.	*	1	0136	97	.00	.00	.00	545.	
1	0006	7	.00	.00	.00	0.	0.	*	1	0137	98	.00	.00	.00	545.	
1	0007	8	.00	.00	.00	0.	0.	*	1	0138	99	.00	.00	.00	545.	
1	0008	9	.00	.00	.00	0.	0.	*	1	0139	100	.00	.00	.00	544.	
1	0009	10	.00	.00	.00	0.	0.	*	1	0140	101	.00	.00	.00	542.	
1	0010	11	.00	.00	.00	0.	0.	*	1	0141	102	.00	.00	.00	540.	
1	0011	12	.00	.00	.00	0.	0.	*	1	0142	103	.00	.00	.00	537.	
1	0012	13	.00	.00	.00	0.	0.	*	1	0143	104	.00	.00	.00	533.	
1	0013	14	.00	.00	.00	0.	0.	*	1	0144	105	.00	.00	.00	529.	
1	0014	15	.00	.00	.00	0.	0.	*	1	0145	106	.00	.00	.00	524.	
1	0015	16	.00	.00	.00	0.	0.	*	1	0146	107	.00	.00	.00	518.	
1	0016	17	.00	.00	.00	0.	0.	*	1	0147	108	.00	.00	.00	512.	
1	0017	18	.00	.00	.00	0.	0.	*	1	0148	109	.00	.00	.00	505.	
1	0018	19	.00	.00	.00	0.	0.	*	1	0149	110	.00	.00	.00	497.	
1	0019	20	.00	.00	.00	0.	0.	*	1	0150	111	.00	.00	.00	490.	
1	0020	21	.00	.00	.00	0.	0.	*	1	0151	112	.00	.00	.00	482.	
1	0021	22	.00	.00	.00	0.	0.	*	1	0152	113	.00	.00	.00	474.	
1	0022	23	.00	.00	.00	0.	0.	*	1	0153	114	.00	.00	.00	465.	
1	0023	24	.00	.00	.00	0.	0.	*	1	0154	115	.00	.00	.00	456.	
1	0024	25	.00	.00	.00	0.	0.	*	1	0155	116	.00	.00	.00	448.	
1	0025	26	.00	.00	.00	0.	0.	*	1	0156	117	.00	.00	.00	439.	
1	0026	27	.00	.00	.00	0.	0.	*	1	0157	118	.00	.00	.00	430.	
1	0027	28	.00	.00	.00	0.	0.	*	1	0158	119	.00	.00	.00	421.	
1	0028	29	.00	.00	.00	0.	0.	*	1	0159	120	.00	.00	.00	412.	
1	0029	30	.00	.00	.00	0.	0.	*	1	0200	121	.00	.00	.00	403.	
1	0030	31	.00	.00	.00	0.	0.	*	1	0201	122	.00	.00	.00	394.	
1	0031	32	.11	.11	.00	0.	0.	*	1	0202	123	.00	.00	.00	385.	
1	0032	33	.11	.11	.00	0.	0.	*	1	0203	124	.00	.00	.00	376.	

pre.out														
ID	STATION	DATE	RAIN	LOSS	EXCESS	COMP Q	DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
1	0033	34	.11	.11	.00	0.	*	1	0204	125	.00	.00	.00	367.
1	0034	35	.11	.11	.00	0.	*	1	0205	126	.00	.00	.00	359.
1	0035	36	.11	.11	.00	0.	*	1	0206	127	.00	.00	.00	350.
1	0036	37	.09	.09	.00	0.	*	1	0207	128	.00	.00	.00	342.
1	0037	38	.09	.08	.01	0.	*	1	0208	129	.00	.00	.00	333.
1	0038	39	.09	.08	.01	0.	*	1	0209	130	.00	.00	.00	325.
1	0039	40	.09	.07	.01	1.	*	1	0210	131	.00	.00	.00	317.
1	0040	41	.09	.07	.02	1.	*	1	0211	132	.00	.00	.00	309.
1	0041	42	.06	.05	.01	2.	*	1	0212	133	.00	.00	.00	302.
1	0042	43	.06	.05	.02	3.	*	1	0213	134	.00	.00	.00	294.
1	0043	44	.06	.04	.02	4.	*	1	0214	135	.00	.00	.00	287.
1	0044	45	.06	.04	.02	6.	*	1	0215	136	.00	.00	.00	279.
1	0045	46	.06	.04	.02	9.	*	1	0216	137	.00	.00	.00	272.
1	0046	47	.04	.03	.01	12.	*	1	0217	138	.00	.00	.00	265.
1	0047	48	.04	.03	.01	15.	*	1	0218	139	.00	.00	.00	258.
1	0048	49	.04	.02	.01	19.	*	1	0219	140	.00	.00	.00	252.
1	0049	50	.04	.02	.01	23.	*	1	0220	141	.00	.00	.00	245.
1	0050	51	.04	.02	.02	28.	*	1	0221	142	.00	.00	.00	239.
1	0051	52	.02	.01	.01	34.	*	1	0222	143	.00	.00	.00	233.
1	0052	53	.02	.01	.01	40.	*	1	0223	144	.00	.00	.00	227.
1	0053	54	.02	.01	.01	47.	*	1	0224	145	.00	.00	.00	221.
1	0054	55	.02	.01	.01	54.	*	1	0225	146	.00	.00	.00	215.
1	0055	56	.02	.01	.01	63.	*	1	0226	147	.00	.00	.00	210.
1	0056	57	.02	.01	.01	72.	*	1	0227	148	.00	.00	.00	204.
1	0057	58	.02	.01	.01	82.	*	1	0228	149	.00	.00	.00	199.
1	0058	59	.02	.01	.01	92.	*	1	0229	150	.00	.00	.00	194.
1	0059	60	.02	.01	.01	104.	*	1	0230	151	.00	.00	.00	189.
1	0100	61	.02	.01	.01	116.	*	1	0231	152	.00	.00	.00	185.
1	0101	62	.01	.01	.01	129.	*	1	0232	153	.00	.00	.00	180.
1	0102	63	.01	.01	.01	143.	*	1	0233	154	.00	.00	.00	176.
1	0103	64	.01	.01	.01	158.	*	1	0234	155	.00	.00	.00	172.
1	0104	65	.01	.01	.01	174.	*	1	0235	156	.00	.00	.00	167.
1	0105	66	.01	.01	.01	190.	*	1	0236	157	.00	.00	.00	164.
1	0106	67	.01	.01	.00	206.	*	1	0237	158	.00	.00	.00	160.
1	0107	68	.01	.01	.00	223.	*	1	0238	159	.00	.00	.00	156.
1	0108	69	.01	.01	.00	240.	*	1	0239	160	.00	.00	.00	153.
1	0109	70	.01	.01	.00	258.	*	1	0240	161	.00	.00	.00	150.
1	0110	71	.01	.01	.00	275.	*	1	0241	162	.00	.00	.00	147.
1	0111	72	.01	.00	.00	292.	*	1	0242	163	.00	.00	.00	144.
1	0112	73	.01	.00	.00	310.	*	1	0243	164	.00	.00	.00	141.
1	0113	74	.01	.00	.00	327.	*	1	0244	165	.00	.00	.00	138.
1	0114	75	.01	.00	.00	343.	*	1	0245	166	.00	.00	.00	135.
1	0115	76	.01	.00	.00	360.	*	1	0246	167	.00	.00	.00	133.
1	0116	77	.01	.00	.00	375.	*	1	0247	168	.00	.00	.00	130.
1	0117	78	.01	.00	.00	391.	*	1	0248	169	.00	.00	.00	128.
1	0118	79	.01	.00	.00	405.	*	1	0249	170	.00	.00	.00	126.
1	0119	80	.01	.00	.00	419.	*	1	0250	171	.00	.00	.00	123.
1	0120	81	.01	.00	.00	433.	*	1	0251	172	.00	.00	.00	121.
1	0121	82	.01	.00	.00	445.	*	1	0252	173	.00	.00	.00	119.
1	0122	83	.01	.00	.00	458.	*	1	0253	174	.00	.00	.00	117.
1	0123	84	.01	.00	.00	469.	*	1	0254	175	.00	.00	.00	115.
1	0124	85	.01	.00	.00	480.	*	1	0255	176	.00	.00	.00	114.
1	0125	86	.01	.00	.00	489.	*	1	0256	177	.00	.00	.00	112.
1	0126	87	.01	.00	.00	498.	*	1	0257	178	.00	.00	.00	110.
1	0127	88	.01	.00	.00	507.	*	1	0258	179	.00	.00	.00	109.
1	0128	89	.01	.00	.00	514.	*	1	0259	180	.00	.00	.00	107.
1	0129	90	.01	.00	.00	521.	*	1	0300	181	.00	.00	.00	106.
1	0130	91	.01	.00	.00	526.	*							

TOTAL RAINFALL = 2.13, TOTAL LOSS = 1.65, TOTAL EXCESS = .48

PEAK FLOW	TIME		MAXIMUM	AVERAGE	FLOW	
+	(CFS)	(HR)	6-HR	24-HR	72-HR	3.00-HR
+	545.	1.62	216.	216.	216.	216.
		(INCHES)	.431	.431	.431	.431
		(AC-FT)	54.	54.	54.	54.

CUMULATIVE AREA = 2.33 SQ MI

HYDROGRAPH AT STATION OE1
PLAN 1, RATIO = .61

DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q		DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
1	0000	1	.00	.00	.00	0.	*		1	0131	92	.00	.00	.00	106.	
1	0001	2	.00	.00	.00	0.	*		1	0132	93	.00	.00	.00	108.	
1	0002	3	.00	.00	.00	0.	*		1	0133	94	.00	.00	.00	110.	
1	0003	4	.00	.00	.00	0.	*		1	0134	95	.00	.00	.00	112.	
1	0004	5	.00	.00	.00	0.	*		1	0135	96	.00	.00	.00	113.	
1	0005	6	.00	.00	.00	0.	*		1	0136	97	.00	.00	.00	115.	
1	0006	7	.00	.00	.00	0.	*		1	0137	98	.00	.00	.00	116.	

													pre.out	
1	0007	8	.00	.00	.00	0.	*	1	0138	99	.00	.00	.00	117.
1	0008	9	.00	.00	.00	0.	*	1	0139	100	.00	.00	.00	118.
1	0009	10	.00	.00	.00	0.	*	1	0140	101	.00	.00	.00	119.
1	0010	11	.00	.00	.00	0.	*	1	0141	102	.00	.00	.00	120.
1	0011	12	.00	.00	.00	0.	*	1	0142	103	.00	.00	.00	120.
1	0012	13	.00	.00	.00	0.	*	1	0143	104	.00	.00	.00	121.
1	0013	14	.00	.00	.00	0.	*	1	0144	105	.00	.00	.00	121.
1	0014	15	.00	.00	.00	0.	*	1	0145	106	.00	.00	.00	121.
1	0015	16	.00	.00	.00	0.	*	1	0146	107	.00	.00	.00	121.
1	0016	17	.00	.00	.00	0.	*	1	0147	108	.00	.00	.00	120.
1	0017	18	.00	.00	.00	0.	*	1	0148	109	.00	.00	.00	120.
1	0018	19	.00	.00	.00	0.	*	1	0149	110	.00	.00	.00	119.
1	0019	20	.00	.00	.00	0.	*	1	0150	111	.00	.00	.00	118.
1	0020	21	.00	.00	.00	0.	*	1	0151	112	.00	.00	.00	117.
1	0021	22	.00	.00	.00	0.	*	1	0152	113	.00	.00	.00	116.
1	0022	23	.00	.00	.00	0.	*	1	0153	114	.00	.00	.00	115.
1	0023	24	.00	.00	.00	0.	*	1	0154	115	.00	.00	.00	114.
1	0024	25	.00	.00	.00	0.	*	1	0155	116	.00	.00	.00	112.
1	0025	26	.00	.00	.00	0.	*	1	0156	117	.00	.00	.00	110.
1	0026	27	.00	.00	.00	0.	*	1	0157	118	.00	.00	.00	109.
1	0027	28	.00	.00	.00	0.	*	1	0158	119	.00	.00	.00	107.
1	0028	29	.00	.00	.00	0.	*	1	0159	120	.00	.00	.00	105.
1	0029	30	.00	.00	.00	0.	*	1	0200	121	.00	.00	.00	104.
1	0030	31	.00	.00	.00	0.	*	1	0201	122	.00	.00	.00	102.
1	0031	32	.07	.07	.00	0.	*	1	0202	123	.00	.00	.00	100.
1	0032	33	.07	.07	.00	0.	*	1	0203	124	.00	.00	.00	98.
1	0033	34	.07	.07	.00	0.	*	1	0204	125	.00	.00	.00	96.
1	0034	35	.07	.07	.00	0.	*	1	0205	126	.00	.00	.00	94.
1	0035	36	.07	.07	.00	0.	*	1	0206	127	.00	.00	.00	92.
1	0036	37	.05	.05	.00	0.	*	1	0207	128	.00	.00	.00	90.
1	0037	38	.05	.05	.00	0.	*	1	0208	129	.00	.00	.00	89.
1	0038	39	.05	.05	.00	0.	*	1	0209	130	.00	.00	.00	87.
1	0039	40	.05	.05	.00	0.	*	1	0210	131	.00	.00	.00	85.
1	0040	41	.05	.05	.00	0.	*	1	0211	132	.00	.00	.00	83.
1	0041	42	.04	.04	.00	0.	*	1	0212	133	.00	.00	.00	81.
1	0042	43	.04	.04	.00	0.	*	1	0213	134	.00	.00	.00	79.
1	0043	44	.04	.04	.00	0.	*	1	0214	135	.00	.00	.00	78.
1	0044	45	.04	.03	.00	0.	*	1	0215	136	.00	.00	.00	76.
1	0045	46	.04	.03	.00	0.	*	1	0216	137	.00	.00	.00	74.
1	0046	47	.02	.02	.00	0.	*	1	0217	138	.00	.00	.00	72.
1	0047	48	.02	.02	.00	1.	*	1	0218	139	.00	.00	.00	71.
1	0048	49	.02	.02	.00	1.	*	1	0219	140	.00	.00	.00	69.
1	0049	50	.02	.02	.00	1.	*	1	0220	141	.00	.00	.00	68.
1	0050	51	.02	.02	.00	2.	*	1	0221	142	.00	.00	.00	66.
1	0051	52	.01	.01	.00	2.	*	1	0222	143	.00	.00	.00	64.
1	0052	53	.01	.01	.00	3.	*	1	0223	144	.00	.00	.00	63.
1	0053	54	.01	.01	.00	4.	*	1	0224	145	.00	.00	.00	62.
1	0054	55	.01	.01	.00	5.	*	1	0225	146	.00	.00	.00	60.
1	0055	56	.01	.01	.00	6.	*	1	0226	147	.00	.00	.00	59.
1	0056	57	.01	.01	.00	7.	*	1	0227	148	.00	.00	.00	57.
1	0057	58	.01	.01	.00	8.	*	1	0228	149	.00	.00	.00	56.
1	0058	59	.01	.01	.00	10.	*	1	0229	150	.00	.00	.00	55.
1	0059	60	.01	.01	.00	11.	*	1	0230	151	.00	.00	.00	54.
1	0100	61	.01	.01	.00	13.	*	1	0231	152	.00	.00	.00	52.
1	0101	62	.01	.01	.00	15.	*	1	0232	153	.00	.00	.00	51.
1	0102	63	.01	.01	.00	17.	*	1	0233	154	.00	.00	.00	50.
1	0103	64	.01	.01	.00	19.	*	1	0234	155	.00	.00	.00	49.
1	0104	65	.01	.01	.00	21.	*	1	0235	156	.00	.00	.00	48.
1	0105	66	.01	.01	.00	24.	*	1	0236	157	.00	.00	.00	47.
1	0106	67	.01	.00	.00	26.	*	1	0237	158	.00	.00	.00	46.
1	0107	68	.01	.00	.00	29.	*	1	0238	159	.00	.00	.00	45.
1	0108	69	.01	.00	.00	32.	*	1	0239	160	.00	.00	.00	45.
1	0109	70	.01	.00	.00	35.	*	1	0240	161	.00	.00	.00	44.
1	0110	71	.01	.00	.00	39.	*	1	0241	162	.00	.00	.00	43.
1	0111	72	.00	.00	.00	42.	*	1	0242	163	.00	.00	.00	42.
1	0112	73	.00	.00	.00	46.	*	1	0243	164	.00	.00	.00	42.
1	0113	74	.00	.00	.00	49.	*	1	0244	165	.00	.00	.00	41.
1	0114	75	.00	.00	.00	53.	*	1	0245	166	.00	.00	.00	40.
1	0115	76	.00	.00	.00	56.	*	1	0246	167	.00	.00	.00	40.
1	0116	77	.00	.00	.00	60.	*	1	0247	168	.00	.00	.00	39.
1	0117	78	.00	.00	.00	64.	*	1	0248	169	.00	.00	.00	38.
1	0118	79	.00	.00	.00	67.	*	1	0249	170	.00	.00	.00	38.
1	0119	80	.00	.00	.00	71.	*	1	0250	171	.00	.00	.00	37.
1	0120	81	.00	.00	.00	74.	*	1	0251	172	.00	.00	.00	37.
1	0121	82	.00	.00	.00	78.	*	1	0252	173	.00	.00	.00	36.
1	0122	83	.00	.00	.00	81.	*	1	0253	174	.00	.00	.00	36.
1	0123	84	.00	.00	.00	84.	*	1	0254	175	.00	.00	.00	35.
1	0124	85	.00	.00	.00	87.	*	1	0255	176	.00	.00	.00	35.
1	0125	86	.00	.00	.00	90.	*	1	0256	177	.00	.00	.00	34.
1	0126	87	.00	.00	.00	93.	*	1	0257	178	.00	.00	.00	34.
1	0127	88	.00	.00	.00	96.	*	1	0258	179	.00	.00	.00	34.
1	0128	89	.00	.00	.00	99.	*	1	0259	180	.00	.00	.00	33.
1	0129	90	.00	.00	.00	101.	*	1	0300	181	.00	.00	.00	33.
1	0130	91	.00	.00	.00	104.	*							

TOTAL RAINFALL = 1.29, TOTAL LOSS = 1.18, TOTAL EXCESS = .11

PEAK FLOW TIME MAXIMUM AVERAGE FLOW

```

+ (CFS) (HR) 6-HR 24-HR 72-HR pre.out
+ 121. 1.75 (CFS) 49. 49. 49. 3.00-HR
(INCHES) .097 .097 .097 .097
(AC-FT) 12. 12. 12. 12.

CUMULATIVE AREA = 2.33 SQ MI

```

```

*****
*          *
151 KK    *      C4 *
*          *
*****

COMBINE C1-C3 & OE1

```

```

153 HC      HYDROGRAPH COMBINATION
            ICOMP      4 NUMBER OF HYDROGRAPHS TO COMBINE

```

```

HYDROGRAPH AT STATION      C4
SUM OF 4 HYDROGRAPHS
PLAN 1,  RATIO = 1.00

```

DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	
1		0000	1	0.	*	1		0046	47	12.	*	1		0132	93	1091.	*	1		0218	139	1483.	*	
1		0001	2	0.	*	1		0047	48	15.	*	1		0133	94	1113.	*	1		0219	140	1470.	*	
1		0002	3	0.	*	1		0048	49	19.	*	1		0134	95	1133.	*	1		0220	141	1457.	*	
1		0003	4	0.	*	1		0049	50	23.	*	1		0135	96	1151.	*	1		0221	142	1443.	*	
1		0004	5	0.	*	1		0050	51	28.	*	1		0136	97	1176.	*	1		0222	143	1429.	*	
1		0005	6	0.	*	1		0051	52	34.	*	1		0137	98	1236.	*	1		0223	144	1415.	*	
1		0006	7	0.	*	1		0052	53	40.	*	1		0138	99	1273.	*	1		0224	145	1401.	*	
1		0007	8	0.	*	1		0053	54	47.	*	1		0139	100	1283.	*	1		0225	146	1386.	*	
1		0008	9	0.	*	1		0054	55	54.	*	1		0140	101	1297.	*	1		0226	147	1371.	*	
1		0009	10	0.	*	1		0055	56	63.	*	1		0141	102	1315.	*	1		0227	148	1356.	*	
1		0010	11	0.	*	1		0056	57	72.	*	1		0142	103	1324.	*	1		0228	149	1341.	*	
1		0011	12	0.	*	1		0057	58	82.	*	1		0143	104	1331.	*	1		0229	150	1326.	*	
1		0012	13	0.	*	1		0058	59	92.	*	1		0144	105	1354.	*	1		0230	151	1310.	*	
1		0013	14	0.	*	1		0059	60	104.	*	1		0145	106	1374.	*	1		0231	152	1294.	*	
1		0014	15	0.	*	1		0100	61	116.	*	1		0146	107	1377.	*	1		0232	153	1278.	*	
1		0015	16	0.	*	1		0101	62	129.	*	1		0147	108	1378.	*	1		0233	154	1262.	*	
1		0016	17	0.	*	1		0102	63	143.	*	1		0148	109	1398.	*	1		0234	155	1246.	*	
1		0017	18	0.	*	1		0103	64	158.	*	1		0149	110	1477.	*	1		0235	156	1230.	*	
1		0018	19	0.	*	1		0104	65	174.	*	1		0150	111	1514.	*	1		0236	157	1213.	*	
1		0019	20	0.	*	1		0105	66	190.	*	1		0151	112	1527.	*	1		0237	158	1197.	*	
1		0020	21	0.	*	1		0106	67	206.	*	1		0152	113	1536.	*	1		0238	159	1180.	*	
1		0021	22	0.	*	1		0107	68	223.	*	1		0153	114	1549.	*	1		0239	160	1163.	*	
1		0022	23	0.	*	1		0108	69	240.	*	1		0154	115	1582.	*	1		0240	161	1146.	*	
1		0023	24	0.	*	1		0109	70	258.	*	1		0155	116	1600.	*	1		0241	162	1129.	*	
1		0024	25	0.	*	1		0110	71	275.	*	1		0156	117	1596.	*	1		0242	163	1113.	*	
1		0025	26	0.	*	1		0111	72	293.	*	1		0157	118	1601.	*	1		0243	164	1096.	*	
1		0026	27	0.	*	1		0112	73	310.	*	1		0158	119	1607.	*	1		0244	165	1079.	*	
1		0027	28	0.	*	1		0113	74	328.	*	1		0159	120	1606.	*	1		0245	166	1062.	*	
1		0028	29	0.	*	1		0114	75	345.	*	1		0200	121	1605.	*	1		0246	167	1046.	*	
1		0029	30	0.	*	1		0115	76	362.	*	1		0201	122	1607.	*	1		0247	168	1030.	*	
1		0030	31	0.	*	1		0116	77	439.	*	1		0202	123	1613.	*	1		0248	169	1013.	*	
1		0031	32	0.	*	1		0117	78	529.	*	1		0203	124	1609.	*	1		0249	170	997.	*	
1		0032	33	0.	*	1		0118	79	567.	*	1		0204	125	1602.	*	1		0250	171	981.	*	
1		0033	34	0.	*	1		0119	80	600.	*	1		0205	126	1598.	*	1		0251	172	966.	*	
1		0034	35	0.	*	1		0120	81	632.	*	1		0206	127	1597.	*	1		0252	173	950.	*	
1		0035	36	0.	*	1		0121	82	661.	*	1		0207	128	1593.	*	1		0253	174	935.	*	
1		0036	37	0.	*	1		0122	83	689.	*	1		0208	129	1585.	*	1		0254	175	920.	*	
1		0037	38	0.	*	1		0123	84	720.	*	1		0209	130	1576.	*	1		0255	176	906.	*	
1		0038	39	0.	*	1		0124	85	752.	*	1		0210	131	1568.	*	1		0256	177	891.	*	
1		0039	40	1.	*	1		0125	86	784.	*	1		0211	132	1559.	*	1		0257	178	877.	*	
1		0040	41	1.	*	1		0126	87	845.	*	1		0212	133	1549.	*	1		0258	179	863.	*	
1		0041	42	2.	*	1		0127	88	939.	*	1		0213	134	1538.	*	1		0259	180	849.	*	
1		0042	43	3.	*	1		0128	89	985.	*	1		0214	135	1527.	*	1		0300	181	836.	*	
1		0043	44	4.	*	1		0129	90	1013.	*	1		0215	136	1516.	*							*
1		0044	45	6.	*	1		0130	91	1042.	*	1		0216	137	1507.	*							*
1		0045	46	9.	*	1		0131	92	1068.	*	1		0217	138	1497.	*							*

```

PEAK FLOW      TIME      MAXIMUM AVERAGE FLOW
+ (CFS)        (HR)      6-HR      24-HR      72-HR      3.00-HR
(CFS)

```

+ 1613. 2.03 741. 741. 741. pre.out
 (INCHES) .336 .336 .336 741.
 (AC-FT) 184. 184. 184. 184.
 CUMULATIVE AREA = 10.23 SQ MI

HYDROGRAPH AT STATION C4
 SUM OF 4 HYDROGRAPHS
 PLAN 1, RATIO = .61

DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*
1	0000	1	0.	*	1	0046	47	0.	*	1	0132	93	108.	*	1	0218	139	321.	*				
1	0001	2	0.	*	1	0047	48	1.	*	1	0133	94	110.	*	1	0219	140	322.	*				
1	0002	3	0.	*	1	0048	49	1.	*	1	0134	95	112.	*	1	0220	141	322.	*				
1	0003	4	0.	*	1	0049	50	1.	*	1	0135	96	114.	*	1	0221	142	322.	*				
1	0004	5	0.	*	1	0050	51	2.	*	1	0136	97	117.	*	1	0222	143	322.	*				
1	0005	6	0.	*	1	0051	52	2.	*	1	0137	98	137.	*	1	0223	144	322.	*				
1	0006	7	0.	*	1	0052	53	3.	*	1	0138	99	153.	*	1	0224	145	324.	*				
1	0007	8	0.	*	1	0053	54	4.	*	1	0139	100	153.	*	1	0225	146	325.	*				
1	0008	9	0.	*	1	0054	55	5.	*	1	0140	101	155.	*	1	0226	147	324.	*				
1	0009	10	0.	*	1	0055	56	6.	*	1	0141	102	159.	*	1	0227	148	323.	*				
1	0010	11	0.	*	1	0056	57	7.	*	1	0142	103	162.	*	1	0228	149	322.	*				
1	0011	12	0.	*	1	0057	58	8.	*	1	0143	104	169.	*	1	0229	150	321.	*				
1	0012	13	0.	*	1	0058	59	10.	*	1	0144	105	176.	*	1	0230	151	322.	*				
1	0013	14	0.	*	1	0059	60	11.	*	1	0145	106	183.	*	1	0231	152	325.	*				
1	0014	15	0.	*	1	0100	61	13.	*	1	0146	107	187.	*	1	0232	153	323.	*				
1	0015	16	0.	*	1	0101	62	15.	*	1	0147	108	192.	*	1	0233	154	320.	*				
1	0016	17	0.	*	1	0102	63	17.	*	1	0148	109	196.	*	1	0234	155	318.	*				
1	0017	18	0.	*	1	0103	64	19.	*	1	0149	110	200.	*	1	0235	156	317.	*				
1	0018	19	0.	*	1	0104	65	21.	*	1	0150	111	217.	*	1	0236	157	315.	*				
1	0019	20	0.	*	1	0105	66	24.	*	1	0151	112	233.	*	1	0237	158	313.	*				
1	0020	21	0.	*	1	0106	67	26.	*	1	0152	113	235.	*	1	0238	159	311.	*				
1	0021	22	0.	*	1	0107	68	29.	*	1	0153	114	236.	*	1	0239	160	308.	*				
1	0022	23	0.	*	1	0108	69	32.	*	1	0154	115	240.	*	1	0240	161	306.	*				
1	0023	24	0.	*	1	0109	70	35.	*	1	0155	116	242.	*	1	0241	162	304.	*				
1	0024	25	0.	*	1	0110	71	39.	*	1	0156	117	244.	*	1	0242	163	303.	*				
1	0025	26	0.	*	1	0111	72	42.	*	1	0157	118	246.	*	1	0243	164	300.	*				
1	0026	27	0.	*	1	0112	73	46.	*	1	0158	119	248.	*	1	0244	165	297.	*				
1	0027	28	0.	*	1	0113	74	49.	*	1	0159	120	249.	*	1	0245	166	295.	*				
1	0028	29	0.	*	1	0114	75	53.	*	1	0200	121	252.	*	1	0246	167	292.	*				
1	0029	30	0.	*	1	0115	76	56.	*	1	0201	122	263.	*	1	0247	168	289.	*				
1	0030	31	0.	*	1	0116	77	60.	*	1	0202	123	271.	*	1	0248	169	286.	*				
1	0031	32	0.	*	1	0117	78	64.	*	1	0203	124	270.	*	1	0249	170	283.	*				
1	0032	33	0.	*	1	0118	79	67.	*	1	0204	125	269.	*	1	0250	171	280.	*				
1	0033	34	0.	*	1	0119	80	71.	*	1	0205	126	270.	*	1	0251	172	277.	*				
1	0034	35	0.	*	1	0120	81	74.	*	1	0206	127	269.	*	1	0252	173	274.	*				
1	0035	36	0.	*	1	0121	82	78.	*	1	0207	128	269.	*	1	0253	174	271.	*				
1	0036	37	0.	*	1	0122	83	81.	*	1	0208	129	268.	*	1	0254	175	268.	*				
1	0037	38	0.	*	1	0123	84	84.	*	1	0209	130	268.	*	1	0255	176	265.	*				
1	0038	39	0.	*	1	0124	85	87.	*	1	0210	131	267.	*	1	0256	177	262.	*				
1	0039	40	0.	*	1	0125	86	90.	*	1	0211	132	269.	*	1	0257	178	260.	*				
1	0040	41	0.	*	1	0126	87	93.	*	1	0212	133	273.	*	1	0258	179	256.	*				
1	0041	42	0.	*	1	0127	88	96.	*	1	0213	134	294.	*	1	0259	180	253.	*				
1	0042	43	0.	*	1	0128	89	99.	*	1	0214	135	320.	*	1	0300	181	250.	*				
1	0043	44	0.	*	1	0129	90	101.	*	1	0215	136	318.	*					*				
1	0044	45	0.	*	1	0130	91	104.	*	1	0216	137	318.	*					*				
1	0045	46	0.	*	1	0131	92	106.	*	1	0217	138	321.	*					*				

PEAK FLOW TIME MAXIMUM AVERAGE FLOW
 + (CFS) (HR) 6-HR 24-HR 72-HR 3.00-HR
 + 325. 2.42 (CFS) 139. 139. 139. 139.
 (INCHES) .063 .063 .063 .063
 (AC-FT) 34. 34. 34. 34.
 CUMULATIVE AREA = 10.23 SQ MI

*** ** ** ** **

 * *
 154 KK * BE15 *
 * *

BE15
 SUBBASIN RUNOFF DATA

pre.out

156 BA SUBBASIN CHARACTERISTICS
TAREA .01 SUBBASIN AREA

PRECIPITATION DATA

23 PB STORM 2.13 BASIN TOTAL PRECIPITATION

24 PI INCREMENTAL PRECIPITATION PATTERN

.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.05	.05	.05	.05	.05	.04	.04	.04	.04	.04	.04
.03	.03	.03	.03	.03	.02	.02	.02	.02	.02	.02
.01	.01	.01	.01	.01	.01	.01	.01	.01	.01	.01
.01	.01	.01	.01	.01	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00

157 LS SCS LOSS RATE
STRTL .60 INITIAL ABSTRACTION
CRVNBR 77.00 CURVE NUMBER
RTIMP .00 PERCENT IMPERVIOUS AREA

158 UD SCS DIMENSIONLESS UNITGRAPH
TLAG .22 LAG

UNIT HYDROGRAPH
67 END-OF-PERIOD ORDINATES

0.	1.	3.	4.	6.	8.	11.	14.	17.	19.
20.	21.	21.	21.	21.	20.	19.	18.	17.	15.
13.	11.	10.	9.	8.	7.	6.	5.	5.	4.
4.	3.	3.	3.	2.	2.	2.	2.	1.	1.
1.	1.	1.	1.	1.	1.	1.	0.	0.	0.
0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.	0.	0.	0.	0.

HYDROGRAPH AT STATION BE15

DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	*	DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
1	0000	1	.00	.00	.00	0.	*	1	0131	92	.00	.00	.00	2.		
1	0001	2	.00	.00	.00	0.	*	1	0132	93	.00	.00	.00	2.		
1	0002	3	.00	.00	.00	0.	*	1	0133	94	.00	.00	.00	2.		
1	0003	4	.00	.00	.00	0.	*	1	0134	95	.00	.00	.00	2.		
1	0004	5	.00	.00	.00	0.	*	1	0135	96	.00	.00	.00	2.		
1	0005	6	.00	.00	.00	0.	*	1	0136	97	.00	.00	.00	1.		
1	0006	7	.00	.00	.00	0.	*	1	0137	98	.00	.00	.00	1.		
1	0007	8	.00	.00	.00	0.	*	1	0138	99	.00	.00	.00	1.		
1	0008	9	.00	.00	.00	0.	*	1	0139	100	.00	.00	.00	1.		
1	0009	10	.00	.00	.00	0.	*	1	0140	101	.00	.00	.00	1.		
1	0010	11	.00	.00	.00	0.	*	1	0141	102	.00	.00	.00	1.		
1	0011	12	.00	.00	.00	0.	*	1	0142	103	.00	.00	.00	1.		
1	0012	13	.00	.00	.00	0.	*	1	0143	104	.00	.00	.00	1.		
1	0013	14	.00	.00	.00	0.	*	1	0144	105	.00	.00	.00	1.		
1	0014	15	.00	.00	.00	0.	*	1	0145	106	.00	.00	.00	1.		
1	0015	16	.00	.00	.00	0.	*	1	0146	107	.00	.00	.00	1.		
1	0016	17	.00	.00	.00	0.	*	1	0147	108	.00	.00	.00	1.		
1	0017	18	.00	.00	.00	0.	*	1	0148	109	.00	.00	.00	1.		
1	0018	19	.00	.00	.00	0.	*	1	0149	110	.00	.00	.00	1.		
1	0019	20	.00	.00	.00	0.	*	1	0150	111	.00	.00	.00	1.		
1	0020	21	.00	.00	.00	0.	*	1	0151	112	.00	.00	.00	1.		
1	0021	22	.00	.00	.00	0.	*	1	0152	113	.00	.00	.00	1.		
1	0022	23	.00	.00	.00	0.	*	1	0153	114	.00	.00	.00	1.		
1	0023	24	.00	.00	.00	0.	*	1	0154	115	.00	.00	.00	0.		
1	0024	25	.00	.00	.00	0.	*	1	0155	116	.00	.00	.00	0.		
1	0025	26	.00	.00	.00	0.	*	1	0156	117	.00	.00	.00	0.		
1	0026	27	.00	.00	.00	0.	*	1	0157	118	.00	.00	.00	0.		
1	0027	28	.00	.00	.00	0.	*	1	0158	119	.00	.00	.00	0.		
1	0028	29	.00	.00	.00	0.	*	1	0159	120	.00	.00	.00	0.		
1	0029	30	.00	.00	.00	0.	*	1	0200	121	.00	.00	.00	0.		
1	0030	31	.00	.00	.00	0.	*	1	0201	122	.00	.00	.00	0.		
1	0031	32	.11	.11	.00	0.	*	1	0202	123	.00	.00	.00	0.		
1	0032	33	.11	.11	.00	0.	*	1	0203	124	.00	.00	.00	0.		
1	0033	34	.11	.11	.00	0.	*	1	0204	125	.00	.00	.00	0.		

pre.out														
1	0034	35	.11	.11	.00	0.	*	1	0205	126	.00	.00	.00	0.
1	0035	36	.11	.11	.00	0.	*	1	0206	127	.00	.00	.00	0.
1	0036	37	.09	.09	.00	0.	*	1	0207	128	.00	.00	.00	0.
1	0037	38	.09	.08	.01	0.	*	1	0208	129	.00	.00	.00	0.
1	0038	39	.09	.08	.01	0.	*	1	0209	130	.00	.00	.00	0.
1	0039	40	.09	.07	.02	0.	*	1	0210	131	.00	.00	.00	0.
1	0040	41	.09	.07	.02	0.	*	1	0211	132	.00	.00	.00	0.
1	0041	42	.06	.05	.02	0.	*	1	0212	133	.00	.00	.00	0.
1	0042	43	.06	.04	.02	0.	*	1	0213	134	.00	.00	.00	0.
1	0043	44	.06	.04	.02	0.	*	1	0214	135	.00	.00	.00	0.
1	0044	45	.06	.04	.02	1.	*	1	0215	136	.00	.00	.00	0.
1	0045	46	.06	.04	.02	1.	*	1	0216	137	.00	.00	.00	0.
1	0046	47	.04	.02	.01	1.	*	1	0217	138	.00	.00	.00	0.
1	0047	48	.04	.02	.01	2.	*	1	0218	139	.00	.00	.00	0.
1	0048	49	.04	.02	.02	2.	*	1	0219	140	.00	.00	.00	0.
1	0049	50	.04	.02	.02	2.	*	1	0220	141	.00	.00	.00	0.
1	0050	51	.04	.02	.02	3.	*	1	0221	142	.00	.00	.00	0.
1	0051	52	.02	.01	.01	3.	*	1	0222	143	.00	.00	.00	0.
1	0052	53	.02	.01	.01	3.	*	1	0223	144	.00	.00	.00	0.
1	0053	54	.02	.01	.01	4.	*	1	0224	145	.00	.00	.00	0.
1	0054	55	.02	.01	.01	4.	*	1	0225	146	.00	.00	.00	0.
1	0055	56	.02	.01	.01	4.	*	1	0226	147	.00	.00	.00	0.
1	0056	57	.02	.01	.01	4.	*	1	0227	148	.00	.00	.00	0.
1	0057	58	.02	.01	.01	5.	*	1	0228	149	.00	.00	.00	0.
1	0058	59	.02	.01	.01	5.	*	1	0229	150	.00	.00	.00	0.
1	0059	60	.02	.01	.01	5.	*	1	0230	151	.00	.00	.00	0.
1	0100	61	.02	.01	.01	5.	*	1	0231	152	.00	.00	.00	0.
1	0101	62	.01	.01	.01	5.	*	1	0232	153	.00	.00	.00	0.
1	0102	63	.01	.01	.01	5.	*	1	0233	154	.00	.00	.00	0.
1	0103	64	.01	.01	.01	5.	*	1	0234	155	.00	.00	.00	0.
1	0104	65	.01	.01	.01	5.	*	1	0235	156	.00	.00	.00	0.
1	0105	66	.01	.01	.01	4.	*	1	0236	157	.00	.00	.00	0.
1	0106	67	.01	.01	.01	4.	*	1	0237	158	.00	.00	.00	0.
1	0107	68	.01	.01	.01	4.	*	1	0238	159	.00	.00	.00	0.
1	0108	69	.01	.01	.01	4.	*	1	0239	160	.00	.00	.00	0.
1	0109	70	.01	.01	.01	4.	*	1	0240	161	.00	.00	.00	0.
1	0110	71	.01	.01	.01	4.	*	1	0241	162	.00	.00	.00	0.
1	0111	72	.01	.00	.00	4.	*	1	0242	163	.00	.00	.00	0.
1	0112	73	.01	.00	.00	4.	*	1	0243	164	.00	.00	.00	0.
1	0113	74	.01	.00	.00	3.	*	1	0244	165	.00	.00	.00	0.
1	0114	75	.01	.00	.00	3.	*	1	0245	166	.00	.00	.00	0.
1	0115	76	.01	.00	.00	3.	*	1	0246	167	.00	.00	.00	0.
1	0116	77	.01	.00	.00	3.	*	1	0247	168	.00	.00	.00	0.
1	0117	78	.01	.00	.00	3.	*	1	0248	169	.00	.00	.00	0.
1	0118	79	.01	.00	.00	3.	*	1	0249	170	.00	.00	.00	0.
1	0119	80	.01	.00	.00	3.	*	1	0250	171	.00	.00	.00	0.
1	0120	81	.01	.00	.00	3.	*	1	0251	172	.00	.00	.00	0.
1	0121	82	.01	.00	.00	3.	*	1	0252	173	.00	.00	.00	0.
1	0122	83	.01	.00	.00	2.	*	1	0253	174	.00	.00	.00	0.
1	0123	84	.01	.00	.00	2.	*	1	0254	175	.00	.00	.00	0.
1	0124	85	.01	.00	.00	2.	*	1	0255	176	.00	.00	.00	0.
1	0125	86	.01	.00	.00	2.	*	1	0256	177	.00	.00	.00	0.
1	0126	87	.01	.00	.00	2.	*	1	0257	178	.00	.00	.00	0.
1	0127	88	.01	.00	.00	2.	*	1	0258	179	.00	.00	.00	0.
1	0128	89	.01	.00	.00	2.	*	1	0259	180	.00	.00	.00	0.
1	0129	90	.01	.00	.00	2.	*	1	0300	181	.00	.00	.00	0.
1	0130	91	.01	.00	.00	2.	*							

TOTAL RAINFALL = 2.13, TOTAL LOSS = 1.61, TOTAL EXCESS = .52

PEAK FLOW (CFS)	TIME (HR)	MAXIMUM AVERAGE FLOW			
		6-HR	24-HR	72-HR	3.00-HR
5.	1.00	1.	1.	1.	1.
		(INCHES)	.506	.506	.506
		(AC-FT)	0.	0.	0.

CUMULATIVE AREA = .01 SQ MI

HYDROGRAPH AT STATION BE15
PLAN 1, RATIO = 1.00

DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	*	DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
1	0000	1	.00	.00	.00	0.	*		1	0131	92	.00	.00	.00	2.	
1	0001	2	.00	.00	.00	0.	*		1	0132	93	.00	.00	.00	2.	
1	0002	3	.00	.00	.00	0.	*		1	0133	94	.00	.00	.00	2.	
1	0003	4	.00	.00	.00	0.	*		1	0134	95	.00	.00	.00	2.	
1	0004	5	.00	.00	.00	0.	*		1	0135	96	.00	.00	.00	2.	
1	0005	6	.00	.00	.00	0.	*		1	0136	97	.00	.00	.00	1.	
1	0006	7	.00	.00	.00	0.	*		1	0137	98	.00	.00	.00	1.	
1	0007	8	.00	.00	.00	0.	*		1	0138	99	.00	.00	.00	1.	

pre.out														
1	0008	9	.00	.00	.00	0.	*	1	0139	100	.00	.00	.00	1.
1	0009	10	.00	.00	.00	0.	*	1	0140	101	.00	.00	.00	1.
1	0010	11	.00	.00	.00	0.	*	1	0141	102	.00	.00	.00	1.
1	0011	12	.00	.00	.00	0.	*	1	0142	103	.00	.00	.00	1.
1	0012	13	.00	.00	.00	0.	*	1	0143	104	.00	.00	.00	1.
1	0013	14	.00	.00	.00	0.	*	1	0144	105	.00	.00	.00	1.
1	0014	15	.00	.00	.00	0.	*	1	0145	106	.00	.00	.00	1.
1	0015	16	.00	.00	.00	0.	*	1	0146	107	.00	.00	.00	1.
1	0016	17	.00	.00	.00	0.	*	1	0147	108	.00	.00	.00	1.
1	0017	18	.00	.00	.00	0.	*	1	0148	109	.00	.00	.00	1.
1	0018	19	.00	.00	.00	0.	*	1	0149	110	.00	.00	.00	1.
1	0019	20	.00	.00	.00	0.	*	1	0150	111	.00	.00	.00	1.
1	0020	21	.00	.00	.00	0.	*	1	0151	112	.00	.00	.00	1.
1	0021	22	.00	.00	.00	0.	*	1	0152	113	.00	.00	.00	1.
1	0022	23	.00	.00	.00	0.	*	1	0153	114	.00	.00	.00	1.
1	0023	24	.00	.00	.00	0.	*	1	0154	115	.00	.00	.00	0.
1	0024	25	.00	.00	.00	0.	*	1	0155	116	.00	.00	.00	0.
1	0025	26	.00	.00	.00	0.	*	1	0156	117	.00	.00	.00	0.
1	0026	27	.00	.00	.00	0.	*	1	0157	118	.00	.00	.00	0.
1	0027	28	.00	.00	.00	0.	*	1	0158	119	.00	.00	.00	0.
1	0028	29	.00	.00	.00	0.	*	1	0159	120	.00	.00	.00	0.
1	0029	30	.00	.00	.00	0.	*	1	0200	121	.00	.00	.00	0.
1	0030	31	.00	.00	.00	0.	*	1	0201	122	.00	.00	.00	0.
1	0031	32	.11	.11	.00	0.	*	1	0202	123	.00	.00	.00	0.
1	0032	33	.11	.11	.00	0.	*	1	0203	124	.00	.00	.00	0.
1	0033	34	.11	.11	.00	0.	*	1	0204	125	.00	.00	.00	0.
1	0034	35	.11	.11	.00	0.	*	1	0205	126	.00	.00	.00	0.
1	0035	36	.11	.11	.00	0.	*	1	0206	127	.00	.00	.00	0.
1	0036	37	.09	.09	.00	0.	*	1	0207	128	.00	.00	.00	0.
1	0037	38	.09	.08	.01	0.	*	1	0208	129	.00	.00	.00	0.
1	0038	39	.09	.08	.01	0.	*	1	0209	130	.00	.00	.00	0.
1	0039	40	.09	.07	.02	0.	*	1	0210	131	.00	.00	.00	0.
1	0040	41	.09	.07	.02	0.	*	1	0211	132	.00	.00	.00	0.
1	0041	42	.06	.05	.02	0.	*	1	0212	133	.00	.00	.00	0.
1	0042	43	.06	.04	.02	0.	*	1	0213	134	.00	.00	.00	0.
1	0043	44	.06	.04	.02	0.	*	1	0214	135	.00	.00	.00	0.
1	0044	45	.06	.04	.02	1.	*	1	0215	136	.00	.00	.00	0.
1	0045	46	.06	.04	.02	1.	*	1	0216	137	.00	.00	.00	0.
1	0046	47	.04	.02	.01	1.	*	1	0217	138	.00	.00	.00	0.
1	0047	48	.04	.02	.01	2.	*	1	0218	139	.00	.00	.00	0.
1	0048	49	.04	.02	.02	2.	*	1	0219	140	.00	.00	.00	0.
1	0049	50	.04	.02	.02	2.	*	1	0220	141	.00	.00	.00	0.
1	0050	51	.04	.02	.02	3.	*	1	0221	142	.00	.00	.00	0.
1	0051	52	.02	.01	.01	3.	*	1	0222	143	.00	.00	.00	0.
1	0052	53	.02	.01	.01	3.	*	1	0223	144	.00	.00	.00	0.
1	0053	54	.02	.01	.01	4.	*	1	0224	145	.00	.00	.00	0.
1	0054	55	.02	.01	.01	4.	*	1	0225	146	.00	.00	.00	0.
1	0055	56	.02	.01	.01	4.	*	1	0226	147	.00	.00	.00	0.
1	0056	57	.02	.01	.01	4.	*	1	0227	148	.00	.00	.00	0.
1	0057	58	.02	.01	.01	5.	*	1	0228	149	.00	.00	.00	0.
1	0058	59	.02	.01	.01	5.	*	1	0229	150	.00	.00	.00	0.
1	0059	60	.02	.01	.01	5.	*	1	0230	151	.00	.00	.00	0.
1	0100	61	.02	.01	.01	5.	*	1	0231	152	.00	.00	.00	0.
1	0101	62	.01	.01	.01	5.	*	1	0232	153	.00	.00	.00	0.
1	0102	63	.01	.01	.01	5.	*	1	0233	154	.00	.00	.00	0.
1	0103	64	.01	.01	.01	5.	*	1	0234	155	.00	.00	.00	0.
1	0104	65	.01	.01	.01	5.	*	1	0235	156	.00	.00	.00	0.
1	0105	66	.01	.01	.01	4.	*	1	0236	157	.00	.00	.00	0.
1	0106	67	.01	.01	.01	4.	*	1	0237	158	.00	.00	.00	0.
1	0107	68	.01	.01	.01	4.	*	1	0238	159	.00	.00	.00	0.
1	0108	69	.01	.01	.01	4.	*	1	0239	160	.00	.00	.00	0.
1	0109	70	.01	.01	.01	4.	*	1	0240	161	.00	.00	.00	0.
1	0110	71	.01	.01	.01	4.	*	1	0241	162	.00	.00	.00	0.
1	0111	72	.01	.00	.00	4.	*	1	0242	163	.00	.00	.00	0.
1	0112	73	.01	.00	.00	4.	*	1	0243	164	.00	.00	.00	0.
1	0113	74	.01	.00	.00	3.	*	1	0244	165	.00	.00	.00	0.
1	0114	75	.01	.00	.00	3.	*	1	0245	166	.00	.00	.00	0.
1	0115	76	.01	.00	.00	3.	*	1	0246	167	.00	.00	.00	0.
1	0116	77	.01	.00	.00	3.	*	1	0247	168	.00	.00	.00	0.
1	0117	78	.01	.00	.00	3.	*	1	0248	169	.00	.00	.00	0.
1	0118	79	.01	.00	.00	3.	*	1	0249	170	.00	.00	.00	0.
1	0119	80	.01	.00	.00	3.	*	1	0250	171	.00	.00	.00	0.
1	0120	81	.01	.00	.00	3.	*	1	0251	172	.00	.00	.00	0.
1	0121	82	.01	.00	.00	3.	*	1	0252	173	.00	.00	.00	0.
1	0122	83	.01	.00	.00	2.	*	1	0253	174	.00	.00	.00	0.
1	0123	84	.01	.00	.00	2.	*	1	0254	175	.00	.00	.00	0.
1	0124	85	.01	.00	.00	2.	*	1	0255	176	.00	.00	.00	0.
1	0125	86	.01	.00	.00	2.	*	1	0256	177	.00	.00	.00	0.
1	0126	87	.01	.00	.00	2.	*	1	0257	178	.00	.00	.00	0.
1	0127	88	.01	.00	.00	2.	*	1	0258	179	.00	.00	.00	0.
1	0128	89	.01	.00	.00	2.	*	1	0259	180	.00	.00	.00	0.
1	0129	90	.01	.00	.00	2.	*	1	0300	181	.00	.00	.00	0.
1	0130	91	.01	.00	.00	2.	*							

TOTAL RAINFALL = 2.13, TOTAL LOSS = 1.61, TOTAL EXCESS = .52

PEAK FLOW TIME MAXIMUM AVERAGE FLOW
6-HR 24-HR 72-HR 3.00-HR
Page 116

pre.out

+	(CFS)	(HR)	(CFS)	1.	1.	1.	1.
+	5.	1.00	(INCHES)	.506	.506	.506	.506
			(AC-FT)	0.	0.	0.	0.

CUMULATIVE AREA = .01 SQ MI

HYDROGRAPH AT STATION BE15
PLAN 1, RATIO = .61

DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	*	DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
1	0000	1	.00	.00	.00	0.	*	1	0131	92	.00	.00	.00	1.		
1	0001	2	.00	.00	.00	0.	*	1	0132	93	.00	.00	.00	1.		
1	0002	3	.00	.00	.00	0.	*	1	0133	94	.00	.00	.00	1.		
1	0003	4	.00	.00	.00	0.	*	1	0134	95	.00	.00	.00	1.		
1	0004	5	.00	.00	.00	0.	*	1	0135	96	.00	.00	.00	1.		
1	0005	6	.00	.00	.00	0.	*	1	0136	97	.00	.00	.00	0.		
1	0006	7	.00	.00	.00	0.	*	1	0137	98	.00	.00	.00	0.		
1	0007	8	.00	.00	.00	0.	*	1	0138	99	.00	.00	.00	0.		
1	0008	9	.00	.00	.00	0.	*	1	0139	100	.00	.00	.00	0.		
1	0009	10	.00	.00	.00	0.	*	1	0140	101	.00	.00	.00	0.		
1	0010	11	.00	.00	.00	0.	*	1	0141	102	.00	.00	.00	0.		
1	0011	12	.00	.00	.00	0.	*	1	0142	103	.00	.00	.00	0.		
1	0012	13	.00	.00	.00	0.	*	1	0143	104	.00	.00	.00	0.		
1	0013	14	.00	.00	.00	0.	*	1	0144	105	.00	.00	.00	0.		
1	0014	15	.00	.00	.00	0.	*	1	0145	106	.00	.00	.00	0.		
1	0015	16	.00	.00	.00	0.	*	1	0146	107	.00	.00	.00	0.		
1	0016	17	.00	.00	.00	0.	*	1	0147	108	.00	.00	.00	0.		
1	0017	18	.00	.00	.00	0.	*	1	0148	109	.00	.00	.00	0.		
1	0018	19	.00	.00	.00	0.	*	1	0149	110	.00	.00	.00	0.		
1	0019	20	.00	.00	.00	0.	*	1	0150	111	.00	.00	.00	0.		
1	0020	21	.00	.00	.00	0.	*	1	0151	112	.00	.00	.00	0.		
1	0021	22	.00	.00	.00	0.	*	1	0152	113	.00	.00	.00	0.		
1	0022	23	.00	.00	.00	0.	*	1	0153	114	.00	.00	.00	0.		
1	0023	24	.00	.00	.00	0.	*	1	0154	115	.00	.00	.00	0.		
1	0024	25	.00	.00	.00	0.	*	1	0155	116	.00	.00	.00	0.		
1	0025	26	.00	.00	.00	0.	*	1	0156	117	.00	.00	.00	0.		
1	0026	27	.00	.00	.00	0.	*	1	0157	118	.00	.00	.00	0.		
1	0027	28	.00	.00	.00	0.	*	1	0158	119	.00	.00	.00	0.		
1	0028	29	.00	.00	.00	0.	*	1	0159	120	.00	.00	.00	0.		
1	0029	30	.00	.00	.00	0.	*	1	0200	121	.00	.00	.00	0.		
1	0030	31	.00	.00	.00	0.	*	1	0201	122	.00	.00	.00	0.		
1	0031	32	.07	.07	.00	0.	*	1	0202	123	.00	.00	.00	0.		
1	0032	33	.07	.07	.00	0.	*	1	0203	124	.00	.00	.00	0.		
1	0033	34	.07	.07	.00	0.	*	1	0204	125	.00	.00	.00	0.		
1	0034	35	.07	.07	.00	0.	*	1	0205	126	.00	.00	.00	0.		
1	0035	36	.07	.07	.00	0.	*	1	0206	127	.00	.00	.00	0.		
1	0036	37	.05	.05	.00	0.	*	1	0207	128	.00	.00	.00	0.		
1	0037	38	.05	.05	.00	0.	*	1	0208	129	.00	.00	.00	0.		
1	0038	39	.05	.05	.00	0.	*	1	0209	130	.00	.00	.00	0.		
1	0039	40	.05	.05	.00	0.	*	1	0210	131	.00	.00	.00	0.		
1	0040	41	.05	.05	.00	0.	*	1	0211	132	.00	.00	.00	0.		
1	0041	42	.04	.04	.00	0.	*	1	0212	133	.00	.00	.00	0.		
1	0042	43	.04	.04	.00	0.	*	1	0213	134	.00	.00	.00	0.		
1	0043	44	.04	.03	.00	0.	*	1	0214	135	.00	.00	.00	0.		
1	0044	45	.04	.03	.00	0.	*	1	0215	136	.00	.00	.00	0.		
1	0045	46	.04	.03	.00	0.	*	1	0216	137	.00	.00	.00	0.		
1	0046	47	.02	.02	.00	0.	*	1	0217	138	.00	.00	.00	0.		
1	0047	48	.02	.02	.00	0.	*	1	0218	139	.00	.00	.00	0.		
1	0048	49	.02	.02	.00	0.	*	1	0219	140	.00	.00	.00	0.		
1	0049	50	.02	.02	.00	0.	*	1	0220	141	.00	.00	.00	0.		
1	0050	51	.02	.02	.00	0.	*	1	0221	142	.00	.00	.00	0.		
1	0051	52	.01	.01	.00	0.	*	1	0222	143	.00	.00	.00	0.		
1	0052	53	.01	.01	.00	0.	*	1	0223	144	.00	.00	.00	0.		
1	0053	54	.01	.01	.00	0.	*	1	0224	145	.00	.00	.00	0.		
1	0054	55	.01	.01	.00	1.	*	1	0225	146	.00	.00	.00	0.		
1	0055	56	.01	.01	.00	1.	*	1	0226	147	.00	.00	.00	0.		
1	0056	57	.01	.01	.00	1.	*	1	0227	148	.00	.00	.00	0.		
1	0057	58	.01	.01	.00	1.	*	1	0228	149	.00	.00	.00	0.		
1	0058	59	.01	.01	.00	1.	*	1	0229	150	.00	.00	.00	0.		
1	0059	60	.01	.01	.00	1.	*	1	0230	151	.00	.00	.00	0.		
1	0100	61	.01	.01	.00	1.	*	1	0231	152	.00	.00	.00	0.		
1	0101	62	.01	.01	.00	1.	*	1	0232	153	.00	.00	.00	0.		
1	0102	63	.01	.01	.00	1.	*	1	0233	154	.00	.00	.00	0.		
1	0103	64	.01	.01	.00	1.	*	1	0234	155	.00	.00	.00	0.		
1	0104	65	.01	.01	.00	1.	*	1	0235	156	.00	.00	.00	0.		
1	0105	66	.01	.01	.00	1.	*	1	0236	157	.00	.00	.00	0.		
1	0106	67	.01	.00	.00	1.	*	1	0237	158	.00	.00	.00	0.		
1	0107	68	.01	.00	.00	1.	*	1	0238	159	.00	.00	.00	0.		
1	0108	69	.01	.00	.00	1.	*	1	0239	160	.00	.00	.00	0.		
1	0109	70	.01	.00	.00	1.	*	1	0240	161	.00	.00	.00	0.		
1	0110	71	.01	.00	.00	1.	*	1	0241	162	.00	.00	.00	0.		
1	0111	72	.00	.00	.00	1.	*	1	0242	163	.00	.00	.00	0.		

pre.out														
1	0112	73	.00	.00	.00	1.	*	1	0243	164	.00	.00	.00	0.
1	0113	74	.00	.00	.00	1.	*	1	0244	165	.00	.00	.00	0.
1	0114	75	.00	.00	.00	1.	*	1	0245	166	.00	.00	.00	0.
1	0115	76	.00	.00	.00	1.	*	1	0246	167	.00	.00	.00	0.
1	0116	77	.00	.00	.00	1.	*	1	0247	168	.00	.00	.00	0.
1	0117	78	.00	.00	.00	1.	*	1	0248	169	.00	.00	.00	0.
1	0118	79	.00	.00	.00	1.	*	1	0249	170	.00	.00	.00	0.
1	0119	80	.00	.00	.00	1.	*	1	0250	171	.00	.00	.00	0.
1	0120	81	.00	.00	.00	1.	*	1	0251	172	.00	.00	.00	0.
1	0121	82	.00	.00	.00	1.	*	1	0252	173	.00	.00	.00	0.
1	0122	83	.00	.00	.00	1.	*	1	0253	174	.00	.00	.00	0.
1	0123	84	.00	.00	.00	1.	*	1	0254	175	.00	.00	.00	0.
1	0124	85	.00	.00	.00	1.	*	1	0255	176	.00	.00	.00	0.
1	0125	86	.00	.00	.00	1.	*	1	0256	177	.00	.00	.00	0.
1	0126	87	.00	.00	.00	1.	*	1	0257	178	.00	.00	.00	0.
1	0127	88	.00	.00	.00	1.	*	1	0258	179	.00	.00	.00	0.
1	0128	89	.00	.00	.00	1.	*	1	0259	180	.00	.00	.00	0.
1	0129	90	.00	.00	.00	1.	*	1	0300	181	.00	.00	.00	0.
1	0130	91	.00	.00	.00	1.	*							

TOTAL RAINFALL = 1.29, TOTAL LOSS = 1.16, TOTAL EXCESS = .13

PEAK FLOW	TIME	MAXIMUM	AVERAGE FLOW		
(CFS)	(HR)	6-HR	24-HR	72-HR	3.00-HR
+	1.	1.10	0.	0.	0.
		(INCHES)	.126	.126	.126
		(AC-FT)	0.	0.	0.
CUMULATIVE AREA =		.01 SQ MI			

*** **

 * *
 159 KK * RE15 *
 * *

 Route BE15 in channel to Outlet OE1

HYDROGRAPH ROUTING DATA

161 RD MUSKINGUM-CUNGE CHANNEL ROUTING
 L 3253. CHANNEL LENGTH
 S .0200 SLOPE
 N .040 CHANNEL ROUGHNESS COEFFICIENT
 CA .00 CONTRIBUTING AREA
 SHAPE TRAP CHANNEL SHAPE
 WD .00 BOTTOM WIDTH OR DIAMETER
 Z 7.00 SIDE SLOPE

 COMPUTED MUSKINGUM-CUNGE PARAMETERS

ELEMENT	ALPHA	M	DT	DX	PEAK	TIME TO PEAK	VOLUME	MAXIMUM CELERITY
			(MIN)	(FT)	(CFS)	(MIN)	(IN)	(FPS)
MAIN	1.73	1.33	1.00	79.34	5.79	74.00	.48	2.50

INTERPOLATED TO SPECIFIED COMPUTATION INTERVAL

MAIN	1.73	1.33	1.00	5.79	74.00	.48
------	------	------	------	------	-------	-----

CONTINUITY SUMMARY (AC-FT) - INFLOW= .2711E+00 EXCESS= .0000E+00 OUTFLOW= .2558E+00 BASIN STORAGE= .2017E-01 PERCENT ERROR= -1.8

HYDROGRAPH AT STATION RE15
 PLAN 1, RATIO = 1.00

DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*
1	0000	1	0.	*	1	0046	47	0.	*	1	0132	93	4.	*	1	0218	139	1.					
1	0001	2	0.	*	1	0047	48	0.	*	1	0133	94	3.	*	1	0219	140	1.					
1	0002	3	0.	*	1	0048	49	0.	*	1	0134	95	3.	*	1	0220	141	1.					

pre.out																		
1	0003	4	0.	*	1	0049	50	0.	*	1	0135	96	3.	*	1	0221	142	1.
1	0004	5	0.	*	1	0050	51	0.	*	1	0136	97	3.	*	1	0222	143	1.
1	0005	6	0.	*	1	0051	52	0.	*	1	0137	98	3.	*	1	0223	144	1.
1	0006	7	0.	*	1	0052	53	0.	*	1	0138	99	3.	*	1	0224	145	1.
1	0007	8	0.	*	1	0053	54	0.	*	1	0139	100	3.	*	1	0225	146	1.
1	0008	9	0.	*	1	0054	55	0.	*	1	0140	101	3.	*	1	0226	147	0.
1	0009	10	0.	*	1	0055	56	0.	*	1	0141	102	3.	*	1	0227	148	0.
1	0010	11	0.	*	1	0056	57	0.	*	1	0142	103	3.	*	1	0228	149	0.
1	0011	12	0.	*	1	0057	58	0.	*	1	0143	104	2.	*	1	0229	150	0.
1	0012	13	0.	*	1	0058	59	0.	*	1	0144	105	2.	*	1	0230	151	0.
1	0013	14	0.	*	1	0059	60	0.	*	1	0145	106	2.	*	1	0231	152	0.
1	0014	15	0.	*	1	0100	61	0.	*	1	0146	107	2.	*	1	0232	153	0.
1	0015	16	0.	*	1	0101	62	0.	*	1	0147	108	2.	*	1	0233	154	0.
1	0016	17	0.	*	1	0102	63	0.	*	1	0148	109	2.	*	1	0234	155	0.
1	0017	18	0.	*	1	0103	64	0.	*	1	0149	110	2.	*	1	0235	156	0.
1	0018	19	0.	*	1	0104	65	0.	*	1	0150	111	2.	*	1	0236	157	0.
1	0019	20	0.	*	1	0105	66	0.	*	1	0151	112	2.	*	1	0237	158	0.
1	0020	21	0.	*	1	0106	67	0.	*	1	0152	113	2.	*	1	0238	159	0.
1	0021	22	0.	*	1	0107	68	0.	*	1	0153	114	2.	*	1	0239	160	0.
1	0022	23	0.	*	1	0108	69	0.	*	1	0154	115	2.	*	1	0240	161	0.
1	0023	24	0.	*	1	0109	70	0.	*	1	0155	116	2.	*	1	0241	162	0.
1	0024	25	0.	*	1	0110	71	0.	*	1	0156	117	2.	*	1	0242	163	0.
1	0025	26	0.	*	1	0111	72	0.	*	1	0157	118	2.	*	1	0243	164	0.
1	0026	27	0.	*	1	0112	73	0.	*	1	0158	119	2.	*	1	0244	165	0.
1	0027	28	0.	*	1	0113	74	3.	*	1	0159	120	2.	*	1	0245	166	0.
1	0028	29	0.	*	1	0114	75	6.	*	1	0200	121	1.	*	1	0246	167	0.
1	0029	30	0.	*	1	0115	76	4.	*	1	0201	122	1.	*	1	0247	168	0.
1	0030	31	0.	*	1	0116	77	4.	*	1	0202	123	1.	*	1	0248	169	0.
1	0031	32	0.	*	1	0117	78	5.	*	1	0203	124	1.	*	1	0249	170	0.
1	0032	33	0.	*	1	0118	79	5.	*	1	0204	125	1.	*	1	0250	171	0.
1	0033	34	0.	*	1	0119	80	5.	*	1	0205	126	1.	*	1	0251	172	0.
1	0034	35	0.	*	1	0120	81	5.	*	1	0206	127	1.	*	1	0252	173	0.
1	0035	36	0.	*	1	0121	82	5.	*	1	0207	128	1.	*	1	0253	174	0.
1	0036	37	0.	*	1	0122	83	5.	*	1	0208	129	1.	*	1	0254	175	0.
1	0037	38	0.	*	1	0123	84	5.	*	1	0209	130	1.	*	1	0255	176	0.
1	0038	39	0.	*	1	0124	85	4.	*	1	0210	131	1.	*	1	0256	177	0.
1	0039	40	0.	*	1	0125	86	4.	*	1	0211	132	1.	*	1	0257	178	0.
1	0040	41	0.	*	1	0126	87	4.	*	1	0212	133	1.	*	1	0258	179	0.
1	0041	42	0.	*	1	0127	88	4.	*	1	0213	134	1.	*	1	0259	180	0.
1	0042	43	0.	*	1	0128	89	4.	*	1	0214	135	1.	*	1	0300	181	0.
1	0043	44	0.	*	1	0129	90	4.	*	1	0215	136	1.	*				
1	0044	45	0.	*	1	0130	91	4.	*	1	0216	137	1.	*				
1	0045	46	0.	*	1	0131	92	4.	*	1	0217	138	1.	*				

PEAK FLOW	TIME	MAXIMUM AVERAGE FLOW			
(CFS)	(HR)	6-HR	24-HR	72-HR	3.00-HR
6.	1.23	1.	1.	1.	1.
		(INCHES)	.478	.478	.478
		(AC-FT)	0.	0.	0.

CUMULATIVE AREA = .01 SQ MI

COMPUTED MUSKINGUM-CUNGE PARAMETERS								
ELEMENT	ALPHA	COMPUTATION TIME STEP		PEAK	TIME TO PEAK	VOLUME	MAXIMUM CELERITY	
		M	DT (MIN)					
MAIN	1.73	1.33	1.00	53.33	1.30	90.00	.11	1.71

INTERPOLATED TO SPECIFIED COMPUTATION INTERVAL

MAIN	1.73	1.33	1.00	1.30	90.00	.11
------	------	------	------	------	-------	-----

CONTINUITY SUMMARY (AC-FT) - INFLOW= .6735E-01 EXCESS= .0000E+00 OUTFLOW= .5987E-01 BASIN STORAGE= .9422E-02 PERCENT ERROR= -2.9

HYDROGRAPH AT STATION RE15
PLAN 1, RATIO = .61

DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*
1	0000	1	0.	*	1	0046	47	0.	*	1	0132	93	1.	*	1	0218	139	0.					
1	0001	2	0.	*	1	0047	48	0.	*	1	0133	94	1.	*	1	0219	140	0.					
1	0002	3	0.	*	1	0048	49	0.	*	1	0134	95	1.	*	1	0220	141	0.					
1	0003	4	0.	*	1	0049	50	0.	*	1	0135	96	1.	*	1	0221	142	0.					
1	0004	5	0.	*	1	0050	51	0.	*	1	0136	97	1.	*	1	0222	143	0.					
1	0005	6	0.	*	1	0051	52	0.	*	1	0137	98	1.	*	1	0223	144	0.					

														pre.out				
1	0006	7	0.	*	1	0052	53	0.	*	1	0138	99	1.	*	1	0224	145	0.
1	0007	8	0.	*	1	0053	54	0.	*	1	0139	100	1.	*	1	0225	146	0.
1	0008	9	0.	*	1	0054	55	0.	*	1	0140	101	1.	*	1	0226	147	0.
1	0009	10	0.	*	1	0055	56	0.	*	1	0141	102	1.	*	1	0227	148	0.
1	0010	11	0.	*	1	0056	57	0.	*	1	0142	103	1.	*	1	0228	149	0.
1	0011	12	0.	*	1	0057	58	0.	*	1	0143	104	1.	*	1	0229	150	0.
1	0012	13	0.	*	1	0058	59	0.	*	1	0144	105	1.	*	1	0230	151	0.
1	0013	14	0.	*	1	0059	60	0.	*	1	0145	106	1.	*	1	0231	152	0.
1	0014	15	0.	*	1	0100	61	0.	*	1	0146	107	1.	*	1	0232	153	0.
1	0015	16	0.	*	1	0101	62	0.	*	1	0147	108	1.	*	1	0233	154	0.
1	0016	17	0.	*	1	0102	63	0.	*	1	0148	109	1.	*	1	0234	155	0.
1	0017	18	0.	*	1	0103	64	0.	*	1	0149	110	1.	*	1	0235	156	0.
1	0018	19	0.	*	1	0104	65	0.	*	1	0150	111	1.	*	1	0236	157	0.
1	0019	20	0.	*	1	0105	66	0.	*	1	0151	112	1.	*	1	0237	158	0.
1	0020	21	0.	*	1	0106	67	0.	*	1	0152	113	1.	*	1	0238	159	0.
1	0021	22	0.	*	1	0107	68	0.	*	1	0153	114	1.	*	1	0239	160	0.
1	0022	23	0.	*	1	0108	69	0.	*	1	0154	115	1.	*	1	0240	161	0.
1	0023	24	0.	*	1	0109	70	0.	*	1	0155	116	1.	*	1	0241	162	0.
1	0024	25	0.	*	1	0110	71	0.	*	1	0156	117	1.	*	1	0242	163	0.
1	0025	26	0.	*	1	0111	72	0.	*	1	0157	118	1.	*	1	0243	164	0.
1	0026	27	0.	*	1	0112	73	0.	*	1	0158	119	1.	*	1	0244	165	0.
1	0027	28	0.	*	1	0113	74	0.	*	1	0159	120	1.	*	1	0245	166	0.
1	0028	29	0.	*	1	0114	75	0.	*	1	0200	121	1.	*	1	0246	167	0.
1	0029	30	0.	*	1	0115	76	0.	*	1	0201	122	1.	*	1	0247	168	0.
1	0030	31	0.	*	1	0116	77	0.	*	1	0202	123	1.	*	1	0248	169	0.
1	0031	32	0.	*	1	0117	78	0.	*	1	0203	124	1.	*	1	0249	170	0.
1	0032	33	0.	*	1	0118	79	0.	*	1	0204	125	1.	*	1	0250	171	0.
1	0033	34	0.	*	1	0119	80	0.	*	1	0205	126	1.	*	1	0251	172	0.
1	0034	35	0.	*	1	0120	81	0.	*	1	0206	127	1.	*	1	0252	173	0.
1	0035	36	0.	*	1	0121	82	0.	*	1	0207	128	1.	*	1	0253	174	0.
1	0036	37	0.	*	1	0122	83	0.	*	1	0208	129	0.	*	1	0254	175	0.
1	0037	38	0.	*	1	0123	84	0.	*	1	0209	130	0.	*	1	0255	176	0.
1	0038	39	0.	*	1	0124	85	0.	*	1	0210	131	0.	*	1	0256	177	0.
1	0039	40	0.	*	1	0125	86	0.	*	1	0211	132	0.	*	1	0257	178	0.
1	0040	41	0.	*	1	0126	87	0.	*	1	0212	133	0.	*	1	0258	179	0.
1	0041	42	0.	*	1	0127	88	0.	*	1	0213	134	0.	*	1	0259	180	0.
1	0042	43	0.	*	1	0128	89	0.	*	1	0214	135	0.	*	1	0300	181	0.
1	0043	44	0.	*	1	0129	90	1.	*	1	0215	136	0.	*				
1	0044	45	0.	*	1	0130	91	1.	*	1	0216	137	0.	*				
1	0045	46	0.	*	1	0131	92	1.	*	1	0217	138	0.	*				

PEAK FLOW + (CFS)	TIME (HR)	MAXIMUM AVERAGE FLOW			
		6-HR	24-HR	72-HR	3.00-HR
+ 1.	1.50	0.	0.	0.	0.
		(INCHES)	.112	.112	.112
		(AC-FT)	0.	0.	0.
CUMULATIVE AREA =		.01 SQ MI			

*** **

* *
162 KK * BE16 *
* *

BE16

SUBBASIN RUNOFF DATA

164 BA SUBBASIN CHARACTERISTICS
TAREA .03 SUBBASIN AREA

PRECIPITATION DATA

23 PB STORM 2.13 BASIN TOTAL PRECIPITATION

24 PI INCREMENTAL PRECIPITATION PATTERN

.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.05	.05	.05	.05	.05	.05	.04	.04	.04	.04	.04
.03	.03	.03	.03	.03	.03	.02	.02	.02	.02	.02
.01	.01	.01	.01	.01	.01	.01	.01	.01	.01	.01
.01	.01	.01	.01	.01	.01	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00

```

pre.out
.00 .00 .00 .00 .00 .00 .00 .00 .00 .00
.00 .00 .00 .00 .00 .00 .00 .00 .00 .00
.00 .00 .00 .00 .00 .00 .00 .00 .00 .00
.00 .00 .00 .00 .00 .00 .00 .00 .00 .00

```

```

165 LS SCS LOSS RATE
        STRTL .60 INITIAL ABSTRACTION
        CRVNBR 77.00 CURVE NUMBER
        RTIMP .00 PERCENT IMPERVIOUS AREA

```

```

166 UD SCS DIMENSIONLESS UNITGRAPH
        TLAG .31 LAG

```

UNIT HYDROGRAPH
95 END-OF-PERIOD ORDINATES

1.	2.	3.	5.	7.	10.	13.	16.	20.	24.
29.	33.	37.	40.	43.	45.	47.	47.	47.	47.
47.	45.	44.	42.	40.	38.	36.	34.	31.	28.
25.	23.	21.	19.	18.	16.	15.	14.	13.	12.
11.	10.	9.	8.	8.	7.	6.	6.	5.	5.
5.	4.	4.	4.	3.	3.	3.	2.	2.	2.
2.	2.	2.	2.	1.	1.	1.	1.	1.	1.
1.	1.	1.	1.	1.	1.	1.	0.	0.	0.
0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.	0.	0.	0.	0.

HYDROGRAPH AT STATION BE16

DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	*	DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
1	0000	1	.00	.00	.00	0.	*	1	0131	92	.00	.00	.00	7.		
1	0001	2	.00	.00	.00	0.	*	1	0132	93	.00	.00	.00	7.		
1	0002	3	.00	.00	.00	0.	*	1	0133	94	.00	.00	.00	7.		
1	0003	4	.00	.00	.00	0.	*	1	0134	95	.00	.00	.00	6.		
1	0004	5	.00	.00	.00	0.	*	1	0135	96	.00	.00	.00	6.		
1	0005	6	.00	.00	.00	0.	*	1	0136	97	.00	.00	.00	6.		
1	0006	7	.00	.00	.00	0.	*	1	0137	98	.00	.00	.00	6.		
1	0007	8	.00	.00	.00	0.	*	1	0138	99	.00	.00	.00	6.		
1	0008	9	.00	.00	.00	0.	*	1	0139	100	.00	.00	.00	5.		
1	0009	10	.00	.00	.00	0.	*	1	0140	101	.00	.00	.00	5.		
1	0010	11	.00	.00	.00	0.	*	1	0141	102	.00	.00	.00	5.		
1	0011	12	.00	.00	.00	0.	*	1	0142	103	.00	.00	.00	5.		
1	0012	13	.00	.00	.00	0.	*	1	0143	104	.00	.00	.00	5.		
1	0013	14	.00	.00	.00	0.	*	1	0144	105	.00	.00	.00	4.		
1	0014	15	.00	.00	.00	0.	*	1	0145	106	.00	.00	.00	4.		
1	0015	16	.00	.00	.00	0.	*	1	0146	107	.00	.00	.00	4.		
1	0016	17	.00	.00	.00	0.	*	1	0147	108	.00	.00	.00	4.		
1	0017	18	.00	.00	.00	0.	*	1	0148	109	.00	.00	.00	4.		
1	0018	19	.00	.00	.00	0.	*	1	0149	110	.00	.00	.00	3.		
1	0019	20	.00	.00	.00	0.	*	1	0150	111	.00	.00	.00	3.		
1	0020	21	.00	.00	.00	0.	*	1	0151	112	.00	.00	.00	3.		
1	0021	22	.00	.00	.00	0.	*	1	0152	113	.00	.00	.00	3.		
1	0022	23	.00	.00	.00	0.	*	1	0153	114	.00	.00	.00	3.		
1	0023	24	.00	.00	.00	0.	*	1	0154	115	.00	.00	.00	3.		
1	0024	25	.00	.00	.00	0.	*	1	0155	116	.00	.00	.00	2.		
1	0025	26	.00	.00	.00	0.	*	1	0156	117	.00	.00	.00	2.		
1	0026	27	.00	.00	.00	0.	*	1	0157	118	.00	.00	.00	2.		
1	0027	28	.00	.00	.00	0.	*	1	0158	119	.00	.00	.00	2.		
1	0028	29	.00	.00	.00	0.	*	1	0159	120	.00	.00	.00	2.		
1	0029	30	.00	.00	.00	0.	*	1	0200	121	.00	.00	.00	2.		
1	0030	31	.00	.00	.00	0.	*	1	0201	122	.00	.00	.00	2.		
1	0031	32	.11	.11	.00	0.	*	1	0202	123	.00	.00	.00	2.		
1	0032	33	.11	.11	.00	0.	*	1	0203	124	.00	.00	.00	2.		
1	0033	34	.11	.11	.00	0.	*	1	0204	125	.00	.00	.00	2.		
1	0034	35	.11	.11	.00	0.	*	1	0205	126	.00	.00	.00	2.		
1	0035	36	.11	.11	.00	0.	*	1	0206	127	.00	.00	.00	2.		
1	0036	37	.09	.09	.00	0.	*	1	0207	128	.00	.00	.00	1.		
1	0037	38	.09	.08	.01	0.	*	1	0208	129	.00	.00	.00	1.		
1	0038	39	.09	.08	.01	0.	*	1	0209	130	.00	.00	.00	1.		
1	0039	40	.09	.07	.02	0.	*	1	0210	131	.00	.00	.00	1.		
1	0040	41	.09	.07	.02	0.	*	1	0211	132	.00	.00	.00	1.		
1	0041	42	.06	.05	.02	0.	*	1	0212	133	.00	.00	.00	1.		
1	0042	43	.06	.04	.02	0.	*	1	0213	134	.00	.00	.00	1.		
1	0043	44	.06	.04	.02	1.	*	1	0214	135	.00	.00	.00	1.		
1	0044	45	.06	.04	.02	1.	*	1	0215	136	.00	.00	.00	1.		
1	0045	46	.06	.04	.02	1.	*	1	0216	137	.00	.00	.00	1.		
1	0046	47	.04	.02	.01	1.	*	1	0217	138	.00	.00	.00	1.		
1	0047	48	.04	.02	.01	2.	*	1	0218	139	.00	.00	.00	1.		
1	0048	49	.04	.02	.02	2.	*	1	0219	140	.00	.00	.00	1.		
1	0049	50	.04	.02	.02	3.	*	1	0220	141	.00	.00	.00	1.		
1	0050	51	.04	.02	.02	4.	*	1	0221	142	.00	.00	.00	1.		
1	0051	52	.02	.01	.01	4.	*	1	0222	143	.00	.00	.00	1.		
1	0052	53	.02	.01	.01	5.	*	1	0223	144	.00	.00	.00	1.		
1	0053	54	.02	.01	.01	6.	*	1	0224	145	.00	.00	.00	1.		

pre.out														
1	0054	55	.02	.01	.01	7.	*	1	0225	146	.00	.00	.00	1.
1	0055	56	.02	.01	.01	8.	*	1	0226	147	.00	.00	.00	1.
1	0056	57	.02	.01	.01	8.	*	1	0227	148	.00	.00	.00	1.
1	0057	58	.02	.01	.01	9.	*	1	0228	149	.00	.00	.00	1.
1	0058	59	.02	.01	.01	10.	*	1	0229	150	.00	.00	.00	1.
1	0059	60	.02	.01	.01	10.	*	1	0230	151	.00	.00	.00	1.
1	0100	61	.02	.01	.01	11.	*	1	0231	152	.00	.00	.00	1.
1	0101	62	.01	.01	.01	11.	*	1	0232	153	.00	.00	.00	1.
1	0102	63	.01	.01	.01	12.	*	1	0233	154	.00	.00	.00	1.
1	0103	64	.01	.01	.01	12.	*	1	0234	155	.00	.00	.00	1.
1	0104	65	.01	.01	.01	12.	*	1	0235	156	.00	.00	.00	1.
1	0105	66	.01	.01	.01	12.	*	1	0236	157	.00	.00	.00	1.
1	0106	67	.01	.01	.01	13.	*	1	0237	158	.00	.00	.00	1.
1	0107	68	.01	.01	.01	13.	*	1	0238	159	.00	.00	.00	1.
1	0108	69	.01	.01	.01	13.	*	1	0239	160	.00	.00	.00	1.
1	0109	70	.01	.01	.01	13.	*	1	0240	161	.00	.00	.00	1.
1	0110	71	.01	.01	.01	12.	*	1	0241	162	.00	.00	.00	1.
1	0111	72	.01	.00	.00	12.	*	1	0242	163	.00	.00	.00	1.
1	0112	73	.01	.00	.00	12.	*	1	0243	164	.00	.00	.00	1.
1	0113	74	.01	.00	.00	12.	*	1	0244	165	.00	.00	.00	1.
1	0114	75	.01	.00	.00	12.	*	1	0245	166	.00	.00	.00	1.
1	0115	76	.01	.00	.00	11.	*	1	0246	167	.00	.00	.00	1.
1	0116	77	.01	.00	.00	11.	*	1	0247	168	.00	.00	.00	1.
1	0117	78	.01	.00	.00	11.	*	1	0248	169	.00	.00	.00	1.
1	0118	79	.01	.00	.00	11.	*	1	0249	170	.00	.00	.00	1.
1	0119	80	.01	.00	.00	10.	*	1	0250	171	.00	.00	.00	1.
1	0120	81	.01	.00	.00	10.	*	1	0251	172	.00	.00	.00	1.
1	0121	82	.01	.00	.00	10.	*	1	0252	173	.00	.00	.00	1.
1	0122	83	.01	.00	.00	9.	*	1	0253	174	.00	.00	.00	1.
1	0123	84	.01	.00	.00	9.	*	1	0254	175	.00	.00	.00	1.
1	0124	85	.01	.00	.00	9.	*	1	0255	176	.00	.00	.00	1.
1	0125	86	.01	.00	.00	9.	*	1	0256	177	.00	.00	.00	1.
1	0126	87	.01	.00	.00	8.	*	1	0257	178	.00	.00	.00	1.
1	0127	88	.01	.00	.00	8.	*	1	0258	179	.00	.00	.00	1.
1	0128	89	.01	.00	.00	8.	*	1	0259	180	.00	.00	.00	1.
1	0129	90	.01	.00	.00	8.	*	1	0300	181	.00	.00	.00	1.
1	0130	91	.01	.00	.00	7.	*							

TOTAL RAINFALL = 2.13, TOTAL LOSS = 1.61, TOTAL EXCESS = .52

PEAK FLOW	TIME	MAXIMUM AVERAGE FLOW			
(CFS)	(HR)	6-HR	24-HR	72-HR	3.00-HR
+	13.	3.	3.	3.	3.
		(INCHES)	.501	.501	.501
		(AC-FT)	1.	1.	1.
CUMULATIVE AREA =		.03 SQ MI			

HYDROGRAPH AT STATION BE16
PLAN 1, RATIO = 1.00

DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	*	DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	*
1	0000	1	.00	.00	.00	0.	*		1	0131	92	.00	.00	.00	7.	*	
1	0001	2	.00	.00	.00	0.	*		1	0132	93	.00	.00	.00	7.	*	
1	0002	3	.00	.00	.00	0.	*		1	0133	94	.00	.00	.00	7.	*	
1	0003	4	.00	.00	.00	0.	*		1	0134	95	.00	.00	.00	6.	*	
1	0004	5	.00	.00	.00	0.	*		1	0135	96	.00	.00	.00	6.	*	
1	0005	6	.00	.00	.00	0.	*		1	0136	97	.00	.00	.00	6.	*	
1	0006	7	.00	.00	.00	0.	*		1	0137	98	.00	.00	.00	6.	*	
1	0007	8	.00	.00	.00	0.	*		1	0138	99	.00	.00	.00	6.	*	
1	0008	9	.00	.00	.00	0.	*		1	0139	100	.00	.00	.00	5.	*	
1	0009	10	.00	.00	.00	0.	*		1	0140	101	.00	.00	.00	5.	*	
1	0010	11	.00	.00	.00	0.	*		1	0141	102	.00	.00	.00	5.	*	
1	0011	12	.00	.00	.00	0.	*		1	0142	103	.00	.00	.00	5.	*	
1	0012	13	.00	.00	.00	0.	*		1	0143	104	.00	.00	.00	5.	*	
1	0013	14	.00	.00	.00	0.	*		1	0144	105	.00	.00	.00	4.	*	
1	0014	15	.00	.00	.00	0.	*		1	0145	106	.00	.00	.00	4.	*	
1	0015	16	.00	.00	.00	0.	*		1	0146	107	.00	.00	.00	4.	*	
1	0016	17	.00	.00	.00	0.	*		1	0147	108	.00	.00	.00	4.	*	
1	0017	18	.00	.00	.00	0.	*		1	0148	109	.00	.00	.00	4.	*	
1	0018	19	.00	.00	.00	0.	*		1	0149	110	.00	.00	.00	3.	*	
1	0019	20	.00	.00	.00	0.	*		1	0150	111	.00	.00	.00	3.	*	
1	0020	21	.00	.00	.00	0.	*		1	0151	112	.00	.00	.00	3.	*	
1	0021	22	.00	.00	.00	0.	*		1	0152	113	.00	.00	.00	3.	*	
1	0022	23	.00	.00	.00	0.	*		1	0153	114	.00	.00	.00	3.	*	
1	0023	24	.00	.00	.00	0.	*		1	0154	115	.00	.00	.00	3.	*	
1	0024	25	.00	.00	.00	0.	*		1	0155	116	.00	.00	.00	2.	*	
1	0025	26	.00	.00	.00	0.	*		1	0156	117	.00	.00	.00	2.	*	
1	0026	27	.00	.00	.00	0.	*		1	0157	118	.00	.00	.00	2.	*	
1	0027	28	.00	.00	.00	0.	*		1	0158	119	.00	.00	.00	2.	*	

pre.out														
1	0028	29	.00	.00	.00	0.	*	1	0159	120	.00	.00	.00	2.
1	0029	30	.00	.00	.00	0.	*	1	0200	121	.00	.00	.00	2.
1	0030	31	.00	.00	.00	0.	*	1	0201	122	.00	.00	.00	2.
1	0031	32	.11	.11	.00	0.	*	1	0202	123	.00	.00	.00	2.
1	0032	33	.11	.11	.00	0.	*	1	0203	124	.00	.00	.00	2.
1	0033	34	.11	.11	.00	0.	*	1	0204	125	.00	.00	.00	2.
1	0034	35	.11	.11	.00	0.	*	1	0205	126	.00	.00	.00	2.
1	0035	36	.11	.11	.00	0.	*	1	0206	127	.00	.00	.00	2.
1	0036	37	.09	.09	.00	0.	*	1	0207	128	.00	.00	.00	1.
1	0037	38	.09	.08	.01	0.	*	1	0208	129	.00	.00	.00	1.
1	0038	39	.09	.08	.01	0.	*	1	0209	130	.00	.00	.00	1.
1	0039	40	.09	.07	.02	0.	*	1	0210	131	.00	.00	.00	1.
1	0040	41	.09	.07	.02	0.	*	1	0211	132	.00	.00	.00	1.
1	0041	42	.06	.05	.02	0.	*	1	0212	133	.00	.00	.00	1.
1	0042	43	.06	.04	.02	0.	*	1	0213	134	.00	.00	.00	1.
1	0043	44	.06	.04	.02	1.	*	1	0214	135	.00	.00	.00	1.
1	0044	45	.06	.04	.02	1.	*	1	0215	136	.00	.00	.00	1.
1	0045	46	.06	.04	.02	1.	*	1	0216	137	.00	.00	.00	1.
1	0046	47	.04	.02	.01	1.	*	1	0217	138	.00	.00	.00	1.
1	0047	48	.04	.02	.01	2.	*	1	0218	139	.00	.00	.00	1.
1	0048	49	.04	.02	.02	2.	*	1	0219	140	.00	.00	.00	1.
1	0049	50	.04	.02	.02	3.	*	1	0220	141	.00	.00	.00	1.
1	0050	51	.04	.02	.02	4.	*	1	0221	142	.00	.00	.00	1.
1	0051	52	.02	.01	.01	4.	*	1	0222	143	.00	.00	.00	1.
1	0052	53	.02	.01	.01	5.	*	1	0223	144	.00	.00	.00	1.
1	0053	54	.02	.01	.01	6.	*	1	0224	145	.00	.00	.00	1.
1	0054	55	.02	.01	.01	7.	*	1	0225	146	.00	.00	.00	1.
1	0055	56	.02	.01	.01	8.	*	1	0226	147	.00	.00	.00	1.
1	0056	57	.02	.01	.01	8.	*	1	0227	148	.00	.00	.00	1.
1	0057	58	.02	.01	.01	9.	*	1	0228	149	.00	.00	.00	1.
1	0058	59	.02	.01	.01	10.	*	1	0229	150	.00	.00	.00	1.
1	0059	60	.02	.01	.01	10.	*	1	0230	151	.00	.00	.00	1.
1	0100	61	.02	.01	.01	11.	*	1	0231	152	.00	.00	.00	1.
1	0101	62	.01	.01	.01	11.	*	1	0232	153	.00	.00	.00	1.
1	0102	63	.01	.01	.01	12.	*	1	0233	154	.00	.00	.00	1.
1	0103	64	.01	.01	.01	12.	*	1	0234	155	.00	.00	.00	1.
1	0104	65	.01	.01	.01	12.	*	1	0235	156	.00	.00	.00	1.
1	0105	66	.01	.01	.01	12.	*	1	0236	157	.00	.00	.00	1.
1	0106	67	.01	.01	.01	13.	*	1	0237	158	.00	.00	.00	1.
1	0107	68	.01	.01	.01	13.	*	1	0238	159	.00	.00	.00	1.
1	0108	69	.01	.01	.01	13.	*	1	0239	160	.00	.00	.00	1.
1	0109	70	.01	.01	.01	13.	*	1	0240	161	.00	.00	.00	1.
1	0110	71	.01	.01	.01	12.	*	1	0241	162	.00	.00	.00	1.
1	0111	72	.01	.00	.00	12.	*	1	0242	163	.00	.00	.00	1.
1	0112	73	.01	.00	.00	12.	*	1	0243	164	.00	.00	.00	1.
1	0113	74	.01	.00	.00	12.	*	1	0244	165	.00	.00	.00	1.
1	0114	75	.01	.00	.00	12.	*	1	0245	166	.00	.00	.00	1.
1	0115	76	.01	.00	.00	11.	*	1	0246	167	.00	.00	.00	1.
1	0116	77	.01	.00	.00	11.	*	1	0247	168	.00	.00	.00	1.
1	0117	78	.01	.00	.00	11.	*	1	0248	169	.00	.00	.00	1.
1	0118	79	.01	.00	.00	11.	*	1	0249	170	.00	.00	.00	1.
1	0119	80	.01	.00	.00	10.	*	1	0250	171	.00	.00	.00	1.
1	0120	81	.01	.00	.00	10.	*	1	0251	172	.00	.00	.00	1.
1	0121	82	.01	.00	.00	10.	*	1	0252	173	.00	.00	.00	1.
1	0122	83	.01	.00	.00	9.	*	1	0253	174	.00	.00	.00	1.
1	0123	84	.01	.00	.00	9.	*	1	0254	175	.00	.00	.00	1.
1	0124	85	.01	.00	.00	9.	*	1	0255	176	.00	.00	.00	1.
1	0125	86	.01	.00	.00	9.	*	1	0256	177	.00	.00	.00	1.
1	0126	87	.01	.00	.00	8.	*	1	0257	178	.00	.00	.00	1.
1	0127	88	.01	.00	.00	8.	*	1	0258	179	.00	.00	.00	1.
1	0128	89	.01	.00	.00	8.	*	1	0259	180	.00	.00	.00	1.
1	0129	90	.01	.00	.00	8.	*	1	0300	181	.00	.00	.00	1.
1	0130	91	.01	.00	.00	7.	*							

TOTAL RAINFALL = 2.13, TOTAL LOSS = 1.61, TOTAL EXCESS = .52

PEAK FLOW + (CFS)	TIME (HR)	MAXIMUM AVERAGE FLOW			
		6-HR	24-HR	72-HR	3.00-HR
+ 13.	1.12	3.	3.	3.	3.
	(INCHES)	.501	.501	.501	.501
	(AC-FT)	1.	1.	1.	1.
CUMULATIVE AREA =		.03 SQ MI			

HYDROGRAPH AT STATION BE16
PLAN 1, RATIO = .61

DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	*	DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
1	0000	1	.00	.00	.00	0.	*		1	0131	92	.00	.00	.00	2.	
1	0001	2	.00	.00	.00	0.	*		1	0132	93	.00	.00	.00	2.	

														pre.out		
1	0002	3	.00	.00	.00	0.	*	1	0133	94	.00	.00	.00	2.		
1	0003	4	.00	.00	.00	0.	*	1	0134	95	.00	.00	.00	2.		
1	0004	5	.00	.00	.00	0.	*	1	0135	96	.00	.00	.00	2.		
1	0005	6	.00	.00	.00	0.	*	1	0136	97	.00	.00	.00	2.		
1	0006	7	.00	.00	.00	0.	*	1	0137	98	.00	.00	.00	2.		
1	0007	8	.00	.00	.00	0.	*	1	0138	99	.00	.00	.00	2.		
1	0008	9	.00	.00	.00	0.	*	1	0139	100	.00	.00	.00	2.		
1	0009	10	.00	.00	.00	0.	*	1	0140	101	.00	.00	.00	2.		
1	0010	11	.00	.00	.00	0.	*	1	0141	102	.00	.00	.00	2.		
1	0011	12	.00	.00	.00	0.	*	1	0142	103	.00	.00	.00	2.		
1	0012	13	.00	.00	.00	0.	*	1	0143	104	.00	.00	.00	1.		
1	0013	14	.00	.00	.00	0.	*	1	0144	105	.00	.00	.00	1.		
1	0014	15	.00	.00	.00	0.	*	1	0145	106	.00	.00	.00	1.		
1	0015	16	.00	.00	.00	0.	*	1	0146	107	.00	.00	.00	1.		
1	0016	17	.00	.00	.00	0.	*	1	0147	108	.00	.00	.00	1.		
1	0017	18	.00	.00	.00	0.	*	1	0148	109	.00	.00	.00	1.		
1	0018	19	.00	.00	.00	0.	*	1	0149	110	.00	.00	.00	1.		
1	0019	20	.00	.00	.00	0.	*	1	0150	111	.00	.00	.00	1.		
1	0020	21	.00	.00	.00	0.	*	1	0151	112	.00	.00	.00	1.		
1	0021	22	.00	.00	.00	0.	*	1	0152	113	.00	.00	.00	1.		
1	0022	23	.00	.00	.00	0.	*	1	0153	114	.00	.00	.00	1.		
1	0023	24	.00	.00	.00	0.	*	1	0154	115	.00	.00	.00	1.		
1	0024	25	.00	.00	.00	0.	*	1	0155	116	.00	.00	.00	1.		
1	0025	26	.00	.00	.00	0.	*	1	0156	117	.00	.00	.00	1.		
1	0026	27	.00	.00	.00	0.	*	1	0157	118	.00	.00	.00	1.		
1	0027	28	.00	.00	.00	0.	*	1	0158	119	.00	.00	.00	1.		
1	0028	29	.00	.00	.00	0.	*	1	0159	120	.00	.00	.00	1.		
1	0029	30	.00	.00	.00	0.	*	1	0200	121	.00	.00	.00	1.		
1	0030	31	.00	.00	.00	0.	*	1	0201	122	.00	.00	.00	1.		
1	0031	32	.07	.07	.00	0.	*	1	0202	123	.00	.00	.00	1.		
1	0032	33	.07	.07	.00	0.	*	1	0203	124	.00	.00	.00	1.		
1	0033	34	.07	.07	.00	0.	*	1	0204	125	.00	.00	.00	1.		
1	0034	35	.07	.07	.00	0.	*	1	0205	126	.00	.00	.00	1.		
1	0035	36	.07	.07	.00	0.	*	1	0206	127	.00	.00	.00	1.		
1	0036	37	.05	.05	.00	0.	*	1	0207	128	.00	.00	.00	1.		
1	0037	38	.05	.05	.00	0.	*	1	0208	129	.00	.00	.00	0.		
1	0038	39	.05	.05	.00	0.	*	1	0209	130	.00	.00	.00	0.		
1	0039	40	.05	.05	.00	0.	*	1	0210	131	.00	.00	.00	0.		
1	0040	41	.05	.05	.00	0.	*	1	0211	132	.00	.00	.00	0.		
1	0041	42	.04	.04	.00	0.	*	1	0212	133	.00	.00	.00	0.		
1	0042	43	.04	.04	.00	0.	*	1	0213	134	.00	.00	.00	0.		
1	0043	44	.04	.03	.00	0.	*	1	0214	135	.00	.00	.00	0.		
1	0044	45	.04	.03	.00	0.	*	1	0215	136	.00	.00	.00	0.		
1	0045	46	.04	.03	.00	0.	*	1	0216	137	.00	.00	.00	0.		
1	0046	47	.02	.02	.00	0.	*	1	0217	138	.00	.00	.00	0.		
1	0047	48	.02	.02	.00	0.	*	1	0218	139	.00	.00	.00	0.		
1	0048	49	.02	.02	.00	0.	*	1	0219	140	.00	.00	.00	0.		
1	0049	50	.02	.02	.00	0.	*	1	0220	141	.00	.00	.00	0.		
1	0050	51	.02	.02	.00	0.	*	1	0221	142	.00	.00	.00	0.		
1	0051	52	.01	.01	.00	0.	*	1	0222	143	.00	.00	.00	0.		
1	0052	53	.01	.01	.00	0.	*	1	0223	144	.00	.00	.00	0.		
1	0053	54	.01	.01	.00	1.	*	1	0224	145	.00	.00	.00	0.		
1	0054	55	.01	.01	.00	1.	*	1	0225	146	.00	.00	.00	0.		
1	0055	56	.01	.01	.00	1.	*	1	0226	147	.00	.00	.00	0.		
1	0056	57	.01	.01	.00	1.	*	1	0227	148	.00	.00	.00	0.		
1	0057	58	.01	.01	.00	1.	*	1	0228	149	.00	.00	.00	0.		
1	0058	59	.01	.01	.00	1.	*	1	0229	150	.00	.00	.00	0.		
1	0059	60	.01	.01	.00	2.	*	1	0230	151	.00	.00	.00	0.		
1	0100	61	.01	.01	.00	2.	*	1	0231	152	.00	.00	.00	0.		
1	0101	62	.01	.01	.00	2.	*	1	0232	153	.00	.00	.00	0.		
1	0102	63	.01	.01	.00	2.	*	1	0233	154	.00	.00	.00	0.		
1	0103	64	.01	.01	.00	2.	*	1	0234	155	.00	.00	.00	0.		
1	0104	65	.01	.01	.00	2.	*	1	0235	156	.00	.00	.00	0.		
1	0105	66	.01	.01	.00	2.	*	1	0236	157	.00	.00	.00	0.		
1	0106	67	.01	.00	.00	2.	*	1	0237	158	.00	.00	.00	0.		
1	0107	68	.01	.00	.00	3.	*	1	0238	159	.00	.00	.00	0.		
1	0108	69	.01	.00	.00	3.	*	1	0239	160	.00	.00	.00	0.		
1	0109	70	.01	.00	.00	3.	*	1	0240	161	.00	.00	.00	0.		
1	0110	71	.01	.00	.00	3.	*	1	0241	162	.00	.00	.00	0.		
1	0111	72	.00	.00	.00	3.	*	1	0242	163	.00	.00	.00	0.		
1	0112	73	.00	.00	.00	3.	*	1	0243	164	.00	.00	.00	0.		
1	0113	74	.00	.00	.00	3.	*	1	0244	165	.00	.00	.00	0.		
1	0114	75	.00	.00	.00	3.	*	1	0245	166	.00	.00	.00	0.		
1	0115	76	.00	.00	.00	3.	*	1	0246	167	.00	.00	.00	0.		
1	0116	77	.00	.00	.00	3.	*	1	0247	168	.00	.00	.00	0.		
1	0117	78	.00	.00	.00	3.	*	1	0248	169	.00	.00	.00	0.		
1	0118	79	.00	.00	.00	3.	*	1	0249	170	.00	.00	.00	0.		
1	0119	80	.00	.00	.00	3.	*	1	0250	171	.00	.00	.00	0.		
1	0120	81	.00	.00	.00	3.	*	1	0251	172	.00	.00	.00	0.		
1	0121	82	.00	.00	.00	3.	*	1	0252	173	.00	.00	.00	0.		
1	0122	83	.00	.00	.00	3.	*	1	0253	174	.00	.00	.00	0.		
1	0123	84	.00	.00	.00	3.	*	1	0254	175	.00	.00	.00	0.		
1	0124	85	.00	.00	.00	2.	*	1	0255	176	.00	.00	.00	0.		
1	0125	86	.00	.00	.00	2.	*	1	0256	177	.00	.00	.00	0.		
1	0126	87	.00	.00	.00	2.	*	1	0257	178	.00	.00	.00	0.		
1	0127	88	.00	.00	.00	2.	*	1	0258	179	.00	.00	.00	0.		
1	0128	89	.00	.00	.00	2.	*	1	0259	180	.00	.00	.00	0.		
1	0129	90	.00	.00	.00	2.	*	1	0300	181	.00	.00	.00	0.		
1	0130	91	.00	.00	.00	2.	*									

pre.out

TOTAL RAINFALL = 1.29, TOTAL LOSS = 1.16, TOTAL EXCESS = .13

PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
(CFS)	(HR)	(CFS)	6-HR	24-HR	72-HR	3.00-HR
+ 3.	1.22		1.	1.	1.	1.
		(INCHES)	.124	.124	.124	.124
		(AC-FT)	0.	0.	0.	0.
CUMULATIVE AREA =			.03 SQ MI			

*** **

```

*****
*
* RE16 *
*
*****

```

Route BE16 in channel to Outlet OE1

HYDROGRAPH ROUTING DATA

169 RD MUSKINGUM-CUNGE CHANNEL ROUTING

L	3067.	CHANNEL LENGTH
S	.0220	SLOPE
N	.040	CHANNEL ROUGHNESS COEFFICIENT
CA	.00	CONTRIBUTING AREA
SHAPE	TRAP	CHANNEL SHAPE
WD	.00	BOTTOM WIDTH OR DIAMETER
Z	7.00	SIDE SLOPE

COMPUTED MUSKINGUM-CUNGE PARAMETERS

ELEMENT	ALPHA	COMPUTATION TIME STEP		PEAK (CFS)	TIME TO PEAK (MIN)	VOLUME (IN)	MAXIMUM CELERITY (FPS)
		M	DX (FT)				
MAIN	1.81	1.33	1.00	105.76	12.67	80.00	.48

INTERPOLATED TO SPECIFIED COMPUTATION INTERVAL

MAIN	1.81	1.33	1.00	12.67	80.00	.48
------	------	------	------	-------	-------	-----

CONTINUITY SUMMARY (AC-FT) - INFLOW= .8330E+00 EXCESS= .0000E+00 OUTFLOW= .7965E+00 BASIN STORAGE= .4332E-01 PERCENT ERROR= -.8

HYDROGRAPH AT STATION RE16
PLAN 1, RATIO = 1.00

DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*
1	0000	1	0.	*	1	0046	47	0.	*	1	0132	93	10.	*	1	0218	139	2.					
1	0001	2	0.	*	1	0047	48	0.	*	1	0133	94	10.	*	1	0219	140	2.					
1	0002	3	0.	*	1	0048	49	0.	*	1	0134	95	10.	*	1	0220	141	2.					
1	0003	4	0.	*	1	0049	50	0.	*	1	0135	96	10.	*	1	0221	142	2.					
1	0004	5	0.	*	1	0050	51	0.	*	1	0136	97	9.	*	1	0222	143	2.					
1	0005	6	0.	*	1	0051	52	0.	*	1	0137	98	9.	*	1	0223	144	2.					
1	0006	7	0.	*	1	0052	53	0.	*	1	0138	99	9.	*	1	0224	145	2.					
1	0007	8	0.	*	1	0053	54	0.	*	1	0139	100	9.	*	1	0225	146	2.					
1	0008	9	0.	*	1	0054	55	0.	*	1	0140	101	8.	*	1	0226	147	2.					
1	0009	10	0.	*	1	0055	56	0.	*	1	0141	102	8.	*	1	0227	148	2.					
1	0010	11	0.	*	1	0056	57	0.	*	1	0142	103	8.	*	1	0228	149	2.					
1	0011	12	0.	*	1	0057	58	0.	*	1	0143	104	8.	*	1	0229	150	1.					
1	0012	13	0.	*	1	0058	59	0.	*	1	0144	105	7.	*	1	0230	151	1.					
1	0013	14	0.	*	1	0059	60	0.	*	1	0145	106	7.	*	1	0231	152	1.					
1	0014	15	0.	*	1	0100	61	0.	*	1	0146	107	7.	*	1	0232	153	1.					
1	0015	16	0.	*	1	0101	62	0.	*	1	0147	108	7.	*	1	0233	154	1.					
1	0016	17	0.	*	1	0102	63	0.	*	1	0148	109	7.	*	1	0234	155	1.					
1	0017	18	0.	*	1	0103	64	0.	*	1	0149	110	6.	*	1	0235	156	1.					
1	0018	19	0.	*	1	0104	65	0.	*	1	0150	111	6.	*	1	0236	157	1.					
1	0019	20	0.	*	1	0105	66	0.	*	1	0151	112	6.	*	1	0237	158	1.					
1	0020	21	0.	*	1	0106	67	0.	*	1	0152	113	6.	*	1	0238	159	1.					
1	0021	22	0.	*	1	0107	68	0.	*	1	0153	114	6.	*	1	0239	160	1.					
1	0022	23	0.	*	1	0108	69	1.	*	1	0154	115	6.	*	1	0240	161	1.					

pre.out																		
1	0023	24	0.	*	1	0109	70	7.	*	1	0155	116	5.	*	1	0241	162	1.
1	0024	25	0.	*	1	0110	71	9.	*	1	0156	117	5.	*	1	0242	163	1.
1	0025	26	0.	*	1	0111	72	8.	*	1	0157	118	5.	*	1	0243	164	1.
1	0026	27	0.	*	1	0112	73	10.	*	1	0158	119	5.	*	1	0244	165	1.
1	0027	28	0.	*	1	0113	74	10.	*	1	0159	120	5.	*	1	0245	166	1.
1	0028	29	0.	*	1	0114	75	11.	*	1	0200	121	5.	*	1	0246	167	1.
1	0029	30	0.	*	1	0115	76	12.	*	1	0201	122	4.	*	1	0247	168	1.
1	0030	31	0.	*	1	0116	77	12.	*	1	0202	123	4.	*	1	0248	169	1.
1	0031	32	0.	*	1	0117	78	12.	*	1	0203	124	4.	*	1	0249	170	1.
1	0032	33	0.	*	1	0118	79	12.	*	1	0204	125	4.	*	1	0250	171	1.
1	0033	34	0.	*	1	0119	80	13.	*	1	0205	126	4.	*	1	0251	172	1.
1	0034	35	0.	*	1	0120	81	13.	*	1	0206	127	4.	*	1	0252	173	1.
1	0035	36	0.	*	1	0121	82	13.	*	1	0207	128	3.	*	1	0253	174	1.
1	0036	37	0.	*	1	0122	83	13.	*	1	0208	129	3.	*	1	0254	175	1.
1	0037	38	0.	*	1	0123	84	12.	*	1	0209	130	3.	*	1	0255	176	1.
1	0038	39	0.	*	1	0124	85	12.	*	1	0210	131	3.	*	1	0256	177	1.
1	0039	40	0.	*	1	0125	86	12.	*	1	0211	132	3.	*	1	0257	178	1.
1	0040	41	0.	*	1	0126	87	12.	*	1	0212	133	3.	*	1	0258	179	1.
1	0041	42	0.	*	1	0127	88	12.	*	1	0213	134	3.	*	1	0259	180	1.
1	0042	43	0.	*	1	0128	89	11.	*	1	0214	135	3.	*	1	0300	181	1.
1	0043	44	0.	*	1	0129	90	11.	*	1	0215	136	2.	*				
1	0044	45	0.	*	1	0130	91	11.	*	1	0216	137	2.	*				
1	0045	46	0.	*	1	0131	92	11.	*	1	0217	138	2.	*				

PEAK FLOW	TIME	MAXIMUM AVERAGE FLOW			
(CFS)	(HR)	6-HR	24-HR	72-HR	3.00-HR
13.	1.33	3.	3.	3.	3.
		.479	.479	.479	.479
		1.	1.	1.	1.

CUMULATIVE AREA = .03 SQ MI

COMPUTED MUSKINGUM-CUNGE PARAMETERS

ELEMENT	ALPHA	COMPUTATION TIME STEP			PEAK	TIME TO PEAK	VOLUME	MAXIMUM CELERITY
		M	DT	DX				
		(MIN)	(FT)	(CFS)	(MIN)	(IN)	(FPS)	
MAIN	1.81	1.33	1.00	71.33	2.93	89.00	.11	

INTERPOLATED TO SPECIFIED COMPUTATION INTERVAL

MAIN	1.81	1.33	1.00	2.93	89.00	.11
------	------	------	------	------	-------	-----

CONTINUITY SUMMARY (AC-FT) - INFLOW= .2059E+00 EXCESS= .0000E+00 OUTFLOW= .1882E+00 BASIN STORAGE= .2029E-01 PERCENT ERROR= -1.3

HYDROGRAPH AT STATION RE16
PLAN 1, RATIO = .61

DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*
1	0000	1	0.	*	1	0046	47	0.	*	1	0132	93	3.	*	1	0218	139	1.					
1	0001	2	0.	*	1	0047	48	0.	*	1	0133	94	3.	*	1	0219	140	1.					
1	0002	3	0.	*	1	0048	49	0.	*	1	0134	95	3.	*	1	0220	141	1.					
1	0003	4	0.	*	1	0049	50	0.	*	1	0135	96	3.	*	1	0221	142	1.					
1	0004	5	0.	*	1	0050	51	0.	*	1	0136	97	3.	*	1	0222	143	1.					
1	0005	6	0.	*	1	0051	52	0.	*	1	0137	98	3.	*	1	0223	144	1.					
1	0006	7	0.	*	1	0052	53	0.	*	1	0138	99	3.	*	1	0224	145	1.					
1	0007	8	0.	*	1	0053	54	0.	*	1	0139	100	3.	*	1	0225	146	1.					
1	0008	9	0.	*	1	0054	55	0.	*	1	0140	101	3.	*	1	0226	147	1.					
1	0009	10	0.	*	1	0055	56	0.	*	1	0141	102	3.	*	1	0227	148	1.					
1	0010	11	0.	*	1	0056	57	0.	*	1	0142	103	3.	*	1	0228	149	1.					
1	0011	12	0.	*	1	0057	58	0.	*	1	0143	104	2.	*	1	0229	150	1.					
1	0012	13	0.	*	1	0058	59	0.	*	1	0144	105	2.	*	1	0230	151	1.					
1	0013	14	0.	*	1	0059	60	0.	*	1	0145	106	2.	*	1	0231	152	1.					
1	0014	15	0.	*	1	0100	61	0.	*	1	0146	107	2.	*	1	0232	153	1.					
1	0015	16	0.	*	1	0101	62	0.	*	1	0147	108	2.	*	1	0233	154	1.					
1	0016	17	0.	*	1	0102	63	0.	*	1	0148	109	2.	*	1	0234	155	1.					
1	0017	18	0.	*	1	0103	64	0.	*	1	0149	110	2.	*	1	0235	156	1.					
1	0018	19	0.	*	1	0104	65	0.	*	1	0150	111	2.	*	1	0236	157	1.					
1	0019	20	0.	*	1	0105	66	0.	*	1	0151	112	2.	*	1	0237	158	0.					
1	0020	21	0.	*	1	0106	67	0.	*	1	0152	113	2.	*	1	0238	159	0.					
1	0021	22	0.	*	1	0107	68	0.	*	1	0153	114	2.	*	1	0239	160	0.					
1	0022	23	0.	*	1	0108	69	0.	*	1	0154	115	2.	*	1	0240	161	0.					
1	0023	24	0.	*	1	0109	70	0.	*	1	0155	116	2.	*	1	0241	162	0.					
1	0024	25	0.	*	1	0110	71	0.	*	1	0156	117	2.	*	1	0242	163	0.					
1	0025	26	0.	*	1	0111	72	0.	*	1	0157	118	2.	*	1	0243	164	0.					

pre.out																		
1	0026	27	0.	*	1	0112	73	0.	*	1	0158	119	2.	*	1	0244	165	0.
1	0027	28	0.	*	1	0113	74	0.	*	1	0159	120	2.	*	1	0245	166	0.
1	0028	29	0.	*	1	0114	75	0.	*	1	0200	121	2.	*	1	0246	167	0.
1	0029	30	0.	*	1	0115	76	0.	*	1	0201	122	2.	*	1	0247	168	0.
1	0030	31	0.	*	1	0116	77	0.	*	1	0202	123	2.	*	1	0248	169	0.
1	0031	32	0.	*	1	0117	78	0.	*	1	0203	124	2.	*	1	0249	170	0.
1	0032	33	0.	*	1	0118	79	0.	*	1	0204	125	2.	*	1	0250	171	0.
1	0033	34	0.	*	1	0119	80	0.	*	1	0205	126	1.	*	1	0251	172	0.
1	0034	35	0.	*	1	0120	81	0.	*	1	0206	127	1.	*	1	0252	173	0.
1	0035	36	0.	*	1	0121	82	0.	*	1	0207	128	1.	*	1	0253	174	0.
1	0036	37	0.	*	1	0122	83	1.	*	1	0208	129	1.	*	1	0254	175	0.
1	0037	38	0.	*	1	0123	84	3.	*	1	0209	130	1.	*	1	0255	176	0.
1	0038	39	0.	*	1	0124	85	2.	*	1	0210	131	1.	*	1	0256	177	0.
1	0039	40	0.	*	1	0125	86	2.	*	1	0211	132	1.	*	1	0257	178	0.
1	0040	41	0.	*	1	0126	87	3.	*	1	0212	133	1.	*	1	0258	179	0.
1	0041	42	0.	*	1	0127	88	3.	*	1	0213	134	1.	*	1	0259	180	0.
1	0042	43	0.	*	1	0128	89	3.	*	1	0214	135	1.	*	1	0300	181	0.
1	0043	44	0.	*	1	0129	90	3.	*	1	0215	136	1.	*				
1	0044	45	0.	*	1	0130	91	3.	*	1	0216	137	1.	*				
1	0045	46	0.	*	1	0131	92	3.	*	1	0217	138	1.	*				

PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
+	(CFS)	(HR)	6-HR	24-HR	72-HR	3.00-HR
+	3.	1.48	1.	1.	1.	1.
		(INCHES)	.113	.113	.113	.113
		(AC-FT)	0.	0.	0.	0.
CUMULATIVE AREA =			.03 SQ MI			

*** **

```

*****
*          *
170 KK    *   BE17  *
*          *
*****

```

BE17

SUBBASIN RUNOFF DATA

172 BA SUBBASIN CHARACTERISTICS
TAREA 2.05 SUBBASIN AREA

PRECIPITATION DATA

23 PB STORM 2.13 BASIN TOTAL PRECIPITATION

24 PI INCREMENTAL PRECIPITATION PATTERN

.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.05	.05	.05	.05	.05	.04	.04	.04	.04	.04
.03	.03	.03	.03	.03	.02	.02	.02	.02	.02
.01	.01	.01	.01	.01	.01	.01	.01	.01	.01
.01	.01	.01	.01	.01	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00

173 LS SCS LOSS RATE
STRTL .60 INITIAL ABSTRACTION
CRVNB 77.00 CURVE NUMBER
RTIMP .00 PERCENT IMPERVIOUS AREA

174 UD SCS DIMENSIONLESS UNITGRAPH
TLAG 1.09 LAG

*** WARNING *** UNIT HYDROGRAPH TRUNCATED FROM 328 TO 300 INTERVALS

pre.out
VOLUME = 1.00

4.	8.	12.	17.	21.	25.	31.	41.	51.	60.
70.	80.	89.	101.	114.	126.	139.	151.	163.	177.
194.	210.	227.	243.	260.	276.	297.	319.	341.	363.
385.	407.	430.	456.	482.	509.	535.	561.	587.	611.
633.	655.	677.	699.	721.	743.	759.	774.	789.	804.
819.	834.	847.	855.	863.	871.	880.	888.	896.	899.
900.	901.	903.	904.	906.	906.	905.	903.	902.	901.
899.	898.	891.	883.	875.	867.	858.	850.	842.	832.
822.	813.	803.	793.	784.	773.	762.	751.	740.	729.
718.	707.	693.	679.	666.	652.	638.	624.	609.	593.
576.	560.	543.	526.	510.	496.	482.	468.	454.	441.
427.	414.	404.	395.	385.	376.	366.	356.	348.	339.
331.	323.	314.	306.	298.	291.	284.	277.	270.	264.
257.	251.	246.	241.	236.	231.	226.	221.	216.	211.
206.	201.	195.	190.	186.	182.	178.	173.	169.	165.
161.	157.	153.	149.	144.	140.	136.	132.	130.	127.
124.	121.	119.	116.	113.	110.	108.	105.	102.	99.
97.	95.	93.	90.	88.	86.	84.	82.	80.	78.
76.	74.	72.	70.	68.	67.	65.	64.	62.	61.
59.	58.	56.	55.	53.	52.	50.	49.	48.	47.
46.	45.	44.	43.	42.	41.	40.	39.	38.	37.
36.	35.	34.	33.	33.	32.	31.	30.	30.	29.
28.	27.	27.	26.	25.	25.	24.	24.	23.	23.
22.	22.	21.	20.	20.	19.	19.	18.	18.	18.
17.	17.	16.	16.	16.	15.	15.	14.	14.	14.
13.	13.	13.	12.	12.	12.	12.	11.	11.	11.
10.	10.	10.	10.	10.	9.	9.	9.	9.	9.
9.	8.	8.	8.	8.	8.	8.	7.	7.	7.
7.	7.	7.	6.	6.	6.	6.	6.	6.	5.
5.	5.	5.	5.	5.	4.	4.	4.	4.	4.

HYDROGRAPH AT STATION BE17

DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP	Q	*	DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP	Q	*
1	0000	1	.00	.00	.00	0.	*	1	0131	92	.00	.00	.00	250.					
1	0001	2	.00	.00	.00	0.	*	1	0132	93	.00	.00	.00	258.					
1	0002	3	.00	.00	.00	0.	*	1	0133	94	.00	.00	.00	265.					
1	0003	4	.00	.00	.00	0.	*	1	0134	95	.00	.00	.00	273.					
1	0004	5	.00	.00	.00	0.	*	1	0135	96	.00	.00	.00	280.					
1	0005	6	.00	.00	.00	0.	*	1	0136	97	.00	.00	.00	287.					
1	0006	7	.00	.00	.00	0.	*	1	0137	98	.00	.00	.00	294.					
1	0007	8	.00	.00	.00	0.	*	1	0138	99	.00	.00	.00	301.					
1	0008	9	.00	.00	.00	0.	*	1	0139	100	.00	.00	.00	307.					
1	0009	10	.00	.00	.00	0.	*	1	0140	101	.00	.00	.00	313.					
1	0010	11	.00	.00	.00	0.	*	1	0141	102	.00	.00	.00	319.					
1	0011	12	.00	.00	.00	0.	*	1	0142	103	.00	.00	.00	324.					
1	0012	13	.00	.00	.00	0.	*	1	0143	104	.00	.00	.00	330.					
1	0013	14	.00	.00	.00	0.	*	1	0144	105	.00	.00	.00	335.					
1	0014	15	.00	.00	.00	0.	*	1	0145	106	.00	.00	.00	339.					
1	0015	16	.00	.00	.00	0.	*	1	0146	107	.00	.00	.00	344.					
1	0016	17	.00	.00	.00	0.	*	1	0147	108	.00	.00	.00	348.					
1	0017	18	.00	.00	.00	0.	*	1	0148	109	.00	.00	.00	352.					
1	0018	19	.00	.00	.00	0.	*	1	0149	110	.00	.00	.00	356.					
1	0019	20	.00	.00	.00	0.	*	1	0150	111	.00	.00	.00	359.					
1	0020	21	.00	.00	.00	0.	*	1	0151	112	.00	.00	.00	362.					
1	0021	22	.00	.00	.00	0.	*	1	0152	113	.00	.00	.00	365.					
1	0022	23	.00	.00	.00	0.	*	1	0153	114	.00	.00	.00	368.					
1	0023	24	.00	.00	.00	0.	*	1	0154	115	.00	.00	.00	370.					
1	0024	25	.00	.00	.00	0.	*	1	0155	116	.00	.00	.00	372.					
1	0025	26	.00	.00	.00	0.	*	1	0156	117	.00	.00	.00	374.					
1	0026	27	.00	.00	.00	0.	*	1	0157	118	.00	.00	.00	375.					
1	0027	28	.00	.00	.00	0.	*	1	0158	119	.00	.00	.00	376.					
1	0028	29	.00	.00	.00	0.	*	1	0159	120	.00	.00	.00	377.					
1	0029	30	.00	.00	.00	0.	*	1	0200	121	.00	.00	.00	378.					
1	0030	31	.00	.00	.00	0.	*	1	0201	122	.00	.00	.00	378.					
1	0031	32	.11	.11	.00	0.	*	1	0202	123	.00	.00	.00	378.					
1	0032	33	.11	.11	.00	0.	*	1	0203	124	.00	.00	.00	378.					
1	0033	34	.11	.11	.00	0.	*	1	0204	125	.00	.00	.00	377.					
1	0034	35	.11	.11	.00	0.	*	1	0205	126	.00	.00	.00	377.					
1	0035	36	.11	.11	.00	0.	*	1	0206	127	.00	.00	.00	376.					
1	0036	37	.09	.09	.00	0.	*	1	0207	128	.00	.00	.00	375.					
1	0037	38	.09	.08	.01	0.	*	1	0208	129	.00	.00	.00	373.					
1	0038	39	.09	.08	.01	0.	*	1	0209	130	.00	.00	.00	372.					
1	0039	40	.09	.07	.02	0.	*	1	0210	131	.00	.00	.00	370.					
1	0040	41	.09	.07	.02	1.	*	1	0211	132	.00	.00	.00	368.					
1	0041	42	.06	.05	.02	1.	*	1	0212	133	.00	.00	.00	366.					
1	0042	43	.06	.04	.02	1.	*	1	0213	134	.00	.00	.00	364.					
1	0043	44	.06	.04	.02	2.	*	1	0214	135	.00	.00	.00	361.					
1	0044	45	.06	.04	.02	2.	*	1	0215	136	.00	.00	.00	358.					
1	0045	46	.06	.04	.02	3.	*	1	0216	137	.00	.00	.00	355.					
1	0046	47	.04	.02	.01	4.	*	1	0217	138	.00	.00	.00	352.					
1	0047	48	.04	.02	.01	5.	*	1	0218	139	.00	.00	.00	349.					
1	0048	49	.04	.02	.02	6.	*	1	0219	140	.00	.00	.00	345.					
1	0049	50	.04	.02	.02	8.	*	1	0220	141	.00	.00	.00	341.					

pre.out														
1	0050	51	.04	.02	.02	9.	*	1	0221	142	.00	.00	.00	337.
1	0051	52	.02	.01	.01	11.	*	1	0222	143	.00	.00	.00	333.
1	0052	53	.02	.01	.01	13.	*	1	0223	144	.00	.00	.00	329.
1	0053	54	.02	.01	.01	15.	*	1	0224	145	.00	.00	.00	325.
1	0054	55	.02	.01	.01	18.	*	1	0225	146	.00	.00	.00	320.
1	0055	56	.02	.01	.01	20.	*	1	0226	147	.00	.00	.00	316.
1	0056	57	.02	.01	.01	23.	*	1	0227	148	.00	.00	.00	311.
1	0057	58	.02	.01	.01	26.	*	1	0228	149	.00	.00	.00	306.
1	0058	59	.02	.01	.01	29.	*	1	0229	150	.00	.00	.00	301.
1	0059	60	.02	.01	.01	32.	*	1	0230	151	.00	.00	.00	297.
1	0100	61	.02	.01	.01	36.	*	1	0231	152	.00	.00	.00	292.
1	0101	62	.01	.01	.01	40.	*	1	0232	153	.00	.00	.00	287.
1	0102	63	.01	.01	.01	44.	*	1	0233	154	.00	.00	.00	283.
1	0103	64	.01	.01	.01	48.	*	1	0234	155	.00	.00	.00	278.
1	0104	65	.01	.01	.01	52.	*	1	0235	156	.00	.00	.00	273.
1	0105	66	.01	.01	.01	57.	*	1	0236	157	.00	.00	.00	269.
1	0106	67	.01	.01	.01	62.	*	1	0237	158	.00	.00	.00	264.
1	0107	68	.01	.01	.01	67.	*	1	0238	159	.00	.00	.00	260.
1	0108	69	.01	.01	.01	73.	*	1	0239	160	.00	.00	.00	255.
1	0109	70	.01	.01	.01	78.	*	1	0240	161	.00	.00	.00	251.
1	0110	71	.01	.01	.01	84.	*	1	0241	162	.00	.00	.00	247.
1	0111	72	.01	.00	.00	91.	*	1	0242	163	.00	.00	.00	243.
1	0112	73	.01	.00	.00	97.	*	1	0243	164	.00	.00	.00	238.
1	0113	74	.01	.00	.00	104.	*	1	0244	165	.00	.00	.00	234.
1	0114	75	.01	.00	.00	111.	*	1	0245	166	.00	.00	.00	230.
1	0115	76	.01	.00	.00	118.	*	1	0246	167	.00	.00	.00	226.
1	0116	77	.01	.00	.00	126.	*	1	0247	168	.00	.00	.00	222.
1	0117	78	.01	.00	.00	134.	*	1	0248	169	.00	.00	.00	219.
1	0118	79	.01	.00	.00	142.	*	1	0249	170	.00	.00	.00	215.
1	0119	80	.01	.00	.00	150.	*	1	0250	171	.00	.00	.00	211.
1	0120	81	.01	.00	.00	158.	*	1	0251	172	.00	.00	.00	208.
1	0121	82	.01	.00	.00	166.	*	1	0252	173	.00	.00	.00	204.
1	0122	83	.01	.00	.00	175.	*	1	0253	174	.00	.00	.00	201.
1	0123	84	.01	.00	.00	183.	*	1	0254	175	.00	.00	.00	198.
1	0124	85	.01	.00	.00	192.	*	1	0255	176	.00	.00	.00	194.
1	0125	86	.01	.00	.00	200.	*	1	0256	177	.00	.00	.00	191.
1	0126	87	.01	.00	.00	209.	*	1	0257	178	.00	.00	.00	188.
1	0127	88	.01	.00	.00	217.	*	1	0258	179	.00	.00	.00	185.
1	0128	89	.01	.00	.00	226.	*	1	0259	180	.00	.00	.00	182.
1	0129	90	.01	.00	.00	234.	*	1	0300	181	.00	.00	.00	179.
1	0130	91	.01	.00	.00	242.	*							

TOTAL RAINFALL = 2.13, TOTAL LOSS = 1.61, TOTAL EXCESS = .52

PEAK FLOW	TIME		MAXIMUM	AVERAGE	FLOW	
(CFS)	(HR)	(CFS)	6-HR	24-HR	72-HR	3.00-HR
378.	2.03		175.	175.	175.	175.
		(INCHES)	.395	.395	.395	.395
		(AC-FT)	43.	43.	43.	43.

CUMULATIVE AREA = 2.05 SQ MI

*** WARNING *** UNIT HYDROGRAPH TRUNCATED FROM 328 TO 300 INTERVALS

HYDROGRAPH AT STATION BE17
PLAN 1, RATIO = 1.00

DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	*	DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
1	0000	1	.00	.00	.00	0.	0.	*	1	0131	92	.00	.00	.00	250.	
1	0001	2	.00	.00	.00	0.	0.	*	1	0132	93	.00	.00	.00	258.	
1	0002	3	.00	.00	.00	0.	0.	*	1	0133	94	.00	.00	.00	265.	
1	0003	4	.00	.00	.00	0.	0.	*	1	0134	95	.00	.00	.00	273.	
1	0004	5	.00	.00	.00	0.	0.	*	1	0135	96	.00	.00	.00	280.	
1	0005	6	.00	.00	.00	0.	0.	*	1	0136	97	.00	.00	.00	287.	
1	0006	7	.00	.00	.00	0.	0.	*	1	0137	98	.00	.00	.00	294.	
1	0007	8	.00	.00	.00	0.	0.	*	1	0138	99	.00	.00	.00	301.	
1	0008	9	.00	.00	.00	0.	0.	*	1	0139	100	.00	.00	.00	307.	
1	0009	10	.00	.00	.00	0.	0.	*	1	0140	101	.00	.00	.00	313.	
1	0010	11	.00	.00	.00	0.	0.	*	1	0141	102	.00	.00	.00	319.	
1	0011	12	.00	.00	.00	0.	0.	*	1	0142	103	.00	.00	.00	324.	
1	0012	13	.00	.00	.00	0.	0.	*	1	0143	104	.00	.00	.00	330.	
1	0013	14	.00	.00	.00	0.	0.	*	1	0144	105	.00	.00	.00	335.	
1	0014	15	.00	.00	.00	0.	0.	*	1	0145	106	.00	.00	.00	339.	
1	0015	16	.00	.00	.00	0.	0.	*	1	0146	107	.00	.00	.00	344.	
1	0016	17	.00	.00	.00	0.	0.	*	1	0147	108	.00	.00	.00	348.	
1	0017	18	.00	.00	.00	0.	0.	*	1	0148	109	.00	.00	.00	352.	
1	0018	19	.00	.00	.00	0.	0.	*	1	0149	110	.00	.00	.00	356.	
1	0019	20	.00	.00	.00	0.	0.	*	1	0150	111	.00	.00	.00	359.	
1	0020	21	.00	.00	.00	0.	0.	*	1	0151	112	.00	.00	.00	362.	

pre.out														
1	0021	22	.00	.00	.00	0.	*	1	0152	113	.00	.00	.00	365.
1	0022	23	.00	.00	.00	0.	*	1	0153	114	.00	.00	.00	368.
1	0023	24	.00	.00	.00	0.	*	1	0154	115	.00	.00	.00	370.
1	0024	25	.00	.00	.00	0.	*	1	0155	116	.00	.00	.00	372.
1	0025	26	.00	.00	.00	0.	*	1	0156	117	.00	.00	.00	374.
1	0026	27	.00	.00	.00	0.	*	1	0157	118	.00	.00	.00	375.
1	0027	28	.00	.00	.00	0.	*	1	0158	119	.00	.00	.00	376.
1	0028	29	.00	.00	.00	0.	*	1	0159	120	.00	.00	.00	377.
1	0029	30	.00	.00	.00	0.	*	1	0200	121	.00	.00	.00	378.
1	0030	31	.00	.00	.00	0.	*	1	0201	122	.00	.00	.00	378.
1	0031	32	.11	.11	.00	0.	*	1	0202	123	.00	.00	.00	378.
1	0032	33	.11	.11	.00	0.	*	1	0203	124	.00	.00	.00	378.
1	0033	34	.11	.11	.00	0.	*	1	0204	125	.00	.00	.00	377.
1	0034	35	.11	.11	.00	0.	*	1	0205	126	.00	.00	.00	377.
1	0035	36	.11	.11	.00	0.	*	1	0206	127	.00	.00	.00	376.
1	0036	37	.09	.09	.00	0.	*	1	0207	128	.00	.00	.00	375.
1	0037	38	.09	.08	.01	0.	*	1	0208	129	.00	.00	.00	373.
1	0038	39	.09	.08	.01	0.	*	1	0209	130	.00	.00	.00	372.
1	0039	40	.09	.07	.02	0.	*	1	0210	131	.00	.00	.00	370.
1	0040	41	.09	.07	.02	1.	*	1	0211	132	.00	.00	.00	368.
1	0041	42	.06	.05	.02	1.	*	1	0212	133	.00	.00	.00	366.
1	0042	43	.06	.04	.02	1.	*	1	0213	134	.00	.00	.00	364.
1	0043	44	.06	.04	.02	2.	*	1	0214	135	.00	.00	.00	361.
1	0044	45	.06	.04	.02	2.	*	1	0215	136	.00	.00	.00	358.
1	0045	46	.06	.04	.02	3.	*	1	0216	137	.00	.00	.00	355.
1	0046	47	.04	.02	.01	4.	*	1	0217	138	.00	.00	.00	352.
1	0047	48	.04	.02	.01	5.	*	1	0218	139	.00	.00	.00	349.
1	0048	49	.04	.02	.02	6.	*	1	0219	140	.00	.00	.00	345.
1	0049	50	.04	.02	.02	8.	*	1	0220	141	.00	.00	.00	341.
1	0050	51	.04	.02	.02	9.	*	1	0221	142	.00	.00	.00	337.
1	0051	52	.02	.01	.01	11.	*	1	0222	143	.00	.00	.00	333.
1	0052	53	.02	.01	.01	13.	*	1	0223	144	.00	.00	.00	329.
1	0053	54	.02	.01	.01	15.	*	1	0224	145	.00	.00	.00	325.
1	0054	55	.02	.01	.01	18.	*	1	0225	146	.00	.00	.00	320.
1	0055	56	.02	.01	.01	20.	*	1	0226	147	.00	.00	.00	316.
1	0056	57	.02	.01	.01	23.	*	1	0227	148	.00	.00	.00	311.
1	0057	58	.02	.01	.01	26.	*	1	0228	149	.00	.00	.00	306.
1	0058	59	.02	.01	.01	29.	*	1	0229	150	.00	.00	.00	301.
1	0059	60	.02	.01	.01	32.	*	1	0230	151	.00	.00	.00	297.
1	0100	61	.02	.01	.01	36.	*	1	0231	152	.00	.00	.00	292.
1	0101	62	.01	.01	.01	40.	*	1	0232	153	.00	.00	.00	287.
1	0102	63	.01	.01	.01	44.	*	1	0233	154	.00	.00	.00	283.
1	0103	64	.01	.01	.01	48.	*	1	0234	155	.00	.00	.00	278.
1	0104	65	.01	.01	.01	52.	*	1	0235	156	.00	.00	.00	273.
1	0105	66	.01	.01	.01	57.	*	1	0236	157	.00	.00	.00	269.
1	0106	67	.01	.01	.01	62.	*	1	0237	158	.00	.00	.00	264.
1	0107	68	.01	.01	.01	67.	*	1	0238	159	.00	.00	.00	260.
1	0108	69	.01	.01	.01	73.	*	1	0239	160	.00	.00	.00	255.
1	0109	70	.01	.01	.01	78.	*	1	0240	161	.00	.00	.00	251.
1	0110	71	.01	.01	.01	84.	*	1	0241	162	.00	.00	.00	247.
1	0111	72	.01	.00	.00	91.	*	1	0242	163	.00	.00	.00	243.
1	0112	73	.01	.00	.00	97.	*	1	0243	164	.00	.00	.00	238.
1	0113	74	.01	.00	.00	104.	*	1	0244	165	.00	.00	.00	234.
1	0114	75	.01	.00	.00	111.	*	1	0245	166	.00	.00	.00	230.
1	0115	76	.01	.00	.00	118.	*	1	0246	167	.00	.00	.00	226.
1	0116	77	.01	.00	.00	126.	*	1	0247	168	.00	.00	.00	222.
1	0117	78	.01	.00	.00	134.	*	1	0248	169	.00	.00	.00	219.
1	0118	79	.01	.00	.00	142.	*	1	0249	170	.00	.00	.00	215.
1	0119	80	.01	.00	.00	150.	*	1	0250	171	.00	.00	.00	211.
1	0120	81	.01	.00	.00	158.	*	1	0251	172	.00	.00	.00	208.
1	0121	82	.01	.00	.00	166.	*	1	0252	173	.00	.00	.00	204.
1	0122	83	.01	.00	.00	175.	*	1	0253	174	.00	.00	.00	201.
1	0123	84	.01	.00	.00	183.	*	1	0254	175	.00	.00	.00	198.
1	0124	85	.01	.00	.00	192.	*	1	0255	176	.00	.00	.00	194.
1	0125	86	.01	.00	.00	200.	*	1	0256	177	.00	.00	.00	191.
1	0126	87	.01	.00	.00	209.	*	1	0257	178	.00	.00	.00	188.
1	0127	88	.01	.00	.00	217.	*	1	0258	179	.00	.00	.00	185.
1	0128	89	.01	.00	.00	226.	*	1	0259	180	.00	.00	.00	182.
1	0129	90	.01	.00	.00	234.	*	1	0300	181	.00	.00	.00	179.
1	0130	91	.01	.00	.00	242.	*							

TOTAL RAINFALL = 2.13, TOTAL LOSS = 1.61, TOTAL EXCESS = .52

+ (CFS)	TIME (HR)	(CFS)	MAXIMUM AVERAGE FLOW			
			6-HR	24-HR	72-HR	3.00-HR
+ 378.	2.03		175.	175.	175.	175.
		(INCHES)	.395	.395	.395	.395
		(AC-FT)	43.	43.	43.	43.

CUMULATIVE AREA = 2.05 SQ MI

*** WARNING *** UNIT HYDROGRAPH TRUNCATED FROM 328 TO 300 INTERVALS

pre.out

HYDROGRAPH AT STATION BE17
PLAN 1, RATIO = .61

DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	*	DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
1	0000	1	.00	.00	.00	0.	*	1	0131	92	.00	.00	.00	48.		
1	0001	2	.00	.00	.00	0.	*	1	0132	93	.00	.00	.00	50.		
1	0002	3	.00	.00	.00	0.	*	1	0133	94	.00	.00	.00	52.		
1	0003	4	.00	.00	.00	0.	*	1	0134	95	.00	.00	.00	54.		
1	0004	5	.00	.00	.00	0.	*	1	0135	96	.00	.00	.00	56.		
1	0005	6	.00	.00	.00	0.	*	1	0136	97	.00	.00	.00	58.		
1	0006	7	.00	.00	.00	0.	*	1	0137	98	.00	.00	.00	60.		
1	0007	8	.00	.00	.00	0.	*	1	0138	99	.00	.00	.00	61.		
1	0008	9	.00	.00	.00	0.	*	1	0139	100	.00	.00	.00	63.		
1	0009	10	.00	.00	.00	0.	*	1	0140	101	.00	.00	.00	65.		
1	0010	11	.00	.00	.00	0.	*	1	0141	102	.00	.00	.00	67.		
1	0011	12	.00	.00	.00	0.	*	1	0142	103	.00	.00	.00	68.		
1	0012	13	.00	.00	.00	0.	*	1	0143	104	.00	.00	.00	70.		
1	0013	14	.00	.00	.00	0.	*	1	0144	105	.00	.00	.00	71.		
1	0014	15	.00	.00	.00	0.	*	1	0145	106	.00	.00	.00	73.		
1	0015	16	.00	.00	.00	0.	*	1	0146	107	.00	.00	.00	74.		
1	0016	17	.00	.00	.00	0.	*	1	0147	108	.00	.00	.00	76.		
1	0017	18	.00	.00	.00	0.	*	1	0148	109	.00	.00	.00	77.		
1	0018	19	.00	.00	.00	0.	*	1	0149	110	.00	.00	.00	78.		
1	0019	20	.00	.00	.00	0.	*	1	0150	111	.00	.00	.00	79.		
1	0020	21	.00	.00	.00	0.	*	1	0151	112	.00	.00	.00	81.		
1	0021	22	.00	.00	.00	0.	*	1	0152	113	.00	.00	.00	82.		
1	0022	23	.00	.00	.00	0.	*	1	0153	114	.00	.00	.00	83.		
1	0023	24	.00	.00	.00	0.	*	1	0154	115	.00	.00	.00	84.		
1	0024	25	.00	.00	.00	0.	*	1	0155	116	.00	.00	.00	85.		
1	0025	26	.00	.00	.00	0.	*	1	0156	117	.00	.00	.00	86.		
1	0026	27	.00	.00	.00	0.	*	1	0157	118	.00	.00	.00	86.		
1	0027	28	.00	.00	.00	0.	*	1	0158	119	.00	.00	.00	87.		
1	0028	29	.00	.00	.00	0.	*	1	0159	120	.00	.00	.00	88.		
1	0029	30	.00	.00	.00	0.	*	1	0200	121	.00	.00	.00	88.		
1	0030	31	.00	.00	.00	0.	*	1	0201	122	.00	.00	.00	89.		
1	0031	32	.07	.07	.00	0.	*	1	0202	123	.00	.00	.00	89.		
1	0032	33	.07	.07	.00	0.	*	1	0203	124	.00	.00	.00	90.		
1	0033	34	.07	.07	.00	0.	*	1	0204	125	.00	.00	.00	90.		
1	0034	35	.07	.07	.00	0.	*	1	0205	126	.00	.00	.00	90.		
1	0035	36	.07	.07	.00	0.	*	1	0206	127	.00	.00	.00	90.		
1	0036	37	.05	.05	.00	0.	*	1	0207	128	.00	.00	.00	90.		
1	0037	38	.05	.05	.00	0.	*	1	0208	129	.00	.00	.00	90.		
1	0038	39	.05	.05	.00	0.	*	1	0209	130	.00	.00	.00	90.		
1	0039	40	.05	.05	.00	0.	*	1	0210	131	.00	.00	.00	90.		
1	0040	41	.05	.05	.00	0.	*	1	0211	132	.00	.00	.00	90.		
1	0041	42	.04	.04	.00	0.	*	1	0212	133	.00	.00	.00	90.		
1	0042	43	.04	.04	.00	0.	*	1	0213	134	.00	.00	.00	90.		
1	0043	44	.04	.03	.00	0.	*	1	0214	135	.00	.00	.00	90.		
1	0044	45	.04	.03	.00	0.	*	1	0215	136	.00	.00	.00	89.		
1	0045	46	.04	.03	.00	0.	*	1	0216	137	.00	.00	.00	89.		
1	0046	47	.02	.02	.00	0.	*	1	0217	138	.00	.00	.00	88.		
1	0047	48	.02	.02	.00	0.	*	1	0218	139	.00	.00	.00	88.		
1	0048	49	.02	.02	.00	0.	*	1	0219	140	.00	.00	.00	88.		
1	0049	50	.02	.02	.00	1.	*	1	0220	141	.00	.00	.00	87.		
1	0050	51	.02	.02	.00	1.	*	1	0221	142	.00	.00	.00	86.		
1	0051	52	.01	.01	.00	1.	*	1	0222	143	.00	.00	.00	86.		
1	0052	53	.01	.01	.00	1.	*	1	0223	144	.00	.00	.00	85.		
1	0053	54	.01	.01	.00	2.	*	1	0224	145	.00	.00	.00	84.		
1	0054	55	.01	.01	.00	2.	*	1	0225	146	.00	.00	.00	83.		
1	0055	56	.01	.01	.00	2.	*	1	0226	147	.00	.00	.00	83.		
1	0056	57	.01	.01	.00	3.	*	1	0227	148	.00	.00	.00	82.		
1	0057	58	.01	.01	.00	3.	*	1	0228	149	.00	.00	.00	81.		
1	0058	59	.01	.01	.00	4.	*	1	0229	150	.00	.00	.00	80.		
1	0059	60	.01	.01	.00	4.	*	1	0230	151	.00	.00	.00	79.		
1	0100	61	.01	.01	.00	5.	*	1	0231	152	.00	.00	.00	78.		
1	0101	62	.01	.01	.00	5.	*	1	0232	153	.00	.00	.00	77.		
1	0102	63	.01	.01	.00	6.	*	1	0233	154	.00	.00	.00	76.		
1	0103	64	.01	.01	.00	7.	*	1	0234	155	.00	.00	.00	75.		
1	0104	65	.01	.01	.00	7.	*	1	0235	156	.00	.00	.00	74.		
1	0105	66	.01	.01	.00	8.	*	1	0236	157	.00	.00	.00	73.		
1	0106	67	.01	.00	.00	9.	*	1	0237	158	.00	.00	.00	72.		
1	0107	68	.01	.00	.00	10.	*	1	0238	159	.00	.00	.00	71.		
1	0108	69	.01	.00	.00	11.	*	1	0239	160	.00	.00	.00	70.		
1	0109	70	.01	.00	.00	12.	*	1	0240	161	.00	.00	.00	69.		
1	0110	71	.01	.00	.00	13.	*	1	0241	162	.00	.00	.00	68.		
1	0111	72	.00	.00	.00	14.	*	1	0242	163	.00	.00	.00	67.		
1	0112	73	.00	.00	.00	15.	*	1	0243	164	.00	.00	.00	66.		
1	0113	74	.00	.00	.00	17.	*	1	0244	165	.00	.00	.00	65.		
1	0114	75	.00	.00	.00	18.	*	1	0245	166	.00	.00	.00	64.		
1	0115	76	.00	.00	.00	19.	*	1	0246	167	.00	.00	.00	63.		
1	0116	77	.00	.00	.00	21.	*	1	0247	168	.00	.00	.00	62.		
1	0117	78	.00	.00	.00	22.	*	1	0248	169	.00	.00	.00	61.		
1	0118	79	.00	.00	.00	24.	*	1	0249	170	.00	.00	.00	60.		
1	0119	80	.00	.00	.00	25.	*	1	0250	171	.00	.00	.00	59.		
1	0120	81	.00	.00	.00	27.	*	1	0251	172	.00	.00	.00	58.		
1	0121	82	.00	.00	.00	29.	*	1	0252	173	.00	.00	.00	57.		

pre.out														
1	0122	83	.00	.00	.00	31.	*	1	0253	174	.00	.00	.00	57.
1	0123	84	.00	.00	.00	33.	*	1	0254	175	.00	.00	.00	56.
1	0124	85	.00	.00	.00	34.	*	1	0255	176	.00	.00	.00	55.
1	0125	86	.00	.00	.00	36.	*	1	0256	177	.00	.00	.00	54.
1	0126	87	.00	.00	.00	38.	*	1	0257	178	.00	.00	.00	53.
1	0127	88	.00	.00	.00	40.	*	1	0258	179	.00	.00	.00	52.
1	0128	89	.00	.00	.00	42.	*	1	0259	180	.00	.00	.00	51.
1	0129	90	.00	.00	.00	44.	*	1	0300	181	.00	.00	.00	51.
1	0130	91	.00	.00	.00	46.	*							

TOTAL RAINFALL = 1.29, TOTAL LOSS = 1.16, TOTAL EXCESS = .13

PEAK FLOW	TIME	6-HR	MAXIMUM AVERAGE FLOW	72-HR	3.00-HR
(CFS)	(HR)	(CFS)	24-HR		
90.	2.13	41.	41.	41.	41.
		(INCHES)	.092	.092	.092
		(AC-FT)	10.	10.	10.

CUMULATIVE AREA = 2.05 SQ MI

*** **

 * *
 175 KK * RE17 *
 * *

Route BE17 in channel to Outlet OE1

HYDROGRAPH ROUTING DATA

177 RD	MUSKINGUM-CUNGE CHANNEL ROUTING
L	2983. CHANNEL LENGTH
S	.0240 SLOPE
N	.040 CHANNEL ROUGHNESS COEFFICIENT
CA	.00 CONTRIBUTING AREA
SHAPE	TRAP CHANNEL SHAPE
WD	.00 BOTTOM WIDTH OR DIAMETER
Z	7.00 SIDE SLOPE

 COMPUTED MUSKINGUM-CUNGE PARAMETERS

ELEMENT	ALPHA	M	DT	PEAK	TIME TO PEAK	VOLUME	MAXIMUM CELERITY
			(MIN)	(CFS)	(MIN)	(IN)	(FPS)
MAIN	1.89	1.33	1.00	377.83	127.00	.38	7.97

INTERPOLATED TO SPECIFIED COMPUTATION INTERVAL

MAIN	1.89	1.33	1.00	377.83	127.00	.38	
------	------	------	------	--------	--------	-----	--

CONTINUITY SUMMARY (AC-FT) - INFLOW= .4341E+02 EXCESS= .0000E+00 OUTFLOW= .4132E+02 BASIN STORAGE= .2174E+01 PERCENT ERROR= -.2

HYDROGRAPH AT STATION RE17
 PLAN 1, RATIO = 1.00

DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*
1	0000	1	0.	*	1	0046	47	0.	*	1	0132	93	208.	*	1	0218	139	364.					
1	0001	2	0.	*	1	0047	48	0.	*	1	0133	94	217.	*	1	0219	140	362.					
1	0002	3	0.	*	1	0048	49	0.	*	1	0134	95	226.	*	1	0220	141	359.					
1	0003	4	0.	*	1	0049	50	0.	*	1	0135	96	235.	*	1	0221	142	356.					
1	0004	5	0.	*	1	0050	51	0.	*	1	0136	97	243.	*	1	0222	143	353.					
1	0005	6	0.	*	1	0051	52	0.	*	1	0137	98	251.	*	1	0223	144	350.					
1	0006	7	0.	*	1	0052	53	0.	*	1	0138	99	260.	*	1	0224	145	346.					
1	0007	8	0.	*	1	0053	54	0.	*	1	0139	100	268.	*	1	0225	146	343.					
1	0008	9	0.	*	1	0054	55	0.	*	1	0140	101	275.	*	1	0226	147	339.					
1	0009	10	0.	*	1	0055	56	1.	*	1	0141	102	283.	*	1	0227	148	335.					
1	0010	11	0.	*	1	0056	57	1.	*	1	0142	103	290.	*	1	0228	149	331.					
1	0011	12	0.	*	1	0057	58	2.	*	1	0143	104	297.	*	1	0229	150	327.					
1	0012	13	0.	*	1	0058	59	3.	*	1	0144	105	304.	*	1	0230	151	322.					

pre.out																		
1	0013	14	0.	*	1	0059	60	4.	*	1	0145	106	310.	*	1	0231	152	318.
1	0014	15	0.	*	1	0100	61	5.	*	1	0146	107	316.	*	1	0232	153	313.
1	0015	16	0.	*	1	0101	62	7.	*	1	0147	108	322.	*	1	0233	154	309.
1	0016	17	0.	*	1	0102	63	8.	*	1	0148	109	327.	*	1	0234	155	304.
1	0017	18	0.	*	1	0103	64	10.	*	1	0149	110	333.	*	1	0235	156	299.
1	0018	19	0.	*	1	0104	65	13.	*	1	0150	111	337.	*	1	0236	157	295.
1	0019	20	0.	*	1	0105	66	17.	*	1	0151	112	342.	*	1	0237	158	290.
1	0020	21	0.	*	1	0106	67	21.	*	1	0152	113	347.	*	1	0238	159	286.
1	0021	22	0.	*	1	0107	68	25.	*	1	0153	114	351.	*	1	0239	160	281.
1	0022	23	0.	*	1	0108	69	29.	*	1	0154	115	355.	*	1	0240	161	276.
1	0023	24	0.	*	1	0109	70	34.	*	1	0155	116	358.	*	1	0241	162	272.
1	0024	25	0.	*	1	0110	71	39.	*	1	0156	117	361.	*	1	0242	163	268.
1	0025	26	0.	*	1	0111	72	44.	*	1	0157	118	364.	*	1	0243	164	263.
1	0026	27	0.	*	1	0112	73	49.	*	1	0158	119	367.	*	1	0244	165	259.
1	0027	28	0.	*	1	0113	74	55.	*	1	0159	120	369.	*	1	0245	166	255.
1	0028	29	0.	*	1	0114	75	61.	*	1	0200	121	371.	*	1	0246	167	250.
1	0029	30	0.	*	1	0115	76	67.	*	1	0201	122	373.	*	1	0247	168	246.
1	0030	31	0.	*	1	0116	77	73.	*	1	0202	123	375.	*	1	0248	169	242.
1	0031	32	0.	*	1	0117	78	80.	*	1	0203	124	376.	*	1	0249	170	238.
1	0032	33	0.	*	1	0118	79	87.	*	1	0204	125	377.	*	1	0250	171	234.
1	0033	34	0.	*	1	0119	80	94.	*	1	0205	126	377.	*	1	0251	172	230.
1	0034	35	0.	*	1	0120	81	102.	*	1	0206	127	378.	*	1	0252	173	226.
1	0035	36	0.	*	1	0121	82	110.	*	1	0207	128	378.	*	1	0253	174	222.
1	0036	37	0.	*	1	0122	83	118.	*	1	0208	129	378.	*	1	0254	175	219.
1	0037	38	0.	*	1	0123	84	127.	*	1	0209	130	377.	*	1	0255	176	215.
1	0038	39	0.	*	1	0124	85	136.	*	1	0210	131	377.	*	1	0256	177	212.
1	0039	40	0.	*	1	0125	86	144.	*	1	0211	132	376.	*	1	0257	178	208.
1	0040	41	0.	*	1	0126	87	153.	*	1	0212	133	375.	*	1	0258	179	205.
1	0041	42	0.	*	1	0127	88	162.	*	1	0213	134	374.	*	1	0259	180	201.
1	0042	43	0.	*	1	0128	89	172.	*	1	0214	135	372.	*	1	0300	181	198.
1	0043	44	0.	*	1	0129	90	181.	*	1	0215	136	371.	*				
1	0044	45	0.	*	1	0130	91	190.	*	1	0216	137	369.	*				
1	0045	46	0.	*	1	0131	92	199.	*	1	0217	138	367.	*				

PEAK FLOW	TIME	MAXIMUM AVERAGE FLOW			
(CFS)	(HR)	6-HR	24-HR	72-HR	3.00-HR
378.	2.12	166.	166.	166.	166.
		(INCHES)	.376	.376	.376
		(AC-FT)	41.	41.	41.

CUMULATIVE AREA = 2.05 SQ MI

COMPUTED MUSKINGUM-CUNGE PARAMETERS

ELEMENT	ALPHA	COMPUTATION TIME STEP			PEAK	TIME TO PEAK	VOLUME	MAXIMUM CELERITY
		M	DT	DX				
			(MIN)	(FT)	(CFS)	(MIN)	(IN)	(FPS)
MAIN	1.89	1.33	1.00	175.47	90.43	136.00	.08	5.57

INTERPOLATED TO SPECIFIED COMPUTATION INTERVAL

MAIN	1.89	1.33	1.00		90.43	136.00	.08	
------	------	------	------	--	-------	--------	-----	--

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1015E+02 EXCESS= .0000E+00 OUTFLOW= .9327E+01 BASIN STORAGE= .8552E+00 PERCENT ERROR= -.3

HYDROGRAPH AT STATION RE17
PLAN 1, RATIO = .61

DA	MON	HRMN	ORD	FLOW	DA	MON	HRMN	ORD	FLOW	DA	MON	HRMN	ORD	FLOW	DA	MON	HRMN	ORD	FLOW
1	0000	1	0.	*	1	0046	47	0.	*	1	0132	93	31.	*	1	0218	139	90.	
1	0001	2	0.	*	1	0047	48	0.	*	1	0133	94	33.	*	1	0219	140	90.	
1	0002	3	0.	*	1	0048	49	0.	*	1	0134	95	35.	*	1	0220	141	90.	
1	0003	4	0.	*	1	0049	50	0.	*	1	0135	96	38.	*	1	0221	142	90.	
1	0004	5	0.	*	1	0050	51	0.	*	1	0136	97	40.	*	1	0222	143	89.	
1	0005	6	0.	*	1	0051	52	0.	*	1	0137	98	42.	*	1	0223	144	89.	
1	0006	7	0.	*	1	0052	53	0.	*	1	0138	99	44.	*	1	0224	145	89.	
1	0007	8	0.	*	1	0053	54	0.	*	1	0139	100	46.	*	1	0225	146	88.	
1	0008	9	0.	*	1	0054	55	0.	*	1	0140	101	48.	*	1	0226	147	88.	
1	0009	10	0.	*	1	0055	56	0.	*	1	0141	102	51.	*	1	0227	148	87.	
1	0010	11	0.	*	1	0056	57	0.	*	1	0142	103	53.	*	1	0228	149	87.	
1	0011	12	0.	*	1	0057	58	0.	*	1	0143	104	55.	*	1	0229	150	86.	
1	0012	13	0.	*	1	0058	59	0.	*	1	0144	105	57.	*	1	0230	151	85.	
1	0013	14	0.	*	1	0059	60	0.	*	1	0145	106	59.	*	1	0231	152	85.	
1	0014	15	0.	*	1	0100	61	0.	*	1	0146	107	61.	*	1	0232	153	84.	
1	0015	16	0.	*	1	0101	62	0.	*	1	0147	108	63.	*	1	0233	154	83.	

UNIT HYDROGRAPH
108 END-OF-PERIOD ORDINATES

4.	7.	15.	23.	33.	44.	57.	71.	88.	107.
127.	150.	173.	192.	211.	226.	239.	248.	256.	260.
261.	262.	260.	258.	251.	244.	235.	227.	217.	208.
197.	185.	171.	157.	143.	131.	119.	111.	102.	95.
88.	82.	76.	71.	66.	62.	57.	53.	50.	46.
42.	39.	36.	34.	31.	29.	27.	25.	23.	21.
20.	18.	17.	16.	14.	14.	13.	12.	11.	10.
9.	9.	8.	7.	7.	7.	6.	6.	5.	5.
4.	4.	4.	4.	3.	3.	3.	3.	3.	2.
2.	2.	2.	2.	2.	2.	1.	1.	1.	1.
1.	1.	1.	1.	0.	0.	0.	0.		

HYDROGRAPH AT STATION OE2

DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	*	DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
1	0000	1	.00	.00	.00	.00	0.	*	1	0131	92	.00	.00	.00	.00	45.
1	0001	2	.00	.00	.00	.00	0.	*	1	0132	93	.00	.00	.00	.00	44.
1	0002	3	.00	.00	.00	.00	0.	*	1	0133	94	.00	.00	.00	.00	43.
1	0003	4	.00	.00	.00	.00	0.	*	1	0134	95	.00	.00	.00	.00	42.
1	0004	5	.00	.00	.00	.00	0.	*	1	0135	96	.00	.00	.00	.00	40.
1	0005	6	.00	.00	.00	.00	0.	*	1	0136	97	.00	.00	.00	.00	39.
1	0006	7	.00	.00	.00	.00	0.	*	1	0137	98	.00	.00	.00	.00	38.
1	0007	8	.00	.00	.00	.00	0.	*	1	0138	99	.00	.00	.00	.00	37.
1	0008	9	.00	.00	.00	.00	0.	*	1	0139	100	.00	.00	.00	.00	36.
1	0009	10	.00	.00	.00	.00	0.	*	1	0140	101	.00	.00	.00	.00	34.
1	0010	11	.00	.00	.00	.00	0.	*	1	0141	102	.00	.00	.00	.00	33.
1	0011	12	.00	.00	.00	.00	0.	*	1	0142	103	.00	.00	.00	.00	32.
1	0012	13	.00	.00	.00	.00	0.	*	1	0143	104	.00	.00	.00	.00	31.
1	0013	14	.00	.00	.00	.00	0.	*	1	0144	105	.00	.00	.00	.00	30.
1	0014	15	.00	.00	.00	.00	0.	*	1	0145	106	.00	.00	.00	.00	28.
1	0015	16	.00	.00	.00	.00	0.	*	1	0146	107	.00	.00	.00	.00	27.
1	0016	17	.00	.00	.00	.00	0.	*	1	0147	108	.00	.00	.00	.00	26.
1	0017	18	.00	.00	.00	.00	0.	*	1	0148	109	.00	.00	.00	.00	25.
1	0018	19	.00	.00	.00	.00	0.	*	1	0149	110	.00	.00	.00	.00	24.
1	0019	20	.00	.00	.00	.00	0.	*	1	0150	111	.00	.00	.00	.00	23.
1	0020	21	.00	.00	.00	.00	0.	*	1	0151	112	.00	.00	.00	.00	22.
1	0021	22	.00	.00	.00	.00	0.	*	1	0152	113	.00	.00	.00	.00	21.
1	0022	23	.00	.00	.00	.00	0.	*	1	0153	114	.00	.00	.00	.00	20.
1	0023	24	.00	.00	.00	.00	0.	*	1	0154	115	.00	.00	.00	.00	19.
1	0024	25	.00	.00	.00	.00	0.	*	1	0155	116	.00	.00	.00	.00	18.
1	0025	26	.00	.00	.00	.00	0.	*	1	0156	117	.00	.00	.00	.00	17.
1	0026	27	.00	.00	.00	.00	0.	*	1	0157	118	.00	.00	.00	.00	16.
1	0027	28	.00	.00	.00	.00	0.	*	1	0158	119	.00	.00	.00	.00	16.
1	0028	29	.00	.00	.00	.00	0.	*	1	0159	120	.00	.00	.00	.00	15.
1	0029	30	.00	.00	.00	.00	0.	*	1	0200	121	.00	.00	.00	.00	14.
1	0030	31	.00	.00	.00	.00	0.	*	1	0201	122	.00	.00	.00	.00	14.
1	0031	32	.11	.11	.00	0.	0.	*	1	0202	123	.00	.00	.00	.00	13.
1	0032	33	.11	.11	.00	0.	0.	*	1	0203	124	.00	.00	.00	.00	12.
1	0033	34	.11	.11	.00	0.	0.	*	1	0204	125	.00	.00	.00	.00	12.
1	0034	35	.11	.11	.00	0.	0.	*	1	0205	126	.00	.00	.00	.00	11.
1	0035	36	.11	.11	.00	0.	0.	*	1	0206	127	.00	.00	.00	.00	11.
1	0036	37	.09	.09	.00	0.	0.	*	1	0207	128	.00	.00	.00	.00	11.
1	0037	38	.09	.08	.01	0.	0.	*	1	0208	129	.00	.00	.00	.00	10.
1	0038	39	.09	.08	.01	0.	0.	*	1	0209	130	.00	.00	.00	.00	10.
1	0039	40	.09	.07	.01	0.	0.	*	1	0210	131	.00	.00	.00	.00	10.
1	0040	41	.09	.07	.02	0.	0.	*	1	0211	132	.00	.00	.00	.00	9.
1	0041	42	.06	.05	.01	1.	0.	*	1	0212	133	.00	.00	.00	.00	9.
1	0042	43	.06	.05	.02	1.	0.	*	1	0213	134	.00	.00	.00	.00	9.
1	0043	44	.06	.04	.02	2.	0.	*	1	0214	135	.00	.00	.00	.00	9.
1	0044	45	.06	.04	.02	3.	0.	*	1	0215	136	.00	.00	.00	.00	8.
1	0045	46	.06	.04	.02	4.	0.	*	1	0216	137	.00	.00	.00	.00	8.
1	0046	47	.04	.03	.01	6.	0.	*	1	0217	138	.00	.00	.00	.00	8.
1	0047	48	.04	.03	.01	7.	0.	*	1	0218	139	.00	.00	.00	.00	8.
1	0048	49	.04	.02	.01	9.	0.	*	1	0219	140	.00	.00	.00	.00	8.
1	0049	50	.04	.02	.01	12.	0.	*	1	0220	141	.00	.00	.00	.00	7.
1	0050	51	.04	.02	.02	14.	0.	*	1	0221	142	.00	.00	.00	.00	7.
1	0051	52	.02	.01	.01	17.	0.	*	1	0222	143	.00	.00	.00	.00	7.
1	0052	53	.02	.01	.01	21.	0.	*	1	0223	144	.00	.00	.00	.00	7.
1	0053	54	.02	.01	.01	24.	0.	*	1	0224	145	.00	.00	.00	.00	7.
1	0054	55	.02	.01	.01	28.	0.	*	1	0225	146	.00	.00	.00	.00	7.
1	0055	56	.02	.01	.01	32.	0.	*	1	0226	147	.00	.00	.00	.00	7.
1	0056	57	.02	.01	.01	35.	0.	*	1	0227	148	.00	.00	.00	.00	7.
1	0057	58	.02	.01	.01	39.	0.	*	1	0228	149	.00	.00	.00	.00	7.
1	0058	59	.02	.01	.01	43.	0.	*	1	0229	150	.00	.00	.00	.00	7.
1	0059	60	.02	.01	.01	46.	0.	*	1	0230	151	.00	.00	.00	.00	6.
1	0100	61	.02	.01	.01	50.	0.	*	1	0231	152	.00	.00	.00	.00	6.
1	0101	62	.01	.01	.01	53.	0.	*	1	0232	153	.00	.00	.00	.00	6.
1	0102	63	.01	.01	.01	56.	0.	*	1	0233	154	.00	.00	.00	.00	6.

pre.out														
1	0103	64	.01	.01	.01	58.	*	1	0234	155	.00	.00	.00	6.
1	0104	65	.01	.01	.01	61.	*	1	0235	156	.00	.00	.00	6.
1	0105	66	.01	.01	.01	63.	*	1	0236	157	.00	.00	.00	6.
1	0106	67	.01	.01	.00	65.	*	1	0237	158	.00	.00	.00	6.
1	0107	68	.01	.01	.00	66.	*	1	0238	159	.00	.00	.00	6.
1	0108	69	.01	.01	.00	67.	*	1	0239	160	.00	.00	.00	6.
1	0109	70	.01	.01	.00	68.	*	1	0240	161	.00	.00	.00	6.
1	0110	71	.01	.01	.00	68.	*	1	0241	162	.00	.00	.00	6.
1	0111	72	.01	.00	.00	69.	*	1	0242	163	.00	.00	.00	6.
1	0112	73	.01	.00	.00	69.	*	1	0243	164	.00	.00	.00	6.
1	0113	74	.01	.00	.00	68.	*	1	0244	165	.00	.00	.00	6.
1	0114	75	.01	.00	.00	68.	*	1	0245	166	.00	.00	.00	6.
1	0115	76	.01	.00	.00	67.	*	1	0246	167	.00	.00	.00	6.
1	0116	77	.01	.00	.00	66.	*	1	0247	168	.00	.00	.00	6.
1	0117	78	.01	.00	.00	65.	*	1	0248	169	.00	.00	.00	6.
1	0118	79	.01	.00	.00	64.	*	1	0249	170	.00	.00	.00	6.
1	0119	80	.01	.00	.00	62.	*	1	0250	171	.00	.00	.00	6.
1	0120	81	.01	.00	.00	61.	*	1	0251	172	.00	.00	.00	6.
1	0121	82	.01	.00	.00	59.	*	1	0252	173	.00	.00	.00	6.
1	0122	83	.01	.00	.00	58.	*	1	0253	174	.00	.00	.00	6.
1	0123	84	.01	.00	.00	57.	*	1	0254	175	.00	.00	.00	6.
1	0124	85	.01	.00	.00	55.	*	1	0255	176	.00	.00	.00	6.
1	0125	86	.01	.00	.00	54.	*	1	0256	177	.00	.00	.00	6.
1	0126	87	.01	.00	.00	52.	*	1	0257	178	.00	.00	.00	6.
1	0127	88	.01	.00	.00	51.	*	1	0258	179	.00	.00	.00	6.
1	0128	89	.01	.00	.00	50.	*	1	0259	180	.00	.00	.00	6.
1	0129	90	.01	.00	.00	48.	*	1	0300	181	.00	.00	.00	6.
1	0130	91	.01	.00	.00	47.	*							

TOTAL RAINFALL = 2.13, TOTAL LOSS = 1.65, TOTAL EXCESS = .48

PEAK FLOW	TIME	MAXIMUM AVERAGE FLOW			
(CFS)	(HR)	6-HR	24-HR	72-HR	3.00-HR
+	69.	19.	19.	19.	19.
	1.18	.461	.461	.461	.461
		(INCHES)			
		(AC-FT)	5.	5.	5.

CUMULATIVE AREA = .20 SQ MI

HYDROGRAPH AT STATION OE2
PLAN 1, RATIO = 1.00

DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	*	DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
1	0000	1	.00	.00	.00	0.	0.	*	1	0131	92	.00	.00	.00	45.	
1	0001	2	.00	.00	.00	0.	0.	*	1	0132	93	.00	.00	.00	44.	
1	0002	3	.00	.00	.00	0.	0.	*	1	0133	94	.00	.00	.00	43.	
1	0003	4	.00	.00	.00	0.	0.	*	1	0134	95	.00	.00	.00	42.	
1	0004	5	.00	.00	.00	0.	0.	*	1	0135	96	.00	.00	.00	40.	
1	0005	6	.00	.00	.00	0.	0.	*	1	0136	97	.00	.00	.00	39.	
1	0006	7	.00	.00	.00	0.	0.	*	1	0137	98	.00	.00	.00	38.	
1	0007	8	.00	.00	.00	0.	0.	*	1	0138	99	.00	.00	.00	37.	
1	0008	9	.00	.00	.00	0.	0.	*	1	0139	100	.00	.00	.00	36.	
1	0009	10	.00	.00	.00	0.	0.	*	1	0140	101	.00	.00	.00	34.	
1	0010	11	.00	.00	.00	0.	0.	*	1	0141	102	.00	.00	.00	33.	
1	0011	12	.00	.00	.00	0.	0.	*	1	0142	103	.00	.00	.00	32.	
1	0012	13	.00	.00	.00	0.	0.	*	1	0143	104	.00	.00	.00	31.	
1	0013	14	.00	.00	.00	0.	0.	*	1	0144	105	.00	.00	.00	30.	
1	0014	15	.00	.00	.00	0.	0.	*	1	0145	106	.00	.00	.00	28.	
1	0015	16	.00	.00	.00	0.	0.	*	1	0146	107	.00	.00	.00	27.	
1	0016	17	.00	.00	.00	0.	0.	*	1	0147	108	.00	.00	.00	26.	
1	0017	18	.00	.00	.00	0.	0.	*	1	0148	109	.00	.00	.00	25.	
1	0018	19	.00	.00	.00	0.	0.	*	1	0149	110	.00	.00	.00	24.	
1	0019	20	.00	.00	.00	0.	0.	*	1	0150	111	.00	.00	.00	23.	
1	0020	21	.00	.00	.00	0.	0.	*	1	0151	112	.00	.00	.00	22.	
1	0021	22	.00	.00	.00	0.	0.	*	1	0152	113	.00	.00	.00	21.	
1	0022	23	.00	.00	.00	0.	0.	*	1	0153	114	.00	.00	.00	20.	
1	0023	24	.00	.00	.00	0.	0.	*	1	0154	115	.00	.00	.00	19.	
1	0024	25	.00	.00	.00	0.	0.	*	1	0155	116	.00	.00	.00	18.	
1	0025	26	.00	.00	.00	0.	0.	*	1	0156	117	.00	.00	.00	17.	
1	0026	27	.00	.00	.00	0.	0.	*	1	0157	118	.00	.00	.00	16.	
1	0027	28	.00	.00	.00	0.	0.	*	1	0158	119	.00	.00	.00	16.	
1	0028	29	.00	.00	.00	0.	0.	*	1	0159	120	.00	.00	.00	15.	
1	0029	30	.00	.00	.00	0.	0.	*	1	0200	121	.00	.00	.00	14.	
1	0030	31	.00	.00	.00	0.	0.	*	1	0201	122	.00	.00	.00	14.	
1	0031	32	.11	.11	.00	0.	0.	*	1	0202	123	.00	.00	.00	13.	
1	0032	33	.11	.11	.00	0.	0.	*	1	0203	124	.00	.00	.00	12.	
1	0033	34	.11	.11	.00	0.	0.	*	1	0204	125	.00	.00	.00	12.	
1	0034	35	.11	.11	.00	0.	0.	*	1	0205	126	.00	.00	.00	11.	
1	0035	36	.11	.11	.00	0.	0.	*	1	0206	127	.00	.00	.00	11.	
1	0036	37	.09	.09	.00	0.	0.	*	1	0207	128	.00	.00	.00	11.	

pre.out														
1	0037	38	.09	.08	.01	0.	*	1	0208	129	.00	.00	.00	10.
1	0038	39	.09	.08	.01	0.	*	1	0209	130	.00	.00	.00	10.
1	0039	40	.09	.07	.01	0.	*	1	0210	131	.00	.00	.00	10.
1	0040	41	.09	.07	.02	0.	*	1	0211	132	.00	.00	.00	9.
1	0041	42	.06	.05	.01	1.	*	1	0212	133	.00	.00	.00	9.
1	0042	43	.06	.05	.02	1.	*	1	0213	134	.00	.00	.00	9.
1	0043	44	.06	.04	.02	2.	*	1	0214	135	.00	.00	.00	9.
1	0044	45	.06	.04	.02	3.	*	1	0215	136	.00	.00	.00	8.
1	0045	46	.06	.04	.02	4.	*	1	0216	137	.00	.00	.00	8.
1	0046	47	.04	.03	.01	6.	*	1	0217	138	.00	.00	.00	8.
1	0047	48	.04	.03	.01	7.	*	1	0218	139	.00	.00	.00	8.
1	0048	49	.04	.02	.01	9.	*	1	0219	140	.00	.00	.00	8.
1	0049	50	.04	.02	.01	12.	*	1	0220	141	.00	.00	.00	7.
1	0050	51	.04	.02	.02	14.	*	1	0221	142	.00	.00	.00	7.
1	0051	52	.02	.01	.01	17.	*	1	0222	143	.00	.00	.00	7.
1	0052	53	.02	.01	.01	21.	*	1	0223	144	.00	.00	.00	7.
1	0053	54	.02	.01	.01	24.	*	1	0224	145	.00	.00	.00	7.
1	0054	55	.02	.01	.01	28.	*	1	0225	146	.00	.00	.00	7.
1	0055	56	.02	.01	.01	32.	*	1	0226	147	.00	.00	.00	7.
1	0056	57	.02	.01	.01	35.	*	1	0227	148	.00	.00	.00	7.
1	0057	58	.02	.01	.01	39.	*	1	0228	149	.00	.00	.00	7.
1	0058	59	.02	.01	.01	43.	*	1	0229	150	.00	.00	.00	7.
1	0059	60	.02	.01	.01	46.	*	1	0230	151	.00	.00	.00	6.
1	0100	61	.02	.01	.01	50.	*	1	0231	152	.00	.00	.00	6.
1	0101	62	.01	.01	.01	53.	*	1	0232	153	.00	.00	.00	6.
1	0102	63	.01	.01	.01	56.	*	1	0233	154	.00	.00	.00	6.
1	0103	64	.01	.01	.01	58.	*	1	0234	155	.00	.00	.00	6.
1	0104	65	.01	.01	.01	61.	*	1	0235	156	.00	.00	.00	6.
1	0105	66	.01	.01	.01	63.	*	1	0236	157	.00	.00	.00	6.
1	0106	67	.01	.01	.00	65.	*	1	0237	158	.00	.00	.00	6.
1	0107	68	.01	.01	.00	66.	*	1	0238	159	.00	.00	.00	6.
1	0108	69	.01	.01	.00	67.	*	1	0239	160	.00	.00	.00	6.
1	0109	70	.01	.01	.00	68.	*	1	0240	161	.00	.00	.00	6.
1	0110	71	.01	.01	.00	68.	*	1	0241	162	.00	.00	.00	6.
1	0111	72	.01	.00	.00	69.	*	1	0242	163	.00	.00	.00	6.
1	0112	73	.01	.00	.00	69.	*	1	0243	164	.00	.00	.00	6.
1	0113	74	.01	.00	.00	68.	*	1	0244	165	.00	.00	.00	6.
1	0114	75	.01	.00	.00	68.	*	1	0245	166	.00	.00	.00	6.
1	0115	76	.01	.00	.00	67.	*	1	0246	167	.00	.00	.00	6.
1	0116	77	.01	.00	.00	66.	*	1	0247	168	.00	.00	.00	6.
1	0117	78	.01	.00	.00	65.	*	1	0248	169	.00	.00	.00	6.
1	0118	79	.01	.00	.00	64.	*	1	0249	170	.00	.00	.00	6.
1	0119	80	.01	.00	.00	62.	*	1	0250	171	.00	.00	.00	6.
1	0120	81	.01	.00	.00	61.	*	1	0251	172	.00	.00	.00	6.
1	0121	82	.01	.00	.00	59.	*	1	0252	173	.00	.00	.00	6.
1	0122	83	.01	.00	.00	58.	*	1	0253	174	.00	.00	.00	6.
1	0123	84	.01	.00	.00	57.	*	1	0254	175	.00	.00	.00	6.
1	0124	85	.01	.00	.00	55.	*	1	0255	176	.00	.00	.00	6.
1	0125	86	.01	.00	.00	54.	*	1	0256	177	.00	.00	.00	6.
1	0126	87	.01	.00	.00	52.	*	1	0257	178	.00	.00	.00	6.
1	0127	88	.01	.00	.00	51.	*	1	0258	179	.00	.00	.00	6.
1	0128	89	.01	.00	.00	50.	*	1	0259	180	.00	.00	.00	6.
1	0129	90	.01	.00	.00	48.	*	1	0300	181	.00	.00	.00	6.
1	0130	91	.01	.00	.00	47.	*							

TOTAL RAINFALL = 2.13, TOTAL LOSS = 1.65, TOTAL EXCESS = .48

PEAK FLOW	TIME	MAXIMUM AVERAGE FLOW			
(CFS)	(HR)	6-HR	24-HR	72-HR	3.00-HR
69.	1.18	19.	19.	19.	19.
		(INCHES)	.461	.461	.461
		(AC-FT)	5.	5.	5.

CUMULATIVE AREA = .20 SQ MI

HYDROGRAPH AT STATION OE2
PLAN 1, RATIO = .61

DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	*	DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
1	0000	1	.00	.00	.00	0.	*		1	0131	92	.00	.00	.00	12.	
1	0001	2	.00	.00	.00	0.	*		1	0132	93	.00	.00	.00	12.	
1	0002	3	.00	.00	.00	0.	*		1	0133	94	.00	.00	.00	12.	
1	0003	4	.00	.00	.00	0.	*		1	0134	95	.00	.00	.00	12.	
1	0004	5	.00	.00	.00	0.	*		1	0135	96	.00	.00	.00	11.	
1	0005	6	.00	.00	.00	0.	*		1	0136	97	.00	.00	.00	11.	
1	0006	7	.00	.00	.00	0.	*		1	0137	98	.00	.00	.00	11.	
1	0007	8	.00	.00	.00	0.	*		1	0138	99	.00	.00	.00	10.	
1	0008	9	.00	.00	.00	0.	*		1	0139	100	.00	.00	.00	10.	
1	0009	10	.00	.00	.00	0.	*		1	0140	101	.00	.00	.00	10.	
1	0010	11	.00	.00	.00	0.	*		1	0141	102	.00	.00	.00	10.	

													pre.out	
1	0011	12	.00	.00	.00	0.	*	1	0142	103	.00	.00	.00	9.
1	0012	13	.00	.00	.00	0.	*	1	0143	104	.00	.00	.00	9.
1	0013	14	.00	.00	.00	0.	*	1	0144	105	.00	.00	.00	9.
1	0014	15	.00	.00	.00	0.	*	1	0145	106	.00	.00	.00	8.
1	0015	16	.00	.00	.00	0.	*	1	0146	107	.00	.00	.00	8.
1	0016	17	.00	.00	.00	0.	*	1	0147	108	.00	.00	.00	8.
1	0017	18	.00	.00	.00	0.	*	1	0148	109	.00	.00	.00	8.
1	0018	19	.00	.00	.00	0.	*	1	0149	110	.00	.00	.00	7.
1	0019	20	.00	.00	.00	0.	*	1	0150	111	.00	.00	.00	7.
1	0020	21	.00	.00	.00	0.	*	1	0151	112	.00	.00	.00	7.
1	0021	22	.00	.00	.00	0.	*	1	0152	113	.00	.00	.00	6.
1	0022	23	.00	.00	.00	0.	*	1	0153	114	.00	.00	.00	6.
1	0023	24	.00	.00	.00	0.	*	1	0154	115	.00	.00	.00	6.
1	0024	25	.00	.00	.00	0.	*	1	0155	116	.00	.00	.00	6.
1	0025	26	.00	.00	.00	0.	*	1	0156	117	.00	.00	.00	5.
1	0026	27	.00	.00	.00	0.	*	1	0157	118	.00	.00	.00	5.
1	0027	28	.00	.00	.00	0.	*	1	0158	119	.00	.00	.00	5.
1	0028	29	.00	.00	.00	0.	*	1	0159	120	.00	.00	.00	5.
1	0029	30	.00	.00	.00	0.	*	1	0200	121	.00	.00	.00	4.
1	0030	31	.00	.00	.00	0.	*	1	0201	122	.00	.00	.00	4.
1	0031	32	.07	.07	.00	0.	*	1	0202	123	.00	.00	.00	4.
1	0032	33	.07	.07	.00	0.	*	1	0203	124	.00	.00	.00	4.
1	0033	34	.07	.07	.00	0.	*	1	0204	125	.00	.00	.00	4.
1	0034	35	.07	.07	.00	0.	*	1	0205	126	.00	.00	.00	4.
1	0035	36	.07	.07	.00	0.	*	1	0206	127	.00	.00	.00	3.
1	0036	37	.05	.05	.00	0.	*	1	0207	128	.00	.00	.00	3.
1	0037	38	.05	.05	.00	0.	*	1	0208	129	.00	.00	.00	3.
1	0038	39	.05	.05	.00	0.	*	1	0209	130	.00	.00	.00	3.
1	0039	40	.05	.05	.00	0.	*	1	0210	131	.00	.00	.00	3.
1	0040	41	.05	.05	.00	0.	*	1	0211	132	.00	.00	.00	3.
1	0041	42	.04	.04	.00	0.	*	1	0212	133	.00	.00	.00	3.
1	0042	43	.04	.04	.00	0.	*	1	0213	134	.00	.00	.00	3.
1	0043	44	.04	.04	.00	0.	*	1	0214	135	.00	.00	.00	3.
1	0044	45	.04	.03	.00	0.	*	1	0215	136	.00	.00	.00	3.
1	0045	46	.04	.03	.00	0.	*	1	0216	137	.00	.00	.00	3.
1	0046	47	.02	.02	.00	0.	*	1	0217	138	.00	.00	.00	3.
1	0047	48	.02	.02	.00	0.	*	1	0218	139	.00	.00	.00	3.
1	0048	49	.02	.02	.00	0.	*	1	0219	140	.00	.00	.00	3.
1	0049	50	.02	.02	.00	1.	*	1	0220	141	.00	.00	.00	2.
1	0050	51	.02	.02	.00	1.	*	1	0221	142	.00	.00	.00	2.
1	0051	52	.01	.01	.00	1.	*	1	0222	143	.00	.00	.00	2.
1	0052	53	.01	.01	.00	2.	*	1	0223	144	.00	.00	.00	2.
1	0053	54	.01	.01	.00	2.	*	1	0224	145	.00	.00	.00	2.
1	0054	55	.01	.01	.00	2.	*	1	0225	146	.00	.00	.00	2.
1	0055	56	.01	.01	.00	3.	*	1	0226	147	.00	.00	.00	2.
1	0056	57	.01	.01	.00	4.	*	1	0227	148	.00	.00	.00	2.
1	0057	58	.01	.01	.00	4.	*	1	0228	149	.00	.00	.00	2.
1	0058	59	.01	.01	.00	5.	*	1	0229	150	.00	.00	.00	2.
1	0059	60	.01	.01	.00	6.	*	1	0230	151	.00	.00	.00	2.
1	0100	61	.01	.01	.00	6.	*	1	0231	152	.00	.00	.00	2.
1	0101	62	.01	.01	.00	7.	*	1	0232	153	.00	.00	.00	2.
1	0102	63	.01	.01	.00	8.	*	1	0233	154	.00	.00	.00	2.
1	0103	64	.01	.01	.00	9.	*	1	0234	155	.00	.00	.00	2.
1	0104	65	.01	.01	.00	9.	*	1	0235	156	.00	.00	.00	2.
1	0105	66	.01	.01	.00	10.	*	1	0236	157	.00	.00	.00	2.
1	0106	67	.01	.00	.00	11.	*	1	0237	158	.00	.00	.00	2.
1	0107	68	.01	.00	.00	11.	*	1	0238	159	.00	.00	.00	2.
1	0108	69	.01	.00	.00	12.	*	1	0239	160	.00	.00	.00	2.
1	0109	70	.01	.00	.00	12.	*	1	0240	161	.00	.00	.00	2.
1	0110	71	.01	.00	.00	13.	*	1	0241	162	.00	.00	.00	2.
1	0111	72	.00	.00	.00	13.	*	1	0242	163	.00	.00	.00	2.
1	0112	73	.00	.00	.00	14.	*	1	0243	164	.00	.00	.00	2.
1	0113	74	.00	.00	.00	14.	*	1	0244	165	.00	.00	.00	2.
1	0114	75	.00	.00	.00	14.	*	1	0245	166	.00	.00	.00	2.
1	0115	76	.00	.00	.00	14.	*	1	0246	167	.00	.00	.00	2.
1	0116	77	.00	.00	.00	14.	*	1	0247	168	.00	.00	.00	2.
1	0117	78	.00	.00	.00	14.	*	1	0248	169	.00	.00	.00	2.
1	0118	79	.00	.00	.00	14.	*	1	0249	170	.00	.00	.00	2.
1	0119	80	.00	.00	.00	14.	*	1	0250	171	.00	.00	.00	2.
1	0120	81	.00	.00	.00	14.	*	1	0251	172	.00	.00	.00	2.
1	0121	82	.00	.00	.00	14.	*	1	0252	173	.00	.00	.00	2.
1	0122	83	.00	.00	.00	14.	*	1	0253	174	.00	.00	.00	2.
1	0123	84	.00	.00	.00	14.	*	1	0254	175	.00	.00	.00	2.
1	0124	85	.00	.00	.00	14.	*	1	0255	176	.00	.00	.00	2.
1	0125	86	.00	.00	.00	14.	*	1	0256	177	.00	.00	.00	2.
1	0126	87	.00	.00	.00	13.	*	1	0257	178	.00	.00	.00	2.
1	0127	88	.00	.00	.00	13.	*	1	0258	179	.00	.00	.00	2.
1	0128	89	.00	.00	.00	13.	*	1	0259	180	.00	.00	.00	2.
1	0129	90	.00	.00	.00	13.	*	1	0300	181	.00	.00	.00	2.
1	0130	91	.00	.00	.00	12.	*							

TOTAL RAINFALL = 1.29, TOTAL LOSS = 1.18, TOTAL EXCESS = .11

PEAK FLOW + (CFS)	TIME (HR)	MAXIMUM AVERAGE FLOW			
		6-HR	24-HR	72-HR	3.00-HR
+ 14.	1.30	4.	4.	4.	4.

(INCHES) .107 .107 .107 pre.out
 (AC-FT) 1. 1. 1. .107
 CUMULATIVE AREA = .20 SQ MI

*** **

 * *
 183 KK * C5 *
 * *

COMBINE RE15 - RE17 & OE2

185 HC HYDROGRAPH COMBINATION
 ICOMP 4 NUMBER OF HYDROGRAPHS TO COMBINE

HYDROGRAPH AT STATION C5
 SUM OF 4 HYDROGRAPHS
 PLAN 1, RATIO = 1.00

DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*
1	0000	1	0.	0.	*	1	0046	47	6.	*	1	0132	93	266.	*	1	0218	139	375.	*			
1	0001	2	0.	0.	*	1	0047	48	7.	*	1	0133	94	273.	*	1	0219	140	372.	*			
1	0002	3	0.	0.	*	1	0048	49	9.	*	1	0134	95	281.	*	1	0220	141	369.	*			
1	0003	4	0.	0.	*	1	0049	50	12.	*	1	0135	96	288.	*	1	0221	142	366.	*			
1	0004	5	0.	0.	*	1	0050	51	14.	*	1	0136	97	295.	*	1	0222	143	363.	*			
1	0005	6	0.	0.	*	1	0051	52	17.	*	1	0137	98	302.	*	1	0223	144	359.	*			
1	0006	7	0.	0.	*	1	0052	53	21.	*	1	0138	99	308.	*	1	0224	145	356.	*			
1	0007	8	0.	0.	*	1	0053	54	24.	*	1	0139	100	314.	*	1	0225	146	352.	*			
1	0008	9	0.	0.	*	1	0054	55	28.	*	1	0140	101	321.	*	1	0226	147	348.	*			
1	0009	10	0.	0.	*	1	0055	56	32.	*	1	0141	102	327.	*	1	0227	148	344.	*			
1	0010	11	0.	0.	*	1	0056	57	37.	*	1	0142	103	332.	*	1	0228	149	339.	*			
1	0011	12	0.	0.	*	1	0057	58	41.	*	1	0143	104	338.	*	1	0229	150	335.	*			
1	0012	13	0.	0.	*	1	0058	59	46.	*	1	0144	105	343.	*	1	0230	151	331.	*			
1	0013	14	0.	0.	*	1	0059	60	50.	*	1	0145	106	348.	*	1	0231	152	326.	*			
1	0014	15	0.	0.	*	1	0100	61	55.	*	1	0146	107	353.	*	1	0232	153	321.	*			
1	0015	16	0.	0.	*	1	0101	62	59.	*	1	0147	108	357.	*	1	0233	154	317.	*			
1	0016	17	0.	0.	*	1	0102	63	64.	*	1	0148	109	361.	*	1	0234	155	312.	*			
1	0017	18	0.	0.	*	1	0103	64	69.	*	1	0149	110	365.	*	1	0235	156	307.	*			
1	0018	19	0.	0.	*	1	0104	65	74.	*	1	0150	111	369.	*	1	0236	157	302.	*			
1	0019	20	0.	0.	*	1	0105	66	80.	*	1	0151	112	372.	*	1	0237	158	298.	*			
1	0020	21	0.	0.	*	1	0106	67	85.	*	1	0152	113	375.	*	1	0238	159	293.	*			
1	0021	22	0.	0.	*	1	0107	68	91.	*	1	0153	114	378.	*	1	0239	160	288.	*			
1	0022	23	0.	0.	*	1	0108	69	97.	*	1	0154	115	381.	*	1	0240	161	284.	*			
1	0023	24	0.	0.	*	1	0109	70	108.	*	1	0155	116	383.	*	1	0241	162	279.	*			
1	0024	25	0.	0.	*	1	0110	71	116.	*	1	0156	117	385.	*	1	0242	163	275.	*			
1	0025	26	0.	0.	*	1	0111	72	120.	*	1	0157	118	387.	*	1	0243	164	270.	*			
1	0026	27	0.	0.	*	1	0112	73	128.	*	1	0158	119	389.	*	1	0244	165	266.	*			
1	0027	28	0.	0.	*	1	0113	74	137.	*	1	0159	120	390.	*	1	0245	166	262.	*			
1	0028	29	0.	0.	*	1	0114	75	145.	*	1	0200	121	392.	*	1	0246	167	258.	*			
1	0029	30	0.	0.	*	1	0115	76	149.	*	1	0201	122	393.	*	1	0247	168	253.	*			
1	0030	31	0.	0.	*	1	0116	77	155.	*	1	0202	123	393.	*	1	0248	169	249.	*			
1	0031	32	0.	0.	*	1	0117	78	162.	*	1	0203	124	394.	*	1	0249	170	245.	*			
1	0032	33	0.	0.	*	1	0118	79	168.	*	1	0204	125	394.	*	1	0250	171	241.	*			
1	0033	34	0.	0.	*	1	0119	80	174.	*	1	0205	126	394.	*	1	0251	172	237.	*			
1	0034	35	0.	0.	*	1	0120	81	181.	*	1	0206	127	393.	*	1	0252	173	233.	*			
1	0035	36	0.	0.	*	1	0121	82	187.	*	1	0207	128	393.	*	1	0253	174	229.	*			
1	0036	37	0.	0.	*	1	0122	83	194.	*	1	0208	129	392.	*	1	0254	175	226.	*			
1	0037	38	0.	0.	*	1	0123	84	201.	*	1	0209	130	391.	*	1	0255	176	222.	*			
1	0038	39	0.	0.	*	1	0124	85	207.	*	1	0210	131	390.	*	1	0256	177	219.	*			
1	0039	40	0.	0.	*	1	0125	86	215.	*	1	0211	132	389.	*	1	0257	178	215.	*			
1	0040	41	0.	0.	*	1	0126	87	222.	*	1	0212	133	388.	*	1	0258	179	212.	*			
1	0041	42	1.	0.	*	1	0127	88	229.	*	1	0213	134	386.	*	1	0259	180	208.	*			
1	0042	43	1.	0.	*	1	0128	89	237.	*	1	0214	135	384.	*	1	0300	181	205.	*			
1	0043	44	2.	0.	*	1	0129	90	244.	*	1	0215	136	382.	*					*			
1	0044	45	3.	0.	*	1	0130	91	251.	*	1	0216	137	380.	*					*			
1	0045	46	4.	0.	*	1	0131	92	259.	*	1	0217	138	378.	*					*			

PEAK FLOW	TIME		MAXIMUM	AVERAGE	FLOW	
(CFS)	(HR)		6-HR	24-HR	72-HR	3.00-HR
+	394.	2.07	190.	190.	190.	190.
			.385	.385	.385	.385
		(INCHES)				
		(AC-FT)	47.	47.	47.	47.

CUMULATIVE AREA = 2.29 SQ MI pre.out

HYDROGRAPH AT STATION C5
 SUM OF 4 HYDROGRAPHS
 PLAN 1, RATIO = .61

DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	
1		0000	1	0.	*	1		0046	47	0.	*	1		0132	93	47.	*	1		0218	139	94.	*	
1		0001	2	0.	*	1		0047	48	0.	*	1		0133	94	49.	*	1		0219	140	94.	*	
1		0002	3	0.	*	1		0048	49	0.	*	1		0134	95	51.	*	1		0220	141	94.	*	
1		0003	4	0.	*	1		0049	50	1.	*	1		0135	96	52.	*	1		0221	142	93.	*	
1		0004	5	0.	*	1		0050	51	1.	*	1		0136	97	55.	*	1		0222	143	93.	*	
1		0005	6	0.	*	1		0051	52	1.	*	1		0137	98	56.	*	1		0223	144	93.	*	
1		0006	7	0.	*	1		0052	53	2.	*	1		0138	99	58.	*	1		0224	145	92.	*	
1		0007	8	0.	*	1		0053	54	2.	*	1		0139	100	60.	*	1		0225	146	92.	*	
1		0008	9	0.	*	1		0054	55	2.	*	1		0140	101	62.	*	1		0226	147	91.	*	
1		0009	10	0.	*	1		0055	56	3.	*	1		0141	102	64.	*	1		0227	148	90.	*	
1		0010	11	0.	*	1		0056	57	4.	*	1		0142	103	66.	*	1		0228	149	90.	*	
1		0011	12	0.	*	1		0057	58	4.	*	1		0143	104	67.	*	1		0229	150	89.	*	
1		0012	13	0.	*	1		0058	59	5.	*	1		0144	105	69.	*	1		0230	151	88.	*	
1		0013	14	0.	*	1		0059	60	6.	*	1		0145	106	71.	*	1		0231	152	88.	*	
1		0014	15	0.	*	1		0100	61	6.	*	1		0146	107	72.	*	1		0232	153	87.	*	
1		0015	16	0.	*	1		0101	62	7.	*	1		0147	108	74.	*	1		0233	154	86.	*	
1		0016	17	0.	*	1		0102	63	8.	*	1		0148	109	75.	*	1		0234	155	85.	*	
1		0017	18	0.	*	1		0103	64	9.	*	1		0149	110	77.	*	1		0235	156	84.	*	
1		0018	19	0.	*	1		0104	65	9.	*	1		0150	111	78.	*	1		0236	157	83.	*	
1		0019	20	0.	*	1		0105	66	10.	*	1		0151	112	79.	*	1		0237	158	82.	*	
1		0020	21	0.	*	1		0106	67	11.	*	1		0152	113	81.	*	1		0238	159	81.	*	
1		0021	22	0.	*	1		0107	68	12.	*	1		0153	114	82.	*	1		0239	160	80.	*	
1		0022	23	0.	*	1		0108	69	12.	*	1		0154	115	83.	*	1		0240	161	79.	*	
1		0023	24	0.	*	1		0109	70	13.	*	1		0155	116	84.	*	1		0241	162	78.	*	
1		0024	25	0.	*	1		0110	71	14.	*	1		0156	117	85.	*	1		0242	163	77.	*	
1		0025	26	0.	*	1		0111	72	15.	*	1		0157	118	86.	*	1		0243	164	76.	*	
1		0026	27	0.	*	1		0112	73	15.	*	1		0158	119	87.	*	1		0244	165	75.	*	
1		0027	28	0.	*	1		0113	74	16.	*	1		0159	120	88.	*	1		0245	166	74.	*	
1		0028	29	0.	*	1		0114	75	17.	*	1		0200	121	89.	*	1		0246	167	73.	*	
1		0029	30	0.	*	1		0115	76	18.	*	1		0201	122	90.	*	1		0247	168	72.	*	
1		0030	31	0.	*	1		0116	77	19.	*	1		0202	123	90.	*	1		0248	169	71.	*	
1		0031	32	0.	*	1		0117	78	21.	*	1		0203	124	91.	*	1		0249	170	70.	*	
1		0032	33	0.	*	1		0118	79	22.	*	1		0204	125	92.	*	1		0250	171	69.	*	
1		0033	34	0.	*	1		0119	80	23.	*	1		0205	126	92.	*	1		0251	172	68.	*	
1		0034	35	0.	*	1		0120	81	24.	*	1		0206	127	93.	*	1		0252	173	67.	*	
1		0035	36	0.	*	1		0121	82	26.	*	1		0207	128	93.	*	1		0253	174	66.	*	
1		0036	37	0.	*	1		0122	83	28.	*	1		0208	129	94.	*	1		0254	175	66.	*	
1		0037	38	0.	*	1		0123	84	31.	*	1		0209	130	94.	*	1		0255	176	65.	*	
1		0038	39	0.	*	1		0124	85	32.	*	1		0210	131	94.	*	1		0256	177	64.	*	
1		0039	40	0.	*	1		0125	86	33.	*	1		0211	132	94.	*	1		0257	178	63.	*	
1		0040	41	0.	*	1		0126	87	35.	*	1		0212	133	94.	*	1		0258	179	62.	*	
1		0041	42	0.	*	1		0127	88	37.	*	1		0213	134	95.	*	1		0259	180	61.	*	
1		0042	43	0.	*	1		0128	89	39.	*	1		0214	135	95.	*	1		0300	181	60.	*	
1		0043	44	0.	*	1		0129	90	42.	*	1		0215	136	95.	*							
1		0044	45	0.	*	1		0130	91	43.	*	1		0216	137	94.	*							
1		0045	46	0.	*	1		0131	92	45.	*	1		0217	138	94.	*							

PEAK FLOW	TIME		MAXIMUM	AVERAGE	FLOW	
+	(CFS)	(HR)	6-HR	24-HR	72-HR	3.00-HR
+	95.	2.23	43.	43.	43.	43.
			(INCHES)	.087	.087	.087
			(AC-FT)	11.	11.	11.

CUMULATIVE AREA = 2.29 SQ MI

1

PEAK FLOW AND STAGE (END-OF-PERIOD) SUMMARY FOR MULTIPLE PLAN-RATIO ECONOMIC COMPUTATIONS
 FLOWS IN CUBIC FEET PER SECOND, AREA IN SQUARE MILES
 TIME TO PEAK IN HOURS

OPERATION	STATION	AREA	PLAN	RATIOS APPLIED TO PRECIPITATION		
				RATIO 1	RATIO 2	
				1.00	.61	
HYDROGRAPH AT						
+	BE1	.20	1	FLOW	78.	18.
				TIME	1.15	1.25
ROUTED TO						
+	RE1	.20	1	FLOW	78.	20.
				TIME	1.63	2.03

HYDROGRAPH AT +	BE2	.03	1	FLOW TIME	8. 1.12	1. 1.30
ROUTED TO +	RE2	.03	1	FLOW TIME	9. 2.12	0. .00
HYDROGRAPH AT +	BE3	.01	1	FLOW TIME	4. 1.18	1. 1.28
ROUTED TO +	RE3	.01	1	FLOW TIME	5. 2.28	1. 2.95
HYDROGRAPH AT +	BE4	.01	1	FLOW TIME	6. .88	1. .95
ROUTED TO +	RE4	.01	1	FLOW TIME	5. 1.97	1. 2.62
HYDROGRAPH AT +	BE5	.02	1	FLOW TIME	12. .90	3. .98
ROUTED TO +	RE5	.02	1	FLOW TIME	12. 1.70	3. 2.20
5 COMBINED AT +	C1	.27	1	FLOW TIME	89. 1.70	20. 2.03
HYDROGRAPH AT +	BE6	.95	1	FLOW TIME	250. 1.23	41. 1.38
ROUTED TO +	RE6	.95	1	FLOW TIME	248. 1.50	41. 1.82
HYDROGRAPH AT +	BE7	4.08	1	FLOW TIME	638. 2.05	133. 2.18
ROUTED TO +	RE7	4.08	1	FLOW TIME	637. 2.28	132. 2.52
HYDROGRAPH AT +	BE8	.54	1	FLOW TIME	153. 1.23	28. 1.37
ROUTED TO +	RE8	.54	1	FLOW TIME	152. 1.62	27. 1.97
HYDROGRAPH AT +	BE9	.12	1	FLOW TIME	39. 1.23	8. 1.35
ROUTED TO +	RE9	.12	1	FLOW TIME	38. 1.85	9. 2.22
HYDROGRAPH AT +	BE10	.05	1	FLOW TIME	22. .98	4. 1.08
ROUTED TO +	RE10	.05	1	FLOW TIME	22. 1.85	4. 2.42
HYDROGRAPH AT +	BE11	.04	1	FLOW TIME	17. .97	3. 1.07
ROUTED TO +	RE11	.04	1	FLOW TIME	18. 1.92	4. 2.53
6 COMBINED AT +	C2	5.77	1	FLOW TIME	876. 2.02	181. 2.42
HYDROGRAPH AT						

```

+          BE12   .02   1  FLOW      12.    3.
      TIME      .92    1.00      pre.out

ROUTED TO
+          RE12   .02   1  FLOW      12.    2.
      TIME      2.03   2.70

HYDROGRAPH AT
+          BE13   .04   1  FLOW      21.    5.
      TIME      .92    1.02

ROUTED TO
+          RE13   .04   1  FLOW      23.    5.
      TIME      1.92   2.52

HYDROGRAPH AT
+          BE14   1.79  1  FLOW      346.   83.
      TIME      1.97   2.07

ROUTED TO
+          RE14   1.79  1  FLOW      345.   82.
      TIME      2.42   2.72

3 COMBINED AT
+          C3     1.85  1  FLOW      360.   88.
      TIME      2.38   2.70

HYDROGRAPH AT
+          OE1    2.33  1  FLOW      545.  121.
      TIME      1.62   1.75

4 COMBINED AT
+          C4    10.23  1  FLOW     1613.  325.
      TIME      2.03   2.42

HYDROGRAPH AT
+          BE15   .01   1  FLOW      5.     1.
      TIME      1.00   1.10

ROUTED TO
+          RE15   .01   1  FLOW      6.     1.
      TIME      1.23   1.50

HYDROGRAPH AT
+          BE16   .03   1  FLOW      13.    3.
      TIME      1.12   1.22

ROUTED TO
+          RE16   .03   1  FLOW      13.    3.
      TIME      1.33   1.48

HYDROGRAPH AT
+          BE17   2.05  1  FLOW      378.   90.
      TIME      2.03   2.13

ROUTED TO
+          RE17   2.05  1  FLOW      378.   90.
      TIME      2.12   2.27

HYDROGRAPH AT
+          OE2    .20   1  FLOW      69.   14.
      TIME      1.18   1.30

4 COMBINED AT
+          C5     2.29  1  FLOW      394.   95.
      TIME      2.07   2.23

```

1

SUMMARY OF KINEMATIC WAVE - MUSKINGUM-CUNGE ROUTING
(FLOW IS DIRECT RUNOFF WITHOUT BASE FLOW)

ISTAQ	ELEMENT	DT	PEAK	TIME TO PEAK	VOLUME	DT	INTERPOLATED TO COMPUTATION INTERVAL		VOLUME
							PEAK	TIME TO PEAK	
		(MIN)	(CFS)	(MIN)	(IN)	(MIN)	(CFS)	(MIN)	(IN)
FOR PLAN = 1	RATIO=	.00							
RE1	MANE	1.00	77.85	98.00	.44	1.00	77.85	98.00	.44

CONTINUITY SUMMARY (AC-FT) - INFLOW= .5327E+01 EXCESS= .0000E+00 OUTFLOW= .4656E+01 BASIN STORAGE= .7844E+00 PERCENT ERROR= -2.1

FOR PLAN = 1	RATIO=	.00							
RE1	MANE	1.00	19.67	122.00	.09	1.00	19.67	122.00	.09

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1315E+01 EXCESS= .0000E+00 OUTFLOW= .9567E+00 BASIN STORAGE= .4028E+00 PERCENT ERROR= -3.4

```

pre.out
FOR PLAN = 1  RATIO= .00
RE2  MANE      1.00      8.55      127.00      .21      1.00      8.55      127.00      .21

CONTINUITY SUMMARY (AC-FT) - INFLOW= .4979E+00 EXCESS= .0000E+00 OUTFLOW= .3485E+00 BASIN STORAGE= .1751E+00 PERCENT ERROR= -5.2

FOR PLAN = 1  RATIO= .00
RE2  MANE      1.00      .00      180.00      .00      1.00      .00      180.00      .00

CONTINUITY SUMMARY (AC-FT) - INFLOW= .7442E-01 EXCESS= .0000E+00 OUTFLOW= .1790E-05 BASIN STORAGE= .8099E-01 PERCENT ERROR= -8.8

FOR PLAN = 1  RATIO= .00
RE3  MANE      1.00      4.93      137.00      .30      1.00      4.93      137.00      .30

CONTINUITY SUMMARY (AC-FT) - INFLOW= .2987E+00 EXCESS= .0000E+00 OUTFLOW= .1824E+00 BASIN STORAGE= .1331E+00 PERCENT ERROR= -5.6

FOR PLAN = 1  RATIO= .00
RE3  MANE      1.00      1.06      177.00      .01      1.00      1.06      177.00      .01

CONTINUITY SUMMARY (AC-FT) - INFLOW= .7361E-01 EXCESS= .0000E+00 OUTFLOW= .5589E-02 BASIN STORAGE= .7505E-01 PERCENT ERROR= -9.5

FOR PLAN = 1  RATIO= .00
RE4  MANE      .95      5.51      117.80      .39      1.00      5.34      118.00      .39

CONTINUITY SUMMARY (AC-FT) - INFLOW= .2688E+00 EXCESS= .0000E+00 OUTFLOW= .2068E+00 BASIN STORAGE= .8105E-01 PERCENT ERROR= -7.1

FOR PLAN = 1  RATIO= .00
RE4  MANE      .90      1.09      156.60      .05      1.00      .99      157.00      .05

CONTINUITY SUMMARY (AC-FT) - INFLOW= .6718E-01 EXCESS= .0000E+00 OUTFLOW= .2560E-01 BASIN STORAGE= .4907E-01 PERCENT ERROR= -11.1

FOR PLAN = 1  RATIO= .00
RE5  MANE      1.00      12.05      102.00      .44      1.00      12.05      102.00      .44

CONTINUITY SUMMARY (AC-FT) - INFLOW= .5789E+00 EXCESS= .0000E+00 OUTFLOW= .4978E+00 BASIN STORAGE= .1092E+00 PERCENT ERROR= -4.9

FOR PLAN = 1  RATIO= .00
RE5  MANE      1.00      2.58      132.00      .08      1.00      2.58      132.00      .08

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1444E+00 EXCESS= .0000E+00 OUTFLOW= .9444E-01 BASIN STORAGE= .6053E-01 PERCENT ERROR= -7.3

FOR PLAN = 1  RATIO= .00
RE6  MANE      1.00      248.07      90.00      .34      1.00      248.07      90.00      .34

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1833E+02 EXCESS= .0000E+00 OUTFLOW= .1716E+02 BASIN STORAGE= .1309E+01 PERCENT ERROR= -.8

FOR PLAN = 1  RATIO= .00
RE6  MANE      1.00      40.62      109.00      .06      1.00      40.62      109.00      .06

CONTINUITY SUMMARY (AC-FT) - INFLOW= .3336E+01 EXCESS= .0000E+00 OUTFLOW= .2836E+01 BASIN STORAGE= .5424E+00 PERCENT ERROR= -1.3

FOR PLAN = 1  RATIO= .00
RE7  MANE      1.00      636.94      137.00      .29      1.00      636.94      137.00      .29

CONTINUITY SUMMARY (AC-FT) - INFLOW= .7309E+02 EXCESS= .0000E+00 OUTFLOW= .6328E+02 BASIN STORAGE= .1021E+02 PERCENT ERROR= -.5

FOR PLAN = 1  RATIO= .00
RE7  MANE      1.00      132.35      151.00      .05      1.00      132.35      151.00      .05

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1473E+02 EXCESS= .0000E+00 OUTFLOW= .1112E+02 BASIN STORAGE= .3728E+01 PERCENT ERROR= -.8

FOR PLAN = 1  RATIO= .00
RE8  MANE      1.00      151.59      97.00      .36      1.00      151.59      97.00      .36

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1128E+02 EXCESS= .0000E+00 OUTFLOW= .1023E+02 BASIN STORAGE= .1188E+01 PERCENT ERROR= -1.2

```

pre.out

FOR PLAN = 1 RATIO= .00
RE8 MANE 1.00 27.32 118.00 .06 1.00 27.32 118.00 .06

CONTINUITY SUMMARY (AC-FT) - INFLOW= .2239E+01 EXCESS= .0000E+00 OUTFLOW= .1761E+01 BASIN STORAGE= .5236E+00 PERCENT ERROR= -2.1

FOR PLAN = 1 RATIO= .00
RE9 MANE 1.00 38.00 111.00 .38 1.00 38.00 111.00 .38

CONTINUITY SUMMARY (AC-FT) - INFLOW= .2855E+01 EXCESS= .0000E+00 OUTFLOW= .2390E+01 BASIN STORAGE= .5263E+00 PERCENT ERROR= -2.1

FOR PLAN = 1 RATIO= .00
RE9 MANE 1.00 8.98 133.00 .07 1.00 8.98 133.00 .07

CONTINUITY SUMMARY (AC-FT) - INFLOW= .6578E+00 EXCESS= .0000E+00 OUTFLOW= .4159E+00 BASIN STORAGE= .2661E+00 PERCENT ERROR= -3.7

FOR PLAN = 1 RATIO= .00
RE10 MANE 1.00 22.10 111.00 .38 1.00 22.10 111.00 .38

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1188E+01 EXCESS= .0000E+00 OUTFLOW= .9702E+00 BASIN STORAGE= .2719E+00 PERCENT ERROR= -4.6

FOR PLAN = 1 RATIO= .00
RE10 MANE 1.00 4.50 145.00 .06 1.00 4.50 145.00 .06

CONTINUITY SUMMARY (AC-FT) - INFLOW= .2771E+00 EXCESS= .0000E+00 OUTFLOW= .1437E+00 BASIN STORAGE= .1535E+00 PERCENT ERROR= -7.3

FOR PLAN = 1 RATIO= .00
RE11 MANE 1.00 18.26 115.00 .37 1.00 18.26 115.00 .37

CONTINUITY SUMMARY (AC-FT) - INFLOW= .9221E+00 EXCESS= .0000E+00 OUTFLOW= .7346E+00 BASIN STORAGE= .2393E+00 PERCENT ERROR= -5.6

FOR PLAN = 1 RATIO= .00
RE11 MANE 1.00 3.66 152.00 .05 1.00 3.66 152.00 .05

CONTINUITY SUMMARY (AC-FT) - INFLOW= .2153E+00 EXCESS= .0000E+00 OUTFLOW= .9521E-01 BASIN STORAGE= .1385E+00 PERCENT ERROR= -8.6

FOR PLAN = 1 RATIO= .00
RE12 MANE 1.00 11.89 122.00 .38 1.00 11.89 122.00 .38

CONTINUITY SUMMARY (AC-FT) - INFLOW= .5962E+00 EXCESS= .0000E+00 OUTFLOW= .4457E+00 BASIN STORAGE= .1968E+00 PERCENT ERROR= -7.8

FOR PLAN = 1 RATIO= .00
RE12 MANE 1.00 2.44 162.00 .04 1.00 2.44 162.00 .04

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1486E+00 EXCESS= .0000E+00 OUTFLOW= .4545E-01 BASIN STORAGE= .1200E+00 PERCENT ERROR= -11.3

FOR PLAN = 1 RATIO= .00
RE13 MANE 1.00 23.38 115.00 .41 1.00 23.38 115.00 .41

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1083E+01 EXCESS= .0000E+00 OUTFLOW= .8644E+00 BASIN STORAGE= .2896E+00 PERCENT ERROR= -6.5

FOR PLAN = 1 RATIO= .00
RE13 MANE 1.00 4.85 151.00 .06 1.00 4.85 151.00 .06

CONTINUITY SUMMARY (AC-FT) - INFLOW= .2700E+00 EXCESS= .0000E+00 OUTFLOW= .1221E+00 BASIN STORAGE= .1737E+00 PERCENT ERROR= -9.5

FOR PLAN = 1 RATIO= .00
RE14 MANE 1.00 345.13 145.00 .30 1.00 345.13 145.00 .30

CONTINUITY SUMMARY (AC-FT) - INFLOW= .3922E+02 EXCESS= .0000E+00 OUTFLOW= .2851E+02 BASIN STORAGE= .1114E+02 PERCENT ERROR= -1.1

FOR PLAN = 1 RATIO= .00
RE14 MANE 1.00 82.47 163.00 .05 1.00 82.47 163.00 .05

CONTINUITY SUMMARY (AC-FT) - INFLOW= .9219E+01 EXCESS= .0000E+00 OUTFLOW= .4814E+01 BASIN STORAGE= .4565E+01 PERCENT ERROR= -1.7

pre.out

FOR PLAN = 1 RATIO= .00
RE15 MANE 1.00 5.79 74.00 .48 1.00 5.79 74.00 .48

CONTINUITY SUMMARY (AC-FT) - INFLOW= .2711E+00 EXCESS= .0000E+00 OUTFLOW= .2558E+00 BASIN STORAGE= .2017E-01 PERCENT ERROR= -1.8

FOR PLAN = 1 RATIO= .00
RE15 MANE 1.00 1.30 90.00 .11 1.00 1.30 90.00 .11

CONTINUITY SUMMARY (AC-FT) - INFLOW= .6735E-01 EXCESS= .0000E+00 OUTFLOW= .5987E-01 BASIN STORAGE= .9422E-02 PERCENT ERROR= -2.9

FOR PLAN = 1 RATIO= .00
RE16 MANE 1.00 12.67 80.00 .48 1.00 12.67 80.00 .48

CONTINUITY SUMMARY (AC-FT) - INFLOW= .8330E+00 EXCESS= .0000E+00 OUTFLOW= .7965E+00 BASIN STORAGE= .4332E-01 PERCENT ERROR= -.8

FOR PLAN = 1 RATIO= .00
RE16 MANE 1.00 2.93 89.00 .11 1.00 2.93 89.00 .11

CONTINUITY SUMMARY (AC-FT) - INFLOW= .2059E+00 EXCESS= .0000E+00 OUTFLOW= .1882E+00 BASIN STORAGE= .2029E-01 PERCENT ERROR= -1.3

FOR PLAN = 1 RATIO= .00
RE17 MANE 1.00 377.83 127.00 .38 1.00 377.83 127.00 .38

CONTINUITY SUMMARY (AC-FT) - INFLOW= .4341E+02 EXCESS= .0000E+00 OUTFLOW= .4132E+02 BASIN STORAGE= .2174E+01 PERCENT ERROR= -.2

FOR PLAN = 1 RATIO= .00
RE17 MANE 1.00 90.43 136.00 .08 1.00 90.43 136.00 .08

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1015E+02 EXCESS= .0000E+00 OUTFLOW= .9327E+01 BASIN STORAGE= .8552E+00 PERCENT ERROR= -.3

*** NORMAL END OF HEC-1 ***

Proposed Conditions

post.out

```

1*****
*
* FLOOD HYDROGRAPH PACKAGE (HEC-1)
*   JUN 1998
*   VERSION 4.1
*
* RUN DATE 19APR17 TIME 14:44:05
*
*****

```

```

*****
*
* U.S. ARMY CORPS OF ENGINEERS
* HYDROLOGIC ENGINEERING CENTER
* 609 SECOND STREET
* DAVIS, CALIFORNIA 95616
* (916) 756-1104
*
*****

```

```

X X XXXXXXX XXXXX X
X X X X X XX
X X X X X
XXXXXXXX XXXX X XXXXX X
X X X X X
X X X X X
X X XXXXXXX XXXXX XXX

```

THIS PROGRAM REPLACES ALL PREVIOUS VERSIONS OF HEC-1 KNOWN AS HEC1 (JAN 73), HEC1GS, HEC1DB, AND HEC1KW.

THE DEFINITIONS OF VARIABLES -RTIMP- AND -RTIOR- HAVE CHANGED FROM THOSE USED WITH THE 1973-STYLE INPUT STRUCTURE. THE DEFINITION OF -AMSK- ON RM-CARD WAS CHANGED WITH REVISIONS DATED 28 SEP 81. THIS IS THE FORTRAN77 VERSION
 NEW OPTIONS: DAMBREAK OUTFLOW SUBMERGENCE , SINGLE EVENT DAMAGE CALCULATION, DSS:WRITE STAGE FREQUENCY,
 DSS:READ TIME SERIES AT DESIRED CALCULATION INTERVAL LOSS RATE:GREEN AND AMPT INFILTRATION
 KINEMATIC WAVE: NEW FINITE DIFFERENCE ALGORITHM

1 HEC-1 INPUT PAGE 1

```

LINE ID.....1.....2.....3.....4.....5.....6.....7.....8.....9.....10
1 ID HYDROLOGY STUDY for
2 ID Dammeron Valley Master Hydrology Plan
3 ID Future Conditions
4 ID Located in Dammeron Valley, Utah
5 ID
6 ID March 2017
7 ID
8 ID PREPARED BY ALPHA ENGINEERING
9 ID 43 SOUTH 100 EAST
10 ID ST. GEORGE, UTAH 84770
11 ID TEL: (435) 628-6500
12 ID FAX: (435) 628-6553
13 ID
14 ID 100-YEAR & 10-YEAR, 3-HOUR STORM EVENT
15 ID
    *Diagram
16 JR PREC 1.0 0.606
17 IT 1 0 0 181
18 IO 0
19 IN 5
    * BEGIN BASIN DEFINITIONS

20 KK BP1
21 KM BP1
22 BA .40017
23 PB 2.13
24 PC 0 0.0033 0.0066 0.0099 0.0132 0.0165 0.0198 0.2822 0.4894 0.6340
25 PC 0.7261 0.7814 0.8238 0.8550 0.8790 0.8974 0.9140 0.9288 0.9407 0.9440
26 PC 0.9473 0.9506 0.9539 0.9572 0.9605 0.9638 0.9671 0.9704 0.9737 0.9769
27 PC 0.9802 0.9835 0.9868 0.9901 0.9934 0.9967 1.0000
28 LS 0 76
29 UD .3820
    *

30 KK RP1
31 KM Route BP1 in channel to Culvert BP15
32 RD 3268 .008 0.040 TRAP 0 7
    *

33 KK BP2
34 KM BP2
35 BA .95091
36 LS 0 73
37 UD 0.3672
    *

38 KK RP2
39 KM Route BP2 in channel to Culvert BP15
40 RD 2925 .008 0.040 TRAP 0 7
    *

```

1 HEC-1 INPUT PAGE 2

post.out

LINE	ID	1	2	3	4	5	6	7	8	9	10
41	KK	BP3									
42	KM	BP3									
43	BA	4.0780									
44	LS	0	75								
45	UD	1.0903									
	*										
46	KK	RP3									
47	KM	Route BP3 in channel to Culvert BP15									
48	RD	2652 .008 0.040					TRAP	0	7		
	*										
49	KK	BP4									
50	KM	BP4									
51	BA	.53884									
52	LS	0	73								
53	UD	0.3817									
	*										
54	KK	RP4									
55	KM	Route BP4 in channel to Culvert BP15									
56	RD	2933 .007 0.040					TRAP	0	7		
	*										
57	KK	BP5									
58	KM	BP5									
59	BA	.11647									
60	LS	0	76								
61	UD	0.3915									
	*										
62	KK	RP5									
63	KM	Route BP5 in channel to Culvert BP15									
64	RD	4372 .007 0.040					TRAP	0	7		
	*										
65	KK	BP6									
66	KM	BP6									
67	BA	.09392									
68	LS	0	80								
69	UD	0.1186									
	*										
70	KK	RP6									
71	KM	Route BP6 in channel to Culvert BP15									
72	RD	5785 .009 0.040					TRAP	0	7		
	*										
73	KK	BP7									
74	KM	BP7									
75	BA	.01381									
76	LS	0	77								
77	UD	0.0994									
	*										

1

HEC-1 INPUT

PAGE 3

LINE	ID	1	2	3	4	5	6	7	8	9	10
78	KK	RP7									
79	KM	Route BP7 in channel to Culvert BP15									
80	RD	8374 .018 0.040					TRAP	0	7		
	*										
81	KK	BP15									
82	KM	BP15									
83	BA	.04486									
84	LS	0	78								
85	UD	0.1980									
	*										
86	KK	CP1									
87	KM	COMBINE BP1 - BP7 & BP15									
88	HC	8									
	*										
89	KK	RCP1									
90	KM	Route CP1 in channel to Outlet OP1									
91	RD	5419 .008 0.040					TRAP	0	7		
	*										
92	KK	BP8									
93	KM	BP8									
94	BA	.03731									
95	LS	0	77								
96	UD	0.0160									
	*										

post.out

97 KK RP8
 98 KM Route BP8 in channel to Outlet OP1
 99 RD 11025 .012 0.040 TRAP 0 7
 *

100 KK BP9
 101 KM BP9
 102 BA 1.7930
 103 LS 0 75
 104 UD 1.0218
 *

105 KK RP9
 106 KM Route BP9 in channel to Outlet OP1
 107 RD 11777 .012 0.040 TRAP 0 7
 *

108 KK BP13
 109 KM BP13
 110 BA .28747
 111 LS 0 77
 112 UD 0.1175
 *

1

HEC-1 INPUT

PAGE 4

LINE ID.....1.....2.....3.....4.....5.....6.....7.....8.....9.....10

113 KK RP13
 114 KM Route BP13 in channel to Outlet OP1
 115 RD 3285 .006 0.040 TRAP 0 7
 *

116 KK BP14
 117 KM BP14
 118 BA .07483
 119 LS 0 77
 120 UD 0.5848
 *

121 KK RP14
 122 KM Route BP14 in channel to Outlet OP1
 123 RD 2900 .006 0.040 TRAP 0 7
 *

124 KK OP1
 125 KM OP1
 126 BA 1.9726
 127 LS 0 76
 128 UD 0.7568
 *

129 KK CP2
 130 KM COMBINE BP8, BP9, BP13, BP14, RCP1, & OP1
 131 HC 6
 *

132 KK BP10
 133 KM BP10
 134 BA .01003
 135 LS 0 77
 136 UD 0.0190
 *

137 KK RP10
 138 KM Route BP10 in channel to Outlet OP2
 139 RD 3253 .017 0.040 TRAP 0 7
 *

140 KK BP11
 141 KM BP11
 142 BA .03064
 143 LS 0 77
 144 UD 0.3117
 *

145 KK RP11
 146 KM Route BP11 in channel to Outlet OP2
 147 RD 3006 .020 0.040 TRAP 0 7
 *

1

HEC-1 INPUT

PAGE 5

LINE ID.....1.....2.....3.....4.....5.....6.....7.....8.....9.....10

148 KK BP12
 149 KM BP12
 150 BA 2.0538
 151 LS 0 77

post.out

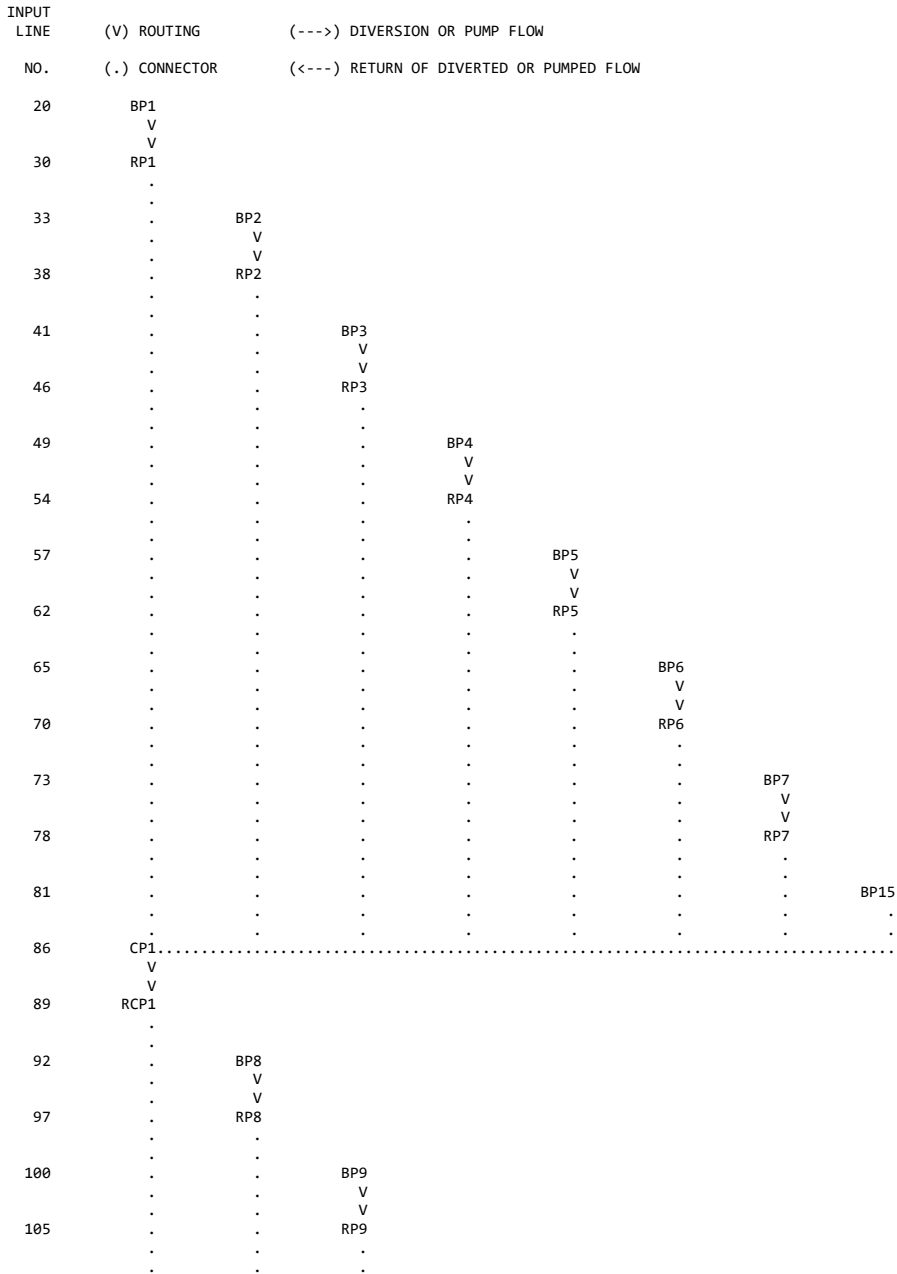
```

152      UD  1.0868
      *
153      KK  RP12
154      KM  Route BP12 in channel to Outlet OP2
155      RD  2983 .022 0.040 TRAP 0 7
      *
156      KK  OP2
157      KM  OP2
158      BA  .19600
159      LS  0 78
160      UD  0.3491
      *
161      KK  CP3
162      KM  COMBINE BP10 - BP12 & OP2
163      HC  4
      *
164      ZZ

```

1

SCHEMATIC DIAGRAM OF STREAM NETWORK



```

108      .      .      .      BP13      post.out
      .      .      .      V
      .      .      .      V
113      .      .      .      RP13
      .      .      .      .
      .      .      .      .
116      .      .      .      .      BP14
      .      .      .      .      V
      .      .      .      .      V
121      .      .      .      .      RP14
      .      .      .      .      .
      .      .      .      .      .
124      .      .      .      .      .      OP1
      .      .      .      .      .      .
      .      .      .      .      .      .
129      CP2.....
      .
132      .      BP10
      .      V
      .      V
137      .      RP10
      .      .
      .      .
140      .      .      BP11
      .      .      V
      .      .      V
145      .      .      RP11
      .      .      .
      .      .      .
148      .      .      .      BP12
      .      .      .      V
      .      .      .      V
153      .      .      .      RP12
      .      .      .      .
      .      .      .      .
156      .      .      .      .      OP2
      .      .      .      .      .
      .      .      .      .      .
161      .      CP3.....

```

(***) RUNOFF ALSO COMPUTED AT THIS LOCATION

```

1*****
*
* FLOOD HYDROGRAPH PACKAGE (HEC-1) *
* JUN 1998 *
* VERSION 4.1 *
* *
* RUN DATE 19APR17 TIME 14:44:05 *
* *
*****

```

```

*****
*
* U.S. ARMY CORPS OF ENGINEERS *
* HYDROLOGIC ENGINEERING CENTER *
* 609 SECOND STREET *
* DAVIS, CALIFORNIA 95616 *
* (916) 756-1104 *
* *
*****

```

HYDROLOGY STUDY for
Dammeron Valley Master Hydrology Plan
Future Conditions
Located in Dammeron Valley, Utah

March 2017

PREPARED BY ALPHA ENGINEERING
43 SOUTH 100 EAST
ST. GEORGE, UTAH 84770
TEL: (435) 628-6500
FAX: (435) 628-6553

100-YEAR & 10-YEAR, 3-HOUR STORM EVENT

```

18 IO      OUTPUT CONTROL VARIABLES
          IPRNT      0      PRINT CONTROL
          IPLOT      0      PLOT CONTROL
          QSCAL      0.    HYDROGRAPH PLOT SCALE

IT        HYDROGRAPH TIME DATA
          NMIN      1      MINUTES IN COMPUTATION INTERVAL
          IDATE      1      0      STARTING DATE
          ITIME      0000    STARTING TIME
          NQ         181    NUMBER OF HYDROGRAPH ORDINATES
          NDDATE     1      0      ENDING DATE
          NDTIME     0300    ENDING TIME
          ICENT      19     CENTURY MARK

          COMPUTATION INTERVAL      .02 HOURS
          TOTAL TIME BASE           3.00 HOURS

```

ENGLISH UNITS

post.out

DRAINAGE AREA SQUARE MILES
PRECIPITATION DEPTH INCHES
LENGTH, ELEVATION FEET
FLOW CUBIC FEET PER SECOND
STORAGE VOLUME ACRE- FEET
SURFACE AREA ACRES
TEMPERATURE DEGREES FAHRENHEIT

JP MULTI-PLAN OPTION
NPLAN 1 NUMBER OF PLANS

JR MULTI-RATIO OPTION
RATIOS OF PRECIPITATION
1.00 .61

*** ** ** ** **

* *
20 KK * BP1 *
* *

BP1

19 IN TIME DATA FOR INPUT TIME SERIES
JXMIN 5 TIME INTERVAL IN MINUTES
JXDATE 1 0 STARTING DATE
JXTIME 0 STARTING TIME

SUBBASIN RUNOFF DATA

22 BA SUBBASIN CHARACTERISTICS
TAREA .40 SUBBASIN AREA

PRECIPITATION DATA

23 PB STORM 2.13 BASIN TOTAL PRECIPITATION

24 PI INCREMENTAL PRECIPITATION PATTERN

Table with 10 columns of numerical values representing precipitation patterns over time.

28 LS SCS LOSS RATE
STRTL .63 INITIAL ABSTRACTION
CRVNBR 76.00 CURVE NUMBER
RTIMP .00 PERCENT IMPERVIOUS AREA

29 UD SCS DIMENSIONLESS UNITGRAPH
TLAG .38 LAG

UNIT HYDROGRAPH
117 END-OF-PERIOD ORDINATES

Table with 10 columns of numerical values representing unit hydrograph ordinates.

HYDROGRAPH AT STATION BP1

post.out

DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP	Q	*	DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP	Q
1	0000	1	.00	.00	.00	0.	*	1	0131	92	.00	.00	.00	97.				
1	0001	2	.00	.00	.00	0.	*	1	0132	93	.00	.00	.00	95.				
1	0002	3	.00	.00	.00	0.	*	1	0133	94	.00	.00	.00	92.				
1	0003	4	.00	.00	.00	0.	*	1	0134	95	.00	.00	.00	89.				
1	0004	5	.00	.00	.00	0.	*	1	0135	96	.00	.00	.00	87.				
1	0005	6	.00	.00	.00	0.	*	1	0136	97	.00	.00	.00	84.				
1	0006	7	.00	.00	.00	0.	*	1	0137	98	.00	.00	.00	82.				
1	0007	8	.00	.00	.00	0.	*	1	0138	99	.00	.00	.00	80.				
1	0008	9	.00	.00	.00	0.	*	1	0139	100	.00	.00	.00	77.				
1	0009	10	.00	.00	.00	0.	*	1	0140	101	.00	.00	.00	75.				
1	0010	11	.00	.00	.00	0.	*	1	0141	102	.00	.00	.00	72.				
1	0011	12	.00	.00	.00	0.	*	1	0142	103	.00	.00	.00	70.				
1	0012	13	.00	.00	.00	0.	*	1	0143	104	.00	.00	.00	68.				
1	0013	14	.00	.00	.00	0.	*	1	0144	105	.00	.00	.00	65.				
1	0014	15	.00	.00	.00	0.	*	1	0145	106	.00	.00	.00	63.				
1	0015	16	.00	.00	.00	0.	*	1	0146	107	.00	.00	.00	61.				
1	0016	17	.00	.00	.00	0.	*	1	0147	108	.00	.00	.00	58.				
1	0017	18	.00	.00	.00	0.	*	1	0148	109	.00	.00	.00	56.				
1	0018	19	.00	.00	.00	0.	*	1	0149	110	.00	.00	.00	54.				
1	0019	20	.00	.00	.00	0.	*	1	0150	111	.00	.00	.00	51.				
1	0020	21	.00	.00	.00	0.	*	1	0151	112	.00	.00	.00	49.				
1	0021	22	.00	.00	.00	0.	*	1	0152	113	.00	.00	.00	47.				
1	0022	23	.00	.00	.00	0.	*	1	0153	114	.00	.00	.00	45.				
1	0023	24	.00	.00	.00	0.	*	1	0154	115	.00	.00	.00	43.				
1	0024	25	.00	.00	.00	0.	*	1	0155	116	.00	.00	.00	41.				
1	0025	26	.00	.00	.00	0.	*	1	0156	117	.00	.00	.00	40.				
1	0026	27	.00	.00	.00	0.	*	1	0157	118	.00	.00	.00	38.				
1	0027	28	.00	.00	.00	0.	*	1	0158	119	.00	.00	.00	36.				
1	0028	29	.00	.00	.00	0.	*	1	0159	120	.00	.00	.00	34.				
1	0029	30	.00	.00	.00	0.	*	1	0200	121	.00	.00	.00	33.				
1	0030	31	.00	.00	.00	0.	*	1	0201	122	.00	.00	.00	32.				
1	0031	32	.11	.11	.00	0.	*	1	0202	123	.00	.00	.00	30.				
1	0032	33	.11	.11	.00	0.	*	1	0203	124	.00	.00	.00	29.				
1	0033	34	.11	.11	.00	0.	*	1	0204	125	.00	.00	.00	28.				
1	0034	35	.11	.11	.00	0.	*	1	0205	126	.00	.00	.00	27.				
1	0035	36	.11	.11	.00	0.	*	1	0206	127	.00	.00	.00	26.				
1	0036	37	.09	.09	.00	0.	*	1	0207	128	.00	.00	.00	25.				
1	0037	38	.09	.08	.01	0.	*	1	0208	129	.00	.00	.00	24.				
1	0038	39	.09	.08	.01	0.	*	1	0209	130	.00	.00	.00	23.				
1	0039	40	.09	.07	.01	0.	*	1	0210	131	.00	.00	.00	22.				
1	0040	41	.09	.07	.02	1.	*	1	0211	132	.00	.00	.00	21.				
1	0041	42	.06	.05	.01	1.	*	1	0212	133	.00	.00	.00	21.				
1	0042	43	.06	.05	.02	2.	*	1	0213	134	.00	.00	.00	20.				
1	0043	44	.06	.04	.02	3.	*	1	0214	135	.00	.00	.00	19.				
1	0044	45	.06	.04	.02	5.	*	1	0215	136	.00	.00	.00	19.				
1	0045	46	.06	.04	.02	7.	*	1	0216	137	.00	.00	.00	18.				
1	0046	47	.04	.03	.01	9.	*	1	0217	138	.00	.00	.00	18.				
1	0047	48	.04	.03	.01	12.	*	1	0218	139	.00	.00	.00	18.				
1	0048	49	.04	.02	.01	15.	*	1	0219	140	.00	.00	.00	17.				
1	0049	50	.04	.02	.01	19.	*	1	0220	141	.00	.00	.00	17.				
1	0050	51	.04	.02	.02	24.	*	1	0221	142	.00	.00	.00	16.				
1	0051	52	.02	.01	.01	29.	*	1	0222	143	.00	.00	.00	16.				
1	0052	53	.02	.01	.01	35.	*	1	0223	144	.00	.00	.00	16.				
1	0053	54	.02	.01	.01	41.	*	1	0224	145	.00	.00	.00	15.				
1	0054	55	.02	.01	.01	47.	*	1	0225	146	.00	.00	.00	15.				
1	0055	56	.02	.01	.01	54.	*	1	0226	147	.00	.00	.00	15.				
1	0056	57	.02	.01	.01	61.	*	1	0227	148	.00	.00	.00	15.				
1	0057	58	.02	.01	.01	68.	*	1	0228	149	.00	.00	.00	14.				
1	0058	59	.02	.01	.01	75.	*	1	0229	150	.00	.00	.00	14.				
1	0059	60	.02	.01	.01	81.	*	1	0230	151	.00	.00	.00	14.				
1	0100	61	.02	.01	.01	88.	*	1	0231	152	.00	.00	.00	14.				
1	0101	62	.01	.01	.01	94.	*	1	0232	153	.00	.00	.00	14.				
1	0102	63	.01	.01	.01	100.	*	1	0233	154	.00	.00	.00	14.				
1	0103	64	.01	.01	.01	106.	*	1	0234	155	.00	.00	.00	13.				
1	0104	65	.01	.01	.01	111.	*	1	0235	156	.00	.00	.00	13.				
1	0105	66	.01	.01	.01	116.	*	1	0236	157	.00	.00	.00	13.				
1	0106	67	.01	.01	.00	120.	*	1	0237	158	.00	.00	.00	13.				
1	0107	68	.01	.01	.00	124.	*	1	0238	159	.00	.00	.00	13.				
1	0108	69	.01	.01	.00	127.	*	1	0239	160	.00	.00	.00	13.				
1	0109	70	.01	.01	.00	129.	*	1	0240	161	.00	.00	.00	13.				
1	0110	71	.01	.01	.00	131.	*	1	0241	162	.00	.00	.00	13.				
1	0111	72	.01	.00	.00	133.	*	1	0242	163	.00	.00	.00	12.				
1	0112	73	.01	.00	.00	134.	*	1	0243	164	.00	.00	.00	12.				
1	0113	74	.01	.00	.00	134.	*	1	0244	165	.00	.00	.00	12.				
1	0114	75	.01	.00	.00	134.	*	1	0245	166	.00	.00	.00	12.				
1	0115	76	.01	.00	.00	134.	*	1	0246	167	.00	.00	.00	12.				
1	0116	77	.01	.00	.00	133.	*	1	0247	168	.00	.00	.00	12.				
1	0117	78	.01	.00	.00	132.	*	1	0248	169	.00	.00	.00	12.				
1	0118	79	.01	.00	.00	130.	*	1	0249	170	.00	.00	.00	12.				
1	0119	80	.01	.00	.00	128.	*	1	0250	171	.00	.00	.00	12.				
1	0120	81	.01	.00	.00	126.	*	1	0251	172	.00	.00	.00	12.				
1	0121	82	.01	.00	.00	123.	*	1	0252	173	.00	.00	.00	12.				
1	0122	83	.01	.00	.00	121.	*	1	0253	174	.00	.00	.00	12.				
1	0123	84	.01	.00	.00	118.	*	1	0254	175	.00	.00	.00	12.				
1	0124	85	.01	.00	.00	116.	*	1	0255	176	.00	.00	.00	12.				
1	0125	86	.01	.00	.00	113.	*	1	0256	177	.00	.00	.00	12.				

													post.out	
1	0126	87	.01	.00	.00	110.	*	1	0257	178	.00	.00	.00	12.
1	0127	88	.01	.00	.00	108.	*	1	0258	179	.00	.00	.00	12.
1	0128	89	.01	.00	.00	105.	*	1	0259	180	.00	.00	.00	12.
1	0129	90	.01	.00	.00	102.	*	1	0300	181	.00	.00	.00	12.
1	0130	91	.01	.00	.00	100.	*							

TOTAL RAINFALL = 2.13, TOTAL LOSS = 1.65, TOTAL EXCESS = .48

+ (CFS)	TIME (HR)	(CFS)	MAXIMUM AVERAGE FLOW			
			6-HR	24-HR	72-HR	3.00-HR
+ 134.	1.22	(INCHES)	40.	40.	40.	40.
		(AC-FT)	.460	.460	.460	.460
			10.	10.	10.	10.

CUMULATIVE AREA = .40 SQ MI

HYDROGRAPH AT STATION BP1
PLAN 1, RATIO = 1.00

DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	*	DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
1	0000	1	.00	.00	.00	0.	*	1	0131	92	.00	.00	.00	97.		
1	0001	2	.00	.00	.00	0.	*	1	0132	93	.00	.00	.00	95.		
1	0002	3	.00	.00	.00	0.	*	1	0133	94	.00	.00	.00	92.		
1	0003	4	.00	.00	.00	0.	*	1	0134	95	.00	.00	.00	89.		
1	0004	5	.00	.00	.00	0.	*	1	0135	96	.00	.00	.00	87.		
1	0005	6	.00	.00	.00	0.	*	1	0136	97	.00	.00	.00	84.		
1	0006	7	.00	.00	.00	0.	*	1	0137	98	.00	.00	.00	82.		
1	0007	8	.00	.00	.00	0.	*	1	0138	99	.00	.00	.00	80.		
1	0008	9	.00	.00	.00	0.	*	1	0139	100	.00	.00	.00	77.		
1	0009	10	.00	.00	.00	0.	*	1	0140	101	.00	.00	.00	75.		
1	0010	11	.00	.00	.00	0.	*	1	0141	102	.00	.00	.00	72.		
1	0011	12	.00	.00	.00	0.	*	1	0142	103	.00	.00	.00	70.		
1	0012	13	.00	.00	.00	0.	*	1	0143	104	.00	.00	.00	68.		
1	0013	14	.00	.00	.00	0.	*	1	0144	105	.00	.00	.00	65.		
1	0014	15	.00	.00	.00	0.	*	1	0145	106	.00	.00	.00	63.		
1	0015	16	.00	.00	.00	0.	*	1	0146	107	.00	.00	.00	61.		
1	0016	17	.00	.00	.00	0.	*	1	0147	108	.00	.00	.00	58.		
1	0017	18	.00	.00	.00	0.	*	1	0148	109	.00	.00	.00	56.		
1	0018	19	.00	.00	.00	0.	*	1	0149	110	.00	.00	.00	54.		
1	0019	20	.00	.00	.00	0.	*	1	0150	111	.00	.00	.00	51.		
1	0020	21	.00	.00	.00	0.	*	1	0151	112	.00	.00	.00	49.		
1	0021	22	.00	.00	.00	0.	*	1	0152	113	.00	.00	.00	47.		
1	0022	23	.00	.00	.00	0.	*	1	0153	114	.00	.00	.00	45.		
1	0023	24	.00	.00	.00	0.	*	1	0154	115	.00	.00	.00	43.		
1	0024	25	.00	.00	.00	0.	*	1	0155	116	.00	.00	.00	41.		
1	0025	26	.00	.00	.00	0.	*	1	0156	117	.00	.00	.00	40.		
1	0026	27	.00	.00	.00	0.	*	1	0157	118	.00	.00	.00	38.		
1	0027	28	.00	.00	.00	0.	*	1	0158	119	.00	.00	.00	36.		
1	0028	29	.00	.00	.00	0.	*	1	0159	120	.00	.00	.00	34.		
1	0029	30	.00	.00	.00	0.	*	1	0200	121	.00	.00	.00	33.		
1	0030	31	.00	.00	.00	0.	*	1	0201	122	.00	.00	.00	32.		
1	0031	32	.11	.11	.00	0.	*	1	0202	123	.00	.00	.00	30.		
1	0032	33	.11	.11	.00	0.	*	1	0203	124	.00	.00	.00	29.		
1	0033	34	.11	.11	.00	0.	*	1	0204	125	.00	.00	.00	28.		
1	0034	35	.11	.11	.00	0.	*	1	0205	126	.00	.00	.00	27.		
1	0035	36	.11	.11	.00	0.	*	1	0206	127	.00	.00	.00	26.		
1	0036	37	.09	.09	.00	0.	*	1	0207	128	.00	.00	.00	25.		
1	0037	38	.09	.08	.01	0.	*	1	0208	129	.00	.00	.00	24.		
1	0038	39	.09	.08	.01	0.	*	1	0209	130	.00	.00	.00	23.		
1	0039	40	.09	.07	.01	0.	*	1	0210	131	.00	.00	.00	22.		
1	0040	41	.09	.07	.02	1.	*	1	0211	132	.00	.00	.00	21.		
1	0041	42	.06	.05	.01	1.	*	1	0212	133	.00	.00	.00	21.		
1	0042	43	.06	.05	.02	2.	*	1	0213	134	.00	.00	.00	20.		
1	0043	44	.06	.04	.02	3.	*	1	0214	135	.00	.00	.00	19.		
1	0044	45	.06	.04	.02	5.	*	1	0215	136	.00	.00	.00	19.		
1	0045	46	.06	.04	.02	7.	*	1	0216	137	.00	.00	.00	18.		
1	0046	47	.04	.03	.01	9.	*	1	0217	138	.00	.00	.00	18.		
1	0047	48	.04	.03	.01	12.	*	1	0218	139	.00	.00	.00	18.		
1	0048	49	.04	.02	.01	15.	*	1	0219	140	.00	.00	.00	17.		
1	0049	50	.04	.02	.01	19.	*	1	0220	141	.00	.00	.00	17.		
1	0050	51	.04	.02	.02	24.	*	1	0221	142	.00	.00	.00	16.		
1	0051	52	.02	.01	.01	29.	*	1	0222	143	.00	.00	.00	16.		
1	0052	53	.02	.01	.01	35.	*	1	0223	144	.00	.00	.00	16.		
1	0053	54	.02	.01	.01	41.	*	1	0224	145	.00	.00	.00	15.		
1	0054	55	.02	.01	.01	47.	*	1	0225	146	.00	.00	.00	15.		
1	0055	56	.02	.01	.01	54.	*	1	0226	147	.00	.00	.00	15.		
1	0056	57	.02	.01	.01	61.	*	1	0227	148	.00	.00	.00	15.		
1	0057	58	.02	.01	.01	68.	*	1	0228	149	.00	.00	.00	14.		
1	0058	59	.02	.01	.01	75.	*	1	0229	150	.00	.00	.00	14.		
1	0059	60	.02	.01	.01	81.	*	1	0230	151	.00	.00	.00	14.		

														post.out			
1	0100	61	.02	.01	.01	88.	*	1	0231	152	.00	.00	.00	14.			
1	0101	62	.01	.01	.01	94.	*	1	0232	153	.00	.00	.00	14.			
1	0102	63	.01	.01	.01	100.	*	1	0233	154	.00	.00	.00	14.			
1	0103	64	.01	.01	.01	106.	*	1	0234	155	.00	.00	.00	13.			
1	0104	65	.01	.01	.01	111.	*	1	0235	156	.00	.00	.00	13.			
1	0105	66	.01	.01	.01	116.	*	1	0236	157	.00	.00	.00	13.			
1	0106	67	.01	.01	.00	120.	*	1	0237	158	.00	.00	.00	13.			
1	0107	68	.01	.01	.00	124.	*	1	0238	159	.00	.00	.00	13.			
1	0108	69	.01	.01	.00	127.	*	1	0239	160	.00	.00	.00	13.			
1	0109	70	.01	.01	.00	129.	*	1	0240	161	.00	.00	.00	13.			
1	0110	71	.01	.01	.00	131.	*	1	0241	162	.00	.00	.00	13.			
1	0111	72	.01	.00	.00	133.	*	1	0242	163	.00	.00	.00	12.			
1	0112	73	.01	.00	.00	134.	*	1	0243	164	.00	.00	.00	12.			
1	0113	74	.01	.00	.00	134.	*	1	0244	165	.00	.00	.00	12.			
1	0114	75	.01	.00	.00	134.	*	1	0245	166	.00	.00	.00	12.			
1	0115	76	.01	.00	.00	134.	*	1	0246	167	.00	.00	.00	12.			
1	0116	77	.01	.00	.00	133.	*	1	0247	168	.00	.00	.00	12.			
1	0117	78	.01	.00	.00	132.	*	1	0248	169	.00	.00	.00	12.			
1	0118	79	.01	.00	.00	130.	*	1	0249	170	.00	.00	.00	12.			
1	0119	80	.01	.00	.00	128.	*	1	0250	171	.00	.00	.00	12.			
1	0120	81	.01	.00	.00	126.	*	1	0251	172	.00	.00	.00	12.			
1	0121	82	.01	.00	.00	123.	*	1	0252	173	.00	.00	.00	12.			
1	0122	83	.01	.00	.00	121.	*	1	0253	174	.00	.00	.00	12.			
1	0123	84	.01	.00	.00	118.	*	1	0254	175	.00	.00	.00	12.			
1	0124	85	.01	.00	.00	116.	*	1	0255	176	.00	.00	.00	12.			
1	0125	86	.01	.00	.00	113.	*	1	0256	177	.00	.00	.00	12.			
1	0126	87	.01	.00	.00	110.	*	1	0257	178	.00	.00	.00	12.			
1	0127	88	.01	.00	.00	108.	*	1	0258	179	.00	.00	.00	12.			
1	0128	89	.01	.00	.00	105.	*	1	0259	180	.00	.00	.00	12.			
1	0129	90	.01	.00	.00	102.	*	1	0300	181	.00	.00	.00	12.			
1	0130	91	.01	.00	.00	100.	*										

TOTAL RAINFALL = 2.13, TOTAL LOSS = 1.65, TOTAL EXCESS = .48

PEAK FLOW	TIME	MAXIMUM AVERAGE FLOW			
(CFS)	(HR)	6-HR	24-HR	72-HR	3.00-HR
+ 134.	1.22	40.	40.	40.	40.
		(INCHES)	.460	.460	.460
		(AC-FT)	10.	10.	10.

CUMULATIVE AREA = .40 SQ MI

HYDROGRAPH AT STATION BP1
PLAN 1, RATIO = .61

DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	*	DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
1	0000	1	.00	.00	.00	0.	*	1	0131	92	.00	.00	.00	.00	25.	
1	0001	2	.00	.00	.00	0.	*	1	0132	93	.00	.00	.00	.00	25.	
1	0002	3	.00	.00	.00	0.	*	1	0133	94	.00	.00	.00	.00	25.	
1	0003	4	.00	.00	.00	0.	*	1	0134	95	.00	.00	.00	.00	24.	
1	0004	5	.00	.00	.00	0.	*	1	0135	96	.00	.00	.00	.00	24.	
1	0005	6	.00	.00	.00	0.	*	1	0136	97	.00	.00	.00	.00	23.	
1	0006	7	.00	.00	.00	0.	*	1	0137	98	.00	.00	.00	.00	23.	
1	0007	8	.00	.00	.00	0.	*	1	0138	99	.00	.00	.00	.00	22.	
1	0008	9	.00	.00	.00	0.	*	1	0139	100	.00	.00	.00	.00	22.	
1	0009	10	.00	.00	.00	0.	*	1	0140	101	.00	.00	.00	.00	21.	
1	0010	11	.00	.00	.00	0.	*	1	0141	102	.00	.00	.00	.00	21.	
1	0011	12	.00	.00	.00	0.	*	1	0142	103	.00	.00	.00	.00	20.	
1	0012	13	.00	.00	.00	0.	*	1	0143	104	.00	.00	.00	.00	19.	
1	0013	14	.00	.00	.00	0.	*	1	0144	105	.00	.00	.00	.00	19.	
1	0014	15	.00	.00	.00	0.	*	1	0145	106	.00	.00	.00	.00	18.	
1	0015	16	.00	.00	.00	0.	*	1	0146	107	.00	.00	.00	.00	18.	
1	0016	17	.00	.00	.00	0.	*	1	0147	108	.00	.00	.00	.00	17.	
1	0017	18	.00	.00	.00	0.	*	1	0148	109	.00	.00	.00	.00	16.	
1	0018	19	.00	.00	.00	0.	*	1	0149	110	.00	.00	.00	.00	16.	
1	0019	20	.00	.00	.00	0.	*	1	0150	111	.00	.00	.00	.00	15.	
1	0020	21	.00	.00	.00	0.	*	1	0151	112	.00	.00	.00	.00	15.	
1	0021	22	.00	.00	.00	0.	*	1	0152	113	.00	.00	.00	.00	14.	
1	0022	23	.00	.00	.00	0.	*	1	0153	114	.00	.00	.00	.00	14.	
1	0023	24	.00	.00	.00	0.	*	1	0154	115	.00	.00	.00	.00	13.	
1	0024	25	.00	.00	.00	0.	*	1	0155	116	.00	.00	.00	.00	12.	
1	0025	26	.00	.00	.00	0.	*	1	0156	117	.00	.00	.00	.00	12.	
1	0026	27	.00	.00	.00	0.	*	1	0157	118	.00	.00	.00	.00	11.	
1	0027	28	.00	.00	.00	0.	*	1	0158	119	.00	.00	.00	.00	11.	
1	0028	29	.00	.00	.00	0.	*	1	0159	120	.00	.00	.00	.00	11.	
1	0029	30	.00	.00	.00	0.	*	1	0200	121	.00	.00	.00	.00	10.	
1	0030	31	.00	.00	.00	0.	*	1	0201	122	.00	.00	.00	.00	10.	
1	0031	32	.07	.07	.00	0.	*	1	0202	123	.00	.00	.00	.00	9.	
1	0032	33	.07	.07	.00	0.	*	1	0203	124	.00	.00	.00	.00	9.	
1	0033	34	.07	.07	.00	0.	*	1	0204	125	.00	.00	.00	.00	9.	

post.out														
1	0034	35	.07	.07	.00	0.	*	1	0205	126	.00	.00	.00	8.
1	0035	36	.07	.07	.00	0.	*	1	0206	127	.00	.00	.00	8.
1	0036	37	.05	.05	.00	0.	*	1	0207	128	.00	.00	.00	8.
1	0037	38	.05	.05	.00	0.	*	1	0208	129	.00	.00	.00	7.
1	0038	39	.05	.05	.00	0.	*	1	0209	130	.00	.00	.00	7.
1	0039	40	.05	.05	.00	0.	*	1	0210	131	.00	.00	.00	7.
1	0040	41	.05	.05	.00	0.	*	1	0211	132	.00	.00	.00	7.
1	0041	42	.04	.04	.00	0.	*	1	0212	133	.00	.00	.00	7.
1	0042	43	.04	.04	.00	0.	*	1	0213	134	.00	.00	.00	6.
1	0043	44	.04	.04	.00	0.	*	1	0214	135	.00	.00	.00	6.
1	0044	45	.04	.03	.00	0.	*	1	0215	136	.00	.00	.00	6.
1	0045	46	.04	.03	.00	0.	*	1	0216	137	.00	.00	.00	6.
1	0046	47	.02	.02	.00	0.	*	1	0217	138	.00	.00	.00	6.
1	0047	48	.02	.02	.00	1.	*	1	0218	139	.00	.00	.00	6.
1	0048	49	.02	.02	.00	1.	*	1	0219	140	.00	.00	.00	6.
1	0049	50	.02	.02	.00	1.	*	1	0220	141	.00	.00	.00	5.
1	0050	51	.02	.02	.00	1.	*	1	0221	142	.00	.00	.00	5.
1	0051	52	.01	.01	.00	2.	*	1	0222	143	.00	.00	.00	5.
1	0052	53	.01	.01	.00	3.	*	1	0223	144	.00	.00	.00	5.
1	0053	54	.01	.01	.00	3.	*	1	0224	145	.00	.00	.00	5.
1	0054	55	.01	.01	.00	4.	*	1	0225	146	.00	.00	.00	5.
1	0055	56	.01	.01	.00	5.	*	1	0226	147	.00	.00	.00	5.
1	0056	57	.01	.01	.00	6.	*	1	0227	148	.00	.00	.00	5.
1	0057	58	.01	.01	.00	7.	*	1	0228	149	.00	.00	.00	5.
1	0058	59	.01	.01	.00	8.	*	1	0229	150	.00	.00	.00	5.
1	0059	60	.01	.01	.00	10.	*	1	0230	151	.00	.00	.00	5.
1	0100	61	.01	.01	.00	11.	*	1	0231	152	.00	.00	.00	5.
1	0101	62	.01	.01	.00	12.	*	1	0232	153	.00	.00	.00	5.
1	0102	63	.01	.01	.00	14.	*	1	0233	154	.00	.00	.00	5.
1	0103	64	.01	.01	.00	15.	*	1	0234	155	.00	.00	.00	5.
1	0104	65	.01	.01	.00	16.	*	1	0235	156	.00	.00	.00	4.
1	0105	66	.01	.01	.00	18.	*	1	0236	157	.00	.00	.00	4.
1	0106	67	.01	.00	.00	19.	*	1	0237	158	.00	.00	.00	4.
1	0107	68	.01	.00	.00	20.	*	1	0238	159	.00	.00	.00	4.
1	0108	69	.01	.00	.00	21.	*	1	0239	160	.00	.00	.00	4.
1	0109	70	.01	.00	.00	23.	*	1	0240	161	.00	.00	.00	4.
1	0110	71	.01	.00	.00	24.	*	1	0241	162	.00	.00	.00	4.
1	0111	72	.00	.00	.00	24.	*	1	0242	163	.00	.00	.00	4.
1	0112	73	.00	.00	.00	25.	*	1	0243	164	.00	.00	.00	4.
1	0113	74	.00	.00	.00	26.	*	1	0244	165	.00	.00	.00	4.
1	0114	75	.00	.00	.00	27.	*	1	0245	166	.00	.00	.00	4.
1	0115	76	.00	.00	.00	27.	*	1	0246	167	.00	.00	.00	4.
1	0116	77	.00	.00	.00	28.	*	1	0247	168	.00	.00	.00	4.
1	0117	78	.00	.00	.00	28.	*	1	0248	169	.00	.00	.00	4.
1	0118	79	.00	.00	.00	28.	*	1	0249	170	.00	.00	.00	4.
1	0119	80	.00	.00	.00	28.	*	1	0250	171	.00	.00	.00	4.
1	0120	81	.00	.00	.00	28.	*	1	0251	172	.00	.00	.00	4.
1	0121	82	.00	.00	.00	28.	*	1	0252	173	.00	.00	.00	4.
1	0122	83	.00	.00	.00	28.	*	1	0253	174	.00	.00	.00	4.
1	0123	84	.00	.00	.00	28.	*	1	0254	175	.00	.00	.00	4.
1	0124	85	.00	.00	.00	28.	*	1	0255	176	.00	.00	.00	4.
1	0125	86	.00	.00	.00	28.	*	1	0256	177	.00	.00	.00	4.
1	0126	87	.00	.00	.00	27.	*	1	0257	178	.00	.00	.00	4.
1	0127	88	.00	.00	.00	27.	*	1	0258	179	.00	.00	.00	4.
1	0128	89	.00	.00	.00	27.	*	1	0259	180	.00	.00	.00	4.
1	0129	90	.00	.00	.00	26.	*	1	0300	181	.00	.00	.00	4.
1	0130	91	.00	.00	.00	26.	*							

TOTAL RAINFALL = 1.29, TOTAL LOSS = 1.18, TOTAL EXCESS = .11

PEAK FLOW + (CFS)	TIME (HR)	MAXIMUM AVERAGE FLOW			
		6-HR	24-HR	72-HR	3.00-HR
+ 28.	1.33	9.	9.	9.	9.
		(INCHES)	.106	.106	.106
		(AC-FT)	2.	2.	2.

CUMULATIVE AREA = .40 SQ MI

*** **

```

*****
*
30 KK *
* RP1 *
*
*****

```

Route BP1 in channel to Culvert BP15

HYDROGRAPH ROUTING DATA

```

32 RD MUSKINGUM-CUNGE CHANNEL ROUTING
L 3268. CHANNEL LENGTH
S .0080 SLOPE

```

N .040 CHANNEL ROUGHNESS COEFFICIENT
 CA .00 CONTRIBUTING AREA
 SHAPE TRAP CHANNEL SHAPE
 WD .00 BOTTOM WIDTH OR DIAMETER
 Z 7.00 SIDE SLOPE

post.out

 COMPUTED MUSKINGUM-CUNGE PARAMETERS
 COMPUTATION TIME STEP

ELEMENT	ALPHA	M	DT (MIN)	DX (FT)	PEAK (CFS)	TIME TO PEAK (MIN)	VOLUME (IN)	MAXIMUM CELERITY (FPS)
MAIN	1.09	1.33	1.00	163.40	133.42	85.00	.44	4.08

INTERPOLATED TO SPECIFIED COMPUTATION INTERVAL

MAIN	1.09	1.33	1.00		133.42	85.00	.44	
------	------	------	------	--	--------	-------	-----	--

CONTINUITY SUMMARY (AC-FT) - INFLOW= .9820E+01 EXCESS= .0000E+00 OUTFLOW= .9415E+01 BASIN STORAGE= .4554E+00 PERCENT ERROR= -.5

HYDROGRAPH AT STATION RP1
 PLAN 1, RATIO = 1.00

DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*
1	0000	1	0.	*	1	0046	47	0.	*	1	0132	93	124.	*	1	0218	139	31.					
1	0001	2	0.	*	1	0047	48	0.	*	1	0133	94	122.	*	1	0219	140	30.					
1	0002	3	0.	*	1	0048	49	0.	*	1	0134	95	120.	*	1	0220	141	28.					
1	0003	4	0.	*	1	0049	50	0.	*	1	0135	96	117.	*	1	0221	142	27.					
1	0004	5	0.	*	1	0050	51	0.	*	1	0136	97	115.	*	1	0222	143	27.					
1	0005	6	0.	*	1	0051	52	0.	*	1	0137	98	112.	*	1	0223	144	26.					
1	0006	7	0.	*	1	0052	53	0.	*	1	0138	99	110.	*	1	0224	145	25.					
1	0007	8	0.	*	1	0053	54	0.	*	1	0139	100	107.	*	1	0225	146	24.					
1	0008	9	0.	*	1	0054	55	0.	*	1	0140	101	105.	*	1	0226	147	23.					
1	0009	10	0.	*	1	0055	56	0.	*	1	0141	102	102.	*	1	0227	148	23.					
1	0010	11	0.	*	1	0056	57	0.	*	1	0142	103	100.	*	1	0228	149	22.					
1	0011	12	0.	*	1	0057	58	0.	*	1	0143	104	98.	*	1	0229	150	21.					
1	0012	13	0.	*	1	0058	59	0.	*	1	0144	105	95.	*	1	0230	151	21.					
1	0013	14	0.	*	1	0059	60	0.	*	1	0145	106	93.	*	1	0231	152	20.					
1	0014	15	0.	*	1	0100	61	0.	*	1	0146	107	90.	*	1	0232	153	20.					
1	0015	16	0.	*	1	0101	62	0.	*	1	0147	108	88.	*	1	0233	154	19.					
1	0016	17	0.	*	1	0102	63	0.	*	1	0148	109	86.	*	1	0234	155	19.					
1	0017	18	0.	*	1	0103	64	0.	*	1	0149	110	84.	*	1	0235	156	18.					
1	0018	19	0.	*	1	0104	65	0.	*	1	0150	111	81.	*	1	0236	157	18.					
1	0019	20	0.	*	1	0105	66	1.	*	1	0151	112	79.	*	1	0237	158	17.					
1	0020	21	0.	*	1	0106	67	2.	*	1	0152	113	77.	*	1	0238	159	17.					
1	0021	22	0.	*	1	0107	68	16.	*	1	0153	114	75.	*	1	0239	160	17.					
1	0022	23	0.	*	1	0108	69	34.	*	1	0154	115	73.	*	1	0240	161	16.					
1	0023	24	0.	*	1	0109	70	50.	*	1	0155	116	71.	*	1	0241	162	16.					
1	0024	25	0.	*	1	0110	71	62.	*	1	0156	117	68.	*	1	0242	163	16.					
1	0025	26	0.	*	1	0111	72	73.	*	1	0157	118	66.	*	1	0243	164	16.					
1	0026	27	0.	*	1	0112	73	82.	*	1	0158	119	64.	*	1	0244	165	15.					
1	0027	28	0.	*	1	0113	74	91.	*	1	0159	120	62.	*	1	0245	166	15.					
1	0028	29	0.	*	1	0114	75	98.	*	1	0200	121	60.	*	1	0246	167	15.					
1	0029	30	0.	*	1	0115	76	105.	*	1	0201	122	58.	*	1	0247	168	15.					
1	0030	31	0.	*	1	0116	77	111.	*	1	0202	123	56.	*	1	0248	169	14.					
1	0031	32	0.	*	1	0117	78	116.	*	1	0203	124	54.	*	1	0249	170	14.					
1	0032	33	0.	*	1	0118	79	120.	*	1	0204	125	52.	*	1	0250	171	14.					
1	0033	34	0.	*	1	0119	80	124.	*	1	0205	126	50.	*	1	0251	172	14.					
1	0034	35	0.	*	1	0120	81	127.	*	1	0206	127	48.	*	1	0252	173	14.					
1	0035	36	0.	*	1	0121	82	130.	*	1	0207	128	47.	*	1	0253	174	14.					
1	0036	37	0.	*	1	0122	83	131.	*	1	0208	129	45.	*	1	0254	175	13.					
1	0037	38	0.	*	1	0123	84	133.	*	1	0209	130	43.	*	1	0255	176	13.					
1	0038	39	0.	*	1	0124	85	133.	*	1	0210	131	42.	*	1	0256	177	13.					
1	0039	40	0.	*	1	0125	86	133.	*	1	0211	132	40.	*	1	0257	178	13.					
1	0040	41	0.	*	1	0126	87	133.	*	1	0212	133	38.	*	1	0258	179	13.					
1	0041	42	0.	*	1	0127	88	132.	*	1	0213	134	37.	*	1	0259	180	13.					
1	0042	43	0.	*	1	0128	89	131.	*	1	0214	135	36.	*	1	0300	181	13.					
1	0043	44	0.	*	1	0129	90	130.	*	1	0215	136	34.	*									
1	0044	45	0.	*	1	0130	91	128.	*	1	0216	137	33.	*									
1	0045	46	0.	*	1	0131	92	126.	*	1	0217	138	32.	*									

PEAK FLOW + (CFS)	TIME (HR)	MAXIMUM AVERAGE FLOW				
		6-HR	24-HR	72-HR	3.00-HR	
133.	1.42	38.	38.	38.	38.	
		(INCHES)	.441	.441	.441	.441

(AC-FT) 9. 9. 9. post.out
9.

CUMULATIVE AREA = .40 SQ MI

COMPUTED MUSKINGUM-CUNGE PARAMETERS
COMPUTATION TIME STEP

ELEMENT	ALPHA	M	DT (MIN)	DX (FT)	PEAK (CFS)	TIME TO PEAK (MIN)	VOLUME (IN)	MAXIMUM CELERITY (FPS)
MAIN	1.09	1.33	1.00	105.42	28.24	97.00	.10	2.76

INTERPOLATED TO SPECIFIED COMPUTATION INTERVAL

MAIN	1.09	1.33	1.00		28.24	97.00	.10	
------	------	------	------	--	-------	-------	-----	--

CONTINUITY SUMMARY (AC-FT) - INFLOW= .2264E+01 EXCESS= .0000E+00 OUTFLOW= .2073E+01 BASIN STORAGE= .2077E+00 PERCENT ERROR= -.7

HYDROGRAPH AT STATION RP1
PLAN 1, RATIO = .61

DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	
1	0000	1	0.	*	1	0046	47	0.	*	1	0132	93	27.	*	1	0218	139	11.						
1	0001	2	0.	*	1	0047	48	0.	*	1	0133	94	27.	*	1	0219	140	11.						
1	0002	3	0.	*	1	0048	49	0.	*	1	0134	95	28.	*	1	0220	141	11.						
1	0003	4	0.	*	1	0049	50	0.	*	1	0135	96	28.	*	1	0221	142	10.						
1	0004	5	0.	*	1	0050	51	0.	*	1	0136	97	28.	*	1	0222	143	10.						
1	0005	6	0.	*	1	0051	52	0.	*	1	0137	98	28.	*	1	0223	144	10.						
1	0006	7	0.	*	1	0052	53	0.	*	1	0138	99	28.	*	1	0224	145	9.						
1	0007	8	0.	*	1	0053	54	0.	*	1	0139	100	28.	*	1	0225	146	9.						
1	0008	9	0.	*	1	0054	55	0.	*	1	0140	101	28.	*	1	0226	147	9.						
1	0009	10	0.	*	1	0055	56	0.	*	1	0141	102	28.	*	1	0227	148	8.						
1	0010	11	0.	*	1	0056	57	0.	*	1	0142	103	27.	*	1	0228	149	8.						
1	0011	12	0.	*	1	0057	58	0.	*	1	0143	104	27.	*	1	0229	150	8.						
1	0012	13	0.	*	1	0058	59	0.	*	1	0144	105	27.	*	1	0230	151	8.						
1	0013	14	0.	*	1	0059	60	0.	*	1	0145	106	26.	*	1	0231	152	7.						
1	0014	15	0.	*	1	0100	61	0.	*	1	0146	107	26.	*	1	0232	153	7.						
1	0015	16	0.	*	1	0101	62	0.	*	1	0147	108	26.	*	1	0233	154	7.						
1	0016	17	0.	*	1	0102	63	0.	*	1	0148	109	25.	*	1	0234	155	7.						
1	0017	18	0.	*	1	0103	64	0.	*	1	0149	110	25.	*	1	0235	156	7.						
1	0018	19	0.	*	1	0104	65	0.	*	1	0150	111	25.	*	1	0236	157	7.						
1	0019	20	0.	*	1	0105	66	0.	*	1	0151	112	24.	*	1	0237	158	6.						
1	0020	21	0.	*	1	0106	67	0.	*	1	0152	113	24.	*	1	0238	159	6.						
1	0021	22	0.	*	1	0107	68	0.	*	1	0153	114	23.	*	1	0239	160	6.						
1	0022	23	0.	*	1	0108	69	0.	*	1	0154	115	23.	*	1	0240	161	6.						
1	0023	24	0.	*	1	0109	70	0.	*	1	0155	116	22.	*	1	0241	162	6.						
1	0024	25	0.	*	1	0110	71	0.	*	1	0156	117	22.	*	1	0242	163	6.						
1	0025	26	0.	*	1	0111	72	0.	*	1	0157	118	21.	*	1	0243	164	6.						
1	0026	27	0.	*	1	0112	73	0.	*	1	0158	119	21.	*	1	0244	165	6.						
1	0027	28	0.	*	1	0113	74	0.	*	1	0159	120	21.	*	1	0245	166	5.						
1	0028	29	0.	*	1	0114	75	0.	*	1	0200	121	20.	*	1	0246	167	5.						
1	0029	30	0.	*	1	0115	76	0.	*	1	0201	122	20.	*	1	0247	168	5.						
1	0030	31	0.	*	1	0116	77	0.	*	1	0202	123	19.	*	1	0248	169	5.						
1	0031	32	0.	*	1	0117	78	0.	*	1	0203	124	19.	*	1	0249	170	5.						
1	0032	33	0.	*	1	0118	79	0.	*	1	0204	125	18.	*	1	0250	171	5.						
1	0033	34	0.	*	1	0119	80	0.	*	1	0205	126	17.	*	1	0251	172	5.						
1	0034	35	0.	*	1	0120	81	0.	*	1	0206	127	17.	*	1	0252	173	5.						
1	0035	36	0.	*	1	0121	82	4.	*	1	0207	128	16.	*	1	0253	174	5.						
1	0036	37	0.	*	1	0122	83	12.	*	1	0208	129	16.	*	1	0254	175	5.						
1	0037	38	0.	*	1	0123	84	16.	*	1	0209	130	15.	*	1	0255	176	5.						
1	0038	39	0.	*	1	0124	85	18.	*	1	0210	131	15.	*	1	0256	177	5.						
1	0039	40	0.	*	1	0125	86	20.	*	1	0211	132	14.	*	1	0257	178	5.						
1	0040	41	0.	*	1	0126	87	21.	*	1	0212	133	14.	*	1	0258	179	5.						
1	0041	42	0.	*	1	0127	88	23.	*	1	0213	134	14.	*	1	0259	180	5.						
1	0042	43	0.	*	1	0128	89	24.	*	1	0214	135	13.	*	1	0300	181	5.						
1	0043	44	0.	*	1	0129	90	25.	*	1	0215	136	13.	*										
1	0044	45	0.	*	1	0130	91	26.	*	1	0216	137	12.	*										
1	0045	46	0.	*	1	0131	92	26.	*	1	0217	138	12.	*										

PEAK FLOW	TIME	MAXIMUM AVERAGE FLOW			
(CFS)	(HR)	6-HR	24-HR	72-HR	3.00-HR
+	28.	8.	8.	8.	8.
	1.62	.097	.097	.097	.097
		(INCHES)			
		(AC-FT)	2.	2.	2.

CUMULATIVE AREA = .40 SQ MI

*** ** ** ** **

* *
33 KK * BP2 *
* *

BP2

SUBBASIN RUNOFF DATA

35 BA SUBBASIN CHARACTERISTICS
TAREA .95 SUBBASIN AREA

PRECIPITATION DATA

23 PB STORM 2.13 BASIN TOTAL PRECIPITATION

Table with 10 columns for incremental precipitation pattern data, showing values from .00 to .05 across multiple rows.

36 LS SCS LOSS RATE
STRTL .74 INITIAL ABSTRACTION
CRVNR 73.00 CURVE NUMBER
RTIMP .00 PERCENT IMPERVIOUS AREA

37 UD SCS DIMENSIONLESS UNITGRAPH
TLAG .37 LAG

UNIT HYDROGRAPH
112 END-OF-PERIOD ORDINATES

Table with 10 columns of ordinates, showing values ranging from 1 to 552.

HYDROGRAPH AT STATION BP2

Table with 14 columns: DA, MON, HRMN, ORD, RAIN, LOSS, EXCESS, COMP Q, and 14 empty columns, followed by data rows for various time steps.

										post.out				
1	0014	15	.00	.00	.00	0.	*	1	0145	106	.00	.00	.00	120.
1	0015	16	.00	.00	.00	0.	*	1	0146	107	.00	.00	.00	115.
1	0016	17	.00	.00	.00	0.	*	1	0147	108	.00	.00	.00	111.
1	0017	18	.00	.00	.00	0.	*	1	0148	109	.00	.00	.00	106.
1	0018	19	.00	.00	.00	0.	*	1	0149	110	.00	.00	.00	102.
1	0019	20	.00	.00	.00	0.	*	1	0150	111	.00	.00	.00	98.
1	0020	21	.00	.00	.00	0.	*	1	0151	112	.00	.00	.00	94.
1	0021	22	.00	.00	.00	0.	*	1	0152	113	.00	.00	.00	89.
1	0022	23	.00	.00	.00	0.	*	1	0153	114	.00	.00	.00	86.
1	0023	24	.00	.00	.00	0.	*	1	0154	115	.00	.00	.00	82.
1	0024	25	.00	.00	.00	0.	*	1	0155	116	.00	.00	.00	78.
1	0025	26	.00	.00	.00	0.	*	1	0156	117	.00	.00	.00	74.
1	0026	27	.00	.00	.00	0.	*	1	0157	118	.00	.00	.00	71.
1	0027	28	.00	.00	.00	0.	*	1	0158	119	.00	.00	.00	68.
1	0028	29	.00	.00	.00	0.	*	1	0159	120	.00	.00	.00	65.
1	0029	30	.00	.00	.00	0.	*	1	0200	121	.00	.00	.00	62.
1	0030	31	.00	.00	.00	0.	*	1	0201	122	.00	.00	.00	59.
1	0031	32	.11	.11	.00	0.	*	1	0202	123	.00	.00	.00	57.
1	0032	33	.11	.11	.00	0.	*	1	0203	124	.00	.00	.00	54.
1	0033	34	.11	.11	.00	0.	*	1	0204	125	.00	.00	.00	52.
1	0034	35	.11	.11	.00	0.	*	1	0205	126	.00	.00	.00	50.
1	0035	36	.11	.11	.00	0.	*	1	0206	127	.00	.00	.00	48.
1	0036	37	.09	.09	.00	0.	*	1	0207	128	.00	.00	.00	46.
1	0037	38	.09	.09	.00	0.	*	1	0208	129	.00	.00	.00	45.
1	0038	39	.09	.08	.00	0.	*	1	0209	130	.00	.00	.00	43.
1	0039	40	.09	.08	.01	0.	*	1	0210	131	.00	.00	.00	42.
1	0040	41	.09	.08	.01	1.	*	1	0211	132	.00	.00	.00	41.
1	0041	42	.06	.05	.01	1.	*	1	0212	133	.00	.00	.00	40.
1	0042	43	.06	.05	.01	3.	*	1	0213	134	.00	.00	.00	38.
1	0043	44	.06	.05	.01	4.	*	1	0214	135	.00	.00	.00	37.
1	0044	45	.06	.05	.01	7.	*	1	0215	136	.00	.00	.00	36.
1	0045	46	.06	.05	.02	10.	*	1	0216	137	.00	.00	.00	36.
1	0046	47	.04	.03	.01	13.	*	1	0217	138	.00	.00	.00	35.
1	0047	48	.04	.03	.01	18.	*	1	0218	139	.00	.00	.00	34.
1	0048	49	.04	.03	.01	23.	*	1	0219	140	.00	.00	.00	33.
1	0049	50	.04	.03	.01	30.	*	1	0220	141	.00	.00	.00	33.
1	0050	51	.04	.03	.01	38.	*	1	0221	142	.00	.00	.00	32.
1	0051	52	.02	.02	.01	47.	*	1	0222	143	.00	.00	.00	31.
1	0052	53	.02	.02	.01	57.	*	1	0223	144	.00	.00	.00	31.
1	0053	54	.02	.02	.01	67.	*	1	0224	145	.00	.00	.00	30.
1	0054	55	.02	.02	.01	79.	*	1	0225	146	.00	.00	.00	30.
1	0055	56	.02	.02	.01	92.	*	1	0226	147	.00	.00	.00	29.
1	0056	57	.02	.01	.01	104.	*	1	0227	148	.00	.00	.00	29.
1	0057	58	.02	.01	.01	118.	*	1	0228	149	.00	.00	.00	29.
1	0058	59	.02	.01	.01	131.	*	1	0229	150	.00	.00	.00	28.
1	0059	60	.02	.01	.01	144.	*	1	0230	151	.00	.00	.00	28.
1	0100	61	.02	.01	.01	157.	*	1	0231	152	.00	.00	.00	28.
1	0101	62	.01	.01	.01	169.	*	1	0232	153	.00	.00	.00	27.
1	0102	63	.01	.01	.01	181.	*	1	0233	154	.00	.00	.00	27.
1	0103	64	.01	.01	.01	192.	*	1	0234	155	.00	.00	.00	27.
1	0104	65	.01	.01	.01	202.	*	1	0235	156	.00	.00	.00	26.
1	0105	66	.01	.01	.01	211.	*	1	0236	157	.00	.00	.00	26.
1	0106	67	.01	.01	.00	219.	*	1	0237	158	.00	.00	.00	26.
1	0107	68	.01	.01	.00	227.	*	1	0238	159	.00	.00	.00	26.
1	0108	69	.01	.01	.00	233.	*	1	0239	160	.00	.00	.00	26.
1	0109	70	.01	.01	.00	238.	*	1	0240	161	.00	.00	.00	25.
1	0110	71	.01	.01	.00	243.	*	1	0241	162	.00	.00	.00	25.
1	0111	72	.01	.00	.00	246.	*	1	0242	163	.00	.00	.00	25.
1	0112	73	.01	.00	.00	248.	*	1	0243	164	.00	.00	.00	25.
1	0113	74	.01	.00	.00	250.	*	1	0244	165	.00	.00	.00	25.
1	0114	75	.01	.00	.00	250.	*	1	0245	166	.00	.00	.00	25.
1	0115	76	.01	.00	.00	249.	*	1	0246	167	.00	.00	.00	25.
1	0116	77	.01	.00	.00	248.	*	1	0247	168	.00	.00	.00	25.
1	0117	78	.01	.00	.00	245.	*	1	0248	169	.00	.00	.00	25.
1	0118	79	.01	.00	.00	243.	*	1	0249	170	.00	.00	.00	25.
1	0119	80	.01	.00	.00	239.	*	1	0250	171	.00	.00	.00	24.
1	0120	81	.01	.00	.00	235.	*	1	0251	172	.00	.00	.00	24.
1	0121	82	.01	.00	.00	231.	*	1	0252	173	.00	.00	.00	24.
1	0122	83	.01	.00	.00	227.	*	1	0253	174	.00	.00	.00	24.
1	0123	84	.01	.00	.00	222.	*	1	0254	175	.00	.00	.00	24.
1	0124	85	.01	.00	.00	218.	*	1	0255	176	.00	.00	.00	24.
1	0125	86	.01	.00	.00	213.	*	1	0256	177	.00	.00	.00	24.
1	0126	87	.01	.00	.00	208.	*	1	0257	178	.00	.00	.00	24.
1	0127	88	.01	.00	.00	203.	*	1	0258	179	.00	.00	.00	24.
1	0128	89	.01	.00	.00	198.	*	1	0259	180	.00	.00	.00	24.
1	0129	90	.01	.00	.00	194.	*	1	0300	181	.00	.00	.00	24.
1	0130	91	.01	.00	.00	189.	*							

TOTAL RAINFALL = 2.13, TOTAL LOSS = 1.75, TOTAL EXCESS = .38

+ (CFS)	TIME (HR)	MAXIMUM AVERAGE FLOW			
		6-HR	24-HR	72-HR	3.00-HR
+ 250.	1.23	74.	74.	74.	74.
		(INCHES)	.361	.361	.361
		(AC-FT)	18.	18.	18.

CUMULATIVE AREA = .95 SQ MI post.out

HYDROGRAPH AT STATION BP2
PLAN 1, RATIO = 1.00

DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	*	DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
1	0000	1	.00	.00	.00	0.	0.	*	1	0131	92	.00	.00	.00	184.	
1	0001	2	.00	.00	.00	0.	0.	*	1	0132	93	.00	.00	.00	179.	
1	0002	3	.00	.00	.00	0.	0.	*	1	0133	94	.00	.00	.00	175.	
1	0003	4	.00	.00	.00	0.	0.	*	1	0134	95	.00	.00	.00	170.	
1	0004	5	.00	.00	.00	0.	0.	*	1	0135	96	.00	.00	.00	166.	
1	0005	6	.00	.00	.00	0.	0.	*	1	0136	97	.00	.00	.00	161.	
1	0006	7	.00	.00	.00	0.	0.	*	1	0137	98	.00	.00	.00	156.	
1	0007	8	.00	.00	.00	0.	0.	*	1	0138	99	.00	.00	.00	152.	
1	0008	9	.00	.00	.00	0.	0.	*	1	0139	100	.00	.00	.00	147.	
1	0009	10	.00	.00	.00	0.	0.	*	1	0140	101	.00	.00	.00	143.	
1	0010	11	.00	.00	.00	0.	0.	*	1	0141	102	.00	.00	.00	138.	
1	0011	12	.00	.00	.00	0.	0.	*	1	0142	103	.00	.00	.00	134.	
1	0012	13	.00	.00	.00	0.	0.	*	1	0143	104	.00	.00	.00	129.	
1	0013	14	.00	.00	.00	0.	0.	*	1	0144	105	.00	.00	.00	125.	
1	0014	15	.00	.00	.00	0.	0.	*	1	0145	106	.00	.00	.00	120.	
1	0015	16	.00	.00	.00	0.	0.	*	1	0146	107	.00	.00	.00	115.	
1	0016	17	.00	.00	.00	0.	0.	*	1	0147	108	.00	.00	.00	111.	
1	0017	18	.00	.00	.00	0.	0.	*	1	0148	109	.00	.00	.00	106.	
1	0018	19	.00	.00	.00	0.	0.	*	1	0149	110	.00	.00	.00	102.	
1	0019	20	.00	.00	.00	0.	0.	*	1	0150	111	.00	.00	.00	98.	
1	0020	21	.00	.00	.00	0.	0.	*	1	0151	112	.00	.00	.00	94.	
1	0021	22	.00	.00	.00	0.	0.	*	1	0152	113	.00	.00	.00	89.	
1	0022	23	.00	.00	.00	0.	0.	*	1	0153	114	.00	.00	.00	86.	
1	0023	24	.00	.00	.00	0.	0.	*	1	0154	115	.00	.00	.00	82.	
1	0024	25	.00	.00	.00	0.	0.	*	1	0155	116	.00	.00	.00	78.	
1	0025	26	.00	.00	.00	0.	0.	*	1	0156	117	.00	.00	.00	74.	
1	0026	27	.00	.00	.00	0.	0.	*	1	0157	118	.00	.00	.00	71.	
1	0027	28	.00	.00	.00	0.	0.	*	1	0158	119	.00	.00	.00	68.	
1	0028	29	.00	.00	.00	0.	0.	*	1	0159	120	.00	.00	.00	65.	
1	0029	30	.00	.00	.00	0.	0.	*	1	0200	121	.00	.00	.00	62.	
1	0030	31	.00	.00	.00	0.	0.	*	1	0201	122	.00	.00	.00	59.	
1	0031	32	.11	.11	.00	0.	0.	*	1	0202	123	.00	.00	.00	57.	
1	0032	33	.11	.11	.00	0.	0.	*	1	0203	124	.00	.00	.00	54.	
1	0033	34	.11	.11	.00	0.	0.	*	1	0204	125	.00	.00	.00	52.	
1	0034	35	.11	.11	.00	0.	0.	*	1	0205	126	.00	.00	.00	50.	
1	0035	36	.11	.11	.00	0.	0.	*	1	0206	127	.00	.00	.00	48.	
1	0036	37	.09	.09	.00	0.	0.	*	1	0207	128	.00	.00	.00	46.	
1	0037	38	.09	.09	.00	0.	0.	*	1	0208	129	.00	.00	.00	45.	
1	0038	39	.09	.08	.00	0.	0.	*	1	0209	130	.00	.00	.00	43.	
1	0039	40	.09	.08	.01	0.	0.	*	1	0210	131	.00	.00	.00	42.	
1	0040	41	.09	.08	.01	1.	0.	*	1	0211	132	.00	.00	.00	41.	
1	0041	42	.06	.05	.01	1.	0.	*	1	0212	133	.00	.00	.00	40.	
1	0042	43	.06	.05	.01	3.	0.	*	1	0213	134	.00	.00	.00	38.	
1	0043	44	.06	.05	.01	4.	0.	*	1	0214	135	.00	.00	.00	37.	
1	0044	45	.06	.05	.01	7.	0.	*	1	0215	136	.00	.00	.00	36.	
1	0045	46	.06	.05	.02	10.	0.	*	1	0216	137	.00	.00	.00	36.	
1	0046	47	.04	.03	.01	13.	0.	*	1	0217	138	.00	.00	.00	35.	
1	0047	48	.04	.03	.01	18.	0.	*	1	0218	139	.00	.00	.00	34.	
1	0048	49	.04	.03	.01	23.	0.	*	1	0219	140	.00	.00	.00	33.	
1	0049	50	.04	.03	.01	30.	0.	*	1	0220	141	.00	.00	.00	33.	
1	0050	51	.04	.03	.01	38.	0.	*	1	0221	142	.00	.00	.00	32.	
1	0051	52	.02	.02	.01	47.	0.	*	1	0222	143	.00	.00	.00	31.	
1	0052	53	.02	.02	.01	57.	0.	*	1	0223	144	.00	.00	.00	31.	
1	0053	54	.02	.02	.01	67.	0.	*	1	0224	145	.00	.00	.00	30.	
1	0054	55	.02	.02	.01	79.	0.	*	1	0225	146	.00	.00	.00	30.	
1	0055	56	.02	.02	.01	92.	0.	*	1	0226	147	.00	.00	.00	29.	
1	0056	57	.02	.01	.01	104.	0.	*	1	0227	148	.00	.00	.00	29.	
1	0057	58	.02	.01	.01	118.	0.	*	1	0228	149	.00	.00	.00	29.	
1	0058	59	.02	.01	.01	131.	0.	*	1	0229	150	.00	.00	.00	28.	
1	0059	60	.02	.01	.01	144.	0.	*	1	0230	151	.00	.00	.00	28.	
1	0100	61	.02	.01	.01	157.	0.	*	1	0231	152	.00	.00	.00	28.	
1	0101	62	.01	.01	.01	169.	0.	*	1	0232	153	.00	.00	.00	27.	
1	0102	63	.01	.01	.01	181.	0.	*	1	0233	154	.00	.00	.00	27.	
1	0103	64	.01	.01	.01	192.	0.	*	1	0234	155	.00	.00	.00	27.	
1	0104	65	.01	.01	.01	202.	0.	*	1	0235	156	.00	.00	.00	26.	
1	0105	66	.01	.01	.01	211.	0.	*	1	0236	157	.00	.00	.00	26.	
1	0106	67	.01	.01	.00	219.	0.	*	1	0237	158	.00	.00	.00	26.	
1	0107	68	.01	.01	.00	227.	0.	*	1	0238	159	.00	.00	.00	26.	
1	0108	69	.01	.01	.00	233.	0.	*	1	0239	160	.00	.00	.00	26.	
1	0109	70	.01	.01	.00	238.	0.	*	1	0240	161	.00	.00	.00	25.	
1	0110	71	.01	.01	.00	243.	0.	*	1	0241	162	.00	.00	.00	25.	
1	0111	72	.01	.00	.00	246.	0.	*	1	0242	163	.00	.00	.00	25.	
1	0112	73	.01	.00	.00	248.	0.	*	1	0243	164	.00	.00	.00	25.	
1	0113	74	.01	.00	.00	250.	0.	*	1	0244	165	.00	.00	.00	25.	
1	0114	75	.01	.00	.00	250.	0.	*	1	0245	166	.00	.00	.00	25.	
1	0115	76	.01	.00	.00	249.	0.	*	1	0246	167	.00	.00	.00	25.	
1	0116	77	.01	.00	.00	248.	0.	*	1	0247	168	.00	.00	.00	25.	
1	0117	78	.01	.00	.00	245.	0.	*	1	0248	169	.00	.00	.00	25.	

													post.out	
1	0118	79	.01	.00	.00	243.	*	1	0249	170	.00	.00	.00	25.
1	0119	80	.01	.00	.00	239.	*	1	0250	171	.00	.00	.00	24.
1	0120	81	.01	.00	.00	235.	*	1	0251	172	.00	.00	.00	24.
1	0121	82	.01	.00	.00	231.	*	1	0252	173	.00	.00	.00	24.
1	0122	83	.01	.00	.00	227.	*	1	0253	174	.00	.00	.00	24.
1	0123	84	.01	.00	.00	222.	*	1	0254	175	.00	.00	.00	24.
1	0124	85	.01	.00	.00	218.	*	1	0255	176	.00	.00	.00	24.
1	0125	86	.01	.00	.00	213.	*	1	0256	177	.00	.00	.00	24.
1	0126	87	.01	.00	.00	208.	*	1	0257	178	.00	.00	.00	24.
1	0127	88	.01	.00	.00	203.	*	1	0258	179	.00	.00	.00	24.
1	0128	89	.01	.00	.00	198.	*	1	0259	180	.00	.00	.00	24.
1	0129	90	.01	.00	.00	194.	*	1	0300	181	.00	.00	.00	24.
1	0130	91	.01	.00	.00	189.	*							

TOTAL RAINFALL = 2.13, TOTAL LOSS = 1.75, TOTAL EXCESS = .38

PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
(CFS)	(HR)	(CFS)	6-HR	24-HR	72-HR	3.00-HR
+	250.	1.23	74.	74.	74.	74.
		(INCHES)	.361	.361	.361	.361
		(AC-FT)	18.	18.	18.	18.

CUMULATIVE AREA = .95 SQ MI

HYDROGRAPH AT STATION BP2
PLAN 1, RATIO = .61

DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	*	DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
1	0000	1	.00	.00	.00	0.	*	1	0131	92	.00	.00	.00	.00	39.	
1	0001	2	.00	.00	.00	0.	*	1	0132	93	.00	.00	.00	.00	38.	
1	0002	3	.00	.00	.00	0.	*	1	0133	94	.00	.00	.00	.00	38.	
1	0003	4	.00	.00	.00	0.	*	1	0134	95	.00	.00	.00	.00	37.	
1	0004	5	.00	.00	.00	0.	*	1	0135	96	.00	.00	.00	.00	37.	
1	0005	6	.00	.00	.00	0.	*	1	0136	97	.00	.00	.00	.00	36.	
1	0006	7	.00	.00	.00	0.	*	1	0137	98	.00	.00	.00	.00	35.	
1	0007	8	.00	.00	.00	0.	*	1	0138	99	.00	.00	.00	.00	35.	
1	0008	9	.00	.00	.00	0.	*	1	0139	100	.00	.00	.00	.00	34.	
1	0009	10	.00	.00	.00	0.	*	1	0140	101	.00	.00	.00	.00	33.	
1	0010	11	.00	.00	.00	0.	*	1	0141	102	.00	.00	.00	.00	33.	
1	0011	12	.00	.00	.00	0.	*	1	0142	103	.00	.00	.00	.00	32.	
1	0012	13	.00	.00	.00	0.	*	1	0143	104	.00	.00	.00	.00	31.	
1	0013	14	.00	.00	.00	0.	*	1	0144	105	.00	.00	.00	.00	30.	
1	0014	15	.00	.00	.00	0.	*	1	0145	106	.00	.00	.00	.00	29.	
1	0015	16	.00	.00	.00	0.	*	1	0146	107	.00	.00	.00	.00	28.	
1	0016	17	.00	.00	.00	0.	*	1	0147	108	.00	.00	.00	.00	27.	
1	0017	18	.00	.00	.00	0.	*	1	0148	109	.00	.00	.00	.00	26.	
1	0018	19	.00	.00	.00	0.	*	1	0149	110	.00	.00	.00	.00	25.	
1	0019	20	.00	.00	.00	0.	*	1	0150	111	.00	.00	.00	.00	24.	
1	0020	21	.00	.00	.00	0.	*	1	0151	112	.00	.00	.00	.00	23.	
1	0021	22	.00	.00	.00	0.	*	1	0152	113	.00	.00	.00	.00	23.	
1	0022	23	.00	.00	.00	0.	*	1	0153	114	.00	.00	.00	.00	22.	
1	0023	24	.00	.00	.00	0.	*	1	0154	115	.00	.00	.00	.00	21.	
1	0024	25	.00	.00	.00	0.	*	1	0155	116	.00	.00	.00	.00	20.	
1	0025	26	.00	.00	.00	0.	*	1	0156	117	.00	.00	.00	.00	19.	
1	0026	27	.00	.00	.00	0.	*	1	0157	118	.00	.00	.00	.00	18.	
1	0027	28	.00	.00	.00	0.	*	1	0158	119	.00	.00	.00	.00	18.	
1	0028	29	.00	.00	.00	0.	*	1	0159	120	.00	.00	.00	.00	17.	
1	0029	30	.00	.00	.00	0.	*	1	0200	121	.00	.00	.00	.00	16.	
1	0030	31	.00	.00	.00	0.	*	1	0201	122	.00	.00	.00	.00	15.	
1	0031	32	.07	.07	.00	0.	*	1	0202	123	.00	.00	.00	.00	15.	
1	0032	33	.07	.07	.00	0.	*	1	0203	124	.00	.00	.00	.00	14.	
1	0033	34	.07	.07	.00	0.	*	1	0204	125	.00	.00	.00	.00	14.	
1	0034	35	.07	.07	.00	0.	*	1	0205	126	.00	.00	.00	.00	13.	
1	0035	36	.07	.07	.00	0.	*	1	0206	127	.00	.00	.00	.00	13.	
1	0036	37	.05	.05	.00	0.	*	1	0207	128	.00	.00	.00	.00	12.	
1	0037	38	.05	.05	.00	0.	*	1	0208	129	.00	.00	.00	.00	12.	
1	0038	39	.05	.05	.00	0.	*	1	0209	130	.00	.00	.00	.00	12.	
1	0039	40	.05	.05	.00	0.	*	1	0210	131	.00	.00	.00	.00	11.	
1	0040	41	.05	.05	.00	0.	*	1	0211	132	.00	.00	.00	.00	11.	
1	0041	42	.04	.04	.00	0.	*	1	0212	133	.00	.00	.00	.00	11.	
1	0042	43	.04	.04	.00	0.	*	1	0213	134	.00	.00	.00	.00	11.	
1	0043	44	.04	.04	.00	0.	*	1	0214	135	.00	.00	.00	.00	10.	
1	0044	45	.04	.04	.00	0.	*	1	0215	136	.00	.00	.00	.00	10.	
1	0045	46	.04	.04	.00	0.	*	1	0216	137	.00	.00	.00	.00	10.	
1	0046	47	.02	.02	.00	0.	*	1	0217	138	.00	.00	.00	.00	10.	
1	0047	48	.02	.02	.00	0.	*	1	0218	139	.00	.00	.00	.00	9.	
1	0048	49	.02	.02	.00	0.	*	1	0219	140	.00	.00	.00	.00	9.	
1	0049	50	.02	.02	.00	1.	*	1	0220	141	.00	.00	.00	.00	9.	
1	0050	51	.02	.02	.00	1.	*	1	0221	142	.00	.00	.00	.00	9.	
1	0051	52	.01	.01	.00	1.	*	1	0222	143	.00	.00	.00	.00	9.	

post.out														
1	0052	53	.01	.01	.00	2.	*	1	0223	144	.00	.00	.00	9.
1	0053	54	.01	.01	.00	2.	*	1	0224	145	.00	.00	.00	9.
1	0054	55	.01	.01	.00	3.	*	1	0225	146	.00	.00	.00	9.
1	0055	56	.01	.01	.00	4.	*	1	0226	147	.00	.00	.00	8.
1	0056	57	.01	.01	.00	5.	*	1	0227	148	.00	.00	.00	8.
1	0057	58	.01	.01	.00	6.	*	1	0228	149	.00	.00	.00	8.
1	0058	59	.01	.01	.00	8.	*	1	0229	150	.00	.00	.00	8.
1	0059	60	.01	.01	.00	9.	*	1	0230	151	.00	.00	.00	8.
1	0100	61	.01	.01	.00	11.	*	1	0231	152	.00	.00	.00	8.
1	0101	62	.01	.01	.00	13.	*	1	0232	153	.00	.00	.00	8.
1	0102	63	.01	.01	.00	14.	*	1	0233	154	.00	.00	.00	8.
1	0103	64	.01	.01	.00	16.	*	1	0234	155	.00	.00	.00	8.
1	0104	65	.01	.01	.00	18.	*	1	0235	156	.00	.00	.00	8.
1	0105	66	.01	.01	.00	20.	*	1	0236	157	.00	.00	.00	8.
1	0106	67	.01	.01	.00	22.	*	1	0237	158	.00	.00	.00	8.
1	0107	68	.01	.01	.00	24.	*	1	0238	159	.00	.00	.00	8.
1	0108	69	.01	.01	.00	26.	*	1	0239	160	.00	.00	.00	8.
1	0109	70	.01	.01	.00	28.	*	1	0240	161	.00	.00	.00	8.
1	0110	71	.01	.01	.00	30.	*	1	0241	162	.00	.00	.00	8.
1	0111	72	.00	.00	.00	31.	*	1	0242	163	.00	.00	.00	8.
1	0112	73	.00	.00	.00	33.	*	1	0243	164	.00	.00	.00	8.
1	0113	74	.00	.00	.00	34.	*	1	0244	165	.00	.00	.00	7.
1	0114	75	.00	.00	.00	35.	*	1	0245	166	.00	.00	.00	7.
1	0115	76	.00	.00	.00	37.	*	1	0246	167	.00	.00	.00	7.
1	0116	77	.00	.00	.00	38.	*	1	0247	168	.00	.00	.00	7.
1	0117	78	.00	.00	.00	38.	*	1	0248	169	.00	.00	.00	7.
1	0118	79	.00	.00	.00	39.	*	1	0249	170	.00	.00	.00	7.
1	0119	80	.00	.00	.00	40.	*	1	0250	171	.00	.00	.00	7.
1	0120	81	.00	.00	.00	40.	*	1	0251	172	.00	.00	.00	7.
1	0121	82	.00	.00	.00	41.	*	1	0252	173	.00	.00	.00	7.
1	0122	83	.00	.00	.00	41.	*	1	0253	174	.00	.00	.00	7.
1	0123	84	.00	.00	.00	41.	*	1	0254	175	.00	.00	.00	7.
1	0124	85	.00	.00	.00	41.	*	1	0255	176	.00	.00	.00	7.
1	0125	86	.00	.00	.00	41.	*	1	0256	177	.00	.00	.00	7.
1	0126	87	.00	.00	.00	40.	*	1	0257	178	.00	.00	.00	7.
1	0127	88	.00	.00	.00	40.	*	1	0258	179	.00	.00	.00	7.
1	0128	89	.00	.00	.00	40.	*	1	0259	180	.00	.00	.00	7.
1	0129	90	.00	.00	.00	40.	*	1	0300	181	.00	.00	.00	7.
1	0130	91	.00	.00	.00	39.	*							

TOTAL RAINFALL = 1.29, TOTAL LOSS = 1.22, TOTAL EXCESS = .07

PEAK FLOW	TIME	MAXIMUM AVERAGE FLOW			
(CFS)	(HR)	6-HR	24-HR	72-HR	3.00-HR
+	41.	13.	13.	13.	13.
		(INCHES)	.066	.066	.066
		(AC-FT)	3.	3.	3.

CUMULATIVE AREA = .95 SQ MI

*** ** ** ** **

 * *
 38 KK * RP2 *
 * *

Route BP2 in channel to Culvert BP15

HYDROGRAPH ROUTING DATA

40 RD MUSKINGUM-CUNGE CHANNEL ROUTING
 L 2925. CHANNEL LENGTH
 S .0080 SLOPE
 N .040 CHANNEL ROUGHNESS COEFFICIENT
 CA .00 CONTRIBUTING AREA
 SHAPE TRAP CHANNEL SHAPE
 WD .00 BOTTOM WIDTH OR DIAMETER
 Z 7.00 SIDE SLOPE

COMPUTED MUSKINGUM-CUNGE PARAMETERS								
ELEMENT	ALPHA	COMPUTATION TIME STEP			PEAK	TIME TO PEAK	VOLUME	MAXIMUM CELERITY
		M	DT	DX				
MAIN	1.09	1.33	1.00	195.00	248.13	83.00	.35	4.76

INTERPOLATED TO SPECIFIED COMPUTATION INTERVAL

post.out

MAIN 1.09 1.33 1.00 248.13 83.00 .35

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1833E+02 EXCESS= .0000E+00 OUTFLOW= .1771E+02 BASIN STORAGE= .6916E+00 PERCENT ERROR= -.4

HYDROGRAPH AT STATION RP2
PLAN 1, RATIO = 1.00

DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	
1	0000	1	0.	*	1	0046	47	0.	*	1	0132	93	221.	*	1	0218	139	50.						
1	0001	2	0.	*	1	0047	48	0.	*	1	0133	94	217.	*	1	0219	140	48.						
1	0002	3	0.	*	1	0048	49	0.	*	1	0134	95	213.	*	1	0220	141	47.						
1	0003	4	0.	*	1	0049	50	0.	*	1	0135	96	208.	*	1	0221	142	45.						
1	0004	5	0.	*	1	0050	51	0.	*	1	0136	97	203.	*	1	0222	143	44.						
1	0005	6	0.	*	1	0051	52	0.	*	1	0137	98	199.	*	1	0223	144	43.						
1	0006	7	0.	*	1	0052	53	0.	*	1	0138	99	194.	*	1	0224	145	42.						
1	0007	8	0.	*	1	0053	54	0.	*	1	0139	100	190.	*	1	0225	146	40.						
1	0008	9	0.	*	1	0054	55	0.	*	1	0140	101	185.	*	1	0226	147	39.						
1	0009	10	0.	*	1	0055	56	0.	*	1	0141	102	181.	*	1	0227	148	38.						
1	0010	11	0.	*	1	0056	57	0.	*	1	0142	103	177.	*	1	0228	149	37.						
1	0011	12	0.	*	1	0057	58	0.	*	1	0143	104	172.	*	1	0229	150	37.						
1	0012	13	0.	*	1	0058	59	0.	*	1	0144	105	168.	*	1	0230	151	36.						
1	0013	14	0.	*	1	0059	60	1.	*	1	0145	106	164.	*	1	0231	152	35.						
1	0014	15	0.	*	1	0100	61	2.	*	1	0146	107	159.	*	1	0232	153	34.						
1	0015	16	0.	*	1	0101	62	3.	*	1	0147	108	155.	*	1	0233	154	34.						
1	0016	17	0.	*	1	0102	63	6.	*	1	0148	109	151.	*	1	0234	155	33.						
1	0017	18	0.	*	1	0103	64	20.	*	1	0149	110	147.	*	1	0235	156	32.						
1	0018	19	0.	*	1	0104	65	44.	*	1	0150	111	142.	*	1	0236	157	32.						
1	0019	20	0.	*	1	0105	66	67.	*	1	0151	112	138.	*	1	0237	158	31.						
1	0020	21	0.	*	1	0106	67	88.	*	1	0152	113	134.	*	1	0238	159	31.						
1	0021	22	0.	*	1	0107	68	108.	*	1	0153	114	130.	*	1	0239	160	30.						
1	0022	23	0.	*	1	0108	69	126.	*	1	0154	115	126.	*	1	0240	161	30.						
1	0023	24	0.	*	1	0109	70	144.	*	1	0155	116	121.	*	1	0241	162	29.						
1	0024	25	0.	*	1	0110	71	159.	*	1	0156	117	117.	*	1	0242	163	29.						
1	0025	26	0.	*	1	0111	72	174.	*	1	0157	118	113.	*	1	0243	164	29.						
1	0026	27	0.	*	1	0112	73	187.	*	1	0158	119	109.	*	1	0244	165	28.						
1	0027	28	0.	*	1	0113	74	199.	*	1	0159	120	105.	*	1	0245	166	28.						
1	0028	29	0.	*	1	0114	75	209.	*	1	0200	121	101.	*	1	0246	167	28.						
1	0029	30	0.	*	1	0115	76	218.	*	1	0201	122	97.	*	1	0247	168	27.						
1	0030	31	0.	*	1	0116	77	226.	*	1	0202	123	94.	*	1	0248	169	27.						
1	0031	32	0.	*	1	0117	78	232.	*	1	0203	124	90.	*	1	0249	170	27.						
1	0032	33	0.	*	1	0118	79	238.	*	1	0204	125	87.	*	1	0250	171	26.						
1	0033	34	0.	*	1	0119	80	242.	*	1	0205	126	83.	*	1	0251	172	26.						
1	0034	35	0.	*	1	0120	81	245.	*	1	0206	127	80.	*	1	0252	173	26.						
1	0035	36	0.	*	1	0121	82	247.	*	1	0207	128	77.	*	1	0253	174	26.						
1	0036	37	0.	*	1	0122	83	248.	*	1	0208	129	74.	*	1	0254	175	26.						
1	0037	38	0.	*	1	0123	84	248.	*	1	0209	130	71.	*	1	0255	176	26.						
1	0038	39	0.	*	1	0124	85	247.	*	1	0210	131	68.	*	1	0256	177	25.						
1	0039	40	0.	*	1	0125	86	246.	*	1	0211	132	65.	*	1	0257	178	25.						
1	0040	41	0.	*	1	0126	87	243.	*	1	0212	133	63.	*	1	0258	179	25.						
1	0041	42	0.	*	1	0127	88	241.	*	1	0213	134	60.	*	1	0259	180	25.						
1	0042	43	0.	*	1	0128	89	237.	*	1	0214	135	58.	*	1	0300	181	25.						
1	0043	44	0.	*	1	0129	90	234.	*	1	0215	136	56.	*										
1	0044	45	0.	*	1	0130	91	230.	*	1	0216	137	54.	*										
1	0045	46	0.	*	1	0131	92	226.	*	1	0217	138	52.	*										

PEAK FLOW	TIME	MAXIMUM AVERAGE FLOW			
(CFS)	(HR)	6-HR	24-HR	72-HR	3.00-HR
+	248.	71.	71.	71.	71.
		(INCHES)	.349	.349	.349
		(AC-FT)	18.	18.	18.

CUMULATIVE AREA = .95 SQ MI

COMPUTED MUSKINGUM-CUNGE PARAMETERS

ELEMENT	ALPHA	COMPUTATION TIME STEP			PEAK (CFS)	TIME TO PEAK (MIN)	VOLUME (IN)	MAXIMUM CELERITY (FPS)
		M	DT (MIN)	DX (FT)				
MAIN	1.09	1.33	1.00	117.00	40.63	97.00	.06	3.03

INTERPOLATED TO SPECIFIED COMPUTATION INTERVAL

MAIN 1.09 1.33 1.00 40.63 97.00 .06

post.out

CONTINUITY SUMMARY (AC-FT) - INFLOW= .3336E+01 EXCESS= .0000E+00 OUTFLOW= .3070E+01 BASIN STORAGE= .2837E+00 PERCENT ERROR= -.5

HYDROGRAPH AT STATION RP2
PLAN 1, RATIO = .61

DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	
1		0000	1	0.	*	1		0046	47	0.	*	1		0132	93	39.	*	1		0218	139	16.	*	
1		0001	2	0.	*	1		0047	48	0.	*	1		0133	94	40.	*	1		0219	140	15.	*	
1		0002	3	0.	*	1		0048	49	0.	*	1		0134	95	40.	*	1		0220	141	15.	*	
1		0003	4	0.	*	1		0049	50	0.	*	1		0135	96	40.	*	1		0221	142	14.	*	
1		0004	5	0.	*	1		0050	51	0.	*	1		0136	97	41.	*	1		0222	143	14.	*	
1		0005	6	0.	*	1		0051	52	0.	*	1		0137	98	41.	*	1		0223	144	13.	*	
1		0006	7	0.	*	1		0052	53	0.	*	1		0138	99	41.	*	1		0224	145	13.	*	
1		0007	8	0.	*	1		0053	54	0.	*	1		0139	100	40.	*	1		0225	146	13.	*	
1		0008	9	0.	*	1		0054	55	0.	*	1		0140	101	40.	*	1		0226	147	12.	*	
1		0009	10	0.	*	1		0055	56	0.	*	1		0141	102	40.	*	1		0227	148	12.	*	
1		0010	11	0.	*	1		0056	57	0.	*	1		0142	103	40.	*	1		0228	149	12.	*	
1		0011	12	0.	*	1		0057	58	0.	*	1		0143	104	39.	*	1		0229	150	11.	*	
1		0012	13	0.	*	1		0058	59	0.	*	1		0144	105	39.	*	1		0230	151	11.	*	
1		0013	14	0.	*	1		0059	60	0.	*	1		0145	106	39.	*	1		0231	152	11.	*	
1		0014	15	0.	*	1		0100	61	0.	*	1		0146	107	38.	*	1		0232	153	11.	*	
1		0015	16	0.	*	1		0101	62	0.	*	1		0147	108	38.	*	1		0233	154	10.	*	
1		0016	17	0.	*	1		0102	63	0.	*	1		0148	109	37.	*	1		0234	155	10.	*	
1		0017	18	0.	*	1		0103	64	0.	*	1		0149	110	37.	*	1		0235	156	10.	*	
1		0018	19	0.	*	1		0104	65	0.	*	1		0150	111	36.	*	1		0236	157	10.	*	
1		0019	20	0.	*	1		0105	66	0.	*	1		0151	112	35.	*	1		0237	158	10.	*	
1		0020	21	0.	*	1		0106	67	0.	*	1		0152	113	35.	*	1		0238	159	9.	*	
1		0021	22	0.	*	1		0107	68	0.	*	1		0153	114	34.	*	1		0239	160	9.	*	
1		0022	23	0.	*	1		0108	69	0.	*	1		0154	115	33.	*	1		0240	161	9.	*	
1		0023	24	0.	*	1		0109	70	0.	*	1		0155	116	33.	*	1		0241	162	9.	*	
1		0024	25	0.	*	1		0110	71	0.	*	1		0156	117	32.	*	1		0242	163	9.	*	
1		0025	26	0.	*	1		0111	72	0.	*	1		0157	118	31.	*	1		0243	164	9.	*	
1		0026	27	0.	*	1		0112	73	0.	*	1		0158	119	30.	*	1		0244	165	9.	*	
1		0027	28	0.	*	1		0113	74	0.	*	1		0159	120	30.	*	1		0245	166	9.	*	
1		0028	29	0.	*	1		0114	75	0.	*	1		0200	121	29.	*	1		0246	167	8.	*	
1		0029	30	0.	*	1		0115	76	0.	*	1		0201	122	28.	*	1		0247	168	8.	*	
1		0030	31	0.	*	1		0116	77	0.	*	1		0202	123	27.	*	1		0248	169	8.	*	
1		0031	32	0.	*	1		0117	78	0.	*	1		0203	124	26.	*	1		0249	170	8.	*	
1		0032	33	0.	*	1		0118	79	1.	*	1		0204	125	26.	*	1		0250	171	8.	*	
1		0033	34	0.	*	1		0119	80	8.	*	1		0205	126	25.	*	1		0251	172	8.	*	
1		0034	35	0.	*	1		0120	81	15.	*	1		0206	127	24.	*	1		0252	173	8.	*	
1		0035	36	0.	*	1		0121	82	19.	*	1		0207	128	23.	*	1		0253	174	8.	*	
1		0036	37	0.	*	1		0122	83	22.	*	1		0208	129	22.	*	1		0254	175	8.	*	
1		0037	38	0.	*	1		0123	84	25.	*	1		0209	130	22.	*	1		0255	176	8.	*	
1		0038	39	0.	*	1		0124	85	28.	*	1		0210	131	21.	*	1		0256	177	8.	*	
1		0039	40	0.	*	1		0125	86	30.	*	1		0211	132	20.	*	1		0257	178	8.	*	
1		0040	41	0.	*	1		0126	87	32.	*	1		0212	133	19.	*	1		0258	179	8.	*	
1		0041	42	0.	*	1		0127	88	33.	*	1		0213	134	19.	*	1		0259	180	8.	*	
1		0042	43	0.	*	1		0128	89	35.	*	1		0214	135	18.	*	1		0300	181	8.	*	
1		0043	44	0.	*	1		0129	90	36.	*	1		0215	136	17.	*							*
1		0044	45	0.	*	1		0130	91	37.	*	1		0216	137	17.	*							*
1		0045	46	0.	*	1		0131	92	38.	*	1		0217	138	16.	*							*

PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
(CFS)	(HR)	(CFS)	6-HR	24-HR	72-HR	3.00-HR
41.	1.62	(INCHES)	12.	12.	12.	12.
		(AC-FT)	.060	.060	.060	.060
			3.	3.	3.	3.

CUMULATIVE AREA = .95 SQ MI

*** **

```

*****
*
41 KK * BP3 *
*
*****

```

BP3

SUBBASIN RUNOFF DATA

```

43 BA SUBBASIN CHARACTERISTICS
TAREA 4.08 SUBBASIN AREA

```


										post.out				
1	0010	11	.00	.00	.00	0.	*	1	0141	102	.00	.00	.00	526.
1	0011	12	.00	.00	.00	0.	*	1	0142	103	.00	.00	.00	536.
1	0012	13	.00	.00	.00	0.	*	1	0143	104	.00	.00	.00	545.
1	0013	14	.00	.00	.00	0.	*	1	0144	105	.00	.00	.00	554.
1	0014	15	.00	.00	.00	0.	*	1	0145	106	.00	.00	.00	563.
1	0015	16	.00	.00	.00	0.	*	1	0146	107	.00	.00	.00	571.
1	0016	17	.00	.00	.00	0.	*	1	0147	108	.00	.00	.00	578.
1	0017	18	.00	.00	.00	0.	*	1	0148	109	.00	.00	.00	586.
1	0018	19	.00	.00	.00	0.	*	1	0149	110	.00	.00	.00	593.
1	0019	20	.00	.00	.00	0.	*	1	0150	111	.00	.00	.00	599.
1	0020	21	.00	.00	.00	0.	*	1	0151	112	.00	.00	.00	605.
1	0021	22	.00	.00	.00	0.	*	1	0152	113	.00	.00	.00	610.
1	0022	23	.00	.00	.00	0.	*	1	0153	114	.00	.00	.00	615.
1	0023	24	.00	.00	.00	0.	*	1	0154	115	.00	.00	.00	620.
1	0024	25	.00	.00	.00	0.	*	1	0155	116	.00	.00	.00	624.
1	0025	26	.00	.00	.00	0.	*	1	0156	117	.00	.00	.00	627.
1	0026	27	.00	.00	.00	0.	*	1	0157	118	.00	.00	.00	630.
1	0027	28	.00	.00	.00	0.	*	1	0158	119	.00	.00	.00	632.
1	0028	29	.00	.00	.00	0.	*	1	0159	120	.00	.00	.00	634.
1	0029	30	.00	.00	.00	0.	*	1	0200	121	.00	.00	.00	636.
1	0030	31	.00	.00	.00	0.	*	1	0201	122	.00	.00	.00	637.
1	0031	32	.11	.11	.00	0.	*	1	0202	123	.00	.00	.00	638.
1	0032	33	.11	.11	.00	0.	*	1	0203	124	.00	.00	.00	638.
1	0033	34	.11	.11	.00	0.	*	1	0204	125	.00	.00	.00	638.
1	0034	35	.11	.11	.00	0.	*	1	0205	126	.00	.00	.00	637.
1	0035	36	.11	.11	.00	0.	*	1	0206	127	.00	.00	.00	636.
1	0036	37	.09	.09	.00	0.	*	1	0207	128	.00	.00	.00	635.
1	0037	38	.09	.08	.00	0.	*	1	0208	129	.00	.00	.00	633.
1	0038	39	.09	.08	.01	0.	*	1	0209	130	.00	.00	.00	631.
1	0039	40	.09	.08	.01	0.	*	1	0210	131	.00	.00	.00	629.
1	0040	41	.09	.07	.02	1.	*	1	0211	132	.00	.00	.00	626.
1	0041	42	.06	.05	.01	1.	*	1	0212	133	.00	.00	.00	623.
1	0042	43	.06	.05	.01	2.	*	1	0213	134	.00	.00	.00	619.
1	0043	44	.06	.05	.02	2.	*	1	0214	135	.00	.00	.00	615.
1	0044	45	.06	.04	.02	3.	*	1	0215	136	.00	.00	.00	611.
1	0045	46	.06	.04	.02	4.	*	1	0216	137	.00	.00	.00	607.
1	0046	47	.04	.03	.01	6.	*	1	0217	138	.00	.00	.00	602.
1	0047	48	.04	.03	.01	7.	*	1	0218	139	.00	.00	.00	597.
1	0048	49	.04	.03	.01	9.	*	1	0219	140	.00	.00	.00	591.
1	0049	50	.04	.03	.01	11.	*	1	0220	141	.00	.00	.00	585.
1	0050	51	.04	.02	.01	14.	*	1	0221	142	.00	.00	.00	579.
1	0051	52	.02	.01	.01	17.	*	1	0222	143	.00	.00	.00	572.
1	0052	53	.02	.01	.01	20.	*	1	0223	144	.00	.00	.00	566.
1	0053	54	.02	.01	.01	23.	*	1	0224	145	.00	.00	.00	558.
1	0054	55	.02	.01	.01	27.	*	1	0225	146	.00	.00	.00	551.
1	0055	56	.02	.01	.01	31.	*	1	0226	147	.00	.00	.00	544.
1	0056	57	.02	.01	.01	35.	*	1	0227	148	.00	.00	.00	536.
1	0057	58	.02	.01	.01	39.	*	1	0228	149	.00	.00	.00	529.
1	0058	59	.02	.01	.01	44.	*	1	0229	150	.00	.00	.00	521.
1	0059	60	.02	.01	.01	50.	*	1	0230	151	.00	.00	.00	513.
1	0100	61	.02	.01	.01	55.	*	1	0231	152	.00	.00	.00	505.
1	0101	62	.01	.01	.01	61.	*	1	0232	153	.00	.00	.00	497.
1	0102	63	.01	.01	.01	68.	*	1	0233	154	.00	.00	.00	489.
1	0103	64	.01	.01	.01	74.	*	1	0234	155	.00	.00	.00	482.
1	0104	65	.01	.01	.01	81.	*	1	0235	156	.00	.00	.00	474.
1	0105	66	.01	.01	.01	89.	*	1	0236	157	.00	.00	.00	466.
1	0106	67	.01	.01	.00	97.	*	1	0237	158	.00	.00	.00	459.
1	0107	68	.01	.01	.00	105.	*	1	0238	159	.00	.00	.00	451.
1	0108	69	.01	.01	.00	114.	*	1	0239	160	.00	.00	.00	444.
1	0109	70	.01	.01	.00	123.	*	1	0240	161	.00	.00	.00	436.
1	0110	71	.01	.01	.00	132.	*	1	0241	162	.00	.00	.00	429.
1	0111	72	.01	.00	.00	142.	*	1	0242	163	.00	.00	.00	422.
1	0112	73	.01	.00	.00	153.	*	1	0243	164	.00	.00	.00	415.
1	0113	74	.01	.00	.00	164.	*	1	0244	165	.00	.00	.00	408.
1	0114	75	.01	.00	.00	175.	*	1	0245	166	.00	.00	.00	401.
1	0115	76	.01	.00	.00	187.	*	1	0246	167	.00	.00	.00	394.
1	0116	77	.01	.00	.00	200.	*	1	0247	168	.00	.00	.00	388.
1	0117	78	.01	.00	.00	212.	*	1	0248	169	.00	.00	.00	381.
1	0118	79	.01	.00	.00	226.	*	1	0249	170	.00	.00	.00	375.
1	0119	80	.01	.00	.00	239.	*	1	0250	171	.00	.00	.00	369.
1	0120	81	.01	.00	.00	252.	*	1	0251	172	.00	.00	.00	363.
1	0121	82	.01	.00	.00	266.	*	1	0252	173	.00	.00	.00	357.
1	0122	83	.01	.00	.00	280.	*	1	0253	174	.00	.00	.00	351.
1	0123	84	.01	.00	.00	294.	*	1	0254	175	.00	.00	.00	345.
1	0124	85	.01	.00	.00	309.	*	1	0255	176	.00	.00	.00	340.
1	0125	86	.01	.00	.00	323.	*	1	0256	177	.00	.00	.00	334.
1	0126	87	.01	.00	.00	337.	*	1	0257	178	.00	.00	.00	329.
1	0127	88	.01	.00	.00	351.	*	1	0258	179	.00	.00	.00	324.
1	0128	89	.01	.00	.00	365.	*	1	0259	180	.00	.00	.00	319.
1	0129	90	.01	.00	.00	379.	*	1	0300	181	.00	.00	.00	314.
1	0130	91	.01	.00	.00	393.	*							

TOTAL RAINFALL = 2.13, TOTAL LOSS = 1.68, TOTAL EXCESS = .45

PEAK FLOW	TIME	MAXIMUM AVERAGE FLOW		
+ (CFS)	(HR)	6-HR	24-HR	72-HR
				3.00-HR
		(CFS)		

+ 638. 2.05 294. 294. 294. post.out
 (INCHES) .335 .335 .335 .335
 (AC-FT) 73. 73. 73. 73.
 CUMULATIVE AREA = 4.08 SQ MI

*** WARNING *** UNIT HYDROGRAPH TRUNCATED FROM 329 TO 300 INTERVALS

HYDROGRAPH AT STATION BP3
 PLAN 1, RATIO = 1.00

DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	*	DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
1	0000	1	.00	.00	.00	.00	0.	*	1	0131	92	.00	.00	.00	407.	
1	0001	2	.00	.00	.00	.00	0.	*	1	0132	93	.00	.00	.00	420.	
1	0002	3	.00	.00	.00	.00	0.	*	1	0133	94	.00	.00	.00	433.	
1	0003	4	.00	.00	.00	.00	0.	*	1	0134	95	.00	.00	.00	446.	
1	0004	5	.00	.00	.00	.00	0.	*	1	0135	96	.00	.00	.00	459.	
1	0005	6	.00	.00	.00	.00	0.	*	1	0136	97	.00	.00	.00	471.	
1	0006	7	.00	.00	.00	.00	0.	*	1	0137	98	.00	.00	.00	483.	
1	0007	8	.00	.00	.00	.00	0.	*	1	0138	99	.00	.00	.00	494.	
1	0008	9	.00	.00	.00	.00	0.	*	1	0139	100	.00	.00	.00	505.	
1	0009	10	.00	.00	.00	.00	0.	*	1	0140	101	.00	.00	.00	516.	
1	0010	11	.00	.00	.00	.00	0.	*	1	0141	102	.00	.00	.00	526.	
1	0011	12	.00	.00	.00	.00	0.	*	1	0142	103	.00	.00	.00	536.	
1	0012	13	.00	.00	.00	.00	0.	*	1	0143	104	.00	.00	.00	545.	
1	0013	14	.00	.00	.00	.00	0.	*	1	0144	105	.00	.00	.00	554.	
1	0014	15	.00	.00	.00	.00	0.	*	1	0145	106	.00	.00	.00	563.	
1	0015	16	.00	.00	.00	.00	0.	*	1	0146	107	.00	.00	.00	571.	
1	0016	17	.00	.00	.00	.00	0.	*	1	0147	108	.00	.00	.00	578.	
1	0017	18	.00	.00	.00	.00	0.	*	1	0148	109	.00	.00	.00	586.	
1	0018	19	.00	.00	.00	.00	0.	*	1	0149	110	.00	.00	.00	593.	
1	0019	20	.00	.00	.00	.00	0.	*	1	0150	111	.00	.00	.00	599.	
1	0020	21	.00	.00	.00	.00	0.	*	1	0151	112	.00	.00	.00	605.	
1	0021	22	.00	.00	.00	.00	0.	*	1	0152	113	.00	.00	.00	610.	
1	0022	23	.00	.00	.00	.00	0.	*	1	0153	114	.00	.00	.00	615.	
1	0023	24	.00	.00	.00	.00	0.	*	1	0154	115	.00	.00	.00	620.	
1	0024	25	.00	.00	.00	.00	0.	*	1	0155	116	.00	.00	.00	624.	
1	0025	26	.00	.00	.00	.00	0.	*	1	0156	117	.00	.00	.00	627.	
1	0026	27	.00	.00	.00	.00	0.	*	1	0157	118	.00	.00	.00	630.	
1	0027	28	.00	.00	.00	.00	0.	*	1	0158	119	.00	.00	.00	632.	
1	0028	29	.00	.00	.00	.00	0.	*	1	0159	120	.00	.00	.00	634.	
1	0029	30	.00	.00	.00	.00	0.	*	1	0200	121	.00	.00	.00	636.	
1	0030	31	.00	.00	.00	.00	0.	*	1	0201	122	.00	.00	.00	637.	
1	0031	32	.11	.11	.00	0.	0.	*	1	0202	123	.00	.00	.00	638.	
1	0032	33	.11	.11	.00	0.	0.	*	1	0203	124	.00	.00	.00	638.	
1	0033	34	.11	.11	.00	0.	0.	*	1	0204	125	.00	.00	.00	638.	
1	0034	35	.11	.11	.00	0.	0.	*	1	0205	126	.00	.00	.00	637.	
1	0035	36	.11	.11	.00	0.	0.	*	1	0206	127	.00	.00	.00	636.	
1	0036	37	.09	.09	.00	0.	0.	*	1	0207	128	.00	.00	.00	635.	
1	0037	38	.09	.08	.00	0.	0.	*	1	0208	129	.00	.00	.00	633.	
1	0038	39	.09	.08	.01	0.	0.	*	1	0209	130	.00	.00	.00	631.	
1	0039	40	.09	.08	.01	0.	0.	*	1	0210	131	.00	.00	.00	629.	
1	0040	41	.09	.07	.02	1.	0.	*	1	0211	132	.00	.00	.00	626.	
1	0041	42	.06	.05	.01	1.	0.	*	1	0212	133	.00	.00	.00	623.	
1	0042	43	.06	.05	.01	2.	0.	*	1	0213	134	.00	.00	.00	619.	
1	0043	44	.06	.05	.02	2.	0.	*	1	0214	135	.00	.00	.00	615.	
1	0044	45	.06	.04	.02	3.	0.	*	1	0215	136	.00	.00	.00	611.	
1	0045	46	.06	.04	.02	4.	0.	*	1	0216	137	.00	.00	.00	607.	
1	0046	47	.04	.03	.01	6.	0.	*	1	0217	138	.00	.00	.00	602.	
1	0047	48	.04	.03	.01	7.	0.	*	1	0218	139	.00	.00	.00	597.	
1	0048	49	.04	.03	.01	9.	0.	*	1	0219	140	.00	.00	.00	591.	
1	0049	50	.04	.03	.01	11.	0.	*	1	0220	141	.00	.00	.00	585.	
1	0050	51	.04	.02	.01	14.	0.	*	1	0221	142	.00	.00	.00	579.	
1	0051	52	.02	.01	.01	17.	0.	*	1	0222	143	.00	.00	.00	572.	
1	0052	53	.02	.01	.01	20.	0.	*	1	0223	144	.00	.00	.00	566.	
1	0053	54	.02	.01	.01	23.	0.	*	1	0224	145	.00	.00	.00	558.	
1	0054	55	.02	.01	.01	27.	0.	*	1	0225	146	.00	.00	.00	551.	
1	0055	56	.02	.01	.01	31.	0.	*	1	0226	147	.00	.00	.00	544.	
1	0056	57	.02	.01	.01	35.	0.	*	1	0227	148	.00	.00	.00	536.	
1	0057	58	.02	.01	.01	39.	0.	*	1	0228	149	.00	.00	.00	529.	
1	0058	59	.02	.01	.01	44.	0.	*	1	0229	150	.00	.00	.00	521.	
1	0059	60	.02	.01	.01	50.	0.	*	1	0230	151	.00	.00	.00	513.	
1	0100	61	.02	.01	.01	55.	0.	*	1	0231	152	.00	.00	.00	505.	
1	0101	62	.01	.01	.01	61.	0.	*	1	0232	153	.00	.00	.00	497.	
1	0102	63	.01	.01	.01	68.	0.	*	1	0233	154	.00	.00	.00	489.	
1	0103	64	.01	.01	.01	74.	0.	*	1	0234	155	.00	.00	.00	482.	
1	0104	65	.01	.01	.01	81.	0.	*	1	0235	156	.00	.00	.00	474.	
1	0105	66	.01	.01	.01	89.	0.	*	1	0236	157	.00	.00	.00	466.	
1	0106	67	.01	.01	.00	97.	0.	*	1	0237	158	.00	.00	.00	459.	
1	0107	68	.01	.01	.00	105.	0.	*	1	0238	159	.00	.00	.00	451.	
1	0108	69	.01	.01	.00	114.	0.	*	1	0239	160	.00	.00	.00	444.	
1	0109	70	.01	.01	.00	123.	0.	*	1	0240	161	.00	.00	.00	436.	
1	0110	71	.01	.01	.00	132.	0.	*	1	0241	162	.00	.00	.00	429.	

														post.out			
1	0111	72	.01	.00	.00	142.	*	1	0242	163	.00	.00	.00	422.			
1	0112	73	.01	.00	.00	153.	*	1	0243	164	.00	.00	.00	415.			
1	0113	74	.01	.00	.00	164.	*	1	0244	165	.00	.00	.00	408.			
1	0114	75	.01	.00	.00	175.	*	1	0245	166	.00	.00	.00	401.			
1	0115	76	.01	.00	.00	187.	*	1	0246	167	.00	.00	.00	394.			
1	0116	77	.01	.00	.00	200.	*	1	0247	168	.00	.00	.00	388.			
1	0117	78	.01	.00	.00	212.	*	1	0248	169	.00	.00	.00	381.			
1	0118	79	.01	.00	.00	226.	*	1	0249	170	.00	.00	.00	375.			
1	0119	80	.01	.00	.00	239.	*	1	0250	171	.00	.00	.00	369.			
1	0120	81	.01	.00	.00	252.	*	1	0251	172	.00	.00	.00	363.			
1	0121	82	.01	.00	.00	266.	*	1	0252	173	.00	.00	.00	357.			
1	0122	83	.01	.00	.00	280.	*	1	0253	174	.00	.00	.00	351.			
1	0123	84	.01	.00	.00	294.	*	1	0254	175	.00	.00	.00	345.			
1	0124	85	.01	.00	.00	309.	*	1	0255	176	.00	.00	.00	340.			
1	0125	86	.01	.00	.00	323.	*	1	0256	177	.00	.00	.00	334.			
1	0126	87	.01	.00	.00	337.	*	1	0257	178	.00	.00	.00	329.			
1	0127	88	.01	.00	.00	351.	*	1	0258	179	.00	.00	.00	324.			
1	0128	89	.01	.00	.00	365.	*	1	0259	180	.00	.00	.00	319.			
1	0129	90	.01	.00	.00	379.	*	1	0300	181	.00	.00	.00	314.			
1	0130	91	.01	.00	.00	393.	*										

TOTAL RAINFALL = 2.13, TOTAL LOSS = 1.68, TOTAL EXCESS = .45

PEAK FLOW	TIME	MAXIMUM AVERAGE FLOW			
(CFS)	(HR)	6-HR	24-HR	72-HR	3.00-HR
+ 638.	2.05	294.	294.	294.	294.
	(INCHES)	.335	.335	.335	.335
	(AC-FT)	73.	73.	73.	73.

CUMULATIVE AREA = 4.08 SQ MI

*** WARNING *** UNIT HYDROGRAPH TRUNCATED FROM 329 TO 300 INTERVALS

HYDROGRAPH AT STATION BP3
PLAN 1, RATIO = .61

DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	*	DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
1	0000	1	.00	.00	.00	0.	0.	*	1	0131	92	.00	.00	.00	64.	
1	0001	2	.00	.00	.00	0.	0.	*	1	0132	93	.00	.00	.00	67.	
1	0002	3	.00	.00	.00	0.	0.	*	1	0133	94	.00	.00	.00	70.	
1	0003	4	.00	.00	.00	0.	0.	*	1	0134	95	.00	.00	.00	72.	
1	0004	5	.00	.00	.00	0.	0.	*	1	0135	96	.00	.00	.00	75.	
1	0005	6	.00	.00	.00	0.	0.	*	1	0136	97	.00	.00	.00	78.	
1	0006	7	.00	.00	.00	0.	0.	*	1	0137	98	.00	.00	.00	81.	
1	0007	8	.00	.00	.00	0.	0.	*	1	0138	99	.00	.00	.00	84.	
1	0008	9	.00	.00	.00	0.	0.	*	1	0139	100	.00	.00	.00	86.	
1	0009	10	.00	.00	.00	0.	0.	*	1	0140	101	.00	.00	.00	89.	
1	0010	11	.00	.00	.00	0.	0.	*	1	0141	102	.00	.00	.00	92.	
1	0011	12	.00	.00	.00	0.	0.	*	1	0142	103	.00	.00	.00	94.	
1	0012	13	.00	.00	.00	0.	0.	*	1	0143	104	.00	.00	.00	97.	
1	0013	14	.00	.00	.00	0.	0.	*	1	0144	105	.00	.00	.00	99.	
1	0014	15	.00	.00	.00	0.	0.	*	1	0145	106	.00	.00	.00	101.	
1	0015	16	.00	.00	.00	0.	0.	*	1	0146	107	.00	.00	.00	104.	
1	0016	17	.00	.00	.00	0.	0.	*	1	0147	108	.00	.00	.00	106.	
1	0017	18	.00	.00	.00	0.	0.	*	1	0148	109	.00	.00	.00	108.	
1	0018	19	.00	.00	.00	0.	0.	*	1	0149	110	.00	.00	.00	110.	
1	0019	20	.00	.00	.00	0.	0.	*	1	0150	111	.00	.00	.00	112.	
1	0020	21	.00	.00	.00	0.	0.	*	1	0151	112	.00	.00	.00	114.	
1	0021	22	.00	.00	.00	0.	0.	*	1	0152	113	.00	.00	.00	116.	
1	0022	23	.00	.00	.00	0.	0.	*	1	0153	114	.00	.00	.00	117.	
1	0023	24	.00	.00	.00	0.	0.	*	1	0154	115	.00	.00	.00	119.	
1	0024	25	.00	.00	.00	0.	0.	*	1	0155	116	.00	.00	.00	121.	
1	0025	26	.00	.00	.00	0.	0.	*	1	0156	117	.00	.00	.00	122.	
1	0026	27	.00	.00	.00	0.	0.	*	1	0157	118	.00	.00	.00	124.	
1	0027	28	.00	.00	.00	0.	0.	*	1	0158	119	.00	.00	.00	125.	
1	0028	29	.00	.00	.00	0.	0.	*	1	0159	120	.00	.00	.00	126.	
1	0029	30	.00	.00	.00	0.	0.	*	1	0200	121	.00	.00	.00	127.	
1	0030	31	.00	.00	.00	0.	0.	*	1	0201	122	.00	.00	.00	128.	
1	0031	32	.07	.07	.00	0.	0.	*	1	0202	123	.00	.00	.00	129.	
1	0032	33	.07	.07	.00	0.	0.	*	1	0203	124	.00	.00	.00	130.	
1	0033	34	.07	.07	.00	0.	0.	*	1	0204	125	.00	.00	.00	130.	
1	0034	35	.07	.07	.00	0.	0.	*	1	0205	126	.00	.00	.00	131.	
1	0035	36	.07	.07	.00	0.	0.	*	1	0206	127	.00	.00	.00	131.	
1	0036	37	.05	.05	.00	0.	0.	*	1	0207	128	.00	.00	.00	132.	
1	0037	38	.05	.05	.00	0.	0.	*	1	0208	129	.00	.00	.00	132.	
1	0038	39	.05	.05	.00	0.	0.	*	1	0209	130	.00	.00	.00	132.	
1	0039	40	.05	.05	.00	0.	0.	*	1	0210	131	.00	.00	.00	133.	
1	0040	41	.05	.05	.00	0.	0.	*	1	0211	132	.00	.00	.00	133.	
1	0041	42	.04	.04	.00	0.	0.	*	1	0212	133	.00	.00	.00	133.	

													post.out	
1	0042	43	.04	.04	.00	0.	*	1	0213	134	.00	.00	.00	132.
1	0043	44	.04	.04	.00	0.	*	1	0214	135	.00	.00	.00	132.
1	0044	45	.04	.04	.00	0.	*	1	0215	136	.00	.00	.00	132.
1	0045	46	.04	.03	.00	0.	*	1	0216	137	.00	.00	.00	132.
1	0046	47	.02	.02	.00	0.	*	1	0217	138	.00	.00	.00	131.
1	0047	48	.02	.02	.00	0.	*	1	0218	139	.00	.00	.00	131.
1	0048	49	.02	.02	.00	0.	*	1	0219	140	.00	.00	.00	130.
1	0049	50	.02	.02	.00	1.	*	1	0220	141	.00	.00	.00	129.
1	0050	51	.02	.02	.00	1.	*	1	0221	142	.00	.00	.00	129.
1	0051	52	.01	.01	.00	1.	*	1	0222	143	.00	.00	.00	128.
1	0052	53	.01	.01	.00	1.	*	1	0223	144	.00	.00	.00	127.
1	0053	54	.01	.01	.00	2.	*	1	0224	145	.00	.00	.00	126.
1	0054	55	.01	.01	.00	2.	*	1	0225	146	.00	.00	.00	125.
1	0055	56	.01	.01	.00	2.	*	1	0226	147	.00	.00	.00	124.
1	0056	57	.01	.01	.00	3.	*	1	0227	148	.00	.00	.00	123.
1	0057	58	.01	.01	.00	3.	*	1	0228	149	.00	.00	.00	122.
1	0058	59	.01	.01	.00	4.	*	1	0229	150	.00	.00	.00	121.
1	0059	60	.01	.01	.00	5.	*	1	0230	151	.00	.00	.00	119.
1	0100	61	.01	.01	.00	5.	*	1	0231	152	.00	.00	.00	118.
1	0101	62	.01	.01	.00	6.	*	1	0232	153	.00	.00	.00	117.
1	0102	63	.01	.01	.00	7.	*	1	0233	154	.00	.00	.00	115.
1	0103	64	.01	.01	.00	8.	*	1	0234	155	.00	.00	.00	114.
1	0104	65	.01	.01	.00	9.	*	1	0235	156	.00	.00	.00	113.
1	0105	66	.01	.01	.00	10.	*	1	0236	157	.00	.00	.00	111.
1	0106	67	.01	.00	.00	11.	*	1	0237	158	.00	.00	.00	110.
1	0107	68	.01	.00	.00	12.	*	1	0238	159	.00	.00	.00	108.
1	0108	69	.01	.00	.00	13.	*	1	0239	160	.00	.00	.00	107.
1	0109	70	.01	.00	.00	15.	*	1	0240	161	.00	.00	.00	105.
1	0110	71	.01	.00	.00	16.	*	1	0241	162	.00	.00	.00	104.
1	0111	72	.00	.00	.00	17.	*	1	0242	163	.00	.00	.00	103.
1	0112	73	.00	.00	.00	19.	*	1	0243	164	.00	.00	.00	101.
1	0113	74	.00	.00	.00	21.	*	1	0244	165	.00	.00	.00	100.
1	0114	75	.00	.00	.00	22.	*	1	0245	166	.00	.00	.00	98.
1	0115	76	.00	.00	.00	24.	*	1	0246	167	.00	.00	.00	97.
1	0116	77	.00	.00	.00	26.	*	1	0247	168	.00	.00	.00	96.
1	0117	78	.00	.00	.00	28.	*	1	0248	169	.00	.00	.00	94.
1	0118	79	.00	.00	.00	30.	*	1	0249	170	.00	.00	.00	93.
1	0119	80	.00	.00	.00	32.	*	1	0250	171	.00	.00	.00	92.
1	0120	81	.00	.00	.00	35.	*	1	0251	172	.00	.00	.00	90.
1	0121	82	.00	.00	.00	37.	*	1	0252	173	.00	.00	.00	89.
1	0122	83	.00	.00	.00	39.	*	1	0253	174	.00	.00	.00	88.
1	0123	84	.00	.00	.00	42.	*	1	0254	175	.00	.00	.00	87.
1	0124	85	.00	.00	.00	44.	*	1	0255	176	.00	.00	.00	86.
1	0125	86	.00	.00	.00	47.	*	1	0256	177	.00	.00	.00	84.
1	0126	87	.00	.00	.00	50.	*	1	0257	178	.00	.00	.00	83.
1	0127	88	.00	.00	.00	53.	*	1	0258	179	.00	.00	.00	82.
1	0128	89	.00	.00	.00	55.	*	1	0259	180	.00	.00	.00	81.
1	0129	90	.00	.00	.00	58.	*	1	0300	181	.00	.00	.00	80.
1	0130	91	.00	.00	.00	61.	*							

TOTAL RAINFALL = 1.29, TOTAL LOSS = 1.19, TOTAL EXCESS = .10

PEAK FLOW	TIME		MAXIMUM	AVERAGE	FLOW	
+	(CFS)	(HR)	6-HR	24-HR	72-HR	3.00-HR
+	133.	2.18	59.	59.	59.	59.
		(INCHES)	.067	.067	.067	.067
		(AC-FT)	15.	15.	15.	15.

CUMULATIVE AREA = 4.08 SQ MI

*** **

 * *
 46 KK * RP3 *
 * *

Route BP3 in channel to Culvert BP15

HYDROGRAPH ROUTING DATA

48 RD MUSKINGUM-CUNGE CHANNEL ROUTING
 L 2652. CHANNEL LENGTH
 S .0080 SLOPE
 N .040 CHANNEL ROUGHNESS COEFFICIENT
 CA .00 CONTRIBUTING AREA
 SHAPE TRAP CHANNEL SHAPE
 WD .00 BOTTOM WIDTH OR DIAMETER
 Z 7.00 SIDE SLOPE

COMPUTED MUSKINGUM-CUNGE PARAMETERS

ELEMENT	ALPHA	COMPUTATION TIME STEP			post.out		VOLUME (IN)	MAXIMUM CELERITY (FPS)
		M	DT	DX	PEAK	TIME TO PEAK (MIN)		
		(MIN)	(FT)	(CFS)				
MAIN	1.09	1.33	1.00	265.20	637.25	129.00	.32	6.02

INTERPOLATED TO SPECIFIED COMPUTATION INTERVAL

MAIN	1.09	1.33	1.00	637.25	129.00	.32
------	------	------	------	--------	--------	-----

CONTINUITY SUMMARY (AC-FT) - INFLOW= .7309E+02 EXCESS= .0000E+00 OUTFLOW= .6884E+02 BASIN STORAGE= .4465E+01 PERCENT ERROR= -.3

HYDROGRAPH AT STATION RP3
PLAN 1, RATIO = 1.00

DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*
1	0000	1	0.	* 1	0046	47	0.	* 1	0132	93	317.	* 1	0218	139	623.								
1	0001	2	0.	* 1	0047	48	0.	* 1	0133	94	333.	* 1	0219	140	620.								
1	0002	3	0.	* 1	0048	49	0.	* 1	0134	95	348.	* 1	0220	141	616.								
1	0003	4	0.	* 1	0049	50	0.	* 1	0135	96	363.	* 1	0221	142	612.								
1	0004	5	0.	* 1	0050	51	0.	* 1	0136	97	378.	* 1	0222	143	607.								
1	0005	6	0.	* 1	0051	52	0.	* 1	0137	98	393.	* 1	0223	144	603.								
1	0006	7	0.	* 1	0052	53	0.	* 1	0138	99	407.	* 1	0224	145	598.								
1	0007	8	0.	* 1	0053	54	0.	* 1	0139	100	421.	* 1	0225	146	592.								
1	0008	9	0.	* 1	0054	55	1.	* 1	0140	101	435.	* 1	0226	147	587.								
1	0009	10	0.	* 1	0055	56	1.	* 1	0141	102	449.	* 1	0227	148	581.								
1	0010	11	0.	* 1	0056	57	2.	* 1	0142	103	462.	* 1	0228	149	574.								
1	0011	12	0.	* 1	0057	58	3.	* 1	0143	104	474.	* 1	0229	150	568.								
1	0012	13	0.	* 1	0058	59	4.	* 1	0144	105	487.	* 1	0230	151	561.								
1	0013	14	0.	* 1	0059	60	5.	* 1	0145	106	498.	* 1	0231	152	554.								
1	0014	15	0.	* 1	0100	61	7.	* 1	0146	107	510.	* 1	0232	153	547.								
1	0015	16	0.	* 1	0101	62	9.	* 1	0147	108	520.	* 1	0233	154	539.								
1	0016	17	0.	* 1	0102	63	11.	* 1	0148	109	531.	* 1	0234	155	532.								
1	0017	18	0.	* 1	0103	64	14.	* 1	0149	110	541.	* 1	0235	156	524.								
1	0018	19	0.	* 1	0104	65	16.	* 1	0150	111	550.	* 1	0236	157	517.								
1	0019	20	0.	* 1	0105	66	20.	* 1	0151	112	559.	* 1	0237	158	509.								
1	0020	21	0.	* 1	0106	67	23.	* 1	0152	113	567.	* 1	0238	159	502.								
1	0021	22	0.	* 1	0107	68	27.	* 1	0153	114	575.	* 1	0239	160	494.								
1	0022	23	0.	* 1	0108	69	32.	* 1	0154	115	583.	* 1	0240	161	486.								
1	0023	24	0.	* 1	0109	70	38.	* 1	0155	116	590.	* 1	0241	162	479.								
1	0024	25	0.	* 1	0110	71	45.	* 1	0156	117	597.	* 1	0242	163	471.								
1	0025	26	0.	* 1	0111	72	53.	* 1	0157	118	603.	* 1	0243	164	464.								
1	0026	27	0.	* 1	0112	73	61.	* 1	0158	119	608.	* 1	0244	165	457.								
1	0027	28	0.	* 1	0113	74	69.	* 1	0159	120	613.	* 1	0245	166	449.								
1	0028	29	0.	* 1	0114	75	79.	* 1	0200	121	618.	* 1	0246	167	442.								
1	0029	30	0.	* 1	0115	76	88.	* 1	0201	122	622.	* 1	0247	168	435.								
1	0030	31	0.	* 1	0116	77	98.	* 1	0202	123	626.	* 1	0248	169	428.								
1	0031	32	0.	* 1	0117	78	109.	* 1	0203	124	629.	* 1	0249	170	421.								
1	0032	33	0.	* 1	0118	79	120.	* 1	0204	125	631.	* 1	0250	171	414.								
1	0033	34	0.	* 1	0119	80	131.	* 1	0205	126	633.	* 1	0251	172	408.								
1	0034	35	0.	* 1	0120	81	143.	* 1	0206	127	635.	* 1	0252	173	401.								
1	0035	36	0.	* 1	0121	82	156.	* 1	0207	128	636.	* 1	0253	174	394.								
1	0036	37	0.	* 1	0122	83	169.	* 1	0208	129	637.	* 1	0254	175	388.								
1	0037	38	0.	* 1	0123	84	182.	* 1	0209	130	637.	* 1	0255	176	382.								
1	0038	39	0.	* 1	0124	85	196.	* 1	0210	131	637.	* 1	0256	177	375.								
1	0039	40	0.	* 1	0125	86	211.	* 1	0211	132	637.	* 1	0257	178	369.								
1	0040	41	0.	* 1	0126	87	225.	* 1	0212	133	636.	* 1	0258	179	363.								
1	0041	42	0.	* 1	0127	88	240.	* 1	0213	134	635.	* 1	0259	180	358.								
1	0042	43	0.	* 1	0128	89	256.	* 1	0214	135	633.	* 1	0300	181	352.								
1	0043	44	0.	* 1	0129	90	271.	* 1	0215	136	631.	*											
1	0044	45	0.	* 1	0130	91	286.	* 1	0216	137	629.	*											
1	0045	46	0.	* 1	0131	92	302.	* 1	0217	138	626.	*											

PEAK FLOW	TIME	MAXIMUM AVERAGE FLOW			
(CFS)	(HR)	6-HR	24-HR	72-HR	3.00-HR
637.	2.15	277.	277.	277.	277.
		(INCHES)	.315	.315	.315
		(AC-FT)	69.	69.	69.

CUMULATIVE AREA = 4.08 SQ MI

COMPUTED MUSKINGUM-CUNGE PARAMETERS

ELEMENT	ALPHA	M	DT	DX	PEAK	TIME TO PEAK	VOLUME	MAXIMUM CELERITY
---------	-------	---	----	----	------	-----------------	--------	---------------------

	(MIN)	(FT)	post.out (CFS)	(MIN)	(IN)	(FPS)
MAIN	1.09	1.33	1.00	165.75	132.42	140.00

INTERPOLATED TO SPECIFIED COMPUTATION INTERVAL

MAIN	1.09	1.33	1.00	132.42	140.00	.06
------	------	------	------	--------	--------	-----

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1473E+02 EXCESS= .0000E+00 OUTFLOW= .1317E+02 BASIN STORAGE= .1615E+01 PERCENT ERROR= -.4

HYDROGRAPH AT STATION RP3
PLAN 1, RATIO = .61

DA	MON	HRMN	ORD	FLOW	DA	MON	HRMN	ORD	FLOW	DA	MON	HRMN	ORD	FLOW	DA	MON	HRMN	ORD	FLOW
1	0000	1	0.	* 1	0046	47	0.	* 1	0132	93	32.	* 1	0218	139	132.				
1	0001	2	0.	* 1	0047	48	0.	* 1	0133	94	35.	* 1	0219	140	132.				
1	0002	3	0.	* 1	0048	49	0.	* 1	0134	95	38.	* 1	0220	141	132.				
1	0003	4	0.	* 1	0049	50	0.	* 1	0135	96	41.	* 1	0221	142	132.				
1	0004	5	0.	* 1	0050	51	0.	* 1	0136	97	44.	* 1	0222	143	132.				
1	0005	6	0.	* 1	0051	52	0.	* 1	0137	98	48.	* 1	0223	144	132.				
1	0006	7	0.	* 1	0052	53	0.	* 1	0138	99	51.	* 1	0224	145	132.				
1	0007	8	0.	* 1	0053	54	0.	* 1	0139	100	54.	* 1	0225	146	132.				
1	0008	9	0.	* 1	0054	55	0.	* 1	0140	101	57.	* 1	0226	147	131.				
1	0009	10	0.	* 1	0055	56	0.	* 1	0141	102	61.	* 1	0227	148	131.				
1	0010	11	0.	* 1	0056	57	0.	* 1	0142	103	64.	* 1	0228	149	130.				
1	0011	12	0.	* 1	0057	58	0.	* 1	0143	104	67.	* 1	0229	150	130.				
1	0012	13	0.	* 1	0058	59	0.	* 1	0144	105	70.	* 1	0230	151	129.				
1	0013	14	0.	* 1	0059	60	0.	* 1	0145	106	73.	* 1	0231	152	128.				
1	0014	15	0.	* 1	0100	61	0.	* 1	0146	107	77.	* 1	0232	153	127.				
1	0015	16	0.	* 1	0101	62	0.	* 1	0147	108	80.	* 1	0233	154	126.				
1	0016	17	0.	* 1	0102	63	0.	* 1	0148	109	83.	* 1	0234	155	125.				
1	0017	18	0.	* 1	0103	64	0.	* 1	0149	110	86.	* 1	0235	156	124.				
1	0018	19	0.	* 1	0104	65	0.	* 1	0150	111	88.	* 1	0236	157	123.				
1	0019	20	0.	* 1	0105	66	0.	* 1	0151	112	91.	* 1	0237	158	122.				
1	0020	21	0.	* 1	0106	67	0.	* 1	0152	113	94.	* 1	0238	159	121.				
1	0021	22	0.	* 1	0107	68	0.	* 1	0153	114	97.	* 1	0239	160	120.				
1	0022	23	0.	* 1	0108	69	0.	* 1	0154	115	99.	* 1	0240	161	119.				
1	0023	24	0.	* 1	0109	70	0.	* 1	0155	116	102.	* 1	0241	162	117.				
1	0024	25	0.	* 1	0110	71	1.	* 1	0156	117	104.	* 1	0242	163	116.				
1	0025	26	0.	* 1	0111	72	1.	* 1	0157	118	106.	* 1	0243	164	115.				
1	0026	27	0.	* 1	0112	73	1.	* 1	0158	119	109.	* 1	0244	165	113.				
1	0027	28	0.	* 1	0113	74	1.	* 1	0159	120	111.	* 1	0245	166	112.				
1	0028	29	0.	* 1	0114	75	2.	* 1	0200	121	113.	* 1	0246	167	111.				
1	0029	30	0.	* 1	0115	76	2.	* 1	0201	122	115.	* 1	0247	168	109.				
1	0030	31	0.	* 1	0116	77	3.	* 1	0202	123	117.	* 1	0248	169	108.				
1	0031	32	0.	* 1	0117	78	3.	* 1	0203	124	118.	* 1	0249	170	106.				
1	0032	33	0.	* 1	0118	79	4.	* 1	0204	125	120.	* 1	0250	171	105.				
1	0033	34	0.	* 1	0119	80	5.	* 1	0205	126	121.	* 1	0251	172	104.				
1	0034	35	0.	* 1	0120	81	6.	* 1	0206	127	123.	* 1	0252	173	102.				
1	0035	36	0.	* 1	0121	82	7.	* 1	0207	128	124.	* 1	0253	174	101.				
1	0036	37	0.	* 1	0122	83	9.	* 1	0208	129	126.	* 1	0254	175	100.				
1	0037	38	0.	* 1	0123	84	11.	* 1	0209	130	127.	* 1	0255	176	98.				
1	0038	39	0.	* 1	0124	85	13.	* 1	0210	131	128.	* 1	0256	177	97.				
1	0039	40	0.	* 1	0125	86	15.	* 1	0211	132	129.	* 1	0257	178	96.				
1	0040	41	0.	* 1	0126	87	17.	* 1	0212	133	129.	* 1	0258	179	94.				
1	0041	42	0.	* 1	0127	88	19.	* 1	0213	134	130.	* 1	0259	180	93.				
1	0042	43	0.	* 1	0128	89	22.	* 1	0214	135	131.	* 1	0300	181	92.				
1	0043	44	0.	* 1	0129	90	24.	* 1	0215	136	131.	* 1							
1	0044	45	0.	* 1	0130	91	27.	* 1	0216	137	132.	* 1							
1	0045	46	0.	* 1	0131	92	30.	* 1	0217	138	132.	* 1							

PEAK FLOW (CFS)	TIME (HR)	MAXIMUM AVERAGE FLOW			
		6-HR	24-HR	72-HR	3.00-HR
132.	2.33	53.	53.	53.	53.
		(INCHES) .060	.060	.060	.060
		(AC-FT) 13.	13.	13.	13.
CUMULATIVE AREA =		4.08 SQ MI			

													post.out	
1	0022	23	.00	.00	.00	0.	*	1	0153	114	.00	.00	.00	51.
1	0023	24	.00	.00	.00	0.	*	1	0154	115	.00	.00	.00	49.
1	0024	25	.00	.00	.00	0.	*	1	0155	116	.00	.00	.00	47.
1	0025	26	.00	.00	.00	0.	*	1	0156	117	.00	.00	.00	45.
1	0026	27	.00	.00	.00	0.	*	1	0157	118	.00	.00	.00	43.
1	0027	28	.00	.00	.00	0.	*	1	0158	119	.00	.00	.00	41.
1	0028	29	.00	.00	.00	0.	*	1	0159	120	.00	.00	.00	39.
1	0029	30	.00	.00	.00	0.	*	1	0200	121	.00	.00	.00	37.
1	0030	31	.00	.00	.00	0.	*	1	0201	122	.00	.00	.00	36.
1	0031	32	.11	.11	.00	0.	*	1	0202	123	.00	.00	.00	34.
1	0032	33	.11	.11	.00	0.	*	1	0203	124	.00	.00	.00	33.
1	0033	34	.11	.11	.00	0.	*	1	0204	125	.00	.00	.00	31.
1	0034	35	.11	.11	.00	0.	*	1	0205	126	.00	.00	.00	30.
1	0035	36	.11	.11	.00	0.	*	1	0206	127	.00	.00	.00	29.
1	0036	37	.09	.09	.00	0.	*	1	0207	128	.00	.00	.00	28.
1	0037	38	.09	.09	.00	0.	*	1	0208	129	.00	.00	.00	27.
1	0038	39	.09	.08	.00	0.	*	1	0209	130	.00	.00	.00	26.
1	0039	40	.09	.08	.01	0.	*	1	0210	131	.00	.00	.00	25.
1	0040	41	.09	.08	.01	0.	*	1	0211	132	.00	.00	.00	24.
1	0041	42	.06	.05	.01	1.	*	1	0212	133	.00	.00	.00	24.
1	0042	43	.06	.05	.01	1.	*	1	0213	134	.00	.00	.00	23.
1	0043	44	.06	.05	.01	2.	*	1	0214	135	.00	.00	.00	22.
1	0044	45	.06	.05	.01	3.	*	1	0215	136	.00	.00	.00	22.
1	0045	46	.06	.05	.02	5.	*	1	0216	137	.00	.00	.00	21.
1	0046	47	.04	.03	.01	7.	*	1	0217	138	.00	.00	.00	21.
1	0047	48	.04	.03	.01	9.	*	1	0218	139	.00	.00	.00	20.
1	0048	49	.04	.03	.01	12.	*	1	0219	140	.00	.00	.00	20.
1	0049	50	.04	.03	.01	15.	*	1	0220	141	.00	.00	.00	19.
1	0050	51	.04	.03	.01	19.	*	1	0221	142	.00	.00	.00	19.
1	0051	52	.02	.02	.01	24.	*	1	0222	143	.00	.00	.00	19.
1	0052	53	.02	.02	.01	29.	*	1	0223	144	.00	.00	.00	18.
1	0053	54	.02	.02	.01	35.	*	1	0224	145	.00	.00	.00	18.
1	0054	55	.02	.02	.01	41.	*	1	0225	146	.00	.00	.00	18.
1	0055	56	.02	.02	.01	47.	*	1	0226	147	.00	.00	.00	17.
1	0056	57	.02	.01	.01	54.	*	1	0227	148	.00	.00	.00	17.
1	0057	58	.02	.01	.01	61.	*	1	0228	149	.00	.00	.00	17.
1	0058	59	.02	.01	.01	68.	*	1	0229	150	.00	.00	.00	17.
1	0059	60	.02	.01	.01	75.	*	1	0230	151	.00	.00	.00	16.
1	0100	61	.02	.01	.01	82.	*	1	0231	152	.00	.00	.00	16.
1	0101	62	.01	.01	.01	89.	*	1	0232	153	.00	.00	.00	16.
1	0102	63	.01	.01	.01	96.	*	1	0233	154	.00	.00	.00	16.
1	0103	64	.01	.01	.01	102.	*	1	0234	155	.00	.00	.00	16.
1	0104	65	.01	.01	.01	108.	*	1	0235	156	.00	.00	.00	15.
1	0105	66	.01	.01	.01	113.	*	1	0236	157	.00	.00	.00	15.
1	0106	67	.01	.01	.00	118.	*	1	0237	158	.00	.00	.00	15.
1	0107	68	.01	.01	.00	122.	*	1	0238	159	.00	.00	.00	15.
1	0108	69	.01	.01	.00	126.	*	1	0239	160	.00	.00	.00	15.
1	0109	70	.01	.01	.00	130.	*	1	0240	161	.00	.00	.00	15.
1	0110	71	.01	.01	.00	132.	*	1	0241	162	.00	.00	.00	15.
1	0111	72	.01	.00	.00	135.	*	1	0242	163	.00	.00	.00	15.
1	0112	73	.01	.00	.00	137.	*	1	0243	164	.00	.00	.00	14.
1	0113	74	.01	.00	.00	138.	*	1	0244	165	.00	.00	.00	14.
1	0114	75	.01	.00	.00	139.	*	1	0245	166	.00	.00	.00	14.
1	0115	76	.01	.00	.00	139.	*	1	0246	167	.00	.00	.00	14.
1	0116	77	.01	.00	.00	138.	*	1	0247	168	.00	.00	.00	14.
1	0117	78	.01	.00	.00	138.	*	1	0248	169	.00	.00	.00	14.
1	0118	79	.01	.00	.00	137.	*	1	0249	170	.00	.00	.00	14.
1	0119	80	.01	.00	.00	135.	*	1	0250	171	.00	.00	.00	14.
1	0120	81	.01	.00	.00	133.	*	1	0251	172	.00	.00	.00	14.
1	0121	82	.01	.00	.00	131.	*	1	0252	173	.00	.00	.00	14.
1	0122	83	.01	.00	.00	129.	*	1	0253	174	.00	.00	.00	14.
1	0123	84	.01	.00	.00	127.	*	1	0254	175	.00	.00	.00	14.
1	0124	85	.01	.00	.00	124.	*	1	0255	176	.00	.00	.00	14.
1	0125	86	.01	.00	.00	122.	*	1	0256	177	.00	.00	.00	14.
1	0126	87	.01	.00	.00	119.	*	1	0257	178	.00	.00	.00	14.
1	0127	88	.01	.00	.00	117.	*	1	0258	179	.00	.00	.00	14.
1	0128	89	.01	.00	.00	114.	*	1	0259	180	.00	.00	.00	14.
1	0129	90	.01	.00	.00	111.	*	1	0300	181	.00	.00	.00	14.
1	0130	91	.01	.00	.00	109.	*							

TOTAL RAINFALL = 2.13, TOTAL LOSS = 1.75, TOTAL EXCESS = .38

PEAK FLOW + (CFS)	TIME (HR)	(CFS)	MAXIMUM AVERAGE FLOW			
			6-HR	24-HR	72-HR	3.00-HR
+ 139.	1.25	(INCHES) (AC-FT)	42. 10.	42. 10.	42. 10.	42. 10.

CUMULATIVE AREA = .54 SQ MI

HYDROGRAPH AT STATION BP4
PLAN 1, RATIO = 1.00

post.out

DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP	Q	*	DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP	Q
1	0000	1	.00	.00	.00	0.	*	1	0131	92	.00	.00	.00	106.				
1	0001	2	.00	.00	.00	0.	*	1	0132	93	.00	.00	.00	104.				
1	0002	3	.00	.00	.00	0.	*	1	0133	94	.00	.00	.00	101.				
1	0003	4	.00	.00	.00	0.	*	1	0134	95	.00	.00	.00	98.				
1	0004	5	.00	.00	.00	0.	*	1	0135	96	.00	.00	.00	96.				
1	0005	6	.00	.00	.00	0.	*	1	0136	97	.00	.00	.00	93.				
1	0006	7	.00	.00	.00	0.	*	1	0137	98	.00	.00	.00	91.				
1	0007	8	.00	.00	.00	0.	*	1	0138	99	.00	.00	.00	88.				
1	0008	9	.00	.00	.00	0.	*	1	0139	100	.00	.00	.00	86.				
1	0009	10	.00	.00	.00	0.	*	1	0140	101	.00	.00	.00	83.				
1	0010	11	.00	.00	.00	0.	*	1	0141	102	.00	.00	.00	81.				
1	0011	12	.00	.00	.00	0.	*	1	0142	103	.00	.00	.00	78.				
1	0012	13	.00	.00	.00	0.	*	1	0143	104	.00	.00	.00	76.				
1	0013	14	.00	.00	.00	0.	*	1	0144	105	.00	.00	.00	73.				
1	0014	15	.00	.00	.00	0.	*	1	0145	106	.00	.00	.00	70.				
1	0015	16	.00	.00	.00	0.	*	1	0146	107	.00	.00	.00	68.				
1	0016	17	.00	.00	.00	0.	*	1	0147	108	.00	.00	.00	65.				
1	0017	18	.00	.00	.00	0.	*	1	0148	109	.00	.00	.00	63.				
1	0018	19	.00	.00	.00	0.	*	1	0149	110	.00	.00	.00	60.				
1	0019	20	.00	.00	.00	0.	*	1	0150	111	.00	.00	.00	58.				
1	0020	21	.00	.00	.00	0.	*	1	0151	112	.00	.00	.00	56.				
1	0021	22	.00	.00	.00	0.	*	1	0152	113	.00	.00	.00	53.				
1	0022	23	.00	.00	.00	0.	*	1	0153	114	.00	.00	.00	51.				
1	0023	24	.00	.00	.00	0.	*	1	0154	115	.00	.00	.00	49.				
1	0024	25	.00	.00	.00	0.	*	1	0155	116	.00	.00	.00	47.				
1	0025	26	.00	.00	.00	0.	*	1	0156	117	.00	.00	.00	45.				
1	0026	27	.00	.00	.00	0.	*	1	0157	118	.00	.00	.00	43.				
1	0027	28	.00	.00	.00	0.	*	1	0158	119	.00	.00	.00	41.				
1	0028	29	.00	.00	.00	0.	*	1	0159	120	.00	.00	.00	39.				
1	0029	30	.00	.00	.00	0.	*	1	0200	121	.00	.00	.00	37.				
1	0030	31	.00	.00	.00	0.	*	1	0201	122	.00	.00	.00	36.				
1	0031	32	.11	.11	.00	0.	*	1	0202	123	.00	.00	.00	34.				
1	0032	33	.11	.11	.00	0.	*	1	0203	124	.00	.00	.00	33.				
1	0033	34	.11	.11	.00	0.	*	1	0204	125	.00	.00	.00	31.				
1	0034	35	.11	.11	.00	0.	*	1	0205	126	.00	.00	.00	30.				
1	0035	36	.11	.11	.00	0.	*	1	0206	127	.00	.00	.00	29.				
1	0036	37	.09	.09	.00	0.	*	1	0207	128	.00	.00	.00	28.				
1	0037	38	.09	.09	.00	0.	*	1	0208	129	.00	.00	.00	27.				
1	0038	39	.09	.08	.00	0.	*	1	0209	130	.00	.00	.00	26.				
1	0039	40	.09	.08	.01	0.	*	1	0210	131	.00	.00	.00	25.				
1	0040	41	.09	.08	.01	0.	*	1	0211	132	.00	.00	.00	24.				
1	0041	42	.06	.05	.01	1.	*	1	0212	133	.00	.00	.00	24.				
1	0042	43	.06	.05	.01	1.	*	1	0213	134	.00	.00	.00	23.				
1	0043	44	.06	.05	.01	2.	*	1	0214	135	.00	.00	.00	22.				
1	0044	45	.06	.05	.01	3.	*	1	0215	136	.00	.00	.00	22.				
1	0045	46	.06	.05	.02	5.	*	1	0216	137	.00	.00	.00	21.				
1	0046	47	.04	.03	.01	7.	*	1	0217	138	.00	.00	.00	21.				
1	0047	48	.04	.03	.01	9.	*	1	0218	139	.00	.00	.00	20.				
1	0048	49	.04	.03	.01	12.	*	1	0219	140	.00	.00	.00	20.				
1	0049	50	.04	.03	.01	15.	*	1	0220	141	.00	.00	.00	19.				
1	0050	51	.04	.03	.01	19.	*	1	0221	142	.00	.00	.00	19.				
1	0051	52	.02	.02	.01	24.	*	1	0222	143	.00	.00	.00	19.				
1	0052	53	.02	.02	.01	29.	*	1	0223	144	.00	.00	.00	18.				
1	0053	54	.02	.02	.01	35.	*	1	0224	145	.00	.00	.00	18.				
1	0054	55	.02	.02	.01	41.	*	1	0225	146	.00	.00	.00	18.				
1	0055	56	.02	.02	.01	47.	*	1	0226	147	.00	.00	.00	17.				
1	0056	57	.02	.01	.01	54.	*	1	0227	148	.00	.00	.00	17.				
1	0057	58	.02	.01	.01	61.	*	1	0228	149	.00	.00	.00	17.				
1	0058	59	.02	.01	.01	68.	*	1	0229	150	.00	.00	.00	17.				
1	0059	60	.02	.01	.01	75.	*	1	0230	151	.00	.00	.00	16.				
1	0100	61	.02	.01	.01	82.	*	1	0231	152	.00	.00	.00	16.				
1	0101	62	.01	.01	.01	89.	*	1	0232	153	.00	.00	.00	16.				
1	0102	63	.01	.01	.01	96.	*	1	0233	154	.00	.00	.00	16.				
1	0103	64	.01	.01	.01	102.	*	1	0234	155	.00	.00	.00	16.				
1	0104	65	.01	.01	.01	108.	*	1	0235	156	.00	.00	.00	15.				
1	0105	66	.01	.01	.01	113.	*	1	0236	157	.00	.00	.00	15.				
1	0106	67	.01	.01	.00	118.	*	1	0237	158	.00	.00	.00	15.				
1	0107	68	.01	.01	.00	122.	*	1	0238	159	.00	.00	.00	15.				
1	0108	69	.01	.01	.00	126.	*	1	0239	160	.00	.00	.00	15.				
1	0109	70	.01	.01	.00	130.	*	1	0240	161	.00	.00	.00	15.				
1	0110	71	.01	.01	.00	132.	*	1	0241	162	.00	.00	.00	15.				
1	0111	72	.01	.00	.00	135.	*	1	0242	163	.00	.00	.00	15.				
1	0112	73	.01	.00	.00	137.	*	1	0243	164	.00	.00	.00	14.				
1	0113	74	.01	.00	.00	138.	*	1	0244	165	.00	.00	.00	14.				
1	0114	75	.01	.00	.00	139.	*	1	0245	166	.00	.00	.00	14.				
1	0115	76	.01	.00	.00	139.	*	1	0246	167	.00	.00	.00	14.				
1	0116	77	.01	.00	.00	138.	*	1	0247	168	.00	.00	.00	14.				
1	0117	78	.01	.00	.00	138.	*	1	0248	169	.00	.00	.00	14.				
1	0118	79	.01	.00	.00	137.	*	1	0249	170	.00	.00	.00	14.				
1	0119	80	.01	.00	.00	135.	*	1	0250	171	.00	.00	.00	14.				
1	0120	81	.01	.00	.00	133.	*	1	0251	172	.00	.00	.00	14.				
1	0121	82	.01	.00	.00	131.	*	1	0252	173	.00	.00	.00	14.				
1	0122	83	.01	.00	.00	129.	*	1	0253	174	.00	.00	.00	14.				
1	0123	84	.01	.00	.00	127.	*	1	0254	175	.00	.00	.00	14.				
1	0124	85	.01	.00	.00	124.	*	1	0255	176	.00	.00	.00	14.				
1	0125	86	.01	.00	.00	122.	*	1	0256	177	.00	.00	.00	14.				

														post.out			
1	0126	87	.01	.00	.00	119.	*	1	0257	178	.00	.00	.00	14.			
1	0127	88	.01	.00	.00	117.	*	1	0258	179	.00	.00	.00	14.			
1	0128	89	.01	.00	.00	114.	*	1	0259	180	.00	.00	.00	14.			
1	0129	90	.01	.00	.00	111.	*	1	0300	181	.00	.00	.00	14.			
1	0130	91	.01	.00	.00	109.	*										

TOTAL RAINFALL = 2.13, TOTAL LOSS = 1.75, TOTAL EXCESS = .38

+ (CFS)	TIME (HR)	(CFS)	MAXIMUM AVERAGE FLOW			
			6-HR	24-HR	72-HR	3.00-HR
+ 139.	1.25		42.	42.	42.	42.
		(INCHES)	.360	.360	.360	.360
		(AC-FT)	10.	10.	10.	10.

CUMULATIVE AREA = .54 SQ MI

HYDROGRAPH AT STATION BP4
PLAN 1, RATIO = .61

DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	*	DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
1	0000	1	.00	.00	.00	0.	0.	*	1	0131	92	.00	.00	.00	22.	
1	0001	2	.00	.00	.00	0.	0.	*	1	0132	93	.00	.00	.00	22.	
1	0002	3	.00	.00	.00	0.	0.	*	1	0133	94	.00	.00	.00	21.	
1	0003	4	.00	.00	.00	0.	0.	*	1	0134	95	.00	.00	.00	21.	
1	0004	5	.00	.00	.00	0.	0.	*	1	0135	96	.00	.00	.00	21.	
1	0005	6	.00	.00	.00	0.	0.	*	1	0136	97	.00	.00	.00	21.	
1	0006	7	.00	.00	.00	0.	0.	*	1	0137	98	.00	.00	.00	20.	
1	0007	8	.00	.00	.00	0.	0.	*	1	0138	99	.00	.00	.00	20.	
1	0008	9	.00	.00	.00	0.	0.	*	1	0139	100	.00	.00	.00	20.	
1	0009	10	.00	.00	.00	0.	0.	*	1	0140	101	.00	.00	.00	19.	
1	0010	11	.00	.00	.00	0.	0.	*	1	0141	102	.00	.00	.00	19.	
1	0011	12	.00	.00	.00	0.	0.	*	1	0142	103	.00	.00	.00	18.	
1	0012	13	.00	.00	.00	0.	0.	*	1	0143	104	.00	.00	.00	18.	
1	0013	14	.00	.00	.00	0.	0.	*	1	0144	105	.00	.00	.00	17.	
1	0014	15	.00	.00	.00	0.	0.	*	1	0145	106	.00	.00	.00	17.	
1	0015	16	.00	.00	.00	0.	0.	*	1	0146	107	.00	.00	.00	16.	
1	0016	17	.00	.00	.00	0.	0.	*	1	0147	108	.00	.00	.00	16.	
1	0017	18	.00	.00	.00	0.	0.	*	1	0148	109	.00	.00	.00	15.	
1	0018	19	.00	.00	.00	0.	0.	*	1	0149	110	.00	.00	.00	15.	
1	0019	20	.00	.00	.00	0.	0.	*	1	0150	111	.00	.00	.00	14.	
1	0020	21	.00	.00	.00	0.	0.	*	1	0151	112	.00	.00	.00	14.	
1	0021	22	.00	.00	.00	0.	0.	*	1	0152	113	.00	.00	.00	13.	
1	0022	23	.00	.00	.00	0.	0.	*	1	0153	114	.00	.00	.00	13.	
1	0023	24	.00	.00	.00	0.	0.	*	1	0154	115	.00	.00	.00	12.	
1	0024	25	.00	.00	.00	0.	0.	*	1	0155	116	.00	.00	.00	12.	
1	0025	26	.00	.00	.00	0.	0.	*	1	0156	117	.00	.00	.00	11.	
1	0026	27	.00	.00	.00	0.	0.	*	1	0157	118	.00	.00	.00	11.	
1	0027	28	.00	.00	.00	0.	0.	*	1	0158	119	.00	.00	.00	10.	
1	0028	29	.00	.00	.00	0.	0.	*	1	0159	120	.00	.00	.00	10.	
1	0029	30	.00	.00	.00	0.	0.	*	1	0200	121	.00	.00	.00	10.	
1	0030	31	.00	.00	.00	0.	0.	*	1	0201	122	.00	.00	.00	9.	
1	0031	32	.07	.07	.00	0.	0.	*	1	0202	123	.00	.00	.00	9.	
1	0032	33	.07	.07	.00	0.	0.	*	1	0203	124	.00	.00	.00	9.	
1	0033	34	.07	.07	.00	0.	0.	*	1	0204	125	.00	.00	.00	8.	
1	0034	35	.07	.07	.00	0.	0.	*	1	0205	126	.00	.00	.00	8.	
1	0035	36	.07	.07	.00	0.	0.	*	1	0206	127	.00	.00	.00	8.	
1	0036	37	.05	.05	.00	0.	0.	*	1	0207	128	.00	.00	.00	7.	
1	0037	38	.05	.05	.00	0.	0.	*	1	0208	129	.00	.00	.00	7.	
1	0038	39	.05	.05	.00	0.	0.	*	1	0209	130	.00	.00	.00	7.	
1	0039	40	.05	.05	.00	0.	0.	*	1	0210	131	.00	.00	.00	7.	
1	0040	41	.05	.05	.00	0.	0.	*	1	0211	132	.00	.00	.00	7.	
1	0041	42	.04	.04	.00	0.	0.	*	1	0212	133	.00	.00	.00	6.	
1	0042	43	.04	.04	.00	0.	0.	*	1	0213	134	.00	.00	.00	6.	
1	0043	44	.04	.04	.00	0.	0.	*	1	0214	135	.00	.00	.00	6.	
1	0044	45	.04	.04	.00	0.	0.	*	1	0215	136	.00	.00	.00	6.	
1	0045	46	.04	.04	.00	0.	0.	*	1	0216	137	.00	.00	.00	6.	
1	0046	47	.02	.02	.00	0.	0.	*	1	0217	138	.00	.00	.00	6.	
1	0047	48	.02	.02	.00	0.	0.	*	1	0218	139	.00	.00	.00	6.	
1	0048	49	.02	.02	.00	0.	0.	*	1	0219	140	.00	.00	.00	5.	
1	0049	50	.02	.02	.00	0.	0.	*	1	0220	141	.00	.00	.00	5.	
1	0050	51	.02	.02	.00	0.	0.	*	1	0221	142	.00	.00	.00	5.	
1	0051	52	.01	.01	.00	1.	1.	*	1	0222	143	.00	.00	.00	5.	
1	0052	53	.01	.01	.00	1.	1.	*	1	0223	144	.00	.00	.00	5.	
1	0053	54	.01	.01	.00	1.	1.	*	1	0224	145	.00	.00	.00	5.	
1	0054	55	.01	.01	.00	2.	2.	*	1	0225	146	.00	.00	.00	5.	
1	0055	56	.01	.01	.00	2.	2.	*	1	0226	147	.00	.00	.00	5.	
1	0056	57	.01	.01	.00	3.	3.	*	1	0227	148	.00	.00	.00	5.	
1	0057	58	.01	.01	.00	3.	3.	*	1	0228	149	.00	.00	.00	5.	
1	0058	59	.01	.01	.00	4.	4.	*	1	0229	150	.00	.00	.00	5.	
1	0059	60	.01	.01	.00	5.	5.	*	1	0230	151	.00	.00	.00	5.	

post.out														
1	0100	61	.01	.01	.00	6.	*	1	0231	152	.00	.00	.00	5.
1	0101	62	.01	.01	.00	6.	*	1	0232	153	.00	.00	.00	5.
1	0102	63	.01	.01	.00	7.	*	1	0233	154	.00	.00	.00	5.
1	0103	64	.01	.01	.00	8.	*	1	0234	155	.00	.00	.00	5.
1	0104	65	.01	.01	.00	10.	*	1	0235	156	.00	.00	.00	5.
1	0105	66	.01	.01	.00	11.	*	1	0236	157	.00	.00	.00	4.
1	0106	67	.01	.01	.00	12.	*	1	0237	158	.00	.00	.00	4.
1	0107	68	.01	.01	.00	13.	*	1	0238	159	.00	.00	.00	4.
1	0108	69	.01	.01	.00	14.	*	1	0239	160	.00	.00	.00	4.
1	0109	70	.01	.01	.00	15.	*	1	0240	161	.00	.00	.00	4.
1	0110	71	.01	.01	.00	16.	*	1	0241	162	.00	.00	.00	4.
1	0111	72	.00	.00	.00	17.	*	1	0242	163	.00	.00	.00	4.
1	0112	73	.00	.00	.00	18.	*	1	0243	164	.00	.00	.00	4.
1	0113	74	.00	.00	.00	18.	*	1	0244	165	.00	.00	.00	4.
1	0114	75	.00	.00	.00	19.	*	1	0245	166	.00	.00	.00	4.
1	0115	76	.00	.00	.00	20.	*	1	0246	167	.00	.00	.00	4.
1	0116	77	.00	.00	.00	20.	*	1	0247	168	.00	.00	.00	4.
1	0117	78	.00	.00	.00	21.	*	1	0248	169	.00	.00	.00	4.
1	0118	79	.00	.00	.00	21.	*	1	0249	170	.00	.00	.00	4.
1	0119	80	.00	.00	.00	22.	*	1	0250	171	.00	.00	.00	4.
1	0120	81	.00	.00	.00	22.	*	1	0251	172	.00	.00	.00	4.
1	0121	82	.00	.00	.00	22.	*	1	0252	173	.00	.00	.00	4.
1	0122	83	.00	.00	.00	23.	*	1	0253	174	.00	.00	.00	4.
1	0123	84	.00	.00	.00	23.	*	1	0254	175	.00	.00	.00	4.
1	0124	85	.00	.00	.00	23.	*	1	0255	176	.00	.00	.00	4.
1	0125	86	.00	.00	.00	23.	*	1	0256	177	.00	.00	.00	4.
1	0126	87	.00	.00	.00	23.	*	1	0257	178	.00	.00	.00	4.
1	0127	88	.00	.00	.00	23.	*	1	0258	179	.00	.00	.00	4.
1	0128	89	.00	.00	.00	23.	*	1	0259	180	.00	.00	.00	4.
1	0129	90	.00	.00	.00	22.	*	1	0300	181	.00	.00	.00	4.
1	0130	91	.00	.00	.00	22.	*							

TOTAL RAINFALL = 1.29, TOTAL LOSS = 1.22, TOTAL EXCESS = .07

PEAK FLOW	TIME		MAXIMUM	AVERAGE	FLOW	
(CFS)	(HR)	(CFS)	6-HR	24-HR	72-HR	3.00-HR
+	23.	1.40	8.	8.	8.	8.
		(INCHES)	.065	.065	.065	.065
		(AC-FT)	2.	2.	2.	2.

CUMULATIVE AREA = .54 SQ MI

*** **

 * *
 54 KK * RP4 *
 * *

Route BP4 in channel to Culvert BP15

HYDROGRAPH ROUTING DATA

56 RD MUSKINGUM-CUNGE CHANNEL ROUTING
 L 2933. CHANNEL LENGTH
 S .0070 SLOPE
 N .040 CHANNEL ROUGHNESS COEFFICIENT
 CA .00 CONTRIBUTING AREA
 SHAPE TRAP CHANNEL SHAPE
 WD .00 BOTTOM WIDTH OR DIAMETER
 Z 7.00 SIDE SLOPE

 COMPUTED MUSKINGUM-CUNGE PARAMETERS
 COMPUTATION TIME STEP

ELEMENT	ALPHA	M	DT	DX	PEAK	TIME TO PEAK	VOLUME	MAXIMUM CELERITY
			(MIN)	(FT)	(CFS)	(MIN)	(IN)	(FPS)
MAIN	1.02	1.33	1.00	162.94	137.60	86.00	.35	3.91

INTERPOLATED TO SPECIFIED COMPUTATION INTERVAL

MAIN	1.02	1.33	1.00		137.60	86.00	.35	
------	------	------	------	--	--------	-------	-----	--

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1036E+02 EXCESS= .0000E+00 OUTFLOW= .9928E+01 BASIN STORAGE= .4818E+00 PERCENT ERROR= -.5

post.out

HYDROGRAPH AT STATION RP4
PLAN 1, RATIO = 1.00

DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*
1		0000	1	0.	*	1		0046	47	0.	*	1		0132	93	130.	*	1		0218	139	33.	*
1		0001	2	0.	*	1		0047	48	0.	*	1		0133	94	128.	*	1		0219	140	32.	*
1		0002	3	0.	*	1		0048	49	0.	*	1		0134	95	126.	*	1		0220	141	31.	*
1		0003	4	0.	*	1		0049	50	0.	*	1		0135	96	124.	*	1		0221	142	30.	*
1		0004	5	0.	*	1		0050	51	0.	*	1		0136	97	121.	*	1		0222	143	29.	*
1		0005	6	0.	*	1		0051	52	0.	*	1		0137	98	119.	*	1		0223	144	28.	*
1		0006	7	0.	*	1		0052	53	0.	*	1		0138	99	117.	*	1		0224	145	27.	*
1		0007	8	0.	*	1		0053	54	0.	*	1		0139	100	114.	*	1		0225	146	26.	*
1		0008	9	0.	*	1		0054	55	0.	*	1		0140	101	112.	*	1		0226	147	25.	*
1		0009	10	0.	*	1		0055	56	0.	*	1		0141	102	109.	*	1		0227	148	25.	*
1		0010	11	0.	*	1		0056	57	0.	*	1		0142	103	107.	*	1		0228	149	24.	*
1		0011	12	0.	*	1		0057	58	0.	*	1		0143	104	104.	*	1		0229	150	23.	*
1		0012	13	0.	*	1		0058	59	0.	*	1		0144	105	102.	*	1		0230	151	23.	*
1		0013	14	0.	*	1		0059	60	0.	*	1		0145	106	100.	*	1		0231	152	22.	*
1		0014	15	0.	*	1		0100	61	0.	*	1		0146	107	97.	*	1		0232	153	22.	*
1		0015	16	0.	*	1		0101	62	0.	*	1		0147	108	95.	*	1		0233	154	21.	*
1		0016	17	0.	*	1		0102	63	0.	*	1		0148	109	92.	*	1		0234	155	21.	*
1		0017	18	0.	*	1		0103	64	0.	*	1		0149	110	90.	*	1		0235	156	20.	*
1		0018	19	0.	*	1		0104	65	1.	*	1		0150	111	88.	*	1		0236	157	20.	*
1		0019	20	0.	*	1		0105	66	2.	*	1		0151	112	85.	*	1		0237	158	19.	*
1		0020	21	0.	*	1		0106	67	5.	*	1		0152	113	83.	*	1		0238	159	19.	*
1		0021	22	0.	*	1		0107	68	18.	*	1		0153	114	81.	*	1		0239	160	19.	*
1		0022	23	0.	*	1		0108	69	34.	*	1		0154	115	78.	*	1		0240	161	18.	*
1		0023	24	0.	*	1		0109	70	48.	*	1		0155	116	76.	*	1		0241	162	18.	*
1		0024	25	0.	*	1		0110	71	60.	*	1		0156	117	74.	*	1		0242	163	18.	*
1		0025	26	0.	*	1		0111	72	71.	*	1		0157	118	72.	*	1		0243	164	18.	*
1		0026	27	0.	*	1		0112	73	80.	*	1		0158	119	69.	*	1		0244	165	17.	*
1		0027	28	0.	*	1		0113	74	89.	*	1		0159	120	67.	*	1		0245	166	17.	*
1		0028	29	0.	*	1		0114	75	97.	*	1		0200	121	65.	*	1		0246	167	17.	*
1		0029	30	0.	*	1		0115	76	104.	*	1		0201	122	63.	*	1		0247	168	17.	*
1		0030	31	0.	*	1		0116	77	111.	*	1		0202	123	60.	*	1		0248	169	16.	*
1		0031	32	0.	*	1		0117	78	116.	*	1		0203	124	58.	*	1		0249	170	16.	*
1		0032	33	0.	*	1		0118	79	121.	*	1		0204	125	56.	*	1		0250	171	16.	*
1		0033	34	0.	*	1		0119	80	126.	*	1		0205	126	54.	*	1		0251	172	16.	*
1		0034	35	0.	*	1		0120	81	129.	*	1		0206	127	52.	*	1		0252	173	16.	*
1		0035	36	0.	*	1		0121	82	132.	*	1		0207	128	50.	*	1		0253	174	15.	*
1		0036	37	0.	*	1		0122	83	134.	*	1		0208	129	48.	*	1		0254	175	15.	*
1		0037	38	0.	*	1		0123	84	136.	*	1		0209	130	46.	*	1		0255	176	15.	*
1		0038	39	0.	*	1		0124	85	137.	*	1		0210	131	45.	*	1		0256	177	15.	*
1		0039	40	0.	*	1		0125	86	138.	*	1		0211	132	43.	*	1		0257	178	15.	*
1		0040	41	0.	*	1		0126	87	138.	*	1		0212	133	41.	*	1		0258	179	15.	*
1		0041	42	0.	*	1		0127	88	137.	*	1		0213	134	40.	*	1		0259	180	15.	*
1		0042	43	0.	*	1		0128	89	136.	*	1		0214	135	38.	*	1		0300	181	15.	*
1		0043	44	0.	*	1		0129	90	135.	*	1		0215	136	37.	*						*
1		0044	45	0.	*	1		0130	91	134.	*	1		0216	137	36.	*						*
1		0045	46	0.	*	1		0131	92	132.	*	1		0217	138	34.	*						*

PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
(CFS)	(HR)	(CFS)	6-HR	24-HR	72-HR	3.00-HR
138.	1.43	40.	40.	40.	40.	40.
		(INCHES)	.345	.345	.345	.345
		(AC-FT)	10.	10.	10.	10.

CUMULATIVE AREA = .54 SQ MI

COMPUTED MUSKINGUM-CUNGE PARAMETERS

ELEMENT	ALPHA	COMPUTATION TIME STEP				PEAK (CFS)	TIME TO PEAK (MIN)	VOLUME (IN)	MAXIMUM CELERITY (FPS)
		M	DT	DX					
			(MIN)	(FT)					
MAIN	1.02	1.33	1.00	101.14	22.63	101.00	.06	2.49	

INTERPOLATED TO SPECIFIED COMPUTATION INTERVAL

MAIN	1.02	1.33	1.00		22.63	101.00	.06	
------	------	------	------	--	-------	--------	-----	--

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1883E+01 EXCESS= .0000E+00 OUTFLOW= .1699E+01 BASIN STORAGE= .1979E+00 PERCENT ERROR= -.7

HYDROGRAPH AT STATION RP4

PLAN 1, post.out
RATIO = .61

DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	
1		0000	1	0.	*	1		0046	47	0.	*	1		0132	93	19.	*	1		0218	139	10.	*	
1		0001	2	0.	*	1		0047	48	0.	*	1		0133	94	20.	*	1		0219	140	10.	*	
1		0002	3	0.	*	1		0048	49	0.	*	1		0134	95	21.	*	1		0220	141	10.	*	
1		0003	4	0.	*	1		0049	50	0.	*	1		0135	96	21.	*	1		0221	142	9.	*	
1		0004	5	0.	*	1		0050	51	0.	*	1		0136	97	22.	*	1		0222	143	9.	*	
1		0005	6	0.	*	1		0051	52	0.	*	1		0137	98	22.	*	1		0223	144	9.	*	
1		0006	7	0.	*	1		0052	53	0.	*	1		0138	99	22.	*	1		0224	145	9.	*	
1		0007	8	0.	*	1		0053	54	0.	*	1		0139	100	22.	*	1		0225	146	8.	*	
1		0008	9	0.	*	1		0054	55	0.	*	1		0140	101	23.	*	1		0226	147	8.	*	
1		0009	10	0.	*	1		0055	56	0.	*	1		0141	102	23.	*	1		0227	148	8.	*	
1		0010	11	0.	*	1		0056	57	0.	*	1		0142	103	23.	*	1		0228	149	8.	*	
1		0011	12	0.	*	1		0057	58	0.	*	1		0143	104	23.	*	1		0229	150	7.	*	
1		0012	13	0.	*	1		0058	59	0.	*	1		0144	105	22.	*	1		0230	151	7.	*	
1		0013	14	0.	*	1		0059	60	0.	*	1		0145	106	22.	*	1		0231	152	7.	*	
1		0014	15	0.	*	1		0100	61	0.	*	1		0146	107	22.	*	1		0232	153	7.	*	
1		0015	16	0.	*	1		0101	62	0.	*	1		0147	108	22.	*	1		0233	154	7.	*	
1		0016	17	0.	*	1		0102	63	0.	*	1		0148	109	22.	*	1		0234	155	7.	*	
1		0017	18	0.	*	1		0103	64	0.	*	1		0149	110	22.	*	1		0235	156	6.	*	
1		0018	19	0.	*	1		0104	65	0.	*	1		0150	111	21.	*	1		0236	157	6.	*	
1		0019	20	0.	*	1		0105	66	0.	*	1		0151	112	21.	*	1		0237	158	6.	*	
1		0020	21	0.	*	1		0106	67	0.	*	1		0152	113	21.	*	1		0238	159	6.	*	
1		0021	22	0.	*	1		0107	68	0.	*	1		0153	114	21.	*	1		0239	160	6.	*	
1		0022	23	0.	*	1		0108	69	0.	*	1		0154	115	20.	*	1		0240	161	6.	*	
1		0023	24	0.	*	1		0109	70	0.	*	1		0155	116	20.	*	1		0241	162	6.	*	
1		0024	25	0.	*	1		0110	71	0.	*	1		0156	117	20.	*	1		0242	163	6.	*	
1		0025	26	0.	*	1		0111	72	0.	*	1		0157	118	19.	*	1		0243	164	5.	*	
1		0026	27	0.	*	1		0112	73	0.	*	1		0158	119	19.	*	1		0244	165	5.	*	
1		0027	28	0.	*	1		0113	74	0.	*	1		0159	120	18.	*	1		0245	166	5.	*	
1		0028	29	0.	*	1		0114	75	0.	*	1		0200	121	18.	*	1		0246	167	5.	*	
1		0029	30	0.	*	1		0115	76	0.	*	1		0201	122	18.	*	1		0247	168	5.	*	
1		0030	31	0.	*	1		0116	77	0.	*	1		0202	123	17.	*	1		0248	169	5.	*	
1		0031	32	0.	*	1		0117	78	0.	*	1		0203	124	17.	*	1		0249	170	5.	*	
1		0032	33	0.	*	1		0118	79	0.	*	1		0204	125	16.	*	1		0250	171	5.	*	
1		0033	34	0.	*	1		0119	80	0.	*	1		0205	126	16.	*	1		0251	172	5.	*	
1		0034	35	0.	*	1		0120	81	0.	*	1		0206	127	15.	*	1		0252	173	5.	*	
1		0035	36	0.	*	1		0121	82	0.	*	1		0207	128	15.	*	1		0253	174	5.	*	
1		0036	37	0.	*	1		0122	83	0.	*	1		0208	129	15.	*	1		0254	175	5.	*	
1		0037	38	0.	*	1		0123	84	0.	*	1		0209	130	14.	*	1		0255	176	5.	*	
1		0038	39	0.	*	1		0124	85	5.	*	1		0210	131	14.	*	1		0256	177	5.	*	
1		0039	40	0.	*	1		0125	86	9.	*	1		0211	132	13.	*	1		0257	178	5.	*	
1		0040	41	0.	*	1		0126	87	12.	*	1		0212	133	13.	*	1		0258	179	5.	*	
1		0041	42	0.	*	1		0127	88	14.	*	1		0213	134	12.	*	1		0259	180	5.	*	
1		0042	43	0.	*	1		0128	89	15.	*	1		0214	135	12.	*	1		0300	181	5.	*	
1		0043	44	0.	*	1		0129	90	16.	*	1		0215	136	12.	*							
1		0044	45	0.	*	1		0130	91	18.	*	1		0216	137	11.	*							
1		0045	46	0.	*	1		0131	92	19.	*	1		0217	138	11.	*							

PEAK FLOW	TIME	MAXIMUM AVERAGE FLOW			
		6-HR	24-HR	72-HR	3.00-HR
+ (CFS)	(HR)				
+ 23.	1.68	7.	7.	7.	7.
		.059	.059	.059	.059
		2.	2.	2.	2.
		(INCHES)			
		(AC-FT)			
		CUMULATIVE AREA =	.54 SQ MI		

*** **

* *
57 KK * BPS *
* *

BPS

SUBBASIN RUNOFF DATA

59 BA SUBBASIN CHARACTERISTICS
TAREA .12 SUBBASIN AREA

PRECIPITATION DATA

23 PB STORM 2.13 BASIN TOTAL PRECIPITATION

24 PI	INCREMENTAL PRECIPITATION PATTERN									
	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00

post.out														
1	0040	41	.09	.07	.02	0.	*	1	0211	132	.00	.00	.00	6.
1	0041	42	.06	.05	.01	0.	*	1	0212	133	.00	.00	.00	6.
1	0042	43	.06	.05	.02	1.	*	1	0213	134	.00	.00	.00	6.
1	0043	44	.06	.04	.02	1.	*	1	0214	135	.00	.00	.00	6.
1	0044	45	.06	.04	.02	1.	*	1	0215	136	.00	.00	.00	6.
1	0045	46	.06	.04	.02	2.	*	1	0216	137	.00	.00	.00	6.
1	0046	47	.04	.03	.01	3.	*	1	0217	138	.00	.00	.00	5.
1	0047	48	.04	.03	.01	3.	*	1	0218	139	.00	.00	.00	5.
1	0048	49	.04	.02	.01	4.	*	1	0219	140	.00	.00	.00	5.
1	0049	50	.04	.02	.01	5.	*	1	0220	141	.00	.00	.00	5.
1	0050	51	.04	.02	.02	7.	*	1	0221	142	.00	.00	.00	5.
1	0051	52	.02	.01	.01	8.	*	1	0222	143	.00	.00	.00	5.
1	0052	53	.02	.01	.01	9.	*	1	0223	144	.00	.00	.00	5.
1	0053	54	.02	.01	.01	11.	*	1	0224	145	.00	.00	.00	5.
1	0054	55	.02	.01	.01	13.	*	1	0225	146	.00	.00	.00	5.
1	0055	56	.02	.01	.01	15.	*	1	0226	147	.00	.00	.00	4.
1	0056	57	.02	.01	.01	17.	*	1	0227	148	.00	.00	.00	4.
1	0057	58	.02	.01	.01	19.	*	1	0228	149	.00	.00	.00	4.
1	0058	59	.02	.01	.01	21.	*	1	0229	150	.00	.00	.00	4.
1	0059	60	.02	.01	.01	23.	*	1	0230	151	.00	.00	.00	4.
1	0100	61	.02	.01	.01	24.	*	1	0231	152	.00	.00	.00	4.
1	0101	62	.01	.01	.01	26.	*	1	0232	153	.00	.00	.00	4.
1	0102	63	.01	.01	.01	28.	*	1	0233	154	.00	.00	.00	4.
1	0103	64	.01	.01	.01	30.	*	1	0234	155	.00	.00	.00	4.
1	0104	65	.01	.01	.01	31.	*	1	0235	156	.00	.00	.00	4.
1	0105	66	.01	.01	.01	33.	*	1	0236	157	.00	.00	.00	4.
1	0106	67	.01	.01	.00	34.	*	1	0237	158	.00	.00	.00	4.
1	0107	68	.01	.01	.00	35.	*	1	0238	159	.00	.00	.00	4.
1	0108	69	.01	.01	.00	36.	*	1	0239	160	.00	.00	.00	4.
1	0109	70	.01	.01	.00	37.	*	1	0240	161	.00	.00	.00	4.
1	0110	71	.01	.01	.00	37.	*	1	0241	162	.00	.00	.00	4.
1	0111	72	.01	.00	.00	38.	*	1	0242	163	.00	.00	.00	4.
1	0112	73	.01	.00	.00	38.	*	1	0243	164	.00	.00	.00	4.
1	0113	74	.01	.00	.00	39.	*	1	0244	165	.00	.00	.00	4.
1	0114	75	.01	.00	.00	39.	*	1	0245	166	.00	.00	.00	4.
1	0115	76	.01	.00	.00	39.	*	1	0246	167	.00	.00	.00	4.
1	0116	77	.01	.00	.00	38.	*	1	0247	168	.00	.00	.00	4.
1	0117	78	.01	.00	.00	38.	*	1	0248	169	.00	.00	.00	4.
1	0118	79	.01	.00	.00	38.	*	1	0249	170	.00	.00	.00	4.
1	0119	80	.01	.00	.00	37.	*	1	0250	171	.00	.00	.00	4.
1	0120	81	.01	.00	.00	37.	*	1	0251	172	.00	.00	.00	4.
1	0121	82	.01	.00	.00	36.	*	1	0252	173	.00	.00	.00	3.
1	0122	83	.01	.00	.00	35.	*	1	0253	174	.00	.00	.00	3.
1	0123	84	.01	.00	.00	35.	*	1	0254	175	.00	.00	.00	3.
1	0124	85	.01	.00	.00	34.	*	1	0255	176	.00	.00	.00	3.
1	0125	86	.01	.00	.00	33.	*	1	0256	177	.00	.00	.00	3.
1	0126	87	.01	.00	.00	32.	*	1	0257	178	.00	.00	.00	3.
1	0127	88	.01	.00	.00	32.	*	1	0258	179	.00	.00	.00	3.
1	0128	89	.01	.00	.00	31.	*	1	0259	180	.00	.00	.00	3.
1	0129	90	.01	.00	.00	30.	*	1	0300	181	.00	.00	.00	3.
1	0130	91	.01	.00	.00	29.	*							

TOTAL RAINFALL = 2.13, TOTAL LOSS = 1.65, TOTAL EXCESS = .48

PEAK FLOW	TIME	MAXIMUM AVERAGE FLOW			
(CFS)	(HR)	6-HR	24-HR	72-HR	3.00-HR
39.	1.23	12.	12.	12.	12.
	(INCHES)	.459	.459	.459	.459
	(AC-FT)	3.	3.	3.	3.
CUMULATIVE AREA =		.12 SQ MI			

HYDROGRAPH AT STATION BP5
PLAN 1, RATIO = 1.00

DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	*	DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
1	0000	1	.00	.00	.00	0.	0.	*	1	0131	92	.00	.00	.00	29.	
1	0001	2	.00	.00	.00	0.	0.	*	1	0132	93	.00	.00	.00	28.	
1	0002	3	.00	.00	.00	0.	0.	*	1	0133	94	.00	.00	.00	27.	
1	0003	4	.00	.00	.00	0.	0.	*	1	0134	95	.00	.00	.00	26.	
1	0004	5	.00	.00	.00	0.	0.	*	1	0135	96	.00	.00	.00	26.	
1	0005	6	.00	.00	.00	0.	0.	*	1	0136	97	.00	.00	.00	25.	
1	0006	7	.00	.00	.00	0.	0.	*	1	0137	98	.00	.00	.00	24.	
1	0007	8	.00	.00	.00	0.	0.	*	1	0138	99	.00	.00	.00	24.	
1	0008	9	.00	.00	.00	0.	0.	*	1	0139	100	.00	.00	.00	23.	
1	0009	10	.00	.00	.00	0.	0.	*	1	0140	101	.00	.00	.00	22.	
1	0010	11	.00	.00	.00	0.	0.	*	1	0141	102	.00	.00	.00	22.	
1	0011	12	.00	.00	.00	0.	0.	*	1	0142	103	.00	.00	.00	21.	
1	0012	13	.00	.00	.00	0.	0.	*	1	0143	104	.00	.00	.00	20.	
1	0013	14	.00	.00	.00	0.	0.	*	1	0144	105	.00	.00	.00	19.	

														post.out			
1	0014	15	.00	.00	.00	0.	*	1	0145	106	.00	.00	.00	19.			
1	0015	16	.00	.00	.00	0.	*	1	0146	107	.00	.00	.00	18.			
1	0016	17	.00	.00	.00	0.	*	1	0147	108	.00	.00	.00	17.			
1	0017	18	.00	.00	.00	0.	*	1	0148	109	.00	.00	.00	17.			
1	0018	19	.00	.00	.00	0.	*	1	0149	110	.00	.00	.00	16.			
1	0019	20	.00	.00	.00	0.	*	1	0150	111	.00	.00	.00	15.			
1	0020	21	.00	.00	.00	0.	*	1	0151	112	.00	.00	.00	15.			
1	0021	22	.00	.00	.00	0.	*	1	0152	113	.00	.00	.00	14.			
1	0022	23	.00	.00	.00	0.	*	1	0153	114	.00	.00	.00	14.			
1	0023	24	.00	.00	.00	0.	*	1	0154	115	.00	.00	.00	13.			
1	0024	25	.00	.00	.00	0.	*	1	0155	116	.00	.00	.00	12.			
1	0025	26	.00	.00	.00	0.	*	1	0156	117	.00	.00	.00	12.			
1	0026	27	.00	.00	.00	0.	*	1	0157	118	.00	.00	.00	11.			
1	0027	28	.00	.00	.00	0.	*	1	0158	119	.00	.00	.00	11.			
1	0028	29	.00	.00	.00	0.	*	1	0159	120	.00	.00	.00	10.			
1	0029	30	.00	.00	.00	0.	*	1	0200	121	.00	.00	.00	10.			
1	0030	31	.00	.00	.00	0.	*	1	0201	122	.00	.00	.00	10.			
1	0031	32	.11	.11	.00	0.	*	1	0202	123	.00	.00	.00	9.			
1	0032	33	.11	.11	.00	0.	*	1	0203	124	.00	.00	.00	9.			
1	0033	34	.11	.11	.00	0.	*	1	0204	125	.00	.00	.00	8.			
1	0034	35	.11	.11	.00	0.	*	1	0205	126	.00	.00	.00	8.			
1	0035	36	.11	.11	.00	0.	*	1	0206	127	.00	.00	.00	8.			
1	0036	37	.09	.09	.00	0.	*	1	0207	128	.00	.00	.00	7.			
1	0037	38	.09	.08	.01	0.	*	1	0208	129	.00	.00	.00	7.			
1	0038	39	.09	.08	.01	0.	*	1	0209	130	.00	.00	.00	7.			
1	0039	40	.09	.07	.01	0.	*	1	0210	131	.00	.00	.00	7.			
1	0040	41	.09	.07	.02	0.	*	1	0211	132	.00	.00	.00	6.			
1	0041	42	.06	.05	.01	0.	*	1	0212	133	.00	.00	.00	6.			
1	0042	43	.06	.05	.02	1.	*	1	0213	134	.00	.00	.00	6.			
1	0043	44	.06	.04	.02	1.	*	1	0214	135	.00	.00	.00	6.			
1	0044	45	.06	.04	.02	1.	*	1	0215	136	.00	.00	.00	6.			
1	0045	46	.06	.04	.02	2.	*	1	0216	137	.00	.00	.00	6.			
1	0046	47	.04	.03	.01	3.	*	1	0217	138	.00	.00	.00	5.			
1	0047	48	.04	.03	.01	3.	*	1	0218	139	.00	.00	.00	5.			
1	0048	49	.04	.02	.01	4.	*	1	0219	140	.00	.00	.00	5.			
1	0049	50	.04	.02	.01	5.	*	1	0220	141	.00	.00	.00	5.			
1	0050	51	.04	.02	.02	7.	*	1	0221	142	.00	.00	.00	5.			
1	0051	52	.02	.01	.01	8.	*	1	0222	143	.00	.00	.00	5.			
1	0052	53	.02	.01	.01	9.	*	1	0223	144	.00	.00	.00	5.			
1	0053	54	.02	.01	.01	11.	*	1	0224	145	.00	.00	.00	5.			
1	0054	55	.02	.01	.01	13.	*	1	0225	146	.00	.00	.00	5.			
1	0055	56	.02	.01	.01	15.	*	1	0226	147	.00	.00	.00	4.			
1	0056	57	.02	.01	.01	17.	*	1	0227	148	.00	.00	.00	4.			
1	0057	58	.02	.01	.01	19.	*	1	0228	149	.00	.00	.00	4.			
1	0058	59	.02	.01	.01	21.	*	1	0229	150	.00	.00	.00	4.			
1	0059	60	.02	.01	.01	23.	*	1	0230	151	.00	.00	.00	4.			
1	0100	61	.02	.01	.01	24.	*	1	0231	152	.00	.00	.00	4.			
1	0101	62	.01	.01	.01	26.	*	1	0232	153	.00	.00	.00	4.			
1	0102	63	.01	.01	.01	28.	*	1	0233	154	.00	.00	.00	4.			
1	0103	64	.01	.01	.01	30.	*	1	0234	155	.00	.00	.00	4.			
1	0104	65	.01	.01	.01	31.	*	1	0235	156	.00	.00	.00	4.			
1	0105	66	.01	.01	.01	33.	*	1	0236	157	.00	.00	.00	4.			
1	0106	67	.01	.01	.00	34.	*	1	0237	158	.00	.00	.00	4.			
1	0107	68	.01	.01	.00	35.	*	1	0238	159	.00	.00	.00	4.			
1	0108	69	.01	.01	.00	36.	*	1	0239	160	.00	.00	.00	4.			
1	0109	70	.01	.01	.00	37.	*	1	0240	161	.00	.00	.00	4.			
1	0110	71	.01	.01	.00	37.	*	1	0241	162	.00	.00	.00	4.			
1	0111	72	.01	.00	.00	38.	*	1	0242	163	.00	.00	.00	4.			
1	0112	73	.01	.00	.00	38.	*	1	0243	164	.00	.00	.00	4.			
1	0113	74	.01	.00	.00	39.	*	1	0244	165	.00	.00	.00	4.			
1	0114	75	.01	.00	.00	39.	*	1	0245	166	.00	.00	.00	4.			
1	0115	76	.01	.00	.00	39.	*	1	0246	167	.00	.00	.00	4.			
1	0116	77	.01	.00	.00	38.	*	1	0247	168	.00	.00	.00	4.			
1	0117	78	.01	.00	.00	38.	*	1	0248	169	.00	.00	.00	4.			
1	0118	79	.01	.00	.00	38.	*	1	0249	170	.00	.00	.00	4.			
1	0119	80	.01	.00	.00	37.	*	1	0250	171	.00	.00	.00	4.			
1	0120	81	.01	.00	.00	37.	*	1	0251	172	.00	.00	.00	4.			
1	0121	82	.01	.00	.00	36.	*	1	0252	173	.00	.00	.00	3.			
1	0122	83	.01	.00	.00	35.	*	1	0253	174	.00	.00	.00	3.			
1	0123	84	.01	.00	.00	35.	*	1	0254	175	.00	.00	.00	3.			
1	0124	85	.01	.00	.00	34.	*	1	0255	176	.00	.00	.00	3.			
1	0125	86	.01	.00	.00	33.	*	1	0256	177	.00	.00	.00	3.			
1	0126	87	.01	.00	.00	32.	*	1	0257	178	.00	.00	.00	3.			
1	0127	88	.01	.00	.00	32.	*	1	0258	179	.00	.00	.00	3.			
1	0128	89	.01	.00	.00	31.	*	1	0259	180	.00	.00	.00	3.			
1	0129	90	.01	.00	.00	30.	*	1	0300	181	.00	.00	.00	3.			
1	0130	91	.01	.00	.00	29.	*										

TOTAL RAINFALL = 2.13, TOTAL LOSS = 1.65, TOTAL EXCESS = .48

+ (CFS)	TIME (HR)	MAXIMUM AVERAGE FLOW			
		6-HR	24-HR	72-HR	3.00-HR
+ 39.	1.23	12.	12.	12.	12.
	(INCHES)	.459	.459	.459	.459
	(AC-FT)	3.	3.	3.	3.

CUMULATIVE AREA = .12 SQ MI post.out

HYDROGRAPH AT STATION BP5
PLAN 1, RATIO = .61

DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	*	DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
1	0000	1	.00	.00	.00	0.	*	1	0131	92	.00	.00	.00	7.		
1	0001	2	.00	.00	.00	0.	*	1	0132	93	.00	.00	.00	7.		
1	0002	3	.00	.00	.00	0.	*	1	0133	94	.00	.00	.00	7.		
1	0003	4	.00	.00	.00	0.	*	1	0134	95	.00	.00	.00	7.		
1	0004	5	.00	.00	.00	0.	*	1	0135	96	.00	.00	.00	7.		
1	0005	6	.00	.00	.00	0.	*	1	0136	97	.00	.00	.00	7.		
1	0006	7	.00	.00	.00	0.	*	1	0137	98	.00	.00	.00	7.		
1	0007	8	.00	.00	.00	0.	*	1	0138	99	.00	.00	.00	7.		
1	0008	9	.00	.00	.00	0.	*	1	0139	100	.00	.00	.00	6.		
1	0009	10	.00	.00	.00	0.	*	1	0140	101	.00	.00	.00	6.		
1	0010	11	.00	.00	.00	0.	*	1	0141	102	.00	.00	.00	6.		
1	0011	12	.00	.00	.00	0.	*	1	0142	103	.00	.00	.00	6.		
1	0012	13	.00	.00	.00	0.	*	1	0143	104	.00	.00	.00	6.		
1	0013	14	.00	.00	.00	0.	*	1	0144	105	.00	.00	.00	6.		
1	0014	15	.00	.00	.00	0.	*	1	0145	106	.00	.00	.00	5.		
1	0015	16	.00	.00	.00	0.	*	1	0146	107	.00	.00	.00	5.		
1	0016	17	.00	.00	.00	0.	*	1	0147	108	.00	.00	.00	5.		
1	0017	18	.00	.00	.00	0.	*	1	0148	109	.00	.00	.00	5.		
1	0018	19	.00	.00	.00	0.	*	1	0149	110	.00	.00	.00	5.		
1	0019	20	.00	.00	.00	0.	*	1	0150	111	.00	.00	.00	5.		
1	0020	21	.00	.00	.00	0.	*	1	0151	112	.00	.00	.00	4.		
1	0021	22	.00	.00	.00	0.	*	1	0152	113	.00	.00	.00	4.		
1	0022	23	.00	.00	.00	0.	*	1	0153	114	.00	.00	.00	4.		
1	0023	24	.00	.00	.00	0.	*	1	0154	115	.00	.00	.00	4.		
1	0024	25	.00	.00	.00	0.	*	1	0155	116	.00	.00	.00	4.		
1	0025	26	.00	.00	.00	0.	*	1	0156	117	.00	.00	.00	4.		
1	0026	27	.00	.00	.00	0.	*	1	0157	118	.00	.00	.00	3.		
1	0027	28	.00	.00	.00	0.	*	1	0158	119	.00	.00	.00	3.		
1	0028	29	.00	.00	.00	0.	*	1	0159	120	.00	.00	.00	3.		
1	0029	30	.00	.00	.00	0.	*	1	0200	121	.00	.00	.00	3.		
1	0030	31	.00	.00	.00	0.	*	1	0201	122	.00	.00	.00	3.		
1	0031	32	.07	.07	.00	0.	*	1	0202	123	.00	.00	.00	3.		
1	0032	33	.07	.07	.00	0.	*	1	0203	124	.00	.00	.00	3.		
1	0033	34	.07	.07	.00	0.	*	1	0204	125	.00	.00	.00	3.		
1	0034	35	.07	.07	.00	0.	*	1	0205	126	.00	.00	.00	2.		
1	0035	36	.07	.07	.00	0.	*	1	0206	127	.00	.00	.00	2.		
1	0036	37	.05	.05	.00	0.	*	1	0207	128	.00	.00	.00	2.		
1	0037	38	.05	.05	.00	0.	*	1	0208	129	.00	.00	.00	2.		
1	0038	39	.05	.05	.00	0.	*	1	0209	130	.00	.00	.00	2.		
1	0039	40	.05	.05	.00	0.	*	1	0210	131	.00	.00	.00	2.		
1	0040	41	.05	.05	.00	0.	*	1	0211	132	.00	.00	.00	2.		
1	0041	42	.04	.04	.00	0.	*	1	0212	133	.00	.00	.00	2.		
1	0042	43	.04	.04	.00	0.	*	1	0213	134	.00	.00	.00	2.		
1	0043	44	.04	.04	.00	0.	*	1	0214	135	.00	.00	.00	2.		
1	0044	45	.04	.03	.00	0.	*	1	0215	136	.00	.00	.00	2.		
1	0045	46	.04	.03	.00	0.	*	1	0216	137	.00	.00	.00	2.		
1	0046	47	.02	.02	.00	0.	*	1	0217	138	.00	.00	.00	2.		
1	0047	48	.02	.02	.00	0.	*	1	0218	139	.00	.00	.00	2.		
1	0048	49	.02	.02	.00	0.	*	1	0219	140	.00	.00	.00	2.		
1	0049	50	.02	.02	.00	0.	*	1	0220	141	.00	.00	.00	2.		
1	0050	51	.02	.02	.00	0.	*	1	0221	142	.00	.00	.00	2.		
1	0051	52	.01	.01	.00	1.	*	1	0222	143	.00	.00	.00	2.		
1	0052	53	.01	.01	.00	1.	*	1	0223	144	.00	.00	.00	2.		
1	0053	54	.01	.01	.00	1.	*	1	0224	145	.00	.00	.00	2.		
1	0054	55	.01	.01	.00	1.	*	1	0225	146	.00	.00	.00	1.		
1	0055	56	.01	.01	.00	1.	*	1	0226	147	.00	.00	.00	1.		
1	0056	57	.01	.01	.00	2.	*	1	0227	148	.00	.00	.00	1.		
1	0057	58	.01	.01	.00	2.	*	1	0228	149	.00	.00	.00	1.		
1	0058	59	.01	.01	.00	2.	*	1	0229	150	.00	.00	.00	1.		
1	0059	60	.01	.01	.00	3.	*	1	0230	151	.00	.00	.00	1.		
1	0100	61	.01	.01	.00	3.	*	1	0231	152	.00	.00	.00	1.		
1	0101	62	.01	.01	.00	3.	*	1	0232	153	.00	.00	.00	1.		
1	0102	63	.01	.01	.00	4.	*	1	0233	154	.00	.00	.00	1.		
1	0103	64	.01	.01	.00	4.	*	1	0234	155	.00	.00	.00	1.		
1	0104	65	.01	.01	.00	5.	*	1	0235	156	.00	.00	.00	1.		
1	0105	66	.01	.01	.00	5.	*	1	0236	157	.00	.00	.00	1.		
1	0106	67	.01	.00	.00	5.	*	1	0237	158	.00	.00	.00	1.		
1	0107	68	.01	.00	.00	6.	*	1	0238	159	.00	.00	.00	1.		
1	0108	69	.01	.00	.00	6.	*	1	0239	160	.00	.00	.00	1.		
1	0109	70	.01	.00	.00	6.	*	1	0240	161	.00	.00	.00	1.		
1	0110	71	.01	.00	.00	7.	*	1	0241	162	.00	.00	.00	1.		
1	0111	72	.00	.00	.00	7.	*	1	0242	163	.00	.00	.00	1.		
1	0112	73	.00	.00	.00	7.	*	1	0243	164	.00	.00	.00	1.		
1	0113	74	.00	.00	.00	7.	*	1	0244	165	.00	.00	.00	1.		
1	0114	75	.00	.00	.00	8.	*	1	0245	166	.00	.00	.00	1.		
1	0115	76	.00	.00	.00	8.	*	1	0246	167	.00	.00	.00	1.		
1	0116	77	.00	.00	.00	8.	*	1	0247	168	.00	.00	.00	1.		
1	0117	78	.00	.00	.00	8.	*	1	0248	169	.00	.00	.00	1.		

post.out														
1	0118	79	.00	.00	.00	8.	*	1	0249	170	.00	.00	.00	1.
1	0119	80	.00	.00	.00	8.	*	1	0250	171	.00	.00	.00	1.
1	0120	81	.00	.00	.00	8.	*	1	0251	172	.00	.00	.00	1.
1	0121	82	.00	.00	.00	8.	*	1	0252	173	.00	.00	.00	1.
1	0122	83	.00	.00	.00	8.	*	1	0253	174	.00	.00	.00	1.
1	0123	84	.00	.00	.00	8.	*	1	0254	175	.00	.00	.00	1.
1	0124	85	.00	.00	.00	8.	*	1	0255	176	.00	.00	.00	1.
1	0125	86	.00	.00	.00	8.	*	1	0256	177	.00	.00	.00	1.
1	0126	87	.00	.00	.00	8.	*	1	0257	178	.00	.00	.00	1.
1	0127	88	.00	.00	.00	8.	*	1	0258	179	.00	.00	.00	1.
1	0128	89	.00	.00	.00	8.	*	1	0259	180	.00	.00	.00	1.
1	0129	90	.00	.00	.00	8.	*	1	0300	181	.00	.00	.00	1.
1	0130	91	.00	.00	.00	8.	*							

TOTAL RAINFALL = 1.29, TOTAL LOSS = 1.18, TOTAL EXCESS = .11

PEAK FLOW	TIME	MAXIMUM AVERAGE FLOW			
(CFS)	(HR)	6-HR	24-HR	72-HR	3.00-HR
+	8.	3.	3.	3.	3.
	1.35	.106	.106	.106	.106
		(INCHES)			
		(AC-FT)	1.	1.	1.
CUMULATIVE AREA =		.12 SQ MI			

*** **

 * *
 62 KK * RPS *
 * *

Route BP5 in channel to Culvert BP15

HYDROGRAPH ROUTING DATA

64 RD MUSKINGUM-CUNGE CHANNEL ROUTING
 L 4372. CHANNEL LENGTH
 S .0070 SLOPE
 N .040 CHANNEL ROUGHNESS COEFFICIENT
 CA .00 CONTRIBUTING AREA
 SHAPE TRAP CHANNEL SHAPE
 WD .00 BOTTOM WIDTH OR DIAMETER
 Z 7.00 SIDE SLOPE

 COMPUTED MUSKINGUM-CUNGE PARAMETERS

ELEMENT	ALPHA	COMPUTATION TIME STEP			PEAK (CFS)	TIME TO PEAK (MIN)	VOLUME (IN)	MAXIMUM CELERITY (FPS)
		M	DT (MIN)	DX (FT)				
MAIN	1.02	1.33	1.00	115.05	38.06	96.00	2.84	

INTERPOLATED TO SPECIFIED COMPUTATION INTERVAL

MAIN	1.02	1.33	1.00	38.06	96.00	.42
------	------	------	------	-------	-------	-----

CONTINUITY SUMMARY (AC-FT) - INFLOW= .2855E+01 EXCESS= .0000E+00 OUTFLOW= .2611E+01 BASIN STORAGE= .2717E+00 PERCENT ERROR= -1.0

HYDROGRAPH AT STATION RPS
 PLAN 1, RATIO = 1.00

DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	
1	0000	1	0.	*	1	0046	47	0.	*	1	0132	93	37.	*	1	0218	139	15.						
1	0001	2	0.	*	1	0047	48	0.	*	1	0133	94	37.	*	1	0219	140	15.						
1	0002	3	0.	*	1	0048	49	0.	*	1	0134	95	38.	*	1	0220	141	14.						
1	0003	4	0.	*	1	0049	50	0.	*	1	0135	96	38.	*	1	0221	142	14.						
1	0004	5	0.	*	1	0050	51	0.	*	1	0136	97	38.	*	1	0222	143	13.						
1	0005	6	0.	*	1	0051	52	0.	*	1	0137	98	38.	*	1	0223	144	13.						
1	0006	7	0.	*	1	0052	53	0.	*	1	0138	99	38.	*	1	0224	145	12.						
1	0007	8	0.	*	1	0053	54	0.	*	1	0139	100	38.	*	1	0225	146	12.						
1	0008	9	0.	*	1	0054	55	0.	*	1	0140	101	37.	*	1	0226	147	12.						

post.out																		
1	0009	10	0.	*	1	0055	56	0.	*	1	0141	102	37.	*	1	0227	148	11.
1	0010	11	0.	*	1	0056	57	0.	*	1	0142	103	36.	*	1	0228	149	11.
1	0011	12	0.	*	1	0057	58	0.	*	1	0143	104	36.	*	1	0229	150	10.
1	0012	13	0.	*	1	0058	59	0.	*	1	0144	105	35.	*	1	0230	151	10.
1	0013	14	0.	*	1	0059	60	0.	*	1	0145	106	35.	*	1	0231	152	10.
1	0014	15	0.	*	1	0100	61	0.	*	1	0146	107	34.	*	1	0232	153	9.
1	0015	16	0.	*	1	0101	62	0.	*	1	0147	108	33.	*	1	0233	154	9.
1	0016	17	0.	*	1	0102	63	0.	*	1	0148	109	33.	*	1	0234	155	9.
1	0017	18	0.	*	1	0103	64	0.	*	1	0149	110	32.	*	1	0235	156	9.
1	0018	19	0.	*	1	0104	65	0.	*	1	0150	111	31.	*	1	0236	157	8.
1	0019	20	0.	*	1	0105	66	0.	*	1	0151	112	31.	*	1	0237	158	8.
1	0020	21	0.	*	1	0106	67	0.	*	1	0152	113	30.	*	1	0238	159	8.
1	0021	22	0.	*	1	0107	68	0.	*	1	0153	114	29.	*	1	0239	160	8.
1	0022	23	0.	*	1	0108	69	0.	*	1	0154	115	29.	*	1	0240	161	7.
1	0023	24	0.	*	1	0109	70	0.	*	1	0155	116	28.	*	1	0241	162	7.
1	0024	25	0.	*	1	0110	71	0.	*	1	0156	117	28.	*	1	0242	163	7.
1	0025	26	0.	*	1	0111	72	0.	*	1	0157	118	27.	*	1	0243	164	7.
1	0026	27	0.	*	1	0112	73	0.	*	1	0158	119	26.	*	1	0244	165	7.
1	0027	28	0.	*	1	0113	74	0.	*	1	0159	120	26.	*	1	0245	166	6.
1	0028	29	0.	*	1	0114	75	0.	*	1	0200	121	25.	*	1	0246	167	6.
1	0029	30	0.	*	1	0115	76	0.	*	1	0201	122	24.	*	1	0247	168	6.
1	0030	31	0.	*	1	0116	77	0.	*	1	0202	123	24.	*	1	0248	169	6.
1	0031	32	0.	*	1	0117	78	0.	*	1	0203	124	23.	*	1	0249	170	6.
1	0032	33	0.	*	1	0118	79	0.	*	1	0204	125	23.	*	1	0250	171	6.
1	0033	34	0.	*	1	0119	80	0.	*	1	0205	126	22.	*	1	0251	172	6.
1	0034	35	0.	*	1	0120	81	0.	*	1	0206	127	21.	*	1	0252	173	5.
1	0035	36	0.	*	1	0121	82	0.	*	1	0207	128	21.	*	1	0253	174	5.
1	0036	37	0.	*	1	0122	83	0.	*	1	0208	129	20.	*	1	0254	175	5.
1	0037	38	0.	*	1	0123	84	2.	*	1	0209	130	20.	*	1	0255	176	5.
1	0038	39	0.	*	1	0124	85	15.	*	1	0210	131	19.	*	1	0256	177	5.
1	0039	40	0.	*	1	0125	86	24.	*	1	0211	132	19.	*	1	0257	178	5.
1	0040	41	0.	*	1	0126	87	28.	*	1	0212	133	18.	*	1	0258	179	5.
1	0041	42	0.	*	1	0127	88	30.	*	1	0213	134	18.	*	1	0259	180	5.
1	0042	43	0.	*	1	0128	89	32.	*	1	0214	135	17.	*	1	0300	181	5.
1	0043	44	0.	*	1	0129	90	34.	*	1	0215	136	17.	*				
1	0044	45	0.	*	1	0130	91	35.	*	1	0216	137	16.	*				
1	0045	46	0.	*	1	0131	92	36.	*	1	0217	138	16.	*				

PEAK FLOW	TIME	MAXIMUM AVERAGE FLOW			
(CFS)	(HR)	6-HR	24-HR	72-HR	3.00-HR
38.	1.60	11.	11.	11.	11.
		(INCHES)	.420	.420	.420
		(AC-FT)	3.	3.	3.

CUMULATIVE AREA = .12 SQ MI

COMPUTED MUSKINGUM-CUNGE PARAMETERS									
ELEMENT	ALPHA	COMPUTATION TIME STEP			PEAK	TIME TO PEAK	VOLUME	MAXIMUM CELERITY	
		M	DT	DX					
		(MIN)	(FT)	(CFS)	(MIN)	(IN)	(FPS)		
MAIN	1.02	1.33	1.00	75.38	8.07	113.00	.09	1.93	

INTERPOLATED TO SPECIFIED COMPUTATION INTERVAL

MAIN	1.02	1.33	1.00	8.07	113.00	.09
------	------	------	------	------	--------	-----

CONTINUITY SUMMARY (AC-FT) - INFLOW= .6578E+00 EXCESS= .0000E+00 OUTFLOW= .5411E+00 BASIN STORAGE= .1272E+00 PERCENT ERROR= -1.6

HYDROGRAPH AT STATION RP5
PLAN 1, RATIO = .61

DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*
1	0000	1	0.	*	1	0046	47	0.	*	1	0132	93	0.	*	1	0218	139	6.					
1	0001	2	0.	*	1	0047	48	0.	*	1	0133	94	0.	*	1	0219	140	6.					
1	0002	3	0.	*	1	0048	49	0.	*	1	0134	95	0.	*	1	0220	141	5.					
1	0003	4	0.	*	1	0049	50	0.	*	1	0135	96	0.	*	1	0221	142	5.					
1	0004	5	0.	*	1	0050	51	0.	*	1	0136	97	0.	*	1	0222	143	5.					
1	0005	6	0.	*	1	0051	52	0.	*	1	0137	98	0.	*	1	0223	144	5.					
1	0006	7	0.	*	1	0052	53	0.	*	1	0138	99	0.	*	1	0224	145	5.					
1	0007	8	0.	*	1	0053	54	0.	*	1	0139	100	0.	*	1	0225	146	5.					
1	0008	9	0.	*	1	0054	55	0.	*	1	0140	101	0.	*	1	0226	147	5.					
1	0009	10	0.	*	1	0055	56	0.	*	1	0141	102	0.	*	1	0227	148	5.					
1	0010	11	0.	*	1	0056	57	0.	*	1	0142	103	0.	*	1	0228	149	4.					
1	0011	12	0.	*	1	0057	58	0.	*	1	0143	104	1.	*	1	0229	150	4.					

STRTL .50 INITIAL ABSTRACTION
 CRVNR 80.00 CURVE NUMBER
 RTIMP .00 PERCENT IMPERVIOUS AREA

post.out

69 UD SCS DIMENSIONLESS UNITGRAPH
 TLAG .12 LAG

UNIT HYDROGRAPH
 38 END-OF-PERIOD ORDINATES

19.	56.	108.	185.	268.	328.	355.	356.	337.	304.
263.	211.	163.	131.	106.	87.	71.	57.	46.	37.
30.	24.	19.	16.	13.	10.	8.	7.	5.	4.
4.	3.	3.	2.	1.	1.	1.	0.		

HYDROGRAPH AT STATION BP6

DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	*	DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
1	0000	1	.00	.00	.00	.00	0.	*	1	0131	92	.00	.00	.00	14.	
1	0001	2	.00	.00	.00	.00	0.	*	1	0132	93	.00	.00	.00	13.	
1	0002	3	.00	.00	.00	.00	0.	*	1	0133	94	.00	.00	.00	13.	
1	0003	4	.00	.00	.00	.00	0.	*	1	0134	95	.00	.00	.00	12.	
1	0004	5	.00	.00	.00	.00	0.	*	1	0135	96	.00	.00	.00	11.	
1	0005	6	.00	.00	.00	.00	0.	*	1	0136	97	.00	.00	.00	10.	
1	0006	7	.00	.00	.00	.00	0.	*	1	0137	98	.00	.00	.00	9.	
1	0007	8	.00	.00	.00	.00	0.	*	1	0138	99	.00	.00	.00	8.	
1	0008	9	.00	.00	.00	.00	0.	*	1	0139	100	.00	.00	.00	7.	
1	0009	10	.00	.00	.00	.00	0.	*	1	0140	101	.00	.00	.00	6.	
1	0010	11	.00	.00	.00	.00	0.	*	1	0141	102	.00	.00	.00	6.	
1	0011	12	.00	.00	.00	.00	0.	*	1	0142	103	.00	.00	.00	5.	
1	0012	13	.00	.00	.00	.00	0.	*	1	0143	104	.00	.00	.00	5.	
1	0013	14	.00	.00	.00	.00	0.	*	1	0144	105	.00	.00	.00	5.	
1	0014	15	.00	.00	.00	.00	0.	*	1	0145	106	.00	.00	.00	4.	
1	0015	16	.00	.00	.00	.00	0.	*	1	0146	107	.00	.00	.00	4.	
1	0016	17	.00	.00	.00	.00	0.	*	1	0147	108	.00	.00	.00	4.	
1	0017	18	.00	.00	.00	.00	0.	*	1	0148	109	.00	.00	.00	4.	
1	0018	19	.00	.00	.00	.00	0.	*	1	0149	110	.00	.00	.00	4.	
1	0019	20	.00	.00	.00	.00	0.	*	1	0150	111	.00	.00	.00	4.	
1	0020	21	.00	.00	.00	.00	0.	*	1	0151	112	.00	.00	.00	3.	
1	0021	22	.00	.00	.00	.00	0.	*	1	0152	113	.00	.00	.00	3.	
1	0022	23	.00	.00	.00	.00	0.	*	1	0153	114	.00	.00	.00	3.	
1	0023	24	.00	.00	.00	.00	0.	*	1	0154	115	.00	.00	.00	3.	
1	0024	25	.00	.00	.00	.00	0.	*	1	0155	116	.00	.00	.00	3.	
1	0025	26	.00	.00	.00	.00	0.	*	1	0156	117	.00	.00	.00	3.	
1	0026	27	.00	.00	.00	.00	0.	*	1	0157	118	.00	.00	.00	3.	
1	0027	28	.00	.00	.00	.00	0.	*	1	0158	119	.00	.00	.00	3.	
1	0028	29	.00	.00	.00	.00	0.	*	1	0159	120	.00	.00	.00	3.	
1	0029	30	.00	.00	.00	.00	0.	*	1	0200	121	.00	.00	.00	3.	
1	0030	31	.00	.00	.00	.00	0.	*	1	0201	122	.00	.00	.00	3.	
1	0031	32	.11	.11	.00	0.	0.	*	1	0202	123	.00	.00	.00	3.	
1	0032	33	.11	.11	.00	0.	0.	*	1	0203	124	.00	.00	.00	3.	
1	0033	34	.11	.11	.00	0.	0.	*	1	0204	125	.00	.00	.00	3.	
1	0034	35	.11	.11	.00	0.	0.	*	1	0205	126	.00	.00	.00	3.	
1	0035	36	.11	.11	.00	0.	0.	*	1	0206	127	.00	.00	.00	3.	
1	0036	37	.09	.08	.01	0.	0.	*	1	0207	128	.00	.00	.00	3.	
1	0037	38	.09	.07	.01	1.	0.	*	1	0208	129	.00	.00	.00	3.	
1	0038	39	.09	.07	.02	3.	0.	*	1	0209	130	.00	.00	.00	3.	
1	0039	40	.09	.07	.02	6.	0.	*	1	0210	131	.00	.00	.00	3.	
1	0040	41	.09	.06	.03	10.	0.	*	1	0211	132	.00	.00	.00	3.	
1	0041	42	.06	.04	.02	16.	0.	*	1	0212	133	.00	.00	.00	3.	
1	0042	43	.06	.04	.02	23.	0.	*	1	0213	134	.00	.00	.00	3.	
1	0043	44	.06	.04	.02	31.	0.	*	1	0214	135	.00	.00	.00	3.	
1	0044	45	.06	.04	.03	39.	0.	*	1	0215	136	.00	.00	.00	3.	
1	0045	46	.06	.03	.03	47.	0.	*	1	0216	137	.00	.00	.00	3.	
1	0046	47	.04	.02	.02	54.	0.	*	1	0217	138	.00	.00	.00	3.	
1	0047	48	.04	.02	.02	60.	0.	*	1	0218	139	.00	.00	.00	3.	
1	0048	49	.04	.02	.02	64.	0.	*	1	0219	140	.00	.00	.00	3.	
1	0049	50	.04	.02	.02	68.	0.	*	1	0220	141	.00	.00	.00	3.	
1	0050	51	.04	.02	.02	70.	0.	*	1	0221	142	.00	.00	.00	3.	
1	0051	52	.02	.01	.01	71.	0.	*	1	0222	143	.00	.00	.00	3.	
1	0052	53	.02	.01	.01	71.	0.	*	1	0223	144	.00	.00	.00	3.	
1	0053	54	.02	.01	.01	70.	0.	*	1	0224	145	.00	.00	.00	3.	
1	0054	55	.02	.01	.01	69.	0.	*	1	0225	146	.00	.00	.00	3.	
1	0055	56	.02	.01	.01	67.	0.	*	1	0226	147	.00	.00	.00	3.	
1	0056	57	.02	.01	.01	64.	0.	*	1	0227	148	.00	.00	.00	3.	
1	0057	58	.02	.01	.01	61.	0.	*	1	0228	149	.00	.00	.00	3.	
1	0058	59	.02	.01	.01	58.	0.	*	1	0229	150	.00	.00	.00	3.	
1	0059	60	.02	.01	.01	55.	0.	*	1	0230	151	.00	.00	.00	3.	
1	0100	61	.02	.01	.01	53.	0.	*	1	0231	152	.00	.00	.00	3.	
1	0101	62	.01	.01	.01	50.	0.	*	1	0232	153	.00	.00	.00	3.	
1	0102	63	.01	.01	.01	47.	0.	*	1	0233	154	.00	.00	.00	3.	
1	0103	64	.01	.01	.01	45.	0.	*	1	0234	155	.00	.00	.00	3.	
1	0104	65	.01	.01	.01	43.	0.	*	1	0235	156	.00	.00	.00	3.	
1	0105	66	.01	.01	.01	41.	0.	*	1	0236	157	.00	.00	.00	3.	

														post.out			
1	0106	67	.01	.00	.01	39.	*	1	0237	158	.00	.00	.00	3.			
1	0107	68	.01	.00	.01	37.	*	1	0238	159	.00	.00	.00	3.			
1	0108	69	.01	.00	.01	35.	*	1	0239	160	.00	.00	.00	3.			
1	0109	70	.01	.00	.01	33.	*	1	0240	161	.00	.00	.00	3.			
1	0110	71	.01	.00	.01	32.	*	1	0241	162	.00	.00	.00	3.			
1	0111	72	.01	.00	.00	30.	*	1	0242	163	.00	.00	.00	3.			
1	0112	73	.01	.00	.00	29.	*	1	0243	164	.00	.00	.00	3.			
1	0113	74	.01	.00	.00	27.	*	1	0244	165	.00	.00	.00	3.			
1	0114	75	.01	.00	.00	26.	*	1	0245	166	.00	.00	.00	3.			
1	0115	76	.01	.00	.00	25.	*	1	0246	167	.00	.00	.00	3.			
1	0116	77	.01	.00	.00	23.	*	1	0247	168	.00	.00	.00	3.			
1	0117	78	.01	.00	.00	22.	*	1	0248	169	.00	.00	.00	3.			
1	0118	79	.01	.00	.00	21.	*	1	0249	170	.00	.00	.00	3.			
1	0119	80	.01	.00	.00	20.	*	1	0250	171	.00	.00	.00	3.			
1	0120	81	.01	.00	.00	20.	*	1	0251	172	.00	.00	.00	3.			
1	0121	82	.01	.00	.00	19.	*	1	0252	173	.00	.00	.00	3.			
1	0122	83	.01	.00	.00	18.	*	1	0253	174	.00	.00	.00	3.			
1	0123	84	.01	.00	.00	18.	*	1	0254	175	.00	.00	.00	3.			
1	0124	85	.01	.00	.00	17.	*	1	0255	176	.00	.00	.00	3.			
1	0125	86	.01	.00	.00	17.	*	1	0256	177	.00	.00	.00	3.			
1	0126	87	.01	.00	.00	16.	*	1	0257	178	.00	.00	.00	3.			
1	0127	88	.01	.00	.00	16.	*	1	0258	179	.00	.00	.00	3.			
1	0128	89	.01	.00	.00	15.	*	1	0259	180	.00	.00	.00	3.			
1	0129	90	.01	.00	.00	15.	*	1	0300	181	.00	.00	.00	3.			
1	0130	91	.01	.00	.00	14.	*										

TOTAL RAINFALL = 2.13, TOTAL LOSS = 1.49, TOTAL EXCESS = .64

PEAK FLOW	TIME	MAXIMUM AVERAGE FLOW				
(CFS)	(HR)	6-HR	24-HR	72-HR	3.00-HR	
71.	.87	13.	13.	13.	13.	
		(INCHES)	.635	.635	.635	.635
		(AC-FT)	3.	3.	3.	3.

CUMULATIVE AREA = .09 SQ MI

HYDROGRAPH AT STATION BP6
PLAN 1, RATIO = 1.00

DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	*	DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
1	0000	1	.00	.00	.00	0.	*	1	0131	92	.00	.00	.00	.00	14.	
1	0001	2	.00	.00	.00	0.	*	1	0132	93	.00	.00	.00	.00	13.	
1	0002	3	.00	.00	.00	0.	*	1	0133	94	.00	.00	.00	.00	13.	
1	0003	4	.00	.00	.00	0.	*	1	0134	95	.00	.00	.00	.00	12.	
1	0004	5	.00	.00	.00	0.	*	1	0135	96	.00	.00	.00	.00	11.	
1	0005	6	.00	.00	.00	0.	*	1	0136	97	.00	.00	.00	.00	10.	
1	0006	7	.00	.00	.00	0.	*	1	0137	98	.00	.00	.00	.00	9.	
1	0007	8	.00	.00	.00	0.	*	1	0138	99	.00	.00	.00	.00	8.	
1	0008	9	.00	.00	.00	0.	*	1	0139	100	.00	.00	.00	.00	7.	
1	0009	10	.00	.00	.00	0.	*	1	0140	101	.00	.00	.00	.00	6.	
1	0010	11	.00	.00	.00	0.	*	1	0141	102	.00	.00	.00	.00	6.	
1	0011	12	.00	.00	.00	0.	*	1	0142	103	.00	.00	.00	.00	5.	
1	0012	13	.00	.00	.00	0.	*	1	0143	104	.00	.00	.00	.00	5.	
1	0013	14	.00	.00	.00	0.	*	1	0144	105	.00	.00	.00	.00	5.	
1	0014	15	.00	.00	.00	0.	*	1	0145	106	.00	.00	.00	.00	4.	
1	0015	16	.00	.00	.00	0.	*	1	0146	107	.00	.00	.00	.00	4.	
1	0016	17	.00	.00	.00	0.	*	1	0147	108	.00	.00	.00	.00	4.	
1	0017	18	.00	.00	.00	0.	*	1	0148	109	.00	.00	.00	.00	4.	
1	0018	19	.00	.00	.00	0.	*	1	0149	110	.00	.00	.00	.00	4.	
1	0019	20	.00	.00	.00	0.	*	1	0150	111	.00	.00	.00	.00	4.	
1	0020	21	.00	.00	.00	0.	*	1	0151	112	.00	.00	.00	.00	3.	
1	0021	22	.00	.00	.00	0.	*	1	0152	113	.00	.00	.00	.00	3.	
1	0022	23	.00	.00	.00	0.	*	1	0153	114	.00	.00	.00	.00	3.	
1	0023	24	.00	.00	.00	0.	*	1	0154	115	.00	.00	.00	.00	3.	
1	0024	25	.00	.00	.00	0.	*	1	0155	116	.00	.00	.00	.00	3.	
1	0025	26	.00	.00	.00	0.	*	1	0156	117	.00	.00	.00	.00	3.	
1	0026	27	.00	.00	.00	0.	*	1	0157	118	.00	.00	.00	.00	3.	
1	0027	28	.00	.00	.00	0.	*	1	0158	119	.00	.00	.00	.00	3.	
1	0028	29	.00	.00	.00	0.	*	1	0159	120	.00	.00	.00	.00	3.	
1	0029	30	.00	.00	.00	0.	*	1	0200	121	.00	.00	.00	.00	3.	
1	0030	31	.00	.00	.00	0.	*	1	0201	122	.00	.00	.00	.00	3.	
1	0031	32	.11	.11	.00	0.	*	1	0202	123	.00	.00	.00	.00	3.	
1	0032	33	.11	.11	.00	0.	*	1	0203	124	.00	.00	.00	.00	3.	
1	0033	34	.11	.11	.00	0.	*	1	0204	125	.00	.00	.00	.00	3.	
1	0034	35	.11	.11	.00	0.	*	1	0205	126	.00	.00	.00	.00	3.	
1	0035	36	.11	.11	.00	0.	*	1	0206	127	.00	.00	.00	.00	3.	
1	0036	37	.09	.08	.01	0.	*	1	0207	128	.00	.00	.00	.00	3.	
1	0037	38	.09	.07	.01	1.	*	1	0208	129	.00	.00	.00	.00	3.	
1	0038	39	.09	.07	.02	3.	*	1	0209	130	.00	.00	.00	.00	3.	
1	0039	40	.09	.07	.02	6.	*	1	0210	131	.00	.00	.00	.00	3.	

														post.out			
1	0040	41	.09	.06	.03	10.	*	1	0211	132	.00	.00	.00	3.			
1	0041	42	.06	.04	.02	16.	*	1	0212	133	.00	.00	.00	3.			
1	0042	43	.06	.04	.02	23.	*	1	0213	134	.00	.00	.00	3.			
1	0043	44	.06	.04	.02	31.	*	1	0214	135	.00	.00	.00	3.			
1	0044	45	.06	.04	.03	39.	*	1	0215	136	.00	.00	.00	3.			
1	0045	46	.06	.03	.03	47.	*	1	0216	137	.00	.00	.00	3.			
1	0046	47	.04	.02	.02	54.	*	1	0217	138	.00	.00	.00	3.			
1	0047	48	.04	.02	.02	60.	*	1	0218	139	.00	.00	.00	3.			
1	0048	49	.04	.02	.02	64.	*	1	0219	140	.00	.00	.00	3.			
1	0049	50	.04	.02	.02	68.	*	1	0220	141	.00	.00	.00	3.			
1	0050	51	.04	.02	.02	70.	*	1	0221	142	.00	.00	.00	3.			
1	0051	52	.02	.01	.01	71.	*	1	0222	143	.00	.00	.00	3.			
1	0052	53	.02	.01	.01	71.	*	1	0223	144	.00	.00	.00	3.			
1	0053	54	.02	.01	.01	70.	*	1	0224	145	.00	.00	.00	3.			
1	0054	55	.02	.01	.01	69.	*	1	0225	146	.00	.00	.00	3.			
1	0055	56	.02	.01	.01	67.	*	1	0226	147	.00	.00	.00	3.			
1	0056	57	.02	.01	.01	64.	*	1	0227	148	.00	.00	.00	3.			
1	0057	58	.02	.01	.01	61.	*	1	0228	149	.00	.00	.00	3.			
1	0058	59	.02	.01	.01	58.	*	1	0229	150	.00	.00	.00	3.			
1	0059	60	.02	.01	.01	55.	*	1	0230	151	.00	.00	.00	3.			
1	0100	61	.02	.01	.01	53.	*	1	0231	152	.00	.00	.00	3.			
1	0101	62	.01	.01	.01	50.	*	1	0232	153	.00	.00	.00	3.			
1	0102	63	.01	.01	.01	47.	*	1	0233	154	.00	.00	.00	3.			
1	0103	64	.01	.01	.01	45.	*	1	0234	155	.00	.00	.00	3.			
1	0104	65	.01	.01	.01	43.	*	1	0235	156	.00	.00	.00	3.			
1	0105	66	.01	.01	.01	41.	*	1	0236	157	.00	.00	.00	3.			
1	0106	67	.01	.00	.01	39.	*	1	0237	158	.00	.00	.00	3.			
1	0107	68	.01	.00	.01	37.	*	1	0238	159	.00	.00	.00	3.			
1	0108	69	.01	.00	.01	35.	*	1	0239	160	.00	.00	.00	3.			
1	0109	70	.01	.00	.01	33.	*	1	0240	161	.00	.00	.00	3.			
1	0110	71	.01	.00	.01	32.	*	1	0241	162	.00	.00	.00	3.			
1	0111	72	.01	.00	.00	30.	*	1	0242	163	.00	.00	.00	3.			
1	0112	73	.01	.00	.00	29.	*	1	0243	164	.00	.00	.00	3.			
1	0113	74	.01	.00	.00	27.	*	1	0244	165	.00	.00	.00	3.			
1	0114	75	.01	.00	.00	26.	*	1	0245	166	.00	.00	.00	3.			
1	0115	76	.01	.00	.00	25.	*	1	0246	167	.00	.00	.00	3.			
1	0116	77	.01	.00	.00	23.	*	1	0247	168	.00	.00	.00	3.			
1	0117	78	.01	.00	.00	22.	*	1	0248	169	.00	.00	.00	3.			
1	0118	79	.01	.00	.00	21.	*	1	0249	170	.00	.00	.00	3.			
1	0119	80	.01	.00	.00	20.	*	1	0250	171	.00	.00	.00	3.			
1	0120	81	.01	.00	.00	20.	*	1	0251	172	.00	.00	.00	3.			
1	0121	82	.01	.00	.00	19.	*	1	0252	173	.00	.00	.00	3.			
1	0122	83	.01	.00	.00	18.	*	1	0253	174	.00	.00	.00	3.			
1	0123	84	.01	.00	.00	18.	*	1	0254	175	.00	.00	.00	3.			
1	0124	85	.01	.00	.00	17.	*	1	0255	176	.00	.00	.00	3.			
1	0125	86	.01	.00	.00	17.	*	1	0256	177	.00	.00	.00	3.			
1	0126	87	.01	.00	.00	16.	*	1	0257	178	.00	.00	.00	3.			
1	0127	88	.01	.00	.00	16.	*	1	0258	179	.00	.00	.00	3.			
1	0128	89	.01	.00	.00	15.	*	1	0259	180	.00	.00	.00	3.			
1	0129	90	.01	.00	.00	15.	*	1	0300	181	.00	.00	.00	3.			
1	0130	91	.01	.00	.00	14.	*										

TOTAL RAINFALL = 2.13, TOTAL LOSS = 1.49, TOTAL EXCESS = .64

PEAK FLOW	TIME	MAXIMUM AVERAGE FLOW			
+	(CFS)	6-HR	24-HR	72-HR	3.00-HR
+	71.	13.	13.	13.	13.
	(INCHES)	.635	.635	.635	.635
	(AC-FT)	3.	3.	3.	3.
CUMULATIVE AREA =		.09 SQ MI			

HYDROGRAPH AT STATION BP6
PLAN 1, RATIO = .61

DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	*	DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
1	0000	1	.00	.00	.00	0.	*	1	0131	92	.00	.00	.00	5.		
1	0001	2	.00	.00	.00	0.	*	1	0132	93	.00	.00	.00	5.		
1	0002	3	.00	.00	.00	0.	*	1	0133	94	.00	.00	.00	5.		
1	0003	4	.00	.00	.00	0.	*	1	0134	95	.00	.00	.00	5.		
1	0004	5	.00	.00	.00	0.	*	1	0135	96	.00	.00	.00	4.		
1	0005	6	.00	.00	.00	0.	*	1	0136	97	.00	.00	.00	4.		
1	0006	7	.00	.00	.00	0.	*	1	0137	98	.00	.00	.00	4.		
1	0007	8	.00	.00	.00	0.	*	1	0138	99	.00	.00	.00	3.		
1	0008	9	.00	.00	.00	0.	*	1	0139	100	.00	.00	.00	3.		
1	0009	10	.00	.00	.00	0.	*	1	0140	101	.00	.00	.00	3.		
1	0010	11	.00	.00	.00	0.	*	1	0141	102	.00	.00	.00	2.		
1	0011	12	.00	.00	.00	0.	*	1	0142	103	.00	.00	.00	2.		
1	0012	13	.00	.00	.00	0.	*	1	0143	104	.00	.00	.00	2.		
1	0013	14	.00	.00	.00	0.	*	1	0144	105	.00	.00	.00	2.		

													post.out			
1	0014	15	.00	.00	.00	0.	*	1	0145	106	.00	.00	.00	2.		
1	0015	16	.00	.00	.00	0.	*	1	0146	107	.00	.00	.00	2.		
1	0016	17	.00	.00	.00	0.	*	1	0147	108	.00	.00	.00	2.		
1	0017	18	.00	.00	.00	0.	*	1	0148	109	.00	.00	.00	1.		
1	0018	19	.00	.00	.00	0.	*	1	0149	110	.00	.00	.00	1.		
1	0019	20	.00	.00	.00	0.	*	1	0150	111	.00	.00	.00	1.		
1	0020	21	.00	.00	.00	0.	*	1	0151	112	.00	.00	.00	1.		
1	0021	22	.00	.00	.00	0.	*	1	0152	113	.00	.00	.00	1.		
1	0022	23	.00	.00	.00	0.	*	1	0153	114	.00	.00	.00	1.		
1	0023	24	.00	.00	.00	0.	*	1	0154	115	.00	.00	.00	1.		
1	0024	25	.00	.00	.00	0.	*	1	0155	116	.00	.00	.00	1.		
1	0025	26	.00	.00	.00	0.	*	1	0156	117	.00	.00	.00	1.		
1	0026	27	.00	.00	.00	0.	*	1	0157	118	.00	.00	.00	1.		
1	0027	28	.00	.00	.00	0.	*	1	0158	119	.00	.00	.00	1.		
1	0028	29	.00	.00	.00	0.	*	1	0159	120	.00	.00	.00	1.		
1	0029	30	.00	.00	.00	0.	*	1	0200	121	.00	.00	.00	1.		
1	0030	31	.00	.00	.00	0.	*	1	0201	122	.00	.00	.00	1.		
1	0031	32	.07	.07	.00	0.	*	1	0202	123	.00	.00	.00	1.		
1	0032	33	.07	.07	.00	0.	*	1	0203	124	.00	.00	.00	1.		
1	0033	34	.07	.07	.00	0.	*	1	0204	125	.00	.00	.00	1.		
1	0034	35	.07	.07	.00	0.	*	1	0205	126	.00	.00	.00	1.		
1	0035	36	.07	.07	.00	0.	*	1	0206	127	.00	.00	.00	1.		
1	0036	37	.05	.05	.00	0.	*	1	0207	128	.00	.00	.00	1.		
1	0037	38	.05	.05	.00	0.	*	1	0208	129	.00	.00	.00	1.		
1	0038	39	.05	.05	.00	0.	*	1	0209	130	.00	.00	.00	1.		
1	0039	40	.05	.05	.00	0.	*	1	0210	131	.00	.00	.00	1.		
1	0040	41	.05	.05	.00	0.	*	1	0211	132	.00	.00	.00	1.		
1	0041	42	.04	.03	.00	1.	*	1	0212	133	.00	.00	.00	1.		
1	0042	43	.04	.03	.01	1.	*	1	0213	134	.00	.00	.00	1.		
1	0043	44	.04	.03	.01	2.	*	1	0214	135	.00	.00	.00	1.		
1	0044	45	.04	.03	.01	4.	*	1	0215	136	.00	.00	.00	1.		
1	0045	46	.04	.03	.01	5.	*	1	0216	137	.00	.00	.00	1.		
1	0046	47	.02	.02	.01	7.	*	1	0217	138	.00	.00	.00	1.		
1	0047	48	.02	.02	.01	9.	*	1	0218	139	.00	.00	.00	1.		
1	0048	49	.02	.02	.01	12.	*	1	0219	140	.00	.00	.00	1.		
1	0049	50	.02	.02	.01	13.	*	1	0220	141	.00	.00	.00	1.		
1	0050	51	.02	.02	.01	15.	*	1	0221	142	.00	.00	.00	1.		
1	0051	52	.01	.01	.00	16.	*	1	0222	143	.00	.00	.00	1.		
1	0052	53	.01	.01	.00	17.	*	1	0223	144	.00	.00	.00	1.		
1	0053	54	.01	.01	.00	18.	*	1	0224	145	.00	.00	.00	1.		
1	0054	55	.01	.01	.00	18.	*	1	0225	146	.00	.00	.00	1.		
1	0055	56	.01	.01	.00	18.	*	1	0226	147	.00	.00	.00	1.		
1	0056	57	.01	.01	.00	18.	*	1	0227	148	.00	.00	.00	1.		
1	0057	58	.01	.01	.00	18.	*	1	0228	149	.00	.00	.00	1.		
1	0058	59	.01	.01	.00	17.	*	1	0229	150	.00	.00	.00	1.		
1	0059	60	.01	.01	.00	17.	*	1	0230	151	.00	.00	.00	1.		
1	0100	61	.01	.01	.00	16.	*	1	0231	152	.00	.00	.00	1.		
1	0101	62	.01	.01	.00	16.	*	1	0232	153	.00	.00	.00	1.		
1	0102	63	.01	.01	.00	15.	*	1	0233	154	.00	.00	.00	1.		
1	0103	64	.01	.01	.00	15.	*	1	0234	155	.00	.00	.00	1.		
1	0104	65	.01	.01	.00	14.	*	1	0235	156	.00	.00	.00	1.		
1	0105	66	.01	.01	.00	14.	*	1	0236	157	.00	.00	.00	1.		
1	0106	67	.01	.00	.00	13.	*	1	0237	158	.00	.00	.00	1.		
1	0107	68	.01	.00	.00	13.	*	1	0238	159	.00	.00	.00	1.		
1	0108	69	.01	.00	.00	12.	*	1	0239	160	.00	.00	.00	1.		
1	0109	70	.01	.00	.00	12.	*	1	0240	161	.00	.00	.00	1.		
1	0110	71	.01	.00	.00	11.	*	1	0241	162	.00	.00	.00	1.		
1	0111	72	.00	.00	.00	11.	*	1	0242	163	.00	.00	.00	1.		
1	0112	73	.00	.00	.00	10.	*	1	0243	164	.00	.00	.00	1.		
1	0113	74	.00	.00	.00	10.	*	1	0244	165	.00	.00	.00	1.		
1	0114	75	.00	.00	.00	9.	*	1	0245	166	.00	.00	.00	1.		
1	0115	76	.00	.00	.00	9.	*	1	0246	167	.00	.00	.00	1.		
1	0116	77	.00	.00	.00	9.	*	1	0247	168	.00	.00	.00	1.		
1	0117	78	.00	.00	.00	8.	*	1	0248	169	.00	.00	.00	1.		
1	0118	79	.00	.00	.00	8.	*	1	0249	170	.00	.00	.00	1.		
1	0119	80	.00	.00	.00	8.	*	1	0250	171	.00	.00	.00	1.		
1	0120	81	.00	.00	.00	7.	*	1	0251	172	.00	.00	.00	1.		
1	0121	82	.00	.00	.00	7.	*	1	0252	173	.00	.00	.00	1.		
1	0122	83	.00	.00	.00	7.	*	1	0253	174	.00	.00	.00	1.		
1	0123	84	.00	.00	.00	7.	*	1	0254	175	.00	.00	.00	1.		
1	0124	85	.00	.00	.00	6.	*	1	0255	176	.00	.00	.00	1.		
1	0125	86	.00	.00	.00	6.	*	1	0256	177	.00	.00	.00	1.		
1	0126	87	.00	.00	.00	6.	*	1	0257	178	.00	.00	.00	1.		
1	0127	88	.00	.00	.00	6.	*	1	0258	179	.00	.00	.00	1.		
1	0128	89	.00	.00	.00	6.	*	1	0259	180	.00	.00	.00	1.		
1	0129	90	.00	.00	.00	6.	*	1	0300	181	.00	.00	.00	1.		
1	0130	91	.00	.00	.00	6.	*									

TOTAL RAINFALL = 1.29, TOTAL LOSS = 1.10, TOTAL EXCESS = .19

+ (CFS)	TIME (HR)	MAXIMUM AVERAGE FLOW			
		6-HR	24-HR	72-HR	3.00-HR
+ 18.	.92	4.	4.	4.	4.
	(INCHES)	.187	.187	.187	.187
	(AC-FT)	1.	1.	1.	1.

CUMULATIVE AREA = .09 SQ MI post.out

*** **

 * *
 70 KK * RP6 *
 * *

Route BP6 in channel to Culvert BP15

HYDROGRAPH ROUTING DATA

72 RD MUSKINGUM-CUNGE CHANNEL ROUTING
 L 5785. CHANNEL LENGTH
 S .0090 SLOPE
 N .040 CHANNEL ROUGHNESS COEFFICIENT
 CA .00 CONTRIBUTING AREA
 SHAPE TRAP CHANNEL SHAPE
 WD .00 BOTTOM WIDTH OR DIAMETER
 Z 7.00 SIDE SLOPE

 COMPUTED MUSKINGUM-CUNGE PARAMETERS

ELEMENT	ALPHA	COMPUTATION TIME STEP		PEAK (CFS)	TIME TO PEAK (MIN)	VOLUME (IN)	MAXIMUM CELERITY (FPS)
		M	DT (MIN)				
MAIN	1.16	1.33	.90	125.76	68.99	74.70	.59

INTERPOLATED TO SPECIFIED COMPUTATION INTERVAL

MAIN	1.16	1.33	1.00	68.63	75.00	.59
------	------	------	------	-------	-------	-----

CONTINUITY SUMMARY (AC-FT) - INFLOW= .3183E+01 EXCESS= .0000E+00 OUTFLOW= .2959E+01 BASIN STORAGE= .2837E+00 PERCENT ERROR= -1.9

HYDROGRAPH AT STATION RP6
 PLAN 1, RATIO = 1.00

DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW
1	0000	1	0.	*	1	0046	47	0.	*	1	0132	93	39.	*	1	0218	139	8.				
1	0001	2	0.	*	1	0047	48	0.	*	1	0133	94	37.	*	1	0219	140	7.				
1	0002	3	0.	*	1	0048	49	0.	*	1	0134	95	36.	*	1	0220	141	7.				
1	0003	4	0.	*	1	0049	50	0.	*	1	0135	96	35.	*	1	0221	142	6.				
1	0004	5	0.	*	1	0050	51	0.	*	1	0136	97	33.	*	1	0222	143	6.				
1	0005	6	0.	*	1	0051	52	0.	*	1	0137	98	32.	*	1	0223	144	6.				
1	0006	7	0.	*	1	0052	53	0.	*	1	0138	99	31.	*	1	0224	145	6.				
1	0007	8	0.	*	1	0053	54	0.	*	1	0139	100	30.	*	1	0225	146	5.				
1	0008	9	0.	*	1	0054	55	0.	*	1	0140	101	29.	*	1	0226	147	5.				
1	0009	10	0.	*	1	0055	56	0.	*	1	0141	102	28.	*	1	0227	148	5.				
1	0010	11	0.	*	1	0056	57	0.	*	1	0142	103	27.	*	1	0228	149	5.				
1	0011	12	0.	*	1	0057	58	0.	*	1	0143	104	26.	*	1	0229	150	5.				
1	0012	13	0.	*	1	0058	59	0.	*	1	0144	105	25.	*	1	0230	151	4.				
1	0013	14	0.	*	1	0059	60	0.	*	1	0145	106	24.	*	1	0231	152	4.				
1	0014	15	0.	*	1	0100	61	0.	*	1	0146	107	23.	*	1	0232	153	4.				
1	0015	16	0.	*	1	0101	62	0.	*	1	0147	108	22.	*	1	0233	154	4.				
1	0016	17	0.	*	1	0102	63	0.	*	1	0148	109	22.	*	1	0234	155	4.				
1	0017	18	0.	*	1	0103	64	0.	*	1	0149	110	21.	*	1	0235	156	4.				
1	0018	19	0.	*	1	0104	65	0.	*	1	0150	111	20.	*	1	0236	157	4.				
1	0019	20	0.	*	1	0105	66	0.	*	1	0151	112	20.	*	1	0237	158	4.				
1	0020	21	0.	*	1	0106	67	0.	*	1	0152	113	19.	*	1	0238	159	4.				
1	0021	22	0.	*	1	0107	68	0.	*	1	0153	114	18.	*	1	0239	160	3.				
1	0022	23	0.	*	1	0108	69	0.	*	1	0154	115	18.	*	1	0240	161	3.				
1	0023	24	0.	*	1	0109	70	0.	*	1	0155	116	18.	*	1	0241	162	3.				
1	0024	25	0.	*	1	0110	71	0.	*	1	0156	117	17.	*	1	0242	163	3.				
1	0025	26	0.	*	1	0111	72	0.	*	1	0157	118	17.	*	1	0243	164	3.				
1	0026	27	0.	*	1	0112	73	9.	*	1	0158	119	16.	*	1	0244	165	3.				
1	0027	28	0.	*	1	0113	74	48.	*	1	0159	120	16.	*	1	0245	166	3.				
1	0028	29	0.	*	1	0114	75	68.	*	1	0200	121	16.	*	1	0246	167	3.				
1	0029	30	0.	*	1	0115	76	69.	*	1	0201	122	15.	*	1	0247	168	3.				
1	0030	31	0.	*	1	0116	77	68.	*	1	0202	123	15.	*	1	0248	169	3.				
1	0031	32	0.	*	1	0117	78	66.	*	1	0203	124	14.	*	1	0249	170	3.				
1	0032	33	0.	*	1	0118	79	65.	*	1	0204	125	14.	*	1	0250	171	3.				
1	0033	34	0.	*	1	0119	80	63.	*	1	0205	126	14.	*	1	0251	172	3.				
1	0034	35	0.	*	1	0120	81	61.	*	1	0206	127	13.	*	1	0252	173	3.				

		post.out																
1	0035	36	0.	*	1	0121	82	59.	*	1	0207	128	13.	*	1	0253	174	3.
1	0036	37	0.	*	1	0122	83	57.	*	1	0208	129	12.	*	1	0254	175	3.
1	0037	38	0.	*	1	0123	84	55.	*	1	0209	130	12.	*	1	0255	176	3.
1	0038	39	0.	*	1	0124	85	53.	*	1	0210	131	11.	*	1	0256	177	3.
1	0039	40	0.	*	1	0125	86	51.	*	1	0211	132	11.	*	1	0257	178	3.
1	0040	41	0.	*	1	0126	87	49.	*	1	0212	133	10.	*	1	0258	179	3.
1	0041	42	0.	*	1	0127	88	47.	*	1	0213	134	10.	*	1	0259	180	3.
1	0042	43	0.	*	1	0128	89	45.	*	1	0214	135	9.	*	1	0300	181	3.
1	0043	44	0.	*	1	0129	90	44.	*	1	0215	136	9.	*				
1	0044	45	0.	*	1	0130	91	42.	*	1	0216	137	8.	*				
1	0045	46	0.	*	1	0131	92	40.	*	1	0217	138	8.	*				

PEAK FLOW	TIME	MAXIMUM AVERAGE FLOW			
(CFS)	(HR)	6-HR	24-HR	72-HR	3.00-HR
69.	1.25	12.	12.	12.	12.
		.590	.590	.590	.590
		3.	3.	3.	3.

CUMULATIVE AREA = .09 SQ MI

COMPUTED MUSKINGUM-CUNGE PARAMETERS

ELEMENT	ALPHA	COMPUTATION TIME STEP			PEAK	TIME TO PEAK	VOLUME	MAXIMUM CELERITY
		M	DT	DX				
		(MIN)	(FT)	(CFS)	(MIN)	(IN)	(FPS)	
MAIN	1.16	1.33	.90	87.65	18.47	89.10	2.59	

INTERPOLATED TO SPECIFIED COMPUTATION INTERVAL

MAIN	1.16	1.33	1.00	18.11	89.00	.16
------	------	------	------	-------	-------	-----

CONTINUITY SUMMARY (AC-FT) - INFLOW= .9359E+00 EXCESS= .0000E+00 OUTFLOW= .8194E+00 BASIN STORAGE= .1424E+00 PERCENT ERROR= -2.8

HYDROGRAPH AT STATION RP6
PLAN 1, RATIO = .61

DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*
1	0000	1	0.	*	1	0046	47	0.	*	1	0132	93	16.	*	1	0218	139	5.					
1	0001	2	0.	*	1	0047	48	0.	*	1	0133	94	16.	*	1	0219	140	4.					
1	0002	3	0.	*	1	0048	49	0.	*	1	0134	95	16.	*	1	0220	141	4.					
1	0003	4	0.	*	1	0049	50	0.	*	1	0135	96	15.	*	1	0221	142	4.					
1	0004	5	0.	*	1	0050	51	0.	*	1	0136	97	15.	*	1	0222	143	4.					
1	0005	6	0.	*	1	0051	52	0.	*	1	0137	98	14.	*	1	0223	144	4.					
1	0006	7	0.	*	1	0052	53	0.	*	1	0138	99	14.	*	1	0224	145	4.					
1	0007	8	0.	*	1	0053	54	0.	*	1	0139	100	14.	*	1	0225	146	3.					
1	0008	9	0.	*	1	0054	55	0.	*	1	0140	101	13.	*	1	0226	147	3.					
1	0009	10	0.	*	1	0055	56	0.	*	1	0141	102	13.	*	1	0227	148	3.					
1	0010	11	0.	*	1	0056	57	0.	*	1	0142	103	12.	*	1	0228	149	3.					
1	0011	12	0.	*	1	0057	58	0.	*	1	0143	104	12.	*	1	0229	150	3.					
1	0012	13	0.	*	1	0058	59	0.	*	1	0144	105	12.	*	1	0230	151	3.					
1	0013	14	0.	*	1	0059	60	0.	*	1	0145	106	11.	*	1	0231	152	3.					
1	0014	15	0.	*	1	0100	61	0.	*	1	0146	107	11.	*	1	0232	153	3.					
1	0015	16	0.	*	1	0101	62	0.	*	1	0147	108	11.	*	1	0233	154	2.					
1	0016	17	0.	*	1	0102	63	0.	*	1	0148	109	10.	*	1	0234	155	2.					
1	0017	18	0.	*	1	0103	64	0.	*	1	0149	110	10.	*	1	0235	156	2.					
1	0018	19	0.	*	1	0104	65	0.	*	1	0150	111	10.	*	1	0236	157	2.					
1	0019	20	0.	*	1	0105	66	0.	*	1	0151	112	9.	*	1	0237	158	2.					
1	0020	21	0.	*	1	0106	67	0.	*	1	0152	113	9.	*	1	0238	159	2.					
1	0021	22	0.	*	1	0107	68	0.	*	1	0153	114	9.	*	1	0239	160	2.					
1	0022	23	0.	*	1	0108	69	0.	*	1	0154	115	9.	*	1	0240	161	2.					
1	0023	24	0.	*	1	0109	70	0.	*	1	0155	116	8.	*	1	0241	162	2.					
1	0024	25	0.	*	1	0110	71	0.	*	1	0156	117	8.	*	1	0242	163	2.					
1	0025	26	0.	*	1	0111	72	0.	*	1	0157	118	8.	*	1	0243	164	2.					
1	0026	27	0.	*	1	0112	73	0.	*	1	0158	119	8.	*	1	0244	165	2.					
1	0027	28	0.	*	1	0113	74	0.	*	1	0159	120	7.	*	1	0245	166	2.					
1	0028	29	0.	*	1	0114	75	0.	*	1	0200	121	7.	*	1	0246	167	2.					
1	0029	30	0.	*	1	0115	76	0.	*	1	0201	122	7.	*	1	0247	168	1.					
1	0030	31	0.	*	1	0116	77	0.	*	1	0202	123	7.	*	1	0248	169	1.					
1	0031	32	0.	*	1	0117	78	0.	*	1	0203	124	7.	*	1	0249	170	1.					
1	0032	33	0.	*	1	0118	79	0.	*	1	0204	125	7.	*	1	0250	171	1.					
1	0033	34	0.	*	1	0119	80	0.	*	1	0205	126	6.	*	1	0251	172	1.					
1	0034	35	0.	*	1	0120	81	0.	*	1	0206	127	6.	*	1	0252	173	1.					
1	0035	36	0.	*	1	0121	82	0.	*	1	0207	128	6.	*	1	0253	174	1.					
1	0036	37	0.	*	1	0122	83	0.	*	1	0208	129	6.	*	1	0254	175	1.					
1	0037	38	0.	*	1	0123	84	0.	*	1	0209	130	6.	*	1	0255	176	1.					

							post.out							
1	0002	3	.00	.00	.00	0.	*	1	0133	94	.00	.00	.00	2.
1	0003	4	.00	.00	.00	0.	*	1	0134	95	.00	.00	.00	1.
1	0004	5	.00	.00	.00	0.	*	1	0135	96	.00	.00	.00	1.
1	0005	6	.00	.00	.00	0.	*	1	0136	97	.00	.00	.00	1.
1	0006	7	.00	.00	.00	0.	*	1	0137	98	.00	.00	.00	1.
1	0007	8	.00	.00	.00	0.	*	1	0138	99	.00	.00	.00	1.
1	0008	9	.00	.00	.00	0.	*	1	0139	100	.00	.00	.00	1.
1	0009	10	.00	.00	.00	0.	*	1	0140	101	.00	.00	.00	1.
1	0010	11	.00	.00	.00	0.	*	1	0141	102	.00	.00	.00	1.
1	0011	12	.00	.00	.00	0.	*	1	0142	103	.00	.00	.00	1.
1	0012	13	.00	.00	.00	0.	*	1	0143	104	.00	.00	.00	1.
1	0013	14	.00	.00	.00	0.	*	1	0144	105	.00	.00	.00	1.
1	0014	15	.00	.00	.00	0.	*	1	0145	106	.00	.00	.00	0.
1	0015	16	.00	.00	.00	0.	*	1	0146	107	.00	.00	.00	0.
1	0016	17	.00	.00	.00	0.	*	1	0147	108	.00	.00	.00	0.
1	0017	18	.00	.00	.00	0.	*	1	0148	109	.00	.00	.00	0.
1	0018	19	.00	.00	.00	0.	*	1	0149	110	.00	.00	.00	0.
1	0019	20	.00	.00	.00	0.	*	1	0150	111	.00	.00	.00	0.
1	0020	21	.00	.00	.00	0.	*	1	0151	112	.00	.00	.00	0.
1	0021	22	.00	.00	.00	0.	*	1	0152	113	.00	.00	.00	0.
1	0022	23	.00	.00	.00	0.	*	1	0153	114	.00	.00	.00	0.
1	0023	24	.00	.00	.00	0.	*	1	0154	115	.00	.00	.00	0.
1	0024	25	.00	.00	.00	0.	*	1	0155	116	.00	.00	.00	0.
1	0025	26	.00	.00	.00	0.	*	1	0156	117	.00	.00	.00	0.
1	0026	27	.00	.00	.00	0.	*	1	0157	118	.00	.00	.00	0.
1	0027	28	.00	.00	.00	0.	*	1	0158	119	.00	.00	.00	0.
1	0028	29	.00	.00	.00	0.	*	1	0159	120	.00	.00	.00	0.
1	0029	30	.00	.00	.00	0.	*	1	0200	121	.00	.00	.00	0.
1	0030	31	.00	.00	.00	0.	*	1	0201	122	.00	.00	.00	0.
1	0031	32	.11	.11	.00	0.	*	1	0202	123	.00	.00	.00	0.
1	0032	33	.11	.11	.00	0.	*	1	0203	124	.00	.00	.00	0.
1	0033	34	.11	.11	.00	0.	*	1	0204	125	.00	.00	.00	0.
1	0034	35	.11	.11	.00	0.	*	1	0205	126	.00	.00	.00	0.
1	0035	36	.11	.11	.00	0.	*	1	0206	127	.00	.00	.00	0.
1	0036	37	.09	.09	.00	0.	*	1	0207	128	.00	.00	.00	0.
1	0037	38	.09	.08	.01	0.	*	1	0208	129	.00	.00	.00	0.
1	0038	39	.09	.08	.01	0.	*	1	0209	130	.00	.00	.00	0.
1	0039	40	.09	.07	.02	1.	*	1	0210	131	.00	.00	.00	0.
1	0040	41	.09	.07	.02	1.	*	1	0211	132	.00	.00	.00	0.
1	0041	42	.06	.05	.02	2.	*	1	0212	133	.00	.00	.00	0.
1	0042	43	.06	.04	.02	3.	*	1	0213	134	.00	.00	.00	0.
1	0043	44	.06	.04	.02	4.	*	1	0214	135	.00	.00	.00	0.
1	0044	45	.06	.04	.02	5.	*	1	0215	136	.00	.00	.00	0.
1	0045	46	.06	.04	.02	6.	*	1	0216	137	.00	.00	.00	0.
1	0046	47	.04	.02	.01	7.	*	1	0217	138	.00	.00	.00	0.
1	0047	48	.04	.02	.01	7.	*	1	0218	139	.00	.00	.00	0.
1	0048	49	.04	.02	.02	8.	*	1	0219	140	.00	.00	.00	0.
1	0049	50	.04	.02	.02	8.	*	1	0220	141	.00	.00	.00	0.
1	0050	51	.04	.02	.02	8.	*	1	0221	142	.00	.00	.00	0.
1	0051	52	.02	.01	.01	9.	*	1	0222	143	.00	.00	.00	0.
1	0052	53	.02	.01	.01	8.	*	1	0223	144	.00	.00	.00	0.
1	0053	54	.02	.01	.01	8.	*	1	0224	145	.00	.00	.00	0.
1	0054	55	.02	.01	.01	8.	*	1	0225	146	.00	.00	.00	0.
1	0055	56	.02	.01	.01	8.	*	1	0226	147	.00	.00	.00	0.
1	0056	57	.02	.01	.01	7.	*	1	0227	148	.00	.00	.00	0.
1	0057	58	.02	.01	.01	7.	*	1	0228	149	.00	.00	.00	0.
1	0058	59	.02	.01	.01	7.	*	1	0229	150	.00	.00	.00	0.
1	0059	60	.02	.01	.01	6.	*	1	0230	151	.00	.00	.00	0.
1	0100	61	.02	.01	.01	6.	*	1	0231	152	.00	.00	.00	0.
1	0101	62	.01	.01	.01	6.	*	1	0232	153	.00	.00	.00	0.
1	0102	63	.01	.01	.01	5.	*	1	0233	154	.00	.00	.00	0.
1	0103	64	.01	.01	.01	5.	*	1	0234	155	.00	.00	.00	0.
1	0104	65	.01	.01	.01	5.	*	1	0235	156	.00	.00	.00	0.
1	0105	66	.01	.01	.01	5.	*	1	0236	157	.00	.00	.00	0.
1	0106	67	.01	.01	.01	4.	*	1	0237	158	.00	.00	.00	0.
1	0107	68	.01	.01	.01	4.	*	1	0238	159	.00	.00	.00	0.
1	0108	69	.01	.01	.01	4.	*	1	0239	160	.00	.00	.00	0.
1	0109	70	.01	.01	.01	4.	*	1	0240	161	.00	.00	.00	0.
1	0110	71	.01	.01	.01	4.	*	1	0241	162	.00	.00	.00	0.
1	0111	72	.01	.00	.00	3.	*	1	0242	163	.00	.00	.00	0.
1	0112	73	.01	.00	.00	3.	*	1	0243	164	.00	.00	.00	0.
1	0113	74	.01	.00	.00	3.	*	1	0244	165	.00	.00	.00	0.
1	0114	75	.01	.00	.00	3.	*	1	0245	166	.00	.00	.00	0.
1	0115	76	.01	.00	.00	3.	*	1	0246	167	.00	.00	.00	0.
1	0116	77	.01	.00	.00	3.	*	1	0247	168	.00	.00	.00	0.
1	0117	78	.01	.00	.00	3.	*	1	0248	169	.00	.00	.00	0.
1	0118	79	.01	.00	.00	3.	*	1	0249	170	.00	.00	.00	0.
1	0119	80	.01	.00	.00	2.	*	1	0250	171	.00	.00	.00	0.
1	0120	81	.01	.00	.00	2.	*	1	0251	172	.00	.00	.00	0.
1	0121	82	.01	.00	.00	2.	*	1	0252	173	.00	.00	.00	0.
1	0122	83	.01	.00	.00	2.	*	1	0253	174	.00	.00	.00	0.
1	0123	84	.01	.00	.00	2.	*	1	0254	175	.00	.00	.00	0.
1	0124	85	.01	.00	.00	2.	*	1	0255	176	.00	.00	.00	0.
1	0125	86	.01	.00	.00	2.	*	1	0256	177	.00	.00	.00	0.
1	0126	87	.01	.00	.00	2.	*	1	0257	178	.00	.00	.00	0.
1	0127	88	.01	.00	.00	2.	*	1	0258	179	.00	.00	.00	0.
1	0128	89	.01	.00	.00	2.	*	1	0259	180	.00	.00	.00	0.
1	0129	90	.01	.00	.00	2.	*	1	0300	181	.00	.00	.00	0.
1	0130	91	.01	.00	.00	2.	*							

post.out

TOTAL RAINFALL = 2.13, TOTAL LOSS = 1.61, TOTAL EXCESS = .52

PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
(CFS)	(HR)	(CFS)	6-HR	24-HR	72-HR	3.00-HR
+	9.	.85	2.	2.	2.	2.
		(INCHES)	.513	.513	.513	.513
		(AC-FT)	0.	0.	0.	0.
CUMULATIVE AREA =			.01 SQ MI			

HYDROGRAPH AT STATION BP7
PLAN 1, RATIO = 1.00

DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	*	DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
1	0000	1	.00	.00	.00	0.	0.	*	1	0131	92	.00	.00	.00	2.	
1	0001	2	.00	.00	.00	0.	0.	*	1	0132	93	.00	.00	.00	2.	
1	0002	3	.00	.00	.00	0.	0.	*	1	0133	94	.00	.00	.00	2.	
1	0003	4	.00	.00	.00	0.	0.	*	1	0134	95	.00	.00	.00	1.	
1	0004	5	.00	.00	.00	0.	0.	*	1	0135	96	.00	.00	.00	1.	
1	0005	6	.00	.00	.00	0.	0.	*	1	0136	97	.00	.00	.00	1.	
1	0006	7	.00	.00	.00	0.	0.	*	1	0137	98	.00	.00	.00	1.	
1	0007	8	.00	.00	.00	0.	0.	*	1	0138	99	.00	.00	.00	1.	
1	0008	9	.00	.00	.00	0.	0.	*	1	0139	100	.00	.00	.00	1.	
1	0009	10	.00	.00	.00	0.	0.	*	1	0140	101	.00	.00	.00	1.	
1	0010	11	.00	.00	.00	0.	0.	*	1	0141	102	.00	.00	.00	1.	
1	0011	12	.00	.00	.00	0.	0.	*	1	0142	103	.00	.00	.00	1.	
1	0012	13	.00	.00	.00	0.	0.	*	1	0143	104	.00	.00	.00	1.	
1	0013	14	.00	.00	.00	0.	0.	*	1	0144	105	.00	.00	.00	1.	
1	0014	15	.00	.00	.00	0.	0.	*	1	0145	106	.00	.00	.00	0.	
1	0015	16	.00	.00	.00	0.	0.	*	1	0146	107	.00	.00	.00	0.	
1	0016	17	.00	.00	.00	0.	0.	*	1	0147	108	.00	.00	.00	0.	
1	0017	18	.00	.00	.00	0.	0.	*	1	0148	109	.00	.00	.00	0.	
1	0018	19	.00	.00	.00	0.	0.	*	1	0149	110	.00	.00	.00	0.	
1	0019	20	.00	.00	.00	0.	0.	*	1	0150	111	.00	.00	.00	0.	
1	0020	21	.00	.00	.00	0.	0.	*	1	0151	112	.00	.00	.00	0.	
1	0021	22	.00	.00	.00	0.	0.	*	1	0152	113	.00	.00	.00	0.	
1	0022	23	.00	.00	.00	0.	0.	*	1	0153	114	.00	.00	.00	0.	
1	0023	24	.00	.00	.00	0.	0.	*	1	0154	115	.00	.00	.00	0.	
1	0024	25	.00	.00	.00	0.	0.	*	1	0155	116	.00	.00	.00	0.	
1	0025	26	.00	.00	.00	0.	0.	*	1	0156	117	.00	.00	.00	0.	
1	0026	27	.00	.00	.00	0.	0.	*	1	0157	118	.00	.00	.00	0.	
1	0027	28	.00	.00	.00	0.	0.	*	1	0158	119	.00	.00	.00	0.	
1	0028	29	.00	.00	.00	0.	0.	*	1	0159	120	.00	.00	.00	0.	
1	0029	30	.00	.00	.00	0.	0.	*	1	0200	121	.00	.00	.00	0.	
1	0030	31	.00	.00	.00	0.	0.	*	1	0201	122	.00	.00	.00	0.	
1	0031	32	.11	.11	.00	0.	0.	*	1	0202	123	.00	.00	.00	0.	
1	0032	33	.11	.11	.00	0.	0.	*	1	0203	124	.00	.00	.00	0.	
1	0033	34	.11	.11	.00	0.	0.	*	1	0204	125	.00	.00	.00	0.	
1	0034	35	.11	.11	.00	0.	0.	*	1	0205	126	.00	.00	.00	0.	
1	0035	36	.11	.11	.00	0.	0.	*	1	0206	127	.00	.00	.00	0.	
1	0036	37	.09	.09	.00	0.	0.	*	1	0207	128	.00	.00	.00	0.	
1	0037	38	.09	.08	.01	0.	0.	*	1	0208	129	.00	.00	.00	0.	
1	0038	39	.09	.08	.01	0.	0.	*	1	0209	130	.00	.00	.00	0.	
1	0039	40	.09	.07	.02	1.	0.	*	1	0210	131	.00	.00	.00	0.	
1	0040	41	.09	.07	.02	1.	0.	*	1	0211	132	.00	.00	.00	0.	
1	0041	42	.06	.05	.02	2.	0.	*	1	0212	133	.00	.00	.00	0.	
1	0042	43	.06	.04	.02	3.	0.	*	1	0213	134	.00	.00	.00	0.	
1	0043	44	.06	.04	.02	4.	0.	*	1	0214	135	.00	.00	.00	0.	
1	0044	45	.06	.04	.02	5.	0.	*	1	0215	136	.00	.00	.00	0.	
1	0045	46	.06	.04	.02	6.	0.	*	1	0216	137	.00	.00	.00	0.	
1	0046	47	.04	.02	.01	7.	0.	*	1	0217	138	.00	.00	.00	0.	
1	0047	48	.04	.02	.01	7.	0.	*	1	0218	139	.00	.00	.00	0.	
1	0048	49	.04	.02	.02	8.	0.	*	1	0219	140	.00	.00	.00	0.	
1	0049	50	.04	.02	.02	8.	0.	*	1	0220	141	.00	.00	.00	0.	
1	0050	51	.04	.02	.02	8.	0.	*	1	0221	142	.00	.00	.00	0.	
1	0051	52	.02	.01	.01	9.	0.	*	1	0222	143	.00	.00	.00	0.	
1	0052	53	.02	.01	.01	8.	0.	*	1	0223	144	.00	.00	.00	0.	
1	0053	54	.02	.01	.01	8.	0.	*	1	0224	145	.00	.00	.00	0.	
1	0054	55	.02	.01	.01	8.	0.	*	1	0225	146	.00	.00	.00	0.	
1	0055	56	.02	.01	.01	8.	0.	*	1	0226	147	.00	.00	.00	0.	
1	0056	57	.02	.01	.01	7.	0.	*	1	0227	148	.00	.00	.00	0.	
1	0057	58	.02	.01	.01	7.	0.	*	1	0228	149	.00	.00	.00	0.	
1	0058	59	.02	.01	.01	7.	0.	*	1	0229	150	.00	.00	.00	0.	
1	0059	60	.02	.01	.01	6.	0.	*	1	0230	151	.00	.00	.00	0.	
1	0100	61	.02	.01	.01	6.	0.	*	1	0231	152	.00	.00	.00	0.	
1	0101	62	.01	.01	.01	6.	0.	*	1	0232	153	.00	.00	.00	0.	
1	0102	63	.01	.01	.01	5.	0.	*	1	0233	154	.00	.00	.00	0.	
1	0103	64	.01	.01	.01	5.	0.	*	1	0234	155	.00	.00	.00	0.	
1	0104	65	.01	.01	.01	5.	0.	*	1	0235	156	.00	.00	.00	0.	
1	0105	66	.01	.01	.01	5.	0.	*	1	0236	157	.00	.00	.00	0.	

														post.out			
1	0106	67	.01	.01	.01	4.	*	1	0237	158	.00	.00	.00	0.			
1	0107	68	.01	.01	.01	4.	*	1	0238	159	.00	.00	.00	0.			
1	0108	69	.01	.01	.01	4.	*	1	0239	160	.00	.00	.00	0.			
1	0109	70	.01	.01	.01	4.	*	1	0240	161	.00	.00	.00	0.			
1	0110	71	.01	.01	.01	4.	*	1	0241	162	.00	.00	.00	0.			
1	0111	72	.01	.00	.00	3.	*	1	0242	163	.00	.00	.00	0.			
1	0112	73	.01	.00	.00	3.	*	1	0243	164	.00	.00	.00	0.			
1	0113	74	.01	.00	.00	3.	*	1	0244	165	.00	.00	.00	0.			
1	0114	75	.01	.00	.00	3.	*	1	0245	166	.00	.00	.00	0.			
1	0115	76	.01	.00	.00	3.	*	1	0246	167	.00	.00	.00	0.			
1	0116	77	.01	.00	.00	3.	*	1	0247	168	.00	.00	.00	0.			
1	0117	78	.01	.00	.00	3.	*	1	0248	169	.00	.00	.00	0.			
1	0118	79	.01	.00	.00	3.	*	1	0249	170	.00	.00	.00	0.			
1	0119	80	.01	.00	.00	2.	*	1	0250	171	.00	.00	.00	0.			
1	0120	81	.01	.00	.00	2.	*	1	0251	172	.00	.00	.00	0.			
1	0121	82	.01	.00	.00	2.	*	1	0252	173	.00	.00	.00	0.			
1	0122	83	.01	.00	.00	2.	*	1	0253	174	.00	.00	.00	0.			
1	0123	84	.01	.00	.00	2.	*	1	0254	175	.00	.00	.00	0.			
1	0124	85	.01	.00	.00	2.	*	1	0255	176	.00	.00	.00	0.			
1	0125	86	.01	.00	.00	2.	*	1	0256	177	.00	.00	.00	0.			
1	0126	87	.01	.00	.00	2.	*	1	0257	178	.00	.00	.00	0.			
1	0127	88	.01	.00	.00	2.	*	1	0258	179	.00	.00	.00	0.			
1	0128	89	.01	.00	.00	2.	*	1	0259	180	.00	.00	.00	0.			
1	0129	90	.01	.00	.00	2.	*	1	0300	181	.00	.00	.00	0.			
1	0130	91	.01	.00	.00	2.	*										

TOTAL RAINFALL = 2.13, TOTAL LOSS = 1.61, TOTAL EXCESS = .52

PEAK FLOW	TIME	MAXIMUM AVERAGE FLOW			
(CFS)	(HR)	6-HR	24-HR	72-HR	3.00-HR
+	9.	.85	2.	2.	2.
		(CFS)	(INCHES)	(AC-FT)	
+			.513	.513	.513
			0.	0.	0.
		CUMULATIVE AREA =	.01 SQ MI		

HYDROGRAPH AT STATION BP7
PLAN 1, RATIO = .61

DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	*	DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	*
1	0000	1	.00	.00	.00	0.	*		1	0131	92	.00	.00	.00	1.	*	
1	0001	2	.00	.00	.00	0.	*		1	0132	93	.00	.00	.00	1.	*	
1	0002	3	.00	.00	.00	0.	*		1	0133	94	.00	.00	.00	1.	*	
1	0003	4	.00	.00	.00	0.	*		1	0134	95	.00	.00	.00	0.	*	
1	0004	5	.00	.00	.00	0.	*		1	0135	96	.00	.00	.00	0.	*	
1	0005	6	.00	.00	.00	0.	*		1	0136	97	.00	.00	.00	0.	*	
1	0006	7	.00	.00	.00	0.	*		1	0137	98	.00	.00	.00	0.	*	
1	0007	8	.00	.00	.00	0.	*		1	0138	99	.00	.00	.00	0.	*	
1	0008	9	.00	.00	.00	0.	*		1	0139	100	.00	.00	.00	0.	*	
1	0009	10	.00	.00	.00	0.	*		1	0140	101	.00	.00	.00	0.	*	
1	0010	11	.00	.00	.00	0.	*		1	0141	102	.00	.00	.00	0.	*	
1	0011	12	.00	.00	.00	0.	*		1	0142	103	.00	.00	.00	0.	*	
1	0012	13	.00	.00	.00	0.	*		1	0143	104	.00	.00	.00	0.	*	
1	0013	14	.00	.00	.00	0.	*		1	0144	105	.00	.00	.00	0.	*	
1	0014	15	.00	.00	.00	0.	*		1	0145	106	.00	.00	.00	0.	*	
1	0015	16	.00	.00	.00	0.	*		1	0146	107	.00	.00	.00	0.	*	
1	0016	17	.00	.00	.00	0.	*		1	0147	108	.00	.00	.00	0.	*	
1	0017	18	.00	.00	.00	0.	*		1	0148	109	.00	.00	.00	0.	*	
1	0018	19	.00	.00	.00	0.	*		1	0149	110	.00	.00	.00	0.	*	
1	0019	20	.00	.00	.00	0.	*		1	0150	111	.00	.00	.00	0.	*	
1	0020	21	.00	.00	.00	0.	*		1	0151	112	.00	.00	.00	0.	*	
1	0021	22	.00	.00	.00	0.	*		1	0152	113	.00	.00	.00	0.	*	
1	0022	23	.00	.00	.00	0.	*		1	0153	114	.00	.00	.00	0.	*	
1	0023	24	.00	.00	.00	0.	*		1	0154	115	.00	.00	.00	0.	*	
1	0024	25	.00	.00	.00	0.	*		1	0155	116	.00	.00	.00	0.	*	
1	0025	26	.00	.00	.00	0.	*		1	0156	117	.00	.00	.00	0.	*	
1	0026	27	.00	.00	.00	0.	*		1	0157	118	.00	.00	.00	0.	*	
1	0027	28	.00	.00	.00	0.	*		1	0158	119	.00	.00	.00	0.	*	
1	0028	29	.00	.00	.00	0.	*		1	0159	120	.00	.00	.00	0.	*	
1	0029	30	.00	.00	.00	0.	*		1	0200	121	.00	.00	.00	0.	*	
1	0030	31	.00	.00	.00	0.	*		1	0201	122	.00	.00	.00	0.	*	
1	0031	32	.07	.07	.00	0.	*		1	0202	123	.00	.00	.00	0.	*	
1	0032	33	.07	.07	.00	0.	*		1	0203	124	.00	.00	.00	0.	*	
1	0033	34	.07	.07	.00	0.	*		1	0204	125	.00	.00	.00	0.	*	
1	0034	35	.07	.07	.00	0.	*		1	0205	126	.00	.00	.00	0.	*	
1	0035	36	.07	.07	.00	0.	*		1	0206	127	.00	.00	.00	0.	*	
1	0036	37	.05	.05	.00	0.	*		1	0207	128	.00	.00	.00	0.	*	
1	0037	38	.05	.05	.00	0.	*		1	0208	129	.00	.00	.00	0.	*	
1	0038	39	.05	.05	.00	0.	*		1	0209	130	.00	.00	.00	0.	*	
1	0039	40	.05	.05	.00	0.	*		1	0210	131	.00	.00	.00	0.	*	

post.out														
1	0040	41	.05	.05	.00	0.	*	1	0211	132	.00	.00	.00	0.
1	0041	42	.04	.04	.00	0.	*	1	0212	133	.00	.00	.00	0.
1	0042	43	.04	.04	.00	0.	*	1	0213	134	.00	.00	.00	0.
1	0043	44	.04	.03	.00	0.	*	1	0214	135	.00	.00	.00	0.
1	0044	45	.04	.03	.00	0.	*	1	0215	136	.00	.00	.00	0.
1	0045	46	.04	.03	.00	0.	*	1	0216	137	.00	.00	.00	0.
1	0046	47	.02	.02	.00	1.	*	1	0217	138	.00	.00	.00	0.
1	0047	48	.02	.02	.00	1.	*	1	0218	139	.00	.00	.00	0.
1	0048	49	.02	.02	.00	1.	*	1	0219	140	.00	.00	.00	0.
1	0049	50	.02	.02	.00	1.	*	1	0220	141	.00	.00	.00	0.
1	0050	51	.02	.02	.00	1.	*	1	0221	142	.00	.00	.00	0.
1	0051	52	.01	.01	.00	2.	*	1	0222	143	.00	.00	.00	0.
1	0052	53	.01	.01	.00	2.	*	1	0223	144	.00	.00	.00	0.
1	0053	54	.01	.01	.00	2.	*	1	0224	145	.00	.00	.00	0.
1	0054	55	.01	.01	.00	2.	*	1	0225	146	.00	.00	.00	0.
1	0055	56	.01	.01	.00	2.	*	1	0226	147	.00	.00	.00	0.
1	0056	57	.01	.01	.00	2.	*	1	0227	148	.00	.00	.00	0.
1	0057	58	.01	.01	.00	2.	*	1	0228	149	.00	.00	.00	0.
1	0058	59	.01	.01	.00	2.	*	1	0229	150	.00	.00	.00	0.
1	0059	60	.01	.01	.00	2.	*	1	0230	151	.00	.00	.00	0.
1	0100	61	.01	.01	.00	2.	*	1	0231	152	.00	.00	.00	0.
1	0101	62	.01	.01	.00	2.	*	1	0232	153	.00	.00	.00	0.
1	0102	63	.01	.01	.00	2.	*	1	0233	154	.00	.00	.00	0.
1	0103	64	.01	.01	.00	2.	*	1	0234	155	.00	.00	.00	0.
1	0104	65	.01	.01	.00	1.	*	1	0235	156	.00	.00	.00	0.
1	0105	66	.01	.01	.00	1.	*	1	0236	157	.00	.00	.00	0.
1	0106	67	.01	.00	.00	1.	*	1	0237	158	.00	.00	.00	0.
1	0107	68	.01	.00	.00	1.	*	1	0238	159	.00	.00	.00	0.
1	0108	69	.01	.00	.00	1.	*	1	0239	160	.00	.00	.00	0.
1	0109	70	.01	.00	.00	1.	*	1	0240	161	.00	.00	.00	0.
1	0110	71	.01	.00	.00	1.	*	1	0241	162	.00	.00	.00	0.
1	0111	72	.00	.00	.00	1.	*	1	0242	163	.00	.00	.00	0.
1	0112	73	.00	.00	.00	1.	*	1	0243	164	.00	.00	.00	0.
1	0113	74	.00	.00	.00	1.	*	1	0244	165	.00	.00	.00	0.
1	0114	75	.00	.00	.00	1.	*	1	0245	166	.00	.00	.00	0.
1	0115	76	.00	.00	.00	1.	*	1	0246	167	.00	.00	.00	0.
1	0116	77	.00	.00	.00	1.	*	1	0247	168	.00	.00	.00	0.
1	0117	78	.00	.00	.00	1.	*	1	0248	169	.00	.00	.00	0.
1	0118	79	.00	.00	.00	1.	*	1	0249	170	.00	.00	.00	0.
1	0119	80	.00	.00	.00	1.	*	1	0250	171	.00	.00	.00	0.
1	0120	81	.00	.00	.00	1.	*	1	0251	172	.00	.00	.00	0.
1	0121	82	.00	.00	.00	1.	*	1	0252	173	.00	.00	.00	0.
1	0122	83	.00	.00	.00	1.	*	1	0253	174	.00	.00	.00	0.
1	0123	84	.00	.00	.00	1.	*	1	0254	175	.00	.00	.00	0.
1	0124	85	.00	.00	.00	1.	*	1	0255	176	.00	.00	.00	0.
1	0125	86	.00	.00	.00	1.	*	1	0256	177	.00	.00	.00	0.
1	0126	87	.00	.00	.00	1.	*	1	0257	178	.00	.00	.00	0.
1	0127	88	.00	.00	.00	1.	*	1	0258	179	.00	.00	.00	0.
1	0128	89	.00	.00	.00	1.	*	1	0259	180	.00	.00	.00	0.
1	0129	90	.00	.00	.00	1.	*	1	0300	181	.00	.00	.00	0.
1	0130	91	.00	.00	.00	1.	*							

TOTAL RAINFALL = 1.29, TOTAL LOSS = 1.16, TOTAL EXCESS = .13

PEAK FLOW (CFS)	TIME (HR)	6-HR (CFS)	24-HR (INCHES)	72-HR (INCHES)	3.00-HR (INCHES)
+	2.	.92	0.	0.	0.
			.128	.128	.128
			0.	0.	0.
CUMULATIVE AREA =			.01 SQ MI		

*** **

```

*****
*
78 KK * RP7 *
*
*****

```

Route BP7 in channel to Culvert BP15

HYDROGRAPH ROUTING DATA

```

80 RD MUSKINGUM-CUNGE CHANNEL ROUTING
L 8374. CHANNEL LENGTH
S .0180 SLOPE
N .040 CHANNEL ROUGHNESS COEFFICIENT
CA .00 CONTRIBUTING AREA
SHAPE TRAP CHANNEL SHAPE
WD .00 BOTTOM WIDTH OR DIAMETER
Z 7.00 SIDE SLOPE

```

post.out

COMPUTED MUSKINGUM-CUNGE PARAMETERS

ELEMENT	ALPHA	M	COMPUTATION TIME STEP		PEAK (CFS)	TIME TO PEAK (MIN)	VOLUME (IN)	MAXIMUM CELERITY (FPS)
			DT (MIN)	DX (FT)				
MAIN	1.64	1.33	.85	76.13	10.03	99.45	.45	2.77

INTERPOLATED TO SPECIFIED COMPUTATION INTERVAL

MAIN	1.64	1.33	1.00		9.22	99.00	.45	
------	------	------	------	--	------	-------	-----	--

CONTINUITY SUMMARY (AC-FT) - INFLOW= .3781E+00 EXCESS= .0000E+00 OUTFLOW= .3330E+00 BASIN STORAGE= .7196E-01 PERCENT ERROR= -7.1

HYDROGRAPH AT STATION RP7
PLAN 1, RATIO = 1.00

DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	
1	0000	1	0.	*	1	0046	47	0.	*	1	0132	93	0.	*	1	0218	139	2.					
1	0001	2	0.	*	1	0047	48	0.	*	1	0133	94	0.	*	1	0219	140	2.					
1	0002	3	0.	*	1	0048	49	0.	*	1	0134	95	0.	*	1	0220	141	2.					
1	0003	4	0.	*	1	0049	50	0.	*	1	0135	96	0.	*	1	0221	142	2.					
1	0004	5	0.	*	1	0050	51	0.	*	1	0136	97	0.	*	1	0222	143	2.					
1	0005	6	0.	*	1	0051	52	0.	*	1	0137	98	0.	*	1	0223	144	2.					
1	0006	7	0.	*	1	0052	53	0.	*	1	0138	99	4.	*	1	0224	145	2.					
1	0007	8	0.	*	1	0053	54	0.	*	1	0139	100	9.	*	1	0225	146	2.					
1	0008	9	0.	*	1	0054	55	0.	*	1	0140	101	7.	*	1	0226	147	2.					
1	0009	10	0.	*	1	0055	56	0.	*	1	0141	102	6.	*	1	0227	148	2.					
1	0010	11	0.	*	1	0056	57	0.	*	1	0142	103	8.	*	1	0228	149	2.					
1	0011	12	0.	*	1	0057	58	0.	*	1	0143	104	7.	*	1	0229	150	2.					
1	0012	13	0.	*	1	0058	59	0.	*	1	0144	105	6.	*	1	0230	151	2.					
1	0013	14	0.	*	1	0059	60	0.	*	1	0145	106	6.	*	1	0231	152	2.					
1	0014	15	0.	*	1	0100	61	0.	*	1	0146	107	6.	*	1	0232	153	2.					
1	0015	16	0.	*	1	0101	62	0.	*	1	0147	108	6.	*	1	0233	154	2.					
1	0016	17	0.	*	1	0102	63	0.	*	1	0148	109	6.	*	1	0234	155	2.					
1	0017	18	0.	*	1	0103	64	0.	*	1	0149	110	6.	*	1	0235	156	2.					
1	0018	19	0.	*	1	0104	65	0.	*	1	0150	111	5.	*	1	0236	157	2.					
1	0019	20	0.	*	1	0105	66	0.	*	1	0151	112	5.	*	1	0237	158	2.					
1	0020	21	0.	*	1	0106	67	0.	*	1	0152	113	5.	*	1	0238	159	2.					
1	0021	22	0.	*	1	0107	68	0.	*	1	0153	114	5.	*	1	0239	160	1.					
1	0022	23	0.	*	1	0108	69	0.	*	1	0154	115	5.	*	1	0240	161	1.					
1	0023	24	0.	*	1	0109	70	0.	*	1	0155	116	5.	*	1	0241	162	1.					
1	0024	25	0.	*	1	0110	71	0.	*	1	0156	117	4.	*	1	0242	163	1.					
1	0025	26	0.	*	1	0111	72	0.	*	1	0157	118	4.	*	1	0243	164	1.					
1	0026	27	0.	*	1	0112	73	0.	*	1	0158	119	4.	*	1	0244	165	1.					
1	0027	28	0.	*	1	0113	74	0.	*	1	0159	120	4.	*	1	0245	166	1.					
1	0028	29	0.	*	1	0114	75	0.	*	1	0200	121	4.	*	1	0246	167	1.					
1	0029	30	0.	*	1	0115	76	0.	*	1	0201	122	4.	*	1	0247	168	1.					
1	0030	31	0.	*	1	0116	77	0.	*	1	0202	123	4.	*	1	0248	169	1.					
1	0031	32	0.	*	1	0117	78	0.	*	1	0203	124	4.	*	1	0249	170	1.					
1	0032	33	0.	*	1	0118	79	0.	*	1	0204	125	3.	*	1	0250	171	1.					
1	0033	34	0.	*	1	0119	80	0.	*	1	0205	126	3.	*	1	0251	172	1.					
1	0034	35	0.	*	1	0120	81	0.	*	1	0206	127	3.	*	1	0252	173	1.					
1	0035	36	0.	*	1	0121	82	0.	*	1	0207	128	3.	*	1	0253	174	1.					
1	0036	37	0.	*	1	0122	83	0.	*	1	0208	129	3.	*	1	0254	175	1.					
1	0037	38	0.	*	1	0123	84	0.	*	1	0209	130	3.	*	1	0255	176	1.					
1	0038	39	0.	*	1	0124	85	0.	*	1	0210	131	3.	*	1	0256	177	1.					
1	0039	40	0.	*	1	0125	86	0.	*	1	0211	132	3.	*	1	0257	178	1.					
1	0040	41	0.	*	1	0126	87	0.	*	1	0212	133	3.	*	1	0258	179	1.					
1	0041	42	0.	*	1	0127	88	0.	*	1	0213	134	3.	*	1	0259	180	1.					
1	0042	43	0.	*	1	0128	89	0.	*	1	0214	135	3.	*	1	0300	181	1.					
1	0043	44	0.	*	1	0129	90	0.	*	1	0215	136	3.	*									
1	0044	45	0.	*	1	0130	91	0.	*	1	0216	137	2.	*									
1	0045	46	0.	*	1	0131	92	0.	*	1	0217	138	2.	*									

PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
(CFS)	(HR)		6-HR	24-HR	72-HR	3.00-HR
+	9.	1.65	1.	1.	1.	1.
		(INCHES)	.452	.452	.452	.452
		(AC-FT)	0.	0.	0.	0.

CUMULATIVE AREA = .01 SQ MI

COMPUTED MUSKINGUM-CUNGE PARAMETERS
COMPUTATION TIME STEP

ELEMENT	ALPHA	M	DT (MIN)	DX (FT)	post.out PEAK (CFS)	TIME TO PEAK (MIN)	VOLUME (IN)	MAXIMUM CELERITY (FPS)
MAIN	1.64	1.33	.80	48.13	2.00	129.60	.09	1.87

INTERPOLATED TO SPECIFIED COMPUTATION INTERVAL

MAIN	1.64	1.33	1.00		1.66	129.00	.09	
------	------	------	------	--	------	--------	-----	--

CONTINUITY SUMMARY (AC-FT) - INFLOW= .9462E-01 EXCESS= .0000E+00 OUTFLOW= .6438E-01 BASIN STORAGE= .3981E-01 PERCENT ERROR= -10.1

HYDROGRAPH AT STATION RP7
PLAN 1, RATIO = .61

DA	MON	HRMN	ORD	FLOW	DA	MON	HRMN	ORD	FLOW	DA	MON	HRMN	ORD	FLOW	DA	MON	HRMN	ORD	FLOW
1	0000	1	0.	*	1	0046	47	0.	*	1	0132	93	0.	*	1	0218	139	1.	
1	0001	2	0.	*	1	0047	48	0.	*	1	0133	94	0.	*	1	0219	140	1.	
1	0002	3	0.	*	1	0048	49	0.	*	1	0134	95	0.	*	1	0220	141	1.	
1	0003	4	0.	*	1	0049	50	0.	*	1	0135	96	0.	*	1	0221	142	1.	
1	0004	5	0.	*	1	0050	51	0.	*	1	0136	97	0.	*	1	0222	143	1.	
1	0005	6	0.	*	1	0051	52	0.	*	1	0137	98	0.	*	1	0223	144	1.	
1	0006	7	0.	*	1	0052	53	0.	*	1	0138	99	0.	*	1	0224	145	1.	
1	0007	8	0.	*	1	0053	54	0.	*	1	0139	100	0.	*	1	0225	146	1.	
1	0008	9	0.	*	1	0054	55	0.	*	1	0140	101	0.	*	1	0226	147	1.	
1	0009	10	0.	*	1	0055	56	0.	*	1	0141	102	0.	*	1	0227	148	1.	
1	0010	11	0.	*	1	0056	57	0.	*	1	0142	103	0.	*	1	0228	149	1.	
1	0011	12	0.	*	1	0057	58	0.	*	1	0143	104	0.	*	1	0229	150	1.	
1	0012	13	0.	*	1	0058	59	0.	*	1	0144	105	0.	*	1	0230	151	1.	
1	0013	14	0.	*	1	0059	60	0.	*	1	0145	106	0.	*	1	0231	152	1.	
1	0014	15	0.	*	1	0100	61	0.	*	1	0146	107	0.	*	1	0232	153	1.	
1	0015	16	0.	*	1	0101	62	0.	*	1	0147	108	0.	*	1	0233	154	1.	
1	0016	17	0.	*	1	0102	63	0.	*	1	0148	109	0.	*	1	0234	155	1.	
1	0017	18	0.	*	1	0103	64	0.	*	1	0149	110	0.	*	1	0235	156	1.	
1	0018	19	0.	*	1	0104	65	0.	*	1	0150	111	0.	*	1	0236	157	1.	
1	0019	20	0.	*	1	0105	66	0.	*	1	0151	112	0.	*	1	0237	158	1.	
1	0020	21	0.	*	1	0106	67	0.	*	1	0152	113	0.	*	1	0238	159	1.	
1	0021	22	0.	*	1	0107	68	0.	*	1	0153	114	0.	*	1	0239	160	1.	
1	0022	23	0.	*	1	0108	69	0.	*	1	0154	115	0.	*	1	0240	161	1.	
1	0023	24	0.	*	1	0109	70	0.	*	1	0155	116	0.	*	1	0241	162	1.	
1	0024	25	0.	*	1	0110	71	0.	*	1	0156	117	0.	*	1	0242	163	1.	
1	0025	26	0.	*	1	0111	72	0.	*	1	0157	118	0.	*	1	0243	164	1.	
1	0026	27	0.	*	1	0112	73	0.	*	1	0158	119	0.	*	1	0244	165	1.	
1	0027	28	0.	*	1	0113	74	0.	*	1	0159	120	0.	*	1	0245	166	1.	
1	0028	29	0.	*	1	0114	75	0.	*	1	0200	121	0.	*	1	0246	167	1.	
1	0029	30	0.	*	1	0115	76	0.	*	1	0201	122	0.	*	1	0247	168	1.	
1	0030	31	0.	*	1	0116	77	0.	*	1	0202	123	0.	*	1	0248	169	1.	
1	0031	32	0.	*	1	0117	78	0.	*	1	0203	124	0.	*	1	0249	170	1.	
1	0032	33	0.	*	1	0118	79	0.	*	1	0204	125	0.	*	1	0250	171	1.	
1	0033	34	0.	*	1	0119	80	0.	*	1	0205	126	0.	*	1	0251	172	1.	
1	0034	35	0.	*	1	0120	81	0.	*	1	0206	127	0.	*	1	0252	173	1.	
1	0035	36	0.	*	1	0121	82	0.	*	1	0207	128	0.	*	1	0253	174	1.	
1	0036	37	0.	*	1	0122	83	0.	*	1	0208	129	0.	*	1	0254	175	1.	
1	0037	38	0.	*	1	0123	84	0.	*	1	0209	130	2.	*	1	0255	176	1.	
1	0038	39	0.	*	1	0124	85	0.	*	1	0210	131	2.	*	1	0256	177	1.	
1	0039	40	0.	*	1	0125	86	0.	*	1	0211	132	1.	*	1	0257	178	1.	
1	0040	41	0.	*	1	0126	87	0.	*	1	0212	133	2.	*	1	0258	179	1.	
1	0041	42	0.	*	1	0127	88	0.	*	1	0213	134	1.	*	1	0259	180	1.	
1	0042	43	0.	*	1	0128	89	0.	*	1	0214	135	1.	*	1	0300	181	0.	
1	0043	44	0.	*	1	0129	90	0.	*	1	0215	136	1.	*					
1	0044	45	0.	*	1	0130	91	0.	*	1	0216	137	1.	*					
1	0045	46	0.	*	1	0131	92	0.	*	1	0217	138	1.	*					

PEAK FLOW (CFS)	TIME (HR)	MAXIMUM 6-HR (CFS)	AVERAGE FLOW 24-HR (INCHES) (AC-FT)	72-HR (CFS)	3.00-HR (CFS)
2.	2.15	.087	.087	.087	.087
		.087	.087	.087	.087
CUMULATIVE AREA =		.01 SQ MI			

*** ** ** ** **

post.out														
1	0025	26	.00	.00	.00	0.	*	1	0156	117	.00	.00	.00	2.
1	0026	27	.00	.00	.00	0.	*	1	0157	118	.00	.00	.00	2.
1	0027	28	.00	.00	.00	0.	*	1	0158	119	.00	.00	.00	2.
1	0028	29	.00	.00	.00	0.	*	1	0159	120	.00	.00	.00	2.
1	0029	30	.00	.00	.00	0.	*	1	0200	121	.00	.00	.00	2.
1	0030	31	.00	.00	.00	0.	*	1	0201	122	.00	.00	.00	2.
1	0031	32	.11	.11	.00	0.	*	1	0202	123	.00	.00	.00	2.
1	0032	33	.11	.11	.00	0.	*	1	0203	124	.00	.00	.00	2.
1	0033	34	.11	.11	.00	0.	*	1	0204	125	.00	.00	.00	2.
1	0034	35	.11	.11	.00	0.	*	1	0205	126	.00	.00	.00	2.
1	0035	36	.11	.11	.00	0.	*	1	0206	127	.00	.00	.00	2.
1	0036	37	.09	.08	.00	0.	*	1	0207	128	.00	.00	.00	1.
1	0037	38	.09	.08	.01	0.	*	1	0208	129	.00	.00	.00	1.
1	0038	39	.09	.07	.01	0.	*	1	0209	130	.00	.00	.00	1.
1	0039	40	.09	.07	.02	0.	*	1	0210	131	.00	.00	.00	1.
1	0040	41	.09	.07	.02	1.	*	1	0211	132	.00	.00	.00	1.
1	0041	42	.06	.04	.02	1.	*	1	0212	133	.00	.00	.00	1.
1	0042	43	.06	.04	.02	2.	*	1	0213	134	.00	.00	.00	1.
1	0043	44	.06	.04	.02	3.	*	1	0214	135	.00	.00	.00	1.
1	0044	45	.06	.04	.02	5.	*	1	0215	136	.00	.00	.00	1.
1	0045	46	.06	.04	.02	6.	*	1	0216	137	.00	.00	.00	1.
1	0046	47	.04	.02	.02	8.	*	1	0217	138	.00	.00	.00	1.
1	0047	48	.04	.02	.02	10.	*	1	0218	139	.00	.00	.00	1.
1	0048	49	.04	.02	.02	12.	*	1	0219	140	.00	.00	.00	1.
1	0049	50	.04	.02	.02	14.	*	1	0220	141	.00	.00	.00	1.
1	0050	51	.04	.02	.02	16.	*	1	0221	142	.00	.00	.00	1.
1	0051	52	.02	.01	.01	18.	*	1	0222	143	.00	.00	.00	1.
1	0052	53	.02	.01	.01	19.	*	1	0223	144	.00	.00	.00	1.
1	0053	54	.02	.01	.01	21.	*	1	0224	145	.00	.00	.00	1.
1	0054	55	.02	.01	.01	22.	*	1	0225	146	.00	.00	.00	1.
1	0055	56	.02	.01	.01	23.	*	1	0226	147	.00	.00	.00	1.
1	0056	57	.02	.01	.01	24.	*	1	0227	148	.00	.00	.00	1.
1	0057	58	.02	.01	.01	24.	*	1	0228	149	.00	.00	.00	1.
1	0058	59	.02	.01	.01	24.	*	1	0229	150	.00	.00	.00	1.
1	0059	60	.02	.01	.01	24.	*	1	0230	151	.00	.00	.00	1.
1	0100	61	.02	.01	.01	24.	*	1	0231	152	.00	.00	.00	1.
1	0101	62	.01	.01	.01	24.	*	1	0232	153	.00	.00	.00	1.
1	0102	63	.01	.01	.01	23.	*	1	0233	154	.00	.00	.00	1.
1	0103	64	.01	.01	.01	22.	*	1	0234	155	.00	.00	.00	1.
1	0104	65	.01	.01	.01	22.	*	1	0235	156	.00	.00	.00	1.
1	0105	66	.01	.01	.01	21.	*	1	0236	157	.00	.00	.00	1.
1	0106	67	.01	.00	.01	21.	*	1	0237	158	.00	.00	.00	1.
1	0107	68	.01	.00	.01	20.	*	1	0238	159	.00	.00	.00	1.
1	0108	69	.01	.00	.01	19.	*	1	0239	160	.00	.00	.00	1.
1	0109	70	.01	.00	.01	18.	*	1	0240	161	.00	.00	.00	1.
1	0110	71	.01	.00	.01	18.	*	1	0241	162	.00	.00	.00	1.
1	0111	72	.01	.00	.00	17.	*	1	0242	163	.00	.00	.00	1.
1	0112	73	.01	.00	.00	16.	*	1	0243	164	.00	.00	.00	1.
1	0113	74	.01	.00	.00	16.	*	1	0244	165	.00	.00	.00	1.
1	0114	75	.01	.00	.00	15.	*	1	0245	166	.00	.00	.00	1.
1	0115	76	.01	.00	.00	14.	*	1	0246	167	.00	.00	.00	1.
1	0116	77	.01	.00	.00	14.	*	1	0247	168	.00	.00	.00	1.
1	0117	78	.01	.00	.00	13.	*	1	0248	169	.00	.00	.00	1.
1	0118	79	.01	.00	.00	13.	*	1	0249	170	.00	.00	.00	1.
1	0119	80	.01	.00	.00	12.	*	1	0250	171	.00	.00	.00	1.
1	0120	81	.01	.00	.00	12.	*	1	0251	172	.00	.00	.00	1.
1	0121	82	.01	.00	.00	11.	*	1	0252	173	.00	.00	.00	1.
1	0122	83	.01	.00	.00	11.	*	1	0253	174	.00	.00	.00	1.
1	0123	84	.01	.00	.00	10.	*	1	0254	175	.00	.00	.00	1.
1	0124	85	.01	.00	.00	10.	*	1	0255	176	.00	.00	.00	1.
1	0125	86	.01	.00	.00	10.	*	1	0256	177	.00	.00	.00	1.
1	0126	87	.01	.00	.00	9.	*	1	0257	178	.00	.00	.00	1.
1	0127	88	.01	.00	.00	9.	*	1	0258	179	.00	.00	.00	1.
1	0128	89	.01	.00	.00	9.	*	1	0259	180	.00	.00	.00	1.
1	0129	90	.01	.00	.00	8.	*	1	0300	181	.00	.00	.00	1.
1	0130	91	.01	.00	.00	8.	*							

TOTAL RAINFALL = 2.13, TOTAL LOSS = 1.57, TOTAL EXCESS = .56

PEAK FLOW	TIME		MAXIMUM	AVERAGE FLOW	
(CFS)	(HR)		6-HR	24-HR	72-HR
+	24.	.97	5.	5.	5.
		(CFS)			
		(INCHES)	.546	.546	.546
		(AC-FT)	1.	1.	1.

CUMULATIVE AREA = .04 SQ MI

HYDROGRAPH AT STATION BP15
PLAN 1, RATIO = 1.00

DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	*	DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
----	-----	------	-----	------	------	--------	--------	---	----	-----	------	-----	------	------	--------	--------

post.out

1	0000	1	.00	.00	.00	0.	*	1	0131	92	.00	.00	.00	8.
1	0001	2	.00	.00	.00	0.	*	1	0132	93	.00	.00	.00	7.
1	0002	3	.00	.00	.00	0.	*	1	0133	94	.00	.00	.00	7.
1	0003	4	.00	.00	.00	0.	*	1	0134	95	.00	.00	.00	7.
1	0004	5	.00	.00	.00	0.	*	1	0135	96	.00	.00	.00	7.
1	0005	6	.00	.00	.00	0.	*	1	0136	97	.00	.00	.00	6.
1	0006	7	.00	.00	.00	0.	*	1	0137	98	.00	.00	.00	6.
1	0007	8	.00	.00	.00	0.	*	1	0138	99	.00	.00	.00	6.
1	0008	9	.00	.00	.00	0.	*	1	0139	100	.00	.00	.00	5.
1	0009	10	.00	.00	.00	0.	*	1	0140	101	.00	.00	.00	5.
1	0010	11	.00	.00	.00	0.	*	1	0141	102	.00	.00	.00	5.
1	0011	12	.00	.00	.00	0.	*	1	0142	103	.00	.00	.00	4.
1	0012	13	.00	.00	.00	0.	*	1	0143	104	.00	.00	.00	4.
1	0013	14	.00	.00	.00	0.	*	1	0144	105	.00	.00	.00	4.
1	0014	15	.00	.00	.00	0.	*	1	0145	106	.00	.00	.00	3.
1	0015	16	.00	.00	.00	0.	*	1	0146	107	.00	.00	.00	3.
1	0016	17	.00	.00	.00	0.	*	1	0147	108	.00	.00	.00	3.
1	0017	18	.00	.00	.00	0.	*	1	0148	109	.00	.00	.00	3.
1	0018	19	.00	.00	.00	0.	*	1	0149	110	.00	.00	.00	3.
1	0019	20	.00	.00	.00	0.	*	1	0150	111	.00	.00	.00	2.
1	0020	21	.00	.00	.00	0.	*	1	0151	112	.00	.00	.00	2.
1	0021	22	.00	.00	.00	0.	*	1	0152	113	.00	.00	.00	2.
1	0022	23	.00	.00	.00	0.	*	1	0153	114	.00	.00	.00	2.
1	0023	24	.00	.00	.00	0.	*	1	0154	115	.00	.00	.00	2.
1	0024	25	.00	.00	.00	0.	*	1	0155	116	.00	.00	.00	2.
1	0025	26	.00	.00	.00	0.	*	1	0156	117	.00	.00	.00	2.
1	0026	27	.00	.00	.00	0.	*	1	0157	118	.00	.00	.00	2.
1	0027	28	.00	.00	.00	0.	*	1	0158	119	.00	.00	.00	2.
1	0028	29	.00	.00	.00	0.	*	1	0159	120	.00	.00	.00	2.
1	0029	30	.00	.00	.00	0.	*	1	0200	121	.00	.00	.00	2.
1	0030	31	.00	.00	.00	0.	*	1	0201	122	.00	.00	.00	2.
1	0031	32	.11	.11	.00	0.	*	1	0202	123	.00	.00	.00	2.
1	0032	33	.11	.11	.00	0.	*	1	0203	124	.00	.00	.00	2.
1	0033	34	.11	.11	.00	0.	*	1	0204	125	.00	.00	.00	2.
1	0034	35	.11	.11	.00	0.	*	1	0205	126	.00	.00	.00	2.
1	0035	36	.11	.11	.00	0.	*	1	0206	127	.00	.00	.00	2.
1	0036	37	.09	.08	.00	0.	*	1	0207	128	.00	.00	.00	1.
1	0037	38	.09	.08	.01	0.	*	1	0208	129	.00	.00	.00	1.
1	0038	39	.09	.07	.01	0.	*	1	0209	130	.00	.00	.00	1.
1	0039	40	.09	.07	.02	0.	*	1	0210	131	.00	.00	.00	1.
1	0040	41	.09	.07	.02	1.	*	1	0211	132	.00	.00	.00	1.
1	0041	42	.06	.04	.02	1.	*	1	0212	133	.00	.00	.00	1.
1	0042	43	.06	.04	.02	2.	*	1	0213	134	.00	.00	.00	1.
1	0043	44	.06	.04	.02	3.	*	1	0214	135	.00	.00	.00	1.
1	0044	45	.06	.04	.02	5.	*	1	0215	136	.00	.00	.00	1.
1	0045	46	.06	.04	.02	6.	*	1	0216	137	.00	.00	.00	1.
1	0046	47	.04	.02	.02	8.	*	1	0217	138	.00	.00	.00	1.
1	0047	48	.04	.02	.02	10.	*	1	0218	139	.00	.00	.00	1.
1	0048	49	.04	.02	.02	12.	*	1	0219	140	.00	.00	.00	1.
1	0049	50	.04	.02	.02	14.	*	1	0220	141	.00	.00	.00	1.
1	0050	51	.04	.02	.02	16.	*	1	0221	142	.00	.00	.00	1.
1	0051	52	.02	.01	.01	18.	*	1	0222	143	.00	.00	.00	1.
1	0052	53	.02	.01	.01	19.	*	1	0223	144	.00	.00	.00	1.
1	0053	54	.02	.01	.01	21.	*	1	0224	145	.00	.00	.00	1.
1	0054	55	.02	.01	.01	22.	*	1	0225	146	.00	.00	.00	1.
1	0055	56	.02	.01	.01	23.	*	1	0226	147	.00	.00	.00	1.
1	0056	57	.02	.01	.01	24.	*	1	0227	148	.00	.00	.00	1.
1	0057	58	.02	.01	.01	24.	*	1	0228	149	.00	.00	.00	1.
1	0058	59	.02	.01	.01	24.	*	1	0229	150	.00	.00	.00	1.
1	0059	60	.02	.01	.01	24.	*	1	0230	151	.00	.00	.00	1.
1	0100	61	.02	.01	.01	24.	*	1	0231	152	.00	.00	.00	1.
1	0101	62	.01	.01	.01	24.	*	1	0232	153	.00	.00	.00	1.
1	0102	63	.01	.01	.01	23.	*	1	0233	154	.00	.00	.00	1.
1	0103	64	.01	.01	.01	22.	*	1	0234	155	.00	.00	.00	1.
1	0104	65	.01	.01	.01	22.	*	1	0235	156	.00	.00	.00	1.
1	0105	66	.01	.01	.01	21.	*	1	0236	157	.00	.00	.00	1.
1	0106	67	.01	.00	.01	21.	*	1	0237	158	.00	.00	.00	1.
1	0107	68	.01	.00	.01	20.	*	1	0238	159	.00	.00	.00	1.
1	0108	69	.01	.00	.01	19.	*	1	0239	160	.00	.00	.00	1.
1	0109	70	.01	.00	.01	18.	*	1	0240	161	.00	.00	.00	1.
1	0110	71	.01	.00	.01	18.	*	1	0241	162	.00	.00	.00	1.
1	0111	72	.01	.00	.00	17.	*	1	0242	163	.00	.00	.00	1.
1	0112	73	.01	.00	.00	16.	*	1	0243	164	.00	.00	.00	1.
1	0113	74	.01	.00	.00	16.	*	1	0244	165	.00	.00	.00	1.
1	0114	75	.01	.00	.00	15.	*	1	0245	166	.00	.00	.00	1.
1	0115	76	.01	.00	.00	14.	*	1	0246	167	.00	.00	.00	1.
1	0116	77	.01	.00	.00	14.	*	1	0247	168	.00	.00	.00	1.
1	0117	78	.01	.00	.00	13.	*	1	0248	169	.00	.00	.00	1.
1	0118	79	.01	.00	.00	13.	*	1	0249	170	.00	.00	.00	1.
1	0119	80	.01	.00	.00	12.	*	1	0250	171	.00	.00	.00	1.
1	0120	81	.01	.00	.00	12.	*	1	0251	172	.00	.00	.00	1.
1	0121	82	.01	.00	.00	11.	*	1	0252	173	.00	.00	.00	1.
1	0122	83	.01	.00	.00	11.	*	1	0253	174	.00	.00	.00	1.
1	0123	84	.01	.00	.00	10.	*	1	0254	175	.00	.00	.00	1.
1	0124	85	.01	.00	.00	10.	*	1	0255	176	.00	.00	.00	1.
1	0125	86	.01	.00	.00	10.	*	1	0256	177	.00	.00	.00	1.
1	0126	87	.01	.00	.00	9.	*	1	0257	178	.00	.00	.00	1.
1	0127	88	.01	.00	.00	9.	*	1	0258	179	.00	.00	.00	1.
1	0128	89	.01	.00	.00	9.	*	1	0259	180	.00	.00	.00	1.

1	0129	90	.01	.00	.00	8.	*	post.out	1	0300	181	.00	.00	.00	1.
1	0130	91	.01	.00	.00	8.	*								

TOTAL RAINFALL = 2.13, TOTAL LOSS = 1.57, TOTAL EXCESS = .56

PEAK FLOW	TIME		MAXIMUM	AVERAGE FLOW	
(CFS)	(HR)	(CFS)	6-HR	24-HR	72-HR
+	24.	.97	5.	5.	5.
		(INCHES)	.546	.546	.546
		(AC-FT)	1.	1.	1.
		CUMULATIVE AREA =	.04 SQ MI		

HYDROGRAPH AT STATION BP15
PLAN 1, RATIO = .61

DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	*	DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
1	0000	1	.00	.00	.00	0.	*		1	0131	92	.00	.00	.00	3.	
1	0001	2	.00	.00	.00	0.	*		1	0132	93	.00	.00	.00	3.	
1	0002	3	.00	.00	.00	0.	*		1	0133	94	.00	.00	.00	3.	
1	0003	4	.00	.00	.00	0.	*		1	0134	95	.00	.00	.00	2.	
1	0004	5	.00	.00	.00	0.	*		1	0135	96	.00	.00	.00	2.	
1	0005	6	.00	.00	.00	0.	*		1	0136	97	.00	.00	.00	2.	
1	0006	7	.00	.00	.00	0.	*		1	0137	98	.00	.00	.00	2.	
1	0007	8	.00	.00	.00	0.	*		1	0138	99	.00	.00	.00	2.	
1	0008	9	.00	.00	.00	0.	*		1	0139	100	.00	.00	.00	2.	
1	0009	10	.00	.00	.00	0.	*		1	0140	101	.00	.00	.00	2.	
1	0010	11	.00	.00	.00	0.	*		1	0141	102	.00	.00	.00	2.	
1	0011	12	.00	.00	.00	0.	*		1	0142	103	.00	.00	.00	2.	
1	0012	13	.00	.00	.00	0.	*		1	0143	104	.00	.00	.00	1.	
1	0013	14	.00	.00	.00	0.	*		1	0144	105	.00	.00	.00	1.	
1	0014	15	.00	.00	.00	0.	*		1	0145	106	.00	.00	.00	1.	
1	0015	16	.00	.00	.00	0.	*		1	0146	107	.00	.00	.00	1.	
1	0016	17	.00	.00	.00	0.	*		1	0147	108	.00	.00	.00	1.	
1	0017	18	.00	.00	.00	0.	*		1	0148	109	.00	.00	.00	1.	
1	0018	19	.00	.00	.00	0.	*		1	0149	110	.00	.00	.00	1.	
1	0019	20	.00	.00	.00	0.	*		1	0150	111	.00	.00	.00	1.	
1	0020	21	.00	.00	.00	0.	*		1	0151	112	.00	.00	.00	1.	
1	0021	22	.00	.00	.00	0.	*		1	0152	113	.00	.00	.00	1.	
1	0022	23	.00	.00	.00	0.	*		1	0153	114	.00	.00	.00	1.	
1	0023	24	.00	.00	.00	0.	*		1	0154	115	.00	.00	.00	1.	
1	0024	25	.00	.00	.00	0.	*		1	0155	116	.00	.00	.00	1.	
1	0025	26	.00	.00	.00	0.	*		1	0156	117	.00	.00	.00	1.	
1	0026	27	.00	.00	.00	0.	*		1	0157	118	.00	.00	.00	1.	
1	0027	28	.00	.00	.00	0.	*		1	0158	119	.00	.00	.00	1.	
1	0028	29	.00	.00	.00	0.	*		1	0159	120	.00	.00	.00	1.	
1	0029	30	.00	.00	.00	0.	*		1	0200	121	.00	.00	.00	1.	
1	0030	31	.00	.00	.00	0.	*		1	0201	122	.00	.00	.00	1.	
1	0031	32	.07	.07	.00	0.	*		1	0202	123	.00	.00	.00	1.	
1	0032	33	.07	.07	.00	0.	*		1	0203	124	.00	.00	.00	1.	
1	0033	34	.07	.07	.00	0.	*		1	0204	125	.00	.00	.00	1.	
1	0034	35	.07	.07	.00	0.	*		1	0205	126	.00	.00	.00	1.	
1	0035	36	.07	.07	.00	0.	*		1	0206	127	.00	.00	.00	1.	
1	0036	37	.05	.05	.00	0.	*		1	0207	128	.00	.00	.00	1.	
1	0037	38	.05	.05	.00	0.	*		1	0208	129	.00	.00	.00	1.	
1	0038	39	.05	.05	.00	0.	*		1	0209	130	.00	.00	.00	1.	
1	0039	40	.05	.05	.00	0.	*		1	0210	131	.00	.00	.00	1.	
1	0040	41	.05	.05	.00	0.	*		1	0211	132	.00	.00	.00	1.	
1	0041	42	.04	.04	.00	0.	*		1	0212	133	.00	.00	.00	1.	
1	0042	43	.04	.03	.00	0.	*		1	0213	134	.00	.00	.00	1.	
1	0043	44	.04	.03	.00	0.	*		1	0214	135	.00	.00	.00	1.	
1	0044	45	.04	.03	.00	0.	*		1	0215	136	.00	.00	.00	1.	
1	0045	46	.04	.03	.01	0.	*		1	0216	137	.00	.00	.00	1.	
1	0046	47	.02	.02	.00	1.	*		1	0217	138	.00	.00	.00	1.	
1	0047	48	.02	.02	.00	1.	*		1	0218	139	.00	.00	.00	1.	
1	0048	49	.02	.02	.00	1.	*		1	0219	140	.00	.00	.00	1.	
1	0049	50	.02	.02	.00	1.	*		1	0220	141	.00	.00	.00	1.	
1	0050	51	.02	.02	.01	2.	*		1	0221	142	.00	.00	.00	1.	
1	0051	52	.01	.01	.00	2.	*		1	0222	143	.00	.00	.00	1.	
1	0052	53	.01	.01	.00	3.	*		1	0223	144	.00	.00	.00	1.	
1	0053	54	.01	.01	.00	3.	*		1	0224	145	.00	.00	.00	1.	
1	0054	55	.01	.01	.00	4.	*		1	0225	146	.00	.00	.00	1.	
1	0055	56	.01	.01	.00	4.	*		1	0226	147	.00	.00	.00	1.	
1	0056	57	.01	.01	.00	4.	*		1	0227	148	.00	.00	.00	1.	
1	0057	58	.01	.01	.00	5.	*		1	0228	149	.00	.00	.00	1.	
1	0058	59	.01	.01	.00	5.	*		1	0229	150	.00	.00	.00	1.	
1	0059	60	.01	.01	.00	5.	*		1	0230	151	.00	.00	.00	1.	
1	0100	61	.01	.01	.00	5.	*		1	0231	152	.00	.00	.00	1.	
1	0101	62	.01	.01	.00	6.	*		1	0232	153	.00	.00	.00	1.	
1	0102	63	.01	.01	.00	6.	*		1	0233	154	.00	.00	.00	1.	

post.out														
1	0103	64	.01	.01	.00	6.	*	1	0234	155	.00	.00	.00	1.
1	0104	65	.01	.01	.00	6.	*	1	0235	156	.00	.00	.00	1.
1	0105	66	.01	.01	.00	6.	*	1	0236	157	.00	.00	.00	1.
1	0106	67	.01	.01	.00	5.	*	1	0237	158	.00	.00	.00	1.
1	0107	68	.01	.00	.00	5.	*	1	0238	159	.00	.00	.00	1.
1	0108	69	.01	.00	.00	5.	*	1	0239	160	.00	.00	.00	1.
1	0109	70	.01	.00	.00	5.	*	1	0240	161	.00	.00	.00	1.
1	0110	71	.01	.00	.00	5.	*	1	0241	162	.00	.00	.00	1.
1	0111	72	.00	.00	.00	5.	*	1	0242	163	.00	.00	.00	1.
1	0112	73	.00	.00	.00	5.	*	1	0243	164	.00	.00	.00	1.
1	0113	74	.00	.00	.00	5.	*	1	0244	165	.00	.00	.00	1.
1	0114	75	.00	.00	.00	5.	*	1	0245	166	.00	.00	.00	1.
1	0115	76	.00	.00	.00	4.	*	1	0246	167	.00	.00	.00	1.
1	0116	77	.00	.00	.00	4.	*	1	0247	168	.00	.00	.00	1.
1	0117	78	.00	.00	.00	4.	*	1	0248	169	.00	.00	.00	1.
1	0118	79	.00	.00	.00	4.	*	1	0249	170	.00	.00	.00	1.
1	0119	80	.00	.00	.00	4.	*	1	0250	171	.00	.00	.00	1.
1	0120	81	.00	.00	.00	4.	*	1	0251	172	.00	.00	.00	1.
1	0121	82	.00	.00	.00	4.	*	1	0252	173	.00	.00	.00	1.
1	0122	83	.00	.00	.00	3.	*	1	0253	174	.00	.00	.00	1.
1	0123	84	.00	.00	.00	3.	*	1	0254	175	.00	.00	.00	1.
1	0124	85	.00	.00	.00	3.	*	1	0255	176	.00	.00	.00	1.
1	0125	86	.00	.00	.00	3.	*	1	0256	177	.00	.00	.00	1.
1	0126	87	.00	.00	.00	3.	*	1	0257	178	.00	.00	.00	1.
1	0127	88	.00	.00	.00	3.	*	1	0258	179	.00	.00	.00	1.
1	0128	89	.00	.00	.00	3.	*	1	0259	180	.00	.00	.00	1.
1	0129	90	.00	.00	.00	3.	*	1	0300	181	.00	.00	.00	1.
1	0130	91	.00	.00	.00	3.	*							

TOTAL RAINFALL = 1.29, TOTAL LOSS = 1.14, TOTAL EXCESS = .15

PEAK FLOW	TIME	MAXIMUM AVERAGE FLOW			
(CFS)	(HR)	6-HR	24-HR	72-HR	3.00-HR
+	6.	1.05	1.	1.	1.
		(CFS)	.144	.144	.144
		(INCHES)	0.	0.	0.
		(AC-FT)			

CUMULATIVE AREA = .04 SQ MI

*** **

 * *
 86 KK CP1 *
 * *

 COMBINE BP1 - BP7 & BP15

88 HC HYDROGRAPH COMBINATION
 ICOMP 8 NUMBER OF HYDROGRAPHS TO COMBINE

HYDROGRAPH AT STATION CP1
 SUM OF 8 HYDROGRAPHS
 PLAN 1, RATIO = 1.00

DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*
1	0000	1	0.	*	1	0046	47	8.	*	1	0132	93	876.	*	1	0218	139	763.					
1	0001	2	0.	*	1	0047	48	10.	*	1	0133	94	882.	*	1	0219	140	755.					
1	0002	3	0.	*	1	0048	49	12.	*	1	0134	95	887.	*	1	0220	141	747.					
1	0003	4	0.	*	1	0049	50	14.	*	1	0135	96	891.	*	1	0221	142	738.					
1	0004	5	0.	*	1	0050	51	16.	*	1	0136	97	896.	*	1	0222	143	730.					
1	0005	6	0.	*	1	0051	52	18.	*	1	0137	98	899.	*	1	0223	144	721.					
1	0006	7	0.	*	1	0052	53	20.	*	1	0138	99	906.	*	1	0224	145	712.					
1	0007	8	0.	*	1	0053	54	21.	*	1	0139	100	915.	*	1	0225	146	704.					
1	0008	9	0.	*	1	0054	55	23.	*	1	0140	101	915.	*	1	0226	147	695.					
1	0009	10	0.	*	1	0055	56	24.	*	1	0141	102	916.	*	1	0227	148	686.					
1	0010	11	0.	*	1	0056	57	26.	*	1	0142	103	920.	*	1	0228	149	676.					
1	0011	12	0.	*	1	0057	58	27.	*	1	0143	104	921.	*	1	0229	150	667.					
1	0012	13	0.	*	1	0058	59	28.	*	1	0144	105	921.	*	1	0230	151	658.					
1	0013	14	0.	*	1	0059	60	30.	*	1	0145	106	923.	*	1	0231	152	648.					
1	0014	15	0.	*	1	0100	61	32.	*	1	0146	107	923.	*	1	0232	153	639.					
1	0015	16	0.	*	1	0101	62	35.	*	1	0147	108	923.	*	1	0233	154	630.					
1	0016	17	0.	*	1	0102	63	40.	*	1	0148	109	923.	*	1	0234	155	620.					
1	0017	18	0.	*	1	0103	64	57.	*	1	0149	110	922.	*	1	0235	156	611.					
1	0018	19	0.	*	1	0104	65	83.	*	1	0150	111	921.	*	1	0236	157	601.					

															post.out			
1	0019	20	0.	*	1	0105	66	110.	*	1	0151	112	919.	*	1	0237	158	592.
1	0020	21	0.	*	1	0106	67	139.	*	1	0152	113	918.	*	1	0238	159	583.
1	0021	22	0.	*	1	0107	68	188.	*	1	0153	114	916.	*	1	0239	160	574.
1	0022	23	0.	*	1	0108	69	246.	*	1	0154	115	913.	*	1	0240	161	565.
1	0023	24	0.	*	1	0109	70	298.	*	1	0155	116	910.	*	1	0241	162	556.
1	0024	25	0.	*	1	0110	71	344.	*	1	0156	117	907.	*	1	0242	163	547.
1	0025	26	0.	*	1	0111	72	387.	*	1	0157	118	903.	*	1	0243	164	538.
1	0026	27	0.	*	1	0112	73	435.	*	1	0158	119	899.	*	1	0244	165	530.
1	0027	28	0.	*	1	0113	74	512.	*	1	0159	120	895.	*	1	0245	166	522.
1	0028	29	0.	*	1	0114	75	566.	*	1	0200	121	890.	*	1	0246	167	513.
1	0029	30	0.	*	1	0115	76	599.	*	1	0201	122	885.	*	1	0247	168	505.
1	0030	31	0.	*	1	0116	77	627.	*	1	0202	123	880.	*	1	0248	169	497.
1	0031	32	0.	*	1	0117	78	653.	*	1	0203	124	874.	*	1	0249	170	490.
1	0032	33	0.	*	1	0118	79	677.	*	1	0204	125	868.	*	1	0250	171	482.
1	0033	34	0.	*	1	0119	80	698.	*	1	0205	126	861.	*	1	0251	172	475.
1	0034	35	0.	*	1	0120	81	717.	*	1	0206	127	855.	*	1	0252	173	467.
1	0035	36	0.	*	1	0121	82	735.	*	1	0207	128	848.	*	1	0253	174	460.
1	0036	37	0.	*	1	0122	83	750.	*	1	0208	129	841.	*	1	0254	175	453.
1	0037	38	0.	*	1	0123	84	766.	*	1	0209	130	834.	*	1	0255	176	446.
1	0038	39	0.	*	1	0124	85	791.	*	1	0210	131	826.	*	1	0256	177	439.
1	0039	40	0.	*	1	0125	86	812.	*	1	0211	132	819.	*	1	0257	178	433.
1	0040	41	1.	*	1	0126	87	826.	*	1	0212	133	811.	*	1	0258	179	426.
1	0041	42	1.	*	1	0127	88	837.	*	1	0213	134	803.	*	1	0259	180	420.
1	0042	43	2.	*	1	0128	89	847.	*	1	0214	135	795.	*	1	0300	181	414.
1	0043	44	3.	*	1	0129	90	856.	*	1	0215	136	787.	*				
1	0044	45	5.	*	1	0130	91	863.	*	1	0216	137	779.	*				
1	0045	46	6.	*	1	0131	92	870.	*	1	0217	138	771.	*				

PEAK FLOW	TIME	MAXIMUM AVERAGE FLOW			
(CFS)	(HR)	6-HR	24-HR	72-HR	3.00-HR
923.	1.77	455.	455.	455.	455.
		(INCHES)	.339	.339	.339
		(AC-FT)	113.	113.	113.
CUMULATIVE AREA =		6.24 SQ MI			

HYDROGRAPH AT STATION CP1
SUM OF 8 HYDROGRAPHS
PLAN 1, RATIO = .61

DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*
1	0000	1	0.	*	1	0046	47	1.	*	1	0132	93	137.	*	1	0218	139	182.					
1	0001	2	0.	*	1	0047	48	1.	*	1	0133	94	141.	*	1	0219	140	180.					
1	0002	3	0.	*	1	0048	49	1.	*	1	0134	95	145.	*	1	0220	141	179.					
1	0003	4	0.	*	1	0049	50	1.	*	1	0135	96	149.	*	1	0221	142	177.					
1	0004	5	0.	*	1	0050	51	2.	*	1	0136	97	152.	*	1	0222	143	176.					
1	0005	6	0.	*	1	0051	52	2.	*	1	0137	98	155.	*	1	0223	144	174.					
1	0006	7	0.	*	1	0052	53	3.	*	1	0138	99	158.	*	1	0224	145	173.					
1	0007	8	0.	*	1	0053	54	3.	*	1	0139	100	161.	*	1	0225	146	171.					
1	0008	9	0.	*	1	0054	55	4.	*	1	0140	101	163.	*	1	0226	147	170.					
1	0009	10	0.	*	1	0055	56	4.	*	1	0141	102	165.	*	1	0227	148	168.					
1	0010	11	0.	*	1	0056	57	4.	*	1	0142	103	168.	*	1	0228	149	166.					
1	0011	12	0.	*	1	0057	58	5.	*	1	0143	104	171.	*	1	0229	150	165.					
1	0012	13	0.	*	1	0058	59	5.	*	1	0144	105	176.	*	1	0230	151	163.					
1	0013	14	0.	*	1	0059	60	5.	*	1	0145	106	180.	*	1	0231	152	161.					
1	0014	15	0.	*	1	0100	61	5.	*	1	0146	107	182.	*	1	0232	153	160.					
1	0015	16	0.	*	1	0101	62	6.	*	1	0147	108	184.	*	1	0233	154	158.					
1	0016	17	0.	*	1	0102	63	6.	*	1	0148	109	186.	*	1	0234	155	156.					
1	0017	18	0.	*	1	0103	64	6.	*	1	0149	110	188.	*	1	0235	156	155.					
1	0018	19	0.	*	1	0104	65	6.	*	1	0150	111	189.	*	1	0236	157	153.					
1	0019	20	0.	*	1	0105	66	6.	*	1	0151	112	190.	*	1	0237	158	151.					
1	0020	21	0.	*	1	0106	67	6.	*	1	0152	113	191.	*	1	0238	159	149.					
1	0021	22	0.	*	1	0107	68	6.	*	1	0153	114	192.	*	1	0239	160	147.					
1	0022	23	0.	*	1	0108	69	6.	*	1	0154	115	193.	*	1	0240	161	146.					
1	0023	24	0.	*	1	0109	70	6.	*	1	0155	116	194.	*	1	0241	162	144.					
1	0024	25	0.	*	1	0110	71	6.	*	1	0156	117	194.	*	1	0242	163	142.					
1	0025	26	0.	*	1	0111	72	6.	*	1	0157	118	195.	*	1	0243	164	140.					
1	0026	27	0.	*	1	0112	73	6.	*	1	0158	119	195.	*	1	0244	165	139.					
1	0027	28	0.	*	1	0113	74	6.	*	1	0159	120	195.	*	1	0245	166	137.					
1	0028	29	0.	*	1	0114	75	6.	*	1	0200	121	195.	*	1	0246	167	135.					
1	0029	30	0.	*	1	0115	76	7.	*	1	0201	122	195.	*	1	0247	168	133.					
1	0030	31	0.	*	1	0116	77	7.	*	1	0202	123	195.	*	1	0248	169	132.					
1	0031	32	0.	*	1	0117	78	8.	*	1	0203	124	195.	*	1	0249	170	130.					
1	0032	33	0.	*	1	0118	79	9.	*	1	0204	125	194.	*	1	0250	171	128.					
1	0033	34	0.	*	1	0119	80	17.	*	1	0205	126	194.	*	1	0251	172	126.					
1	0034	35	0.	*	1	0120	81	24.	*	1	0206	127	193.	*	1	0252	173	125.					
1	0035	36	0.	*	1	0121	82	34.	*	1	0207	128	193.	*	1	0253	174	123.					
1	0036	37	0.	*	1	0122	83	47.	*	1	0208	129	192.	*	1	0254	175	122.					
1	0037	38	0.	*	1	0123	84	55.	*	1	0209	130	193.	*	1	0255	176	120.					
1	0038	39	0.	*	1	0124	85	66.	*	1	0210	131	192.	*	1	0256	177	119.					

										post.out								
1	0039	40	0.	*	1	0125	86	77.	*	1	0211	132	190.	*	1	0257	178	117.
1	0040	41	0.	*	1	0126	87	85.	*	1	0212	133	190.	*	1	0258	179	116.
1	0041	42	0.	*	1	0127	88	95.	*	1	0213	134	188.	*	1	0259	180	114.
1	0042	43	0.	*	1	0128	89	111.	*	1	0214	135	187.	*	1	0300	181	113.
1	0043	44	0.	*	1	0129	90	123.	*	1	0215	136	186.	*				
1	0044	45	0.	*	1	0130	91	128.	*	1	0216	137	185.	*				
1	0045	46	0.	*	1	0131	92	132.	*	1	0217	138	183.	*				

PEAK FLOW	TIME		MAXIMUM	AVERAGE	FLOW	
+	(CFS)	(HR)	6-HR	24-HR	72-HR	3.00-HR
		(CFS)				
+	195.	2.00	88.	88.	88.	88.
		(INCHES)	.065	.065	.065	.065
		(AC-FT)	22.	22.	22.	22.

CUMULATIVE AREA = 6.24 SQ MI

*** ** ** ** **

 * *
 89 KK * RCP1 *
 * *

Route CP1 in channel to Outlet OP1

HYDROGRAPH ROUTING DATA

91 RD MUSKINGUM-CUNGE CHANNEL ROUTING
 L 5419. CHANNEL LENGTH
 S .0080 SLOPE
 N .040 CHANNEL ROUGHNESS COEFFICIENT
 CA .00 CONTRIBUTING AREA
 SHAPE TRAP CHANNEL SHAPE
 WD .00 BOTTOM WIDTH OR DIAMETER
 Z 7.00 SIDE SLOPE

COMPUTED MUSKINGUM-CUNGE PARAMETERS									
ELEMENT	ALPHA	M	DT	DX	PEAK	TIME TO PEAK	VOLUME	MAXIMUM CELERITY	
			(MIN)	(FT)	(CFS)	(MIN)	(IN)	(FPS)	
MAIN	1.09	1.33	1.00	285.21	922.09	118.00	.31	6.60	

INTERPOLATED TO SPECIFIED COMPUTATION INTERVAL

MAIN	1.09	1.33	1.00		922.09	118.00	.31		
------	------	------	------	--	--------	--------	-----	--	--

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1131E+03 EXCESS= .0000E+00 OUTFLOW= .1019E+03 BASIN STORAGE= .1163E+02 PERCENT ERROR= -.4

HYDROGRAPH AT STATION RCP1
 PLAN 1, RATIO = 1.00

DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*
1	0000	1	0.	*	1	0046	47	0.	*	1	0132	93	706.	*	1	0218	139	852.					
1	0001	2	0.	*	1	0047	48	0.	*	1	0133	94	728.	*	1	0219	140	846.					
1	0002	3	0.	*	1	0048	49	0.	*	1	0134	95	749.	*	1	0220	141	839.					
1	0003	4	0.	*	1	0049	50	0.	*	1	0135	96	768.	*	1	0221	142	832.					
1	0004	5	0.	*	1	0050	51	0.	*	1	0136	97	787.	*	1	0222	143	825.					
1	0005	6	0.	*	1	0051	52	0.	*	1	0137	98	805.	*	1	0223	144	817.					
1	0006	7	0.	*	1	0052	53	0.	*	1	0138	99	820.	*	1	0224	145	810.					
1	0007	8	0.	*	1	0053	54	0.	*	1	0139	100	834.	*	1	0225	146	802.					
1	0008	9	0.	*	1	0054	55	0.	*	1	0140	101	845.	*	1	0226	147	795.					
1	0009	10	0.	*	1	0055	56	0.	*	1	0141	102	855.	*	1	0227	148	787.					
1	0010	11	0.	*	1	0056	57	0.	*	1	0142	103	863.	*	1	0228	149	779.					
1	0011	12	0.	*	1	0057	58	0.	*	1	0143	104	870.	*	1	0229	150	771.					
1	0012	13	0.	*	1	0058	59	0.	*	1	0144	105	877.	*	1	0230	151	763.					
1	0013	14	0.	*	1	0059	60	0.	*	1	0145	106	882.	*	1	0231	152	755.					
1	0014	15	0.	*	1	0100	61	0.	*	1	0146	107	888.	*	1	0232	153	747.					
1	0015	16	0.	*	1	0101	62	0.	*	1	0147	108	893.	*	1	0233	154	739.					
1	0016	17	0.	*	1	0102	63	0.	*	1	0148	109	898.	*	1	0234	155	731.					

															post.out			
1	0017	18	0.	*	1	0103	64	0.	*	1	0149	110	903.	*	1	0235	156	723.
1	0018	19	0.	*	1	0104	65	0.	*	1	0150	111	907.	*	1	0236	157	714.
1	0019	20	0.	*	1	0105	66	0.	*	1	0151	112	911.	*	1	0237	158	706.
1	0020	21	0.	*	1	0106	67	1.	*	1	0152	113	914.	*	1	0238	159	697.
1	0021	22	0.	*	1	0107	68	2.	*	1	0153	114	917.	*	1	0239	160	689.
1	0022	23	0.	*	1	0108	69	2.	*	1	0154	115	919.	*	1	0240	161	680.
1	0023	24	0.	*	1	0109	70	4.	*	1	0155	116	920.	*	1	0241	162	671.
1	0024	25	0.	*	1	0110	71	5.	*	1	0156	117	921.	*	1	0242	163	662.
1	0025	26	0.	*	1	0111	72	7.	*	1	0157	118	922.	*	1	0243	164	653.
1	0026	27	0.	*	1	0112	73	9.	*	1	0158	119	922.	*	1	0244	165	644.
1	0027	28	0.	*	1	0113	74	11.	*	1	0159	120	922.	*	1	0245	166	635.
1	0028	29	0.	*	1	0114	75	13.	*	1	0200	121	921.	*	1	0246	167	626.
1	0029	30	0.	*	1	0115	76	15.	*	1	0201	122	921.	*	1	0247	168	618.
1	0030	31	0.	*	1	0116	77	16.	*	1	0202	123	919.	*	1	0248	169	609.
1	0031	32	0.	*	1	0117	78	18.	*	1	0203	124	918.	*	1	0249	170	600.
1	0032	33	0.	*	1	0118	79	20.	*	1	0204	125	916.	*	1	0250	171	591.
1	0033	34	0.	*	1	0119	80	22.	*	1	0205	126	913.	*	1	0251	172	582.
1	0034	35	0.	*	1	0120	81	23.	*	1	0206	127	911.	*	1	0252	173	574.
1	0035	36	0.	*	1	0121	82	25.	*	1	0207	128	908.	*	1	0253	174	565.
1	0036	37	0.	*	1	0122	83	27.	*	1	0208	129	904.	*	1	0254	175	557.
1	0037	38	0.	*	1	0123	84	66.	*	1	0209	130	901.	*	1	0255	176	548.
1	0038	39	0.	*	1	0124	85	182.	*	1	0210	131	897.	*	1	0256	177	540.
1	0039	40	0.	*	1	0125	86	317.	*	1	0211	132	892.	*	1	0257	178	532.
1	0040	41	0.	*	1	0126	87	426.	*	1	0212	133	887.	*	1	0258	179	524.
1	0041	42	0.	*	1	0127	88	508.	*	1	0213	134	882.	*	1	0259	180	516.
1	0042	43	0.	*	1	0128	89	570.	*	1	0214	135	877.	*	1	0300	181	509.
1	0043	44	0.	*	1	0129	90	616.	*	1	0215	136	871.	*				
1	0044	45	0.	*	1	0130	91	652.	*	1	0216	137	865.	*				
1	0045	46	0.	*	1	0131	92	681.	*	1	0217	138	859.	*				

PEAK FLOW	TIME	MAXIMUM AVERAGE FLOW			
(CFS)	(HR)	6-HR	24-HR	72-HR	3.00-HR
922.	1.97	410.	410.	410.	410.
		.305	.305	.305	.305
		102.	102.	102.	102.

CUMULATIVE AREA = 6.24 SQ MI

COMPUTED MUSKINGUM-CUNGE PARAMETERS								
COMPUTATION TIME STEP								
ELEMENT	ALPHA	M	DT	DX	PEAK	TIME TO PEAK	VOLUME	MAXIMUM CELERITY
			(MIN)	(FT)	(CFS)	(MIN)	(IN)	(FPS)
MAIN	1.09	1.33	1.00	180.63	194.87	137.00	.05	4.48

INTERPOLATED TO SPECIFIED COMPUTATION INTERVAL

MAIN	1.09	1.33	1.00	194.87	137.00	.05
------	------	------	------	--------	--------	-----

CONTINUITY SUMMARY (AC-FT) - INFLOW= .2178E+02 EXCESS= .0000E+00 OUTFLOW= .1749E+02 BASIN STORAGE= .4436E+01 PERCENT ERROR= -.6

HYDROGRAPH AT STATION RCP1
PLAN 1, RATIO = .61

DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*
1	0000	1	0.	*	1	0046	47	0.	*	1	0132	93	3.	*	1	0218	139	195.					
1	0001	2	0.	*	1	0047	48	0.	*	1	0133	94	4.	*	1	0219	140	195.					
1	0002	3	0.	*	1	0048	49	0.	*	1	0134	95	4.	*	1	0220	141	194.					
1	0003	4	0.	*	1	0049	50	0.	*	1	0135	96	4.	*	1	0221	142	194.					
1	0004	5	0.	*	1	0050	51	0.	*	1	0136	97	5.	*	1	0222	143	194.					
1	0005	6	0.	*	1	0051	52	0.	*	1	0137	98	5.	*	1	0223	144	193.					
1	0006	7	0.	*	1	0052	53	0.	*	1	0138	99	5.	*	1	0224	145	193.					
1	0007	8	0.	*	1	0053	54	0.	*	1	0139	100	5.	*	1	0225	146	192.					
1	0008	9	0.	*	1	0054	55	0.	*	1	0140	101	5.	*	1	0226	147	192.					
1	0009	10	0.	*	1	0055	56	0.	*	1	0141	102	5.	*	1	0227	148	191.					
1	0010	11	0.	*	1	0056	57	0.	*	1	0142	103	6.	*	1	0228	149	190.					
1	0011	12	0.	*	1	0057	58	0.	*	1	0143	104	6.	*	1	0229	150	189.					
1	0012	13	0.	*	1	0058	59	0.	*	1	0144	105	6.	*	1	0230	151	188.					
1	0013	14	0.	*	1	0059	60	0.	*	1	0145	106	6.	*	1	0231	152	187.					
1	0014	15	0.	*	1	0100	61	0.	*	1	0146	107	9.	*	1	0232	153	186.					
1	0015	16	0.	*	1	0101	62	0.	*	1	0147	108	44.	*	1	0233	154	185.					
1	0016	17	0.	*	1	0102	63	0.	*	1	0148	109	89.	*	1	0234	155	183.					
1	0017	18	0.	*	1	0103	64	0.	*	1	0149	110	115.	*	1	0235	156	182.					
1	0018	19	0.	*	1	0104	65	0.	*	1	0150	111	128.	*	1	0236	157	181.					
1	0019	20	0.	*	1	0105	66	0.	*	1	0151	112	136.	*	1	0237	158	179.					

post.out

WARNING *** TIME INTERVAL IS GREATER THAN .29*LAG

UNIT HYDROGRAPH
7 END-OF-PERIOD ORDINATES

579. 585. 189. 63. 20. 7. 1.

HYDROGRAPH AT STATION BP8

DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	*	DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
1	0000	1	.00	.00	.00	0.	*	1	0131	92	.00	.00	.00	3.		
1	0001	2	.00	.00	.00	0.	*	1	0132	93	.00	.00	.00	2.		
1	0002	3	.00	.00	.00	0.	*	1	0133	94	.00	.00	.00	1.		
1	0003	4	.00	.00	.00	0.	*	1	0134	95	.00	.00	.00	1.		
1	0004	5	.00	.00	.00	0.	*	1	0135	96	.00	.00	.00	1.		
1	0005	6	.00	.00	.00	0.	*	1	0136	97	.00	.00	.00	1.		
1	0006	7	.00	.00	.00	0.	*	1	0137	98	.00	.00	.00	1.		
1	0007	8	.00	.00	.00	0.	*	1	0138	99	.00	.00	.00	1.		
1	0008	9	.00	.00	.00	0.	*	1	0139	100	.00	.00	.00	1.		
1	0009	10	.00	.00	.00	0.	*	1	0140	101	.00	.00	.00	1.		
1	0010	11	.00	.00	.00	0.	*	1	0141	102	.00	.00	.00	1.		
1	0011	12	.00	.00	.00	0.	*	1	0142	103	.00	.00	.00	1.		
1	0012	13	.00	.00	.00	0.	*	1	0143	104	.00	.00	.00	1.		
1	0013	14	.00	.00	.00	0.	*	1	0144	105	.00	.00	.00	1.		
1	0014	15	.00	.00	.00	0.	*	1	0145	106	.00	.00	.00	1.		
1	0015	16	.00	.00	.00	0.	*	1	0146	107	.00	.00	.00	1.		
1	0016	17	.00	.00	.00	0.	*	1	0147	108	.00	.00	.00	1.		
1	0017	18	.00	.00	.00	0.	*	1	0148	109	.00	.00	.00	1.		
1	0018	19	.00	.00	.00	0.	*	1	0149	110	.00	.00	.00	1.		
1	0019	20	.00	.00	.00	0.	*	1	0150	111	.00	.00	.00	1.		
1	0020	21	.00	.00	.00	0.	*	1	0151	112	.00	.00	.00	1.		
1	0021	22	.00	.00	.00	0.	*	1	0152	113	.00	.00	.00	1.		
1	0022	23	.00	.00	.00	0.	*	1	0153	114	.00	.00	.00	1.		
1	0023	24	.00	.00	.00	0.	*	1	0154	115	.00	.00	.00	1.		
1	0024	25	.00	.00	.00	0.	*	1	0155	116	.00	.00	.00	1.		
1	0025	26	.00	.00	.00	0.	*	1	0156	117	.00	.00	.00	1.		
1	0026	27	.00	.00	.00	0.	*	1	0157	118	.00	.00	.00	1.		
1	0027	28	.00	.00	.00	0.	*	1	0158	119	.00	.00	.00	1.		
1	0028	29	.00	.00	.00	0.	*	1	0159	120	.00	.00	.00	1.		
1	0029	30	.00	.00	.00	0.	*	1	0200	121	.00	.00	.00	1.		
1	0030	31	.00	.00	.00	0.	*	1	0201	122	.00	.00	.00	1.		
1	0031	32	.11	.11	.00	0.	*	1	0202	123	.00	.00	.00	1.		
1	0032	33	.11	.11	.00	0.	*	1	0203	124	.00	.00	.00	1.		
1	0033	34	.11	.11	.00	0.	*	1	0204	125	.00	.00	.00	1.		
1	0034	35	.11	.11	.00	0.	*	1	0205	126	.00	.00	.00	1.		
1	0035	36	.11	.11	.00	0.	*	1	0206	127	.00	.00	.00	1.		
1	0036	37	.09	.09	.00	2.	*	1	0207	128	.00	.00	.00	1.		
1	0037	38	.09	.08	.01	6.	*	1	0208	129	.00	.00	.00	1.		
1	0038	39	.09	.08	.01	12.	*	1	0209	130	.00	.00	.00	1.		
1	0039	40	.09	.07	.02	18.	*	1	0210	131	.00	.00	.00	1.		
1	0040	41	.09	.07	.02	23.	*	1	0211	132	.00	.00	.00	1.		
1	0041	42	.06	.05	.02	25.	*	1	0212	133	.00	.00	.00	1.		
1	0042	43	.06	.04	.02	24.	*	1	0213	134	.00	.00	.00	1.		
1	0043	44	.06	.04	.02	26.	*	1	0214	135	.00	.00	.00	1.		
1	0044	45	.06	.04	.02	28.	*	1	0215	136	.00	.00	.00	1.		
1	0045	46	.06	.04	.02	30.	*	1	0216	137	.00	.00	.00	1.		
1	0046	47	.04	.02	.01	27.	*	1	0217	138	.00	.00	.00	1.		
1	0047	48	.04	.02	.01	23.	*	1	0218	139	.00	.00	.00	1.		
1	0048	49	.04	.02	.02	22.	*	1	0219	140	.00	.00	.00	1.		
1	0049	50	.04	.02	.02	23.	*	1	0220	141	.00	.00	.00	1.		
1	0050	51	.04	.02	.02	23.	*	1	0221	142	.00	.00	.00	1.		
1	0051	52	.02	.01	.01	20.	*	1	0222	143	.00	.00	.00	1.		
1	0052	53	.02	.01	.01	16.	*	1	0223	144	.00	.00	.00	1.		
1	0053	54	.02	.01	.01	15.	*	1	0224	145	.00	.00	.00	1.		
1	0054	55	.02	.01	.01	15.	*	1	0225	146	.00	.00	.00	1.		
1	0055	56	.02	.01	.01	15.	*	1	0226	147	.00	.00	.00	1.		
1	0056	57	.02	.01	.01	14.	*	1	0227	148	.00	.00	.00	1.		
1	0057	58	.02	.01	.01	13.	*	1	0228	149	.00	.00	.00	1.		
1	0058	59	.02	.01	.01	12.	*	1	0229	150	.00	.00	.00	1.		
1	0059	60	.02	.01	.01	12.	*	1	0230	151	.00	.00	.00	1.		
1	0100	61	.02	.01	.01	12.	*	1	0231	152	.00	.00	.00	1.		
1	0101	62	.01	.01	.01	11.	*	1	0232	153	.00	.00	.00	1.		
1	0102	63	.01	.01	.01	10.	*	1	0233	154	.00	.00	.00	1.		
1	0103	64	.01	.01	.01	10.	*	1	0234	155	.00	.00	.00	1.		
1	0104	65	.01	.01	.01	9.	*	1	0235	156	.00	.00	.00	1.		
1	0105	66	.01	.01	.01	9.	*	1	0236	157	.00	.00	.00	1.		
1	0106	67	.01	.01	.01	9.	*	1	0237	158	.00	.00	.00	1.		
1	0107	68	.01	.01	.01	8.	*	1	0238	159	.00	.00	.00	1.		
1	0108	69	.01	.01	.01	8.	*	1	0239	160	.00	.00	.00	1.		
1	0109	70	.01	.01	.01	7.	*	1	0240	161	.00	.00	.00	1.		
1	0110	71	.01	.01	.01	7.	*	1	0241	162	.00	.00	.00	1.		
1	0111	72	.01	.00	.00	7.	*	1	0242	163	.00	.00	.00	1.		
1	0112	73	.01	.00	.00	6.	*	1	0243	164	.00	.00	.00	1.		
1	0113	74	.01	.00	.00	6.	*	1	0244	165	.00	.00	.00	1.		
1	0114	75	.01	.00	.00	6.	*	1	0245	166	.00	.00	.00	1.		

													post.out	
1	0115	76	.01	.00	.00	6.	*	1	0246	167	.00	.00	.00	1.
1	0116	77	.01	.00	.00	6.	*	1	0247	168	.00	.00	.00	1.
1	0117	78	.01	.00	.00	5.	*	1	0248	169	.00	.00	.00	1.
1	0118	79	.01	.00	.00	5.	*	1	0249	170	.00	.00	.00	1.
1	0119	80	.01	.00	.00	5.	*	1	0250	171	.00	.00	.00	1.
1	0120	81	.01	.00	.00	5.	*	1	0251	172	.00	.00	.00	1.
1	0121	82	.01	.00	.00	5.	*	1	0252	173	.00	.00	.00	1.
1	0122	83	.01	.00	.00	5.	*	1	0253	174	.00	.00	.00	1.
1	0123	84	.01	.00	.00	5.	*	1	0254	175	.00	.00	.00	1.
1	0124	85	.01	.00	.00	5.	*	1	0255	176	.00	.00	.00	1.
1	0125	86	.01	.00	.00	5.	*	1	0256	177	.00	.00	.00	1.
1	0126	87	.01	.00	.00	4.	*	1	0257	178	.00	.00	.00	1.
1	0127	88	.01	.00	.00	4.	*	1	0258	179	.00	.00	.00	1.
1	0128	89	.01	.00	.00	4.	*	1	0259	180	.00	.00	.00	1.
1	0129	90	.01	.00	.00	4.	*	1	0300	181	.00	.00	.00	1.
1	0130	91	.01	.00	.00	4.	*							

TOTAL RAINFALL = 2.13, TOTAL LOSS = 1.61, TOTAL EXCESS = .52

PEAK FLOW	TIME		6-HR	24-HR	72-HR	3.00-HR
(CFS)	(HR)	(CFS)				
+	30.	.75	4.	4.	4.	4.
		(INCHES)	.519	.519	.519	.519
		(AC-FT)	1.	1.	1.	1.
CUMULATIVE AREA =			.04 SQ MI			

WARNING *** TIME INTERVAL IS GREATER THAN .29*LAG

HYDROGRAPH AT STATION BP8
PLAN 1, RATIO = 1.00

DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	*	DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
1	0000	1	.00	.00	.00	0.	0.	*	1	0131	92	.00	.00	.00	3.	
1	0001	2	.00	.00	.00	0.	0.	*	1	0132	93	.00	.00	.00	2.	
1	0002	3	.00	.00	.00	0.	0.	*	1	0133	94	.00	.00	.00	1.	
1	0003	4	.00	.00	.00	0.	0.	*	1	0134	95	.00	.00	.00	1.	
1	0004	5	.00	.00	.00	0.	0.	*	1	0135	96	.00	.00	.00	1.	
1	0005	6	.00	.00	.00	0.	0.	*	1	0136	97	.00	.00	.00	1.	
1	0006	7	.00	.00	.00	0.	0.	*	1	0137	98	.00	.00	.00	1.	
1	0007	8	.00	.00	.00	0.	0.	*	1	0138	99	.00	.00	.00	1.	
1	0008	9	.00	.00	.00	0.	0.	*	1	0139	100	.00	.00	.00	1.	
1	0009	10	.00	.00	.00	0.	0.	*	1	0140	101	.00	.00	.00	1.	
1	0010	11	.00	.00	.00	0.	0.	*	1	0141	102	.00	.00	.00	1.	
1	0011	12	.00	.00	.00	0.	0.	*	1	0142	103	.00	.00	.00	1.	
1	0012	13	.00	.00	.00	0.	0.	*	1	0143	104	.00	.00	.00	1.	
1	0013	14	.00	.00	.00	0.	0.	*	1	0144	105	.00	.00	.00	1.	
1	0014	15	.00	.00	.00	0.	0.	*	1	0145	106	.00	.00	.00	1.	
1	0015	16	.00	.00	.00	0.	0.	*	1	0146	107	.00	.00	.00	1.	
1	0016	17	.00	.00	.00	0.	0.	*	1	0147	108	.00	.00	.00	1.	
1	0017	18	.00	.00	.00	0.	0.	*	1	0148	109	.00	.00	.00	1.	
1	0018	19	.00	.00	.00	0.	0.	*	1	0149	110	.00	.00	.00	1.	
1	0019	20	.00	.00	.00	0.	0.	*	1	0150	111	.00	.00	.00	1.	
1	0020	21	.00	.00	.00	0.	0.	*	1	0151	112	.00	.00	.00	1.	
1	0021	22	.00	.00	.00	0.	0.	*	1	0152	113	.00	.00	.00	1.	
1	0022	23	.00	.00	.00	0.	0.	*	1	0153	114	.00	.00	.00	1.	
1	0023	24	.00	.00	.00	0.	0.	*	1	0154	115	.00	.00	.00	1.	
1	0024	25	.00	.00	.00	0.	0.	*	1	0155	116	.00	.00	.00	1.	
1	0025	26	.00	.00	.00	0.	0.	*	1	0156	117	.00	.00	.00	1.	
1	0026	27	.00	.00	.00	0.	0.	*	1	0157	118	.00	.00	.00	1.	
1	0027	28	.00	.00	.00	0.	0.	*	1	0158	119	.00	.00	.00	1.	
1	0028	29	.00	.00	.00	0.	0.	*	1	0159	120	.00	.00	.00	1.	
1	0029	30	.00	.00	.00	0.	0.	*	1	0200	121	.00	.00	.00	1.	
1	0030	31	.00	.00	.00	0.	0.	*	1	0201	122	.00	.00	.00	1.	
1	0031	32	.11	.11	.00	0.	0.	*	1	0202	123	.00	.00	.00	1.	
1	0032	33	.11	.11	.00	0.	0.	*	1	0203	124	.00	.00	.00	1.	
1	0033	34	.11	.11	.00	0.	0.	*	1	0204	125	.00	.00	.00	1.	
1	0034	35	.11	.11	.00	0.	0.	*	1	0205	126	.00	.00	.00	1.	
1	0035	36	.11	.11	.00	0.	0.	*	1	0206	127	.00	.00	.00	1.	
1	0036	37	.09	.09	.00	2.	0.	*	1	0207	128	.00	.00	.00	1.	
1	0037	38	.09	.08	.01	6.	0.	*	1	0208	129	.00	.00	.00	1.	
1	0038	39	.09	.08	.01	12.	0.	*	1	0209	130	.00	.00	.00	1.	
1	0039	40	.09	.07	.02	18.	0.	*	1	0210	131	.00	.00	.00	1.	
1	0040	41	.09	.07	.02	23.	0.	*	1	0211	132	.00	.00	.00	1.	
1	0041	42	.06	.05	.02	25.	0.	*	1	0212	133	.00	.00	.00	1.	
1	0042	43	.06	.04	.02	24.	0.	*	1	0213	134	.00	.00	.00	1.	
1	0043	44	.06	.04	.02	26.	0.	*	1	0214	135	.00	.00	.00	1.	
1	0044	45	.06	.04	.02	28.	0.	*	1	0215	136	.00	.00	.00	1.	
1	0045	46	.06	.04	.02	30.	0.	*	1	0216	137	.00	.00	.00	1.	
1	0046	47	.04	.02	.01	27.	0.	*	1	0217	138	.00	.00	.00	1.	

post.out														
1	0047	48	.04	.02	.01	23.	*	1	0218	139	.00	.00	.00	1.
1	0048	49	.04	.02	.02	22.	*	1	0219	140	.00	.00	.00	1.
1	0049	50	.04	.02	.02	23.	*	1	0220	141	.00	.00	.00	1.
1	0050	51	.04	.02	.02	23.	*	1	0221	142	.00	.00	.00	1.
1	0051	52	.02	.01	.01	20.	*	1	0222	143	.00	.00	.00	1.
1	0052	53	.02	.01	.01	16.	*	1	0223	144	.00	.00	.00	1.
1	0053	54	.02	.01	.01	15.	*	1	0224	145	.00	.00	.00	1.
1	0054	55	.02	.01	.01	15.	*	1	0225	146	.00	.00	.00	1.
1	0055	56	.02	.01	.01	15.	*	1	0226	147	.00	.00	.00	1.
1	0056	57	.02	.01	.01	14.	*	1	0227	148	.00	.00	.00	1.
1	0057	58	.02	.01	.01	13.	*	1	0228	149	.00	.00	.00	1.
1	0058	59	.02	.01	.01	12.	*	1	0229	150	.00	.00	.00	1.
1	0059	60	.02	.01	.01	12.	*	1	0230	151	.00	.00	.00	1.
1	0100	61	.02	.01	.01	12.	*	1	0231	152	.00	.00	.00	1.
1	0101	62	.01	.01	.01	11.	*	1	0232	153	.00	.00	.00	1.
1	0102	63	.01	.01	.01	10.	*	1	0233	154	.00	.00	.00	1.
1	0103	64	.01	.01	.01	10.	*	1	0234	155	.00	.00	.00	1.
1	0104	65	.01	.01	.01	9.	*	1	0235	156	.00	.00	.00	1.
1	0105	66	.01	.01	.01	9.	*	1	0236	157	.00	.00	.00	1.
1	0106	67	.01	.01	.01	9.	*	1	0237	158	.00	.00	.00	1.
1	0107	68	.01	.01	.01	8.	*	1	0238	159	.00	.00	.00	1.
1	0108	69	.01	.01	.01	8.	*	1	0239	160	.00	.00	.00	1.
1	0109	70	.01	.01	.01	7.	*	1	0240	161	.00	.00	.00	1.
1	0110	71	.01	.01	.01	7.	*	1	0241	162	.00	.00	.00	1.
1	0111	72	.01	.00	.00	7.	*	1	0242	163	.00	.00	.00	1.
1	0112	73	.01	.00	.00	6.	*	1	0243	164	.00	.00	.00	1.
1	0113	74	.01	.00	.00	6.	*	1	0244	165	.00	.00	.00	1.
1	0114	75	.01	.00	.00	6.	*	1	0245	166	.00	.00	.00	1.
1	0115	76	.01	.00	.00	6.	*	1	0246	167	.00	.00	.00	1.
1	0116	77	.01	.00	.00	6.	*	1	0247	168	.00	.00	.00	1.
1	0117	78	.01	.00	.00	5.	*	1	0248	169	.00	.00	.00	1.
1	0118	79	.01	.00	.00	5.	*	1	0249	170	.00	.00	.00	1.
1	0119	80	.01	.00	.00	5.	*	1	0250	171	.00	.00	.00	1.
1	0120	81	.01	.00	.00	5.	*	1	0251	172	.00	.00	.00	1.
1	0121	82	.01	.00	.00	5.	*	1	0252	173	.00	.00	.00	1.
1	0122	83	.01	.00	.00	5.	*	1	0253	174	.00	.00	.00	1.
1	0123	84	.01	.00	.00	5.	*	1	0254	175	.00	.00	.00	1.
1	0124	85	.01	.00	.00	5.	*	1	0255	176	.00	.00	.00	1.
1	0125	86	.01	.00	.00	5.	*	1	0256	177	.00	.00	.00	1.
1	0126	87	.01	.00	.00	4.	*	1	0257	178	.00	.00	.00	1.
1	0127	88	.01	.00	.00	4.	*	1	0258	179	.00	.00	.00	1.
1	0128	89	.01	.00	.00	4.	*	1	0259	180	.00	.00	.00	1.
1	0129	90	.01	.00	.00	4.	*	1	0300	181	.00	.00	.00	1.
1	0130	91	.01	.00	.00	4.	*							

TOTAL RAINFALL = 2.13, TOTAL LOSS = 1.61, TOTAL EXCESS = .52

PEAK FLOW	TIME	MAXIMUM AVERAGE FLOW				
(CFS)	(HR)	6-HR	24-HR	72-HR	3.00-HR	
30.	.75	4.	4.	4.	4.	
		(INCHES)	.519	.519	.519	.519
		(AC-FT)	1.	1.	1.	1.
CUMULATIVE AREA =		.04 SQ MI				

WARNING *** TIME INTERVAL IS GREATER THAN .29*LAG

HYDROGRAPH AT STATION BP8
PLAN 1, RATIO = .61

DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	*	DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
1	0000	1	.00	.00	.00	0.	*	1	0131	92	.00	.00	.00	1.		
1	0001	2	.00	.00	.00	0.	*	1	0132	93	.00	.00	.00	1.		
1	0002	3	.00	.00	.00	0.	*	1	0133	94	.00	.00	.00	0.		
1	0003	4	.00	.00	.00	0.	*	1	0134	95	.00	.00	.00	0.		
1	0004	5	.00	.00	.00	0.	*	1	0135	96	.00	.00	.00	0.		
1	0005	6	.00	.00	.00	0.	*	1	0136	97	.00	.00	.00	0.		
1	0006	7	.00	.00	.00	0.	*	1	0137	98	.00	.00	.00	0.		
1	0007	8	.00	.00	.00	0.	*	1	0138	99	.00	.00	.00	0.		
1	0008	9	.00	.00	.00	0.	*	1	0139	100	.00	.00	.00	0.		
1	0009	10	.00	.00	.00	0.	*	1	0140	101	.00	.00	.00	0.		
1	0010	11	.00	.00	.00	0.	*	1	0141	102	.00	.00	.00	0.		
1	0011	12	.00	.00	.00	0.	*	1	0142	103	.00	.00	.00	0.		
1	0012	13	.00	.00	.00	0.	*	1	0143	104	.00	.00	.00	0.		
1	0013	14	.00	.00	.00	0.	*	1	0144	105	.00	.00	.00	0.		
1	0014	15	.00	.00	.00	0.	*	1	0145	106	.00	.00	.00	0.		
1	0015	16	.00	.00	.00	0.	*	1	0146	107	.00	.00	.00	0.		
1	0016	17	.00	.00	.00	0.	*	1	0147	108	.00	.00	.00	0.		
1	0017	18	.00	.00	.00	0.	*	1	0148	109	.00	.00	.00	0.		
1	0018	19	.00	.00	.00	0.	*	1	0149	110	.00	.00	.00	0.		

													post.out			
1	0019	20	.00	.00	.00	0.	*	1	0150	111	.00	.00	.00	0.		
1	0020	21	.00	.00	.00	0.	*	1	0151	112	.00	.00	.00	0.		
1	0021	22	.00	.00	.00	0.	*	1	0152	113	.00	.00	.00	0.		
1	0022	23	.00	.00	.00	0.	*	1	0153	114	.00	.00	.00	0.		
1	0023	24	.00	.00	.00	0.	*	1	0154	115	.00	.00	.00	0.		
1	0024	25	.00	.00	.00	0.	*	1	0155	116	.00	.00	.00	0.		
1	0025	26	.00	.00	.00	0.	*	1	0156	117	.00	.00	.00	0.		
1	0026	27	.00	.00	.00	0.	*	1	0157	118	.00	.00	.00	0.		
1	0027	28	.00	.00	.00	0.	*	1	0158	119	.00	.00	.00	0.		
1	0028	29	.00	.00	.00	0.	*	1	0159	120	.00	.00	.00	0.		
1	0029	30	.00	.00	.00	0.	*	1	0200	121	.00	.00	.00	0.		
1	0030	31	.00	.00	.00	0.	*	1	0201	122	.00	.00	.00	0.		
1	0031	32	.07	.07	.00	0.	*	1	0202	123	.00	.00	.00	0.		
1	0032	33	.07	.07	.00	0.	*	1	0203	124	.00	.00	.00	0.		
1	0033	34	.07	.07	.00	0.	*	1	0204	125	.00	.00	.00	0.		
1	0034	35	.07	.07	.00	0.	*	1	0205	126	.00	.00	.00	0.		
1	0035	36	.07	.07	.00	0.	*	1	0206	127	.00	.00	.00	0.		
1	0036	37	.05	.05	.00	0.	*	1	0207	128	.00	.00	.00	0.		
1	0037	38	.05	.05	.00	0.	*	1	0208	129	.00	.00	.00	0.		
1	0038	39	.05	.05	.00	0.	*	1	0209	130	.00	.00	.00	0.		
1	0039	40	.05	.05	.00	0.	*	1	0210	131	.00	.00	.00	0.		
1	0040	41	.05	.05	.00	0.	*	1	0211	132	.00	.00	.00	0.		
1	0041	42	.04	.04	.00	1.	*	1	0212	133	.00	.00	.00	0.		
1	0042	43	.04	.04	.00	2.	*	1	0213	134	.00	.00	.00	0.		
1	0043	44	.04	.03	.00	3.	*	1	0214	135	.00	.00	.00	0.		
1	0044	45	.04	.03	.00	4.	*	1	0215	136	.00	.00	.00	0.		
1	0045	46	.04	.03	.00	6.	*	1	0216	137	.00	.00	.00	0.		
1	0046	47	.02	.02	.00	6.	*	1	0217	138	.00	.00	.00	0.		
1	0047	48	.02	.02	.00	5.	*	1	0218	139	.00	.00	.00	0.		
1	0048	49	.02	.02	.00	5.	*	1	0219	140	.00	.00	.00	0.		
1	0049	50	.02	.02	.00	6.	*	1	0220	141	.00	.00	.00	0.		
1	0050	51	.02	.02	.00	6.	*	1	0221	142	.00	.00	.00	0.		
1	0051	52	.01	.01	.00	5.	*	1	0222	143	.00	.00	.00	0.		
1	0052	53	.01	.01	.00	5.	*	1	0223	144	.00	.00	.00	0.		
1	0053	54	.01	.01	.00	4.	*	1	0224	145	.00	.00	.00	0.		
1	0054	55	.01	.01	.00	4.	*	1	0225	146	.00	.00	.00	0.		
1	0055	56	.01	.01	.00	5.	*	1	0226	147	.00	.00	.00	0.		
1	0056	57	.01	.01	.00	4.	*	1	0227	148	.00	.00	.00	0.		
1	0057	58	.01	.01	.00	4.	*	1	0228	149	.00	.00	.00	0.		
1	0058	59	.01	.01	.00	4.	*	1	0229	150	.00	.00	.00	0.		
1	0059	60	.01	.01	.00	4.	*	1	0230	151	.00	.00	.00	0.		
1	0100	61	.01	.01	.00	4.	*	1	0231	152	.00	.00	.00	0.		
1	0101	62	.01	.01	.00	4.	*	1	0232	153	.00	.00	.00	0.		
1	0102	63	.01	.01	.00	3.	*	1	0233	154	.00	.00	.00	0.		
1	0103	64	.01	.01	.00	3.	*	1	0234	155	.00	.00	.00	0.		
1	0104	65	.01	.01	.00	3.	*	1	0235	156	.00	.00	.00	0.		
1	0105	66	.01	.01	.00	3.	*	1	0236	157	.00	.00	.00	0.		
1	0106	67	.01	.00	.00	3.	*	1	0237	158	.00	.00	.00	0.		
1	0107	68	.01	.00	.00	3.	*	1	0238	159	.00	.00	.00	0.		
1	0108	69	.01	.00	.00	2.	*	1	0239	160	.00	.00	.00	0.		
1	0109	70	.01	.00	.00	2.	*	1	0240	161	.00	.00	.00	0.		
1	0110	71	.01	.00	.00	2.	*	1	0241	162	.00	.00	.00	0.		
1	0111	72	.00	.00	.00	2.	*	1	0242	163	.00	.00	.00	0.		
1	0112	73	.00	.00	.00	2.	*	1	0243	164	.00	.00	.00	0.		
1	0113	74	.00	.00	.00	2.	*	1	0244	165	.00	.00	.00	0.		
1	0114	75	.00	.00	.00	2.	*	1	0245	166	.00	.00	.00	0.		
1	0115	76	.00	.00	.00	2.	*	1	0246	167	.00	.00	.00	0.		
1	0116	77	.00	.00	.00	2.	*	1	0247	168	.00	.00	.00	0.		
1	0117	78	.00	.00	.00	2.	*	1	0248	169	.00	.00	.00	0.		
1	0118	79	.00	.00	.00	2.	*	1	0249	170	.00	.00	.00	0.		
1	0119	80	.00	.00	.00	2.	*	1	0250	171	.00	.00	.00	0.		
1	0120	81	.00	.00	.00	2.	*	1	0251	172	.00	.00	.00	0.		
1	0121	82	.00	.00	.00	2.	*	1	0252	173	.00	.00	.00	0.		
1	0122	83	.00	.00	.00	2.	*	1	0253	174	.00	.00	.00	0.		
1	0123	84	.00	.00	.00	2.	*	1	0254	175	.00	.00	.00	0.		
1	0124	85	.00	.00	.00	2.	*	1	0255	176	.00	.00	.00	0.		
1	0125	86	.00	.00	.00	2.	*	1	0256	177	.00	.00	.00	0.		
1	0126	87	.00	.00	.00	2.	*	1	0257	178	.00	.00	.00	0.		
1	0127	88	.00	.00	.00	1.	*	1	0258	179	.00	.00	.00	0.		
1	0128	89	.00	.00	.00	1.	*	1	0259	180	.00	.00	.00	0.		
1	0129	90	.00	.00	.00	1.	*	1	0300	181	.00	.00	.00	0.		
1	0130	91	.00	.00	.00	1.	*									

TOTAL RAINFALL = 1.29, TOTAL LOSS = 1.16, TOTAL EXCESS = .13

PEAK FLOW + (CFS)	TIME (HR)	MAXIMUM AVERAGE FLOW			
		6-HR	24-HR	72-HR	3.00-HR
+ 6.	.83	1.	1.	1.	1.
	(INCHES)	.130	.130	.130	.130
	(AC-FT)	0.	0.	0.	0.

CUMULATIVE AREA = .04 SQ MI

*** **

*
* RP8 *
*

Route BP8 in channel to Outlet OP1

HYDROGRAPH ROUTING DATA

99 RD MUSKINGUM-CUNGE CHANNEL ROUTING
L 11025. CHANNEL LENGTH
S .0120 SLOPE
N .040 CHANNEL ROUGHNESS COEFFICIENT
CA .00 CONTRIBUTING AREA
SHAPE TRAP CHANNEL SHAPE
WD .00 BOTTOM WIDTH OR DIAMETER
Z 7.00 SIDE SLOPE

COMPUTED MUSKINGUM-CUNGE PARAMETERS

Table with 9 columns: ELEMENT, ALPHA, M, DT, DX, PEAK, TIME TO PEAK, VOLUME, MAXIMUM CELERITY. Row 1: MAIN, 1.34, 1.33, .50, 63.36, 19.52, 104.00, .43, 3.25

INTERPOLATED TO SPECIFIED COMPUTATION INTERVAL

Table with 9 columns: ELEMENT, ALPHA, M, DT, DX, PEAK, TIME TO PEAK, VOLUME, MAXIMUM CELERITY. Row 1: MAIN, 1.34, 1.33, 1.00, 19.52, 104.00, .43

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1032E+01 EXCESS= .0000E+00 OUTFLOW= .8503E+00 BASIN STORAGE= .2393E+00 PERCENT ERROR= -5.5

HYDROGRAPH AT STATION RP8
PLAN 1, RATIO = 1.00

Large table with 16 columns: DA, MON, HRMN, ORD, FLOW, DA, MON, HRMN, ORD, FLOW, DA, MON, HRMN, ORD, FLOW, DA, MON, HRMN, ORD, FLOW. Contains 40 rows of data.

ID	Code	Time	Flow	Order	Flow	Order	Flow	Order	Flow	Order	Flow	Order	Flow	Order				
1	0040	41	0.	*	1	0126	87	0.	*	1	0212	133	8.	*	1	0258	179	3.
1	0041	42	0.	*	1	0127	88	0.	*	1	0213	134	8.	*	1	0259	180	3.
1	0042	43	0.	*	1	0128	89	0.	*	1	0214	135	8.	*	1	0300	181	2.
1	0043	44	0.	*	1	0129	90	0.	*	1	0215	136	8.	*				
1	0044	45	0.	*	1	0130	91	0.	*	1	0216	137	7.	*				
1	0045	46	0.	*	1	0131	92	0.	*	1	0217	138	7.	*				

PEAK FLOW	TIME	6-HR	24-HR	72-HR	3.00-HR
(CFS)	(HR)	(CFS)	(CFS)	(CFS)	(CFS)
20.	1.73	3.	3.	3.	3.
		.427	.427	.427	.427
		(INCHES)	(INCHES)	(INCHES)	(INCHES)
		1.	1.	1.	1.

CUMULATIVE AREA = .04 SQ MI

COMPUTED MUSKINGUM-CUNGE PARAMETERS

ELEMENT	ALPHA	COMPUTATION TIME STEP			PEAK (CFS)	TIME TO PEAK (MIN)	VOLUME (IN)	MAXIMUM CELERITY (FPS)
		M	DT (MIN)	DX (FT)				
MAIN	1.34	1.33	.40	55.13	4.08	134.40	2.19	

INTERPOLATED TO SPECIFIED COMPUTATION INTERVAL

MAIN	1.34	1.33	1.00	4.08	134.00	.09
------	------	------	------	------	--------	-----

CONTINUITY SUMMARY (AC-FT) - INFLOW= .2593E+00 EXCESS= .0000E+00 OUTFLOW= .1769E+00 BASIN STORAGE= .1289E+00 PERCENT ERROR= -18.0

HYDROGRAPH AT STATION RP8
PLAN 1, RATIO = .61

DA	MON	HRMN	ORD	FLOW	DA	MON	HRMN	ORD	FLOW	DA	MON	HRMN	ORD	FLOW	DA	MON	HRMN	ORD	FLOW
1	0000	1	0.	*	1	0046	47	0.	*	1	0132	93	0.	*	1	0218	139	4.	
1	0001	2	0.	*	1	0047	48	0.	*	1	0133	94	0.	*	1	0219	140	4.	
1	0002	3	0.	*	1	0048	49	0.	*	1	0134	95	0.	*	1	0220	141	4.	
1	0003	4	0.	*	1	0049	50	0.	*	1	0135	96	0.	*	1	0221	142	4.	
1	0004	5	0.	*	1	0050	51	0.	*	1	0136	97	0.	*	1	0222	143	3.	
1	0005	6	0.	*	1	0051	52	0.	*	1	0137	98	0.	*	1	0223	144	3.	
1	0006	7	0.	*	1	0052	53	0.	*	1	0138	99	0.	*	1	0224	145	3.	
1	0007	8	0.	*	1	0053	54	0.	*	1	0139	100	0.	*	1	0225	146	3.	
1	0008	9	0.	*	1	0054	55	0.	*	1	0140	101	0.	*	1	0226	147	3.	
1	0009	10	0.	*	1	0055	56	0.	*	1	0141	102	0.	*	1	0227	148	3.	
1	0010	11	0.	*	1	0056	57	0.	*	1	0142	103	0.	*	1	0228	149	3.	
1	0011	12	0.	*	1	0057	58	0.	*	1	0143	104	0.	*	1	0229	150	3.	
1	0012	13	0.	*	1	0058	59	0.	*	1	0144	105	0.	*	1	0230	151	3.	
1	0013	14	0.	*	1	0059	60	0.	*	1	0145	106	0.	*	1	0231	152	3.	
1	0014	15	0.	*	1	0100	61	0.	*	1	0146	107	0.	*	1	0232	153	3.	
1	0015	16	0.	*	1	0101	62	0.	*	1	0147	108	0.	*	1	0233	154	3.	
1	0016	17	0.	*	1	0102	63	0.	*	1	0148	109	0.	*	1	0234	155	3.	
1	0017	18	0.	*	1	0103	64	0.	*	1	0149	110	0.	*	1	0235	156	3.	
1	0018	19	0.	*	1	0104	65	0.	*	1	0150	111	0.	*	1	0236	157	3.	
1	0019	20	0.	*	1	0105	66	0.	*	1	0151	112	0.	*	1	0237	158	2.	
1	0020	21	0.	*	1	0106	67	0.	*	1	0152	113	0.	*	1	0238	159	2.	
1	0021	22	0.	*	1	0107	68	0.	*	1	0153	114	0.	*	1	0239	160	2.	
1	0022	23	0.	*	1	0108	69	0.	*	1	0154	115	0.	*	1	0240	161	2.	
1	0023	24	0.	*	1	0109	70	0.	*	1	0155	116	0.	*	1	0241	162	2.	
1	0024	25	0.	*	1	0110	71	0.	*	1	0156	117	0.	*	1	0242	163	2.	
1	0025	26	0.	*	1	0111	72	0.	*	1	0157	118	0.	*	1	0243	164	2.	
1	0026	27	0.	*	1	0112	73	0.	*	1	0158	119	0.	*	1	0244	165	2.	
1	0027	28	0.	*	1	0113	74	0.	*	1	0159	120	0.	*	1	0245	166	2.	
1	0028	29	0.	*	1	0114	75	0.	*	1	0200	121	0.	*	1	0246	167	2.	
1	0029	30	0.	*	1	0115	76	0.	*	1	0201	122	0.	*	1	0247	168	2.	
1	0030	31	0.	*	1	0116	77	0.	*	1	0202	123	0.	*	1	0248	169	2.	
1	0031	32	0.	*	1	0117	78	0.	*	1	0203	124	0.	*	1	0249	170	2.	
1	0032	33	0.	*	1	0118	79	0.	*	1	0204	125	0.	*	1	0250	171	2.	
1	0033	34	0.	*	1	0119	80	0.	*	1	0205	126	0.	*	1	0251	172	2.	
1	0034	35	0.	*	1	0120	81	0.	*	1	0206	127	0.	*	1	0252	173	2.	
1	0035	36	0.	*	1	0121	82	0.	*	1	0207	128	0.	*	1	0253	174	2.	
1	0036	37	0.	*	1	0122	83	0.	*	1	0208	129	0.	*	1	0254	175	2.	
1	0037	38	0.	*	1	0123	84	0.	*	1	0209	130	0.	*	1	0255	176	2.	
1	0038	39	0.	*	1	0124	85	0.	*	1	0210	131	0.	*	1	0256	177	2.	
1	0039	40	0.	*	1	0125	86	0.	*	1	0211	132	0.	*	1	0257	178	2.	
1	0040	41	0.	*	1	0126	87	0.	*	1	0212	133	1.	*	1	0258	179	2.	
1	0041	42	0.	*	1	0127	88	0.	*	1	0213	134	4.	*	1	0259	180	2.	
1	0042	43	0.	*	1	0128	89	0.	*	1	0214	135	4.	*	1	0300	181	2.	

```

1 0043 44 0. * 1 0129 90 0. * 1 0215 136 4. *
1 0044 45 0. * 1 0130 91 0. * 1 0216 137 4. *
1 0045 46 0. * 1 0131 92 0. * 1 0217 138 4. *

```

```

PEAK FLOW      TIME      MAXIMUM AVERAGE FLOW
+ (CFS)        (HR)          6-HR      24-HR      72-HR      3.00-HR
+ 4.          2.23      (CFS)
              (INCHES)  1.        1.        1.        1.
              (AC-FT)  .089     .089     .089     .089
              CUMULATIVE AREA = .04 SQ MI

```

*** **

```

*****
*          *
100 KK    *          *
*          *          *
*          *          *
*****

```

BP9

SUBBASIN RUNOFF DATA

```

102 BA      SUBBASIN CHARACTERISTICS
            TAREA      1.79  SUBBASIN AREA

```

PRECIPITATION DATA

```

23 PB      STORM      2.13  BASIN TOTAL PRECIPITATION

```

```

24 PI      INCREMENTAL PRECIPITATION PATTERN
            .00 .00 .00 .00 .00 .00 .00 .00 .00 .00
            .00 .00 .00 .00 .00 .00 .00 .00 .00 .00
            .00 .00 .00 .00 .00 .00 .00 .00 .00 .00
            .05 .05 .05 .05 .05 .04 .04 .04 .04 .04
            .03 .03 .03 .03 .03 .02 .02 .02 .02 .02
            .01 .01 .01 .01 .01 .01 .01 .01 .01 .01
            .01 .01 .01 .01 .01 .00 .00 .00 .00 .00
            .00 .00 .00 .00 .00 .00 .00 .00 .00 .00
            .00 .00 .00 .00 .00 .00 .00 .00 .00 .00
            .00 .00 .00 .00 .00 .00 .00 .00 .00 .00
            .00 .00 .00 .00 .00 .00 .00 .00 .00 .00
            .00 .00 .00 .00 .00 .00 .00 .00 .00 .00
            .00 .00 .00 .00 .00 .00 .00 .00 .00 .00
            .00 .00 .00 .00 .00 .00 .00 .00 .00 .00
            .00 .00 .00 .00 .00 .00 .00 .00 .00 .00
            .00 .00 .00 .00 .00 .00 .00 .00 .00 .00
            .00 .00 .00 .00 .00 .00 .00 .00 .00 .00

```

```

103 LS      SCS LOSS RATE
            STRTL      .67  INITIAL ABSTRACTION
            CRVNBR     75.00  CURVE NUMBER
            RTIMP      .00  PERCENT IMPERVIOUS AREA

```

```

104 UD      SCS DIMENSIONLESS UNITGRAPH
            TLAG      1.02  LAG

```

*** WARNING *** UNIT HYDROGRAPH TRUNCATED FROM 309 TO 300 INTERVALS

UNIT HYDROGRAPH
300 END-OF-PERIOD ORDINATES
VOLUME = 1.00

```

4.      8.      12.     16.     20.     24.     33.     43.     52.     62.
71.     81.     92.     104.    116.    129.    141.    153.    167.    184.
200.    216.    233.    249.    267.    288.    310.    332.    354.    376.
398.    424.    449.    475.    501.    527.    553.    575.    597.    618.
640.    662.    684.    700.    715.    730.    745.    760.    775.    787.
795.    803.    811.    819.    827.    833.    834.    836.    837.    838.
840.    841.    839.    838.    836.    835.    834.    832.    824.    816.
808.    800.    792.    783.    774.    765.    755.    746.    736.    726.
716.    705.    694.    683.    673.    662.    649.    636.    622.    609.
595.    581.    567.    551.    534.    518.    502.    485.    469.    456.
442.    429.    415.    401.    388.    378.    368.    359.    349.    340.
330.    322.    314.    306.    297.    289.    281.    274.    267.    260.
253.    246.    240.    234.    229.    224.    219.    214.    209.    204.
199.    194.    189.    184.    179.    174.    170.    166.    162.    158.
154.    149.    145.    141.    137.    133.    129.    125.    122.    119.
116.    114.    111.    108.    105.    103.    100.    97.     95.     92.

```

89.	87.	85.	83.	81.	79.	77.	75.	73.	71.
69.	67.	65.	63.	62.	60.	59.	57.	56.	54.
53.	51.	50.	48.	47.	46.	45.	44.	43.	42.
41.	40.	39.	37.	36.	35.	34.	33.	33.	32.
31.	30.	30.	29.	28.	27.	27.	26.	25.	24.
24.	23.	23.	22.	22.	21.	21.	20.	20.	19.
18.	18.	17.	17.	17.	16.	16.	15.	15.	15.
14.	14.	13.	13.	13.	12.	12.	12.	11.	11.
11.	11.	10.	10.	10.	10.	9.	9.	9.	9.
9.	8.	8.	8.	8.	8.	8.	7.	7.	7.
7.	7.	7.	7.	6.	6.	6.	6.	6.	6.
5.	5.	5.	5.	5.	5.	4.	4.	4.	4.
4.	4.	4.	3.	3.	3.	3.	3.	3.	3.
2.	2.	2.	2.	2.	2.	2.	2.	1.	1.

post.out

HYDROGRAPH AT STATION BP9

DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	*	DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
1	0000	1	.00	.00	.00	.00	0.	*	1	0131	92	.00	.00	.00	206.	
1	0001	2	.00	.00	.00	.00	0.	*	1	0132	93	.00	.00	.00	212.	
1	0002	3	.00	.00	.00	.00	0.	*	1	0133	94	.00	.00	.00	218.	
1	0003	4	.00	.00	.00	.00	0.	*	1	0134	95	.00	.00	.00	223.	
1	0004	5	.00	.00	.00	.00	0.	*	1	0135	96	.00	.00	.00	229.	
1	0005	6	.00	.00	.00	.00	0.	*	1	0136	97	.00	.00	.00	234.	
1	0006	7	.00	.00	.00	.00	0.	*	1	0137	98	.00	.00	.00	239.	
1	0007	8	.00	.00	.00	.00	0.	*	1	0138	99	.00	.00	.00	244.	
1	0008	9	.00	.00	.00	.00	0.	*	1	0139	100	.00	.00	.00	249.	
1	0009	10	.00	.00	.00	.00	0.	*	1	0140	101	.00	.00	.00	254.	
1	0010	11	.00	.00	.00	.00	0.	*	1	0141	102	.00	.00	.00	258.	
1	0011	12	.00	.00	.00	.00	0.	*	1	0142	103	.00	.00	.00	262.	
1	0012	13	.00	.00	.00	.00	0.	*	1	0143	104	.00	.00	.00	266.	
1	0013	14	.00	.00	.00	.00	0.	*	1	0144	105	.00	.00	.00	269.	
1	0014	15	.00	.00	.00	.00	0.	*	1	0145	106	.00	.00	.00	273.	
1	0015	16	.00	.00	.00	.00	0.	*	1	0146	107	.00	.00	.00	276.	
1	0016	17	.00	.00	.00	.00	0.	*	1	0147	108	.00	.00	.00	279.	
1	0017	18	.00	.00	.00	.00	0.	*	1	0148	109	.00	.00	.00	282.	
1	0018	19	.00	.00	.00	.00	0.	*	1	0149	110	.00	.00	.00	284.	
1	0019	20	.00	.00	.00	.00	0.	*	1	0150	111	.00	.00	.00	286.	
1	0020	21	.00	.00	.00	.00	0.	*	1	0151	112	.00	.00	.00	288.	
1	0021	22	.00	.00	.00	.00	0.	*	1	0152	113	.00	.00	.00	290.	
1	0022	23	.00	.00	.00	.00	0.	*	1	0153	114	.00	.00	.00	291.	
1	0023	24	.00	.00	.00	.00	0.	*	1	0154	115	.00	.00	.00	292.	
1	0024	25	.00	.00	.00	.00	0.	*	1	0155	116	.00	.00	.00	293.	
1	0025	26	.00	.00	.00	.00	0.	*	1	0156	117	.00	.00	.00	294.	
1	0026	27	.00	.00	.00	.00	0.	*	1	0157	118	.00	.00	.00	294.	
1	0027	28	.00	.00	.00	.00	0.	*	1	0158	119	.00	.00	.00	295.	
1	0028	29	.00	.00	.00	.00	0.	*	1	0159	120	.00	.00	.00	295.	
1	0029	30	.00	.00	.00	.00	0.	*	1	0200	121	.00	.00	.00	294.	
1	0030	31	.00	.00	.00	.00	0.	*	1	0201	122	.00	.00	.00	294.	
1	0031	32	.11	.11	.00	.00	0.	*	1	0202	123	.00	.00	.00	294.	
1	0032	33	.11	.11	.00	.00	0.	*	1	0203	124	.00	.00	.00	293.	
1	0033	34	.11	.11	.00	.00	0.	*	1	0204	125	.00	.00	.00	292.	
1	0034	35	.11	.11	.00	.00	0.	*	1	0205	126	.00	.00	.00	291.	
1	0035	36	.11	.11	.00	.00	0.	*	1	0206	127	.00	.00	.00	290.	
1	0036	37	.09	.09	.00	.00	0.	*	1	0207	128	.00	.00	.00	288.	
1	0037	38	.09	.08	.00	.00	0.	*	1	0208	129	.00	.00	.00	286.	
1	0038	39	.09	.08	.01	0.	0.	*	1	0209	130	.00	.00	.00	284.	
1	0039	40	.09	.08	.01	0.	0.	*	1	0210	131	.00	.00	.00	282.	
1	0040	41	.09	.07	.02	0.	0.	*	1	0211	132	.00	.00	.00	280.	
1	0041	42	.06	.05	.01	1.	0.	*	1	0212	133	.00	.00	.00	278.	
1	0042	43	.06	.05	.01	1.	0.	*	1	0213	134	.00	.00	.00	275.	
1	0043	44	.06	.05	.02	1.	0.	*	1	0214	135	.00	.00	.00	272.	
1	0044	45	.06	.04	.02	2.	0.	*	1	0215	136	.00	.00	.00	269.	
1	0045	46	.06	.04	.02	2.	0.	*	1	0216	137	.00	.00	.00	266.	
1	0046	47	.04	.03	.01	3.	0.	*	1	0217	138	.00	.00	.00	263.	
1	0047	48	.04	.03	.01	4.	0.	*	1	0218	139	.00	.00	.00	259.	
1	0048	49	.04	.03	.01	5.	0.	*	1	0219	140	.00	.00	.00	256.	
1	0049	50	.04	.03	.01	6.	0.	*	1	0220	141	.00	.00	.00	252.	
1	0050	51	.04	.02	.01	7.	0.	*	1	0221	142	.00	.00	.00	248.	
1	0051	52	.02	.01	.01	9.	0.	*	1	0222	143	.00	.00	.00	245.	
1	0052	53	.02	.01	.01	10.	0.	*	1	0223	144	.00	.00	.00	241.	
1	0053	54	.02	.01	.01	12.	0.	*	1	0224	145	.00	.00	.00	237.	
1	0054	55	.02	.01	.01	14.	0.	*	1	0225	146	.00	.00	.00	233.	
1	0055	56	.02	.01	.01	16.	0.	*	1	0226	147	.00	.00	.00	229.	
1	0056	57	.02	.01	.01	18.	0.	*	1	0227	148	.00	.00	.00	226.	
1	0057	58	.02	.01	.01	20.	0.	*	1	0228	149	.00	.00	.00	222.	
1	0058	59	.02	.01	.01	23.	0.	*	1	0229	150	.00	.00	.00	218.	
1	0059	60	.02	.01	.01	26.	0.	*	1	0230	151	.00	.00	.00	214.	
1	0100	61	.02	.01	.01	29.	0.	*	1	0231	152	.00	.00	.00	211.	
1	0101	62	.01	.01	.01	32.	0.	*	1	0232	153	.00	.00	.00	207.	
1	0102	63	.01	.01	.01	35.	0.	*	1	0233	154	.00	.00	.00	203.	
1	0103	64	.01	.01	.01	39.	0.	*	1	0234	155	.00	.00	.00	200.	
1	0104	65	.01	.01	.01	42.	0.	*	1	0235	156	.00	.00	.00	196.	
1	0105	66	.01	.01	.01	46.	0.	*	1	0236	157	.00	.00	.00	193.	
1	0106	67	.01	.01	.00	51.	0.	*	1	0237	158	.00	.00	.00	189.	

														post.out			
1	0107	68	.01	.01	.00	55.	*	1	0238	159	.00	.00	.00	186.			
1	0108	69	.01	.01	.00	60.	*	1	0239	160	.00	.00	.00	183.			
1	0109	70	.01	.01	.00	64.	*	1	0240	161	.00	.00	.00	179.			
1	0110	71	.01	.01	.00	70.	*	1	0241	162	.00	.00	.00	176.			
1	0111	72	.01	.00	.00	75.	*	1	0242	163	.00	.00	.00	173.			
1	0112	73	.01	.00	.00	80.	*	1	0243	164	.00	.00	.00	170.			
1	0113	74	.01	.00	.00	86.	*	1	0244	165	.00	.00	.00	167.			
1	0114	75	.01	.00	.00	92.	*	1	0245	166	.00	.00	.00	164.			
1	0115	76	.01	.00	.00	99.	*	1	0246	167	.00	.00	.00	161.			
1	0116	77	.01	.00	.00	105.	*	1	0247	168	.00	.00	.00	158.			
1	0117	78	.01	.00	.00	111.	*	1	0248	169	.00	.00	.00	156.			
1	0118	79	.01	.00	.00	118.	*	1	0249	170	.00	.00	.00	153.			
1	0119	80	.01	.00	.00	125.	*	1	0250	171	.00	.00	.00	150.			
1	0120	81	.01	.00	.00	132.	*	1	0251	172	.00	.00	.00	148.			
1	0121	82	.01	.00	.00	139.	*	1	0252	173	.00	.00	.00	145.			
1	0122	83	.01	.00	.00	145.	*	1	0253	174	.00	.00	.00	143.			
1	0123	84	.01	.00	.00	152.	*	1	0254	175	.00	.00	.00	140.			
1	0124	85	.01	.00	.00	159.	*	1	0255	176	.00	.00	.00	138.			
1	0125	86	.01	.00	.00	166.	*	1	0256	177	.00	.00	.00	136.			
1	0126	87	.01	.00	.00	173.	*	1	0257	178	.00	.00	.00	133.			
1	0127	88	.01	.00	.00	180.	*	1	0258	179	.00	.00	.00	131.			
1	0128	89	.01	.00	.00	186.	*	1	0259	180	.00	.00	.00	129.			
1	0129	90	.01	.00	.00	193.	*	1	0300	181	.00	.00	.00	127.			
1	0130	91	.01	.00	.00	199.	*										

TOTAL RAINFALL = 2.13, TOTAL LOSS = 1.68, TOTAL EXCESS = .45

PEAK FLOW + (CFS)	TIME (HR)	MAXIMUM AVERAGE FLOW			
		6-HR	24-HR	72-HR	3.00-HR
+ 295.	1.98	134.	134.	134.	134.
		(INCHES) .348	.348	.348	.348
		(AC-FT) 33.	33.	33.	33.

CUMULATIVE AREA = 1.79 SQ MI

*** WARNING *** UNIT HYDROGRAPH TRUNCATED FROM 309 TO 300 INTERVALS

HYDROGRAPH AT STATION BP9
PLAN 1, RATIO = 1.00

DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	*	DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
1	0000	1	.00	.00	.00	0.	0.	*	1	0131	92	.00	.00	.00	206.	
1	0001	2	.00	.00	.00	0.	0.	*	1	0132	93	.00	.00	.00	212.	
1	0002	3	.00	.00	.00	0.	0.	*	1	0133	94	.00	.00	.00	218.	
1	0003	4	.00	.00	.00	0.	0.	*	1	0134	95	.00	.00	.00	223.	
1	0004	5	.00	.00	.00	0.	0.	*	1	0135	96	.00	.00	.00	229.	
1	0005	6	.00	.00	.00	0.	0.	*	1	0136	97	.00	.00	.00	234.	
1	0006	7	.00	.00	.00	0.	0.	*	1	0137	98	.00	.00	.00	239.	
1	0007	8	.00	.00	.00	0.	0.	*	1	0138	99	.00	.00	.00	244.	
1	0008	9	.00	.00	.00	0.	0.	*	1	0139	100	.00	.00	.00	249.	
1	0009	10	.00	.00	.00	0.	0.	*	1	0140	101	.00	.00	.00	254.	
1	0010	11	.00	.00	.00	0.	0.	*	1	0141	102	.00	.00	.00	258.	
1	0011	12	.00	.00	.00	0.	0.	*	1	0142	103	.00	.00	.00	262.	
1	0012	13	.00	.00	.00	0.	0.	*	1	0143	104	.00	.00	.00	266.	
1	0013	14	.00	.00	.00	0.	0.	*	1	0144	105	.00	.00	.00	269.	
1	0014	15	.00	.00	.00	0.	0.	*	1	0145	106	.00	.00	.00	273.	
1	0015	16	.00	.00	.00	0.	0.	*	1	0146	107	.00	.00	.00	276.	
1	0016	17	.00	.00	.00	0.	0.	*	1	0147	108	.00	.00	.00	279.	
1	0017	18	.00	.00	.00	0.	0.	*	1	0148	109	.00	.00	.00	282.	
1	0018	19	.00	.00	.00	0.	0.	*	1	0149	110	.00	.00	.00	284.	
1	0019	20	.00	.00	.00	0.	0.	*	1	0150	111	.00	.00	.00	286.	
1	0020	21	.00	.00	.00	0.	0.	*	1	0151	112	.00	.00	.00	288.	
1	0021	22	.00	.00	.00	0.	0.	*	1	0152	113	.00	.00	.00	290.	
1	0022	23	.00	.00	.00	0.	0.	*	1	0153	114	.00	.00	.00	291.	
1	0023	24	.00	.00	.00	0.	0.	*	1	0154	115	.00	.00	.00	292.	
1	0024	25	.00	.00	.00	0.	0.	*	1	0155	116	.00	.00	.00	293.	
1	0025	26	.00	.00	.00	0.	0.	*	1	0156	117	.00	.00	.00	294.	
1	0026	27	.00	.00	.00	0.	0.	*	1	0157	118	.00	.00	.00	294.	
1	0027	28	.00	.00	.00	0.	0.	*	1	0158	119	.00	.00	.00	295.	
1	0028	29	.00	.00	.00	0.	0.	*	1	0159	120	.00	.00	.00	295.	
1	0029	30	.00	.00	.00	0.	0.	*	1	0200	121	.00	.00	.00	294.	
1	0030	31	.00	.00	.00	0.	0.	*	1	0201	122	.00	.00	.00	294.	
1	0031	32	.11	.11	.00	0.	0.	*	1	0202	123	.00	.00	.00	294.	
1	0032	33	.11	.11	.00	0.	0.	*	1	0203	124	.00	.00	.00	293.	
1	0033	34	.11	.11	.00	0.	0.	*	1	0204	125	.00	.00	.00	292.	
1	0034	35	.11	.11	.00	0.	0.	*	1	0205	126	.00	.00	.00	291.	
1	0035	36	.11	.11	.00	0.	0.	*	1	0206	127	.00	.00	.00	290.	
1	0036	37	.09	.09	.00	0.	0.	*	1	0207	128	.00	.00	.00	288.	
1	0037	38	.09	.08	.00	0.	0.	*	1	0208	129	.00	.00	.00	286.	

														post.out			
1	0038	39	.09	.08	.01	0.	*	1	0209	130	.00	.00	.00	284.			
1	0039	40	.09	.08	.01	0.	*	1	0210	131	.00	.00	.00	282.			
1	0040	41	.09	.07	.02	0.	*	1	0211	132	.00	.00	.00	280.			
1	0041	42	.06	.05	.01	1.	*	1	0212	133	.00	.00	.00	278.			
1	0042	43	.06	.05	.01	1.	*	1	0213	134	.00	.00	.00	275.			
1	0043	44	.06	.05	.02	1.	*	1	0214	135	.00	.00	.00	272.			
1	0044	45	.06	.04	.02	2.	*	1	0215	136	.00	.00	.00	269.			
1	0045	46	.06	.04	.02	2.	*	1	0216	137	.00	.00	.00	266.			
1	0046	47	.04	.03	.01	3.	*	1	0217	138	.00	.00	.00	263.			
1	0047	48	.04	.03	.01	4.	*	1	0218	139	.00	.00	.00	259.			
1	0048	49	.04	.03	.01	5.	*	1	0219	140	.00	.00	.00	256.			
1	0049	50	.04	.03	.01	6.	*	1	0220	141	.00	.00	.00	252.			
1	0050	51	.04	.02	.01	7.	*	1	0221	142	.00	.00	.00	248.			
1	0051	52	.02	.01	.01	9.	*	1	0222	143	.00	.00	.00	245.			
1	0052	53	.02	.01	.01	10.	*	1	0223	144	.00	.00	.00	241.			
1	0053	54	.02	.01	.01	12.	*	1	0224	145	.00	.00	.00	237.			
1	0054	55	.02	.01	.01	14.	*	1	0225	146	.00	.00	.00	233.			
1	0055	56	.02	.01	.01	16.	*	1	0226	147	.00	.00	.00	229.			
1	0056	57	.02	.01	.01	18.	*	1	0227	148	.00	.00	.00	226.			
1	0057	58	.02	.01	.01	20.	*	1	0228	149	.00	.00	.00	222.			
1	0058	59	.02	.01	.01	23.	*	1	0229	150	.00	.00	.00	218.			
1	0059	60	.02	.01	.01	26.	*	1	0230	151	.00	.00	.00	214.			
1	0100	61	.02	.01	.01	29.	*	1	0231	152	.00	.00	.00	211.			
1	0101	62	.01	.01	.01	32.	*	1	0232	153	.00	.00	.00	207.			
1	0102	63	.01	.01	.01	35.	*	1	0233	154	.00	.00	.00	203.			
1	0103	64	.01	.01	.01	39.	*	1	0234	155	.00	.00	.00	200.			
1	0104	65	.01	.01	.01	42.	*	1	0235	156	.00	.00	.00	196.			
1	0105	66	.01	.01	.01	46.	*	1	0236	157	.00	.00	.00	193.			
1	0106	67	.01	.01	.00	51.	*	1	0237	158	.00	.00	.00	189.			
1	0107	68	.01	.01	.00	55.	*	1	0238	159	.00	.00	.00	186.			
1	0108	69	.01	.01	.00	60.	*	1	0239	160	.00	.00	.00	183.			
1	0109	70	.01	.01	.00	64.	*	1	0240	161	.00	.00	.00	179.			
1	0110	71	.01	.01	.00	70.	*	1	0241	162	.00	.00	.00	176.			
1	0111	72	.01	.00	.00	75.	*	1	0242	163	.00	.00	.00	173.			
1	0112	73	.01	.00	.00	80.	*	1	0243	164	.00	.00	.00	170.			
1	0113	74	.01	.00	.00	86.	*	1	0244	165	.00	.00	.00	167.			
1	0114	75	.01	.00	.00	92.	*	1	0245	166	.00	.00	.00	164.			
1	0115	76	.01	.00	.00	99.	*	1	0246	167	.00	.00	.00	161.			
1	0116	77	.01	.00	.00	105.	*	1	0247	168	.00	.00	.00	158.			
1	0117	78	.01	.00	.00	111.	*	1	0248	169	.00	.00	.00	156.			
1	0118	79	.01	.00	.00	118.	*	1	0249	170	.00	.00	.00	153.			
1	0119	80	.01	.00	.00	125.	*	1	0250	171	.00	.00	.00	150.			
1	0120	81	.01	.00	.00	132.	*	1	0251	172	.00	.00	.00	148.			
1	0121	82	.01	.00	.00	139.	*	1	0252	173	.00	.00	.00	145.			
1	0122	83	.01	.00	.00	145.	*	1	0253	174	.00	.00	.00	143.			
1	0123	84	.01	.00	.00	152.	*	1	0254	175	.00	.00	.00	140.			
1	0124	85	.01	.00	.00	159.	*	1	0255	176	.00	.00	.00	138.			
1	0125	86	.01	.00	.00	166.	*	1	0256	177	.00	.00	.00	136.			
1	0126	87	.01	.00	.00	173.	*	1	0257	178	.00	.00	.00	133.			
1	0127	88	.01	.00	.00	180.	*	1	0258	179	.00	.00	.00	131.			
1	0128	89	.01	.00	.00	186.	*	1	0259	180	.00	.00	.00	129.			
1	0129	90	.01	.00	.00	193.	*	1	0300	181	.00	.00	.00	127.			
1	0130	91	.01	.00	.00	199.	*										

TOTAL RAINFALL = 2.13, TOTAL LOSS = 1.68, TOTAL EXCESS = .45

+ (CFS)	TIME (HR)	MAXIMUM AVERAGE FLOW			
		6-HR	24-HR	72-HR	3.00-HR
+ 295.	1.98	134.	134.	134.	134.
	(INCHES)	.348	.348	.348	.348
	(AC-FT)	33.	33.	33.	33.

CUMULATIVE AREA = 1.79 SQ MI

*** WARNING *** UNIT HYDROGRAPH TRUNCATED FROM 309 TO 300 INTERVALS

HYDROGRAPH AT STATION BP9
PLAN 1, RATIO = .61

DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	*	DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
1	0000	1		.00	.00	.00	0.	*	1	0131	92		.00	.00	.00	33.
1	0001	2		.00	.00	.00	0.	*	1	0132	93		.00	.00	.00	34.
1	0002	3		.00	.00	.00	0.	*	1	0133	94		.00	.00	.00	36.
1	0003	4		.00	.00	.00	0.	*	1	0134	95		.00	.00	.00	37.
1	0004	5		.00	.00	.00	0.	*	1	0135	96		.00	.00	.00	38.
1	0005	6		.00	.00	.00	0.	*	1	0136	97		.00	.00	.00	40.
1	0006	7		.00	.00	.00	0.	*	1	0137	98		.00	.00	.00	41.
1	0007	8		.00	.00	.00	0.	*	1	0138	99		.00	.00	.00	42.
1	0008	9		.00	.00	.00	0.	*	1	0139	100		.00	.00	.00	43.

													post.out	
1	0009	10	.00	.00	.00	0.	*	1	0140	101	.00	.00	.00	45.
1	0010	11	.00	.00	.00	0.	*	1	0141	102	.00	.00	.00	46.
1	0011	12	.00	.00	.00	0.	*	1	0142	103	.00	.00	.00	47.
1	0012	13	.00	.00	.00	0.	*	1	0143	104	.00	.00	.00	48.
1	0013	14	.00	.00	.00	0.	*	1	0144	105	.00	.00	.00	49.
1	0014	15	.00	.00	.00	0.	*	1	0145	106	.00	.00	.00	50.
1	0015	16	.00	.00	.00	0.	*	1	0146	107	.00	.00	.00	51.
1	0016	17	.00	.00	.00	0.	*	1	0147	108	.00	.00	.00	52.
1	0017	18	.00	.00	.00	0.	*	1	0148	109	.00	.00	.00	53.
1	0018	19	.00	.00	.00	0.	*	1	0149	110	.00	.00	.00	54.
1	0019	20	.00	.00	.00	0.	*	1	0150	111	.00	.00	.00	55.
1	0020	21	.00	.00	.00	0.	*	1	0151	112	.00	.00	.00	55.
1	0021	22	.00	.00	.00	0.	*	1	0152	113	.00	.00	.00	56.
1	0022	23	.00	.00	.00	0.	*	1	0153	114	.00	.00	.00	57.
1	0023	24	.00	.00	.00	0.	*	1	0154	115	.00	.00	.00	57.
1	0024	25	.00	.00	.00	0.	*	1	0155	116	.00	.00	.00	58.
1	0025	26	.00	.00	.00	0.	*	1	0156	117	.00	.00	.00	59.
1	0026	27	.00	.00	.00	0.	*	1	0157	118	.00	.00	.00	59.
1	0027	28	.00	.00	.00	0.	*	1	0158	119	.00	.00	.00	59.
1	0028	29	.00	.00	.00	0.	*	1	0159	120	.00	.00	.00	60.
1	0029	30	.00	.00	.00	0.	*	1	0200	121	.00	.00	.00	60.
1	0030	31	.00	.00	.00	0.	*	1	0201	122	.00	.00	.00	60.
1	0031	32	.07	.07	.00	0.	*	1	0202	123	.00	.00	.00	61.
1	0032	33	.07	.07	.00	0.	*	1	0203	124	.00	.00	.00	61.
1	0033	34	.07	.07	.00	0.	*	1	0204	125	.00	.00	.00	61.
1	0034	35	.07	.07	.00	0.	*	1	0205	126	.00	.00	.00	61.
1	0035	36	.07	.07	.00	0.	*	1	0206	127	.00	.00	.00	61.
1	0036	37	.05	.05	.00	0.	*	1	0207	128	.00	.00	.00	61.
1	0037	38	.05	.05	.00	0.	*	1	0208	129	.00	.00	.00	61.
1	0038	39	.05	.05	.00	0.	*	1	0209	130	.00	.00	.00	61.
1	0039	40	.05	.05	.00	0.	*	1	0210	131	.00	.00	.00	61.
1	0040	41	.05	.05	.00	0.	*	1	0211	132	.00	.00	.00	61.
1	0041	42	.04	.04	.00	0.	*	1	0212	133	.00	.00	.00	61.
1	0042	43	.04	.04	.00	0.	*	1	0213	134	.00	.00	.00	60.
1	0043	44	.04	.04	.00	0.	*	1	0214	135	.00	.00	.00	60.
1	0044	45	.04	.04	.00	0.	*	1	0215	136	.00	.00	.00	60.
1	0045	46	.04	.03	.00	0.	*	1	0216	137	.00	.00	.00	59.
1	0046	47	.02	.02	.00	0.	*	1	0217	138	.00	.00	.00	59.
1	0047	48	.02	.02	.00	0.	*	1	0218	139	.00	.00	.00	59.
1	0048	49	.02	.02	.00	0.	*	1	0219	140	.00	.00	.00	58.
1	0049	50	.02	.02	.00	0.	*	1	0220	141	.00	.00	.00	58.
1	0050	51	.02	.02	.00	0.	*	1	0221	142	.00	.00	.00	57.
1	0051	52	.01	.01	.00	0.	*	1	0222	143	.00	.00	.00	56.
1	0052	53	.01	.01	.00	1.	*	1	0223	144	.00	.00	.00	56.
1	0053	54	.01	.01	.00	1.	*	1	0224	145	.00	.00	.00	55.
1	0054	55	.01	.01	.00	1.	*	1	0225	146	.00	.00	.00	55.
1	0055	56	.01	.01	.00	1.	*	1	0226	147	.00	.00	.00	54.
1	0056	57	.01	.01	.00	1.	*	1	0227	148	.00	.00	.00	53.
1	0057	58	.01	.01	.00	2.	*	1	0228	149	.00	.00	.00	53.
1	0058	59	.01	.01	.00	2.	*	1	0229	150	.00	.00	.00	52.
1	0059	60	.01	.01	.00	2.	*	1	0230	151	.00	.00	.00	51.
1	0100	61	.01	.01	.00	3.	*	1	0231	152	.00	.00	.00	51.
1	0101	62	.01	.01	.00	3.	*	1	0232	153	.00	.00	.00	50.
1	0102	63	.01	.01	.00	4.	*	1	0233	154	.00	.00	.00	49.
1	0103	64	.01	.01	.00	4.	*	1	0234	155	.00	.00	.00	48.
1	0104	65	.01	.01	.00	5.	*	1	0235	156	.00	.00	.00	48.
1	0105	66	.01	.01	.00	5.	*	1	0236	157	.00	.00	.00	47.
1	0106	67	.01	.00	.00	6.	*	1	0237	158	.00	.00	.00	46.
1	0107	68	.01	.00	.00	6.	*	1	0238	159	.00	.00	.00	46.
1	0108	69	.01	.00	.00	7.	*	1	0239	160	.00	.00	.00	45.
1	0109	70	.01	.00	.00	8.	*	1	0240	161	.00	.00	.00	44.
1	0110	71	.01	.00	.00	8.	*	1	0241	162	.00	.00	.00	44.
1	0111	72	.00	.00	.00	9.	*	1	0242	163	.00	.00	.00	43.
1	0112	73	.00	.00	.00	10.	*	1	0243	164	.00	.00	.00	42.
1	0113	74	.00	.00	.00	11.	*	1	0244	165	.00	.00	.00	42.
1	0114	75	.00	.00	.00	12.	*	1	0245	166	.00	.00	.00	41.
1	0115	76	.00	.00	.00	13.	*	1	0246	167	.00	.00	.00	40.
1	0116	77	.00	.00	.00	14.	*	1	0247	168	.00	.00	.00	40.
1	0117	78	.00	.00	.00	15.	*	1	0248	169	.00	.00	.00	39.
1	0118	79	.00	.00	.00	16.	*	1	0249	170	.00	.00	.00	39.
1	0119	80	.00	.00	.00	17.	*	1	0250	171	.00	.00	.00	38.
1	0120	81	.00	.00	.00	18.	*	1	0251	172	.00	.00	.00	38.
1	0121	82	.00	.00	.00	19.	*	1	0252	173	.00	.00	.00	37.
1	0122	83	.00	.00	.00	21.	*	1	0253	174	.00	.00	.00	36.
1	0123	84	.00	.00	.00	22.	*	1	0254	175	.00	.00	.00	36.
1	0124	85	.00	.00	.00	23.	*	1	0255	176	.00	.00	.00	35.
1	0125	86	.00	.00	.00	25.	*	1	0256	177	.00	.00	.00	35.
1	0126	87	.00	.00	.00	26.	*	1	0257	178	.00	.00	.00	34.
1	0127	88	.00	.00	.00	27.	*	1	0258	179	.00	.00	.00	34.
1	0128	89	.00	.00	.00	29.	*	1	0259	180	.00	.00	.00	33.
1	0129	90	.00	.00	.00	30.	*	1	0300	181	.00	.00	.00	33.
1	0130	91	.00	.00	.00	31.	*							

TOTAL RAINFALL = 1.29, TOTAL LOSS = 1.19, TOTAL EXCESS = .10

PEAK FLOW TIME MAXIMUM AVERAGE FLOW
+ (CFS) (HR) 6-HR 24-HR 72-HR 3.00-HR

```

(CFS)
+ 61. 2.12 27. 27. 27. 27.
(INCHES) .070 .070 .070 .070
(AC-FT) 7. 7. 7. 7.
CUMULATIVE AREA = 1.79 SQ MI

```

post.out

*** **

```

*****
*
105 KK * RP9 *
*
*****

```

Route BP9 in channel to Outlet OP1

HYDROGRAPH ROUTING DATA

```

107 RD MUSKINGUM-CUNGE CHANNEL ROUTING
L 11777. CHANNEL LENGTH
S .0120 SLOPE
N .040 CHANNEL ROUGHNESS COEFFICIENT
CA .00 CONTRIBUTING AREA
SHAPE TRAP CHANNEL SHAPE
WD .00 BOTTOM WIDTH OR DIAMETER
Z 7.00 SIDE SLOPE

```

COMPUTED MUSKINGUM-CUNGE PARAMETERS

ELEMENT	ALPHA	COMPUTATION TIME STEP		PEAK (CFS)	TIME TO PEAK (MIN)	VOLUME (IN)	MAXIMUM CELERITY (FPS)
		M	DT (MIN)				
MAIN	1.34	1.33	1.00	206.61	147.00	.24	5.77

INTERPOLATED TO SPECIFIED COMPUTATION INTERVAL

MAIN	1.34	1.33	1.00	294.01	147.00	.24	
------	------	------	------	--------	--------	-----	--

CONTINUITY SUMMARY (AC-FT) - INFLOW= .3334E+02 EXCESS= .0000E+00 OUTFLOW= .2347E+02 BASIN STORAGE= .1027E+02 PERCENT ERROR= -1.2

HYDROGRAPH AT STATION RP9
PLAN 1, RATIO = 1.00

DA	MON	HRMN	ORD	FLOW	DA	MON	HRMN	ORD	FLOW	DA	MON	HRMN	ORD	FLOW	DA	MON	HRMN	ORD	FLOW
1	0000	1	0.	*	1	0046	47	0.	*	1	0132	93	0.	*	1	0218	139	283.	
1	0001	2	0.	*	1	0047	48	0.	*	1	0133	94	0.	*	1	0219	140	286.	
1	0002	3	0.	*	1	0048	49	0.	*	1	0134	95	0.	*	1	0220	141	288.	
1	0003	4	0.	*	1	0049	50	0.	*	1	0135	96	0.	*	1	0221	142	289.	
1	0004	5	0.	*	1	0050	51	0.	*	1	0136	97	0.	*	1	0222	143	291.	
1	0005	6	0.	*	1	0051	52	0.	*	1	0137	98	0.	*	1	0223	144	292.	
1	0006	7	0.	*	1	0052	53	0.	*	1	0138	99	0.	*	1	0224	145	293.	
1	0007	8	0.	*	1	0053	54	0.	*	1	0139	100	0.	*	1	0225	146	293.	
1	0008	9	0.	*	1	0054	55	0.	*	1	0140	101	0.	*	1	0226	147	294.	
1	0009	10	0.	*	1	0055	56	0.	*	1	0141	102	0.	*	1	0227	148	294.	
1	0010	11	0.	*	1	0056	57	0.	*	1	0142	103	0.	*	1	0228	149	294.	
1	0011	12	0.	*	1	0057	58	0.	*	1	0143	104	0.	*	1	0229	150	294.	
1	0012	13	0.	*	1	0058	59	0.	*	1	0144	105	0.	*	1	0230	151	293.	
1	0013	14	0.	*	1	0059	60	0.	*	1	0145	106	0.	*	1	0231	152	293.	
1	0014	15	0.	*	1	0100	61	0.	*	1	0146	107	0.	*	1	0232	153	292.	
1	0015	16	0.	*	1	0101	62	0.	*	1	0147	108	0.	*	1	0233	154	291.	
1	0016	17	0.	*	1	0102	63	0.	*	1	0148	109	0.	*	1	0234	155	290.	
1	0017	18	0.	*	1	0103	64	0.	*	1	0149	110	0.	*	1	0235	156	289.	
1	0018	19	0.	*	1	0104	65	0.	*	1	0150	111	0.	*	1	0236	157	287.	
1	0019	20	0.	*	1	0105	66	0.	*	1	0151	112	5.	*	1	0237	158	285.	
1	0020	21	0.	*	1	0106	67	0.	*	1	0152	113	71.	*	1	0238	159	284.	
1	0021	22	0.	*	1	0107	68	0.	*	1	0153	114	108.	*	1	0239	160	282.	
1	0022	23	0.	*	1	0108	69	0.	*	1	0154	115	117.	*	1	0240	161	279.	
1	0023	24	0.	*	1	0109	70	0.	*	1	0155	116	131.	*	1	0241	162	277.	
1	0024	25	0.	*	1	0110	71	0.	*	1	0156	117	143.	*	1	0242	163	275.	
1	0025	26	0.	*	1	0111	72	0.	*	1	0157	118	154.	*	1	0243	164	272.	
1	0026	27	0.	*	1	0112	73	0.	*	1	0158	119	165.	*	1	0244	165	269.	
1	0027	28	0.	*	1	0113	74	0.	*	1	0159	120	175.	*	1	0245	166	267.	
1	0028	29	0.	*	1	0114	75	0.	*	1	0200	121	185.	*	1	0246	167	264.	
1	0029	30	0.	*	1	0115	76	0.	*	1	0201	122	194.	*	1	0247	168	261.	

														post.out				
1	0030	31	0.	*	1	0116	77	0.	*	1	0202	123	202.	*	1	0248	169	257.
1	0031	32	0.	*	1	0117	78	0.	*	1	0203	124	210.	*	1	0249	170	254.
1	0032	33	0.	*	1	0118	79	0.	*	1	0204	125	218.	*	1	0250	171	251.
1	0033	34	0.	*	1	0119	80	0.	*	1	0205	126	225.	*	1	0251	172	248.
1	0034	35	0.	*	1	0120	81	0.	*	1	0206	127	231.	*	1	0252	173	244.
1	0035	36	0.	*	1	0121	82	0.	*	1	0207	128	238.	*	1	0253	174	241.
1	0036	37	0.	*	1	0122	83	0.	*	1	0208	129	244.	*	1	0254	175	238.
1	0037	38	0.	*	1	0123	84	0.	*	1	0209	130	249.	*	1	0255	176	234.
1	0038	39	0.	*	1	0124	85	0.	*	1	0210	131	254.	*	1	0256	177	231.
1	0039	40	0.	*	1	0125	86	0.	*	1	0211	132	259.	*	1	0257	178	227.
1	0040	41	0.	*	1	0126	87	0.	*	1	0212	133	263.	*	1	0258	179	224.
1	0041	42	0.	*	1	0127	88	0.	*	1	0213	134	268.	*	1	0259	180	221.
1	0042	43	0.	*	1	0128	89	0.	*	1	0214	135	271.	*	1	0300	181	217.
1	0043	44	0.	*	1	0129	90	0.	*	1	0215	136	275.	*				
1	0044	45	0.	*	1	0130	91	0.	*	1	0216	137	278.	*				
1	0045	46	0.	*	1	0131	92	0.	*	1	0217	138	281.	*				

PEAK FLOW (CFS)	TIME (HR)	MAXIMUM AVERAGE FLOW			
		6-HR	24-HR	72-HR	3.00-HR
294.	2.45	94.	94.	94.	94.
		(INCHES)	.244	.244	.244
		(AC-FT)	23.	23.	23.

CUMULATIVE AREA = 1.79 SQ MI

COMPUTED MUSKINGUM-CUNGE PARAMETERS

ELEMENT	ALPHA	COMPUTATION TIME STEP			PEAK (CFS)	TIME TO PEAK (MIN)	VOLUME (IN)	MAXIMUM CELERITY (FPS)
		M	DT	DX				
		(MIN)	(FT)					
MAIN	1.34	1.33	1.00	135.37	61.00	169.00	.03	

INTERPOLATED TO SPECIFIED COMPUTATION INTERVAL

MAIN	1.34	1.33	1.00	61.00	169.00	.03
------	------	------	------	-------	--------	-----

CONTINUITY SUMMARY (AC-FT) - INFLOW= .6763E+01 EXCESS= .0000E+00 OUTFLOW= .3037E+01 BASIN STORAGE= .3855E+01 PERCENT ERROR= -1.9

HYDROGRAPH AT STATION RP9
PLAN 1, RATIO = .61

DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*
1	0000	1	0.	*	1	0046	47	0.	*	1	0132	93	0.	*	1	0218	139	0.					
1	0001	2	0.	*	1	0047	48	0.	*	1	0133	94	0.	*	1	0219	140	0.					
1	0002	3	0.	*	1	0048	49	0.	*	1	0134	95	0.	*	1	0220	141	9.					
1	0003	4	0.	*	1	0049	50	0.	*	1	0135	96	0.	*	1	0221	142	35.					
1	0004	5	0.	*	1	0050	51	0.	*	1	0136	97	0.	*	1	0222	143	39.					
1	0005	6	0.	*	1	0051	52	0.	*	1	0137	98	0.	*	1	0223	144	37.					
1	0006	7	0.	*	1	0052	53	0.	*	1	0138	99	0.	*	1	0224	145	41.					
1	0007	8	0.	*	1	0053	54	0.	*	1	0139	100	0.	*	1	0225	146	43.					
1	0008	9	0.	*	1	0054	55	0.	*	1	0140	101	0.	*	1	0226	147	44.					
1	0009	10	0.	*	1	0055	56	0.	*	1	0141	102	0.	*	1	0227	148	46.					
1	0010	11	0.	*	1	0056	57	0.	*	1	0142	103	0.	*	1	0228	149	48.					
1	0011	12	0.	*	1	0057	58	0.	*	1	0143	104	0.	*	1	0229	150	49.					
1	0012	13	0.	*	1	0058	59	0.	*	1	0144	105	0.	*	1	0230	151	50.					
1	0013	14	0.	*	1	0059	60	0.	*	1	0145	106	0.	*	1	0231	152	52.					
1	0014	15	0.	*	1	0100	61	0.	*	1	0146	107	0.	*	1	0232	153	53.					
1	0015	16	0.	*	1	0101	62	0.	*	1	0147	108	0.	*	1	0233	154	54.					
1	0016	17	0.	*	1	0102	63	0.	*	1	0148	109	0.	*	1	0234	155	55.					
1	0017	18	0.	*	1	0103	64	0.	*	1	0149	110	0.	*	1	0235	156	56.					
1	0018	19	0.	*	1	0104	65	0.	*	1	0150	111	0.	*	1	0236	157	56.					
1	0019	20	0.	*	1	0105	66	0.	*	1	0151	112	0.	*	1	0237	158	57.					
1	0020	21	0.	*	1	0106	67	0.	*	1	0152	113	0.	*	1	0238	159	58.					
1	0021	22	0.	*	1	0107	68	0.	*	1	0153	114	0.	*	1	0239	160	58.					
1	0022	23	0.	*	1	0108	69	0.	*	1	0154	115	0.	*	1	0240	161	59.					
1	0023	24	0.	*	1	0109	70	0.	*	1	0155	116	0.	*	1	0241	162	59.					
1	0024	25	0.	*	1	0110	71	0.	*	1	0156	117	0.	*	1	0242	163	60.					
1	0025	26	0.	*	1	0111	72	0.	*	1	0157	118	0.	*	1	0243	164	60.					
1	0026	27	0.	*	1	0112	73	0.	*	1	0158	119	0.	*	1	0244	165	60.					
1	0027	28	0.	*	1	0113	74	0.	*	1	0159	120	0.	*	1	0245	166	61.					
1	0028	29	0.	*	1	0114	75	0.	*	1	0200	121	0.	*	1	0246	167	61.					
1	0029	30	0.	*	1	0115	76	0.	*	1	0201	122	0.	*	1	0247	168	61.					
1	0030	31	0.	*	1	0116	77	0.	*	1	0202	123	0.	*	1	0248	169	61.					
1	0031	32	0.	*	1	0117	78	0.	*	1	0203	124	0.	*	1	0249	170	61.					
1	0032	33	0.	*	1	0118	79	0.	*	1	0204	125	0.	*	1	0250	171	61.					

post.out																		
1	0033	34	0.	*	1	0119	80	0.	*	1	0205	126	0.	*	1	0251	172	61.
1	0034	35	0.	*	1	0120	81	0.	*	1	0206	127	0.	*	1	0252	173	61.
1	0035	36	0.	*	1	0121	82	0.	*	1	0207	128	0.	*	1	0253	174	61.
1	0036	37	0.	*	1	0122	83	0.	*	1	0208	129	0.	*	1	0254	175	61.
1	0037	38	0.	*	1	0123	84	0.	*	1	0209	130	0.	*	1	0255	176	60.
1	0038	39	0.	*	1	0124	85	0.	*	1	0210	131	0.	*	1	0256	177	60.
1	0039	40	0.	*	1	0125	86	0.	*	1	0211	132	0.	*	1	0257	178	60.
1	0040	41	0.	*	1	0126	87	0.	*	1	0212	133	0.	*	1	0258	179	59.
1	0041	42	0.	*	1	0127	88	0.	*	1	0213	134	0.	*	1	0259	180	59.
1	0042	43	0.	*	1	0128	89	0.	*	1	0214	135	0.	*	1	0300	181	59.
1	0043	44	0.	*	1	0129	90	0.	*	1	0215	136	0.	*				
1	0044	45	0.	*	1	0130	91	0.	*	1	0216	137	0.	*				
1	0045	46	0.	*	1	0131	92	0.	*	1	0217	138	0.	*				

PEAK FLOW	TIME	MAXIMUM AVERAGE FLOW			
(CFS)	(HR)	6-HR	24-HR	72-HR	3.00-HR
61.	2.82	12.	12.	12.	12.
		(INCHES)	.031	.031	.031
		(AC-FT)	3.	3.	3.
CUMULATIVE AREA =		1.79 SQ MI			

*** ** ** ** **

 * *
 108 KK * BP13 *
 * *

BP13

SUBBASIN RUNOFF DATA

110 BA SUBBASIN CHARACTERISTICS
 TAREA .29 SUBBASIN AREA

PRECIPITATION DATA

23 PB STORM 2.13 BASIN TOTAL PRECIPITATION

24 PI INCREMENTAL PRECIPITATION PATTERN

.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.05	.05	.05	.05	.05	.04	.04	.04	.04	.04
.03	.03	.03	.03	.03	.02	.02	.02	.02	.02
.01	.01	.01	.01	.01	.01	.01	.01	.01	.01
.01	.01	.01	.01	.01	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00

111 LS SCS LOSS RATE
 STRTL .60 INITIAL ABSTRACTION
 CRVNBR 77.00 CURVE NUMBER
 RTIMP .00 PERCENT IMPERVIOUS AREA

112 UD SCS DIMENSIONLESS UNITGRAPH
 TLAG .12 LAG

UNIT HYDROGRAPH

37 END-OF-PERIOD ORDINATES									
58.	175.	339.	582.	839.	1021.	1096.	1098.	1032.	928.
799.	633.	491.	395.	317.	261.	212.	168.	137.	110.
88.	71.	57.	46.	37.	30.	24.	20.	16.	13.
11.	9.	7.	5.	4.	3.	1.			

HYDROGRAPH AT STATION BP13

post.out

DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	*	DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
1	0000	1	.00	.00	.00	0.	0.	*	1	0131	92	.00	.00	.00	37.	
1	0001	2	.00	.00	.00	0.	0.	*	1	0132	93	.00	.00	.00	36.	
1	0002	3	.00	.00	.00	0.	0.	*	1	0133	94	.00	.00	.00	34.	
1	0003	4	.00	.00	.00	0.	0.	*	1	0134	95	.00	.00	.00	32.	
1	0004	5	.00	.00	.00	0.	0.	*	1	0135	96	.00	.00	.00	30.	
1	0005	6	.00	.00	.00	0.	0.	*	1	0136	97	.00	.00	.00	27.	
1	0006	7	.00	.00	.00	0.	0.	*	1	0137	98	.00	.00	.00	24.	
1	0007	8	.00	.00	.00	0.	0.	*	1	0138	99	.00	.00	.00	22.	
1	0008	9	.00	.00	.00	0.	0.	*	1	0139	100	.00	.00	.00	19.	
1	0009	10	.00	.00	.00	0.	0.	*	1	0140	101	.00	.00	.00	17.	
1	0010	11	.00	.00	.00	0.	0.	*	1	0141	102	.00	.00	.00	15.	
1	0011	12	.00	.00	.00	0.	0.	*	1	0142	103	.00	.00	.00	14.	
1	0012	13	.00	.00	.00	0.	0.	*	1	0143	104	.00	.00	.00	13.	
1	0013	14	.00	.00	.00	0.	0.	*	1	0144	105	.00	.00	.00	12.	
1	0014	15	.00	.00	.00	0.	0.	*	1	0145	106	.00	.00	.00	11.	
1	0015	16	.00	.00	.00	0.	0.	*	1	0146	107	.00	.00	.00	11.	
1	0016	17	.00	.00	.00	0.	0.	*	1	0147	108	.00	.00	.00	10.	
1	0017	18	.00	.00	.00	0.	0.	*	1	0148	109	.00	.00	.00	10.	
1	0018	19	.00	.00	.00	0.	0.	*	1	0149	110	.00	.00	.00	10.	
1	0019	20	.00	.00	.00	0.	0.	*	1	0150	111	.00	.00	.00	9.	
1	0020	21	.00	.00	.00	0.	0.	*	1	0151	112	.00	.00	.00	9.	
1	0021	22	.00	.00	.00	0.	0.	*	1	0152	113	.00	.00	.00	9.	
1	0022	23	.00	.00	.00	0.	0.	*	1	0153	114	.00	.00	.00	9.	
1	0023	24	.00	.00	.00	0.	0.	*	1	0154	115	.00	.00	.00	9.	
1	0024	25	.00	.00	.00	0.	0.	*	1	0155	116	.00	.00	.00	9.	
1	0025	26	.00	.00	.00	0.	0.	*	1	0156	117	.00	.00	.00	9.	
1	0026	27	.00	.00	.00	0.	0.	*	1	0157	118	.00	.00	.00	9.	
1	0027	28	.00	.00	.00	0.	0.	*	1	0158	119	.00	.00	.00	9.	
1	0028	29	.00	.00	.00	0.	0.	*	1	0159	120	.00	.00	.00	9.	
1	0029	30	.00	.00	.00	0.	0.	*	1	0200	121	.00	.00	.00	9.	
1	0030	31	.00	.00	.00	0.	0.	*	1	0201	122	.00	.00	.00	9.	
1	0031	32	.11	.11	.00	0.	0.	*	1	0202	123	.00	.00	.00	9.	
1	0032	33	.11	.11	.00	0.	0.	*	1	0203	124	.00	.00	.00	9.	
1	0033	34	.11	.11	.00	0.	0.	*	1	0204	125	.00	.00	.00	9.	
1	0034	35	.11	.11	.00	0.	0.	*	1	0205	126	.00	.00	.00	9.	
1	0035	36	.11	.11	.00	0.	0.	*	1	0206	127	.00	.00	.00	9.	
1	0036	37	.09	.09	.00	0.	0.	*	1	0207	128	.00	.00	.00	9.	
1	0037	38	.09	.08	.01	1.	0.	*	1	0208	129	.00	.00	.00	9.	
1	0038	39	.09	.08	.01	3.	0.	*	1	0209	130	.00	.00	.00	9.	
1	0039	40	.09	.07	.02	7.	0.	*	1	0210	131	.00	.00	.00	9.	
1	0040	41	.09	.07	.02	15.	0.	*	1	0211	132	.00	.00	.00	9.	
1	0041	42	.06	.05	.02	26.	0.	*	1	0212	133	.00	.00	.00	9.	
1	0042	43	.06	.04	.02	40.	0.	*	1	0213	134	.00	.00	.00	9.	
1	0043	44	.06	.04	.02	58.	0.	*	1	0214	135	.00	.00	.00	9.	
1	0044	45	.06	.04	.02	76.	0.	*	1	0215	136	.00	.00	.00	9.	
1	0045	46	.06	.04	.02	95.	0.	*	1	0216	137	.00	.00	.00	9.	
1	0046	47	.04	.02	.01	114.	0.	*	1	0217	138	.00	.00	.00	9.	
1	0047	48	.04	.02	.01	130.	0.	*	1	0218	139	.00	.00	.00	9.	
1	0048	49	.04	.02	.02	144.	0.	*	1	0219	140	.00	.00	.00	9.	
1	0049	50	.04	.02	.02	155.	0.	*	1	0220	141	.00	.00	.00	9.	
1	0050	51	.04	.02	.02	163.	0.	*	1	0221	142	.00	.00	.00	9.	
1	0051	52	.02	.01	.01	167.	0.	*	1	0222	143	.00	.00	.00	9.	
1	0052	53	.02	.01	.01	170.	0.	*	1	0223	144	.00	.00	.00	9.	
1	0053	54	.02	.01	.01	170.	0.	*	1	0224	145	.00	.00	.00	9.	
1	0054	55	.02	.01	.01	168.	0.	*	1	0225	146	.00	.00	.00	9.	
1	0055	56	.02	.01	.01	164.	0.	*	1	0226	147	.00	.00	.00	9.	
1	0056	57	.02	.01	.01	158.	0.	*	1	0227	148	.00	.00	.00	9.	
1	0057	58	.02	.01	.01	152.	0.	*	1	0228	149	.00	.00	.00	9.	
1	0058	59	.02	.01	.01	146.	0.	*	1	0229	150	.00	.00	.00	9.	
1	0059	60	.02	.01	.01	139.	0.	*	1	0230	151	.00	.00	.00	9.	
1	0100	61	.02	.01	.01	133.	0.	*	1	0231	152	.00	.00	.00	9.	
1	0101	62	.01	.01	.01	127.	0.	*	1	0232	153	.00	.00	.00	9.	
1	0102	63	.01	.01	.01	121.	0.	*	1	0233	154	.00	.00	.00	9.	
1	0103	64	.01	.01	.01	116.	0.	*	1	0234	155	.00	.00	.00	9.	
1	0104	65	.01	.01	.01	110.	0.	*	1	0235	156	.00	.00	.00	9.	
1	0105	66	.01	.01	.01	105.	0.	*	1	0236	157	.00	.00	.00	9.	
1	0106	67	.01	.01	.01	100.	0.	*	1	0237	158	.00	.00	.00	9.	
1	0107	68	.01	.01	.01	96.	0.	*	1	0238	159	.00	.00	.00	9.	
1	0108	69	.01	.01	.01	91.	0.	*	1	0239	160	.00	.00	.00	9.	
1	0109	70	.01	.01	.01	87.	0.	*	1	0240	161	.00	.00	.00	9.	
1	0110	71	.01	.01	.01	83.	0.	*	1	0241	162	.00	.00	.00	9.	
1	0111	72	.01	.00	.00	79.	0.	*	1	0242	163	.00	.00	.00	9.	
1	0112	73	.01	.00	.00	75.	0.	*	1	0243	164	.00	.00	.00	9.	
1	0113	74	.01	.00	.00	71.	0.	*	1	0244	165	.00	.00	.00	9.	
1	0114	75	.01	.00	.00	68.	0.	*	1	0245	166	.00	.00	.00	9.	
1	0115	76	.01	.00	.00	65.	0.	*	1	0246	167	.00	.00	.00	9.	
1	0116	77	.01	.00	.00	62.	0.	*	1	0247	168	.00	.00	.00	9.	
1	0117	78	.01	.00	.00	59.	0.	*	1	0248	169	.00	.00	.00	9.	
1	0118	79	.01	.00	.00	56.	0.	*	1	0249	170	.00	.00	.00	9.	
1	0119	80	.01	.00	.00	54.	0.	*	1	0250	171	.00	.00	.00	9.	
1	0120	81	.01	.00	.00	52.	0.	*	1	0251	172	.00	.00	.00	9.	
1	0121	82	.01	.00	.00	50.	0.	*	1	0252	173	.00	.00	.00	9.	
1	0122	83	.01	.00	.00	48.	0.	*	1	0253	174	.00	.00	.00	9.	
1	0123	84	.01	.00	.00	47.	0.	*	1	0254	175	.00	.00	.00	9.	
1	0124	85	.01	.00	.00	45.	0.	*	1	0255	176	.00	.00	.00	9.	
1	0125	86	.01	.00	.00	44.	0.	*	1	0256	177	.00	.00	.00	9.	
1	0126	87	.01	.00	.00	43.	0.	*	1	0257	178	.00	.00	.00	9.	

													post.out			
1	0127	88	.01	.00	.00	42.	*	1	0258	179	.00	.00	.00	9.		
1	0128	89	.01	.00	.00	41.	*	1	0259	180	.00	.00	.00	9.		
1	0129	90	.01	.00	.00	40.	*	1	0300	181	.00	.00	.00	9.		
1	0130	91	.01	.00	.00	39.	*									

TOTAL RAINFALL = 2.13, TOTAL LOSS = 1.61, TOTAL EXCESS = .52

PEAK FLOW	TIME	MAXIMUM AVERAGE FLOW			
(CFS)	(HR)	6-HR	24-HR	72-HR	3.00-HR
+ 170.	.88	32.	32.	32.	32.
		(INCHES)	.512	.512	.512
		(AC-FT)	8.	8.	8.
CUMULATIVE AREA =		.29 SQ MI			

HYDROGRAPH AT STATION BP13
PLAN 1, RATIO = 1.00

DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	*	DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
1	0000	1	.00	.00	.00	0.	0.	*	1	0131	92	.00	.00	.00	37.	
1	0001	2	.00	.00	.00	0.	0.	*	1	0132	93	.00	.00	.00	36.	
1	0002	3	.00	.00	.00	0.	0.	*	1	0133	94	.00	.00	.00	34.	
1	0003	4	.00	.00	.00	0.	0.	*	1	0134	95	.00	.00	.00	32.	
1	0004	5	.00	.00	.00	0.	0.	*	1	0135	96	.00	.00	.00	30.	
1	0005	6	.00	.00	.00	0.	0.	*	1	0136	97	.00	.00	.00	27.	
1	0006	7	.00	.00	.00	0.	0.	*	1	0137	98	.00	.00	.00	24.	
1	0007	8	.00	.00	.00	0.	0.	*	1	0138	99	.00	.00	.00	22.	
1	0008	9	.00	.00	.00	0.	0.	*	1	0139	100	.00	.00	.00	19.	
1	0009	10	.00	.00	.00	0.	0.	*	1	0140	101	.00	.00	.00	17.	
1	0010	11	.00	.00	.00	0.	0.	*	1	0141	102	.00	.00	.00	15.	
1	0011	12	.00	.00	.00	0.	0.	*	1	0142	103	.00	.00	.00	14.	
1	0012	13	.00	.00	.00	0.	0.	*	1	0143	104	.00	.00	.00	13.	
1	0013	14	.00	.00	.00	0.	0.	*	1	0144	105	.00	.00	.00	12.	
1	0014	15	.00	.00	.00	0.	0.	*	1	0145	106	.00	.00	.00	11.	
1	0015	16	.00	.00	.00	0.	0.	*	1	0146	107	.00	.00	.00	11.	
1	0016	17	.00	.00	.00	0.	0.	*	1	0147	108	.00	.00	.00	10.	
1	0017	18	.00	.00	.00	0.	0.	*	1	0148	109	.00	.00	.00	10.	
1	0018	19	.00	.00	.00	0.	0.	*	1	0149	110	.00	.00	.00	10.	
1	0019	20	.00	.00	.00	0.	0.	*	1	0150	111	.00	.00	.00	9.	
1	0020	21	.00	.00	.00	0.	0.	*	1	0151	112	.00	.00	.00	9.	
1	0021	22	.00	.00	.00	0.	0.	*	1	0152	113	.00	.00	.00	9.	
1	0022	23	.00	.00	.00	0.	0.	*	1	0153	114	.00	.00	.00	9.	
1	0023	24	.00	.00	.00	0.	0.	*	1	0154	115	.00	.00	.00	9.	
1	0024	25	.00	.00	.00	0.	0.	*	1	0155	116	.00	.00	.00	9.	
1	0025	26	.00	.00	.00	0.	0.	*	1	0156	117	.00	.00	.00	9.	
1	0026	27	.00	.00	.00	0.	0.	*	1	0157	118	.00	.00	.00	9.	
1	0027	28	.00	.00	.00	0.	0.	*	1	0158	119	.00	.00	.00	9.	
1	0028	29	.00	.00	.00	0.	0.	*	1	0159	120	.00	.00	.00	9.	
1	0029	30	.00	.00	.00	0.	0.	*	1	0200	121	.00	.00	.00	9.	
1	0030	31	.00	.00	.00	0.	0.	*	1	0201	122	.00	.00	.00	9.	
1	0031	32	.11	.11	.00	0.	0.	*	1	0202	123	.00	.00	.00	9.	
1	0032	33	.11	.11	.00	0.	0.	*	1	0203	124	.00	.00	.00	9.	
1	0033	34	.11	.11	.00	0.	0.	*	1	0204	125	.00	.00	.00	9.	
1	0034	35	.11	.11	.00	0.	0.	*	1	0205	126	.00	.00	.00	9.	
1	0035	36	.11	.11	.00	0.	0.	*	1	0206	127	.00	.00	.00	9.	
1	0036	37	.09	.09	.00	0.	0.	*	1	0207	128	.00	.00	.00	9.	
1	0037	38	.09	.08	.01	1.	1.	*	1	0208	129	.00	.00	.00	9.	
1	0038	39	.09	.08	.01	3.	3.	*	1	0209	130	.00	.00	.00	9.	
1	0039	40	.09	.07	.02	7.	7.	*	1	0210	131	.00	.00	.00	9.	
1	0040	41	.09	.07	.02	15.	15.	*	1	0211	132	.00	.00	.00	9.	
1	0041	42	.06	.05	.02	26.	26.	*	1	0212	133	.00	.00	.00	9.	
1	0042	43	.06	.04	.02	40.	40.	*	1	0213	134	.00	.00	.00	9.	
1	0043	44	.06	.04	.02	58.	58.	*	1	0214	135	.00	.00	.00	9.	
1	0044	45	.06	.04	.02	76.	76.	*	1	0215	136	.00	.00	.00	9.	
1	0045	46	.06	.04	.02	95.	95.	*	1	0216	137	.00	.00	.00	9.	
1	0046	47	.04	.02	.01	114.	114.	*	1	0217	138	.00	.00	.00	9.	
1	0047	48	.04	.02	.01	130.	130.	*	1	0218	139	.00	.00	.00	9.	
1	0048	49	.04	.02	.02	144.	144.	*	1	0219	140	.00	.00	.00	9.	
1	0049	50	.04	.02	.02	155.	155.	*	1	0220	141	.00	.00	.00	9.	
1	0050	51	.04	.02	.02	163.	163.	*	1	0221	142	.00	.00	.00	9.	
1	0051	52	.02	.01	.01	167.	167.	*	1	0222	143	.00	.00	.00	9.	
1	0052	53	.02	.01	.01	170.	170.	*	1	0223	144	.00	.00	.00	9.	
1	0053	54	.02	.01	.01	170.	170.	*	1	0224	145	.00	.00	.00	9.	
1	0054	55	.02	.01	.01	168.	168.	*	1	0225	146	.00	.00	.00	9.	
1	0055	56	.02	.01	.01	164.	164.	*	1	0226	147	.00	.00	.00	9.	
1	0056	57	.02	.01	.01	158.	158.	*	1	0227	148	.00	.00	.00	9.	
1	0057	58	.02	.01	.01	152.	152.	*	1	0228	149	.00	.00	.00	9.	
1	0058	59	.02	.01	.01	146.	146.	*	1	0229	150	.00	.00	.00	9.	
1	0059	60	.02	.01	.01	139.	139.	*	1	0230	151	.00	.00	.00	9.	
1	0100	61	.02	.01	.01	133.	133.	*	1	0231	152	.00	.00	.00	9.	

post.out														
1	0101	62	.01	.01	.01	127.	*	1	0232	153	.00	.00	.00	9.
1	0102	63	.01	.01	.01	121.	*	1	0233	154	.00	.00	.00	9.
1	0103	64	.01	.01	.01	116.	*	1	0234	155	.00	.00	.00	9.
1	0104	65	.01	.01	.01	110.	*	1	0235	156	.00	.00	.00	9.
1	0105	66	.01	.01	.01	105.	*	1	0236	157	.00	.00	.00	9.
1	0106	67	.01	.01	.01	100.	*	1	0237	158	.00	.00	.00	9.
1	0107	68	.01	.01	.01	96.	*	1	0238	159	.00	.00	.00	9.
1	0108	69	.01	.01	.01	91.	*	1	0239	160	.00	.00	.00	9.
1	0109	70	.01	.01	.01	87.	*	1	0240	161	.00	.00	.00	9.
1	0110	71	.01	.01	.01	83.	*	1	0241	162	.00	.00	.00	9.
1	0111	72	.01	.00	.00	79.	*	1	0242	163	.00	.00	.00	9.
1	0112	73	.01	.00	.00	75.	*	1	0243	164	.00	.00	.00	9.
1	0113	74	.01	.00	.00	71.	*	1	0244	165	.00	.00	.00	9.
1	0114	75	.01	.00	.00	68.	*	1	0245	166	.00	.00	.00	9.
1	0115	76	.01	.00	.00	65.	*	1	0246	167	.00	.00	.00	9.
1	0116	77	.01	.00	.00	62.	*	1	0247	168	.00	.00	.00	9.
1	0117	78	.01	.00	.00	59.	*	1	0248	169	.00	.00	.00	9.
1	0118	79	.01	.00	.00	56.	*	1	0249	170	.00	.00	.00	9.
1	0119	80	.01	.00	.00	54.	*	1	0250	171	.00	.00	.00	9.
1	0120	81	.01	.00	.00	52.	*	1	0251	172	.00	.00	.00	9.
1	0121	82	.01	.00	.00	50.	*	1	0252	173	.00	.00	.00	9.
1	0122	83	.01	.00	.00	48.	*	1	0253	174	.00	.00	.00	9.
1	0123	84	.01	.00	.00	47.	*	1	0254	175	.00	.00	.00	9.
1	0124	85	.01	.00	.00	45.	*	1	0255	176	.00	.00	.00	9.
1	0125	86	.01	.00	.00	44.	*	1	0256	177	.00	.00	.00	9.
1	0126	87	.01	.00	.00	43.	*	1	0257	178	.00	.00	.00	9.
1	0127	88	.01	.00	.00	42.	*	1	0258	179	.00	.00	.00	9.
1	0128	89	.01	.00	.00	41.	*	1	0259	180	.00	.00	.00	9.
1	0129	90	.01	.00	.00	40.	*	1	0300	181	.00	.00	.00	9.
1	0130	91	.01	.00	.00	39.	*							

TOTAL RAINFALL = 2.13, TOTAL LOSS = 1.61, TOTAL EXCESS = .52

PEAK FLOW	TIME	MAXIMUM AVERAGE FLOW			
(CFS)	(HR)	6-HR	24-HR	72-HR	3.00-HR
+ 170.	.88	32.	32.	32.	32.
		(INCHES)	.512	.512	.512
		(AC-FT)	8.	8.	8.

CUMULATIVE AREA = .29 SQ MI

HYDROGRAPH AT STATION BP13
PLAN 1, RATIO = .61

DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	*	DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
1	0000	1	.00	.00	.00	0.	*		1	0131	92	.00	.00	.00	13.	
1	0001	2	.00	.00	.00	0.	*		1	0132	93	.00	.00	.00	12.	
1	0002	3	.00	.00	.00	0.	*		1	0133	94	.00	.00	.00	12.	
1	0003	4	.00	.00	.00	0.	*		1	0134	95	.00	.00	.00	11.	
1	0004	5	.00	.00	.00	0.	*		1	0135	96	.00	.00	.00	10.	
1	0005	6	.00	.00	.00	0.	*		1	0136	97	.00	.00	.00	9.	
1	0006	7	.00	.00	.00	0.	*		1	0137	98	.00	.00	.00	8.	
1	0007	8	.00	.00	.00	0.	*		1	0138	99	.00	.00	.00	8.	
1	0008	9	.00	.00	.00	0.	*		1	0139	100	.00	.00	.00	7.	
1	0009	10	.00	.00	.00	0.	*		1	0140	101	.00	.00	.00	6.	
1	0010	11	.00	.00	.00	0.	*		1	0141	102	.00	.00	.00	5.	
1	0011	12	.00	.00	.00	0.	*		1	0142	103	.00	.00	.00	5.	
1	0012	13	.00	.00	.00	0.	*		1	0143	104	.00	.00	.00	5.	
1	0013	14	.00	.00	.00	0.	*		1	0144	105	.00	.00	.00	4.	
1	0014	15	.00	.00	.00	0.	*		1	0145	106	.00	.00	.00	4.	
1	0015	16	.00	.00	.00	0.	*		1	0146	107	.00	.00	.00	4.	
1	0016	17	.00	.00	.00	0.	*		1	0147	108	.00	.00	.00	4.	
1	0017	18	.00	.00	.00	0.	*		1	0148	109	.00	.00	.00	4.	
1	0018	19	.00	.00	.00	0.	*		1	0149	110	.00	.00	.00	3.	
1	0019	20	.00	.00	.00	0.	*		1	0150	111	.00	.00	.00	3.	
1	0020	21	.00	.00	.00	0.	*		1	0151	112	.00	.00	.00	3.	
1	0021	22	.00	.00	.00	0.	*		1	0152	113	.00	.00	.00	3.	
1	0022	23	.00	.00	.00	0.	*		1	0153	114	.00	.00	.00	3.	
1	0023	24	.00	.00	.00	0.	*		1	0154	115	.00	.00	.00	3.	
1	0024	25	.00	.00	.00	0.	*		1	0155	116	.00	.00	.00	3.	
1	0025	26	.00	.00	.00	0.	*		1	0156	117	.00	.00	.00	3.	
1	0026	27	.00	.00	.00	0.	*		1	0157	118	.00	.00	.00	3.	
1	0027	28	.00	.00	.00	0.	*		1	0158	119	.00	.00	.00	3.	
1	0028	29	.00	.00	.00	0.	*		1	0159	120	.00	.00	.00	3.	
1	0029	30	.00	.00	.00	0.	*		1	0200	121	.00	.00	.00	3.	
1	0030	31	.00	.00	.00	0.	*		1	0201	122	.00	.00	.00	3.	
1	0031	32	.07	.07	.00	0.	*		1	0202	123	.00	.00	.00	3.	
1	0032	33	.07	.07	.00	0.	*		1	0203	124	.00	.00	.00	3.	
1	0033	34	.07	.07	.00	0.	*		1	0204	125	.00	.00	.00	3.	
1	0034	35	.07	.07	.00	0.	*		1	0205	126	.00	.00	.00	3.	

post.out														
1	0035	36	.07	.07	.00	0.	*	1	0206	127	.00	.00	.00	3.
1	0036	37	.05	.05	.00	0.	*	1	0207	128	.00	.00	.00	3.
1	0037	38	.05	.05	.00	0.	*	1	0208	129	.00	.00	.00	3.
1	0038	39	.05	.05	.00	0.	*	1	0209	130	.00	.00	.00	3.
1	0039	40	.05	.05	.00	0.	*	1	0210	131	.00	.00	.00	3.
1	0040	41	.05	.05	.00	0.	*	1	0211	132	.00	.00	.00	3.
1	0041	42	.04	.04	.00	0.	*	1	0212	133	.00	.00	.00	3.
1	0042	43	.04	.04	.00	0.	*	1	0213	134	.00	.00	.00	3.
1	0043	44	.04	.03	.00	1.	*	1	0214	135	.00	.00	.00	3.
1	0044	45	.04	.03	.00	3.	*	1	0215	136	.00	.00	.00	3.
1	0045	46	.04	.03	.00	5.	*	1	0216	137	.00	.00	.00	3.
1	0046	47	.02	.02	.00	8.	*	1	0217	138	.00	.00	.00	3.
1	0047	48	.02	.02	.00	11.	*	1	0218	139	.00	.00	.00	3.
1	0048	49	.02	.02	.00	15.	*	1	0219	140	.00	.00	.00	3.
1	0049	50	.02	.02	.00	19.	*	1	0220	141	.00	.00	.00	3.
1	0050	51	.02	.02	.00	23.	*	1	0221	142	.00	.00	.00	3.
1	0051	52	.01	.01	.00	27.	*	1	0222	143	.00	.00	.00	3.
1	0052	53	.01	.01	.00	30.	*	1	0223	144	.00	.00	.00	3.
1	0053	54	.01	.01	.00	32.	*	1	0224	145	.00	.00	.00	3.
1	0054	55	.01	.01	.00	34.	*	1	0225	146	.00	.00	.00	3.
1	0055	56	.01	.01	.00	35.	*	1	0226	147	.00	.00	.00	3.
1	0056	57	.01	.01	.00	35.	*	1	0227	148	.00	.00	.00	3.
1	0057	58	.01	.01	.00	36.	*	1	0228	149	.00	.00	.00	3.
1	0058	59	.01	.01	.00	35.	*	1	0229	150	.00	.00	.00	3.
1	0059	60	.01	.01	.00	35.	*	1	0230	151	.00	.00	.00	3.
1	0100	61	.01	.01	.00	34.	*	1	0231	152	.00	.00	.00	3.
1	0101	62	.01	.01	.00	34.	*	1	0232	153	.00	.00	.00	3.
1	0102	63	.01	.01	.00	33.	*	1	0233	154	.00	.00	.00	3.
1	0103	64	.01	.01	.00	32.	*	1	0234	155	.00	.00	.00	3.
1	0104	65	.01	.01	.00	31.	*	1	0235	156	.00	.00	.00	3.
1	0105	66	.01	.01	.00	30.	*	1	0236	157	.00	.00	.00	3.
1	0106	67	.01	.00	.00	29.	*	1	0237	158	.00	.00	.00	3.
1	0107	68	.01	.00	.00	28.	*	1	0238	159	.00	.00	.00	3.
1	0108	69	.01	.00	.00	27.	*	1	0239	160	.00	.00	.00	3.
1	0109	70	.01	.00	.00	26.	*	1	0240	161	.00	.00	.00	3.
1	0110	71	.01	.00	.00	25.	*	1	0241	162	.00	.00	.00	3.
1	0111	72	.00	.00	.00	24.	*	1	0242	163	.00	.00	.00	3.
1	0112	73	.00	.00	.00	24.	*	1	0243	164	.00	.00	.00	3.
1	0113	74	.00	.00	.00	23.	*	1	0244	165	.00	.00	.00	3.
1	0114	75	.00	.00	.00	22.	*	1	0245	166	.00	.00	.00	3.
1	0115	76	.00	.00	.00	21.	*	1	0246	167	.00	.00	.00	3.
1	0116	77	.00	.00	.00	20.	*	1	0247	168	.00	.00	.00	3.
1	0117	78	.00	.00	.00	19.	*	1	0248	169	.00	.00	.00	3.
1	0118	79	.00	.00	.00	18.	*	1	0249	170	.00	.00	.00	3.
1	0119	80	.00	.00	.00	18.	*	1	0250	171	.00	.00	.00	3.
1	0120	81	.00	.00	.00	17.	*	1	0251	172	.00	.00	.00	3.
1	0121	82	.00	.00	.00	17.	*	1	0252	173	.00	.00	.00	3.
1	0122	83	.00	.00	.00	16.	*	1	0253	174	.00	.00	.00	3.
1	0123	84	.00	.00	.00	16.	*	1	0254	175	.00	.00	.00	3.
1	0124	85	.00	.00	.00	15.	*	1	0255	176	.00	.00	.00	3.
1	0125	86	.00	.00	.00	15.	*	1	0256	177	.00	.00	.00	3.
1	0126	87	.00	.00	.00	15.	*	1	0257	178	.00	.00	.00	3.
1	0127	88	.00	.00	.00	14.	*	1	0258	179	.00	.00	.00	3.
1	0128	89	.00	.00	.00	14.	*	1	0259	180	.00	.00	.00	3.
1	0129	90	.00	.00	.00	14.	*	1	0300	181	.00	.00	.00	3.
1	0130	91	.00	.00	.00	13.	*							

TOTAL RAINFALL = 1.29, TOTAL LOSS = 1.16, TOTAL EXCESS = .13

PEAK FLOW	TIME	MAXIMUM AVERAGE FLOW			
(CFS)	(HR)	6-HR	24-HR	72-HR	3.00-HR
+	36.	8.	8.	8.	8.
		(INCHES)	.128	.128	.128
		(AC-FT)	2.	2.	2.

CUMULATIVE AREA = .29 SQ MI

*** **

```

*****
*      *
113 KK *   RP13 *
*      *
*****

```

Route BP13 in channel to Outlet OP1

HYDROGRAPH ROUTING DATA

```

115 RD      MUSKINGUM-CUNGE CHANNEL ROUTING
           L      3285.  CHANNEL LENGTH
           S      .0060  SLOPE
           N      .040  CHANNEL ROUGHNESS COEFFICIENT

```

post.out

CA .00 CONTRIBUTING AREA
SHAPE TRAP CHANNEL SHAPE
WD .00 BOTTOM WIDTH OR DIAMETER
Z 7.00 SIDE SLOPE

COMPUTED MUSKINGUM-CUNGE PARAMETERS

ELEMENT	ALPHA	M	DT (MIN)	DX (FT)	PEAK (CFS)	TIME TO PEAK (MIN)	VOLUME (IN)	MAXIMUM CELERITY (FPS)
MAIN	.95	1.33	.95	172.89	161.72	65.55	.49	3.88

INTERPOLATED TO SPECIFIED COMPUTATION INTERVAL

MAIN	.95	1.33	1.00		161.57	65.00	.49	
------	-----	------	------	--	--------	-------	-----	--

CONTINUITY SUMMARY (AC-FT) - INFLOW= .7855E+01 EXCESS= .0000E+00 OUTFLOW= .7493E+01 BASIN STORAGE= .3985E+00 PERCENT ERROR= -.5

HYDROGRAPH AT STATION RP13
PLAN 1, RATIO = 1.00

DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*			
1	0000	1	0.	*	1	0046	47	0.	*	1	0132	93	61.	*	1	0218	139	9.														
1	0001	2	0.	*	1	0047	48	0.	*	1	0133	94	58.	*	1	0219	140	9.														
1	0002	3	0.	*	1	0048	49	0.	*	1	0134	95	56.	*	1	0220	141	9.														
1	0003	4	0.	*	1	0049	50	0.	*	1	0135	96	54.	*	1	0221	142	9.														
1	0004	5	0.	*	1	0050	51	0.	*	1	0136	97	52.	*	1	0222	143	9.														
1	0005	6	0.	*	1	0051	52	0.	*	1	0137	98	51.	*	1	0223	144	9.														
1	0006	7	0.	*	1	0052	53	0.	*	1	0138	99	49.	*	1	0224	145	9.														
1	0007	8	0.	*	1	0053	54	0.	*	1	0139	100	48.	*	1	0225	146	9.														
1	0008	9	0.	*	1	0054	55	0.	*	1	0140	101	46.	*	1	0226	147	9.														
1	0009	10	0.	*	1	0055	56	0.	*	1	0141	102	45.	*	1	0227	148	9.														
1	0010	11	0.	*	1	0056	57	0.	*	1	0142	103	44.	*	1	0228	149	9.														
1	0011	12	0.	*	1	0057	58	0.	*	1	0143	104	43.	*	1	0229	150	9.														
1	0012	13	0.	*	1	0058	59	8.	*	1	0144	105	42.	*	1	0230	151	9.														
1	0013	14	0.	*	1	0059	60	52.	*	1	0145	106	41.	*	1	0231	152	9.														
1	0014	15	0.	*	1	0100	61	97.	*	1	0146	107	40.	*	1	0232	153	9.														
1	0015	16	0.	*	1	0101	62	127.	*	1	0147	108	38.	*	1	0233	154	9.														
1	0016	17	0.	*	1	0102	63	145.	*	1	0148	109	37.	*	1	0234	155	9.														
1	0017	18	0.	*	1	0103	64	155.	*	1	0149	110	36.	*	1	0235	156	9.														
1	0018	19	0.	*	1	0104	65	160.	*	1	0150	111	34.	*	1	0236	157	9.														
1	0019	20	0.	*	1	0105	66	162.	*	1	0151	112	33.	*	1	0237	158	9.														
1	0020	21	0.	*	1	0106	67	161.	*	1	0152	113	31.	*	1	0238	159	9.														
1	0021	22	0.	*	1	0107	68	159.	*	1	0153	114	30.	*	1	0239	160	9.														
1	0022	23	0.	*	1	0108	69	155.	*	1	0154	115	28.	*	1	0240	161	9.														
1	0023	24	0.	*	1	0109	70	151.	*	1	0155	116	26.	*	1	0241	162	9.														
1	0024	25	0.	*	1	0110	71	146.	*	1	0156	117	25.	*	1	0242	163	9.														
1	0025	26	0.	*	1	0111	72	141.	*	1	0157	118	23.	*	1	0243	164	9.														
1	0026	27	0.	*	1	0112	73	136.	*	1	0158	119	22.	*	1	0244	165	9.														
1	0027	28	0.	*	1	0113	74	131.	*	1	0159	120	20.	*	1	0245	166	9.														
1	0028	29	0.	*	1	0114	75	126.	*	1	0200	121	19.	*	1	0246	167	9.														
1	0029	30	0.	*	1	0115	76	121.	*	1	0201	122	18.	*	1	0247	168	9.														
1	0030	31	0.	*	1	0116	77	116.	*	1	0202	123	17.	*	1	0248	169	9.														
1	0031	32	0.	*	1	0117	78	112.	*	1	0203	124	16.	*	1	0249	170	9.														
1	0032	33	0.	*	1	0118	79	107.	*	1	0204	125	15.	*	1	0250	171	9.														
1	0033	34	0.	*	1	0119	80	103.	*	1	0205	126	14.	*	1	0251	172	9.														
1	0034	35	0.	*	1	0120	81	99.	*	1	0206	127	13.	*	1	0252	173	9.														
1	0035	36	0.	*	1	0121	82	95.	*	1	0207	128	13.	*	1	0253	174	9.														
1	0036	37	0.	*	1	0122	83	91.	*	1	0208	129	12.	*	1	0254	175	9.														
1	0037	38	0.	*	1	0123	84	87.	*	1	0209	130	11.	*	1	0255	176	9.														
1	0038	39	0.	*	1	0124	85	84.	*	1	0210	131	11.	*	1	0256	177	9.														
1	0039	40	0.	*	1	0125	86	80.	*	1	0211	132	11.	*	1	0257	178	9.														
1	0040	41	0.	*	1	0126	87	77.	*	1	0212	133	10.	*	1	0258	179	9.														
1	0041	42	0.	*	1	0127	88	74.	*	1	0213	134	10.	*	1	0259	180	9.														
1	0042	43	0.	*	1	0128	89	71.	*	1	0214	135	10.	*	1	0300	181	9.														
1	0043	44	0.	*	1	0129	90	68.	*	1	0215	136	10.	*																		
1	0044	45	0.	*	1	0130	91	66.	*	1	0216	137	9.	*																		
1	0045	46	0.	*	1	0131	92	63.	*	1	0217	138	9.	*																		

PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
(CFS)	(HR)		6-HR	24-HR	72-HR	3.00-HR
162.	1.08	(CFS)	30.	30.	30.	30.
		(INCHES)	.488	.488	.488	.488
		(AC-FT)	7.	7.	7.	7.

post.out

CUMULATIVE AREA = .29 SQ MI

COMPUTED MUSKINGUM-CUNGE PARAMETERS								
ELEMENT	ALPHA	COMPUTATION TIME STEP		PEAK (CFS)	TIME TO PEAK (MIN)	VOLUME (IN)	MAXIMUM CELERITY (FPS)	
		M	DT (MIN)					DX (FT)
MAIN	.95	1.33	.90	105.97	34.06	76.50	.12	2.62

INTERPOLATED TO SPECIFIED COMPUTATION INTERVAL

MAIN	.95	1.33	1.00		34.05	76.00	.12	
------	-----	------	------	--	-------	-------	-----	--

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1964E+01 EXCESS= .0000E+00 OUTFLOW= .1793E+01 BASIN STORAGE= .1860E+00 PERCENT ERROR= -.8

HYDROGRAPH AT STATION RP13
PLAN 1, RATIO = .61

DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*
1	0000	1	0.	*	1	0046	47	0.	*	1	0132	93	23.	*	1	0218	139	4.					
1	0001	2	0.	*	1	0047	48	0.	*	1	0133	94	22.	*	1	0219	140	4.					
1	0002	3	0.	*	1	0048	49	0.	*	1	0134	95	22.	*	1	0220	141	4.					
1	0003	4	0.	*	1	0049	50	0.	*	1	0135	96	21.	*	1	0221	142	3.					
1	0004	5	0.	*	1	0050	51	0.	*	1	0136	97	20.	*	1	0222	143	3.					
1	0005	6	0.	*	1	0051	52	0.	*	1	0137	98	20.	*	1	0223	144	3.					
1	0006	7	0.	*	1	0052	53	0.	*	1	0138	99	19.	*	1	0224	145	3.					
1	0007	8	0.	*	1	0053	54	0.	*	1	0139	100	18.	*	1	0225	146	3.					
1	0008	9	0.	*	1	0054	55	0.	*	1	0140	101	18.	*	1	0226	147	3.					
1	0009	10	0.	*	1	0055	56	0.	*	1	0141	102	17.	*	1	0227	148	3.					
1	0010	11	0.	*	1	0056	57	0.	*	1	0142	103	17.	*	1	0228	149	3.					
1	0011	12	0.	*	1	0057	58	0.	*	1	0143	104	16.	*	1	0229	150	3.					
1	0012	13	0.	*	1	0058	59	0.	*	1	0144	105	16.	*	1	0230	151	3.					
1	0013	14	0.	*	1	0059	60	0.	*	1	0145	106	16.	*	1	0231	152	3.					
1	0014	15	0.	*	1	0100	61	0.	*	1	0146	107	15.	*	1	0232	153	3.					
1	0015	16	0.	*	1	0101	62	0.	*	1	0147	108	15.	*	1	0233	154	3.					
1	0016	17	0.	*	1	0102	63	0.	*	1	0148	109	15.	*	1	0234	155	3.					
1	0017	18	0.	*	1	0103	64	0.	*	1	0149	110	14.	*	1	0235	156	3.					
1	0018	19	0.	*	1	0104	65	0.	*	1	0150	111	14.	*	1	0236	157	3.					
1	0019	20	0.	*	1	0105	66	0.	*	1	0151	112	14.	*	1	0237	158	3.					
1	0020	21	0.	*	1	0106	67	0.	*	1	0152	113	13.	*	1	0238	159	3.					
1	0021	22	0.	*	1	0107	68	0.	*	1	0153	114	13.	*	1	0239	160	3.					
1	0022	23	0.	*	1	0108	69	0.	*	1	0154	115	12.	*	1	0240	161	3.					
1	0023	24	0.	*	1	0109	70	0.	*	1	0155	116	12.	*	1	0241	162	3.					
1	0024	25	0.	*	1	0110	71	1.	*	1	0156	117	12.	*	1	0242	163	3.					
1	0025	26	0.	*	1	0111	72	12.	*	1	0157	118	11.	*	1	0243	164	3.					
1	0026	27	0.	*	1	0112	73	24.	*	1	0158	119	11.	*	1	0244	165	3.					
1	0027	28	0.	*	1	0113	74	30.	*	1	0159	120	10.	*	1	0245	166	3.					
1	0028	29	0.	*	1	0114	75	33.	*	1	0200	121	10.	*	1	0246	167	3.					
1	0029	30	0.	*	1	0115	76	34.	*	1	0201	122	9.	*	1	0247	168	3.					
1	0030	31	0.	*	1	0116	77	34.	*	1	0202	123	9.	*	1	0248	169	3.					
1	0031	32	0.	*	1	0117	78	34.	*	1	0203	124	8.	*	1	0249	170	3.					
1	0032	33	0.	*	1	0118	79	34.	*	1	0204	125	8.	*	1	0250	171	3.					
1	0033	34	0.	*	1	0119	80	33.	*	1	0205	126	7.	*	1	0251	172	3.					
1	0034	35	0.	*	1	0120	81	33.	*	1	0206	127	7.	*	1	0252	173	3.					
1	0035	36	0.	*	1	0121	82	32.	*	1	0207	128	6.	*	1	0253	174	3.					
1	0036	37	0.	*	1	0122	83	31.	*	1	0208	129	6.	*	1	0254	175	3.					
1	0037	38	0.	*	1	0123	84	30.	*	1	0209	130	6.	*	1	0255	176	3.					
1	0038	39	0.	*	1	0124	85	30.	*	1	0210	131	5.	*	1	0256	177	3.					
1	0039	40	0.	*	1	0125	86	29.	*	1	0211	132	5.	*	1	0257	178	3.					
1	0040	41	0.	*	1	0126	87	28.	*	1	0212	133	5.	*	1	0258	179	3.					
1	0041	42	0.	*	1	0127	88	27.	*	1	0213	134	5.	*	1	0259	180	3.					
1	0042	43	0.	*	1	0128	89	26.	*	1	0214	135	4.	*	1	0300	181	3.					
1	0043	44	0.	*	1	0129	90	26.	*	1	0215	136	4.	*									
1	0044	45	0.	*	1	0130	91	25.	*	1	0216	137	4.	*									
1	0045	46	0.	*	1	0131	92	24.	*	1	0217	138	4.	*									

PEAK FLOW	TIME	MAXIMUM AVERAGE FLOW			
(CFS)	(HR)	6-HR	24-HR	72-HR	3.00-HR
34.	1.27	7.	7.	7.	7.
(INCHES)		.117	.117	.117	.117
(AC-FT)		2.	2.	2.	2.

CUMULATIVE AREA = .29 SQ MI

*** ** ** ** **

*
116 KK * BP14 *
*

BP14

SUBBASIN RUNOFF DATA

118 BA SUBBASIN CHARACTERISTICS
TAREA .07 SUBBASIN AREA

PRECIPITATION DATA

23 PB STORM 2.13 BASIN TOTAL PRECIPITATION

24 PI INCREMENTAL PRECIPITATION PATTERN

Table with 10 columns of incremental precipitation values ranging from .00 to .05.

119 LS SCS LOSS RATE
STRTL .60 INITIAL ABSTRACTION
CRVNBR 77.00 CURVE NUMBER
RTIMP .00 PERCENT IMPERVIOUS AREA

120 UD SCS DIMENSIONLESS UNITGRAPH
TLAG .58 LAG

UNIT HYDROGRAPH
177 END-OF-PERIOD ORDINATES

Table with 10 columns of ordinates for the unit hydrograph, showing values from 0 to 61.

HYDROGRAPH AT STATION BP14

Table with 16 columns: DA, MON, HRMN, ORD, RAIN, LOSS, EXCESS, COMP Q, and 4 empty columns. It lists hydrograph data for 9 different ordinates.

													post.out	
1	0009	10	.00	.00	.00	0.	*	1	0140	101	.00	.00	.00	19.
1	0010	11	.00	.00	.00	0.	*	1	0141	102	.00	.00	.00	19.
1	0011	12	.00	.00	.00	0.	*	1	0142	103	.00	.00	.00	18.
1	0012	13	.00	.00	.00	0.	*	1	0143	104	.00	.00	.00	18.
1	0013	14	.00	.00	.00	0.	*	1	0144	105	.00	.00	.00	18.
1	0014	15	.00	.00	.00	0.	*	1	0145	106	.00	.00	.00	17.
1	0015	16	.00	.00	.00	0.	*	1	0146	107	.00	.00	.00	17.
1	0016	17	.00	.00	.00	0.	*	1	0147	108	.00	.00	.00	16.
1	0017	18	.00	.00	.00	0.	*	1	0148	109	.00	.00	.00	16.
1	0018	19	.00	.00	.00	0.	*	1	0149	110	.00	.00	.00	16.
1	0019	20	.00	.00	.00	0.	*	1	0150	111	.00	.00	.00	15.
1	0020	21	.00	.00	.00	0.	*	1	0151	112	.00	.00	.00	15.
1	0021	22	.00	.00	.00	0.	*	1	0152	113	.00	.00	.00	15.
1	0022	23	.00	.00	.00	0.	*	1	0153	114	.00	.00	.00	14.
1	0023	24	.00	.00	.00	0.	*	1	0154	115	.00	.00	.00	14.
1	0024	25	.00	.00	.00	0.	*	1	0155	116	.00	.00	.00	14.
1	0025	26	.00	.00	.00	0.	*	1	0156	117	.00	.00	.00	13.
1	0026	27	.00	.00	.00	0.	*	1	0157	118	.00	.00	.00	13.
1	0027	28	.00	.00	.00	0.	*	1	0158	119	.00	.00	.00	12.
1	0028	29	.00	.00	.00	0.	*	1	0159	120	.00	.00	.00	12.
1	0029	30	.00	.00	.00	0.	*	1	0200	121	.00	.00	.00	12.
1	0030	31	.00	.00	.00	0.	*	1	0201	122	.00	.00	.00	11.
1	0031	32	.11	.11	.00	0.	*	1	0202	123	.00	.00	.00	11.
1	0032	33	.11	.11	.00	0.	*	1	0203	124	.00	.00	.00	11.
1	0033	34	.11	.11	.00	0.	*	1	0204	125	.00	.00	.00	10.
1	0034	35	.11	.11	.00	0.	*	1	0205	126	.00	.00	.00	10.
1	0035	36	.11	.11	.00	0.	*	1	0206	127	.00	.00	.00	10.
1	0036	37	.09	.09	.00	0.	*	1	0207	128	.00	.00	.00	9.
1	0037	38	.09	.08	.01	0.	*	1	0208	129	.00	.00	.00	9.
1	0038	39	.09	.08	.01	0.	*	1	0209	130	.00	.00	.00	9.
1	0039	40	.09	.07	.02	0.	*	1	0210	131	.00	.00	.00	9.
1	0040	41	.09	.07	.02	0.	*	1	0211	132	.00	.00	.00	8.
1	0041	42	.06	.05	.02	0.	*	1	0212	133	.00	.00	.00	8.
1	0042	43	.06	.04	.02	0.	*	1	0213	134	.00	.00	.00	8.
1	0043	44	.06	.04	.02	0.	*	1	0214	135	.00	.00	.00	8.
1	0044	45	.06	.04	.02	0.	*	1	0215	136	.00	.00	.00	7.
1	0045	46	.06	.04	.02	1.	*	1	0216	137	.00	.00	.00	7.
1	0046	47	.04	.02	.01	1.	*	1	0217	138	.00	.00	.00	7.
1	0047	48	.04	.02	.01	1.	*	1	0218	139	.00	.00	.00	7.
1	0048	49	.04	.02	.02	1.	*	1	0219	140	.00	.00	.00	7.
1	0049	50	.04	.02	.02	1.	*	1	0220	141	.00	.00	.00	6.
1	0050	51	.04	.02	.02	2.	*	1	0221	142	.00	.00	.00	6.
1	0051	52	.02	.01	.01	2.	*	1	0222	143	.00	.00	.00	6.
1	0052	53	.02	.01	.01	2.	*	1	0223	144	.00	.00	.00	6.
1	0053	54	.02	.01	.01	3.	*	1	0224	145	.00	.00	.00	6.
1	0054	55	.02	.01	.01	3.	*	1	0225	146	.00	.00	.00	5.
1	0055	56	.02	.01	.01	4.	*	1	0226	147	.00	.00	.00	5.
1	0056	57	.02	.01	.01	4.	*	1	0227	148	.00	.00	.00	5.
1	0057	58	.02	.01	.01	5.	*	1	0228	149	.00	.00	.00	5.
1	0058	59	.02	.01	.01	6.	*	1	0229	150	.00	.00	.00	5.
1	0059	60	.02	.01	.01	6.	*	1	0230	151	.00	.00	.00	5.
1	0100	61	.02	.01	.01	7.	*	1	0231	152	.00	.00	.00	5.
1	0101	62	.01	.01	.01	8.	*	1	0232	153	.00	.00	.00	5.
1	0102	63	.01	.01	.01	8.	*	1	0233	154	.00	.00	.00	4.
1	0103	64	.01	.01	.01	9.	*	1	0234	155	.00	.00	.00	4.
1	0104	65	.01	.01	.01	10.	*	1	0235	156	.00	.00	.00	4.
1	0105	66	.01	.01	.01	11.	*	1	0236	157	.00	.00	.00	4.
1	0106	67	.01	.01	.01	12.	*	1	0237	158	.00	.00	.00	4.
1	0107	68	.01	.01	.01	12.	*	1	0238	159	.00	.00	.00	4.
1	0108	69	.01	.01	.01	13.	*	1	0239	160	.00	.00	.00	4.
1	0109	70	.01	.01	.01	14.	*	1	0240	161	.00	.00	.00	4.
1	0110	71	.01	.01	.01	15.	*	1	0241	162	.00	.00	.00	4.
1	0111	72	.01	.00	.00	15.	*	1	0242	163	.00	.00	.00	4.
1	0112	73	.01	.00	.00	16.	*	1	0243	164	.00	.00	.00	4.
1	0113	74	.01	.00	.00	17.	*	1	0244	165	.00	.00	.00	4.
1	0114	75	.01	.00	.00	17.	*	1	0245	166	.00	.00	.00	4.
1	0115	76	.01	.00	.00	18.	*	1	0246	167	.00	.00	.00	3.
1	0116	77	.01	.00	.00	18.	*	1	0247	168	.00	.00	.00	3.
1	0117	78	.01	.00	.00	19.	*	1	0248	169	.00	.00	.00	3.
1	0118	79	.01	.00	.00	19.	*	1	0249	170	.00	.00	.00	3.
1	0119	80	.01	.00	.00	20.	*	1	0250	171	.00	.00	.00	3.
1	0120	81	.01	.00	.00	20.	*	1	0251	172	.00	.00	.00	3.
1	0121	82	.01	.00	.00	20.	*	1	0252	173	.00	.00	.00	3.
1	0122	83	.01	.00	.00	21.	*	1	0253	174	.00	.00	.00	3.
1	0123	84	.01	.00	.00	21.	*	1	0254	175	.00	.00	.00	3.
1	0124	85	.01	.00	.00	21.	*	1	0255	176	.00	.00	.00	3.
1	0125	86	.01	.00	.00	21.	*	1	0256	177	.00	.00	.00	3.
1	0126	87	.01	.00	.00	21.	*	1	0257	178	.00	.00	.00	3.
1	0127	88	.01	.00	.00	21.	*	1	0258	179	.00	.00	.00	3.
1	0128	89	.01	.00	.00	21.	*	1	0259	180	.00	.00	.00	3.
1	0129	90	.01	.00	.00	21.	*	1	0300	181	.00	.00	.00	3.
1	0130	91	.01	.00	.00	21.	*							

TOTAL RAINFALL = 2.13, TOTAL LOSS = 1.61, TOTAL EXCESS = .52

PEAK FLOW	TIME	MAXIMUM AVERAGE FLOW	
+ (CFS)	(HR)	6-HR 24-HR 72-HR 3.00-HR	

post.out

	(CFS)				
+	21.	1.47	8.	8.	8.
	(INCHES)		.480	.480	.480
	(AC-FT)		2.	2.	2.

CUMULATIVE AREA = .07 SQ MI

HYDROGRAPH AT STATION BP14
PLAN 1, RATIO = 1.00

DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	*	DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
1	0000	1		.00	.00	.00	0.	*	1	0131	92		.00	.00	.00	21.
1	0001	2		.00	.00	.00	0.	*	1	0132	93		.00	.00	.00	21.
1	0002	3		.00	.00	.00	0.	*	1	0133	94		.00	.00	.00	21.
1	0003	4		.00	.00	.00	0.	*	1	0134	95		.00	.00	.00	21.
1	0004	5		.00	.00	.00	0.	*	1	0135	96		.00	.00	.00	20.
1	0005	6		.00	.00	.00	0.	*	1	0136	97		.00	.00	.00	20.
1	0006	7		.00	.00	.00	0.	*	1	0137	98		.00	.00	.00	20.
1	0007	8		.00	.00	.00	0.	*	1	0138	99		.00	.00	.00	20.
1	0008	9		.00	.00	.00	0.	*	1	0139	100		.00	.00	.00	19.
1	0009	10		.00	.00	.00	0.	*	1	0140	101		.00	.00	.00	19.
1	0010	11		.00	.00	.00	0.	*	1	0141	102		.00	.00	.00	19.
1	0011	12		.00	.00	.00	0.	*	1	0142	103		.00	.00	.00	18.
1	0012	13		.00	.00	.00	0.	*	1	0143	104		.00	.00	.00	18.
1	0013	14		.00	.00	.00	0.	*	1	0144	105		.00	.00	.00	18.
1	0014	15		.00	.00	.00	0.	*	1	0145	106		.00	.00	.00	17.
1	0015	16		.00	.00	.00	0.	*	1	0146	107		.00	.00	.00	17.
1	0016	17		.00	.00	.00	0.	*	1	0147	108		.00	.00	.00	16.
1	0017	18		.00	.00	.00	0.	*	1	0148	109		.00	.00	.00	16.
1	0018	19		.00	.00	.00	0.	*	1	0149	110		.00	.00	.00	16.
1	0019	20		.00	.00	.00	0.	*	1	0150	111		.00	.00	.00	15.
1	0020	21		.00	.00	.00	0.	*	1	0151	112		.00	.00	.00	15.
1	0021	22		.00	.00	.00	0.	*	1	0152	113		.00	.00	.00	15.
1	0022	23		.00	.00	.00	0.	*	1	0153	114		.00	.00	.00	14.
1	0023	24		.00	.00	.00	0.	*	1	0154	115		.00	.00	.00	14.
1	0024	25		.00	.00	.00	0.	*	1	0155	116		.00	.00	.00	14.
1	0025	26		.00	.00	.00	0.	*	1	0156	117		.00	.00	.00	13.
1	0026	27		.00	.00	.00	0.	*	1	0157	118		.00	.00	.00	13.
1	0027	28		.00	.00	.00	0.	*	1	0158	119		.00	.00	.00	12.
1	0028	29		.00	.00	.00	0.	*	1	0159	120		.00	.00	.00	12.
1	0029	30		.00	.00	.00	0.	*	1	0200	121		.00	.00	.00	12.
1	0030	31		.00	.00	.00	0.	*	1	0201	122		.00	.00	.00	11.
1	0031	32	.11	.11	.00	0.	0.	*	1	0202	123		.00	.00	.00	11.
1	0032	33	.11	.11	.00	0.	0.	*	1	0203	124		.00	.00	.00	11.
1	0033	34	.11	.11	.00	0.	0.	*	1	0204	125		.00	.00	.00	10.
1	0034	35	.11	.11	.00	0.	0.	*	1	0205	126		.00	.00	.00	10.
1	0035	36	.11	.11	.00	0.	0.	*	1	0206	127		.00	.00	.00	10.
1	0036	37	.09	.09	.00	0.	0.	*	1	0207	128		.00	.00	.00	9.
1	0037	38	.09	.08	.01	0.	0.	*	1	0208	129		.00	.00	.00	9.
1	0038	39	.09	.08	.01	0.	0.	*	1	0209	130		.00	.00	.00	9.
1	0039	40	.09	.07	.02	0.	0.	*	1	0210	131		.00	.00	.00	9.
1	0040	41	.09	.07	.02	0.	0.	*	1	0211	132		.00	.00	.00	8.
1	0041	42	.06	.05	.02	0.	0.	*	1	0212	133		.00	.00	.00	8.
1	0042	43	.06	.04	.02	0.	0.	*	1	0213	134		.00	.00	.00	8.
1	0043	44	.06	.04	.02	0.	0.	*	1	0214	135		.00	.00	.00	8.
1	0044	45	.06	.04	.02	0.	0.	*	1	0215	136		.00	.00	.00	7.
1	0045	46	.06	.04	.02	1.	0.	*	1	0216	137		.00	.00	.00	7.
1	0046	47	.04	.02	.01	1.	0.	*	1	0217	138		.00	.00	.00	7.
1	0047	48	.04	.02	.01	1.	0.	*	1	0218	139		.00	.00	.00	7.
1	0048	49	.04	.02	.02	1.	0.	*	1	0219	140		.00	.00	.00	7.
1	0049	50	.04	.02	.02	1.	0.	*	1	0220	141		.00	.00	.00	6.
1	0050	51	.04	.02	.02	2.	0.	*	1	0221	142		.00	.00	.00	6.
1	0051	52	.02	.01	.01	2.	0.	*	1	0222	143		.00	.00	.00	6.
1	0052	53	.02	.01	.01	2.	0.	*	1	0223	144		.00	.00	.00	6.
1	0053	54	.02	.01	.01	3.	0.	*	1	0224	145		.00	.00	.00	6.
1	0054	55	.02	.01	.01	3.	0.	*	1	0225	146		.00	.00	.00	5.
1	0055	56	.02	.01	.01	4.	0.	*	1	0226	147		.00	.00	.00	5.
1	0056	57	.02	.01	.01	4.	0.	*	1	0227	148		.00	.00	.00	5.
1	0057	58	.02	.01	.01	5.	0.	*	1	0228	149		.00	.00	.00	5.
1	0058	59	.02	.01	.01	6.	0.	*	1	0229	150		.00	.00	.00	5.
1	0059	60	.02	.01	.01	6.	0.	*	1	0230	151		.00	.00	.00	5.
1	0100	61	.02	.01	.01	7.	0.	*	1	0231	152		.00	.00	.00	5.
1	0101	62	.01	.01	.01	8.	0.	*	1	0232	153		.00	.00	.00	5.
1	0102	63	.01	.01	.01	8.	0.	*	1	0233	154		.00	.00	.00	4.
1	0103	64	.01	.01	.01	9.	0.	*	1	0234	155		.00	.00	.00	4.
1	0104	65	.01	.01	.01	10.	0.	*	1	0235	156		.00	.00	.00	4.
1	0105	66	.01	.01	.01	11.	0.	*	1	0236	157		.00	.00	.00	4.
1	0106	67	.01	.01	.01	12.	0.	*	1	0237	158		.00	.00	.00	4.
1	0107	68	.01	.01	.01	12.	0.	*	1	0238	159		.00	.00	.00	4.
1	0108	69	.01	.01	.01	13.	0.	*	1	0239	160		.00	.00	.00	4.
1	0109	70	.01	.01	.01	14.	0.	*	1	0240	161		.00	.00	.00	4.
1	0110	71	.01	.01	.01	15.	0.	*	1	0241	162		.00	.00	.00	4.
1	0111	72	.01	.00	.00	15.	0.	*	1	0242	163		.00	.00	.00	4.
1	0112	73	.01	.00	.00	16.	0.	*	1	0243	164		.00	.00	.00	4.

													post.out			
1	0113	74	.01	.00	.00	17.	*	1	0244	165	.00	.00	.00	4.		
1	0114	75	.01	.00	.00	17.	*	1	0245	166	.00	.00	.00	4.		
1	0115	76	.01	.00	.00	18.	*	1	0246	167	.00	.00	.00	3.		
1	0116	77	.01	.00	.00	18.	*	1	0247	168	.00	.00	.00	3.		
1	0117	78	.01	.00	.00	19.	*	1	0248	169	.00	.00	.00	3.		
1	0118	79	.01	.00	.00	19.	*	1	0249	170	.00	.00	.00	3.		
1	0119	80	.01	.00	.00	20.	*	1	0250	171	.00	.00	.00	3.		
1	0120	81	.01	.00	.00	20.	*	1	0251	172	.00	.00	.00	3.		
1	0121	82	.01	.00	.00	20.	*	1	0252	173	.00	.00	.00	3.		
1	0122	83	.01	.00	.00	21.	*	1	0253	174	.00	.00	.00	3.		
1	0123	84	.01	.00	.00	21.	*	1	0254	175	.00	.00	.00	3.		
1	0124	85	.01	.00	.00	21.	*	1	0255	176	.00	.00	.00	3.		
1	0125	86	.01	.00	.00	21.	*	1	0256	177	.00	.00	.00	3.		
1	0126	87	.01	.00	.00	21.	*	1	0257	178	.00	.00	.00	3.		
1	0127	88	.01	.00	.00	21.	*	1	0258	179	.00	.00	.00	3.		
1	0128	89	.01	.00	.00	21.	*	1	0259	180	.00	.00	.00	3.		
1	0129	90	.01	.00	.00	21.	*	1	0300	181	.00	.00	.00	3.		
1	0130	91	.01	.00	.00	21.	*									

TOTAL RAINFALL = 2.13, TOTAL LOSS = 1.61, TOTAL EXCESS = .52

PEAK FLOW	TIME	MAXIMUM AVERAGE FLOW			
(CFS)	(HR)	6-HR	24-HR	72-HR	3.00-HR
+	21.	8.	8.	8.	8.
	1.47	.480	.480	.480	.480
		(INCHES)	(INCHES)	(INCHES)	(INCHES)
		(AC-FT)	(AC-FT)	(AC-FT)	(AC-FT)
		2.	2.	2.	2.

CUMULATIVE AREA = .07 SQ MI

HYDROGRAPH AT STATION BP14
PLAN 1, RATIO = .61

DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	*	DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
1	0000	1	.00	.00	.00	0.	0.	*	1	0131	92	.00	.00	.00	5.	
1	0001	2	.00	.00	.00	0.	0.	*	1	0132	93	.00	.00	.00	5.	
1	0002	3	.00	.00	.00	0.	0.	*	1	0133	94	.00	.00	.00	5.	
1	0003	4	.00	.00	.00	0.	0.	*	1	0134	95	.00	.00	.00	5.	
1	0004	5	.00	.00	.00	0.	0.	*	1	0135	96	.00	.00	.00	5.	
1	0005	6	.00	.00	.00	0.	0.	*	1	0136	97	.00	.00	.00	5.	
1	0006	7	.00	.00	.00	0.	0.	*	1	0137	98	.00	.00	.00	5.	
1	0007	8	.00	.00	.00	0.	0.	*	1	0138	99	.00	.00	.00	5.	
1	0008	9	.00	.00	.00	0.	0.	*	1	0139	100	.00	.00	.00	5.	
1	0009	10	.00	.00	.00	0.	0.	*	1	0140	101	.00	.00	.00	5.	
1	0010	11	.00	.00	.00	0.	0.	*	1	0141	102	.00	.00	.00	5.	
1	0011	12	.00	.00	.00	0.	0.	*	1	0142	103	.00	.00	.00	5.	
1	0012	13	.00	.00	.00	0.	0.	*	1	0143	104	.00	.00	.00	5.	
1	0013	14	.00	.00	.00	0.	0.	*	1	0144	105	.00	.00	.00	5.	
1	0014	15	.00	.00	.00	0.	0.	*	1	0145	106	.00	.00	.00	5.	
1	0015	16	.00	.00	.00	0.	0.	*	1	0146	107	.00	.00	.00	5.	
1	0016	17	.00	.00	.00	0.	0.	*	1	0147	108	.00	.00	.00	4.	
1	0017	18	.00	.00	.00	0.	0.	*	1	0148	109	.00	.00	.00	4.	
1	0018	19	.00	.00	.00	0.	0.	*	1	0149	110	.00	.00	.00	4.	
1	0019	20	.00	.00	.00	0.	0.	*	1	0150	111	.00	.00	.00	4.	
1	0020	21	.00	.00	.00	0.	0.	*	1	0151	112	.00	.00	.00	4.	
1	0021	22	.00	.00	.00	0.	0.	*	1	0152	113	.00	.00	.00	4.	
1	0022	23	.00	.00	.00	0.	0.	*	1	0153	114	.00	.00	.00	4.	
1	0023	24	.00	.00	.00	0.	0.	*	1	0154	115	.00	.00	.00	4.	
1	0024	25	.00	.00	.00	0.	0.	*	1	0155	116	.00	.00	.00	4.	
1	0025	26	.00	.00	.00	0.	0.	*	1	0156	117	.00	.00	.00	4.	
1	0026	27	.00	.00	.00	0.	0.	*	1	0157	118	.00	.00	.00	4.	
1	0027	28	.00	.00	.00	0.	0.	*	1	0158	119	.00	.00	.00	4.	
1	0028	29	.00	.00	.00	0.	0.	*	1	0159	120	.00	.00	.00	3.	
1	0029	30	.00	.00	.00	0.	0.	*	1	0200	121	.00	.00	.00	3.	
1	0030	31	.00	.00	.00	0.	0.	*	1	0201	122	.00	.00	.00	3.	
1	0031	32	.07	.07	.00	0.	0.	*	1	0202	123	.00	.00	.00	3.	
1	0032	33	.07	.07	.00	0.	0.	*	1	0203	124	.00	.00	.00	3.	
1	0033	34	.07	.07	.00	0.	0.	*	1	0204	125	.00	.00	.00	3.	
1	0034	35	.07	.07	.00	0.	0.	*	1	0205	126	.00	.00	.00	3.	
1	0035	36	.07	.07	.00	0.	0.	*	1	0206	127	.00	.00	.00	3.	
1	0036	37	.05	.05	.00	0.	0.	*	1	0207	128	.00	.00	.00	3.	
1	0037	38	.05	.05	.00	0.	0.	*	1	0208	129	.00	.00	.00	3.	
1	0038	39	.05	.05	.00	0.	0.	*	1	0209	130	.00	.00	.00	3.	
1	0039	40	.05	.05	.00	0.	0.	*	1	0210	131	.00	.00	.00	3.	
1	0040	41	.05	.05	.00	0.	0.	*	1	0211	132	.00	.00	.00	2.	
1	0041	42	.04	.04	.00	0.	0.	*	1	0212	133	.00	.00	.00	2.	
1	0042	43	.04	.04	.00	0.	0.	*	1	0213	134	.00	.00	.00	2.	
1	0043	44	.04	.03	.00	0.	0.	*	1	0214	135	.00	.00	.00	2.	
1	0044	45	.04	.03	.00	0.	0.	*	1	0215	136	.00	.00	.00	2.	
1	0045	46	.04	.03	.00	0.	0.	*	1	0216	137	.00	.00	.00	2.	
1	0046	47	.02	.02	.00	0.	0.	*	1	0217	138	.00	.00	.00	2.	

post.out														
1	0047	48	.02	.02	.00	0.	*	1	0218	139	.00	.00	.00	2.
1	0048	49	.02	.02	.00	0.	*	1	0219	140	.00	.00	.00	2.
1	0049	50	.02	.02	.00	0.	*	1	0220	141	.00	.00	.00	2.
1	0050	51	.02	.02	.00	0.	*	1	0221	142	.00	.00	.00	2.
1	0051	52	.01	.01	.00	0.	*	1	0222	143	.00	.00	.00	2.
1	0052	53	.01	.01	.00	0.	*	1	0223	144	.00	.00	.00	2.
1	0053	54	.01	.01	.00	0.	*	1	0224	145	.00	.00	.00	2.
1	0054	55	.01	.01	.00	0.	*	1	0225	146	.00	.00	.00	2.
1	0055	56	.01	.01	.00	0.	*	1	0226	147	.00	.00	.00	2.
1	0056	57	.01	.01	.00	0.	*	1	0227	148	.00	.00	.00	2.
1	0057	58	.01	.01	.00	1.	*	1	0228	149	.00	.00	.00	2.
1	0058	59	.01	.01	.00	1.	*	1	0229	150	.00	.00	.00	2.
1	0059	60	.01	.01	.00	1.	*	1	0230	151	.00	.00	.00	2.
1	0100	61	.01	.01	.00	1.	*	1	0231	152	.00	.00	.00	1.
1	0101	62	.01	.01	.00	1.	*	1	0232	153	.00	.00	.00	1.
1	0102	63	.01	.01	.00	1.	*	1	0233	154	.00	.00	.00	1.
1	0103	64	.01	.01	.00	1.	*	1	0234	155	.00	.00	.00	1.
1	0104	65	.01	.01	.00	1.	*	1	0235	156	.00	.00	.00	1.
1	0105	66	.01	.01	.00	2.	*	1	0236	157	.00	.00	.00	1.
1	0106	67	.01	.00	.00	2.	*	1	0237	158	.00	.00	.00	1.
1	0107	68	.01	.00	.00	2.	*	1	0238	159	.00	.00	.00	1.
1	0108	69	.01	.00	.00	2.	*	1	0239	160	.00	.00	.00	1.
1	0109	70	.01	.00	.00	2.	*	1	0240	161	.00	.00	.00	1.
1	0110	71	.01	.00	.00	2.	*	1	0241	162	.00	.00	.00	1.
1	0111	72	.00	.00	.00	3.	*	1	0242	163	.00	.00	.00	1.
1	0112	73	.00	.00	.00	3.	*	1	0243	164	.00	.00	.00	1.
1	0113	74	.00	.00	.00	3.	*	1	0244	165	.00	.00	.00	1.
1	0114	75	.00	.00	.00	3.	*	1	0245	166	.00	.00	.00	1.
1	0115	76	.00	.00	.00	3.	*	1	0246	167	.00	.00	.00	1.
1	0116	77	.00	.00	.00	3.	*	1	0247	168	.00	.00	.00	1.
1	0117	78	.00	.00	.00	4.	*	1	0248	169	.00	.00	.00	1.
1	0118	79	.00	.00	.00	4.	*	1	0249	170	.00	.00	.00	1.
1	0119	80	.00	.00	.00	4.	*	1	0250	171	.00	.00	.00	1.
1	0120	81	.00	.00	.00	4.	*	1	0251	172	.00	.00	.00	1.
1	0121	82	.00	.00	.00	4.	*	1	0252	173	.00	.00	.00	1.
1	0122	83	.00	.00	.00	4.	*	1	0253	174	.00	.00	.00	1.
1	0123	84	.00	.00	.00	4.	*	1	0254	175	.00	.00	.00	1.
1	0124	85	.00	.00	.00	4.	*	1	0255	176	.00	.00	.00	1.
1	0125	86	.00	.00	.00	5.	*	1	0256	177	.00	.00	.00	1.
1	0126	87	.00	.00	.00	5.	*	1	0257	178	.00	.00	.00	1.
1	0127	88	.00	.00	.00	5.	*	1	0258	179	.00	.00	.00	1.
1	0128	89	.00	.00	.00	5.	*	1	0259	180	.00	.00	.00	1.
1	0129	90	.00	.00	.00	5.	*	1	0300	181	.00	.00	.00	1.
1	0130	91	.00	.00	.00	5.	*							

TOTAL RAINFALL = 1.29, TOTAL LOSS = 1.16, TOTAL EXCESS = .13

PEAK FLOW	TIME	MAXIMUM AVERAGE FLOW			
(CFS)	(HR)	6-HR	24-HR	72-HR	3.00-HR
+	5.	2.	2.	2.	2.
		(INCHES)	.116	.116	.116
		(AC-FT)	0.	0.	0.
CUMULATIVE AREA =		.07 SQ MI			

*** **

```

*****
*           *
121 KK    *   RP14 *
*           *
*****

```

Route BP14 in channel to Outlet OP1

HYDROGRAPH ROUTING DATA

```

123 RD    MUSKINGUM-CUNGE CHANNEL ROUTING
          L      2900.  CHANNEL LENGTH
          S      .0060  SLOPE
          N      .040   CHANNEL ROUGHNESS COEFFICIENT
          CA     .00    CONTRIBUTING AREA
          SHAPE  TRAP   CHANNEL SHAPE
          WD     .00    BOTTOM WIDTH OR DIAMETER
          Z      7.00   SIDE SLOPE

```

COMPUTED MUSKINGUM-CUNGE PARAMETERS

ELEMENT	ALPHA	COMPUTATION TIME STEP			PEAK	TIME TO PEAK	VOLUME	MAXIMUM CELERITY
		M	DT	DX				
			(MIN)	(FT)	(CFS)	(MIN)	(IN)	(FPS)

MAIN .95 1.33 1.00 100.00 post.out 21.15 106.00 .44 2.31

INTERPOLATED TO SPECIFIED COMPUTATION INTERVAL

MAIN .95 1.33 1.00 21.15 106.00 .44

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1916E+01 EXCESS= .0000E+00 OUTFLOW= .1752E+01 BASIN STORAGE= .1798E+00 PERCENT ERROR= -.8

HYDROGRAPH AT STATION RP14
PLAN 1, RATIO = 1.00

DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*		
1	0000	1	0.	*	1	0046	47	0.	*	1	0132	93	17.	*	1	0218	139	12.							
1	0001	2	0.	*	1	0047	48	0.	*	1	0133	94	17.	*	1	0219	140	12.							
1	0002	3	0.	*	1	0048	49	0.	*	1	0134	95	18.	*	1	0220	141	12.							
1	0003	4	0.	*	1	0049	50	0.	*	1	0135	96	18.	*	1	0221	142	12.							
1	0004	5	0.	*	1	0050	51	0.	*	1	0136	97	19.	*	1	0222	143	11.							
1	0005	6	0.	*	1	0051	52	0.	*	1	0137	98	19.	*	1	0223	144	11.							
1	0006	7	0.	*	1	0052	53	0.	*	1	0138	99	20.	*	1	0224	145	11.							
1	0007	8	0.	*	1	0053	54	0.	*	1	0139	100	20.	*	1	0225	146	10.							
1	0008	9	0.	*	1	0054	55	0.	*	1	0140	101	20.	*	1	0226	147	10.							
1	0009	10	0.	*	1	0055	56	0.	*	1	0141	102	21.	*	1	0227	148	10.							
1	0010	11	0.	*	1	0056	57	0.	*	1	0142	103	21.	*	1	0228	149	10.							
1	0011	12	0.	*	1	0057	58	0.	*	1	0143	104	21.	*	1	0229	150	9.							
1	0012	13	0.	*	1	0058	59	0.	*	1	0144	105	21.	*	1	0230	151	9.							
1	0013	14	0.	*	1	0059	60	0.	*	1	0145	106	21.	*	1	0231	152	9.							
1	0014	15	0.	*	1	0100	61	0.	*	1	0146	107	21.	*	1	0232	153	9.							
1	0015	16	0.	*	1	0101	62	0.	*	1	0147	108	21.	*	1	0233	154	8.							
1	0016	17	0.	*	1	0102	63	0.	*	1	0148	109	21.	*	1	0234	155	8.							
1	0017	18	0.	*	1	0103	64	0.	*	1	0149	110	21.	*	1	0235	156	8.							
1	0018	19	0.	*	1	0104	65	0.	*	1	0150	111	21.	*	1	0236	157	8.							
1	0019	20	0.	*	1	0105	66	0.	*	1	0151	112	21.	*	1	0237	158	8.							
1	0020	21	0.	*	1	0106	67	0.	*	1	0152	113	21.	*	1	0238	159	7.							
1	0021	22	0.	*	1	0107	68	0.	*	1	0153	114	20.	*	1	0239	160	7.							
1	0022	23	0.	*	1	0108	69	0.	*	1	0154	115	20.	*	1	0240	161	7.							
1	0023	24	0.	*	1	0109	70	0.	*	1	0155	116	20.	*	1	0241	162	7.							
1	0024	25	0.	*	1	0110	71	0.	*	1	0156	117	20.	*	1	0242	163	7.							
1	0025	26	0.	*	1	0111	72	0.	*	1	0157	118	19.	*	1	0243	164	6.							
1	0026	27	0.	*	1	0112	73	0.	*	1	0158	119	19.	*	1	0244	165	6.							
1	0027	28	0.	*	1	0113	74	0.	*	1	0159	120	19.	*	1	0245	166	6.							
1	0028	29	0.	*	1	0114	75	0.	*	1	0200	121	18.	*	1	0246	167	6.							
1	0029	30	0.	*	1	0115	76	0.	*	1	0201	122	18.	*	1	0247	168	6.							
1	0030	31	0.	*	1	0116	77	0.	*	1	0202	123	18.	*	1	0248	169	6.							
1	0031	32	0.	*	1	0117	78	0.	*	1	0203	124	17.	*	1	0249	170	6.							
1	0032	33	0.	*	1	0118	79	0.	*	1	0204	125	17.	*	1	0250	171	5.							
1	0033	34	0.	*	1	0119	80	0.	*	1	0205	126	17.	*	1	0251	172	5.							
1	0034	35	0.	*	1	0120	81	0.	*	1	0206	127	16.	*	1	0252	173	5.							
1	0035	36	0.	*	1	0121	82	1.	*	1	0207	128	16.	*	1	0253	174	5.							
1	0036	37	0.	*	1	0122	83	3.	*	1	0208	129	16.	*	1	0254	175	5.							
1	0037	38	0.	*	1	0123	84	5.	*	1	0209	130	15.	*	1	0255	176	5.							
1	0038	39	0.	*	1	0124	85	8.	*	1	0210	131	15.	*	1	0256	177	5.							
1	0039	40	0.	*	1	0125	86	9.	*	1	0211	132	15.	*	1	0257	178	5.							
1	0040	41	0.	*	1	0126	87	11.	*	1	0212	133	14.	*	1	0258	179	5.							
1	0041	42	0.	*	1	0127	88	12.	*	1	0213	134	14.	*	1	0259	180	4.							
1	0042	43	0.	*	1	0128	89	13.	*	1	0214	135	14.	*	1	0300	181	4.							
1	0043	44	0.	*	1	0129	90	14.	*	1	0215	136	13.	*											
1	0044	45	0.	*	1	0130	91	15.	*	1	0216	137	13.	*											
1	0045	46	0.	*	1	0131	92	16.	*	1	0217	138	13.	*											

PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
(CFS)	(HR)		6-HR	24-HR	72-HR	3.00-HR
21.	1.77	(CFS)	7.	7.	7.	7.
		(INCHES)	.438	.438	.438	.438
		(AC-FT)	2.	2.	2.	2.

CUMULATIVE AREA = .07 SQ MI

COMPUTED MUSKINGUM-CUNGE PARAMETERS									
ELEMENT	ALPHA	M	DT	DX	PEAK	TIME TO PEAK	VOLUME	MAXIMUM CELERITY	
			(MIN)	(FT)	(CFS)	(MIN)	(IN)	(FPS)	
MAIN	.95	1.33	1.00	65.91	4.96	120.00	.10	1.61	

post.out
INTERPOLATED TO SPECIFIED COMPUTATION INTERVAL

MAIN .95 1.33 1.00 4.96 120.00 .10

CONTINUITY SUMMARY (AC-FT) - INFLOW= .4655E+00 EXCESS= .0000E+00 OUTFLOW= .3886E+00 BASIN STORAGE= .8233E-01 PERCENT ERROR= -1.2

HYDROGRAPH AT STATION RP14
PLAN 1, RATIO = .61

DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	
1		0000	1	0.	*	1		0046	47	0.	*	1		0132	93	0.	*	1		0218	139	4.	*	
1		0001	2	0.	*	1		0047	48	0.	*	1		0133	94	0.	*	1		0219	140	4.	*	
1		0002	3	0.	*	1		0048	49	0.	*	1		0134	95	0.	*	1		0220	141	4.	*	
1		0003	4	0.	*	1		0049	50	0.	*	1		0135	96	0.	*	1		0221	142	4.	*	
1		0004	5	0.	*	1		0050	51	0.	*	1		0136	97	0.	*	1		0222	143	4.	*	
1		0005	6	0.	*	1		0051	52	0.	*	1		0137	98	0.	*	1		0223	144	4.	*	
1		0006	7	0.	*	1		0052	53	0.	*	1		0138	99	0.	*	1		0224	145	4.	*	
1		0007	8	0.	*	1		0053	54	0.	*	1		0139	100	0.	*	1		0225	146	4.	*	
1		0008	9	0.	*	1		0054	55	0.	*	1		0140	101	2.	*	1		0226	147	4.	*	
1		0009	10	0.	*	1		0055	56	0.	*	1		0141	102	2.	*	1		0227	148	3.	*	
1		0010	11	0.	*	1		0056	57	0.	*	1		0142	103	3.	*	1		0228	149	3.	*	
1		0011	12	0.	*	1		0057	58	0.	*	1		0143	104	3.	*	1		0229	150	3.	*	
1		0012	13	0.	*	1		0058	59	0.	*	1		0144	105	3.	*	1		0230	151	3.	*	
1		0013	14	0.	*	1		0059	60	0.	*	1		0145	106	4.	*	1		0231	152	3.	*	
1		0014	15	0.	*	1		0100	61	0.	*	1		0146	107	4.	*	1		0232	153	3.	*	
1		0015	16	0.	*	1		0101	62	0.	*	1		0147	108	4.	*	1		0233	154	3.	*	
1		0016	17	0.	*	1		0102	63	0.	*	1		0148	109	4.	*	1		0234	155	3.	*	
1		0017	18	0.	*	1		0103	64	0.	*	1		0149	110	4.	*	1		0235	156	3.	*	
1		0018	19	0.	*	1		0104	65	0.	*	1		0150	111	4.	*	1		0236	157	3.	*	
1		0019	20	0.	*	1		0105	66	0.	*	1		0151	112	5.	*	1		0237	158	3.	*	
1		0020	21	0.	*	1		0106	67	0.	*	1		0152	113	5.	*	1		0238	159	3.	*	
1		0021	22	0.	*	1		0107	68	0.	*	1		0153	114	5.	*	1		0239	160	3.	*	
1		0022	23	0.	*	1		0108	69	0.	*	1		0154	115	5.	*	1		0240	161	3.	*	
1		0023	24	0.	*	1		0109	70	0.	*	1		0155	116	5.	*	1		0241	162	3.	*	
1		0024	25	0.	*	1		0110	71	0.	*	1		0156	117	5.	*	1		0242	163	2.	*	
1		0025	26	0.	*	1		0111	72	0.	*	1		0157	118	5.	*	1		0243	164	2.	*	
1		0026	27	0.	*	1		0112	73	0.	*	1		0158	119	5.	*	1		0244	165	2.	*	
1		0027	28	0.	*	1		0113	74	0.	*	1		0159	120	5.	*	1		0245	166	2.	*	
1		0028	29	0.	*	1		0114	75	0.	*	1		0200	121	5.	*	1		0246	167	2.	*	
1		0029	30	0.	*	1		0115	76	0.	*	1		0201	122	5.	*	1		0247	168	2.	*	
1		0030	31	0.	*	1		0116	77	0.	*	1		0202	123	5.	*	1		0248	169	2.	*	
1		0031	32	0.	*	1		0117	78	0.	*	1		0203	124	5.	*	1		0249	170	2.	*	
1		0032	33	0.	*	1		0118	79	0.	*	1		0204	125	5.	*	1		0250	171	2.	*	
1		0033	34	0.	*	1		0119	80	0.	*	1		0205	126	5.	*	1		0251	172	2.	*	
1		0034	35	0.	*	1		0120	81	0.	*	1		0206	127	5.	*	1		0252	173	2.	*	
1		0035	36	0.	*	1		0121	82	0.	*	1		0207	128	5.	*	1		0253	174	2.	*	
1		0036	37	0.	*	1		0122	83	0.	*	1		0208	129	5.	*	1		0254	175	2.	*	
1		0037	38	0.	*	1		0123	84	0.	*	1		0209	130	5.	*	1		0255	176	2.	*	
1		0038	39	0.	*	1		0124	85	0.	*	1		0210	131	5.	*	1		0256	177	2.	*	
1		0039	40	0.	*	1		0125	86	0.	*	1		0211	132	5.	*	1		0257	178	2.	*	
1		0040	41	0.	*	1		0126	87	0.	*	1		0212	133	5.	*	1		0258	179	2.	*	
1		0041	42	0.	*	1		0127	88	0.	*	1		0213	134	4.	*	1		0259	180	2.	*	
1		0042	43	0.	*	1		0128	89	0.	*	1		0214	135	4.	*	1		0300	181	2.	*	
1		0043	44	0.	*	1		0129	90	0.	*	1		0215	136	4.	*							*
1		0044	45	0.	*	1		0130	91	0.	*	1		0216	137	4.	*							*
1		0045	46	0.	*	1		0131	92	0.	*	1		0217	138	4.	*							*

PEAK FLOW + (CFS)	TIME (HR)	(CFS)	MAXIMUM AVERAGE FLOW			
			6-HR	24-HR	72-HR	3.00-HR
+ 5.	2.00		2.	2.	2.	2.
		(INCHES)	.097	.097	.097	.097
		(AC-FT)	0.	0.	0.	0.
CUMULATIVE AREA =			.07 SQ MI			

*** ** ** ** **

* *
124 KK * OP1 *
* *

OP1

										post.out				
1	0016	17	.00	.00	.00	0.	*	1	0147	108	.00	.00	.00	429.
1	0017	18	.00	.00	.00	0.	*	1	0148	109	.00	.00	.00	425.
1	0018	19	.00	.00	.00	0.	*	1	0149	110	.00	.00	.00	422.
1	0019	20	.00	.00	.00	0.	*	1	0150	111	.00	.00	.00	417.
1	0020	21	.00	.00	.00	0.	*	1	0151	112	.00	.00	.00	413.
1	0021	22	.00	.00	.00	0.	*	1	0152	113	.00	.00	.00	408.
1	0022	23	.00	.00	.00	0.	*	1	0153	114	.00	.00	.00	402.
1	0023	24	.00	.00	.00	0.	*	1	0154	115	.00	.00	.00	396.
1	0024	25	.00	.00	.00	0.	*	1	0155	116	.00	.00	.00	390.
1	0025	26	.00	.00	.00	0.	*	1	0156	117	.00	.00	.00	384.
1	0026	27	.00	.00	.00	0.	*	1	0157	118	.00	.00	.00	377.
1	0027	28	.00	.00	.00	0.	*	1	0158	119	.00	.00	.00	371.
1	0028	29	.00	.00	.00	0.	*	1	0159	120	.00	.00	.00	364.
1	0029	30	.00	.00	.00	0.	*	1	0200	121	.00	.00	.00	357.
1	0030	31	.00	.00	.00	0.	*	1	0201	122	.00	.00	.00	350.
1	0031	32	.11	.11	.00	0.	*	1	0202	123	.00	.00	.00	343.
1	0032	33	.11	.11	.00	0.	*	1	0203	124	.00	.00	.00	336.
1	0033	34	.11	.11	.00	0.	*	1	0204	125	.00	.00	.00	329.
1	0034	35	.11	.11	.00	0.	*	1	0205	126	.00	.00	.00	322.
1	0035	36	.11	.11	.00	0.	*	1	0206	127	.00	.00	.00	315.
1	0036	37	.09	.09	.00	0.	*	1	0207	128	.00	.00	.00	308.
1	0037	38	.09	.08	.01	0.	*	1	0208	129	.00	.00	.00	301.
1	0038	39	.09	.08	.01	0.	*	1	0209	130	.00	.00	.00	295.
1	0039	40	.09	.07	.01	0.	*	1	0210	131	.00	.00	.00	288.
1	0040	41	.09	.07	.02	1.	*	1	0211	132	.00	.00	.00	282.
1	0041	42	.06	.05	.01	1.	*	1	0212	133	.00	.00	.00	275.
1	0042	43	.06	.05	.02	2.	*	1	0213	134	.00	.00	.00	269.
1	0043	44	.06	.04	.02	3.	*	1	0214	135	.00	.00	.00	263.
1	0044	45	.06	.04	.02	4.	*	1	0215	136	.00	.00	.00	256.
1	0045	46	.06	.04	.02	6.	*	1	0216	137	.00	.00	.00	250.
1	0046	47	.04	.03	.01	8.	*	1	0217	138	.00	.00	.00	245.
1	0047	48	.04	.03	.01	10.	*	1	0218	139	.00	.00	.00	239.
1	0048	49	.04	.02	.01	13.	*	1	0219	140	.00	.00	.00	233.
1	0049	50	.04	.02	.01	16.	*	1	0220	141	.00	.00	.00	228.
1	0050	51	.04	.02	.02	20.	*	1	0221	142	.00	.00	.00	222.
1	0051	52	.02	.01	.01	24.	*	1	0222	143	.00	.00	.00	217.
1	0052	53	.02	.01	.01	28.	*	1	0223	144	.00	.00	.00	212.
1	0053	54	.02	.01	.01	33.	*	1	0224	145	.00	.00	.00	207.
1	0054	55	.02	.01	.01	38.	*	1	0225	146	.00	.00	.00	202.
1	0055	56	.02	.01	.01	44.	*	1	0226	147	.00	.00	.00	197.
1	0056	57	.02	.01	.01	50.	*	1	0227	148	.00	.00	.00	192.
1	0057	58	.02	.01	.01	56.	*	1	0228	149	.00	.00	.00	188.
1	0058	59	.02	.01	.01	64.	*	1	0229	150	.00	.00	.00	183.
1	0059	60	.02	.01	.01	72.	*	1	0230	151	.00	.00	.00	179.
1	0100	61	.02	.01	.01	80.	*	1	0231	152	.00	.00	.00	174.
1	0101	62	.01	.01	.01	89.	*	1	0232	153	.00	.00	.00	170.
1	0102	63	.01	.01	.01	98.	*	1	0233	154	.00	.00	.00	166.
1	0103	64	.01	.01	.01	109.	*	1	0234	155	.00	.00	.00	162.
1	0104	65	.01	.01	.01	120.	*	1	0235	156	.00	.00	.00	159.
1	0105	66	.01	.01	.01	131.	*	1	0236	157	.00	.00	.00	155.
1	0106	67	.01	.01	.00	143.	*	1	0237	158	.00	.00	.00	152.
1	0107	68	.01	.01	.00	155.	*	1	0238	159	.00	.00	.00	148.
1	0108	69	.01	.01	.00	167.	*	1	0239	160	.00	.00	.00	145.
1	0109	70	.01	.01	.00	180.	*	1	0240	161	.00	.00	.00	142.
1	0110	71	.01	.01	.00	193.	*	1	0241	162	.00	.00	.00	139.
1	0111	72	.01	.00	.00	206.	*	1	0242	163	.00	.00	.00	136.
1	0112	73	.01	.00	.00	219.	*	1	0243	164	.00	.00	.00	133.
1	0113	74	.01	.00	.00	232.	*	1	0244	165	.00	.00	.00	130.
1	0114	75	.01	.00	.00	246.	*	1	0245	166	.00	.00	.00	128.
1	0115	76	.01	.00	.00	258.	*	1	0246	167	.00	.00	.00	125.
1	0116	77	.01	.00	.00	271.	*	1	0247	168	.00	.00	.00	123.
1	0117	78	.01	.00	.00	283.	*	1	0248	169	.00	.00	.00	121.
1	0118	79	.01	.00	.00	296.	*	1	0249	170	.00	.00	.00	118.
1	0119	80	.01	.00	.00	307.	*	1	0250	171	.00	.00	.00	116.
1	0120	81	.01	.00	.00	319.	*	1	0251	172	.00	.00	.00	114.
1	0121	82	.01	.00	.00	330.	*	1	0252	173	.00	.00	.00	112.
1	0122	83	.01	.00	.00	340.	*	1	0253	174	.00	.00	.00	110.
1	0123	84	.01	.00	.00	350.	*	1	0254	175	.00	.00	.00	108.
1	0124	85	.01	.00	.00	360.	*	1	0255	176	.00	.00	.00	107.
1	0125	86	.01	.00	.00	369.	*	1	0256	177	.00	.00	.00	105.
1	0126	87	.01	.00	.00	377.	*	1	0257	178	.00	.00	.00	103.
1	0127	88	.01	.00	.00	385.	*	1	0258	179	.00	.00	.00	101.
1	0128	89	.01	.00	.00	393.	*	1	0259	180	.00	.00	.00	100.
1	0129	90	.01	.00	.00	400.	*	1	0300	181	.00	.00	.00	98.
1	0130	91	.01	.00	.00	406.	*							

TOTAL RAINFALL = 2.13, TOTAL LOSS = 1.65, TOTAL EXCESS = .48

PEAK FLOW	TIME		MAXIMUM	AVERAGE FLOW	
+	(CFS)	(HR)	6-HR	24-HR	72-HR
					3.00-HR
+	438.	1.68	180.	180.	180.
		(INCHES)	.423	.423	.423
		(AC-FT)	45.	45.	45.

CUMULATIVE AREA = 1.97 SQ MI

HYDROGRAPH AT STATION OP1
 PLAN 1, RATIO = 1.00

DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	*	DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
1	0000	1	.00	.00	.00	0.	*	1	0131	92	.00	.00	.00	.00	412.	
1	0001	2	.00	.00	.00	0.	*	1	0132	93	.00	.00	.00	.00	417.	
1	0002	3	.00	.00	.00	0.	*	1	0133	94	.00	.00	.00	.00	421.	
1	0003	4	.00	.00	.00	0.	*	1	0134	95	.00	.00	.00	.00	425.	
1	0004	5	.00	.00	.00	0.	*	1	0135	96	.00	.00	.00	.00	429.	
1	0005	6	.00	.00	.00	0.	*	1	0136	97	.00	.00	.00	.00	431.	
1	0006	7	.00	.00	.00	0.	*	1	0137	98	.00	.00	.00	.00	434.	
1	0007	8	.00	.00	.00	0.	*	1	0138	99	.00	.00	.00	.00	435.	
1	0008	9	.00	.00	.00	0.	*	1	0139	100	.00	.00	.00	.00	437.	
1	0009	10	.00	.00	.00	0.	*	1	0140	101	.00	.00	.00	.00	437.	
1	0010	11	.00	.00	.00	0.	*	1	0141	102	.00	.00	.00	.00	438.	
1	0011	12	.00	.00	.00	0.	*	1	0142	103	.00	.00	.00	.00	437.	
1	0012	13	.00	.00	.00	0.	*	1	0143	104	.00	.00	.00	.00	437.	
1	0013	14	.00	.00	.00	0.	*	1	0144	105	.00	.00	.00	.00	435.	
1	0014	15	.00	.00	.00	0.	*	1	0145	106	.00	.00	.00	.00	434.	
1	0015	16	.00	.00	.00	0.	*	1	0146	107	.00	.00	.00	.00	431.	
1	0016	17	.00	.00	.00	0.	*	1	0147	108	.00	.00	.00	.00	429.	
1	0017	18	.00	.00	.00	0.	*	1	0148	109	.00	.00	.00	.00	425.	
1	0018	19	.00	.00	.00	0.	*	1	0149	110	.00	.00	.00	.00	422.	
1	0019	20	.00	.00	.00	0.	*	1	0150	111	.00	.00	.00	.00	417.	
1	0020	21	.00	.00	.00	0.	*	1	0151	112	.00	.00	.00	.00	413.	
1	0021	22	.00	.00	.00	0.	*	1	0152	113	.00	.00	.00	.00	408.	
1	0022	23	.00	.00	.00	0.	*	1	0153	114	.00	.00	.00	.00	402.	
1	0023	24	.00	.00	.00	0.	*	1	0154	115	.00	.00	.00	.00	396.	
1	0024	25	.00	.00	.00	0.	*	1	0155	116	.00	.00	.00	.00	390.	
1	0025	26	.00	.00	.00	0.	*	1	0156	117	.00	.00	.00	.00	384.	
1	0026	27	.00	.00	.00	0.	*	1	0157	118	.00	.00	.00	.00	377.	
1	0027	28	.00	.00	.00	0.	*	1	0158	119	.00	.00	.00	.00	371.	
1	0028	29	.00	.00	.00	0.	*	1	0159	120	.00	.00	.00	.00	364.	
1	0029	30	.00	.00	.00	0.	*	1	0200	121	.00	.00	.00	.00	357.	
1	0030	31	.00	.00	.00	0.	*	1	0201	122	.00	.00	.00	.00	350.	
1	0031	32	.11	.11	.00	0.	*	1	0202	123	.00	.00	.00	.00	343.	
1	0032	33	.11	.11	.00	0.	*	1	0203	124	.00	.00	.00	.00	336.	
1	0033	34	.11	.11	.00	0.	*	1	0204	125	.00	.00	.00	.00	329.	
1	0034	35	.11	.11	.00	0.	*	1	0205	126	.00	.00	.00	.00	322.	
1	0035	36	.11	.11	.00	0.	*	1	0206	127	.00	.00	.00	.00	315.	
1	0036	37	.09	.09	.00	0.	*	1	0207	128	.00	.00	.00	.00	308.	
1	0037	38	.09	.08	.01	0.	*	1	0208	129	.00	.00	.00	.00	301.	
1	0038	39	.09	.08	.01	0.	*	1	0209	130	.00	.00	.00	.00	295.	
1	0039	40	.09	.07	.01	0.	*	1	0210	131	.00	.00	.00	.00	288.	
1	0040	41	.09	.07	.02	1.	*	1	0211	132	.00	.00	.00	.00	282.	
1	0041	42	.06	.05	.01	1.	*	1	0212	133	.00	.00	.00	.00	275.	
1	0042	43	.06	.05	.02	2.	*	1	0213	134	.00	.00	.00	.00	269.	
1	0043	44	.06	.04	.02	3.	*	1	0214	135	.00	.00	.00	.00	263.	
1	0044	45	.06	.04	.02	4.	*	1	0215	136	.00	.00	.00	.00	256.	
1	0045	46	.06	.04	.02	6.	*	1	0216	137	.00	.00	.00	.00	250.	
1	0046	47	.04	.03	.01	8.	*	1	0217	138	.00	.00	.00	.00	245.	
1	0047	48	.04	.03	.01	10.	*	1	0218	139	.00	.00	.00	.00	239.	
1	0048	49	.04	.02	.01	13.	*	1	0219	140	.00	.00	.00	.00	233.	
1	0049	50	.04	.02	.01	16.	*	1	0220	141	.00	.00	.00	.00	228.	
1	0050	51	.04	.02	.02	20.	*	1	0221	142	.00	.00	.00	.00	222.	
1	0051	52	.02	.01	.01	24.	*	1	0222	143	.00	.00	.00	.00	217.	
1	0052	53	.02	.01	.01	28.	*	1	0223	144	.00	.00	.00	.00	212.	
1	0053	54	.02	.01	.01	33.	*	1	0224	145	.00	.00	.00	.00	207.	
1	0054	55	.02	.01	.01	38.	*	1	0225	146	.00	.00	.00	.00	202.	
1	0055	56	.02	.01	.01	44.	*	1	0226	147	.00	.00	.00	.00	197.	
1	0056	57	.02	.01	.01	50.	*	1	0227	148	.00	.00	.00	.00	192.	
1	0057	58	.02	.01	.01	56.	*	1	0228	149	.00	.00	.00	.00	188.	
1	0058	59	.02	.01	.01	64.	*	1	0229	150	.00	.00	.00	.00	183.	
1	0059	60	.02	.01	.01	72.	*	1	0230	151	.00	.00	.00	.00	179.	
1	0100	61	.02	.01	.01	80.	*	1	0231	152	.00	.00	.00	.00	174.	
1	0101	62	.01	.01	.01	89.	*	1	0232	153	.00	.00	.00	.00	170.	
1	0102	63	.01	.01	.01	98.	*	1	0233	154	.00	.00	.00	.00	166.	
1	0103	64	.01	.01	.01	109.	*	1	0234	155	.00	.00	.00	.00	162.	
1	0104	65	.01	.01	.01	120.	*	1	0235	156	.00	.00	.00	.00	159.	
1	0105	66	.01	.01	.01	131.	*	1	0236	157	.00	.00	.00	.00	155.	
1	0106	67	.01	.01	.00	143.	*	1	0237	158	.00	.00	.00	.00	152.	
1	0107	68	.01	.01	.00	155.	*	1	0238	159	.00	.00	.00	.00	148.	
1	0108	69	.01	.01	.00	167.	*	1	0239	160	.00	.00	.00	.00	145.	
1	0109	70	.01	.01	.00	180.	*	1	0240	161	.00	.00	.00	.00	142.	
1	0110	71	.01	.01	.00	193.	*	1	0241	162	.00	.00	.00	.00	139.	
1	0111	72	.01	.00	.00	206.	*	1	0242	163	.00	.00	.00	.00	136.	
1	0112	73	.01	.00	.00	219.	*	1	0243	164	.00	.00	.00	.00	133.	
1	0113	74	.01	.00	.00	232.	*	1	0244	165	.00	.00	.00	.00	130.	
1	0114	75	.01	.00	.00	246.	*	1	0245	166	.00	.00	.00	.00	128.	
1	0115	76	.01	.00	.00	258.	*	1	0246	167	.00	.00	.00	.00	125.	
1	0116	77	.01	.00	.00	271.	*	1	0247	168	.00	.00	.00	.00	123.	
1	0117	78	.01	.00	.00	283.	*	1	0248	169	.00	.00	.00	.00	121.	
1	0118	79	.01	.00	.00	296.	*	1	0249	170	.00	.00	.00	.00	118.	
1	0119	80	.01	.00	.00	307.	*	1	0250	171	.00	.00	.00	.00	116.	

post.out														
1	0120	81	.01	.00	.00	319.	*	1	0251	172	.00	.00	.00	114.
1	0121	82	.01	.00	.00	330.	*	1	0252	173	.00	.00	.00	112.
1	0122	83	.01	.00	.00	340.	*	1	0253	174	.00	.00	.00	110.
1	0123	84	.01	.00	.00	350.	*	1	0254	175	.00	.00	.00	108.
1	0124	85	.01	.00	.00	360.	*	1	0255	176	.00	.00	.00	107.
1	0125	86	.01	.00	.00	369.	*	1	0256	177	.00	.00	.00	105.
1	0126	87	.01	.00	.00	377.	*	1	0257	178	.00	.00	.00	103.
1	0127	88	.01	.00	.00	385.	*	1	0258	179	.00	.00	.00	101.
1	0128	89	.01	.00	.00	393.	*	1	0259	180	.00	.00	.00	100.
1	0129	90	.01	.00	.00	400.	*	1	0300	181	.00	.00	.00	98.
1	0130	91	.01	.00	.00	406.	*							

TOTAL RAINFALL = 2.13, TOTAL LOSS = 1.65, TOTAL EXCESS = .48

PEAK FLOW	TIME	MAXIMUM AVERAGE FLOW			
(CFS)	(HR)	6-HR	24-HR	72-HR	3.00-HR
+ 438.	1.68	180.	180.	180.	180.
		(INCHES)	.423	.423	.423
		(AC-FT)	45.	45.	45.

CUMULATIVE AREA = 1.97 SQ MI

HYDROGRAPH AT STATION OP1
PLAN 1, RATIO = .61

DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	*	DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
1	0000	1	.00	.00	.00	.00	0.	*	1	0131	92	.00	.00	.00	.00	80.
1	0001	2	.00	.00	.00	.00	0.	*	1	0132	93	.00	.00	.00	.00	82.
1	0002	3	.00	.00	.00	.00	0.	*	1	0133	94	.00	.00	.00	.00	84.
1	0003	4	.00	.00	.00	.00	0.	*	1	0134	95	.00	.00	.00	.00	85.
1	0004	5	.00	.00	.00	.00	0.	*	1	0135	96	.00	.00	.00	.00	87.
1	0005	6	.00	.00	.00	.00	0.	*	1	0136	97	.00	.00	.00	.00	89.
1	0006	7	.00	.00	.00	.00	0.	*	1	0137	98	.00	.00	.00	.00	90.
1	0007	8	.00	.00	.00	.00	0.	*	1	0138	99	.00	.00	.00	.00	91.
1	0008	9	.00	.00	.00	.00	0.	*	1	0139	100	.00	.00	.00	.00	92.
1	0009	10	.00	.00	.00	.00	0.	*	1	0140	101	.00	.00	.00	.00	93.
1	0010	11	.00	.00	.00	.00	0.	*	1	0141	102	.00	.00	.00	.00	94.
1	0011	12	.00	.00	.00	.00	0.	*	1	0142	103	.00	.00	.00	.00	95.
1	0012	13	.00	.00	.00	.00	0.	*	1	0143	104	.00	.00	.00	.00	96.
1	0013	14	.00	.00	.00	.00	0.	*	1	0144	105	.00	.00	.00	.00	96.
1	0014	15	.00	.00	.00	.00	0.	*	1	0145	106	.00	.00	.00	.00	97.
1	0015	16	.00	.00	.00	.00	0.	*	1	0146	107	.00	.00	.00	.00	97.
1	0016	17	.00	.00	.00	.00	0.	*	1	0147	108	.00	.00	.00	.00	97.
1	0017	18	.00	.00	.00	.00	0.	*	1	0148	109	.00	.00	.00	.00	97.
1	0018	19	.00	.00	.00	.00	0.	*	1	0149	110	.00	.00	.00	.00	97.
1	0019	20	.00	.00	.00	.00	0.	*	1	0150	111	.00	.00	.00	.00	97.
1	0020	21	.00	.00	.00	.00	0.	*	1	0151	112	.00	.00	.00	.00	97.
1	0021	22	.00	.00	.00	.00	0.	*	1	0152	113	.00	.00	.00	.00	96.
1	0022	23	.00	.00	.00	.00	0.	*	1	0153	114	.00	.00	.00	.00	96.
1	0023	24	.00	.00	.00	.00	0.	*	1	0154	115	.00	.00	.00	.00	95.
1	0024	25	.00	.00	.00	.00	0.	*	1	0155	116	.00	.00	.00	.00	94.
1	0025	26	.00	.00	.00	.00	0.	*	1	0156	117	.00	.00	.00	.00	94.
1	0026	27	.00	.00	.00	.00	0.	*	1	0157	118	.00	.00	.00	.00	93.
1	0027	28	.00	.00	.00	.00	0.	*	1	0158	119	.00	.00	.00	.00	92.
1	0028	29	.00	.00	.00	.00	0.	*	1	0159	120	.00	.00	.00	.00	91.
1	0029	30	.00	.00	.00	.00	0.	*	1	0200	121	.00	.00	.00	.00	89.
1	0030	31	.00	.00	.00	.00	0.	*	1	0201	122	.00	.00	.00	.00	88.
1	0031	32	.07	.07	.00	0.	*	1	0202	123	.00	.00	.00	.00	87.	
1	0032	33	.07	.07	.00	0.	*	1	0203	124	.00	.00	.00	.00	85.	
1	0033	34	.07	.07	.00	0.	*	1	0204	125	.00	.00	.00	.00	84.	
1	0034	35	.07	.07	.00	0.	*	1	0205	126	.00	.00	.00	.00	83.	
1	0035	36	.07	.07	.00	0.	*	1	0206	127	.00	.00	.00	.00	81.	
1	0036	37	.05	.05	.00	0.	*	1	0207	128	.00	.00	.00	.00	80.	
1	0037	38	.05	.05	.00	0.	*	1	0208	129	.00	.00	.00	.00	78.	
1	0038	39	.05	.05	.00	0.	*	1	0209	130	.00	.00	.00	.00	77.	
1	0039	40	.05	.05	.00	0.	*	1	0210	131	.00	.00	.00	.00	75.	
1	0040	41	.05	.05	.00	0.	*	1	0211	132	.00	.00	.00	.00	74.	
1	0041	42	.04	.04	.00	0.	*	1	0212	133	.00	.00	.00	.00	73.	
1	0042	43	.04	.04	.00	0.	*	1	0213	134	.00	.00	.00	.00	71.	
1	0043	44	.04	.04	.00	0.	*	1	0214	135	.00	.00	.00	.00	70.	
1	0044	45	.04	.03	.00	0.	*	1	0215	136	.00	.00	.00	.00	68.	
1	0045	46	.04	.03	.00	0.	*	1	0216	137	.00	.00	.00	.00	67.	
1	0046	47	.02	.02	.00	0.	*	1	0217	138	.00	.00	.00	.00	65.	
1	0047	48	.02	.02	.00	0.	*	1	0218	139	.00	.00	.00	.00	64.	
1	0048	49	.02	.02	.00	1.	*	1	0219	140	.00	.00	.00	.00	63.	
1	0049	50	.02	.02	.00	1.	*	1	0220	141	.00	.00	.00	.00	61.	
1	0050	51	.02	.02	.00	1.	*	1	0221	142	.00	.00	.00	.00	60.	
1	0051	52	.01	.01	.00	2.	*	1	0222	143	.00	.00	.00	.00	59.	
1	0052	53	.01	.01	.00	2.	*	1	0223	144	.00	.00	.00	.00	58.	
1	0053	54	.01	.01	.00	3.	*	1	0224	145	.00	.00	.00	.00	56.	

														post.out			
1	0054	55	.01	.01	.00	3.	*	1	0225	146	.00	.00	.00	55.			
1	0055	56	.01	.01	.00	4.	*	1	0226	147	.00	.00	.00	54.			
1	0056	57	.01	.01	.00	5.	*	1	0227	148	.00	.00	.00	53.			
1	0057	58	.01	.01	.00	6.	*	1	0228	149	.00	.00	.00	52.			
1	0058	59	.01	.01	.00	7.	*	1	0229	150	.00	.00	.00	51.			
1	0059	60	.01	.01	.00	8.	*	1	0230	151	.00	.00	.00	50.			
1	0100	61	.01	.01	.00	9.	*	1	0231	152	.00	.00	.00	49.			
1	0101	62	.01	.01	.00	10.	*	1	0232	153	.00	.00	.00	48.			
1	0102	63	.01	.01	.00	11.	*	1	0233	154	.00	.00	.00	47.			
1	0103	64	.01	.01	.00	13.	*	1	0234	155	.00	.00	.00	46.			
1	0104	65	.01	.01	.00	15.	*	1	0235	156	.00	.00	.00	45.			
1	0105	66	.01	.01	.00	16.	*	1	0236	157	.00	.00	.00	44.			
1	0106	67	.01	.00	.00	18.	*	1	0237	158	.00	.00	.00	43.			
1	0107	68	.01	.00	.00	20.	*	1	0238	159	.00	.00	.00	42.			
1	0108	69	.01	.00	.00	22.	*	1	0239	160	.00	.00	.00	41.			
1	0109	70	.01	.00	.00	24.	*	1	0240	161	.00	.00	.00	40.			
1	0110	71	.01	.00	.00	27.	*	1	0241	162	.00	.00	.00	40.			
1	0111	72	.00	.00	.00	29.	*	1	0242	163	.00	.00	.00	39.			
1	0112	73	.00	.00	.00	32.	*	1	0243	164	.00	.00	.00	38.			
1	0113	74	.00	.00	.00	34.	*	1	0244	165	.00	.00	.00	38.			
1	0114	75	.00	.00	.00	37.	*	1	0245	166	.00	.00	.00	37.			
1	0115	76	.00	.00	.00	40.	*	1	0246	167	.00	.00	.00	36.			
1	0116	77	.00	.00	.00	42.	*	1	0247	168	.00	.00	.00	36.			
1	0117	78	.00	.00	.00	45.	*	1	0248	169	.00	.00	.00	35.			
1	0118	79	.00	.00	.00	48.	*	1	0249	170	.00	.00	.00	35.			
1	0119	80	.00	.00	.00	51.	*	1	0250	171	.00	.00	.00	34.			
1	0120	81	.00	.00	.00	53.	*	1	0251	172	.00	.00	.00	34.			
1	0121	82	.00	.00	.00	56.	*	1	0252	173	.00	.00	.00	33.			
1	0122	83	.00	.00	.00	59.	*	1	0253	174	.00	.00	.00	33.			
1	0123	84	.00	.00	.00	61.	*	1	0254	175	.00	.00	.00	32.			
1	0124	85	.00	.00	.00	64.	*	1	0255	176	.00	.00	.00	32.			
1	0125	86	.00	.00	.00	66.	*	1	0256	177	.00	.00	.00	31.			
1	0126	87	.00	.00	.00	69.	*	1	0257	178	.00	.00	.00	31.			
1	0127	88	.00	.00	.00	71.	*	1	0258	179	.00	.00	.00	31.			
1	0128	89	.00	.00	.00	74.	*	1	0259	180	.00	.00	.00	30.			
1	0129	90	.00	.00	.00	76.	*	1	0300	181	.00	.00	.00	30.			
1	0130	91	.00	.00	.00	78.	*										

TOTAL RAINFALL = 1.29, TOTAL LOSS = 1.18, TOTAL EXCESS = .11

PEAK FLOW	TIME	MAXIMUM AVERAGE FLOW			
(CFS)	(HR)	6-HR	24-HR	72-HR	3.00-HR
+ 97.	1.80	40.	40.	40.	40.
		(INCHES)	.095	.095	.095
		(AC-FT)	10.	10.	10.

CUMULATIVE AREA = 1.97 SQ MI

*** **

 * *
 129 KK * CP2 *
 * *

COMBINE BP8, BP9, BP13, BP14, RCP1, & OP1

131 HC HYDROGRAPH COMBINATION
 ICOMP 6 NUMBER OF HYDROGRAPHS TO COMBINE

HYDROGRAPH AT STATION CP2
 SUM OF 6 HYDROGRAPHS
 PLAN 1, RATIO = 1.00

DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*
1	0000	1	0.	*	1	0046	47	8.	*	1	0132	93	1200.	*	1	0218	139	1403.					
1	0001	2	0.	*	1	0047	48	10.	*	1	0133	94	1225.	*	1	0219	140	1393.					
1	0002	3	0.	*	1	0048	49	13.	*	1	0134	95	1248.	*	1	0220	141	1382.					
1	0003	4	0.	*	1	0049	50	16.	*	1	0135	96	1270.	*	1	0221	142	1370.					
1	0004	5	0.	*	1	0050	51	20.	*	1	0136	97	1290.	*	1	0222	143	1359.					
1	0005	6	0.	*	1	0051	52	24.	*	1	0137	98	1308.	*	1	0223	144	1347.					
1	0006	7	0.	*	1	0052	53	28.	*	1	0138	99	1325.	*	1	0224	145	1335.					
1	0007	8	0.	*	1	0053	54	33.	*	1	0139	100	1338.	*	1	0225	146	1323.					
1	0008	9	0.	*	1	0054	55	38.	*	1	0140	101	1349.	*	1	0226	147	1310.					
1	0009	10	0.	*	1	0055	56	44.	*	1	0141	102	1358.	*	1	0227	148	1297.					

														post.out				
1	0010	11	0.	*	1	0056	57	50.	*	1	0142	103	1365.	*	1	0228	149	1285.
1	0011	12	0.	*	1	0057	58	56.	*	1	0143	104	1379.	*	1	0229	150	1272.
1	0012	13	0.	*	1	0058	59	71.	*	1	0144	105	1394.	*	1	0230	151	1259.
1	0013	14	0.	*	1	0059	60	124.	*	1	0145	106	1396.	*	1	0231	152	1246.
1	0014	15	0.	*	1	0100	61	177.	*	1	0146	107	1398.	*	1	0232	153	1232.
1	0015	16	0.	*	1	0101	62	216.	*	1	0147	108	1398.	*	1	0233	154	1219.
1	0016	17	0.	*	1	0102	63	243.	*	1	0148	109	1398.	*	1	0234	155	1205.
1	0017	18	0.	*	1	0103	64	264.	*	1	0149	110	1397.	*	1	0235	156	1192.
1	0018	19	0.	*	1	0104	65	280.	*	1	0150	111	1396.	*	1	0236	157	1178.
1	0019	20	0.	*	1	0105	66	293.	*	1	0151	112	1397.	*	1	0237	158	1164.
1	0020	21	0.	*	1	0106	67	305.	*	1	0152	113	1459.	*	1	0238	159	1150.
1	0021	22	0.	*	1	0107	68	315.	*	1	0153	114	1491.	*	1	0239	160	1136.
1	0022	23	0.	*	1	0108	69	325.	*	1	0154	115	1494.	*	1	0240	161	1121.
1	0023	24	0.	*	1	0109	70	335.	*	1	0155	116	1501.	*	1	0241	162	1107.
1	0024	25	0.	*	1	0110	71	345.	*	1	0156	117	1505.	*	1	0242	163	1093.
1	0025	26	0.	*	1	0111	72	354.	*	1	0157	118	1509.	*	1	0243	164	1078.
1	0026	27	0.	*	1	0112	73	364.	*	1	0158	119	1511.	*	1	0244	165	1063.
1	0027	28	0.	*	1	0113	74	374.	*	1	0159	120	1512.	*	1	0245	166	1049.
1	0028	29	0.	*	1	0114	75	384.	*	1	0200	121	1512.	*	1	0246	167	1034.
1	0029	30	0.	*	1	0115	76	394.	*	1	0201	122	1511.	*	1	0247	168	1019.
1	0030	31	0.	*	1	0116	77	404.	*	1	0202	123	1510.	*	1	0248	169	1005.
1	0031	32	0.	*	1	0117	78	414.	*	1	0203	124	1508.	*	1	0249	170	990.
1	0032	33	0.	*	1	0118	79	423.	*	1	0204	125	1505.	*	1	0250	171	976.
1	0033	34	0.	*	1	0119	80	432.	*	1	0205	126	1501.	*	1	0251	172	961.
1	0034	35	0.	*	1	0120	81	441.	*	1	0206	127	1497.	*	1	0252	173	947.
1	0035	36	0.	*	1	0121	82	450.	*	1	0207	128	1492.	*	1	0253	174	933.
1	0036	37	0.	*	1	0122	83	461.	*	1	0208	129	1486.	*	1	0254	175	919.
1	0037	38	0.	*	1	0123	84	509.	*	1	0209	130	1480.	*	1	0255	176	905.
1	0038	39	0.	*	1	0124	85	633.	*	1	0210	131	1474.	*	1	0256	177	892.
1	0039	40	0.	*	1	0125	86	775.	*	1	0211	132	1466.	*	1	0257	178	879.
1	0040	41	1.	*	1	0126	87	891.	*	1	0212	133	1459.	*	1	0258	179	865.
1	0041	42	1.	*	1	0127	88	979.	*	1	0213	134	1451.	*	1	0259	180	853.
1	0042	43	2.	*	1	0128	89	1046.	*	1	0214	135	1442.	*	1	0300	181	840.
1	0043	44	3.	*	1	0129	90	1098.	*	1	0215	136	1433.	*				
1	0044	45	4.	*	1	0130	91	1138.	*	1	0216	137	1423.	*				
1	0045	46	6.	*	1	0131	92	1171.	*	1	0217	138	1414.	*				

PEAK FLOW	TIME	MAXIMUM AVERAGE FLOW				
+	(CFS)	(HR)	6-HR	24-HR	72-HR	3.00-HR
+	1512.	2.00	724.	724.	724.	724.
		(INCHES)	.324	.324	.324	.324
		(AC-FT)	180.	180.	180.	180.

CUMULATIVE AREA = 10.40 SQ MI

HYDROGRAPH AT STATION CP2
SUM OF 6 HYDROGRAPHS
PLAN 1, RATIO = .61

														*					
DA	MON	HRMN	ORD	FLOW					*						*				
DA	MON	HRMN	ORD	FLOW	DA	MON	HRMN	ORD	FLOW	DA	MON	HRMN	ORD	FLOW	DA	MON	HRMN	ORD	FLOW
1	0000	1	0.	*	1	0046	47	0.	*	1	0132	93	108.	*	1	0218	139	271.	
1	0001	2	0.	*	1	0047	48	0.	*	1	0133	94	110.	*	1	0219	140	269.	
1	0002	3	0.	*	1	0048	49	1.	*	1	0134	95	111.	*	1	0220	141	276.	
1	0003	4	0.	*	1	0049	50	1.	*	1	0135	96	112.	*	1	0221	142	300.	
1	0004	5	0.	*	1	0050	51	1.	*	1	0136	97	114.	*	1	0222	143	303.	
1	0005	6	0.	*	1	0051	52	2.	*	1	0137	98	114.	*	1	0223	144	298.	
1	0006	7	0.	*	1	0052	53	2.	*	1	0138	99	115.	*	1	0224	145	300.	
1	0007	8	0.	*	1	0053	54	3.	*	1	0139	100	116.	*	1	0225	146	301.	
1	0008	9	0.	*	1	0054	55	3.	*	1	0140	101	118.	*	1	0226	147	300.	
1	0009	10	0.	*	1	0055	56	4.	*	1	0141	102	119.	*	1	0227	148	300.	
1	0010	11	0.	*	1	0056	57	5.	*	1	0142	103	120.	*	1	0228	149	299.	
1	0011	12	0.	*	1	0057	58	6.	*	1	0143	104	121.	*	1	0229	150	298.	
1	0012	13	0.	*	1	0058	59	7.	*	1	0144	105	121.	*	1	0230	151	298.	
1	0013	14	0.	*	1	0059	60	8.	*	1	0145	106	121.	*	1	0231	152	296.	
1	0014	15	0.	*	1	0100	61	9.	*	1	0146	107	125.	*	1	0232	153	295.	
1	0015	16	0.	*	1	0101	62	10.	*	1	0147	108	160.	*	1	0233	154	294.	
1	0016	17	0.	*	1	0102	63	11.	*	1	0148	109	205.	*	1	0234	155	292.	
1	0017	18	0.	*	1	0103	64	13.	*	1	0149	110	231.	*	1	0235	156	291.	
1	0018	19	0.	*	1	0104	65	15.	*	1	0150	111	243.	*	1	0236	157	289.	
1	0019	20	0.	*	1	0105	66	16.	*	1	0151	112	251.	*	1	0237	158	288.	
1	0020	21	0.	*	1	0106	67	18.	*	1	0152	113	256.	*	1	0238	159	286.	
1	0021	22	0.	*	1	0107	68	20.	*	1	0153	114	260.	*	1	0239	160	284.	
1	0022	23	0.	*	1	0108	69	22.	*	1	0154	115	263.	*	1	0240	161	282.	
1	0023	24	0.	*	1	0109	70	24.	*	1	0155	116	266.	*	1	0241	162	280.	
1	0024	25	0.	*	1	0110	71	28.	*	1	0156	117	268.	*	1	0242	163	278.	
1	0025	26	0.	*	1	0111	72	41.	*	1	0157	118	269.	*	1	0243	164	276.	
1	0026	27	0.	*	1	0112	73	56.	*	1	0158	119	271.	*	1	0244	165	274.	
1	0027	28	0.	*	1	0113	74	64.	*	1	0159	120	273.	*	1	0245	166	272.	
1	0028	29	0.	*	1	0114	75	70.	*	1	0200	121	274.	*	1	0246	167	270.	
1	0029	30	0.	*	1	0115	76	73.	*	1	0201	122	276.	*	1	0247	168	268.	

DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	*	DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
1	0000	1	.00	.00	.00	0.	*	1	0131	92	.00	.00	.00	1.		
1	0001	2	.00	.00	.00	0.	*	1	0132	93	.00	.00	.00	1.		
1	0002	3	.00	.00	.00	0.	*	1	0133	94	.00	.00	.00	0.		
1	0003	4	.00	.00	.00	0.	*	1	0134	95	.00	.00	.00	0.		
1	0004	5	.00	.00	.00	0.	*	1	0135	96	.00	.00	.00	0.		
1	0005	6	.00	.00	.00	0.	*	1	0136	97	.00	.00	.00	0.		
1	0006	7	.00	.00	.00	0.	*	1	0137	98	.00	.00	.00	0.		
1	0007	8	.00	.00	.00	0.	*	1	0138	99	.00	.00	.00	0.		
1	0008	9	.00	.00	.00	0.	*	1	0139	100	.00	.00	.00	0.		
1	0009	10	.00	.00	.00	0.	*	1	0140	101	.00	.00	.00	0.		
1	0010	11	.00	.00	.00	0.	*	1	0141	102	.00	.00	.00	0.		
1	0011	12	.00	.00	.00	0.	*	1	0142	103	.00	.00	.00	0.		
1	0012	13	.00	.00	.00	0.	*	1	0143	104	.00	.00	.00	0.		
1	0013	14	.00	.00	.00	0.	*	1	0144	105	.00	.00	.00	0.		
1	0014	15	.00	.00	.00	0.	*	1	0145	106	.00	.00	.00	0.		
1	0015	16	.00	.00	.00	0.	*	1	0146	107	.00	.00	.00	0.		
1	0016	17	.00	.00	.00	0.	*	1	0147	108	.00	.00	.00	0.		
1	0017	18	.00	.00	.00	0.	*	1	0148	109	.00	.00	.00	0.		
1	0018	19	.00	.00	.00	0.	*	1	0149	110	.00	.00	.00	0.		
1	0019	20	.00	.00	.00	0.	*	1	0150	111	.00	.00	.00	0.		
1	0020	21	.00	.00	.00	0.	*	1	0151	112	.00	.00	.00	0.		
1	0021	22	.00	.00	.00	0.	*	1	0152	113	.00	.00	.00	0.		
1	0022	23	.00	.00	.00	0.	*	1	0153	114	.00	.00	.00	0.		
1	0023	24	.00	.00	.00	0.	*	1	0154	115	.00	.00	.00	0.		
1	0024	25	.00	.00	.00	0.	*	1	0155	116	.00	.00	.00	0.		
1	0025	26	.00	.00	.00	0.	*	1	0156	117	.00	.00	.00	0.		
1	0026	27	.00	.00	.00	0.	*	1	0157	118	.00	.00	.00	0.		
1	0027	28	.00	.00	.00	0.	*	1	0158	119	.00	.00	.00	0.		
1	0028	29	.00	.00	.00	0.	*	1	0159	120	.00	.00	.00	0.		
1	0029	30	.00	.00	.00	0.	*	1	0200	121	.00	.00	.00	0.		
1	0030	31	.00	.00	.00	0.	*	1	0201	122	.00	.00	.00	0.		
1	0031	32	.11	.11	.00	0.	*	1	0202	123	.00	.00	.00	0.		
1	0032	33	.11	.11	.00	0.	*	1	0203	124	.00	.00	.00	0.		
1	0033	34	.11	.11	.00	0.	*	1	0204	125	.00	.00	.00	0.		
1	0034	35	.11	.11	.00	0.	*	1	0205	126	.00	.00	.00	0.		
1	0035	36	.11	.11	.00	0.	*	1	0206	127	.00	.00	.00	0.		
1	0036	37	.09	.09	.00	0.	*	1	0207	128	.00	.00	.00	0.		
1	0037	38	.09	.08	.01	1.	*	1	0208	129	.00	.00	.00	0.		
1	0038	39	.09	.08	.01	3.	*	1	0209	130	.00	.00	.00	0.		
1	0039	40	.09	.07	.02	4.	*	1	0210	131	.00	.00	.00	0.		
1	0040	41	.09	.07	.02	6.	*	1	0211	132	.00	.00	.00	0.		
1	0041	42	.06	.05	.02	7.	*	1	0212	133	.00	.00	.00	0.		
1	0042	43	.06	.04	.02	6.	*	1	0213	134	.00	.00	.00	0.		
1	0043	44	.06	.04	.02	7.	*	1	0214	135	.00	.00	.00	0.		
1	0044	45	.06	.04	.02	7.	*	1	0215	136	.00	.00	.00	0.		
1	0045	46	.06	.04	.02	8.	*	1	0216	137	.00	.00	.00	0.		
1	0046	47	.04	.02	.01	7.	*	1	0217	138	.00	.00	.00	0.		
1	0047	48	.04	.02	.01	6.	*	1	0218	139	.00	.00	.00	0.		
1	0048	49	.04	.02	.02	6.	*	1	0219	140	.00	.00	.00	0.		
1	0049	50	.04	.02	.02	6.	*	1	0220	141	.00	.00	.00	0.		
1	0050	51	.04	.02	.02	6.	*	1	0221	142	.00	.00	.00	0.		
1	0051	52	.02	.01	.01	6.	*	1	0222	143	.00	.00	.00	0.		
1	0052	53	.02	.01	.01	5.	*	1	0223	144	.00	.00	.00	0.		
1	0053	54	.02	.01	.01	4.	*	1	0224	145	.00	.00	.00	0.		
1	0054	55	.02	.01	.01	4.	*	1	0225	146	.00	.00	.00	0.		
1	0055	56	.02	.01	.01	4.	*	1	0226	147	.00	.00	.00	0.		
1	0056	57	.02	.01	.01	4.	*	1	0227	148	.00	.00	.00	0.		
1	0057	58	.02	.01	.01	3.	*	1	0228	149	.00	.00	.00	0.		
1	0058	59	.02	.01	.01	3.	*	1	0229	150	.00	.00	.00	0.		
1	0059	60	.02	.01	.01	3.	*	1	0230	151	.00	.00	.00	0.		
1	0100	61	.02	.01	.01	3.	*	1	0231	152	.00	.00	.00	0.		
1	0101	62	.01	.01	.01	3.	*	1	0232	153	.00	.00	.00	0.		
1	0102	63	.01	.01	.01	3.	*	1	0233	154	.00	.00	.00	0.		
1	0103	64	.01	.01	.01	3.	*	1	0234	155	.00	.00	.00	0.		
1	0104	65	.01	.01	.01	3.	*	1	0235	156	.00	.00	.00	0.		
1	0105	66	.01	.01	.01	3.	*	1	0236	157	.00	.00	.00	0.		
1	0106	67	.01	.01	.01	2.	*	1	0237	158	.00	.00	.00	0.		
1	0107	68	.01	.01	.01	2.	*	1	0238	159	.00	.00	.00	0.		
1	0108	69	.01	.01	.01	2.	*	1	0239	160	.00	.00	.00	0.		
1	0109	70	.01	.01	.01	2.	*	1	0240	161	.00	.00	.00	0.		
1	0110	71	.01	.01	.01	2.	*	1	0241	162	.00	.00	.00	0.		
1	0111	72	.01	.00	.00	2.	*	1	0242	163	.00	.00	.00	0.		
1	0112	73	.01	.00	.00	2.	*	1	0243	164	.00	.00	.00	0.		
1	0113	74	.01	.00	.00	2.	*	1	0244	165	.00	.00	.00	0.		
1	0114	75	.01	.00	.00	2.	*	1	0245	166	.00	.00	.00	0.		
1	0115	76	.01	.00	.00	2.	*	1	0246	167	.00	.00	.00	0.		
1	0116	77	.01	.00	.00	2.	*	1	0247	168	.00	.00	.00	0.		
1	0117	78	.01	.00	.00	1.	*	1	0248	169	.00	.00	.00	0.		
1	0118	79	.01	.00	.00	1.	*	1	0249	170	.00	.00	.00	0.		
1	0119	80	.01	.00	.00	1.	*	1	0250	171	.00	.00	.00	0.		
1	0120	81	.01	.00	.00	1.	*	1	0251	172	.00	.00	.00	0.		
1	0121	82	.01	.00	.00	1.	*	1	0252	173	.00	.00	.00	0.		
1	0122	83	.01	.00	.00	1.	*	1	0253	174	.00	.00	.00	0.		
1	0123	84	.01	.00	.00	1.	*	1	0254	175	.00	.00	.00	0.		
1	0124	85	.01	.00	.00	1.	*	1	0255	176	.00	.00	.00	0.		

												post.out		
1	0125	86	.01	.00	.00	1.	*	1	0256	177	.00	.00	.00	0.
1	0126	87	.01	.00	.00	1.	*	1	0257	178	.00	.00	.00	0.
1	0127	88	.01	.00	.00	1.	*	1	0258	179	.00	.00	.00	0.
1	0128	89	.01	.00	.00	1.	*	1	0259	180	.00	.00	.00	0.
1	0129	90	.01	.00	.00	1.	*	1	0300	181	.00	.00	.00	0.
1	0130	91	.01	.00	.00	1.	*							

TOTAL RAINFALL = 2.13, TOTAL LOSS = 1.61, TOTAL EXCESS = .52

PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
(CFS)	(HR)	(CFS)	6-HR	24-HR	72-HR	3.00-HR
8.	.75	1.	1.	1.	1.	1.
		(INCHES)	.518	.518	.518	.518
		(AC-FT)	0.	0.	0.	0.

CUMULATIVE AREA = .01 SQ MI

WARNING *** TIME INTERVAL IS GREATER THAN .29*LAG

HYDROGRAPH AT STATION BP10
PLAN 1, RATIO = 1.00

DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	*	DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
1	0000	1	.00	.00	.00	0.	*		1	0131	92	.00	.00	.00	1.	
1	0001	2	.00	.00	.00	0.	*		1	0132	93	.00	.00	.00	1.	
1	0002	3	.00	.00	.00	0.	*		1	0133	94	.00	.00	.00	0.	
1	0003	4	.00	.00	.00	0.	*		1	0134	95	.00	.00	.00	0.	
1	0004	5	.00	.00	.00	0.	*		1	0135	96	.00	.00	.00	0.	
1	0005	6	.00	.00	.00	0.	*		1	0136	97	.00	.00	.00	0.	
1	0006	7	.00	.00	.00	0.	*		1	0137	98	.00	.00	.00	0.	
1	0007	8	.00	.00	.00	0.	*		1	0138	99	.00	.00	.00	0.	
1	0008	9	.00	.00	.00	0.	*		1	0139	100	.00	.00	.00	0.	
1	0009	10	.00	.00	.00	0.	*		1	0140	101	.00	.00	.00	0.	
1	0010	11	.00	.00	.00	0.	*		1	0141	102	.00	.00	.00	0.	
1	0011	12	.00	.00	.00	0.	*		1	0142	103	.00	.00	.00	0.	
1	0012	13	.00	.00	.00	0.	*		1	0143	104	.00	.00	.00	0.	
1	0013	14	.00	.00	.00	0.	*		1	0144	105	.00	.00	.00	0.	
1	0014	15	.00	.00	.00	0.	*		1	0145	106	.00	.00	.00	0.	
1	0015	16	.00	.00	.00	0.	*		1	0146	107	.00	.00	.00	0.	
1	0016	17	.00	.00	.00	0.	*		1	0147	108	.00	.00	.00	0.	
1	0017	18	.00	.00	.00	0.	*		1	0148	109	.00	.00	.00	0.	
1	0018	19	.00	.00	.00	0.	*		1	0149	110	.00	.00	.00	0.	
1	0019	20	.00	.00	.00	0.	*		1	0150	111	.00	.00	.00	0.	
1	0020	21	.00	.00	.00	0.	*		1	0151	112	.00	.00	.00	0.	
1	0021	22	.00	.00	.00	0.	*		1	0152	113	.00	.00	.00	0.	
1	0022	23	.00	.00	.00	0.	*		1	0153	114	.00	.00	.00	0.	
1	0023	24	.00	.00	.00	0.	*		1	0154	115	.00	.00	.00	0.	
1	0024	25	.00	.00	.00	0.	*		1	0155	116	.00	.00	.00	0.	
1	0025	26	.00	.00	.00	0.	*		1	0156	117	.00	.00	.00	0.	
1	0026	27	.00	.00	.00	0.	*		1	0157	118	.00	.00	.00	0.	
1	0027	28	.00	.00	.00	0.	*		1	0158	119	.00	.00	.00	0.	
1	0028	29	.00	.00	.00	0.	*		1	0159	120	.00	.00	.00	0.	
1	0029	30	.00	.00	.00	0.	*		1	0200	121	.00	.00	.00	0.	
1	0030	31	.00	.00	.00	0.	*		1	0201	122	.00	.00	.00	0.	
1	0031	32	.11	.11	.00	0.	*		1	0202	123	.00	.00	.00	0.	
1	0032	33	.11	.11	.00	0.	*		1	0203	124	.00	.00	.00	0.	
1	0033	34	.11	.11	.00	0.	*		1	0204	125	.00	.00	.00	0.	
1	0034	35	.11	.11	.00	0.	*		1	0205	126	.00	.00	.00	0.	
1	0035	36	.11	.11	.00	0.	*		1	0206	127	.00	.00	.00	0.	
1	0036	37	.09	.09	.00	0.	*		1	0207	128	.00	.00	.00	0.	
1	0037	38	.09	.08	.01	1.	*		1	0208	129	.00	.00	.00	0.	
1	0038	39	.09	.08	.01	3.	*		1	0209	130	.00	.00	.00	0.	
1	0039	40	.09	.07	.02	4.	*		1	0210	131	.00	.00	.00	0.	
1	0040	41	.09	.07	.02	6.	*		1	0211	132	.00	.00	.00	0.	
1	0041	42	.06	.05	.02	7.	*		1	0212	133	.00	.00	.00	0.	
1	0042	43	.06	.04	.02	6.	*		1	0213	134	.00	.00	.00	0.	
1	0043	44	.06	.04	.02	7.	*		1	0214	135	.00	.00	.00	0.	
1	0044	45	.06	.04	.02	7.	*		1	0215	136	.00	.00	.00	0.	
1	0045	46	.06	.04	.02	8.	*		1	0216	137	.00	.00	.00	0.	
1	0046	47	.04	.02	.01	7.	*		1	0217	138	.00	.00	.00	0.	
1	0047	48	.04	.02	.01	6.	*		1	0218	139	.00	.00	.00	0.	
1	0048	49	.04	.02	.02	6.	*		1	0219	140	.00	.00	.00	0.	
1	0049	50	.04	.02	.02	6.	*		1	0220	141	.00	.00	.00	0.	
1	0050	51	.04	.02	.02	6.	*		1	0221	142	.00	.00	.00	0.	
1	0051	52	.02	.01	.01	6.	*		1	0222	143	.00	.00	.00	0.	
1	0052	53	.02	.01	.01	5.	*		1	0223	144	.00	.00	.00	0.	
1	0053	54	.02	.01	.01	4.	*		1	0224	145	.00	.00	.00	0.	
1	0054	55	.02	.01	.01	4.	*		1	0225	146	.00	.00	.00	0.	
1	0055	56	.02	.01	.01	4.	*		1	0226	147	.00	.00	.00	0.	
1	0056	57	.02	.01	.01	4.	*		1	0227	148	.00	.00	.00	0.	

														post.out			
1	0057	58	.02	.01	.01	3.	*	1	0228	149	.00	.00	.00	0.			
1	0058	59	.02	.01	.01	3.	*	1	0229	150	.00	.00	.00	0.			
1	0059	60	.02	.01	.01	3.	*	1	0230	151	.00	.00	.00	0.			
1	0100	61	.02	.01	.01	3.	*	1	0231	152	.00	.00	.00	0.			
1	0101	62	.01	.01	.01	3.	*	1	0232	153	.00	.00	.00	0.			
1	0102	63	.01	.01	.01	3.	*	1	0233	154	.00	.00	.00	0.			
1	0103	64	.01	.01	.01	3.	*	1	0234	155	.00	.00	.00	0.			
1	0104	65	.01	.01	.01	3.	*	1	0235	156	.00	.00	.00	0.			
1	0105	66	.01	.01	.01	3.	*	1	0236	157	.00	.00	.00	0.			
1	0106	67	.01	.01	.01	2.	*	1	0237	158	.00	.00	.00	0.			
1	0107	68	.01	.01	.01	2.	*	1	0238	159	.00	.00	.00	0.			
1	0108	69	.01	.01	.01	2.	*	1	0239	160	.00	.00	.00	0.			
1	0109	70	.01	.01	.01	2.	*	1	0240	161	.00	.00	.00	0.			
1	0110	71	.01	.01	.01	2.	*	1	0241	162	.00	.00	.00	0.			
1	0111	72	.01	.00	.00	2.	*	1	0242	163	.00	.00	.00	0.			
1	0112	73	.01	.00	.00	2.	*	1	0243	164	.00	.00	.00	0.			
1	0113	74	.01	.00	.00	2.	*	1	0244	165	.00	.00	.00	0.			
1	0114	75	.01	.00	.00	2.	*	1	0245	166	.00	.00	.00	0.			
1	0115	76	.01	.00	.00	2.	*	1	0246	167	.00	.00	.00	0.			
1	0116	77	.01	.00	.00	2.	*	1	0247	168	.00	.00	.00	0.			
1	0117	78	.01	.00	.00	1.	*	1	0248	169	.00	.00	.00	0.			
1	0118	79	.01	.00	.00	1.	*	1	0249	170	.00	.00	.00	0.			
1	0119	80	.01	.00	.00	1.	*	1	0250	171	.00	.00	.00	0.			
1	0120	81	.01	.00	.00	1.	*	1	0251	172	.00	.00	.00	0.			
1	0121	82	.01	.00	.00	1.	*	1	0252	173	.00	.00	.00	0.			
1	0122	83	.01	.00	.00	1.	*	1	0253	174	.00	.00	.00	0.			
1	0123	84	.01	.00	.00	1.	*	1	0254	175	.00	.00	.00	0.			
1	0124	85	.01	.00	.00	1.	*	1	0255	176	.00	.00	.00	0.			
1	0125	86	.01	.00	.00	1.	*	1	0256	177	.00	.00	.00	0.			
1	0126	87	.01	.00	.00	1.	*	1	0257	178	.00	.00	.00	0.			
1	0127	88	.01	.00	.00	1.	*	1	0258	179	.00	.00	.00	0.			
1	0128	89	.01	.00	.00	1.	*	1	0259	180	.00	.00	.00	0.			
1	0129	90	.01	.00	.00	1.	*	1	0300	181	.00	.00	.00	0.			
1	0130	91	.01	.00	.00	1.	*										

TOTAL RAINFALL = 2.13, TOTAL LOSS = 1.61, TOTAL EXCESS = .52

PEAK FLOW	TIME		6-HR	24-HR	72-HR	3.00-HR
+	(CFS)					
+	8.	.75	1.	1.	1.	1.
		(INCHES)	.518	.518	.518	.518
		(AC-FT)	0.	0.	0.	0.
		CUMULATIVE AREA =	.01 SQ MI			

WARNING *** TIME INTERVAL IS GREATER THAN .29*LAG

HYDROGRAPH AT STATION BP10
PLAN 1, RATIO = .61

DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	*	DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
1	0000	1	.00	.00	.00	0.	*	1	0131	92	.00	.00	.00	0.		
1	0001	2	.00	.00	.00	0.	*	1	0132	93	.00	.00	.00	0.		
1	0002	3	.00	.00	.00	0.	*	1	0133	94	.00	.00	.00	0.		
1	0003	4	.00	.00	.00	0.	*	1	0134	95	.00	.00	.00	0.		
1	0004	5	.00	.00	.00	0.	*	1	0135	96	.00	.00	.00	0.		
1	0005	6	.00	.00	.00	0.	*	1	0136	97	.00	.00	.00	0.		
1	0006	7	.00	.00	.00	0.	*	1	0137	98	.00	.00	.00	0.		
1	0007	8	.00	.00	.00	0.	*	1	0138	99	.00	.00	.00	0.		
1	0008	9	.00	.00	.00	0.	*	1	0139	100	.00	.00	.00	0.		
1	0009	10	.00	.00	.00	0.	*	1	0140	101	.00	.00	.00	0.		
1	0010	11	.00	.00	.00	0.	*	1	0141	102	.00	.00	.00	0.		
1	0011	12	.00	.00	.00	0.	*	1	0142	103	.00	.00	.00	0.		
1	0012	13	.00	.00	.00	0.	*	1	0143	104	.00	.00	.00	0.		
1	0013	14	.00	.00	.00	0.	*	1	0144	105	.00	.00	.00	0.		
1	0014	15	.00	.00	.00	0.	*	1	0145	106	.00	.00	.00	0.		
1	0015	16	.00	.00	.00	0.	*	1	0146	107	.00	.00	.00	0.		
1	0016	17	.00	.00	.00	0.	*	1	0147	108	.00	.00	.00	0.		
1	0017	18	.00	.00	.00	0.	*	1	0148	109	.00	.00	.00	0.		
1	0018	19	.00	.00	.00	0.	*	1	0149	110	.00	.00	.00	0.		
1	0019	20	.00	.00	.00	0.	*	1	0150	111	.00	.00	.00	0.		
1	0020	21	.00	.00	.00	0.	*	1	0151	112	.00	.00	.00	0.		
1	0021	22	.00	.00	.00	0.	*	1	0152	113	.00	.00	.00	0.		
1	0022	23	.00	.00	.00	0.	*	1	0153	114	.00	.00	.00	0.		
1	0023	24	.00	.00	.00	0.	*	1	0154	115	.00	.00	.00	0.		
1	0024	25	.00	.00	.00	0.	*	1	0155	116	.00	.00	.00	0.		
1	0025	26	.00	.00	.00	0.	*	1	0156	117	.00	.00	.00	0.		
1	0026	27	.00	.00	.00	0.	*	1	0157	118	.00	.00	.00	0.		
1	0027	28	.00	.00	.00	0.	*	1	0158	119	.00	.00	.00	0.		
1	0028	29	.00	.00	.00	0.	*	1	0159	120	.00	.00	.00	0.		

													post.out			
1	0029	30	.00	.00	.00	0.	*	1	0200	121	.00	.00	.00	0.		
1	0030	31	.00	.00	.00	0.	*	1	0201	122	.00	.00	.00	0.		
1	0031	32	.07	.07	.00	0.	*	1	0202	123	.00	.00	.00	0.		
1	0032	33	.07	.07	.00	0.	*	1	0203	124	.00	.00	.00	0.		
1	0033	34	.07	.07	.00	0.	*	1	0204	125	.00	.00	.00	0.		
1	0034	35	.07	.07	.00	0.	*	1	0205	126	.00	.00	.00	0.		
1	0035	36	.07	.07	.00	0.	*	1	0206	127	.00	.00	.00	0.		
1	0036	37	.05	.05	.00	0.	*	1	0207	128	.00	.00	.00	0.		
1	0037	38	.05	.05	.00	0.	*	1	0208	129	.00	.00	.00	0.		
1	0038	39	.05	.05	.00	0.	*	1	0209	130	.00	.00	.00	0.		
1	0039	40	.05	.05	.00	0.	*	1	0210	131	.00	.00	.00	0.		
1	0040	41	.05	.05	.00	0.	*	1	0211	132	.00	.00	.00	0.		
1	0041	42	.04	.04	.00	0.	*	1	0212	133	.00	.00	.00	0.		
1	0042	43	.04	.04	.00	0.	*	1	0213	134	.00	.00	.00	0.		
1	0043	44	.04	.03	.00	1.	*	1	0214	135	.00	.00	.00	0.		
1	0044	45	.04	.03	.00	1.	*	1	0215	136	.00	.00	.00	0.		
1	0045	46	.04	.03	.00	1.	*	1	0216	137	.00	.00	.00	0.		
1	0046	47	.02	.02	.00	1.	*	1	0217	138	.00	.00	.00	0.		
1	0047	48	.02	.02	.00	1.	*	1	0218	139	.00	.00	.00	0.		
1	0048	49	.02	.02	.00	1.	*	1	0219	140	.00	.00	.00	0.		
1	0049	50	.02	.02	.00	2.	*	1	0220	141	.00	.00	.00	0.		
1	0050	51	.02	.02	.00	2.	*	1	0221	142	.00	.00	.00	0.		
1	0051	52	.01	.01	.00	1.	*	1	0222	143	.00	.00	.00	0.		
1	0052	53	.01	.01	.00	1.	*	1	0223	144	.00	.00	.00	0.		
1	0053	54	.01	.01	.00	1.	*	1	0224	145	.00	.00	.00	0.		
1	0054	55	.01	.01	.00	1.	*	1	0225	146	.00	.00	.00	0.		
1	0055	56	.01	.01	.00	1.	*	1	0226	147	.00	.00	.00	0.		
1	0056	57	.01	.01	.00	1.	*	1	0227	148	.00	.00	.00	0.		
1	0057	58	.01	.01	.00	1.	*	1	0228	149	.00	.00	.00	0.		
1	0058	59	.01	.01	.00	1.	*	1	0229	150	.00	.00	.00	0.		
1	0059	60	.01	.01	.00	1.	*	1	0230	151	.00	.00	.00	0.		
1	0100	61	.01	.01	.00	1.	*	1	0231	152	.00	.00	.00	0.		
1	0101	62	.01	.01	.00	1.	*	1	0232	153	.00	.00	.00	0.		
1	0102	63	.01	.01	.00	1.	*	1	0233	154	.00	.00	.00	0.		
1	0103	64	.01	.01	.00	1.	*	1	0234	155	.00	.00	.00	0.		
1	0104	65	.01	.01	.00	1.	*	1	0235	156	.00	.00	.00	0.		
1	0105	66	.01	.01	.00	1.	*	1	0236	157	.00	.00	.00	0.		
1	0106	67	.01	.00	.00	1.	*	1	0237	158	.00	.00	.00	0.		
1	0107	68	.01	.00	.00	1.	*	1	0238	159	.00	.00	.00	0.		
1	0108	69	.01	.00	.00	1.	*	1	0239	160	.00	.00	.00	0.		
1	0109	70	.01	.00	.00	1.	*	1	0240	161	.00	.00	.00	0.		
1	0110	71	.01	.00	.00	1.	*	1	0241	162	.00	.00	.00	0.		
1	0111	72	.00	.00	.00	1.	*	1	0242	163	.00	.00	.00	0.		
1	0112	73	.00	.00	.00	1.	*	1	0243	164	.00	.00	.00	0.		
1	0113	74	.00	.00	.00	1.	*	1	0244	165	.00	.00	.00	0.		
1	0114	75	.00	.00	.00	1.	*	1	0245	166	.00	.00	.00	0.		
1	0115	76	.00	.00	.00	1.	*	1	0246	167	.00	.00	.00	0.		
1	0116	77	.00	.00	.00	1.	*	1	0247	168	.00	.00	.00	0.		
1	0117	78	.00	.00	.00	0.	*	1	0248	169	.00	.00	.00	0.		
1	0118	79	.00	.00	.00	0.	*	1	0249	170	.00	.00	.00	0.		
1	0119	80	.00	.00	.00	0.	*	1	0250	171	.00	.00	.00	0.		
1	0120	81	.00	.00	.00	0.	*	1	0251	172	.00	.00	.00	0.		
1	0121	82	.00	.00	.00	0.	*	1	0252	173	.00	.00	.00	0.		
1	0122	83	.00	.00	.00	0.	*	1	0253	174	.00	.00	.00	0.		
1	0123	84	.00	.00	.00	0.	*	1	0254	175	.00	.00	.00	0.		
1	0124	85	.00	.00	.00	0.	*	1	0255	176	.00	.00	.00	0.		
1	0125	86	.00	.00	.00	0.	*	1	0256	177	.00	.00	.00	0.		
1	0126	87	.00	.00	.00	0.	*	1	0257	178	.00	.00	.00	0.		
1	0127	88	.00	.00	.00	0.	*	1	0258	179	.00	.00	.00	0.		
1	0128	89	.00	.00	.00	0.	*	1	0259	180	.00	.00	.00	0.		
1	0129	90	.00	.00	.00	0.	*	1	0300	181	.00	.00	.00	0.		
1	0130	91	.00	.00	.00	0.	*									

TOTAL RAINFALL = 1.29, TOTAL LOSS = 1.16, TOTAL EXCESS = .13

PEAK FLOW	TIME	MAXIMUM AVERAGE FLOW			
(CFS)	(HR)	6-HR	24-HR	72-HR	3.00-HR
+	2.	.83	0.	0.	0.
		(CFS)	0.	0.	0.
		(INCHES)	.130	.130	.130
		(AC-FT)	0.	0.	0.

CUMULATIVE AREA = .01 SQ MI

*** **

 * *
 137 KK * RP10 *
 * *

Route BP10 in channel to Outlet OP2

HYDROGRAPH ROUTING DATA

139 RD MUSKINGUM-CUNGE CHANNEL ROUTING
 L 3253. CHANNEL LENGTH
 S .0170 SLOPE
 N .040 CHANNEL ROUGHNESS COEFFICIENT
 CA .00 CONTRIBUTING AREA
 SHAPE TRAP CHANNEL SHAPE
 WD .00 BOTTOM WIDTH OR DIAMETER
 Z 7.00 SIDE SLOPE

 COMPUTED MUSKINGUM-CUNGE PARAMETERS

ELEMENT	ALPHA	COMPUTATION TIME STEP			PEAK (CFS)	TIME TO PEAK (MIN)	VOLUME (IN)	MAXIMUM CELERITY (FPS)
		M	DT	DX				
MAIN	1.59	1.33	.50	45.82	8.77	62.00	.49	

INTERPOLATED TO SPECIFIED COMPUTATION INTERVAL

MAIN	1.59	1.33	1.00		8.77	62.00	.49
------	------	------	------	--	------	-------	-----

CONTINUITY SUMMARY (AC-FT) - INFLOW= .2774E+00 EXCESS= .0000E+00 OUTFLOW= .2635E+00 BASIN STORAGE= .2154E-01 PERCENT ERROR= -2.8

HYDROGRAPH AT STATION RP10
 PLAN 1, RATIO = 1.00

DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*
1	0000	1	0.	*	1	0046	47	0.	*	1	0132	93	2.	*	1	0218	139	0.	*				
1	0001	2	0.	*	1	0047	48	0.	*	1	0133	94	2.	*	1	0219	140	0.	*				
1	0002	3	0.	*	1	0048	49	0.	*	1	0134	95	2.	*	1	0220	141	0.	*				
1	0003	4	0.	*	1	0049	50	0.	*	1	0135	96	2.	*	1	0221	142	0.	*				
1	0004	5	0.	*	1	0050	51	0.	*	1	0136	97	2.	*	1	0222	143	0.	*				
1	0005	6	0.	*	1	0051	52	0.	*	1	0137	98	2.	*	1	0223	144	0.	*				
1	0006	7	0.	*	1	0052	53	0.	*	1	0138	99	2.	*	1	0224	145	0.	*				
1	0007	8	0.	*	1	0053	54	0.	*	1	0139	100	2.	*	1	0225	146	0.	*				
1	0008	9	0.	*	1	0054	55	0.	*	1	0140	101	2.	*	1	0226	147	0.	*				
1	0009	10	0.	*	1	0055	56	0.	*	1	0141	102	2.	*	1	0227	148	0.	*				
1	0010	11	0.	*	1	0056	57	0.	*	1	0142	103	2.	*	1	0228	149	0.	*				
1	0011	12	0.	*	1	0057	58	0.	*	1	0143	104	1.	*	1	0229	150	0.	*				
1	0012	13	0.	*	1	0058	59	0.	*	1	0144	105	1.	*	1	0230	151	0.	*				
1	0013	14	0.	*	1	0059	60	0.	*	1	0145	106	1.	*	1	0231	152	0.	*				
1	0014	15	0.	*	1	0100	61	0.	*	1	0146	107	1.	*	1	0232	153	0.	*				
1	0015	16	0.	*	1	0101	62	1.	*	1	0147	108	1.	*	1	0233	154	0.	*				
1	0016	17	0.	*	1	0102	63	9.	*	1	0148	109	1.	*	1	0234	155	0.	*				
1	0017	18	0.	*	1	0103	64	7.	*	1	0149	110	1.	*	1	0235	156	0.	*				
1	0018	19	0.	*	1	0104	65	7.	*	1	0150	111	1.	*	1	0236	157	0.	*				
1	0019	20	0.	*	1	0105	66	7.	*	1	0151	112	1.	*	1	0237	158	0.	*				
1	0020	21	0.	*	1	0106	67	6.	*	1	0152	113	1.	*	1	0238	159	0.	*				
1	0021	22	0.	*	1	0107	68	6.	*	1	0153	114	1.	*	1	0239	160	0.	*				
1	0022	23	0.	*	1	0108	69	6.	*	1	0154	115	1.	*	1	0240	161	0.	*				
1	0023	24	0.	*	1	0109	70	6.	*	1	0155	116	1.	*	1	0241	162	0.	*				
1	0024	25	0.	*	1	0110	71	5.	*	1	0156	117	1.	*	1	0242	163	0.	*				
1	0025	26	0.	*	1	0111	72	5.	*	1	0157	118	1.	*	1	0243	164	0.	*				
1	0026	27	0.	*	1	0112	73	5.	*	1	0158	119	1.	*	1	0244	165	0.	*				
1	0027	28	0.	*	1	0113	74	4.	*	1	0159	120	1.	*	1	0245	166	0.	*				
1	0028	29	0.	*	1	0114	75	4.	*	1	0200	121	1.	*	1	0246	167	0.	*				
1	0029	30	0.	*	1	0115	76	4.	*	1	0201	122	1.	*	1	0247	168	0.	*				
1	0030	31	0.	*	1	0116	77	4.	*	1	0202	123	1.	*	1	0248	169	0.	*				
1	0031	32	0.	*	1	0117	78	4.	*	1	0203	124	1.	*	1	0249	170	0.	*				
1	0032	33	0.	*	1	0118	79	4.	*	1	0204	125	1.	*	1	0250	171	0.	*				
1	0033	34	0.	*	1	0119	80	3.	*	1	0205	126	1.	*	1	0251	172	0.	*				
1	0034	35	0.	*	1	0120	81	3.	*	1	0206	127	1.	*	1	0252	173	0.	*				
1	0035	36	0.	*	1	0121	82	3.	*	1	0207	128	0.	*	1	0253	174	0.	*				
1	0036	37	0.	*	1	0122	83	3.	*	1	0208	129	0.	*	1	0254	175	0.	*				
1	0037	38	0.	*	1	0123	84	3.	*	1	0209	130	0.	*	1	0255	176	0.	*				
1	0038	39	0.	*	1	0124	85	3.	*	1	0210	131	0.	*	1	0256	177	0.	*				
1	0039	40	0.	*	1	0125	86	3.	*	1	0211	132	0.	*	1	0257	178	0.	*				
1	0040	41	0.	*	1	0126	87	3.	*	1	0212	133	0.	*	1	0258	179	0.	*				
1	0041	42	0.	*	1	0127	88	3.	*	1	0213	134	0.	*	1	0259	180	0.	*				
1	0042	43	0.	*	1	0128	89	2.	*	1	0214	135	0.	*	1	0300	181	0.	*				
1	0043	44	0.	*	1	0129	90	2.	*	1	0215	136	0.	*									
1	0044	45	0.	*	1	0130	91	2.	*	1	0216	137	0.	*									
1	0045	46	0.	*	1	0131	92	2.	*	1	0217	138	0.	*									

PEAK FLOW TIME MAXIMUM AVERAGE FLOW

+ (CFS) (HR) 6-HR 24-HR 72-HR post.out
 3.00-HR
 + 9. 1.03 (CFS) 1. 1. 1. 1.
 (INCHES) .492 .492 .492 .492
 (AC-FT) 0. 0. 0. 0.

CUMULATIVE AREA = .01 SQ MI

COMPUTED MUSKINGUM-CUNGE PARAMETERS
 COMPUTATION TIME STEP
 ELEMENT ALPHA M DT DX PEAK TIME TO VOLUME MAXIMUM
 (MIN) (FT) (CFS) (MIN) (IN) CELERITY
 (FPS)
 MAIN 1.59 1.33 .45 27.34 1.73 76.50 .12 1.79

INTERPOLATED TO SPECIFIED COMPUTATION INTERVAL

MAIN 1.59 1.33 1.00 1.61 77.00 .12

CONTINUITY SUMMARY (AC-FT) - INFLOW= .6967E-01 EXCESS= .0000E+00 OUTFLOW= .6248E-01 BASIN STORAGE= .1006E-01 PERCENT ERROR= -4.1

HYDROGRAPH AT STATION RP10
 PLAN 1, RATIO = .61

DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	
1	0000	1	0.	*	1	0046	47	0.	*	1	0132	93	1.	*	1	0218	139	0.						
1	0001	2	0.	*	1	0047	48	0.	*	1	0133	94	1.	*	1	0219	140	0.						
1	0002	3	0.	*	1	0048	49	0.	*	1	0134	95	1.	*	1	0220	141	0.						
1	0003	4	0.	*	1	0049	50	0.	*	1	0135	96	1.	*	1	0221	142	0.						
1	0004	5	0.	*	1	0050	51	0.	*	1	0136	97	1.	*	1	0222	143	0.						
1	0005	6	0.	*	1	0051	52	0.	*	1	0137	98	1.	*	1	0223	144	0.						
1	0006	7	0.	*	1	0052	53	0.	*	1	0138	99	1.	*	1	0224	145	0.						
1	0007	8	0.	*	1	0053	54	0.	*	1	0139	100	1.	*	1	0225	146	0.						
1	0008	9	0.	*	1	0054	55	0.	*	1	0140	101	1.	*	1	0226	147	0.						
1	0009	10	0.	*	1	0055	56	0.	*	1	0141	102	1.	*	1	0227	148	0.						
1	0010	11	0.	*	1	0056	57	0.	*	1	0142	103	1.	*	1	0228	149	0.						
1	0011	12	0.	*	1	0057	58	0.	*	1	0143	104	1.	*	1	0229	150	0.						
1	0012	13	0.	*	1	0058	59	0.	*	1	0144	105	1.	*	1	0230	151	0.						
1	0013	14	0.	*	1	0059	60	0.	*	1	0145	106	1.	*	1	0231	152	0.						
1	0014	15	0.	*	1	0100	61	0.	*	1	0146	107	1.	*	1	0232	153	0.						
1	0015	16	0.	*	1	0101	62	0.	*	1	0147	108	1.	*	1	0233	154	0.						
1	0016	17	0.	*	1	0102	63	0.	*	1	0148	109	1.	*	1	0234	155	0.						
1	0017	18	0.	*	1	0103	64	0.	*	1	0149	110	1.	*	1	0235	156	0.						
1	0018	19	0.	*	1	0104	65	0.	*	1	0150	111	1.	*	1	0236	157	0.						
1	0019	20	0.	*	1	0105	66	0.	*	1	0151	112	1.	*	1	0237	158	0.						
1	0020	21	0.	*	1	0106	67	0.	*	1	0152	113	0.	*	1	0238	159	0.						
1	0021	22	0.	*	1	0107	68	0.	*	1	0153	114	0.	*	1	0239	160	0.						
1	0022	23	0.	*	1	0108	69	0.	*	1	0154	115	0.	*	1	0240	161	0.						
1	0023	24	0.	*	1	0109	70	0.	*	1	0155	116	0.	*	1	0241	162	0.						
1	0024	25	0.	*	1	0110	71	0.	*	1	0156	117	0.	*	1	0242	163	0.						
1	0025	26	0.	*	1	0111	72	0.	*	1	0157	118	0.	*	1	0243	164	0.						
1	0026	27	0.	*	1	0112	73	0.	*	1	0158	119	0.	*	1	0244	165	0.						
1	0027	28	0.	*	1	0113	74	0.	*	1	0159	120	0.	*	1	0245	166	0.						
1	0028	29	0.	*	1	0114	75	0.	*	1	0200	121	0.	*	1	0246	167	0.						
1	0029	30	0.	*	1	0115	76	0.	*	1	0201	122	0.	*	1	0247	168	0.						
1	0030	31	0.	*	1	0116	77	1.	*	1	0202	123	0.	*	1	0248	169	0.						
1	0031	32	0.	*	1	0117	78	2.	*	1	0203	124	0.	*	1	0249	170	0.						
1	0032	33	0.	*	1	0118	79	1.	*	1	0204	125	0.	*	1	0250	171	0.						
1	0033	34	0.	*	1	0119	80	1.	*	1	0205	126	0.	*	1	0251	172	0.						
1	0034	35	0.	*	1	0120	81	1.	*	1	0206	127	0.	*	1	0252	173	0.						
1	0035	36	0.	*	1	0121	82	1.	*	1	0207	128	0.	*	1	0253	174	0.						
1	0036	37	0.	*	1	0122	83	1.	*	1	0208	129	0.	*	1	0254	175	0.						
1	0037	38	0.	*	1	0123	84	1.	*	1	0209	130	0.	*	1	0255	176	0.						
1	0038	39	0.	*	1	0124	85	1.	*	1	0210	131	0.	*	1	0256	177	0.						
1	0039	40	0.	*	1	0125	86	1.	*	1	0211	132	0.	*	1	0257	178	0.						
1	0040	41	0.	*	1	0126	87	1.	*	1	0212	133	0.	*	1	0258	179	0.						
1	0041	42	0.	*	1	0127	88	1.	*	1	0213	134	0.	*	1	0259	180	0.						
1	0042	43	0.	*	1	0128	89	1.	*	1	0214	135	0.	*	1	0300	181	0.						
1	0043	44	0.	*	1	0129	90	1.	*	1	0215	136	0.	*										
1	0044	45	0.	*	1	0130	91	1.	*	1	0216	137	0.	*										
1	0045	46	0.	*	1	0131	92	1.	*	1	0217	138	0.	*										

PEAK FLOW TIME MAXIMUM AVERAGE FLOW
 6-HR 24-HR 72-HR 3.00-HR
 + (CFS) (HR) (CFS)

														post.out		
1	0011	12	.00	.00	.00	0.	*	1	0142	103	.00	.00	.00	5.		
1	0012	13	.00	.00	.00	0.	*	1	0143	104	.00	.00	.00	4.		
1	0013	14	.00	.00	.00	0.	*	1	0144	105	.00	.00	.00	4.		
1	0014	15	.00	.00	.00	0.	*	1	0145	106	.00	.00	.00	4.		
1	0015	16	.00	.00	.00	0.	*	1	0146	107	.00	.00	.00	4.		
1	0016	17	.00	.00	.00	0.	*	1	0147	108	.00	.00	.00	4.		
1	0017	18	.00	.00	.00	0.	*	1	0148	109	.00	.00	.00	4.		
1	0018	19	.00	.00	.00	0.	*	1	0149	110	.00	.00	.00	3.		
1	0019	20	.00	.00	.00	0.	*	1	0150	111	.00	.00	.00	3.		
1	0020	21	.00	.00	.00	0.	*	1	0151	112	.00	.00	.00	3.		
1	0021	22	.00	.00	.00	0.	*	1	0152	113	.00	.00	.00	3.		
1	0022	23	.00	.00	.00	0.	*	1	0153	114	.00	.00	.00	3.		
1	0023	24	.00	.00	.00	0.	*	1	0154	115	.00	.00	.00	3.		
1	0024	25	.00	.00	.00	0.	*	1	0155	116	.00	.00	.00	2.		
1	0025	26	.00	.00	.00	0.	*	1	0156	117	.00	.00	.00	2.		
1	0026	27	.00	.00	.00	0.	*	1	0157	118	.00	.00	.00	2.		
1	0027	28	.00	.00	.00	0.	*	1	0158	119	.00	.00	.00	2.		
1	0028	29	.00	.00	.00	0.	*	1	0159	120	.00	.00	.00	2.		
1	0029	30	.00	.00	.00	0.	*	1	0200	121	.00	.00	.00	2.		
1	0030	31	.00	.00	.00	0.	*	1	0201	122	.00	.00	.00	2.		
1	0031	32	.11	.11	.00	0.	*	1	0202	123	.00	.00	.00	2.		
1	0032	33	.11	.11	.00	0.	*	1	0203	124	.00	.00	.00	2.		
1	0033	34	.11	.11	.00	0.	*	1	0204	125	.00	.00	.00	2.		
1	0034	35	.11	.11	.00	0.	*	1	0205	126	.00	.00	.00	2.		
1	0035	36	.11	.11	.00	0.	*	1	0206	127	.00	.00	.00	2.		
1	0036	37	.09	.09	.00	0.	*	1	0207	128	.00	.00	.00	1.		
1	0037	38	.09	.08	.01	0.	*	1	0208	129	.00	.00	.00	1.		
1	0038	39	.09	.08	.01	0.	*	1	0209	130	.00	.00	.00	1.		
1	0039	40	.09	.07	.02	0.	*	1	0210	131	.00	.00	.00	1.		
1	0040	41	.09	.07	.02	0.	*	1	0211	132	.00	.00	.00	1.		
1	0041	42	.06	.05	.02	0.	*	1	0212	133	.00	.00	.00	1.		
1	0042	43	.06	.04	.02	0.	*	1	0213	134	.00	.00	.00	1.		
1	0043	44	.06	.04	.02	1.	*	1	0214	135	.00	.00	.00	1.		
1	0044	45	.06	.04	.02	1.	*	1	0215	136	.00	.00	.00	1.		
1	0045	46	.06	.04	.02	1.	*	1	0216	137	.00	.00	.00	1.		
1	0046	47	.04	.02	.01	1.	*	1	0217	138	.00	.00	.00	1.		
1	0047	48	.04	.02	.01	2.	*	1	0218	139	.00	.00	.00	1.		
1	0048	49	.04	.02	.02	2.	*	1	0219	140	.00	.00	.00	1.		
1	0049	50	.04	.02	.02	3.	*	1	0220	141	.00	.00	.00	1.		
1	0050	51	.04	.02	.02	4.	*	1	0221	142	.00	.00	.00	1.		
1	0051	52	.02	.01	.01	4.	*	1	0222	143	.00	.00	.00	1.		
1	0052	53	.02	.01	.01	5.	*	1	0223	144	.00	.00	.00	1.		
1	0053	54	.02	.01	.01	6.	*	1	0224	145	.00	.00	.00	1.		
1	0054	55	.02	.01	.01	7.	*	1	0225	146	.00	.00	.00	1.		
1	0055	56	.02	.01	.01	7.	*	1	0226	147	.00	.00	.00	1.		
1	0056	57	.02	.01	.01	8.	*	1	0227	148	.00	.00	.00	1.		
1	0057	58	.02	.01	.01	9.	*	1	0228	149	.00	.00	.00	1.		
1	0058	59	.02	.01	.01	9.	*	1	0229	150	.00	.00	.00	1.		
1	0059	60	.02	.01	.01	10.	*	1	0230	151	.00	.00	.00	1.		
1	0100	61	.02	.01	.01	11.	*	1	0231	152	.00	.00	.00	1.		
1	0101	62	.01	.01	.01	11.	*	1	0232	153	.00	.00	.00	1.		
1	0102	63	.01	.01	.01	11.	*	1	0233	154	.00	.00	.00	1.		
1	0103	64	.01	.01	.01	12.	*	1	0234	155	.00	.00	.00	1.		
1	0104	65	.01	.01	.01	12.	*	1	0235	156	.00	.00	.00	1.		
1	0105	66	.01	.01	.01	12.	*	1	0236	157	.00	.00	.00	1.		
1	0106	67	.01	.01	.01	12.	*	1	0237	158	.00	.00	.00	1.		
1	0107	68	.01	.01	.01	12.	*	1	0238	159	.00	.00	.00	1.		
1	0108	69	.01	.01	.01	12.	*	1	0239	160	.00	.00	.00	1.		
1	0109	70	.01	.01	.01	12.	*	1	0240	161	.00	.00	.00	1.		
1	0110	71	.01	.01	.01	12.	*	1	0241	162	.00	.00	.00	1.		
1	0111	72	.01	.00	.00	12.	*	1	0242	163	.00	.00	.00	1.		
1	0112	73	.01	.00	.00	12.	*	1	0243	164	.00	.00	.00	1.		
1	0113	74	.01	.00	.00	12.	*	1	0244	165	.00	.00	.00	1.		
1	0114	75	.01	.00	.00	11.	*	1	0245	166	.00	.00	.00	1.		
1	0115	76	.01	.00	.00	11.	*	1	0246	167	.00	.00	.00	1.		
1	0116	77	.01	.00	.00	11.	*	1	0247	168	.00	.00	.00	1.		
1	0117	78	.01	.00	.00	11.	*	1	0248	169	.00	.00	.00	1.		
1	0118	79	.01	.00	.00	10.	*	1	0249	170	.00	.00	.00	1.		
1	0119	80	.01	.00	.00	10.	*	1	0250	171	.00	.00	.00	1.		
1	0120	81	.01	.00	.00	10.	*	1	0251	172	.00	.00	.00	1.		
1	0121	82	.01	.00	.00	10.	*	1	0252	173	.00	.00	.00	1.		
1	0122	83	.01	.00	.00	9.	*	1	0253	174	.00	.00	.00	1.		
1	0123	84	.01	.00	.00	9.	*	1	0254	175	.00	.00	.00	1.		
1	0124	85	.01	.00	.00	9.	*	1	0255	176	.00	.00	.00	1.		
1	0125	86	.01	.00	.00	8.	*	1	0256	177	.00	.00	.00	1.		
1	0126	87	.01	.00	.00	8.	*	1	0257	178	.00	.00	.00	1.		
1	0127	88	.01	.00	.00	8.	*	1	0258	179	.00	.00	.00	1.		
1	0128	89	.01	.00	.00	8.	*	1	0259	180	.00	.00	.00	1.		
1	0129	90	.01	.00	.00	7.	*	1	0300	181	.00	.00	.00	1.		
1	0130	91	.01	.00	.00	7.	*									

TOTAL RAINFALL = 2.13, TOTAL LOSS = 1.61, TOTAL EXCESS = .52

PEAK FLOW	TIME	MAXIMUM AVERAGE FLOW				
+	(CFS)	(HR)	6-HR	24-HR	72-HR	3.00-HR
+	12.	1.12	3.	3.	3.	3.

(INCHES) .501 .501 .501 post.out
 (AC-FT) 1. 1. 1. .501
 CUMULATIVE AREA = .03 SQ MI

HYDROGRAPH AT STATION BP11
 PLAN 1, RATIO = 1.00

DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	*	DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
1	0000	1	.00	.00	.00	0.	*	1	0131	92	.00	.00	.00	7.		
1	0001	2	.00	.00	.00	0.	*	1	0132	93	.00	.00	.00	7.		
1	0002	3	.00	.00	.00	0.	*	1	0133	94	.00	.00	.00	7.		
1	0003	4	.00	.00	.00	0.	*	1	0134	95	.00	.00	.00	6.		
1	0004	5	.00	.00	.00	0.	*	1	0135	96	.00	.00	.00	6.		
1	0005	6	.00	.00	.00	0.	*	1	0136	97	.00	.00	.00	6.		
1	0006	7	.00	.00	.00	0.	*	1	0137	98	.00	.00	.00	6.		
1	0007	8	.00	.00	.00	0.	*	1	0138	99	.00	.00	.00	5.		
1	0008	9	.00	.00	.00	0.	*	1	0139	100	.00	.00	.00	5.		
1	0009	10	.00	.00	.00	0.	*	1	0140	101	.00	.00	.00	5.		
1	0010	11	.00	.00	.00	0.	*	1	0141	102	.00	.00	.00	5.		
1	0011	12	.00	.00	.00	0.	*	1	0142	103	.00	.00	.00	5.		
1	0012	13	.00	.00	.00	0.	*	1	0143	104	.00	.00	.00	4.		
1	0013	14	.00	.00	.00	0.	*	1	0144	105	.00	.00	.00	4.		
1	0014	15	.00	.00	.00	0.	*	1	0145	106	.00	.00	.00	4.		
1	0015	16	.00	.00	.00	0.	*	1	0146	107	.00	.00	.00	4.		
1	0016	17	.00	.00	.00	0.	*	1	0147	108	.00	.00	.00	4.		
1	0017	18	.00	.00	.00	0.	*	1	0148	109	.00	.00	.00	4.		
1	0018	19	.00	.00	.00	0.	*	1	0149	110	.00	.00	.00	3.		
1	0019	20	.00	.00	.00	0.	*	1	0150	111	.00	.00	.00	3.		
1	0020	21	.00	.00	.00	0.	*	1	0151	112	.00	.00	.00	3.		
1	0021	22	.00	.00	.00	0.	*	1	0152	113	.00	.00	.00	3.		
1	0022	23	.00	.00	.00	0.	*	1	0153	114	.00	.00	.00	3.		
1	0023	24	.00	.00	.00	0.	*	1	0154	115	.00	.00	.00	3.		
1	0024	25	.00	.00	.00	0.	*	1	0155	116	.00	.00	.00	2.		
1	0025	26	.00	.00	.00	0.	*	1	0156	117	.00	.00	.00	2.		
1	0026	27	.00	.00	.00	0.	*	1	0157	118	.00	.00	.00	2.		
1	0027	28	.00	.00	.00	0.	*	1	0158	119	.00	.00	.00	2.		
1	0028	29	.00	.00	.00	0.	*	1	0159	120	.00	.00	.00	2.		
1	0029	30	.00	.00	.00	0.	*	1	0200	121	.00	.00	.00	2.		
1	0030	31	.00	.00	.00	0.	*	1	0201	122	.00	.00	.00	2.		
1	0031	32	.11	.11	.00	0.	*	1	0202	123	.00	.00	.00	2.		
1	0032	33	.11	.11	.00	0.	*	1	0203	124	.00	.00	.00	2.		
1	0033	34	.11	.11	.00	0.	*	1	0204	125	.00	.00	.00	2.		
1	0034	35	.11	.11	.00	0.	*	1	0205	126	.00	.00	.00	2.		
1	0035	36	.11	.11	.00	0.	*	1	0206	127	.00	.00	.00	2.		
1	0036	37	.09	.09	.00	0.	*	1	0207	128	.00	.00	.00	1.		
1	0037	38	.09	.08	.01	0.	*	1	0208	129	.00	.00	.00	1.		
1	0038	39	.09	.08	.01	0.	*	1	0209	130	.00	.00	.00	1.		
1	0039	40	.09	.07	.02	0.	*	1	0210	131	.00	.00	.00	1.		
1	0040	41	.09	.07	.02	0.	*	1	0211	132	.00	.00	.00	1.		
1	0041	42	.06	.05	.02	0.	*	1	0212	133	.00	.00	.00	1.		
1	0042	43	.06	.04	.02	0.	*	1	0213	134	.00	.00	.00	1.		
1	0043	44	.06	.04	.02	1.	*	1	0214	135	.00	.00	.00	1.		
1	0044	45	.06	.04	.02	1.	*	1	0215	136	.00	.00	.00	1.		
1	0045	46	.06	.04	.02	1.	*	1	0216	137	.00	.00	.00	1.		
1	0046	47	.04	.02	.01	1.	*	1	0217	138	.00	.00	.00	1.		
1	0047	48	.04	.02	.01	2.	*	1	0218	139	.00	.00	.00	1.		
1	0048	49	.04	.02	.02	2.	*	1	0219	140	.00	.00	.00	1.		
1	0049	50	.04	.02	.02	3.	*	1	0220	141	.00	.00	.00	1.		
1	0050	51	.04	.02	.02	4.	*	1	0221	142	.00	.00	.00	1.		
1	0051	52	.02	.01	.01	4.	*	1	0222	143	.00	.00	.00	1.		
1	0052	53	.02	.01	.01	5.	*	1	0223	144	.00	.00	.00	1.		
1	0053	54	.02	.01	.01	6.	*	1	0224	145	.00	.00	.00	1.		
1	0054	55	.02	.01	.01	7.	*	1	0225	146	.00	.00	.00	1.		
1	0055	56	.02	.01	.01	7.	*	1	0226	147	.00	.00	.00	1.		
1	0056	57	.02	.01	.01	8.	*	1	0227	148	.00	.00	.00	1.		
1	0057	58	.02	.01	.01	9.	*	1	0228	149	.00	.00	.00	1.		
1	0058	59	.02	.01	.01	9.	*	1	0229	150	.00	.00	.00	1.		
1	0059	60	.02	.01	.01	10.	*	1	0230	151	.00	.00	.00	1.		
1	0100	61	.02	.01	.01	11.	*	1	0231	152	.00	.00	.00	1.		
1	0101	62	.01	.01	.01	11.	*	1	0232	153	.00	.00	.00	1.		
1	0102	63	.01	.01	.01	11.	*	1	0233	154	.00	.00	.00	1.		
1	0103	64	.01	.01	.01	12.	*	1	0234	155	.00	.00	.00	1.		
1	0104	65	.01	.01	.01	12.	*	1	0235	156	.00	.00	.00	1.		
1	0105	66	.01	.01	.01	12.	*	1	0236	157	.00	.00	.00	1.		
1	0106	67	.01	.01	.01	12.	*	1	0237	158	.00	.00	.00	1.		
1	0107	68	.01	.01	.01	12.	*	1	0238	159	.00	.00	.00	1.		
1	0108	69	.01	.01	.01	12.	*	1	0239	160	.00	.00	.00	1.		
1	0109	70	.01	.01	.01	12.	*	1	0240	161	.00	.00	.00	1.		
1	0110	71	.01	.01	.01	12.	*	1	0241	162	.00	.00	.00	1.		
1	0111	72	.01	.00	.00	12.	*	1	0242	163	.00	.00	.00	1.		
1	0112	73	.01	.00	.00	12.	*	1	0243	164	.00	.00	.00	1.		
1	0113	74	.01	.00	.00	12.	*	1	0244	165	.00	.00	.00	1.		
1	0114	75	.01	.00	.00	11.	*	1	0245	166	.00	.00	.00	1.		

post.out														
1	0115	76	.01	.00	.00	11.	*	1	0246	167	.00	.00	.00	1.
1	0116	77	.01	.00	.00	11.	*	1	0247	168	.00	.00	.00	1.
1	0117	78	.01	.00	.00	11.	*	1	0248	169	.00	.00	.00	1.
1	0118	79	.01	.00	.00	10.	*	1	0249	170	.00	.00	.00	1.
1	0119	80	.01	.00	.00	10.	*	1	0250	171	.00	.00	.00	1.
1	0120	81	.01	.00	.00	10.	*	1	0251	172	.00	.00	.00	1.
1	0121	82	.01	.00	.00	10.	*	1	0252	173	.00	.00	.00	1.
1	0122	83	.01	.00	.00	9.	*	1	0253	174	.00	.00	.00	1.
1	0123	84	.01	.00	.00	9.	*	1	0254	175	.00	.00	.00	1.
1	0124	85	.01	.00	.00	9.	*	1	0255	176	.00	.00	.00	1.
1	0125	86	.01	.00	.00	8.	*	1	0256	177	.00	.00	.00	1.
1	0126	87	.01	.00	.00	8.	*	1	0257	178	.00	.00	.00	1.
1	0127	88	.01	.00	.00	8.	*	1	0258	179	.00	.00	.00	1.
1	0128	89	.01	.00	.00	8.	*	1	0259	180	.00	.00	.00	1.
1	0129	90	.01	.00	.00	7.	*	1	0300	181	.00	.00	.00	1.
1	0130	91	.01	.00	.00	7.	*							

TOTAL RAINFALL = 2.13, TOTAL LOSS = 1.61, TOTAL EXCESS = .52

PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
(CFS)	(HR)	(CFS)	6-HR	24-HR	72-HR	3.00-HR
+	12.	1.12	3.	3.	3.	3.
		(INCHES)	.501	.501	.501	.501
		(AC-FT)	1.	1.	1.	1.
CUMULATIVE AREA =			.03 SQ MI			

HYDROGRAPH AT STATION BP11
PLAN 1, RATIO = .61

DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	*	DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
1	0000	1	.00	.00	.00	0.	0.	*	1	0131	92	.00	.00	.00	2.	
1	0001	2	.00	.00	.00	0.	0.	*	1	0132	93	.00	.00	.00	2.	
1	0002	3	.00	.00	.00	0.	0.	*	1	0133	94	.00	.00	.00	2.	
1	0003	4	.00	.00	.00	0.	0.	*	1	0134	95	.00	.00	.00	2.	
1	0004	5	.00	.00	.00	0.	0.	*	1	0135	96	.00	.00	.00	2.	
1	0005	6	.00	.00	.00	0.	0.	*	1	0136	97	.00	.00	.00	2.	
1	0006	7	.00	.00	.00	0.	0.	*	1	0137	98	.00	.00	.00	2.	
1	0007	8	.00	.00	.00	0.	0.	*	1	0138	99	.00	.00	.00	2.	
1	0008	9	.00	.00	.00	0.	0.	*	1	0139	100	.00	.00	.00	2.	
1	0009	10	.00	.00	.00	0.	0.	*	1	0140	101	.00	.00	.00	2.	
1	0010	11	.00	.00	.00	0.	0.	*	1	0141	102	.00	.00	.00	2.	
1	0011	12	.00	.00	.00	0.	0.	*	1	0142	103	.00	.00	.00	1.	
1	0012	13	.00	.00	.00	0.	0.	*	1	0143	104	.00	.00	.00	1.	
1	0013	14	.00	.00	.00	0.	0.	*	1	0144	105	.00	.00	.00	1.	
1	0014	15	.00	.00	.00	0.	0.	*	1	0145	106	.00	.00	.00	1.	
1	0015	16	.00	.00	.00	0.	0.	*	1	0146	107	.00	.00	.00	1.	
1	0016	17	.00	.00	.00	0.	0.	*	1	0147	108	.00	.00	.00	1.	
1	0017	18	.00	.00	.00	0.	0.	*	1	0148	109	.00	.00	.00	1.	
1	0018	19	.00	.00	.00	0.	0.	*	1	0149	110	.00	.00	.00	1.	
1	0019	20	.00	.00	.00	0.	0.	*	1	0150	111	.00	.00	.00	1.	
1	0020	21	.00	.00	.00	0.	0.	*	1	0151	112	.00	.00	.00	1.	
1	0021	22	.00	.00	.00	0.	0.	*	1	0152	113	.00	.00	.00	1.	
1	0022	23	.00	.00	.00	0.	0.	*	1	0153	114	.00	.00	.00	1.	
1	0023	24	.00	.00	.00	0.	0.	*	1	0154	115	.00	.00	.00	1.	
1	0024	25	.00	.00	.00	0.	0.	*	1	0155	116	.00	.00	.00	1.	
1	0025	26	.00	.00	.00	0.	0.	*	1	0156	117	.00	.00	.00	1.	
1	0026	27	.00	.00	.00	0.	0.	*	1	0157	118	.00	.00	.00	1.	
1	0027	28	.00	.00	.00	0.	0.	*	1	0158	119	.00	.00	.00	1.	
1	0028	29	.00	.00	.00	0.	0.	*	1	0159	120	.00	.00	.00	1.	
1	0029	30	.00	.00	.00	0.	0.	*	1	0200	121	.00	.00	.00	1.	
1	0030	31	.00	.00	.00	0.	0.	*	1	0201	122	.00	.00	.00	1.	
1	0031	32	.07	.07	.00	0.	0.	*	1	0202	123	.00	.00	.00	1.	
1	0032	33	.07	.07	.00	0.	0.	*	1	0203	124	.00	.00	.00	1.	
1	0033	34	.07	.07	.00	0.	0.	*	1	0204	125	.00	.00	.00	1.	
1	0034	35	.07	.07	.00	0.	0.	*	1	0205	126	.00	.00	.00	1.	
1	0035	36	.07	.07	.00	0.	0.	*	1	0206	127	.00	.00	.00	1.	
1	0036	37	.05	.05	.00	0.	0.	*	1	0207	128	.00	.00	.00	0.	
1	0037	38	.05	.05	.00	0.	0.	*	1	0208	129	.00	.00	.00	0.	
1	0038	39	.05	.05	.00	0.	0.	*	1	0209	130	.00	.00	.00	0.	
1	0039	40	.05	.05	.00	0.	0.	*	1	0210	131	.00	.00	.00	0.	
1	0040	41	.05	.05	.00	0.	0.	*	1	0211	132	.00	.00	.00	0.	
1	0041	42	.04	.04	.00	0.	0.	*	1	0212	133	.00	.00	.00	0.	
1	0042	43	.04	.04	.00	0.	0.	*	1	0213	134	.00	.00	.00	0.	
1	0043	44	.04	.03	.00	0.	0.	*	1	0214	135	.00	.00	.00	0.	
1	0044	45	.04	.03	.00	0.	0.	*	1	0215	136	.00	.00	.00	0.	
1	0045	46	.04	.03	.00	0.	0.	*	1	0216	137	.00	.00	.00	0.	
1	0046	47	.02	.02	.00	0.	0.	*	1	0217	138	.00	.00	.00	0.	
1	0047	48	.02	.02	.00	0.	0.	*	1	0218	139	.00	.00	.00	0.	
1	0048	49	.02	.02	.00	0.	0.	*	1	0219	140	.00	.00	.00	0.	

post.out														
1	0049	50	.02	.02	.00	0.	*	1	0220	141	.00	.00	.00	0.
1	0050	51	.02	.02	.00	0.	*	1	0221	142	.00	.00	.00	0.
1	0051	52	.01	.01	.00	0.	*	1	0222	143	.00	.00	.00	0.
1	0052	53	.01	.01	.00	0.	*	1	0223	144	.00	.00	.00	0.
1	0053	54	.01	.01	.00	1.	*	1	0224	145	.00	.00	.00	0.
1	0054	55	.01	.01	.00	1.	*	1	0225	146	.00	.00	.00	0.
1	0055	56	.01	.01	.00	1.	*	1	0226	147	.00	.00	.00	0.
1	0056	57	.01	.01	.00	1.	*	1	0227	148	.00	.00	.00	0.
1	0057	58	.01	.01	.00	1.	*	1	0228	149	.00	.00	.00	0.
1	0058	59	.01	.01	.00	1.	*	1	0229	150	.00	.00	.00	0.
1	0059	60	.01	.01	.00	1.	*	1	0230	151	.00	.00	.00	0.
1	0100	61	.01	.01	.00	2.	*	1	0231	152	.00	.00	.00	0.
1	0101	62	.01	.01	.00	2.	*	1	0232	153	.00	.00	.00	0.
1	0102	63	.01	.01	.00	2.	*	1	0233	154	.00	.00	.00	0.
1	0103	64	.01	.01	.00	2.	*	1	0234	155	.00	.00	.00	0.
1	0104	65	.01	.01	.00	2.	*	1	0235	156	.00	.00	.00	0.
1	0105	66	.01	.01	.00	2.	*	1	0236	157	.00	.00	.00	0.
1	0106	67	.01	.00	.00	2.	*	1	0237	158	.00	.00	.00	0.
1	0107	68	.01	.00	.00	3.	*	1	0238	159	.00	.00	.00	0.
1	0108	69	.01	.00	.00	3.	*	1	0239	160	.00	.00	.00	0.
1	0109	70	.01	.00	.00	3.	*	1	0240	161	.00	.00	.00	0.
1	0110	71	.01	.00	.00	3.	*	1	0241	162	.00	.00	.00	0.
1	0111	72	.00	.00	.00	3.	*	1	0242	163	.00	.00	.00	0.
1	0112	73	.00	.00	.00	3.	*	1	0243	164	.00	.00	.00	0.
1	0113	74	.00	.00	.00	3.	*	1	0244	165	.00	.00	.00	0.
1	0114	75	.00	.00	.00	3.	*	1	0245	166	.00	.00	.00	0.
1	0115	76	.00	.00	.00	3.	*	1	0246	167	.00	.00	.00	0.
1	0116	77	.00	.00	.00	3.	*	1	0247	168	.00	.00	.00	0.
1	0117	78	.00	.00	.00	3.	*	1	0248	169	.00	.00	.00	0.
1	0118	79	.00	.00	.00	3.	*	1	0249	170	.00	.00	.00	0.
1	0119	80	.00	.00	.00	3.	*	1	0250	171	.00	.00	.00	0.
1	0120	81	.00	.00	.00	3.	*	1	0251	172	.00	.00	.00	0.
1	0121	82	.00	.00	.00	3.	*	1	0252	173	.00	.00	.00	0.
1	0122	83	.00	.00	.00	3.	*	1	0253	174	.00	.00	.00	0.
1	0123	84	.00	.00	.00	2.	*	1	0254	175	.00	.00	.00	0.
1	0124	85	.00	.00	.00	2.	*	1	0255	176	.00	.00	.00	0.
1	0125	86	.00	.00	.00	2.	*	1	0256	177	.00	.00	.00	0.
1	0126	87	.00	.00	.00	2.	*	1	0257	178	.00	.00	.00	0.
1	0127	88	.00	.00	.00	2.	*	1	0258	179	.00	.00	.00	0.
1	0128	89	.00	.00	.00	2.	*	1	0259	180	.00	.00	.00	0.
1	0129	90	.00	.00	.00	2.	*	1	0300	181	.00	.00	.00	0.
1	0130	91	.00	.00	.00	2.	*							

TOTAL RAINFALL = 1.29, TOTAL LOSS = 1.16, TOTAL EXCESS = .13

PEAK FLOW	TIME	6-HR	24-HR	72-HR	3.00-HR
(CFS)	(HR)	(CFS)	(INCHES)	(AC-FT)	(CFS)
+	3.	1.22	1.	1.	1.
			.124	.124	.124
			0.	0.	0.

CUMULATIVE AREA = .03 SQ MI

*** **

 * *
 145 KK * RP11 *
 * *

Route BP11 in channel to Outlet OP2

HYDROGRAPH ROUTING DATA

147 RD MUSKINGUM-CUNGE CHANNEL ROUTING
 L 3006. CHANNEL LENGTH
 S .0200 SLOPE
 N .040 CHANNEL ROUGHNESS COEFFICIENT
 CA .00 CONTRIBUTING AREA
 SHAPE TRAP CHANNEL SHAPE
 WD .00 BOTTOM WIDTH OR DIAMETER
 Z 7.00 SIDE SLOPE

 COMPUTED MUSKINGUM-CUNGE PARAMETERS
 COMPUTATION TIME STEP

ELEMENT	ALPHA	M	DT	DX	PEAK	TIME TO PEAK	VOLUME	MAXIMUM CELERITY
			(MIN)	(FT)	(CFS)	(MIN)	(IN)	(FPS)
MAIN	1.73	1.33	1.00	100.20	12.41	80.00	.48	3.17

post.out

INTERPOLATED TO SPECIFIED COMPUTATION INTERVAL

MAIN 1.73 1.33 1.00 12.41 80.00 .48

CONTINUITY SUMMARY (AC-FT) - INFLOW= .8187E+00 EXCESS= .0000E+00 OUTFLOW= .7818E+00 BASIN STORAGE= .4347E-01 PERCENT ERROR= -.8

HYDROGRAPH AT STATION RP11
PLAN 1, RATIO = 1.00

DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*
1	0000	1	0.	*	1	0046	47	0.	*	1	0132	93	10.	*	1	0218	139	2.	*				
1	0001	2	0.	*	1	0047	48	0.	*	1	0133	94	10.	*	1	0219	140	2.	*				
1	0002	3	0.	*	1	0048	49	0.	*	1	0134	95	10.	*	1	0220	141	2.	*				
1	0003	4	0.	*	1	0049	50	0.	*	1	0135	96	10.	*	1	0221	142	2.	*				
1	0004	5	0.	*	1	0050	51	0.	*	1	0136	97	9.	*	1	0222	143	2.	*				
1	0005	6	0.	*	1	0051	52	0.	*	1	0137	98	9.	*	1	0223	144	2.	*				
1	0006	7	0.	*	1	0052	53	0.	*	1	0138	99	9.	*	1	0224	145	2.	*				
1	0007	8	0.	*	1	0053	54	0.	*	1	0139	100	9.	*	1	0225	146	2.	*				
1	0008	9	0.	*	1	0054	55	0.	*	1	0140	101	8.	*	1	0226	147	2.	*				
1	0009	10	0.	*	1	0055	56	0.	*	1	0141	102	8.	*	1	0227	148	2.	*				
1	0010	11	0.	*	1	0056	57	0.	*	1	0142	103	8.	*	1	0228	149	2.	*				
1	0011	12	0.	*	1	0057	58	0.	*	1	0143	104	8.	*	1	0229	150	1.	*				
1	0012	13	0.	*	1	0058	59	0.	*	1	0144	105	7.	*	1	0230	151	1.	*				
1	0013	14	0.	*	1	0059	60	0.	*	1	0145	106	7.	*	1	0231	152	1.	*				
1	0014	15	0.	*	1	0100	61	0.	*	1	0146	107	7.	*	1	0232	153	1.	*				
1	0015	16	0.	*	1	0101	62	0.	*	1	0147	108	7.	*	1	0233	154	1.	*				
1	0016	17	0.	*	1	0102	63	0.	*	1	0148	109	7.	*	1	0234	155	1.	*				
1	0017	18	0.	*	1	0103	64	0.	*	1	0149	110	6.	*	1	0235	156	1.	*				
1	0018	19	0.	*	1	0104	65	0.	*	1	0150	111	6.	*	1	0236	157	1.	*				
1	0019	20	0.	*	1	0105	66	0.	*	1	0151	112	6.	*	1	0237	158	1.	*				
1	0020	21	0.	*	1	0106	67	0.	*	1	0152	113	6.	*	1	0238	159	1.	*				
1	0021	22	0.	*	1	0107	68	0.	*	1	0153	114	6.	*	1	0239	160	1.	*				
1	0022	23	0.	*	1	0108	69	0.	*	1	0154	115	6.	*	1	0240	161	1.	*				
1	0023	24	0.	*	1	0109	70	3.	*	1	0155	116	5.	*	1	0241	162	1.	*				
1	0024	25	0.	*	1	0110	71	9.	*	1	0156	117	5.	*	1	0242	163	1.	*				
1	0025	26	0.	*	1	0111	72	8.	*	1	0157	118	5.	*	1	0243	164	1.	*				
1	0026	27	0.	*	1	0112	73	9.	*	1	0158	119	5.	*	1	0244	165	1.	*				
1	0027	28	0.	*	1	0113	74	10.	*	1	0159	120	5.	*	1	0245	166	1.	*				
1	0028	29	0.	*	1	0114	75	10.	*	1	0200	121	5.	*	1	0246	167	1.	*				
1	0029	30	0.	*	1	0115	76	11.	*	1	0201	122	4.	*	1	0247	168	1.	*				
1	0030	31	0.	*	1	0116	77	12.	*	1	0202	123	4.	*	1	0248	169	1.	*				
1	0031	32	0.	*	1	0117	78	12.	*	1	0203	124	4.	*	1	0249	170	1.	*				
1	0032	33	0.	*	1	0118	79	12.	*	1	0204	125	4.	*	1	0250	171	1.	*				
1	0033	34	0.	*	1	0119	80	12.	*	1	0205	126	4.	*	1	0251	172	1.	*				
1	0034	35	0.	*	1	0120	81	12.	*	1	0206	127	4.	*	1	0252	173	1.	*				
1	0035	36	0.	*	1	0121	82	12.	*	1	0207	128	3.	*	1	0253	174	1.	*				
1	0036	37	0.	*	1	0122	83	12.	*	1	0208	129	3.	*	1	0254	175	1.	*				
1	0037	38	0.	*	1	0123	84	12.	*	1	0209	130	3.	*	1	0255	176	1.	*				
1	0038	39	0.	*	1	0124	85	12.	*	1	0210	131	3.	*	1	0256	177	1.	*				
1	0039	40	0.	*	1	0125	86	12.	*	1	0211	132	3.	*	1	0257	178	1.	*				
1	0040	41	0.	*	1	0126	87	12.	*	1	0212	133	3.	*	1	0258	179	1.	*				
1	0041	42	0.	*	1	0127	88	12.	*	1	0213	134	3.	*	1	0259	180	1.	*				
1	0042	43	0.	*	1	0128	89	11.	*	1	0214	135	3.	*	1	0300	181	1.	*				
1	0043	44	0.	*	1	0129	90	11.	*	1	0215	136	2.	*					*				
1	0044	45	0.	*	1	0130	91	11.	*	1	0216	137	2.	*					*				
1	0045	46	0.	*	1	0131	92	11.	*	1	0217	138	2.	*					*				

PEAK FLOW	TIME	MAXIMUM AVERAGE FLOW			
(CFS)	(HR)	6-HR	24-HR	72-HR	3.00-HR
12.	1.33	3.	3.	3.	3.
		(INCHES)	.478	.478	.478
		(AC-FT)	1.	1.	1.

CUMULATIVE AREA = .03 SQ MI

COMPUTED MUSKINGUM-CUNGE PARAMETERS								
ELEMENT	ALPHA	COMPUTATION TIME STEP			PEAK	TIME TO PEAK	VOLUME	MAXIMUM CELERITY
		M	DT	DX				
MAIN	1.73	1.33	1.00	68.32	2.82	90.00	.11	2.18

INTERPOLATED TO SPECIFIED COMPUTATION INTERVAL

post.out

MAIN 1.73 1.33 1.00 2.82 90.00 .11

CONTINUITY SUMMARY (AC-FT) - INFLOW= .2023E+00 EXCESS= .0000E+00 OUTFLOW= .1846E+00 BASIN STORAGE= .2037E-01 PERCENT ERROR= -1.3

HYDROGRAPH AT STATION RP11
PLAN 1, RATIO = .61

DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*
1	0000	1	0.	*	1	0046	47	0.	*	1	0132	93	3.	*	1	0218	139	1.					
1	0001	2	0.	*	1	0047	48	0.	*	1	0133	94	3.	*	1	0219	140	1.					
1	0002	3	0.	*	1	0048	49	0.	*	1	0134	95	3.	*	1	0220	141	1.					
1	0003	4	0.	*	1	0049	50	0.	*	1	0135	96	3.	*	1	0221	142	1.					
1	0004	5	0.	*	1	0050	51	0.	*	1	0136	97	3.	*	1	0222	143	1.					
1	0005	6	0.	*	1	0051	52	0.	*	1	0137	98	3.	*	1	0223	144	1.					
1	0006	7	0.	*	1	0052	53	0.	*	1	0138	99	3.	*	1	0224	145	1.					
1	0007	8	0.	*	1	0053	54	0.	*	1	0139	100	3.	*	1	0225	146	1.					
1	0008	9	0.	*	1	0054	55	0.	*	1	0140	101	3.	*	1	0226	147	1.					
1	0009	10	0.	*	1	0055	56	0.	*	1	0141	102	3.	*	1	0227	148	1.					
1	0010	11	0.	*	1	0056	57	0.	*	1	0142	103	3.	*	1	0228	149	1.					
1	0011	12	0.	*	1	0057	58	0.	*	1	0143	104	2.	*	1	0229	150	1.					
1	0012	13	0.	*	1	0058	59	0.	*	1	0144	105	2.	*	1	0230	151	1.					
1	0013	14	0.	*	1	0059	60	0.	*	1	0145	106	2.	*	1	0231	152	1.					
1	0014	15	0.	*	1	0100	61	0.	*	1	0146	107	2.	*	1	0232	153	1.					
1	0015	16	0.	*	1	0101	62	0.	*	1	0147	108	2.	*	1	0233	154	1.					
1	0016	17	0.	*	1	0102	63	0.	*	1	0148	109	2.	*	1	0234	155	1.					
1	0017	18	0.	*	1	0103	64	0.	*	1	0149	110	2.	*	1	0235	156	1.					
1	0018	19	0.	*	1	0104	65	0.	*	1	0150	111	2.	*	1	0236	157	1.					
1	0019	20	0.	*	1	0105	66	0.	*	1	0151	112	2.	*	1	0237	158	0.					
1	0020	21	0.	*	1	0106	67	0.	*	1	0152	113	2.	*	1	0238	159	0.					
1	0021	22	0.	*	1	0107	68	0.	*	1	0153	114	2.	*	1	0239	160	0.					
1	0022	23	0.	*	1	0108	69	0.	*	1	0154	115	2.	*	1	0240	161	0.					
1	0023	24	0.	*	1	0109	70	0.	*	1	0155	116	2.	*	1	0241	162	0.					
1	0024	25	0.	*	1	0110	71	0.	*	1	0156	117	2.	*	1	0242	163	0.					
1	0025	26	0.	*	1	0111	72	0.	*	1	0157	118	2.	*	1	0243	164	0.					
1	0026	27	0.	*	1	0112	73	0.	*	1	0158	119	2.	*	1	0244	165	0.					
1	0027	28	0.	*	1	0113	74	0.	*	1	0159	120	2.	*	1	0245	166	0.					
1	0028	29	0.	*	1	0114	75	0.	*	1	0200	121	2.	*	1	0246	167	0.					
1	0029	30	0.	*	1	0115	76	0.	*	1	0201	122	2.	*	1	0247	168	0.					
1	0030	31	0.	*	1	0116	77	0.	*	1	0202	123	2.	*	1	0248	169	0.					
1	0031	32	0.	*	1	0117	78	0.	*	1	0203	124	2.	*	1	0249	170	0.					
1	0032	33	0.	*	1	0118	79	0.	*	1	0204	125	2.	*	1	0250	171	0.					
1	0033	34	0.	*	1	0119	80	0.	*	1	0205	126	1.	*	1	0251	172	0.					
1	0034	35	0.	*	1	0120	81	0.	*	1	0206	127	1.	*	1	0252	173	0.					
1	0035	36	0.	*	1	0121	82	0.	*	1	0207	128	1.	*	1	0253	174	0.					
1	0036	37	0.	*	1	0122	83	0.	*	1	0208	129	1.	*	1	0254	175	0.					
1	0037	38	0.	*	1	0123	84	2.	*	1	0209	130	1.	*	1	0255	176	0.					
1	0038	39	0.	*	1	0124	85	3.	*	1	0210	131	1.	*	1	0256	177	0.					
1	0039	40	0.	*	1	0125	86	2.	*	1	0211	132	1.	*	1	0257	178	0.					
1	0040	41	0.	*	1	0126	87	2.	*	1	0212	133	1.	*	1	0258	179	0.					
1	0041	42	0.	*	1	0127	88	3.	*	1	0213	134	1.	*	1	0259	180	0.					
1	0042	43	0.	*	1	0128	89	2.	*	1	0214	135	1.	*	1	0300	181	0.					
1	0043	44	0.	*	1	0129	90	3.	*	1	0215	136	1.	*									
1	0044	45	0.	*	1	0130	91	3.	*	1	0216	137	1.	*									
1	0045	46	0.	*	1	0131	92	3.	*	1	0217	138	1.	*									

PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
(CFS)	(HR)		6-HR	24-HR	72-HR	3.00-HR
+	3.	1.50	1.	1.	1.	1.
		(INCHES)	.113	.113	.113	.113
		(AC-FT)	0.	0.	0.	0.
CUMULATIVE AREA =			.03 SQ MI			

*** **

* *
148 KK * BP12 *
* *

BP12

SUBBASIN RUNOFF DATA

										post.out				
1	0007	8	.00	.00	.00	0.	*	1	0138	99	.00	.00	.00	301.
1	0008	9	.00	.00	.00	0.	*	1	0139	100	.00	.00	.00	307.
1	0009	10	.00	.00	.00	0.	*	1	0140	101	.00	.00	.00	313.
1	0010	11	.00	.00	.00	0.	*	1	0141	102	.00	.00	.00	319.
1	0011	12	.00	.00	.00	0.	*	1	0142	103	.00	.00	.00	324.
1	0012	13	.00	.00	.00	0.	*	1	0143	104	.00	.00	.00	330.
1	0013	14	.00	.00	.00	0.	*	1	0144	105	.00	.00	.00	335.
1	0014	15	.00	.00	.00	0.	*	1	0145	106	.00	.00	.00	339.
1	0015	16	.00	.00	.00	0.	*	1	0146	107	.00	.00	.00	344.
1	0016	17	.00	.00	.00	0.	*	1	0147	108	.00	.00	.00	348.
1	0017	18	.00	.00	.00	0.	*	1	0148	109	.00	.00	.00	352.
1	0018	19	.00	.00	.00	0.	*	1	0149	110	.00	.00	.00	356.
1	0019	20	.00	.00	.00	0.	*	1	0150	111	.00	.00	.00	359.
1	0020	21	.00	.00	.00	0.	*	1	0151	112	.00	.00	.00	362.
1	0021	22	.00	.00	.00	0.	*	1	0152	113	.00	.00	.00	365.
1	0022	23	.00	.00	.00	0.	*	1	0153	114	.00	.00	.00	368.
1	0023	24	.00	.00	.00	0.	*	1	0154	115	.00	.00	.00	370.
1	0024	25	.00	.00	.00	0.	*	1	0155	116	.00	.00	.00	372.
1	0025	26	.00	.00	.00	0.	*	1	0156	117	.00	.00	.00	374.
1	0026	27	.00	.00	.00	0.	*	1	0157	118	.00	.00	.00	375.
1	0027	28	.00	.00	.00	0.	*	1	0158	119	.00	.00	.00	376.
1	0028	29	.00	.00	.00	0.	*	1	0159	120	.00	.00	.00	377.
1	0029	30	.00	.00	.00	0.	*	1	0200	121	.00	.00	.00	378.
1	0030	31	.00	.00	.00	0.	*	1	0201	122	.00	.00	.00	378.
1	0031	32	.11	.11	.00	0.	*	1	0202	123	.00	.00	.00	378.
1	0032	33	.11	.11	.00	0.	*	1	0203	124	.00	.00	.00	378.
1	0033	34	.11	.11	.00	0.	*	1	0204	125	.00	.00	.00	377.
1	0034	35	.11	.11	.00	0.	*	1	0205	126	.00	.00	.00	377.
1	0035	36	.11	.11	.00	0.	*	1	0206	127	.00	.00	.00	376.
1	0036	37	.09	.09	.00	0.	*	1	0207	128	.00	.00	.00	375.
1	0037	38	.09	.08	.01	0.	*	1	0208	129	.00	.00	.00	373.
1	0038	39	.09	.08	.01	0.	*	1	0209	130	.00	.00	.00	372.
1	0039	40	.09	.07	.02	0.	*	1	0210	131	.00	.00	.00	370.
1	0040	41	.09	.07	.02	1.	*	1	0211	132	.00	.00	.00	368.
1	0041	42	.06	.05	.02	1.	*	1	0212	133	.00	.00	.00	366.
1	0042	43	.06	.04	.02	1.	*	1	0213	134	.00	.00	.00	364.
1	0043	44	.06	.04	.02	2.	*	1	0214	135	.00	.00	.00	361.
1	0044	45	.06	.04	.02	2.	*	1	0215	136	.00	.00	.00	358.
1	0045	46	.06	.04	.02	3.	*	1	0216	137	.00	.00	.00	355.
1	0046	47	.04	.02	.01	4.	*	1	0217	138	.00	.00	.00	352.
1	0047	48	.04	.02	.01	5.	*	1	0218	139	.00	.00	.00	349.
1	0048	49	.04	.02	.02	6.	*	1	0219	140	.00	.00	.00	345.
1	0049	50	.04	.02	.02	8.	*	1	0220	141	.00	.00	.00	341.
1	0050	51	.04	.02	.02	9.	*	1	0221	142	.00	.00	.00	337.
1	0051	52	.02	.01	.01	11.	*	1	0222	143	.00	.00	.00	333.
1	0052	53	.02	.01	.01	13.	*	1	0223	144	.00	.00	.00	329.
1	0053	54	.02	.01	.01	15.	*	1	0224	145	.00	.00	.00	325.
1	0054	55	.02	.01	.01	18.	*	1	0225	146	.00	.00	.00	320.
1	0055	56	.02	.01	.01	20.	*	1	0226	147	.00	.00	.00	316.
1	0056	57	.02	.01	.01	23.	*	1	0227	148	.00	.00	.00	311.
1	0057	58	.02	.01	.01	26.	*	1	0228	149	.00	.00	.00	306.
1	0058	59	.02	.01	.01	29.	*	1	0229	150	.00	.00	.00	301.
1	0059	60	.02	.01	.01	32.	*	1	0230	151	.00	.00	.00	297.
1	0100	61	.02	.01	.01	36.	*	1	0231	152	.00	.00	.00	292.
1	0101	62	.01	.01	.01	40.	*	1	0232	153	.00	.00	.00	287.
1	0102	63	.01	.01	.01	44.	*	1	0233	154	.00	.00	.00	283.
1	0103	64	.01	.01	.01	48.	*	1	0234	155	.00	.00	.00	278.
1	0104	65	.01	.01	.01	52.	*	1	0235	156	.00	.00	.00	273.
1	0105	66	.01	.01	.01	57.	*	1	0236	157	.00	.00	.00	269.
1	0106	67	.01	.01	.01	62.	*	1	0237	158	.00	.00	.00	264.
1	0107	68	.01	.01	.01	67.	*	1	0238	159	.00	.00	.00	260.
1	0108	69	.01	.01	.01	73.	*	1	0239	160	.00	.00	.00	255.
1	0109	70	.01	.01	.01	78.	*	1	0240	161	.00	.00	.00	251.
1	0110	71	.01	.01	.01	84.	*	1	0241	162	.00	.00	.00	247.
1	0111	72	.01	.00	.00	91.	*	1	0242	163	.00	.00	.00	243.
1	0112	73	.01	.00	.00	97.	*	1	0243	164	.00	.00	.00	238.
1	0113	74	.01	.00	.00	104.	*	1	0244	165	.00	.00	.00	234.
1	0114	75	.01	.00	.00	111.	*	1	0245	166	.00	.00	.00	230.
1	0115	76	.01	.00	.00	118.	*	1	0246	167	.00	.00	.00	226.
1	0116	77	.01	.00	.00	126.	*	1	0247	168	.00	.00	.00	222.
1	0117	78	.01	.00	.00	134.	*	1	0248	169	.00	.00	.00	219.
1	0118	79	.01	.00	.00	142.	*	1	0249	170	.00	.00	.00	215.
1	0119	80	.01	.00	.00	150.	*	1	0250	171	.00	.00	.00	211.
1	0120	81	.01	.00	.00	158.	*	1	0251	172	.00	.00	.00	208.
1	0121	82	.01	.00	.00	166.	*	1	0252	173	.00	.00	.00	204.
1	0122	83	.01	.00	.00	175.	*	1	0253	174	.00	.00	.00	201.
1	0123	84	.01	.00	.00	183.	*	1	0254	175	.00	.00	.00	198.
1	0124	85	.01	.00	.00	192.	*	1	0255	176	.00	.00	.00	194.
1	0125	86	.01	.00	.00	200.	*	1	0256	177	.00	.00	.00	191.
1	0126	87	.01	.00	.00	209.	*	1	0257	178	.00	.00	.00	188.
1	0127	88	.01	.00	.00	217.	*	1	0258	179	.00	.00	.00	185.
1	0128	89	.01	.00	.00	226.	*	1	0259	180	.00	.00	.00	182.
1	0129	90	.01	.00	.00	234.	*	1	0300	181	.00	.00	.00	179.
1	0130	91	.01	.00	.00	242.	*							

TOTAL RAINFALL = 2.13, TOTAL LOSS = 1.61, TOTAL EXCESS = .52

PEAK FLOW TIME MAXIMUM AVERAGE FLOW

			6-HR	24-HR	72-HR	post.out 3.00-HR
+	(CFS)	(HR)				
+	378.	2.03	(CFS) 175.	175.	175.	175.
			(INCHES) .395	.395	.395	.395
			(AC-FT) 43.	43.	43.	43.

CUMULATIVE AREA = 2.05 SQ MI

*** WARNING *** UNIT HYDROGRAPH TRUNCATED FROM 328 TO 300 INTERVALS

HYDROGRAPH AT STATION BP12
PLAN 1, RATIO = 1.00

DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	*	DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
1	0000	1	.00	.00	.00	.00	0.	*	1	0131	92	.00	.00	.00	.00	250.
1	0001	2	.00	.00	.00	.00	0.	*	1	0132	93	.00	.00	.00	.00	258.
1	0002	3	.00	.00	.00	.00	0.	*	1	0133	94	.00	.00	.00	.00	265.
1	0003	4	.00	.00	.00	.00	0.	*	1	0134	95	.00	.00	.00	.00	273.
1	0004	5	.00	.00	.00	.00	0.	*	1	0135	96	.00	.00	.00	.00	280.
1	0005	6	.00	.00	.00	.00	0.	*	1	0136	97	.00	.00	.00	.00	287.
1	0006	7	.00	.00	.00	.00	0.	*	1	0137	98	.00	.00	.00	.00	294.
1	0007	8	.00	.00	.00	.00	0.	*	1	0138	99	.00	.00	.00	.00	301.
1	0008	9	.00	.00	.00	.00	0.	*	1	0139	100	.00	.00	.00	.00	307.
1	0009	10	.00	.00	.00	.00	0.	*	1	0140	101	.00	.00	.00	.00	313.
1	0010	11	.00	.00	.00	.00	0.	*	1	0141	102	.00	.00	.00	.00	319.
1	0011	12	.00	.00	.00	.00	0.	*	1	0142	103	.00	.00	.00	.00	324.
1	0012	13	.00	.00	.00	.00	0.	*	1	0143	104	.00	.00	.00	.00	330.
1	0013	14	.00	.00	.00	.00	0.	*	1	0144	105	.00	.00	.00	.00	335.
1	0014	15	.00	.00	.00	.00	0.	*	1	0145	106	.00	.00	.00	.00	339.
1	0015	16	.00	.00	.00	.00	0.	*	1	0146	107	.00	.00	.00	.00	344.
1	0016	17	.00	.00	.00	.00	0.	*	1	0147	108	.00	.00	.00	.00	348.
1	0017	18	.00	.00	.00	.00	0.	*	1	0148	109	.00	.00	.00	.00	352.
1	0018	19	.00	.00	.00	.00	0.	*	1	0149	110	.00	.00	.00	.00	356.
1	0019	20	.00	.00	.00	.00	0.	*	1	0150	111	.00	.00	.00	.00	359.
1	0020	21	.00	.00	.00	.00	0.	*	1	0151	112	.00	.00	.00	.00	362.
1	0021	22	.00	.00	.00	.00	0.	*	1	0152	113	.00	.00	.00	.00	365.
1	0022	23	.00	.00	.00	.00	0.	*	1	0153	114	.00	.00	.00	.00	368.
1	0023	24	.00	.00	.00	.00	0.	*	1	0154	115	.00	.00	.00	.00	370.
1	0024	25	.00	.00	.00	.00	0.	*	1	0155	116	.00	.00	.00	.00	372.
1	0025	26	.00	.00	.00	.00	0.	*	1	0156	117	.00	.00	.00	.00	374.
1	0026	27	.00	.00	.00	.00	0.	*	1	0157	118	.00	.00	.00	.00	375.
1	0027	28	.00	.00	.00	.00	0.	*	1	0158	119	.00	.00	.00	.00	376.
1	0028	29	.00	.00	.00	.00	0.	*	1	0159	120	.00	.00	.00	.00	377.
1	0029	30	.00	.00	.00	.00	0.	*	1	0200	121	.00	.00	.00	.00	378.
1	0030	31	.00	.00	.00	.00	0.	*	1	0201	122	.00	.00	.00	.00	378.
1	0031	32	.11	.11	.00	0.	0.	*	1	0202	123	.00	.00	.00	.00	378.
1	0032	33	.11	.11	.00	0.	0.	*	1	0203	124	.00	.00	.00	.00	378.
1	0033	34	.11	.11	.00	0.	0.	*	1	0204	125	.00	.00	.00	.00	377.
1	0034	35	.11	.11	.00	0.	0.	*	1	0205	126	.00	.00	.00	.00	377.
1	0035	36	.11	.11	.00	0.	0.	*	1	0206	127	.00	.00	.00	.00	376.
1	0036	37	.09	.09	.00	0.	0.	*	1	0207	128	.00	.00	.00	.00	375.
1	0037	38	.09	.08	.01	0.	0.	*	1	0208	129	.00	.00	.00	.00	373.
1	0038	39	.09	.08	.01	0.	0.	*	1	0209	130	.00	.00	.00	.00	372.
1	0039	40	.09	.07	.02	0.	0.	*	1	0210	131	.00	.00	.00	.00	370.
1	0040	41	.09	.07	.02	1.	0.	*	1	0211	132	.00	.00	.00	.00	368.
1	0041	42	.06	.05	.02	1.	0.	*	1	0212	133	.00	.00	.00	.00	366.
1	0042	43	.06	.04	.02	1.	0.	*	1	0213	134	.00	.00	.00	.00	364.
1	0043	44	.06	.04	.02	2.	0.	*	1	0214	135	.00	.00	.00	.00	361.
1	0044	45	.06	.04	.02	2.	0.	*	1	0215	136	.00	.00	.00	.00	358.
1	0045	46	.06	.04	.02	3.	0.	*	1	0216	137	.00	.00	.00	.00	355.
1	0046	47	.04	.02	.01	4.	0.	*	1	0217	138	.00	.00	.00	.00	352.
1	0047	48	.04	.02	.01	5.	0.	*	1	0218	139	.00	.00	.00	.00	349.
1	0048	49	.04	.02	.02	6.	0.	*	1	0219	140	.00	.00	.00	.00	345.
1	0049	50	.04	.02	.02	8.	0.	*	1	0220	141	.00	.00	.00	.00	341.
1	0050	51	.04	.02	.02	9.	0.	*	1	0221	142	.00	.00	.00	.00	337.
1	0051	52	.02	.01	.01	11.	0.	*	1	0222	143	.00	.00	.00	.00	333.
1	0052	53	.02	.01	.01	13.	0.	*	1	0223	144	.00	.00	.00	.00	329.
1	0053	54	.02	.01	.01	15.	0.	*	1	0224	145	.00	.00	.00	.00	325.
1	0054	55	.02	.01	.01	18.	0.	*	1	0225	146	.00	.00	.00	.00	320.
1	0055	56	.02	.01	.01	20.	0.	*	1	0226	147	.00	.00	.00	.00	316.
1	0056	57	.02	.01	.01	23.	0.	*	1	0227	148	.00	.00	.00	.00	311.
1	0057	58	.02	.01	.01	26.	0.	*	1	0228	149	.00	.00	.00	.00	306.
1	0058	59	.02	.01	.01	29.	0.	*	1	0229	150	.00	.00	.00	.00	301.
1	0059	60	.02	.01	.01	32.	0.	*	1	0230	151	.00	.00	.00	.00	297.
1	0100	61	.02	.01	.01	36.	0.	*	1	0231	152	.00	.00	.00	.00	292.
1	0101	62	.01	.01	.01	40.	0.	*	1	0232	153	.00	.00	.00	.00	287.
1	0102	63	.01	.01	.01	44.	0.	*	1	0233	154	.00	.00	.00	.00	283.
1	0103	64	.01	.01	.01	48.	0.	*	1	0234	155	.00	.00	.00	.00	278.
1	0104	65	.01	.01	.01	52.	0.	*	1	0235	156	.00	.00	.00	.00	273.
1	0105	66	.01	.01	.01	57.	0.	*	1	0236	157	.00	.00	.00	.00	269.
1	0106	67	.01	.01	.01	62.	0.	*	1	0237	158	.00	.00	.00	.00	264.
1	0107	68	.01	.01	.01	67.	0.	*	1	0238	159	.00	.00	.00	.00	260.

													post.out			
1	0108	69	.01	.01	.01	73.	*	1	0239	160	.00	.00	.00	255.		
1	0109	70	.01	.01	.01	78.	*	1	0240	161	.00	.00	.00	251.		
1	0110	71	.01	.01	.01	84.	*	1	0241	162	.00	.00	.00	247.		
1	0111	72	.01	.00	.00	91.	*	1	0242	163	.00	.00	.00	243.		
1	0112	73	.01	.00	.00	97.	*	1	0243	164	.00	.00	.00	238.		
1	0113	74	.01	.00	.00	104.	*	1	0244	165	.00	.00	.00	234.		
1	0114	75	.01	.00	.00	111.	*	1	0245	166	.00	.00	.00	230.		
1	0115	76	.01	.00	.00	118.	*	1	0246	167	.00	.00	.00	226.		
1	0116	77	.01	.00	.00	126.	*	1	0247	168	.00	.00	.00	222.		
1	0117	78	.01	.00	.00	134.	*	1	0248	169	.00	.00	.00	219.		
1	0118	79	.01	.00	.00	142.	*	1	0249	170	.00	.00	.00	215.		
1	0119	80	.01	.00	.00	150.	*	1	0250	171	.00	.00	.00	211.		
1	0120	81	.01	.00	.00	158.	*	1	0251	172	.00	.00	.00	208.		
1	0121	82	.01	.00	.00	166.	*	1	0252	173	.00	.00	.00	204.		
1	0122	83	.01	.00	.00	175.	*	1	0253	174	.00	.00	.00	201.		
1	0123	84	.01	.00	.00	183.	*	1	0254	175	.00	.00	.00	198.		
1	0124	85	.01	.00	.00	192.	*	1	0255	176	.00	.00	.00	194.		
1	0125	86	.01	.00	.00	200.	*	1	0256	177	.00	.00	.00	191.		
1	0126	87	.01	.00	.00	209.	*	1	0257	178	.00	.00	.00	188.		
1	0127	88	.01	.00	.00	217.	*	1	0258	179	.00	.00	.00	185.		
1	0128	89	.01	.00	.00	226.	*	1	0259	180	.00	.00	.00	182.		
1	0129	90	.01	.00	.00	234.	*	1	0300	181	.00	.00	.00	179.		
1	0130	91	.01	.00	.00	242.	*									

TOTAL RAINFALL = 2.13, TOTAL LOSS = 1.61, TOTAL EXCESS = .52

PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
(CFS)	(HR)	(CFS)	6-HR	24-HR	72-HR	3.00-HR
+ 378.	2.03		175.	175.	175.	175.
		(INCHES)	.395	.395	.395	.395
		(AC-FT)	43.	43.	43.	43.

CUMULATIVE AREA = 2.05 SQ MI

*** WARNING *** UNIT HYDROGRAPH TRUNCATED FROM 328 TO 300 INTERVALS

HYDROGRAPH AT STATION BP12
PLAN 1, RATIO = .61

DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	*	DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
1	0000	1	.00	.00	.00	0.	*		1	0131	92	.00	.00	.00	48.	
1	0001	2	.00	.00	.00	0.	*		1	0132	93	.00	.00	.00	50.	
1	0002	3	.00	.00	.00	0.	*		1	0133	94	.00	.00	.00	52.	
1	0003	4	.00	.00	.00	0.	*		1	0134	95	.00	.00	.00	54.	
1	0004	5	.00	.00	.00	0.	*		1	0135	96	.00	.00	.00	56.	
1	0005	6	.00	.00	.00	0.	*		1	0136	97	.00	.00	.00	58.	
1	0006	7	.00	.00	.00	0.	*		1	0137	98	.00	.00	.00	60.	
1	0007	8	.00	.00	.00	0.	*		1	0138	99	.00	.00	.00	61.	
1	0008	9	.00	.00	.00	0.	*		1	0139	100	.00	.00	.00	63.	
1	0009	10	.00	.00	.00	0.	*		1	0140	101	.00	.00	.00	65.	
1	0010	11	.00	.00	.00	0.	*		1	0141	102	.00	.00	.00	67.	
1	0011	12	.00	.00	.00	0.	*		1	0142	103	.00	.00	.00	68.	
1	0012	13	.00	.00	.00	0.	*		1	0143	104	.00	.00	.00	70.	
1	0013	14	.00	.00	.00	0.	*		1	0144	105	.00	.00	.00	71.	
1	0014	15	.00	.00	.00	0.	*		1	0145	106	.00	.00	.00	73.	
1	0015	16	.00	.00	.00	0.	*		1	0146	107	.00	.00	.00	74.	
1	0016	17	.00	.00	.00	0.	*		1	0147	108	.00	.00	.00	76.	
1	0017	18	.00	.00	.00	0.	*		1	0148	109	.00	.00	.00	77.	
1	0018	19	.00	.00	.00	0.	*		1	0149	110	.00	.00	.00	78.	
1	0019	20	.00	.00	.00	0.	*		1	0150	111	.00	.00	.00	79.	
1	0020	21	.00	.00	.00	0.	*		1	0151	112	.00	.00	.00	81.	
1	0021	22	.00	.00	.00	0.	*		1	0152	113	.00	.00	.00	82.	
1	0022	23	.00	.00	.00	0.	*		1	0153	114	.00	.00	.00	83.	
1	0023	24	.00	.00	.00	0.	*		1	0154	115	.00	.00	.00	84.	
1	0024	25	.00	.00	.00	0.	*		1	0155	116	.00	.00	.00	85.	
1	0025	26	.00	.00	.00	0.	*		1	0156	117	.00	.00	.00	86.	
1	0026	27	.00	.00	.00	0.	*		1	0157	118	.00	.00	.00	86.	
1	0027	28	.00	.00	.00	0.	*		1	0158	119	.00	.00	.00	87.	
1	0028	29	.00	.00	.00	0.	*		1	0159	120	.00	.00	.00	88.	
1	0029	30	.00	.00	.00	0.	*		1	0200	121	.00	.00	.00	88.	
1	0030	31	.00	.00	.00	0.	*		1	0201	122	.00	.00	.00	89.	
1	0031	32	.07	.07	.00	0.	*		1	0202	123	.00	.00	.00	89.	
1	0032	33	.07	.07	.00	0.	*		1	0203	124	.00	.00	.00	90.	
1	0033	34	.07	.07	.00	0.	*		1	0204	125	.00	.00	.00	90.	
1	0034	35	.07	.07	.00	0.	*		1	0205	126	.00	.00	.00	90.	
1	0035	36	.07	.07	.00	0.	*		1	0206	127	.00	.00	.00	90.	
1	0036	37	.05	.05	.00	0.	*		1	0207	128	.00	.00	.00	90.	
1	0037	38	.05	.05	.00	0.	*		1	0208	129	.00	.00	.00	90.	
1	0038	39	.05	.05	.00	0.	*		1	0209	130	.00	.00	.00	90.	

post.out														
1	0039	40	.05	.05	.00	0.	*	1	0210	131	.00	.00	.00	90.
1	0040	41	.05	.05	.00	0.	*	1	0211	132	.00	.00	.00	90.
1	0041	42	.04	.04	.00	0.	*	1	0212	133	.00	.00	.00	90.
1	0042	43	.04	.04	.00	0.	*	1	0213	134	.00	.00	.00	90.
1	0043	44	.04	.03	.00	0.	*	1	0214	135	.00	.00	.00	90.
1	0044	45	.04	.03	.00	0.	*	1	0215	136	.00	.00	.00	89.
1	0045	46	.04	.03	.00	0.	*	1	0216	137	.00	.00	.00	89.
1	0046	47	.02	.02	.00	0.	*	1	0217	138	.00	.00	.00	88.
1	0047	48	.02	.02	.00	0.	*	1	0218	139	.00	.00	.00	88.
1	0048	49	.02	.02	.00	0.	*	1	0219	140	.00	.00	.00	88.
1	0049	50	.02	.02	.00	1.	*	1	0220	141	.00	.00	.00	87.
1	0050	51	.02	.02	.00	1.	*	1	0221	142	.00	.00	.00	86.
1	0051	52	.01	.01	.00	1.	*	1	0222	143	.00	.00	.00	86.
1	0052	53	.01	.01	.00	1.	*	1	0223	144	.00	.00	.00	85.
1	0053	54	.01	.01	.00	2.	*	1	0224	145	.00	.00	.00	84.
1	0054	55	.01	.01	.00	2.	*	1	0225	146	.00	.00	.00	83.
1	0055	56	.01	.01	.00	2.	*	1	0226	147	.00	.00	.00	83.
1	0056	57	.01	.01	.00	3.	*	1	0227	148	.00	.00	.00	82.
1	0057	58	.01	.01	.00	3.	*	1	0228	149	.00	.00	.00	81.
1	0058	59	.01	.01	.00	4.	*	1	0229	150	.00	.00	.00	80.
1	0059	60	.01	.01	.00	4.	*	1	0230	151	.00	.00	.00	79.
1	0100	61	.01	.01	.00	5.	*	1	0231	152	.00	.00	.00	78.
1	0101	62	.01	.01	.00	5.	*	1	0232	153	.00	.00	.00	77.
1	0102	63	.01	.01	.00	6.	*	1	0233	154	.00	.00	.00	76.
1	0103	64	.01	.01	.00	7.	*	1	0234	155	.00	.00	.00	75.
1	0104	65	.01	.01	.00	7.	*	1	0235	156	.00	.00	.00	74.
1	0105	66	.01	.01	.00	8.	*	1	0236	157	.00	.00	.00	73.
1	0106	67	.01	.00	.00	9.	*	1	0237	158	.00	.00	.00	72.
1	0107	68	.01	.00	.00	10.	*	1	0238	159	.00	.00	.00	71.
1	0108	69	.01	.00	.00	11.	*	1	0239	160	.00	.00	.00	70.
1	0109	70	.01	.00	.00	12.	*	1	0240	161	.00	.00	.00	69.
1	0110	71	.01	.00	.00	13.	*	1	0241	162	.00	.00	.00	68.
1	0111	72	.00	.00	.00	14.	*	1	0242	163	.00	.00	.00	67.
1	0112	73	.00	.00	.00	15.	*	1	0243	164	.00	.00	.00	66.
1	0113	74	.00	.00	.00	17.	*	1	0244	165	.00	.00	.00	65.
1	0114	75	.00	.00	.00	18.	*	1	0245	166	.00	.00	.00	64.
1	0115	76	.00	.00	.00	19.	*	1	0246	167	.00	.00	.00	63.
1	0116	77	.00	.00	.00	21.	*	1	0247	168	.00	.00	.00	62.
1	0117	78	.00	.00	.00	22.	*	1	0248	169	.00	.00	.00	61.
1	0118	79	.00	.00	.00	24.	*	1	0249	170	.00	.00	.00	60.
1	0119	80	.00	.00	.00	25.	*	1	0250	171	.00	.00	.00	59.
1	0120	81	.00	.00	.00	27.	*	1	0251	172	.00	.00	.00	58.
1	0121	82	.00	.00	.00	29.	*	1	0252	173	.00	.00	.00	57.
1	0122	83	.00	.00	.00	31.	*	1	0253	174	.00	.00	.00	57.
1	0123	84	.00	.00	.00	33.	*	1	0254	175	.00	.00	.00	56.
1	0124	85	.00	.00	.00	34.	*	1	0255	176	.00	.00	.00	55.
1	0125	86	.00	.00	.00	36.	*	1	0256	177	.00	.00	.00	54.
1	0126	87	.00	.00	.00	38.	*	1	0257	178	.00	.00	.00	53.
1	0127	88	.00	.00	.00	40.	*	1	0258	179	.00	.00	.00	53.
1	0128	89	.00	.00	.00	42.	*	1	0259	180	.00	.00	.00	52.
1	0129	90	.00	.00	.00	44.	*	1	0300	181	.00	.00	.00	51.
1	0130	91	.00	.00	.00	46.	*							

TOTAL RAINFALL = 1.29, TOTAL LOSS = 1.16, TOTAL EXCESS = .13

PEAK FLOW	TIME	MAXIMUM AVERAGE FLOW			
(CFS)	(HR)	6-HR	24-HR	72-HR	3.00-HR
+	90.	41.	41.	41.	41.
	2.13	.092	.092	.092	.092
		(INCHES)			
		(AC-FT)	10.	10.	10.

CUMULATIVE AREA = 2.05 SQ MI

*** ** **

 * *
 153 KK * RP12 *
 * *

Route BP12 in channel to Outlet OP2

HYDROGRAPH ROUTING DATA

155 RD MUSKINGUM-CUNGE CHANNEL ROUTING
 L 2983. CHANNEL LENGTH
 S .0220 SLOPE
 N .040 CHANNEL ROUGHNESS COEFFICIENT
 CA .00 CONTRIBUTING AREA
 SHAPE TRAP CHANNEL SHAPE
 WD .00 BOTTOM WIDTH OR DIAMETER
 Z 7.00 SIDE SLOPE

post.out

COMPUTED MUSKINGUM-CUNGE PARAMETERS

ELEMENT	ALPHA	COMPUTATION TIME STEP			PEAK (CFS)	TIME TO PEAK (MIN)	VOLUME (IN)	MAXIMUM CELERITY (FPS)
		M	DT	DX				
		(MIN)	(FT)					
MAIN	1.81	1.33	1.00	248.58	377.82	127.00	.38	

INTERPOLATED TO SPECIFIED COMPUTATION INTERVAL

MAIN	1.81	1.33	1.00	377.82	127.00	.38
------	------	------	------	--------	--------	-----

CONTINUITY SUMMARY (AC-FT) - INFLOW= .4341E+02 EXCESS= .0000E+00 OUTFLOW= .4125E+02 BASIN STORAGE= .2249E+01 PERCENT ERROR= -.2

HYDROGRAPH AT STATION RP12
PLAN 1, RATIO = 1.00

DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	
1	0000	1	0.	*	1	0046	47	0.	*	1	0132	93	206.	*	1	0218	139	365.						
1	0001	2	0.	*	1	0047	48	0.	*	1	0133	94	215.	*	1	0219	140	360.						
1	0002	3	0.	*	1	0048	49	0.	*	1	0134	95	224.	*	1	0220	141	360.						
1	0003	4	0.	*	1	0049	50	0.	*	1	0135	96	233.	*	1	0221	142	357.						
1	0004	5	0.	*	1	0050	51	0.	*	1	0136	97	241.	*	1	0222	143	354.						
1	0005	6	0.	*	1	0051	52	0.	*	1	0137	98	250.	*	1	0223	144	351.						
1	0006	7	0.	*	1	0052	53	0.	*	1	0138	99	258.	*	1	0224	145	347.						
1	0007	8	0.	*	1	0053	54	0.	*	1	0139	100	266.	*	1	0225	146	343.						
1	0008	9	0.	*	1	0054	55	0.	*	1	0140	101	274.	*	1	0226	147	340.						
1	0009	10	0.	*	1	0055	56	1.	*	1	0141	102	281.	*	1	0227	148	336.						
1	0010	11	0.	*	1	0056	57	1.	*	1	0142	103	289.	*	1	0228	149	332.						
1	0011	12	0.	*	1	0057	58	2.	*	1	0143	104	296.	*	1	0229	150	327.						
1	0012	13	0.	*	1	0058	59	3.	*	1	0144	105	302.	*	1	0230	151	323.						
1	0013	14	0.	*	1	0059	60	4.	*	1	0145	106	309.	*	1	0231	152	319.						
1	0014	15	0.	*	1	0100	61	5.	*	1	0146	107	315.	*	1	0232	153	314.						
1	0015	16	0.	*	1	0101	62	6.	*	1	0147	108	321.	*	1	0233	154	309.						
1	0016	17	0.	*	1	0102	63	8.	*	1	0148	109	326.	*	1	0234	155	305.						
1	0017	18	0.	*	1	0103	64	10.	*	1	0149	110	332.	*	1	0235	156	300.						
1	0018	19	0.	*	1	0104	65	12.	*	1	0150	111	337.	*	1	0236	157	296.						
1	0019	20	0.	*	1	0105	66	15.	*	1	0151	112	341.	*	1	0237	158	291.						
1	0020	21	0.	*	1	0106	67	19.	*	1	0152	113	346.	*	1	0238	159	286.						
1	0021	22	0.	*	1	0107	68	24.	*	1	0153	114	350.	*	1	0239	160	282.						
1	0022	23	0.	*	1	0108	69	28.	*	1	0154	115	354.	*	1	0240	161	277.						
1	0023	24	0.	*	1	0109	70	32.	*	1	0155	116	358.	*	1	0241	162	273.						
1	0024	25	0.	*	1	0110	71	37.	*	1	0156	117	361.	*	1	0242	163	268.						
1	0025	26	0.	*	1	0111	72	42.	*	1	0157	118	364.	*	1	0243	164	264.						
1	0026	27	0.	*	1	0112	73	48.	*	1	0158	119	367.	*	1	0244	165	260.						
1	0027	28	0.	*	1	0113	74	53.	*	1	0159	120	369.	*	1	0245	166	255.						
1	0028	29	0.	*	1	0114	75	59.	*	1	0200	121	371.	*	1	0246	167	251.						
1	0029	30	0.	*	1	0115	76	65.	*	1	0201	122	373.	*	1	0247	168	247.						
1	0030	31	0.	*	1	0116	77	71.	*	1	0202	123	374.	*	1	0248	169	243.						
1	0031	32	0.	*	1	0117	78	78.	*	1	0203	124	376.	*	1	0249	170	239.						
1	0032	33	0.	*	1	0118	79	85.	*	1	0204	125	377.	*	1	0250	171	235.						
1	0033	34	0.	*	1	0119	80	93.	*	1	0205	126	377.	*	1	0251	172	231.						
1	0034	35	0.	*	1	0120	81	100.	*	1	0206	127	378.	*	1	0252	173	227.						
1	0035	36	0.	*	1	0121	82	108.	*	1	0207	128	378.	*	1	0253	174	223.						
1	0036	37	0.	*	1	0122	83	116.	*	1	0208	129	378.	*	1	0254	175	219.						
1	0037	38	0.	*	1	0123	84	125.	*	1	0209	130	377.	*	1	0255	176	216.						
1	0038	39	0.	*	1	0124	85	134.	*	1	0210	131	377.	*	1	0256	177	212.						
1	0039	40	0.	*	1	0125	86	142.	*	1	0211	132	376.	*	1	0257	178	209.						
1	0040	41	0.	*	1	0126	87	151.	*	1	0212	133	375.	*	1	0258	179	205.						
1	0041	42	0.	*	1	0127	88	160.	*	1	0213	134	374.	*	1	0259	180	202.						
1	0042	43	0.	*	1	0128	89	170.	*	1	0214	135	373.	*	1	0300	181	199.						
1	0043	44	0.	*	1	0129	90	179.	*	1	0215	136	371.	*										
1	0044	45	0.	*	1	0130	91	188.	*	1	0216	137	369.	*										
1	0045	46	0.	*	1	0131	92	197.	*	1	0217	138	367.	*										

PEAK FLOW (CFS)	TIME (HR)	MAXIMUM AVERAGE FLOW			
		6-HR	24-HR	72-HR	3.00-HR
378.	2.12	166.	166.	166.	166.
		.375	.375	.375	.375
		41.	41.	41.	41.

CUMULATIVE AREA = 2.05 SQ MI

COMPUTED MUSKINGUM-CUNGE PARAMETERS

ELEMENT	ALPHA	COMPUTATION TIME STEP			post.out		VOLUME (IN)	MAXIMUM CELERITY (FPS)
		M	DT	DX	PEAK	TIME TO PEAK		
		(MIN)	(FT)	(CFS)	(MIN)			
MAIN	1.81	1.33	1.00	175.47	90.42	136.00	.08	5.40

INTERPOLATED TO SPECIFIED COMPUTATION INTERVAL

MAIN	1.81	1.33	1.00	90.42	136.00	.08
------	------	------	------	-------	--------	-----

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1015E+02 EXCESS= .0000E+00 OUTFLOW= .9300E+01 BASIN STORAGE= .8850E+00 PERCENT ERROR= -.3

HYDROGRAPH AT STATION RP12
PLAN 1, RATIO = .61

DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*
1	0000	1	0.	* 1	0046	47	0.	* 1	0132	93	30.	* 1	0218	139	90.								
1	0001	2	0.	* 1	0047	48	0.	* 1	0133	94	32.	* 1	0219	140	90.								
1	0002	3	0.	* 1	0048	49	0.	* 1	0134	95	35.	* 1	0220	141	90.								
1	0003	4	0.	* 1	0049	50	0.	* 1	0135	96	37.	* 1	0221	142	90.								
1	0004	5	0.	* 1	0050	51	0.	* 1	0136	97	39.	* 1	0222	143	90.								
1	0005	6	0.	* 1	0051	52	0.	* 1	0137	98	41.	* 1	0223	144	89.								
1	0006	7	0.	* 1	0052	53	0.	* 1	0138	99	43.	* 1	0224	145	89.								
1	0007	8	0.	* 1	0053	54	0.	* 1	0139	100	46.	* 1	0225	146	88.								
1	0008	9	0.	* 1	0054	55	0.	* 1	0140	101	48.	* 1	0226	147	88.								
1	0009	10	0.	* 1	0055	56	0.	* 1	0141	102	50.	* 1	0227	148	87.								
1	0010	11	0.	* 1	0056	57	0.	* 1	0142	103	52.	* 1	0228	149	87.								
1	0011	12	0.	* 1	0057	58	0.	* 1	0143	104	54.	* 1	0229	150	86.								
1	0012	13	0.	* 1	0058	59	0.	* 1	0144	105	56.	* 1	0230	151	86.								
1	0013	14	0.	* 1	0059	60	0.	* 1	0145	106	58.	* 1	0231	152	85.								
1	0014	15	0.	* 1	0100	61	0.	* 1	0146	107	60.	* 1	0232	153	84.								
1	0015	16	0.	* 1	0101	62	0.	* 1	0147	108	62.	* 1	0233	154	83.								
1	0016	17	0.	* 1	0102	63	0.	* 1	0148	109	64.	* 1	0234	155	82.								
1	0017	18	0.	* 1	0103	64	0.	* 1	0149	110	66.	* 1	0235	156	82.								
1	0018	19	0.	* 1	0104	65	0.	* 1	0150	111	68.	* 1	0236	157	81.								
1	0019	20	0.	* 1	0105	66	0.	* 1	0151	112	69.	* 1	0237	158	80.								
1	0020	21	0.	* 1	0106	67	0.	* 1	0152	113	71.	* 1	0238	159	79.								
1	0021	22	0.	* 1	0107	68	0.	* 1	0153	114	73.	* 1	0239	160	78.								
1	0022	23	0.	* 1	0108	69	1.	* 1	0154	115	74.	* 1	0240	161	77.								
1	0023	24	0.	* 1	0109	70	1.	* 1	0155	116	76.	* 1	0241	162	76.								
1	0024	25	0.	* 1	0110	71	1.	* 1	0156	117	77.	* 1	0242	163	75.								
1	0025	26	0.	* 1	0111	72	1.	* 1	0157	118	78.	* 1	0243	164	74.								
1	0026	27	0.	* 1	0112	73	2.	* 1	0158	119	79.	* 1	0244	165	73.								
1	0027	28	0.	* 1	0113	74	2.	* 1	0159	120	81.	* 1	0245	166	72.								
1	0028	29	0.	* 1	0114	75	3.	* 1	0200	121	82.	* 1	0246	167	71.								
1	0029	30	0.	* 1	0115	76	3.	* 1	0201	122	83.	* 1	0247	168	70.								
1	0030	31	0.	* 1	0116	77	5.	* 1	0202	123	84.	* 1	0248	169	69.								
1	0031	32	0.	* 1	0117	78	6.	* 1	0203	124	85.	* 1	0249	170	68.								
1	0032	33	0.	* 1	0118	79	7.	* 1	0204	125	86.	* 1	0250	171	67.								
1	0033	34	0.	* 1	0119	80	8.	* 1	0205	126	86.	* 1	0251	172	66.								
1	0034	35	0.	* 1	0120	81	9.	* 1	0206	127	87.	* 1	0252	173	65.								
1	0035	36	0.	* 1	0121	82	11.	* 1	0207	128	88.	* 1	0253	174	64.								
1	0036	37	0.	* 1	0122	83	12.	* 1	0208	129	88.	* 1	0254	175	63.								
1	0037	38	0.	* 1	0123	84	14.	* 1	0209	130	89.	* 1	0255	176	62.								
1	0038	39	0.	* 1	0124	85	15.	* 1	0210	131	89.	* 1	0256	177	61.								
1	0039	40	0.	* 1	0125	86	17.	* 1	0211	132	90.	* 1	0257	178	61.								
1	0040	41	0.	* 1	0126	87	19.	* 1	0212	133	90.	* 1	0258	179	60.								
1	0041	42	0.	* 1	0127	88	20.	* 1	0213	134	90.	* 1	0259	180	59.								
1	0042	43	0.	* 1	0128	89	22.	* 1	0214	135	90.	* 1	0300	181	58.								
1	0043	44	0.	* 1	0129	90	24.	* 1	0215	136	90.	*											
1	0044	45	0.	* 1	0130	91	26.	* 1	0216	137	90.	*											
1	0045	46	0.	* 1	0131	92	28.	* 1	0217	138	90.	*											

PEAK FLOW	TIME	MAXIMUM AVERAGE FLOW			
(CFS)	(HR)	6-HR	24-HR	72-HR	3.00-HR
90.	2.27	37.	37.	37.	37.
		(INCHES)	.085	.085	.085
		(AC-FT)	9.	9.	9.
CUMULATIVE AREA =		2.05 SQ MI			

														post.out			
1	0020	21	.00	.00	.00	0.	*	1	0151	112	.00	.00	.00	24.			
1	0021	22	.00	.00	.00	0.	*	1	0152	113	.00	.00	.00	23.			
1	0022	23	.00	.00	.00	0.	*	1	0153	114	.00	.00	.00	22.			
1	0023	24	.00	.00	.00	0.	*	1	0154	115	.00	.00	.00	21.			
1	0024	25	.00	.00	.00	0.	*	1	0155	116	.00	.00	.00	20.			
1	0025	26	.00	.00	.00	0.	*	1	0156	117	.00	.00	.00	19.			
1	0026	27	.00	.00	.00	0.	*	1	0157	118	.00	.00	.00	18.			
1	0027	28	.00	.00	.00	0.	*	1	0158	119	.00	.00	.00	17.			
1	0028	29	.00	.00	.00	0.	*	1	0159	120	.00	.00	.00	16.			
1	0029	30	.00	.00	.00	0.	*	1	0200	121	.00	.00	.00	15.			
1	0030	31	.00	.00	.00	0.	*	1	0201	122	.00	.00	.00	15.			
1	0031	32	.11	.11	.00	0.	*	1	0202	123	.00	.00	.00	14.			
1	0032	33	.11	.11	.00	0.	*	1	0203	124	.00	.00	.00	13.			
1	0033	34	.11	.11	.00	0.	*	1	0204	125	.00	.00	.00	13.			
1	0034	35	.11	.11	.00	0.	*	1	0205	126	.00	.00	.00	12.			
1	0035	36	.11	.11	.00	0.	*	1	0206	127	.00	.00	.00	12.			
1	0036	37	.09	.08	.00	0.	*	1	0207	128	.00	.00	.00	12.			
1	0037	38	.09	.08	.01	0.	*	1	0208	129	.00	.00	.00	11.			
1	0038	39	.09	.07	.01	0.	*	1	0209	130	.00	.00	.00	11.			
1	0039	40	.09	.07	.02	0.	*	1	0210	131	.00	.00	.00	10.			
1	0040	41	.09	.07	.02	1.	*	1	0211	132	.00	.00	.00	10.			
1	0041	42	.06	.04	.02	1.	*	1	0212	133	.00	.00	.00	10.			
1	0042	43	.06	.04	.02	2.	*	1	0213	134	.00	.00	.00	10.			
1	0043	44	.06	.04	.02	3.	*	1	0214	135	.00	.00	.00	9.			
1	0044	45	.06	.04	.02	5.	*	1	0215	136	.00	.00	.00	9.			
1	0045	46	.06	.04	.02	6.	*	1	0216	137	.00	.00	.00	9.			
1	0046	47	.04	.02	.02	8.	*	1	0217	138	.00	.00	.00	9.			
1	0047	48	.04	.02	.02	11.	*	1	0218	139	.00	.00	.00	8.			
1	0048	49	.04	.02	.02	13.	*	1	0219	140	.00	.00	.00	8.			
1	0049	50	.04	.02	.02	17.	*	1	0220	141	.00	.00	.00	8.			
1	0050	51	.04	.02	.02	20.	*	1	0221	142	.00	.00	.00	8.			
1	0051	52	.02	.01	.01	24.	*	1	0222	143	.00	.00	.00	8.			
1	0052	53	.02	.01	.01	28.	*	1	0223	144	.00	.00	.00	8.			
1	0053	54	.02	.01	.01	33.	*	1	0224	145	.00	.00	.00	8.			
1	0054	55	.02	.01	.01	37.	*	1	0225	146	.00	.00	.00	7.			
1	0055	56	.02	.01	.01	42.	*	1	0226	147	.00	.00	.00	7.			
1	0056	57	.02	.01	.01	46.	*	1	0227	148	.00	.00	.00	7.			
1	0057	58	.02	.01	.01	51.	*	1	0228	149	.00	.00	.00	7.			
1	0058	59	.02	.01	.01	55.	*	1	0229	150	.00	.00	.00	7.			
1	0059	60	.02	.01	.01	59.	*	1	0230	151	.00	.00	.00	7.			
1	0100	61	.02	.01	.01	63.	*	1	0231	152	.00	.00	.00	7.			
1	0101	62	.01	.01	.01	66.	*	1	0232	153	.00	.00	.00	7.			
1	0102	63	.01	.01	.01	70.	*	1	0233	154	.00	.00	.00	7.			
1	0103	64	.01	.01	.01	72.	*	1	0234	155	.00	.00	.00	7.			
1	0104	65	.01	.01	.01	75.	*	1	0235	156	.00	.00	.00	7.			
1	0105	66	.01	.01	.01	77.	*	1	0236	157	.00	.00	.00	7.			
1	0106	67	.01	.00	.01	78.	*	1	0237	158	.00	.00	.00	7.			
1	0107	68	.01	.00	.01	80.	*	1	0238	159	.00	.00	.00	7.			
1	0108	69	.01	.00	.01	81.	*	1	0239	160	.00	.00	.00	6.			
1	0109	70	.01	.00	.01	81.	*	1	0240	161	.00	.00	.00	6.			
1	0110	71	.01	.00	.01	81.	*	1	0241	162	.00	.00	.00	6.			
1	0111	72	.01	.00	.00	81.	*	1	0242	163	.00	.00	.00	6.			
1	0112	73	.01	.00	.00	81.	*	1	0243	164	.00	.00	.00	6.			
1	0113	74	.01	.00	.00	80.	*	1	0244	165	.00	.00	.00	6.			
1	0114	75	.01	.00	.00	79.	*	1	0245	166	.00	.00	.00	6.			
1	0115	76	.01	.00	.00	78.	*	1	0246	167	.00	.00	.00	6.			
1	0116	77	.01	.00	.00	76.	*	1	0247	168	.00	.00	.00	6.			
1	0117	78	.01	.00	.00	75.	*	1	0248	169	.00	.00	.00	6.			
1	0118	79	.01	.00	.00	73.	*	1	0249	170	.00	.00	.00	6.			
1	0119	80	.01	.00	.00	72.	*	1	0250	171	.00	.00	.00	6.			
1	0120	81	.01	.00	.00	70.	*	1	0251	172	.00	.00	.00	6.			
1	0121	82	.01	.00	.00	68.	*	1	0252	173	.00	.00	.00	6.			
1	0122	83	.01	.00	.00	66.	*	1	0253	174	.00	.00	.00	6.			
1	0123	84	.01	.00	.00	64.	*	1	0254	175	.00	.00	.00	6.			
1	0124	85	.01	.00	.00	63.	*	1	0255	176	.00	.00	.00	6.			
1	0125	86	.01	.00	.00	61.	*	1	0256	177	.00	.00	.00	6.			
1	0126	87	.01	.00	.00	59.	*	1	0257	178	.00	.00	.00	6.			
1	0127	88	.01	.00	.00	57.	*	1	0258	179	.00	.00	.00	6.			
1	0128	89	.01	.00	.00	56.	*	1	0259	180	.00	.00	.00	6.			
1	0129	90	.01	.00	.00	54.	*	1	0300	181	.00	.00	.00	6.			
1	0130	91	.01	.00	.00	53.	*										

TOTAL RAINFALL = 2.13, TOTAL LOSS = 1.57, TOTAL EXCESS = .56

PEAK FLOW	TIME	MAXIMUM AVERAGE FLOW			
(CFS)	(HR)	6-HR	24-HR	72-HR	3.00-HR
+ 81.	1.17	23.	23.	23.	23.
		(INCHES)	.537	.537	.537
		(AC-FT)	6.	6.	6.

CUMULATIVE AREA = .20 SQ MI

DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	*	DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
1	0000	1	.00	.00	.00	0.	0.	*	1	0131	92	.00	.00	.00	51.	
1	0001	2	.00	.00	.00	0.	0.	*	1	0132	93	.00	.00	.00	49.	
1	0002	3	.00	.00	.00	0.	0.	*	1	0133	94	.00	.00	.00	48.	
1	0003	4	.00	.00	.00	0.	0.	*	1	0134	95	.00	.00	.00	46.	
1	0004	5	.00	.00	.00	0.	0.	*	1	0135	96	.00	.00	.00	45.	
1	0005	6	.00	.00	.00	0.	0.	*	1	0136	97	.00	.00	.00	44.	
1	0006	7	.00	.00	.00	0.	0.	*	1	0137	98	.00	.00	.00	42.	
1	0007	8	.00	.00	.00	0.	0.	*	1	0138	99	.00	.00	.00	41.	
1	0008	9	.00	.00	.00	0.	0.	*	1	0139	100	.00	.00	.00	39.	
1	0009	10	.00	.00	.00	0.	0.	*	1	0140	101	.00	.00	.00	38.	
1	0010	11	.00	.00	.00	0.	0.	*	1	0141	102	.00	.00	.00	37.	
1	0011	12	.00	.00	.00	0.	0.	*	1	0142	103	.00	.00	.00	35.	
1	0012	13	.00	.00	.00	0.	0.	*	1	0143	104	.00	.00	.00	34.	
1	0013	14	.00	.00	.00	0.	0.	*	1	0144	105	.00	.00	.00	33.	
1	0014	15	.00	.00	.00	0.	0.	*	1	0145	106	.00	.00	.00	31.	
1	0015	16	.00	.00	.00	0.	0.	*	1	0146	107	.00	.00	.00	30.	
1	0016	17	.00	.00	.00	0.	0.	*	1	0147	108	.00	.00	.00	29.	
1	0017	18	.00	.00	.00	0.	0.	*	1	0148	109	.00	.00	.00	27.	
1	0018	19	.00	.00	.00	0.	0.	*	1	0149	110	.00	.00	.00	26.	
1	0019	20	.00	.00	.00	0.	0.	*	1	0150	111	.00	.00	.00	25.	
1	0020	21	.00	.00	.00	0.	0.	*	1	0151	112	.00	.00	.00	24.	
1	0021	22	.00	.00	.00	0.	0.	*	1	0152	113	.00	.00	.00	23.	
1	0022	23	.00	.00	.00	0.	0.	*	1	0153	114	.00	.00	.00	22.	
1	0023	24	.00	.00	.00	0.	0.	*	1	0154	115	.00	.00	.00	21.	
1	0024	25	.00	.00	.00	0.	0.	*	1	0155	116	.00	.00	.00	20.	
1	0025	26	.00	.00	.00	0.	0.	*	1	0156	117	.00	.00	.00	19.	
1	0026	27	.00	.00	.00	0.	0.	*	1	0157	118	.00	.00	.00	18.	
1	0027	28	.00	.00	.00	0.	0.	*	1	0158	119	.00	.00	.00	17.	
1	0028	29	.00	.00	.00	0.	0.	*	1	0159	120	.00	.00	.00	16.	
1	0029	30	.00	.00	.00	0.	0.	*	1	0200	121	.00	.00	.00	15.	
1	0030	31	.00	.00	.00	0.	0.	*	1	0201	122	.00	.00	.00	15.	
1	0031	32	.11	.11	.00	0.	0.	*	1	0202	123	.00	.00	.00	14.	
1	0032	33	.11	.11	.00	0.	0.	*	1	0203	124	.00	.00	.00	13.	
1	0033	34	.11	.11	.00	0.	0.	*	1	0204	125	.00	.00	.00	13.	
1	0034	35	.11	.11	.00	0.	0.	*	1	0205	126	.00	.00	.00	12.	
1	0035	36	.11	.11	.00	0.	0.	*	1	0206	127	.00	.00	.00	12.	
1	0036	37	.09	.08	.00	0.	0.	*	1	0207	128	.00	.00	.00	12.	
1	0037	38	.09	.08	.01	0.	0.	*	1	0208	129	.00	.00	.00	11.	
1	0038	39	.09	.07	.01	0.	0.	*	1	0209	130	.00	.00	.00	11.	
1	0039	40	.09	.07	.02	0.	0.	*	1	0210	131	.00	.00	.00	10.	
1	0040	41	.09	.07	.02	1.	1.	*	1	0211	132	.00	.00	.00	10.	
1	0041	42	.06	.04	.02	1.	1.	*	1	0212	133	.00	.00	.00	10.	
1	0042	43	.06	.04	.02	2.	2.	*	1	0213	134	.00	.00	.00	10.	
1	0043	44	.06	.04	.02	3.	3.	*	1	0214	135	.00	.00	.00	9.	
1	0044	45	.06	.04	.02	5.	5.	*	1	0215	136	.00	.00	.00	9.	
1	0045	46	.06	.04	.02	6.	6.	*	1	0216	137	.00	.00	.00	9.	
1	0046	47	.04	.02	.02	8.	8.	*	1	0217	138	.00	.00	.00	9.	
1	0047	48	.04	.02	.02	11.	11.	*	1	0218	139	.00	.00	.00	8.	
1	0048	49	.04	.02	.02	13.	13.	*	1	0219	140	.00	.00	.00	8.	
1	0049	50	.04	.02	.02	17.	17.	*	1	0220	141	.00	.00	.00	8.	
1	0050	51	.04	.02	.02	20.	20.	*	1	0221	142	.00	.00	.00	8.	
1	0051	52	.02	.01	.01	24.	24.	*	1	0222	143	.00	.00	.00	8.	
1	0052	53	.02	.01	.01	28.	28.	*	1	0223	144	.00	.00	.00	8.	
1	0053	54	.02	.01	.01	33.	33.	*	1	0224	145	.00	.00	.00	8.	
1	0054	55	.02	.01	.01	37.	37.	*	1	0225	146	.00	.00	.00	7.	
1	0055	56	.02	.01	.01	42.	42.	*	1	0226	147	.00	.00	.00	7.	
1	0056	57	.02	.01	.01	46.	46.	*	1	0227	148	.00	.00	.00	7.	
1	0057	58	.02	.01	.01	51.	51.	*	1	0228	149	.00	.00	.00	7.	
1	0058	59	.02	.01	.01	55.	55.	*	1	0229	150	.00	.00	.00	7.	
1	0059	60	.02	.01	.01	59.	59.	*	1	0230	151	.00	.00	.00	7.	
1	0100	61	.02	.01	.01	63.	63.	*	1	0231	152	.00	.00	.00	7.	
1	0101	62	.01	.01	.01	66.	66.	*	1	0232	153	.00	.00	.00	7.	
1	0102	63	.01	.01	.01	70.	70.	*	1	0233	154	.00	.00	.00	7.	
1	0103	64	.01	.01	.01	72.	72.	*	1	0234	155	.00	.00	.00	7.	
1	0104	65	.01	.01	.01	75.	75.	*	1	0235	156	.00	.00	.00	7.	
1	0105	66	.01	.01	.01	77.	77.	*	1	0236	157	.00	.00	.00	7.	
1	0106	67	.01	.00	.01	78.	78.	*	1	0237	158	.00	.00	.00	7.	
1	0107	68	.01	.00	.01	80.	80.	*	1	0238	159	.00	.00	.00	7.	
1	0108	69	.01	.00	.01	81.	81.	*	1	0239	160	.00	.00	.00	6.	
1	0109	70	.01	.00	.01	81.	81.	*	1	0240	161	.00	.00	.00	6.	
1	0110	71	.01	.00	.01	81.	81.	*	1	0241	162	.00	.00	.00	6.	
1	0111	72	.01	.00	.00	81.	81.	*	1	0242	163	.00	.00	.00	6.	
1	0112	73	.01	.00	.00	81.	81.	*	1	0243	164	.00	.00	.00	6.	
1	0113	74	.01	.00	.00	80.	80.	*	1	0244	165	.00	.00	.00	6.	
1	0114	75	.01	.00	.00	79.	79.	*	1	0245	166	.00	.00	.00	6.	
1	0115	76	.01	.00	.00	78.	78.	*	1	0246	167	.00	.00	.00	6.	
1	0116	77	.01	.00	.00	76.	76.	*	1	0247	168	.00	.00	.00	6.	
1	0117	78	.01	.00	.00	75.	75.	*	1	0248	169	.00	.00	.00	6.	
1	0118	79	.01	.00	.00	73.	73.	*	1	0249	170	.00	.00	.00	6.	
1	0119	80	.01	.00	.00	72.	72.	*	1	0250	171	.00	.00	.00	6.	
1	0120	81	.01	.00	.00	70.	70.	*	1	0251	172	.00	.00	.00	6.	
1	0121	82	.01	.00	.00	68.	68.	*	1	0252	173	.00	.00	.00	6.	
1	0122	83	.01	.00	.00	66.	66.	*	1	0253	174	.00	.00	.00	6.	
1	0123	84	.01	.00	.00	64.	64.	*	1	0254	175	.00	.00	.00	6.	

													post.out			
1	0124	85	.01	.00	.00	63.	*	1	0255	176	.00	.00	.00	6.		
1	0125	86	.01	.00	.00	61.	*	1	0256	177	.00	.00	.00	6.		
1	0126	87	.01	.00	.00	59.	*	1	0257	178	.00	.00	.00	6.		
1	0127	88	.01	.00	.00	57.	*	1	0258	179	.00	.00	.00	6.		
1	0128	89	.01	.00	.00	56.	*	1	0259	180	.00	.00	.00	6.		
1	0129	90	.01	.00	.00	54.	*	1	0300	181	.00	.00	.00	6.		
1	0130	91	.01	.00	.00	53.	*									

TOTAL RAINFALL = 2.13, TOTAL LOSS = 1.57, TOTAL EXCESS = .56

PEAK FLOW	TIME	MAXIMUM AVERAGE FLOW			
(CFS)	(HR)	6-HR	24-HR	72-HR	3.00-HR
81.	1.17	23.	23.	23.	23.
		(INCHES)	.537	.537	.537
		(AC-FT)	6.	6.	6.

CUMULATIVE AREA = .20 SQ MI

HYDROGRAPH AT STATION OP2
PLAN 1, RATIO = .61

DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	*	DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
1	0000	1	.00	.00	.00	0.	*		1	0131	92	.00	.00	.00	15.	
1	0001	2	.00	.00	.00	0.	*		1	0132	93	.00	.00	.00	15.	
1	0002	3	.00	.00	.00	0.	*		1	0133	94	.00	.00	.00	15.	
1	0003	4	.00	.00	.00	0.	*		1	0134	95	.00	.00	.00	14.	
1	0004	5	.00	.00	.00	0.	*		1	0135	96	.00	.00	.00	14.	
1	0005	6	.00	.00	.00	0.	*		1	0136	97	.00	.00	.00	14.	
1	0006	7	.00	.00	.00	0.	*		1	0137	98	.00	.00	.00	13.	
1	0007	8	.00	.00	.00	0.	*		1	0138	99	.00	.00	.00	13.	
1	0008	9	.00	.00	.00	0.	*		1	0139	100	.00	.00	.00	13.	
1	0009	10	.00	.00	.00	0.	*		1	0140	101	.00	.00	.00	12.	
1	0010	11	.00	.00	.00	0.	*		1	0141	102	.00	.00	.00	12.	
1	0011	12	.00	.00	.00	0.	*		1	0142	103	.00	.00	.00	11.	
1	0012	13	.00	.00	.00	0.	*		1	0143	104	.00	.00	.00	11.	
1	0013	14	.00	.00	.00	0.	*		1	0144	105	.00	.00	.00	11.	
1	0014	15	.00	.00	.00	0.	*		1	0145	106	.00	.00	.00	10.	
1	0015	16	.00	.00	.00	0.	*		1	0146	107	.00	.00	.00	10.	
1	0016	17	.00	.00	.00	0.	*		1	0147	108	.00	.00	.00	9.	
1	0017	18	.00	.00	.00	0.	*		1	0148	109	.00	.00	.00	9.	
1	0018	19	.00	.00	.00	0.	*		1	0149	110	.00	.00	.00	9.	
1	0019	20	.00	.00	.00	0.	*		1	0150	111	.00	.00	.00	8.	
1	0020	21	.00	.00	.00	0.	*		1	0151	112	.00	.00	.00	8.	
1	0021	22	.00	.00	.00	0.	*		1	0152	113	.00	.00	.00	8.	
1	0022	23	.00	.00	.00	0.	*		1	0153	114	.00	.00	.00	7.	
1	0023	24	.00	.00	.00	0.	*		1	0154	115	.00	.00	.00	7.	
1	0024	25	.00	.00	.00	0.	*		1	0155	116	.00	.00	.00	7.	
1	0025	26	.00	.00	.00	0.	*		1	0156	117	.00	.00	.00	6.	
1	0026	27	.00	.00	.00	0.	*		1	0157	118	.00	.00	.00	6.	
1	0027	28	.00	.00	.00	0.	*		1	0158	119	.00	.00	.00	6.	
1	0028	29	.00	.00	.00	0.	*		1	0159	120	.00	.00	.00	5.	
1	0029	30	.00	.00	.00	0.	*		1	0200	121	.00	.00	.00	5.	
1	0030	31	.00	.00	.00	0.	*		1	0201	122	.00	.00	.00	5.	
1	0031	32	.07	.07	.00	0.	*		1	0202	123	.00	.00	.00	5.	
1	0032	33	.07	.07	.00	0.	*		1	0203	124	.00	.00	.00	5.	
1	0033	34	.07	.07	.00	0.	*		1	0204	125	.00	.00	.00	4.	
1	0034	35	.07	.07	.00	0.	*		1	0205	126	.00	.00	.00	4.	
1	0035	36	.07	.07	.00	0.	*		1	0206	127	.00	.00	.00	4.	
1	0036	37	.05	.05	.00	0.	*		1	0207	128	.00	.00	.00	4.	
1	0037	38	.05	.05	.00	0.	*		1	0208	129	.00	.00	.00	4.	
1	0038	39	.05	.05	.00	0.	*		1	0209	130	.00	.00	.00	4.	
1	0039	40	.05	.05	.00	0.	*		1	0210	131	.00	.00	.00	4.	
1	0040	41	.05	.05	.00	0.	*		1	0211	132	.00	.00	.00	4.	
1	0041	42	.04	.04	.00	0.	*		1	0212	133	.00	.00	.00	3.	
1	0042	43	.04	.03	.00	0.	*		1	0213	134	.00	.00	.00	3.	
1	0043	44	.04	.03	.00	0.	*		1	0214	135	.00	.00	.00	3.	
1	0044	45	.04	.03	.00	0.	*		1	0215	136	.00	.00	.00	3.	
1	0045	46	.04	.03	.01	0.	*		1	0216	137	.00	.00	.00	3.	
1	0046	47	.02	.02	.00	1.	*		1	0217	138	.00	.00	.00	3.	
1	0047	48	.02	.02	.00	1.	*		1	0218	139	.00	.00	.00	3.	
1	0048	49	.02	.02	.00	1.	*		1	0219	140	.00	.00	.00	3.	
1	0049	50	.02	.02	.00	1.	*		1	0220	141	.00	.00	.00	3.	
1	0050	51	.02	.02	.01	2.	*		1	0221	142	.00	.00	.00	3.	
1	0051	52	.01	.01	.00	2.	*		1	0222	143	.00	.00	.00	3.	
1	0052	53	.01	.01	.00	3.	*		1	0223	144	.00	.00	.00	3.	
1	0053	54	.01	.01	.00	4.	*		1	0224	145	.00	.00	.00	3.	
1	0054	55	.01	.01	.00	5.	*		1	0225	146	.00	.00	.00	3.	
1	0055	56	.01	.01	.00	6.	*		1	0226	147	.00	.00	.00	3.	
1	0056	57	.01	.01	.00	6.	*		1	0227	148	.00	.00	.00	3.	
1	0057	58	.01	.01	.00	7.	*		1	0228	149	.00	.00	.00	3.	

post.out														
1	0058	59	.01	.01	.00	9.	*	1	0229	150	.00	.00	.00	3.
1	0059	60	.01	.01	.00	10.	*	1	0230	151	.00	.00	.00	3.
1	0100	61	.01	.01	.00	11.	*	1	0231	152	.00	.00	.00	3.
1	0101	62	.01	.01	.00	12.	*	1	0232	153	.00	.00	.00	3.
1	0102	63	.01	.01	.00	13.	*	1	0233	154	.00	.00	.00	2.
1	0103	64	.01	.01	.00	14.	*	1	0234	155	.00	.00	.00	2.
1	0104	65	.01	.01	.00	14.	*	1	0235	156	.00	.00	.00	2.
1	0105	66	.01	.01	.00	15.	*	1	0236	157	.00	.00	.00	2.
1	0106	67	.01	.00	.00	16.	*	1	0237	158	.00	.00	.00	2.
1	0107	68	.01	.00	.00	17.	*	1	0238	159	.00	.00	.00	2.
1	0108	69	.01	.00	.00	17.	*	1	0239	160	.00	.00	.00	2.
1	0109	70	.01	.00	.00	18.	*	1	0240	161	.00	.00	.00	2.
1	0110	71	.01	.00	.00	18.	*	1	0241	162	.00	.00	.00	2.
1	0111	72	.00	.00	.00	19.	*	1	0242	163	.00	.00	.00	2.
1	0112	73	.00	.00	.00	19.	*	1	0243	164	.00	.00	.00	2.
1	0113	74	.00	.00	.00	19.	*	1	0244	165	.00	.00	.00	2.
1	0114	75	.00	.00	.00	20.	*	1	0245	166	.00	.00	.00	2.
1	0115	76	.00	.00	.00	20.	*	1	0246	167	.00	.00	.00	2.
1	0116	77	.00	.00	.00	20.	*	1	0247	168	.00	.00	.00	2.
1	0117	78	.00	.00	.00	20.	*	1	0248	169	.00	.00	.00	2.
1	0118	79	.00	.00	.00	19.	*	1	0249	170	.00	.00	.00	2.
1	0119	80	.00	.00	.00	19.	*	1	0250	171	.00	.00	.00	2.
1	0120	81	.00	.00	.00	19.	*	1	0251	172	.00	.00	.00	2.
1	0121	82	.00	.00	.00	19.	*	1	0252	173	.00	.00	.00	2.
1	0122	83	.00	.00	.00	18.	*	1	0253	174	.00	.00	.00	2.
1	0123	84	.00	.00	.00	18.	*	1	0254	175	.00	.00	.00	2.
1	0124	85	.00	.00	.00	18.	*	1	0255	176	.00	.00	.00	2.
1	0125	86	.00	.00	.00	17.	*	1	0256	177	.00	.00	.00	2.
1	0126	87	.00	.00	.00	17.	*	1	0257	178	.00	.00	.00	2.
1	0127	88	.00	.00	.00	17.	*	1	0258	179	.00	.00	.00	2.
1	0128	89	.00	.00	.00	16.	*	1	0259	180	.00	.00	.00	2.
1	0129	90	.00	.00	.00	16.	*	1	0300	181	.00	.00	.00	2.
1	0130	91	.00	.00	.00	16.	*							

TOTAL RAINFALL = 1.29, TOTAL LOSS = 1.14, TOTAL EXCESS = .15

PEAK FLOW	TIME	MAXIMUM AVERAGE FLOW			
(CFS)	(HR)	6-HR	24-HR	72-HR	3.00-HR
+	20.	6.	6.	6.	6.
	1.25	.140	.140	.140	.140
		(INCHES)			
		(AC-FT)	1.	1.	1.
CUMULATIVE AREA =		.20 SQ MI			

*** **

 * *
 161 KK * CP3 *
 * *

COMBINE BP10 - BP12 & OP2

163 HC HYDROGRAPH COMBINATION
 ICOMP 4 NUMBER OF HYDROGRAPHS TO COMBINE

HYDROGRAPH AT STATION CP3
 SUM OF 4 HYDROGRAPHS
 PLAN 1, RATIO = 1.00

DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*
1	0000	1	0.	*	1	0046	47	8.	*	1	0132	93	268.	*	1	0218	139	376.					
1	0001	2	0.	*	1	0047	48	11.	*	1	0133	94	275.	*	1	0219	140	373.					
1	0002	3	0.	*	1	0048	49	13.	*	1	0134	95	282.	*	1	0220	141	370.					
1	0003	4	0.	*	1	0049	50	17.	*	1	0135	96	289.	*	1	0221	142	367.					
1	0004	5	0.	*	1	0050	51	20.	*	1	0136	97	296.	*	1	0222	143	364.					
1	0005	6	0.	*	1	0051	52	24.	*	1	0137	98	303.	*	1	0223	144	360.					
1	0006	7	0.	*	1	0052	53	28.	*	1	0138	99	309.	*	1	0224	145	357.					
1	0007	8	0.	*	1	0053	54	33.	*	1	0139	100	316.	*	1	0225	146	353.					
1	0008	9	0.	*	1	0054	55	37.	*	1	0140	101	322.	*	1	0226	147	349.					
1	0009	10	0.	*	1	0055	56	42.	*	1	0141	102	328.	*	1	0227	148	345.					
1	0010	11	0.	*	1	0056	57	47.	*	1	0142	103	333.	*	1	0228	149	341.					
1	0011	12	0.	*	1	0057	58	52.	*	1	0143	104	339.	*	1	0229	150	336.					
1	0012	13	0.	*	1	0058	59	58.	*	1	0144	105	344.	*	1	0230	151	332.					
1	0013	14	0.	*	1	0059	60	63.	*	1	0145	106	349.	*	1	0231	152	327.					

															post.out			
1	0014	15	0.	*	1	0100	61	68.	*	1	0146	107	353.	*	1	0232	153	323.
1	0015	16	0.	*	1	0101	62	73.	*	1	0147	108	358.	*	1	0233	154	318.
1	0016	17	0.	*	1	0102	63	86.	*	1	0148	109	362.	*	1	0234	155	313.
1	0017	18	0.	*	1	0103	64	89.	*	1	0149	110	366.	*	1	0235	156	308.
1	0018	19	0.	*	1	0104	65	94.	*	1	0150	111	369.	*	1	0236	157	304.
1	0019	20	0.	*	1	0105	66	99.	*	1	0151	112	372.	*	1	0237	158	299.
1	0020	21	0.	*	1	0106	67	104.	*	1	0152	113	376.	*	1	0238	159	294.
1	0021	22	0.	*	1	0107	68	109.	*	1	0153	114	379.	*	1	0239	160	290.
1	0022	23	0.	*	1	0108	69	115.	*	1	0154	115	381.	*	1	0240	161	285.
1	0023	24	0.	*	1	0109	70	123.	*	1	0155	116	384.	*	1	0241	162	281.
1	0024	25	0.	*	1	0110	71	133.	*	1	0156	117	386.	*	1	0242	163	276.
1	0025	26	0.	*	1	0111	72	136.	*	1	0157	118	388.	*	1	0243	164	272.
1	0026	27	0.	*	1	0112	73	141.	*	1	0158	119	389.	*	1	0244	165	267.
1	0027	28	0.	*	1	0113	74	148.	*	1	0159	120	391.	*	1	0245	166	263.
1	0028	29	0.	*	1	0114	75	152.	*	1	0200	121	392.	*	1	0246	167	259.
1	0029	30	0.	*	1	0115	76	158.	*	1	0201	122	393.	*	1	0247	168	255.
1	0030	31	0.	*	1	0116	77	163.	*	1	0202	123	393.	*	1	0248	169	250.
1	0031	32	0.	*	1	0117	78	169.	*	1	0203	124	394.	*	1	0249	170	246.
1	0032	33	0.	*	1	0118	79	174.	*	1	0204	125	394.	*	1	0250	171	242.
1	0033	34	0.	*	1	0119	80	180.	*	1	0205	126	394.	*	1	0251	172	238.
1	0034	35	0.	*	1	0120	81	186.	*	1	0206	127	394.	*	1	0252	173	235.
1	0035	36	0.	*	1	0121	82	192.	*	1	0207	128	393.	*	1	0253	174	231.
1	0036	37	0.	*	1	0122	83	198.	*	1	0208	129	393.	*	1	0254	175	227.
1	0037	38	0.	*	1	0123	84	205.	*	1	0209	130	392.	*	1	0255	176	223.
1	0038	39	0.	*	1	0124	85	211.	*	1	0210	131	391.	*	1	0256	177	220.
1	0039	40	0.	*	1	0125	86	218.	*	1	0211	132	389.	*	1	0257	178	216.
1	0040	41	1.	*	1	0126	87	225.	*	1	0212	133	388.	*	1	0258	179	213.
1	0041	42	1.	*	1	0127	88	232.	*	1	0213	134	386.	*	1	0259	180	209.
1	0042	43	2.	*	1	0128	89	239.	*	1	0214	135	385.	*	1	0300	181	206.
1	0043	44	3.	*	1	0129	90	246.	*	1	0215	136	383.	*				
1	0044	45	5.	*	1	0130	91	254.	*	1	0216	137	381.	*				
1	0045	46	6.	*	1	0131	92	261.	*	1	0217	138	378.	*				

PEAK FLOW	TIME	MAXIMUM AVERAGE FLOW			
(CFS)	(HR)	6-HR	24-HR	72-HR	3.00-HR
+ 394.	2.07	193.	193.	193.	193.
		(INCHES)	.391	.391	.391
		(AC-FT)	48.	48.	48.

CUMULATIVE AREA = 2.29 SQ MI

HYDROGRAPH AT STATION CP3
SUM OF 4 HYDROGRAPHS
PLAN 1, RATIO = .61

DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*	DA	MON	HRMN	ORD	FLOW	*
1	0000	1	0.	*	1	0046	47	1.	*	1	0132	93	49.	*	1	0218	139	94.					
1	0001	2	0.	*	1	0047	48	1.	*	1	0133	94	51.	*	1	0219	140	94.					
1	0002	3	0.	*	1	0048	49	1.	*	1	0134	95	53.	*	1	0220	141	94.					
1	0003	4	0.	*	1	0049	50	1.	*	1	0135	96	54.	*	1	0221	142	94.					
1	0004	5	0.	*	1	0050	51	2.	*	1	0136	97	56.	*	1	0222	143	93.					
1	0005	6	0.	*	1	0051	52	2.	*	1	0137	98	58.	*	1	0223	144	93.					
1	0006	7	0.	*	1	0052	53	3.	*	1	0138	99	60.	*	1	0224	145	92.					
1	0007	8	0.	*	1	0053	54	4.	*	1	0139	100	62.	*	1	0225	146	92.					
1	0008	9	0.	*	1	0054	55	5.	*	1	0140	101	63.	*	1	0226	147	91.					
1	0009	10	0.	*	1	0055	56	6.	*	1	0141	102	65.	*	1	0227	148	91.					
1	0010	11	0.	*	1	0056	57	6.	*	1	0142	103	67.	*	1	0228	149	90.					
1	0011	12	0.	*	1	0057	58	8.	*	1	0143	104	68.	*	1	0229	150	89.					
1	0012	13	0.	*	1	0058	59	9.	*	1	0144	105	70.	*	1	0230	151	89.					
1	0013	14	0.	*	1	0059	60	10.	*	1	0145	106	72.	*	1	0231	152	88.					
1	0014	15	0.	*	1	0100	61	11.	*	1	0146	107	73.	*	1	0232	153	87.					
1	0015	16	0.	*	1	0101	62	12.	*	1	0147	108	75.	*	1	0233	154	86.					
1	0016	17	0.	*	1	0102	63	13.	*	1	0148	109	76.	*	1	0234	155	86.					
1	0017	18	0.	*	1	0103	64	14.	*	1	0149	110	77.	*	1	0235	156	85.					
1	0018	19	0.	*	1	0104	65	15.	*	1	0150	111	79.	*	1	0236	157	84.					
1	0019	20	0.	*	1	0105	66	15.	*	1	0151	112	80.	*	1	0237	158	83.					
1	0020	21	0.	*	1	0106	67	16.	*	1	0152	113	81.	*	1	0238	159	82.					
1	0021	22	0.	*	1	0107	68	17.	*	1	0153	114	82.	*	1	0239	160	81.					
1	0022	23	0.	*	1	0108	69	18.	*	1	0154	115	83.	*	1	0240	161	80.					
1	0023	24	0.	*	1	0109	70	19.	*	1	0155	116	85.	*	1	0241	162	79.					
1	0024	25	0.	*	1	0110	71	20.	*	1	0156	117	86.	*	1	0242	163	78.					
1	0025	26	0.	*	1	0111	72	20.	*	1	0157	118	87.	*	1	0243	164	77.					
1	0026	27	0.	*	1	0112	73	21.	*	1	0158	119	87.	*	1	0244	165	76.					
1	0027	28	0.	*	1	0113	74	22.	*	1	0159	120	88.	*	1	0245	166	75.					
1	0028	29	0.	*	1	0114	75	22.	*	1	0200	121	89.	*	1	0246	167	74.					
1	0029	30	0.	*	1	0115	76	23.	*	1	0201	122	90.	*	1	0247	168	73.					
1	0030	31	0.	*	1	0116	77	25.	*	1	0202	123	91.	*	1	0248	169	72.					
1	0031	32	0.	*	1	0117	78	27.	*	1	0203	124	91.	*	1	0249	170	71.					
1	0032	33	0.	*	1	0118	79	28.	*	1	0204	125	92.	*	1	0250	171	70.					
1	0033	34	0.	*	1	0119	80	29.	*	1	0205	126	93.	*	1	0251	172	69.					

										post.out								
1	0034	35	0.	*	1	0120	81	30.	*	1	0206	127	93.	*	1	0252	173	68.
1	0035	36	0.	*	1	0121	82	31.	*	1	0207	128	94.	*	1	0253	174	67.
1	0036	37	0.	*	1	0122	83	32.	*	1	0208	129	94.	*	1	0254	175	66.
1	0037	38	0.	*	1	0123	84	35.	*	1	0209	130	94.	*	1	0255	176	65.
1	0038	39	0.	*	1	0124	85	37.	*	1	0210	131	94.	*	1	0256	177	64.
1	0039	40	0.	*	1	0125	86	37.	*	1	0211	132	95.	*	1	0257	178	63.
1	0040	41	0.	*	1	0126	87	39.	*	1	0212	133	95.	*	1	0258	179	63.
1	0041	42	0.	*	1	0127	88	41.	*	1	0213	134	95.	*	1	0259	180	62.
1	0042	43	0.	*	1	0128	89	42.	*	1	0214	135	95.	*	1	0300	181	61.
1	0043	44	0.	*	1	0129	90	44.	*	1	0215	136	95.	*				
1	0044	45	0.	*	1	0130	91	46.	*	1	0216	137	95.	*				
1	0045	46	0.	*	1	0131	92	47.	*	1	0217	138	95.	*				

PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
+	(CFS)	(HR)	6-HR	24-HR	72-HR	3.00-HR
+	95.	2.23	44.	44.	44.	44.
		(INCHES)	.090	.090	.090	.090
		(AC-FT)	11.	11.	11.	11.
CUMULATIVE AREA =			2.29 SQ MI			

1

PEAK FLOW AND STAGE (END-OF-PERIOD) SUMMARY FOR MULTIPLE PLAN-RATIO ECONOMIC COMPUTATIONS
 FLOWS IN CUBIC FEET PER SECOND, AREA IN SQUARE MILES
 TIME TO PEAK IN HOURS

OPERATION	STATION	AREA	PLAN	RATIOS APPLIED TO PRECIPITATION		
				RATIO 1	RATIO 2	
HYDROGRAPH AT				1.00	.61	
+	BP1	.40	1	FLOW	134.	28.
				TIME	1.22	1.33
ROUTED TO						
+	RP1	.40	1	FLOW	133.	28.
				TIME	1.42	1.62
HYDROGRAPH AT						
+	BP2	.95	1	FLOW	250.	41.
				TIME	1.23	1.38
ROUTED TO						
+	RP2	.95	1	FLOW	248.	41.
				TIME	1.38	1.62
HYDROGRAPH AT						
+	BP3	4.08	1	FLOW	638.	133.
				TIME	2.05	2.18
ROUTED TO						
+	RP3	4.08	1	FLOW	637.	132.
				TIME	2.15	2.33
HYDROGRAPH AT						
+	BP4	.54	1	FLOW	139.	23.
				TIME	1.25	1.40
ROUTED TO						
+	RP4	.54	1	FLOW	138.	23.
				TIME	1.43	1.68
HYDROGRAPH AT						
+	BP5	.12	1	FLOW	39.	8.
				TIME	1.23	1.35
ROUTED TO						
+	RP5	.12	1	FLOW	38.	8.
				TIME	1.60	1.88
HYDROGRAPH AT						
+	BP6	.09	1	FLOW	71.	18.
				TIME	.87	.92
ROUTED TO						
+	RP6	.09	1	FLOW	69.	18.
				TIME	1.25	1.48
HYDROGRAPH AT						
+	BP7	.01	1	FLOW	9.	2.
				TIME	.85	.92
ROUTED TO						
+	RP7	.01	1	FLOW	9.	2.

					TIME	1.65	2.15	post.out
HYDROGRAPH AT								
+	BP15	.04	1	FLOW	24.	6.		
				TIME	.97	1.05		
8 COMBINED AT								
+	CP1	6.24	1	FLOW	923.	195.		
				TIME	1.77	2.00		
ROUTED TO								
+	RCP1	6.24	1	FLOW	922.	195.		
				TIME	1.97	2.28		
HYDROGRAPH AT								
+	BP8	.04	1	FLOW	30.	6.		
				TIME	.75	.83		
ROUTED TO								
+	RP8	.04	1	FLOW	20.	4.		
				TIME	1.73	2.23		
HYDROGRAPH AT								
+	BP9	1.79	1	FLOW	295.	61.		
				TIME	1.98	2.12		
ROUTED TO								
+	RP9	1.79	1	FLOW	294.	61.		
				TIME	2.45	2.82		
HYDROGRAPH AT								
+	BP13	.29	1	FLOW	170.	36.		
				TIME	.88	.95		
ROUTED TO								
+	RP13	.29	1	FLOW	162.	34.		
				TIME	1.08	1.27		
HYDROGRAPH AT								
+	BP14	.07	1	FLOW	21.	5.		
				TIME	1.47	1.58		
ROUTED TO								
+	RP14	.07	1	FLOW	21.	5.		
				TIME	1.77	2.00		
HYDROGRAPH AT								
+	OP1	1.97	1	FLOW	438.	97.		
				TIME	1.68	1.80		
6 COMBINED AT								
+	CP2	10.40	1	FLOW	1512.	303.		
				TIME	2.00	2.37		
HYDROGRAPH AT								
+	BP10	.01	1	FLOW	8.	2.		
				TIME	.75	.83		
ROUTED TO								
+	RP10	.01	1	FLOW	9.	2.		
				TIME	1.03	1.28		
HYDROGRAPH AT								
+	BP11	.03	1	FLOW	12.	3.		
				TIME	1.12	1.22		
ROUTED TO								
+	RP11	.03	1	FLOW	12.	3.		
				TIME	1.33	1.50		
HYDROGRAPH AT								
+	BP12	2.05	1	FLOW	378.	90.		
				TIME	2.03	2.13		
ROUTED TO								
+	RP12	2.05	1	FLOW	378.	90.		
				TIME	2.12	2.27		
HYDROGRAPH AT								
+	OP2	.20	1	FLOW	81.	20.		
				TIME	1.17	1.25		
4 COMBINED AT								
+	CP3	2.29	1	FLOW	394.	95.		
				TIME	2.07	2.23		

SUMMARY OF KINEMATIC WAVE - MUSKINGUM-CUNGE ROUTING
(FLOW IS DIRECT RUNOFF WITHOUT BASE FLOW)
INTERPOLATED TO
COMPUTATION INTERVAL

ISTAQ	ELEMENT	DT	PEAK	TIME TO PEAK	VOLUME	post.out DT	PEAK	TIME TO PEAK	VOLUME
		(MIN)	(CFS)	(MIN)	(IN)	(MIN)	(CFS)	(MIN)	(IN)
FOR PLAN = 1	RATIO=	.00							
RP1	MANE	1.00	133.42	85.00	.44	1.00	133.42	85.00	.44
CONTINUITY SUMMARY (AC-FT) - INFLOW= .9820E+01 EXCESS= .0000E+00 OUTFLOW= .9415E+01 BASIN STORAGE= .4554E+00 PERCENT ERROR= -.5									
FOR PLAN = 1	RATIO=	.00							
RP1	MANE	1.00	28.24	97.00	.10	1.00	28.24	97.00	.10
CONTINUITY SUMMARY (AC-FT) - INFLOW= .2264E+01 EXCESS= .0000E+00 OUTFLOW= .2073E+01 BASIN STORAGE= .2077E+00 PERCENT ERROR= -.7									
FOR PLAN = 1	RATIO=	.00							
RP2	MANE	1.00	248.13	83.00	.35	1.00	248.13	83.00	.35
CONTINUITY SUMMARY (AC-FT) - INFLOW= .1833E+02 EXCESS= .0000E+00 OUTFLOW= .1771E+02 BASIN STORAGE= .6916E+00 PERCENT ERROR= -.4									
FOR PLAN = 1	RATIO=	.00							
RP2	MANE	1.00	40.63	97.00	.06	1.00	40.63	97.00	.06
CONTINUITY SUMMARY (AC-FT) - INFLOW= .3336E+01 EXCESS= .0000E+00 OUTFLOW= .3070E+01 BASIN STORAGE= .2837E+00 PERCENT ERROR= -.5									
FOR PLAN = 1	RATIO=	.00							
RP3	MANE	1.00	637.25	129.00	.32	1.00	637.25	129.00	.32
CONTINUITY SUMMARY (AC-FT) - INFLOW= .7309E+02 EXCESS= .0000E+00 OUTFLOW= .6884E+02 BASIN STORAGE= .4465E+01 PERCENT ERROR= -.3									
FOR PLAN = 1	RATIO=	.00							
RP3	MANE	1.00	132.42	140.00	.06	1.00	132.42	140.00	.06
CONTINUITY SUMMARY (AC-FT) - INFLOW= .1473E+02 EXCESS= .0000E+00 OUTFLOW= .1317E+02 BASIN STORAGE= .1615E+01 PERCENT ERROR= -.4									
FOR PLAN = 1	RATIO=	.00							
RP4	MANE	1.00	137.60	86.00	.35	1.00	137.60	86.00	.35
CONTINUITY SUMMARY (AC-FT) - INFLOW= .1036E+02 EXCESS= .0000E+00 OUTFLOW= .9928E+01 BASIN STORAGE= .4818E+00 PERCENT ERROR= -.5									
FOR PLAN = 1	RATIO=	.00							
RP4	MANE	1.00	22.63	101.00	.06	1.00	22.63	101.00	.06
CONTINUITY SUMMARY (AC-FT) - INFLOW= .1883E+01 EXCESS= .0000E+00 OUTFLOW= .1699E+01 BASIN STORAGE= .1979E+00 PERCENT ERROR= -.7									
FOR PLAN = 1	RATIO=	.00							
RP5	MANE	1.00	38.06	96.00	.42	1.00	38.06	96.00	.42
CONTINUITY SUMMARY (AC-FT) - INFLOW= .2855E+01 EXCESS= .0000E+00 OUTFLOW= .2611E+01 BASIN STORAGE= .2717E+00 PERCENT ERROR= -1.0									
FOR PLAN = 1	RATIO=	.00							
RP5	MANE	1.00	8.07	113.00	.09	1.00	8.07	113.00	.09
CONTINUITY SUMMARY (AC-FT) - INFLOW= .6578E+00 EXCESS= .0000E+00 OUTFLOW= .5411E+00 BASIN STORAGE= .1272E+00 PERCENT ERROR= -1.6									
FOR PLAN = 1	RATIO=	.00							
RP6	MANE	.90	68.99	74.70	.59	1.00	68.63	75.00	.59
CONTINUITY SUMMARY (AC-FT) - INFLOW= .3183E+01 EXCESS= .0000E+00 OUTFLOW= .2959E+01 BASIN STORAGE= .2837E+00 PERCENT ERROR= -1.9									
FOR PLAN = 1	RATIO=	.00							
RP6	MANE	.90	18.47	89.10	.16	1.00	18.11	89.00	.16
CONTINUITY SUMMARY (AC-FT) - INFLOW= .9359E+00 EXCESS= .0000E+00 OUTFLOW= .8194E+00 BASIN STORAGE= .1424E+00 PERCENT ERROR= -2.8									
FOR PLAN = 1	RATIO=	.00							

	RP7	MANE	.85	10.03	99.45	.45	post.out 1.00	9.22	99.00	.45
CONTINUITY SUMMARY (AC-FT) - INFLOW= .3781E+00 EXCESS= .0000E+00 OUTFLOW= .3330E+00 BASIN STORAGE= .7196E-01 PERCENT ERROR= -7.1										
	FOR PLAN = 1	RATIO=	.00							
	RP7	MANE	.80	2.00	129.60	.09	1.00	1.66	129.00	.09
CONTINUITY SUMMARY (AC-FT) - INFLOW= .9462E-01 EXCESS= .0000E+00 OUTFLOW= .6438E-01 BASIN STORAGE= .3981E-01 PERCENT ERROR= -10.1										
	FOR PLAN = 1	RATIO=	.00							
	RCP1	MANE	1.00	922.09	118.00	.31	1.00	922.09	118.00	.31
CONTINUITY SUMMARY (AC-FT) - INFLOW= .1131E+03 EXCESS= .0000E+00 OUTFLOW= .1019E+03 BASIN STORAGE= .1163E+02 PERCENT ERROR= -.4										
	FOR PLAN = 1	RATIO=	.00							
	RCP1	MANE	1.00	194.87	137.00	.05	1.00	194.87	137.00	.05
CONTINUITY SUMMARY (AC-FT) - INFLOW= .2178E+02 EXCESS= .0000E+00 OUTFLOW= .1749E+02 BASIN STORAGE= .4436E+01 PERCENT ERROR= -.6										
	FOR PLAN = 1	RATIO=	.00							
	RP8	MANE	.50	19.52	104.00	.43	1.00	19.52	104.00	.43
CONTINUITY SUMMARY (AC-FT) - INFLOW= .1032E+01 EXCESS= .0000E+00 OUTFLOW= .8503E+00 BASIN STORAGE= .2393E+00 PERCENT ERROR= -5.5										
	FOR PLAN = 1	RATIO=	.00							
	RP8	MANE	.40	4.08	134.40	.09	1.00	4.08	134.00	.09
CONTINUITY SUMMARY (AC-FT) - INFLOW= .2593E+00 EXCESS= .0000E+00 OUTFLOW= .1769E+00 BASIN STORAGE= .1289E+00 PERCENT ERROR= -18.0										
	FOR PLAN = 1	RATIO=	.00							
	RP9	MANE	1.00	294.01	147.00	.24	1.00	294.01	147.00	.24
CONTINUITY SUMMARY (AC-FT) - INFLOW= .3334E+02 EXCESS= .0000E+00 OUTFLOW= .2347E+02 BASIN STORAGE= .1027E+02 PERCENT ERROR= -1.2										
	FOR PLAN = 1	RATIO=	.00							
	RP9	MANE	1.00	61.00	169.00	.03	1.00	61.00	169.00	.03
CONTINUITY SUMMARY (AC-FT) - INFLOW= .6763E+01 EXCESS= .0000E+00 OUTFLOW= .3037E+01 BASIN STORAGE= .3855E+01 PERCENT ERROR= -1.9										
	FOR PLAN = 1	RATIO=	.00							
	RP13	MANE	.95	161.72	65.55	.49	1.00	161.57	65.00	.49
CONTINUITY SUMMARY (AC-FT) - INFLOW= .7855E+01 EXCESS= .0000E+00 OUTFLOW= .7493E+01 BASIN STORAGE= .3985E+00 PERCENT ERROR= -.5										
	FOR PLAN = 1	RATIO=	.00							
	RP13	MANE	.90	34.06	76.50	.12	1.00	34.05	76.00	.12
CONTINUITY SUMMARY (AC-FT) - INFLOW= .1964E+01 EXCESS= .0000E+00 OUTFLOW= .1793E+01 BASIN STORAGE= .1860E+00 PERCENT ERROR= -.8										
	FOR PLAN = 1	RATIO=	.00							
	RP14	MANE	1.00	21.15	106.00	.44	1.00	21.15	106.00	.44
CONTINUITY SUMMARY (AC-FT) - INFLOW= .1916E+01 EXCESS= .0000E+00 OUTFLOW= .1752E+01 BASIN STORAGE= .1798E+00 PERCENT ERROR= -.8										
	FOR PLAN = 1	RATIO=	.00							
	RP14	MANE	1.00	4.96	120.00	.10	1.00	4.96	120.00	.10
CONTINUITY SUMMARY (AC-FT) - INFLOW= .4655E+00 EXCESS= .0000E+00 OUTFLOW= .3886E+00 BASIN STORAGE= .8233E-01 PERCENT ERROR= -1.2										
	FOR PLAN = 1	RATIO=	.00							
	RP10	MANE	.50	8.77	62.00	.49	1.00	8.77	62.00	.49
CONTINUITY SUMMARY (AC-FT) - INFLOW= .2774E+00 EXCESS= .0000E+00 OUTFLOW= .2635E+00 BASIN STORAGE= .2154E-01 PERCENT ERROR= -2.8										

post.out

FOR PLAN = 1	RATIO=	.00							
RP10	MANE	.45	1.73	76.50	.12	1.00	1.61	77.00	.12

CONTINUITY SUMMARY (AC-FT) - INFLOW= .6967E-01 EXCESS= .0000E+00 OUTFLOW= .6248E-01 BASIN STORAGE= .1006E-01 PERCENT ERROR= -4.1

FOR PLAN = 1	RATIO=	.00							
RP11	MANE	1.00	12.41	80.00	.48	1.00	12.41	80.00	.48

CONTINUITY SUMMARY (AC-FT) - INFLOW= .8187E+00 EXCESS= .0000E+00 OUTFLOW= .7818E+00 BASIN STORAGE= .4347E-01 PERCENT ERROR= -.8

FOR PLAN = 1	RATIO=	.00							
RP11	MANE	1.00	2.82	90.00	.11	1.00	2.82	90.00	.11

CONTINUITY SUMMARY (AC-FT) - INFLOW= .2023E+00 EXCESS= .0000E+00 OUTFLOW= .1846E+00 BASIN STORAGE= .2037E-01 PERCENT ERROR= -1.3

FOR PLAN = 1	RATIO=	.00							
RP12	MANE	1.00	377.82	127.00	.38	1.00	377.82	127.00	.38

CONTINUITY SUMMARY (AC-FT) - INFLOW= .4341E+02 EXCESS= .0000E+00 OUTFLOW= .4125E+02 BASIN STORAGE= .2249E+01 PERCENT ERROR= -.2

FOR PLAN = 1	RATIO=	.00							
RP12	MANE	1.00	90.42	136.00	.08	1.00	90.42	136.00	.08

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1015E+02 EXCESS= .0000E+00 OUTFLOW= .9300E+01 BASIN STORAGE= .8850E+00 PERCENT ERROR= -.3

*** NORMAL END OF HEC-1 ***

Appendix C. Traffic Impact Study



August 2017

Dammeron Valley
Washington County, Utah

TRAFFIC IMPACT STUDY



KELLER
associates

August 2017

Dammeron Valley
Washington County, Utah

TRAFFIC IMPACT STUDY

TRAFFIC IMPACT STUDY

Dammeron Valley
Washington County, Utah

Table of Contents

1	Introduction	1
2	Proposed Development	1
2.1	Site Plan.....	1
2.2	Development Phasing and Timing	1
3	Data Sources	3
3.1	Turning Movement Counts.....	3
3.2	SR-18 Annual Average Daily Traffic (AADT)	3
3.3	Crash Data	3
4	Projected Traffic.....	4
4.1	SR-18 Traffic Forecast.....	4
4.2	Trip Generation	4
4.3	Trip Distribution.....	5
4.4	Trip Assignment.....	6
5	Traffic and Improvement Analysis.....	7
5.1	Level of Service Analysis	7
5.2	Traffic Safety.....	8
5.2.1	Crash History	8
5.2.2	Sight Distance.....	8
5.2.3	Turn Lane Requirements	10
6	Conclusions	12
7	Recommendations.....	12

Appendix A: Turning Movement Counts

Appendix B: Trip Assignment and Turning Movement Diagrams

Appendix C: Level of Service Output



Figures

Figure 1 – Dammeron Valley Master Lot Layout.....2
Figure 2 – Trip Assignment6
Figure 3 – Sand Cove Road Sight Distance, Looking North.....9
Figure 4 –Turn Lanes Required.....11

Tables

Table 1 – SR-18 Annual Average Daily Traffic.....3
Table 2 – ITE Land Use 270: Residential Planned Unit Development.....4
Table 3 – Trip Generation for Existing Vacant Lots and Proposed Subdivisions5
Table 4 – Existing Directional Distribution of Turning Movements5
Table 5 – Worst Movement Delay (seconds) and Level of Service7
Table 6 – SR-18 Crash Severity from 2011-2015.....8
Table 7 – Turn Lanes Required10

1 Introduction

This report presents a traffic study of the Dammeron Valley community, located north of St. George, Utah on State Route 18 (SR-18). Washington County is requiring a traffic impact study before allowing continued development of the valley. An additional five subdivisions, comprised of 217 residential lots, and a small area of future commercial are planned. However, the two future commercial parcels are not included in this study.

Keller Associates performed trip generation, distribution, and assignment for existing vacant lots and proposed subdivisions, evaluated vehicle level of service at SR-18 accesses, reviewed crash history in the study area, reviewed turn lane requirements, and evaluated available sight distance north of Sand Cove Road. Recommendations for traffic safety and capacity improvements are included in the conclusions of this report.

The SR-18 intersections in Dammeron Valley were chosen for analysis, as they will be the worst-case locations with the highest traffic. The existing interior subdivision roads have large amounts of reserve capacity and impacts to those roads are expected to be minimal.

2 Proposed Development

2.1 Site Plan

Figure 1 on the next page shows a master layout of Dammeron Valley. Occupied lots are colored blue, and the five proposed subdivisions are bolded.

2.2 Development Phasing and Timing

Dammeron Valley was evaluated under three scenarios:

- Existing conditions (2017 traffic volumes)
- Full build-out of existing platted lots, without the proposed subdivisions (2037 projected traffic volumes) – referred to as “Without Development”
- Full build-out of existing platted lots, with the proposed subdivisions (2037 projected traffic volumes) – referred to as “With Development”

Year 2037 was selected as the full-buildout year, as 20 years is typically the maximum amount of time that can be accurately forecast. Full buildout of existing and proposed lots by 2037 is a conservative assumption; in reality, full-buildout may take longer than 20 years.

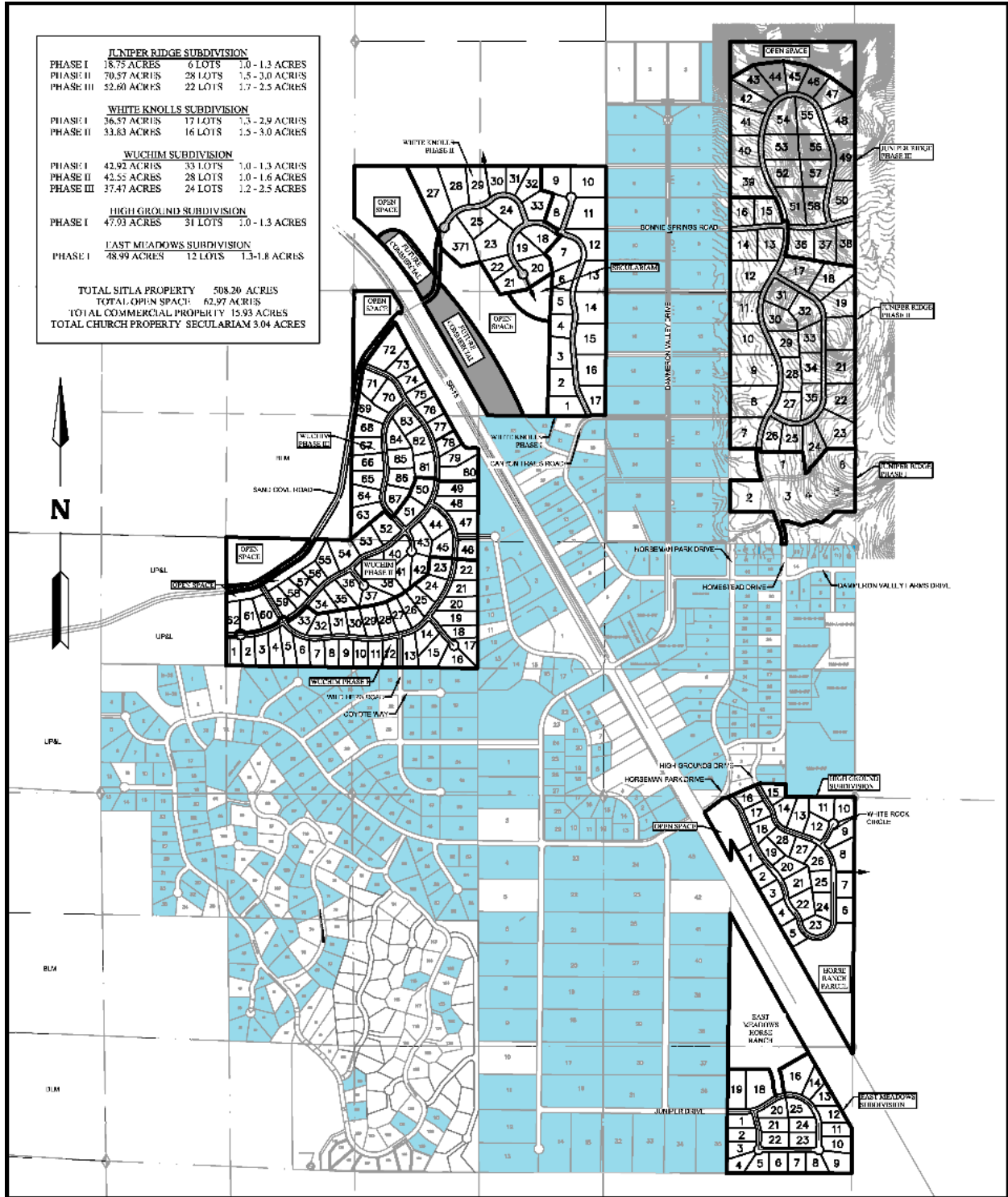


Figure 1 – Dammeron Valley Master Lot Layout

3 Data Sources

3.1 Turning Movement Counts

AM peak period (6:45 to 8:45 AM) and PM peak period (4:15 to 6:15 PM) turning movement counts were collected by Alpha Engineering. The Dammeron Valley Drive intersection was counted on Thursday, January 19, 2017, and the Homestead Drive intersection was counted on Wednesday, January 25, 2017.

A seasonal adjustment factor¹ of 1.06 was applied to the counts, referenced from Automatic Traffic Recorder (ATR) station 623, located on SR-18 within the City of St. George. Turning movement count summary sheets are included in **Appendix A**.

3.2 SR-18 Annual Average Daily Traffic (AADT)

2015 AADT data were obtained from the Utah Department of Transportation (UDOT) “Traffic on Utah Highways” publication. **Table 1** shows the two segments referenced, 2015 AADT, and projected 2017 AADT.

Table 1 – SR-18 Annual Average Daily Traffic

Location	2015 AADT	2017 AADT (Projected) ²
Milepost 12.61 – 17.32 (south of Dammeron Valley Drive)	3,870	4,190
Milepost 17.32 – 20.14 (north of Dammeron Valley Drive)	3,070	3,320

3.3 Crash Data

Five-year crash history (years 2011-2015) on SR-18 and study area intersections was obtained from UDOT via a Government Records Access and Management Act (GRAMA) request.

¹ Traffic volumes typically decline in winter months, and peak in the summer months. Seasonal adjustment factors are applied to convert traffic counts into annual average volumes.

² See section 4.1 for discussion of SR-18 traffic forecast.

4 Projected Traffic

4.1 SR-18 Traffic Forecast

SR-18 background traffic for the 2037 study horizon year was estimated by referencing SR-18 AADT growth in the past 20 years (1995 to 2015), and assuming the same growth rate in the future. AADT on the segment south of Dammeron Valley (spanning MP 12.61 to 17.32) grew 23 percent from 1995 to 2005. This equates to 1.04 percent average annual growth, and is a reasonable assumption for future background traffic growth on SR-18 considering the relatively slower development pace outside of St. George since 2008.

4.2 Trip Generation

Trip generation was conducted using the 9th Edition of the ITE Trip Generation Manual. Keller Associates used Land Use 270: Residential Planned Unit Development (PUD) to predict trips generated from all existing vacant lots and proposed subdivisions³. The details of this land use code are shown in **Table 2**.

Table 2 – ITE Land Use 270: Residential Planned Unit Development

Analysis Period	Trip Generation Rate (trips per dwelling unit)	Entering %	Exiting %
AM Peak Hour	0.51	22%	78%
PM Peak Hour	0.62	65%	35%

³ Based on existing traffic volumes versus number of occupied lots, Dammeron Valley is generating trips at a rate much lower than one would expect from typical single-family homes. However, the existing vacant lots and proposed subdivisions are expected to contain a combination of typical homes (ITE Land Use 210: Single-Family Detached Housing) and recreational/second homes (ITE Land Use 260: Recreational Homes). ITE Land Use 270: Residential PUD was selected because trip generation rates for Single-Family Detached Housing are over three times higher than rates for Recreational Homes, with the Residential PUD rate falling between the two. The Residential PUD trip generation rate is still higher than observed volumes in Dammeron Valley.

Using Residential PUD trip generation rates, **Table 3** shows AM and PM peak hour entering and exiting trips generated by the 146 existing vacant lots and 231 proposed lots.

Table 3 – Trip Generation for Existing Vacant Lots and Proposed Subdivisions

Origins (ITE Land Use 270: Residential Planned Unit Development)	Dwelling Units	AM Peak Hour		PM Peak Hour	
		Entering	Exiting	Entering	Exiting
		Existing vacant lots	146	16	58
Juniper Ridge Subdivision	58	7	23	23	13
White Knolls Subdivision	33	4	13	13	7
Wuchim Subdivision	87	10	35	35	19
High Ground Subdivision	28	3	11	11	6
East Meadows Subdivision	25	3	10	10	5
Total	377	42	150	152	82

4.3 Trip Distribution

The distribution of new Dammeron Valley trips north and south along SR-18 was determined by referencing existing turning movement counts at the Dammeron Valley Drive and Homestead Drive intersections. **Table 4** below shows the sum of turning movement volumes during the AM and PM peak hours at both intersections, and the resulting directional distribution used for trip assignment.

Table 4 – Existing Directional Distribution of Turning Movements

Turning Movement Direction	Dammeron Valley Drive				Homestead Drive				Total	Directional Distribution
	AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour			
	Entering	Exiting	Entering	Exiting	Entering	Exiting	Entering	Exiting		
To/from North	3	3	14	6	0	2	3	2	33	13% North
To/from South	3	25	36	20	10	58	46	18	216	87% South

Eighty-seven percent of Dammeron Valley traffic travels to/from the south toward the St. George metropolitan area, while only 13 percent of traffic travels to/from the north toward Veyo. This distribution was expected considering the relatively high concentration of destinations in the St. George area. The same distribution can be expected for full buildout traffic because the existing occupied lots and proposed additions are of the same residential use.

4.4 Trip Assignment

New trips were assigned to the Dammeron Valley accesses based the estimated shortest travel time between residences and SR-18. **Figure 2** illustrates the lots and subdivisions most likely to use each access, as well as the directional distribution of turning movements at each access.

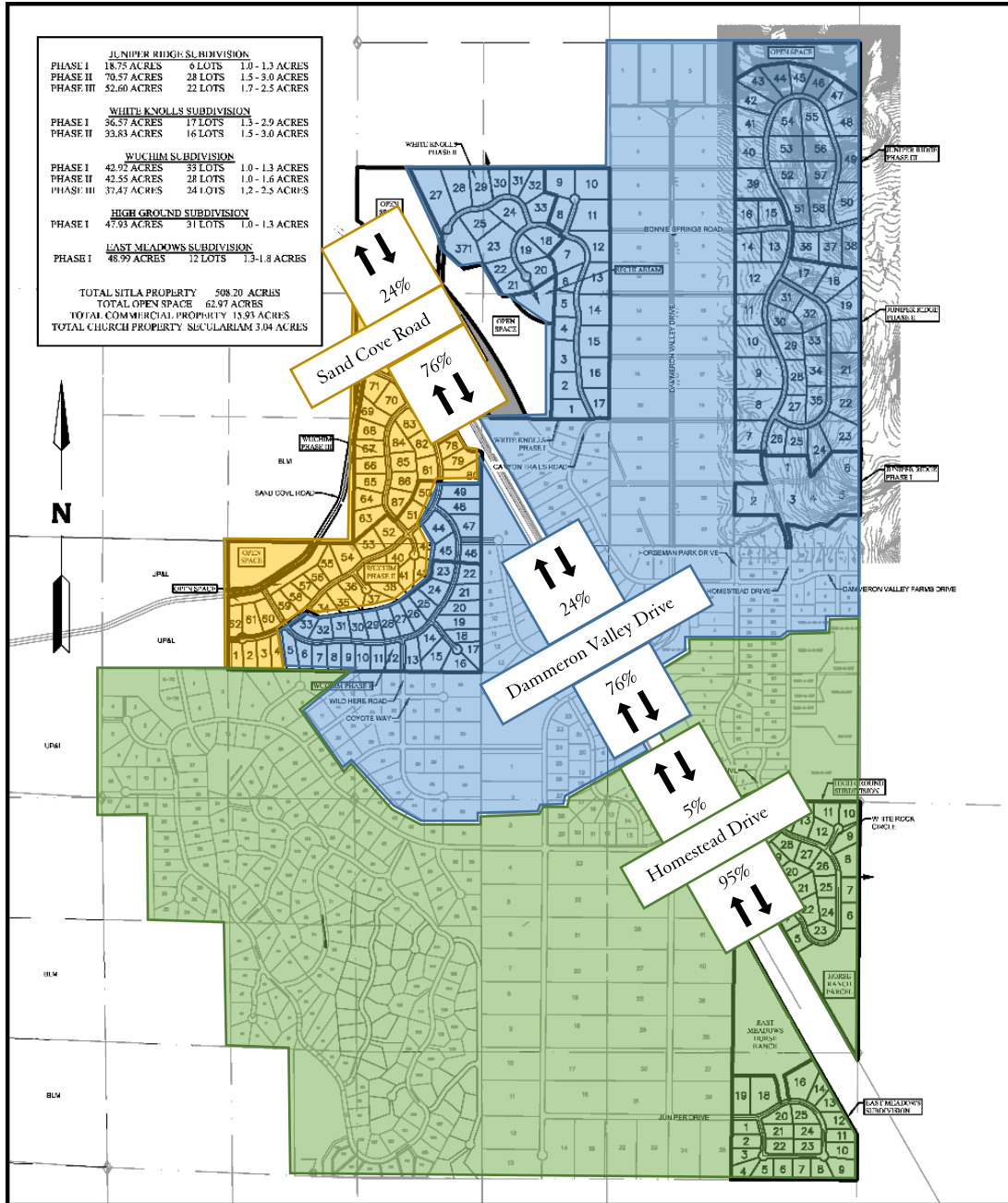


Figure 2 – Trip Assignment

Directional distribution of turning movements were determined by referencing existing turning movement counts at study intersections. Turning movements at Homestead Drive are distributed 5 percent to the north and 95 percent to the south. Turning movements at Dammeron Valley Drive

are distributed 24 percent to the north and 76 percent to the south. Turning movement counts were not collected at Sand Cove Road, as it is currently only used for recreational access, so the same distribution as Dammeron Valley Drive was used; it is the northern-most access, and therefore should be used by a relatively high percentage of drivers traveling to/from the north.

Detailed trip assignment spreadsheets are included in **Appendix B**.

5 Traffic and Improvement Analysis

5.1 Level of Service Analysis

Vehicle delay and level of service (LOS) at the study intersections was evaluated using Highway Capacity Manual (HCM) 6th Edition methodology. Level of service (LOS) is a concept used to measure traffic capacity. There are six level of service ratings, ranging from “A” to “F.” LOS A through LOS C represent adequate traffic flow in rural areas. LOS D suggests longer delays and possible need for improvements, while LOS E and F represent congestion and certain need for improvements in rural areas such as Dammeron Valley.

Table 5 below shows delay and level of service for the worst movement of each intersection scenario during the AM and PM peak hours. Detailed analysis output sheets are included in **Appendix C**.

Table 5 – Worst Movement Delay (seconds) and Level of Service

SR-18 Intersection	AM Peak Hour			PM Peak Hour		
	Existing (2017)	Without Development (2037)	With Development (2037)	Existing (2017)	Without Development (2037)	With Development (2037)
Sand Cove Road	n/a	n/a	10.1 LOS B Eastbound right	n/a	n/a	9.6 LOS A Eastbound right
Dammeron Valley Drive	10.3 LOS B Westbound left	10.9 LOS B Westbound left	11.7 LOS B Westbound left	11.2 LOS B Westbound left	12.1 LOS B Westbound left	13.3 LOS B Westbound left
Homestead Drive	11.5 LOS B Westbound left	13.7 LOS B Westbound left	15.9 LOS C Westbound left	12.9 LOS B Westbound left	16.4 LOS C Westbound left	19.8 LOS C Westbound left

Currently, traffic capacity is adequate at Dammeron Valley accesses, which is expected considering the rural nature of the area and relatively low turning movement volumes. Traffic capacity is expected to be adequate in 2037 as well, even with full buildout of both existing and proposed subdivisions. The lowest level of service is expected to occur on the westbound left turn from Homestead Drive onto SR-18 during the PM peak hour (LOS C in 2037, at full build-out of existing and proposed subdivisions).

5.2 Traffic Safety

5.2.1 Crash History

From the beginning of 2011 to the end of 2015, there were 35 crashes along SR-18 between milepost 16.5-18.5 (roughly one half-mile south of Homestead Drive to one half-mile north of Sand Cove Rd). Twenty-six of these crashes were animal-related, and one was alcohol-related. Animal and alcohol-related crashes are generally disregarded in safety evaluations because roadway design has little or no influence on the crash.

After removing animal and alcohol-related crashes, eight crashes remain. **Table 6** shows the severity distribution of the crashes.

Table 6 - SR-18 Crash Severity from 2011 – 2015

Crash Severity	Number of Crashes from 2011 - 2015
Fatality	1
A-Injury (Incapacitating)	2
B-Injury (Non-incapacitating)	0
C-Injury (Possible injury)	1
Property Damage Only	4
Total	8

There is a relatively large proportion of high severity crashes (fatality and A-Injury). However, this is a common trend on rural two-lane highways, influenced by high travel speeds.

The one fatal crash occurred at night and involved a northbound vehicle drifting onto the shoulder and overturning approximately 200 feet north of Dammeron Valley Drive. The first A-Injury crash was a vehicle-bicycle crash on SR-18 approximately 2,000 feet north of Sand Cove Road. The second A-Injury crash was a head-on crash between two vehicles approximately 1,500 feet south of Homestead Drive.

Notably, there were no crashes primarily influenced by the Dammeron Valley intersections with SR-18.

5.2.2 Sight Distance

Sight distance along SR-18 in the study area is mostly unlimited due to the straight highway alignment and flat terrain. However, there is a horizontal curve north of Sand Cove Road that could restrict sight distance for vehicles turning left from Sand Cove Road to northbound SR-18. **Figure 3** shows the area of SR-18 visible from the Sand Cove Road approach.



Figure 3 – Sand Cove Road Sight Distance, Looking North

The available sight distance north of the Sand Cove Road approach is approximately 1200 feet, limited by vegetation. This distance could be increased by several hundred feet with the removal of the high vegetation. However, this available sight distance is adequate; the American Association of State Highway Transportation Officials (AASHTO) “Green Book” recommends 850 feet of intersection sight distance for a 65-mph design speed⁴.

The Sand Cove Road approach has a steep upgrade approach of approximately 10%. The large change in grade entering the intersection slows down vehicles starting a turn from the stop sign, and the undersides of longer vehicles with trailers have the potential to drag. When this approach is improved and paved in the future, the vertical profile should be modified so that the grade is no steeper than 6%.

⁴ Table 9-6 in “A Policy on Geometric Design of Highways and Streets”, 6th Edition; left-turn from stop, with distance modified for a 10% upgrade approach

5.2.3 Turn Lane Requirements

Utah Administrative Code R930-6 requires turn lanes on State Highways under the following conditions:

- Right turn lane – Any access with a projected peak hour right turn ingress turning volume greater than 10 vehicles per hour
- Left turn lane – Any access with a projected peak hour left turn ingress turning volume greater than 5 vehicles per hour

Dedicated turn lanes currently exist in the following study area locations:

- SR-18 & Dammeron Valley Drive – northbound left and right, southbound left
- SR-18 & Homestead Drive – northbound left and right, southbound left

Table 7 shows the four turning movements into Dammeron Valley that do not already have a dedicated turn lane, and if a turn lane will be required.

Table 7 – Turn Lanes Required

SR-18 Intersection	Turning Movement	Analysis Scenario		
		Existing (2017)	Without Development (2037)	With Development (2037)
Sand Cove Road	Southbound right	No (no count data)	No (no count data)	No (5 veh/hr)
	Northbound left	No (no count data)	No (no count data)	Yes (16 veh/hr)
Dammeron Valley Drive	Southbound right	No (8 veh/hr)	No (9 veh/hr)	Yes (12 veh/hr)
Homestead Drive	Southbound right	No (3 veh/hr)	No (5 veh/hr)	No (6 veh/hr)

Figure 4 on the following page illustrates turn lanes that are expected to be required if existing platted lots and proposed subdivisions are fully built-out. These include the northbound left turn lane onto Sand Cove Road, and the southbound right turn lane onto Dammeron Valley Drive. The northbound left turn lane onto Sand Cove Road may be required sooner than full buildout (when one-third of the proposed Wuchim subdivision is occupied).



Figure 4 –Turn Lanes Required

6 Conclusions

Traffic capacity is currently adequate at Dammeron Valley accesses, and is expected to be adequate in 2037 with full buildout of existing and proposed subdivisions. Five-year crash history in the study area revealed that the majority of crashes are animal-related. Other notable crashes include one fatal crash and two A-Injury crashes on SR-18 that were not related to Dammeron Valley accesses and appear typical of high-speed travel on two-lane highways. Sight distance north of Sand Cove Road is adequate. Lastly, development of the Wuchim subdivision is expected to trigger turn lane requirements on SR-18 at Sand Cove Road and Dammeron Valley Drive.

We have also reviewed the expected traffic loading at certain intersections within the existing subdivisions, and there should be no significant changes to the traffic patterns. The existing interior subdivision roads have large amounts of reserve capacity and they should continue to operate at LOS A or B, with and without additional development.

7 Recommendations

Keller Associates recommends construction of SR-18 turn lanes, with appropriate deceleration and taper lengths, at the following intersections and buildout thresholds:

- Southbound right turn lane at SR-18 & Dammeron Valley Drive intersection – construct when Phase 1 of the Wuchim subdivision is approved for development.
- Northbound left turn lane at SR-18 & Sand Cove Road intersection – construct when either Phase 2 or Phase 3 of the Wuchim subdivision is approved for development.

In addition, the Sand Cove Road approach to SR-18 has a steep upgrade of approximately 10%. When this intersection approach is improved and paved in the future, its vertical profile should be modified so that the grade is no steeper than 6%.

Appendix A:

Turning Movement Counts



INTERSECTION
 N-S STREET: SR-18
 E-W STREET: Dammeron Valley Dr

PROJECT NO.: 217007
 COUNT DATE: January 19, 2017
 NOTES:

COUNT TIME
 FROM: 6:45 AM
 TO: 8:45 AM

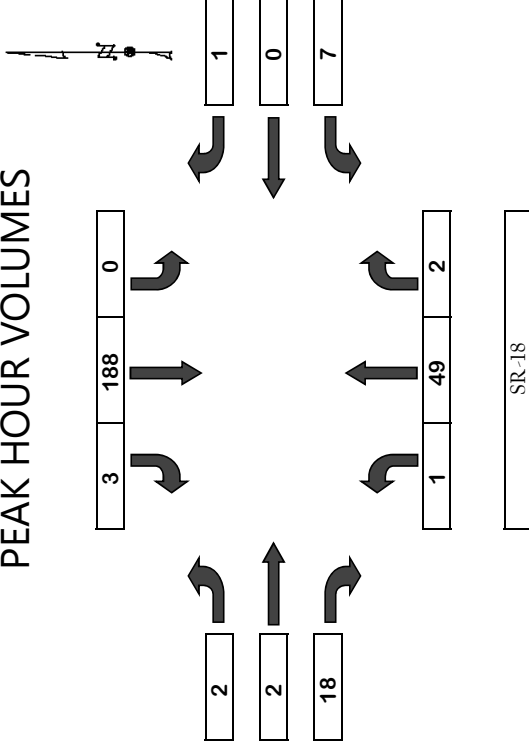
GROWTH FACTOR: 1.06

PEAK HOUR VOL: 273
 PHF: 0.88
 PEAK HOUR: FROM 7:15 AM TO 8:15 AM

Dammeron Valley Dr

TURNING MOVEMENT COUNT SUMMARY

PEAK HOUR VOLUMES



COUNT DATA INPUT:

TIME PERIOD	NORTHBOUND			EASTBOUND			SOUTHBOUND			WESTBOUND			TOTAL VOLUMES
	L	T	R	L	T	R	L	T	R	L	T	R	
6:45 AM TO: 7:00 AM	0	7	1	0	0	1	0	24	0	4	1	0	38
7:00 AM TO: 7:15 AM	0	3	0	0	1	4	0	26	0	4	1	0	39
7:15 AM TO: 7:30 AM	0	13	0	1	0	1	0	51	1	4	0	0	71
7:30 AM TO: 7:45 AM	0	9	0	0	2	4	0	55	0	2	0	1	73
7:45 AM TO: 8:00 AM	0	11	1	0	0	11	0	35	1	0	0	0	59
8:00 AM TO: 8:15 AM	1	13	1	1	1	1	0	36	1	1	0	0	55
8:15 AM TO: 8:30 AM	0	8	0	0	2	3	0	31	3	2	0	0	49
8:30 AM TO: 8:45 AM	1	15	5	1	5	2	2	39	1	7	0	1	77
Heavy Vehicles included in counts:													11
0% 5% 13% 0% 0% 0% 0% 2% 0% 0% 0% 0% 0%													2%
#DIV/0!													0%

HOURLY TOTALS:

TIME PERIOD	NORTHBOUND			EASTBOUND			SOUTHBOUND			WESTBOUND			TOTAL VOLUMES
	L	T	R	L	T	R	L	T	R	L	T	R	
6:45 AM TO: 7:45 AM	0	32	1	1	3	10	0	156	1	14	2	1	221
7:00 AM TO: 8:00 AM	0	36	1	1	3	20	0	167	2	10	1	1	242
7:15 AM TO: 8:15 AM	1	46	2	2	2	17	0	177	3	7	0	1	258
7:30 AM TO: 8:30 AM	1	41	2	1	4	19	0	157	5	5	0	1	236
7:45 AM TO: 8:45 AM	2	47	7	2	7	17	0	141	6	10	0	1	240

NOTE PHF IS BASED ON 15 MIN. PEAK WITHIN THE PEAK HOUR.



INTERSECTION: **SR-18**
 N-S STREET: **Dammeron Valley Dr**
 E-W STREET: **217007**
 PROJECT NO.: **January 19, 2017**
 COUNT DATE: **January 19, 2017**
 NOTES:

COUNT TIME: **4:15 PM**
 FROM: **6:15 PM**
 TO:

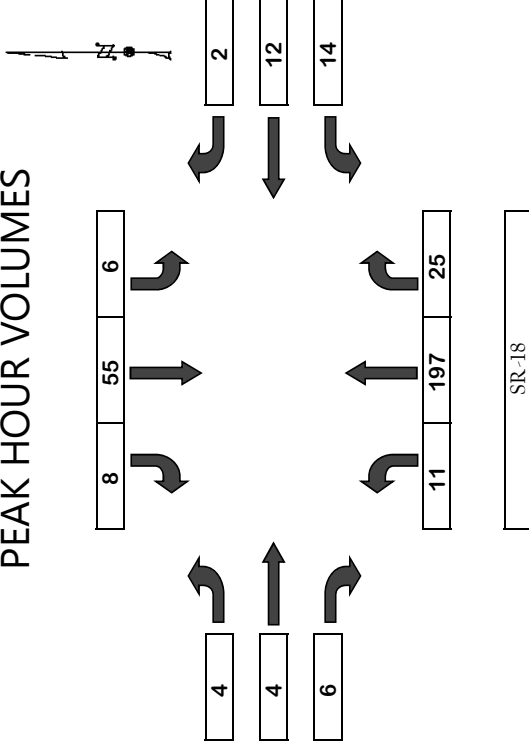
GROWTH FACTOR: **1.06**

PEAK HOUR VOL: **346**
 PHF: **0.90**
 PEAK HOUR: **5:15 PM** TO **6:15 PM**

Dammeron Valley Dr

TURNING MOVEMENT COUNT SUMMARY

PEAK HOUR VOLUMES



COUNT DATA INPUT:

TIME PERIOD	NORTHBOUND			EASTBOUND			SOUTHBOUND			WESTBOUND			TOTAL VOLUMES
	L	T	R	L	T	R	L	T	R	L	T	R	
FROM: 4:15 PM TO: 4:30 PM	3	41	5	1	4	4	0	14	2	0	3	1	78
4:30 PM TO: 4:45 PM	0	38	6	0	1	0	0	21	1	1	2	1	71
4:45 PM TO: 5:00 PM	1	35	7	1	0	1	1	17	0	2	0	0	65
5:00 PM TO: 5:15 PM	0	39	2	1	0	1	0	20	2	3	0	0	68
5:15 PM TO: 5:30 PM	3	48	5	1	1	1	0	12	2	4	2	1	80
5:30 PM TO: 5:45 PM	1	46	6	2	3	2	0	9	3	5	4	0	81
5:45 PM TO: 6:00 PM	1	51	9	0	0	1	3	17	1	2	5	1	91
6:00 PM TO: 6:15 PM	5	41	4	1	0	2	3	14	2	2	0	0	74
Heavy Vehicles included in counts:	0	4	0	0	0	0	0	7	3	0	0	0	14
	0%	1%	0%	0%	0%	0%	0%	6%	23%	0%	0%	0%	2%

HOURLY TOTALS:

TIME PERIOD	NORTHBOUND			EASTBOUND			SOUTHBOUND			WESTBOUND			TOTAL VOLUMES
	L	T	R	L	T	R	L	T	R	L	T	R	
FROM: 4:15 PM TO: 5:15 PM	4	153	20	3	5	6	1	72	5	6	5	2	282
4:30 PM TO: 5:30 PM	4	160	20	3	2	3	1	70	5	10	4	2	284
4:45 PM TO: 5:45 PM	5	168	20	5	4	5	1	58	7	14	6	1	294
5:00 PM TO: 6:00 PM	5	184	22	4	4	5	3	58	8	14	11	2	320
5:15 PM TO: 6:15 PM	10	186	24	4	4	6	6	52	8	13	11	2	326

NOTE PHF IS BASED ON 15 MIN. PEAK WITHIN THE PEAK HOUR.

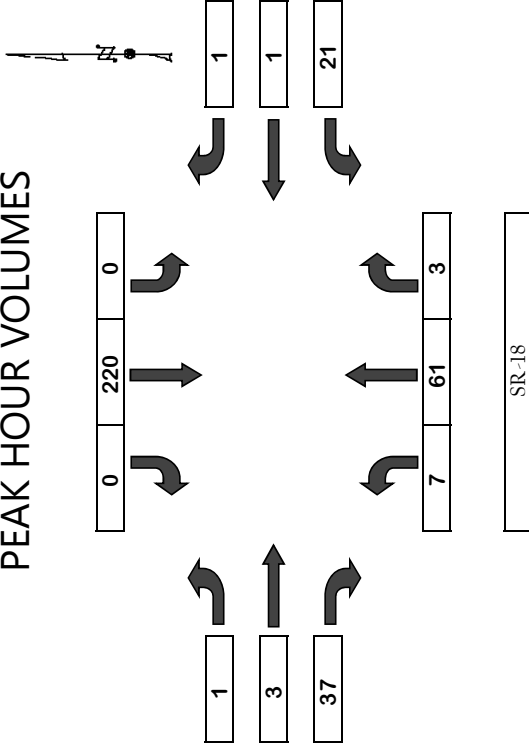


INTERSECTION: SR-18 Homestead Dr
 N-S STREET: SR-18
 E-W STREET: Homestead Dr
 PROJECT NO.: 217007
 COUNT DATE: January 25, 2017
 NOTES:
 COUNT TIME: 6:45 AM
 FROM: 6:45 AM
 TO: 8:45 AM
 GROWTH FACTOR: 1.06

PEAK HOUR VOL: 357
 PHF: 0.89
 PEAK HOUR: FROM 7:15 AM TO 8:15 AM
 Homestead Dr

TURNING MOVEMENT COUNT SUMMARY

PEAK HOUR VOLUMES



COUNT DATA INPUT:

TIME PERIOD	NORTHBOUND		EASTBOUND		SOUTHBOUND		WESTBOUND		TOTAL VOLUMES										
	L	T	L	T	L	T	L	T											
6:45 AM	2	6	0	0	5	0	28	0	4	0	45								
7:00 AM	1	7	0	1	6	0	46	0	1	0	62								
7:15 AM	2	11	0	2	11	0	64	0	2	1	95								
7:30 AM	1	10	1	1	10	0	66	0	5	0	94								
7:45 AM	1	13	1	0	11	0	45	0	7	0	78								
8:00 AM	3	24	0	1	3	0	33	0	6	0	70								
8:15 AM	3	24	0	0	5	0	44	2	4	0	82								
8:30 AM	2	18	1	1	5	0	48	0	1	0	77								
8:45 AM	0	10	0	0	0	0	8	0	0	0	18								
Heavy Vehicles included in counts:										0%	9%	0%	0%	0%	2%	0%	0%	0%	3%

HOURLY TOTALS:

TIME PERIOD	NORTHBOUND		EASTBOUND		SOUTHBOUND		WESTBOUND		TOTAL VOLUMES		
	L	T	L	T	L	T	L	T			
6:45 AM	6	34	2	1	3	32	0	12	1	1	296
7:00 AM	5	41	3	1	3	38	0	15	1	1	329
7:15 AM	7	58	3	1	3	35	0	20	1	1	337
7:30 AM	8	71	2	1	1	29	2	22	0	0	324
7:45 AM	9	79	2	2	0	24	2	18	0	1	307

NOTE PHF IS BASED ON 15 MIN. PEAK WITHIN THE PEAK HOUR.

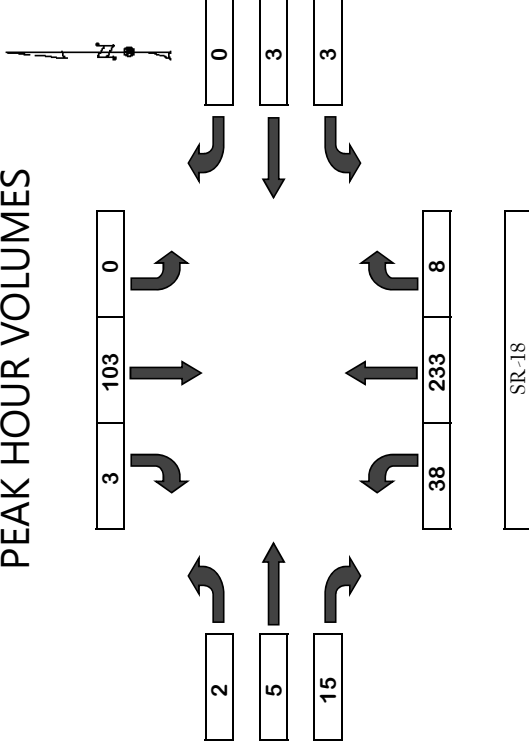
TURNING MOVEMENT COUNT SUMMARY



INTERSECTION: SR-18
N-S STREET: Homestead Dr
E-W STREET: Homestead Dr
PROJECT NO.: 217007
COUNT DATE: January 25, 2017
NOTES:
COUNT TIME: Homestead Dr
FROM: 4:15 PM
TO: 6:15 PM
GROWTH FACTOR: 1.06

PEAK HOUR VOL: 414
PHF: 0.90
PEAK HOUR:
FROM **TO**
4:45 PM **5:45 PM**

PEAK HOUR VOLUMES



COUNT DATA INPUT:

TIME PERIOD	NORTHBOUND		EASTBOUND		SOUTHBOUND		WESTBOUND		TOTAL VOLUMES	
	L	T	L	T	L	T	L	T		
4:15 PM	3	49	3	0	0	30	2	1	0	92
4:30 PM	9	49	2	0	1	27	0	0	0	91
4:45 PM	5	54	2	1	2	28	0	1	0	94
5:00 PM	10	51	1	0	0	18	1	0	1	87
5:15 PM	10	55	1	1	2	30	1	0	2	109
5:30 PM	11	60	4	0	2	21	1	2	0	101
5:45 PM	6	38	2	0	0	17	1	2	1	71
6:00 PM	8	51	2	0	1	11	0	2	0	77
6:15 PM	0	5	0	0	1	5	0	2	0	13
Heavy Vehicles included in counts: 0% 1% 0% 0% 4% 0% 3% 0% 25% 0% #DIV/0! 2%										

HOURLY TOTALS:

TIME PERIOD	NORTHBOUND		EASTBOUND		SOUTHBOUND		WESTBOUND		TOTAL VOLUMES	
	L	T	L	T	L	T	L	T		
4:15 PM	27	203	8	1	1	103	3	2	1	364
4:30 PM	34	209	6	2	1	103	2	1	3	381
4:45 PM	36	220	8	2	0	97	3	3	3	391
5:00 PM	37	204	8	1	0	86	4	4	4	368
5:15 PM	35	204	9	1	0	79	3	6	3	358

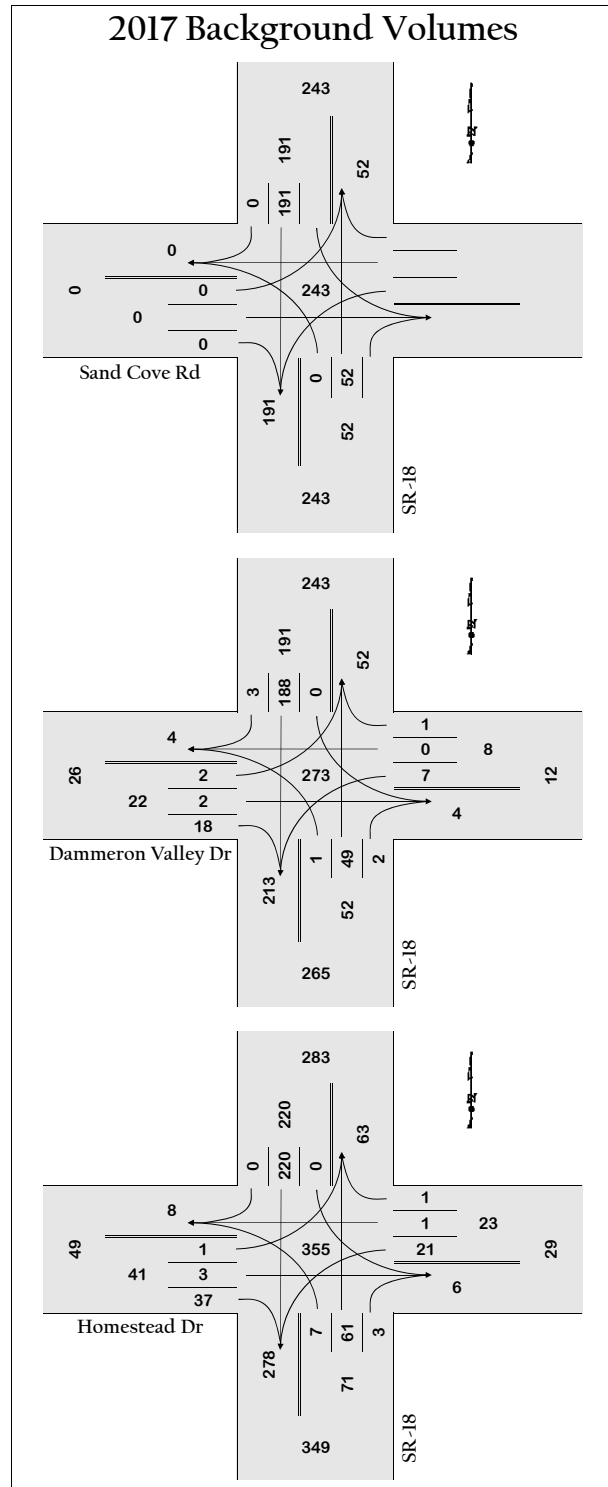
NOTE PHF IS BASED ON 15 MIN. PEAK WITHIN THE PEAK HOUR.

Appendix B:

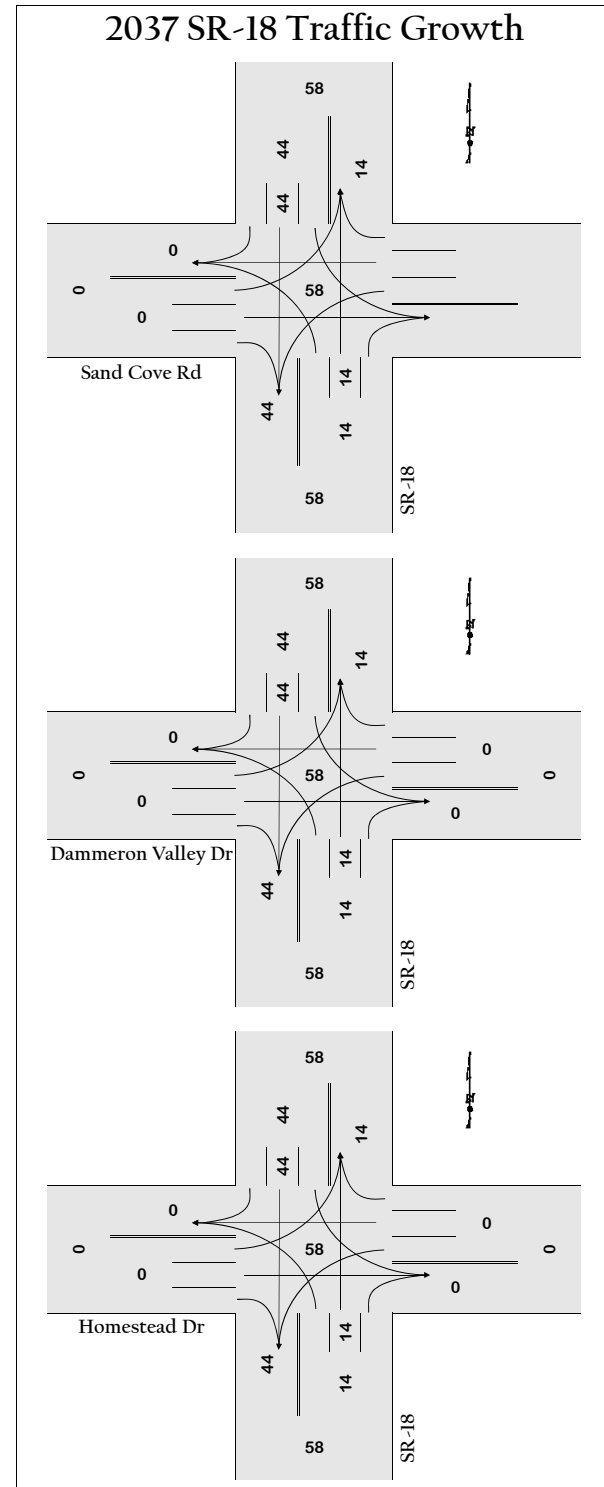
Trip Assignment Sheets

Trip Assignment

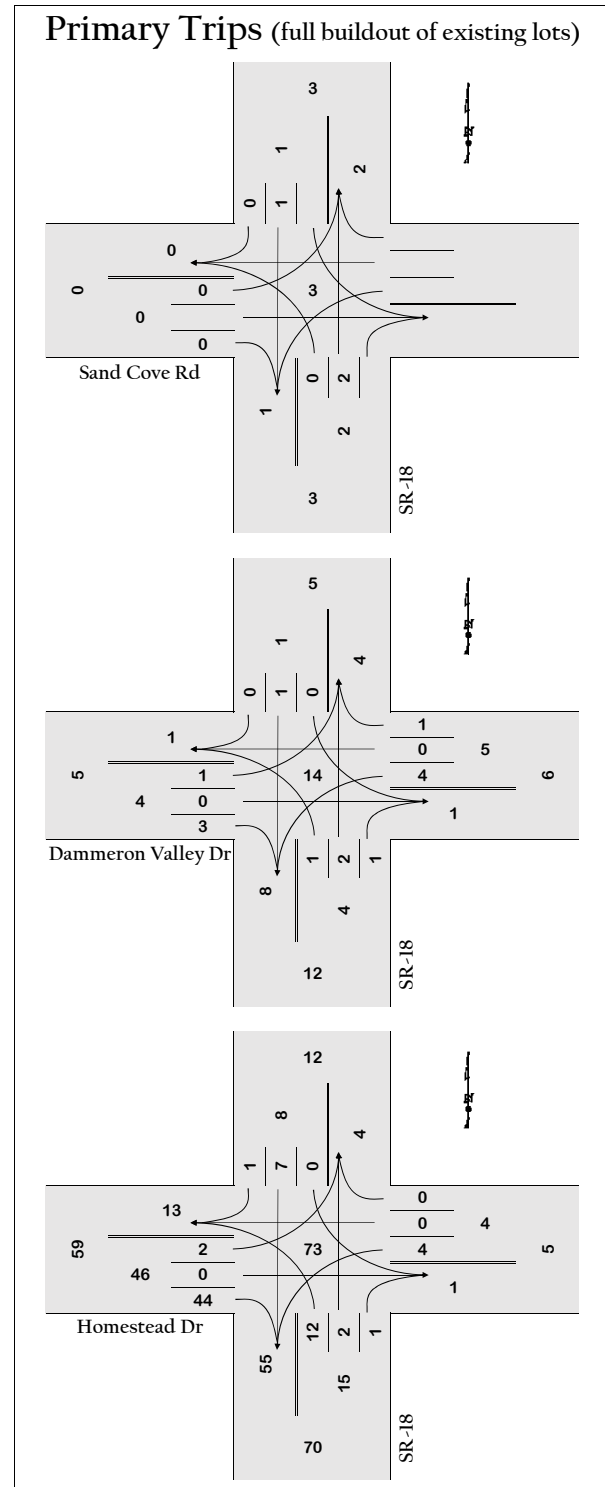
2037 Full Buildout, Without Development
AM Peak Hour



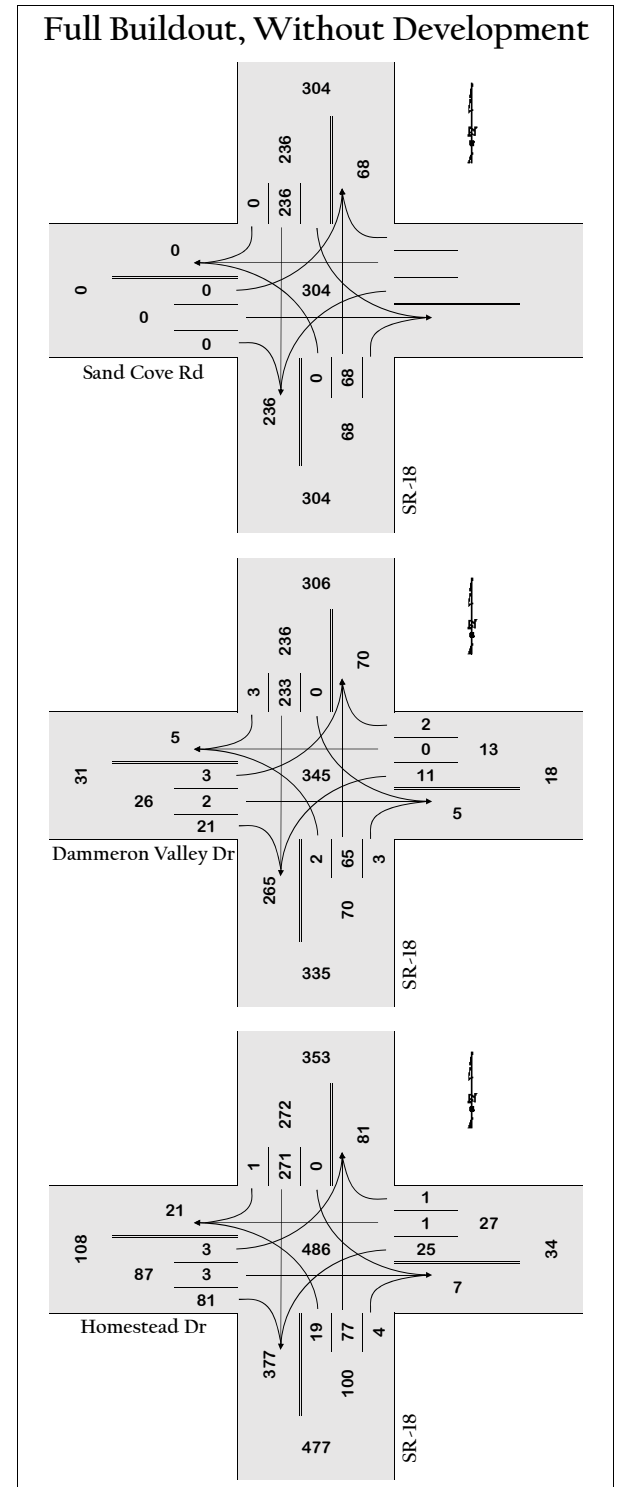
+



+



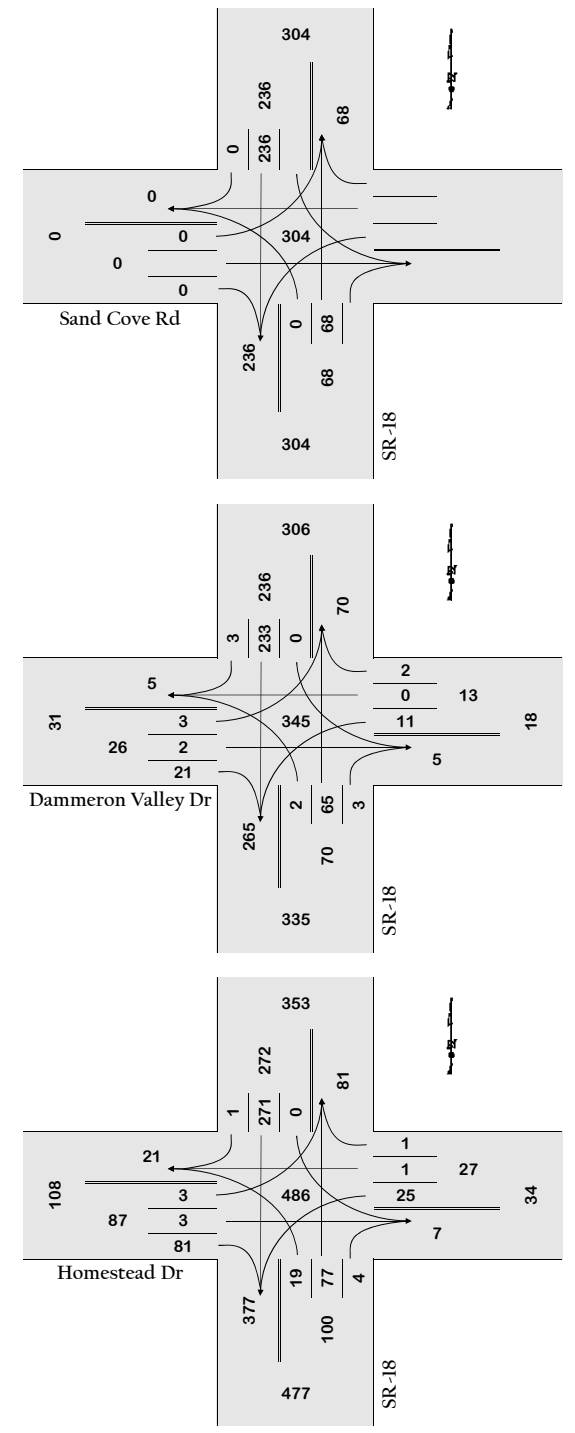
=



Trip Assignment

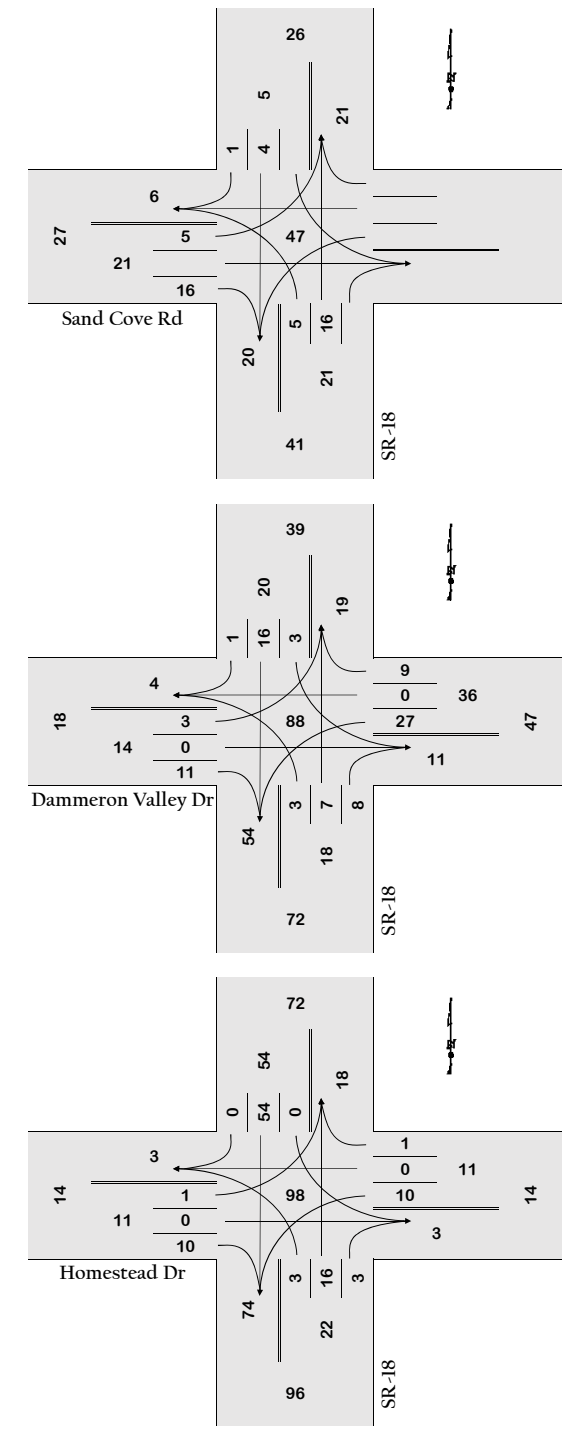
2037 Full Buildout, With Development
AM Peak Hour

Full Buildout, Without Development



+

Primary Trips (full buildout of proposed lots)



+

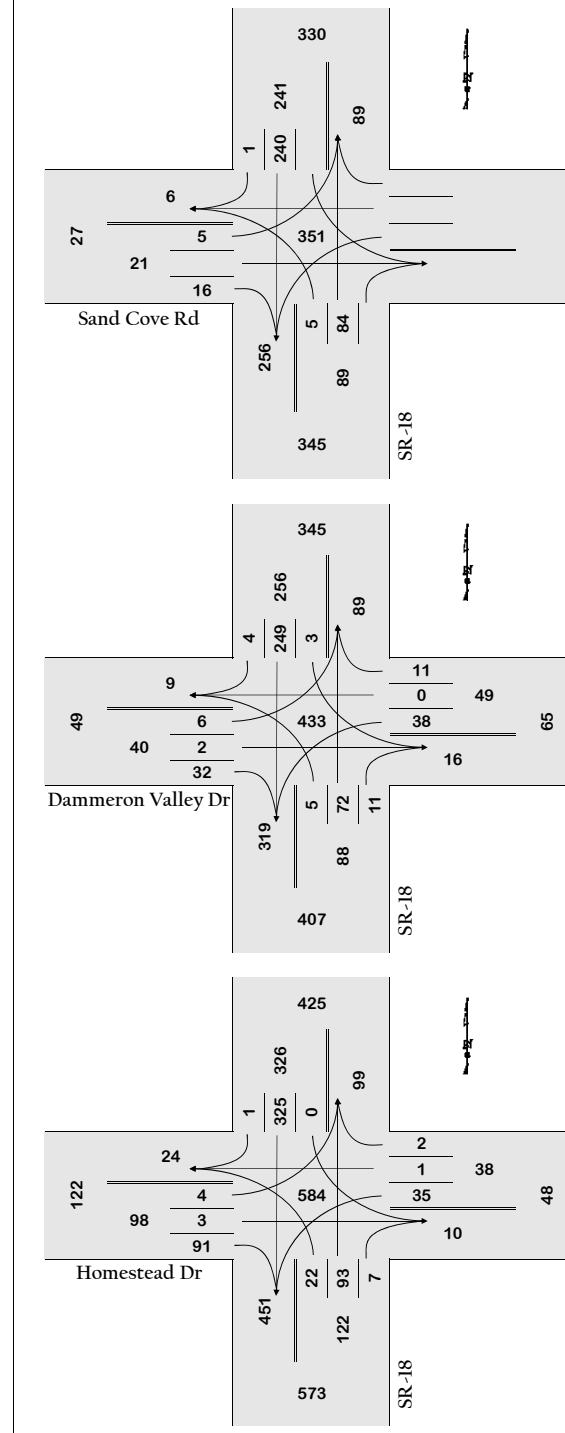
+

=

=

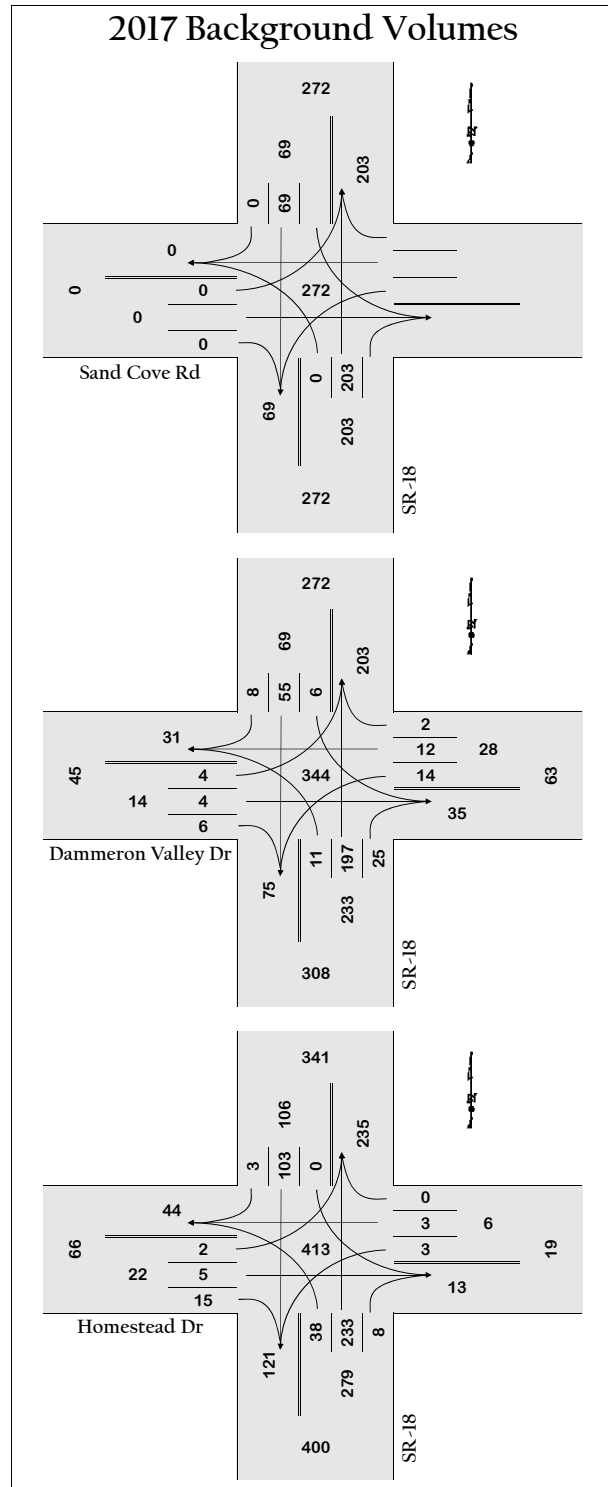
=

Full Buildout, With Development

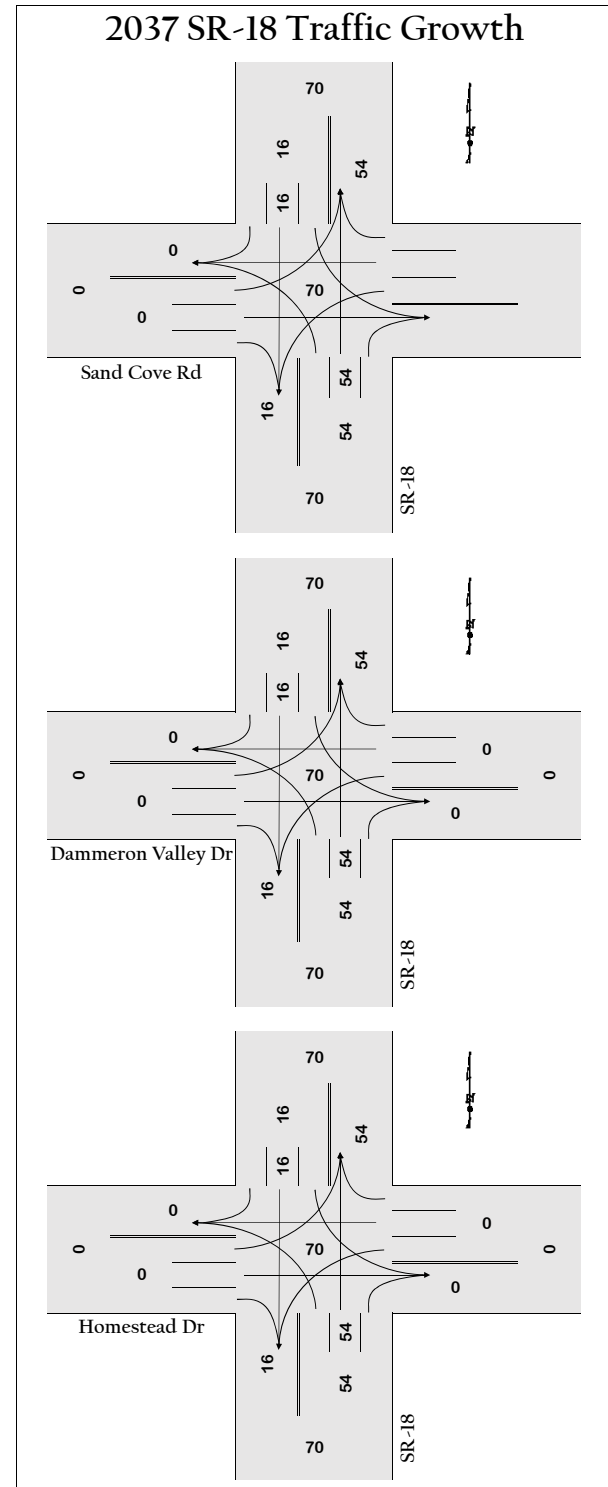


Trip Assignment

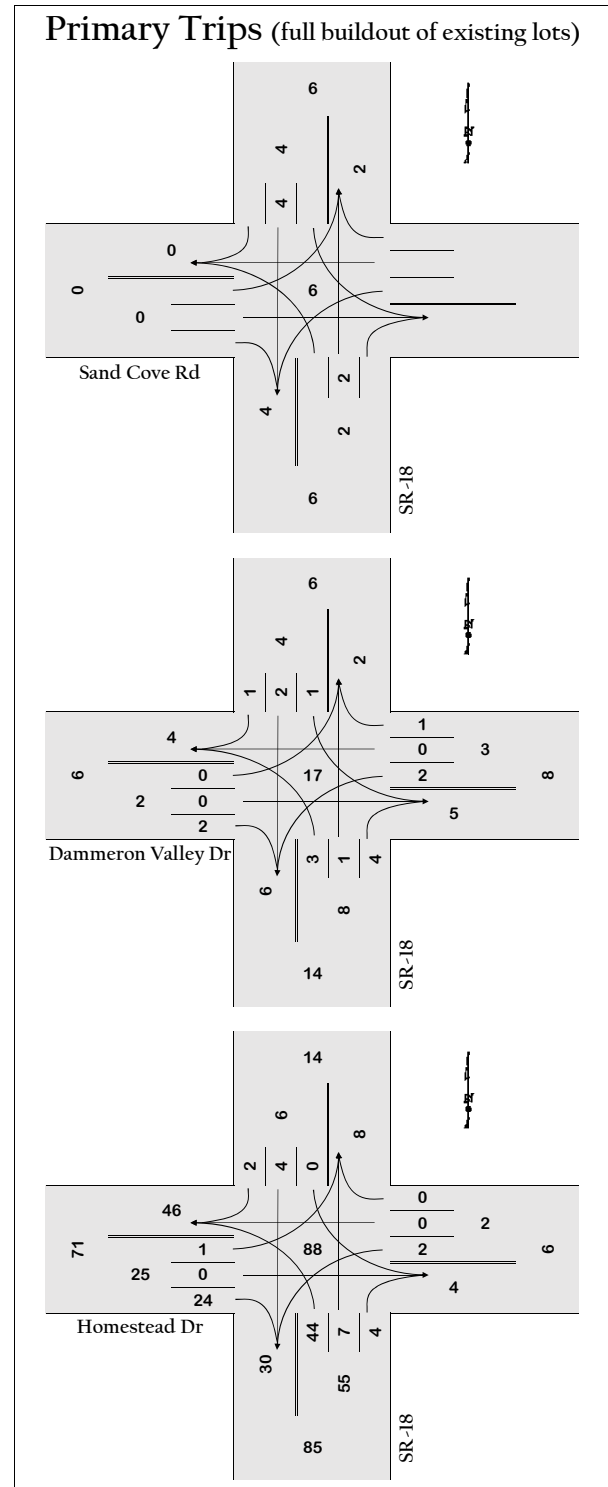
2037 Full Buildout, Without Development
PM Peak Hour



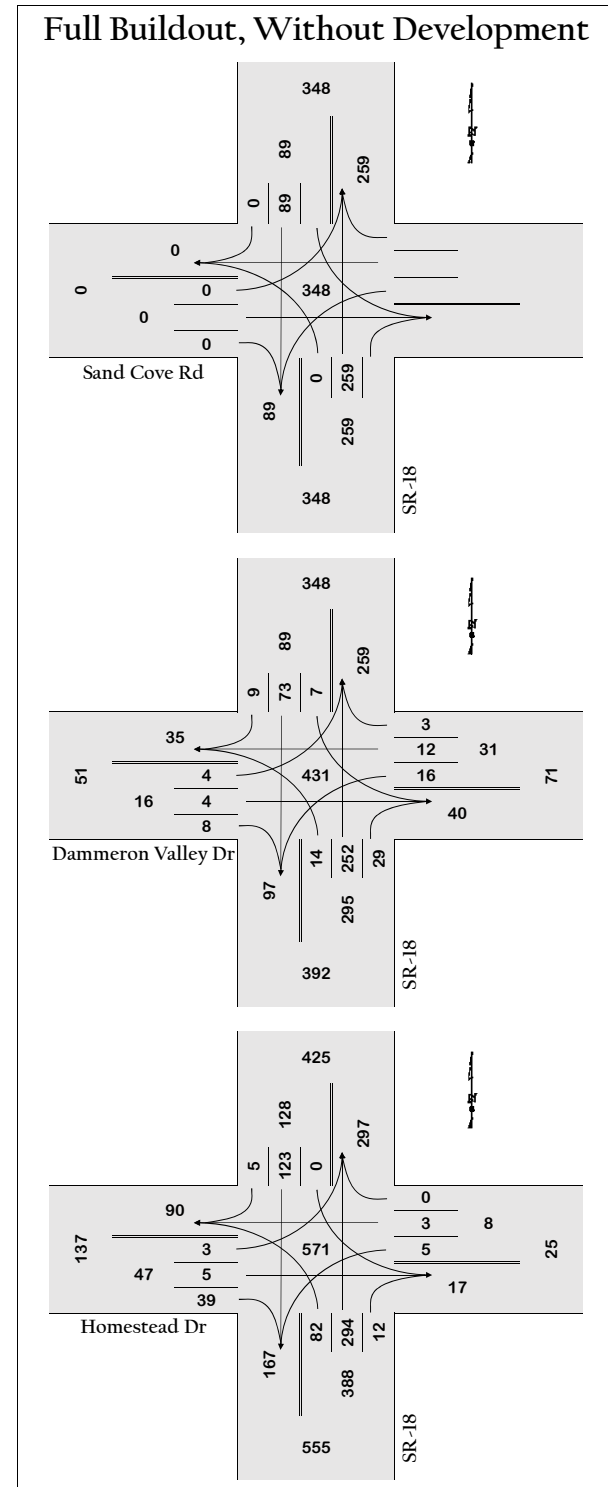
+



+



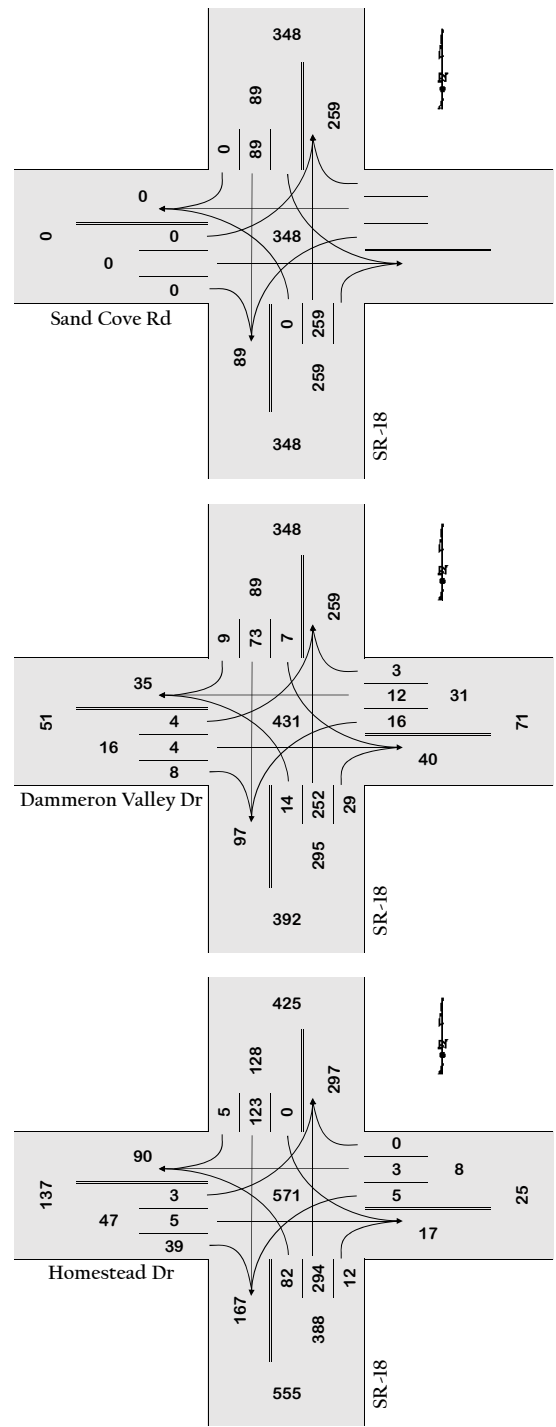
=



Trip Assignment

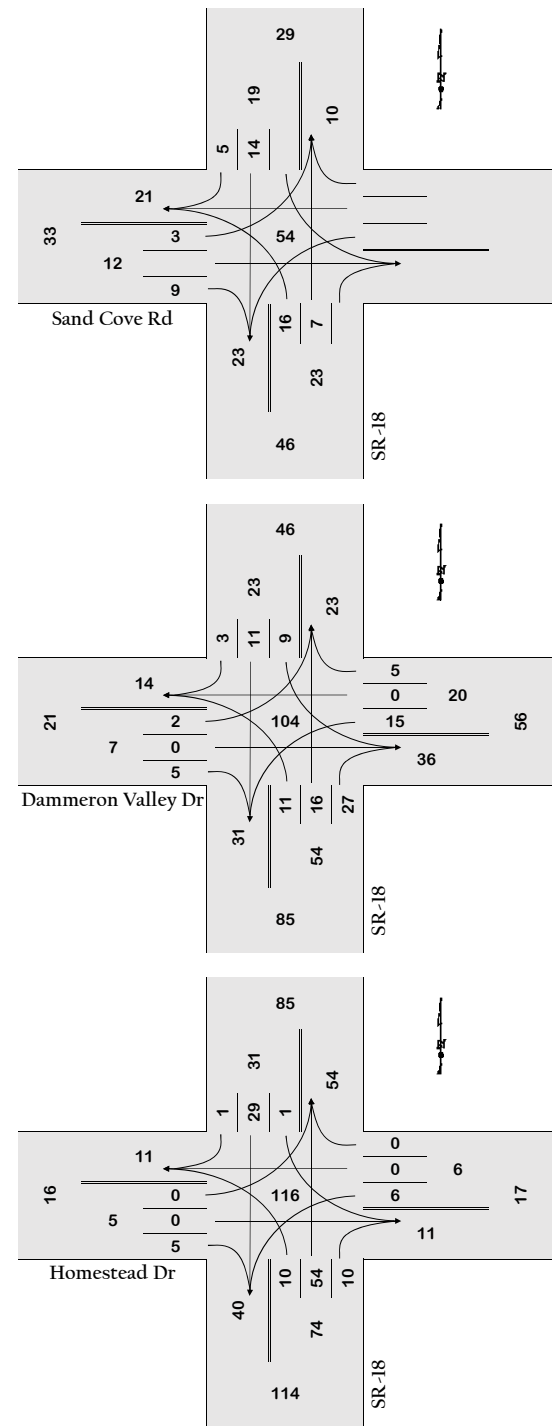
2037 Full Buildout, With Development
PM Peak Hour

Full Buildout, Without Development



+

Primary Trips (full buildout of proposed lots)



+

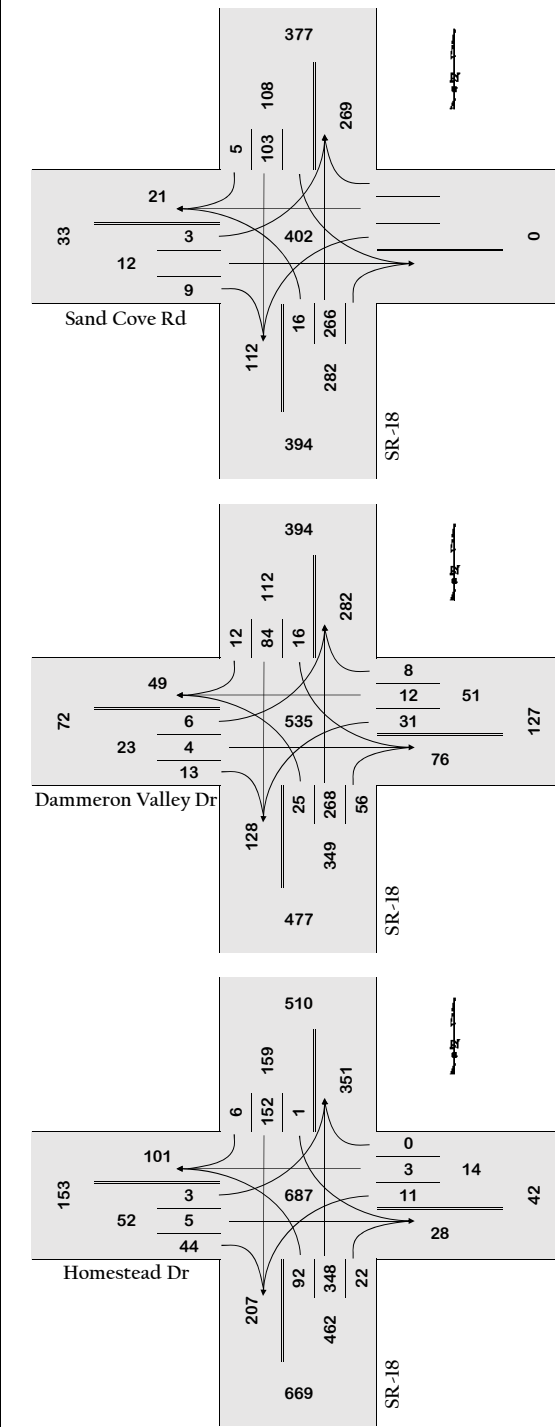
+

=

=

=

Full Buildout, With Development



Appendix C:

Level of Service Output

Intersection

Int Delay, s/veh 0.7

Movement	NBL	NBT	SBT	SBR	NEL	NER
Lane Configurations		↖	↗		↘	
Traffic Vol, veh/h	0	66	235	0	0	0
Future Vol, veh/h	5	84	240	1	5	16
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	0	2	6	0	2	2
Mvmt Flow	6	95	273	1	6	18

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	274	0	273
Stage 1	-	-	273
Stage 2	-	-	107
Critical Hdwy	4.1	-	6.22
Critical Hdwy Stg 1	-	-	5.42
Critical Hdwy Stg 2	-	-	5.42
Follow-up Hdwy	2.2	-	3.318
Pot Cap-1 Maneuver	1301	-	766
Stage 1	-	-	773
Stage 2	-	-	917
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	1301	-	766
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	773
Stage 2	-	-	912

Approach	NB	SB	NE
HCM Control Delay, s	0.4	0	10.1
HCM LOS			B

Minor Lane/Major Mvmt	NELn1	NBL	NBT	SBT	SBR
Capacity (veh/h)	725	1301	-	-	-
HCM Lane V/C Ratio	0.033	0.004	-	-	-
HCM Control Delay (s)	10.1	7.8	0	-	-
HCM Lane LOS	B	A	A	-	-
HCM 95th %tile Q(veh)	0.1	0	-	-	-

Intersection

Int Delay, s/veh 0.6

Movement	NBL	NBT	SBT	SBR	NEL	NER
Lane Configurations		↖	↗		↘	
Traffic Vol, veh/h	0	257	85	0	0	0
Future Vol, veh/h	16	266	103	5	3	9
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	0	2	6	0	2	2
Mvmt Flow	18	296	114	6	3	10

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	120	0	448
Stage 1	-	-	117
Stage 2	-	-	331
Critical Hdwy	4.1	-	6.42
Critical Hdwy Stg 1	-	-	5.42
Critical Hdwy Stg 2	-	-	5.42
Follow-up Hdwy	2.2	-	3.518
Pot Cap-1 Maneuver	1480	-	568
Stage 1	-	-	908
Stage 2	-	-	728
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	1480	-	559
Mov Cap-2 Maneuver	-	-	559
Stage 1	-	-	908
Stage 2	-	-	717

Approach	NB	SB	NE
HCM Control Delay, s	0.4	0	9.6
HCM LOS			A

Minor Lane/Major Mvmt	NELn1	NBL	NBT	SBT	SBR
Capacity (veh/h)	800	1480	-	-	-
HCM Lane V/C Ratio	0.017	0.012	-	-	-
HCM Control Delay (s)	9.6	7.5	0	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0.1	0	-	-	-

Intersection

Int Delay, s/veh 1.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↕	↑	↗	↕	↗	
Traffic Vol, veh/h	2	2	18	7	0	1	1	49	2	0	188	3
Future Vol, veh/h	2	2	18	7	0	1	1	49	2	0	188	3
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	440	-	230	445	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	0	0	0	0	0	0	0	6	13	0	2	0
Mvmt Flow	2	2	20	8	0	1	1	56	2	0	214	3

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	274	273	215	285	275	56	217	0	0	56	0	0
Stage 1	215	215	-	58	58	-	-	-	-	-	-	-
Stage 2	59	58	-	227	217	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	683	637	830	671	636	1016	1365	-	-	1562	-	-
Stage 1	792	729	-	959	851	-	-	-	-	-	-	-
Stage 2	958	851	-	780	727	-	-	-	-	-	-	-
Platoon blocked, %												
Mov Cap-1 Maneuver	682	637	830	652	636	1016	1365	-	-	1562	-	-
Mov Cap-2 Maneuver	682	637	-	652	636	-	-	-	-	-	-	-
Stage 1	791	729	-	958	850	-	-	-	-	-	-	-
Stage 2	956	850	-	758	727	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9.7	10.3	0.1	0
HCM LOS	A	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1365	-	-	793	683	1562	-	-
HCM Lane V/C Ratio	0.001	-	-	0.032	0.013	-	-	-
HCM Control Delay (s)	7.6	-	-	9.7	10.3	0	-	-
HCM Lane LOS	A	-	-	A	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0	0	-	-

Intersection

Int Delay, s/veh 1.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↕	↑	↗	↕	↗	
Traffic Vol, veh/h	2	2	18	7	0	1	1	63	2	0	232	3
Future Vol, veh/h	3	2	21	11	0	2	2	65	3	0	233	3
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	440	-	230	445	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	0	0	0	0	0	0	0	6	13	0	2	0
Mvmt Flow	3	2	24	13	0	2	2	74	3	0	265	3

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	346	344	266	358	346	74	268	0	0	74	0	0
Stage 1	266	266	-	78	78	-	-	-	-	-	-	-
Stage 2	80	78	-	280	268	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	612	582	778	601	580	993	1307	-	-	1538	-	-
Stage 1	744	692	-	936	834	-	-	-	-	-	-	-
Stage 2	934	834	-	731	691	-	-	-	-	-	-	-
Platoon blocked, %												
Mov Cap-1 Maneuver	610	581	778	580	579	993	1307	-	-	1538	-	-
Mov Cap-2 Maneuver	610	581	-	580	579	-	-	-	-	-	-	-
Stage 1	743	692	-	935	833	-	-	-	-	-	-	-
Stage 2	930	833	-	706	691	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	10.1	10.9	0.2	0
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1307	-	-	735	620	1538	-	-
HCM Lane V/C Ratio	0.002	-	-	0.04	0.024	-	-	-
HCM Control Delay (s)	7.8	-	-	10.1	10.9	0	-	-
HCM Lane LOS	A	-	-	B	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.1	0	-	-

Intersection

Int Delay, s/veh 2.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↕	↑	↗	↕	↗	
Traffic Vol, veh/h	2	2	18	7	0	1	1	63	2	0	232	3
Future Vol, veh/h	6	2	32	38	0	11	5	72	11	3	249	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	440	-	230	445	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	0	0	0	0	0	0	0	6	13	0	2	0
Mvmt Flow	7	2	36	43	0	13	6	82	13	3	283	5

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	391	385	285	404	387	82	288	0	0	82	0	0
Stage 1	292	292	-	93	93	-	-	-	-	-	-	-
Stage 2	99	93	-	311	294	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	572	552	759	561	551	983	1286	-	-	1528	-	-
Stage 1	720	675	-	919	822	-	-	-	-	-	-	-
Stage 2	912	822	-	704	673	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	562	548	759	530	547	983	1286	-	-	1528	-	-
Mov Cap-2 Maneuver	562	548	-	530	547	-	-	-	-	-	-	-
Stage 1	717	674	-	915	818	-	-	-	-	-	-	-
Stage 2	896	818	-	667	672	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	10.4	11.7	0.4	0.1
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1286	-	-	708	591	1528	-	-
HCM Lane V/C Ratio	0.004	-	-	0.064	0.094	0.002	-	-
HCM Control Delay (s)	7.8	-	-	10.4	11.7	7.4	-	-
HCM Lane LOS	A	-	-	B	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.2	0.3	0	-	-

Intersection

Int Delay, s/veh 1.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↕	↑	↕	↕	↕	↕
Traffic Vol, veh/h	4	4	6	14	12	2	11	197	25	6	55	8
Future Vol, veh/h	4	4	6	14	12	2	11	197	25	6	55	8
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	440	-	230	445	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	0	0	0	0	0	0	0	1	0	0	6	23
Mvmt Flow	4	4	7	16	13	2	12	219	28	7	61	9

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	330	322	66	327	326	219	70	0	0	219	0	0
Stage 1	79	79	-	243	243	-	-	-	-	-	-	-
Stage 2	251	243	-	84	83	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	627	599	1003	630	596	826	1544	-	-	1362	-	-
Stage 1	935	833	-	765	708	-	-	-	-	-	-	-
Stage 2	758	708	-	929	830	-	-	-	-	-	-	-
Platoon blocked, %												
Mov Cap-1 Maneuver	608	591	1003	616	588	826	1544	-	-	1362	-	-
Mov Cap-2 Maneuver	608	591	-	616	588	-	-	-	-	-	-	-
Stage 1	928	829	-	759	702	-	-	-	-	-	-	-
Stage 2	736	702	-	913	826	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	10.1	11.2	0.3	0.7
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1544	-	-	724	615	1362	-	-
HCM Lane V/C Ratio	0.008	-	-	0.021	0.051	0.005	-	-
HCM Control Delay (s)	7.3	-	-	10.1	11.2	7.7	-	-
HCM Lane LOS	A	-	-	B	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.2	0	-	-

Intersection

Int Delay, s/veh 1.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↕	↑	↕	↕	↕	↕
Traffic Vol, veh/h	4	4	6	14	12	2	11	251	25	6	71	8
Future Vol, veh/h	4	4	8	16	12	3	14	252	29	7	73	9
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	440	-	230	445	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	0	0	0	0	0	0	0	1	0	0	6	23
Mvmt Flow	4	4	9	18	13	3	16	280	32	8	81	10

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	421	413	86	419	418	280	91	0	0	280	0	0
Stage 1	102	102	-	311	311	-	-	-	-	-	-	-
Stage 2	319	311	-	108	107	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	546	532	978	548	529	764	1517	-	-	1294	-	-
Stage 1	909	815	-	704	662	-	-	-	-	-	-	-
Stage 2	697	662	-	902	811	-	-	-	-	-	-	-
Platoon blocked, %												
Mov Cap-1 Maneuver	526	523	978	533	520	764	1517	-	-	1294	-	-
Mov Cap-2 Maneuver	526	523	-	533	520	-	-	-	-	-	-	-
Stage 1	899	810	-	697	655	-	-	-	-	-	-	-
Stage 2	673	655	-	883	806	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	10.4	12.1	0.4	0.6
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1517	-	-	683	544	1294	-	-
HCM Lane V/C Ratio	0.01	-	-	0.026	0.063	0.006	-	-
HCM Control Delay (s)	7.4	-	-	10.4	12.1	7.8	-	-
HCM Lane LOS	A	-	-	B	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.2	0	-	-

Intersection

Int Delay, s/veh 2.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↕	↑	↕	↕	↕	↕
Traffic Vol, veh/h	4	4	6	14	12	2	11	251	25	6	71	8
Future Vol, veh/h	6	4	13	31	12	8	25	268	56	16	84	12
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	440	-	230	445	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	0	0	0	0	0	0	0	1	0	0	6	23
Mvmt Flow	7	4	14	34	13	9	28	298	62	18	93	13

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	500	489	100	498	495	298	107	0	0	298	0	0
Stage 1	136	136	-	353	353	-	-	-	-	-	-	-
Stage 2	364	353	-	145	142	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	484	482	961	486	479	746	1497	-	-	1275	-	-
Stage 1	872	788	-	668	634	-	-	-	-	-	-	-
Stage 2	659	634	-	863	783	-	-	-	-	-	-	-
Platoon blocked, %												
Mov Cap-1 Maneuver	456	466	961	463	463	746	1497	-	-	1275	-	-
Mov Cap-2 Maneuver	456	466	-	463	463	-	-	-	-	-	-	-
Stage 1	856	777	-	656	622	-	-	-	-	-	-	-
Stage 2	625	622	-	833	772	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	10.7	13.3	0.5	1.1
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1497	-	-	652	492	1275	-
HCM Lane V/C Ratio	0.019	-	-	0.039	0.115	0.014	-
HCM Control Delay (s)	7.5	-	-	10.7	13.3	7.9	-
HCM Lane LOS	A	-	-	B	B	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0.1	0.4	0	-

Intersection

Int Delay, s/veh 2.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↕	↑	↕	↕	↕	
Traffic Vol, veh/h	1	3	37	21	1	1	7	61	3	0	220	0
Future Vol, veh/h	1	3	37	21	1	1	7	61	3	0	220	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	430	-	230	420	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	89	89	89	89	89	89	89	89	89	89	89	89
Heavy Vehicles, %	0	0	0	0	0	0	0	9	0	0	2	0
Mvmt Flow	1	3	42	24	1	1	8	69	3	0	247	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	332	331	247	354	331	69	247	0	0	69	0	0
Stage 1	247	247	-	84	84	-	-	-	-	-	-	-
Stage 2	85	84	-	270	247	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	625	592	797	605	592	1000	1331	-	-	1545	-	-
Stage 1	761	706	-	929	829	-	-	-	-	-	-	-
Stage 2	928	829	-	740	706	-	-	-	-	-	-	-
Platoon blocked, %												
Mov Cap-1 Maneuver	621	588	797	568	588	1000	1331	-	-	1545	-	-
Mov Cap-2 Maneuver	621	588	-	568	588	-	-	-	-	-	-	-
Stage 1	756	706	-	923	824	-	-	-	-	-	-	-
Stage 2	920	824	-	698	706	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	10	11.5	0.8	0
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1331	-	-	772	580	1545	-
HCM Lane V/C Ratio	0.006	-	-	0.06	0.045	-	-
HCM Control Delay (s)	7.7	-	-	10	11.5	0	-
HCM Lane LOS	A	-	-	B	B	A	-
HCM 95th %tile Q(veh)	0	-	-	0.2	0.1	0	-

Intersection												
Int Delay, s/veh	3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↕	↑	↗	↕	↗	
Traffic Vol, veh/h	1	3	37	21	1	1	7	75	3	0	264	0
Future Vol, veh/h	3	3	81	25	1	1	19	77	4	0	271	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	430	-	230	420	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	89	89	89	89	89	89	89	89	89	89	89	89
Heavy Vehicles, %	0	0	0	0	0	0	0	9	0	0	2	0
Mvmt Flow	3	3	91	28	1	1	21	87	4	0	304	1
Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	435	434	305	481	435	87	306	0	0	87	0	0
Stage 1	305	305	-	129	129	-	-	-	-	-	-	-
Stage 2	130	129	-	352	306	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	535	518	740	499	517	977	1266	-	-	1522	-	-
Stage 1	709	666	-	880	793	-	-	-	-	-	-	-
Stage 2	878	793	-	669	665	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	527	509	740	430	508	977	1266	-	-	1522	-	-
Mov Cap-2 Maneuver	527	509	-	430	508	-	-	-	-	-	-	-
Stage 1	697	666	-	865	780	-	-	-	-	-	-	-
Stage 2	861	780	-	584	665	-	-	-	-	-	-	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	10.8			13.7			1.5			0		
HCM LOS	B			B								
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR				
Capacity (veh/h)	1266	-	-	719	442	1522	-	-				
HCM Lane V/C Ratio	0.017	-	-	0.136	0.069	-	-	-				
HCM Control Delay (s)	7.9	-	-	10.8	13.7	0	-	-				
HCM Lane LOS	A	-	-	B	B	A	-	-				
HCM 95th %tile Q(veh)	0.1	-	-	0.5	0.2	0	-	-				

Intersection

Int Delay, s/veh 3.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↕	↑	↗	↕	↗	
Traffic Vol, veh/h	1	3	37	21	1	1	7	75	3	0	264	0
Future Vol, veh/h	4	3	91	35	1	2	22	93	7	0	325	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	430	-	230	420	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	89	89	89	89	89	89	89	89	89	89	89	89
Heavy Vehicles, %	0	0	0	0	0	0	0	9	0	0	2	0
Mvmt Flow	4	3	102	39	1	2	25	104	8	0	365	1

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	522	520	366	573	520	104	366	0	0	104	0	0
Stage 1	366	366	-	154	154	-	-	-	-	-	-	-
Stage 2	156	154	-	419	366	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	468	463	684	433	463	956	1204	-	-	1500	-	-
Stage 1	657	626	-	853	774	-	-	-	-	-	-	-
Stage 2	851	774	-	616	626	-	-	-	-	-	-	-
Platoon blocked, %												
Mov Cap-1 Maneuver	459	453	684	360	453	956	1204	-	-	1500	-	-
Mov Cap-2 Maneuver	459	453	-	360	453	-	-	-	-	-	-	-
Stage 1	643	626	-	835	758	-	-	-	-	-	-	-
Stage 2	830	758	-	521	626	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	11.5	15.9	1.5	0
HCM LOS	B	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1204	-	-	660	374	1500	-	-
HCM Lane V/C Ratio	0.021	-	-	0.167	0.114	-	-	-
HCM Control Delay (s)	8.1	-	-	11.5	15.9	0	-	-
HCM Lane LOS	A	-	-	B	C	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.6	0.4	0	-	-

Intersection

Int Delay, s/veh 1.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↕	↑	↕	↕	↕	
Traffic Vol, veh/h	2	5	15	3	3	0	38	233	8	0	103	3
Future Vol, veh/h	2	5	15	3	3	0	38	233	8	0	103	3
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	430	-	230	420	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	0	0	4	25	0	0	0	1	0	0	3	0
Mvmt Flow	2	6	17	3	3	0	42	259	9	0	114	3

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	461	459	116	470	461	259	118	0	0	259	0	0
Stage 1	116	116	-	343	343	-	-	-	-	-	-	-
Stage 2	345	343	-	127	118	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.24	7.35	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.35	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.35	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.336	3.725	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	514	502	931	467	500	785	1483	-	-	1317	-	-
Stage 1	894	803	-	627	641	-	-	-	-	-	-	-
Stage 2	675	641	-	824	802	-	-	-	-	-	-	-
Platoon blocked, %												
Mov Cap-1 Maneuver	500	488	931	445	486	785	1483	-	-	1317	-	-
Mov Cap-2 Maneuver	500	488	-	445	486	-	-	-	-	-	-	-
Stage 1	869	803	-	609	623	-	-	-	-	-	-	-
Stage 2	652	623	-	804	802	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	10.1	12.9	1	0
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1483	-	-	725	465	1317	-	-
HCM Lane V/C Ratio	0.028	-	-	0.034	0.014	-	-	-
HCM Control Delay (s)	7.5	-	-	10.1	12.9	0	-	-
HCM Lane LOS	A	-	-	B	B	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.1	0	0	-	-

Intersection

Int Delay, s/veh 2.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↕	↑	↕	↕	↕	
Traffic Vol, veh/h	2	5	15	3	3	0	38	287	8	0	119	3
Future Vol, veh/h	3	5	39	5	3	0	82	294	12	0	123	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	430	-	230	420	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	0	0	4	25	0	0	0	1	0	0	3	0
Mvmt Flow	3	6	43	6	3	0	91	327	13	0	137	6

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	650	648	139	673	651	327	142	0	0	327	0	0
Stage 1	139	139	-	509	509	-	-	-	-	-	-	-
Stage 2	511	509	-	164	142	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.24	7.35	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.35	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.35	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.336	3.725	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	385	392	904	340	390	719	1453	-	-	1244	-	-
Stage 1	869	785	-	507	541	-	-	-	-	-	-	-
Stage 2	549	541	-	787	783	-	-	-	-	-	-	-
Platoon blocked, %												
Mov Cap-1 Maneuver	364	367	904	305	366	719	1453	-	-	1244	-	-
Mov Cap-2 Maneuver	364	367	-	305	366	-	-	-	-	-	-	-
Stage 1	815	785	-	475	507	-	-	-	-	-	-	-
Stage 2	511	507	-	744	783	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	10.4	16.4	1.6	0
HCM LOS	B	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1453	-	-	723	325	1244	-
HCM Lane V/C Ratio	0.063	-	-	0.072	0.027	-	-
HCM Control Delay (s)	7.6	-	-	10.4	16.4	0	-
HCM Lane LOS	A	-	-	B	C	A	-
HCM 95th %tile Q(veh)	0.2	-	-	0.2	0.1	0	-

Intersection

Int Delay, s/veh 2.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↕	↑	↕	↕	↕	
Traffic Vol, veh/h	2	5	15	3	3	0	38	287	8	0	119	3
Future Vol, veh/h	3	5	44	11	3	0	92	348	22	1	152	6
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	430	-	230	420	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	0	0	4	25	0	0	0	1	0	0	3	0
Mvmt Flow	3	6	49	12	3	0	102	387	24	1	169	7

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	767	765	172	793	769	387	176	0	0	387	0	0
Stage 1	174	174	-	591	591	-	-	-	-	-	-	-
Stage 2	593	591	-	202	178	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.24	7.35	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.35	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.35	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.336	3.725	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	322	336	866	281	334	665	1412	-	-	1183	-	-
Stage 1	833	759	-	455	498	-	-	-	-	-	-	-
Stage 2	496	498	-	750	756	-	-	-	-	-	-	-
Platoon blocked, %												
Mov Cap-1 Maneuver	302	311	866	247	310	665	1412	-	-	1183	-	-
Mov Cap-2 Maneuver	302	311	-	247	310	-	-	-	-	-	-	-
Stage 1	773	758	-	422	462	-	-	-	-	-	-	-
Stage 2	457	462	-	702	755	-	-	-	-	-	-	-

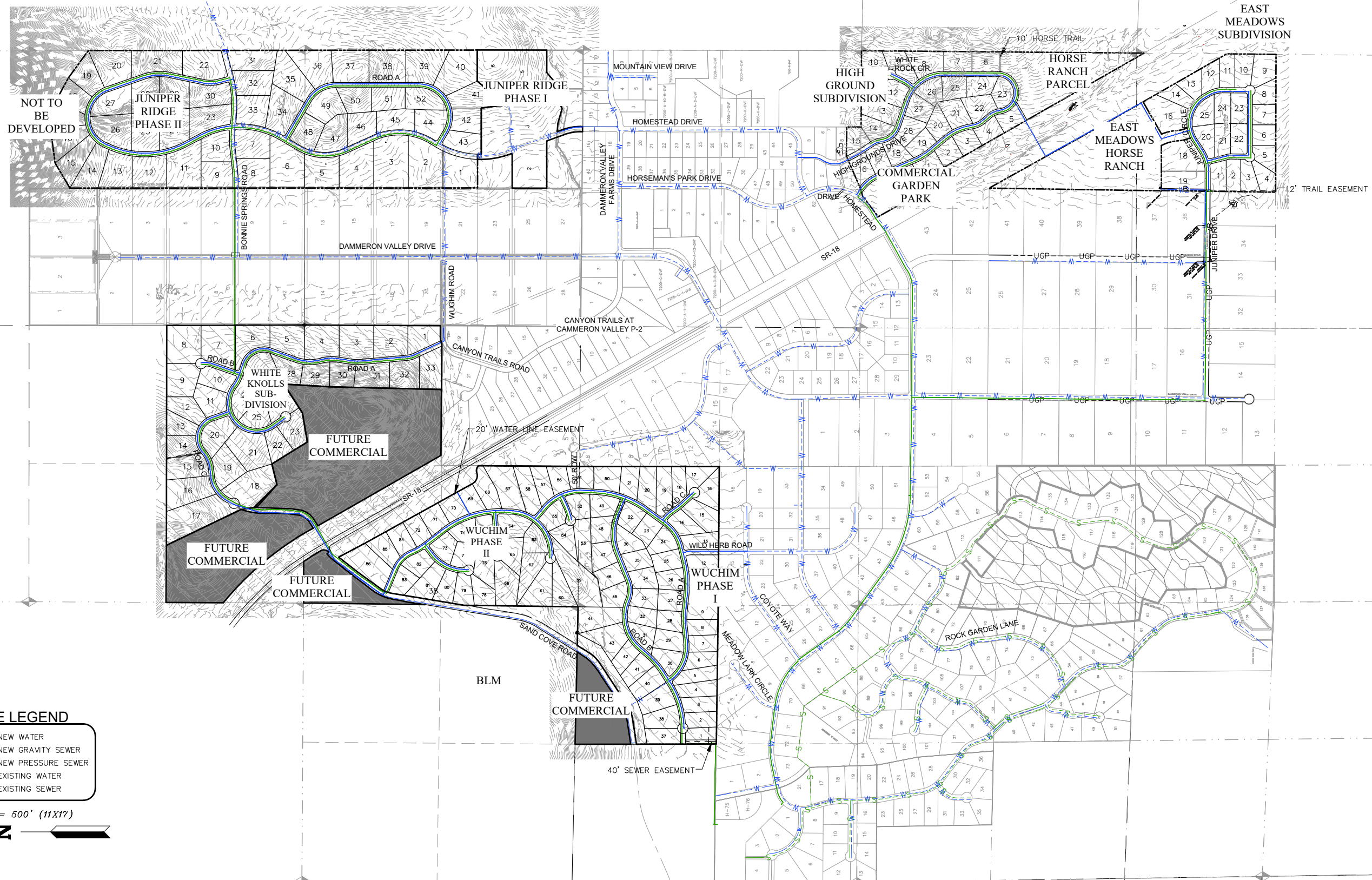
Approach	EB	WB	NB	SB
HCM Control Delay, s	10.8	19.8	1.5	0.1
HCM LOS	B	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1412	-	-	677	258	1183	-
HCM Lane V/C Ratio	0.072	-	-	0.085	0.06	0.001	-
HCM Control Delay (s)	7.7	-	-	10.8	19.8	8	-
HCM Lane LOS	A	-	-	B	C	A	-
HCM 95th %tile Q(veh)	0.2	-	-	0.3	0.2	0	-

Appendix D. Maps

FIGURES

- Fig. 1 to 3. Sewer and Water Plans
- Fig. 4 to 6. Power and Gas Plans



LINETYPE LEGEND

	NEW WATER
	NEW GRAVITY SEWER
	NEW PRESSURE SEWER
	EXISTING WATER
	EXISTING SEWER

SCALE: 1" = 500' (11X17)



NO.	DATE	BY	DESCRIPTION

NO.	DATE	BY	DESCRIPTION

ALPHA ENGINEERING

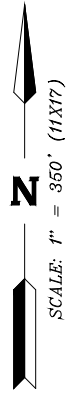
43 South 100 East, Suite 100 • St. George, Utah 84770
 T: 435.628.6500 • F: 435.628.6553 • alphaengineering.com

**SEWER & WATER MASTER PLAN
 OVERALL EXHIBIT**

DAMMERON VALLEY,
 UTAH

PROJECT #	007-16
NAME	CWL
DATE	APRIL 19, 2019
SCALE	AS NOTED
SHEET	1
1 OF 6	

FILE: DAMMERON VALLEY MASTER PLAN OVERALL UTIL EXHIBIT.DWG



LINETYPE LEGEND

- NEW WATER
- NEW GRAVITY SEWER
- NEW PRESSURE SEWER
- - - EXISTING WATER
- - - EXISTING SEWER



NO.	DATE	BY	DESCRIPTION

REVISIONS

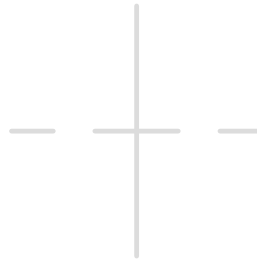
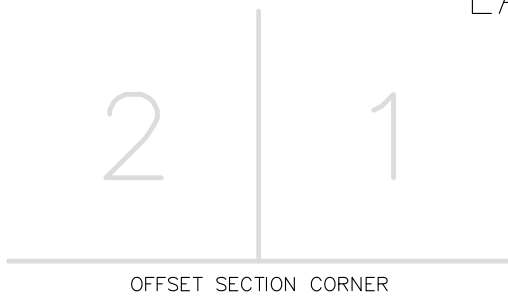
ALPHA ENGINEERING
 43 South 100 East, Suite 100 • St. George, Utah 84770
 T: 435.628.6500 • F: 435.628.6553 • alphaengineering.com

**SEWER & WATER MASTER PLAN
 NORTH SIDE EXHIBIT**
 DAMMERON VALLEY,
 UTAH

PROJECT #	007-16
NAME	CWL
DATE	APRIL 19, 2019
SCALE	AS NOTED
SHEET	2 OF 6
FILE	DAMMERON VALLEY MASTER PLAN OVERALL UTIL EXHIBIT.DWG

SYMBOLS LIBRARY

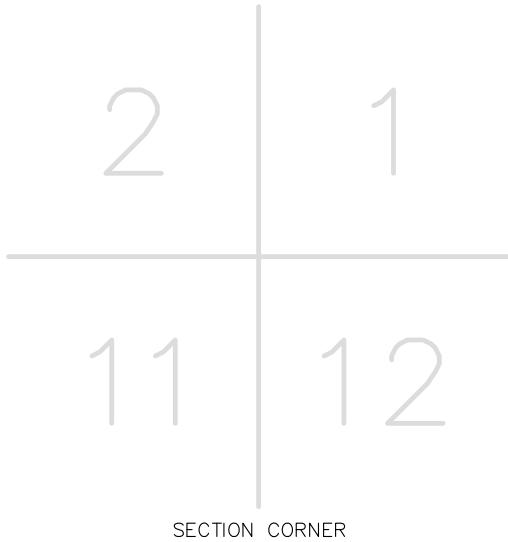
LANDBASE



INTERSTATE
HIGHWAY
SHIELD



STATE
HIGHWAY
SHIELD



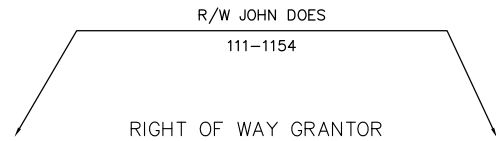
QUARTER CORNER



FOUND SECTION
CORNER



U. S.
HIGHWAY
SHIELD



ROAD EDGE (R/w)



ROAD EDGE (CURB)



CITY BOUNDARY LINE



COUNTY BOUNDARY LINE



STATE BOUNDARY LINE



TOWNSHIP & RANGE LINE



HYDROGRAPHY LINE



RAILROAD LINE



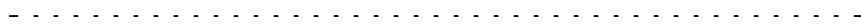
ALLOCATION BNDRY. LINE



TAX BOUNDARY LINE



LOT LINE



SUBDIVISION BNDRY. LINE



RIGHTS OF WAY LINE



EASEMENT LINE



FENCE LINE



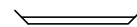
TRANSMISSION LINE



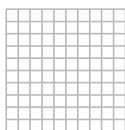
BUILDING FOOTPRINT



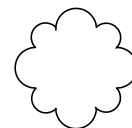
SIGN



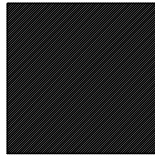
GRID LINES



TREE - NO FACILITY POINT



OVERHEAD



Wilson Sub
067631

SUBSTATION

OVERHEAD CONDUCTOR

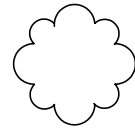
SINGLE PHASE	7.2	1#2-AS,N#4-AS	A↓	OR	1↓
SINGLE PHASE	7.2	1#2-AS,N#4-AS	B↓	OR	2↓
SINGLE PHASE	7.2	1#2-AS,N#4-AS	C↓	OR	3↓
SINGLE PHASE	7.2	1#2-AS,N#4-AS	?		
? = TRUE PHASING UNKNOWN (TPU)					
TWO PHASE	12.5	2#4-AS,N#4-AS	AB↓	OR	12↓
TWO PHASE	12.5	2#4-AS,N#4-AS	?		
THREE PHASE	20.8	3#4-AS,N#4-AS	ABC↓	OR	123↓
THREE PHASE	20.8	3#4-AS,N#4-AS	?		

UNDERGROUND CONDUCTOR

LINE COLOR & LINE PATTERN REPRESENT: A or 1 PHASE (SINGLE)	7.2	1#2-AL XLPJ	A or 1	25KV
LINE COLOR & LINE PATTERN REPRESENT: B or 2 PHASE (SINGLE)	7.2	1#2-AL XLPJ	B or 2	25KV
LINE COLOR & LINE PATTERN REPRESENT: C or 3 PHASE (SINGLE)	7.2	1#2-AL XLPJ	C or 3	25KV
SINGLE PHASE - TRUE PHASING UNKNOWN OR NOT NOTED	7.2	1#2-AL XLPJ	?	25KV
THREE PHASE	12.5	3#2-AL XLPJ	3∅	25KV

OVERHEAD

117401



○ 117400

⊗ 117440

⊠ 117460

● 117470

DISTRIBUTION POLE

OTHER UTILITY POLE

TRANSMISSION POLE

PRIVATELY OWNED POLE

CONTACTED TREE

△ 25 A 33-4587

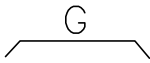
△ 25 A 33-1575
37.5 B 33-5512

△ 15 A 22-2525
25 B 33-5648
37.5 C 33-89954

1 TRANSFORMER

2 TRANSFORMERS

3 TRANSFORMERS



SPANGUY



POLE W/GROUND



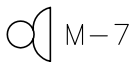
POLE W/LIGHTNING ARRESTOR



POLE W/PUSH GUY



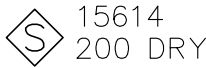
POLE W/DOWN GUY



AREA LIGHT



PUMP



SECTIONALIZER



RECLOSER



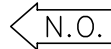
VOLTAGE REGULATOR



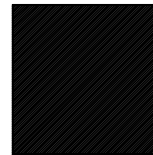
CONDUCTOR SIZE CHANGE



OPEN POINT



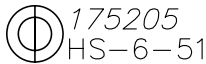
NORMALLY OPEN INDICATOR



MEDFORD
133814

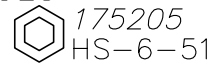
SUBSTATION

STREET LIGHT SYMBOLS



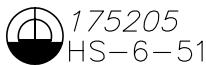
175205
HS-6-51

COMPANY OWNED - NON DECORATIVE



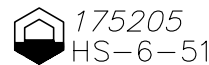
175205
HS-6-51

OTHER OWNED - NON DECORATIVE



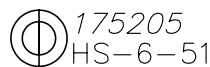
175205
HS-6-51

COMPANY OWNED - DECORATIVE



175205
HS-6-51

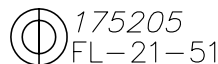
OTHER OWNED - DECORATIVE



175205
HS-6-51

HIGH PRESS SODIUM FLOOD
(0) NON-STANDARD

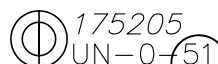
5,600 (6) HIGH INTENSITY DISCHARGE (70 WATTS)
9,500 (10) HIGH INTENSITY DISCHARGE (100 WATTS)
16,000 (16) HIGH INTENSITY DISCHARGE (150 WATTS)
22,000 (22) HIGH INTENSITY DISCHARGE (200 WATTS)
27,500 (28) HIGH INTENSITY DISCHARGE (250 WATTS)
50,000 (50) HIGH INTENSITY DISCHARGE (400 WATTS)



175205
FL-21-51

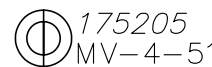
FLUORESCENT LAMP
(0) NON-STANDARD

21,000 (21) / 2-LAMP LUMINAIRE (70 WATTS/LUMINAIRE)
21,800 (22) / 2-LAMP LUMINAIRE (100 WATTS/LUMINAIRE)
43,600 (43) / 4-LAMP LUMINAIRE (150 WATTS/LUMINAIRE)



175205
UN-0-51

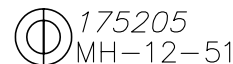
UNKNOWN
(0) NON-STANDARD



175205
MV-4-51

MERCURY VAPOR
(0) NON-STANDARD

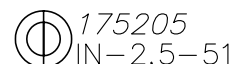
4,000 (4) 100 WATTS
7,000 (7) 175 WATTS
10,000 (10) 250 WATTS
20,000 (20) 400 WATTS
37,000 (37) 700 WATTS
54,000 (54) 1000 WATTS



175205
MH-12-51

METAL HALIDE
(0) NON-STANDARD

12,000 (12) 175 WATTS
19,500 (20) 250 WATTS
32,000 (32) 400 WATTS
107,000 (107) 1000 WATTS




175205
IN-2.5-51

INCANDESCENT
(0) NON-STANDARD
2,500 (2.5) 189 WATTS OR LESS
6,000 (6) 405 WATTS
10,000 (10) 620 WATTS


LAST DIGITS ARE THE RATE SCHEDULE

LAST UPDATED: 11/03/2005

UNDERGROUND

123580 


PAD MOUNTED ENCLOSURE

123580
1635 
E 100


PAD MOUNTED RECLOSER

123580
6 
AIR


PAD MOUNTED SWITCH GEAR

123581 


PAD ONLY

123581 


SPLICE POINT IN ENCLOSURE

123581
33-11514 75 
3Ø


PAD MOUNTED
3 PHASE TRANSFORMER

123582
32-56584 25 
A


PAD MOUNTED
1 PHASE TRANSFORMER

123582
11-5658 A 15 


PAD MOUNTED
1 OH TRANSFORMER

123582
33-4812 A 25 
13-2214 B 25


PAD MOUNTED
2 OH TRANSFORMERS

123583
32-22131 A 15 
11-541 B 25
44-12165 C 37.5


PAD MOUNTED
3 OH TRANSFORMERS

123583 

SUB SURFACE ENCLOSURE

123583
13636 
H 400


SUB SURFACE RECLOSURE

123584
6 
VAC

SUB SURFACE SWITCH GEAR

123584 

SUB SURFACE PAD ONLY

123584 

SPLICE POINT SUB SURFACE

019687
STATION 81
FIRST INTERSTATE PLAZA
26 WEST 200 SOUTH 

VAULTS
(IN THE CORE AREAS ONLY)
"PDX/SLC METRO"


123585 
105
VAULT

123585 


SUB SURFACE PULL BOX

123585 


SUB SURFACE MANHOLE

123585
11-56210 15 
A


SUB SURFACE
1 PHASE TRANSFORMER

123586
55-61214 75 
3Ø


SUB SURFACE
3 PHASE TRANSFORMER

123585
11-14100 A 37.5 

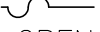

1 OH TRANSFORMER IN
SUB SURFACE ENCLOSURE

123585
15-4386 A 50 
33-44426 B 50



2 OH TRANSFORMERS IN
SUB SURFACE ENCLOSURE

123587
33-22251 A 75 
12-11217 B 50
33-10015 C 50

3 OH TRANSFORMERS IN
SUB SURFACE ENCLOSURE

1635 1635
LB 15 LB
 OPEN  OPEN

UG FUSE UG BLADE
UNDERGROUND LINEFUSES

1-2" PVC
CONDUIT
A  
JUNCTION BOX METERING PEDESTAL

• A
SPLICE POINT DIRECT BURY