RESPONSE TO COMMENTS
ON THE
MASTER DRAINAGE STUDY
FOR
SUMMERLIN VILLAGE 26
REVERENCE

764-204-011

November 2015

GCW
ENGINEERS \ SURVEYORS

Prepared For:

Pulte Homes
7255 S. Tenaya Way, #200
Las Vegas, NV 89113
(702) 914-4800

HYDROLOGIC CRITERIA AND DRAINAGE MANUAL

DRAINAGE STUDY INFORMATION FORM

Name of Development: Reverence Date: November 2015

Location of Development: a) Descriptive (Cross Streets) North/South: CC 215

East/West: Cheyenne Road

b) Section: 14 Township: 20 Range: 59E

c) APN : 137-14-601-002; 137-14-501-004;

Name of Owner: Pulte Homes

Telephone No.: (702) 914-4800 Fax No.: (702) 914-3100 E-Mail Address:

Address: 7255 S. Tenaya Way, #200

Contact Person-Name: James A. Monroe, Jr. **Telephone No.:** (702)804-2133

*** E-Mail Address:** JMonroe@gcwallace.com **Fax No.:** (702)804-2299

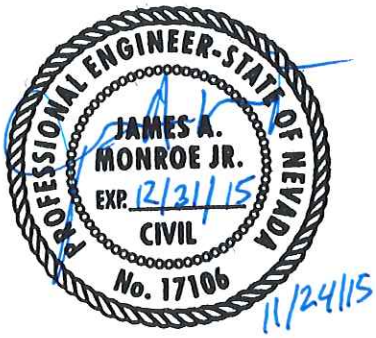
Firm: G.C. Wallace, Inc.

Address: 1555 S Rainbow Blvd. Las Vegas, NV 89146

Type of Land Development/Land Disturbance Process:

	Rezoning		Subdivision Map		Clearing and Grading Only
	Parcel Map	X	Planned Unit Development		Other (Please specify below)
	Large Parcel Map		Building Permit		

1. Total Owned Land Area: At Site: +/- 300 acres Being Developed/Disturbed: +/- 300 acres
2. Is a portion or all of the subject property located in a designated FEMA Flood Hazard Area? ☐ **Yes**** ☒ **No**
3. Is the property bordered or crossed by an existing or proposed Clark County Regional Flood Control District Master Planned Facility? ☒ **Yes**** ☐ **No**
4. Proposed type of development (Residential, Commercial, Etc.): Residential
5. Approximate upstream land area which drains to the subject site: +/- 4 sq mi.
6. Has the site drainage been evaluated in the past? ☒ **YES** ☐ **NO** If yes, please identify documentation: Master Conceptual Drainage Study for Village 26 at Summerlin West (Technical Drainage Study for Model Homes, Access Road, and Rough Grading, GCW Inc.; Technical Drainage Study for Village 26 at Summerlin West Offsite Improvements, GCW Inc.; 2006 Summerlin West Planning Area Flood Control Master Plan Update
7. If known, please briefly identify the proposed discharge point(s) of runoff from the site: CCRFCD MPU Facilites GOL3 0128 (Village 26 Detention Basin) and GOL4 0000 (14'X8' RCB)
8. Briefly describe your proposed schedule for the subject project: ASAP



Engineer's Seal

Submit this form as part of the required drainage study to the local entity which has jurisdiction over the subject property. This form may provide sufficient information to serve as the Conceptual Drainage Study.

*New Required Field

****Review and concurrence of the Clark County Regional Flood Control District is required.**

Local Entity File No.

Revision	Date

REFERENCE:

STANDARD FORM 1

CITY OF LAS VEGAS INTER-OFFICE MEMORANDUM				DATE: October 22, 2015
TO: **Land Development Services** Department of Building & Safety				FROM: Albert Sung, P.E. Flood Control Project Engineer Department of Public Works
SUBJECT:	Drainage Study for: **Summerlin Village 26 – Reverence** **(Updated Master Drainage Study)**			**COPIES TO:** GCW Engineers & Surveyors
Cross Streets:	West of I-215 between Lake Mead & Cheyenne			Pulte Homes
File Number:	F:\Depot\DSMemos\DS4752A.doc			Bart Anderson, P.E., DevCo
Parcel Number:	137-14-601-002 & 137-14-501-004			CCRFCD
Zoning Action:	TMP-60968			CCPW
FEMA Flood Zone	YES	NO X		
Proposed Storm Drain	YES X	NO		

HISTORY	DATE RECEIVED	DATE REVIEWED	COMMENTS	REVIEW FEES	FEES PAID Payment Trn #
1st Submittal	9/15/2015 & 10/15/2015	10/22/2015	See Comments Below	$400.00	414615: $400
			TOTAL FEES (LDDRS):	**$400.00**	----

REMARKS:

The Drainage Study for the subject project has been reviewed and:

	is approved subject to conformance to all City standards and the following conditions:
X	must be resubmitted or supplemented including the following:
	is conditionally approved subject to Clark County Regional Flood Control District concurrence.
	is conditionally approved subject to Clark County Public Works Department concurrence.

1. Provide a copy of the zoning/planning conditions associated with this site (**TMP-60968**) with the next submittal to verify compliance with conditions. *Flood Control* will not issue conditional approval of the drainage study without the associated zoning/planning conditions (issued by the *City Council*). Any associated conditions of approval that revise the site drainage parameters will require that the drainage study be revised and resubmitted.

2. The site is adjacent to or crosses an existing or proposed *Clark County Regional Flood Control District* (CCRFCD) master planned facility. Therefore, CCRFCD concurrence is required prior to final approval of the drainage study.

3. The site is also adjacent to the *Clark County Western Beltway-215* project to the east. The engineer must coordinate with *Clark County Public Works Department* (CCPW) and incorporate any concerns for boundary conditions. CCPW concurrence is required prior to final acceptance of the study.

4. The final approval of this *Master Drainage Study* is only as a precursor to allow the submittal of technical drainage studies such as but not limited to the Modified Detention Basin, Infrastructures and Phases of housing subdivisions etc.

5. Since the previous studies from the master drainage, offsite berms/channels, street and storm drains improvements to individual Unit developments were approved seven to eight years ago, subsequent technical drainage studies must be submitted as a new project after the approval of this master study.

6. Technical drainage studies are required for each of the development phases (PODs). The studies for the PODs may not be submitted prior to the conditional approval of the pertinent infrastructure drainage studies. No building permits will be issued prior to the final approval of the pertinent technical drainage studies and improvement plans.

7. Provide a chapter in the *Master Drainage Study Update* to detail the sequence of forthcoming submittal of the technical drainage studies and the pertinent improvement plans. Include a description of the existing infrastructures such as interim flood control facilities and proposed and ultimate conditions in the next submittal.

8. Page 4 of the *Master Study* stated that, quote "CCRFCD Facilities GOBE 0001-0065 will be removed and replaced with this project". Advise what the regional facilities will be replaced with in the next submittal.

9. Page 20 of the *Master Drainage Study* stated that concrete-lined rectangular channels will be constructed along the perimeter of **Village 26** for flood protection. Address in the addendum whether the channels will be built altogether before any phases of development or will be built in phases. Provide a perimeter channels phasing map (if any) in the next submittal. A technical drainage study for the proposed concrete channels as infrastructure must be submitted prior to any onsite developments.

10. Obtain *Bureau of Land Management* (BLM) approval if the perimeter channels encroach into their property prior to the final approval of the infrastructure drainage study.

11. The master drainage study proposes a mixed-use detention basin that may include a park, amphi-theatre, basketball court etc. Design multi-use facilities per *Section 304.8* of the *CCRFCD Hydrologic Criteria and Drainage Design Manual*. The modification of the existing detention basin will require a technical drainage study with *State* and *CCRFCD* approval. Any technical drainage studies for future onsite developments will not be accepted for review prior to the final approval of the modified detention basin study.

12. To accommodate the additional features such as a park and the various ball game courts in the detention basin as well as the anticipated sediment load generated by the 100-year storm event, address in the next submittal how and where the additional storage volume in the basin will come from.

13. Provide a technical drainage study for a proposed debris basin at the southwest corner of *Summerlin Village 26* as part of the infrastructure studies.

14. The *Master Study* discussed about the volume of the proposed debris basin at CP3, the southwest corner of *Village 26* for onsite protection. However, even though the sediment transported from *Subbasin LMT1R* does not impact the proposed developments, it will impact the downstream regional facility (GOL4 0025 and 0026). Address in the addendum whether another debris basin will be necessitated for downstream facilities protection.

15. Provide a *Master Storm Drain Plan* identifying all the existing and proposed *Clark County Regional Flood Control Facilities* with the "ID / River Mile" clearly labeled.

16. **FIG 6** (*Flood Control Facilities Map*): It appears that *Concentration Point 4* (CP4) is mis-located on the map. Move the identifier to the northeast corner of *Subbasin 1-3P* to match that of in **FIG 5** and **FIG 5A**.

    CP5B was missing in **FIG 6**. Provide as such in the next submittal.

    Provide a north arrow and scale bar in **FIG 6**.

NOTE: Please be advised that all land surface area disturbances over 1 acre or any area adjacent to a water way must submit to the *Nevada Division of Environmental Protection* a "Notice of Intent" to discharge that certifies a stormwater pollution prevention plan has been developed and is maintained on site; for inclusion in the Stormwater General Permit No. NVR100000. A phased construction unit in a contiguous subdivision is considered under construction until all stripped or disturbed surface areas have been covered by paving, building construction or planting. For more information, including forms and applications see http://ndep.nv.gov/bwpc/storm01.htm or call (775) 687-9429.

END OF REMARKS
ays

T/R/S: T20S/R59E/14
AREA K-14

hp LaserJet 9050mfp series

Fax Call Report 1

GC Wallace Companies
702-804-2299
22-Oct-2015 10:31 AM

Job	Date/Time	Type	Identification	Duration	Pages	Result
7554	22-Oct-2015 10:29 AM	Receive		0:49	3	Success

10/22/2015 THU 10:01 FAX PW 7th Floor ☑001/003

CITY OF LAS VEGAS INTER-OFFICE MEMORANDUM			DATE: October 22, 2015
TO: Land Development Services Department of Building & Safety			FROM: Albert Sung, P.E. Flood Control Project Engineer Department of Public Works
SUBJECT:	Drainage Study for: Summerlin Village 26 – Reverence (Updated Master Drainage Study)		COPIES TO: GCW Engineers & Surveyors
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File Number:	F:\Depot\DSMemos\DS4752A.doc		Bart Anderson, P.E., DevCo
Parcel Number:	137-14-601-002 & 137-14-501-004		CCRFCD
Zoning Action:	TMP-60968		CCPW
FEMA Flood Zone	YES	NO X	
Proposed Storm Drain	YES X	NO	

HISTORY	DATE RECEIVED	DATE REVIEWED	COMMENTS	REVIEW FEES	FEES PAID Payment Trn #
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	is conditionally approved subject to Clark County Public Works Department concurrence.

1. Provide a copy of the zoning/planning conditions associated with this site (**TMP-60968**) with the next submittal to verify compliance with conditions. *Flood Control* will not issue conditional approval of the drainage study without the associated zoning/planning conditions (issued by the *City Council*). Any associated conditions of approval that revise the site drainage parameters will require that the drainage study be revised and resubmitted.

2. The site is adjacent to or crosses an existing or proposed *Clark County Regional Flood Control District* (CCRFCD) master planned facility. Therefore, CCRFCD concurrence is required prior to final approval of the drainage study.

3. The site is also adjacent to the *Clark County Western Beltway-215* project to the east. The engineer must coordinate with *Clark County Public Works Department* (CCPW) and incorporate any concerns for boundary conditions. CCPW concurrence is required prior to final acceptance of the study.

4. The final approval of this *Master Drainage Study* is only as a precursor to allow the submittal of technical drainage studies such as but not limited to the Modified Detention Basin, Infrastructures and Phases of housing subdivisions etc.

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FOR
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764-204-011

November 2015

Prepared For:

Pulte Homes
7255 S. Tenaya Way, #200
Las Vegas, NV 89113
(702) 914-4800

Prepared by:

GCW, Inc.
1555 S. Rainbow Blvd.
Las Vegas, Nevada 89146
Phone: (702) 804-2000
Fax: (702) 804-2299

GCW
ENGINEERS \ SURVEYORS

764-204-011

November 24, 2015

Albert Sung, PE
Flood Control Project Engineer
City of Las Vegas Department of Public Works
333 N. Rancho Drive
Las Vegas, NV 89106

Re: Response to Comments on the Master Drainage Study for Summerlin Village 26 – Reverence
DS 4752A

Dear Mr. Sung:

The purpose of this letter is to address your comments dated October 22, 2015, regarding the above-referenced project. The comments are individually addressed as follows:

Comment: "1. Provide a copy of the zoning/planning conditions associated with this site (**TMP-60968**) with the next submittal to verify compliance with conditions. *Flood* Control will not issue conditional approval of the drainage study without the associated zoning/planning conditions (issued by the *City Council*). Any associated conditions of approval that revise the site drainage parameters will require that the drainage study be revised and resubmitted."

Response: A copy of the zoning/planning conditions associated with this site (**TMP-60968**) is included in Appendix A.

Comment: "2. The site is adjacent to or crosses an existing or proposed *Clark County Regional Flood Control District* (CCRFCD) master planned facility. Therefore, CCRFCD concurrence is required prior to final approval of the drainage study."

Response: The study will be submitted to CCRFCD for concurrence following conditional approval from the City of Las Vegas.

Comment: "3. The site is also adjacent to the *Clark County Western Beltway-215* project to the east. The engineer must coordinate with *Clark County Public Works Department* (CCPW) and incorporate any concerns for boundary conditions. CCPW concurrence is required prior to final acceptance of the study."

Response: Noted. Upon CLV conditional approval, the study will be submitted to CCPW for their review and concurrence.

1555 South Rainbow Boulevard
Las Vegas, Nevada 89146
O 702.804.2000
F 702.804.2299
info@gcwengineering.com
gcwengineering.com

Comment: "4. The final approval of this *Master Drainage Study* is only as a precursor to allow the submittal of technical drainage studies such as but not limited to the Modified Detention Basin, Infrastructures and Phases of housing subdivisions etc."

Response: Noted.

Comment: "5. Since the previous studies from the master drainage, offsite berms/channels, street and storm drains improvements to individual Unit developments were approved seven to eight years ago, subsequent technical drainage studies must be submitted as a new project after the approval of this master study."

Response: Noted.

Comment: "6. Technical drainage studies are required for each of the development phases (PODs). The studies for the PODs may not be submitted prior to the conditional approval of the pertinent infrastructure drainage studies. No building permits will be issued prior to the final approval of the pertinent technical drainage studies and improvement plans"

Response: In a meeting with CLV on November 12, 2015, it was determined the comment should be revised to state "The studies for the PODS may not be submitted prior to conditional approval of this Master Study Update. Conditional approval of the studies for the (PODS) will not be granted prior to conditional approval of the pertinent infrastructure drainage studies. However, the infrastructure studies can be submitted prior to conditional approval of the Master Study Update, provided the site plan and proposed drainage patterns are consistent with the Master Study Update."

Comment: "7. Provide a chapter in the Master Drainage Study Update to detail the sequence of forthcoming submittal of the technical drainage studies and the pertinent improvement plans. Include a description of the existing infrastructures such as interim flood control facilities and proposed and ultimate conditions in the next submittal."

Response: The offsite improvements will include rough grading for the site and the proposed pertinent infrastructure improvements required to protect the site. As discussed in the meeting with CLV on November 12, 2015, the offsite improvements will be constructed prior to onsite POD development. The pertinent offsite improvements will include a debris basin and RCB storm drain / concrete-lined channel outfall system and modification of the Village 26 detention basin. Additionally, the offsite improvements will include reconstruction of the existing Western Beltway Channel adjacent to the site. GCW is currently preparing, a technical drainage study update that addresses the proposed offsite improvements and proposed interim conditions. The proposed offsite improvements will be addressed in the future technical drainage study update to the "*Technical Drainage Study for Village 26 at Summerlin West Offsite Improvements* (hereinafter, referred to as the Offsites Study) which is currently scheduled to be submitted to CLV for review shortly hereafter.

Comment: "8. Page 4 of the *Master Study* stated that, quote "CCRFCD Facilities GOBE 0001-0065 will be removed and replaced with this project". Advise what the regional facilities will be replaced with inthe next submittal."

Response: CCRFCD Facilities GOBE 0001-0065 will be replaced with an 11-foot wide to 17-foot wide concrete channel. The proposed CCRFCD Facilities are labeled on Figure 6R included in Appendix A.

Comment: "9. Page 20 of the *Master Drainage Study* stated that concrete-lined rectangular channels will be constructed along the perimeter of **Village** 26 for flood protection. Address in the addendum whether the channels will be built altogether before any phases of development or will be built in phases. Provide a perimeter channels phasing map (if any) in the next submittal. A technical drainage study for the proposed concrete channels as infrastructure must be submitted prior to any onsite developments."

Response: As discussed in the meeting with CLV on November 12, 2015, the perimeter channels will not be constructed prior to the phases of development. The concrete-lined rectangular perimeter channel will be constructed as required to provide offsite flow protection for each phase of development. The phasing for the concrete-lined perimeter channels have been labeled on the phasing exhibits included in Appendix A. Future technical drainage studies for the PODS will address interim grading required to fully protect each phase of development from offsite flows.

Comment: "10. Obtain Bureau of Land Management (BLM) approval if the perimeter channels encroach into their property prior to the final approval of the infrastructure drainage study."

Response: The proposed perimeter channels will be constructed onsite and will not encroach onto BLM property; therefore BLM approval is not anticipated.

Comment: "11. The master drainage study proposes a mixed-use detention basin that may include a park, amphitheatre, basketball court etc. Design multi-use facilities per *Section 304.8* of the *CCRFCD Hydrologic Criteria and Drainage Design Manual.* The modification of the existing detention basin will require a technical drainage study with *State* and *CCRFCD* approval. Any technical drainage studies for future onsite developments will not be accepted for review prior to the final approval of the modified detention basin study."

Response: Noted. GCW intends to obtain *State* and *CCRFCD* approval for the modification of the existing detention basin. The modifications will be addressed in the future update to the Offsites Study. In the meeting with CLV on November 12, 2015, CLV agreed that the technical drainage studies for the future onsite developments can be submitted after conditional approval of the Master Study Update and the initial review of the future update to the Offsites Study, provided the site plan and proposed drainage patterns are consistent with the Master Study Update.

Comment: "12. To accommodate the additional features such as a park and the various ball game courts in the detention basin as well as the anticipated sediment load generated by the 100-year storm event, address in the next submittal how and where the additional storage volume in the basin will come from."

Response: The proposed detention basin modification does not include sediment load since the upstream sediment load will be captured by the proposed debris basin. The proposed soccer fields will be elevated above the 10-year storm event water surface elevation and the proposed park, basketball courts, tennis courts, volleyball and amphitheatre will be elevated above the 25-year storm event water surface elevation to meet CCRFCD Criteria. Additionally, a minimum 1-foot of freeboard will be provided in the detention basin during the 100-year storm event. As discussed in the November 12, 2015 Meeting, maintenance access to the bottom of the proposed detention basin will be provided and the proposed park improvements will be required to be maintained by the Homeowner's Association.

Comment: "13. Provide a technical drainage study for a proposed debris basin at the southwest corner of *Summerlin Village 26* as part of the infrastructure studies."

Response: The proposed debris basin will be addressed in the future update to the Offsites Study.

Comment: "14. The *Master Study* discussed about the volume of the proposed debris basin at CP3, the southwest corner of *Village 26* for onsite protection. However, even though the sediment transported from *Subbasin LMT1R* does not impact the proposed developments, it will impact the downstream regional facility (GOL4 0025 and 0026). Address in the addendum whether another debris basin will be necessitated for downstream facilities protection."

Response: This project will not adversely impact sediment to or from Subbasin LMT1R. The flow velocity discharged from the site into LMT1R will be non-erosive. Therefore, development of the site will not increase sediment to LMT1R and a debris basin will not be required at this location due to development of the site.

Facility 18, which is proposed to discharge flow to the wash north of the site will include outlet protection. The need for an energy dissipater at this location will be evaluated in the future technical drainage study for the PODS.

Comment: "15. Provide a *Master Storm Drain Plan* identifying all the existing and proposed *Clark County Regional Flood Control Facilities* with the "ID / River Mile" clearly labeled."

Response: The CCRFCD Facilities have been clearly labeled with the "ID / River Mile" on the tables shown on revised *Figure 6R Flood Control Facilities Map*. Figure 6R has been included in Appendix A.

Comment: "16. FIG 6 (Flood Control Facilities Map): It appears that Concentration Point 4 (CP4) is mis-located on the map. Move the identifier to the northeast corner of Subbasin 1-3P to match that of in FIG 5 and FIG 5A.

CP5B was missing in FIG 6. Provide as such in the next submittal.

Provide a north arrow and scale bar in Figure 6."

Response: The label for Concentration Point CP4 has been moved to the correct location on Figure 6R and now matches Figures 5 and 5A. The label for CP5B, a north arrow, and a scale bar has been added to Figure 6R. Figure 6R has been included in Appendix A.

Additional Comments

Minor changes to the land plan for the site have occurred since the previous submittal. Although general drainage patterns and the proposed flowrate and volumes for the conceptually proposed detention basin were not affected by the revisions, slight revisions to the onsite basin boundaries Subbasins 1-11P and 1-12P have occurred. Please refer to the revised drainage maps (Figures 5R and 5AR) and facility map (Figure 6R) included in Appendix A. The Standard Form 4, HEC-1, and subbasin prorate calculations have also been revised to reflect the site plan revisions. The revised hydrology calculations have been included in Appendix A.

The results of the revised HEC-1 model have been summarized in Table 1. A copy of the HEC-1 model has been included in Appendix A.

TABLE 1
SUMMARY OF ULTIMATE CONDITIONS HEC-1 MODEL

SB OR CP	AREA (AC)	100 YR (CFS)	25 YR (CFS)	10 YR (CFS)
1-1A	1497.2	2289	1477	942
1-1B	111.8	226	115	63
CP1	-	2404	1549	986
1-2A	552.7	1541	938	608
1-2B	137.7	315	173	103
CP2	-	2941	1914	1209
1-2CR	367.6	859	503	313
CP3	-	3309	2171	1365
1-3P	16.5	63	42	31
CP4	-	3311	2179	1368
1-12P	116.1*	230*	128	78
CP5	-	3454*	2266*	1416*
1-14	1.0	3	2	1
1-15	3.6	10	6	4
1-16	1.9	5	3	2
1-17	2.5	7	4	2

TABLE 1 SUMMARY OF ULTIMATE CONDITIONS HEC-1 MODEL				
SB OR CP	AREA (AC)	100 YR (CFS)	25 YR (CFS)	10 YR (CFS)
1-18	2.4	7	4	2
CP5B	-	3464	2273	1421
EXDB	-	653	550	446
1-4R	34.3	100	58	37
1-5R	22	63	37	24
CP6	-	163	95	61
1-6R	9.7	28	16	11
1-7R	17.3	50	30	19
CP7	-	79	46	29
1-8R	1.6	5	3	2
1-10R	35.6	101	59	38
CP8	-	106	62	39
1-11P	113.6*	219*	118	69
CP9	-	536*	308	192
1-13	0.5	1	1	1
LMT1R	1256.6	1966	1267	821
CP10	-	2190	1422	913
*Revised from Previous Submittal				

The results of the revised onsite prorate calculations have been summarized below.

ONSITE PRORATED FLOW SUMMARY			
Subbasin	Q_{100} (cfs)	New Area	cfs/acre
1-11P	219*	113.6*	1.93
1-12P	230*	116.1*	1.98
Onsite Prorated Basins			
Subbasin	Q_{100} (cfs)	New Area (acres)	cfs/acre
11-A	30*	15.6*	1.93
11-B	12	6.3*	1.93
11-C	21	10.7	1.93
11-D	33*	17.1*	1.93
11-E	17*	9.0*	1.93
11-F	18	9.2*	1.93
11-G	5*	2.3*	1.93
11-H	19	9.7*	1.93
11-I	14	7.4	1.93
11-J1	6	3.3	1.93

ONSITE PRORATED FLOW SUMMARY			
Subbasin	Q_{100} (cfs)	New Area	cfs/acre
11-J2	15*	7.5	1.93
11-K	23	12.1*	1.93
11-L	6	3.4*	1.93
Total	**219***	**113.6***	**N/A**
12-A	33	16.5	1.98
12-B	11	5.8	1.98
12-C	3	1.7*	1.98
12-D	24	12.0	1.98
12-E	15	7.4*	1.98
12-F	14	7.0	1.98
12-G	13*	6.6*	1.98
12-H	12*	5.9*	1.98
12-I	17*	8.8*	1.98
12-J	13	6.7*	1.98
12-K	13	6.4	1.98
12-L	43	21.5	1.98
12-M	7	3.8	1.98
12-N	12	6*	1.98
TOTAL	**230***	**116.1***	**N/A**
*Revised from Previous Submittal			

The results of the revised street flow calculations are summarized in Table 2. The street flow and facility normal depth calculations have been included in Appendix B.

TABLE 2 100-YEAR STREET FLOW CHARACTERISTICS ULTIMATE CONDITIONS						
Location	**Slope (%)**	**Q_{100} (cfs)**	**Depth (ft)**	**Velocity (ft/s)**	**D*V**	**Tributary Subbasins**
Section 1	6.00	32	0.44	6.59	2.9	11-A + $Q_{Byp\text{-}Sect3}$
Section 2	2.80	12	0.38	3.89	1.5	11-B
Section 3	3.20	21	0.43	4.68	2.0	11-C
Section 4	3.80	35	0.48	5.63	2.7	11-D + $Q_{Byp\text{-}Sect6}$
Section 5	2.66	17	0.42	4.14	1.7	11-E
Section 6	2.30	20	0.44	4.09	1.8	11-F + $Q_{Byp\text{-}Sect5}$
Section 7	2.54	21	0.44	4.29	1.9	11-H + $Q_{Byp\text{-}Sect9A}$
Section 8A	0.50	14	0.50	2.08	1.0	11-I
Section 8B	2.34	6	0.32	3.10	1.0	11-J1
Section 9A	2.54	19	0.43	4.19	1.8	11-J2 + $Q_{Byp\text{-}Sect8A}$ + $Q_{Byp\text{-}Sect8B}$

TABLE 2
100-YEAR STREET FLOW CHARACTERISTICS
ULTIMATE CONDITIONS

Location	Slope (%)	Q_{100} (cfs)	Depth (ft)	Velocity (ft/s)	D*V	Tributary Subbasins
Section 9B	3.07	23	0.44	4.70	2.1	11-K
Section 10	5.67	10	0.33	4.90	1.6	11-L + $Q_{Byp\text{-}Sect7}$ + $Q_{Byp\text{-}Sect9B}$
Section 11	0.50	12	0.48	2.02	1.0	12-N
Section 12	5.60	33	0.45	6.44	2.9	12-A
Section 13	5.20	13	0.36	5.02	1.8	12-B + $Q_{Byp\text{-}Sect12}$
Section 14	5.00	24	0.42	5.72	2.4	12-D
Section 15	2.96	15	0.40	4.19	1.7	12-E
Section 16	6.00	29	0.43	6.42	2.8	12-G + 12-F + $Q_{Byp\text{-}Sect15}$
Section 17	0.50	12	0.48	2.02	1.0	12-H
Section 18	1.80	17	0.44	3.56	1.6	12-I
Section 19	5.00	13	0.36	4.95	1.8	12-J
Section 20	0.49	13	0.49	2.05	1.0	12-K

*$Q_{byp\text{-}Sect\#}$: Assumes 2 cfs bypasses the upstream street cross section

In general, the proposed drainage patterns are consistent with the previously approved referenced drainage studies. The proposed facilities do not significantly alter existing peak flows or the character of flows downstream of the development and do not pose any negative impacts on downstream facilities and development.

If you have any questions or require additional information, please contact our office at 702-804-2133.

Cordially,
GCW, INC.

James A. Monroe, PE LEED AP
Project Manager
Flood Control Division

JAM/vlr
Enclosures

c: Brian Schmidt, GCW
Ryan Belsick, GCW
Wes Petty, GCW

REVERENCE
APPENDIX LAYOUT

Appendix A. Hydrologic Calculations, Exhibits, and Information

1. Zoning and Planning Approval Letter
2. Phasing and Land Use Exhibits
3. Average Lot Size Calculations
4. Ultimate Conditions Standard Form 4
5. Ultimate Conditions HEC-1 Analysis
6. Figure 5R Ultimate Conditions Overall Drainage Map
7. Figure 5AR Ultimate Conditions Drainage Map
8. Figure 6R Flood Control Facilities Map

Appendix B. Hydraulic Calculations, Exhibits, and Information

1. Street Width Exhibit
2. Street Normal Depth Calculations
3. Ultimate Flood Protection Facility Calculations
   a. Normal Depth Calculations

APPENDIX A

Hydrologic Calculations, Exhibits, and Information

764-764

October 14, 2015

Ms. Julie Cleaver
The Howard Hughes Company
10801 West Charleston Blvd., 3rd Floor
Las Vegas, Nevada 89135

RE: TMP-60968 [PRJ-60662] - TENTATIVE MAP RELATED TO MOD-61039 PLANNING COMMISSION MEETING OF OCTOBER 13, 2015

Dear Applicant:

Your request for a Tentative Map FOR A MASTER PLANNED VILLAGE CONTAINING 323 SINGLE-FAMILY RESIDENTIAL LOTS, ONE MULTI-FAMILY RESIDENTIAL LOT AND 14 LARGE POD LOTS on 300.16 acres at the northwest corner of Lake Mead Boulevard and Clark County 215 (APNs 137-13-101-007 and 008; 137-14-501-004; and 137-14-601-002), P-C (Planned Community) Zone, Ward 4 (Anthony) [PRJ-60662], was considered by the Planning Commission on October 13, 2015.

The Planning Commission voted to recommend ***APPROVAL*** of your request, subject to the following:

Planning

1. Approval of the Tentative Map shall be for no more than four (4) years. If a Final Map is not recorded on all or a portion of the area embraced by the Tentative Map within four (4) years of the approval of the Tentative Map, this action is void.

2. Approval of a Major Modification (MOD-61039) of the Village 26 Development Plan shall be required, if approved.

3. Prior to recordation of a final map over this site, a Parcel Map (PMP-61340) shall be recorded.

4. All development shall conform to the Summerlin Village 10, 11, 12 and 26 Development Agreement and the Summerlin Development Standards, 2004 Revision, as applicable.

5. Street names must be provided in accordance with the City's Street Naming Regulations.

6. A fully operational fire protection system, including fire apparatus roads, fire hydrants and water supply, shall be installed and shall be functioning prior to construction of any combustible structures.

LAS VEGAS
CITY COUNCIL

CAROLYN G. GOODMAN
MAYOR

STEVEN D. ROSS
MAYOR PRO TEM

LOIS TARKANIAN
RICKI Y. BARLOW
STAVROS S. ANTHONY
BOB COFFIN
BOB BEERS

ELIZABETH N. FRETWELL
CITY MANAGER

CITY OF LAS VEGAS
DEPARTMENT OF PLANNING

DEVELOPMENT SERVICES CENTER
333 NORTH RANCHO DRIVE
3RD FLOOR
LAS VEGAS, NEVADA 89106

VOICE 702.229.6301
FAX 702.474.0352
TTY 7-1-1
www.lasvegasnevada.gov

/city of las vegas

7. All development is subject to the conditions of City Departments and State Subdivision Statutes.

Public Works

8. If an area outside the proposed public right-of-way is planned for public infrastructure, separate public easements (sewer, drainage, traffic, pedestrian, etc.) must be granted for these facilities on the Final Map for this site unless otherwise allowed by the City Engineer. We note that the areas shown as "Future Utility Easement" on the Tentative Map across Parcels Q & R & COS-5 may need to be granted as Public Sewer and Public Drainage Easements to be privately maintained on the Final Map. Construction of these public improvements may happen at a later date to coincide with parcel development. All Public Sewer Easements must be a minimum 20' wide and have paved drivable access for maintenance purposes. The size of Public Drainage Easements will be determined through a required Drainage Study.

9. Unless otherwise allowed by the City Engineer, provide a terminus and grant an associated Temporary Access Easement acceptable to the Department of Public Works for all public streets that continue to a future phase.

10. All parcels created by the Parent Final Map for this site shall provide a minimum of two lanes of paved legal access from an existing paved public street to each developable parcel prior to occupancy of any buildings within each developable parcel. All public roads shown on the Final Map shall be labeled as "Hereby Dedicated."

11. Meet with the Sanitary Sewer Planning Section of the Department of Public Works regarding the previously approved Summerlin Village 26 Wastewater Collection System Master Plan. All public sewer lines and manholes shall have paved, drivable access at all times. Comply with the recommendations of the Sanitary Sewer Planning Section.

12. Prior to the recordation of the Final Map for this site, meet with the Fire Protection Engineering Section of the Department of Fire Services to discuss fire requirements for this site.

13. All landscaping within public rights of way or common areas shall be maintained by the Master Developer or his designee. Encroachment Agreement approval shall be obtained from the City Council prior to installation of any private improvements within public rights of way. All installed landscaping, whether in public rights-of-way or within common area properties, shall be situated and maintained so as to not create sight visibility obstructions for vehicular traffic at all development access drives and all adjacent, abutting street intersections.

14. If a Special Improvement District (SID) is proposed, the SID section of the Department of Public Works must be contacted and appropriate written agreements (if necessary) must be executed by the property owner(s) of record prior to the recordation of a Final Map or the issuance of any building permits, whichever may occur first. The written agreements (if applicable) will allow the recalculation and/or the redistribution of all assessments of record on this site.

15. Coordinate with the Clark County Department of Public Works to establish appropriate wall heights along the eastern perimeter of this site in order to comply with noise mitigation requirements as set forth in the Beltway Noise Mitigation Study. Provide documentation from Clark County to the City of Las Vegas Land Development Section that this condition has been satisfied prior to the submittal of any construction drawings.

16. A Traffic Impact Analysis must be submitted to and approved by the Department of Public Works prior to the issuance of any building or grading permits, submittal of any construction drawings or the recordation of a Map subdividing this site. Comply with the recommendations of the approved Traffic Impact Analysis prior to occupancy of the site. The Traffic Impact Analysis shall also include a section addressing Standard Drawings #234.1 #234.2 and #234.3 to determine additional right-of-way requirements for bus turnouts adjacent to this site, if any; dedicate all areas recommended by the approved Traffic Impact Analysis. All additional rights of way required by Standard Drawing #201.1 for exclusive right turn lanes and dual left turn lanes shall be dedicated prior to or concurrent with the commencement of on site development activities unless specifically noted as not required in the approved Traffic Impact Analysis. If additional rights of way are not required and Traffic Control devices are or may be proposed at this site outside of the public right of way, all necessary easements for the location and/or access of such devices shall be granted prior to the issuance of permits for this site. Phased compliance will be allowed if recommended by the approved Traffic Impact Analysis. No recommendation of the approved Traffic Impact Analysis, nor compliance therewith, shall be deemed to modify or eliminate any condition of approval imposed by the Planning Commission or the City Council on the development of this site.

17. A Drainage Plan and Technical Drainage Study must be submitted to and approved by the Department of Public Works prior to the issuance of any building or grading permits or submittal of any construction drawings, whichever may occur first. Provide and improve all drainageways recommended in the approved drainage plan/study. The developer of this site shall be responsible to construct such neighborhood or local drainage facility improvements as are recommended by the City of Las Vegas Neighborhood Drainage Studies and approved Drainage Plan/Study concurrent with development of this site.

18. The approval of all Public Works related improvements shown on this rezoning map is in concept only. Specific design and construction details relating to size, type and/or alignment of public improvements, including but not limited to street, sewer and drainage improvements, shall be resolved prior to approval of the construction plans by the City. All deviations from adopted Summerlin and/or City Standards must receive approval from the City Planning Commission or the City Engineer prior to the recordation of a Final Map or the approval of subdivision related construction plans, whichever may occur first. We reserve the right to impose additional conditions of approval for each individual development site when such plans are known. We anticipate the need for additional conditions concurrent with approval of the Master Tentative Map(s) and/or Village Map(s) for this site.

This item will be considered by the City Council on ***November 18, 2015***, at 1:00 P.M. in the Council Chambers of City Hall, 495 South Main Street, Las Vegas, Nevada. ***The Council requires that you or your representative be present at this meeting.*** If you or your representative chooses not to attend, the City Council may act in your absence without your input.

Sincerely,

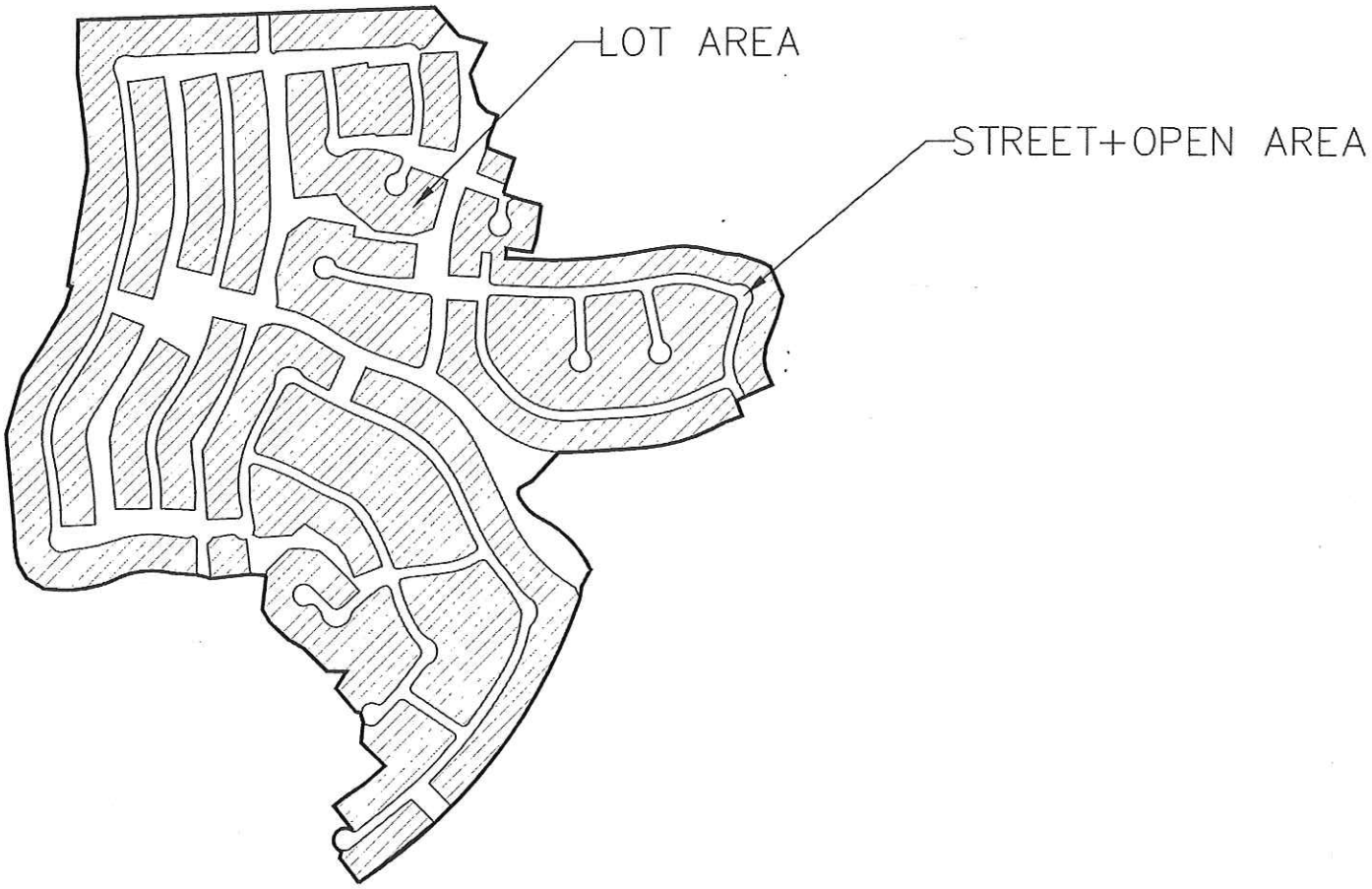
Peter Lowenstein, AICP
Planning Manager
Case Planning Division

PL:nl

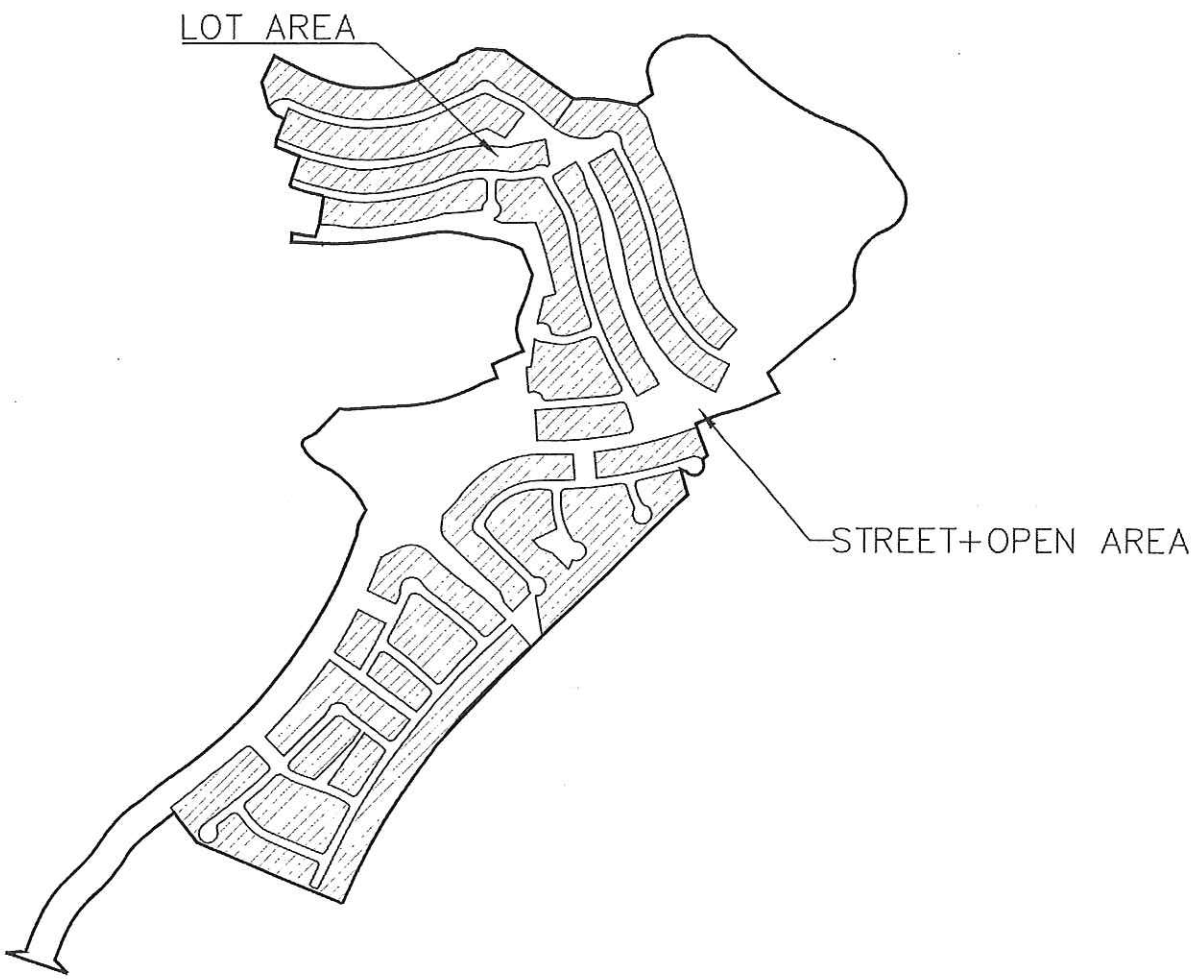
cc:

Bernin Anderson
PN II, Inc.
8345 West Sunset Road
Las Vegas, Nevada 89113

Ms. Cindie Gee
G.C. Wallace, Inc.
1555 South Rainbow Blvd.
Las Vegas, Nevada 89146



LOT AREA = 81.57 AC
LOTS = 342
AVG LOT SIZE = LOT AREA / # LOTS = 81.57 AC / 342 = 0.239 AC = 10,389.44 SQFT



LOT AREA = 55.14 AC
LOTS = 317
AVG LOT SIZE = LOT AREA / # LOTS = 55.14 AC / 317 = 0.17 AC = 7,576.97 SQFT

764-264-01

LAS VEGAS
CITY COUNCIL

CAROLYN G. GOODMAN
MAYOR

STEVEN D. ROSS
MAYOR PRO TEM

LOIS TARKANIAN
RICKI Y. BARLOW
STAVROS S. ANTHONY
BOB COFFIN
BOB BEERS

ELIZABETH N. FRETWELL
CITY MANAGER

November 19, 2015

Ms. Julie Cleaver
The Howard Hughes Company
10801 West Charleston Boulevard, 3rd Floor
Las Vegas, Nevada 89135

RE: MOD-61039 [PRJ-60662] - MAJOR MODIFICATION RELATED TO TMP-60968
CITY COUNCIL MEETING OF NOVEMBER 18, 2015

Dear Ms. Cleaver:

The City Council at a regular meeting held on November 18, 2015 ***APPROVED*** a request for a Summerlin Major Modification of an approved Development Plan for Village 26 on 300.16 acres at the northwest corner of Lake Mead Boulevard and Clark County 215 (APNs 137-13-101-007 and 008; 137-14-501-004; and 137-14-601-002), P-C (Planned Community) Zone, Ward 4 (Anthony) [PRJ-60662].

The Notice of Final Action was filed with the Las Vegas City Clerk on November 19, 2015.

Sincerely,

Thomas A. Perrigo
Director
Department of Planning

TAP:clb

cc: Mr. Bernin Anderson
PN II, Inc.
8345 West Sunset Road
Las Vegas, Nevada 89113

Ms. Cindie Gee
G.C. Wallace, Inc.
1555 South Rainbow Boulevard
Las Vegas, Nevada 89146

CITY OF LAS VEGAS
DEPARTMENT OF PLANNING

DEVELOPMENT SERVICES CENTER
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LAS VEGAS, NEVADA 89106

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FAX 702.474.0352
TTY 7-1-1
www.lasvegasnevada.gov

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LAS VEGAS
CITY COUNCIL

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BOB COFFIN
BOB BEERS

ELIZABETH N. FRETWELL
CITY MANAGER

November 19, 2015

Ms. Julie Cleaver
The Howard Hughes Company
10801 West Charleston Boulevard, 3rd Floor
Las Vegas, Nevada 89135

RE: TMP-60968 [PRJ-60662] - TENTATIVE MAP RELATED TO MOD-61039 CITY COUNCIL MEETING OF NOVEMBER 19, 2015

Dear Ms. Cleaver:

The City Council at a regular meeting held on November 18, 2015 ***APPROVED*** a request for a Tentative Map FOR A MASTER PLANNED VILLAGE CONTAINING 323 SINGLE-FAMILY RESIDENTIAL LOTS, ONE MULTI-FAMILY RESIDENTIAL LOT AND 14 LARGE POD LOTS on 300.16 acres at the northwest corner of Lake Mead Boulevard and Clark County 215 (APNs 137-13-101-007 and 008; 137-14-501-004; and 137-14-601-002), P-C (Planned Community) Zone, Ward 4 (Anthony) [PRJ-60662].

This approval is subject to the following conditions:

Planning

1. Approval of the Tentative Map shall be for no more than four (4) years. If a Final Map is not recorded on all or a portion of the area embraced by the Tentative Map within four (4) years of the approval of the Tentative Map, this action is void.

2. Approval of a Major Modification (MOD-61039) of the Village 26 Development Plan shall be required, if approved.

3. Prior to recordation of a final map over this site, a Parcel Map (PMP-61340) shall be recorded.

4. All development shall conform to the Summerlin Village 10, 11, 12 and 26 Development Agreement and the Summerlin Development Standards, 2004 Revision, as applicable.

5. Street names must be provided in accordance with the City's Street Naming Regulations.

6. A fully operational fire protection system, including fire apparatus roads, fire hydrants and water supply, shall be installed and shall be functioning prior to construction of any combustible structures.

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/city of las vegas

7. All development is subject to the conditions of City Departments and State Subdivision Statutes.

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8. If an area outside the proposed public right-of-way is planned for public infrastructure, separate public easements (sewer, drainage, traffic, pedestrian, etc.) must be granted for these facilities on the Final Map for this site unless otherwise allowed by the City Engineer. We note that the areas shown as "Future Utility Easement" on the Tentative Map across Parcels Q & R & COS-5 may need to be granted as Public Sewer and Public Drainage Easements to be privately maintained on the Final Map. Construction of these public improvements may happen at a later date to coincide with parcel development. All Public Sewer Easements must be a minimum 20' wide and have paved drivable access for maintenance purposes. The size of Public Drainage Easements will be determined through a required Drainage Study.

9. Unless otherwise allowed by the City Engineer, provide a terminus and grant an associated Temporary Access Easement acceptable to the Department of Public Works for all public streets that continue to a future phase.

10. All parcels created by the Parent Final Map for this site shall provide a minimum of two lanes of paved legal access from an existing paved public street to each developable parcel prior to occupancy of any buildings within each developable parcel. All public roads shown on the Final Map shall be labeled as "Hereby Dedicated."

11. Meet with the Sanitary Sewer Planning Section of the Department of Public Works regarding the previously approved Summerlin Village 26 Wastewater Collection System Master Plan. All public sewer lines and manholes shall have paved, drivable access at all times. Comply with the recommendations of the Sanitary Sewer Planning Section.

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15. Coordinate with the Clark County Department of Public Works to establish appropriate wall heights along the eastern perimeter of this site in order to comply with noise mitigation requirements as set forth in the Beltway Noise Mitigation Study. Provide documentation from Clark County to the City of Las Vegas Land Development Section that this condition has been satisfied prior to the submittal of any construction drawings.

16. A Traffic Impact Analysis must be submitted to and approved by the Department of Public Works prior to the issuance of any building or grading permits, submittal of any construction drawings or the recordation of a Map subdividing this site. Comply with the recommendations of the approved Traffic Impact Analysis prior to occupancy of the site. The Traffic Impact Analysis shall also include a section addressing Standard Drawings #234.1 #234.2 and #234.3 to determine additional right-of-way requirements for bus turnouts adjacent to this site, if any; dedicate all areas recommended by the approved Traffic Impact Analysis. All additional rights of way required by Standard Drawing #201.1 for exclusive right turn lanes and dual left turn lanes shall be dedicated prior to or concurrent with the commencement of on site development activities unless specifically noted as not required in the approved Traffic Impact Analysis. If additional rights of way are not required and Traffic Control devices are or may be proposed at this site outside of the public right of way, all necessary easements for the location and/or access of such devices shall be granted prior to the issuance of permits for this site. Phased compliance will be allowed if recommended by the approved Traffic Impact Analysis. No recommendation of the approved Traffic Impact Analysis, nor compliance therewith, shall be deemed to modify or eliminate any condition of approval imposed by the Planning Commission or the City Council on the development of this site.

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The Notice of Final Action was filed with the Las Vegas City Clerk on November 19, 2015.

Sincerely,

Thomas A. Perrigo
Director
Department of Planning

TAP:clb

cc: Ms. Bernin Anderson
PN II, Inc.
8345 West Sunset Road
Las Vegas, Nevada 89113

Ms. Cindie Gee
G.C. Wallace, Inc.
1555 South Rainbow Boulevard
Las Vegas, Nevada 89146

REVERENCE BOUNDARY
OWNERSHIP BOUNDARY
PHASE LINE
DRAINAGE CHANNEL

PHASE 1

UNIT	LOT SIZE	LOT COUNT	ACREAGE (NET-NET)
REC CENTER	–	–	7.62
3	40X95, 45X105, & 50X105	27	3.87
4	50X105	27	5.25
5A	65X115	32	6.24
5B	65X115	25	8.04
6	85X130 & 105X130	89	13.63
8	85X130 & 105X130	9	3.14
9	VARIES	12	3.67
11	65X115 &75X125	56	13.96
12	65X115	16	4.02
TOTAL		293	69.44

% COMPLETE

DATE:

DESCRIPTION	DATE	AGEN APP	DATE	GOW APP

REV	DATE

PROJECT NO. 764-204
DESIGN:
DRAWN: NSL
CHECK:
PLOT DATE: 11-19-15
PLOT TIME: 08:50:03

GCW ENGINEERS \ SURVEYORS
1555 S. RAINBOW BLVD.
LAS VEGAS, NV 89146
T: 702.804.2000
F: 702.804.2299
gcwengineering.com

F:\Projects\700\764-204-013\Division\Land\Reverence_SP-PH1.dwg
Nathan Lim

PULTE HOMES

SUMMERLIN VILLAGE 26 - REVERENCE

PHASE 1 EXHIBIT

DRAWING

1 OF 1 SHTS

UID#

HTE: 00-00000

REVERENCE BOUNDARY
OWNERSHIP BOUNDARY
PHASE LINE
DRAINAGE CHANNEL

PHASE 2			
UNIT	LOT SIZE	LOT COUNT	ACREAGE (NET-NET)
2	40X95 & 45X105	43	5.85
3	40X95 & 45X105	21	2.71
4	50X105	24	4.00
8	85X130 & 105X130	17	5.52
11	65X115 &75X125	14	3.61
12	65X115	29	5.93
TOTAL		148	27.62

% COMPLETE

DATE:

REV	DATE	DESCRIPTION	AGEN APP	DATE	CCW APP

PROJECT NO. 764-204
DESIGN: NSL
DRAWN:
CHECK:
PLOT DATE: 11-19-15
PLOT TIME: 08:49:20

GCW ENGINEERS \ SURVEYORS
1555 S. RAINBOW BLVD.
LAS VEGAS, NV 89146
T: 702.804.2000
F: 702.804.2299
gcwengineering.com
F:\Projects\700\764-204-013\Division\Land\Reverence_SP-PH2.dwg
Nathan Lim

PULTE HOMES

SUMMERLIN VILLAGE 26 - REVERENCE

PHASE 2 EXHIBIT

DRAWING

1 OF 1 SHTS

UID#

HTE: 00-00000

BLM

CHURCH INTERNATIONAL LAS VEGAS

CHEYENNE BLVD

UNDEVELOPABLE

DESERT HOPE DRIVE

DETENTION BASIN

NORTH

SCALE 1"=250'

250 0 250 500

SCALE FEET

215 BELTWAY

SUN CITY SUMMERLIN

5'X2' RECTANGULAR CHANNEL

5'X3' RECTANGULAR CHANNEL

5'X2.5' RECTANGULAR CHANNEL

UNDEVELOPABLE

5'X2' RECTANGULAR CHANNEL

5'X3.5' RECTANGULAR CHANNEL

3'X1.5' RECTANGULAR CHANNEL

5'X2.5' RECTANGULAR CHANNEL

PHASE 3

RECREATION CENTER

BLM
RED ROCK NATURAL
CONSERVATION AREA

DEBRIS BASIN

UNDEVELOPABLE

MULTI-FAMILY

SUMMERLIN
VILLAGE
22

LAKE MEAD BLVD

215 BELTWAY

(3205' P2)
(3320' P2)

REVERENCE BOUNDARY
OWNERSHIP BOUNDARY
PHASE LINE
DRAINAGE CHANNEL

PHASE 3			
UNIT	LOT SIZE	LOT COUNT	ACREAGE (NET-NET)
2	40X95 & 45X105	35	4.42
7	55X110	93	14.67
10	75X125, 85X130, & 105X130 (•)	86	23.66
TOTAL		214	42.75

% COMPLETE

DATE:

DESCRIPTION	DATE	AGEN APP	DATE	CCW APP

REV	DATE

PROJECT NO. 764-204

DESIGN:
DRAWN: NSL
CHECK:
PLOT DATE: 11-19-15
PLOT TIME: 08:46:28

GCW
ENGINEERS \ SURVEYORS
1555 S. RAINBOW BLVD.
LAS VEGAS, NV 89146
T: 702.804.2000
F: 702.804.2299
gcwengineering.com

F:\Projects\700\764-204-013\Division\Land\Reverence_SP-PH3.dwg
Nathan Lim

PULTE HOMES

SUMMERLIN VILLAGE 26 - REVERENCE

PHASE 3 EXHIBIT

DRAWING

1 OF 1 SHTS

HTE: 00-00000

HYDROLOGIC CRITERIA AND DESIGN MANUAL

TIME OF CONCENTRATION

GCW
ENGINEERS \ SURVEYORS

Summerlin Village 26
Reverence
Ultimate Conditions

Project No: 764-204-011
Date: 11/23/15
Calculated by: JYA

SUB-BASIN DATA						INITIAL / OVERLAND TIME (Ti)			TRAVEL TIME (Tt)					Tc CHECK URBANIZED BASINS		Tc	Tlag	REMARKS
DESIG: (1)	DEV./EX. (D or E)	CN (16)	K (2)	AREA Ac (3)	AREA Sq Mi (4)	INITIAL LENGTH Feet (5)	SLOPE % (6)	Ti Min (7)	TRAVEL LENGTH Feet (8)	SLOPE % (9a)	V1 VELOCITY fps (9b)	V2 VELOCITY fps (10)	Tt Min (11)	TOTAL LENGTH Feet (12)	Tc = (L/180)+10 Min (13)	Min (14)	Tlag = 0.6Tc/60 Hours (15)	Rainfall (in)
1-1A*	E	85.4	0.7373	1497.2	2.3394	500	34.0	4.5	14575	8.4	4.3	8.5	29.5	15075	N/A	34.0	**0.488**	3.67
1-1B*	D	78.3	0.6436	111.8	0.1747	100	1.0	8.2	4775	8.5	5.9	8.9	9.4	4875	37.1	17.6	**0.176**	3.61
1-2A*	E	85.8	0.7426	552.7	0.8636	500	56.0	3.8	5905	17.4	6.2	12.3	8.7	6405	N/A	12.5	**0.125**	3.55
1-2B*	D	82.6	0.7003	137.7	0.2152	100	1.0	7.2	5100	7.5	5.5	8.4	10.7	5200	38.9	17.8	**0.178**	3.51
1-2CR*	E	84.7	0.7280	367.6	0.5743	500	52.0	4.0	9505	16.3	6.0	11.9	14.0	10005	N/A	18.0	**0.180**	3.46
1-4R	E	86.3	0.7492	34.3	0.0536	500	60.0	3.6	1890	36.2	8.9	17.7	2.2	2390	N/A	5.9	**0.100**	3.44
1-5R	E	86.3	0.7492	22.0	0.0343	330	65.0	2.9	1160	39.0	9.2	18.4	1.5	1490	N/A	4.4	**0.100**	3.42
1-6R	E	86.3	0.7492	9.7	0.0152	360	56.9	3.1	840	34.4	8.7	17.2	1.3	1200	N/A	4.4	**0.100**	3.43
1-7R	E	86.3	0.7492	17.3	0.0271	500	72.0	3.4	1490	26.8	7.7	15.2	2.2	1990	N/A	5.6	**0.100**	3.44
1-8R	E	86.3	0.7492	1.6	0.0025	210	38.3	2.7	205	20.0	6.6	13.1	0.5	415	N/A	3.2	**0.100**	3.42
1-10R	E	86.1	0.7465	35.6	0.0556	500	24.0	4.9	1030	21.9	6.9	13.8	1.8	1530	N/A	6.8	**0.100**	3.41
1-3P	D	94.9	0.8627	16.5	0.0258	100	1.0	4.3	1190	3.7	3.9	5.9	4.1	1290	17.2	8.4	**0.084**	3.36
1-11P	D	81.7	0.6884	113.6	0.1775	100	1.0	7.4	4160	3.0	3.5	5.3	14.0	4260	33.7	21.4	**0.214**	3.38
1-12P	D	83.8	0.7162	116.1	0.1814	100	1.0	6.9	5810	4.0	4.1	6.1	16.5	5910	42.8	23.4	**0.234**	3.32
1-13	E	86.3	0.7492	0.5	0.0008	50	40.0	1.3	333	25.0	7.4	14.7	0.8	383	N/A	2.1	**0.100**	3.34
1-14	E	86.3	0.7492	1.0	0.0016	50	40.0	1.3	406	18.0	6.3	12.5	1.1	456	N/A	2.4	**0.100**	3.31
1-15	E	86.1	0.7465	3.6	0.0057	50	26.0	1.5	575	19.7	6.6	13.0	1.4	625	N/A	2.9	**0.100**	3.32
1-16	E	86.3	0.7492	1.9	0.0030	50	32.0	1.4	334	6.9	3.9	7.7	1.4	384	N/A	2.8	**0.100**	3.31
1-17	E	86.3	0.7492	2.5	0.0039	50	62.0	1.1	452	38.1	9.1	18.1	0.8	502	N/A	2.0	**0.100**	3.28
1-18	E	86.3	0.7492	2.4	0.0038	50	58.0	1.2	657	24.8	7.4	14.6	1.3	707	N/A	2.5	**0.100**	3.28

Tc = Ti + Tt Tlag = 0.6 Tc

$Ti = 1.8\ (1.1 - K)\ L^{1/2} / S^{1/3}$

$K = 0.0132\ (CN) - 0.39$

For the travel time (Tt) calculations,
V1 applies to the first 500 feet of travel distance;
V2 applies to the remaining travel distance.

Existing: $V1 = 14.8*(S/100)^{1/2}$ $V2 = 29.4*(S/100)^{1/2}$

Developed: $V1 = 20.2*(S/100)^{1/2}$ $V2 = 30.6*(S/100)^{1/2}$

* Basin parameters referenced from the Summerlin West MPU

REFERENCE:

STANDARD FORM 4

ONSITE PRORATED FLOW SUMMARY			
Subbasin	Q_{100} (cfs)	New Area	cfs/acre
1-11P	219*	113.6*	1.93
1-12P	230*	116.1*	1.98
Onsite Prorated Basins			
Subbasin	Q_{100} (cfs)	New Area (acres)	cfs/acre
11-A	30*	15.6*	1.93
11-B	12	6.3*	1.93
11-C	21	10.7	1.93
11-D	33*	17.1*	1.93
11-E	17*	9.0*	1.93
11-F	18	9.2*	1.93
11-G	5*	2.3*	1.93
11-H	19	9.7*	1.93
11-I	14	7.4	1.93
11-J1	6	3.3	1.93
11-J2	15*	7.5	1.93
11-K	23	12.1*	1.93
11-L	6	3.4*	1.93
Total	**219***	**113.6***	**N/A**
12-A	33	16.5	1.98
12-B	11	5.8	1.98
12-C	3	1.7*	1.98
12-D	24	12.0	1.98
12-E	15	7.4*	1.98
12-F	14	7.0	1.98
12-G	13*	6.6*	1.98
12-H	12*	5.9*	1.98
12-I	17*	8.8*	1.98
12-J	13	6.7*	1.98
12-K	13	6.4	1.98
12-L	43	21.5	1.98
12-M	7	3.8	1.98
12-N	12	6*	1.98
TOTAL	**230***	**116.1***	**N/A**
*Revised from Previous Submittal			

```
1*****************************************
*                                       *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)   *
*              JUN  1998                *
*            VERSION 4.1                *
*                                       *
*  RUN DATE   23NOV15  TIME  13:13:11   *
*                                       *
*****************************************
```

```
*****************************************
*                                       *
*    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
XXXXXXX  XXXX     X       XXXXX   X
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


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

                        *DIAGRAM
*** FREE ***
              1         ID   ************************************************************
              2         ID   * ........................................................ *
              3         ID   * :            SUMMERLIN VILLAGE 26 REVERENCE            : *
              4         ID   * :                 ULTIMATE CONDITION                   : *
              5         ID   * :       THIS MODEL DETERMINES THE RUNOFF DURING        : *
              6         ID   * :           ULTIMATE DEVELOPMENT CONDITIONS            : *
              7         ID   * :......................................................: *
              8         ID   * :             RETURN PERIOD_ _ _ _100-YEAR             : *
              9         ID   * :             DISTRIBUTION_ _ _ _ 6-HOUR SDN3          : *
             10         ID   * :             PROJECT NO_ _ _ _ _ 764.204.011          : *
             11         ID   * :             FILENAME_ _ _ _ _ _ V26ULT.H1            : *
             12         ID   * :             DATE_ _ _ _ _ _ _ 11/23/2015             : *
             13         ID   * :             MODELED BY_ _ _ _ JAM                    : *
             14         ID   * :                                                      : *
             15         ID   * :           DEPTH AREA REDUCTION FACTORS:              : *
             16         ID   * :             AREA              DARF                   : *
             17         ID   * :           0.00 TO 0.24 SQ MI     1.00               : *
             18         ID   * :           0.25 TO 0.49 SQ MI     0.99               : *
             19         ID   * :           0.50 TO 0.99 SQ MI     0.98               : *
             20         ID   * :           1.00 TO 1.24 SQ MI     0.97               : *
             21         ID   * :           1.25 TO 1.50 SQ MI     0.96               : *
             22         ID   * :           1.51 TO 1.74 SQ MI     0.95               : *
             23         ID   * :           1.75 TO 1.99 SQ MI     0.94               : *
             24         ID   * :           2.00 TO 2.99 SQ MI     0.93               : *
             25         ID   * :           3.00 TO 3.99 SQ MI     0.92               : *
             26         ID   * :           4.00 TO 4.99 SQ MI     0.91               : *
             27         ID   * :......................................................: *
             28         ID   ************************************************************
             29         ID
             30         ID
             31         IT       5       0       0     300
             32         IO       5
             33         IN       5       0       0
             34         JR    PREC     1.0    0.99    0.98    0.94    0.93    0.92    0.91    0.70    0.54
                        *
             35         KK    1-1A
             36         BA   2.339
             37         PB    3.67
             38         PC   0.000   .0200   .0570   .0700   .0870   .1080   .1240   .1300   .1300   .1300
             39         PC   .1300   .1300   .1300   .1330   .1400   .1420   .1480   .1580   .1720   .1810
             40         PC   .1900   .1970   .1990   .2000   .2010   .2040   .2140   .2290   .2410   .2490
             41         PC   .2510   .2560   .2700   .2780   .2810   .2830   .2950   .3220   .3520   .4090
             42         PC   .4990   .5900   .7100   .7440   .7810   .8120   .8190   .8350   .8510   .8560
             43         PC   .8600   .8680   .8760   .8880   .9100   .9260   .9370   .9500   .9700   .9760
             44         PC   .9820   .9850   .9870   .9890   .9900   .9930   .9930   .9940   .9950   .9980
             45         PC   .9980   .9990  1.000
             46         LS       0    85.4
             47         UD   0.488
                        *
```



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

             48         KK    1-1B
             49         PB    3.61
             50         BA   0.175
             51         LS       0    78.3
             52         UD    .176
                        *

             53         KK      R2
             54         KM   ROUTE 1-1B THROUGH PORTION OF 1-1A
```

```
 55          KM   ASSUME EXISTING WASH
 56          KM     LEN   SLOPE      n             SHAPE      BW      SS
 57          RD    1885  0.0680    0.04       0    TRAP       20      10
             *

 58          KK     CP1
 59          KM    COMBINE 1-1A AND R2
 60          HC       2
             *

 61          KK      R3
 62          KM   ROUTE CP1 THROUGH 1-2B TO CP2
 63          KM   ASSUME EXISTING WASH IS MAINTAINED THROUGH DEVELOPED AREA
 64          KM   NSTEPS      K       X
 65          RM       1    .092     .15
             *

 66          KK    1-2A
 67          PB    3.55
 68          BA   0.864
 69          LS       0    85.8
 70          UD    .125
             *

 71          KK      R4
 72          KM   ROUTE 1-2A THROUGH 1-2B TO CP2
 73          KM   ASSUME EXISTING WASH IS MAINTAINED THROUGH DEVELOPED AREA
 74          KM   NSTEPS      K       X
 75          RM       1    .054     .15
             *

 76          KK    1-2B
 77          PB    3.51
 78          BA   0.215
 79          LS       0    82.6
 80          UD    .178
             *

 81          KK     CP2
 82          KM    COMBINE 1-2B, R4 AND R3
 83          HC       3
             *
```



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

 84          KK      R5
 85          KM   ROUTE CP2 THROUGH 1-2C TO CP3
 86          KM   ASSUME EXISTING WASH
 87          KM   NSTEPS      K       X
 88          RM       1    .087     .15
             *

 89          KK   1-2CR
 90          PB    3.46
 91          BA   0.574
 92          LS       0    84.7
 93          UD    .180
             *

 94          KK     CP3
 95          KM    COMBINE 1-2C AND R5
 96          KO       1
 97          HC       2
             *

 98          KK      R6
 99          KM   ROUTE CP3 TO CP4
100          KM   ASSUME BOX CULVERT
101          KM     LEN   SLOPE      n             SHAPE      BW
102          RD    1745  0.0050   0.015       0    DEEP       14
             *

103          KK    1-3P
104          PB    3.36
105          BA   .0258
106          LS       0    94.9
107          UD    .084
             *

108          KK     CP4
109          KM    COMBINE CP3 and 1-3P
110          HC       2
             *

111          KK      R7
112          KM   ROUTE CP4 THROUGH 1-12P TO CP5 (DETENTION BASIN)
113          KM   ASSUME RCP
114          KM     LEN   SLOPE      n             SHAPE      BW
115          RD    2258  0.0050   0.016       0    DEEP       12
             *

116          KK   1-12P
117          PB    3.32
118          BA   .1814
119          LS       0    83.8
120          UD    .234
             *
```



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

```
121          KK     CP5
122          KM    COMBINE CP4 AND 1-12P
123          HC       2
             *

124          KK    1-14
125          PB    3.31
126          BA   .0016
127          LS       0    86.3
128          UD    .100
             *

129          KK    1-15
130          PB    3.32
131          BA   .0057
132          LS       0    86.1
133          UD    .100
             *

134          KK    1-16
135          PB    3.31
136          BA   .0030
137          LS       0    86.3
138          UD    .100
             *

139          KK    1-17
140          PB    3.28
141          BA   .0039
142          LS       0    86.3
143          UD    .100
             *

144          KK    1-18
145          PB    3.28
146          BA   .0038
147          LS       0    86.3
148          UD    .100
             *

149          KK    CP5B
150          KM    COMBINE CP5, 1-14, 1-15, 1-16, 1-17, AND 1-18 AT DETENTION BASIN
151          KO       1
152          HC       6
             *

153          KK    EXDB
154          KO       1
155          KM   DETENTION BASIN CHEYENNE AND BELTWAY
156          KM   LOW-FLOW OUTLET IS 66" PIPE
157          RS       1    STOR       0
158          SV       0     0.07    0.80   12.71   18.75   25.05   85.95   95.04  124.21  135.14
159          SV  200.27  243.11  258.06  273.36  289.00  304.99
160          SE    2990    2991    2992    2995    2996    2997    3005    3006    3009    3010
1                                          HEC-1 INPUT                                          PAGE  5

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

161          SE    3015    3018    3019    3020    3021    3022
162          SL  2993.7   22.31     0.7     0.5
163          SS  3021.9     200     2.6     1.5
             *

164          KK    1-4R
165          PB    3.44
166          BA  0.0536
167          LS       0    86.3
168          UD   0.100
             *

169          KK    1-5R
170          PB    3.42
171          BA   .0343
172          LS       0    86.3
173          UD   0.100
             *

174          KK     CP6
175          KM    COMBINE 1-4R AND 1-5R
176          HC       2
             *

177          KK      R8
178          KM   ROUTE CP6 THROUGH 1-11P TO CP9
179          KM   ASSUME RCP
180          KM     LEN   SLOPE     n              SHAPE   DIAMETER
181          RD    1800  0.0610   0.013       0    CIRC       4
             *

182          KK    1-6R
183          PB    3.43
184          BA   .0152
185          LS       0    86.3
186          UD    .100
             *

187          KK    1-7R
188          PB    3.44
189          BA   .0271
190          LS       0    86.3
191          UD    .100
             *

192          KK     CP7
```

```
          193          KM    COMBINE 1-6R AND 1-7R
          194          HC       2
                       *
1                                                HEC-1 INPUT                                                PAGE  6

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

          195          KK      R9
          196          KM   ROUTE CP7 THROUGH 1-11P TO CP9
          197          KM   ASSUME RCP
          198          KM     LEN   SLOPE     n             SHAPE   DIAMETER
          199          RD    3150  0.0400   0.013       0    CIRC     4.5
                       *

          200          KK    1-8R
          201          PB    3.42
          202          BA   .0025
          203          LS       0    86.3
          204          UD    .100
                       *

          205          KK   1-10R
          206          PB    3.41
          207          BA   .0556
          208          LS       0    86.1
          209          UD    .100
                       *

          210          KK     CP8
          211          KM    COMBINE 1-8R AND 1-10R
          212          HC       2
                       *

          213          KK     R10
          214          KM   ASSUME RCP
          215          KM     LEN   SLOPE     n             SHAPE   DIAMETER
          216          RD    2900  0.0400   0.013       0    CIRC     4.5
                       *

          217          KK   1-11P
          218          PB    3.38
          219          BA   .1775
          220          LS       0    81.7
          221          UD    .214
                       *

          222          KK     CP9
          223          KM    COMBINE CP6, CP7, CP8 AND 1-11P
          224          HC       4
                       *

          225          KK    1-13
          226          PB    3.34
          227          BA   .0008
          228          LS       0    86.3
          229          UD    .100
                       *
1                                                HEC-1 INPUT                                                PAGE  7

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

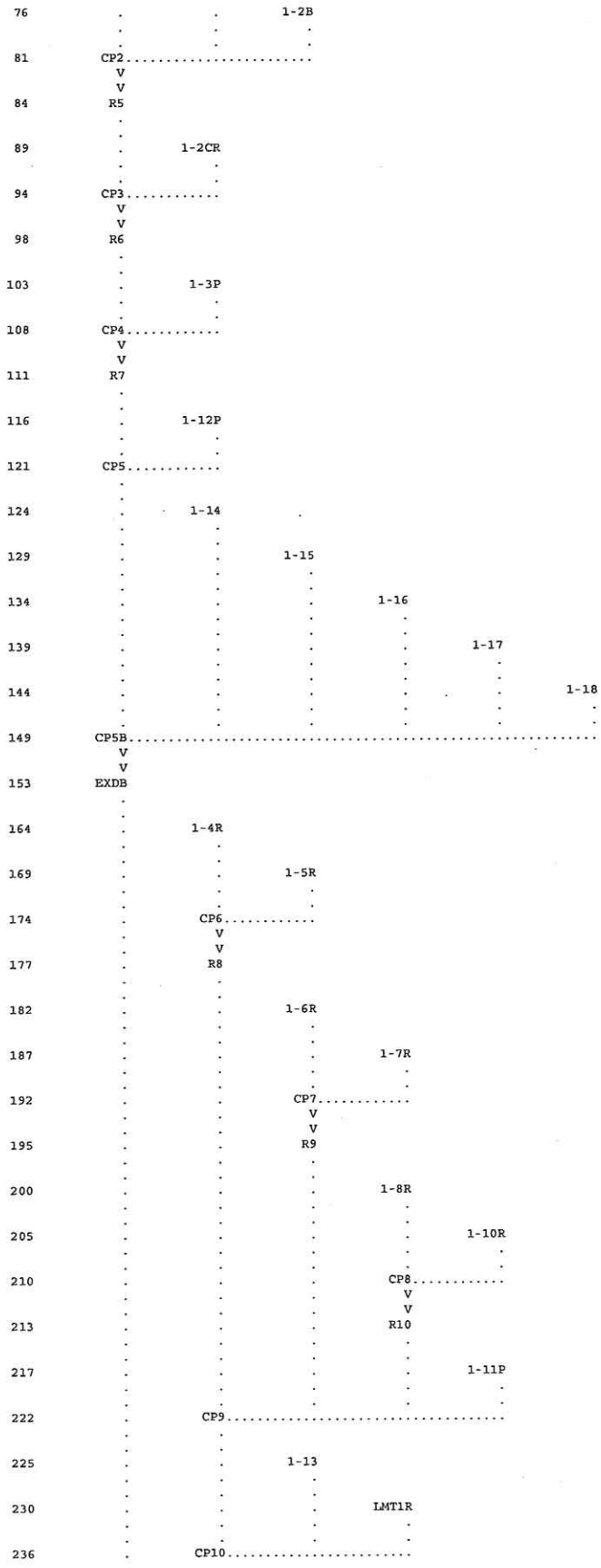
          230          KK   LMT1R
          231          KM   REFERENCED FROM LAS VEGAS VALLEY MPU
          232          PB    3.45
          233          BA   1.964
          234          LS       0    86.8
          235          UD    .447
                       *

          236          KK    CP10
          237          KM    COMBINE CP9, 1-13, AND LMT1R
          238          HC       3
                       *
          239          ZZ
1
                SCHEMATIC DIAGRAM OF STREAM NETWORK

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

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

    35        1-1A
                .
                .
    48          .        1-1B
                .          V
                .          V
    53          .         R2
                .          .
                .          .
    58         CP1.............
                V
                V
    61          R3
                .
                .
    66          .        1-2A
                .          V
                .          V
    71          .         R4
                .          .
                .          .
```


76
1-2B
81
CP2
84
R5
89
1-2CR
94
CP3
98
R6
103
1-3P
108
CP4
111
R7
116
1-12P
121
CP5
124
1-14
129
1-15
134
1-16
139
1-17
144
1-18
149
CP5B
153
EXDB
164
1-4R
169
1-5R
174
CP6
177
R8
182
1-6R
187
1-7R
192
CP7
195
R9
200
1-8R
205
1-10R
210
CP8
213
R10
217
1-11P
222
CP9
225
1-13
230
LMT1R
236
CP10

```
 (***) RUNOFF ALSO COMPUTED AT THIS LOCATION
1*****************************************
*                                       *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)   *
*              JUN  1998                *
*            VERSION 4.1                *
*                                       *
*  RUN DATE   23NOV15  TIME  13:13:11   *
*                                       *
*****************************************
```

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

```
************************************************************
* ........................................................ *
* :            SUMMERLIN VILLAGE 26 REVERENCE            : *
* :                 ULTIMATE CONDITION                   : *
* :       THIS MODEL DETERMINES THE RUNOFF DURING        : *
* :           ULTIMATE DEVELOPMENT CONDITIONS            : *
* :......................................................: *
* :            RETURN PERIOD_ _ _ _100-YEAR              : *
* :            DISTRIBUTION_ _ _ _ 6-HOUR SDN3           : *
* :            PROJECT NO_ _ _ _ _ 764.204.011           : *
* :            FILENAME_ _ _ _ _ _ V26ULT.H1             : *
* :            DATE_ _ _ _ _ _ _ _ 11/23/2015            : *
* :            MODELED BY_ _ _ _ _ JAM                   : *
* :                                                      : *
* :            DEPTH AREA REDUCTION FACTORS:             : *
* :              AREA                DARF                : *
* :            0.00 TO 0.24 SQ MI    1.00                : *
* :            0.25 TO 0.49 SQ MI    0.99                : *
* :            0.50 TO 0.99 SQ MI    0.98                : *
* :            1.00 TO 1.24 SQ MI    0.97                : *
* :            1.25 TO 1.50 SQ MI    0.96                : *
* :            1.51 TO 1.74 SQ MI    0.95                : *
* :            1.75 TO 1.99 SQ MI    0.94                : *
* :            2.00 TO 2.99 SQ MI    0.93                : *
* :            3.00 TO 3.99 SQ MI    0.92                : *
* :            4.00 TO 4.99 SQ MI    0.91                : *
* :......................................................: *
************************************************************
```

```
 32 IO          OUTPUT CONTROL VARIABLES
                     IPRNT          5  PRINT CONTROL
                     IPLOT          0  PLOT CONTROL
                     QSCAL         0.  HYDROGRAPH PLOT SCALE

    IT          HYDROGRAPH TIME DATA
                      NMIN          5  MINUTES IN COMPUTATION INTERVAL
                     IDATE      1   0  STARTING DATE
                     ITIME       0000  STARTING TIME
                        NQ        300  NUMBER OF HYDROGRAPH ORDINATES
                    NDDATE      2   0  ENDING DATE
                    NDTIME       0055  ENDING TIME
                     ICENT         19  CENTURY MARK

                  COMPUTATION INTERVAL     .08 HOURS
                      TOTAL TIME BASE   24.92 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       .99       .98       .94       .93       .92       .91       .70       .54
```

*** *** *** *

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		0615	76	176.	1		1230	151	0.	1		1845	226	0.
1		0005	2	0.	1		0620	77	144.	1		1235	152	0.	1		1850	227	0.
1		0010	3	0.	1		0625	78	119.	1		1240	153	0.	1		1855	228	0.
1		0015	4	0.	1		0630	79	98.	1		1245	154	0.	1		1900	229	0.
1		0020	5	0.	1		0635	80	80.	1		1250	155	0.	1		1905	230	0.
1		0025	6	0.	1		0640	81	64.	1		1255	156	0.	1		1910	231	0.
1		0030	7	3.	1		0645	82	51.	1		1300	157	0.	1		1915	232	0.
1		0035	8	10.	1		0650	83	40.	1		1305	158	0.	1		1920	233	0.
1		0040	9	20.	1		0655	84	31.	1		1310	159	0.	1		1925	234	0.
1		0045	10	25.	1		0700	85	24.	1		1315	160	0.	1		1930	235	0.
1		0050	11	24.	1		0705	86	18.	1		1320	161	0.	1		1935	236	0.
1		0055	12	22.	1		0710	87	14.	1		1325	162	0.	1		1940	237	0.
1		0100	13	22.	1		0715	88	10.	1		1330	163	0.	1		1945	238	0.
1		0105	14	22.	1		0720	89	8.	1		1335	164	0.	1		1950	239	0.
1		0110	15	24.	1		0725	90	6.	1		1340	165	0.	1		1955	240	0.
1		0115	16	29.	1		0730	91	4.	1		1345	166	0.	1		2000	241	0.
1		0120	17	35.	1		0735	92	3.	1		1350	167	0.	1		2005	242	0.
1		0125	18	42.	1		0740	93	2.	1		1355	168	0.	1		2010	243	0.
1		0130	19	57.	1		0745	94	2.	1		1400	169	0.	1		2015	244	0.
1		0135	20	83.	1		0750	95	1.	1		1405	170	0.	1		2020	245	0.
1		0140	21	111.	1		0755	96	1.	1		1410	171	0.	1		2025	246	0.
1		0145	22	136.	1		0800	97	1.	1		1415	172	0.	1		2030	247	0.
1		0150	23	152.	1		0805	98	1.	1		1420	173	0.	1		2035	248	0.
1		0155	24	158.	1		0810	99	0.	1		1425	174	0.	1		2040	249	0.
1		0200	25	154.	1		0815	100	0.	1		1430	175	0.	1		2045	250	0.
1		0205	26	147.	1		0820	101	0.	1		1435	176	0.	1		2050	251	0.
1		0210	27	148.	1		0825	102	0.	1		1440	177	0.	1		2055	252	0.
1		0215	28	167.	1		0830	103	0.	1		1445	178	0.	1		2100	253	0.
1		0220	29	205.	1		0835	104	0.	1		1450	179	0.	1		2105	254	0.
1		0225	30	247.	1		0840	105	0.	1		1455	180	0.	1		2110	255	0.
1		0230	31	272.	1		0845	106	0.	1		1500	181	0.	1		2115	256	0.
1		0235	32	272.	1		0850	107	0.	1		1505	182	0.	1		2120	257	0.
1		0240	33	272.	1		0855	108	0.	1		1510	183	0.	1		2125	258	0.
1		0245	34	294.	1		0900	109	0.	1		1515	184	0.	1		2130	259	0.
1		0250	35	325.	1		0905	110	0.	1		1520	185	0.	1		2135	260	0.
1		0255	36	337.	1		0910	111	0.	1		1525	186	0.	1		2140	261	0.
1		0300	37	330.	1		0915	112	0.	1		1530	187	0.	1		2145	262	0.
1		0305	38	353.	1		0920	113	0.	1		1535	188	0.	1		2150	263	0.
1		0310	39	445.	1		0925	114	0.	1		1540	189	0.	1		2155	264	0.
1		0315	40	628.	1		0930	115	0.	1		1545	190	0.	1		2200	265	0.
1		0320	41	962.	1		0935	116	0.	1		1550	191	0.	1		2205	266	0.
1		0325	42	1509.	1		0940	117	0.	1		1555	192	0.	1		2210	267	0.
1		0330	43	2268.	1		0945	118	0.	1		1600	193	0.	1		2215	268	0.
1		0335	44	3079.	1		0950	119	0.	1		1605	194	0.	1		2220	269	0.
1		0340	45	3618.	1		0955	120	0.	1		1610	195	0.	1		2225	270	0.
1		0345	46	3812.	1		1000	121	0.	1		1615	196	0.	1		2230	271	0.
1		0350	47	3787.	1		1005	122	0.	1		1620	197	0.	1		2235	272	0.
1		0355	48	3685.	1		1010	123	0.	1		1625	198	0.	1		2240	273	0.
1		0400	49	3538.	1		1015	124	0.	1		1630	199	0.	1		2245	274	0.
1		0405	50	3363.	1		1020	125	0.	1		1635	200	0.	1		2250	275	0.
1		0410	51	3134.	1		1025	126	0.	1		1640	201	0.	1		2255	276	0.
1		0415	52	2826.	1		1030	127	0.	1		1645	202	0.	1		2300	277	0.
1		0420	53	2493.	1		1035	128	0.	1		1650	203	0.	1		2305	278	0.
1		0425	54	2193.	1		1040	129	0.	1		1655	204	0.	1		2310	279	0.
1		0430	55	1966.	1		1045	130	0.	1		1700	205	0.	1		2315	280	0.
1		0435	56	1828.	1		1050	131	0.	1		1705	206	0.	1		2320	281	0.
1		0440	57	1737.	1		1055	132	0.	1		1710	207	0.	1		2325	282	0.
1		0445	58	1643.	1		1100	133	0.	1		1715	208	0.	1		2330	283	0.
1		0450	59	1555.	1		1105	134	0.	1		1720	209	0.	1		2335	284	0.
1		0455	60	1503.	1		1110	135	0.	1		1725	210	0.	1		2340	285	0.
1		0500	61	1449.	1		1115	136	0.	1		1730	211	0.	1		2345	286	0.
1		0505	62	1358.	1		1120	137	0.	1		1735	212	0.	1		2350	287	0.
1		0510	63	1234.	1		1125	138	0.	1		1740	213	0.	1		2355	288	0.
1		0515	64	1109.	1		1130	139	0.	1		1745	214	0.	2		0000	289	0.
1		0520	65	988.	1		1135	140	0.	1		1750	215	0.	2		0005	290	0.
1		0525	66	874.	1		1140	141	0.	1		1755	216	0.	2		0010	291	0.
1		0530	67	768.	1		1145	142	0.	1		1800	217	0.	2		0015	292	0.
1		0535	68	665.	1		1150	143	0.	1		1805	218	0.	2		0020	293	0.
1		0540	69	566.	1		1155	144	0.	1		1810	219	0.	2		0025	294	0.
1		0545	70	478.	1		1200	145	0.	1		1815	220	0.	2		0030	295	0.
1		0550	71	410.	1		1205	146	0.	1		1820	221	0.	2		0035	296	0.
1		0555	72	351.	1		1210	147	0.	1		1825	222	0.	2		0040	297	0.
1		0600	73	298.	1		1215	148	0.	1		1830	223	0.	2		0045	298	0.
1		0605	74	251.	1		1220	149	0.	1		1835	224	0.	2		0050	299	0.
1		0610	75	212.	1		1225	150	0.	1		1840	225	0.	2		0055	300	0.

PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
			6-HR	24-HR	72-HR	24.92-HR
(CFS)	(HR)					
		(CFS)				
3812.	3.75		941.	236.	227.	227.
		(INCHES)	2.100	2.107	2.107	2.107
		(AC-FT)	467.	468.	468.	468.

CUMULATIVE AREA = 4.17 SQ MI

HYDROGRAPH AT STATION CP3
SUM OF 2 HYDROGRAPHS
PLAN 1, RATIO = .99

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	DA	MON	HRMN	ORD	FLOW	DA	MON	HRMN	ORD	FLOW	DA	MON	HRMN	ORD	FLOW
1		0000	1	0.	1		0615	76	174.	1		1230	151	0.	1		1845	226	0.
1		0005	2	0.	1		0620	77	143.	1		1235	152	0.	1		1850	227	0.
1		0010	3	0.	1		0625	78	117.	1		1240	153	0.	1		1855	228	0.
1		0015	4	0.	1		0630	79	96.	1		1245	154	0.	1		1900	229	0.
1		0020	5	0.	1		0635	80	79.	1		1250	155	0.	1		1905	230	0.
1		0025	6	0.	1		0640	81	63.	1		1255	156	0.	1		1910	231	0.
1		0030	7	2.	1		0645	82	50.	1		1300	157	0.	1		1915	232	0.
1		0035	8	9.	1		0650	83	39.	1		1305	158	0.	1		1920	233	0.
1		0040	9	18.	1		0655	84	30.	1		1310	159	0.	1		1925	234	0.
1		0045	10	23.	1		0700	85	23.	1		1315	160	0.	1		1930	235	0.
1		0050	11	22.	1		0705	86	18.	1		1320	161	0.	1		1935	236	0.
1		0055	12	21.	1		0710	87	14.	1		1325	162	0.	1		1940	237	0.
1		0100	13	20.	1		0715	88	10.	1		1330	163	0.	1		1945	238	0.
1		0105	14	20.	1		0720	89	8.	1		1335	164	0.	1		1950	239	0.
1		0110	15	23.	1		0725	90	6.	1		1340	165	0.	1		1955	240	0.
1		0115	16	28.	1		0730	91	4.	1		1345	166	0.	1		2000	241	0.
1		0120	17	33.	1		0735	92	3.	1		1350	167	0.	1		2005	242	0.
1		0125	18	40.	1		0740	93	2.	1		1355	168	0.	1		2010	243	0.
1		0130	19	55.	1		0745	94	2.	1		1400	169	0.	1		2015	244	0.
1		0135	20	80.	1		0750	95	1.	1		1405	170	0.	1		2020	245	0.
1		0140	21	108.	1		0755	96	1.	1		1410	171	0.	1		2025	246	0.
1		0145	22	132.	1		0800	97	1.	1		1415	172	0.	1		2030	247	0.
1		0150	23	148.	1		0805	98	1.	1		1420	173	0.	1		2035	248	0.
1		0155	24	153.	1		0810	99	0.	1		1425	174	0.	1		2040	249	0.
1		0200	25	150.	1		0815	100	0.	1		1430	175	0.	1		2045	250	0.
1		0205	26	143.	1		0820	101	0.	1		1435	176	0.	1		2050	251	0.
1		0210	27	144.	1		0825	102	0.	1		1440	177	0.	1		2055	252	0.
1		0215	28	162.	1		0830	103	0.	1		1445	178	0.	1		2100	253	0.
1		0220	29	200.	1		0835	104	0.	1		1450	179	0.	1		2105	254	0.
1		0225	30	241.	1		0840	105	0.	1		1455	180	0.	1		2110	255	0.
1		0230	31	265.	1		0845	106	0.	1		1500	181	0.	1		2115	256	0.
1		0235	32	266.	1		0850	107	0.	1		1505	182	0.	1		2120	257	0.
1		0240	33	266.	1		0855	108	0.	1		1510	183	0.	1		2125	258	0.
1		0245	34	287.	1		0900	109	0.	1		1515	184	0.	1		2130	259	0.
1		0250	35	318.	1		0905	110	0.	1		1520	185	0.	1		2135	260	0.
1		0255	36	330.	1		0910	111	0.	1		1525	186	0.	1		2140	261	0.
1		0300	37	323.	1		0915	112	0.	1		1530	187	0.	1		2145	262	0.
1		0305	38	345.	1		0920	113	0.	1		1535	188	0.	1		2150	263	0.
1		0310	39	436.	1		0925	114	0.	1		1540	189	0.	1		2155	264	0.
1		0315	40	616.	1		0930	115	0.	1		1545	190	0.	1		2200	265	0.
1		0320	41	944.	1		0935	116	0.	1		1550	191	0.	1		2205	266	0.
1		0325	42	1483.	1		0940	117	0.	1		1555	192	0.	1		2210	267	0.
1		0330	43	2230.	1		0945	118	0.	1		1600	193	0.	1		2215	268	0.
1		0335	44	3031.	1		0950	119	0.	1		1605	194	0.	1		2220	269	0.
1		0340	45	3564.	1		0955	120	0.	1		1610	195	0.	1		2225	270	0.
1		0345	46	3756.	1		1000	121	0.	1		1615	196	0.	1		2230	271	0.
1		0350	47	3731.	1		1005	122	0.	1		1620	197	0.	1		2235	272	0.
1		0355	48	3631.	1		1010	123	0.	1		1625	198	0.	1		2240	273	0.
1		0400	49	3488.	1		1015	124	0.	1		1630	199	0.	1		2245	274	0.
1		0405	50	3316.	1		1020	125	0.	1		1635	200	0.	1		2250	275	0.
1		0410	51	3090.	1		1025	126	0.	1		1640	201	0.	1		2255	276	0.
1		0415	52	2787.	1		1030	127	0.	1		1645	202	0.	1		2300	277	0.
1		0420	53	2459.	1		1035	128	0.	1		1650	203	0.	1		2305	278	0.
1		0425	54	2163.	1		1040	129	0.	1		1655	204	0.	1		2310	279	0.
1		0430	55	1940.	1		1045	130	0.	1		1700	205	0.	1		2315	280	0.
1		0435	56	1804.	1		1050	131	0.	1		1705	206	0.	1		2320	281	0.
1		0440	57	1715.	1		1055	132	0.	1		1710	207	0.	1		2325	282	0.
1		0445	58	1622.	1		1100	133	0.	1		1715	208	0.	1		2330	283	0.
1		0450	59	1536.	1		1105	134	0.	1		1720	209	0.	1		2335	284	0.
1		0455	60	1484.	1		1110	135	0.	1		1725	210	0.	1		2340	285	0.
1		0500	61	1431.	1		1115	136	0.	1		1730	211	0.	1		2345	286	0.
1		0505	62	1341.	1		1120	137	0.	1		1735	212	0.	1		2350	287	0.
1		0510	63	1219.	1		1125	138	0.	1		1740	213	0.	1		2355	288	0.
1		0515	64	1096.	1		1130	139	0.	1		1745	214	0.	2		0000	289	0.
1		0520	65	976.	1		1135	140	0.	1		1750	215	0.	2		0005	290	0.
1		0525	66	863.	1		1140	141	0.	1		1755	216	0.	2		0010	291	0.
1		0530	67	759.	1		1145	142	0.	1		1800	217	0.	2		0015	292	0.
1		0535	68	657.	1		1150	143	0.	1		1805	218	0.	2		0020	293	0.
1		0540	69	559.	1		1155	144	0.	1		1810	219	0.	2		0025	294	0.
1		0545	70	472.	1		1200	145	0.	1		1815	220	0.	2		0030	295	0.
1		0550	71	405.	1		1205	146	0.	1		1820	221	0.	2		0035	296	0.
1		0555	72	347.	1		1210	147	0.	1		1825	222	0.	2		0040	297	0.
1		0600	73	294.	1		1215	148	0.	1		1830	223	0.	2		0045	298	0.
1		0605	74	248.	1		1220	149	0.	1		1835	224	0.	2		0050	299	0.
1		0610	75	209.	1		1225	150	0.	1		1840	225	0.	2		0055	300	0.

PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
			6-HR	24-HR	72-HR	24.92-HR
+ (CFS)	(HR)	(CFS)				
+ 3756.	3.75		927.	233.	224.	224.
		(INCHES)	2.069	2.075	2.075	2.075
		(AC-FT)	460.	461.	461.	461.

CUMULATIVE AREA = 4.17 SQ MI

HYDROGRAPH AT STATION CP3
SUM OF 2 HYDROGRAPHS
PLAN 1, RATIO = .98

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		0615	76	172.	1		1230	151	0.	1		1845	226	0.
1		0005	2	0.	1		0620	77	141.	1		1235	152	0.	1		1850	227	0.
1		0010	3	0.	1		0625	78	116.	1		1240	153	0.	1		1855	228	0.
1		0015	4	0.	1		0630	79	95.	1		1245	154	0.	1		1900	229	0.

1	0020	5	0.	*	1	0635	80	78.	*	1	1250	155	0.	*	1	1905	230	0.		
1	0025	6	0.	*	1	0640	81	62.	*	1	1255	156	0.	*	1	1910	231	0.		
1	0030	7	2.	*	1	0645	82	49.	*	1	1300	157	0.	*	1	1915	232	0.		
1	0035	8	8.	*	1	0650	83	39.	*	1	1305	158	0.	*	1	1920	233	0.		
1	0040	9	16.	*	1	0655	84	30.	*	1	1310	159	0.	*	1	1925	234	0.		
1	0045	10	21.	*	1	0700	85	23.	*	1	1315	160	0.	*	1	1930	235	0.		
1	0050	11	21.	*	1	0705	86	18.	*	1	1320	161	0.	*	1	1935	236	0.		
1	0055	12	19.	*	1	0710	87	14.	*	1	1325	162	0.	*	1	1940	237	0.		
1	0100	13	19.	*	1	0715	88	10.	*	1	1330	163	0.	*	1	1945	238	0.		
1	0105	14	19.	*	1	0720	89	8.	*	1	1335	164	0.	*	1	1950	239	0.		
1	0110	15	21.	*	1	0725	90	6.	*	1	1340	165	0.	*	1	1955	240	0.		
1	0115	16	26.	*	1	0730	91	4.	*	1	1345	166	0.	*	1	2000	241	0.		
1	0120	17	32.	*	1	0735	92	3.	*	1	1350	167	0.	*	1	2005	242	0.		
1	0125	18	38.	*	1	0740	93	2.	*	1	1355	168	0.	*	1	2010	243	0.		
1	0130	19	52.	*	1	0745	94	2.	*	1	1400	169	0.	*	1	2015	244	0.		
1	0135	20	77.	*	1	0750	95	1.	*	1	1405	170	0.	*	1	2020	245	0.		
1	0140	21	104.	*	1	0755	96	1.	*	1	1410	171	0.	*	1	2025	246	0.		
1	0145	22	127.	*	1	0800	97	1.	*	1	1415	172	0.	*	1	2030	247	0.		
1	0150	23	143.	*	1	0805	98	1.	*	1	1420	173	0.	*	1	2035	248	0.		
1	0155	24	149.	*	1	0810	99	0.	*	1	1425	174	0.	*	1	2040	249	0.		
1	0200	25	145.	*	1	0815	100	0.	*	1	1430	175	0.	*	1	2045	250	0.		
1	0205	26	139.	*	1	0820	101	0.	*	1	1435	176	0.	*	1	2050	251	0.		
1	0210	27	139.	*	1	0825	102	0.	*	1	1440	177	0.	*	1	2055	252	0.		
1	0215	28	158.	*	1	0830	103	0.	*	1	1445	178	0.	*	1	2100	253	0.		
1	0220	29	195.	*	1	0835	104	0.	*	1	1450	179	0.	*	1	2105	254	0.		
1	0225	30	235.	*	1	0840	105	0.	*	1	1455	180	0.	*	1	2110	255	0.		
1	0230	31	259.	*	1	0845	106	0.	*	1	1500	181	0.	*	1	2115	256	0.		
1	0235	32	259.	*	1	0850	107	0.	*	1	1505	182	0.	*	1	2120	257	0.		
1	0240	33	259.	*	1	0855	108	0.	*	1	1510	183	0.	*	1	2125	258	0.		
1	0245	34	281.	*	1	0900	109	0.	*	1	1515	184	0.	*	1	2130	259	0.		
1	0250	35	311.	*	1	0905	110	0.	*	1	1520	185	0.	*	1	2135	260	0.		
1	0255	36	322.	*	1	0910	111	0.	*	1	1525	186	0.	*	1	2140	261	0.		
1	0300	37	316.	*	1	0915	112	0.	*	1	1530	187	0.	*	1	2145	262	0.		
1	0305	38	338.	*	1	0920	113	0.	*	1	1535	188	0.	*	1	2150	263	0.		
1	0310	39	427.	*	1	0925	114	0.	*	1	1540	189	0.	*	1	2155	264	0.		
1	0315	40	604.	*	1	0930	115	0.	*	1	1545	190	0.	*	1	2200	265	0.		
1	0320	41	927.	*	1	0935	116	0.	*	1	1550	191	0.	*	1	2205	266	0.		
1	0325	42	1457.	*	1	0940	117	0.	*	1	1555	192	0.	*	1	2210	267	0.		
1	0330	43	2194.	*	1	0945	118	0.	*	1	1600	193	0.	*	1	2215	268	0.		
1	0335	44	2983.	*	1	0950	119	0.	*	1	1605	194	0.	*	1	2220	269	0.		
1	0340	45	3509.	*	1	0955	120	0.	*	1	1610	195	0.	*	1	2225	270	0.		
1	0345	46	3700.	*	1	1000	121	0.	*	1	1615	196	0.	*	1	2230	271	0.		
1	0350	47	3677.	*	1	1005	122	0.	*	1	1620	197	0.	*	1	2235	272	0.		
1	0355	48	3579.	*	1	1010	123	0.	*	1	1625	198	0.	*	1	2240	273	0.		
1	0400	49	3438.	*	1	1015	124	0.	*	1	1630	199	0.	*	1	2245	274	0.		
1	0405	50	3269.	*	1	1020	125	0.	*	1	1635	200	0.	*	1	2250	275	0.		
1	0410	51	3047.	*	1	1025	126	0.	*	1	1640	201	0.	*	1	2255	276	0.		
1	0415	52	2749.	*	1	1030	127	0.	*	1	1645	202	0.	*	1	2300	277	0.		
1	0420	53	2425.	*	1	1035	128	0.	*	1	1650	203	0.	*	1	2305	278	0.		
1	0425	54	2134.	*	1	1040	129	0.	*	1	1655	204	0.	*	1	2310	279	0.		
1	0430	55	1913.	*	1	1045	130	0.	*	1	1700	205	0.	*	1	2315	280	0.		
1	0435	56	1780.	*	1	1050	131	0.	*	1	1705	206	0.	*	1	2320	281	0.		
1	0440	57	1692.	*	1	1055	132	0.	*	1	1710	207	0.	*	1	2325	282	0.		
1	0445	58	1601.	*	1	1100	133	0.	*	1	1715	208	0.	*	1	2330	283	0.		
1	0450	59	1515.	*	1	1105	134	0.	*	1	1720	209	0.	*	1	2335	284	0.		
1	0455	60	1465.	*	1	1110	135	0.	*	1	1725	210	0.	*	1	2340	285	0.		
1	0500	61	1413.	*	1	1115	136	0.	*	1	1730	211	0.	*	1	2345	286	0.		
1	0505	62	1324.	*	1	1120	137	0.	*	1	1735	212	0.	*	1	2350	287	0.		
1	0510	63	1204.	*	1	1125	138	0.	*	1	1740	213	0.	*	1	2355	288	0.		
1	0515	64	1082.	*	1	1130	139	0.	*	1	1745	214	0.	*	2	0000	289	0.		
1	0520	65	964.	*	1	1135	140	0.	*	1	1750	215	0.	*	2	0005	290	0.		
1	0525	66	852.	*	1	1140	141	0.	*	1	1755	216	0.	*	2	0010	291	0.		
1	0530	67	749.	*	1	1145	142	0.	*	1	1800	217	0.	*	2	0015	292	0.		
1	0535	68	649.	*	1	1150	143	0.	*	1	1805	218	0.	*	2	0020	293	0.		
1	0540	69	552.	*	1	1155	144	0.	*	1	1810	219	0.	*	2	0025	294	0.		
1	0545	70	466.	*	1	1200	145	0.	*	1	1815	220	0.	*	2	0030	295	0.		
1	0550	71	400.	*	1	1205	146	0.	*	1	1820	221	0.	*	2	0035	296	0.		
1	0555	72	343.	*	1	1210	147	0.	*	1	1825	222	0.	*	2	0040	297	0.		
1	0600	73	291.	*	1	1215	148	0.	*	1	1830	223	0.	*	2	0045	298	0.		
1	0605	74	245.	*	1	1220	149	0.	*	1	1835	224	0.	*	2	0050	299	0.		
1	0610	75	207.	*	1	1225	150	0.	*	1	1840	225	0.	*	2	0055	300	0.		

PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
			6-HR	24-HR	72-HR	24.92-HR
+ (CFS)	(HR)	(CFS)				
+ 3700.	3.75		913.	229.	221.	221.
		(INCHES)	2.038	2.044	2.044	2.044
		(AC-FT)	453.	454.	454.	454.

CUMULATIVE AREA = 4.17 SQ MI

HYDROGRAPH AT STATION CP3
SUM OF 2 HYDROGRAPHS
PLAN 1, RATIO = .94

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		0615	76	163.	*	1		1230	151	0.	*	1		1845	226	0.
1		0005	2	0.	*	1		0620	77	134.	*	1		1235	152	0.	*	1		1850	227	0.
1		0010	3	0.	*	1		0625	78	110.	*	1		1240	153	0.	*	1		1855	228	0.
1		0015	4	0.	*	1		0630	79	91.	*	1		1245	154	0.	*	1		1900	229	0.
1		0020	5	0.	*	1		0635	80	74.	*	1		1250	155	0.	*	1		1905	230	0.
1		0025	6	0.	*	1		0640	81	59.	*	1		1255	156	0.	*	1		1910	231	0.
1		0030	7	1.	*	1		0645	82	47.	*	1		1300	157	0.	*	1		1915	232	0.
1		0035	8	5.	*	1		0650	83	37.	*	1		1305	158	0.	*	1		1920	233	0.
1		0040	9	11.	*	1		0655	84	29.	*	1		1310	159	0.	*	1		1925	234	0.

1	0045	10	15.	*	1	0700	85	22.	*	1	1315	160	0.	*	1	1930	235	0.
1	0050	11	15.	*	1	0705	86	17.	*	1	1320	161	0.	*	1	1935	236	0.
1	0055	12	14.	*	1	0710	87	13.	*	1	1325	162	0.	*	1	1940	237	0.
1	0100	13	13.	*	1	0715	88	10.	*	1	1330	163	0.	*	1	1945	238	0.
1	0105	14	14.	*	1	0720	89	7.	*	1	1335	164	0.	*	1	1950	239	0.
1	0110	15	16.	*	1	0725	90	5.	*	1	1340	165	0.	*	1	1955	240	0.
1	0115	16	20.	*	1	0730	91	4.	*	1	1345	166	0.	*	1	2000	241	0.
1	0120	17	25.	*	1	0735	92	3.	*	1	1350	167	0.	*	1	2005	242	0.
1	0125	18	31.	*	1	0740	93	2.	*	1	1355	168	0.	*	1	2010	243	0.
1	0130	19	43.	*	1	0745	94	2.	*	1	1400	169	0.	*	1	2015	244	0.
1	0135	20	65.	*	1	0750	95	1.	*	1	1405	170	0.	*	1	2020	245	0.
1	0140	21	89.	*	1	0755	96	1.	*	1	1410	171	0.	*	1	2025	246	0.
1	0145	22	110.	*	1	0800	97	1.	*	1	1415	172	0.	*	1	2030	247	0.
1	0150	23	125.	*	1	0805	98	0.	*	1	1420	173	0.	*	1	2035	248	0.
1	0155	24	130.	*	1	0810	99	0.	*	1	1425	174	0.	*	1	2040	249	0.
1	0200	25	127.	*	1	0815	100	0.	*	1	1430	175	0.	*	1	2045	250	0.
1	0205	26	122.	*	1	0820	101	0.	*	1	1435	176	0.	*	1	2050	251	0.
1	0210	27	123.	*	1	0825	102	0.	*	1	1440	177	0.	*	1	2055	252	0.
1	0215	28	140.	*	1	0830	103	0.	*	1	1445	178	0.	*	1	2100	253	0.
1	0220	29	174.	*	1	0835	104	0.	*	1	1450	179	0.	*	1	2105	254	0.
1	0225	30	211.	*	1	0840	105	0.	*	1	1455	180	0.	*	1	2110	255	0.
1	0230	31	233.	*	1	0845	106	0.	*	1	1500	181	0.	*	1	2115	256	0.
1	0235	32	234.	*	1	0850	107	0.	*	1	1505	182	0.	*	1	2120	257	0.
1	0240	33	235.	*	1	0855	108	0.	*	1	1510	183	0.	*	1	2125	258	0.
1	0245	34	255.	*	1	0900	109	0.	*	1	1515	184	0.	*	1	2130	259	0.
1	0250	35	283.	*	1	0905	110	0.	*	1	1520	185	0.	*	1	2135	260	0.
1	0255	36	294.	*	1	0910	111	0.	*	1	1525	186	0.	*	1	2140	261	0.
1	0300	37	289.	*	1	0915	112	0.	*	1	1530	187	0.	*	1	2145	262	0.
1	0305	38	309.	*	1	0920	113	0.	*	1	1535	188	0.	*	1	2150	263	0.
1	0310	39	392.	*	1	0925	114	0.	*	1	1540	189	0.	*	1	2155	264	0.
1	0315	40	556.	*	1	0930	115	0.	*	1	1545	190	0.	*	1	2200	265	0.
1	0320	41	857.	*	1	0935	116	0.	*	1	1550	191	0.	*	1	2205	266	0.
1	0325	42	1354.	*	1	0940	117	0.	*	1	1555	192	0.	*	1	2210	267	0.
1	0330	43	2047.	*	1	0945	118	0.	*	1	1600	193	0.	*	1	2215	268	0.
1	0335	44	2792.	*	1	0950	119	0.	*	1	1605	194	0.	*	1	2220	269	0.
1	0340	45	3291.	*	1	0955	120	0.	*	1	1610	195	0.	*	1	2225	270	0.
1	0345	46	3476.	*	1	1000	121	0.	*	1	1615	196	0.	*	1	2230	271	0.
1	0350	47	3458.	*	1	1005	122	0.	*	1	1620	197	0.	*	1	2235	272	0.
1	0355	48	3369.	*	1	1010	123	0.	*	1	1625	198	0.	*	1	2240	273	0.
1	0400	49	3238.	*	1	1015	124	0.	*	1	1630	199	0.	*	1	2245	274	0.
1	0405	50	3081.	*	1	1020	125	0.	*	1	1635	200	0.	*	1	2250	275	0.
1	0410	51	2873.	*	1	1025	126	0.	*	1	1640	201	0.	*	1	2255	276	0.
1	0415	52	2594.	*	1	1030	127	0.	*	1	1645	202	0.	*	1	2300	277	0.
1	0420	53	2289.	*	1	1035	128	0.	*	1	1650	203	0.	*	1	2305	278	0.
1	0425	54	2016.	*	1	1040	129	0.	*	1	1655	204	0.	*	1	2310	279	0.
1	0430	55	1809.	*	1	1045	130	0.	*	1	1700	205	0.	*	1	2315	280	0.
1	0435	56	1683.	*	1	1050	131	0.	*	1	1705	206	0.	*	1	2320	281	0.
1	0440	57	1601.	*	1	1055	132	0.	*	1	1710	207	0.	*	1	2325	282	0.
1	0445	58	1516.	*	1	1100	133	0.	*	1	1715	208	0.	*	1	2330	283	0.
1	0450	59	1436.	*	1	1105	134	0.	*	1	1720	209	0.	*	1	2335	284	0.
1	0455	60	1389.	*	1	1110	135	0.	*	1	1725	210	0.	*	1	2340	285	0.
1	0500	61	1340.	*	1	1115	136	0.	*	1	1730	211	0.	*	1	2345	286	0.
1	0505	62	1256.	*	1	1120	137	0.	*	1	1735	212	0.	*	1	2350	287	0.
1	0510	63	1142.	*	1	1125	138	0.	*	1	1740	213	0.	*	1	2355	288	0.
1	0515	64	1027.	*	1	1130	139	0.	*	1	1745	214	0.	*	2	0000	289	0.
1	0520	65	915.	*	1	1135	140	0.	*	1	1750	215	0.	*	2	0005	290	0.
1	0525	66	809.	*	1	1140	141	0.	*	1	1755	216	0.	*	2	0010	291	0.
1	0530	67	712.	*	1	1145	142	0.	*	1	1800	217	0.	*	2	0015	292	0.
1	0535	68	616.	*	1	1150	143	0.	*	1	1805	218	0.	*	2	0020	293	0.
1	0540	69	524.	*	1	1155	144	0.	*	1	1810	219	0.	*	2	0025	294	0.
1	0545	70	443.	*	1	1200	145	0.	*	1	1815	220	0.	*	2	0030	295	0.
1	0550	71	380.	*	1	1205	146	0.	*	1	1820	221	0.	*	2	0035	296	0.
1	0555	72	326.	*	1	1210	147	0.	*	1	1825	222	0.	*	2	0040	297	0.
1	0600	73	276.	*	1	1215	148	0.	*	1	1830	223	0.	*	2	0045	298	0.
1	0605	74	233.	*	1	1220	149	0.	*	1	1835	224	0.	*	2	0050	299	0.
1	0610	75	196.	*	1	1225	150	0.	*	1	1840	225	0.	*	2	0055	300	0.

PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
			6-HR	24-HR	72-HR	24.92-HR
+ (CFS)	(HR)					
		(CFS)				
+ 3476.	3.75		858.	215.	207.	207.
		(INCHES)	1.914	1.919	1.919	1.919
		(AC-FT)	425.	426.	426.	426.

CUMULATIVE AREA = 4.17 SQ MI

HYDROGRAPH AT STATION CP3
SUM OF 2 HYDROGRAPHS
PLAN 1, RATIO = .93

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		0615	76	161.	*	1		1230	151	0.	*	1		1845	226	0.
1		0005	2	0.	*	1		0620	77	132.	*	1		1235	152	0.	*	1		1850	227	0.
1		0010	3	0.	*	1		0625	78	109.	*	1		1240	153	0.	*	1		1855	228	0.
1		0015	4	0.	*	1		0630	79	89.	*	1		1245	154	0.	*	1		1900	229	0.
1		0020	5	0.	*	1		0635	80	73.	*	1		1250	155	0.	*	1		1905	230	0.
1		0025	6	0.	*	1		0640	81	59.	*	1		1255	156	0.	*	1		1910	231	0.
1		0030	7	1.	*	1		0645	82	46.	*	1		1300	157	0.	*	1		1915	232	0.
1		0035	8	4.	*	1		0650	83	36.	*	1		1305	158	0.	*	1		1920	233	0.
1		0040	9	10.	*	1		0655	84	28.	*	1		1310	159	0.	*	1		1925	234	0.
1		0045	10	13.	*	1		0700	85	22.	*	1		1315	160	0.	*	1		1930	235	0.
1		0050	11	14.	*	1		0705	86	17.	*	1		1320	161	0.	*	1		1935	236	0.
1		0055	12	13.	*	1		0710	87	13.	*	1		1325	162	0.	*	1		1940	237	0.
1		0100	13	12.	*	1		0715	88	10.	*	1		1330	163	0.	*	1		1945	238	0.
1		0105	14	13.	*	1		0720	89	7.	*	1		1335	164	0.	*	1		1950	239	0.

1	0110	15	14.	*	1	0725	90	5.	*	1	1340	165	0.	*	1	1955	240	0.	
1	0115	16	18.	*	1	0730	91	4.	*	1	1345	166	0.	*	1	2000	241	0.	
1	0120	17	23.	*	1	0735	92	3.	*	1	1350	167	0.	*	1	2005	242	0.	
1	0125	18	29.	*	1	0740	93	2.	*	1	1355	168	0.	*	1	2010	243	0.	
1	0130	19	41.	*	1	0745	94	2.	*	1	1400	169	0.	*	1	2015	244	0.	
1	0135	20	62.	*	1	0750	95	1.	*	1	1405	170	0.	*	1	2020	245	0.	
1	0140	21	85.	*	1	0755	96	1.	*	1	1410	171	0.	*	1	2025	246	0.	
1	0145	22	106.	*	1	0800	97	1.	*	1	1415	172	0.	*	1	2030	247	0.	
1	0150	23	120.	*	1	0805	98	0.	*	1	1420	173	0.	*	1	2035	248	0.	
1	0155	24	126.	*	1	0810	99	0.	*	1	1425	174	0.	*	1	2040	249	0.	
1	0200	25	123.	*	1	0815	100	0.	*	1	1430	175	0.	*	1	2045	250	0.	
1	0205	26	118.	*	1	0820	101	0.	*	1	1435	176	0.	*	1	2050	251	0.	
1	0210	27	119.	*	1	0825	102	0.	*	1	1440	177	0.	*	1	2055	252	0.	
1	0215	28	136.	*	1	0830	103	0.	*	1	1445	178	0.	*	1	2100	253	0.	
1	0220	29	169.	*	1	0835	104	0.	*	1	1450	179	0.	*	1	2105	254	0.	
1	0225	30	205.	*	1	0840	105	0.	*	1	1455	180	0.	*	1	2110	255	0.	
1	0230	31	227.	*	1	0845	106	0.	*	1	1500	181	0.	*	1	2115	256	0.	
1	0235	32	228.	*	1	0850	107	0.	*	1	1505	182	0.	*	1	2120	257	0.	
1	0240	33	228.	*	1	0855	108	0.	*	1	1510	183	0.	*	1	2125	258	0.	
1	0245	34	248.	*	1	0900	109	0.	*	1	1515	184	0.	*	1	2130	259	0.	
1	0250	35	276.	*	1	0905	110	0.	*	1	1520	185	0.	*	1	2135	260	0.	
1	0255	36	287.	*	1	0910	111	0.	*	1	1525	186	0.	*	1	2140	261	0.	
1	0300	37	282.	*	1	0915	112	0.	*	1	1530	187	0.	*	1	2145	262	0.	
1	0305	38	302.	*	1	0920	113	0.	*	1	1535	188	0.	*	1	2150	263	0.	
1	0310	39	384.	*	1	0925	114	0.	*	1	1540	189	0.	*	1	2155	264	0.	
1	0315	40	545.	*	1	0930	115	0.	*	1	1545	190	0.	*	1	2200	265	0.	
1	0320	41	840.	*	1	0935	116	0.	*	1	1550	191	0.	*	1	2205	266	0.	
1	0325	42	1329.	*	1	0940	117	0.	*	1	1555	192	0.	*	1	2210	267	0.	
1	0330	43	2011.	*	1	0945	118	0.	*	1	1600	193	0.	*	1	2215	268	0.	
1	0335	44	2745.	*	1	0950	119	0.	*	1	1605	194	0.	*	1	2220	269	0.	
1	0340	45	3238.	*	1	0955	120	0.	*	1	1610	195	0.	*	1	2225	270	0.	
1	0345	46	3419.	*	1	1000	121	0.	*	1	1615	196	0.	*	1	2230	271	0.	
1	0350	47	3402.	*	1	1005	122	0.	*	1	1620	197	0.	*	1	2235	272	0.	
1	0355	48	3315.	*	1	1010	123	0.	*	1	1625	198	0.	*	1	2240	273	0.	
1	0400	49	3188.	*	1	1015	124	0.	*	1	1630	199	0.	*	1	2245	274	0.	
1	0405	50	3034.	*	1	1020	125	0.	*	1	1635	200	0.	*	1	2250	275	0.	
1	0410	51	2830.	*	1	1025	126	0.	*	1	1640	201	0.	*	1	2255	276	0.	
1	0415	52	2555.	*	1	1030	127	0.	*	1	1645	202	0.	*	1	2300	277	0.	
1	0420	53	2255.	*	1	1035	128	0.	*	1	1650	203	0.	*	1	2305	278	0.	
1	0425	54	1986.	*	1	1040	129	0.	*	1	1655	204	0.	*	1	2310	279	0.	
1	0430	55	1782.	*	1	1045	130	0.	*	1	1700	205	0.	*	1	2315	280	0.	
1	0435	56	1659.	*	1	1050	131	0.	*	1	1705	206	0.	*	1	2320	281	0.	
1	0440	57	1579.	*	1	1055	132	0.	*	1	1710	207	0.	*	1	2325	282	0.	
1	0445	58	1494.	*	1	1100	133	0.	*	1	1715	208	0.	*	1	2330	283	0.	
1	0450	59	1416.	*	1	1105	134	0.	*	1	1720	209	0.	*	1	2335	284	0.	
1	0455	60	1370.	*	1	1110	135	0.	*	1	1725	210	0.	*	1	2340	285	0.	
1	0500	61	1321.	*	1	1115	136	0.	*	1	1730	211	0.	*	1	2345	286	0.	
1	0505	62	1239.	*	1	1120	137	0.	*	1	1735	212	0.	*	1	2350	287	0.	
1	0510	63	1127.	*	1	1125	138	0.	*	1	1740	213	0.	*	1	2355	288	0.	
1	0515	64	1013.	*	1	1130	139	0.	*	1	1745	214	0.	*	2	0000	289	0.	
1	0520	65	903.	*	1	1135	140	0.	*	1	1750	215	0.	*	2	0005	290	0.	
1	0525	66	798.	*	1	1140	141	0.	*	1	1755	216	0.	*	2	0010	291	0.	
1	0530	67	702.	*	1	1145	142	0.	*	1	1800	217	0.	*	2	0015	292	0.	
1	0535	68	608.	*	1	1150	143	0.	*	1	1805	218	0.	*	2	0020	293	0.	
1	0540	69	517.	*	1	1155	144	0.	*	1	1810	219	0.	*	2	0025	294	0.	
1	0545	70	437.	*	1	1200	145	0.	*	1	1815	220	0.	*	2	0030	295	0.	
1	0550	71	375.	*	1	1205	146	0.	*	1	1820	221	0.	*	2	0035	296	0.	
1	0555	72	321.	*	1	1210	147	0.	*	1	1825	222	0.	*	2	0040	297	0.	
1	0600	73	273.	*	1	1215	148	0.	*	1	1830	223	0.	*	2	0045	298	0.	
1	0605	74	230.	*	1	1220	149	0.	*	1	1835	224	0.	*	2	0050	299	0.	
1	0610	75	194.	*	1	1225	150	0.	*	1	1840	225	0.	*	2	0055	300	0.	

PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
			6-HR	24-HR	72-HR	24.92-HR
+ (CFS)	(HR)	(CFS)				
+ 3419.	3.75		844.	211.	204.	204.
		(INCHES)	1.883	1.887	1.887	1.887
		(AC-FT)	419.	419.	419.	419.

CUMULATIVE AREA = 4.17 SQ MI

HYDROGRAPH AT STATION CP3
SUM OF 2 HYDROGRAPHS
PLAN 1, RATIO = .92

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		0615	76	159.	1		1230	151	0.	1		1845	226	0.
1		0005	2	0.	1		0620	77	131.	1		1235	152	0.	1		1850	227	0.
1		0010	3	0.	1		0625	78	107.	1		1240	153	0.	1		1855	228	0.
1		0015	4	0.	1		0630	79	88.	1		1245	154	0.	1		1900	229	0.
1		0020	5	0.	1		0635	80	72.	1		1250	155	0.	1		1905	230	0.
1		0025	6	0.	1		0640	81	58.	1		1255	156	0.	1		1910	231	0.
1		0030	7	1.	1		0645	82	46.	1		1300	157	0.	1		1915	232	0.
1		0035	8	4.	1		0650	83	36.	1		1305	158	0.	1		1920	233	0.
1		0040	9	9.	1		0655	84	28.	1		1310	159	0.	1		1925	234	0.
1		0045	10	12.	1		0700	85	21.	1		1315	160	0.	1		1930	235	0.
1		0050	11	12.	1		0705	86	16.	1		1320	161	0.	1		1935	236	0.
1		0055	12	11.	1		0710	87	13.	1		1325	162	0.	1		1940	237	0.
1		0100	13	11.	1		0715	88	9.	1		1330	163	0.	1		1945	238	0.
1		0105	14	11.	1		0720	89	7.	1		1335	164	0.	1		1950	239	0.
1		0110	15	13.	1		0725	90	5.	1		1340	165	0.	1		1955	240	0.
1		0115	16	17.	1		0730	91	4.	1		1345	166	0.	1		2000	241	0.
1		0120	17	21.	1		0735	92	3.	1		1350	167	0.	1		2005	242	0.
1		0125	18	27.	1		0740	93	2.	1		1355	168	0.	1		2010	243	0.
1		0130	19	39.	1		0745	94	2.	1		1400	169	0.	1		2015	244	0.

1	0135	20	59.	*	1	0750	95	1.	*	1	1405	170	0.	*	1	2020	245	0.	
1	0140	21	82.	*	1	0755	96	1.	*	1	1410	171	0.	*	1	2025	246	0.	
1	0145	22	102.	*	1	0800	97	1.	*	1	1415	172	0.	*	1	2030	247	0.	
1	0150	23	116.	*	1	0805	98	0.	*	1	1420	173	0.	*	1	2035	248	0.	
1	0155	24	121.	*	1	0810	99	0.	*	1	1425	174	0.	*	1	2040	249	0.	
1	0200	25	119.	*	1	0815	100	0.	*	1	1430	175	0.	*	1	2045	250	0.	
1	0205	26	114.	*	1	0820	101	0.	*	1	1435	176	0.	*	1	2050	251	0.	
1	0210	27	115.	*	1	0825	102	0.	*	1	1440	177	0.	*	1	2055	252	0.	
1	0215	28	131.	*	1	0830	103	0.	*	1	1445	178	0.	*	1	2100	253	0.	
1	0220	29	164.	*	1	0835	104	0.	*	1	1450	179	0.	*	1	2105	254	0.	
1	0225	30	199.	*	1	0840	105	0.	*	1	1455	180	0.	*	1	2110	255	0.	
1	0230	31	220.	*	1	0845	106	0.	*	1	1500	181	0.	*	1	2115	256	0.	
1	0235	32	222.	*	1	0850	107	0.	*	1	1505	182	0.	*	1	2120	257	0.	
1	0240	33	222.	*	1	0855	108	0.	*	1	1510	183	0.	*	1	2125	258	0.	
1	0245	34	242.	*	1	0900	109	0.	*	1	1515	184	0.	*	1	2130	259	0.	
1	0250	35	269.	*	1	0905	110	0.	*	1	1520	185	0.	*	1	2135	260	0.	
1	0255	36	280.	*	1	0910	111	0.	*	1	1525	186	0.	*	1	2140	261	0.	
1	0300	37	275.	*	1	0915	112	0.	*	1	1530	187	0.	*	1	2145	262	0.	
1	0305	38	295.	*	1	0920	113	0.	*	1	1535	188	0.	*	1	2150	263	0.	
1	0310	39	375.	*	1	0925	114	0.	*	1	1540	189	0.	*	1	2155	264	0.	
1	0315	40	533.	*	1	0930	115	0.	*	1	1545	190	0.	*	1	2200	265	0.	
1	0320	41	823.	*	1	0935	116	0.	*	1	1550	191	0.	*	1	2205	266	0.	
1	0325	42	1303.	*	1	0940	117	0.	*	1	1555	192	0.	*	1	2210	267	0.	
1	0330	43	1974.	*	1	0945	118	0.	*	1	1600	193	0.	*	1	2215	268	0.	
1	0335	44	2698.	*	1	0950	119	0.	*	1	1605	194	0.	*	1	2220	269	0.	
1	0340	45	3184.	*	1	0955	120	0.	*	1	1610	195	0.	*	1	2225	270	0.	
1	0345	46	3365.	*	1	1000	121	0.	*	1	1615	196	0.	*	1	2230	271	0.	
1	0350	47	3348.	*	1	1005	122	0.	*	1	1620	197	0.	*	1	2235	272	0.	
1	0355	48	3263.	*	1	1010	123	0.	*	1	1625	198	0.	*	1	2240	273	0.	
1	0400	49	3138.	*	1	1015	124	0.	*	1	1630	199	0.	*	1	2245	274	0.	
1	0405	50	2987.	*	1	1020	125	0.	*	1	1635	200	0.	*	1	2250	275	0.	
1	0410	51	2787.	*	1	1025	126	0.	*	1	1640	201	0.	*	1	2255	276	0.	
1	0415	52	2516.	*	1	1030	127	0.	*	1	1645	202	0.	*	1	2300	277	0.	
1	0420	53	2222.	*	1	1035	128	0.	*	1	1650	203	0.	*	1	2305	278	0.	
1	0425	54	1957.	*	1	1040	129	0.	*	1	1655	204	0.	*	1	2310	279	0.	
1	0430	55	1756.	*	1	1045	130	0.	*	1	1700	205	0.	*	1	2315	280	0.	
1	0435	56	1635.	*	1	1050	131	0.	*	1	1705	206	0.	*	1	2320	281	0.	
1	0440	57	1556.	*	1	1055	132	0.	*	1	1710	207	0.	*	1	2325	282	0.	
1	0445	58	1473.	*	1	1100	133	0.	*	1	1715	208	0.	*	1	2330	283	0.	
1	0450	59	1396.	*	1	1105	134	0.	*	1	1720	209	0.	*	1	2335	284	0.	
1	0455	60	1350.	*	1	1110	135	0.	*	1	1725	210	0.	*	1	2340	285	0.	
1	0500	61	1303.	*	1	1115	136	0.	*	1	1730	211	0.	*	1	2345	286	0.	
1	0505	62	1221.	*	1	1120	137	0.	*	1	1735	212	0.	*	1	2350	287	0.	
1	0510	63	1111.	*	1	1125	138	0.	*	1	1740	213	0.	*	1	2355	288	0.	
1	0515	64	999.	*	1	1130	139	0.	*	1	1745	214	0.	*	2	0000	289	0.	
1	0520	65	890.	*	1	1135	140	0.	*	1	1750	215	0.	*	2	0005	290	0.	
1	0525	66	788.	*	1	1140	141	0.	*	1	1755	216	0.	*	2	0010	291	0.	
1	0530	67	693.	*	1	1145	142	0.	*	1	1800	217	0.	*	2	0015	292	0.	
1	0535	68	600.	*	1	1150	143	0.	*	1	1805	218	0.	*	2	0020	293	0.	
1	0540	69	510.	*	1	1155	144	0.	*	1	1810	219	0.	*	2	0025	294	0.	
1	0545	70	431.	*	1	1200	145	0.	*	1	1815	220	0.	*	2	0030	295	0.	
1	0550	71	370.	*	1	1205	146	0.	*	1	1820	221	0.	*	2	0035	296	0.	
1	0555	72	317.	*	1	1210	147	0.	*	1	1825	222	0.	*	2	0040	297	0.	
1	0600	73	269.	*	1	1215	148	0.	*	1	1830	223	0.	*	2	0045	298	0.	
1	0605	74	227.	*	1	1220	149	0.	*	1	1835	224	0.	*	2	0050	299	0.	
1	0610	75	191.	*	1	1225	150	0.	*	1	1840	225	0.	*	2	0055	300	0.	

PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
			6-HR	24-HR	72-HR	24.92-HR
+ (CFS)	(HR)					
		(CFS)				
+ 3365.	3.75		830.	208.	200.	200.
		(INCHES)	1.853	1.857	1.857	1.857
		(AC-FT)	412.	413.	413.	413.

CUMULATIVE AREA = 4.17 SQ MI

HYDROGRAPH AT STATION CP3
SUM OF 2 HYDROGRAPHS
PLAN 1, RATIO = .91

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		0615	76	157.	*	1		1230	151	0.	*	1		1845	226	0.
1		0005	2	0.	*	1		0620	77	129.	*	1		1235	152	0.	*	1		1850	227	0.
1		0010	3	0.	*	1		0625	78	106.	*	1		1240	153	0.	*	1		1855	228	0.
1		0015	4	0.	*	1		0630	79	87.	*	1		1245	154	0.	*	1		1900	229	0.
1		0020	5	0.	*	1		0635	80	71.	*	1		1250	155	0.	*	1		1905	230	0.
1		0025	6	0.	*	1		0640	81	57.	*	1		1255	156	0.	*	1		1910	231	0.
1		0030	7	1.	*	1		0645	82	45.	*	1		1300	157	0.	*	1		1915	232	0.
1		0035	8	3.	*	1		0650	83	35.	*	1		1305	158	0.	*	1		1920	233	0.
1		0040	9	8.	*	1		0655	84	28.	*	1		1310	159	0.	*	1		1925	234	0.
1		0045	10	11.	*	1		0700	85	21.	*	1		1315	160	0.	*	1		1930	235	0.
1		0050	11	11.	*	1		0705	86	16.	*	1		1320	161	0.	*	1		1935	236	0.
1		0055	12	10.	*	1		0710	87	12.	*	1		1325	162	0.	*	1		1940	237	0.
1		0100	13	10.	*	1		0715	88	9.	*	1		1330	163	0.	*	1		1945	238	0.
1		0105	14	10.	*	1		0720	89	7.	*	1		1335	164	0.	*	1		1950	239	0.
1		0110	15	12.	*	1		0725	90	5.	*	1		1340	165	0.	*	1		1955	240	0.
1		0115	16	16.	*	1		0730	91	4.	*	1		1345	166	0.	*	1		2000	241	0.
1		0120	17	20.	*	1		0735	92	3.	*	1		1350	167	0.	*	1		2005	242	0.
1		0125	18	25.	*	1		0740	93	2.	*	1		1355	168	0.	*	1		2010	243	0.
1		0130	19	37.	*	1		0745	94	2.	*	1		1400	169	0.	*	1		2015	244	0.
1		0135	20	56.	*	1		0750	95	1.	*	1		1405	170	0.	*	1		2020	245	0.
1		0140	21	78.	*	1		0755	96	1.	*	1		1410	171	0.	*	1		2025	246	0.
1		0145	22	98.	*	1		0800	97	1.	*	1		1415	172	0.	*	1		2030	247	0.
1		0150	23	111.	*	1		0805	98	0.	*	1		1420	173	0.	*	1		2035	248	0.
1		0155	24	117.	*	1		0810	99	0.	*	1		1425	174	0.	*	1		2040	249	0.

1	0200	25	114.	*	1	0815	100	0.	*	1	1430	175	0.	*	1	2045	250	0.
1	0205	26	110.	*	1	0820	101	0.	*	1	1435	176	0.	*	1	2050	251	0.
1	0210	27	111.	*	1	0825	102	0.	*	1	1440	177	0.	*	1	2055	252	0.
1	0215	28	127.	*	1	0830	103	0.	*	1	1445	178	0.	*	1	2100	253	0.
1	0220	29	158.	*	1	0835	104	0.	*	1	1450	179	0.	*	1	2105	254	0.
1	0225	30	193.	*	1	0840	105	0.	*	1	1455	180	0.	*	1	2110	255	0.
1	0230	31	214.	*	1	0845	106	0.	*	1	1500	181	0.	*	1	2115	256	0.
1	0235	32	216.	*	1	0850	107	0.	*	1	1505	182	0.	*	1	2120	257	0.
1	0240	33	216.	*	1	0855	108	0.	*	1	1510	183	0.	*	1	2125	258	0.
1	0245	34	235.	*	1	0900	109	0.	*	1	1515	184	0.	*	1	2130	259	0.
1	0250	35	262.	*	1	0905	110	0.	*	1	1520	185	0.	*	1	2135	260	0.
1	0255	36	273.	*	1	0910	111	0.	*	1	1525	186	0.	*	1	2140	261	0.
1	0300	37	268.	*	1	0915	112	0.	*	1	1530	187	0.	*	1	2145	262	0.
1	0305	38	288.	*	1	0920	113	0.	*	1	1535	188	0.	*	1	2150	263	0.
1	0310	39	366.	*	1	0925	114	0.	*	1	1540	189	0.	*	1	2155	264	0.
1	0315	40	521.	*	1	0930	115	0.	*	1	1545	190	0.	*	1	2200	265	0.
1	0320	41	806.	*	1	0935	116	0.	*	1	1550	191	0.	*	1	2205	266	0.
1	0325	42	1278.	*	1	0940	117	0.	*	1	1555	192	0.	*	1	2210	267	0.
1	0330	43	1938.	*	1	0945	118	0.	*	1	1600	193	0.	*	1	2215	268	0.
1	0335	44	2650.	*	1	0950	119	0.	*	1	1605	194	0.	*	1	2220	269	0.
1	0340	45	3129.	*	1	0955	120	0.	*	1	1610	195	0.	*	1	2225	270	0.
1	0345	46	3309.	*	1	1000	121	0.	*	1	1615	196	0.	*	1	2230	271	0.
1	0350	47	3294.	*	1	1005	122	0.	*	1	1620	197	0.	*	1	2235	272	0.
1	0355	48	3211.	*	1	1010	123	0.	*	1	1625	198	0.	*	1	2240	273	0.
1	0400	49	3088.	*	1	1015	124	0.	*	1	1630	199	0.	*	1	2245	274	0.
1	0405	50	2940.	*	1	1020	125	0.	*	1	1635	200	0.	*	1	2250	275	0.
1	0410	51	2744.	*	1	1025	126	0.	*	1	1640	201	0.	*	1	2255	276	0.
1	0415	52	2478.	*	1	1030	127	0.	*	1	1645	202	0.	*	1	2300	277	0.
1	0420	53	2188.	*	1	1035	128	0.	*	1	1650	203	0.	*	1	2305	278	0.
1	0425	54	1927.	*	1	1040	129	0.	*	1	1655	204	0.	*	1	2310	279	0.
1	0430	55	1730.	*	1	1045	130	0.	*	1	1700	205	0.	*	1	2315	280	0.
1	0435	56	1611.	*	1	1050	131	0.	*	1	1705	206	0.	*	1	2320	281	0.
1	0440	57	1533.	*	1	1055	132	0.	*	1	1710	207	0.	*	1	2325	282	0.
1	0445	58	1452.	*	1	1100	133	0.	*	1	1715	208	0.	*	1	2330	283	0.
1	0450	59	1376.	*	1	1105	134	0.	*	1	1720	209	0.	*	1	2335	284	0.
1	0455	60	1332.	*	1	1110	135	0.	*	1	1725	210	0.	*	1	2340	285	0.
1	0500	61	1285.	*	1	1115	136	0.	*	1	1730	211	0.	*	1	2345	286	0.
1	0505	62	1205.	*	1	1120	137	0.	*	1	1735	212	0.	*	1	2350	287	0.
1	0510	63	1096.	*	1	1125	138	0.	*	1	1740	213	0.	*	1	2355	288	0.
1	0515	64	986.	*	1	1130	139	0.	*	1	1745	214	0.	*	2	0000	289	0.
1	0520	65	878.	*	1	1135	140	0.	*	1	1750	215	0.	*	2	0005	290	0.
1	0525	66	777.	*	1	1140	141	0.	*	1	1755	216	0.	*	2	0010	291	0.
1	0530	67	683.	*	1	1145	142	0.	*	1	1800	217	0.	*	2	0015	292	0.
1	0535	68	592.	*	1	1150	143	0.	*	1	1805	218	0.	*	2	0020	293	0.
1	0540	69	503.	*	1	1155	144	0.	*	1	1810	219	0.	*	2	0025	294	0.
1	0545	70	425.	*	1	1200	145	0.	*	1	1815	220	0.	*	2	0030	295	0.
1	0550	71	365.	*	1	1205	146	0.	*	1	1820	221	0.	*	2	0035	296	0.
1	0555	72	313.	*	1	1210	147	0.	*	1	1825	222	0.	*	2	0040	297	0.
1	0600	73	265.	*	1	1215	148	0.	*	1	1830	223	0.	*	2	0045	298	0.
1	0605	74	224.	*	1	1220	149	0.	*	1	1835	224	0.	*	2	0050	299	0.
1	0610	75	189.	*	1	1225	150	0.	*	1	1840	225	0.	*	2	0055	300	0.
				*					*					*				

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PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
			6-HR	24-HR	72-HR	24.92-HR
+ (CFS)	(HR)	(CFS)				
+ 3309.	3.75		817.	205.	197.	197.
		(INCHES)	1.822	1.826	1.826	1.826
		(AC-FT)	405.	406.	406.	406.

CUMULATIVE AREA = 4.17 SQ MI

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HYDROGRAPH AT STATION CP3
SUM OF 2 HYDROGRAPHS
PLAN 1, RATIO = .70

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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		0615	76	112.	*	1		1230	151	0.	*	1		1845	226	0.
1		0005	2	0.	*	1		0620	77	92.	*	1		1235	152	0.	*	1		1850	227	0.
1		0010	3	0.	*	1		0625	78	76.	*	1		1240	153	0.	*	1		1855	228	0.
1		0015	4	0.	*	1		0630	79	62.	*	1		1245	154	0.	*	1		1900	229	0.
1		0020	5	0.	*	1		0635	80	51.	*	1		1250	155	0.	*	1		1905	230	0.
1		0025	6	0.	*	1		0640	81	41.	*	1		1255	156	0.	*	1		1910	231	0.
1		0030	7	0.	*	1		0645	82	32.	*	1		1300	157	0.	*	1		1915	232	0.
1		0035	8	0.	*	1		0650	83	25.	*	1		1305	158	0.	*	1		1920	233	0.
1		0040	9	0.	*	1		0655	84	20.	*	1		1310	159	0.	*	1		1925	234	0.
1		0045	10	0.	*	1		0700	85	15.	*	1		1315	160	0.	*	1		1930	235	0.
1		0050	11	0.	*	1		0705	86	12.	*	1		1320	161	0.	*	1		1935	236	0.
1		0055	12	0.	*	1		0710	87	9.	*	1		1325	162	0.	*	1		1940	237	0.
1		0100	13	0.	*	1		0715	88	7.	*	1		1330	163	0.	*	1		1945	238	0.
1		0105	14	0.	*	1		0720	89	5.	*	1		1335	164	0.	*	1		1950	239	0.
1		0110	15	0.	*	1		0725	90	4.	*	1		1340	165	0.	*	1		1955	240	0.
1		0115	16	0.	*	1		0730	91	3.	*	1		1345	166	0.	*	1		2000	241	0.
1		0120	17	0.	*	1		0735	92	2.	*	1		1350	167	0.	*	1		2005	242	0.
1		0125	18	1.	*	1		0740	93	1.	*	1		1355	168	0.	*	1		2010	243	0.
1		0130	19	4.	*	1		0745	94	1.	*	1		1400	169	0.	*	1		2015	244	0.
1		0135	20	9.	*	1		0750	95	1.	*	1		1405	170	0.	*	1		2020	245	0.
1		0140	21	17.	*	1		0755	96	1.	*	1		1410	171	0.	*	1		2025	246	0.
1		0145	22	25.	*	1		0800	97	0.	*	1		1415	172	0.	*	1		2030	247	0.
1		0150	23	32.	*	1		0805	98	0.	*	1		1420	173	0.	*	1		2035	248	0.
1		0155	24	36.	*	1		0810	99	0.	*	1		1425	174	0.	*	1		2040	249	0.
1		0200	25	37.	*	1		0815	100	0.	*	1		1430	175	0.	*	1		2045	250	0.
1		0205	26	37.	*	1		0820	101	0.	*	1		1435	176	0.	*	1		2050	251	0.
1		0210	27	39.	*	1		0825	102	0.	*	1		1440	177	0.	*	1		2055	252	0.
1		0215	28	47.	*	1		0830	103	0.	*	1		1445	178	0.	*	1		2100	253	0.
1		0220	29	64.	*	1		0835	104	0.	*	1		1450	179	0.	*	1		2105	254	0.

1	0225	30	83.	*	1	0840	105	0.	*	1	1455	180	0.	*	1	2110	255	0.
1	0230	31	96.	*	1	0845	106	0.	*	1	1500	181	0.	*	1	2115	256	0.
1	0235	32	99.	*	1	0850	107	0.	*	1	1505	182	0.	*	1	2120	257	0.
1	0240	33	101.	*	1	0855	108	0.	*	1	1510	183	0.	*	1	2125	258	0.
1	0245	34	113.	*	1	0900	109	0.	*	1	1515	184	0.	*	1	2130	259	0.
1	0250	35	130.	*	1	0905	110	0.	*	1	1520	185	0.	*	1	2135	260	0.
1	0255	36	137.	*	1	0910	111	0.	*	1	1525	186	0.	*	1	2140	261	0.
1	0300	37	137.	*	1	0915	112	0.	*	1	1530	187	0.	*	1	2145	262	0.
1	0305	38	150.	*	1	0920	113	0.	*	1	1535	188	0.	*	1	2150	263	0.
1	0310	39	197.	*	1	0925	114	0.	*	1	1540	189	0.	*	1	2155	264	0.
1	0315	40	290.	*	1	0930	115	0.	*	1	1545	190	0.	*	1	2200	265	0.
1	0320	41	467.	*	1	0935	116	0.	*	1	1550	191	0.	*	1	2205	266	0.
1	0325	42	769.	*	1	0940	117	0.	*	1	1555	192	0.	*	1	2210	267	0.
1	0330	43	1204.	*	1	0945	118	0.	*	1	1600	193	0.	*	1	2215	268	0.
1	0335	44	1689.	*	1	0950	119	0.	*	1	1605	194	0.	*	1	2220	269	0.
1	0340	45	2026.	*	1	0955	120	0.	*	1	1610	195	0.	*	1	2225	270	0.
1	0345	46	2164.	*	1	1000	121	0.	*	1	1615	196	0.	*	1	2230	271	0.
1	0350	47	2171.	*	1	1005	122	0.	*	1	1620	197	0.	*	1	2235	272	0.
1	0355	48	2130.	*	1	1010	123	0.	*	1	1625	198	0.	*	1	2240	273	0.
1	0400	49	2060.	*	1	1015	124	0.	*	1	1630	199	0.	*	1	2245	274	0.
1	0405	50	1972.	*	1	1020	125	0.	*	1	1635	200	0.	*	1	2250	275	0.
1	0410	51	1850.	*	1	1025	126	0.	*	1	1640	201	0.	*	1	2255	276	0.
1	0415	52	1678.	*	1	1030	127	0.	*	1	1645	202	0.	*	1	2300	277	0.
1	0420	53	1488.	*	1	1035	128	0.	*	1	1650	203	0.	*	1	2305	278	0.
1	0425	54	1316.	*	1	1040	129	0.	*	1	1655	204	0.	*	1	2310	279	0.
1	0430	55	1187.	*	1	1045	130	0.	*	1	1700	205	0.	*	1	2315	280	0.
1	0435	56	1110.	*	1	1050	131	0.	*	1	1705	206	0.	*	1	2320	281	0.
1	0440	57	1062.	*	1	1055	132	0.	*	1	1710	207	0.	*	1	2325	282	0.
1	0445	58	1009.	*	1	1100	133	0.	*	1	1715	208	0.	*	1	2330	283	0.
1	0450	59	960.	*	1	1105	134	0.	*	1	1720	209	0.	*	1	2335	284	0.
1	0455	60	932.	*	1	1110	135	0.	*	1	1725	210	0.	*	1	2340	285	0.
1	0500	61	903.	*	1	1115	136	0.	*	1	1730	211	0.	*	1	2345	286	0.
1	0505	62	848.	*	1	1120	137	0.	*	1	1735	212	0.	*	1	2350	287	0.
1	0510	63	774.	*	1	1125	138	0.	*	1	1740	213	0.	*	1	2355	288	0.
1	0515	64	697.	*	1	1130	139	0.	*	1	1745	214	0.	*	2	0000	289	0.
1	0520	65	622.	*	1	1135	140	0.	*	1	1750	215	0.	*	2	0005	290	0.
1	0525	66	551.	*	1	1140	141	0.	*	1	1755	216	0.	*	2	0010	291	0.
1	0530	67	486.	*	1	1145	142	0.	*	1	1800	217	0.	*	2	0015	292	0.
1	0535	68	421.	*	1	1150	143	0.	*	1	1805	218	0.	*	2	0020	293	0.
1	0540	69	358.	*	1	1155	144	0.	*	1	1810	219	0.	*	2	0025	294	0.
1	0545	70	303.	*	1	1200	145	0.	*	1	1815	220	0.	*	2	0030	295	0.
1	0550	71	260.	*	1	1205	146	0.	*	1	1820	221	0.	*	2	0035	296	0.
1	0555	72	223.	*	1	1210	147	0.	*	1	1825	222	0.	*	2	0040	297	0.
1	0600	73	189.	*	1	1215	148	0.	*	1	1830	223	0.	*	2	0045	298	0.
1	0605	74	160.	*	1	1220	149	0.	*	1	1835	224	0.	*	2	0050	299	0.
1	0610	75	135.	*	1	1225	150	0.	*	1	1840	225	0.	*	2	0055	300	0.
				*					*					*				

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PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
			6-HR	24-HR	72-HR	24.92-HR
+ (CFS)	(HR)					
		(CFS)				
+ 2171.	3.83		536.	134.	129.	129.
		(INCHES)	1.197	1.197	1.197	1.197
		(AC-FT)	266.	266.	266.	266.

CUMULATIVE AREA = 4.17 SQ MI

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HYDROGRAPH AT STATION CP3
SUM OF 2 HYDROGRAPHS
PLAN 1, RATIO = .54

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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		0615	76	78.	*	1		1230	151	0.	*	1		1845	226	0.
1		0005	2	0.	*	1		0620	77	65.	*	1		1235	152	0.	*	1		1850	227	0.
1		0010	3	0.	*	1		0625	78	53.	*	1		1240	153	0.	*	1		1855	228	0.
1		0015	4	0.	*	1		0630	79	44.	*	1		1245	154	0.	*	1		1900	229	0.
1		0020	5	0.	*	1		0635	80	36.	*	1		1250	155	0.	*	1		1905	230	0.
1		0025	6	0.	*	1		0640	81	29.	*	1		1255	156	0.	*	1		1910	231	0.
1		0030	7	0.	*	1		0645	82	23.	*	1		1300	157	0.	*	1		1915	232	0.
1		0035	8	0.	*	1		0650	83	18.	*	1		1305	158	0.	*	1		1920	233	0.
1		0040	9	0.	*	1		0655	84	14.	*	1		1310	159	0.	*	1		1925	234	0.
1		0045	10	0.	*	1		0700	85	11.	*	1		1315	160	0.	*	1		1930	235	0.
1		0050	11	0.	*	1		0705	86	8.	*	1		1320	161	0.	*	1		1935	236	0.
1		0055	12	0.	*	1		0710	87	6.	*	1		1325	162	0.	*	1		1940	237	0.
1		0100	13	0.	*	1		0715	88	5.	*	1		1330	163	0.	*	1		1945	238	0.
1		0105	14	0.	*	1		0720	89	4.	*	1		1335	164	0.	*	1		1950	239	0.
1		0110	15	0.	*	1		0725	90	3.	*	1		1340	165	0.	*	1		1955	240	0.
1		0115	16	0.	*	1		0730	91	2.	*	1		1345	166	0.	*	1		2000	241	0.
1		0120	17	0.	*	1		0735	92	1.	*	1		1350	167	0.	*	1		2005	242	0.
1		0125	18	0.	*	1		0740	93	1.	*	1		1355	168	0.	*	1		2010	243	0.
1		0130	19	0.	*	1		0745	94	1.	*	1		1400	169	0.	*	1		2015	244	0.
1		0135	20	0.	*	1		0750	95	1.	*	1		1405	170	0.	*	1		2020	245	0.
1		0140	21	0.	*	1		0755	96	0.	*	1		1410	171	0.	*	1		2025	246	0.
1		0145	22	1.	*	1		0800	97	0.	*	1		1415	172	0.	*	1		2030	247	0.
1		0150	23	2.	*	1		0805	98	0.	*	1		1420	173	0.	*	1		2035	248	0.
1		0155	24	3.	*	1		0810	99	0.	*	1		1425	174	0.	*	1		2040	249	0.
1		0200	25	3.	*	1		0815	100	0.	*	1		1430	175	0.	*	1		2045	250	0.
1		0205	26	4.	*	1		0820	101	0.	*	1		1435	176	0.	*	1		2050	251	0.
1		0210	27	5.	*	1		0825	102	0.	*	1		1440	177	0.	*	1		2055	252	0.
1		0215	28	7.	*	1		0830	103	0.	*	1		1445	178	0.	*	1		2100	253	0.
1		0220	29	13.	*	1		0835	104	0.	*	1		1450	179	0.	*	1		2105	254	0.
1		0225	30	21.	*	1		0840	105	0.	*	1		1455	180	0.	*	1		2110	255	0.
1		0230	31	27.	*	1		0845	106	0.	*	1		1500	181	0.	*	1		2115	256	0.
1		0235	32	31.	*	1		0850	107	0.	*	1		1505	182	0.	*	1		2120	257	0.
1		0240	33	34.	*	1		0855	108	0.	*	1		1510	183	0.	*	1		2125	258	0.
1		0245	34	40.	*	1		0900	109	0.	*	1		1515	184	0.	*	1		2130	259	0.

1	0250	35	49.	*	1	0905	110	0.	*	1	1520	185	0.	*	1	2135	260	0.
1	0255	36	54.	*	1	0910	111	0.	*	1	1525	186	0.	*	1	2140	261	0.
1	0300	37	56.	*	1	0915	112	0.	*	1	1530	187	0.	*	1	2145	262	0.
1	0305	38	63.	*	1	0920	113	0.	*	1	1535	188	0.	*	1	2150	263	0.
1	0310	39	89.	*	1	0925	114	0.	*	1	1540	189	0.	*	1	2155	264	0.
1	0315	40	140.	*	1	0930	115	0.	*	1	1545	190	0.	*	1	2200	265	0.
1	0320	41	242.	*	1	0935	116	0.	*	1	1550	191	0.	*	1	2205	266	0.
1	0325	42	423.	*	1	0940	117	0.	*	1	1555	192	0.	*	1	2210	267	0.
1	0330	43	697.	*	1	0945	118	0.	*	1	1600	193	0.	*	1	2215	268	0.
1	0335	44	1013.	*	1	0950	119	0.	*	1	1605	194	0.	*	1	2220	269	0.
1	0340	45	1243.	*	1	0955	120	0.	*	1	1610	195	0.	*	1	2225	270	0.
1	0345	46	1348.	*	1	1000	121	0.	*	1	1615	196	0.	*	1	2230	271	0.
1	0350	47	1365.	*	1	1005	122	0.	*	1	1620	197	0.	*	1	2235	272	0.
1	0355	48	1350.	*	1	1010	123	0.	*	1	1625	198	0.	*	1	2240	273	0.
1	0400	49	1316.	*	1	1015	124	0.	*	1	1630	199	0.	*	1	2245	274	0.
1	0405	50	1268.	*	1	1020	125	0.	*	1	1635	200	0.	*	1	2250	275	0.
1	0410	51	1198.	*	1	1025	126	0.	*	1	1640	201	0.	*	1	2255	276	0.
1	0415	52	1093.	*	1	1030	127	0.	*	1	1645	202	0.	*	1	2300	277	0.
1	0420	53	974.	*	1	1035	128	0.	*	1	1650	203	0.	*	1	2305	278	0.
1	0425	54	867.	*	1	1040	129	0.	*	1	1655	204	0.	*	1	2310	279	0.
1	0430	55	786.	*	1	1045	130	0.	*	1	1700	205	0.	*	1	2315	280	0.
1	0435	56	740.	*	1	1050	131	0.	*	1	1705	206	0.	*	1	2320	281	0.
1	0440	57	712.	*	1	1055	132	0.	*	1	1710	207	0.	*	1	2325	282	0.
1	0445	58	680.	*	1	1100	133	0.	*	1	1715	208	0.	*	1	2330	283	0.
1	0450	59	650.	*	1	1105	134	0.	*	1	1720	209	0.	*	1	2335	284	0.
1	0455	60	634.	*	1	1110	135	0.	*	1	1725	210	0.	*	1	2340	285	0.
1	0500	61	616.	*	1	1115	136	0.	*	1	1730	211	0.	*	1	2345	286	0.
1	0505	62	581.	*	1	1120	137	0.	*	1	1735	212	0.	*	1	2350	287	0.
1	0510	63	531.	*	1	1125	138	0.	*	1	1740	213	0.	*	1	2355	288	0.
1	0515	64	480.	*	1	1130	139	0.	*	1	1745	214	0.	*	2	0000	289	0.
1	0520	65	430.	*	1	1135	140	0.	*	1	1750	215	0.	*	2	0005	290	0.
1	0525	66	381.	*	1	1140	141	0.	*	1	1755	216	0.	*	2	0010	291	0.
1	0530	67	336.	*	1	1145	142	0.	*	1	1800	217	0.	*	2	0015	292	0.
1	0535	68	292.	*	1	1150	143	0.	*	1	1805	218	0.	*	2	0020	293	0.
1	0540	69	249.	*	1	1155	144	0.	*	1	1810	219	0.	*	2	0025	294	0.
1	0545	70	211.	*	1	1200	145	0.	*	1	1815	220	0.	*	2	0030	295	0.
1	0550	71	181.	*	1	1205	146	0.	*	1	1820	221	0.	*	2	0035	296	0.
1	0555	72	155.	*	1	1210	147	0.	*	1	1825	222	0.	*	2	0040	297	0.
1	0600	73	132.	*	1	1215	148	0.	*	1	1830	223	0.	*	2	0045	298	0.
1	0605	74	111.	*	1	1220	149	0.	*	1	1835	224	0.	*	2	0050	299	0.
1	0610	75	94.	*	1	1225	150	0.	*	1	1840	225	0.	*	2	0055	300	0.
				*					*					*				

PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
			6-HR	24-HR	72-HR	24.92-HR
+ (CFS)	(HR)					
		(CFS)				
+ 1365.	3.83		339.	85.	82.	82.
		(INCHES)	.757	.757	.757	.757
		(AC-FT)	168.	168.	168.	168.

CUMULATIVE AREA = 4.17 SQ MI

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          **************
          *            *
149 KK    *     CP5B   *
          *            *
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151 KO OUTPUT CONTROL VARIABLES

IPRNT	1	PRINT CONTROL
IPLOT	0	PLOT CONTROL
QSCAL	0.	HYDROGRAPH PLOT SCALE

152 HC HYDROGRAPH COMBINATION

ICOMP	6	NUMBER OF HYDROGRAPHS TO COMBINE

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HYDROGRAPH AT STATION CP5B
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		0615	76	209.	*	1		1230	151	0.	*	1		1845	226	0.
1		0005	2	0.	*	1		0620	77	173.	*	1		1235	152	0.	*	1		1850	227	0.
1		0010	3	0.	*	1		0625	78	142.	*	1		1240	153	0.	*	1		1855	228	0.
1		0015	4	1.	*	1		0630	79	116.	*	1		1245	154	0.	*	1		1900	229	0.
1		0020	5	2.	*	1		0635	80	95.	*	1		1250	155	0.	*	1		1905	230	0.
1		0025	6	4.	*	1		0640	81	77.	*	1		1255	156	0.	*	1		1910	231	0.
1		0030	7	7.	*	1		0645	82	62.	*	1		1300	157	0.	*	1		1915	232	0.
1		0035	8	10.	*	1		0650	83	49.	*	1		1305	158	0.	*	1		1920	233	0.
1		0040	9	16.	*	1		0655	84	39.	*	1		1310	159	0.	*	1		1925	234	0.
1		0045	10	21.	*	1		0700	85	30.	*	1		1315	160	0.	*	1		1930	235	0.
1		0050	11	24.	*	1		0705	86	23.	*	1		1320	161	0.	*	1		1935	236	0.
1		0055	12	24.	*	1		0710	87	18.	*	1		1325	162	0.	*	1		1940	237	0.
1		0100	13	23.	*	1		0715	88	14.	*	1		1330	163	0.	*	1		1945	238	0.
1		0105	14	22.	*	1		0720	89	10.	*	1		1335	164	0.	*	1		1950	239	0.
1		0110	15	24.	*	1		0725	90	8.	*	1		1340	165	0.	*	1		1955	240	0.
1		0115	16	28.	*	1		0730	91	6.	*	1		1345	166	0.	*	1		2000	241	0.
1		0120	17	33.	*	1		0735	92	4.	*	1		1350	167	0.	*	1		2005	242	0.
1		0125	18	41.	*	1		0740	93	3.	*	1		1355	168	0.	*	1		2010	243	0.

1	0130	19	53.	*	1	0745	94	2.	*	1	1400	169	0.	*	1	2015	244	0.
1	0135	20	74.	*	1	0750	95	2.	*	1	1405	170	0.	*	1	2020	245	0.
1	0140	21	100.	*	1	0755	96	1.	*	1	1410	171	0.	*	1	2025	246	0.
1	0145	22	127.	*	1	0800	97	1.	*	1	1415	172	0.	*	1	2030	247	0.
1	0150	23	149.	*	1	0805	98	1.	*	1	1420	173	0.	*	1	2035	248	0.
1	0155	24	160.	*	1	0810	99	1.	*	1	1425	174	0.	*	1	2040	249	0.
1	0200	25	162.	*	1	0815	100	0.	*	1	1430	175	0.	*	1	2045	250	0.
1	0205	26	157.	*	1	0820	101	0.	*	1	1435	176	0.	*	1	2050	251	0.
1	0210	27	155.	*	1	0825	102	0.	*	1	1440	177	0.	*	1	2055	252	0.
1	0215	28	165.	*	1	0830	103	0.	*	1	1445	178	0.	*	1	2100	253	0.
1	0220	29	193.	*	1	0835	104	0.	*	1	1450	179	0.	*	1	2105	254	0.
1	0225	30	233.	*	1	0840	105	0.	*	1	1455	180	0.	*	1	2110	255	0.
1	0230	31	267.	*	1	0845	106	0.	*	1	1500	181	0.	*	1	2115	256	0.
1	0235	32	283.	*	1	0850	107	0.	*	1	1505	182	0.	*	1	2120	257	0.
1	0240	33	288.	*	1	0855	108	0.	*	1	1510	183	0.	*	1	2125	258	0.
1	0245	34	298.	*	1	0900	109	0.	*	1	1515	184	0.	*	1	2130	259	0.
1	0250	35	320.	*	1	0905	110	0.	*	1	1520	185	0.	*	1	2135	260	0.
1	0255	36	340.	*	1	0910	111	0.	*	1	1525	186	0.	*	1	2140	261	0.
1	0300	37	348.	*	1	0915	112	0.	*	1	1530	187	0.	*	1	2145	262	0.
1	0305	38	362.	*	1	0920	113	0.	*	1	1535	188	0.	*	1	2150	263	0.
1	0310	39	419.	*	1	0925	114	0.	*	1	1540	189	0.	*	1	2155	264	0.
1	0315	40	555.	*	1	0930	115	0.	*	1	1545	190	0.	*	1	2200	265	0.
1	0320	41	838.	*	1	0935	116	0.	*	1	1550	191	0.	*	1	2205	266	0.
1	0325	42	1332.	*	1	0940	117	0.	*	1	1555	192	0.	*	1	2210	267	0.
1	0330	43	2064.	*	1	0945	118	0.	*	1	1600	193	0.	*	1	2215	268	0.
1	0335	44	2907.	*	1	0950	119	0.	*	1	1605	194	0.	*	1	2220	269	0.
1	0340	45	3573.	*	1	0955	120	0.	*	1	1610	195	0.	*	1	2225	270	0.
1	0345	46	3921.	*	1	1000	121	0.	*	1	1615	196	0.	*	1	2230	271	0.
1	0350	47	3985.	*	1	1005	122	0.	*	1	1620	197	0.	*	1	2235	272	0.
1	0355	48	3891.	*	1	1010	123	0.	*	1	1625	198	0.	*	1	2240	273	0.
1	0400	49	3738.	*	1	1015	124	0.	*	1	1630	199	0.	*	1	2245	274	0.
1	0405	50	3552.	*	1	1020	125	0.	*	1	1635	200	0.	*	1	2250	275	0.
1	0410	51	3327.	*	1	1025	126	0.	*	1	1640	201	0.	*	1	2255	276	0.
1	0415	52	3049.	*	1	1030	127	0.	*	1	1645	202	0.	*	1	2300	277	0.
1	0420	53	2730.	*	1	1035	128	0.	*	1	1650	203	0.	*	1	2305	278	0.
1	0425	54	2420.	*	1	1040	129	0.	*	1	1655	204	0.	*	1	2310	279	0.
1	0430	55	2165.	*	1	1045	130	0.	*	1	1700	205	0.	*	1	2315	280	0.
1	0435	56	1987.	*	1	1050	131	0.	*	1	1705	206	0.	*	1	2320	281	0.
1	0440	57	1868.	*	1	1055	132	0.	*	1	1710	207	0.	*	1	2325	282	0.
1	0445	58	1771.	*	1	1100	133	0.	*	1	1715	208	0.	*	1	2330	283	0.
1	0450	59	1683.	*	1	1105	134	0.	*	1	1720	209	0.	*	1	2335	284	0.
1	0455	60	1611.	*	1	1110	135	0.	*	1	1725	210	0.	*	1	2340	285	0.
1	0500	61	1546.	*	1	1115	136	0.	*	1	1730	211	0.	*	1	2345	286	0.
1	0505	62	1466.	*	1	1120	137	0.	*	1	1735	212	0.	*	1	2350	287	0.
1	0510	63	1354.	*	1	1125	138	0.	*	1	1740	213	0.	*	1	2355	288	0.
1	0515	64	1226.	*	1	1130	139	0.	*	1	1745	214	0.	*	2	0000	289	0.
1	0520	65	1097.	*	1	1135	140	0.	*	1	1750	215	0.	*	2	0005	290	0.
1	0525	66	976.	*	1	1140	141	0.	*	1	1755	216	0.	*	2	0010	291	0.
1	0530	67	863.	*	1	1145	142	0.	*	1	1800	217	0.	*	2	0015	292	0.
1	0535	68	757.	*	1	1150	143	0.	*	1	1805	218	0.	*	2	0020	293	0.
1	0540	69	655.	*	1	1155	144	0.	*	1	1810	219	0.	*	2	0025	294	0.
1	0545	70	562.	*	1	1200	145	0.	*	1	1815	220	0.	*	2	0030	295	0.
1	0550	71	478.	*	1	1205	146	0.	*	1	1820	221	0.	*	2	0035	296	0.
1	0555	72	409.	*	1	1210	147	0.	*	1	1825	222	0.	*	2	0040	297	0.
1	0600	73	349.	*	1	1215	148	0.	*	1	1830	223	0.	*	2	0045	298	0.
1	0605	74	296.	*	1	1220	149	0.	*	1	1835	224	0.	*	2	0050	299	0.
1	0610	75	249.	*	1	1225	150	0.	*	1	1840	225	0.	*	2	0055	300	0.

PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
			6-HR	24-HR	72-HR	24.92-HR
+ (CFS)	(HR)					
		(CFS)				
+ 3985.	3.83		987.	247.	238.	238.
		(INCHES)	2.089	2.095	2.095	2.095
		(AC-FT)	489.	491.	491.	491.

CUMULATIVE AREA = 4.39 SQ MI

HYDROGRAPH AT STATION CP5B
SUM OF 6 HYDROGRAPHS
PLAN 1, RATIO = .99

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		0615	76	206.	1		1230	151	0.	1		1845	226	0.
1		0005	2	0.	1		0620	77	171.	1		1235	152	0.	1		1850	227	0.
1		0010	3	0.	1		0625	78	140.	1		1240	153	0.	1		1855	228	0.
1		0015	4	1.	1		0630	79	115.	1		1245	154	0.	1		1900	229	0.
1		0020	5	2.	1		0635	80	94.	1		1250	155	0.	1		1905	230	0.
1		0025	6	4.	1		0640	81	77.	1		1255	156	0.	1		1910	231	0.
1		0030	7	6.	1		0645	82	61.	1		1300	157	0.	1		1915	232	0.
1		0035	8	10.	1		0650	83	49.	1		1305	158	0.	1		1920	233	0.
1		0040	9	15.	1		0655	84	38.	1		1310	159	0.	1		1925	234	0.
1		0045	10	20.	1		0700	85	30.	1		1315	160	0.	1		1930	235	0.
1		0050	11	23.	1		0705	86	23.	1		1320	161	0.	1		1935	236	0.
1		0055	12	22.	1		0710	87	18.	1		1325	162	0.	1		1940	237	0.
1		0100	13	21.	1		0715	88	13.	1		1330	163	0.	1		1945	238	0.
1		0105	14	21.	1		0720	89	10.	1		1335	164	0.	1		1950	239	0.
1		0110	15	23.	1		0725	90	8.	1		1340	165	0.	1		1955	240	0.
1		0115	16	26.	1		0730	91	6.	1		1345	166	0.	1		2000	241	0.
1		0120	17	32.	1		0735	92	4.	1		1350	167	0.	1		2005	242	0.
1		0125	18	39.	1		0740	93	3.	1		1355	168	0.	1		2010	243	0.
1		0130	19	51.	1		0745	94	2.	1		1400	169	0.	1		2015	244	0.
1		0135	20	71.	1		0750	95	2.	1		1405	170	0.	1		2020	245	0.
1		0140	21	96.	1		0755	96	1.	1		1410	171	0.	1		2025	246	0.
1		0145	22	123.	1		0800	97	1.	1		1415	172	0.	1		2030	247	0.
1		0150	23	144.	1		0805	98	1.	1		1420	173	0.	1		2035	248	0.

1	0155	24	155.	*	1	0810	99	1.	*	1	1425	174	0.	*	1	2040	249	0.
1	0200	25	157.	*	1	0815	100	0.	*	1	1430	175	0.	*	1	2045	250	0.
1	0205	26	153.	*	1	0820	101	0.	*	1	1435	176	0.	*	1	2050	251	0.
1	0210	27	150.	*	1	0825	102	0.	*	1	1440	177	0.	*	1	2055	252	0.
1	0215	28	160.	*	1	0830	103	0.	*	1	1445	178	0.	*	1	2100	253	0.
1	0220	29	188.	*	1	0835	104	0.	*	1	1450	179	0.	*	1	2105	254	0.
1	0225	30	227.	*	1	0840	105	0.	*	1	1455	180	0.	*	1	2110	255	0.
1	0230	31	260.	*	1	0845	106	0.	*	1	1500	181	0.	*	1	2115	256	0.
1	0235	32	276.	*	1	0850	107	0.	*	1	1505	182	0.	*	1	2120	257	0.
1	0240	33	281.	*	1	0855	108	0.	*	1	1510	183	0.	*	1	2125	258	0.
1	0245	34	291.	*	1	0900	109	0.	*	1	1515	184	0.	*	1	2130	259	0.
1	0250	35	313.	*	1	0905	110	0.	*	1	1520	185	0.	*	1	2135	260	0.
1	0255	36	333.	*	1	0910	111	0.	*	1	1525	186	0.	*	1	2140	261	0.
1	0300	37	341.	*	1	0915	112	0.	*	1	1530	187	0.	*	1	2145	262	0.
1	0305	38	354.	*	1	0920	113	0.	*	1	1535	188	0.	*	1	2150	263	0.
1	0310	39	410.	*	1	0925	114	0.	*	1	1540	189	0.	*	1	2155	264	0.
1	0315	40	544.	*	1	0930	115	0.	*	1	1545	190	0.	*	1	2200	265	0.
1	0320	41	819.	*	1	0935	116	0.	*	1	1550	191	0.	*	1	2205	266	0.
1	0325	42	1305.	*	1	0940	117	0.	*	1	1555	192	0.	*	1	2210	267	0.
1	0330	43	2029.	*	1	0945	118	0.	*	1	1600	193	0.	*	1	2215	268	0.
1	0335	44	2855.	*	1	0950	119	0.	*	1	1605	194	0.	*	1	2220	269	0.
1	0340	45	3524.	*	1	0955	120	0.	*	1	1610	195	0.	*	1	2225	270	0.
1	0345	46	3875.	*	1	1000	121	0.	*	1	1615	196	0.	*	1	2230	271	0.
1	0350	47	3927.	*	1	1005	122	0.	*	1	1620	197	0.	*	1	2235	272	0.
1	0355	48	3832.	*	1	1010	123	0.	*	1	1625	198	0.	*	1	2240	273	0.
1	0400	49	3684.	*	1	1015	124	0.	*	1	1630	199	0.	*	1	2245	274	0.
1	0405	50	3504.	*	1	1020	125	0.	*	1	1635	200	0.	*	1	2250	275	0.
1	0410	51	3282.	*	1	1025	126	0.	*	1	1640	201	0.	*	1	2255	276	0.
1	0415	52	3006.	*	1	1030	127	0.	*	1	1645	202	0.	*	1	2300	277	0.
1	0420	53	2693.	*	1	1035	128	0.	*	1	1650	203	0.	*	1	2305	278	0.
1	0425	54	2386.	*	1	1040	129	0.	*	1	1655	204	0.	*	1	2310	279	0.
1	0430	55	2134.	*	1	1045	130	0.	*	1	1700	205	0.	*	1	2315	280	0.
1	0435	56	1961.	*	1	1050	131	0.	*	1	1705	206	0.	*	1	2320	281	0.
1	0440	57	1844.	*	1	1055	132	0.	*	1	1710	207	0.	*	1	2325	282	0.
1	0445	58	1749.	*	1	1100	133	0.	*	1	1715	208	0.	*	1	2330	283	0.
1	0450	59	1662.	*	1	1105	134	0.	*	1	1720	209	0.	*	1	2335	284	0.
1	0455	60	1591.	*	1	1110	135	0.	*	1	1725	210	0.	*	1	2340	285	0.
1	0500	61	1527.	*	1	1115	136	0.	*	1	1730	211	0.	*	1	2345	286	0.
1	0505	62	1447.	*	1	1120	137	0.	*	1	1735	212	0.	*	1	2350	287	0.
1	0510	63	1337.	*	1	1125	138	0.	*	1	1740	213	0.	*	1	2355	288	0.
1	0515	64	1210.	*	1	1130	139	0.	*	1	1745	214	0.	*	2	0000	289	0.
1	0520	65	1084.	*	1	1135	140	0.	*	1	1750	215	0.	*	2	0005	290	0.
1	0525	66	964.	*	1	1140	141	0.	*	1	1755	216	0.	*	2	0010	291	0.
1	0530	67	853.	*	1	1145	142	0.	*	1	1800	217	0.	*	2	0015	292	0.
1	0535	68	748.	*	1	1150	143	0.	*	1	1805	218	0.	*	2	0020	293	0.
1	0540	69	648.	*	1	1155	144	0.	*	1	1810	219	0.	*	2	0025	294	0.
1	0545	70	555.	*	1	1200	145	0.	*	1	1815	220	0.	*	2	0030	295	0.
1	0550	71	473.	*	1	1205	146	0.	*	1	1820	221	0.	*	2	0035	296	0.
1	0555	72	404.	*	1	1210	147	0.	*	1	1825	222	0.	*	2	0040	297	0.
1	0600	73	345.	*	1	1215	148	0.	*	1	1830	223	0.	*	2	0045	298	0.
1	0605	74	293.	*	1	1220	149	0.	*	1	1835	224	0.	*	2	0050	299	0.
1	0610	75	246.	*	1	1225	150	0.	*	1	1840	225	0.	*	2	0055	300	0.
				*					*					*				

	PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
				6-HR	24-HR	72-HR	24.92-HR
+	(CFS)	(HR)					
			(CFS)				
+	3927.	3.83		972.	244.	235.	235.
			(INCHES)	2.058	2.064	2.064	2.064
			(AC-FT)	482.	484.	484.	484.

CUMULATIVE AREA = 4.39 SQ MI

HYDROGRAPH AT STATION CP5B
SUM OF 6 HYDROGRAPHS
PLAN 1, RATIO = .98

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		0615	76	204.	*	1		1230	151	0.	*	1		1845	226	0.
1		0005	2	0.	*	1		0620	77	169.	*	1		1235	152	0.	*	1		1850	227	0.
1		0010	3	0.	*	1		0625	78	138.	*	1		1240	153	0.	*	1		1855	228	0.
1		0015	4	1.	*	1		0630	79	114.	*	1		1245	154	0.	*	1		1900	229	0.
1		0020	5	2.	*	1		0635	80	93.	*	1		1250	155	0.	*	1		1905	230	0.
1		0025	6	4.	*	1		0640	81	76.	*	1		1255	156	0.	*	1		1910	231	0.
1		0030	7	6.	*	1		0645	82	61.	*	1		1300	157	0.	*	1		1915	232	0.
1		0035	8	9.	*	1		0650	83	48.	*	1		1305	158	0.	*	1		1920	233	0.
1		0040	9	13.	*	1		0655	84	38.	*	1		1310	159	0.	*	1		1925	234	0.
1		0045	10	18.	*	1		0700	85	29.	*	1		1315	160	0.	*	1		1930	235	0.
1		0050	11	21.	*	1		0705	86	23.	*	1		1320	161	0.	*	1		1935	236	0.
1		0055	12	21.	*	1		0710	87	17.	*	1		1325	162	0.	*	1		1940	237	0.
1		0100	13	19.	*	1		0715	88	13.	*	1		1330	163	0.	*	1		1945	238	0.
1		0105	14	19.	*	1		0720	89	10.	*	1		1335	164	0.	*	1		1950	239	0.
1		0110	15	21.	*	1		0725	90	8.	*	1		1340	165	0.	*	1		1955	240	0.
1		0115	16	25.	*	1		0730	91	6.	*	1		1345	166	0.	*	1		2000	241	0.
1		0120	17	30.	*	1		0735	92	4.	*	1		1350	167	0.	*	1		2005	242	0.
1		0125	18	37.	*	1		0740	93	3.	*	1		1355	168	0.	*	1		2010	243	0.
1		0130	19	49.	*	1		0745	94	2.	*	1		1400	169	0.	*	1		2015	244	0.
1		0135	20	68.	*	1		0750	95	2.	*	1		1405	170	0.	*	1		2020	245	0.
1		0140	21	93.	*	1		0755	96	1.	*	1		1410	171	0.	*	1		2025	246	0.
1		0145	22	119.	*	1		0800	97	1.	*	1		1415	172	0.	*	1		2030	247	0.
1		0150	23	139.	*	1		0805	98	1.	*	1		1420	173	0.	*	1		2035	248	0.
1		0155	24	150.	*	1		0810	99	1.	*	1		1425	174	0.	*	1		2040	249	0.
1		0200	25	152.	*	1		0815	100	0.	*	1		1430	175	0.	*	1		2045	250	0.
1		0205	26	148.	*	1		0820	101	0.	*	1		1435	176	0.	*	1		2050	251	0.
1		0210	27	146.	*	1		0825	102	0.	*	1		1440	177	0.	*	1		2055	252	0.
1		0215	28	156.	*	1		0830	103	0.	*	1		1445	178	0.	*	1		2100	253	0.

1	0220	29	183.	*	1	0835	104	0.	*	1	1450	179	0.	*	1	2105	254	0.
1	0225	30	221.	*	1	0840	105	0.	*	1	1455	180	0.	*	1	2110	255	0.
1	0230	31	254.	*	1	0845	106	0.	*	1	1500	181	0.	*	1	2115	256	0.
1	0235	32	270.	*	1	0850	107	0.	*	1	1505	182	0.	*	1	2120	257	0.
1	0240	33	274.	*	1	0855	108	0.	*	1	1510	183	0.	*	1	2125	258	0.
1	0245	34	285.	*	1	0900	109	0.	*	1	1515	184	0.	*	1	2130	259	0.
1	0250	35	306.	*	1	0905	110	0.	*	1	1520	185	0.	*	1	2135	260	0.
1	0255	36	325.	*	1	0910	111	0.	*	1	1525	186	0.	*	1	2140	261	0.
1	0300	37	333.	*	1	0915	112	0.	*	1	1530	187	0.	*	1	2145	262	0.
1	0305	38	347.	*	1	0920	113	0.	*	1	1535	188	0.	*	1	2150	263	0.
1	0310	39	402.	*	1	0925	114	0.	*	1	1540	189	0.	*	1	2155	264	0.
1	0315	40	533.	*	1	0930	115	0.	*	1	1545	190	0.	*	1	2200	265	0.
1	0320	41	804.	*	1	0935	116	0.	*	1	1550	191	0.	*	1	2205	266	0.
1	0325	42	1282.	*	1	0940	117	0.	*	1	1555	192	0.	*	1	2210	267	0.
1	0330	43	1992.	*	1	0945	118	0.	*	1	1600	193	0.	*	1	2215	268	0.
1	0335	44	2812.	*	1	0950	119	0.	*	1	1605	194	0.	*	1	2220	269	0.
1	0340	45	3462.	*	1	0955	120	0.	*	1	1610	195	0.	*	1	2225	270	0.
1	0345	46	3805.	*	1	1000	121	0.	*	1	1615	196	0.	*	1	2230	271	0.
1	0350	47	3870.	*	1	1005	122	0.	*	1	1620	197	0.	*	1	2235	272	0.
1	0355	48	3779.	*	1	1010	123	0.	*	1	1625	198	0.	*	1	2240	273	0.
1	0400	49	3632.	*	1	1015	124	0.	*	1	1630	199	0.	*	1	2245	274	0.
1	0405	50	3453.	*	1	1020	125	0.	*	1	1635	200	0.	*	1	2250	275	0.
1	0410	51	3237.	*	1	1025	126	0.	*	1	1640	201	0.	*	1	2255	276	0.
1	0415	52	2966.	*	1	1030	127	0.	*	1	1645	202	0.	*	1	2300	277	0.
1	0420	53	2657.	*	1	1035	128	0.	*	1	1650	203	0.	*	1	2305	278	0.
1	0425	54	2356.	*	1	1040	129	0.	*	1	1655	204	0.	*	1	2310	279	0.
1	0430	55	2107.	*	1	1045	130	0.	*	1	1700	205	0.	*	1	2315	280	0.
1	0435	56	1934.	*	1	1050	131	0.	*	1	1705	206	0.	*	1	2320	281	0.
1	0440	57	1819.	*	1	1055	132	0.	*	1	1710	207	0.	*	1	2325	282	0.
1	0445	58	1726.	*	1	1100	133	0.	*	1	1715	208	0.	*	1	2330	283	0.
1	0450	59	1640.	*	1	1105	134	0.	*	1	1720	209	0.	*	1	2335	284	0.
1	0455	60	1570.	*	1	1110	135	0.	*	1	1725	210	0.	*	1	2340	285	0.
1	0500	61	1508.	*	1	1115	136	0.	*	1	1730	211	0.	*	1	2345	286	0.
1	0505	62	1429.	*	1	1120	137	0.	*	1	1735	212	0.	*	1	2350	287	0.
1	0510	63	1321.	*	1	1125	138	0.	*	1	1740	213	0.	*	1	2355	288	0.
1	0515	64	1196.	*	1	1130	139	0.	*	1	1745	214	0.	*	2	0000	289	0.
1	0520	65	1071.	*	1	1135	140	0.	*	1	1750	215	0.	*	2	0005	290	0.
1	0525	66	952.	*	1	1140	141	0.	*	1	1755	216	0.	*	2	0010	291	0.
1	0530	67	842.	*	1	1145	142	0.	*	1	1800	217	0.	*	2	0015	292	0.
1	0535	68	739.	*	1	1150	143	0.	*	1	1805	218	0.	*	2	0020	293	0.
1	0540	69	640.	*	1	1155	144	0.	*	1	1810	219	0.	*	2	0025	294	0.
1	0545	70	548.	*	1	1200	145	0.	*	1	1815	220	0.	*	2	0030	295	0.
1	0550	71	467.	*	1	1205	146	0.	*	1	1820	221	0.	*	2	0035	296	0.
1	0555	72	399.	*	1	1210	147	0.	*	1	1825	222	0.	*	2	0040	297	0.
1	0600	73	341.	*	1	1215	148	0.	*	1	1830	223	0.	*	2	0045	298	0.
1	0605	74	289.	*	1	1220	149	0.	*	1	1835	224	0.	*	2	0050	299	0.
1	0610	75	243.	*	1	1225	150	0.	*	1	1840	225	0.	*	2	0055	300	0.

PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
			6-HR	24-HR	72-HR	24.92-HR
+ (CFS)	(HR)					
		(CFS)				
+ 3870.	3.83		958.	240.	231.	231.
		(INCHES)	2.027	2.033	2.033	2.033
		(AC-FT)	475.	476.	476.	476.

CUMULATIVE AREA = 4.39 SQ MI

HYDROGRAPH AT STATION CP5B
SUM OF 6 HYDROGRAPHS
PLAN 1, RATIO = .94

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		0615	76	194.	1		1230	151	0.	1		1845	226	0.
1		0005	2	0.	1		0620	77	160.	1		1235	152	0.	1		1850	227	0.
1		0010	3	0.	1		0625	78	132.	1		1240	153	0.	1		1855	228	0.
1		0015	4	1.	1		0630	79	108.	1		1245	154	0.	1		1900	229	0.
1		0020	5	2.	1		0635	80	89.	1		1250	155	0.	1		1905	230	0.
1		0025	6	3.	1		0640	81	72.	1		1255	156	0.	1		1910	231	0.
1		0030	7	5.	1		0645	82	58.	1		1300	157	0.	1		1915	232	0.
1		0035	8	7.	1		0650	83	46.	1		1305	158	0.	1		1920	233	0.
1		0040	9	9.	1		0655	84	36.	1		1310	159	0.	1		1925	234	0.
1		0045	10	12.	1		0700	85	28.	1		1315	160	0.	1		1930	235	0.
1		0050	11	15.	1		0705	86	22.	1		1320	161	0.	1		1935	236	0.
1		0055	12	15.	1		0710	87	17.	1		1325	162	0.	1		1940	237	0.
1		0100	13	14.	1		0715	88	13.	1		1330	163	0.	1		1945	238	0.
1		0105	14	14.	1		0720	89	10.	1		1335	164	0.	1		1950	239	0.
1		0110	15	16.	1		0725	90	7.	1		1340	165	0.	1		1955	240	0.
1		0115	16	19.	1		0730	91	5.	1		1345	166	0.	1		2000	241	0.
1		0120	17	23.	1		0735	92	4.	1		1350	167	0.	1		2005	242	0.
1		0125	18	29.	1		0740	93	3.	1		1355	168	0.	1		2010	243	0.
1		0130	19	40.	1		0745	94	2.	1		1400	169	0.	1		2015	244	0.
1		0135	20	56.	1		0750	95	2.	1		1405	170	0.	1		2020	245	0.
1		0140	21	79.	1		0755	96	1.	1		1410	171	0.	1		2025	246	0.
1		0145	22	102.	1		0800	97	1.	1		1415	172	0.	1		2030	247	0.
1		0150	23	121.	1		0805	98	1.	1		1420	173	0.	1		2035	248	0.
1		0155	24	131.	1		0810	99	0.	1		1425	174	0.	1		2040	249	0.
1		0200	25	133.	1		0815	100	0.	1		1430	175	0.	1		2045	250	0.
1		0205	26	130.	1		0820	101	0.	1		1435	176	0.	1		2050	251	0.
1		0210	27	128.	1		0825	102	0.	1		1440	177	0.	1		2055	252	0.
1		0215	28	138.	1		0830	103	0.	1		1445	178	0.	1		2100	253	0.
1		0220	29	163.	1		0835	104	0.	1		1450	179	0.	1		2105	254	0.
1		0225	30	197.	1		0840	105	0.	1		1455	180	0.	1		2110	255	0.
1		0230	31	228.	1		0845	106	0.	1		1500	181	0.	1		2115	256	0.
1		0235	32	243.	1		0850	107	0.	1		1505	182	0.	1		2120	257	0.
1		0240	33	248.	1		0855	108	0.	1		1510	183	0.	1		2125	258	0.

1	0245	34	258.	*	1	0900	109	0.	*	1	1515	184	0.	*	1	2130	259	0.
1	0250	35	277.	*	1	0905	110	0.	*	1	1520	185	0.	*	1	2135	260	0.
1	0255	36	296.	*	1	0910	111	0.	*	1	1525	186	0.	*	1	2140	261	0.
1	0300	37	304.	*	1	0915	112	0.	*	1	1530	187	0.	*	1	2145	262	0.
1	0305	38	317.	*	1	0920	113	0.	*	1	1535	188	0.	*	1	2150	263	0.
1	0310	39	368.	*	1	0925	114	0.	*	1	1540	189	0.	*	1	2155	264	0.
1	0315	40	490.	*	1	0930	115	0.	*	1	1545	190	0.	*	1	2200	265	0.
1	0320	41	737.	*	1	0935	116	0.	*	1	1550	191	0.	*	1	2205	266	0.
1	0325	42	1183.	*	1	0940	117	0.	*	1	1555	192	0.	*	1	2210	267	0.
1	0330	43	1850.	*	1	0945	118	0.	*	1	1600	193	0.	*	1	2215	268	0.
1	0335	44	2621.	*	1	0950	119	0.	*	1	1605	194	0.	*	1	2220	269	0.
1	0340	45	3247.	*	1	0955	120	0.	*	1	1610	195	0.	*	1	2225	270	0.
1	0345	46	3571.	*	1	1000	121	0.	*	1	1615	196	0.	*	1	2230	271	0.
1	0350	47	3636.	*	1	1005	122	0.	*	1	1620	197	0.	*	1	2235	272	0.
1	0355	48	3556.	*	1	1010	123	0.	*	1	1625	198	0.	*	1	2240	273	0.
1	0400	49	3421.	*	1	1015	124	0.	*	1	1630	199	0.	*	1	2245	274	0.
1	0405	50	3255.	*	1	1020	125	0.	*	1	1635	200	0.	*	1	2250	275	0.
1	0410	51	3053.	*	1	1025	126	0.	*	1	1640	201	0.	*	1	2255	276	0.
1	0415	52	2801.	*	1	1030	127	0.	*	1	1645	202	0.	*	1	2300	277	0.
1	0420	53	2510.	*	1	1035	128	0.	*	1	1650	203	0.	*	1	2305	278	0.
1	0425	54	2227.	*	1	1040	129	0.	*	1	1655	204	0.	*	1	2310	279	0.
1	0430	55	1993.	*	1	1045	130	0.	*	1	1700	205	0.	*	1	2315	280	0.
1	0435	56	1830.	*	1	1050	131	0.	*	1	1705	206	0.	*	1	2320	281	0.
1	0440	57	1722.	*	1	1055	132	0.	*	1	1710	207	0.	*	1	2325	282	0.
1	0445	58	1634.	*	1	1100	133	0.	*	1	1715	208	0.	*	1	2330	283	0.
1	0450	59	1554.	*	1	1105	134	0.	*	1	1720	209	0.	*	1	2335	284	0.
1	0455	60	1488.	*	1	1110	135	0.	*	1	1725	210	0.	*	1	2340	285	0.
1	0500	61	1430.	*	1	1115	136	0.	*	1	1730	211	0.	*	1	2345	286	0.
1	0505	62	1356.	*	1	1120	137	0.	*	1	1735	212	0.	*	1	2350	287	0.
1	0510	63	1254.	*	1	1125	138	0.	*	1	1740	213	0.	*	1	2355	288	0.
1	0515	64	1136.	*	1	1130	139	0.	*	1	1745	214	0.	*	2	0000	289	0.
1	0520	65	1017.	*	1	1135	140	0.	*	1	1750	215	0.	*	2	0005	290	0.
1	0525	66	905.	*	1	1140	141	0.	*	1	1755	216	0.	*	2	0010	291	0.
1	0530	67	801.	*	1	1145	142	0.	*	1	1800	217	0.	*	2	0015	292	0.
1	0535	68	703.	*	1	1150	143	0.	*	1	1805	218	0.	*	2	0020	293	0.
1	0540	69	609.	*	1	1155	144	0.	*	1	1810	219	0.	*	2	0025	294	0.
1	0545	70	521.	*	1	1200	145	0.	*	1	1815	220	0.	*	2	0030	295	0.
1	0550	71	444.	*	1	1205	146	0.	*	1	1820	221	0.	*	2	0035	296	0.
1	0555	72	379.	*	1	1210	147	0.	*	1	1825	222	0.	*	2	0040	297	0.
1	0600	73	324.	*	1	1215	148	0.	*	1	1830	223	0.	*	2	0045	298	0.
1	0605	74	275.	*	1	1220	149	0.	*	1	1835	224	0.	*	2	0050	299	0.
1	0610	75	232.	*	1	1225	150	0.	*	1	1840	225	0.	*	2	0055	300	0.

PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
			6-HR	24-HR	72-HR	24.92-HR
+ (CFS)	(HR)					
		(CFS)				
+ 3636.	3.83		899.	225.	217.	217.
		(INCHES)	1.904	1.909	1.909	1.909
		(AC-FT)	446.	447.	447.	447.

CUMULATIVE AREA = 4.39 SQ MI

HYDROGRAPH AT STATION CP5B
SUM OF 6 HYDROGRAPHS
PLAN 1, RATIO = .93

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		0615	76	191.	*	1		1230	151	0.	*	1		1845	226	0.
1		0005	2	0.	*	1		0620	77	158.	*	1		1235	152	0.	*	1		1850	227	0.
1		0010	3	0.	*	1		0625	78	130.	*	1		1240	153	0.	*	1		1855	228	0.
1		0015	4	1.	*	1		0630	79	107.	*	1		1245	154	0.	*	1		1900	229	0.
1		0020	5	2.	*	1		0635	80	88.	*	1		1250	155	0.	*	1		1905	230	0.
1		0025	6	3.	*	1		0640	81	71.	*	1		1255	156	0.	*	1		1910	231	0.
1		0030	7	5.	*	1		0645	82	57.	*	1		1300	157	0.	*	1		1915	232	0.
1		0035	8	7.	*	1		0650	83	45.	*	1		1305	158	0.	*	1		1920	233	0.
1		0040	9	9.	*	1		0655	84	36.	*	1		1310	159	0.	*	1		1925	234	0.
1		0045	10	11.	*	1		0700	85	28.	*	1		1315	160	0.	*	1		1930	235	0.
1		0050	11	13.	*	1		0705	86	21.	*	1		1320	161	0.	*	1		1935	236	0.
1		0055	12	13.	*	1		0710	87	16.	*	1		1325	162	0.	*	1		1940	237	0.
1		0100	13	13.	*	1		0715	88	13.	*	1		1330	163	0.	*	1		1945	238	0.
1		0105	14	13.	*	1		0720	89	10.	*	1		1335	164	0.	*	1		1950	239	0.
1		0110	15	14.	*	1		0725	90	7.	*	1		1340	165	0.	*	1		1955	240	0.
1		0115	16	17.	*	1		0730	91	5.	*	1		1345	166	0.	*	1		2000	241	0.
1		0120	17	21.	*	1		0735	92	4.	*	1		1350	167	0.	*	1		2005	242	0.
1		0125	18	27.	*	1		0740	93	3.	*	1		1355	168	0.	*	1		2010	243	0.
1		0130	19	38.	*	1		0745	94	2.	*	1		1400	169	0.	*	1		2015	244	0.
1		0135	20	54.	*	1		0750	95	2.	*	1		1405	170	0.	*	1		2020	245	0.
1		0140	21	75.	*	1		0755	96	1.	*	1		1410	171	0.	*	1		2025	246	0.
1		0145	22	98.	*	1		0800	97	1.	*	1		1415	172	0.	*	1		2030	247	0.
1		0150	23	116.	*	1		0805	98	1.	*	1		1420	173	0.	*	1		2035	248	0.
1		0155	24	126.	*	1		0810	99	0.	*	1		1425	174	0.	*	1		2040	249	0.
1		0200	25	129.	*	1		0815	100	0.	*	1		1430	175	0.	*	1		2045	250	0.
1		0205	26	126.	*	1		0820	101	0.	*	1		1435	176	0.	*	1		2050	251	0.
1		0210	27	124.	*	1		0825	102	0.	*	1		1440	177	0.	*	1		2055	252	0.
1		0215	28	134.	*	1		0830	103	0.	*	1		1445	178	0.	*	1		2100	253	0.
1		0220	29	158.	*	1		0835	104	0.	*	1		1450	179	0.	*	1		2105	254	0.
1		0225	30	192.	*	1		0840	105	0.	*	1		1455	180	0.	*	1		2110	255	0.
1		0230	31	222.	*	1		0845	106	0.	*	1		1500	181	0.	*	1		2115	256	0.
1		0235	32	236.	*	1		0850	107	0.	*	1		1505	182	0.	*	1		2120	257	0.
1		0240	33	241.	*	1		0855	108	0.	*	1		1510	183	0.	*	1		2125	258	0.
1		0245	34	251.	*	1		0900	109	0.	*	1		1515	184	0.	*	1		2130	259	0.
1		0250	35	271.	*	1		0905	110	0.	*	1		1520	185	0.	*	1		2135	260	0.
1		0255	36	289.	*	1		0910	111	0.	*	1		1525	186	0.	*	1		2140	261	0.
1		0300	37	296.	*	1		0915	112	0.	*	1		1530	187	0.	*	1		2145	262	0.
1		0305	38	309.	*	1		0920	113	0.	*	1		1535	188	0.	*	1		2150	263	0.

1	0310	39	360.	*	1	0925	114	0.	*	1	1540	189	0.	*	1	2155	264	0.
1	0315	40	479.	*	1	0930	115	0.	*	1	1545	190	0.	*	1	2200	265	0.
1	0320	41	723.	*	1	0935	116	0.	*	1	1550	191	0.	*	1	2205	266	0.
1	0325	42	1159.	*	1	0940	117	0.	*	1	1555	192	0.	*	1	2210	267	0.
1	0330	43	1813.	*	1	0945	118	0.	*	1	1600	193	0.	*	1	2215	268	0.
1	0335	44	2571.	*	1	0950	119	0.	*	1	1605	194	0.	*	1	2220	269	0.
1	0340	45	3185.	*	1	0955	120	0.	*	1	1610	195	0.	*	1	2225	270	0.
1	0345	46	3518.	*	1	1000	121	0.	*	1	1615	196	0.	*	1	2230	271	0.
1	0350	47	3579.	*	1	1005	122	0.	*	1	1620	197	0.	*	1	2235	272	0.
1	0355	48	3498.	*	1	1010	123	0.	*	1	1625	198	0.	*	1	2240	273	0.
1	0400	49	3367.	*	1	1015	124	0.	*	1	1630	199	0.	*	1	2245	274	0.
1	0405	50	3206.	*	1	1020	125	0.	*	1	1635	200	0.	*	1	2250	275	0.
1	0410	51	3006.	*	1	1025	126	0.	*	1	1640	201	0.	*	1	2255	276	0.
1	0415	52	2758.	*	1	1030	127	0.	*	1	1645	202	0.	*	1	2300	277	0.
1	0420	53	2473.	*	1	1035	128	0.	*	1	1650	203	0.	*	1	2305	278	0.
1	0425	54	2194.	*	1	1040	129	0.	*	1	1655	204	0.	*	1	2310	279	0.
1	0430	55	1965.	*	1	1045	130	0.	*	1	1700	205	0.	*	1	2315	280	0.
1	0435	56	1804.	*	1	1050	131	0.	*	1	1705	206	0.	*	1	2320	281	0.
1	0440	57	1698.	*	1	1055	132	0.	*	1	1710	207	0.	*	1	2325	282	0.
1	0445	58	1611.	*	1	1100	133	0.	*	1	1715	208	0.	*	1	2330	283	0.
1	0450	59	1533.	*	1	1105	134	0.	*	1	1720	209	0.	*	1	2335	284	0.
1	0455	60	1468.	*	1	1110	135	0.	*	1	1725	210	0.	*	1	2340	285	0.
1	0500	61	1410.	*	1	1115	136	0.	*	1	1730	211	0.	*	1	2345	286	0.
1	0505	62	1337.	*	1	1120	137	0.	*	1	1735	212	0.	*	1	2350	287	0.
1	0510	63	1237.	*	1	1125	138	0.	*	1	1740	213	0.	*	1	2355	288	0.
1	0515	64	1121.	*	1	1130	139	0.	*	1	1745	214	0.	*	2	0000	289	0.
1	0520	65	1004.	*	1	1135	140	0.	*	1	1750	215	0.	*	2	0005	290	0.
1	0525	66	893.	*	1	1140	141	0.	*	1	1755	216	0.	*	2	0010	291	0.
1	0530	67	791.	*	1	1145	142	0.	*	1	1800	217	0.	*	2	0015	292	0.
1	0535	68	694.	*	1	1150	143	0.	*	1	1805	218	0.	*	2	0020	293	0.
1	0540	69	601.	*	1	1155	144	0.	*	1	1810	219	0.	*	2	0025	294	0.
1	0545	70	515.	*	1	1200	145	0.	*	1	1815	220	0.	*	2	0030	295	0.
1	0550	71	438.	*	1	1205	146	0.	*	1	1820	221	0.	*	2	0035	296	0.
1	0555	72	375.	*	1	1210	147	0.	*	1	1825	222	0.	*	2	0040	297	0.
1	0600	73	320.	*	1	1215	148	0.	*	1	1830	223	0.	*	2	0045	298	0.
1	0605	74	272.	*	1	1220	149	0.	*	1	1835	224	0.	*	2	0050	299	0.
1	0610	75	229.	*	1	1225	150	0.	*	1	1840	225	0.	*	2	0055	300	0.
				*					*					*				

PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
			6-HR	24-HR	72-HR	24.92-HR
+ (CFS)	(HR)					
		(CFS)				
+ 3579.	3.83		885.	222.	214.	214.
		(INCHES)	1.873	1.877	1.877	1.877
		(AC-FT)	439.	440.	440.	440.

CUMULATIVE AREA = 4.39 SQ MI

HYDROGRAPH AT STATION CP5B
SUM OF 6 HYDROGRAPHS
PLAN 1, RATIO = .92

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		0615	76	189.	*	1		1230	151	0.	*	1		1845	226	0.
1		0005	2	0.	*	1		0620	77	156.	*	1		1235	152	0.	*	1		1850	227	0.
1		0010	3	0.	*	1		0625	78	129.	*	1		1240	153	0.	*	1		1855	228	0.
1		0015	4	1.	*	1		0630	79	106.	*	1		1245	154	0.	*	1		1900	229	0.
1		0020	5	2.	*	1		0635	80	86.	*	1		1250	155	0.	*	1		1905	230	0.
1		0025	6	3.	*	1		0640	81	70.	*	1		1255	156	0.	*	1		1910	231	0.
1		0030	7	5.	*	1		0645	82	57.	*	1		1300	157	0.	*	1		1915	232	0.
1		0035	8	6.	*	1		0650	83	45.	*	1		1305	158	0.	*	1		1920	233	0.
1		0040	9	8.	*	1		0655	84	35.	*	1		1310	159	0.	*	1		1925	234	0.
1		0045	10	10.	*	1		0700	85	27.	*	1		1315	160	0.	*	1		1930	235	0.
1		0050	11	12.	*	1		0705	86	21.	*	1		1320	161	0.	*	1		1935	236	0.
1		0055	12	12.	*	1		0710	87	16.	*	1		1325	162	0.	*	1		1940	237	0.
1		0100	13	12.	*	1		0715	88	12.	*	1		1330	163	0.	*	1		1945	238	0.
1		0105	14	12.	*	1		0720	89	9.	*	1		1335	164	0.	*	1		1950	239	0.
1		0110	15	13.	*	1		0725	90	7.	*	1		1340	165	0.	*	1		1955	240	0.
1		0115	16	16.	*	1		0730	91	5.	*	1		1345	166	0.	*	1		2000	241	0.
1		0120	17	20.	*	1		0735	92	4.	*	1		1350	167	0.	*	1		2005	242	0.
1		0125	18	26.	*	1		0740	93	3.	*	1		1355	168	0.	*	1		2010	243	0.
1		0130	19	35.	*	1		0745	94	2.	*	1		1400	169	0.	*	1		2015	244	0.
1		0135	20	51.	*	1		0750	95	2.	*	1		1405	170	0.	*	1		2020	245	0.
1		0140	21	72.	*	1		0755	96	1.	*	1		1410	171	0.	*	1		2025	246	0.
1		0145	22	94.	*	1		0800	97	1.	*	1		1415	172	0.	*	1		2030	247	0.
1		0150	23	112.	*	1		0805	98	1.	*	1		1420	173	0.	*	1		2035	248	0.
1		0155	24	122.	*	1		0810	99	0.	*	1		1425	174	0.	*	1		2040	249	0.
1		0200	25	124.	*	1		0815	100	0.	*	1		1430	175	0.	*	1		2045	250	0.
1		0205	26	121.	*	1		0820	101	0.	*	1		1435	176	0.	*	1		2050	251	0.
1		0210	27	120.	*	1		0825	102	0.	*	1		1440	177	0.	*	1		2055	252	0.
1		0215	28	129.	*	1		0830	103	0.	*	1		1445	178	0.	*	1		2100	253	0.
1		0220	29	153.	*	1		0835	104	0.	*	1		1450	179	0.	*	1		2105	254	0.
1		0225	30	186.	*	1		0840	105	0.	*	1		1455	180	0.	*	1		2110	255	0.
1		0230	31	215.	*	1		0845	106	0.	*	1		1500	181	0.	*	1		2115	256	0.
1		0235	32	230.	*	1		0850	107	0.	*	1		1505	182	0.	*	1		2120	257	0.
1		0240	33	235.	*	1		0855	108	0.	*	1		1510	183	0.	*	1		2125	258	0.
1		0245	34	245.	*	1		0900	109	0.	*	1		1515	184	0.	*	1		2130	259	0.
1		0250	35	264.	*	1		0905	110	0.	*	1		1520	185	0.	*	1		2135	260	0.
1		0255	36	282.	*	1		0910	111	0.	*	1		1525	186	0.	*	1		2140	261	0.
1		0300	37	289.	*	1		0915	112	0.	*	1		1530	187	0.	*	1		2145	262	0.
1		0305	38	302.	*	1		0920	113	0.	*	1		1535	188	0.	*	1		2150	263	0.
1		0310	39	351.	*	1		0925	114	0.	*	1		1540	189	0.	*	1		2155	264	0.
1		0315	40	468.	*	1		0930	115	0.	*	1		1545	190	0.	*	1		2200	265	0.
1		0320	41	706.	*	1		0935	116	0.	*	1		1550	191	0.	*	1		2205	266	0.
1		0325	42	1135.	*	1		0940	117	0.	*	1		1555	192	0.	*	1		2210	267	0.
1		0330	43	1780.	*	1		0945	118	0.	*	1		1600	193	0.	*	1		2215	268	0.

1	0335	44	2527.	*	1	0950	119	0.	*	1	1605	194	0.	*	1	2220	269	0.
1	0340	45	3136.	*	1	0955	120	0.	*	1	1610	195	0.	*	1	2225	270	0.
1	0345	46	3455.	*	1	1000	121	0.	*	1	1615	196	0.	*	1	2230	271	0.
1	0350	47	3521.	*	1	1005	122	0.	*	1	1620	197	0.	*	1	2235	272	0.
1	0355	48	3444.	*	1	1010	123	0.	*	1	1625	198	0.	*	1	2240	273	0.
1	0400	49	3315.	*	1	1015	124	0.	*	1	1630	199	0.	*	1	2245	274	0.
1	0405	50	3156.	*	1	1020	125	0.	*	1	1635	200	0.	*	1	2250	275	0.
1	0410	51	2961.	*	1	1025	126	0.	*	1	1640	201	0.	*	1	2255	276	0.
1	0415	52	2717.	*	1	1030	127	0.	*	1	1645	202	0.	*	1	2300	277	0.
1	0420	53	2437.	*	1	1035	128	0.	*	1	1650	203	0.	*	1	2305	278	0.
1	0425	54	2163.	*	1	1040	129	0.	*	1	1655	204	0.	*	1	2310	279	0.
1	0430	55	1935.	*	1	1045	130	0.	*	1	1700	205	0.	*	1	2315	280	0.
1	0435	56	1779.	*	1	1050	131	0.	*	1	1705	206	0.	*	1	2320	281	0.
1	0440	57	1674.	*	1	1055	132	0.	*	1	1710	207	0.	*	1	2325	282	0.
1	0445	58	1589.	*	1	1100	133	0.	*	1	1715	208	0.	*	1	2330	283	0.
1	0450	59	1511.	*	1	1105	134	0.	*	1	1720	209	0.	*	1	2335	284	0.
1	0455	60	1447.	*	1	1110	135	0.	*	1	1725	210	0.	*	1	2340	285	0.
1	0500	61	1391.	*	1	1115	136	0.	*	1	1730	211	0.	*	1	2345	286	0.
1	0505	62	1319.	*	1	1120	137	0.	*	1	1735	212	0.	*	1	2350	287	0.
1	0510	63	1220.	*	1	1125	138	0.	*	1	1740	213	0.	*	1	2355	288	0.
1	0515	64	1105.	*	1	1130	139	0.	*	1	1745	214	0.	*	2	0000	289	0.
1	0520	65	990.	*	1	1135	140	0.	*	1	1750	215	0.	*	2	0005	290	0.
1	0525	66	881.	*	1	1140	141	0.	*	1	1755	216	0.	*	2	0010	291	0.
1	0530	67	780.	*	1	1145	142	0.	*	1	1800	217	0.	*	2	0015	292	0.
1	0535	68	684.	*	1	1150	143	0.	*	1	1805	218	0.	*	2	0020	293	0.
1	0540	69	593.	*	1	1155	144	0.	*	1	1810	219	0.	*	2	0025	294	0.
1	0545	70	508.	*	1	1200	145	0.	*	1	1815	220	0.	*	2	0030	295	0.
1	0550	71	433.	*	1	1205	146	0.	*	1	1820	221	0.	*	2	0035	296	0.
1	0555	72	370.	*	1	1210	147	0.	*	1	1825	222	0.	*	2	0040	297	0.
1	0600	73	316.	*	1	1215	148	0.	*	1	1830	223	0.	*	2	0045	298	0.
1	0605	74	268.	*	1	1220	149	0.	*	1	1835	224	0.	*	2	0050	299	0.
1	0610	75	226.	*	1	1225	150	0.	*	1	1840	225	0.	*	2	0055	300	0.

PEAK FLOW	TIME	MAXIMUM AVERAGE FLOW			
		6-HR	24-HR	72-HR	24.92-HR
+ (CFS)	(HR)				
	(CFS)				
+ 3521.	3.83	870.	218.	210.	210.
	(INCHES)	1.842	1.847	1.847	1.847
	(AC-FT)	432.	433.	433.	433.

CUMULATIVE AREA = 4.39 SQ MI

HYDROGRAPH AT STATION CP5B
SUM OF 6 HYDROGRAPHS
PLAN 1, RATIO = .91

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		0615	76	186.	*	1		1230	151	0.	*	1		1845	226	0.
1		0005	2	0.	*	1		0620	77	154.	*	1		1235	152	0.	*	1		1850	227	0.
1		0010	3	0.	*	1		0625	78	127.	*	1		1240	153	0.	*	1		1855	228	0.
1		0015	4	1.	*	1		0630	79	104.	*	1		1245	154	0.	*	1		1900	229	0.
1		0020	5	2.	*	1		0635	80	85.	*	1		1250	155	0.	*	1		1905	230	0.
1		0025	6	3.	*	1		0640	81	69.	*	1		1255	156	0.	*	1		1910	231	0.
1		0030	7	5.	*	1		0645	82	56.	*	1		1300	157	0.	*	1		1915	232	0.
1		0035	8	6.	*	1		0650	83	44.	*	1		1305	158	0.	*	1		1920	233	0.
1		0040	9	7.	*	1		0655	84	35.	*	1		1310	159	0.	*	1		1925	234	0.
1		0045	10	9.	*	1		0700	85	27.	*	1		1315	160	0.	*	1		1930	235	0.
1		0050	11	11.	*	1		0705	86	21.	*	1		1320	161	0.	*	1		1935	236	0.
1		0055	12	11.	*	1		0710	87	16.	*	1		1325	162	0.	*	1		1940	237	0.
1		0100	13	11.	*	1		0715	88	12.	*	1		1330	163	0.	*	1		1945	238	0.
1		0105	14	10.	*	1		0720	89	9.	*	1		1335	164	0.	*	1		1950	239	0.
1		0110	15	12.	*	1		0725	90	7.	*	1		1340	165	0.	*	1		1955	240	0.
1		0115	16	15.	*	1		0730	91	5.	*	1		1345	166	0.	*	1		2000	241	0.
1		0120	17	18.	*	1		0735	92	4.	*	1		1350	167	0.	*	1		2005	242	0.
1		0125	18	24.	*	1		0740	93	3.	*	1		1355	168	0.	*	1		2010	243	0.
1		0130	19	33.	*	1		0745	94	2.	*	1		1400	169	0.	*	1		2015	244	0.
1		0135	20	48.	*	1		0750	95	2.	*	1		1405	170	0.	*	1		2020	245	0.
1		0140	21	69.	*	1		0755	96	1.	*	1		1410	171	0.	*	1		2025	246	0.
1		0145	22	90.	*	1		0800	97	1.	*	1		1415	172	0.	*	1		2030	247	0.
1		0150	23	107.	*	1		0805	98	1.	*	1		1420	173	0.	*	1		2035	248	0.
1		0155	24	117.	*	1		0810	99	0.	*	1		1425	174	0.	*	1		2040	249	0.
1		0200	25	120.	*	1		0815	100	0.	*	1		1430	175	0.	*	1		2045	250	0.
1		0205	26	117.	*	1		0820	101	0.	*	1		1435	176	0.	*	1		2050	251	0.
1		0210	27	116.	*	1		0825	102	0.	*	1		1440	177	0.	*	1		2055	252	0.
1		0215	28	125.	*	1		0830	103	0.	*	1		1445	178	0.	*	1		2100	253	0.
1		0220	29	148.	*	1		0835	104	0.	*	1		1450	179	0.	*	1		2105	254	0.
1		0225	30	180.	*	1		0840	105	0.	*	1		1455	180	0.	*	1		2110	255	0.
1		0230	31	209.	*	1		0845	106	0.	*	1		1500	181	0.	*	1		2115	256	0.
1		0235	32	223.	*	1		0850	107	0.	*	1		1505	182	0.	*	1		2120	257	0.
1		0240	33	228.	*	1		0855	108	0.	*	1		1510	183	0.	*	1		2125	258	0.
1		0245	34	238.	*	1		0900	109	0.	*	1		1515	184	0.	*	1		2130	259	0.
1		0250	35	257.	*	1		0905	110	0.	*	1		1520	185	0.	*	1		2135	260	0.
1		0255	36	274.	*	1		0910	111	0.	*	1		1525	186	0.	*	1		2140	261	0.
1		0300	37	282.	*	1		0915	112	0.	*	1		1530	187	0.	*	1		2145	262	0.
1		0305	38	295.	*	1		0920	113	0.	*	1		1535	188	0.	*	1		2150	263	0.
1		0310	39	343.	*	1		0925	114	0.	*	1		1540	189	0.	*	1		2155	264	0.
1		0315	40	457.	*	1		0930	115	0.	*	1		1545	190	0.	*	1		2200	265	0.
1		0320	41	691.	*	1		0935	116	0.	*	1		1550	191	0.	*	1		2205	266	0.
1		0325	42	1111.	*	1		0940	117	0.	*	1		1555	192	0.	*	1		2210	267	0.
1		0330	43	1743.	*	1		0945	118	0.	*	1		1600	193	0.	*	1		2215	268	0.
1		0335	44	2479.	*	1		0950	119	0.	*	1		1605	194	0.	*	1		2220	269	0.
1		0340	45	3075.	*	1		0955	120	0.	*	1		1610	195	0.	*	1		2225	270	0.
1		0345	46	3399.	*	1		1000	121	0.	*	1		1615	196	0.	*	1		2230	271	0.
1		0350	47	3464.	*	1		1005	122	0.	*	1		1620	197	0.	*	1		2235	272	0.
1		0355	48	3388.	*	1		1010	123	0.	*	1		1625	198	0.	*	1		2240	273	0.

1	0400	49	3262.	*	1	1015	124	0.	*	1	1630	199	0.	*	1	2245	274	0.
1	0405	50	3107.	*	1	1020	125	0.	*	1	1635	200	0.	*	1	2250	275	0.
1	0410	51	2915.	*	1	1025	126	0.	*	1	1640	201	0.	*	1	2255	276	0.
1	0415	52	2675.	*	1	1030	127	0.	*	1	1645	202	0.	*	1	2300	277	0.
1	0420	53	2400.	*	1	1035	128	0.	*	1	1650	203	0.	*	1	2305	278	0.
1	0425	54	2130.	*	1	1040	129	0.	*	1	1655	204	0.	*	1	2310	279	0.
1	0430	55	1908.	*	1	1045	130	0.	*	1	1700	205	0.	*	1	2315	280	0.
1	0435	56	1752.	*	1	1050	131	0.	*	1	1705	206	0.	*	1	2320	281	0.
1	0440	57	1649.	*	1	1055	132	0.	*	1	1710	207	0.	*	1	2325	282	0.
1	0445	58	1566.	*	1	1100	133	0.	*	1	1715	208	0.	*	1	2330	283	0.
1	0450	59	1490.	*	1	1105	134	0.	*	1	1720	209	0.	*	1	2335	284	0.
1	0455	60	1427.	*	1	1110	135	0.	*	1	1725	210	0.	*	1	2340	285	0.
1	0500	61	1371.	*	1	1115	136	0.	*	1	1730	211	0.	*	1	2345	286	0.
1	0505	62	1301.	*	1	1120	137	0.	*	1	1735	212	0.	*	1	2350	287	0.
1	0510	63	1204.	*	1	1125	138	0.	*	1	1740	213	0.	*	1	2355	288	0.
1	0515	64	1091.	*	1	1130	139	0.	*	1	1745	214	0.	*	2	0000	289	0.
1	0520	65	977.	*	1	1135	140	0.	*	1	1750	215	0.	*	2	0005	290	0.
1	0525	66	870.	*	1	1140	141	0.	*	1	1755	216	0.	*	2	0010	291	0.
1	0530	67	770.	*	1	1145	142	0.	*	1	1800	217	0.	*	2	0015	292	0.
1	0535	68	675.	*	1	1150	143	0.	*	1	1805	218	0.	*	2	0020	293	0.
1	0540	69	585.	*	1	1155	144	0.	*	1	1810	219	0.	*	2	0025	294	0.
1	0545	70	501.	*	1	1200	145	0.	*	1	1815	220	0.	*	2	0030	295	0.
1	0550	71	427.	*	1	1205	146	0.	*	1	1820	221	0.	*	2	0035	296	0.
1	0555	72	365.	*	1	1210	147	0.	*	1	1825	222	0.	*	2	0040	297	0.
1	0600	73	312.	*	1	1215	148	0.	*	1	1830	223	0.	*	2	0045	298	0.
1	0605	74	264.	*	1	1220	149	0.	*	1	1835	224	0.	*	2	0050	299	0.
1	0610	75	223.	*	1	1225	150	0.	*	1	1840	225	0.	*	2	0055	300	0.

PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
			6-HR	24-HR	72-HR	24.92-HR
+ (CFS)	(HR)					
		(CFS)				
+ 3464.	3.83		856.	214.	207.	207.
		(INCHES)	1.812	1.816	1.816	1.816
		(AC-FT)	424.	425.	425.	425.

CUMULATIVE AREA = 4.39 SQ MI

HYDROGRAPH AT STATION CP5B
SUM OF 6 HYDROGRAPHS
PLAN 1, RATIO = .70

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		0615	76	135.	*	1		1230	151	0.	*	1		1845	226	0.
1		0005	2	0.	*	1		0620	77	112.	*	1		1235	152	0.	*	1		1850	227	0.
1		0010	3	0.	*	1		0625	78	92.	*	1		1240	153	0.	*	1		1855	228	0.
1		0015	4	0.	*	1		0630	79	76.	*	1		1245	154	0.	*	1		1900	229	0.
1		0020	5	1.	*	1		0635	80	62.	*	1		1250	155	0.	*	1		1905	230	0.
1		0025	6	2.	*	1		0640	81	51.	*	1		1255	156	0.	*	1		1910	231	0.
1		0030	7	2.	*	1		0645	82	41.	*	1		1300	157	0.	*	1		1915	232	0.
1		0035	8	3.	*	1		0650	83	32.	*	1		1305	158	0.	*	1		1920	233	0.
1		0040	9	2.	*	1		0655	84	25.	*	1		1310	159	0.	*	1		1925	234	0.
1		0045	10	1.	*	1		0700	85	20.	*	1		1315	160	0.	*	1		1930	235	0.
1		0050	11	0.	*	1		0705	86	15.	*	1		1320	161	0.	*	1		1935	236	0.
1		0055	12	0.	*	1		0710	87	12.	*	1		1325	162	0.	*	1		1940	237	0.
1		0100	13	0.	*	1		0715	88	9.	*	1		1330	163	0.	*	1		1945	238	0.
1		0105	14	0.	*	1		0720	89	7.	*	1		1335	164	0.	*	1		1950	239	0.
1		0110	15	0.	*	1		0725	90	5.	*	1		1340	165	0.	*	1		1955	240	0.
1		0115	16	1.	*	1		0730	91	4.	*	1		1345	166	0.	*	1		2000	241	0.
1		0120	17	1.	*	1		0735	92	3.	*	1		1350	167	0.	*	1		2005	242	0.
1		0125	18	2.	*	1		0740	93	2.	*	1		1355	168	0.	*	1		2010	243	0.
1		0130	19	4.	*	1		0745	94	2.	*	1		1400	169	0.	*	1		2015	244	0.
1		0135	20	8.	*	1		0750	95	1.	*	1		1405	170	0.	*	1		2020	245	0.
1		0140	21	13.	*	1		0755	96	1.	*	1		1410	171	0.	*	1		2025	246	0.
1		0145	22	21.	*	1		0800	97	1.	*	1		1415	172	0.	*	1		2030	247	0.
1		0150	23	29.	*	1		0805	98	0.	*	1		1420	173	0.	*	1		2035	248	0.
1		0155	24	34.	*	1		0810	99	0.	*	1		1425	174	0.	*	1		2040	249	0.
1		0200	25	37.	*	1		0815	100	0.	*	1		1430	175	0.	*	1		2045	250	0.
1		0205	26	38.	*	1		0820	101	0.	*	1		1435	176	0.	*	1		2050	251	0.
1		0210	27	39.	*	1		0825	102	0.	*	1		1440	177	0.	*	1		2055	252	0.
1		0215	28	45.	*	1		0830	103	0.	*	1		1445	178	0.	*	1		2100	253	0.
1		0220	29	57.	*	1		0835	104	0.	*	1		1450	179	0.	*	1		2105	254	0.
1		0225	30	74.	*	1		0840	105	0.	*	1		1455	180	0.	*	1		2110	255	0.
1		0230	31	90.	*	1		0845	106	0.	*	1		1500	181	0.	*	1		2115	256	0.
1		0235	32	100.	*	1		0850	107	0.	*	1		1505	182	0.	*	1		2120	257	0.
1		0240	33	105.	*	1		0855	108	0.	*	1		1510	183	0.	*	1		2125	258	0.
1		0245	34	112.	*	1		0900	109	0.	*	1		1515	184	0.	*	1		2130	259	0.
1		0250	35	124.	*	1		0905	110	0.	*	1		1520	185	0.	*	1		2135	260	0.
1		0255	36	136.	*	1		0910	111	0.	*	1		1525	186	0.	*	1		2140	261	0.
1		0300	37	142.	*	1		0915	112	0.	*	1		1530	187	0.	*	1		2145	262	0.
1		0305	38	152.	*	1		0920	113	0.	*	1		1535	188	0.	*	1		2150	263	0.
1		0310	39	181.	*	1		0925	114	0.	*	1		1540	189	0.	*	1		2155	264	0.
1		0315	40	249.	*	1		0930	115	0.	*	1		1545	190	0.	*	1		2200	265	0.
1		0320	41	383.	*	1		0935	116	0.	*	1		1550	191	0.	*	1		2205	266	0.
1		0325	42	634.	*	1		0940	117	0.	*	1		1555	192	0.	*	1		2210	267	0.
1		0330	43	1039.	*	1		0945	118	0.	*	1		1600	193	0.	*	1		2215	268	0.
1		0335	44	1532.	*	1		0950	119	0.	*	1		1605	194	0.	*	1		2220	269	0.
1		0340	45	1955.	*	1		0955	120	0.	*	1		1610	195	0.	*	1		2225	270	0.
1		0345	46	2205.	*	1		1000	121	0.	*	1		1615	196	0.	*	1		2230	271	0.
1		0350	47	2273.	*	1		1005	122	0.	*	1		1620	197	0.	*	1		2235	272	0.
1		0355	48	2243.	*	1		1010	123	0.	*	1		1625	198	0.	*	1		2240	273	0.
1		0400	49	2174.	*	1		1015	124	0.	*	1		1630	199	0.	*	1		2245	274	0.
1		0405	50	2083.	*	1		1020	125	0.	*	1		1635	200	0.	*	1		2250	275	0.
1		0410	51	1966.	*	1		1025	126	0.	*	1		1640	201	0.	*	1		2255	276	0.
1		0415	52	1816.	*	1		1030	127	0.	*	1		1645	202	0.	*	1		2300	277	0.
1		0420	53	1639.	*	1		1035	128	0.	*	1		1650	203	0.	*	1		2305	278	0.

1	0425	54	1462.	*	1	1040	129	0.	*	1	1655	204	0.	*	1	2310	279	0.
1	0430	55	1314.	*	1	1045	130	0.	*	1	1700	205	0.	*	1	2315	280	0.
1	0435	56	1211.	*	1	1050	131	0.	*	1	1705	206	0.	*	1	2320	281	0.
1	0440	57	1143.	*	1	1055	132	0.	*	1	1710	207	0.	*	1	2325	282	0.
1	0445	58	1089.	*	1	1100	133	0.	*	1	1715	208	0.	*	1	2330	283	0.
1	0450	59	1040.	*	1	1105	134	0.	*	1	1720	209	0.	*	1	2335	284	0.
1	0455	60	999.	*	1	1110	135	0.	*	1	1725	210	0.	*	1	2340	285	0.
1	0500	61	963.	*	1	1115	136	0.	*	1	1730	211	0.	*	1	2345	286	0.
1	0505	62	918.	*	1	1120	137	0.	*	1	1735	212	0.	*	1	2350	287	0.
1	0510	63	852.	*	1	1125	138	0.	*	1	1740	213	0.	*	1	2355	288	0.
1	0515	64	775.	*	1	1130	139	0.	*	1	1745	214	0.	*	2	0000	289	0.
1	0520	65	696.	*	1	1135	140	0.	*	1	1750	215	0.	*	2	0005	290	0.
1	0525	66	621.	*	1	1140	141	0.	*	1	1755	216	0.	*	2	0010	291	0.
1	0530	67	551.	*	1	1145	142	0.	*	1	1800	217	0.	*	2	0015	292	0.
1	0535	68	485.	*	1	1150	143	0.	*	1	1805	218	0.	*	2	0020	293	0.
1	0540	69	421.	*	1	1155	144	0.	*	1	1810	219	0.	*	2	0025	294	0.
1	0545	70	360.	*	1	1200	145	0.	*	1	1815	220	0.	*	2	0030	295	0.
1	0550	71	306.	*	1	1205	146	0.	*	1	1820	221	0.	*	2	0035	296	0.
1	0555	72	262.	*	1	1210	147	0.	*	1	1825	222	0.	*	2	0040	297	0.
1	0600	73	224.	*	1	1215	148	0.	*	1	1830	223	0.	*	2	0045	298	0.
1	0605	74	191.	*	1	1220	149	0.	*	1	1835	224	0.	*	2	0050	299	0.
1	0610	75	161.	*	1	1225	150	0.	*	1	1840	225	0.	*	2	0055	300	0.
				*					*					*				

PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
			6-HR	24-HR	72-HR	24.92-HR
+ (CFS)	(HR)					
		(CFS)				
+ 2273.	3.83		562.	141.	135.	135.
		(INCHES)	1.190	1.191	1.191	1.191
		(AC-FT)	279.	279.	279.	279.

CUMULATIVE AREA = 4.39 SQ MI

HYDROGRAPH AT STATION CP5B
SUM OF 6 HYDROGRAPHS
PLAN 1, RATIO = .54

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		0615	76	101.	*	1		1230	151	0.	*	1		1845	226	0.
1		0005	2	0.	*	1		0620	77	85.	*	1		1235	152	0.	*	1		1850	227	0.
1		0010	3	0.	*	1		0625	78	71.	*	1		1240	153	0.	*	1		1855	228	0.
1		0015	4	0.	*	1		0630	79	59.	*	1		1245	154	0.	*	1		1900	229	0.
1		0020	5	0.	*	1		0635	80	49.	*	1		1250	155	0.	*	1		1905	230	0.
1		0025	6	0.	*	1		0640	81	41.	*	1		1255	156	0.	*	1		1910	231	0.
1		0030	7	1.	*	1		0645	82	34.	*	1		1300	157	0.	*	1		1915	232	0.
1		0035	8	1.	*	1		0650	83	27.	*	1		1305	158	0.	*	1		1920	233	0.
1		0040	9	1.	*	1		0655	84	22.	*	1		1310	159	0.	*	1		1925	234	0.
1		0045	10	1.	*	1		0700	85	17.	*	1		1315	160	0.	*	1		1930	235	0.
1		0050	11	0.	*	1		0705	86	13.	*	1		1320	161	0.	*	1		1935	236	0.
1		0055	12	0.	*	1		0710	87	10.	*	1		1325	162	0.	*	1		1940	237	0.
1		0100	13	0.	*	1		0715	88	8.	*	1		1330	163	0.	*	1		1945	238	0.
1		0105	14	0.	*	1		0720	89	6.	*	1		1335	164	0.	*	1		1950	239	0.
1		0110	15	0.	*	1		0725	90	5.	*	1		1340	165	0.	*	1		1955	240	0.
1		0115	16	0.	*	1		0730	91	4.	*	1		1345	166	0.	*	1		2000	241	0.
1		0120	17	1.	*	1		0735	92	3.	*	1		1350	167	0.	*	1		2005	242	0.
1		0125	18	1.	*	1		0740	93	2.	*	1		1355	168	0.	*	1		2010	243	0.
1		0130	19	1.	*	1		0745	94	1.	*	1		1400	169	0.	*	1		2015	244	0.
1		0135	20	2.	*	1		0750	95	1.	*	1		1405	170	0.	*	1		2020	245	0.
1		0140	21	2.	*	1		0755	96	1.	*	1		1410	171	0.	*	1		2025	246	0.
1		0145	22	2.	*	1		0800	97	1.	*	1		1415	172	0.	*	1		2030	247	0.
1		0150	23	2.	*	1		0805	98	0.	*	1		1420	173	0.	*	1		2035	248	0.
1		0155	24	2.	*	1		0810	99	0.	*	1		1425	174	0.	*	1		2040	249	0.
1		0200	25	2.	*	1		0815	100	0.	*	1		1430	175	0.	*	1		2045	250	0.
1		0205	26	3.	*	1		0820	101	0.	*	1		1435	176	0.	*	1		2050	251	0.
1		0210	27	4.	*	1		0825	102	0.	*	1		1440	177	0.	*	1		2055	252	0.
1		0215	28	5.	*	1		0830	103	0.	*	1		1445	178	0.	*	1		2100	253	0.
1		0220	29	8.	*	1		0835	104	0.	*	1		1450	179	0.	*	1		2105	254	0.
1		0225	30	12.	*	1		0840	105	0.	*	1		1455	180	0.	*	1		2110	255	0.
1		0230	31	18.	*	1		0845	106	0.	*	1		1500	181	0.	*	1		2115	256	0.
1		0235	32	24.	*	1		0850	107	0.	*	1		1505	182	0.	*	1		2120	257	0.
1		0240	33	30.	*	1		0855	108	0.	*	1		1510	183	0.	*	1		2125	258	0.
1		0245	34	35.	*	1		0900	109	0.	*	1		1515	184	0.	*	1		2130	259	0.
1		0250	35	40.	*	1		0905	110	0.	*	1		1520	185	0.	*	1		2135	260	0.
1		0255	36	47.	*	1		0910	111	0.	*	1		1525	186	0.	*	1		2140	261	0.
1		0300	37	54.	*	1		0915	112	0.	*	1		1530	187	0.	*	1		2145	262	0.
1		0305	38	60.	*	1		0920	113	0.	*	1		1535	188	0.	*	1		2150	263	0.
1		0310	39	70.	*	1		0925	114	0.	*	1		1540	189	0.	*	1		2155	264	0.
1		0315	40	99.	*	1		0930	115	0.	*	1		1545	190	0.	*	1		2200	265	0.
1		0320	41	172.	*	1		0935	116	0.	*	1		1550	191	0.	*	1		2205	266	0.
1		0325	42	318.	*	1		0940	117	0.	*	1		1555	192	0.	*	1		2210	267	0.
1		0330	43	563.	*	1		0945	118	0.	*	1		1600	193	0.	*	1		2215	268	0.
1		0335	44	879.	*	1		0950	119	0.	*	1		1605	194	0.	*	1		2220	269	0.
1		0340	45	1171.	*	1		0955	120	0.	*	1		1610	195	0.	*	1		2225	270	0.
1		0345	46	1355.	*	1		1000	121	0.	*	1		1615	196	0.	*	1		2230	271	0.
1		0350	47	1421.	*	1		1005	122	0.	*	1		1620	197	0.	*	1		2235	272	0.
1		0355	48	1417.	*	1		1010	123	0.	*	1		1625	198	0.	*	1		2240	273	0.
1		0400	49	1385.	*	1		1015	124	0.	*	1		1630	199	0.	*	1		2245	274	0.
1		0405	50	1338.	*	1		1020	125	0.	*	1		1635	200	0.	*	1		2250	275	0.
1		0410	51	1274.	*	1		1025	126	0.	*	1		1640	201	0.	*	1		2255	276	0.
1		0415	52	1187.	*	1		1030	127	0.	*	1		1645	202	0.	*	1		2300	277	0.
1		0420	53	1079.	*	1		1035	128	0.	*	1		1650	203	0.	*	1		2305	278	0.
1		0425	54	968.	*	1		1040	129	0.	*	1		1655	204	0.	*	1		2310	279	0.
1		0430	55	874.	*	1		1045	130	0.	*	1		1700	205	0.	*	1		2315	280	0.
1		0435	56	808.	*	1		1050	131	0.	*	1		1705	206	0.	*	1		2320	281	0.
1		0440	57	766.	*	1		1055	132	0.	*	1		1710	207	0.	*	1		2325	282	0.
1		0445	58	734.	*	1		1100	133	0.	*	1		1715	208	0.	*	1		2330	283	0.

1	0450	59	705.	*	1	1105	134	0.	*	1	1720	209	0.	*	1	2335	284	0.
1	0455	60	679.	*	1	1110	135	0.	*	1	1725	210	0.	*	1	2340	285	0.
1	0500	61	657.	*	1	1115	136	0.	*	1	1730	211	0.	*	1	2345	286	0.
1	0505	62	629.	*	1	1120	137	0.	*	1	1735	212	0.	*	1	2350	287	0.
1	0510	63	588.	*	1	1125	138	0.	*	1	1740	213	0.	*	1	2355	288	0.
1	0515	64	537.	*	1	1130	139	0.	*	1	1745	214	0.	*	2	0000	289	0.
1	0520	65	484.	*	1	1135	140	0.	*	1	1750	215	0.	*	2	0005	290	0.
1	0525	66	433.	*	1	1140	141	0.	*	1	1755	216	0.	*	2	0010	291	0.
1	0530	67	385.	*	1	1145	142	0.	*	1	1800	217	0.	*	2	0015	292	0.
1	0535	68	339.	*	1	1150	143	0.	*	1	1805	218	0.	*	2	0020	293	0.
1	0540	69	296.	*	1	1155	144	0.	*	1	1810	219	0.	*	2	0025	294	0.
1	0545	70	255.	*	1	1200	145	0.	*	1	1815	220	0.	*	2	0030	295	0.
1	0550	71	218.	*	1	1205	146	0.	*	1	1820	221	0.	*	2	0035	296	0.
1	0555	72	188.	*	1	1210	147	0.	*	1	1825	222	0.	*	2	0040	297	0.
1	0600	73	162.	*	1	1215	148	0.	*	1	1830	223	0.	*	2	0045	298	0.
1	0605	74	139.	*	1	1220	149	0.	*	1	1835	224	0.	*	2	0050	299	0.
1	0610	75	119.	*	1	1225	150	0.	*	1	1840	225	0.	*	2	0055	300	0.
				*					*					*				

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PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
			6-HR	24-HR	72-HR	24.92-HR
+ (CFS)	(HR)					
		(CFS)				
+ 1421.	3.83		355.	89.	86.	86.
		(INCHES)	.753	.753	.753	.753
		(AC-FT)	176.	176.	176.	176.

CUMULATIVE AREA = 4.39 SQ MI

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            **************
            *            *
153 KK      *      EXDB  *
            *            *
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154 KO OUTPUT CONTROL VARIABLES
IPRNT 1 PRINT CONTROL
IPLOT 0 PLOT CONTROL
QSCAL 0. HYDROGRAPH PLOT SCALE
DETENTION BASIN CHEYENNE AND BELTWAY
LOW-FLOW OUTLET IS 66" PIPE

HYDROGRAPH ROUTING DATA

157 RS STORAGE ROUTING
NSTPS 1 NUMBER OF SUBREACHES
ITYP STOR TYPE OF INITIAL CONDITION
RSVRIC .00 INITIAL CONDITION
X .00 WORKING R AND D COEFFICIENT

158 SV	STORAGE	.0	.1	.8	12.7	18.8	25.0	85.9	95.0	124.2	135.1
		200.3	243.1	258.1	273.4	289.0	305.0				

160 SE	ELEVATION	2990.00	2991.00	2992.00	2995.00	2996.00	2997.00	3005.00	3006.00	3009.00	3010.00
		3015.00	3018.00	3019.00	3020.00	3021.00	3022.00				

162 SL LOW-LEVEL OUTLET
ELEVL 2993.70 ELEVATION AT CENTER OF OUTLET
CAREA 22.31 CROSS-SECTIONAL AREA
COQL .70 COEFFICIENT
EXPL .50 EXPONENT OF HEAD

163 SS SPILLWAY
CREL 3021.90 SPILLWAY CREST ELEVATION
SPWID 200.00 SPILLWAY WIDTH
COQW 2.60 WEIR COEFFICIENT
EXPW 1.50 EXPONENT OF HEAD

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COMPUTED OUTFLOW-ELEVATION DATA

OUTFLOW	.00	.00	206.52	229.08	257.18	293.14	340.79	406.93	504.93	665.11
ELEVATION	2990.00	2993.70	2996.42	2997.05	2997.92	2999.18	3001.10	3004.26	3009.95	3021.90
OUTFLOW	665.18	665.40	665.87	666.62	667.82	669.47	671.71	674.64	678.30	682.76
ELEVATION	3021.90	3021.91	3021.91	3021.92	3021.93	3021.94	3021.95	3021.97	3021.98	3022.00

COMPUTED STORAGE-OUTFLOW-ELEVATION DATA

STORAGE	.00	.07	.80	7.55	12.71	18.75	21.39	25.05	25.39	32.03
OUTFLOW	.00	.00	.00	.00	142.81	189.95	206.52	227.53	229.08	257.18
ELEVATION	2990.00	2991.00	2992.00	2993.70	2995.00	2996.00	2996.42	2997.00	2997.05	2997.92
STORAGE	41.63	56.29	80.29	85.95	95.04	124.21	134.62	135.14	200.27	243.11
OUTFLOW	293.14	340.79	406.93	421.03	439.26	489.91	504.93	505.67	578.05	617.41
ELEVATION	2999.18	3001.10	3004.26	3005.00	3006.00	3009.00	3009.95	3010.00	3015.00	3018.00
STORAGE	258.06	273.36	289.00	303.39	303.57	303.83	304.00	304.21	304.44	304.70
OUTFLOW	629.99	642.32	654.42	665.11	665.87	667.82	669.47	671.71	674.64	678.30
ELEVATION	3019.00	3020.00	3021.00	3021.90	3021.91	3021.93	3021.94	3021.95	3021.97	3021.98
STORAGE	304.99									
OUTFLOW	682.76									
ELEVATION	3022.00									

WARNING --- ROUTED OUTFLOW (749.) IS GREATER THAN MAXIMUM OUTFLOW (683.) IN STORAGE-OUTFLOW TABLE

WARNING --- ROUTED OUTFLOW (833.) IS GREATER THAN MAXIMUM OUTFLOW (683.) IN STORAGE-OUTFLOW TABLE

WARNING --- ROUTED OUTFLOW (901.) IS GREATER THAN MAXIMUM OUTFLOW (683.) IN STORAGE-OUTFLOW TABLE

WARNING --- ROUTED OUTFLOW (952.) IS GREATER THAN MAXIMUM OUTFLOW (683.) IN STORAGE-OUTFLOW TABLE

WARNING --- ROUTED OUTFLOW (986.) IS GREATER THAN MAXIMUM OUTFLOW (683.) IN STORAGE-OUTFLOW TABLE

WARNING --- ROUTED OUTFLOW (1004.) IS GREATER THAN MAXIMUM OUTFLOW (683.) IN STORAGE-OUTFLOW TABLE

WARNING --- ROUTED OUTFLOW (1007.) IS GREATER THAN MAXIMUM OUTFLOW (683.) IN STORAGE-OUTFLOW TABLE

WARNING --- ROUTED OUTFLOW (999.) IS GREATER THAN MAXIMUM OUTFLOW (683.) IN STORAGE-OUTFLOW TABLE

WARNING --- ROUTED OUTFLOW (979.) IS GREATER THAN MAXIMUM OUTFLOW (683.) IN STORAGE-OUTFLOW TABLE

WARNING --- ROUTED OUTFLOW (952.) IS GREATER THAN MAXIMUM OUTFLOW (683.) IN STORAGE-OUTFLOW TABLE

WARNING --- ROUTED OUTFLOW (917.) IS GREATER THAN MAXIMUM OUTFLOW (683.) IN STORAGE-OUTFLOW TABLE

WARNING --- ROUTED OUTFLOW (877.) IS GREATER THAN MAXIMUM OUTFLOW (683.) IN STORAGE-OUTFLOW TABLE

WARNING --- ROUTED OUTFLOW (833.) IS GREATER THAN MAXIMUM OUTFLOW (683.) IN STORAGE-OUTFLOW TABLE

WARNING --- ROUTED OUTFLOW (787.) IS GREATER THAN MAXIMUM OUTFLOW (683.) IN STORAGE-OUTFLOW TABLE

WARNING --- ROUTED OUTFLOW (740.) IS GREATER THAN MAXIMUM OUTFLOW (683.) IN STORAGE-OUTFLOW TABLE

WARNING --- ROUTED OUTFLOW (693.) IS GREATER THAN MAXIMUM OUTFLOW (683.) IN STORAGE-OUTFLOW TABLE

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HYDROGRAPH AT STATION EXDB
PLAN 1, RATIO = 1.00

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DA	MON	HRMN	ORD	OUTFLOW	STORAGE	STAGE	DA	MON	HRMN	ORD	OUTFLOW	STORAGE	STAGE	DA	MON	HRMN	ORD	OUTFLOW	STORAGE	STAGE
1		0000	1	0.	.0	2990.0	1		0820	101	579.	201.8	3015.1	1		1640	201	0.	7.6	2993.7
1		0005	2	0.	.0	2990.0	1		0825	102	575.	197.8	3014.8	1		1645	202	0.	7.6	2993.7
1		0010	3	0.	.0	2990.0	1		0830	103	571.	193.9	3014.5	1		1650	203	0.	7.6	2993.7
1		0015	4	0.	.0	2990.1	1		0835	104	567.	189.9	3014.2	1		1655	204	0.	7.6	2993.7
1		0020	5	0.	.0	2990.3	1		0840	105	562.	186.1	3013.9	1		1700	205	0.	7.6	2993.7
1		0025	6	0.	.0	2990.6	1		0845	106	558.	182.2	3013.6	1		1705	206	0.	7.6	2993.7
1		0030	7	0.	.1	2991.0	1		0850	107	554.	178.4	3013.3	1		1710	207	0.	7.6	2993.7
1		0035	8	0.	.1	2991.1	1		0855	108	549.	174.6	3013.0	1		1715	208	0.	7.6	2993.7
1		0040	9	0.	.2	2991.2	1		0900	109	545.	170.8	3012.7	1		1720	209	0.	7.6	2993.7
1		0045	10	0.	.4	2991.4	1		0905	110	541.	167.1	3012.5	1		1725	210	0.	7.6	2993.7
1		0050	11	0.	.5	2991.6	1		0910	111	537.	163.3	3012.2	1		1730	211	0.	7.6	2993.7
1		0055	12	0.	.7	2991.8	1		0915	112	533.	159.7	3011.9	1		1735	212	0.	7.6	2993.7
1		0100	13	0.	.8	2992.0	1		0920	113	529.	156.0	3011.6	1		1740	213	0.	7.6	2993.7
1		0105	14	0.	1.0	2992.0	1		0925	114	525.	152.4	3011.3	1		1745	214	0.	7.6	2993.7
1		0110	15	0.	1.2	2992.1	1		0930	115	521.	148.8	3011.0	1		1750	215	0.	7.6	2993.7
1		0115	16	0.	1.3	2992.1	1		0935	116	517.	145.2	3010.8	1		1755	216	0.	7.5	2993.7
1		0120	17	0.	1.5	2992.2	1		0940	117	513.	141.7	3010.5	1		1800	217	0.	7.5	2993.7
1		0125	18	0.	1.8	2992.3	1		0945	118	509.	138.1	3010.2	1		1805	218	0.	7.5	2993.7
1		0130	19	0.	2.1	2992.3	1		0950	119	505.	134.6	3010.0	1		1810	219	0.	7.5	2993.7
1		0135	20	0.	2.6	2992.4	1		0955	120	500.	131.2	3009.6	1		1815	220	0.	7.5	2993.7
1		0140	21	0.	3.2	2992.6	1		1000	121	495.	127.8	3009.3	1		1820	221	0.	7.5	2993.7
1		0145	22	0.	3.9	2992.8	1		1005	122	490.	124.4	3009.0	1		1825	222	0.	7.5	2993.7
1		0150	23	0.	4.9	2993.0	1		1010	123	484.	121.0	3008.7	1		1830	223	0.	7.5	2993.7
1		0155	24	0.	6.0	2993.3	1		1015	124	479.	117.7	3008.3	1		1835	224	0.	7.5	2993.7
1		0200	25	0.	7.1	2993.6	1		1020	125	473.	114.4	3008.0	1		1840	225	0.	7.5	2993.7
1		0205	26	16.	8.1	2993.8	1		1025	126	467.	111.2	3007.7	1		1845	226	0.	7.5	2993.7
1		0210	27	40.	9.0	2994.1	1		1030	127	462.	108.0	3007.3	1		1850	227	0.	7.5	2993.7
1		0215	28	61.	9.7	2994.3	1		1035	128	456.	104.8	3007.0	1		1855	228	0.	7.5	2993.7
1		0220	29	81.	10.5	2994.4	1		1040	129	451.	101.7	3006.7	1		1900	229	0.	7.5	2993.7
1		0225	30	104.	11.3	2994.6	1		1045	130	445.	98.6	3006.4	1		1905	230	0.	7.5	2993.7
1		0230	31	130.	12.2	2994.9	1		1050	131	440.	95.6	3006.1	1		1910	231	0.	7.5	2993.7
1		0235	32	146.	13.2	2995.1	1		1055	132	434.	92.5	3005.7	1		1915	232	0.	7.5	2993.7
1		0240	33	154.	14.1	2995.2	1		1100	133	428.	89.6	3005.4	1		1920	233	0.	7.5	2993.7
1		0245	34	161.	15.0	2995.4	1		1105	134	422.	86.6	3005.1	1		1925	234	0.	7.5	2993.7
1		0250	35	169.	16.0	2995.6	1		1110	135	416.	83.8	3004.7	1		1930	235	0.	7.5	2993.7
1		0255	36	177.	17.1	2995.7	1		1115	136	409.	80.9	3004.3	1		1935	236	0.	7.5	2993.7
1		0300	37	186.	18.2	2995.9	1		1120	137	401.	78.1	3004.0	1		1940	237	0.	7.5	2993.7
1		0305	38	194.	19.4	2996.1	1		1125	138	393.	75.4	3003.6	1		1945	238	0.	7.5	2993.7
1		0310	39	202.	20.7	2996.3	1		1130	139	386.	72.7	3003.3	1		1950	239	0.	7.5	2993.7
1		0315	40	214.	22.6	2996.6	1		1135	140	379.	70.1	3002.9	1		1955	240	0.	7.5	2993.7
1		0320	41	231.	25.9	2997.1	1		1140	141	372.	67.5	3002.6	1		2000	241	0.	7.5	2993.7
1		0325	42	256.	31.7	2997.9	1		1145	142	365.	65.0	3002.2	1		2005	242	0.	7.5	2993.7
1		0330	43	293.	41.5	2999.2	1		1150	143	358.	62.5	3001.9	1		2010	243	0.	7.5	2993.7
1		0335	44	341.	56.4	3001.1	1		1155	144	351.	60.0	3001.6	1		2015	244	0.	7.5	2993.7
1		0340	45	396.	76.2	3003.7	1		1200	145	345.	57.6	3001.3	1		2020	245	0.	7.5	2993.7
1		0345	46	446.	99.1	3006.4	1		1205	146	338.	55.3	3001.0	1		2025	246	0.	7.5	2993.7
1		0350	47	488.	123.1	3008.9	1		1210	147	330.	53.0	3000.7	1		2030	247	0.	7.5	2993.7
1		0355	48	519.	146.8	3010.9	1		1215	148	323.	50.7	3000.4	1		2035	248	0.	7.5	2993.7
1		0400	49	544.	169.4	3012.6	1		1220	149	316.	48.5	3000.1	1		2040	249	0.	7.5	2993.7
1		0405	50	567.	190.7	3014.3	1		1225	150	309.	46.4	2999.8	1		2045	250	0.	7.5	2993.7
1		0410	51	587.	210.4	3015.7	1		1230	151	302.	44.3	2999.5	1		2050	251	0.	7.5	2993.7
1		0415	52	604.	228.2	3017.0	1		1235	152	295.	42.2	2999.3	1		2055	252	0.	7.5	2993.7
1		0420	53	618.	243.9	3018.1	1		1240	153	288.	40.2	2999.0	1		2100	253	0.	7.5	2993.7
1		0425	54	629.	257.4	3019.0	1		1245	154	281.	38.3	2998.7	1		2105	254	0.	7.5	2993.7
1		0430	55	639.	268.8	3019.7	1		1250	155	273.	36.4	2998.5	1		2110	255	0.	7.5	2993.7
1		0435	56	646.	278.7	3020.3	1		1255	156	266.	34.5	2998.2	1		2115	256	0.	7.5	2993.7
1		0440	57	653.	287.5	3020.9	1		1300	157	260.	32.7	2998.0	1		2120	257	0.	7.5	2993.7
1		0445	58	659.	295.5	3021.4	1		1305	158	253.	30.9	2997.8	1		2125	258	0.	7.5	2993.7
1		0450	59	665.	302.8	3021.9	1		1310	159	245.	29.2	2997.5	1		2130	259	0.	7.5	2993.7
1		0455	60	749.	309.3	3022.3	1		1315	160	238.	27.6	2997.3	1		2135	260	0.	7.5	2993.7
1		0500	61	833.	314.7	3022.6	1		1320	161	231.	25.9	2997.1	1		2140	261	0.	7.5	2993.7
1		0505	62	901.	319.1	3022.9	1		1325	162	224.	24.4	2996.9	1		2145	262	0.	7.5	2993.7
1		0510	63	952.	322.4	3023.1	1		1330	163	215.	22.9	2996.7	1		2150	263	0.	7.5	2993.7

1	0515	64	986.	324.6	3023.2	*	1	1335	164	207.	21.4	2996.4	*	1	2155	264	0.	7.5	2993.7
1	0520	65	1004.	325.8	3023.3	*	1	1340	165	198.	20.0	2996.2	*	1	2200	265	0.	7.5	2993.7
1	0525	66	1007.	326.0	3023.3	*	1	1345	166	189.	18.7	2996.0	*	1	2205	266	0.	7.5	2993.7
1	0530	67	999.	325.4	3023.3	*	1	1350	167	179.	17.4	2995.8	*	1	2210	267	0.	7.5	2993.7
1	0535	68	979.	324.2	3023.2	*	1	1355	168	170.	16.2	2995.6	*	1	2215	268	0.	7.5	2993.7
1	0540	69	952.	322.4	3023.1	*	1	1400	169	161.	15.1	2995.4	*	1	2220	269	0.	7.5	2993.7
1	0545	70	917.	320.2	3022.9	*	1	1405	170	153.	14.0	2995.2	*	1	2225	270	0.	7.5	2993.7
1	0550	71	877.	317.6	3022.8	*	1	1410	171	145.	13.0	2995.0	*	1	2230	271	0.	7.5	2993.7
1	0555	72	833.	314.7	3022.6	*	1	1415	172	124.	12.0	2994.8	*	1	2235	272	0.	7.5	2993.7
1	0600	73	787.	311.8	3022.4	*	1	1420	173	102.	11.3	2994.6	*	1	2240	273	0.	7.5	2993.7
1	0605	74	740.	308.7	3022.2	*	1	1425	174	85.	10.6	2994.5	*	1	2245	274	0.	7.5	2993.7
1	0610	75	693.	305.7	3022.0	*	1	1430	175	70.	10.1	2994.3	*	1	2250	275	0.	7.5	2993.7
1	0615	76	664.	302.6	3021.8	*	1	1435	176	58.	9.6	2994.2	*	1	2255	276	0.	7.5	2993.7
1	0620	77	662.	299.3	3021.6	*	1	1440	177	48.	9.3	2994.1	*	1	2300	277	0.	7.5	2993.7
1	0625	78	659.	295.8	3021.4	*	1	1445	178	39.	9.0	2994.1	*	1	2305	278	0.	7.5	2993.7
1	0630	79	657.	292.2	3021.2	*	1	1450	179	33.	8.7	2994.0	*	1	2310	279	0.	7.5	2993.7
1	0635	80	654.	288.4	3021.0	*	1	1455	180	27.	8.5	2993.9	*	1	2315	280	0.	7.5	2993.7
1	0640	81	651.	284.5	3020.7	*	1	1500	181	22.	8.4	2993.9	*	1	2320	281	0.	7.5	2993.7
1	0645	82	648.	280.5	3020.5	*	1	1505	182	18.	8.2	2993.9	*	1	2325	282	0.	7.5	2993.7
1	0650	83	645.	276.4	3020.2	*	1	1510	183	15.	8.1	2993.8	*	1	2330	283	0.	7.5	2993.7
1	0655	84	641.	272.3	3019.9	*	1	1515	184	13.	8.0	2993.8	*	1	2335	284	0.	7.5	2993.7
1	0700	85	638.	268.2	3019.7	*	1	1520	185	10.	7.9	2993.8	*	1	2340	285	0.	7.5	2993.7
1	0705	86	635.	264.0	3019.4	*	1	1525	186	9.	7.9	2993.8	*	1	2345	286	0.	7.5	2993.7
1	0710	87	631.	259.7	3019.1	*	1	1530	187	7.	7.8	2993.8	*	1	2350	287	0.	7.5	2993.7
1	0715	88	628.	255.5	3018.8	*	1	1535	188	6.	7.8	2993.8	*	1	2355	288	0.	7.5	2993.7
1	0720	89	624.	251.3	3018.5	*	1	1540	189	5.	7.7	2993.7	*	2	0000	289	0.	7.5	2993.7
1	0725	90	621.	247.1	3018.3	*	1	1545	190	4.	7.7	2993.7	*	2	0005	290	0.	7.5	2993.7
1	0730	91	617.	242.8	3018.0	*	1	1550	191	3.	7.7	2993.7	*	2	0010	291	0.	7.5	2993.7
1	0735	92	613.	238.6	3017.7	*	1	1555	192	3.	7.6	2993.7	*	2	0015	292	0.	7.5	2993.7
1	0740	93	609.	234.5	3017.4	*	1	1600	193	2.	7.6	2993.7	*	2	0020	293	0.	7.5	2993.7
1	0745	94	606.	230.3	3017.1	*	1	1605	194	2.	7.6	2993.7	*	2	0025	294	0.	7.5	2993.7
1	0750	95	602.	226.1	3016.8	*	1	1610	195	2.	7.6	2993.7	*	2	0030	295	0.	7.5	2993.7
1	0755	96	598.	222.0	3016.5	*	1	1615	196	1.	7.6	2993.7	*	2	0035	296	0.	7.5	2993.7
1	0800	97	594.	217.9	3016.2	*	1	1620	197	1.	7.6	2993.7	*	2	0040	297	0.	7.5	2993.7
1	0805	98	591.	213.9	3016.0	*	1	1625	198	1.	7.6	2993.7	*	2	0045	298	0.	7.5	2993.7
1	0810	99	587.	209.8	3015.7	*	1	1630	199	1.	7.6	2993.7	*	2	0050	299	0.	7.5	2993.7
1	0815	100	583.	205.8	3015.4	*	1	1635	200	1.	7.6	2993.7	*	2	0055	300	0.	7.5	2993.7
						*							*						

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PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
			6-HR	24-HR	72-HR	24.92-HR
+ (CFS)	(HR)					
		(CFS)				
+ 1007.	5.42		659.	244.	235.	235.
		(INCHES)	1.396	2.063	2.063	2.063
		(AC-FT)	327.	483.	483.	483.

PEAK STORAGE	TIME	MAXIMUM AVERAGE STORAGE			
		6-HR	24-HR	72-HR	24.92-HR
+ (AC-FT)	(HR)				
326.	5.42	243.	78.	75.	75.

PEAK STAGE	TIME	MAXIMUM AVERAGE STAGE			
		6-HR	24-HR	72-HR	24.92-HR
+ (FEET)	(HR)				
3023.31	5.42	3017.81	3001.40	3001.01	3001.01

CUMULATIVE AREA = 4.39 SQ MI

WARNING --- ROUTED OUTFLOW (762.) IS GREATER THAN MAXIMUM OUTFLOW (683.) IN STORAGE-OUTFLOW TABLE

WARNING --- ROUTED OUTFLOW (836.) IS GREATER THAN MAXIMUM OUTFLOW (683.) IN STORAGE-OUTFLOW TABLE

WARNING --- ROUTED OUTFLOW (892.) IS GREATER THAN MAXIMUM OUTFLOW (683.) IN STORAGE-OUTFLOW TABLE

WARNING --- ROUTED OUTFLOW (930.) IS GREATER THAN MAXIMUM OUTFLOW (683.) IN STORAGE-OUTFLOW TABLE

WARNING --- ROUTED OUTFLOW (952.) IS GREATER THAN MAXIMUM OUTFLOW (683.) IN STORAGE-OUTFLOW TABLE

WARNING --- ROUTED OUTFLOW (960.) IS GREATER THAN MAXIMUM OUTFLOW (683.) IN STORAGE-OUTFLOW TABLE

WARNING --- ROUTED OUTFLOW (954.) IS GREATER THAN MAXIMUM OUTFLOW (683.) IN STORAGE-OUTFLOW TABLE

WARNING --- ROUTED OUTFLOW (939.) IS GREATER THAN MAXIMUM OUTFLOW (683.) IN STORAGE-OUTFLOW TABLE

WARNING --- ROUTED OUTFLOW (914.) IS GREATER THAN MAXIMUM OUTFLOW (683.) IN STORAGE-OUTFLOW TABLE

WARNING --- ROUTED OUTFLOW (883.) IS GREATER THAN MAXIMUM OUTFLOW (683.) IN STORAGE-OUTFLOW TABLE

WARNING --- ROUTED OUTFLOW (845.) IS GREATER THAN MAXIMUM OUTFLOW (683.) IN STORAGE-OUTFLOW TABLE

WARNING --- ROUTED OUTFLOW (804.) IS GREATER THAN MAXIMUM OUTFLOW (683.) IN STORAGE-OUTFLOW TABLE

WARNING --- ROUTED OUTFLOW (761.) IS GREATER THAN MAXIMUM OUTFLOW (683.) IN STORAGE-OUTFLOW TABLE

WARNING --- ROUTED OUTFLOW (716.) IS GREATER THAN MAXIMUM OUTFLOW (683.) IN STORAGE-OUTFLOW TABLE

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HYDROGRAPH AT STATION EXDB
PLAN 1, RATIO = .99

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DA	MON	HRMN	ORD	OUTFLOW	STORAGE	STAGE	*	DA	MON	HRMN	ORD	OUTFLOW	STORAGE	STAGE	*	DA	MON	HRMN	ORD	OUTFLOW	STORAGE	STAGE
1	0000		1	0.	.0	2990.0	*	1	0820		101	578.	200.5	3015.0	*	1	1640		201	0.	7.6	2993.7
1	0005		2	0.	.0	2990.0	*	1	0825		102	574.	196.6	3014.7	*	1	1645		202	0.	7.6	2993.7
1	0010		3	0.	.0	2990.0	*	1	0830		103	570.	192.6	3014.4	*	1	1650		203	0.	7.6	2993.7
1	0015		4	0.	.0	2990.1	*	1	0835		104	565.	188.7	3014.1	*	1	1655		204	0.	7.6	2993.7
1	0020		5	0.	.0	2990.3	*	1	0840		105	561.	184.8	3013.8	*	1	1700		205	0.	7.6	2993.7
1	0025		6	0.	.0	2990.6	*	1	0845		106	557.	181.0	3013.5	*	1	1705		206	0.	7.6	2993.7

1	0030	7	0.	.1	2991.0	*	1	0850	107	552.	177.2	3013.2	*	1	1710	207	0.	7.6	2993.7
1	0035	8	0.	.1	2991.1	*	1	0855	108	548.	173.4	3012.9	*	1	1715	208	0.	7.6	2993.7
1	0040	9	0.	.2	2991.2	*	1	0900	109	544.	169.6	3012.6	*	1	1720	209	0.	7.6	2993.7
1	0045	10	0.	.3	2991.4	*	1	0905	110	540.	165.9	3012.4	*	1	1725	210	0.	7.6	2993.7
1	0050	11	0.	.5	2991.6	*	1	0910	111	536.	162.2	3012.1	*	1	1730	211	0.	7.6	2993.7
1	0055	12	0.	.6	2991.8	*	1	0915	112	532.	158.5	3011.8	*	1	1735	212	0.	7.6	2993.7
1	0100	13	0.	.8	2992.0	*	1	0920	113	528.	154.9	3011.5	*	1	1740	213	0.	7.6	2993.7
1	0105	14	0.	.9	2992.0	*	1	0925	114	524.	151.2	3011.2	*	1	1745	214	0.	7.6	2993.7
1	0110	15	0.	1.1	2992.1	*	1	0930	115	520.	147.6	3011.0	*	1	1750	215	0.	7.5	2993.7
1	0115	16	0.	1.2	2992.1	*	1	0935	116	516.	144.1	3010.7	*	1	1755	216	0.	7.5	2993.7
1	0120	17	0.	1.4	2992.2	*	1	0940	117	512.	140.5	3010.4	*	1	1800	217	0.	7.5	2993.7
1	0125	18	0.	1.7	2992.2	*	1	0945	118	508.	137.0	3010.1	*	1	1805	218	0.	7.5	2993.7
1	0130	19	0.	2.0	2992.3	*	1	0950	119	503.	133.6	3009.9	*	1	1810	219	0.	7.5	2993.7
1	0135	20	0.	2.4	2992.4	*	1	0955	120	498.	130.1	3009.5	*	1	1815	220	0.	7.5	2993.7
1	0140	21	0.	3.0	2992.6	*	1	1000	121	493.	126.7	3009.2	*	1	1820	221	0.	7.5	2993.7
1	0145	22	0.	3.7	2992.7	*	1	1005	122	488.	123.3	3008.9	*	1	1825	222	0.	7.5	2993.7
1	0150	23	0.	4.7	2993.0	*	1	1010	123	483.	120.0	3008.6	*	1	1830	223	0.	7.5	2993.7
1	0155	24	0.	5.7	2993.2	*	1	1015	124	477.	116.7	3008.2	*	1	1835	224	0.	7.5	2993.7
1	0200	25	0.	6.8	2993.5	*	1	1020	125	471.	113.4	3007.9	*	1	1840	225	0.	7.5	2993.7
1	0205	26	7.	7.8	2993.8	*	1	1025	126	466.	110.2	3007.6	*	1	1845	226	0.	7.5	2993.7
1	0210	27	32.	8.7	2994.0	*	1	1030	127	460.	107.0	3007.2	*	1	1850	227	0.	7.5	2993.7
1	0215	28	54.	9.5	2994.2	*	1	1035	128	455.	103.8	3006.9	*	1	1855	228	0.	7.5	2993.7
1	0220	29	75.	10.2	2994.4	*	1	1040	129	449.	100.7	3006.6	*	1	1900	229	0.	7.5	2993.7
1	0225	30	98.	11.1	2994.6	*	1	1045	130	444.	97.6	3006.3	*	1	1905	230	0.	7.5	2993.7
1	0230	31	123.	12.0	2994.8	*	1	1050	131	438.	94.6	3006.0	*	1	1910	231	0.	7.5	2993.7
1	0235	32	144.	12.9	2995.0	*	1	1055	132	432.	91.6	3005.6	*	1	1915	232	0.	7.5	2993.7
1	0240	33	152.	13.8	2995.2	*	1	1100	133	426.	88.7	3005.3	*	1	1920	233	0.	7.5	2993.7
1	0245	34	159.	14.7	2995.3	*	1	1105	134	420.	85.7	3005.0	*	1	1925	234	0.	7.5	2993.7
1	0250	35	166.	15.7	2995.5	*	1	1110	135	413.	82.9	3004.6	*	1	1930	235	0.	7.5	2993.7
1	0255	36	174.	16.7	2995.7	*	1	1115	136	406.	80.0	3004.2	*	1	1935	236	0.	7.5	2993.7
1	0300	37	183.	17.8	2995.8	*	1	1120	137	399.	77.3	3003.9	*	1	1940	237	0.	7.5	2993.7
1	0305	38	191.	18.9	2996.0	*	1	1125	138	391.	74.6	3003.5	*	1	1945	238	0.	7.5	2993.7
1	0310	39	199.	20.2	2996.2	*	1	1130	139	384.	71.9	3003.2	*	1	1950	239	0.	7.5	2993.7
1	0315	40	211.	22.1	2996.5	*	1	1135	140	377.	69.3	3002.8	*	1	1955	240	0.	7.5	2993.7
1	0320	41	229.	25.3	2997.0	*	1	1140	141	369.	66.7	3002.5	*	1	2000	241	0.	7.5	2993.7
1	0325	42	253.	30.9	2997.8	*	1	1145	142	363.	64.2	3002.1	*	1	2005	242	0.	7.5	2993.7
1	0330	43	289.	40.6	2999.0	*	1	1150	143	356.	61.7	3001.8	*	1	2010	243	0.	7.5	2993.7
1	0335	44	337.	55.2	3001.0	*	1	1155	144	349.	59.3	3001.5	*	1	2015	244	0.	7.5	2993.7
1	0340	45	391.	74.7	3003.5	*	1	1200	145	342.	56.9	3001.2	*	1	2020	245	0.	7.5	2993.7
1	0345	46	443.	97.3	3006.2	*	1	1205	146	335.	54.6	3000.9	*	1	2025	246	0.	7.5	2993.7
1	0350	47	484.	120.9	3008.7	*	1	1210	147	328.	52.3	3000.6	*	1	2030	247	0.	7.5	2993.7
1	0355	48	516.	144.2	3010.7	*	1	1215	148	321.	50.0	3000.3	*	1	2035	248	0.	7.5	2993.7
1	0400	49	540.	166.5	3012.4	*	1	1220	149	313.	47.9	3000.0	*	1	2040	249	0.	7.5	2993.7
1	0405	50	564.	187.4	3014.0	*	1	1225	150	306.	45.7	2999.7	*	1	2045	250	0.	7.5	2993.7
1	0410	51	584.	206.8	3015.5	*	1	1230	151	300.	43.6	2999.4	*	1	2050	251	0.	7.5	2993.7
1	0415	52	600.	224.4	3016.7	*	1	1235	152	293.	41.6	2999.2	*	1	2055	252	0.	7.5	2993.7
1	0420	53	614.	239.9	3017.8	*	1	1240	153	286.	39.6	2998.9	*	1	2100	253	0.	7.5	2993.7
1	0425	54	626.	253.1	3018.7	*	1	1245	154	278.	37.7	2998.7	*	1	2105	254	0.	7.5	2993.7
1	0430	55	635.	264.3	3019.4	*	1	1250	155	271.	35.8	2998.4	*	1	2110	255	0.	7.5	2993.7
1	0435	56	643.	274.0	3020.0	*	1	1255	156	264.	33.9	2998.2	*	1	2115	256	0.	7.5	2993.7
1	0440	57	650.	282.7	3020.6	*	1	1300	157	258.	32.1	2997.9	*	1	2120	257	0.	7.5	2993.7
1	0445	58	656.	290.5	3021.1	*	1	1305	158	250.	30.4	2997.7	*	1	2125	258	0.	7.5	2993.7
1	0450	59	661.	297.7	3021.5	*	1	1310	159	243.	28.7	2997.5	*	1	2130	259	0.	7.5	2993.7
1	0455	60	674.	304.4	3022.0	*	1	1315	160	236.	27.0	2997.3	*	1	2135	260	0.	7.5	2993.7
1	0500	61	762.	310.1	3022.3	*	1	1320	161	229.	25.4	2997.1	*	1	2140	261	0.	7.5	2993.7
1	0505	62	836.	314.9	3022.6	*	1	1325	162	221.	23.9	2996.8	*	1	2145	262	0.	7.5	2993.7
1	0510	63	892.	318.5	3022.8	*	1	1330	163	212.	22.4	2996.6	*	1	2150	263	0.	7.5	2993.7
1	0515	64	930.	321.0	3023.0	*	1	1335	164	204.	21.0	2996.4	*	1	2155	264	0.	7.5	2993.7
1	0520	65	952.	322.4	3023.1	*	1	1340	165	195.	19.6	2996.1	*	1	2200	265	0.	7.5	2993.7
1	0525	66	960.	322.9	3023.1	*	1	1345	166	186.	18.3	2995.9	*	1	2205	266	0.	7.5	2993.7
1	0530	67	954.	322.6	3023.1	*	1	1350	167	176.	17.0	2995.7	*	1	2210	267	0.	7.5	2993.7
1	0535	68	939.	321.6	3023.0	*	1	1355	168	167.	15.8	2995.5	*	1	2215	268	0.	7.5	2993.7
1	0540	69	914.	320.0	3022.9	*	1	1400	169	158.	14.7	2995.3	*	1	2220	269	0.	7.5	2993.7
1	0545	70	883.	317.9	3022.8	*	1	1405	170	150.	13.7	2995.2	*	1	2225	270	0.	7.5	2993.7
1	0550	71	845.	315.5	3022.7	*	1	1410	171	141.	12.7	2995.0	*	1	2230	271	0.	7.5	2993.7
1	0555	72	804.	312.9	3022.5	*	1	1415	172	117.	11.8	2994.8	*	1	2235	272	0.	7.5	2993.7
1	0600	73	761.	310.0	3022.3	*	1	1420	173	96.	11.0	2994.6	*	1	2240	273	0.	7.5	2993.7
1	0605	74	716.	307.2	3022.1	*	1	1425	174	80.	10.4	2994.4	*	1	2245	274	0.	7.5	2993.7
1	0610	75	672.	304.2	3022.0	*	1	1430	175	66.	9.9	2994.3	*	1	2250	275	0.	7.5	2993.7
1	0615	76	663.	301.2	3021.8	*	1	1435	176	54.	9.5	2994.2	*	1	2255	276	0.	7.5	2993.7
1	0620	77	661.	297.9	3021.6	*	1	1440	177	45.	9.2	2994.1	*	1	2300	277	0.	7.5	2993.7
1	0625	78	658.	294.5	3021.3	*	1	1445	178	37.	8.9	2994.0	*	1	2305	278	0.	7.5	2993.7
1	0630	79	656.	290.8	3021.1	*	1	1450	179	31.	8.7	2994.0	*	1	2310	279	0.	7.5	2993.7
1	0635	80	653.	287.0	3020.9	*	1	1455	180	25.	8.5	2993.9	*	1	2315	280	0.	7.5	2993.7
1	0640	81	650.	283.1	3020.6	*	1	1500	181	21.	8.3	2993.9	*	1	2320	281	0.	7.5	2993.7
1	0645	82	647.	279.1	3020.4	*	1	1505	182	17.	8.2	2993.9	*	1	2325	282	0.	7.5	2993.7
1	0650	83	644.	275.1	3020.1	*	1	1510	183	14.	8.1	2993.8	*	1	2330	283	0.	7.5	2993.7
1	0655	84	640.	270.9	3019.8	*	1	1515	184	12.	8.0	2993.8	*	1	2335	284	0.	7.5	2993.7
1	0700	85	637.	266.8	3019.6	*	1	1520	185	10.	7.9	2993.8	*	1	2340	285	0.	7.5	2993.7
1	0705	86	634.	262.6	3019.3	*	1	1525	186	8.	7.8	2993.8	*	1	2345	286	0.	7.5	2993.7
1	0710	87	630.	258.4	3019.0	*	1	1530	187	7.	7.8	2993.8	*	1	2350	287	0.	7.5	2993.7
1	0715	88	627.	254.2	3018.7	*	1	1535	188	5.	7.7	2993.7	*	1	2355	288	0.	7.5	2993.7
1	0720	89	623.	249.9	3018.5	*	1	1540	189	5.	7.7	2993.7	*	2	0000	289	0.	7.5	2993.7
1	0725	90	620.	245.7	3018.2	*	1	1545	190	4.	7.7	2993.7	*	2	0005	290	0.	7.5	2993.7
1	0730	91	616.	241.5	3017.9	*	1	1550	191	3.	7.7	2993.7	*	2	0010	291	0.	7.5	2993.7
1	0735	92	612.	237.3	3017.6	*	1	1555	192	3.	7.6	2993.7	*	2	0015	292	0.	7.5	2993.7
1	0740	93	608.	233.1	3017.3	*	1	1600	193	2.	7.6	2993.7	*	2	0020	293	0.	7.5	2993.7
1	0745	94	604.	229.0	3017.0	*	1	1605	194	2.	7.6	2993.7	*	2	0025	294	0.	7.5	2993.7
1	0750	95	601.	224.8	3016.7	*	1	1610	195	1.	7.6	2993.7	*	2	0030	295	0.	7.5	2993.7
1	0755	96	597.	220.7	3016.4	*	1	1615	196	1.	7.6	2993.7	*	2	0035	296	0.	7.5	2993.7
1	0800	97	593.	216.6	3016.1	*	1	1620	197	1.	7.6	2993.7	*	2	0040	297	0.	7.5	2993.7
1	0805	98	589.	212.6	3015.9	*	1	1625	198	1.	7.6	2993.7	*	2	0045	298	0.	7.5	2993.7
1	0810	99	586.	208.5	3015.6	*	1	1630	199	1.	7.6	2993.7	*	2	0050	299	0.	7.5	2993.7
1	0815	100	582.	204.5	3015.3	*	1	1635	200	1.	7.6	2993.7	*	2	0055	300	0.	7.5	2993.7
						*							*								

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	PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
				6-HR	24-HR	72-HR	24.92-HR
+	(CFS)	(HR)					
			(CFS)				
+	960.	5.42		648.	240.	231.	231.
			(INCHES)	1.372	2.032	2.032	2.032
			(AC-FT)	321.	476.	476.	476.

PEAK STORAGE	TIME	MAXIMUM AVERAGE STORAGE			
		6-HR	24-HR	72-HR	24.92-HR
+ (AC-FT)	(HR)				
323.	5.42	241.	77.	74.	74.

PEAK STAGE	TIME	MAXIMUM AVERAGE STAGE			
		6-HR	24-HR	72-HR	24.92-HR
+ (FEET)	(HR)				
3023.12	5.42	3017.67	3001.34	3000.95	3000.95

CUMULATIVE AREA = 4.39 SQ MI

WARNING --- ROUTED OUTFLOW (685.) IS GREATER THAN MAXIMUM OUTFLOW (683.) IN STORAGE-OUTFLOW TABLE

WARNING --- ROUTED OUTFLOW (764.) IS GREATER THAN MAXIMUM OUTFLOW (683.) IN STORAGE-OUTFLOW TABLE

WARNING --- ROUTED OUTFLOW (826.) IS GREATER THAN MAXIMUM OUTFLOW (683.) IN STORAGE-OUTFLOW TABLE

WARNING --- ROUTED OUTFLOW (869.) IS GREATER THAN MAXIMUM OUTFLOW (683.) IN STORAGE-OUTFLOW TABLE

WARNING --- ROUTED OUTFLOW (896.) IS GREATER THAN MAXIMUM OUTFLOW (683.) IN STORAGE-OUTFLOW TABLE

WARNING --- ROUTED OUTFLOW (908.) IS GREATER THAN MAXIMUM OUTFLOW (683.) IN STORAGE-OUTFLOW TABLE

WARNING --- ROUTED OUTFLOW (907.) IS GREATER THAN MAXIMUM OUTFLOW (683.) IN STORAGE-OUTFLOW TABLE

WARNING --- ROUTED OUTFLOW (895.) IS GREATER THAN MAXIMUM OUTFLOW (683.) IN STORAGE-OUTFLOW TABLE

WARNING --- ROUTED OUTFLOW (874.) IS GREATER THAN MAXIMUM OUTFLOW (683.) IN STORAGE-OUTFLOW TABLE

WARNING --- ROUTED OUTFLOW (846.) IS GREATER THAN MAXIMUM OUTFLOW (683.) IN STORAGE-OUTFLOW TABLE

WARNING --- ROUTED OUTFLOW (812.) IS GREATER THAN MAXIMUM OUTFLOW (683.) IN STORAGE-OUTFLOW TABLE

WARNING --- ROUTED OUTFLOW (773.) IS GREATER THAN MAXIMUM OUTFLOW (683.) IN STORAGE-OUTFLOW TABLE

WARNING --- ROUTED OUTFLOW (733.) IS GREATER THAN MAXIMUM OUTFLOW (683.) IN STORAGE-OUTFLOW TABLE

WARNING --- ROUTED OUTFLOW (690.) IS GREATER THAN MAXIMUM OUTFLOW (683.) IN STORAGE-OUTFLOW TABLE

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HYDROGRAPH AT STATION EXDB
PLAN 1, RATIO = .98

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DA	MON	HRMN	ORD	OUTFLOW	STORAGE	STAGE	DA	MON	HRMN	ORD	OUTFLOW	STORAGE	STAGE	DA	MON	HRMN	ORD	OUTFLOW	STORAGE	STAGE
1		0000	1	0.	.0	2990.0	1		0820	101	577.	199.1	3014.9	1		1640	201	0.	7.6	2993.7
1		0005	2	0.	.0	2990.0	1		0825	102	572.	195.1	3014.6	1		1645	202	0.	7.6	2993.7
1		0010	3	0.	.0	2990.0	1		0830	103	568.	191.2	3014.3	1		1650	203	0.	7.6	2993.7
1		0015	4	0.	.0	2990.1	1		0835	104	564.	187.3	3014.0	1		1655	204	0.	7.6	2993.7
1		0020	5	0.	.0	2990.3	1		0840	105	559.	183.5	3013.7	1		1700	205	0.	7.6	2993.7
1		0025	6	0.	.0	2990.6	1		0845	106	555.	179.6	3013.4	1		1705	206	0.	7.6	2993.7
1		0030	7	0.	.1	2991.0	1		0850	107	551.	175.8	3013.1	1		1710	207	0.	7.6	2993.7
1		0035	8	0.	.1	2991.1	1		0855	108	547.	172.0	3012.8	1		1715	208	0.	7.6	2993.7
1		0040	9	0.	.2	2991.2	1		0900	109	542.	168.3	3012.5	1		1720	209	0.	7.6	2993.7
1		0045	10	0.	.3	2991.3	1		0905	110	538.	164.6	3012.3	1		1725	210	0.	7.6	2993.7
1		0050	11	0.	.4	2991.5	1		0910	111	534.	160.9	3012.0	1		1730	211	0.	7.6	2993.7
1		0055	12	0.	.6	2991.7	1		0915	112	530.	157.2	3011.7	1		1735	212	0.	7.6	2993.7
1		0100	13	0.	.7	2991.9	1		0920	113	526.	153.6	3011.4	1		1740	213	0.	7.6	2993.7
1		0105	14	0.	.9	2992.0	1		0925	114	522.	149.9	3011.1	1		1745	214	0.	7.6	2993.7
1		0110	15	0.	1.0	2992.1	1		0930	115	518.	146.4	3010.9	1		1750	215	0.	7.5	2993.7
1		0115	16	0.	1.2	2992.1	1		0935	116	514.	142.8	3010.6	1		1755	216	0.	7.5	2993.7
1		0120	17	0.	1.3	2992.1	1		0940	117	510.	139.3	3010.3	1		1800	217	0.	7.5	2993.7
1		0125	18	0.	1.6	2992.2	1		0945	118	506.	135.8	3010.0	1		1805	218	0.	7.5	2993.7
1		0130	19	0.	1.9	2992.3	1		0950	119	502.	132.3	3009.7	1		1810	219	0.	7.5	2993.7
1		0135	20	0.	2.3	2992.4	1		0955	120	497.	128.9	3009.4	1		1815	220	0.	7.5	2993.7
1		0140	21	0.	2.8	2992.5	1		1000	121	492.	125.5	3009.1	1		1820	221	0.	7.5	2993.7
1		0145	22	0.	3.5	2992.7	1		1005	122	486.	122.1	3008.8	1		1825	222	0.	7.5	2993.7
1		0150	23	0.	4.4	2992.9	1		1010	123	480.	118.8	3008.4	1		1830	223	0.	7.5	2993.7
1		0155	24	0.	5.4	2993.2	1		1015	124	475.	115.5	3008.1	1		1835	224	0.	7.5	2993.7
1		0200	25	0.	6.5	2993.4	1		1020	125	469.	112.2	3007.8	1		1840	225	0.	7.5	2993.7
1		0205	26	0.	7.5	2993.7	1		1025	126	464.	109.0	3007.4	1		1845	226	0.	7.5	2993.7
1		0210	27	25.	8.4	2993.9	1		1030	127	458.	105.8	3007.1	1		1850	227	0.	7.5	2993.7
1		0215	28	47.	9.2	2994.1	1		1035	128	453.	102.7	3006.8	1		1855	228	0.	7.5	2993.7
1		0220	29	68.	10.0	2994.3	1		1040	129	447.	99.6	3006.5	1		1900	229	0.	7.5	2993.7
1		0225	30	91.	10.8	2994.5	1		1045	130	442.	96.6	3006.2	1		1905	230	0.	7.5	2993.7
1		0230	31	117.	11.8	2994.8	1		1050	131	436.	93.5	3005.8	1		1910	231	0.	7.5	2993.7
1		0235	32	142.	12.7	2995.0	1		1055	132	430.	90.5	3005.5	1		1915	232	0.	7.5	2993.7
1		0240	33	149.	13.5	2995.1	1		1100	133	424.	87.6	3005.2	1		1920	233	0.	7.5	2993.7
1		0245	34	156.	14.4	2995.3	1		1105	134	418.	84.7	3004.8	1		1925	234	0.	7.5	2993.7
1		0250	35	163.	15.4	2995.4	1		1110	135	411.	81.8	3004.5	1		1930	235	0.	7.5	2993.7
1		0255	36	171.	16.4	2995.6	1		1115	136	404.	79.0	3004.1	1		1935	236	0.	7.5	2993.7
1		0300	37	180.	17.4	2995.8	1		1120	137	396.	76.3	3003.7	1		1940	237	0.	7.5	2993.7
1		0305	38	188.	18.5	2996.0	1		1125	138	388.	73.6	3003.4	1		1945	238	0.	7.5	2993.7
1		0310	39	196.	19.8	2996.2	1		1130	139	381.	70.9	3003.0	1		1950	239	0.	7.5	2993.7
1		0315	40	208.	21.6	2996.5	1		1135	140	374.	68.3	3002.7	1		1955	240	0.	7.5	2993.7
1		0320	41	226.	24.7	2996.9	1		1140	141	367.	65.8	3002.4	1		2000	241	0.	7.5	2993.7
1		0325	42	250.	30.2	2997.7	1		1145	142	360.	63.3	3002.0	1		2005	242	0.	7.5	2993.7
1		0330	43	286.	39.7	2998.9	1		1150	143	353.	60.8	3001.7	1		2010	243	0.	7.5	2993.7
1		0335	44	334.	54.1	3000.8	1		1155	144	347.	58.4	3001.4	1		2015	244	0.	7.5	2993.7
1		0340	45	387.	73.2	3003.3	1		1200	145	340.	56.1	3001.1	1		2020	245	0.	7.5	2993.7
1		0345	46	440.	95.4	3006.0	1		1205	146	333.	53.7	3000.8	1		2025	246	0.	7.5	2993.7
1		0350	47	480.	118.7	3008.4	1		1210	147	325.	51.5	3000.5	1		2030	247	0.	7.5	2993.7
1		0355	48	513.	141.6	3010.5	1		1215	148	318.	49.3	3000.2	1		2035	248	0.	7.5	2993.7
1		0400	49	537.	163.5	3012.2	1		1220	149	311.	47.1	2999.9	1		2040	249	0.	7.5	2993.7
1		0405	50	560.	184.1	3013.8	1		1225	150	304.	45.0	2999.6	1		2045	250	0.	7.5	2993.7
1		0410	51	581.	203.2	3015.2	1		1230	151	297.	42.9	2999.3	1		2050	251	0.	7.5	2993.7
1		0415	52	597.	220.5	3016.4	1		1235	152	290.	40.9	2999.1	1		2055	252	0.	7.5	2993.7
1		0420	53	611.	235.7	3017.5	1		1240	153	283.	38.9	2998.8	1		2100	253	0.	7.5	2993.7

1	0425	54	622.	248.7	3018.4	*	1	1245	154	276.	37.0	2998.6	*	1	2105	254	0.	7.5	2993.7
1	0430	55	631.	259.8	3019.1	*	1	1250	155	269.	35.1	2998.3	*	1	2110	255	0.	7.5	2993.7
1	0435	56	639.	269.3	3019.7	*	1	1255	156	262.	33.3	2998.1	*	1	2115	256	0.	7.5	2993.7
1	0440	57	646.	277.8	3020.3	*	1	1300	157	255.	31.5	2997.8	*	1	2120	257	0.	7.5	2993.7
1	0445	58	652.	285.6	3020.8	*	1	1305	158	248.	29.8	2997.6	*	1	2125	258	0.	7.5	2993.7
1	0450	59	657.	292.6	3021.2	*	1	1310	159	241.	28.1	2997.4	*	1	2130	259	0.	7.5	2993.7
1	0455	60	662.	299.2	3021.6	*	1	1315	160	234.	26.5	2997.2	*	1	2135	260	0.	7.5	2993.7
1	0500	61	685.	305.1	3022.0	*	1	1320	161	227.	24.9	2997.0	*	1	2140	261	0.	7.5	2993.7
1	0505	62	764.	310.2	3022.3	*	1	1325	162	218.	23.3	2996.7	*	1	2145	262	0.	7.5	2993.7
1	0510	63	826.	314.2	3022.6	*	1	1330	163	209.	21.9	2996.5	*	1	2150	263	0.	7.5	2993.7
1	0515	64	869.	317.1	3022.8	*	1	1335	164	201.	20.5	2996.3	*	1	2155	264	0.	7.5	2993.7
1	0520	65	896.	318.8	3022.9	*	1	1340	165	192.	19.1	2996.1	*	1	2200	265	0.	7.5	2993.7
1	0525	66	908.	319.5	3022.9	*	1	1345	166	183.	17.8	2995.8	*	1	2205	266	0.	7.5	2993.7
1	0530	67	907.	319.5	3022.9	*	1	1350	167	173.	16.6	2995.6	*	1	2210	267	0.	7.5	2993.7
1	0535	68	895.	318.7	3022.9	*	1	1355	168	164.	15.4	2995.5	*	1	2215	268	0.	7.5	2993.7
1	0540	69	874.	317.4	3022.8	*	1	1400	169	155.	14.3	2995.3	*	1	2220	269	0.	7.5	2993.7
1	0545	70	846.	315.5	3022.7	*	1	1405	170	147.	13.3	2995.1	*	1	2225	270	0.	7.5	2993.7
1	0550	71	812.	313.3	3022.5	*	1	1410	171	132.	12.3	2994.9	*	1	2230	271	0.	7.5	2993.7
1	0555	72	773.	310.9	3022.4	*	1	1415	172	109.	11.5	2994.7	*	1	2235	272	0.	7.5	2993.7
1	0600	73	733.	308.2	3022.2	*	1	1420	173	90.	10.8	2994.5	*	1	2240	273	0.	7.5	2993.7
1	0605	74	690.	305.5	3022.0	*	1	1425	174	74.	10.2	2994.4	*	1	2245	274	0.	7.5	2993.7
1	0610	75	665.	302.7	3021.9	*	1	1430	175	62.	9.8	2994.3	*	1	2250	275	0.	7.5	2993.7
1	0615	76	662.	299.6	3021.7	*	1	1435	176	51.	9.4	2994.2	*	1	2255	276	0.	7.5	2993.7
1	0620	77	660.	296.3	3021.5	*	1	1440	177	42.	9.1	2994.1	*	1	2300	277	0.	7.5	2993.7
1	0625	78	657.	292.9	3021.2	*	1	1445	178	35.	8.8	2994.0	*	1	2305	278	0.	7.5	2993.7
1	0630	79	655.	289.2	3021.0	*	1	1450	179	29.	8.6	2994.0	*	1	2310	279	0.	7.5	2993.7
1	0635	80	652.	285.4	3020.8	*	1	1455	180	24.	8.4	2993.9	*	1	2315	280	0.	7.5	2993.7
1	0640	81	649.	281.5	3020.5	*	1	1500	181	20.	8.3	2993.9	*	1	2320	281	0.	7.5	2993.7
1	0645	82	646.	277.6	3020.3	*	1	1505	182	16.	8.1	2993.8	*	1	2325	282	0.	7.5	2993.7
1	0650	83	642.	273.5	3020.0	*	1	1510	183	13.	8.0	2993.8	*	1	2330	283	0.	7.5	2993.7
1	0655	84	639.	269.4	3019.7	*	1	1515	184	11.	7.9	2993.8	*	1	2335	284	0.	7.5	2993.7
1	0700	85	636.	265.2	3019.5	*	1	1520	185	9.	7.9	2993.8	*	1	2340	285	0.	7.5	2993.7
1	0705	86	632.	261.0	3019.2	*	1	1525	186	8.	7.8	2993.8	*	1	2345	286	0.	7.5	2993.7
1	0710	87	629.	256.8	3018.9	*	1	1530	187	6.	7.8	2993.8	*	1	2350	287	0.	7.5	2993.7
1	0715	88	625.	252.6	3018.6	*	1	1535	188	5.	7.7	2993.7	*	1	2355	288	0.	7.5	2993.7
1	0720	89	622.	248.4	3018.4	*	1	1540	189	4.	7.7	2993.7	*	2	0000	289	0.	7.5	2993.7
1	0725	90	618.	244.2	3018.1	*	1	1545	190	3.	7.7	2993.7	*	2	0005	290	0.	7.5	2993.7
1	0730	91	615.	240.0	3017.8	*	1	1550	191	3.	7.7	2993.7	*	2	0010	291	0.	7.5	2993.7
1	0735	92	611.	235.8	3017.5	*	1	1555	192	2.	7.6	2993.7	*	2	0015	292	0.	7.5	2993.7
1	0740	93	607.	231.6	3017.2	*	1	1600	193	2.	7.6	2993.7	*	2	0020	293	0.	7.5	2993.7
1	0745	94	603.	227.5	3016.9	*	1	1605	194	2.	7.6	2993.7	*	2	0025	294	0.	7.5	2993.7
1	0750	95	599.	223.4	3016.6	*	1	1610	195	1.	7.6	2993.7	*	2	0030	295	0.	7.5	2993.7
1	0755	96	595.	219.3	3016.3	*	1	1615	196	1.	7.6	2993.7	*	2	0035	296	0.	7.5	2993.7
1	0800	97	592.	215.2	3016.0	*	1	1620	197	1.	7.6	2993.7	*	2	0040	297	0.	7.5	2993.7
1	0805	98	588.	211.1	3015.8	*	1	1625	198	1.	7.6	2993.7	*	2	0045	298	0.	7.5	2993.7
1	0810	99	584.	207.1	3015.5	*	1	1630	199	1.	7.6	2993.7	*	2	0050	299	0.	7.5	2993.7
1	0815	100	581.	203.1	3015.2	*	1	1635	200	1.	7.6	2993.7	*	2	0055	300	0.	7.5	2993.7

PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
			6-HR	24-HR	72-HR	24.92-HR
(CFS)	(HR)					
		(CFS)				
908.	5.42		637.	236.	228.	228.
		(INCHES)	1.349	2.001	2.001	2.001
		(AC-FT)	316.	469.	469.	469.

PEAK STORAGE	TIME	MAXIMUM AVERAGE STORAGE			
		6-HR	24-HR	72-HR	24.92-HR
(AC-FT)	(HR)				
320.	5.42	239.	76.	74.	74.

PEAK STAGE	TIME	MAXIMUM AVERAGE STAGE			
		6-HR	24-HR	72-HR	24.92-HR
(FEET)	(HR)				
3022.91	5.42	3017.52	3001.28	3000.89	3000.89

CUMULATIVE AREA = 4.39 SQ MI

HYDROGRAPH AT STATION EXDB
PLAN 1, RATIO = .94

DA	MON	HRMN	ORD	OUTFLOW	STORAGE	STAGE	DA	MON	HRMN	ORD	OUTFLOW	STORAGE	STAGE	DA	MON	HRMN	ORD	OUTFLOW	STORAGE	STAGE
1		0000	1	0.	.0	2990.0	1		0820	101	567.	190.4	3014.2	1		1640	201	0.	7.6	2993.7
1		0005	2	0.	.0	2990.0	1		0825	102	563.	186.5	3013.9	1		1645	202	0.	7.6	2993.7
1		0010	3	0.	.0	2990.0	1		0830	103	559.	182.7	3013.7	1		1650	203	0.	7.6	2993.7
1		0015	4	0.	.0	2990.1	1		0835	104	554.	178.9	3013.4	1		1655	204	0.	7.6	2993.7
1		0020	5	0.	.0	2990.2	1		0840	105	550.	175.1	3013.1	1		1700	205	0.	7.6	2993.7
1		0025	6	0.	.0	2990.5	1		0845	106	546.	171.3	3012.8	1		1705	206	0.	7.6	2993.7
1		0030	7	0.	.1	2990.9	1		0850	107	542.	167.5	3012.5	1		1710	207	0.	7.6	2993.7
1		0035	8	0.	.1	2991.1	1		0855	108	538.	163.8	3012.2	1		1715	208	0.	7.6	2993.7
1		0040	9	0.	.2	2991.1	1		0900	109	533.	160.1	3011.9	1		1720	209	0.	7.6	2993.7
1		0045	10	0.	.2	2991.2	1		0905	110	529.	156.5	3011.6	1		1725	210	0.	7.6	2993.7
1		0050	11	0.	.3	2991.4	1		0910	111	525.	152.8	3011.4	1		1730	211	0.	7.6	2993.7
1		0055	12	0.	.4	2991.5	1		0915	112	521.	149.2	3011.1	1		1735	212	0.	7.6	2993.7
1		0100	13	0.	.5	2991.6	1		0920	113	517.	145.7	3010.8	1		1740	213	0.	7.5	2993.7
1		0105	14	0.	.6	2991.8	1		0925	114	513.	142.1	3010.5	1		1745	214	0.	7.5	2993.7
1		0110	15	0.	.7	2991.9	1		0930	115	510.	138.6	3010.3	1		1750	215	0.	7.5	2993.7
1		0115	16	0.	.8	2992.0	1		0935	116	506.	135.1	3010.0	1		1755	216	0.	7.5	2993.7
1		0120	17	0.	1.0	2992.0	1		0940	117	501.	131.6	3009.7	1		1800	217	0.	7.5	2993.7
1		0125	18	0.	1.2	2992.1	1		0945	118	496.	128.2	3009.4	1		1805	218	0.	7.5	2993.7
1		0130	19	0.	1.4	2992.2	1		0950	119	491.	124.8	3009.1	1		1810	219	0.	7.5	2993.7
1		0135	20	0.	1.7	2992.2	1		0955	120	485.	121.4	3008.7	1		1815	220	0.	7.5	2993.7
1		0140	21	0.	2.2	2992.4	1		1000	121	479.	118.1	3008.4	1		1820	221	0.	7.5	2993.7
1		0145	22	0.	2.8	2992.5	1		1005	122	474.	114.8	3008.0	1		1825	222	0.	7.5	2993.7
1		0150	23	0.	3.6	2992.7	1		1010	123	468.	111.6	3007.7	1		1830	223	0.	7.5	2993.7
1		0155	24	0.	4.5	2992.9	1		1015	124	462.	108.4	3007.4	1		1835	224	0.	7.5	2993.7

1	0200	25	0.	5.4	2993.2	*	1	1020	125	457.	105.2	3007.0	*	1	1840	225	0.	7.5	2993.7
1	0205	26	0.	6.3	2993.4	*	1	1025	126	452.	102.1	3006.7	*	1	1845	226	0.	7.5	2993.7
1	0210	27	0.	7.2	2993.6	*	1	1030	127	446.	99.0	3006.4	*	1	1850	227	0.	7.5	2993.7
1	0215	28	13.	8.0	2993.8	*	1	1035	128	441.	96.0	3006.1	*	1	1855	228	0.	7.5	2993.7
1	0220	29	37.	8.9	2994.0	*	1	1040	129	435.	92.9	3005.8	*	1	1900	229	0.	7.5	2993.7
1	0225	30	62.	9.8	2994.3	*	1	1045	130	429.	90.0	3005.4	*	1	1905	230	0.	7.5	2993.7
1	0230	31	88.	10.7	2994.5	*	1	1050	131	423.	87.0	3005.1	*	1	1910	231	0.	7.5	2993.7
1	0235	32	114.	11.7	2994.7	*	1	1055	132	417.	84.1	3004.8	*	1	1915	232	0.	7.5	2993.7
1	0240	33	137.	12.5	2994.9	*	1	1100	133	409.	81.3	3004.4	*	1	1920	233	0.	7.5	2993.7
1	0245	34	147.	13.3	2995.1	*	1	1105	134	402.	78.5	3004.0	*	1	1925	234	0.	7.5	2993.7
1	0250	35	153.	14.1	2995.2	*	1	1110	135	394.	75.8	3003.7	*	1	1930	235	0.	7.5	2993.7
1	0255	36	160.	15.0	2995.4	*	1	1115	136	387.	73.1	3003.3	*	1	1935	236	0.	7.5	2993.7
1	0300	37	168.	15.9	2995.5	*	1	1120	137	380.	70.4	3003.0	*	1	1940	237	0.	7.5	2993.7
1	0305	38	175.	16.8	2995.7	*	1	1125	138	373.	67.8	3002.6	*	1	1945	238	0.	7.5	2993.7
1	0310	39	184.	18.0	2995.9	*	1	1130	139	366.	65.3	3002.3	*	1	1950	239	0.	7.5	2993.7
1	0315	40	195.	19.6	2996.1	*	1	1135	140	359.	62.8	3002.0	*	1	1955	240	0.	7.5	2993.7
1	0320	41	213.	22.4	2996.6	*	1	1140	141	352.	60.3	3001.6	*	1	2000	241	0.	7.5	2993.7
1	0325	42	238.	27.5	2997.3	*	1	1145	142	345.	57.9	3001.3	*	1	2005	242	0.	7.5	2993.7
1	0330	43	273.	36.2	2998.5	*	1	1150	143	339.	55.6	3001.0	*	1	2010	243	0.	7.5	2993.7
1	0335	44	319.	49.5	3000.2	*	1	1155	144	331.	53.3	3000.7	*	1	2015	244	0.	7.5	2993.7
1	0340	45	371.	67.4	3002.6	*	1	1200	145	324.	51.0	3000.4	*	1	2020	245	0.	7.5	2993.7
1	0345	46	425.	88.1	3005.2	*	1	1205	146	317.	48.8	3000.1	*	1	2025	246	0.	7.5	2993.7
1	0350	47	465.	109.9	3007.5	*	1	1210	147	310.	46.7	2999.8	*	1	2030	247	0.	7.5	2993.7
1	0355	48	500.	131.3	3009.6	*	1	1215	148	303.	44.6	2999.6	*	1	2035	248	0.	7.5	2993.7
1	0400	49	524.	151.8	3011.3	*	1	1220	149	296.	42.5	2999.3	*	1	2040	249	0.	7.5	2993.7
1	0405	50	546.	171.1	3012.8	*	1	1225	150	289.	40.5	2999.0	*	1	2045	250	0.	7.5	2993.7
1	0410	51	566.	189.0	3014.1	*	1	1230	151	282.	38.5	2998.8	*	1	2050	251	0.	7.5	2993.7
1	0415	52	583.	205.2	3015.3	*	1	1235	152	274.	36.6	2998.5	*	1	2055	252	0.	7.5	2993.7
1	0420	53	596.	219.4	3016.3	*	1	1240	153	267.	34.7	2998.3	*	1	2100	253	0.	7.5	2993.7
1	0425	54	607.	231.6	3017.2	*	1	1245	154	261.	32.9	2998.0	*	1	2105	254	0.	7.5	2993.7
1	0430	55	616.	241.9	3017.9	*	1	1250	155	253.	31.2	2997.8	*	1	2110	255	0.	7.5	2993.7
1	0435	56	624.	250.8	3018.5	*	1	1255	156	246.	29.4	2997.6	*	1	2115	256	0.	7.5	2993.7
1	0440	57	631.	258.7	3019.0	*	1	1300	157	239.	27.8	2997.4	*	1	2120	257	0.	7.5	2993.7
1	0445	58	636.	265.9	3019.5	*	1	1305	158	232.	26.1	2997.1	*	1	2125	258	0.	7.5	2993.7
1	0450	59	642.	272.5	3019.9	*	1	1310	159	225.	24.6	2996.9	*	1	2130	259	0.	7.5	2993.7
1	0455	60	646.	278.5	3020.3	*	1	1315	160	216.	23.0	2996.7	*	1	2135	260	0.	7.5	2993.7
1	0500	61	651.	284.1	3020.7	*	1	1320	161	208.	21.6	2996.5	*	1	2140	261	0.	7.5	2993.7
1	0505	62	655.	289.2	3021.0	*	1	1325	162	199.	20.2	2996.2	*	1	2145	262	0.	7.5	2993.7
1	0510	63	658.	293.7	3021.3	*	1	1330	163	191.	18.8	2996.0	*	1	2150	263	0.	7.5	2993.7
1	0515	64	661.	297.4	3021.5	*	1	1335	164	181.	17.6	2995.8	*	1	2155	264	0.	7.5	2993.7
1	0520	65	663.	300.2	3021.7	*	1	1340	165	171.	16.4	2995.6	*	1	2200	265	0.	7.5	2993.7
1	0525	66	664.	302.3	3021.8	*	1	1345	166	162.	15.2	2995.4	*	1	2205	266	0.	7.5	2993.7
1	0530	67	666.	303.6	3021.9	*	1	1350	167	154.	14.1	2995.2	*	1	2210	267	0.	7.5	2993.7
1	0535	68	671.	304.1	3021.9	*	1	1355	168	146.	13.1	2995.1	*	1	2215	268	0.	7.5	2993.7
1	0540	69	670.	304.0	3021.9	*	1	1400	169	127.	12.1	2994.9	*	1	2220	269	0.	7.5	2993.7
1	0545	70	665.	303.3	3021.9	*	1	1405	170	105.	11.3	2994.7	*	1	2225	270	0.	7.5	2993.7
1	0550	71	664.	302.1	3021.8	*	1	1410	171	87.	10.7	2994.5	*	1	2230	271	0.	7.5	2993.7
1	0555	72	663.	300.4	3021.7	*	1	1415	172	72.	10.1	2994.4	*	1	2235	272	0.	7.5	2993.7
1	0600	73	661.	298.2	3021.6	*	1	1420	173	59.	9.7	2994.2	*	1	2240	273	0.	7.5	2993.7
1	0605	74	659.	295.7	3021.4	*	1	1425	174	49.	9.3	2994.1	*	1	2245	274	0.	7.5	2993.7
1	0610	75	657.	292.9	3021.2	*	1	1430	175	40.	9.0	2994.1	*	1	2250	275	0.	7.5	2993.7
1	0615	76	655.	289.9	3021.1	*	1	1435	176	33.	8.8	2994.0	*	1	2255	276	0.	7.5	2993.7
1	0620	77	653.	286.6	3020.8	*	1	1440	177	28.	8.5	2994.0	*	1	2300	277	0.	7.5	2993.7
1	0625	78	650.	283.1	3020.6	*	1	1445	178	23.	8.4	2993.9	*	1	2305	278	0.	7.5	2993.7
1	0630	79	647.	279.5	3020.4	*	1	1450	179	19.	8.2	2993.9	*	1	2310	279	0.	7.5	2993.7
1	0635	80	644.	275.7	3020.2	*	1	1455	180	16.	8.1	2993.8	*	1	2315	280	0.	7.5	2993.7
1	0640	81	641.	271.8	3019.9	*	1	1500	181	13.	8.0	2993.8	*	1	2320	281	0.	7.5	2993.7
1	0645	82	638.	267.9	3019.6	*	1	1505	182	11.	7.9	2993.8	*	1	2325	282	0.	7.5	2993.7
1	0650	83	635.	263.9	3019.4	*	1	1510	183	9.	7.9	2993.8	*	1	2330	283	0.	7.5	2993.7
1	0655	84	631.	259.8	3019.1	*	1	1515	184	7.	7.8	2993.8	*	1	2335	284	0.	7.5	2993.7
1	0700	85	628.	255.7	3018.8	*	1	1520	185	6.	7.8	2993.8	*	1	2340	285	0.	7.5	2993.7
1	0705	86	624.	251.5	3018.6	*	1	1525	186	5.	7.7	2993.7	*	1	2345	286	0.	7.5	2993.7
1	0710	87	621.	247.4	3018.3	*	1	1530	187	4.	7.7	2993.7	*	1	2350	287	0.	7.5	2993.7
1	0715	88	618.	243.2	3018.0	*	1	1535	188	3.	7.7	2993.7	*	1	2355	288	0.	7.5	2993.7
1	0720	89	614.	239.1	3017.7	*	1	1540	189	3.	7.6	2993.7	*	2	0000	289	0.	7.5	2993.7
1	0725	90	610.	234.9	3017.4	*	1	1545	190	2.	7.6	2993.7	*	2	0005	290	0.	7.5	2993.7
1	0730	91	606.	230.8	3017.1	*	1	1550	191	2.	7.6	2993.7	*	2	0010	291	0.	7.5	2993.7
1	0735	92	602.	226.6	3016.8	*	1	1555	192	2.	7.6	2993.7	*	2	0015	292	0.	7.5	2993.7
1	0740	93	598.	222.5	3016.6	*	1	1600	193	1.	7.6	2993.7	*	2	0020	293	0.	7.5	2993.7
1	0745	94	595.	218.4	3016.3	*	1	1605	194	1.	7.6	2993.7	*	2	0025	294	0.	7.5	2993.7
1	0750	95	591.	214.4	3016.0	*	1	1610	195	1.	7.6	2993.7	*	2	0030	295	0.	7.5	2993.7
1	0755	96	587.	210.3	3015.7	*	1	1615	196	1.	7.6	2993.7	*	2	0035	296	0.	7.5	2993.7
1	0800	97	584.	206.3	3015.4	*	1	1620	197	1.	7.6	2993.7	*	2	0040	297	0.	7.5	2993.7
1	0805	98	580.	202.3	3015.1	*	1	1625	198	0.	7.6	2993.7	*	2	0045	298	0.	7.5	2993.7
1	0810	99	576.	198.3	3014.8	*	1	1630	199	0.	7.6	2993.7	*	2	0050	299	0.	7.5	2993.7
1	0815	100	571.	194.4	3014.5	*	1	1635	200	0.	7.6	2993.7	*	2	0055	300	0.	7.5	2993.7
						*							*						

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PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
			6-HR	24-HR	72-HR	24.92-HR
+ (CFS)	(HR)	(CFS)				
+ 671.	5.58		599.	222.	213.	213.
		(INCHES)	1.267	1.876	1.876	1.876
		(AC-FT)	297.	440.	440.	440.

PEAK STORAGE	TIME	MAXIMUM AVERAGE STORAGE			
		6-HR	24-HR	72-HR	24.92-HR
+ (AC-FT)	(HR)				
+ 304.	5.58	228.	72.	70.	70.

PEAK STAGE	TIME	MAXIMUM AVERAGE STAGE			
		6-HR	24-HR	72-HR	24.92-HR
+ (FEET)	(HR)				
+ 3021.95	5.58	3016.73	3000.92	3000.55	3000.55

CUMULATIVE AREA = 4.39 SQ MI

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HYDROGRAPH AT STATION EXDB
PLAN 1, RATIO = .93

DA	MON	HRMN	ORD	OUTFLOW	STORAGE	STAGE	DA	MON	HRMN	ORD	OUTFLOW	STORAGE	STAGE	DA	MON	HRMN	ORD	OUTFLOW	STORAGE	STAGE
1		0000	1	0.	.0	2990.0	1		0820	101	562.	185.4	3013.9	1		1640	201	0.	7.6	2993.7
1		0005	2	0.	.0	2990.0	1		0825	102	557.	181.6	3013.6	1		1645	202	0.	7.6	2993.7
1		0010	3	0.	.0	2990.0	1		0830	103	553.	177.8	3013.3	1		1650	203	0.	7.6	2993.7
1		0015	4	0.	.0	2990.1	1		0835	104	549.	174.0	3013.0	1		1655	204	0.	7.6	2993.7
1		0020	5	0.	.0	2990.2	1		0840	105	545.	170.2	3012.7	1		1700	205	0.	7.6	2993.7
1		0025	6	0.	.0	2990.5	1		0845	106	540.	166.5	3012.4	1		1705	206	0.	7.6	2993.7
1		0030	7	0.	.1	2990.9	1		0850	107	536.	162.8	3012.1	1		1710	207	0.	7.6	2993.7
1		0035	8	0.	.1	2991.0	1		0855	108	532.	159.1	3011.8	1		1715	208	0.	7.6	2993.7
1		0040	9	0.	.2	2991.1	1		0900	109	528.	155.4	3011.6	1		1720	209	0.	7.6	2993.7
1		0045	10	0.	.2	2991.2	1		0905	110	524.	151.8	3011.3	1		1725	210	0.	7.6	2993.7
1		0050	11	0.	.3	2991.3	1		0910	111	520.	148.2	3011.0	1		1730	211	0.	7.5	2993.7
1		0055	12	0.	.4	2991.5	1		0915	112	516.	144.7	3010.7	1		1735	212	0.	7.5	2993.7
1		0100	13	0.	.5	2991.6	1		0920	113	512.	141.1	3010.5	1		1740	213	0.	7.5	2993.7
1		0105	14	0.	.6	2991.7	1		0925	114	508.	137.6	3010.2	1		1745	214	0.	7.5	2993.7
1		0110	15	0.	.7	2991.8	1		0930	115	504.	134.1	3009.9	1		1750	215	0.	7.5	2993.7
1		0115	16	0.	.8	2992.0	1		0935	116	499.	130.7	3009.6	1		1755	216	0.	7.5	2993.7
1		0120	17	0.	.9	2992.0	1		0940	117	494.	127.2	3009.3	1		1800	217	0.	7.5	2993.7
1		0125	18	0.	1.1	2992.1	1		0945	118	489.	123.8	3009.0	1		1805	218	0.	7.5	2993.7
1		0130	19	0.	1.3	2992.1	1		0950	119	483.	120.5	3008.6	1		1810	219	0.	7.5	2993.7
1		0135	20	0.	1.6	2992.2	1		0955	120	478.	117.2	3008.3	1		1815	220	0.	7.5	2993.7
1		0140	21	0.	2.1	2992.3	1		1000	121	472.	113.9	3007.9	1		1820	221	0.	7.5	2993.7
1		0145	22	0.	2.7	2992.5	1		1005	122	466.	110.7	3007.6	1		1825	222	0.	7.5	2993.7
1		0150	23	0.	3.4	2992.7	1		1010	123	461.	107.5	3007.3	1		1830	223	0.	7.5	2993.7
1		0155	24	0.	4.2	2992.9	1		1015	124	455.	104.3	3007.0	1		1835	224	0.	7.5	2993.7
1		0200	25	0.	5.1	2993.1	1		1020	125	450.	101.2	3006.6	1		1840	225	0.	7.5	2993.7
1		0205	26	0.	6.0	2993.3	1		1025	126	445.	98.1	3006.3	1		1845	226	0.	7.5	2993.7
1		0210	27	0.	6.8	2993.5	1		1030	127	439.	95.1	3006.0	1		1850	227	0.	7.5	2993.7
1		0215	28	5.	7.7	2993.7	1		1035	128	433.	92.1	3005.7	1		1855	228	0.	7.5	2993.7
1		0220	29	29.	8.6	2994.0	1		1040	129	427.	89.1	3005.3	1		1900	229	0.	7.5	2993.7
1		0225	30	54.	9.5	2994.2	1		1045	130	422.	86.2	3005.0	1		1905	230	0.	7.5	2993.7
1		0230	31	81.	10.5	2994.4	1		1050	131	414.	83.3	3004.7	1		1910	231	0.	7.5	2993.7
1		0235	32	107.	11.4	2994.7	1		1055	132	407.	80.5	3004.3	1		1915	232	0.	7.5	2993.7
1		0240	33	130.	12.2	2994.9	1		1100	133	400.	77.7	3003.9	1		1920	233	0.	7.5	2993.7
1		0245	34	145.	13.0	2995.0	1		1105	134	392.	75.0	3003.6	1		1925	234	0.	7.5	2993.7
1		0250	35	151.	13.8	2995.2	1		1110	135	385.	72.3	3003.2	1		1930	235	0.	7.5	2993.7
1		0255	36	158.	14.6	2995.3	1		1115	136	378.	69.7	3002.9	1		1935	236	0.	7.5	2993.7
1		0300	37	165.	15.5	2995.5	1		1120	137	371.	67.1	3002.5	1		1940	237	0.	7.5	2993.7
1		0305	38	172.	16.5	2995.6	1		1125	138	364.	64.6	3002.2	1		1945	238	0.	7.5	2993.7
1		0310	39	181.	17.5	2995.8	1		1130	139	357.	62.1	3001.9	1		1950	239	0.	7.5	2993.7
1		0315	40	192.	19.1	2996.1	1		1135	140	350.	59.7	3001.5	1		1955	240	0.	7.5	2993.7
1		0320	41	209.	21.9	2996.5	1		1140	141	344.	57.3	3001.2	1		2000	241	0.	7.5	2993.7
1		0325	42	235.	26.9	2997.2	1		1145	142	336.	54.9	3000.9	1		2005	242	0.	7.5	2993.7
1		0330	43	270.	35.3	2998.4	1		1150	143	329.	52.6	3000.6	1		2010	243	0.	7.5	2993.7
1		0335	44	315.	48.4	3000.1	1		1155	144	322.	50.4	3000.3	1		2015	244	0.	7.5	2993.7
1		0340	45	367.	65.9	3002.4	1		1200	145	315.	48.2	3000.0	1		2020	245	0.	7.5	2993.7
1		0345	46	422.	86.3	3005.0	1		1205	146	308.	46.1	2999.8	1		2025	246	0.	7.5	2993.7
1		0350	47	461.	107.7	3007.3	1		1210	147	301.	44.0	2999.5	1		2030	247	0.	7.5	2993.7
1		0355	48	496.	128.7	3009.4	1		1215	148	294.	41.9	2999.2	1		2035	248	0.	7.5	2993.7
1		0400	49	521.	148.9	3011.1	1		1220	149	287.	39.9	2999.0	1		2040	249	0.	7.5	2993.7
1		0405	50	542.	167.8	3012.5	1		1225	150	279.	38.0	2998.7	1		2045	250	0.	7.5	2993.7
1		0410	51	562.	185.4	3013.9	1		1230	151	272.	36.1	2998.4	1		2050	251	0.	7.5	2993.7
1		0415	52	579.	201.4	3015.1	1		1235	152	265.	34.2	2998.2	1		2055	252	0.	7.5	2993.7
1		0420	53	592.	215.3	3016.1	1		1240	153	259.	32.4	2998.0	1		2100	253	0.	7.5	2993.7
1		0425	54	603.	227.3	3016.9	1		1245	154	251.	30.7	2997.7	1		2105	254	0.	7.5	2993.7
1		0430	55	612.	237.4	3017.6	1		1250	155	244.	29.0	2997.5	1		2110	255	0.	7.5	2993.7
1		0435	56	620.	246.2	3018.2	1		1255	156	237.	27.3	2997.3	1		2115	256	0.	7.5	2993.7
1		0440	57	627.	253.9	3018.7	1		1300	157	230.	25.7	2997.1	1		2120	257	0.	7.5	2993.7
1		0445	58	632.	261.0	3019.2	1		1305	158	222.	24.1	2996.9	1		2125	258	0.	7.5	2993.7
1		0450	59	638.	267.5	3019.6	1		1310	159	214.	22.6	2996.6	1		2130	259	0.	7.5	2993.7
1		0455	60	642.	273.4	3020.0	1		1315	160	205.	21.2	2996.4	1		2135	260	0.	7.5	2993.7
1		0500	61	647.	278.8	3020.4	1		1320	161	197.	19.8	2996.2	1		2140	261	0.	7.5	2993.7
1		0505	62	650.	283.8	3020.7	1		1325	162	188.	18.5	2996.0	1		2145	262	0.	7.5	2993.7
1		0510	63	654.	288.2	3021.0	1		1330	163	178.	17.2	2995.7	1		2150	263	0.	7.5	2993.7
1		0515	64	657.	291.8	3021.2	1		1335	164	169.	16.0	2995.5	1		2155	264	0.	7.5	2993.7
1		0520	65	659.	294.6	3021.4	1		1340	165	160.	14.9	2995.4	1		2200	265	0.	7.5	2993.7
1		0525	66	660.	296.6	3021.5	1		1345	166	151.	13.8	2995.2	1		2205	266	0.	7.5	2993.7
1		0530	67	661.	297.9	3021.6	1		1350	167	144.	12.8	2995.0	1		2210	267	0.	7.5	2993.7
1		0535	68	661.	298.4	3021.6	1		1355	168	120.	11.9	2994.8	1		2215	268	0.	7.5	2993.7
1		0540	69	661.	298.3	3021.6	1		1400	169	99.	11.1	2994.6	1		2220	269	0.	7.5	2993.7
1		0545	70	661.	297.6	3021.5	1		1405	170	82.	10.5	2994.4	1		2225	270	0.	7.5	2993.7
1		0550	71	660.	296.3	3021.5	1		1410	171	68.	10.0	2994.3	1		2230	271	0.	7.5	2993.7
1		0555	72	659.	294.6	3021.3	1		1415	172	56.	9.6	2994.2	1		2235	272	0.	7.5	2993.7
1		0600	73	657.	292.5	3021.2	1		1420	173	46.	9.2	2994.1	1		2240	273	0.	7.5	2993.7
1		0605	74	655.	290.0	3021.1	1		1425	174	38.	8.9	2994.0	1		2245	274	0.	7.5	2993.7
1		0610	75	653.	287.2	3020.9	1		1430	175	32.	8.7	2994.0	1		2250	275	0.	7.5	2993.7
1		0615	76	651.	284.2	3020.7	1		1435	176	26.	8.5	2993.9	1		2255	276	0.	7.5	2993.7
1		0620	77	648.	280.9	3020.5	1		1440	177	22.	8.3	2993.9	1		2300	277	0.	7.5	2993.7
1		0625	78	645.	277.4	3020.3	1		1445	178	18.	8.2	2993.9	1		2305	278	0.	7.5	2993.7
1		0630	79	643.	273.8	3020.0	1		1450	179	15.	8.1	2993.8	1		2310	279	0.	7.5	2993.7
1		0635	80	640.	270.1	3019.8	1		1455	180	12.	8.0	2993.8	1		2315	280	0.	7.5	2993.7
1		0640	81	637.	266.2	3019.5	1		1500	181	10.	7.9	2993.8	1		2320	281	0.	7.5	2993.7
1		0645	82	633.	262.3	3019.3	1		1505	182	8.	7.8	2993.8	1		2325	282	0.	7.5	2993.7
1		0650	83	630.	258.3	3019.0	1		1510	183	7.	7.8	2993.8	1		2330	283	0.	7.5	2993.7
1		0655	84	627.	254.2	3018.7	1		1515	184	6.	7.8	2993.8	1		2335	284	0.	7.5	2993.7
1		0700	85	623.	250.1	3018.5	1		1520	185	5.	7.7	2993.7	1		2340	285	0.	7.5	2993.7
1		0705	86	620.	246.0	3018.2	1		1525	186	4.	7.7	2993.7	1		2345	286	0.	7.5	2993.7
1		0710	87	616.	241.9	3017.9	1		1530	187	3.	7.7	2993.7	1		2350	287	0.	7.5	2993.7
1		0715	88	613.	237.8	3017.6	1		1535	188	3.	7.6	2993.7	1		2355	288	0.	7.5	2993.7
1		0720	89	609.	233.6	3017.3	1		1540	189	2.	7.6	2993.7	2		0000	289	0.	7.5	2993.7
1		0725	90	605.	229.5	3017.0	1		1545	190	2.	7.6	2993.7	2		0005	290	0.	7.5	2993.7
1		0730	91	601.	225.4	3016.8	1		1550	191	1.	7.6	2993.7	2		0010	291	0.	7.5	2993.7
1		0735	92	597.	221.3	3016.5	1		1555	192	1.	7.6	2993.7	2		0015	292	0.	7.5	2993.7
1		0740	93	594.	217.2	3016.2	1		1600	193	1.	7.6	2993.7	2		0020	293	0.	7.5	2993.7
1		0745	94	590.	213.2	3015.9	1		1605	194	1.	7.6	2993.7	2		0025	294	0.	7.5	2993.7
1		0750	95	586.	209.1	3015.6	1		1610	195	1.	7.6	2993.7	2		0030	295	0.	7.5	2993.7
1		0755	96	583.	205.1	3015.3	1		1615	196	1.	7.6	2993.7	2		0035	296	0.	7.5	2993.7
1		0800	97	579.	201.1	3015.1	1		1620	197	0.	7.6	2993.7	2		0040	297	0.	7.5	2993.7
1		0805	98	575.	197.2	3014.8	1		1625	198	0.	7.6	2993.7	2		0045	298	0.	7.5	2993.7
1		0810	99	570.	193.2	3014.5	1		1630	199	0.	7.6	2993.7	2		0050	299	0.	7.5	2993.7

1	0815	100	566.	189.3	3014.2	*	1	1635	200	0.	7.6	2993.7	*	2	0055	300	0.	7.5	2993.7

PEAK FLOW	TIME	MAXIMUM AVERAGE FLOW			
		6-HR	24-HR	72-HR	24.92-HR
(CFS)	(HR)				
		(CFS)			
661.	5.58	594.	218.	210.	210.
		(INCHES) 1.257	1.845	1.845	1.845
		(AC-FT) 294.	432.	432.	432.

PEAK STORAGE	TIME	MAXIMUM AVERAGE STORAGE			
		6-HR	24-HR	72-HR	24.92-HR
(AC-FT)	(HR)				
298.	5.58	223.	71.	68.	68.

PEAK STAGE	TIME	MAXIMUM AVERAGE STAGE			
		6-HR	24-HR	72-HR	24.92-HR
(FEET)	(HR)				
3021.59	5.58	3016.38	3000.76	3000.39	3000.39

CUMULATIVE AREA = 4.39 SQ MI

HYDROGRAPH AT STATION EXDB
PLAN 1, RATIO = .92

DA	MON	HRMN	ORD	OUTFLOW	STORAGE	STAGE	*	DA	MON	HRMN	ORD	OUTFLOW	STORAGE	STAGE	*	DA	MON	HRMN	ORD	OUTFLOW	STORAGE	STAGE
1		0000	1	0.	.0	2990.0	*	1		0820	101	556.	180.5	3013.5	*	1		1640	201	0.	7.6	2993.7
1		0005	2	0.	.0	2990.0	*	1		0825	102	552.	176.7	3013.2	*	1		1645	202	0.	7.6	2993.7
1		0010	3	0.	.0	2990.0	*	1		0830	103	548.	172.9	3012.9	*	1		1650	203	0.	7.6	2993.7
1		0015	4	0.	.0	2990.1	*	1		0835	104	543.	169.1	3012.6	*	1		1655	204	0.	7.6	2993.7
1		0020	5	0.	.0	2990.2	*	1		0840	105	539.	165.4	3012.3	*	1		1700	205	0.	7.6	2993.7
1		0025	6	0.	.0	2990.5	*	1		0845	106	535.	161.7	3012.0	*	1		1705	206	0.	7.6	2993.7
1		0030	7	0.	.1	2990.9	*	1		0850	107	531.	158.0	3011.8	*	1		1710	207	0.	7.6	2993.7
1		0035	8	0.	.1	2991.0	*	1		0855	108	527.	154.4	3011.5	*	1		1715	208	0.	7.6	2993.7
1		0040	9	0.	.1	2991.1	*	1		0900	109	523.	150.8	3011.2	*	1		1720	209	0.	7.6	2993.7
1		0045	10	0.	.2	2991.2	*	1		0905	110	519.	147.2	3010.9	*	1		1725	210	0.	7.5	2993.7
1		0050	11	0.	.3	2991.3	*	1		0910	111	515.	143.6	3010.7	*	1		1730	211	0.	7.5	2993.7
1		0055	12	0.	.4	2991.4	*	1		0915	112	511.	140.1	3010.4	*	1		1735	212	0.	7.5	2993.7
1		0100	13	0.	.4	2991.5	*	1		0920	113	507.	136.6	3010.1	*	1		1740	213	0.	7.5	2993.7
1		0105	14	0.	.5	2991.6	*	1		0925	114	503.	133.1	3009.8	*	1		1745	214	0.	7.5	2993.7
1		0110	15	0.	.6	2991.7	*	1		0930	115	498.	129.7	3009.5	*	1		1750	215	0.	7.5	2993.7
1		0115	16	0.	.7	2991.9	*	1		0935	116	493.	126.3	3009.2	*	1		1755	216	0.	7.5	2993.7
1		0120	17	0.	.8	2992.0	*	1		0940	117	488.	122.9	3008.9	*	1		1800	217	0.	7.5	2993.7
1		0125	18	0.	1.0	2992.0	*	1		0945	118	482.	119.5	3008.5	*	1		1805	218	0.	7.5	2993.7
1		0130	19	0.	1.2	2992.1	*	1		0950	119	476.	116.2	3008.2	*	1		1810	219	0.	7.5	2993.7
1		0135	20	0.	1.5	2992.2	*	1		0955	120	470.	113.0	3007.8	*	1		1815	220	0.	7.5	2993.7
1		0140	21	0.	1.9	2992.3	*	1		1000	121	465.	109.8	3007.5	*	1		1820	221	0.	7.5	2993.7
1		0145	22	0.	2.5	2992.4	*	1		1005	122	459.	106.6	3007.2	*	1		1825	222	0.	7.5	2993.7
1		0150	23	0.	3.2	2992.6	*	1		1010	123	454.	103.4	3006.9	*	1		1830	223	0.	7.5	2993.7
1		0155	24	0.	4.0	2992.8	*	1		1015	124	448.	100.3	3006.5	*	1		1835	224	0.	7.5	2993.7
1		0200	25	0.	4.9	2993.0	*	1		1020	125	443.	97.3	3006.2	*	1		1840	225	0.	7.5	2993.7
1		0205	26	0.	5.7	2993.2	*	1		1025	126	438.	94.2	3005.9	*	1		1845	226	0.	7.5	2993.7
1		0210	27	0.	6.5	2993.4	*	1		1030	127	432.	91.2	3005.6	*	1		1850	227	0.	7.5	2993.7
1		0215	28	0.	7.4	2993.7	*	1		1035	128	426.	88.3	3005.3	*	1		1855	228	0.	7.5	2993.7
1		0220	29	20.	8.3	2993.9	*	1		1040	129	420.	85.4	3004.9	*	1		1900	229	0.	7.5	2993.7
1		0225	30	46.	9.2	2994.1	*	1		1045	130	412.	82.5	3004.5	*	1		1905	230	0.	7.5	2993.7
1		0230	31	73.	10.2	2994.4	*	1		1050	131	405.	79.7	3004.2	*	1		1910	231	0.	7.5	2993.7
1		0235	32	99.	11.1	2994.6	*	1		1055	132	398.	76.9	3003.8	*	1		1915	232	0.	7.5	2993.7
1		0240	33	122.	12.0	2994.8	*	1		1100	133	390.	74.2	3003.5	*	1		1920	233	0.	7.5	2993.7
1		0245	34	143.	12.7	2995.0	*	1		1105	134	383.	71.6	3003.1	*	1		1925	234	0.	7.5	2993.7
1		0250	35	149.	13.5	2995.1	*	1		1110	135	376.	68.9	3002.8	*	1		1930	235	0.	7.5	2993.7
1		0255	36	155.	14.3	2995.3	*	1		1115	136	369.	66.4	3002.4	*	1		1935	236	0.	7.5	2993.7
1		0300	37	162.	15.2	2995.4	*	1		1120	137	362.	63.9	3002.1	*	1		1940	237	0.	7.5	2993.7
1		0305	38	169.	16.1	2995.6	*	1		1125	138	355.	61.4	3001.8	*	1		1945	238	0.	7.5	2993.7
1		0310	39	177.	17.1	2995.7	*	1		1130	139	348.	59.0	3001.5	*	1		1950	239	0.	7.5	2993.7
1		0315	40	189.	18.7	2996.0	*	1		1135	140	342.	56.6	3001.1	*	1		1955	240	0.	7.5	2993.7
1		0320	41	206.	21.4	2996.4	*	1		1140	141	334.	54.3	3000.8	*	1		2000	241	0.	7.5	2993.7
1		0325	42	232.	26.2	2997.1	*	1		1145	142	327.	52.0	3000.5	*	1		2005	242	0.	7.5	2993.7
1		0330	43	266.	34.5	2998.2	*	1		1150	143	320.	49.8	3000.2	*	1		2010	243	0.	7.5	2993.7
1		0335	44	312.	47.3	2999.9	*	1		1155	144	313.	47.6	3000.0	*	1		2015	244	0.	7.5	2993.7
1		0340	45	363.	64.5	3002.2	*	1		1200	145	306.	45.5	2999.7	*	1		2020	245	0.	7.5	2993.7
1		0345	46	417.	84.5	3004.8	*	1		1205	146	299.	43.4	2999.4	*	1		2025	246	0.	7.5	2993.7
1		0350	47	457.	105.5	3007.1	*	1		1210	147	292.	41.3	2999.1	*	1		2030	247	0.	7.5	2993.7
1		0355	48	493.	126.2	3009.2	*	1		1215	148	285.	39.4	2998.9	*	1		2035	248	0.	7.5	2993.7
1		0400	49	518.	146.0	3010.8	*	1		1220	149	277.	37.4	2998.6	*	1		2040	249	0.	7.5	2993.7
1		0405	50	538.	164.7	3012.3	*	1		1225	150	270.	35.5	2998.4	*	1		2045	250	0.	7.5	2993.7
1		0410	51	558.	182.0	3013.6	*	1		1230	151	263.	33.7	2998.1	*	1		2050	251	0.	7.5	2993.7
1		0415	52	575.	197.6	3014.8	*	1		1235	152	257.	31.9	2997.9	*	1		2055	252	0.	7.5	2993.7
1		0420	53	588.	211.4	3015.8	*	1		1240	153	249.	30.2	2997.7	*	1		2100	253	0.	7.5	2993.7
1		0425	54	599.	223.1	3016.6	*	1		1245	154	242.	28.5	2997.4	*	1		2105	254	0.	7.5	2993.7
1		0430	55	608.	233.1	3017.3	*	1		1250	155	235.	26.8	2997.2	*	1		2110	255	0.	7.5	2993.7
1		0435	56	616.	241.6	3017.9	*	1		1255	156	228.	25.2	2997.0	*	1		2115	256	0.	7.5	2993.7
1		0440	57	623.	249.3	3018.4	*	1		1300	157	220.	23.7	2996.8	*	1		2120	257	0.	7.5	2993.7
1		0445	58	628.	256.2	3018.9	*	1		1305	158	211.	22.2	2996.5	*	1		2125	258	0.	7.5	2993.7
1		0450	59	634.	262.5	3019.3	*	1		1310	159	203.	20.8	2996.3	*	1		2130	259	0.	7.5	2993.7
1		0455	60	638.	268.3	3019.7	*	1		1315	160	194.	19.4	2996.1	*	1		2135	260	0.	7.5	2993.7
1		0500	61	643.	273.7	3020.0	*	1		1320	161	185.	18.1	2995.9	*	1		2140	261	0.	7.5	2993.7
1		0505	62	646.	278.6	3020.3	*	1		1325	162	175.	16.9	2995.7	*	1		2145	262	0.	7.5	2993.7
1		0510	63	650.	282.9	3020.6	*	1		1330	163	166.	15.7	2995.5	*	1		2150	263	0.	7.5	2993.7
1		0515	64	652.	286.4	3020.8	*	1		1335	164	157.	14.6	2995.3	*	1		2155	264	0.	7.5	2993.7
1		0520	65	654.	289.1	3021.0	*	1		1340	165	149.	13.5	2995.1	*	1		2200	265	0.	7.5	2993.7
1		0525	66	656.	291.0	3021.1	*	1		1345	166	138.	12.5	2995.0	*	1		2205	266	0.	7.5	2993.7
1		0530	67	657.	292.2	3021.2	*	1		1350	167	114.	11.7	2994.7	*	1		2210	267	0.	7.5	2993.7
1		0535	68	657.	292.8	3021.2	*	1		1355	168	94.	11.0	2994.6	*	1		2215	268	0.	7.5	2993.7
1		0540	69	657.	292.6	3021.2	*	1		1400	169	78.	10.4	2994.4	*	1		2220	269	0.	7.5	2993.7
1		0545	70	657.	291.9	3021.2	*	1		1405	170	64.	9.9	2994.3	*	1		2225	270	0.	7.5	2993.7

1	0550	71	656.	290.6	3021.1	*	1	1410	171	53.	9.5	2994.2	*	1	2230	271	0.	7.5	2993.7
1	0555	72	654.	288.9	3021.0	*	1	1415	172	44.	9.1	2994.1	*	1	2235	272	0.	7.5	2993.7
1	0600	73	653.	286.7	3020.9	*	1	1420	173	36.	8.9	2994.0	*	1	2240	273	0.	7.5	2993.7
1	0605	74	651.	284.2	3020.7	*	1	1425	174	30.	8.6	2994.0	*	1	2245	274	0.	7.5	2993.7
1	0610	75	649.	281.5	3020.5	*	1	1430	175	25.	8.4	2993.9	*	1	2250	275	0.	7.5	2993.7
1	0615	76	646.	278.4	3020.3	*	1	1435	176	20.	8.3	2993.9	*	1	2255	276	0.	7.5	2993.7
1	0620	77	644.	275.2	3020.1	*	1	1440	177	17.	8.2	2993.9	*	1	2300	277	0.	7.5	2993.7
1	0625	78	641.	271.7	3019.9	*	1	1445	178	14.	8.1	2993.8	*	1	2305	278	0.	7.5	2993.7
1	0630	79	638.	268.1	3019.7	*	1	1450	179	12.	8.0	2993.8	*	1	2310	279	0.	7.5	2993.7
1	0635	80	635.	264.4	3019.4	*	1	1455	180	9.	7.9	2993.8	*	1	2315	280	0.	7.5	2993.7
1	0640	81	632.	260.6	3019.2	*	1	1500	181	8.	7.8	2993.8	*	1	2320	281	0.	7.5	2993.7
1	0645	82	629.	256.7	3018.9	*	1	1505	182	6.	7.8	2993.8	*	1	2325	282	0.	7.5	2993.7
1	0650	83	626.	252.7	3018.6	*	1	1510	183	5.	7.7	2993.7	*	1	2330	283	0.	7.5	2993.7
1	0655	84	622.	248.7	3018.4	*	1	1515	184	4.	7.7	2993.7	*	1	2335	284	0.	7.5	2993.7
1	0700	85	619.	244.7	3018.1	*	1	1520	185	4.	7.7	2993.7	*	1	2340	285	0.	7.5	2993.7
1	0705	86	615.	240.6	3017.8	*	1	1525	186	3.	7.7	2993.7	*	1	2345	286	0.	7.5	2993.7
1	0710	87	611.	236.5	3017.5	*	1	1530	187	2.	7.6	2993.7	*	1	2350	287	0.	7.5	2993.7
1	0715	88	608.	232.4	3017.2	*	1	1535	188	2.	7.6	2993.7	*	1	2355	288	0.	7.5	2993.7
1	0720	89	604.	228.3	3017.0	*	1	1540	189	2.	7.6	2993.7	*	2	0000	289	0.	7.5	2993.7
1	0725	90	600.	224.2	3016.7	*	1	1545	190	1.	7.6	2993.7	*	2	0005	290	0.	7.5	2993.7
1	0730	91	596.	220.1	3016.4	*	1	1550	191	1.	7.6	2993.7	*	2	0010	291	0.	7.5	2993.7
1	0735	92	593.	216.1	3016.1	*	1	1555	192	1.	7.6	2993.7	*	2	0015	292	0.	7.5	2993.7
1	0740	93	589.	212.0	3015.8	*	1	1600	193	1.	7.6	2993.7	*	2	0020	293	0.	7.5	2993.7
1	0745	94	585.	208.0	3015.5	*	1	1605	194	1.	7.6	2993.7	*	2	0025	294	0.	7.5	2993.7
1	0750	95	581.	204.0	3015.3	*	1	1610	195	1.	7.6	2993.7	*	2	0030	295	0.	7.5	2993.7
1	0755	96	578.	200.0	3015.0	*	1	1615	196	0.	7.6	2993.7	*	2	0035	296	0.	7.5	2993.7
1	0800	97	573.	196.0	3014.7	*	1	1620	197	0.	7.6	2993.7	*	2	0040	297	0.	7.5	2993.7
1	0805	98	569.	192.1	3014.4	*	1	1625	198	0.	7.6	2993.7	*	2	0045	298	0.	7.5	2993.7
1	0810	99	565.	188.2	3014.1	*	1	1630	199	0.	7.6	2993.7	*	2	0050	299	0.	7.5	2993.7
1	0815	100	560.	184.3	3013.8	*	1	1635	200	0.	7.6	2993.7	*	2	0055	300	0.	7.5	2993.7
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PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
			6-HR	24-HR	72-HR	24.92-HR
+ (CFS)	(HR)					
		(CFS)				
+ 657.	5.58		589.	214.	206.	206.
		(INCHES)	1.247	1.815	1.815	1.815
		(AC-FT)	292.	425.	425.	425.

PEAK STORAGE	TIME		MAXIMUM AVERAGE STORAGE			
			6-HR	24-HR	72-HR	24.92-HR
+ (AC-FT)	(HR)					
293.	5.58		218.	69.	66.	66.

PEAK STAGE	TIME		MAXIMUM AVERAGE STAGE			
			6-HR	24-HR	72-HR	24.92-HR
+ (FEET)	(HR)					
3021.23	5.58		3016.03	3000.60	3000.23	3000.23

CUMULATIVE AREA = 4.39 SQ MI

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HYDROGRAPH AT STATION EXDB
PLAN 1, RATIO = .91

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DA	MON	HRMN	ORD	OUTFLOW	STORAGE	STAGE	*	DA	MON	HRMN	ORD	OUTFLOW	STORAGE	STAGE	*	DA	MON	HRMN	ORD	OUTFLOW	STORAGE	STAGE
1		0000	1	0.	.0	2990.0	*	1		0820	101	551.	175.6	3013.1	*	1		1640	201	0.	7.6	2993.7
1		0005	2	0.	.0	2990.0	*	1		0825	102	546.	171.8	3012.8	*	1		1645	202	0.	7.6	2993.7
1		0010	3	0.	.0	2990.0	*	1		0830	103	542.	168.0	3012.5	*	1		1650	203	0.	7.6	2993.7
1		0015	4	0.	.0	2990.1	*	1		0835	104	538.	164.3	3012.2	*	1		1655	204	0.	7.6	2993.7
1		0020	5	0.	.0	2990.2	*	1		0840	105	534.	160.6	3012.0	*	1		1700	205	0.	7.6	2993.7
1		0025	6	0.	.0	2990.5	*	1		0845	106	530.	157.0	3011.7	*	1		1705	206	0.	7.6	2993.7
1		0030	7	0.	.1	2990.8	*	1		0850	107	526.	153.3	3011.4	*	1		1710	207	0.	7.6	2993.7
1		0035	8	0.	.1	2991.0	*	1		0855	108	522.	149.7	3011.1	*	1		1715	208	0.	7.6	2993.7
1		0040	9	0.	.1	2991.1	*	1		0900	109	518.	146.1	3010.8	*	1		1720	209	0.	7.5	2993.7
1		0045	10	0.	.2	2991.2	*	1		0905	110	514.	142.6	3010.6	*	1		1725	210	0.	7.5	2993.7
1		0050	11	0.	.3	2991.3	*	1		0910	111	510.	139.1	3010.3	*	1		1730	211	0.	7.5	2993.7
1		0055	12	0.	.3	2991.4	*	1		0915	112	506.	135.6	3010.0	*	1		1735	212	0.	7.5	2993.7
1		0100	13	0.	.4	2991.5	*	1		0920	113	501.	132.1	3009.7	*	1		1740	213	0.	7.5	2993.7
1		0105	14	0.	.5	2991.6	*	1		0925	114	496.	128.7	3009.4	*	1		1745	214	0.	7.5	2993.7
1		0110	15	0.	.6	2991.7	*	1		0930	115	491.	125.2	3009.1	*	1		1750	215	0.	7.5	2993.7
1		0115	16	0.	.7	2991.8	*	1		0935	116	486.	121.9	3008.8	*	1		1755	216	0.	7.5	2993.7
1		0120	17	0.	.8	2992.0	*	1		0940	117	480.	118.6	3008.4	*	1		1800	217	0.	7.5	2993.7
1		0125	18	0.	.9	2992.0	*	1		0945	118	474.	115.3	3008.1	*	1		1805	218	0.	7.5	2993.7
1		0130	19	0.	1.1	2992.1	*	1		0950	119	469.	112.0	3007.7	*	1		1810	219	0.	7.5	2993.7
1		0135	20	0.	1.4	2992.1	*	1		0955	120	463.	108.8	3007.4	*	1		1815	220	0.	7.5	2993.7
1		0140	21	0.	1.8	2992.3	*	1		1000	121	458.	105.6	3007.1	*	1		1820	221	0.	7.5	2993.7
1		0145	22	0.	2.3	2992.4	*	1		1005	122	452.	102.5	3006.8	*	1		1825	222	0.	7.5	2993.7
1		0150	23	0.	3.0	2992.6	*	1		1010	123	447.	99.4	3006.4	*	1		1830	223	0.	7.5	2993.7
1		0155	24	0.	3.8	2992.8	*	1		1015	124	442.	96.4	3006.1	*	1		1835	224	0.	7.5	2993.7
1		0200	25	0.	4.6	2993.0	*	1		1020	125	436.	93.3	3005.8	*	1		1840	225	0.	7.5	2993.7
1		0205	26	0.	5.4	2993.2	*	1		1025	126	430.	90.4	3005.5	*	1		1845	226	0.	7.5	2993.7
1		0210	27	0.	6.2	2993.4	*	1		1030	127	424.	87.4	3005.2	*	1		1850	227	0.	7.5	2993.7
1		0215	28	0.	7.0	2993.6	*	1		1035	128	417.	84.5	3004.8	*	1		1855	228	0.	7.5	2993.7
1		0220	29	11.	8.0	2993.8	*	1		1040	129	410.	81.7	3004.4	*	1		1900	229	0.	7.5	2993.7
1		0225	30	38.	8.9	2994.0	*	1		1045	130	403.	78.9	3004.1	*	1		1905	230	0.	7.5	2993.7
1		0230	31	65.	9.9	2994.3	*	1		1050	131	395.	76.1	3003.7	*	1		1910	231	0.	7.5	2993.7
1		0235	32	91.	10.8	2994.5	*	1		1055	132	388.	73.4	3003.4	*	1		1915	232	0.	7.5	2993.7
1		0240	33	115.	11.7	2994.7	*	1		1100	133	381.	70.8	3003.0	*	1		1920	233	0.	7.5	2993.7
1		0245	34	135.	12.4	2994.9	*	1		1105	134	374.	68.2	3002.7	*	1		1925	234	0.	7.5	2993.7
1		0250	35	146.	13.2	2995.1	*	1		1110	135	367.	65.6	3002.3	*	1		1930	235	0.	7.5	2993.7
1		0255	36	153.	14.0	2995.2	*	1		1115	136	360.	63.1	3002.0	*	1		1935	236	0.	7.5	2993.7
1		0300	37	159.	14.8	2995.3	*	1		1120	137	353.	60.7	3001.7	*	1		1940	237	0.	7.5	2993.7
1		0305	38	166.	15.7	2995.5	*	1		1125	138	346.	58.3	3001.4	*	1		1945	238	0.	7.5	2993.7
1		0310	39	174.	16.7	2995.7	*	1		1130	139	340.	55.9	3001.1	*	1		1950	239	0.	7.5	2993.7
1		0315	40	186.	18.2	2995.9	*	1		1135	140	332.	53.6	3000.7	*	1		1955	240	0.	7.5	2993.7
1		0320	41	203.	20.8	2996.3	*	1		1140	141	325.	51.3	3000.5	*	1		2000	241	0.	7.5	2993.7

1	0325	42	230.	25.6	2997.1	*	1	1145	142	317.	49.1	3000.2	*	1	2005	242	0.	7.5	2993.7
1	0330	43	263.	33.7	2998.1	*	1	1150	143	310.	47.0	2999.9	*	1	2010	243	0.	7.5	2993.7
1	0335	44	308.	46.3	2999.8	*	1	1155	144	304.	44.8	2999.6	*	1	2015	244	0.	7.5	2993.7
1	0340	45	360.	63.1	3002.0	*	1	1200	145	297.	42.8	2999.3	*	1	2020	245	0.	7.5	2993.7
1	0345	46	413.	82.7	3004.6	*	1	1205	146	290.	40.8	2999.1	*	1	2025	246	0.	7.5	2993.7
1	0350	47	454.	103.4	3006.9	*	1	1210	147	282.	38.8	2998.8	*	1	2030	247	0.	7.5	2993.7
1	0355	48	489.	123.7	3008.9	*	1	1215	148	275.	36.9	2998.6	*	1	2035	248	0.	7.5	2993.7
1	0400	49	515.	143.2	3010.6	*	1	1220	149	268.	35.0	2998.3	*	1	2040	249	0.	7.5	2993.7
1	0405	50	535.	161.5	3012.0	*	1	1225	150	261.	33.2	2998.1	*	1	2045	250	0.	7.5	2993.7
1	0410	51	554.	178.5	3013.3	*	1	1230	151	254.	31.4	2997.8	*	1	2050	251	0.	7.5	2993.7
1	0415	52	571.	193.8	3014.5	*	1	1235	152	247.	29.7	2997.6	*	1	2055	252	0.	7.5	2993.7
1	0420	53	585.	207.3	3015.5	*	1	1240	153	240.	28.0	2997.4	*	1	2100	253	0.	7.5	2993.7
1	0425	54	595.	218.9	3016.3	*	1	1245	154	233.	26.4	2997.2	*	1	2105	254	0.	7.5	2993.7
1	0430	55	604.	228.7	3017.0	*	1	1250	155	226.	24.8	2997.0	*	1	2110	255	0.	7.5	2993.7
1	0435	56	612.	237.1	3017.6	*	1	1255	156	217.	23.2	2996.7	*	1	2115	256	0.	7.5	2993.7
1	0440	57	619.	244.5	3018.1	*	1	1300	157	209.	21.8	2996.5	*	1	2120	257	0.	7.5	2993.7
1	0445	58	624.	251.3	3018.6	*	1	1305	158	200.	20.4	2996.3	*	1	2125	258	0.	7.5	2993.7
1	0450	59	630.	257.5	3019.0	*	1	1310	159	192.	19.0	2996.0	*	1	2130	259	0.	7.5	2993.7
1	0455	60	634.	263.2	3019.3	*	1	1315	160	182.	17.7	2995.8	*	1	2135	260	0.	7.5	2993.7
1	0500	61	638.	268.5	3019.7	*	1	1320	161	173.	16.5	2995.6	*	1	2140	261	0.	7.5	2993.7
1	0505	62	642.	273.3	3020.0	*	1	1325	162	163.	15.4	2995.4	*	1	2145	262	0.	7.5	2993.7
1	0510	63	645.	277.5	3020.3	*	1	1330	163	155.	14.3	2995.3	*	1	2150	263	0.	7.5	2993.7
1	0515	64	648.	280.9	3020.5	*	1	1335	164	147.	13.2	2995.1	*	1	2155	264	0.	7.5	2993.7
1	0520	65	650.	283.6	3020.7	*	1	1340	165	131.	12.3	2994.9	*	1	2200	265	0.	7.5	2993.7
1	0525	66	652.	285.4	3020.8	*	1	1345	166	108.	11.4	2994.7	*	1	2205	266	0.	7.5	2993.7
1	0530	67	653.	286.6	3020.8	*	1	1350	167	89.	10.8	2994.5	*	1	2210	267	0.	7.5	2993.7
1	0535	68	653.	287.1	3020.9	*	1	1355	168	74.	10.2	2994.4	*	1	2215	268	0.	7.5	2993.7
1	0540	69	653.	286.9	3020.9	*	1	1400	169	61.	9.7	2994.3	*	1	2220	269	0.	7.5	2993.7
1	0545	70	652.	286.2	3020.8	*	1	1405	170	50.	9.4	2994.2	*	1	2225	270	0.	7.5	2993.7
1	0550	71	651.	284.9	3020.7	*	1	1410	171	41.	9.0	2994.1	*	1	2230	271	0.	7.5	2993.7
1	0555	72	650.	283.1	3020.6	*	1	1415	172	34.	8.8	2994.0	*	1	2235	272	0.	7.5	2993.7
1	0600	73	648.	281.0	3020.5	*	1	1420	173	28.	8.6	2994.0	*	1	2240	273	0.	7.5	2993.7
1	0605	74	646.	278.5	3020.3	*	1	1425	174	23.	8.4	2993.9	*	1	2245	274	0.	7.5	2993.7
1	0610	75	644.	275.7	3020.2	*	1	1430	175	19.	8.2	2993.9	*	1	2250	275	0.	7.5	2993.7
1	0615	76	642.	272.7	3020.0	*	1	1435	176	16.	8.1	2993.8	*	1	2255	276	0.	7.5	2993.7
1	0620	77	639.	269.5	3019.7	*	1	1440	177	13.	8.0	2993.8	*	1	2300	277	0.	7.5	2993.7
1	0625	78	636.	266.1	3019.5	*	1	1445	178	11.	7.9	2993.8	*	1	2305	278	0.	7.5	2993.7
1	0630	79	634.	262.5	3019.3	*	1	1450	179	9.	7.9	2993.8	*	1	2310	279	0.	7.5	2993.7
1	0635	80	631.	258.8	3019.0	*	1	1455	180	7.	7.8	2993.8	*	1	2315	280	0.	7.5	2993.7
1	0640	81	627.	255.0	3018.8	*	1	1500	181	6.	7.8	2993.8	*	1	2320	281	0.	7.5	2993.7
1	0645	82	624.	251.1	3018.5	*	1	1505	182	5.	7.7	2993.7	*	1	2325	282	0.	7.5	2993.7
1	0650	83	621.	247.2	3018.3	*	1	1510	183	4.	7.7	2993.7	*	1	2330	283	0.	7.5	2993.7
1	0655	84	617.	243.2	3018.0	*	1	1515	184	3.	7.7	2993.7	*	1	2335	284	0.	7.5	2993.7
1	0700	85	614.	239.1	3017.7	*	1	1520	185	3.	7.7	2993.7	*	1	2340	285	0.	7.5	2993.7
1	0705	86	610.	235.1	3017.4	*	1	1525	186	2.	7.6	2993.7	*	1	2345	286	0.	7.5	2993.7
1	0710	87	606.	231.0	3017.2	*	1	1530	187	2.	7.6	2993.7	*	1	2350	287	0.	7.5	2993.7
1	0715	88	603.	227.0	3016.9	*	1	1535	188	2.	7.6	2993.7	*	1	2355	288	0.	7.5	2993.7
1	0720	89	599.	222.9	3016.6	*	1	1540	189	1.	7.6	2993.7	*	2	0000	289	0.	7.5	2993.7
1	0725	90	595.	218.9	3016.3	*	1	1545	190	1.	7.6	2993.7	*	2	0005	290	0.	7.5	2993.7
1	0730	91	591.	214.8	3016.0	*	1	1550	191	1.	7.6	2993.7	*	2	0010	291	0.	7.5	2993.7
1	0735	92	588.	210.8	3015.7	*	1	1555	192	1.	7.6	2993.7	*	2	0015	292	0.	7.5	2993.7
1	0740	93	584.	206.8	3015.5	*	1	1600	193	1.	7.6	2993.7	*	2	0020	293	0.	7.5	2993.7
1	0745	94	580.	202.8	3015.2	*	1	1605	194	1.	7.6	2993.7	*	2	0025	294	0.	7.5	2993.7
1	0750	95	576.	198.8	3014.9	*	1	1610	195	0.	7.6	2993.7	*	2	0030	295	0.	7.5	2993.7
1	0755	96	572.	194.9	3014.6	*	1	1615	196	0.	7.6	2993.7	*	2	0035	296	0.	7.5	2993.7
1	0800	97	568.	190.9	3014.3	*	1	1620	197	0.	7.6	2993.7	*	2	0040	297	0.	7.5	2993.7
1	0805	98	563.	187.1	3014.0	*	1	1625	198	0.	7.6	2993.7	*	2	0045	298	0.	7.5	2993.7
1	0810	99	559.	183.2	3013.7	*	1	1630	199	0.	7.6	2993.7	*	2	0050	299	0.	7.5	2993.7
1	0815	100	555.	179.4	3013.4	*	1	1635	200	0.	7.6	2993.7	*	2	0055	300	0.	7.5	2993.7

PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
			6-HR	24-HR	72-HR	24.92-HR
+ (CFS)	(HR)					
		(CFS)				
+ 653.	5.58		584.	211.	203.	203.
		(INCHES)	1.236	1.784	1.784	1.784
		(AC-FT)	290.	418.	418.	418.

PEAK STORAGE	TIME	MAXIMUM AVERAGE STORAGE			
		6-HR	24-HR	72-HR	24.92-HR
+ (AC-FT)	(HR)				
287.	5.58	213.	67.	65.	65.

PEAK STAGE	TIME	MAXIMUM AVERAGE STAGE			
		6-HR	24-HR	72-HR	24.92-HR
+ (FEET)	(HR)				
3020.88	5.58	3015.67	3000.43	3000.07	3000.07

CUMULATIVE AREA = 4.39 SQ MI

HYDROGRAPH AT STATION EXDB
PLAN 1, RATIO = .70

DA	MON	HRMN	ORD	OUTFLOW	STORAGE	STAGE	*	DA	MON	HRMN	ORD	OUTFLOW	STORAGE	STAGE	*	DA	MON	HRMN	ORD	OUTFLOW	STORAGE	STAGE
1		0000	1	0.	.0	2990.0	*	1		0820	101	411.	81.8	3004.4	*	1		1640	201	0.	7.5	2993.7
1		0005	2	0.	.0	2990.0	*	1		0825	102	403.	79.0	3004.1	*	1		1645	202	0.	7.5	2993.7
1		0010	3	0.	.0	2990.0	*	1		0830	103	396.	76.2	3003.7	*	1		1650	203	0.	7.5	2993.7
1		0015	4	0.	.0	2990.0	*	1		0835	104	388.	73.5	3003.4	*	1		1655	204	0.	7.5	2993.7
1		0020	5	0.	.0	2990.1	*	1		0840	105	381.	70.9	3003.0	*	1		1700	205	0.	7.5	2993.7
1		0025	6	0.	.0	2990.2	*	1		0845	106	374.	68.3	3002.7	*	1		1705	206	0.	7.5	2993.7
1		0030	7	0.	.0	2990.4	*	1		0850	107	367.	65.7	3002.3	*	1		1710	207	0.	7.5	2993.7
1		0035	8	0.	.0	2990.6	*	1		0855	108	360.	63.2	3002.0	*	1		1715	208	0.	7.5	2993.7
1		0040	9	0.	.1	2990.8	*	1		0900	109	353.	60.8	3001.7	*	1		1720	209	0.	7.5	2993.7
1		0045	10	0.	.1	2991.0	*	1		0905	110	346.	58.3	3001.4	*	1		1725	210	0.	7.5	2993.7
1		0050	11	0.	.1	2991.0	*	1		0910	111	340.	56.0	3001.1	*	1		1730	211	0.	7.5	2993.7
1		0055	12	0.	.1	2991.0	*	1		0915	112	332.	53.7	3000.8	*	1		1735	212	0.	7.5	2993.7

1	0100	13	0.	.1	2991.0	*	1	0920	113	325.	51.4	3000.5	*	1	1740	213	0.	7.5	2993.7
1	0105	14	0.	.1	2991.0	*	1	0925	114	318.	49.2	3000.2	*	1	1745	214	0.	7.5	2993.7
1	0110	15	0.	.1	2991.0	*	1	0930	115	311.	47.0	2999.9	*	1	1750	215	0.	7.5	2993.7
1	0115	16	0.	.1	2991.0	*	1	0935	116	304.	44.9	2999.6	*	1	1755	216	0.	7.5	2993.7
1	0120	17	0.	.1	2991.0	*	1	0940	117	297.	42.8	2999.3	*	1	1800	217	0.	7.5	2993.7
1	0125	18	0.	.1	2991.0	*	1	0945	118	290.	40.8	2999.1	*	1	1805	218	0.	7.5	2993.7
1	0130	19	0.	.1	2991.1	*	1	0950	119	283.	38.8	2998.8	*	1	1810	219	0.	7.5	2993.7
1	0135	20	0.	.2	2991.1	*	1	0955	120	276.	36.9	2998.6	*	1	1815	220	0.	7.5	2993.7
1	0140	21	0.	.2	2991.2	*	1	1000	121	269.	35.1	2998.3	*	1	1820	221	0.	7.5	2993.7
1	0145	22	0.	.3	2991.4	*	1	1005	122	262.	33.2	2998.1	*	1	1825	222	0.	7.5	2993.7
1	0150	23	0.	.5	2991.6	*	1	1010	123	255.	31.4	2997.8	*	1	1830	223	0.	7.5	2993.7
1	0155	24	0.	.7	2991.9	*	1	1015	124	247.	29.7	2997.6	*	1	1835	224	0.	7.5	2993.7
1	0200	25	0.	1.0	2992.0	*	1	1020	125	240.	28.0	2997.4	*	1	1840	225	0.	7.5	2993.7
1	0205	26	0.	1.2	2992.1	*	1	1025	126	233.	26.4	2997.2	*	1	1845	226	0.	7.5	2993.7
1	0210	27	0.	1.5	2992.2	*	1	1030	127	226.	24.8	2997.0	*	1	1850	227	0.	7.5	2993.7
1	0215	28	0.	1.8	2992.3	*	1	1035	128	217.	23.3	2996.7	*	1	1855	228	0.	7.5	2993.7
1	0220	29	0.	2.1	2992.3	*	1	1040	129	209.	21.8	2996.5	*	1	1900	229	0.	7.5	2993.7
1	0225	30	0.	2.6	2992.5	*	1	1045	130	200.	20.4	2996.3	*	1	1905	230	0.	7.5	2993.7
1	0230	31	0.	3.2	2992.6	*	1	1050	131	192.	19.1	2996.1	*	1	1910	231	0.	7.5	2993.7
1	0235	32	0.	3.8	2992.8	*	1	1055	132	182.	17.8	2995.8	*	1	1915	232	0.	7.5	2993.7
1	0240	33	0.	4.5	2992.9	*	1	1100	133	173.	16.6	2995.6	*	1	1920	233	0.	7.5	2993.7
1	0245	34	0.	5.3	2993.1	*	1	1105	134	164.	15.4	2995.4	*	1	1925	234	0.	7.5	2993.7
1	0250	35	0.	6.1	2993.3	*	1	1110	135	155.	14.3	2995.3	*	1	1930	235	0.	7.5	2993.7
1	0255	36	0.	7.0	2993.6	*	1	1115	136	147.	13.3	2995.1	*	1	1935	236	0.	7.5	2993.7
1	0300	37	10.	7.9	2993.8	*	1	1120	137	131.	12.3	2994.9	*	1	1940	237	0.	7.5	2993.7
1	0305	38	34.	8.8	2994.0	*	1	1125	138	109.	11.5	2994.7	*	1	1945	238	0.	7.5	2993.7
1	0310	39	57.	9.6	2994.2	*	1	1130	139	90.	10.8	2994.5	*	1	1950	239	0.	7.5	2993.7
1	0315	40	84.	10.6	2994.5	*	1	1135	140	74.	10.2	2994.4	*	1	1955	240	0.	7.5	2993.7
1	0320	41	125.	12.1	2994.8	*	1	1140	141	61.	9.8	2994.3	*	1	2000	241	0.	7.5	2993.7
1	0325	42	157.	14.6	2995.3	*	1	1145	142	51.	9.4	2994.2	*	1	2005	242	0.	7.5	2993.7
1	0330	43	192.	19.1	2996.1	*	1	1150	143	42.	9.1	2994.1	*	1	2010	243	0.	7.5	2993.7
1	0335	44	234.	26.5	2997.2	*	1	1155	144	34.	8.8	2994.0	*	1	2015	244	0.	7.5	2993.7
1	0340	45	275.	36.8	2998.5	*	1	1200	145	28.	8.6	2994.0	*	1	2020	245	0.	7.5	2993.7
1	0345	46	317.	49.1	3000.2	*	1	1205	146	24.	8.4	2993.9	*	1	2025	246	0.	7.5	2993.7
1	0350	47	357.	62.2	3001.9	*	1	1210	147	19.	8.3	2993.9	*	1	2030	247	0.	7.5	2993.7
1	0355	48	393.	75.1	3003.6	*	1	1215	148	16.	8.1	2993.8	*	1	2035	248	0.	7.5	2993.7
1	0400	49	424.	87.5	3005.2	*	1	1220	149	13.	8.0	2993.8	*	1	2040	249	0.	7.5	2993.7
1	0405	50	446.	99.2	3006.4	*	1	1225	150	11.	7.9	2993.8	*	1	2045	250	0.	7.5	2993.7
1	0410	51	465.	110.0	3007.5	*	1	1230	151	9.	7.9	2993.8	*	1	2050	251	0.	7.5	2993.7
1	0415	52	482.	119.8	3008.5	*	1	1235	152	7.	7.8	2993.8	*	1	2055	252	0.	7.5	2993.7
1	0420	53	496.	128.3	3009.4	*	1	1240	153	6.	7.8	2993.8	*	1	2100	253	0.	7.5	2993.7
1	0425	54	506.	135.5	3010.0	*	1	1245	154	5.	7.7	2993.7	*	1	2105	254	0.	7.5	2993.7
1	0430	55	513.	141.6	3010.5	*	1	1250	155	4.	7.7	2993.7	*	1	2110	255	0.	7.5	2993.7
1	0435	56	519.	146.7	3010.9	*	1	1255	156	3.	7.7	2993.7	*	1	2115	256	0.	7.5	2993.7
1	0440	57	524.	151.2	3011.2	*	1	1300	157	3.	7.7	2993.7	*	1	2120	257	0.	7.5	2993.7
1	0445	58	528.	155.3	3011.5	*	1	1305	158	2.	7.6	2993.7	*	1	2125	258	0.	7.5	2993.7
1	0450	59	532.	159.0	3011.8	*	1	1310	159	2.	7.6	2993.7	*	1	2130	259	0.	7.5	2993.7
1	0455	60	536.	162.3	3012.1	*	1	1315	160	2.	7.6	2993.7	*	1	2135	260	0.	7.5	2993.7
1	0500	61	539.	165.4	3012.3	*	1	1320	161	1.	7.6	2993.7	*	1	2140	261	0.	7.5	2993.7
1	0505	62	542.	168.1	3012.5	*	1	1325	162	1.	7.6	2993.7	*	1	2145	262	0.	7.5	2993.7
1	0510	63	545.	170.5	3012.7	*	1	1330	163	1.	7.6	2993.7	*	1	2150	263	0.	7.5	2993.7
1	0515	64	547.	172.3	3012.9	*	1	1335	164	1.	7.6	2993.7	*	1	2155	264	0.	7.5	2993.7
1	0520	65	548.	173.6	3013.0	*	1	1340	165	1.	7.6	2993.7	*	1	2200	265	0.	7.5	2993.7
1	0525	66	549.	174.4	3013.0	*	1	1345	166	1.	7.6	2993.7	*	1	2205	266	0.	7.5	2993.7
1	0530	67	550.	174.6	3013.0	*	1	1350	167	0.	7.6	2993.7	*	1	2210	267	0.	7.5	2993.7
1	0535	68	549.	174.4	3013.0	*	1	1355	168	0.	7.6	2993.7	*	1	2215	268	0.	7.5	2993.7
1	0540	69	549.	173.7	3013.0	*	1	1400	169	0.	7.6	2993.7	*	1	2220	269	0.	7.5	2993.7
1	0545	70	547.	172.7	3012.9	*	1	1405	170	0.	7.6	2993.7	*	1	2225	270	0.	7.5	2993.7
1	0550	71	546.	171.2	3012.8	*	1	1410	171	0.	7.6	2993.7	*	1	2230	271	0.	7.5	2993.7
1	0555	72	544.	169.4	3012.6	*	1	1415	172	0.	7.6	2993.7	*	1	2235	272	0.	7.5	2993.7
1	0600	73	541.	167.3	3012.5	*	1	1420	173	0.	7.6	2993.7	*	1	2240	273	0.	7.5	2993.7
1	0605	74	539.	165.0	3012.3	*	1	1425	174	0.	7.6	2993.7	*	1	2245	274	0.	7.5	2993.7
1	0610	75	536.	162.5	3012.1	*	1	1430	175	0.	7.6	2993.7	*	1	2250	275	0.	7.5	2993.7
1	0615	76	533.	159.9	3011.9	*	1	1435	176	0.	7.6	2993.7	*	1	2255	276	0.	7.5	2993.7
1	0620	77	530.	157.1	3011.7	*	1	1440	177	0.	7.6	2993.7	*	1	2300	277	0.	7.5	2993.7
1	0625	78	527.	154.1	3011.5	*	1	1445	178	0.	7.6	2993.7	*	1	2305	278	0.	7.5	2993.7
1	0630	79	523.	151.1	3011.2	*	1	1450	179	0.	7.6	2993.7	*	1	2310	279	0.	7.5	2993.7
1	0635	80	520.	148.0	3011.0	*	1	1455	180	0.	7.6	2993.7	*	1	2315	280	0.	7.5	2993.7
1	0640	81	516.	144.8	3010.7	*	1	1500	181	0.	7.5	2993.7	*	1	2320	281	0.	7.5	2993.7
1	0645	82	513.	141.6	3010.5	*	1	1505	182	0.	7.5	2993.7	*	1	2325	282	0.	7.5	2993.7
1	0650	83	509.	138.3	3010.2	*	1	1510	183	0.	7.5	2993.7	*	1	2330	283	0.	7.5	2993.7
1	0655	84	505.	135.0	3010.0	*	1	1515	184	0.	7.5	2993.7	*	1	2335	284	0.	7.5	2993.7
1	0700	85	501.	131.7	3009.7	*	1	1520	185	0.	7.5	2993.7	*	1	2340	285	0.	7.5	2993.7
1	0705	86	496.	128.4	3009.4	*	1	1525	186	0.	7.5	2993.7	*	1	2345	286	0.	7.5	2993.7
1	0710	87	491.	125.1	3009.1	*	1	1530	187	0.	7.5	2993.7	*	1	2350	287	0.	7.5	2993.7
1	0715	88	486.	121.8	3008.8	*	1	1535	188	0.	7.5	2993.7	*	1	2355	288	0.	7.5	2993.7
1	0720	89	480.	118.5	3008.4	*	1	1540	189	0.	7.5	2993.7	*	2	0000	289	0.	7.5	2993.7
1	0725	90	474.	115.3	3008.1	*	1	1545	190	0.	7.5	2993.7	*	2	0005	290	0.	7.5	2993.7
1	0730	91	469.	112.0	3007.7	*	1	1550	191	0.	7.5	2993.7	*	2	0010	291	0.	7.5	2993.7
1	0735	92	463.	108.9	3007.4	*	1	1555	192	0.	7.5	2993.7	*	2	0015	292	0.	7.5	2993.7
1	0740	93	458.	105.7	3007.1	*	1	1600	193	0.	7.5	2993.7	*	2	0020	293	0.	7.5	2993.7
1	0745	94	452.	102.6	3006.8	*	1	1605	194	0.	7.5	2993.7	*	2	0025	294	0.	7.5	2993.7
1	0750	95	447.	99.5	3006.5	*	1	1610	195	0.	7.5	2993.7	*	2	0030	295	0.	7.5	2993.7
1	0755	96	442.	96.4	3006.1	*	1	1615	196	0.	7.5	2993.7	*	2	0035	296	0.	7.5	2993.7
1	0800	97	436.	93.4	3005.8	*	1	1620	197	0.	7.5	2993.7	*	2	0040	297	0.	7.5	2993.7
1	0805	98	430.	90.4	3005.5	*	1	1625	198	0.	7.5	2993.7	*	2	0045	298	0.	7.5	2993.7
1	0810	99	424.	87.5	3005.2	*	1	1630	199	0.	7.5	2993.7	*	2	0050	299	0.	7.5	2993.7
1	0815	100	418.	84.6	3004.8	*	1	1635	200	0.	7.5	2993.7	*	2	0055	300	0.	7.5	2993.7
						*							*							

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PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
			6-HR	24-HR	72-HR	24.92-HR
+ (CFS)	(HR)	(CFS)				
+ 550.	5.50		462.	137.	132.	132.
		(INCHES)	.977	1.158	1.158	1.158
		(AC-FT)	229.	271.	271.	271.

PEAK STORAGE	TIME	MAXIMUM AVERAGE STORAGE			
		6-HR	24-HR	72-HR	24.92-HR
+ (AC-FT)	(HR)				
175.	5.50	117.	36.	35.	35.

PEAK STAGE	TIME	MAXIMUM AVERAGE STAGE			
		6-HR	24-HR	72-HR	24.92-HR
+ (FEET)	(HR)				
3013.03	5.50	3007.72	2997.34	2997.09	2997.09

CUMULATIVE AREA = 4.39 SQ MI

HYDROGRAPH AT STATION EXDB
PLAN 1, RATIO = .54

DA	MON	HRMN	ORD	OUTFLOW	STORAGE	STAGE	DA	MON	HRMN	ORD	OUTFLOW	STORAGE	STAGE	DA	MON	HRMN	ORD	OUTFLOW	STORAGE	STAGE
1		0000	1	0.	.0	2990.0	1		0820	101	251.	30.7	2997.7	1		1640	201	0.	7.5	2993.7
1		0005	2	0.	.0	2990.0	1		0825	102	244.	29.0	2997.5	1		1645	202	0.	7.5	2993.7
1		0010	3	0.	.0	2990.0	1		0830	103	237.	27.3	2997.3	1		1650	203	0.	7.5	2993.7
1		0015	4	0.	.0	2990.0	1		0835	104	230.	25.7	2997.1	1		1655	204	0.	7.5	2993.7
1		0020	5	0.	.0	2990.0	1		0840	105	222.	24.1	2996.9	1		1700	205	0.	7.5	2993.7
1		0025	6	0.	.0	2990.0	1		0845	106	214.	22.6	2996.6	1		1705	206	0.	7.5	2993.7
1		0030	7	0.	.0	2990.1	1		0850	107	205.	21.2	2996.4	1		1710	207	0.	7.5	2993.7
1		0035	8	0.	.0	2990.2	1		0855	108	197.	19.8	2996.2	1		1715	208	0.	7.5	2993.7
1		0040	9	0.	.0	2990.3	1		0900	109	188.	18.5	2996.0	1		1720	209	0.	7.5	2993.7
1		0045	10	0.	.0	2990.4	1		0905	110	178.	17.2	2995.7	1		1725	210	0.	7.5	2993.7
1		0050	11	0.	.0	2990.5	1		0910	111	169.	16.0	2995.5	1		1730	211	0.	7.5	2993.7
1		0055	12	0.	.0	2990.5	1		0915	112	160.	14.9	2995.4	1		1735	212	0.	7.5	2993.7
1		0100	13	0.	.0	2990.5	1		0920	113	151.	13.8	2995.2	1		1740	213	0.	7.5	2993.7
1		0105	14	0.	.0	2990.5	1		0925	114	144.	12.8	2995.0	1		1745	214	0.	7.5	2993.7
1		0110	15	0.	.0	2990.5	1		0930	115	120.	11.9	2994.8	1		1750	215	0.	7.5	2993.7
1		0115	16	0.	.0	2990.5	1		0935	116	99.	11.1	2994.6	1		1755	216	0.	7.5	2993.7
1		0120	17	0.	.0	2990.6	1		0940	117	82.	10.5	2994.4	1		1800	217	0.	7.5	2993.7
1		0125	18	0.	.0	2990.6	1		0945	118	68.	10.0	2994.3	1		1805	218	0.	7.5	2993.7
1		0130	19	0.	.0	2990.7	1		0950	119	56.	9.6	2994.2	1		1810	219	0.	7.5	2993.7
1		0135	20	0.	.1	2990.8	1		0955	120	46.	9.2	2994.1	1		1815	220	0.	7.5	2993.7
1		0140	21	0.	.1	2991.0	1		1000	121	38.	8.9	2994.0	1		1820	221	0.	7.5	2993.7
1		0145	22	0.	.1	2991.0	1		1005	122	32.	8.7	2994.0	1		1825	222	0.	7.5	2993.7
1		0150	23	0.	.1	2991.0	1		1010	123	26.	8.5	2993.9	1		1830	223	0.	7.5	2993.7
1		0155	24	0.	.1	2991.1	1		1015	124	22.	8.3	2993.9	1		1835	224	0.	7.5	2993.7
1		0200	25	0.	.1	2991.1	1		1020	125	18.	8.2	2993.9	1		1840	225	0.	7.5	2993.7
1		0205	26	0.	.1	2991.1	1		1025	126	15.	8.1	2993.8	1		1845	226	0.	7.5	2993.7
1		0210	27	0.	.2	2991.1	1		1030	127	12.	8.0	2993.8	1		1850	227	0.	7.5	2993.7
1		0215	28	0.	.2	2991.2	1		1035	128	10.	7.9	2993.8	1		1855	228	0.	7.5	2993.7
1		0220	29	0.	.2	2991.2	1		1040	129	8.	7.8	2993.8	1		1900	229	0.	7.5	2993.7
1		0225	30	0.	.3	2991.3	1		1045	130	7.	7.8	2993.8	1		1905	230	0.	7.5	2993.7
1		0230	31	0.	.4	2991.5	1		1050	131	6.	7.8	2993.8	1		1910	231	0.	7.5	2993.7
1		0235	32	0.	.6	2991.7	1		1055	132	5.	7.7	2993.7	1		1915	232	0.	7.5	2993.7
1		0240	33	0.	.7	2991.9	1		1100	133	4.	7.7	2993.7	1		1920	233	0.	7.5	2993.7
1		0245	34	0.	1.0	2992.0	1		1105	134	3.	7.7	2993.7	1		1925	234	0.	7.5	2993.7
1		0250	35	0.	1.2	2992.1	1		1110	135	3.	7.6	2993.7	1		1930	235	0.	7.5	2993.7
1		0255	36	0.	1.5	2992.2	1		1115	136	2.	7.6	2993.7	1		1935	236	0.	7.5	2993.7
1		0300	37	0.	1.9	2992.3	1		1120	137	2.	7.6	2993.7	1		1940	237	0.	7.5	2993.7
1		0305	38	0.	2.3	2992.4	1		1125	138	1.	7.6	2993.7	1		1945	238	0.	7.5	2993.7
1		0310	39	0.	2.7	2992.5	1		1130	139	1.	7.6	2993.7	1		1950	239	0.	7.5	2993.7
1		0315	40	0.	3.3	2992.6	1		1135	140	1.	7.6	2993.7	1		1955	240	0.	7.5	2993.7
1		0320	41	0.	4.2	2992.9	1		1140	141	1.	7.6	2993.7	1		2000	241	0.	7.5	2993.7
1		0325	42	0.	5.9	2993.3	1		1145	142	1.	7.6	2993.7	1		2005	242	0.	7.5	2993.7
1		0330	43	36.	8.8	2994.0	1		1150	143	1.	7.6	2993.7	1		2010	243	0.	7.5	2993.7
1		0335	44	146.	13.2	2995.1	1		1155	144	0.	7.6	2993.7	1		2015	244	0.	7.5	2993.7
1		0340	45	192.	19.1	2996.1	1		1200	145	0.	7.6	2993.7	1		2020	245	0.	7.5	2993.7
1		0345	46	233.	26.3	2997.2	1		1205	146	0.	7.6	2993.7	1		2025	246	0.	7.5	2993.7
1		0350	47	265.	34.1	2998.2	1		1210	147	0.	7.6	2993.7	1		2030	247	0.	7.5	2993.7
1		0355	48	294.	42.0	2999.2	1		1215	148	0.	7.6	2993.7	1		2035	248	0.	7.5	2993.7
1		0400	49	319.	49.5	3000.2	1		1220	149	0.	7.6	2993.7	1		2040	249	0.	7.5	2993.7
1		0405	50	342.	56.6	3001.1	1		1225	150	0.	7.6	2993.7	1		2045	250	0.	7.5	2993.7
1		0410	51	360.	63.2	3002.0	1		1230	151	0.	7.6	2993.7	1		2050	251	0.	7.5	2993.7
1		0415	52	376.	69.1	3002.8	1		1235	152	0.	7.6	2993.7	1		2055	252	0.	7.5	2993.7
1		0420	53	390.	74.3	3003.5	1		1240	153	0.	7.6	2993.7	1		2100	253	0.	7.5	2993.7
1		0425	54	402.	78.6	3004.0	1		1245	154	0.	7.6	2993.7	1		2105	254	0.	7.5	2993.7
1		0430	55	412.	82.2	3004.5	1		1250	155	0.	7.6	2993.7	1		2110	255	0.	7.5	2993.7
1		0435	56	419.	85.1	3004.9	1		1255	156	0.	7.6	2993.7	1		2115	256	0.	7.5	2993.7
1		0440	57	424.	87.6	3005.2	1		1300	157	0.	7.6	2993.7	1		2120	257	0.	7.5	2993.7
1		0445	58	429.	89.8	3005.4	1		1305	158	0.	7.5	2993.7	1		2125	258	0.	7.5	2993.7
1		0450	59	433.	91.8	3005.6	1		1310	159	0.	7.5	2993.7	1		2130	259	0.	7.5	2993.7
1		0455	60	436.	93.6	3005.8	1		1315	160	0.	7.5	2993.7	1		2135	260	0.	7.5	2993.7
1		0500	61	440.	95.2	3006.0	1		1320	161	0.	7.5	2993.7	1		2140	261	0.	7.5	2993.7
1		0505	62	442.	96.6	3006.2	1		1325	162	0.	7.5	2993.7	1		2145	262	0.	7.5	2993.7
1		0510	63	444.	97.7	3006.3	1		1330	163	0.	7.5	2993.7	1		2150	263	0.	7.5	2993.7
1		0515	64	445.	98.5	3006.4	1		1335	164	0.	7.5	2993.7	1		2155	264	0.	7.5	2993.7
1		0520	65	446.	99.0	3006.4	1		1340	165	0.	7.5	2993.7	1		2200	265	0.	7.5	2993.7
1		0525	66	446.	99.1	3006.4	1		1345	166	0.	7.5	2993.7	1		2205	266	0.	7.5	2993.7
1		0530	67	446.	98.8	3006.4	1		1350	167	0.	7.5	2993.7	1		2210	267	0.	7.5	2993.7
1		0535	68	445.	98.2	3006.3	1		1355	168	0.	7.5	2993.7	1		2215	268	0.	7.5	2993.7
1		0540	69	443.	97.4	3006.2	1		1400	169	0.	7.5	2993.7	1		2220	269	0.	7.5	2993.7
1		0545	70	441.	96.2	3006.1	1		1405	170	0.	7.5	2993.7	1		2225	270	0.	7.5	2993.7
1		0550	71	439.	94.8	3006.0	1		1410	171	0.	7.5	2993.7	1		2230	271	0.	7.5	2993.7
1		0555	72	436.	93.2	3005.8	1		1415	172	0.	7.5	2993.7	1		2235	272	0.	7.5	2993.7
1		0600	73	432.	91.4	3005.6	1		1420	173	0.	7.5	2993.7	1		2240	273	0.	7.5	2993.7
1		0605	74	428.	89.5	3005.4	1		1425	174	0.	7.5	2993.7	1		2245	274	0.	7.5	2993.7
1		0610	75	424.	87.4	3005.2	1		1430	175	0.	7.5	2993.7	1		2250	275	0.	7.5	2993.7
1		0615	76	419.	85.3	3004.9	1		1435	176	0.	7.5	2993.7	1		2255	276	0.	7.5	2993.7
1		0620	77	414.	83.1	3004.6	1		1440	177	0.	7.5	2993.7	1		2300	277	0.	7.5	2993.7
1		0625	78	408.	80.8	3004.3	1		1445	178	0.	7.5	2993.7	1		2305	278	0.	7.5	2993.7
1		0630	79	402.	78.4	3004.0	1		1450	179	0.	7.5	2993.7	1		2310	279	0.	7.5	2993.7
1		0635	80	395.	76.1	3003.7	1		1455	180	0.	7.5	2993.7	1		2315	280	0.	7.5	2993.7
1		0640	81	389.	73.7	3003.4	1		1500	181	0.	7.5	2993.7	1		2320	281	0.	7.5	2993.7
1		0645	82	382.	71.3	3003.1	1		1505	182	0.	7.5	2993.7	1		2325	282	0.	7.5	2993.7
1		0650	83	375.	68.9	3002.8	1		1510	183	0.	7.5	2993.7	1		2330	283	0.	7.5	2993.7
1		0655	84	369.	66.5	3002.4	1		1515	184	0.	7.5	2993.7	1		2335	284	0.	7.5	2993.7
1		0700	85	362.	64.1	3002.1	1		1520	185	0.	7.5	2993.7	1		2340	285	0.	7.5	2993.7
1		0705	86	356.	61.7	3001.8	1		1525	186	0.	7.5	2993.7	1		2345	286	0.	7.5	2993.7
1		0710	87	349.	59.4	3001.5	1		1530	187	0.	7.5	2993.7	1		2350	287	0.	7.5	2993.7

1	0715	88	343.	57.1	3001.2	*	1	1535	188	0.	7.5	2993.7	*	1	2355	288	0.	7.5	2993.7
1	0720	89	336.	54.8	3000.9	*	1	1540	189	0.	7.5	2993.7	*	2	0000	289	0.	7.5	2993.7
1	0725	90	329.	52.5	3000.6	*	1	1545	190	0.	7.5	2993.7	*	2	0005	290	0.	7.5	2993.7
1	0730	91	321.	50.3	3000.3	*	1	1550	191	0.	7.5	2993.7	*	2	0010	291	0.	7.5	2993.7
1	0735	92	314.	48.1	3000.0	*	1	1555	192	0.	7.5	2993.7	*	2	0015	292	0.	7.5	2993.7
1	0740	93	307.	46.0	2999.8	*	1	1600	193	0.	7.5	2993.7	*	2	0020	293	0.	7.5	2993.7
1	0745	94	301.	43.9	2999.5	*	1	1605	194	0.	7.5	2993.7	*	2	0025	294	0.	7.5	2993.7
1	0750	95	294.	41.9	2999.2	*	1	1610	195	0.	7.5	2993.7	*	2	0030	295	0.	7.5	2993.7
1	0755	96	287.	39.9	2999.0	*	1	1615	196	0.	7.5	2993.7	*	2	0035	296	0.	7.5	2993.7
1	0800	97	279.	38.0	2998.7	*	1	1620	197	0.	7.5	2993.7	*	2	0040	297	0.	7.5	2993.7
1	0805	98	272.	36.1	2998.4	*	1	1625	198	0.	7.5	2993.7	*	2	0045	298	0.	7.5	2993.7
1	0810	99	265.	34.2	2998.2	*	1	1630	199	0.	7.5	2993.7	*	2	0050	299	0.	7.5	2993.7
1	0815	100	259.	32.4	2998.0	*	1	1635	200	0.	7.5	2993.7	*	2	0055	300	0.	7.5	2993.7
						*							*						

****

PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
			6-HR	24-HR	72-HR	24.92-HR
+ (CFS)	(HR)	(CFS)				
+ 446.	5.42		332.	85.	82.	82.
		(INCHES)	.702	.721	.721	.721
		(AC-FT)	165.	169.	169.	169.

PEAK STORAGE	TIME	MAXIMUM AVERAGE STORAGE			
		6-HR	24-HR	72-HR	24.92-HR
+ (AC-FT)	(HR)				
99.	5.42	59.	20.	19.	19.

PEAK STAGE	TIME	MAXIMUM AVERAGE STAGE			
		6-HR	24-HR	72-HR	24.92-HR
+ (FEET)	(HR)				
3006.41	5.42	3001.35	2995.38	2995.19	2995.19

CUMULATIVE AREA = 4.39 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 1.00	RATIO 2 .99	RATIO 3 .98	RATIO 4 .94	RATIO 5 .93	RATIO 6 .92	RATIO 7 .91	RATIO 8 .70	RATIO 9 .54
HYDROGRAPH AT													
+	1-1A	2.34	1	FLOW	2541.	2505.	2469.	2325.	2289.	2253.	2217.	1477.	942.
				TIME	3.92	3.92	3.92	3.92	3.92	3.92	3.92	3.92	3.92
HYDROGRAPH AT													
+	1-1B	.17	1	FLOW	226.	223.	219.	203.	199.	195.	192.	115.	63.
				TIME	3.58	3.58	3.58	3.58	3.58	3.58	3.58	3.58	3.67
ROUTED TO													
+	R2	.17	1	FLOW	220.	218.	215.	200.	194.	193.	189.	112.	62.
				TIME	3.67	3.67	3.67	3.67	3.67	3.67	3.67	3.67	3.67
2 COMBINED AT													
+	CP1	2.51	1	FLOW	2670.	2632.	2594.	2442.	2404.	2366.	2329.	1549.	986.
				TIME	3.92	3.92	3.92	3.92	3.92	3.92	3.92	3.92	3.92
ROUTED TO													
+	R3	2.51	1	FLOW	2610.	2572.	2535.	2386.	2349.	2312.	2275.	1512.	960.
				TIME	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
HYDROGRAPH AT													
+	1-2A	.86	1	FLOW	1584.	1562.	1541.	1453.	1432.	1410.	1388.	938.	608.
				TIME	3.58	3.58	3.58	3.58	3.58	3.58	3.58	3.58	3.58
ROUTED TO													
+	R4	.86	1	FLOW	1516.	1494.	1473.	1388.	1366.	1345.	1324.	884.	565.
				TIME	3.58	3.58	3.58	3.58	3.58	3.58	3.58	3.58	3.58
HYDROGRAPH AT													
+	1-2B	.22	1	FLOW	315.	310.	305.	286.	281.	276.	271.	173.	103.
				TIME	3.58	3.58	3.58	3.58	3.58	3.58	3.58	3.58	3.58
3 COMBINED AT													
+	CP2	3.59	1	FLOW	3324.	3275.	3228.	3037.	2989.	2941.	2894.	1914.	1209.
				TIME	3.83	3.83	3.83	3.83	3.83	3.83	3.83	3.83	3.83
ROUTED TO													
+	R5	3.59	1	FLOW	3291.	3243.	3196.	3007.	2959.	2912.	2865.	1894.	1197.
				TIME	3.92	3.92	3.92	3.92	3.92	3.92	3.92	3.92	4.00
HYDROGRAPH AT													
+	1-2CR	.57	1	FLOW	885.	872.	859.	807.	794.	781.	768.	503.	313.
				TIME	3.58	3.58	3.58	3.58	3.58	3.58	3.58	3.58	3.58
2 COMBINED AT													
+	CP3	4.17	1	FLOW	3812.	3756.	3700.	3476.	3419.	3365.	3309.	2171.	1365.
				TIME	3.75	3.75	3.75	3.75	3.75	3.75	3.75	3.83	3.83
ROUTED TO													
+	R6	4.17	1	FLOW	3790.	3734.	3681.	3460.	3404.	3351.	3296.	2168.	1360.
				TIME	3.83	3.83	3.83	3.83	3.83	3.83	3.83	3.83	3.83
HYDROGRAPH AT													
+	1-3P	.03	1	FLOW	63.	62.	61.	58.	58.	57.	56.	42.	31.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
2 COMBINED AT													

+	CP4	4.19	1	FLOW	3806.	3750.	3697.	3475.	3419.	3366.	3311.	2179.	1368.
				TIME	3.83	3.83	3.83	3.83	3.83	3.83	3.83	3.83	3.83
ROUTED TO													
+	R7	4.19	1	FLOW	3795.	3740.	3685.	3462.	3408.	3353.	3298.	2163.	1362.
				TIME	3.83	3.83	3.83	3.83	3.83	3.83	3.83	3.83	3.92
HYDROGRAPH AT													
+	1-12P	.18	1	FLOW	230.	227.	223.	209.	206.	202.	199.	128.	78.
				TIME	3.67	3.67	3.67	3.67	3.67	3.67	3.67	3.67	3.67
2 COMBINED AT													
+	CP5	4.37	1	FLOW	3974.	3917.	3859.	3626.	3569.	3511.	3454.	2266.	1416.
				TIME	3.83	3.83	3.83	3.83	3.83	3.83	3.83	3.83	3.83
HYDROGRAPH AT													
+	1-14	.00	1	FLOW	3.	3.	3.	3.	3.	2.	2.	2.	1.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
HYDROGRAPH AT													
+	1-15	.01	1	FLOW	10.	10.	10.	9.	9.	9.	9.	6.	4.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
HYDROGRAPH AT													
+	1-16	.00	1	FLOW	5.	5.	5.	5.	5.	5.	5.	3.	2.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
HYDROGRAPH AT													
+	1-17	.00	1	FLOW	7.	7.	7.	6.	6.	6.	6.	4.	2.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
HYDROGRAPH AT													
+	1-18	.00	1	FLOW	7.	7.	6.	6.	6.	6.	6.	4.	2.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
6 COMBINED AT													
+	CP5B	4.39	1	FLOW	3985.	3927.	3870.	3636.	3579.	3521.	3464.	2273.	1421.
				TIME	3.83	3.83	3.83	3.83	3.83	3.83	3.83	3.83	3.83
ROUTED TO													
+	EXDB	4.39	1	FLOW	1007.	960.	908.	671.	661.	657.	653.	550.	446.
				TIME	5.42	5.42	5.42	5.58	5.58	5.58	5.58	5.50	5.42
			** PEAK STAGES IN FEET **										
			1	STAGE	3023.31	3023.12	3022.91	3021.95	3021.59	3021.23	3020.88	3013.03	3006.41
				TIME	5.42	5.42	5.42	5.58	5.58	5.58	5.58	5.50	5.42
HYDROGRAPH AT													
+	1-4R	.05	1	FLOW	100.	98.	97.	91.	90.	89.	87.	58.	37.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
HYDROGRAPH AT													
+	1-5R	.03	1	FLOW	63.	62.	61.	58.	57.	56.	55.	37.	24.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
2 COMBINED AT													
+	CP6	.09	1	FLOW	163.	161.	158.	149.	147.	145.	142.	95.	61.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
ROUTED TO													
+	R8	.09	1	FLOW	156.	154.	152.	143.	141.	138.	136.	92.	60.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.58	3.58
HYDROGRAPH AT													
+	1-6R	.02	1	FLOW	28.	28.	27.	26.	25.	25.	25.	16.	11.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
HYDROGRAPH AT													
+	1-7R	.03	1	FLOW	50.	50.	49.	46.	45.	45.	44.	30.	19.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
2 COMBINED AT													
+	CP7	.04	1	FLOW	79.	77.	76.	72.	71.	70.	69.	46.	29.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
ROUTED TO													
+	R9	.04	1	FLOW	76.	75.	74.	70.	69.	68.	67.	45.	30.
				TIME	3.58	3.58	3.58	3.58	3.58	3.58	3.58	3.58	3.58
HYDROGRAPH AT													
+	1-8R	.00	1	FLOW	5.	5.	4.	4.	4.	4.	4.	3.	2.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
HYDROGRAPH AT													
+	1-10R	.06	1	FLOW	101.	100.	99.	93.	91.	90.	89.	59.	38.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
2 COMBINED AT													
+	CP8	.06	1	FLOW	106.	105.	103.	97.	96.	94.	93.	62.	39.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
ROUTED TO													
+	R10	.06	1	FLOW	102.	101.	99.	94.	92.	90.	89.	61.	39.
				TIME	3.58	3.58	3.58	3.58	3.58	3.58	3.58	3.58	3.58
HYDROGRAPH AT													
+	1-11P	.18	1	FLOW	219.	215.	212.	198.	194.	191.	188.	118.	69.
				TIME	3.67	3.67	3.67	3.67	3.67	3.67	3.67	3.67	3.67
4 COMBINED AT													
+	CP9	.37	1	FLOW	543.	536.	528.	495.	487.	480.	472.	308.	192.
				TIME	3.58	3.58	3.58	3.58	3.58	3.58	3.58	3.58	3.58
HYDROGRAPH AT													

+	1-13	.00	1	FLOW	1.	1.	1.	1.	1.	1.	1.	1.	1.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
HYDROGRAPH AT													
+	LMT1R	1.96	1	FLOW	2144.	2114.	2085.	1966.	1937.	1907.	1878.	1267.	821.
				TIME	3.92	3.92	3.92	3.92	3.92	3.92	3.92	3.92	3.92
3 COMBINED AT													
+	CP10	2.33	1	FLOW	2429.	2395.	2361.	2224.	2190.	2156.	2123.	1422.	913.
				TIME	3.83	3.83	3.83	3.83	3.83	3.83	3.83	3.83	3.83

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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 PEAK	TIME TO PEAK	VOLUME
		(MIN)	(CFS)	(MIN)	(IN)	(MIN)	(CFS)	(MIN)	(IN)
FOR PLAN = 1 RATIO= .00									
R2	MANE	3.62	221.26	220.72	1.60	5.00	220.26	220.00	1.60

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1495E+02 EXCESS= .0000E+00 OUTFLOW= .1496E+02 BASIN STORAGE= .1444E-02 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00									
R2	MANE	3.64	219.12	218.16	1.57	5.00	217.69	220.00	1.57

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1469E+02 EXCESS= .0000E+00 OUTFLOW= .1470E+02 BASIN STORAGE= .1118E-02 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00									
R2	MANE	3.65	216.76	219.24	1.55	5.00	215.22	220.00	1.55

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1444E+02 EXCESS= .0000E+00 OUTFLOW= .1444E+02 BASIN STORAGE= .1367E-02 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00									
R2	MANE	3.73	200.37	220.08	1.44	5.00	200.09	220.00	1.44

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1341E+02 EXCESS= .0000E+00 OUTFLOW= .1341E+02 BASIN STORAGE= .1137E-02 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00									
R2	MANE	3.75	194.48	221.26	1.41	5.00	193.59	220.00	1.41

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1315E+02 EXCESS= .0000E+00 OUTFLOW= .1315E+02 BASIN STORAGE= .1366E-02 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00									
R2	MANE	3.77	194.78	218.70	1.38	5.00	193.14	220.00	1.38

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1291E+02 EXCESS= .0000E+00 OUTFLOW= .1292E+02 BASIN STORAGE= .1037E-02 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00									
R2	MANE	3.79	189.65	219.91	1.36	5.00	189.47	220.00	1.36

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1265E+02 EXCESS= .0000E+00 OUTFLOW= .1265E+02 BASIN STORAGE= .1202E-02 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00									
R2	MANE	3.75	114.28	221.25	.82	5.00	112.11	220.00	.82

CONTINUITY SUMMARY (AC-FT) - INFLOW= .7650E+01 EXCESS= .0000E+00 OUTFLOW= .7654E+01 BASIN STORAGE= .1004E-02 PERCENT ERROR= -.1

FOR PLAN = 1 RATIO= .00									
R2	MANE	2.25	64.30	222.75	.47	5.00	61.71	220.00	.47

CONTINUITY SUMMARY (AC-FT) - INFLOW= .4359E+01 EXCESS= .0000E+00 OUTFLOW= .4361E+01 BASIN STORAGE= .1019E-02 PERCENT ERROR= -.1

FOR PLAN = 1 RATIO= .00									
R6	MANE	1.32	3798.53	227.06	2.11	5.00	3790.18	230.00	2.11

CONTINUITY SUMMARY (AC-FT) - INFLOW= .4682E+03 EXCESS= .0000E+00 OUTFLOW= .4681E+03 BASIN STORAGE= .5398E-03 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00									
R6	MANE	1.33	3743.79	227.90	2.07	5.00	3734.37	230.00	2.08

CONTINUITY SUMMARY (AC-FT) - INFLOW= .4612E+03 EXCESS= .0000E+00 OUTFLOW= .4611E+03 BASIN STORAGE= .5897E-03 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00									
R6	MANE	1.33	3688.44	227.43	2.04	5.00	3681.22	230.00	2.04

CONTINUITY SUMMARY (AC-FT) - INFLOW= .4542E+03 EXCESS= .0000E+00 OUTFLOW= .4541E+03 BASIN STORAGE= .5356E-03 PERCENT ERROR= .0

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 FOR PLAN = 1  RATIO=  .00
      R6  MANE          1.35   3465.50    228.32      1.92      5.00   3459.93    230.00        1.92

CONTINUITY SUMMARY (AC-FT) - INFLOW= .4264E+03 EXCESS= .0000E+00 OUTFLOW= .4263E+03 BASIN STORAGE= .6080E-03 PERCENT ERROR=    .0

 FOR PLAN = 1  RATIO=  .00
      R6  MANE          1.36   3410.14    227.90      1.89      5.00   3403.62    230.00        1.89

CONTINUITY SUMMARY (AC-FT) - INFLOW= .4195E+03 EXCESS= .0000E+00 OUTFLOW= .4194E+03 BASIN STORAGE= .5400E-03 PERCENT ERROR=    .0

 FOR PLAN = 1  RATIO=  .00
      R6  MANE          1.36   3355.30    227.45      1.86      5.00   3350.78    230.00        1.86

CONTINUITY SUMMARY (AC-FT) - INFLOW= .4126E+03 EXCESS= .0000E+00 OUTFLOW= .4125E+03 BASIN STORAGE= .5832E-03 PERCENT ERROR=    .0

 FOR PLAN = 1  RATIO=  .00
      R6  MANE          1.37   3299.90    228.42      1.83      5.00   3295.94    230.00        1.83

CONTINUITY SUMMARY (AC-FT) - INFLOW= .4057E+03 EXCESS= .0000E+00 OUTFLOW= .4056E+03 BASIN STORAGE= .5145E-03 PERCENT ERROR=    .0

 FOR PLAN = 1  RATIO=  .00
      R6  MANE          1.52   2168.16    229.48      1.20      5.00   2167.85    230.00        1.20

CONTINUITY SUMMARY (AC-FT) - INFLOW= .2660E+03 EXCESS= .0000E+00 OUTFLOW= .2660E+03 BASIN STORAGE= .5661E-03 PERCENT ERROR=    .0

 FOR PLAN = 1  RATIO=  .00
      R6  MANE          1.71   1362.06    232.09       .76      5.00   1359.64    230.00         .76

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1682E+03 EXCESS= .0000E+00 OUTFLOW= .1682E+03 BASIN STORAGE= .5203E-03 PERCENT ERROR=    .0

 FOR PLAN = 1  RATIO=  .00
      R7  MANE          1.79   3795.45    229.59      2.11      5.00   3794.91    230.00        2.11

CONTINUITY SUMMARY (AC-FT) - INFLOW= .4720E+03 EXCESS= .0000E+00 OUTFLOW= .4718E+03 BASIN STORAGE= .7223E-03 PERCENT ERROR=    .0

 FOR PLAN = 1  RATIO=  .00
      R7  MANE          1.80   3741.61    230.44      2.08      5.00   3739.99    230.00        2.08

CONTINUITY SUMMARY (AC-FT) - INFLOW= .4650E+03 EXCESS= .0000E+00 OUTFLOW= .4648E+03 BASIN STORAGE= .6922E-03 PERCENT ERROR=    .0

 FOR PLAN = 1  RATIO=  .00
      R7  MANE          1.81   3685.33    229.46      2.05      5.00   3685.10    230.00        2.05

CONTINUITY SUMMARY (AC-FT) - INFLOW= .4579E+03 EXCESS= .0000E+00 OUTFLOW= .4577E+03 BASIN STORAGE= .8797E-03 PERCENT ERROR=    .0

 FOR PLAN = 1  RATIO=  .00
      R7  MANE          1.83   3463.28    231.21      1.92      5.00   3461.86    230.00        1.92

CONTINUITY SUMMARY (AC-FT) - INFLOW= .4300E+03 EXCESS= .0000E+00 OUTFLOW= .4298E+03 BASIN STORAGE= .7379E-03 PERCENT ERROR=    .0

 FOR PLAN = 1  RATIO=  .00
      R7  MANE          1.84   3409.50    230.31      1.89      5.00   3407.75    230.00        1.89

CONTINUITY SUMMARY (AC-FT) - INFLOW= .4230E+03 EXCESS= .0000E+00 OUTFLOW= .4228E+03 BASIN STORAGE= .7225E-03 PERCENT ERROR=    .0

 FOR PLAN = 1  RATIO=  .00
      R7  MANE          1.85   3354.16    231.21      1.86      5.00   3352.63    230.00        1.86

CONTINUITY SUMMARY (AC-FT) - INFLOW= .4161E+03 EXCESS= .0000E+00 OUTFLOW= .4159E+03 BASIN STORAGE= .8684E-03 PERCENT ERROR=    .0

 FOR PLAN = 1  RATIO=  .00
      R7  MANE          1.86   3300.08    230.31      1.83      5.00   3298.02    230.00        1.83

CONTINUITY SUMMARY (AC-FT) - INFLOW= .4091E+03 EXCESS= .0000E+00 OUTFLOW= .4090E+03 BASIN STORAGE= .8486E-03 PERCENT ERROR=    .0

 FOR PLAN = 1  RATIO=  .00
      R7  MANE          2.06   2169.12    230.96      1.20      5.00   2163.45    230.00        1.20

CONTINUITY SUMMARY (AC-FT) - INFLOW= .2685E+03 EXCESS= .0000E+00 OUTFLOW= .2684E+03 BASIN STORAGE= .8290E-03 PERCENT ERROR=    .0

 FOR PLAN = 1  RATIO=  .00
      R7  MANE          2.32   1364.06    233.98       .76      5.00   1361.92    235.00         .76

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1700E+03 EXCESS= .0000E+00 OUTFLOW= .1700E+03 BASIN STORAGE= .7714E-03 PERCENT ERROR=    .0
```

```
          FOR PLAN = 1  RATIO=  .00
               R8  MANE          .93    162.44    211.19      2.06      5.00    156.28    210.00         2.07

CONTINUITY SUMMARY (AC-FT) - INFLOW= .9673E+01 EXCESS= .0000E+00 OUTFLOW= .9673E+01 BASIN STORAGE= .1111E-03 PERCENT ERROR=    .0

          FOR PLAN = 1  RATIO=  .00
               R8  MANE          .94    160.11    211.79      2.03      5.00    154.20    210.00         2.04

CONTINUITY SUMMARY (AC-FT) - INFLOW= .9530E+01 EXCESS= .0000E+00 OUTFLOW= .9530E+01 BASIN STORAGE= .1067E-03 PERCENT ERROR=    .0

          FOR PLAN = 1  RATIO=  .00
               R8  MANE          .94    157.86    211.45      2.00      5.00    151.74    210.00         2.00

CONTINUITY SUMMARY (AC-FT) - INFLOW= .9386E+01 EXCESS= .0000E+00 OUTFLOW= .9386E+01 BASIN STORAGE= .1011E-03 PERCENT ERROR=    .0

          FOR PLAN = 1  RATIO=  .00
               R8  MANE          .95    148.79    211.13      1.88      5.00    142.96    210.00         1.88

CONTINUITY SUMMARY (AC-FT) - INFLOW= .8822E+01 EXCESS= .0000E+00 OUTFLOW= .8822E+01 BASIN STORAGE= .9884E-04 PERCENT ERROR=    .0

          FOR PLAN = 1  RATIO=  .00
               R8  MANE          .95    146.53    211.78      1.85      5.00    140.79    210.00         1.85

CONTINUITY SUMMARY (AC-FT) - INFLOW= .8682E+01 EXCESS= .0000E+00 OUTFLOW= .8682E+01 BASIN STORAGE= .1118E-03 PERCENT ERROR=    .0

          FOR PLAN = 1  RATIO=  .00
               R8  MANE          .96    144.27    211.49      1.82      5.00    138.40    210.00         1.82

CONTINUITY SUMMARY (AC-FT) - INFLOW= .8540E+01 EXCESS= .0000E+00 OUTFLOW= .8540E+01 BASIN STORAGE= .1059E-03 PERCENT ERROR=    .0

          FOR PLAN = 1  RATIO=  .00
               R8  MANE          .96    141.99    211.20      1.79      5.00    136.26    210.00         1.79

CONTINUITY SUMMARY (AC-FT) - INFLOW= .8401E+01 EXCESS= .0000E+00 OUTFLOW= .8401E+01 BASIN STORAGE= .9888E-04 PERCENT ERROR=    .0

          FOR PLAN = 1  RATIO=  .00
               R8  MANE         1.04     95.18    212.20      1.18      5.00     92.29    215.00         1.19

CONTINUITY SUMMARY (AC-FT) - INFLOW= .5549E+01 EXCESS= .0000E+00 OUTFLOW= .5549E+01 BASIN STORAGE= .1036E-03 PERCENT ERROR=    .0

          FOR PLAN = 1  RATIO=  .00
               R8  MANE         1.14     61.18    212.58       .76      5.00     60.41    215.00          .76

CONTINUITY SUMMARY (AC-FT) - INFLOW= .3541E+01 EXCESS= .0000E+00 OUTFLOW= .3541E+01 BASIN STORAGE= .1150E-03 PERCENT ERROR=    .0

          FOR PLAN = 1  RATIO=  .00
               R9  MANE         2.21     77.94    213.91      2.07      5.00     75.83    215.00         2.07

CONTINUITY SUMMARY (AC-FT) - INFLOW= .4663E+01 EXCESS= .0000E+00 OUTFLOW= .4663E+01 BASIN STORAGE= .2195E-03 PERCENT ERROR=    .0

          FOR PLAN = 1  RATIO=  .00
               R9  MANE         2.21     76.93    212.31      2.04      5.00     75.47    215.00         2.04

CONTINUITY SUMMARY (AC-FT) - INFLOW= .4596E+01 EXCESS= .0000E+00 OUTFLOW= .4596E+01 BASIN STORAGE= .2595E-03 PERCENT ERROR=    .0

          FOR PLAN = 1  RATIO=  .00
               R9  MANE         2.22     75.81    212.92      2.01      5.00     74.35    215.00         2.01

CONTINUITY SUMMARY (AC-FT) - INFLOW= .4526E+01 EXCESS= .0000E+00 OUTFLOW= .4526E+01 BASIN STORAGE= .2157E-03 PERCENT ERROR=    .0

          FOR PLAN = 1  RATIO=  .00
               R9  MANE         2.24     71.46    213.22      1.88      5.00     69.79    215.00         1.88

CONTINUITY SUMMARY (AC-FT) - INFLOW= .4250E+01 EXCESS= .0000E+00 OUTFLOW= .4250E+01 BASIN STORAGE= .2037E-03 PERCENT ERROR=    .0

          FOR PLAN = 1  RATIO=  .00
               R9  MANE         2.25     70.38    213.87      1.86      5.00     68.57    215.00         1.85

CONTINUITY SUMMARY (AC-FT) - INFLOW= .4185E+01 EXCESS= .0000E+00 OUTFLOW= .4185E+01 BASIN STORAGE= .2368E-03 PERCENT ERROR=    .0

          FOR PLAN = 1  RATIO=  .00
               R9  MANE         2.26     69.30    212.28      1.83      5.00     68.25    215.00         1.83

CONTINUITY SUMMARY (AC-FT) - INFLOW= .4120E+01 EXCESS= .0000E+00 OUTFLOW= .4121E+01 BASIN STORAGE= .2804E-03 PERCENT ERROR=    .0
```

```
          FOR PLAN = 1  RATIO=  .00
               R9  MANE          2.27     68.22    212.96      1.80      5.00     67.01    215.00         1.80

CONTINUITY SUMMARY (AC-FT) - INFLOW= .4050E+01 EXCESS= .0000E+00 OUTFLOW= .4050E+01 BASIN STORAGE= .2266E-03 PERCENT ERROR=     .0

          FOR PLAN = 1  RATIO=  .00
               R9  MANE          2.45     45.90    213.56      1.19      5.00     45.08    215.00         1.19

CONTINUITY SUMMARY (AC-FT) - INFLOW= .2676E+01 EXCESS= .0000E+00 OUTFLOW= .2676E+01 BASIN STORAGE= .2443E-03 PERCENT ERROR=     .0

          FOR PLAN = 1  RATIO=  .00
               R9  MANE          2.68     29.81    214.60       .76      5.00     29.57    215.00          .76

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1707E+01 EXCESS= .0000E+00 OUTFLOW= .1708E+01 BASIN STORAGE= .2506E-03 PERCENT ERROR=     .0

          FOR PLAN = 1  RATIO=  .00
               R10 MANE          1.91    105.41    212.23      2.03      5.00    102.04    215.00         2.03

CONTINUITY SUMMARY (AC-FT) - INFLOW= .6281E+01 EXCESS= .0000E+00 OUTFLOW= .6282E+01 BASIN STORAGE= .1837E-03 PERCENT ERROR=     .0

          FOR PLAN = 1  RATIO=  .00
               R10 MANE          1.92    103.90    212.84      2.00      5.00    100.78    215.00         2.00

CONTINUITY SUMMARY (AC-FT) - INFLOW= .6191E+01 EXCESS= .0000E+00 OUTFLOW= .6192E+01 BASIN STORAGE= .2091E-03 PERCENT ERROR=     .0

          FOR PLAN = 1  RATIO=  .00
               R10 MANE          1.92    102.41    213.46      1.97      5.00     98.79    215.00         1.97

CONTINUITY SUMMARY (AC-FT) - INFLOW= .6100E+01 EXCESS= .0000E+00 OUTFLOW= .6100E+01 BASIN STORAGE= .2350E-03 PERCENT ERROR=     .0

          FOR PLAN = 1  RATIO=  .00
               R10 MANE          1.95     96.48    212.14      1.85      5.00     93.59    215.00         1.85

CONTINUITY SUMMARY (AC-FT) - INFLOW= .5728E+01 EXCESS= .0000E+00 OUTFLOW= .5728E+01 BASIN STORAGE= .1973E-03 PERCENT ERROR=     .0

          FOR PLAN = 1  RATIO=  .00
               R10 MANE          1.95     95.02    212.79      1.82      5.00     92.45    215.00         1.82

CONTINUITY SUMMARY (AC-FT) - INFLOW= .5636E+01 EXCESS= .0000E+00 OUTFLOW= .5637E+01 BASIN STORAGE= .2226E-03 PERCENT ERROR=     .0

          FOR PLAN = 1  RATIO=  .00
               R10 MANE          1.96     93.59    213.47      1.79      5.00     90.47    215.00         1.79

CONTINUITY SUMMARY (AC-FT) - INFLOW= .5545E+01 EXCESS= .0000E+00 OUTFLOW= .5545E+01 BASIN STORAGE= .2464E-03 PERCENT ERROR=     .0

          FOR PLAN = 1  RATIO=  .00
               R10 MANE          1.96     92.04    212.18      1.76      5.00     89.47    215.00         1.76

CONTINUITY SUMMARY (AC-FT) - INFLOW= .5453E+01 EXCESS= .0000E+00 OUTFLOW= .5453E+01 BASIN STORAGE= .1980E-03 PERCENT ERROR=     .0

          FOR PLAN = 1  RATIO=  .00
               R10 MANE          2.13     61.63    213.03      1.16      5.00     60.64    215.00         1.16

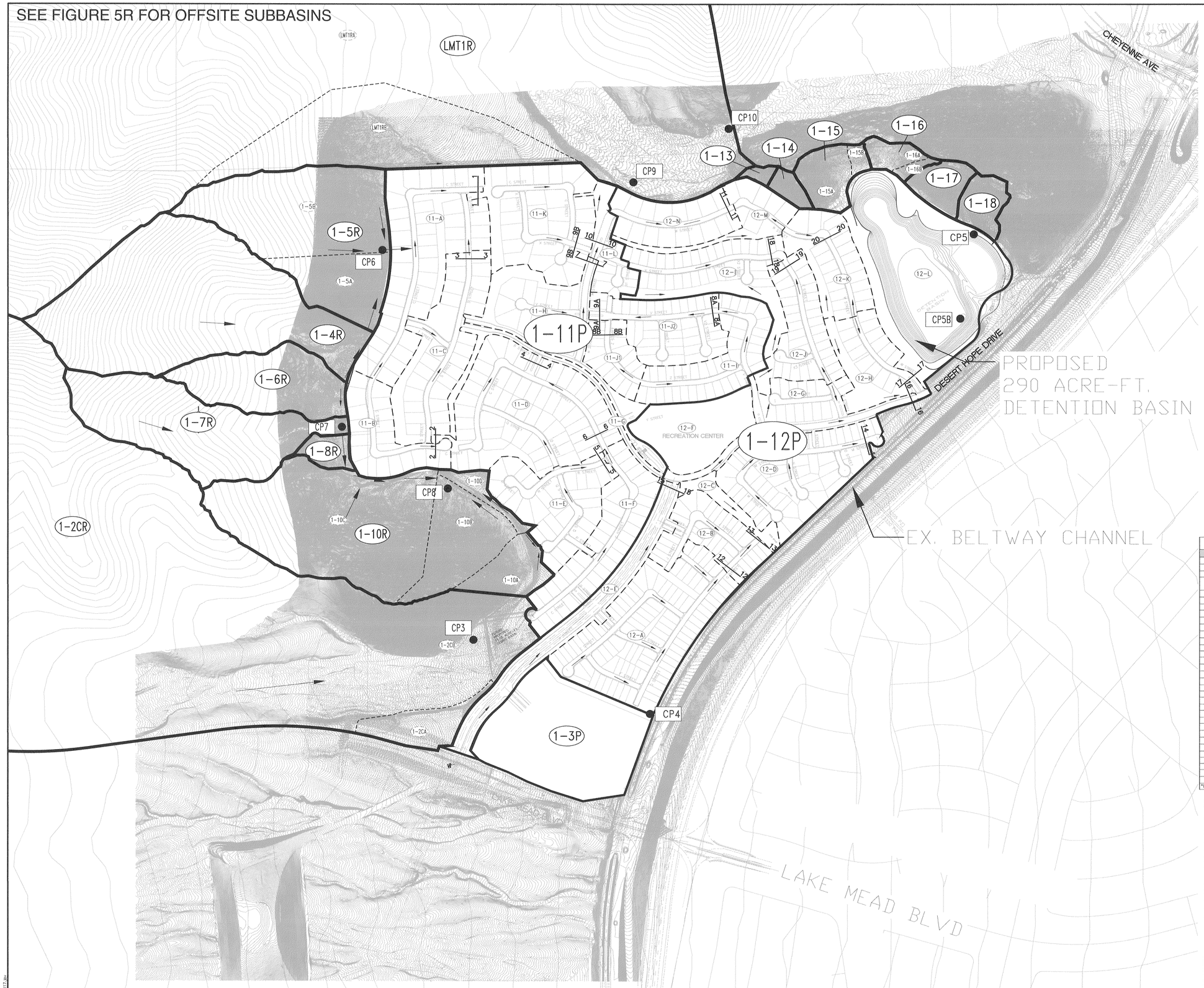
CONTINUITY SUMMARY (AC-FT) - INFLOW= .3593E+01 EXCESS= .0000E+00 OUTFLOW= .3593E+01 BASIN STORAGE= .1886E-03 PERCENT ERROR=     .0

          FOR PLAN = 1  RATIO=  .00
               R10 MANE          2.33     39.86    214.40       .74      5.00     39.34    215.00          .74

CONTINUITY SUMMARY (AC-FT) - INFLOW= .2284E+01 EXCESS= .0000E+00 OUTFLOW= .2284E+01 BASIN STORAGE= .2420E-03 PERCENT ERROR=     .0


*** NORMAL END OF HEC-1 ***
```

SEE FIGURE 5R FOR OFFSITE SUBBASINS



NORTH
SCALE 1" = 300'

GRAPHIC SCALE
300 0 150 300
(IN FEET)
1 inch = 300 ft.

LEGEND

- 1-3P — DRAINAGE BASIN
- 3-E — PRORATED DRAINAGE BASIN
- CP3 — CONCENTRATION POINT
- BASIN BOUNDARY
- PRORATE BASIN BOUNDARY
- FLOW DIRECTION
- 1 1 — STREET CROSS SECTION

SUMMARY OF ULTIMATE CONDITIONS HEC-1 MODEL

SB OR CP	AREA (AC)	100 YR (CFS)	25 YR (CFS)	10 YR (CFS)
1-1A	1497.2	2289	1477	942
1-1B	111.8	226	115	63
CP1	-	2404	1549	986
1-2A	552.7	1541	938	608
1-2B	137.7	315	173	103
CP2	-	2941	1914	1209
1-2CR	367.6	859	503	313
CP3	-	3309	2171	1365
1-3P	16.5	63	42	31
CP4	-	3311	2179	1368
1-12P	116.1*	230*	128	78
CP5	-	3454*	2266*	1416*
1-14	1.0	3	2	1
1-15	3.6	10	6	4
1-16	1.9	5	3	2
1-17	2.5	7	4	2
1-18	2.4	7	4	2
CP5B	-	3464	2273	1421
EXDB	-	653	550	446
1-4R	34.3	100	58	37
1-5R	22	63	37	24
CP6	-	163	95	61
1-6R	9.7	28	16	11
1-7R	17.3	50	30	19
CP7	-	79	46	29
1-8R	1.6	5	3	2
1-10R	35.6	101	59	38
CP8	-	106	62	39
1-11P	113.6*	219*	118	69
CP9	-	536*	308	192
1-13	0.5	1	1	1
LMT1R	1256.6	1966	1267	821
CP10	-	2190	1422	913

ONSITE PRORATED FLOW SUMMARY

Subbasin	Q_{100} (cfs)	New Area	cfs/acre
1-11P	219*	113.6*	1.93
1-12P	230*	116.1*	1.98
Onsite Prorated Basins			
Subbasin	Q_{100} (cfs)	New Area (acres)	cfs/acre
11-A	30*	15.6*	1.93
11-B	12	6.3*	1.93
11-C	21	10.7	1.93
11-D	33*	17.1*	1.93
11-E	17*	9.0*	1.93
11-F	18	9.2*	1.93
11-G	5*	2.3*	1.93
11-H	19	9.7*	1.93
11-I	14	7.4	1.93
11-J1	6	3.3	1.93
11-J2	15*	7.5	1.93
11-K	23	12.1*	1.93
11-L	6	3.4*	1.93
Total	**219***	**113.6***	**N/A**
12-A	33	16.5	1.98
12-B	11	5.8	1.98
12-C	3	1.7*	1.98
12-D	24	12.0	1.98
12-E	15	7.4*	1.98
12-F	14	7.0	1.98
12-G	13*	6.6*	1.98
12-H	12*	5.9*	1.98
12-I	17*	8.8*	1.98
12-J	13	6.7*	1.98
12-K	13	6.4	1.98
12-L	43	21.5	1.98
12-M	7	3.8	1.98
12-N	12	6*	1.98
TOTAL	**230***	**116.1***	**N/A**

*Revised from Previous Submittal

OFFSITE PRORATED FLOW SUMMARY

Subbasin	Q_{100} (cfs)	Area (acres)	cfs/acre
1-2CR	859	367.6	2.34
1-5R	63	22.0	2.86
1-10R	101	35.6	2.84
1-15	10	3.6	2.78
1-16	5	1.9	2.63
LMT1R	1966	1256.6	1.56
Offsite Prorated Basins			
Subbasin	Q_{100} (cfs)	Area (acres)	cfs/acre
1-2CA	9	3.7	2.34
1-2CB	850	363.9	2.34
TOTAL	**859**	**367.6**	**N/A**
1-5A	18	6.2	2.86
1-5B	45	15.8	2.86
TOTAL	**63**	**22.0**	**N/A**
1-10A	10	3.5	2.84
1-10B	21	7.4	2.84
1-10C	66	23.2	2.84
1-10D	4	1.5	2.84
TOTAL	**101**	**35.6**	**N/A**
1-15A	9	3.1	2.78
1-15B	1	0.5	2.78
TOTAL	**10**	**3.6**	**N/A**
1-16A	4	1.4	2.63
1-16B	1	0.5	2.63
TOTAL	**5**	**1.9**	**N/A**
LMT1RA	1935	1236.8	1.56
LMT1RB	31	19.8	1.56
TOTAL	**1966**	**1256.6**	**N/A**

100-YEAR STREET FLOW CHARACTERISTICS
ULTIMATE CONDITIONS

Location	Slope (%)	Q_{100} (cfs)	Depth (ft)	Velocity (ft/s)	D*V	Tributary Subbasins
Section 1	6.00	32	0.44	6.59	2.9	11-A + $Q_{Byp\text{-}Sect3}$
Section 2	2.80	12	0.38	3.89	1.5	11-B
Section 3	3.20	21	0.43	4.68	2.0	11-C
Section 4	3.80	35	0.48	5.63	2.7	11-D + $Q_{Byp\text{-}Sect6}$
Section 5	2.66	17	0.42	4.14	1.7	11-E
Section 6	2.30	20	0.44	4.09	1.8	11-F + $Q_{Byp\text{-}Sect5}$
Section 7	2.54	21	0.44	4.29	1.9	11-H + $Q_{Byp\text{-}Sect9A}$
Section 8A	0.50	14	0.50	2.08	1.0	11-I
Section 8B	2.34	6	0.32	3.10	1.0	11-J1
Section 9A	2.54	19	0.43	4.19	1.8	11-J2 + $Q_{Byp\text{-}Sect8A}$ + $Q_{Byp\text{-}Sect8B}$
Section 9B	3.07	23	0.44	4.70	2.1	11-K
Section 10	5.67	10	0.33	4.90	1.6	11-L + $Q_{Byp\text{-}Sect7}$ + $Q_{Byp\text{-}Sect9B}$
Section 11	0.50	12	0.48	2.02	1.0	12-N
Section 12	5.55	33	0.45	6.44	2.9	12-A
Section 13	5.20	13	0.36	5.02	1.8	12-B + $Q_{Byp\text{-}Sect12}$
Section 14	5.00	24	0.42	5.72	2.4	12-D
Section 15	2.96	15	0.40	4.19	1.7	12-E
Section 16	6.00	29	0.43	6.42	2.8	12-G + 12-F + $Q_{Byp\text{-}Sect15}$
Section 17	0.50	12	0.48	2.02	1.0	12-H
Section 18	1.80	17	0.44	3.56	1.6	12-I
Section 19	5.00	13	0.36	4.95	1.8	12-J
Section 20	0.49	13	0.49	2.05	1.0	12-K

*$Q_{Byp\text{-}Sect8}$: Assumes 2 cfs bypasses the upstream street cross section

DESIGN:
DRAWN:
CHECK:
ISSUE DATE:
ISSUE EDITOR:
PLOT DATE: 11-24-15
PLOT TIME: 13:23:28

NO.	DESCRIPTION	REV. DATE	DATE:	DATE: ASEN. APP.	DATE: SCHL. APP.

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F:\Projects\700\784-204-01\Division\Civil\Figures\RTC\Fig. 5A.dwg

PULTE HOMES
REVERENCE
MASTER DRAINAGE STUDY
ULTIMATE CONDITIONS DRAINAGE MAP

DRAWING
FIG 5AR
OF SHTS

fig-2A36.dwg, 080117, dv

NORTH

GRAPHIC SCALE

1000 0 500 1000

(IN FEET)

1 inch = 1000 ft.

LEGEND

- (1-3P) DRAINAGE BASIN
- CP3 ● CONCENTRATION POINT
- BASIN BOUNDARY
- FLOW DIRECTION

(LMT1R)

(1-1A) (1-1B) (1-2A) (1-2B) (1-2CR)

(1-4R) (1-5R) (1-6R) (1-7R) (1-8R) (1-10R)

(1-11P) (1-12P) (1-13) (1-14) (1-15) (1-16) (1-17) (1-18)

CP1 CP2 CP3 CP4 CP5 CP5B CP6 CP7 CP8 CP9 CP10

(1-3P)

DIV. BERM NO.5

PROPOSED 290 ACRE-FT. DETENTION BASIN

EX. BELTWAY CHANNEL

CHEYENNE AVE

DESERT HOPE DR

LAKE MEAD BLVD

LAKE MEAD BLVD

DESCRIPTION	REV. DATE	DATE AGEN. APP	DATE GOV. APP.	DATE

DESIGN:
DRAWN:
CHECK:
ISSUE DATE:
ISSUE EDITOR:
PLOT DATE:11-23-15
PLOT TIME: 16:57:14

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F:\Projects\700\704-204-011\Division\Civil\Figures\XTCS\Figs\fig5r.dwgrev.

PULTE HOMES

REVERENCE

MASTER DRAINAGE STUDY

ULTIMATE CONDITIONS OVERALL DRAINAGE MAP

DRAWING

FIG 5R

OF SHTS

pce2435.mxp 060117.jpg

LEGEND

- FACILITY IDENTIFIER
- FLOOD PROTECTION FACILITY
- FACILITY BREAK LINE
- FLOW DIRECTION
- DRAINAGE CHANNEL
- DRAINAGE CHANNEL
- PRORATE SUBBASIN BOUNDARY
- WESTERN BELTWAY EXISTING CHANNEL

ONSITE FLOOD PROTECTION FACILITIES

LOCATION	Q_{100} ULT (cfs)	TRIBUTARIES	DESIGN SLOPE (%)	FACILITY
1	163	CP6	0.5%	66" RCP
2	21	11-C	0.5%	36" RCP
4	214	FACILITY 1 (163 cfs) + FACILITY 2 (21 cfs) + 11-A (30 cfs)	1.0%	66" RCP
6	79	CP7	4.5%	36" RCP
7	91	FACILITY 6 (79 cfs) + 11-B (12 cfs)	2.0%	42" RCP
8	96	1-8R (5 cfs) + 1-10C (66 cfs) + 1-10B (21 cfs) + 1-10D (4 cfs)	0.5%	54" RCP
9	187	FACILITY 7 (91 cfs) + FACILITY 8 (96 cfs)	0.5%	72" RCP
10	27	11-E (17 cfs) + 1-10A (10 cfs)	1.5%	30" RCP
11	45	FACILITY 10 (27 cfs) + 11-F (18 cfs)	0.5%	42" RCP
12	220	FACILITY 9 (187 cfs) + 11-D (33 cfs)	0.5%	72" RCP
13A	5	11-G	1.0%	24" RCP
13B	270	FACILITY 11 (45 cfs) + FACILITY 12 (220 cfs) + FACILITY 13A (5 cfs)	1.0%	72" RCP
14A	14	11-I	0.5%	30" RCP
14B	6	11-J1	0.5%	24" RCP
15	35	FACILITY 14A (14 cfs) + FACILITY 14B (6 cfs) + 11-J2 (15 cfs)	0.5%	42" RCP
16	305	FACILITY 13B (270 cfs) + FACILITY 15 (35 cfs)	1.0%	72" RCP
17A	23	11-K	2.0%	30" RCP
17B	328	FACILITY 16 (305 cfs) + FACILITY 17A (23 cfs)	1.0%	72" RCP
18	536	CP9	0.5%	8'X7' RCB
19	30	12-I (17 cfs)+ 12-J (13 cfs)	1.0%	36" RCP
20	62	FACILITY 19 (30 cfs) + 12-K (13 cfs) + 12-M (7 cfs) + 12-N (12 cfs)	1.0%	42" RCP
21	9	1-2CA	6.0%	24" RCP
22*	3309	CP3	0.5%	20'X14' RCB
23*	3311	CP4	0.5%	14'X14' RCB (CCRFCD FACILITY GOL3)
24	63	1-3P	0.5%	48" RCP
25*	3311	CP4	3.5%	20' X 7.5' CONCRETE CHANNEL (CCRFCD FACILITY GOL3)
26A	33	12-A	4.5%	30" RCP
26B	47	FACILITY 26A (33 cfs) + 12-B (11 cfs) + 12-C (3 cfs)	0.5%	42" RCP
27*	3358	FACILITY 25 (3311 cfs) + FACILITY 26B (47 cfs)	6.5%	20' X 7.5' CONCRETE CHANNEL (CCRFCD FACILITY 0137)
28	24	12-D	0.5%	36" RCP
29*	3382	FACILITY 27 (3358 cfs) + FACILITY 28 (24 cfs)	6.5%	20' X 7.5' CONCRETE CHANNEL (CCRFCD FACILITY 0137)
30	14	12-F	4.0%	24" RCP
30A	12	12-H	0.5%	30" RCP
31	54	12-E (15 cfs) + FACILITY 30 (14 cfs) + 12-G (13 cfs) + FACILITY 30A (12 cfs)	5.5%	36" RCP
32**	3454	CP5	4.0%	20'X7' RCB
33	958	CSV22-3**	0.5%	17'W 7.5'-9'D CONCRETE CHANNEL (EX CCRFCD FACILITY GOBE 0065)
34	958	CSV22-3**	2.5%	15'W 7.5'D CONCRETE CHANNEL (EX CCRFCD FACILITY GOBE 0001)
35	958	CSV22-3**	2.5%	11'W 6.8'D CONCRETE CHANNEL (EX CCRFCD FACILITY GOBE 0001)
36	32	1-14 (3 cfs) + 1-15 (10 cfs) + 1-16 (5 cfs) + 1-17 (7 cfs) + 1-18 (7 cfs)	0.5%	42" RCP
E1	653	EXDB	N/A	EXISTING 65" ORIFACE PLATE
E2	653	EXDB	N/A	EXISTING 96" OUTFALL PIPE (EX CCRFCD FACILITY GOL3 0115)

*FACILITY SIZES REFERENCED FROM THE OFFSITE STUDY
**FLOW REFERENCED FROM THE 2013 MPU

OFFSITE FLOOD PROTECTION FACILITIES

LOCATION	Q_{100} ULT (cfs)	TRIBUTARIES	DESIGN SLOPE (%)	FACILITY
1-2CA	5	1-2CA	5.7%	Conc. Rect. Channel- 5' BW, 1.5' Deep
1-4R	100	1-4R	7.0%	Conc. Rect. Channel- 5' BW, 2.5' Deep
1-5A	118	1-4R (100 cfs) + 1-5A (18 cfs)	3.5%	Conc. Rect. Channel- 5' BW, 3' Deep
1-5B	45	1-5B	12.5%	Conc. Rect. Channel- 5' BW, 2' Deep
1-6R	28	1-6R	0.5%	Conc. Rect. Channel- 5' BW, 2' Deep
1-7R	78	1-7R (50 cfs) + 1-6R (28 cfs)	0.5%	Conc. Rect. Channel- 5' BW, 3.5' Deep
1-8R	5	1-8R	12.0%	Conc. Rect. Channel- 3' BW, 1.5' Deep
1-10A	10	1-10A	11.5%	Conc. Rect. Channel- 3' BW, 1.5' Deep
1-10C	71	1-8R (5 cfs) + 1-10C (66 cfs)	9.0%	Conc. Rect. Channel- 5' BW, 2.5' Deep
1-10D	4	1-10D	0.5%	Unlined V-Ditch- 3:1/3:1 Side Slopes,1.5' Deep
1-13	1	1-13 (1 cfs)	0.5%	Conc. Rect. Channel- 3' BW, 1.5' Deep
1-14	4	1-13 (1 cfs) + 1-14A (3 cfs)	0.5%	Conc. Rect. Channel- 3' BW, 1.5' Deep
1-15A	9	1-15A	0.5%	Unlined V-Ditch- 3:1/3:1 Side Slopes, 2' Deep
1-15B	1	1-15B	0.5%	Unlined V-Ditch- 3:1/3:1 Side Slopes, 1.5' Deep
1-16A	4	1-16A	0.5%	Unlined V-Ditch- 3:1/3:1 Side Slopes,1.5' Deep
1-16B	1	1-16B	0.5%	Unlined V-Ditch- 3:1/3:1 Side Slopes,1.5' Deep
1-17	7	1-17	0.5%	Unlined V-Ditch- 3:1/3:1 Side Slopes, 2' Deep
1-18	7	1-18	0.5%	Unlined V-Ditch- 3:1/3:1 Side Slopes,1.5' Deep
LMT1RB	31	LMT1RB	7.0%	Conc. Rect. Channel- 5' BW, 2' Deep

DESIGN:
DRAWN:
CHECK:
ISSUE DATE:
ISSUE EDITOR:
PLOT DATE:11-24-15
PLOT TIME: 13:31:34

REV.	DATE	DESCRIPTION	DATE: AGEN. APP	DATE: GOVN. APP	DATE:

GCW
1555 S. RAINBOW BLVD.
LAS VEGAS, NV 89146
T: 702.804.2000
F: 702.804.2299
gcwengineering.com
ENGINEERS \ SURVEYORS
F:\Projects\7001764-204-01\Division\Fet\Figures\ARTC\Fig6R.dwg&proce

PULTE HOMES INC

VILLAGE 26 - REVERENCE
MASTER DRAINAGE STUDY
FLOOD CONTROL FACILITIES MAP

DRAWING
FIG 6R
OF SHTS

proce2436.dwg 050117 JH

APPENDIX B

Hydraulic Calculations, Exhibits, and Information

REVERENCE STREET WIDTH EXHIBIT

37' STREET (PRIVATE)

NOT TO SCALE

59' ENTRY (PRIVATE)

NOT TO SCALE

44' DESERT HOPE DRIVE (PRIVATE)

NOT TO SCALE

41' STREET (PRIVATE)

NOT TO SCALE

80' TO 107' ENTRY ROAD @ CHEYENNE BOULEVARD (PUBLIC)

NOT TO SCALE

47' STREET (PUBLIC)

NOT TO SCALE

76' DESERT HOPE DRIVE (PUBLIC)

NOT TO SCALE

63' STREET (PRIVATE)

NOT TO SCALE

41' STREET (PUBLIC)

NOT TO SCALE

44' DESERT HOPE DRIVE (PUBLIC)

NOT TO SCALE

59' ENTRY (PUBLIC)

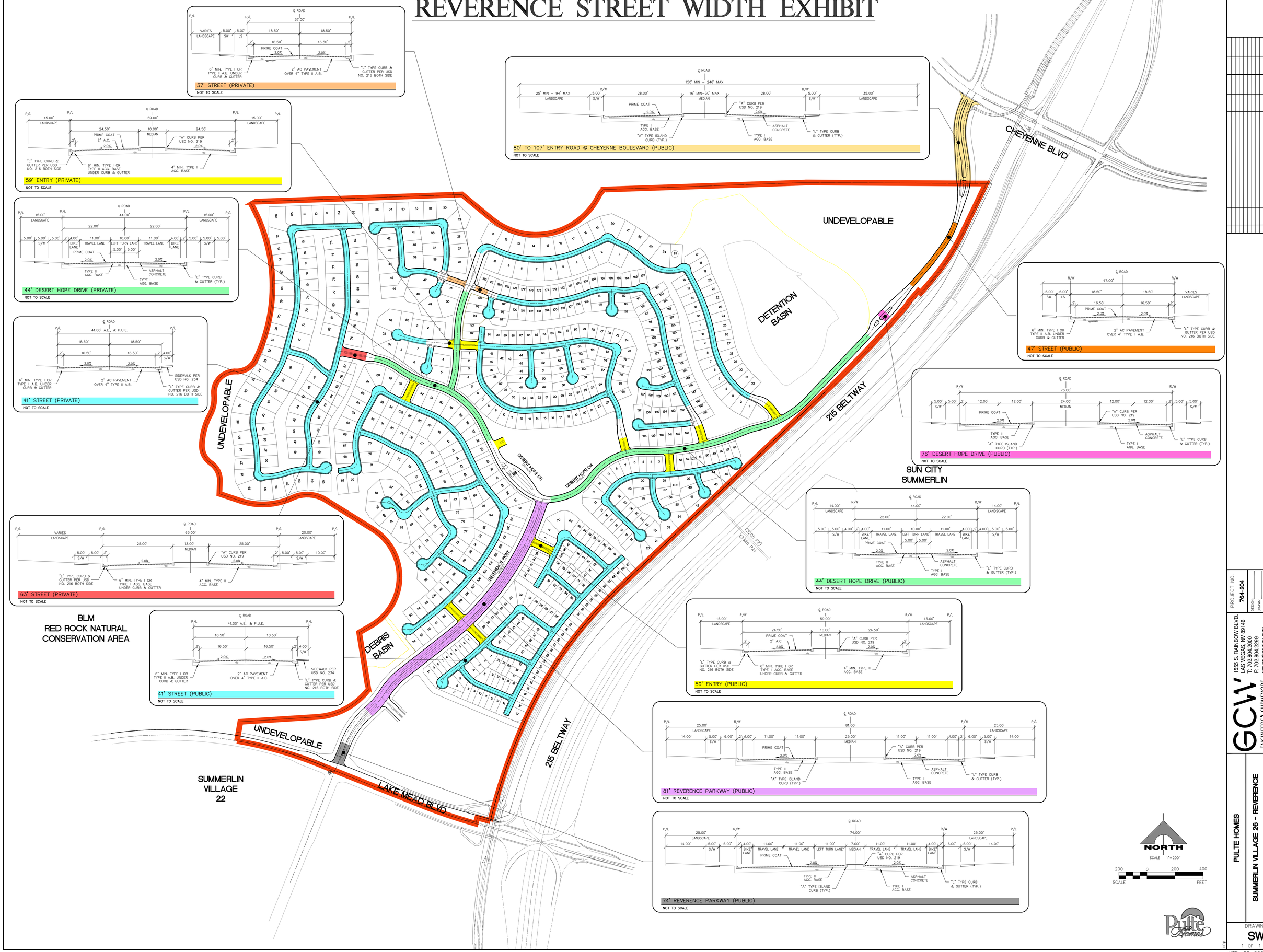
NOT TO SCALE

81' REVERENCE PARKWAY (PUBLIC)

NOT TO SCALE

74' REVERENCE PARKWAY (PUBLIC)

NOT TO SCALE



% COMPLETE

DESCRIPTION	DATE	APP	DATE	APP	DATE	DWN	DATE

PROJECT NO. 784-204
DESIGN:
DRAWN:
CHECK:
PLOT DATE 11-17-15
PLOT TIME 15:25:15

GCW
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C:\Projects\7200\784-204-013\Division\Land\Reverence_SV-Width.dwg
Nathan Lim

PULTE HOMES

SUMMERLIN VILLAGE 26 - REVERENCE

STREET WIDTH EXHIBIT

DRAWING
SW
1 OF 1 SHTS

LD#

HTE: 00-00000

Worksheet for Cross Section 1

Project Description

Friction Method	Manning Formula
Solve For	Normal Depth

Input Data

Channel Slope	6.00	%
Discharge	32.00	ft³/s

Section Definitions

Station (ft)	Elevation (ft)
0+00	0.50
0+01	0.48
0+01	0.00
0+02	0.13
0+02	0.17
0+19	0.50
0+35	0.17
0+35	0.13
0+37	0.00
0+37	0.48
0+37	0.50

Roughness Segment Definitions

Start Station	Ending Station	Roughness Coefficient
(0+00, 0.50)	(0+37, 0.50)	0.016

Options

Current Roughness Weighted Method	Pavlovskii's Method
Open Channel Weighting Method	Pavlovskii's Method
Closed Channel Weighting Method	Pavlovskii's Method

Results

Normal Depth	0.44	ft
Elevation Range	0.00 to 0.50 ft	

Worksheet for Cross Section 1

Results

Flow Area		4.86	ft²
Wetted Perimeter		31.28	ft
Hydraulic Radius		0.16	ft
Top Width		30.29	ft
Normal Depth		0.44	ft
Critical Depth		0.60	ft
Critical Slope		0.00592	ft/ft
Velocity		6.59	ft/s
Velocity Head		0.67	ft
Specific Energy		1.12	ft
Froude Number		2.90	
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	0.44	ft
Critical Depth	0.60	ft
Channel Slope	6.00	%
Critical Slope	0.00592	ft/ft

Cross Section for Cross Section 1

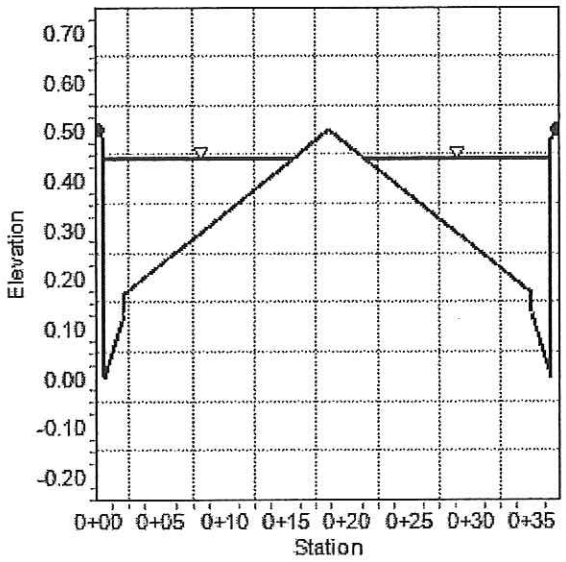
Project Description

Friction Method	Manning Formula
Solve For	Normal Depth

Input Data

Channel Slope	6.00	%
Normal Depth	0.44	ft
Discharge	32.00	ft³/s

Cross Section Image



Worksheet for Cross Section 2

Project Description

Friction Method	Manning Formula
Solve For	Normal Depth

Input Data

Channel Slope	2.80	%
Discharge	12.00	ft³/s

Section Definitions

Station (ft)	Elevation (ft)
0+00	0.50
0+01	0.48
0+01	0.00
0+02	0.13
0+02	0.17
0+19	0.50
0+35	0.17
0+35	0.13
0+37	0.00
0+37	0.48
0+37	0.50

Roughness Segment Definitions

Start Station	Ending Station	Roughness Coefficient
(0+00, 0.50)	(0+37, 0.50)	0.016

Options

Current Roughness Weighted Method	Pavlovskii's Method
Open Channel Weighting Method	Pavlovskii's Method
Closed Channel Weighting Method	Pavlovskii's Method

Results

Normal Depth	0.38	ft
Elevation Range	0.00 to 0.50 ft	

Worksheet for Cross Section 2

Results

Flow Area		3.09	ft²
Wetted Perimeter		24.58	ft
Hydraulic Radius		0.13	ft
Top Width		23.73	ft
Normal Depth		0.38	ft
Critical Depth		0.45	ft
Critical Slope		0.00708	ft/ft
Velocity		3.89	ft/s
Velocity Head		0.23	ft
Specific Energy		0.61	ft
Froude Number		1.90	
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	0.38	ft
Critical Depth	0.45	ft
Channel Slope	2.80	%
Critical Slope	0.00708	ft/ft

Cross Section for Cross Section 2

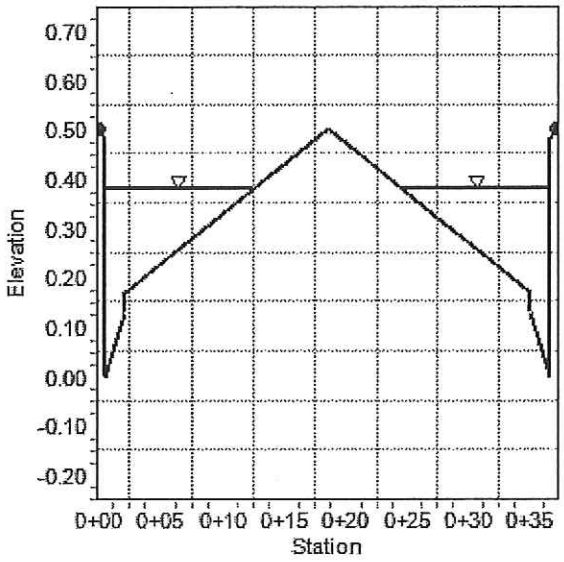
Project Description

Friction Method	Manning Formula
Solve For	Normal Depth

Input Data

Channel Slope	2.80	%
Normal Depth	0.38	ft
Discharge	12.00	ft³/s

Cross Section Image



Worksheet for Cross Section 3

Project Description

Friction Method	Manning Formula
Solve For	Normal Depth

Input Data

Channel Slope	3.20	%
Discharge	21.00	ft³/s

Section Definitions

Station (ft)	Elevation (ft)
0+00	0.50
0+01	0.48
0+01	0.00
0+02	0.13
0+02	0.17
0+19	0.50
0+35	0.17
0+35	0.13
0+37	0.00
0+37	0.48
0+37	0.50

Roughness Segment Definitions

Start Station	Ending Station	Roughness Coefficient
(0+00, 0.50)	(0+37, 0.50)	0.016

Options

Current Roughness Weighted Method	Pavlovskii's Method
Open Channel Weighting Method	Pavlovskii's Method
Closed Channel Weighting Method	Pavlovskii's Method

Results

Normal Depth	0.43	ft
Elevation Range	0.00 to 0.50 ft	

Worksheet for Cross Section 3

Results

Flow Area		4.49	ft²
Wetted Perimeter		30.01	ft
Hydraulic Radius		0.15	ft
Top Width		29.05	ft
Normal Depth		0.43	ft
Critical Depth		0.53	ft
Critical Slope		0.00647	ft/ft
Velocity		4.68	ft/s
Velocity Head		0.34	ft
Specific Energy		0.77	ft
Froude Number		2.10	
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	0.43	ft
Critical Depth	0.53	ft
Channel Slope	3.20	%
Critical Slope	0.00647	ft/ft

Cross Section for Cross Section 3

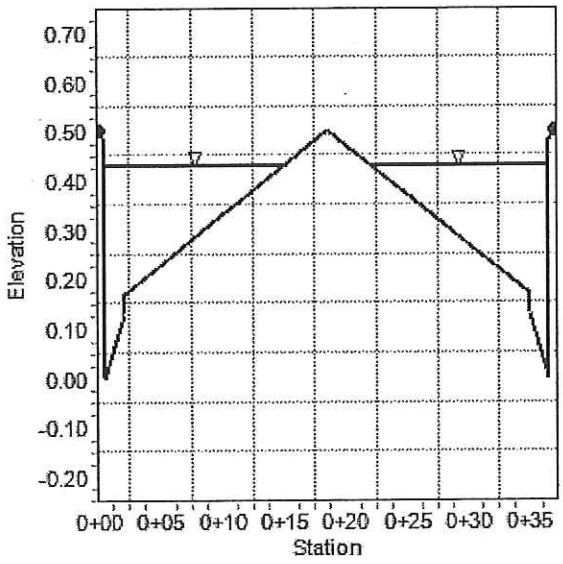
Project Description

Friction Method	Manning Formula
Solve For	Normal Depth

Input Data

Channel Slope	3.20	%
Normal Depth	0.43	ft
Discharge	21.00	ft³/s

Cross Section Image



Worksheet for Cross Section 4

Project Description

Friction Method	Manning Formula
Solve For	Normal Depth

Input Data

Channel Slope	3.80	%
Discharge	35.00	ft³/s

Section Definitions

Station (ft)	Elevation (ft)
0+00	0.50
0+01	0.48
0+01	0.00
0+02	0.13
0+02	0.17
0+25	0.62
0+25	1.12
0+35	1.12
0+35	0.62
0+57	0.17
0+57	0.13
0+59	0.00
0+59	0.48
0+59	0.50

Roughness Segment Definitions

Start Station	Ending Station	Roughness Coefficient
(0+00, 0.50)	(0+59, 0.50)	0.016

Options

Current Roughness Weighted Method	Pavlovskii's Method
Open Channel Weighting Method	Pavlovskii's Method
Closed Channel Weighting Method	Pavlovskii's Method

Worksheet for Cross Section 4

Results

Normal Depth		0.48	ft
Elevation Range	0.00 to 1.12 ft		
Flow Area		6.22	ft²
Wetted Perimeter		35.79	ft
Hydraulic Radius		0.17	ft
Top Width		34.73	ft
Normal Depth		0.48	ft
Critical Depth		0.63	ft
Critical Slope		0.00613	ft/ft
Velocity		5.63	ft/s
Velocity Head		0.49	ft
Specific Energy		0.98	ft
Froude Number		2.35	
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	0.48	ft
Critical Depth	0.63	ft
Channel Slope	3.80	%
Critical Slope	0.00613	ft/ft

Cross Section for Cross Section 4

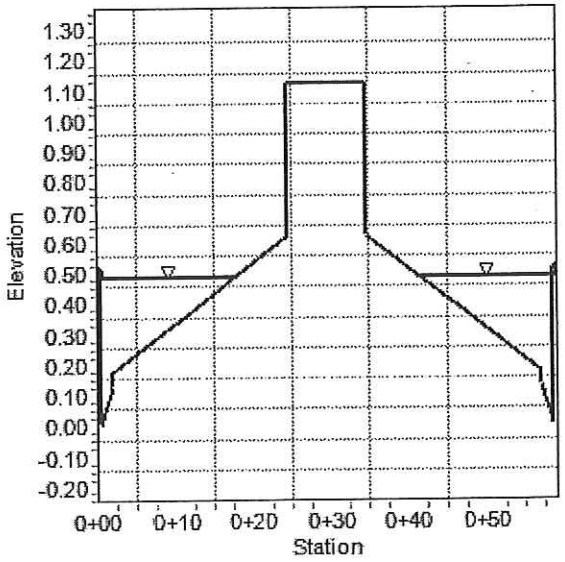
Project Description

Friction Method	Manning Formula
Solve For	Normal Depth

Input Data

Channel Slope	3.80	%
Normal Depth	0.48	ft
Discharge	35.00	ft³/s

Cross Section Image



Worksheet for Cross Section 5

Project Description

Friction Method	Manning Formula
Solve For	Normal Depth

Input Data

Channel Slope	2.66	%
Discharge	17.00	ft³/s

Section Definitions

Station (ft)	Elevation (ft)
0+00	0.50
0+01	0.48
0+01	0.00
0+02	0.13
0+02	0.17
0+19	0.50
0+35	0.17
0+35	0.13
0+37	0.00
0+37	0.48
0+37	0.50

Roughness Segment Definitions

Start Station	Ending Station	Roughness Coefficient
(0+00, 0.50)	(0+37, 0.50)	0.016

Options

Current Roughness Weighted Method	Pavlovskii's Method
Open Channel Weighting Method	Pavlovskii's Method
Closed Channel Weighting Method	Pavlovskii's Method

Results

Normal Depth	0.42	ft
Elevation Range	0.00 to 0.50 ft	

Worksheet for Cross Section 5

Results

Flow Area	4.11	ft²
Wetted Perimeter	28.63	ft
Hydraulic Radius	0.14	ft
Top Width	27.70	ft
Normal Depth	0.42	ft
Critical Depth	0.50	ft
Critical Slope	0.00677	ft/ft
Velocity	4.14	ft/s
Velocity Head	0.27	ft
Specific Energy	0.68	ft
Froude Number	1.90	
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	0.42	ft
Critical Depth	0.50	ft
Channel Slope	2.66	%
Critical Slope	0.00677	ft/ft

Cross Section for Cross Section 5

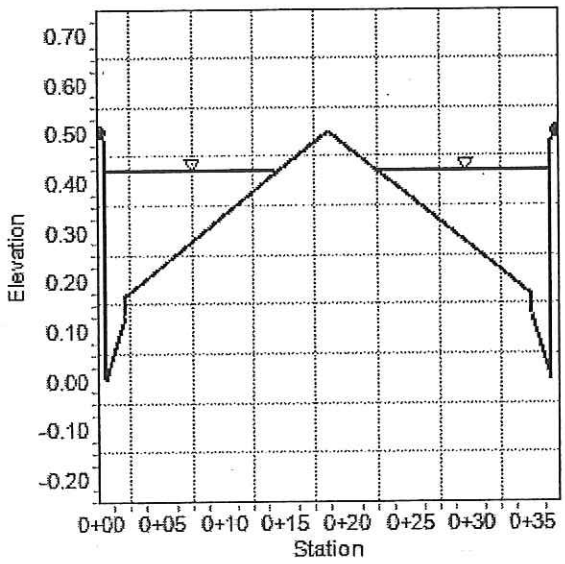
Project Description

Friction Method	Manning Formula
Solve For	Normal Depth

Input Data

Channel Slope	2.66	%
Normal Depth	0.42	ft
Discharge	17.00	ft³/s

Cross Section Image



Worksheet for Cross Section 6

Project Description

Friction Method	Manning Formula
Solve For	Normal Depth

Input Data

Channel Slope	2.30	%
Discharge	20.00	ft³/s

Section Definitions

Station (ft)	Elevation (ft)
0+00	0.50
0+01	0.48
0+01	0.00
0+02	0.13
0+02	0.17
0+19	0.50
0+35	0.17
0+35	0.13
0+37	0.00
0+37	0.48
0+37	0.50

Roughness Segment Definitions

Start Station	Ending Station	Roughness Coefficient
(0+00, 0.50)	(0+37, 0.50)	0.016

Options

Current Roughness Weighted Method	Pavlovskii's Method
Open Channel Weighting Method	Pavlovskii's Method
Closed Channel Weighting Method	Pavlovskii's Method

Results

Normal Depth	0.44	ft
Elevation Range	0.00 to 0.50 ft	

Worksheet for Cross Section 6

Results

Flow Area		4.89	ft²
Wetted Perimeter		31.39	ft
Hydraulic Radius		0.16	ft
Top Width		30.41	ft
Normal Depth		0.44	ft
Critical Depth		0.53	ft
Critical Slope		0.00654	ft/ft
Velocity		4.09	ft/s
Velocity Head		0.26	ft
Specific Energy		0.70	ft
Froude Number		1.80	
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	0.44	ft
Critical Depth	0.53	ft
Channel Slope	2.30	%
Critical Slope	0.00654	ft/ft

Cross Section for Cross Section 6

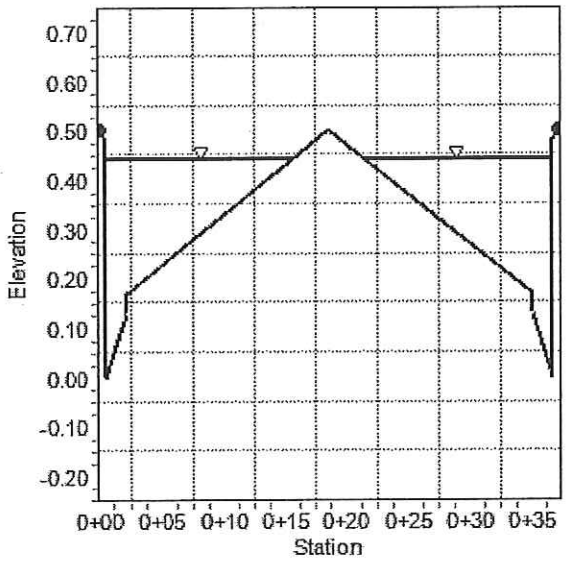
Project Description

Friction Method	Manning Formula
Solve For	Normal Depth

Input Data

Channel Slope	2.30	%
Normal Depth	0.44	ft
Discharge	20.00	ft³/s

Cross Section Image



Worksheet for Cross Section 7

Project Description

Friction Method	Manning Formula
Solve For	Normal Depth

Input Data

Channel Slope	2.54	%
Discharge	21.00	ft³/s

Section Definitions

Station (ft)	Elevation (ft)
0+00	0.50
0+01	0.48
0+01	0.00
0+02	0.13
0+02	0.17
0+19	0.50
0+35	0.17
0+35	0.13
0+37	0.00
0+37	0.48
0+37	0.50

Roughness Segment Definitions

Start Station	Ending Station	Roughness Coefficient
(0+00, 0.50)	(0+37, 0.50)	0.016

Options

Current Roughness Weighted Method	Pavlovskii's Method
Open Channel Weighting Method	Pavlovskii's Method
Closed Channel Weighting Method	Pavlovskii's Method

Results

Normal Depth	0.44	ft
Elevation Range	0.00 to 0.50 ft	

Worksheet for Cross Section 7

Results

Flow Area		4.89	ft²
Wetted Perimeter		31.38	ft
Hydraulic Radius		0.16	ft
Top Width		30.40	ft
Normal Depth		0.44	ft
Critical Depth		0.53	ft
Critical Slope		0.00647	ft/ft
Velocity		4.29	ft/s
Velocity Head		0.29	ft
Specific Energy		0.73	ft
Froude Number		1.89	
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	0.44	ft
Critical Depth	0.53	ft
Channel Slope	2.54	%
Critical Slope	0.00647	ft/ft

Cross Section for Cross Section 7

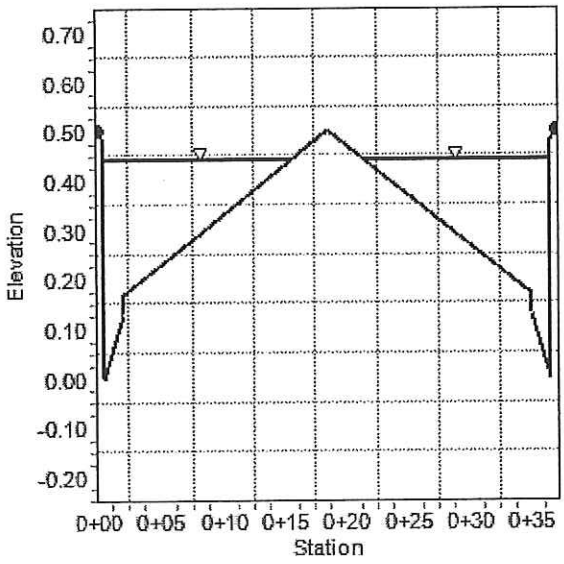
Project Description

Friction Method	Manning Formula
Solve For	Normal Depth

Input Data

Channel Slope	2.54	%
Normal Depth	0.44	ft
Discharge	21.00	ft³/s

Cross Section Image



Worksheet for Cross Section 8A

Project Description

Friction Method	Manning Formula
Solve For	Normal Depth

Input Data

Channel Slope	0.50	%
Discharge	14.00	ft³/s

Section Definitions

Station (ft)	Elevation (ft)
0+00	0.50
0+01	0.48
0+01	0.00
0+02	0.13
0+02	0.17
0+19	0.50
0+35	0.17
0+35	0.13
0+37	0.00
0+37	0.48
0+37	0.50

Roughness Segment Definitions

Start Station	Ending Station	Roughness Coefficient
(0+00, 0.50)	(0+37, 0.50)	0.016

Options

Current Roughness Weighted Method	Pavlovskii's Method
Open Channel Weighting Method	Pavlovskii's Method
Closed Channel Weighting Method	Pavlovskii's Method

Results

Normal Depth	0.50	ft
Elevation Range	0.00 to 0.50 ft	

Worksheet for Cross Section 8A

Results

Flow Area		6.74	ft²
Wetted Perimeter		37.99	ft
Hydraulic Radius		0.18	ft
Top Width		36.93	ft
Normal Depth		0.50	ft
Critical Depth		0.48	ft
Critical Slope		0.00694	ft/ft
Velocity		2.08	ft/s
Velocity Head		0.07	ft
Specific Energy		0.57	ft
Froude Number		0.86	
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	0.50	ft
Critical Depth	0.48	ft
Channel Slope	0.50	%
Critical Slope	0.00694	ft/ft

Cross Section for Cross Section 8A

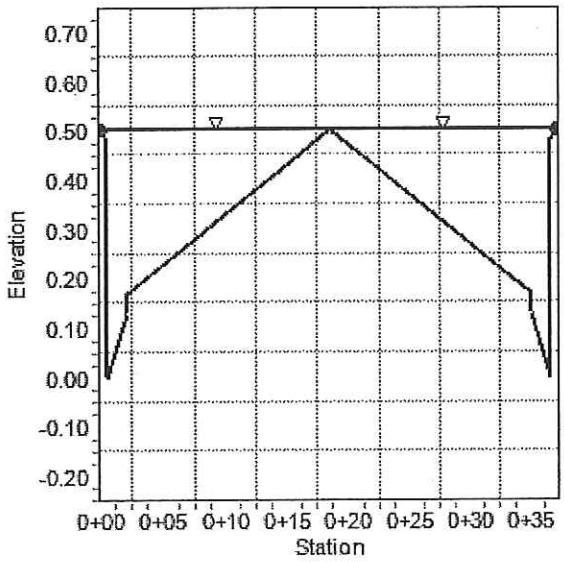
Project Description

Friction Method	Manning Formula
Solve For	Normal Depth

Input Data

Channel Slope	0.50	%
Normal Depth	0.50	ft
Discharge	14.00	ft³/s

Cross Section Image



Worksheet for Cross Section 8B

Project Description

Friction Method	Manning Formula
Solve For	Normal Depth

Input Data

Channel Slope	2.34	%
Discharge	6.00	ft³/s

Section Definitions

Station (ft)	Elevation (ft)
0+00	0.50
0+01	0.48
0+01	0.00
0+02	0.13
0+02	0.17
0+19	0.50
0+35	0.17
0+35	0.13
0+37	0.00
0+37	0.48
0+37	0.50

Roughness Segment Definitions

Start Station	Ending Station	Roughness Coefficient
(0+00, 0.50)	(0+37, 0.50)	0.016

Options

Current Roughness Weighted Method	Pavlovskii's Method
Open Channel Weighting Method	Pavlovskii's Method
Closed Channel Weighting Method	Pavlovskii's Method

Results

Normal Depth	0.32	ft
Elevation Range	0.00 to 0.50 ft	

Worksheet for Cross Section 8B

Results

Flow Area	1.94	ft²
Wetted Perimeter	19.00	ft
Hydraulic Radius	0.10	ft
Top Width	18.26	ft
Normal Depth	0.32	ft
Critical Depth	0.37	ft
Critical Slope	0.00777	ft/ft
Velocity	3.10	ft/s
Velocity Head	0.15	ft
Specific Energy	0.47	ft
Froude Number	1.68	
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	0.32	ft
Critical Depth	0.37	ft
Channel Slope	2.34	%
Critical Slope	0.00777	ft/ft

Cross Section for Cross Section 8B

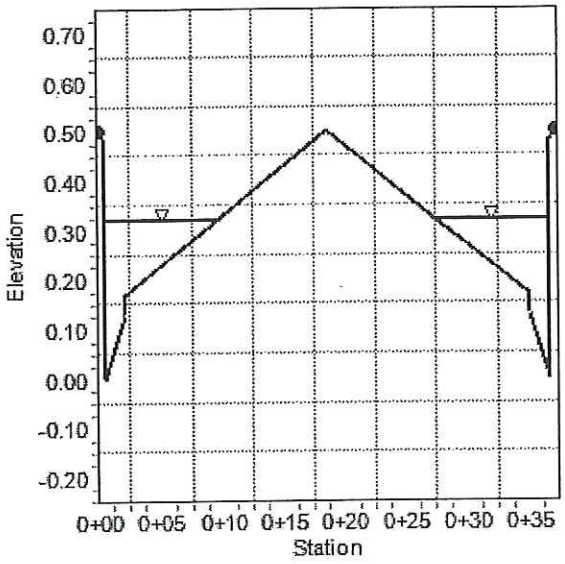
Project Description

Friction Method	Manning Formula
Solve For	Normal Depth

Input Data

Channel Slope	2.34	%
Normal Depth	0.32	ft
Discharge	6.00	ft³/s

Cross Section Image



Worksheet for Cross Section 9A

Project Description

Friction Method	Manning Formula
Solve For	Normal Depth

Input Data

Channel Slope	2.54	%
Discharge	19.00	ft³/s

Section Definitions

Station (ft)	Elevation (ft)
0+00	0.50
0+01	0.48
0+01	0.00
0+02	0.13
0+02	0.17
0+25	0.62
0+25	1.12
0+35	1.12
0+35	0.62
0+57	0.17
0+57	0.13
0+59	0.00
0+59	0.48
0+59	0.50

Roughness Segment Definitions

Start Station	Ending Station	Roughness Coefficient
(0+00, 0.50)	(0+59, 0.50)	0.016

Options

Current Roughness Weighted Method	Pavlovskii's Method
Open Channel Weighting Method	Pavlovskii's Method
Closed Channel Weighting Method	Pavlovskii's Method

Worksheet for Cross Section 9A

Results

Normal Depth		0.43	ft
Elevation Range	0.00 to 1.12 ft		
Flow Area		4.54	ft²
Wetted Perimeter		30.18	ft
Hydraulic Radius		0.15	ft
Top Width		29.22	ft
Normal Depth		0.43	ft
Critical Depth		0.52	ft
Critical Slope		0.00669	ft/ft
Velocity		4.19	ft/s
Velocity Head		0.27	ft
Specific Energy		0.70	ft
Froude Number		1.87	
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	0.43	ft
Critical Depth	0.52	ft
Channel Slope	2.54	%
Critical Slope	0.00669	ft/ft

Cross Section for Cross Section 9A

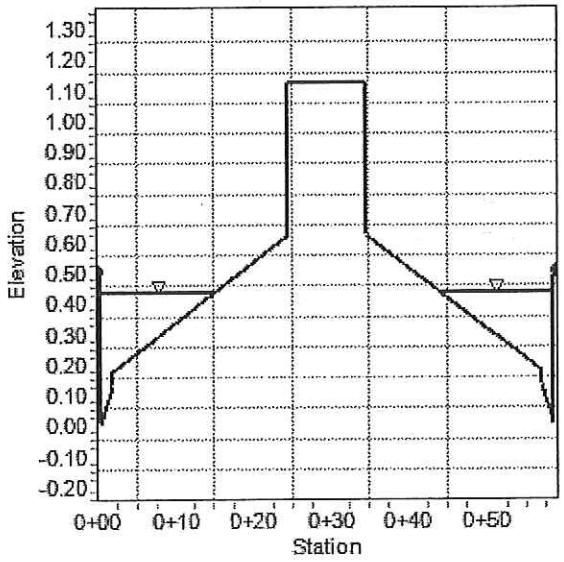
Project Description

Friction Method	Manning Formula
Solve For	Normal Depth

Input Data

Channel Slope	2.54	%
Normal Depth	0.43	ft
Discharge	19.00	ft³/s

Cross Section Image



Worksheet for Cross Section 9B

Project Description

Friction Method	Manning Formula
Solve For	Normal Depth

Input Data

Channel Slope	3.07	%
Discharge	23.00	ft³/s

Section Definitions

Station (ft)	Elevation (ft)
0+00	0.50
0+01	0.48
0+01	0.00
0+02	0.13
0+02	0.17
0+25	0.62
0+25	1.12
0+35	1.12
0+35	0.62
0+57	0.17
0+57	0.13
0+59	0.00
0+59	0.48
0+59	0.50

Roughness Segment Definitions

Start Station	Ending Station	Roughness Coefficient
(0+00, 0.50)	(0+59, 0.50)	0.016

Options

Current Roughness Weighted Method	Pavlovskii's Method
Open Channel Weighting Method	Pavlovskii's Method
Closed Channel Weighting Method	Pavlovskii's Method

Worksheet for Cross Section 9B

Results

Normal Depth		0.44	ft
Elevation Range	0.00 to 1.12 ft		
Flow Area		4.89	ft²
Wetted Perimeter		31.38	ft
Hydraulic Radius		0.16	ft
Top Width		30.40	ft
Normal Depth		0.44	ft
Critical Depth		0.55	ft
Critical Slope		0.00651	ft/ft
Velocity		4.70	ft/s
Velocity Head		0.34	ft
Specific Energy		0.79	ft
Froude Number		2.07	
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	0.44	ft
Critical Depth	0.55	ft
Channel Slope	3.07	%
Critical Slope	0.00651	ft/ft

Cross Section for Cross Section 9B

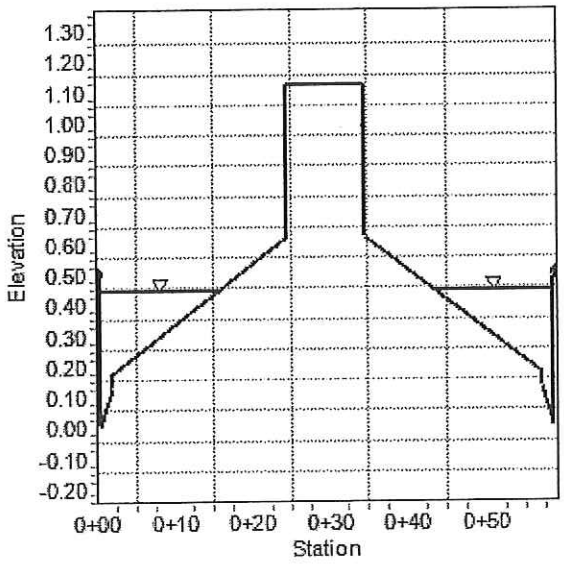
Project Description

Friction Method	Manning Formula
Solve For	Normal Depth

Input Data

Channel Slope	3.07	%
Normal Depth	0.44	ft
Discharge	23.00	ft³/s

Cross Section Image



Worksheet for Cross Section 10

Project Description

Friction Method	Manning Formula
Solve For	Normal Depth

Input Data

Channel Slope	5.67	%
Discharge	10.00	ft³/s

Section Definitions

Station (ft)	Elevation (ft)
0+00	0.50
0+01	0.48
0+01	0.00
0+02	0.13
0+02	0.17
0+25	0.62
0+25	1.12
0+35	1.12
0+35	0.62
0+57	0.17
0+57	0.13
0+59	0.00
0+59	0.48
0+59	0.50

Roughness Segment Definitions

Start Station	Ending Station	Roughness Coefficient
(0+00, 0.50)	(0+59, 0.50)	0.016

Options

Current Roughness Weighted Method	Pavlovskii's Method
Open Channel Weighting Method	Pavlovskii's Method
Closed Channel Weighting Method	Pavlovskii's Method

Worksheet for Cross Section 10

Results

Normal Depth		0.33	ft
Elevation Range	0.00 to 1.12 ft		
Flow Area		2.04	ft²
Wetted Perimeter		19.57	ft
Hydraulic Radius		0.10	ft
Top Width		18.82	ft
Normal Depth		0.33	ft
Critical Depth		0.43	ft
Critical Slope		0.00726	ft/ft
Velocity		4.90	ft/s
Velocity Head		0.37	ft
Specific Energy		0.70	ft
Froude Number		2.62	
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	0.33	ft
Critical Depth	0.43	ft
Channel Slope	5.67	%
Critical Slope	0.00726	ft/ft

Cross Section for Cross Section 10

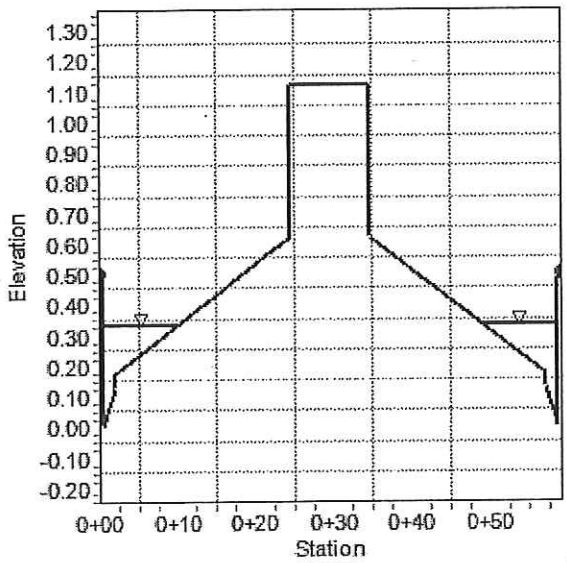
Project Description

Friction Method	Manning Formula
Solve For	Normal Depth

Input Data

Channel Slope	5.67	%
Normal Depth	0.33	ft
Discharge	10.00	ft³/s

Cross Section Image



Worksheet for Cross Section 11

Project Description

Friction Method	Manning Formula
Solve For	Normal Depth

Input Data

Channel Slope	0.50	%
Discharge	12.00	ft³/s

Section Definitions

Station (ft)	Elevation (ft)
0+00	0.50
0+01	0.48
0+01	0.00
0+02	0.13
0+02	0.17
0+19	0.50
0+35	0.17
0+35	0.13
0+37	0.00
0+37	0.48
0+37	0.50

Roughness Segment Definitions

Start Station	Ending Station	Roughness Coefficient
(0+00, 0.50)	(0+37, 0.50)	0.016

Options

Current Roughness Weighted Method	Pavlovskii's Method
Open Channel Weighting Method	Pavlovskii's Method
Closed Channel Weighting Method	Pavlovskii's Method

Results

Normal Depth	0.48	ft
Elevation Range	0.00 to 0.50 ft	

Worksheet for Cross Section 11

Results

Flow Area		5.94	ft²
Wetted Perimeter		34.72	ft
Hydraulic Radius		0.17	ft
Top Width		33.67	ft
Normal Depth		0.48	ft
Critical Depth		0.45	ft
Critical Slope		0.00709	ft/ft
Velocity		2.02	ft/s
Velocity Head		0.06	ft
Specific Energy		0.54	ft
Froude Number		0.85	
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	0.48	ft
Critical Depth	0.45	ft
Channel Slope	0.50	%
Critical Slope	0.00709	ft/ft

Cross Section for Cross Section 11

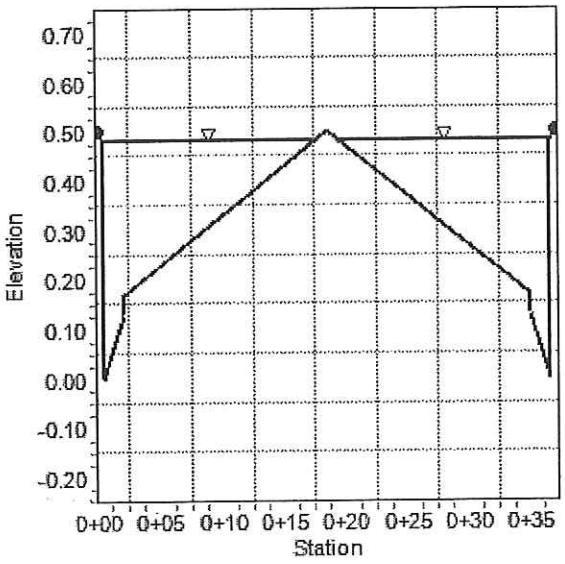
Project Description

Friction Method	Manning Formula
Solve For	Normal Depth

Input Data

Channel Slope	0.50	%
Normal Depth	0.48	ft
Discharge	12.00	ft³/s

Cross Section Image



Worksheet for Cross Section 12

Project Description

Friction Method	Manning Formula
Solve For	Normal Depth

Input Data

Channel Slope	5.55	%
Discharge	33.00	ft³/s

Section Definitions

Station (ft)	Elevation (ft)
0+00	0.50
0+01	0.48
0+01	0.00
0+02	0.13
0+02	0.17
0+19	0.50
0+35	0.17
0+35	0.13
0+37	0.00
0+37	0.48
0+37	0.50

Roughness Segment Definitions

Start Station	Ending Station	Roughness Coefficient
(0+00, 0.50)	(0+37, 0.50)	0.016

Options

Current Roughness Weighted Method	Pavlovskii's Method
Open Channel Weighting Method	Pavlovskii's Method
Closed Channel Weighting Method	Pavlovskii's Method

Results

Normal Depth	0.45	ft
Elevation Range	0.00 to 0.50 ft	

Worksheet for Cross Section 12

Results

Flow Area	5.13	ft²
Wetted Perimeter	32.17	ft
Hydraulic Radius	0.16	ft
Top Width	31.17	ft
Normal Depth	0.45	ft
Critical Depth	0.61	ft
Critical Slope	0.00589	ft/ft
Velocity	6.44	ft/s
Velocity Head	0.64	ft
Specific Energy	1.10	ft
Froude Number	2.80	
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	0.45	ft
Critical Depth	0.61	ft
Channel Slope	5.55	%
Critical Slope	0.00589	ft/ft

Cross Section for Cross Section 12

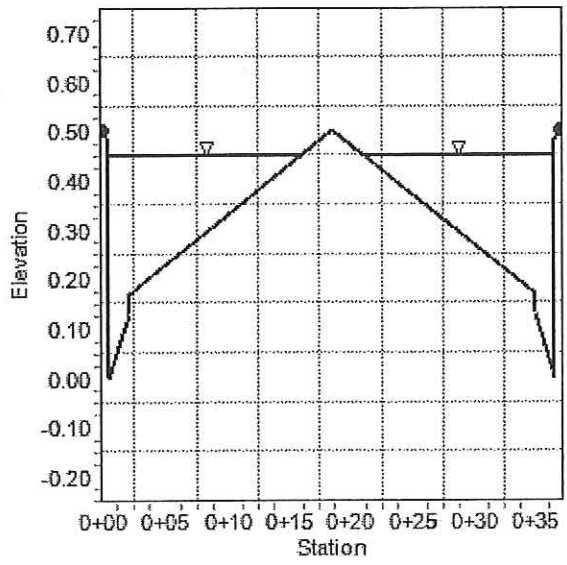
Project Description

Friction Method	Manning Formula
Solve For	Normal Depth

Input Data

Channel Slope	5.55	%
Normal Depth	0.45	ft
Discharge	33.00	ft³/s

Cross Section Image



Worksheet for Cross Section 13

Project Description

Friction Method	Manning Formula
Solve For	Normal Depth

Input Data

Channel Slope	5.20	%
Discharge	13.00	ft³/s

Section Definitions

Station (ft)	Elevation (ft)
0+00	0.50
0+01	0.48
0+01	0.00
0+02	0.13
0+02	0.17
0+19	0.50
0+35	0.17
0+35	0.13
0+37	0.00
0+37	0.48
0+37	0.50

Roughness Segment Definitions

Start Station	Ending Station	Roughness Coefficient
(0+00, 0.50)	(0+37, 0.50)	0.016

Options

Current Roughness Weighted Method	Pavlovskii's Method
Open Channel Weighting Method	Pavlovskii's Method
Closed Channel Weighting Method	Pavlovskii's Method

Results

Normal Depth	0.36	ft
Elevation Range	0.00 to 0.50 ft	

Worksheet for Cross Section 13

Results

Flow Area		2.59	ft²
Wetted Perimeter		22.34	ft
Hydraulic Radius		0.12	ft
Top Width		21.54	ft
Normal Depth		0.36	ft
Critical Depth		0.46	ft
Critical Slope		0.00701	ft/ft
Velocity		5.02	ft/s
Velocity Head		0.39	ft
Specific Energy		0.75	ft
Froude Number		2.55	
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	0.36	ft
Critical Depth	0.46	ft
Channel Slope	5.20	%
Critical Slope	0.00701	ft/ft

Cross Section for Cross Section 13

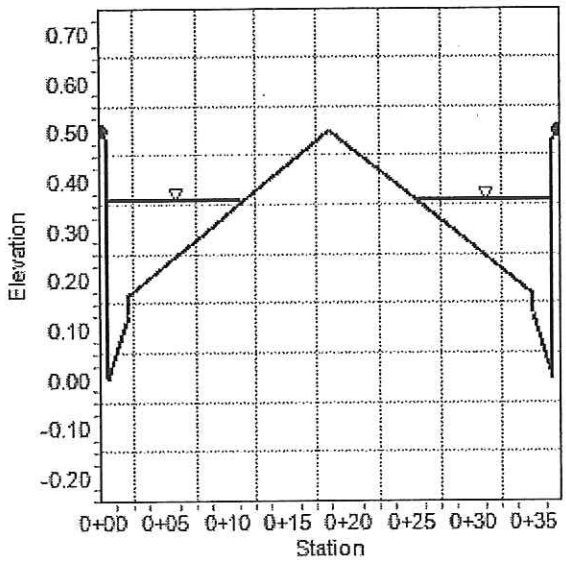
Project Description

Friction Method	Manning Formula
Solve For	Normal Depth

Input Data

Channel Slope	5.20	%
Normal Depth	0.36	ft
Discharge	13.00	ft³/s

Cross Section Image



Worksheet for Cross Section 14

Project Description

Friction Method	Manning Formula
Solve For	Normal Depth

Input Data

Channel Slope	5.00	%
Discharge	24.00	ft³/s

Section Definitions

Station (ft)	Elevation (ft)
0+00	0.50
0+01	0.48
0+01	0.00
0+02	0.13
0+02	0.17
0+19	0.50
0+35	0.17
0+35	0.13
0+37	0.00
0+37	0.48
0+37	0.50

Roughness Segment Definitions

Start Station	Ending Station	Roughness Coefficient
(0+00, 0.50)	(0+37, 0.50)	0.016

Options

Current Roughness Weighted Method	Pavlovskii's Method
Open Channel Weighting Method	Pavlovskii's Method
Closed Channel Weighting Method	Pavlovskii's Method

Results

Normal Depth	0.42	ft
Elevation Range	0.00 to 0.50 ft	

Worksheet for Cross Section 14

Results

Flow Area		4.20	ft²
Wetted Perimeter		28.96	ft
Hydraulic Radius		0.14	ft
Top Width		28.02	ft
Normal Depth		0.42	ft
Critical Depth		0.55	ft
Critical Slope		0.00629	ft/ft
Velocity		5.72	ft/s
Velocity Head		0.51	ft
Specific Energy		0.93	ft
Froude Number		2.61	
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	0.42	ft
Critical Depth	0.55	ft
Channel Slope	5.00	%
Critical Slope	0.00629	ft/ft

Cross Section for Cross Section 14

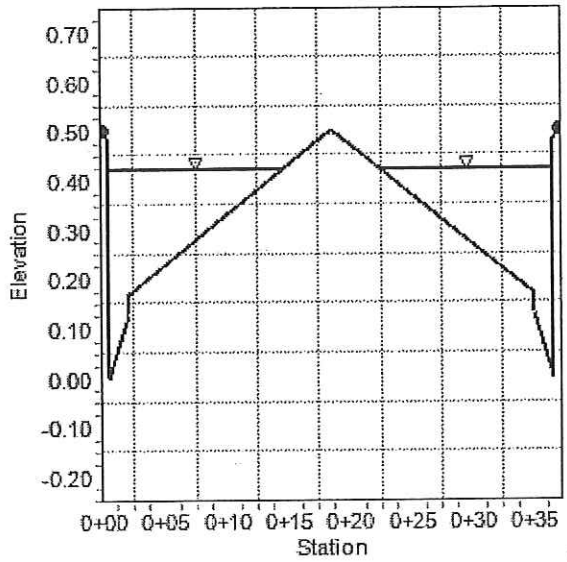
Project Description

Friction Method	Manning Formula
Solve For	Normal Depth

Input Data

Channel Slope	5.00	%
Normal Depth	0.42	ft
Discharge	24.00	ft³/s

Cross Section Image



Worksheet for Cross Section 15

Project Description

Friction Method	Manning Formula
Solve For	Normal Depth

Input Data

Channel Slope	2.96	%
Discharge	15.00	ft³/s

Section Definitions

Station (ft)	Elevation (ft)
0+00	0.50
0+01	0.48
0+01	0.00
0+02	0.13
0+02	0.17
0+28	0.69
0+28	1.19
0+53	1.19
0+53	0.69
0+79	0.17
0+79	0.13
0+81	0.00
0+81	0.48
0+81	0.50

Roughness Segment Definitions

Start Station	Ending Station	Roughness Coefficient
(0+00, 0.50)	(0+81, 0.50)	0.016

Options

Current Roughness Weighted Method	Pavlovskii's Method
Open Channel Weighting Method	Pavlovskii's Method
Closed Channel Weighting Method	Pavlovskii's Method

Worksheet for Cross Section 15

Results

Normal Depth		0.40	ft
Elevation Range	0.00 to 1.19 ft		
Flow Area		3.58	ft²
Wetted Perimeter		26.61	ft
Hydraulic Radius		0.13	ft
Top Width		25.72	ft
Normal Depth		0.40	ft
Critical Depth		0.49	ft
Critical Slope		0.00689	ft/ft
Velocity		4.19	ft/s
Velocity Head		0.27	ft
Specific Energy		0.67	ft
Froude Number		1.98	
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	0.40	ft
Critical Depth	0.49	ft
Channel Slope	2.96	%
Critical Slope	0.00689	ft/ft

Cross Section for Cross Section 15

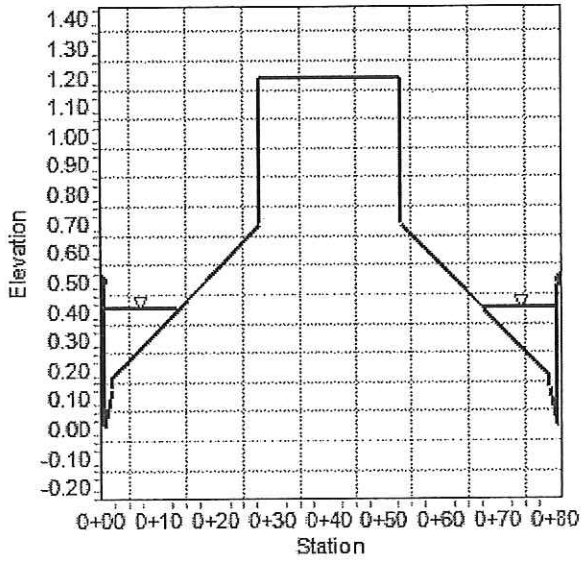
Project Description

Friction Method	Manning Formula
Solve For	Normal Depth

Input Data

Channel Slope	2.96	%
Normal Depth	0.40	ft
Discharge	15.00	ft³/s

Cross Section Image



Worksheet for Cross Section 16

Project Description

Friction Method	Manning Formula
Solve For	Normal Depth

Input Data

Channel Slope	6.00	%
Discharge	29.00	ft³/s

Section Definitions

Station (ft)	Elevation (ft)
0+00	0.50
0+01	0.48
0+01	0.00
0+02	0.13
0+02	0.17
0+22	0.57
0+42	0.17
0+42	0.13
0+44	0.00
0+44	0.48
0+44	0.50

Roughness Segment Definitions

Start Station	Ending Station	Roughness Coefficient
(0+00, 0.50)	(0+44, 0.50)	0.016

Options

Current Roughness Weighted Method	Pavlovskii's Method
Open Channel Weighting Method	Pavlovskii's Method
Closed Channel Weighting Method	Pavlovskii's Method

Results

Normal Depth	0.43	ft
Elevation Range	0.00 to 0.57 ft	

Worksheet for Cross Section 16

Results

Flow Area	4.52	ft²
Wetted Perimeter	30.11	ft
Hydraulic Radius	0.15	ft
Top Width	29.15	ft
Normal Depth	0.43	ft
Critical Depth	0.59	ft
Critical Slope	0.00624	ft/ft
Velocity	6.42	ft/s
Velocity Head	0.64	ft
Specific Energy	1.07	ft
Froude Number	2.87	
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	0.43	ft
Critical Depth	0.59	ft
Channel Slope	6.00	%
Critical Slope	0.00624	ft/ft

Cross Section for Cross Section 16

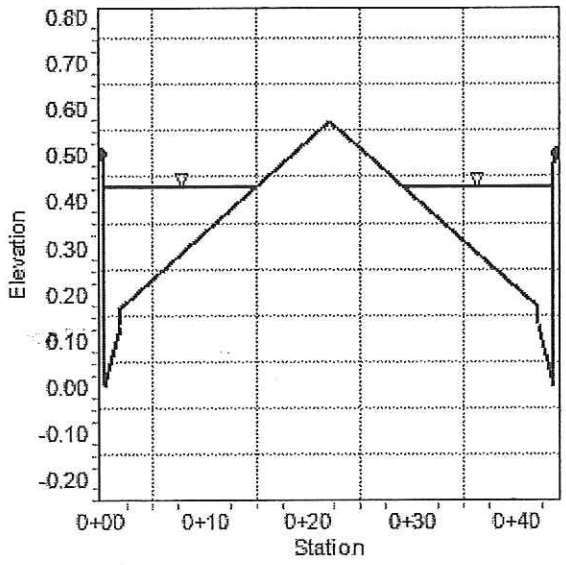
Project Description

Friction Method	Manning Formula
Solve For	Normal Depth

Input Data

Channel Slope	6.00	%
Normal Depth	0.43	ft
Discharge	29.00	ft³/s

Cross Section Image



Worksheet for Cross Section 17

Project Description

Friction Method	Manning Formula
Solve For	Normal Depth

Input Data

Channel Slope	0.50	%
Discharge	12.00	ft³/s

Section Definitions

Station (ft)	Elevation (ft)
0+00	0.50
0+01	0.48
0+01	0.00
0+02	0.13
0+02	0.17
0+25	0.62
0+25	1.12
0+35	1.12
0+35	0.62
0+57	0.17
0+57	0.13
0+59	0.00
0+59	0.48
0+59	0.50

Roughness Segment Definitions

Start Station	Ending Station	Roughness Coefficient
(0+00, 0.50)	(0+59, 0.50)	0.016

Options

Current Roughness Weighted Method	Pavlovskii's Method
Open Channel Weighting Method	Pavlovskii's Method
Closed Channel Weighting Method	Pavlovskii's Method

Worksheet for Cross Section 17

Results

Normal Depth		0.48	ft
Elevation Range	0.00 to 1.12 ft		
Flow Area		5.93	ft²
Wetted Perimeter		34.70	ft
Hydraulic Radius		0.17	ft
Top Width		33.65	ft
Normal Depth		0.48	ft
Critical Depth		0.45	ft
Critical Slope		0.00709	ft/ft
Velocity		2.02	ft/s
Velocity Head		0.06	ft
Specific Energy		0.54	ft
Froude Number		0.85	
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	0.48	ft
Critical Depth	0.45	ft
Channel Slope	0.50	%
Critical Slope	0.00709	ft/ft

Cross Section for Cross Section 17

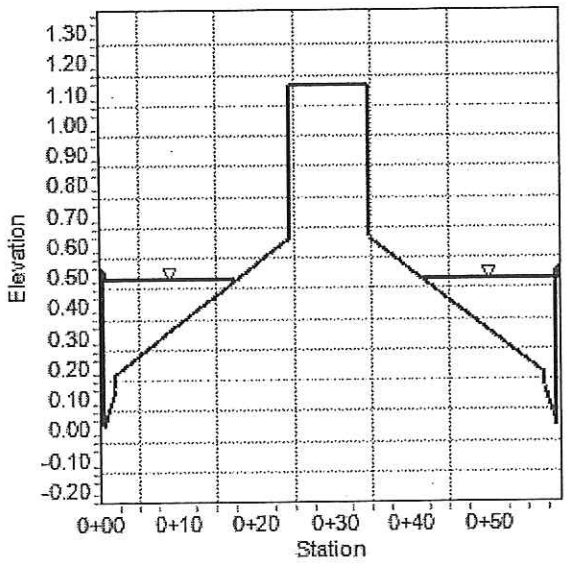
Project Description

Friction Method	Manning Formula
Solve For	Normal Depth

Input Data

Channel Slope	0.50	%
Normal Depth	0.48	ft
Discharge	12.00	ft³/s

Cross Section Image



Worksheet for Cross Section 18

Project Description

Friction Method	Manning Formula
Solve For	Normal Depth

Input Data

Channel Slope	1.78	%
Discharge	17.00	ft³/s

Section Definitions

Station (ft)	Elevation (ft)
0+00	0.50
0+01	0.48
0+01	0.00
0+02	0.13
0+02	0.17
0+19	0.50
0+35	0.17
0+35	0.13
0+37	0.00
0+37	0.48
0+37	0.50

Roughness Segment Definitions

Start Station	Ending Station	Roughness Coefficient
(0+00, 0.50)	(0+37, 0.50)	0.016

Options

Current Roughness Weighted Method	Pavlovskii's Method
Open Channel Weighting Method	Pavlovskii's Method
Closed Channel Weighting Method	Pavlovskii's Method

Results

Normal Depth	0.44	ft
Elevation Range	0.00 to 0.50 ft	

Worksheet for Cross Section 18

Results

Flow Area	4.78	ft²
Wetted Perimeter	31.01	ft
Hydraulic Radius	0.15	ft
Top Width	30.04	ft
Normal Depth	0.44	ft
Critical Depth	0.50	ft
Critical Slope	0.00677	ft/ft
Velocity	3.56	ft/s
Velocity Head	0.20	ft
Specific Energy	0.64	ft
Froude Number	1.57	
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	0.44	ft
Critical Depth	0.50	ft
Channel Slope	1.78	%
Critical Slope	0.00677	ft/ft

Cross Section for Cross Section 18

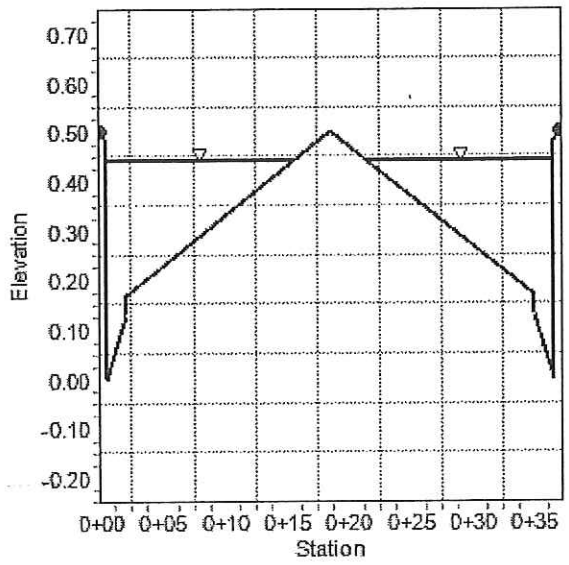
Project Description

Friction Method	Manning Formula
Solve For	Normal Depth

Input Data

Channel Slope	1.78	%
Normal Depth	0.44	ft
Discharge	17.00	ft³/s

Cross Section Image



Worksheet for Cross Section 19

Project Description

Friction Method	Manning Formula
Solve For	Normal Depth

Input Data

Channel Slope	5.00	%
Discharge	13.00	ft³/s

Section Definitions

Station (ft)	Elevation (ft)
0+00	0.50
0+01	0.48
0+01	0.00
0+02	0.13
0+02	0.17
0+19	0.50
0+35	0.17
0+35	0.13
0+37	0.00
0+37	0.48
0+37	0.50

Roughness Segment Definitions

Start Station	Ending Station	Roughness Coefficient
(0+00, 0.50)	(0+37, 0.50)	0.016

Options

Current Roughness Weighted Method	Pavlovskii's Method
Open Channel Weighting Method	Pavlovskii's Method
Closed Channel Weighting Method	Pavlovskii's Method

Results

Normal Depth	0.36	ft
Elevation Range	0.00 to 0.50 ft	

Worksheet for Cross Section 19

Results

Flow Area		2.63	ft²
Wetted Perimeter		22.52	ft
Hydraulic Radius		0.12	ft
Top Width		21.71	ft
Normal Depth		0.36	ft
Critical Depth		0.46	ft
Critical Slope		0.00701	ft/ft
Velocity		4.95	ft/s
Velocity Head		0.38	ft
Specific Energy		0.74	ft
Froude Number		2.51	
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	0.36	ft
Critical Depth	0.46	ft
Channel Slope	5.00	%
Critical Slope	0.00701	ft/ft

Cross Section for Cross Section 19

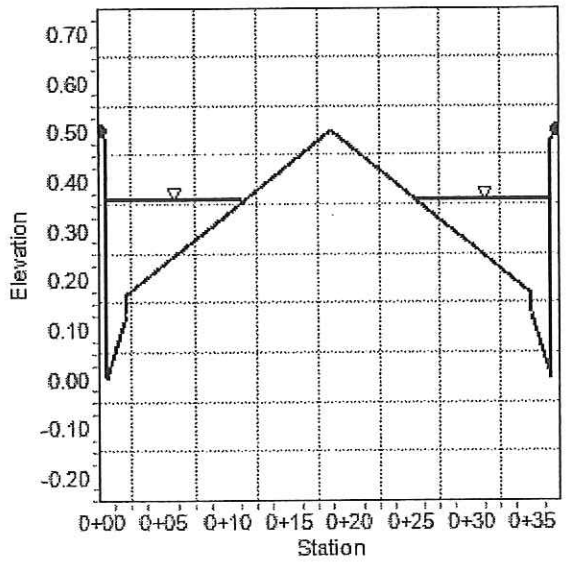
Project Description

Friction Method	Manning Formula
Solve For	Normal Depth

Input Data

Channel Slope	5.00	%
Normal Depth	0.36	ft
Discharge	13.00	ft³/s

Cross Section Image



Worksheet for Cross Section 20

Project Description

Friction Method	Manning Formula
Solve For	Normal Depth

Input Data

Channel Slope	0.50	%
Discharge	13.00	ft³/s

Section Definitions

Station (ft)	Elevation (ft)
0+00	0.50
0+01	0.48
0+01	0.00
0+02	0.13
0+02	0.17
0+19	0.50
0+35	0.17
0+35	0.13
0+37	0.00
0+37	0.48
0+37	0.50

Roughness Segment Definitions

Start Station	Ending Station	Roughness Coefficient
(0+00, 0.50)	(0+37, 0.50)	0.016

Options

Current Roughness Weighted Method	Pavlovskii's Method
Open Channel Weighting Method	Pavlovskii's Method
Closed Channel Weighting Method	Pavlovskii's Method

Results

Normal Depth	0.49	ft
Elevation Range	0.00 to 0.50 ft	

Worksheet for Cross Section 20

Results

Flow Area		6.34	ft²
Wetted Perimeter		36.31	ft
Hydraulic Radius		0.17	ft
Top Width		35.25	ft
Normal Depth		0.49	ft
Critical Depth		0.46	ft
Critical Slope		0.00701	ft/ft
Velocity		2.05	ft/s
Velocity Head		0.07	ft
Specific Energy		0.55	ft
Froude Number		0.85	
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	0.49	ft
Critical Depth	0.46	ft
Channel Slope	0.50	%
Critical Slope	0.00701	ft/ft

Cross Section for Cross Section 20

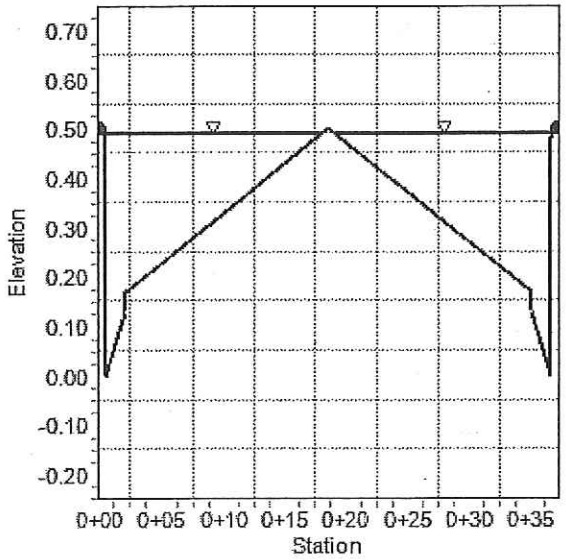
Project Description

Friction Method	Manning Formula
Solve For	Normal Depth

Input Data

Channel Slope	0.50	%
Normal Depth	0.49	ft
Discharge	13.00	ft³/s

Cross Section Image



Worksheet for Facility 4 - 66" RCP

Project Description

Friction Method	Manning Formula
Solve For	Full Flow Diameter

Input Data

Roughness Coefficient	0.013	
Channel Slope	1.00	%
Normal Depth	4.65	ft
Diameter	55.74	in
Discharge	214.00	ft³/s

Results

Diameter	55.74	in
Normal Depth	4.65	ft
Flow Area	16.95	ft²
Wetted Perimeter	14.59	ft
Hydraulic Radius	1.16	ft
Top Width	0.00	ft
Critical Depth	4.15	ft
Percent Full	100.0	%
Critical Slope	0.00886	ft/ft
Velocity	12.63	ft/s
Velocity Head	2.48	ft
Specific Energy	7.12	ft
Froude Number	0.00	
Maximum Discharge	230.20	ft³/s
Discharge Full	214.00	ft³/s
Slope Full	0.01000	ft/ft
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
Average End Depth Over Rise	0.00	%

Worksheet for Facility 4 - 66" RCP

GVF Output Data

Normal Depth Over Rise	100.00	%
Downstream Velocity	Infinity	ft/s
Upstream Velocity	Infinity	ft/s
Normal Depth	4.65	ft
Critical Depth	4.15	ft
Channel Slope	1.00	%
Critical Slope	0.00886	ft/ft

Cross Section for Facility 4 - 66" RCP

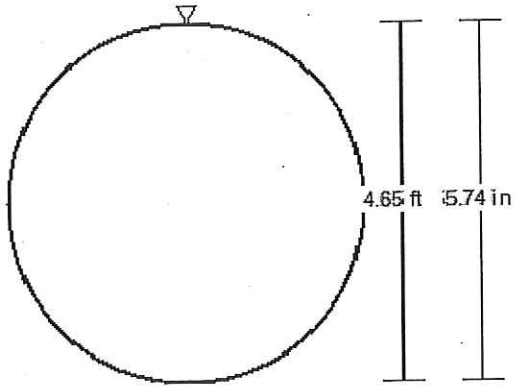
Project Description

Friction Method	Manning Formula
Solve For	Full Flow Diameter

Input Data

Roughness Coefficient	0.013	
Channel Slope	1.00	%
Normal Depth	4.65	ft
Diameter	55.74	in
Discharge	214.00	ft³/s

Cross Section Image



V: 1
H: 1

Worksheet for Facility 10 - 30" RCP

Project Description

Friction Method	Manning Formula
Solve For	Full Flow Diameter

Input Data

Roughness Coefficient	0.013	
Channel Slope	1.50	%
Normal Depth	1.98	ft
Diameter	23.77	in
Discharge	27.00	ft³/s

Results

Diameter	23.77	in
Normal Depth	1.98	ft
Flow Area	3.08	ft²
Wetted Perimeter	6.22	ft
Hydraulic Radius	0.50	ft
Top Width	0.00	ft
Critical Depth	1.80	ft
Percent Full	100.0	%
Critical Slope	0.01309	ft/ft
Velocity	8.76	ft/s
Velocity Head	1.19	ft
Specific Energy	3.17	ft
Froude Number	0.00	
Maximum Discharge	29.04	ft³/s
Discharge Full	27.00	ft³/s
Slope Full	0.01500	ft/ft
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
Average End Depth Over Rise	0.00	%

Worksheet for Facility 10 - 30" RCP

GVF Output Data

Normal Depth Over Rise	100.00	%
Downstream Velocity	Infinity	ft/s
Upstream Velocity	Infinity	ft/s
Normal Depth	1.98	ft
Critical Depth	1.80	ft
Channel Slope	1.50	%
Critical Slope	0.01309	ft/ft

Cross Section for Facility 10 - 30" RCP

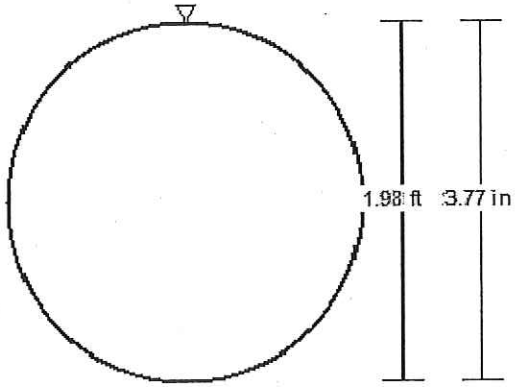
Project Description

Friction Method	Manning Formula
Solve For	Full Flow Diameter

Input Data

Roughness Coefficient	0.013	
Channel Slope	1.50	%
Normal Depth	1.98	ft
Diameter	23.77	in
Discharge	27.00	ft³/s

Cross Section Image



V: 1
H: 1

Worksheet for Facility 11 - 42" RCP

Project Description

Friction Method	Manning Formula
Solve For	Full Flow Diameter

Input Data

Roughness Coefficient	0.013	
Channel Slope	0.50	%
Normal Depth	2.95	ft
Diameter	35.37	in
Discharge	45.00	ft³/s

Results

Diameter	35.37	in
Normal Depth	2.95	ft
Flow Area	6.82	ft²
Wetted Perimeter	9.26	ft
Hydraulic Radius	0.74	ft
Top Width	0.00	ft
Critical Depth	2.19	ft
Percent Full	100.0	%
Critical Slope	0.00612	ft/ft
Velocity	6.59	ft/s
Velocity Head	0.68	ft
Specific Energy	3.62	ft
Froude Number	0.00	
Maximum Discharge	48.41	ft³/s
Discharge Full	45.00	ft³/s
Slope Full	0.00500	ft/ft
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
Average End Depth Over Rise	0.00	%

Worksheet for Facility 11 - 42" RCP

GVF Output Data

Normal Depth Over Rise	100.00	%
Downstream Velocity	Infinity	ft/s
Upstream Velocity	Infinity	ft/s
Normal Depth	2.95	ft
Critical Depth	2.19	ft
Channel Slope	0.50	%
Critical Slope	0.00612	ft/ft

Cross Section for Facility 11 - 42" RCP

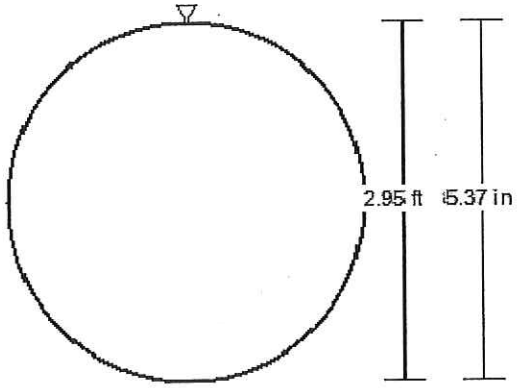
Project Description

Friction Method	Manning Formula
Solve For	Full Flow Diameter

Input Data

Roughness Coefficient	0.013	
Channel Slope	0.50	%
Normal Depth	2.95	ft
Diameter	35.37	in
Discharge	45.00	ft³/s

Cross Section Image



V: 1
H: 1

Worksheet for Facility 12 - 72" RCP

Project Description

Friction Method	Manning Formula
Solve For	Full Flow Diameter

Input Data

Roughness Coefficient	0.013	
Channel Slope	0.50	%
Normal Depth	5.34	ft
Diameter	64.14	in
Discharge	220.00	ft³/s

Results

Diameter	64.14	in
Normal Depth	5.34	ft
Flow Area	22.44	ft²
Wetted Perimeter	16.79	ft
Hydraulic Radius	1.34	ft
Top Width	0.00	ft
Critical Depth	4.18	ft
Percent Full	100.0	%
Critical Slope	0.00549	ft/ft
Velocity	9.81	ft/s
Velocity Head	1.49	ft
Specific Energy	6.84	ft
Froude Number	0.00	
Maximum Discharge	236.65	ft³/s
Discharge Full	220.00	ft³/s
Slope Full	0.00500	ft/ft
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
Average End Depth Over Rise	0.00	%

Worksheet for Facility 12 - 72" RCP

GVF Output Data

Normal Depth Over Rise	100.00	%
Downstream Velocity	Infinity	ft/s
Upstream Velocity	Infinity	ft/s
Normal Depth	5.34	ft
Critical Depth	4.18	ft
Channel Slope	0.50	%
Critical Slope	0.00549	ft/ft

Cross Section for Facility 12 - 72" RCP

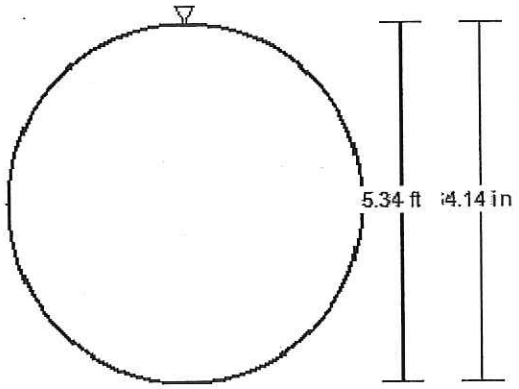
Project Description

Friction Method	Manning Formula
Solve For	Full Flow Diameter

Input Data

Roughness Coefficient	0.013	
Channel Slope	0.50	%
Normal Depth	5.34	ft
Diameter	64.14	in
Discharge	220.00	ft³/s

Cross Section Image



V: 1
H: 1

Worksheet for Facility 13A - 24" RCP

Project Description

Friction Method	Manning Formula
Solve For	Full Flow Diameter

Input Data

Roughness Coefficient	0.013	
Channel Slope	1.00	%
Normal Depth	1.14	ft
Diameter	13.63	in
Discharge	5.00	ft³/s

Results

Diameter	13.63	in
Normal Depth	1.14	ft
Flow Area	1.01	ft²
Wetted Perimeter	3.57	ft
Hydraulic Radius	0.28	ft
Top Width	0.00	ft
Critical Depth	0.92	ft
Percent Full	100.0	%
Critical Slope	0.01013	ft/ft
Velocity	4.94	ft/s
Velocity Head	0.38	ft
Specific Energy	1.51	ft
Froude Number	0.00	
Maximum Discharge	5.38	ft³/s
Discharge Full	5.00	ft³/s
Slope Full	0.01000	ft/ft
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
Average End Depth Over Rise	0.00	%

Worksheet for Facility 13A - 24" RCP

GVF Output Data

Normal Depth Over Rise	100.00	%
Downstream Velocity	Infinity	ft/s
Upstream Velocity	Infinity	ft/s
Normal Depth	1.14	ft
Critical Depth	0.92	ft
Channel Slope	1.00	%
Critical Slope	0.01013	ft/ft

Cross Section for Facility 13A - 24" RCP

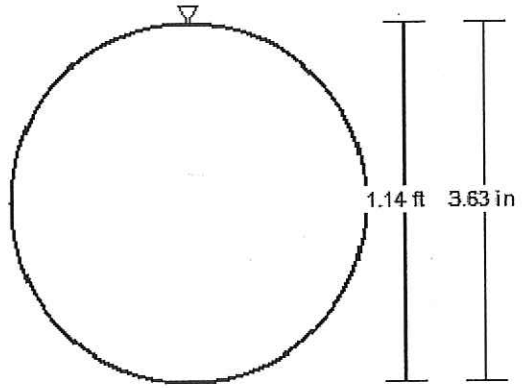
Project Description

Friction Method	Manning Formula
Solve For	Full Flow Diameter

Input Data

Roughness Coefficient	0.013	
Channel Slope	1.00	%
Normal Depth	1.14	ft
Diameter	13.63	in
Discharge	5.00	ft³/s

Cross Section Image



V: 1
H: 1

Worksheet for Facility 13B - 72" RCP

Project Description

Friction Method	Manning Formula
Solve For	Full Flow Diameter

Input Data

Roughness Coefficient	0.013	
Channel Slope	1.00	%
Normal Depth	5.07	ft
Diameter	60.82	in
Discharge	270.00	ft³/s

Results

Diameter	60.82	in
Normal Depth	5.07	ft
Flow Area	20.17	ft²
Wetted Perimeter	15.92	ft
Hydraulic Radius	1.27	ft
Top Width	0.00	ft
Critical Depth	4.55	ft
Percent Full	100.0	%
Critical Slope	0.00882	ft/ft
Velocity	13.38	ft/s
Velocity Head	2.78	ft
Specific Energy	7.85	ft
Froude Number	0.00	
Maximum Discharge	290.44	ft³/s
Discharge Full	270.00	ft³/s
Slope Full	0.01000	ft/ft
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
Average End Depth Over Rise	0.00	%

Worksheet for Facility 13B - 72" RCP

GVF Output Data

Normal Depth Over Rise	100.00	%
Downstream Velocity	Infinity	ft/s
Upstream Velocity	Infinity	ft/s
Normal Depth	5.07	ft
Critical Depth	4.55	ft
Channel Slope	1.00	%
Critical Slope	0.00882	ft/ft

Cross Section for Facility 13B - 72" RCP

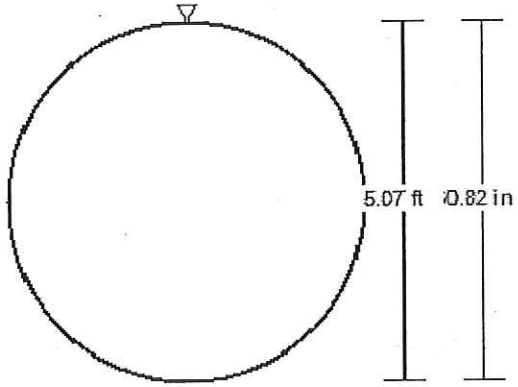
Project Description

Friction Method	Manning Formula
Solve For	Full Flow Diameter

Input Data

Roughness Coefficient	0.013	
Channel Slope	1.00	%
Normal Depth	5.07	ft
Diameter	60.82	in
Discharge	270.00	ft³/s

Cross Section Image



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Worksheet for Facility 15 - 42" RCP

Project Description

Friction Method	Manning Formula
Solve For	Full Flow Diameter

Input Data

Roughness Coefficient	0.013	
Channel Slope	0.50	%
Normal Depth	2.68	ft
Diameter	32.19	in
Discharge	35.00	ft³/s

Results

Diameter	32.19	in
Normal Depth	2.68	ft
Flow Area	5.65	ft²
Wetted Perimeter	8.43	ft
Hydraulic Radius	0.67	ft
Top Width	0.00	ft
Critical Depth	1.98	ft
Percent Full	100.0	%
Critical Slope	0.00623	ft/ft
Velocity	6.19	ft/s
Velocity Head	0.60	ft
Specific Energy	3.28	ft
Froude Number	0.00	
Maximum Discharge	37.65	ft³/s
Discharge Full	35.00	ft³/s
Slope Full	0.00500	ft/ft
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
Average End Depth Over Rise	0.00	%

Worksheet for Facility 15 - 42" RCP

GVF Output Data

Normal Depth Over Rise	100.00	%
Downstream Velocity	Infinity	ft/s
Upstream Velocity	Infinity	ft/s
Normal Depth	2.68	ft
Critical Depth	1.98	ft
Channel Slope	0.50	%
Critical Slope	0.00623	ft/ft

Cross Section for Facility 15 - 42" RCP

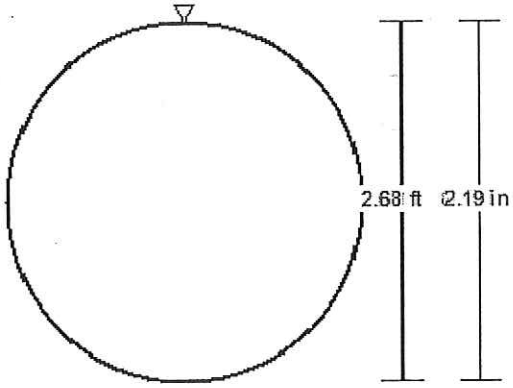
Project Description

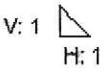
Friction Method	Manning Formula
Solve For	Full Flow Diameter

Input Data

Roughness Coefficient	0.013	
Channel Slope	0.50	%
Normal Depth	2.68	ft
Diameter	32.19	in
Discharge	35.00	ft³/s

Cross Section Image





Worksheet for Facility 16 - 72" RCP

Project Description

Friction Method	Manning Formula
Solve For	Full Flow Diameter

Input Data

Roughness Coefficient	0.013	
Channel Slope	1.00	%
Normal Depth	5.31	ft
Diameter	63.66	in
Discharge	305.00	ft³/s

Results

Diameter	63.66	in
Normal Depth	5.31	ft
Flow Area	22.10	ft²
Wetted Perimeter	16.67	ft
Hydraulic Radius	1.33	ft
Top Width	0.00	ft
Critical Depth	4.77	ft
Percent Full	100.0	%
Critical Slope	0.00880	ft/ft
Velocity	13.80	ft/s
Velocity Head	2.96	ft
Specific Energy	8.26	ft
Froude Number	0.00	
Maximum Discharge	328.09	ft³/s
Discharge Full	305.00	ft³/s
Slope Full	0.01000	ft/ft
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
Average End Depth Over Rise	0.00	%

Worksheet for Facility 16 - 72" RCP

GVF Output Data

Normal Depth Over Rise	100.00	%
Downstream Velocity	Infinity	ft/s
Upstream Velocity	Infinity	ft/s
Normal Depth	5.31	ft
Critical Depth	4.77	ft
Channel Slope	1.00	%
Critical Slope	0.00880	ft/ft

Cross Section for Facility 16 - 72" RCP

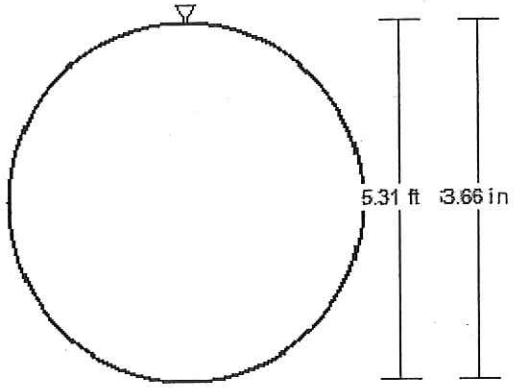
Project Description

Friction Method	Manning Formula
Solve For	Full Flow Diameter

Input Data

Roughness Coefficient	0.013	
Channel Slope	1.00	%
Normal Depth	5.31	ft
Diameter	63.66	in
Discharge	305.00	ft³/s

Cross Section Image



V: 1
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Worksheet for Facility 18 - 8'x7' RCB

Project Description

Friction Method	Manning Formula
Solve For	Normal Depth

Input Data

Roughness Coefficient	0.015	
Channel Slope	0.50	%
Height	7.00	ft
Bottom Width	8.00	ft
Discharge	536.00	ft³/s

Results

Normal Depth	5.47	ft
Flow Area	43.78	ft²
Wetted Perimeter	18.94	ft
Hydraulic Radius	2.31	ft
Top Width	8.00	ft
Critical Depth	5.19	ft
Percent Full	78.2	%
Critical Slope	0.00574	ft/ft
Velocity	12.24	ft/s
Velocity Head	2.33	ft
Specific Energy	7.80	ft
Froude Number	0.92	
Discharge Full	594.69	ft³/s
Slope Full	0.00615	ft/ft
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
Average End Depth Over Rise	0.00	%
Normal Depth Over Rise	78.18	%
Downstream Velocity	Infinity	ft/s

Worksheet for Facility 17B - 72" RCP

Project Description

Friction Method	Manning Formula
Solve For	Full Flow Diameter

Input Data

Roughness Coefficient	0.013	
Channel Slope	1.00	%
Normal Depth	5.45	ft
Diameter	65.42	in
Discharge	328.00	ft³/s

Results

Diameter	65.42	in
Normal Depth	5.45	ft
Flow Area	23.34	ft²
Wetted Perimeter	17.13	ft
Hydraulic Radius	1.36	ft
Top Width	0.00	ft
Critical Depth	4.91	ft
Percent Full	100.0	%
Critical Slope	0.00879	ft/ft
Velocity	14.05	ft/s
Velocity Head	3.07	ft
Specific Energy	8.52	ft
Froude Number	0.00	
Maximum Discharge	352.83	ft³/s
Discharge Full	328.00	ft³/s
Slope Full	0.01000	ft/ft
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
Average End Depth Over Rise	0.00	%

Worksheet for Facility 17B - 72" RCP

GVF Output Data

Normal Depth Over Rise	100.00	%
Downstream Velocity	Infinity	ft/s
Upstream Velocity	Infinity	ft/s
Normal Depth	5.45	ft
Critical Depth	4.91	ft
Channel Slope	1.00	%
Critical Slope	0.00879	ft/ft

Cross Section for Facility 17B - 72" RCP

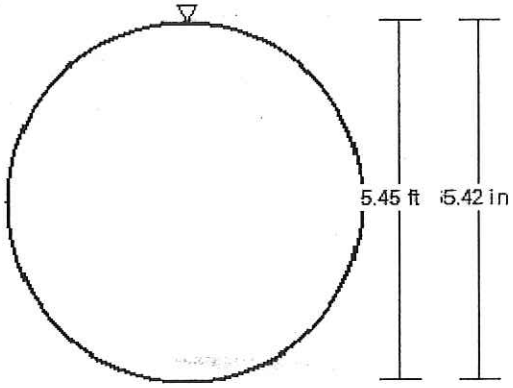
Project Description

Friction Method	Manning Formula
Solve For	Full Flow Diameter

Input Data

Roughness Coefficient	0.013	
Channel Slope	1.00	%
Normal Depth	5.45	ft
Diameter	65.42	in
Discharge	328.00	ft³/s

Cross Section Image



V: 1
H: 1

Worksheet for Facility 18 - 8'x7' RCB

GVF Output Data

Upstream Velocity	Infinity	ft/s
Normal Depth	5.47	ft
Critical Depth	5.19	ft
Channel Slope	0.50	%
Critical Slope	0.00574	ft/ft

Cross Section for Facility 18 - 8'x7' RCB

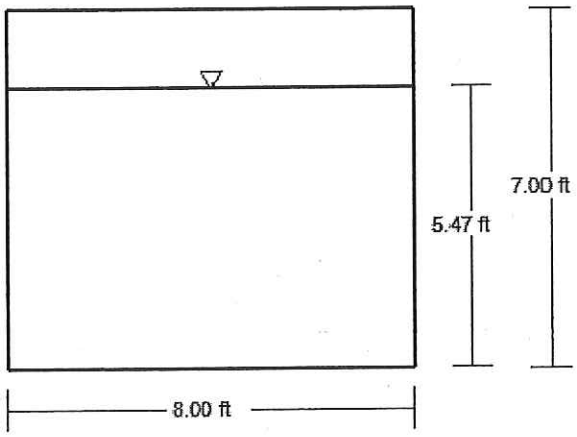
Project Description

Friction Method	Manning Formula
Solve For	Normal Depth

Input Data

Roughness Coefficient	0.015	
Channel Slope	0.50	%
Normal Depth	5.47	ft
Height	7.00	ft
Bottom Width	8.00	ft
Discharge	536.00	ft³/s

Cross Section Image



V: 1
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Worksheet for Facility 19 - 36" RCP

Project Description

Friction Method	Manning Formula
Solve For	Full Flow Diameter

Input Data

Roughness Coefficient	0.013	
Channel Slope	1.00	%
Normal Depth	2.22	ft
Diameter	26.68	in
Discharge	30.00	ft³/s

Results

Diameter	26.68	in
Normal Depth	2.22	ft
Flow Area	3.88	ft²
Wetted Perimeter	6.98	ft
Hydraulic Radius	0.56	ft
Top Width	0.00	ft
Critical Depth	1.90	ft
Percent Full	100.0	%
Critical Slope	0.00936	ft/ft
Velocity	7.73	ft/s
Velocity Head	0.93	ft
Specific Energy	3.15	ft
Froude Number	0.00	
Maximum Discharge	32.27	ft³/s
Discharge Full	30.00	ft³/s
Slope Full	0.01000	ft/ft
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
Average End Depth Over Rise	0.00	%

Worksheet for Facility 19 - 36" RCP

GVF Output Data

Normal Depth Over Rise	100.00	%
Downstream Velocity	Infinity	ft/s
Upstream Velocity	Infinity	ft/s
Normal Depth	2.22	ft
Critical Depth	1.90	ft
Channel Slope	1.00	%
Critical Slope	0.00936	ft/ft

Cross Section for Facility 19 - 36" RCP

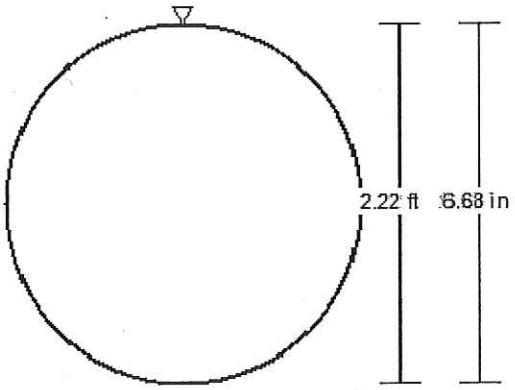
Project Description

Friction Method	Manning Formula
Solve For	Full Flow Diameter

Input Data

Roughness Coefficient	0.013	
Channel Slope	1.00	%
Normal Depth	2.22	ft
Diameter	26.68	in
Discharge	30.00	ft³/s

Cross Section Image



V: 1
H: 1

Worksheet for Facility 20 - 42" RCP

Project Description

Friction Method	Manning Formula
Solve For	Full Flow Diameter

Input Data

Roughness Coefficient	0.013	
Channel Slope	1.00	%
Normal Depth	2.92	ft
Diameter	35.03	in
Discharge	62.00	ft³/s

Results

Diameter	35.03	in
Normal Depth	2.92	ft
Flow Area	6.69	ft²
Wetted Perimeter	9.17	ft
Hydraulic Radius	0.73	ft
Top Width	0.00	ft
Critical Depth	2.54	ft
Percent Full	100.0	%
Critical Slope	0.00914	ft/ft
Velocity	9.26	ft/s
Velocity Head	1.33	ft
Specific Energy	4.25	ft
Froude Number	0.00	
Maximum Discharge	66.69	ft³/s
Discharge Full	62.00	ft³/s
Slope Full	0.01000	ft/ft
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
Average End Depth Over Rise	0.00	%

Worksheet for Facility 20 - 42" RCP

GVF Output Data

Normal Depth Over Rise	100.00	%
Downstream Velocity	Infinity	ft/s
Upstream Velocity	Infinity	ft/s
Normal Depth	2.92	ft
Critical Depth	2.54	ft
Channel Slope	1.00	%
Critical Slope	0.00914	ft/ft

Cross Section for Facility 20 - 42" RCP

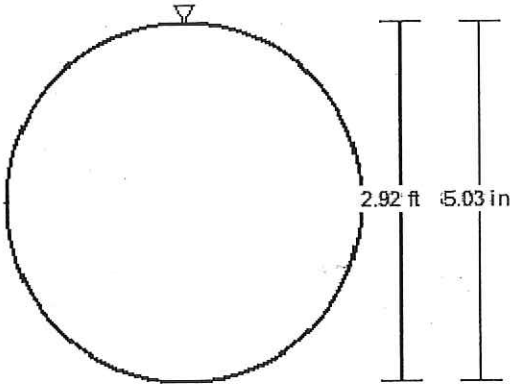
Project Description

Friction Method	Manning Formula
Solve For	Full Flow Diameter

Input Data

Roughness Coefficient	0.013	
Channel Slope	1.00	%
Normal Depth	2.92	ft
Diameter	35.03	in
Discharge	62.00	ft³/s

Cross Section Image



V: 1
H: 1

Worksheet for Facility 30A - 30" RCP

Project Description

Friction Method	Manning Formula
Solve For	Full Flow Diameter

Input Data

Roughness Coefficient	0.013	
Channel Slope	0.50	%
Normal Depth	1.80	ft
Diameter	21.55	in
Discharge	12.00	ft^3/s

Results

Diameter	21.55	in
Normal Depth	1.80	ft
Flow Area	2.53	ft^2
Wetted Perimeter	5.64	ft
Hydraulic Radius	0.45	ft
Top Width	0.00	ft
Critical Depth	1.28	ft
Percent Full	100.0	%
Critical Slope	0.00676	ft/ft
Velocity	4.74	ft/s
Velocity Head	0.35	ft
Specific Energy	2.14	ft
Froude Number	0.00	
Maximum Discharge	12.91	ft^3/s
Discharge Full	12.00	ft^3/s
Slope Full	0.00500	ft/ft
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
Average End Depth Over Rise	0.00	%

Worksheet for Facility 30A - 30" RCP

GVF Output Data

Normal Depth Over Rise	100.00	%
Downstream Velocity	Infinity	ft/s
Upstream Velocity	Infinity	ft/s
Normal Depth	1.80	ft
Critical Depth	1.28	ft
Channel Slope	0.50	%
Critical Slope	0.00676	ft/ft

Cross Section for Facility 30A - 30" RCP

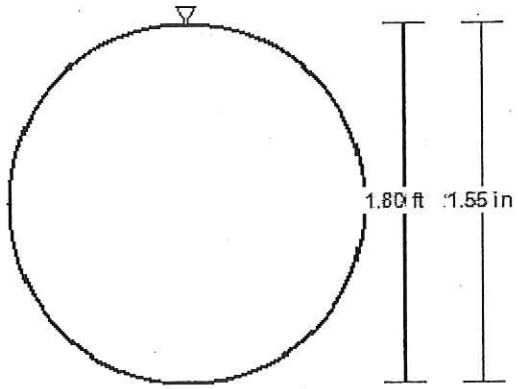
Project Description

Friction Method	Manning Formula
Solve For	Full Flow Diameter

Input Data

Roughness Coefficient	0.013	
Channel Slope	0.50	%
Normal Depth	1.80	ft
Diameter	21.55	in
Discharge	12.00	ft³/s

Cross Section Image



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Worksheet for Facility 32 - 20'x7' RCB

Project Description

Friction Method	Manning Formula
Solve For	Normal Depth

Input Data

Roughness Coefficient	0.015	
Channel Slope	4.00	%
Height	7.00	ft
Bottom Width	20.00	ft
Discharge	3454.00	ft³/s

Results

Normal Depth	4.22	ft
Flow Area	84.42	ft²
Wetted Perimeter	28.44	ft
Hydraulic Radius	2.97	ft
Top Width	20.00	ft
Critical Depth	9.75	ft
Percent Full	60.3	%
Critical Slope	0.00380	ft/ft
Velocity	40.92	ft/s
Velocity Head	26.02	ft
Specific Energy	30.24	ft
Froude Number	3.51	
Discharge Full	5234.62	ft³/s
Slope Full	0.09186	ft/ft
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
Average End Depth Over Rise	0.00	%
Normal Depth Over Rise	60.30	%
Downstream Velocity	Infinity	ft/s

Worksheet for Facility 32 - 20'x7' RCB

GVF Output Data

Upstream Velocity	Infinity	ft/s
Normal Depth	4.22	ft
Critical Depth	9.75	ft
Channel Slope	4.00	%
Critical Slope	0.00380	ft/ft

Cross Section for Facility 32 - 20'x7' RCB

Project Description

Friction Method	Manning Formula
Solve For	Normal Depth

Input Data

Roughness Coefficient	0.015	
Channel Slope	4.00	%
Normal Depth	4.22	ft
Height	7.00	ft
Bottom Width	20.00	ft
Discharge	3454.00	ft³/s

Cross Section Image