DS #: 4420

APN: 125-06-001-001

PROJECT: KYLE CANYON MASTER DRAINAGE STUDY (A.K.A. SKYE CANYON MASTER DRAINAGE)

SUBMITTAL: 8TH

SCANNED BY/DATE: _____

CHECKED BY/DATE: _____

CITY OF LAS VEGAS NEVADA

CITY OF LAS VEGAS INTER-OFFICE MEMORANDUM				DATE: March 5, 2015
TO: **Land Development Services** Department of Public Works				FROM: Oh Sang Kwon, P.E. Flood Control Section Department of Public Works
SUBJECT:	Drainage Study for:			**COPIES TO:**
Skye Canyon Master Drainage Study – **Update #1 to Kyle Canyon Master Drainage Study**				Slater Hanifan Group
Cross Streets:	Fort Apache Road & Moccasin Road			KAG Development South, LLC
File Number:	F:\Depot\DSMemos\DS4420H.doc			Bart Anderson, P.E., DevCo
Parcel Number:	125-06-001-001			CCRFCD
Zoning Action:				CCPW
FEMA Flood Zone	YES	NO **X**		NDOT; NV Energy
Proposed Storm Drain	YES **X**	NO		PB America, Inc.

HISTORY	DATE RECEIVED	DATE REVIEWED	COMMENTS	REVIEW FEES	FEES PAID Transaction #
1st Submittal	6/22/2010	7/13/2010	Not Approved	$1,000.00	147216: $1000
2nd Submittal	9/17/2010	10/4/2010	Not Approved	$400.00	153788: $400
3rd Submittal	10/15/2011	11/14/2011	Not Approved	$400.00	153788: $400
4th Submittal	2/13/2012	3/1/2012	Conditional Approval	$400.00	274196: $400
CCRFCD	5/23/2012	5/24/2012	Concurrence Recv'd	N/C	N/C
5th Submittal NDOT Comments	9/10/2012	9/19/2012	Conditional Approval	N/C	N/C
6th Submittal	12/4/2014	12/30/2014	Conditional Approval	$400.00	378889: $400
7th Submittal	2/17/2015	3/3/2015	See Comments Below	$400.00	385987: $400
			TOTAL FEES (LDDRS):	**$3,000.00**	**----**

REMARKS:

7th Submittal: Response to CCRFCD Comments on Update #1

6th Submittal: Update #1 to revise Detention Basins Layout and Phase 2 Land Plan Changes

5th Submittal: Responses to NDOT Comments

Update to original Kyle Canyon Master Drainage Study (DS4091). Site layout has been changed.

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

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

1. This *Master Study Update* revises the Detention Basins configuration from three-cell to two-cell and proposes to eliminate the MOSR regional facility alignment. Previous concurrence from the *Clark County Regional Flood Control District* (CCRFCD) is no longer valid. Obtain concurrence again from the CCRFCD for the revised conceptual master layout.

2. ***Skye Canyon Phase 2 Improvement*** technical designs which include drainage study and the improvement plans will not be accepted for review prior to the subject Update #1 to the Master Study is adopted as a **MPU Amendment (MPA)** by the CCRFCD.

3. Resubmit the Kyle Canyon Master Drainage Study with the updated Land Uses to match the current Master Land Use Plan.

4. Include the Phasing Plan for the Pods with the corresponding Pod related drainage infrastructure.

The following comments are repeated until they are complete:

1. Please note that the traffic study must be approved prior to final approval of the Master Drainage Study. If the street layout does not match the Master Drainage study, an update to the Master Drainage Study must be submitted to address the changes.
2. The Kyle Canyon Master Drainage Study is proposing to revise the hydrology and facilities indentified in the *Clark County Regional Flood Control District's (CCRFCD) 2008 Las Vegas Valley Flood Control Master Plan Update*. A Master Plan Amendment (MPA) must be submitted to the City of Las Vegas for approval. The City of Las Vegas will coordinate the MPA submittal to CCRFCD for approval. The Master Developer will be responsible for preparing all submittals needed for CCRFCD along with any and all presentations. The MPU must be approved by CCRFCD prior to the final approval of the Master Drainage Study.
3. Per a meeting held in August 18, 2011 between the developer and the *City of Las Vegas*, it was agreed that NV Energy's approval of any proposed drainage facilities within their access easements (such as the proposed detention basins) must be obtained prior to the final approval of the Master Drainage Study. Please provide documentation for such approval or acknowledgment.
4. Please note that any future technical drainage study submittals that differ from the Master Drainage Study (ie. Changes in pods, infrastructure, flows etc.) will require an update to the Master Drainage Study and this update must be approved by the *City of Las Vegas Flood Control Section* prior to final approval of technical drainage study.
5. The proposed detention basins will require coordination with the State of Nevada, Division of Water Resources Dam Safety and will require the State's approval prior to permitting.
6. Please obtain necessary 404 permits from Army Corps of Engineers and provide a copy of the permit to Flood Control prior to issuance of the grading permit. The contact information for Army Corps of Engineers is listed below:

   Patricia L. McQueary
   Chief, USACE S. George Regulatory Office
   US Army Corps of Engineers
   321 North Mall Drive
   Suite L-101
   St. George, UT 84790

   (435) 986-3979 (Office)
   (435) 986-3981 (FAX)
   Patricia.L.McQueary@usace.army.mil

7. Please note that the proposed 100-year flood protection facilities identified on Exhibit I must be constructed by the Master Developer as a part of the master planned infrastructure. Technical drainage studies are required for each phase of the master planned infrastructure improvements. The technical drainage studies for the infrastructure improvements may be submitted with conditional approval of this Master Drainage Study. However, final approval for the Master Drainage Study must be obtained prior to conditional approval of the infrastructure drainage studies.
8. Technical drainage studies are required for each of the POD's. The technical drainage studies for the POD's may not be submitted until the conditional approval of the pertinent infrastructure drainage study is obtained. Final approval for the infrastructure drainage study must be obtained prior to conditional approval of the impacted POD drainage studies.
9. Building permits for the homes within the individual POD's will not be issued until construction of the street and flood control infrastructure around the POD is substantially complete or interim protection is provided per the approved technical drainage study.
10. The site is adjacent to Clark County jurisdictional boundaries. The engineer must coordinate the Master Drainage Study with *Clark County Public Works Department* (CCPW) and incorporate any concerns for boundary conditions. CCPW concurrence is required prior to final acceptance of the Master Drainage Study.
11. The project proposed to construct facilities and/or increase flows within *Nevada Department of Transportation* (NDOT) right-of-way. Therefore, NDOT concurrence is required prior to final approval of the Master Drainage Study.
12. The project proposed to discharge flows onto and proposed facilities within U.S. Bureau of Land Management (BLM) property. Therefore, BLM concurrence is required prior to final approval of the Master Drainage Study.
13. The proposed berm/levee along Moccasin Road will require approval from *Federal Emergency Management Agency* (FEMA) in the future. The proposed berm/levee must be designed to meet the minimum requirements set by FEMA and CCRFCD by a future technical drainage study.
14. The design of debris basins at all major culvert entrances to limit the amount of sediment and debris entering the storm drain facilities will be required in a future infrastructure study.
15. Please note that all detention basins must be designed per CCRFCD criteria including a low flow facility around the detention basin. Also, include new water quality feature per Storm Water Management Plan.
16. Please note that all proposed interim facilities must be maintained by the master developer.
17. Provide a legal description of the proposed detention basins prior to recordation of the parent final map.
18. Coordinate the proposed drainage facilities with *Sheep Mountain Parkway* project. Please contact Greg McDermott, P.E., at 702-229-2143 to coordinate the proposed drainage facilities.

NOTE: Any future changes to the proposed design (or design assumptions) as outlined in the approved master drainage study and attached preliminary grading plan which affect drainage must be addressed in a Drainage Study Amendment and accepted by the *City of Las Vegas Flood Control Section.* Additionally, conditional acceptance of a drainage study is valid for a period of one (1) year. If the proposed construction has not been completed in that time period, the *City of Las Vegas* reserves the right to require additional conditions and/or submission and acceptance of a complete drainage study update prior to further construction of a project.

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
osk

T/R/S: T19S/R60E/6 & 7
AREA G-6, 7, & F-12

SLATER HANIFAN GROUP
CONSULTING ENGINEERS & PLANNERS

MEETING NOTES

Project Number: OLY1401.004
Project Name: Skye Canyon
Meeting Date: 2/26/2015
Meeting Location: CLV Public Works – Turquoise Room
Meeting Topic: Detention Basin & Master Drainage Larger Issues (Meeting Agenda Attached)

Attendees:	*Company Name:*
Oh Sang Kwon	CLV
Peter Jackson	CLV
Allen Pavelka	CLV
Lucien Paet	CLV
Bart Anderson	CLV
Jeremy Leavitt	CLV
Jerry Slater	SHG
Steve Jones	SHG
Marc Bolduc	Olympia

Meeting Notes:

Item:	*Discussion:*
1	***BLM & NDOT Concurrences*** – SHG & Olympia discussed its intent to begin development of Detention Basin 1 and Phase 2. SHG explained that as a condition of allowing the property to reduce detention basins from 3 to 2, the CLV required updating the Master Drainage Study. For ease of schedule delivery, SHG also included the Phase 2 revised land plan in the same Update #1 that has received CLV conditional approval and responses to CCRFCD comments is currently under review by CLV. SHG & Olympia questioned NDOT & BLM concurrences required on the Master Drainage Study Update #1 that is primarily revising areas insignificant to NDOT & BLM jurisdiction as shown in the study. CLV explained that although the changes are insignificant to NDOT & BLM, the connectivity of facilities throughout the project require these concurrences to show CLV that moving forward with drainage planning isn't going to change in the future due to disallowment of the overall project's impacts to NDOT and BLM. It was agreed that the material changes to NDOT's right-of-way are insignificant from the last time that SHG received NDOT concurrence for the Carwin Master Drainage Study so that re-requiring NDOT concurrence is acceptable. CLV discussed that due to the Conservation Transfer Area rules on BLM property that BLM concurrence would be an infeasible task and all agreed; therefore, SHG and Olympia discussed that it would investigate adding an RCB facility in the existing 50-ft grant from BLM in Moccasin to the Master Drainage Study facilities exhibit that would remove BLM concurrence on the Master Drainage Study. It was also agreed by all that if the developer could provide an alternative solution to the RCB facility in Moccasin that CLV would review its legitimacy upon that time.
2	***MPU Amendment*** – SHG discussed that it received CCRFCD approval of an MPU Amendment (MPA) prepared based on the previous Carwin Master Drainage Study but was never adopted by CLV City Council due to Olympia's purchase of the property. It was also explained to the City that with the exception of the number of detention basins, that the routing of flows in the regional alignments is approximately the same as was approved by CCRFCD. SHG outlined a plan where if CCRFCD would accept its previous MPA approval based on the current condition of the master drainage plan and allow the City to resurrect it onto City Council, CLV agreed it would support the plan and a revision to the CCRFCD Master Plan, possibly a Master Plan Change (MPC), could be processed to reduce the detention basins from 3 to 2. CLV explained that having the CCRFCD Master Plan revised to the current master drainage plan would give it a comfort level that it has a formal outline for drainage patterns moving forward in development of the project, which would allow the developer to receive approvals on Detention Basin 1 and Phase 2 improvements. A follow-up meeting will be setup to discuss the MPU Amendment when SHG engages with CCRFCD about this concept.
3	***Phase 2 Technical Studies*** – it was agreed that in the meeting that if Items 1 and 2 are satisfied adequately, CLV would allow processing of technical designs for the Phase 2 improvements.
4	***Detention Basin 1 & BLM related issues*** – The following items were discussed:

Prepared By: Steve Jones, SHG

Please notify the preparer if you have any questions, concerns or additions to these minutes within 2 days. After 2 days the content of this document will be considered accurate and accepted as the final recordation.

Item:	Discussion:
	• **Buffer Zone from Red Rock Conservation Area:** CLV discussed how previous NV Energy easements in the area were granted with what is believed to be a 28-ft buffer. SHG showed that the existing access paths for these easements are within the 28-ft buffer. CLV and SHG agreed that a buffer zone from Red Rock Conservation Area is manageable and a good idea. It was decided that the Detention Basin 1 improvements would not encroach within 10-ft of the Red Rock Conservation Area, and that BLM concurrence would not be required to get approval of this buffer zone. • **Fencing:** CLV discussed that the SHG proposal for controlled access measures needs to be extended for the entire limits of the detention basin. SHG and Olympia discussed that fencing the basin at the Grand Teton point of access is consistent with many detention basins in the vicinity that don't have fencing around the entire basin, and CLV responded that they are in the process of retro-fitting these older basins not designed to these standards. CLV also added that there is a common problem with ATV/recreational vehicles unauthorized use of detention basin facilities, and anticipates the same issue with this basin since it is isolated away from development adjacent to the Red Rock Conservation Area. SHG and Olympia agreed to address controlled access measures around the entire basin.
5	***Detention Basin Easement & Disturbance Area –*** The following items were discussed: • **Future Expansion:** SHG offered the idea that the detention basin could be excavated further in the case additional expansion is needed in the basin. CLV agreed on the condition that it would not have to remove/replace the outlet structure, and SHG agreed to re-design the outlet pipes to allow for the potential future expansion. • **4:1 Slopes Requirement:** SHG and Olympia questioned this requirement since it isn't specifically identified in the CCRFCD Manual, other detention basins in the vicinity have 3:1 or steeper slopes, the previous GC Wallace approved designs had 3:1 or steeper slopes, and that this is a new comment generated on the 2nd review that results in a significant re-design. CLV discussed that the CCRFCD Manual reserves each governing agency the right to enforce maintenance policies, which is why this 4:1 slope was generated. CLV acknowledged SHG and Olympia's concerns and reserved the right to discuss this issue further internally. • **Maintenance Activities:** SHG requested CLV outline the additional area it would require for equipment staging and temporary storage areas for sediment removal, in order for SHG to address appropriately. CLV acknowledged SHG's question and discussed it would provide us more information after the meeting. • **Expand Easement Limits for Toe of Embankment Maintenance & Safety:** SHG acknowledged this concern and proposed that a temporary easement be dedicated that could be vacated when development is adjacent to the basin and the dam embankment toe is no longer present. CLV agreed to this proposal.
5	***Detention Basin & Sheep Mountain Parkway Coordination –*** SHG and Olympia discussed that due to the uncertainty of Sheep Mountain Parkway design in the future, it is likely whatever configuration its collector channel is aligned within the existing BLM grant that it will likely need to be removed and replaced defeating the purpose of realignment. CLV discussed that the shift in alignment would at least provide the best chance of permanence for the channel since it is a CCRFCD facility. However, CLV acknowledged the re-design constraints it would cause SHG and Olympia to re-align the channel and reserved the right to discuss this issue further.

Action Items:

Item:	Discussion:
1	***BLM & NDOT Concurrences –*** SHG will submit its Master Drainage Study Update to NDOT for concurrence. SHG will also adjust its Master Drainage Study to remove the requirement for BLM concurrence.
2	***MPU Amendment –*** SHG will discuss MPU impacts with CCRFCD and setup a follow-up meeting between CLV, SHG and CCRFCD to discuss possibility of adopting the previous MPU Amendment and how the change from 3 to 2 detention basins affects the Amendment.
3	***Phase 2 Technical Studies –*** No action items.
4	***Detention Basin 1 & BLM related issues –*** • **Buffer Zone from Red Rock Conservation Area:** SHG will revise its plans for 10-ft buffer zone. • **Fencing:** SHG will revise its plans to address controlled access measures for entire detention basin.
5	***Detention Basin Easement & Disturbance Area –*** • **Future Expansion:** SHG will revise its plans to adjust outlet pipes for future expansion by way of further excavation. • **4:1 Slopes Requirement:** CLV will discuss this requirement internally and provide resolution to SHG. • **Maintenance Activities:** CLV will discuss this requirement internally and provide resolution to SHG. • **Expand Easement Limits for Toe of Embankment Maintenance & Safety:** SHG will revise its plans to re-delineate drainage easement boundaries.
5	***Detention Basin & Sheep Mountain Parkway Coordination –*** CLV will discuss this requirement internally and provide resolution to SHG.

Prepared By: Steve Jones, SHG

Please notify the preparer if you have any questions, concerns or additions to these minutes within 2 days. After 2 days the content of this document will be considered accurate and accepted as the final recordation.

Detention Basin 1 Larger Issue Drainage Comments

- Building Permit restrictions (Comment #2)

- BLM concurrence/buffers from Red Rock Conservation Area (Comments #9, 12, 15, 26)
  - Concurrence?
  - Buffer Zone without going to BLM?
  - 4:1 Slopes?
  - Fencing?

- Detention Basin Easement/Disturbance Area (Comments #11, 14, 15)
  - Future expansion?
  - Maintenance activities?
  - Dam Safety Toe?
  - Access Roads in NV Energy easements?

- Sheep Mountain Parkway Coordination (Comment #18)
  - Realignment of collector channel?

- Maintenance & Liability Agreement (Comment #22)
  - Timing of posting the bond for this item?

SLATER HANIFAN GROUP
CONSULTING ENGINEERS & PLANNERS

Skye Canyon Larger Drainage Issues – Meeting Agenda

Where: City of Las Vegas – 7th Floor Development Services Center (333 N. Rancho Dr.)

Attendees: See Attached Sign-In Sheet

Date: February 26, 2015

Purpose: Discuss Skye Canyon master drainage approval conditions regarding Olympia's construction sequencing. Discuss Detention Basin 1 larger issue comments.

- Present Olympia Development Phasing exhibit

Master Drainage Conditions of Approval from Most Recent CLV issued Letter (for Phase 2 & DB1 Construction)

- Required Agency Concurrences
  - CCRFCD, CCPW, NDOT, BLM
  - CCRFCD MPU Amendment (Condition #2)
  - NV Energy (Condition #3)
  - USACE 404 permit(s) (Condition #6)

- Phase 2 Technical Studies
  - "Final approval of Master Drainage Study must be obtained prior to conditional approval of the infrastructure drainage studies." (Condition #7)
    - Justification Letter?
    - Master Drainage Study Update #1 proved no increase in flow from existing condition downstream of Phase 2.
  - "Final approval of the infrastructure drainage study must be obtained prior to conditional approval of the impacted POD drainage studies" (Condition #8)
    - Previous DA 7.05-f-iv: 1st submittal of infrastructure IPs allows conditional approval of PODs technical drainage study.

Current Development Agreement Master Drainage Issues

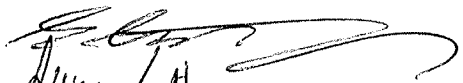
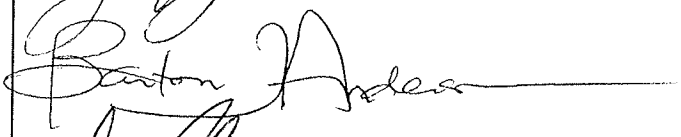
- Present New Land Plan

- Requirement for Master Drainage Study Update #2

- Master Drainage Study Conditions of Approval

Skye Canyon Larger Drainage Issues (2/26/2015)

Sign-In Sheet

Name	Signature
STEVE JONES - SHG	
Jeremy Leavitt	
Allen Pavelka	
Jerry Slater	
Marc Bolduc	
Lucien Paet	
BART ANDERSON	
Peter Jackson	
oh sang Kwon	

SLATER HANIFAN GROUP
CONSULTING ENGINEERS & PLANNERS

TRANSMITTAL

To: **Oh Sang Kwon, P.E.**
City of Las Vegas – Public Works
333 N. Rancho Drive – 7th Floor
Las Vegas, NV 89106

From: **Steve Jones, P.E.**

Date: February 17, 2015

Project No.: OLY1401.004

Subject: **Master Drainage Study Update Response to CCRFCD Comments**

CC: Jerry Slater, SHG
CC: Chelsea Peltier, SHG
CC: Mark Failla, SHG
CC: Rhonda Miller, SHG
CC: Steve Jones, SHG
CC:

Transmitting Via:
- ☐ Mail
- ☒ Messenger / MDS
- ☐ Federal Express
- ☐ Pickup

For:
- ☒ Review & Comment
- ☐ Per your Request
- ☐ Information/File

Acknowledgement of Receipt:
- ☐ Not Required
- ☒ Acknowledgement Required

Received By:_____
Date:_____ Time:_____

Copies	Description
1	Subject Study
1	Stamped and Signed Standard Form 1
1	$400 Submittal Fee
1	CD containing PDF of submittal documents

Comments:

Enclosed please find the above listed items in support of the *Master Drainage Study Update #1 for Skye Canyon*. The study addresses the re-configuration of the detention basins at the west property boundary, as conditioned for approval of the Technical Drainage Study for Detention Basin 1 (DS4698). The study also addresses the modified land plan for Phase 2 portion of the Skye Canyon property to accompany future technical submittals for Phase 2 improvements.

Please contact us if there are any questions at 702-284-5300. Thanks.

Signed: _____

Erick Mata, E.I.
Flood Control Division

G:\SHG\Office Forms\Transmittal.doc

Please, notify us at (702) 284-5300 if there are any problems receiving this transmission.

MASTER DRAINAGE STUDY
UPDATE #1
(Response to CCRFCD Comments)

Skye Canyon
City of Las Vegas, Nevada

Job No.: OLY1401.004
Date: February 2015

Prepared By:
Slater Hanifan Group, Inc.
5740 S. Arville Street, Suite 216
Las Vegas, Nevada 89118
Phone: 702-284-5300 ▪ Fax: 702-284-5399

Prepared For:
Ninety-Five Management, LLC
11411 Southern Highlands Parkway, Suite 300
Las Vegas, NV 89141
Phone: 702-220-6565 ▪ Fax: 702-220-6566

2/12/2015

Steve Jones, P.E.
NV Professional Engineer No. 19638

Assisted by: Erick Mata, EI

HYDROLOGIC CRITERIA AND DRAINAGE DESIGN MANUAL

DRAINAGE STUDY INFORMATION FORM

Name of Development: Skye Canyon Master Drainage Study – Update #1 Date: February 2015

Location of Development:
a) Descriptive (Cross Streets): North/South: Puli Road
East/West: Grand Teton Drive
b) Section: 12 Township: 19 South Range: 59 East
Section: 6, 7 Township: 19 South Range: 60 East
c) APN: 125-06-101-001; 125-06-401-001; 125-06-501-001; 125-06-701-001; 125-07-101-005; 125-07-201-001, 002, 003; 125-07-301-001, 002; 125-07-401-001, 002; 125-07-501-005; 125-07-602-001, 003, 004, 005; 126-12-000-001; 125-07-310-001, 002; 125-07-410-001

Name of Owner/Developer: KAG Development South, LLC; Section 12, LLC; MF Land, LLC; G Land, LLC; Northland, LLC; Eastland, LLC; East of 95, LLC

Telephone No.: 702-220-6565 Fax No.: 702-220-6566 E-mail Address: mbolduc@olympiacompanies.com

Address: 11411 Southern Highlands Parkway, Suite 300; Las Vegas, NV 89141

Contact Person – Name: Steve Jones, P.E. Telephone No.: 702-284-5300

*E-mail Address: sjones@shg-inc.com Fax No.: 702-284-5399

Firm: Slater Hanifan Group

Address: 5740 S. Arville Street, Suite 216; Las Vegas, NV 89118

Type of Land Development/Land Disturbance Process:

☐	Rezoning	☐	Subdivison Map	☐	Clearing and grading Only
☐	Parcel Map	☐	Planned Unit Development	☒	Other (Please specify below)
☐	Large Parcel Map	☐	Building Permit	☐	Master Drainage Study

1. Total Owned Land Area: At Site: 1,662 +/- Acres Being Developed/Disturbed: All

2. Is a portion or all of the subject property located in a 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, Commercial, Schools, Parks, Roadways, Gaming, etc.

5. Approximate upstream land area which drains to the subject site: 6.1 sq. miles +/-

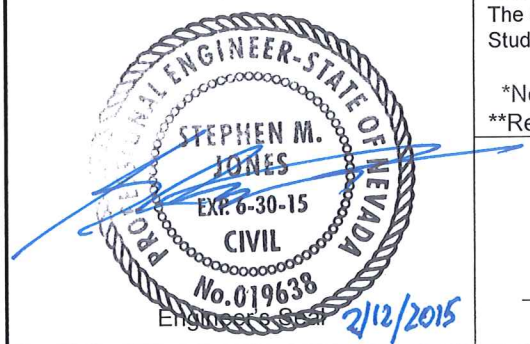
6. Has the site drainage been evaluated in the past? ☒ Yes** ☐ No If yes, please identify documentation:

Master Drainage Study for Kyle Canyon (SHG, DS4420)

Master Drainage Study for Kyle Canyon (GCW, DS4091)

7. If known, please briefly identify the proposed discharge point(s) of runoff from the site:
Intersections of Moccasin, Log Cabin, O'Hare, Iron Mountain, Brent and Horse along Fort Apache Road,
Future Sheep Mountain Parkway alignment north of Moccasin,
U.S. Highway 95 right-of-way

8. Briefly describe your proposed schedule for the subject project: N/A



Engineer's Seal 2/12/2015

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.

*Newly Required Field

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

Revision	Date

Local Entity File No.

REFERENCE: ***SHG Job No. OLY1401.004***

STANDARD FORM 1

Updated 05/01/2008

SLATER HANIFAN GROUP
CONSULTING ENGINEERS & PLANNERS

OLY1401.004

February 12, 2015

Oh Sang Kwon, P.E.
Flood Control Project Manager
City of Las Vegas Department of Public Works
333 N. Rancho Drive
Las Vegas, Nevada 89106

Subject: Response to CCRFCD Comments on the Master Drainage Study Update #1 for Skye Canyon (CLV DS4420, RFCD 15-9442)

Dear Mr. Kwon:

This letter is submitted in response to the concurrence review comments in the Clark County Regional Flood Control District (CCRFCD) review memorandum dated January 22, 2015 regarding the above referenced Master Drainage Study. Clark County concurrence has been received and provided in Appendix A along with a copy of the Regional Flood Control District (CCRFCD) review comments. The comments have been individually addressed as follows:

1. **Comment:** *It is noted that City of Las Vegas will submit a Master Plan Amendment (MPA) to address impacts to the Districts' Master Plan Update (MPU). The proposed detention basins and associated facilities will not be eligible for District maintenance funding until an MPA is approved by the District's Board of Directors and adopted by City of Las Vegas.*

   Response: Acknowledged.

2. **Comment:** *The exhibits show the DB#1 outfall (Facility P74W) terminating west of the future Sheep Mountain Parkway alignment. The outfall facility must show connectivity to a regional facility. Address accordingly.*

   Response: Facility P75W has been extended to show connectivity with facility P74W across Sheep Mountain Parkway on the facility exhibits. This facility is an existing USACE 404 wash that the developer will not disturb across the reserved Sheep Mountain Parkway alignment. Refer to Response to Comment No. 3 for further detail regarding the connectivity of facilities P74W and P75W.

3. **Comment:** *Discuss the status of Sheep Mountain Parkway. The arroyo east of DB#1 crosses the future Sheep Mountain Parkway alignment. Discuss and identify future District facility crossings that will be required when future roadways are constructed.*

   Response: The future of Sheep Mountain Parkway remains uncertain at this time. However, to maintain connectivity of the Detention Basin #1 outfall and work within current proposed USACE 404 permitting by the developer, the site has been planned to accept the southern arroyo flows and a portion of developed runoff from the reserved Sheep Mountain

5740 S. Arville Street #216, Las Vegas, NV 89118 ph (702) 284-5300 fax (702) 284-5399

right-of-way as Facility P75W. Additionally, the developer is proposing to construct Facilities P16W, P17W and P18W to route its contributing developed flows north to Iron Mountain Road and plan to allow only arroyo and Sheep Mountain flows conveyed in the northern arroyo

In the future, if Sheep Mountain constructs improvements that collect and route all flows north in its right-of-way, it will be required to perform its own USACE 404 permitting and technically re-evaluate its drainage impacts for potentially re-routing flows. In the future if this re-routing occurs, the Skye Canyon property is considered conservatively planned to accommodate flows from Sheep Mountain in the 404 arroyos.

Note that this methodology is considered comparable to the plan outlined in the CCRFCD Supplement provided in obtaining CCRFCD concurrence in the original Master Drainage Study. A copy of the correspondence in the previous CCRFCD Supplement email has been included in Appendix B for reference.

4. **Comment:** *HEC-1 models: Provide outfall discharge calculation corresponding to elevations 38 feet thru 44 feet for DB#1. Verify and provide outfall discharge calculation for DB#2. Revise accordingly.*

Response: A spillway discharge curve has been produced for both detention basins and added arithmetically to the outlet pipe discharge curve to result in a total discharge curve during the use of the emergency spillway. Total discharge curves for both detention basins have been included in Appendix C.

5. **Comment:** *The HMR 49 worksheets for the PMF analyses are incomplete. The PMP distribution must be determined for the PC cards for the HEC-1 models. Revise models and update exhibits and calculations accordingly.*

Response: The HMR 49 worksheet has been completed for both detention basins to determine the incremental hourly and largest 15 minute PMP precipitation values. Both detention basins produce the same incremental PMP values; therefore, the PC values computed for 15 minute intervals have been utilized in both detention basin PMF HEC-1 models included in Appendix C.

As a result, the following are the revised performance data for both detention basins during a PMF storm event:

Detention Basin 1

- *Estimated Basin Depth:* 22-ft measured from bottom of basin (Elev. = 3023-ft) to top of basin (Elev. = 3045-ft)
- *100-year Water Surface Elevation:* 3036.0-ft
- *PMF Flow:* 5,852 cfs
- *PMF Spillway Crest:* 3037.0-ft
- *Top of PMF Spillway:* 3045.0-ft
- *PMF Water Surface Elevation:* 3044.85-ft

Detention Basin 2

- *Estimated Basin Depth:* 29-ft measured from bottom of basin (Elev. = 2989-ft) to top of basin (Elev. = 3018-ft)

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- *100-year Water Surface Elevation:* 3008.5-ft
- *PMF Flow:* 5,899 cfs
- *PMF Spillway Crest:* 3009.5-ft
- *Top of PMF Spillway:* 3018.0-ft
- *PMF Water Surface Elevation:* 3017.36-ft

6. **Comment:** *Provide basin depth calculation for DB#2. Provide conceptual spillway length calculations for both basins.*

   Response: See above Response to Comment No. 5

7. **Comment:** *Exhibits H and I: Label and provide values for all diversions and diverted flows (e.g. SHEPAB, DSHEPB). Clarify why a diversion is created at the south arroyo and Sheep Mountain Parkway location when the existing flow in the arroyo is toward the east.*

   Response: All diversions modeled with Sheep Mountain Parkway have been clearly annotated on the drainage exhibits included in Appendix E. These diversions are intended to show that the USACE 404 washes that cross Sheep Mountain Parkway have been anticipated to remain and the contributing portion of Sheep Mountain reserved right-of-way (SHEEP-A and SHEEP-B) will be routed thru Skye Canyon in the applicable 404 wash alignment.

8. **Comment:** *For ease of future reference and a comprehensive Master Drainage Study, provide updated Standard Form 4 which includes all subbasins and Exhibits F and G reflecting the revisions to subbasins north of Skye Canyon Park Boulevard.*

   Response: Although this Update's change is only to the detention basins and Phase 2 area of the master planned property, Exhibits F and G have been produced as comprehensive reference as requested. Note the "zoom-in" Phase 2 drainage maps remain for ease of reference when preparing technical drainage studies within the focused area, but have been re-labeled as Exhibits K and L.

Additional Revision:

In preparation of the *Technical Drainage Study for Skye Canyon Park – Phase 1* (DS4707) it was determined that the previous shown drainage pattern of routing the runoff produced by the parcel at the northeast corner of the intersection of Eagle Canyon and Egan Crest (formerly Basin PH2L3) to the south was no longer feasible due to downstream facility capacity restrictions. As a result, the subject parcel has been divided into Basins PH2L3A and PH2L3B routing its runoff toward Concentration Points RA-HU and HU-HO, respectively. The HEC-1 models and Exhibits F thru L have been updated accordingly to match this drainage pattern.

In summary, the previously submitted comparison tables have been re-produced and updated to show the modified flow rates resulting from the above drainage pattern. The below tables show that the flow rates at the terminus of influence from this Update's detention basin and Phase 2 land plan changes discharging remain in conformance with the previous Master Drainage Study and no adverse impacts occur to downstream properties and/or facilities.

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Comparison of Phase 2 Flow Rates @ Downstream Concentration Points				
Concentration Point	Previously Approved		Update	
	Proposed Condition Q_{100} (cfs)	Ultimate Condition Q_{100} (cfs)	Proposed Condition Q_{100} (cfs)	Ultimate Condition Q_{100} (cfs)
RA-HU	477[1]	477[1]	469	469
CP26	777	777	777	777
HU-HO	367[1]	367[1]	354	349
1 – Updated flow rate established in Phase 1 Infrastructure (DS4661).				

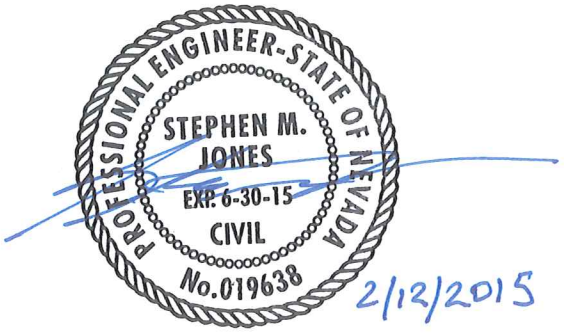
Comparison of Modified Converged Flow Rates				
Concentration Point	Previously Approved		Update	
	Proposed Condition Q_{100} (cfs)	Ultimate Condition Q_{100} (cfs)	Proposed Condition Q_{100} (cfs)	Ultimate Condition Q_{100} (cfs)
HU-IR	1126	1101	1131	1109
CKC5	1578	3324	1543	3308

Note that although there is a very slight increase in flow rates at HU-IR, the flows are less at the CKC5 location where the West property discharges across US-95 at Kyle Canyon Road; therefore, returning to conformance to previous approved drainage patterns.

If you have any questions or require additional information, please do not hesitate to contact us at 284-5300.

Respectfully Submitted,

SLATER HANIFAN GROUP



Steve Jones, P.E.
Project Manager - Flood Control Division

cc: Marc Bolduc – Olympia Companies
Bobby Williamson – Olympia Companies
Jerry Slater, P.E. – SHG
Mark Failla, P.E., CFM – SHG
Rhonda Miller – SHG

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APPENDIX

Appendix A – CCRFCD Concurrence Review Comments

Appendix B – Response to Comments #2 & #3
(Sheep Mountain Parkway Information)

Appendix C – Response to Comments #4 thru #6
(PMF Storm & Ermergency Spillway Computations)

Appendix D – Additional Revision – Proposed & Ultimate Condition HEC-1 Models
(Modified Basins PH2L3A & PH2L3B)

Appendix E – Revised Drainage Exhibits

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APPENDIX A

CCRFCD Concurrence Review Comments

Department of Public Works

500 S Grand Central Pky • Box 554000 • Las Vegas NV 89155-4000
(702) 455-6000 • Fax (702) 455-6040

Denis Cederburg, P.E., Director • E-Mail: dlc@ClarkCountyNV.gov

Concurrence Letter

Date: February 6, 2015
Firm: SHG
Engineer: Steve Jones, P.E.
Address: 5740 S. Arville Street, Suite 216, Las Vegas, NV 89118
Phone: (702) 284-5300
Fax: (702) 284-5399
E-mail: sjones@shg-inc.com

Subject: Technical Drainage Study Update for Skye Canton Master Drainage Study (CLV)
Location: SW of Moccasin Road and Fort Apache Road
APN: 125-06-101-001, et.al.
Sec, Township, Range: S06, T19S, R60E
Flood Zone & Panel: Zone X, 1735F, 1750F, Dated November 16, 2011
Application Tracking #: 15-3816

HTE15-3816

Submittals	Date Received	Date Returned	Reviewer	Miscellaneous
Concurrence	01/27/2015	02/06/2015	WG	

The above-referenced project is located within the **City of Las Vegas** adjacent to Clark County unincorporated areas. The drainage study was submitted to the County for concurrence on January 27, 2015. In addition, the County has received the City of Las Vegas acceptance letter dated December 30, 3014 for the Technical Drainage Study (DS4420G).

The County concurs with the acceptance of this Drainage Study by the City of Las Vegas. Please note that the County's review of this development is limited to drainage issues significant to Clark County unincorporated areas.

BOARD OF COUNTY COMMISSIONERS
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SUSAN BRAGER • TOM COLLINS • CHRIS GIUNCHIGLIANI • MARY BETH SCOW • LAWRENCE WEEKLY

The County's review is solely based on the information submitted by the Engineer of Record. The County's review is strictly limited to compliance with minimum County Codes and Standards. The Engineer of Record is responsible for researching and addressing situations that may require designs above and beyond the minimum codes for issues of public safety and impacts to upstream, downstream and adjacent properties. The County assumes no liability for information data, designs or conclusions of the Engineer of Record.

By W. Layne Weber

W. Layne Weber, P.E., CFM
Principal Engineer
Clark County Public Works
Development Review

cc: Oh Sang Kwon, P.E., City of Las Vegas

REGIONAL FLOOD CONTROL DISTRICT

Gale Wm. Fraser, II, P.E.
General Manager/Chief Engineer

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City of Las Vegas

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City of Boulder City

January 22, 2015

Mr. Oh Sang Kwon, P.E.
City of Las Vegas
333 North Rancho Drive
Las Vegas, NV 89106

DISTRICT COMMENT(S): **UPDATE #1 TO SKYE CANYON MASTER DRAINAGE STUDY (FORMERLY KYLE CANYON) (DS4420G) (RFCD No. 15-9442)**

Dear Mr. Kwon:

Clark County Regional Flood Control District (District) reviewed Technical Drainage Study dated December 4, 2014 for above-mentioned project as submitted by SLATER HANIFAN GROUP. In addition, District is in receipt of the Conditional Letter of Acceptance from City of Las Vegas dated December 30, 2014.

District has the following comment(s):

1. It is noted that City of Las Vegas will submit a Master Plan Amendment (MPA) to address impacts to the Districts' Master Plan Update (MPU). The proposed detention basins and associated facilities will not be eligible for District maintenance funding until an MPA is approved by the District's Board of Directors and adopted by City of Las Vegas.

2. The exhibits show the DB#1 outfall (Facility P74W) terminating west of the future Sheep Mountain Parkway alignment. The outfall facility must show connectivity to a regional facility. Address accordingly.

3. Discuss the status of Sheep Mountain Parkway. The arroyo east of DB#1 crosses the future Sheep Mountain Parkway alignment. Discuss and identify future District facility crossings that will be required when future roadways are constructed.

4. HEC-1 models: Provide outfall discharge calculation corresponding to elevations 38 feet thru 44 feet for DB#1. Verify and provide outfall discharge calculation for DB#2. Revise accordingly.

5. The HMR 49 worksheets for the PMF analyses are incomplete. The PMP distribution must be determined for the PC cards for the HEC-1 models. Revise models and update exhibits and calculations accordingly.

6. Provide basin depth calculation for DB#2. Provide conceptual spillway length calculations for both basins.

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Website: *http://www.regionalflood.org*

REGIONAL FLOOD
CONTROL DISTRICT

7. Exhibits H and I: Label and provide values for all diversions and diverted flows (e.g. SHEPAB, DSHEPB). Clarify why a diversion is created at the south arroyo and Sheep Mountain Parkway location when the existing flow in the arroyo is toward the east.

8. For ease of future reference and a comprehensive Master Drainage Study, provide updated Standard Form 4 which includes all subbasins and Exhibits F and G reflecting the revisions to subbasins north of Skye Canyon Park Boulevard.

District's review of this project was limited to issues of Regional Flood Control Significance as defined in *Uniform Regulations for the Control of Drainage*.

The consultant must be advised to submit any revisions to the Technical Drainage Study and Improvement Plans to City of Las Vegas for review/re-approval. District review of any such revisions will commence upon City of Las Vegas's acceptance.

Please be aware that as additional information becomes available and/or restudies of Flood Insurance Studies are performed, information submitted by SLATER HANIFAN GROUP may be superseded. Compliance with regulatory elements and design standards specified in *Uniform Regulations for the Control of Drainage* does not imply a guarantee that properties will be free from flooding or flood damage. The District, its officials, or employees assume no liability for information, data, or conclusions presented by consulting engineers. We, therefore, make no warranties, either expressed or implied, in conducting this review.

GALE WM. FRASER, II, P.E.
General Manager/Chief Engineer

BY: _____
Abigail Mayrena, P.E., CFM
Senior Engineer

AM:eab

c: Steve Jones, P.E., Slater Hanifan Group

P:\Letters and Memos\Local Drainage\Land Development & Drainage\2015\L-15-9442comment doc

APPENDIX B

Response to Comments #2 & #3

(Sheep Mountain Parkway Information)

REGIONAL FLOOD CONTROL DISTRICT

Gale Wm. Fraser, II, P.E.
General Manager/Chief Engineer

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Debra March
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City of Las Vegas

Mayor Roger Tobler
City of Boulder City

May 7, 2012

Mr. Oh Sang Kwon, P.E.
City of Las Vegas
333 North Rancho Drive
Las Vegas, NV 89106

DISTRICT CONCURRENCE: KYLE CANYON
(DS #4420D) (RFCD No. 12-8054)

Dear Mr. Kwon:

Clark County Regional Flood Control District (District) reviewed Technical Drainage Study dated June 22, 2010, Addendum No. 1 dated September 17, 2010, Addendum No. 2 dated October 18, 2011, and Addendum No. 3 dated February 13, 2012 for above-mentioned project as submitted by SLATER HANIFAN GROUP. In addition, District is in receipt of the Conditional Letter of Acceptance from City of Las Vegas dated March 1, 2012.

District concurs with acceptance of this Technical Drainage Study by City of Las Vegas.

District's review of this project was limited to issues of Regional Flood Control Significance as defined in *Uniform Regulations for the Control of Drainage*.

Please be aware that as additional information becomes available and/or restudies of Flood Insurance Studies are performed, information submitted by SLATER HANIFAN GROUP may be superseded. Compliance with regulatory elements and design standards specified in *Uniform Regulations for the Control of Drainage* does not imply a guarantee that properties will be free from flooding or flood damage. The District, its officials, or employees assume no liability for information, data, or conclusions presented by consulting engineers. We, therefore, make no warranties, either expressed or implied, in conducting this review.

GALE WM. FRASER, II, P.E.
General Manager/Chief Engineer

BY: _____
Abigail Mayrena, P.E., CFM
Senior Engineer

_____ FOR
Andrew R. Trelease, P.E., CFM
Principal Civil Engineer

AM:ART:sa

c: Stephen Jones, P.E., Slater Hanifan Group

P:\Letters and Memos\Local Drainage\Land Development & Drainage\2012\L-12-8054.doc

600 S. Grand Central Parkway, Suite 300 • Las Vegas, Nevada 89106-4511
(702) 685-0000 • FAX: (702) 685-0001
Website: *http://www.regionalflood.org*

Steve Jones

From: Steve Jones
Sent: Thursday, May 03, 2012 4:04 PM
To: Abigail Mayrena (AMayrena@regionalflood.org)
Cc: okwon@lasvegasnevada.gov; Todd Steadham (tsteadham@shg-inc.com)
Subject: RE: Kyle Canyon exhibits
Attachments: Exhibit J - Regional Facilities Map.pdf

Abi,

Facility U4 is intended to be constructed in the ultimate condition when Sheep Mountain Parkway is improved. Prior to Sheep Mountain Parkway improvements, the discharge from the regional detention basin Facility P01W (Facility P04W) is maintained in the existing southern arroyo and conveyed thru the Kyle Canyon site to the Hualapai Way alignment where it is conveyed north. Therefore, rather than revising the regional alignment after Sheep Mountain Parkway is complete and proposing a new developer financed (Category B) regional facility, Facility U4 has been changed to a future local facility and the regional alignment has been changed to match the proposed drainage condition presented in the CLV conditionally approved drainage study. Per the March 22, 2012 meeting with you and Andrew, this was determined an acceptable regional alignment to replace U4.

The attached Exhibit J and its summary table of West Regional Facilities has been updated accordingly. Note the only flow identified in the updated summary table that has not been updated is for Facility P22W; however, the flow reported and utilized for conceptual sizing of this facility included outflow from Detention Basin P01W which is considered conservative. Therefore, the reported flow and conceptual size for P22W is considered acceptable and the flow returns to as reported in the summary table at the next downstream facility (north of the intersection of Hualapai and Iron Mountain).

Let me know if you have any questions, comments or concerns. Thanks,

Steve Jones, P.E.
Assistant Project Manager

SLATER HANIFAN GROUP
"The Benchmark of Our Profession."

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PHOENIX, ARIZONA 85028
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FAX: (602) 687-9693

Any files contained within are to be used for information ONLY. Accuracy and/or design information to be verified from approved original plans. Use of electronic media is at the sole risk of the user.

From: Abigail Mayrena [mailto:AMayrena@regionalflood.org]
Sent: Monday, April 30, 2012 10:09 AM
To: Steve Jones
Cc: Oh Sang Kwon ,P.E. (okwon@lasvegasnevada.gov)
Subject: Kyle Canyon exhibits

As discussed last week, can you revise U4 to be a Category B facility. I'll need the revised exhibits before I can process your concurrence letter. Can you also send the revised exhibits to CLV.

Thanks,

Abigail Mayrena, P.E., CFM
Senior Engineer

Clark County Regional Flood Control District
600 South Grand Central Pkwy, Suite 300
Las Vegas, Nevada 89106

AMayrena@regionalflood.org
702-685-0000 (phone)
702-685-0001 (fax)
www.regionalflood.org

Please consider the environment before printing this e-mail.

APPENDIX C

Response to Comments #4 thru #6

(PMF Storm & Emergency Spillway Computations)

HYDROMETEOROLOGICAL REPORT NO. 49

Probable Maximum Precipitation Estimates, Colorado River and Great Basin Drainages

REPRINTED 1984

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U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
U.S. DEPARTMENT OF ARMY
CORPS OF ENGINEERS

Silver Spring, Md.

Table 6.3A.--Local-storm PMP computation, Colorado River, Great Basin and California drainages. For drainage average depth PMP. Go to table 6.3B if areal variation is required.

Drainage INFLOW TO DB1 Area 8.9 mi^2 (km^2)
Latitude 36°N Longitude 115°W Minimum Elevation 3020 ft (m)

Steps correspond to those in sec. 6.3A.

1. Average 1-hr 1-mi^2 (2.6-km^2) PMP for drainage [fig. 4.5]. 10.6 in. (mm)

2. a. Reduction for elevation. [No adjustment for elevations up to 5,000 feet (1,524 m): 5% decrease per 1,000 feet (305 m) above 5,000 feet (1,524 m)]. 100 %

   b. Multiply step 1 by step 2a. 10.6 in. (mm)

3. Average 6/1-hr ratio for drainage [fig. 4.7]. 1.33

Duration (hr)								
1/4	1/2	3/4	1	2	3	4	5	6

4. Durational variation for 6/1-hr ratio of step 3 [table 4.4]. 69.3 87.2 94.7 100 115.2 122.5 127.1 130.7 133 %

5. 1-mi^2 (2.6-km^2) PMP for indicated durations [step 2b X step 4]. 7.3 9.2 10.0 10.6 12.2 13.0 13.5 13.9 14.1 in. (mm)

6. Areal reduction [fig. 4.9]. 100 100 100 100 100 100 100 100 100 %

7. Areal reduced PMP [steps 5 X 6]. 7.3 9.2 10.0 10.6 12.2 13.0 13.5 13.9 (14.1) in. (mm)

8. Incremental PMP [successive subtraction in step 7]. 10.6 1.6 0.8 0.5 0.4 0.2 in. (mm)
   7.3 1.9 0.8 0.6 } 15-min. increments

9. Time sequence of incremental PMP according to:

   Hourly increments [table 4.7]. 0.2 0.5 1.6 10.6 0.8 0.4 in. (mm)

   Four largest 15-min. increments [table 4.8]. 7.3 1.9 0.8 0.6 in. (mm)

USE 10
PMF HEC-1
AS PRECIP. VALUE

Table 6.3A.--Local-storm PMP computation, Colorado River, Great Basin and California drainages. For drainage average depth PMP. Go to table 6.3B if areal variation is required.

Drainage INFLOW TO DB2 Area 1.01 mi^2 (km^2)
Latitude 36°N Longitude 115°W Minimum Elevation 2990 ft (m)

Steps correspond to those in sec. 6.3A.

1. Average 1-hr 1-mi^2 (2.6-km^2) PMP for drainage [fig. 4.5]. 10.6 in. (mm)

2. a. Reduction for elevation. [No adjustment for elevations up to 5,000 feet (1,524 m): 5% decrease per 1,000 feet (305 m) above 5,000 feet (1,524 m)]. 100 %

   b. Multiply step 1 by step 2a. 10.6 in. (mm)

3. Average 6/1-hr ratio for drainage [fig. 4.7]. 1.33

	Duration (hr)								
	1/4	1/2	3/4	1	2	3	4	5	6
4. Durational variation for 6/1-hr ratio of step 3 [table 4.4].	70.7	87.2	94.4	100	115.2	122.5	127.1	130.7	133 %
5. 1-mi^2 (2.6-km^2) PMP for indicated durations [step 2b X step 4].	7.5	9.2	10.0	10.6	12.2	13.0	13.5	13.9	14.1 in. (mm)
6. Areal reduction [fig. 4.9].	100	100	100	100	100	100	100	100	100 %
7. Areal reduced PMP [steps 5 X 6].	7.5	9.2	10.0	10.6	12.2	13.0	13.5	13.9	14.1 in. (mm)

8. Incremental PMP [successive subtraction in step 7]. 10.6 1.6 0.8 0.5 0.4 0.2 in. (mm)
   7.3 1.9 0.8 0.6 } 15-min. increments

9. Time sequence of incremental PMP according to:

   Hourly increments [table 4.7]. 0.2 0.5 1.6 10.6 0.8 0.4 in. (mm)

   Four largest 15-min. increments [table 4.8]. 7.3 1.9 0.8 0.6 in. (mm)

USE IN PMF HEC-1 AS PRECIP VALUE

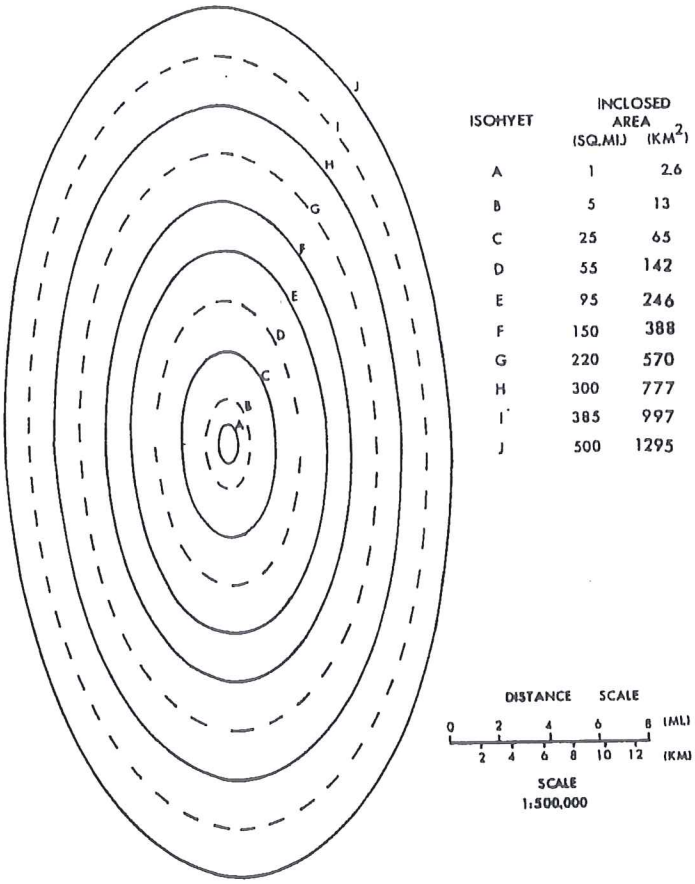

Figure 4.10.--Idealized local-storm isohyetal pattern.

storm period. The sequence of hourly incremental PMP for the Southwest 6-hr thunderstorm in accord with this study is presented in column 2 of table 4.7. A small variation from this sequence is given in Engineering Manual 1110-2-1411 (U. S. Army, Corps of Engineers 1965). The latter, listed in column 3 of table 4.7, places greater incremental amounts somewhat more toward the end of the 6-hr storm period. In application, the choice of either of these distributions is left to the user since one may prove to be more critical in a specific case than the other.

Table 4.7.--Time sequence for hourly incremental PMP in 6-hr storm

	HMR No. 5[1]	EM1110-2-1411[2]
Increment	Sequence Position	
Largest hourly amount	Third	Fourth
2nd largest	Fourth	Third
3rd largest	Second	Fifth
4th largest	Fifth	Second
5th largest	First	Last
least	Last	First

[1]U. S. Weather Bureau 1947.
[2]U. S. Corps of Engineers 1952.

Also of importance is the sequence of the four 15-min incremental PMP values. We recommend a time distribution, table 4.8, giving the greatest intensity in the first 15-min interval (U.S. Weather Bureau 1947). This is based on data from a broad geographical region. Additional support for this time distribution is found in the reports of specific storms by Keppell (1963) and Osborn and Renard (1969).

Table 4.8.--Time sequence for 15-min incremental PMP within 1 hr.

Increment	Sequence Position
Largest 15-min amount	First
2nd largest	Second
3rd largest	Third
least	Last

4.8 Seasonal Distribution

The time of the year when local-storm PMP is most likely is of interest. Guidance was obtained from analysis of the distribution of maximum 1-hr thunderstorm events through the warm season at the recording stations in Utah, Arizona, and in southern California (south of 37°N and east of the Sierra Nevada ridgeline). The period of record used was for 1940-72 with an average record length for the stations considered of 27 years. The month with the one greatest thunderstorm rainfall for the period of record at each station was noted. The totals of these events for each month, by States, are shown in table 4.9.

Table 4.9.--Seasonal distribution of thunderstorm rainfalls.

(The maximum event at each of 108 stations, period of record 1940-72.)

	Month						
	M	J	J	A	S	O	No. of Cases
Utah	1	5	9	14	5		34
Arizona		4	16	19	4		43
S. Calif.*		14	10	7			31
No. of cases/mo.	1	23	35	40	9	0	

*South of 37°N and east of Sierra Nevada ridgeline.

SLATER HANIFAN GROUP
CONSULTING ENGINEERS & PLANNERS

HEC-1 PC Card Value Computations

Project Name: Skye Canyon Detention Basins #1 & #2 PMF
Date: Feb-15
File Name: OLY1401.004 MDS UP Add1 PMP Distribution Calc.xlsx
By: SMJ

Table 6.3 A Step 7 Value 14.1 inches

ID	A	B	C	D	E	F	unit
Table 6.3 A Step 9 Values	0.2	0.5	1.6	10.6	0.8	0.4	inches

ID	G	H	I	J	unit
Table 6.3 A Step 9 Values	7.3	1.9	0.8	0.6	inches

Equation Computation	Time Percent of Total Storm Event
PMP / 0 = 0.0000	Hour 0 = 0.0000
	15 = 0.0035
Equal Increments (1 Hr - 0 Hr) / 4 = 0.0035	30 = 0.0071
	45 = 0.0106
A / PMP = 0.0142	Hour 1 = 0.0142
	15 = 0.0230
Equal Increments (2 Hr - 1 Hr) / 4 = 0.0089	30 = 0.0319
	45 = 0.0408
(A+B) / PMP = 0.0496	Hour 2 = 0.0496
	15 = 0.0780
Equal Increments (3 Hr - 2 Hr) / 4 = 0.0284	30 = 0.1064
	45 = 0.1348
(A+B+C) / PMP = 0.1631	Hour 3 = 0.1631
(A+B+C+G) / PMP = 0.6809	15 = 0.6809
(A+B+C+G+H) / PMP = 0.8156	30 = 0.8156
(A+B+C+G+H+I) / PMP = 0.8723	45 = 0.8723
(A+B+C+G+H+I+J) / PMP = 0.9149	Hour 4 = 0.9149
	15 = 0.9291
Equal Increments (5 Hr - 4 Hr) / 4 = 0.0142	30 = 0.9433
	45 = 0.9574
(A+B+C+G+H+I+J+E) / PMP = 0.9716	Hour 5 = 0.9716
	15 = 0.9787
Equal Increments (6 Hr - 5 Hr) / 4 = 0.0071	30 = 0.9858
	45 = 0.9929
PMP / PMP = 1.0000	Hour 6 = 1.0000

HEC-1 PC card values in 15 minute intervals

PC	0.000	0.004	0.007	0.011	0.014	0.023	0.032	0.041	0.050	0.078
PC	0.106	0.135	0.163	0.681	0.816	0.872	0.915	0.929	0.943	0.957
PC	0.972	0.979	0.986	0.993	1.000					

DB1 - Flow Summary

Stage (elevation)	Outfall Pipe Flow (cfs)	Spillway Flow (cfs)	Total Flow (cfs)
3023	0	0	0
3024	0	0	0
3025	0	0	0
3026	0	0	0
3027	0	0	0
3028	0	0	0
3029	25.59	0	25.59
3030	36.2	0	36.2
3031	44.33	0	44.33
3032	51.19	0	51.19
3033	57.23	0	57.23
3034	62.69	0	62.69
3035	67.72	0	67.72
3036	72.39	0	72.39
3037	76.78	0	76.78
3038	80.94	261	341.94
3039	84.89	738.22	823.11
3040	88.66	1356.2	1444.86
3041	92.28	2088	2180.28
3042	95.77	2918.07	3013.84
3043	99.13	3835.9	3935.03
3044	102.38	4833.79	4936.17
3045	105.53	5905.76	6011.29

DB1 - PMF 30" Orifice Outfall
Rating Table for Circular Orifice

Project Description	
Worksheet	DB1 - PMF 30" Orifice Outfall
Type	Circular Orifice
Solve For	Discharge

Input Data	
Centroid Elevation	3,026.75 ft
Tailwater Elevation	3,028.00 ft
Discharge Coefficient	0.65
Diameter	30.0 in

Attribute	Minimum	Maximum	Increment
Headwater Elevation (ft)	3,026.00	3,044.00	1.00

Headwater Elevation (ft)	Discharge (cfs)	Velocity (ft/s)
3,026.00	N/A	N/A
3,027.00	N/A	N/A
3,028.00	N/A	N/A
3,029.00	25.59	5.21
3,030.00	36.20	7.37
3,031.00	44.33	9.03
3,032.00	51.19	10.43
3,033.00	57.23	11.66
3,034.00	62.69	12.77
3,035.00	67.72	13.80
3,036.00	72.39	14.75
3,037.00	76.78	15.64
3,038.00	80.94	16.49
3,039.00	84.89	17.29
3,040.00	88.66	18.06
3,041.00	92.28	18.80
3,042.00	95.77	19.51
3,043.00	99.13	20.19
3,044.00	102.38	20.86

DB1 - PMF Spillway (Weir)
Rating Table for Generic Weir

Project Description	
Worksheet	DB1 - PMF Spillway (Weir)
Type	Generic Weir
Solve For	Discharge

Input Data		
Crest Elevation	3,037.00	ft
Discharge Coefficient	3.00	US
Crest Length	87.00	ft

Attribute	Minimum	Maximum	Increment
Headwater Elevation (ft)	3,037.00	3,045.00	1.00

Headwater Elevation (ft)	Discharge (cfs)	Velocity (ft/s)
3,037.00	N/A	N/A
3,038.00	261.00	3.00
3,039.00	738.22	4.24
3,040.00	1,356.20	5.20
3,041.00	2,088.00	6.00
3,042.00	2,918.07	6.71
3,043.00	3,835.90	7.35
3,044.00	4,833.79	7.94
3,045.00	5,905.76	8.49

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Slater Hanifan Group
37 Brookside Road Waterbury, CT 06708 USA +1-203-755-1666

```
1*****************************************
*                                       *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)   *
*             JUN  1998                 *
*           VERSION 4.1                 *
*                                       *
*  RUN DATE   12FEB15  TIME  09:03:00   *
*                                       *
*****************************************
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*****************************************
*                                       *
*    U.S. ARMY CORPS OF ENGINEERS       *
*    HYDROLOGIC ENGINEERING CENTER      *
*          609 SECOND STREET            *
*       DAVIS, CALIFORNIA 95616         *
*           (916) 756-1104              *
*                                       *
*****************************************
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```
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
    1         ID     SLATER HANIFAN GROUP
    2         ID     NINETY-FIVE MANAGEMENT, LLC.
    3         ID     SKYE CANYON - DETENTION BASINS
    4         ID     MASTER DRAINAGE STUDY UPDATE
    5         ID     DB1 - PMF DRAINAGE CONDITION
    6         ID
    7         ID     RETURN PERIOD ------- 100-YEAR
    8         ID     DISTRIBUTION -------- 6-HOUR SDN3
    9         ID     PROJECT NO. --------- OLY1401.004
   10         ID     FILENAME ------------ PMF-DB1.H1
   11         ID     DATE ---------------- 02/10/2015
   12         ID     MODELED BY ---------- SMJ
   13         ID
   14         ID        SIX HOUR DEPTH-AREA REDUCTION FACTORS
   15         ID        DRAINAGE AREA (MI^2)    RATIO
   16         ID        0.0-0.49                1.00
   17         ID        0.5-0.99                0.98
   18         ID
   19         IT      15       0       0     500
   20         IO       5       0       0
   21         IN      15       0       0
   22         JR    PREC    1.00    0.98
              *

   23         KK    OFF1
   24         KM   EXISTING OFFSITE DRAINAGE BASIN
   25         KM   DISCHARGES INTO DETENTION BASIN "DB1"
   26         PB    14.1
   27         PC   0.000   0.004   0.007   0.011   0.014   0.023   0.032   0.041   0.050   0.078
   28         PC   0.106   0.135   0.163   0.681   0.816   0.872   0.915   0.929   0.943   0.957
   29         PC   0.972   0.979   0.986   0.993   1.000
   30         BA   .4073
   31         LS       0    86.4
   32         UD   0.356
              *

   33         KK    OFF7
   34         KM   FUTURE DEVELOPED OFFSITE DRAINAGE BASIN
   35         KM   DISCHARGES INTO DETENTION BASIN "DB1"
   36         BA   .0281
   37         LS       0    96.0
   38         UD   0.118
              *

   39         KK     CP2
   40         KM   COMBINE OFF1, OFF7
   41         HC       2
              *
```



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

   42         KK    OFF2
   43         KM   EXISTING OFFSITE DRAINAGE BASIN
   44         KM   DISCHARGES INTO DETENTION BASIN "DB1"
   45         BA   .0355
   46         LS       0    85.0
   47         UD   0.148
              *

   48         KK    OFF3
   49         KM   EXISTING OFFSITE DRAINAGE BASIN
   50         KM   DISCHARGES INTO DETENTION BASIN "DB1"
   51         BA   .0259
   52         LS       0    86.2
   53         UD   0.112
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                *

          54    KK     CP1
          55    KM   COMBINE CP2, OFF2, AND OFF3
          56    HC       3
                *

          57    KK    OFF4
          58    KM   EXISTING OFFSITE DRAINAGE BASIN
          59    KM   DISCHARGES INTO DETENTION BASIN "DB1"
          60    BA   .0581
          61    LS       0    86.2
          62    UD   0.136
                *

          63    KK    OFF5
          64    KM   EXISTING OFFSITE DRAINAGE BASIN
          65    KM   DISCHARGES INTO DETENTION BASIN "DB1"
          66    BA   .2569
          67    LS       0    86.5
          68    UD   0.419
                *

          69    KK    OFF6
          70    KM   EXISTING OFFSITE DRAINAGE BASIN
          71    KM   DISCHARGES INTO DETENTION BASIN "DB1"
          72    BA   .0399
          73    LS       0    86.2
          74    UD   0.121
                *

          75    KK     ON1
          76    KM   PROPOSED ONSITE DRAINAGE BASIN
          77    BA   .0261
          78    LS       0    92.8
          79    UD   0.116
                *
1                                        HEC-1 INPUT                                                    PAGE  3

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

          80    KK     DB1
          81    KM   COMBINE CP1, OFF4, OFF5, OFF6 AND ON1
          82    KO       1
          83    HC       5
                *

          84    KK    RDB1
          85    KM   OUTLET = 30" ORIFICE @ INVERT ELEVATION = 3025.5-FT
          86    KO       1
          87    RS       1     VOL      -1
          88    SV       0    7.78   13.43   19.26   58.03   96.21  132.22  141.70
          89    SE    25.5      27      28      29      35      40      44      45
          90    SQ       0   25.59   36.20   44.33   76.78  341.94 1444.86 3013.84 4936.17 6011.29
          91    SE    25.5      29      30      31      37      38      40      42      44      45
                *

          92    ZZ
1
                SCHEMATIC DIAGRAM OF STREAM NETWORK

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

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

    23        OFF1
              .
              .
    33        .        OFF7
              .          .
              .          .
    39        CP2.........
              .
              .
    42        .        OFF2
              .          .
              .          .
    48        .          .        OFF3
              .          .          .
              .          .          .
    54        CP1.....................
              .
              .
    57        .        OFF4
              .          .
              .          .
    63        .          .        OFF5
              .          .          .
              .          .          .
    69        .          .          .        OFF6
              .          .          .          .
              .          .          .          .
    75        .          .          .          .        ON1
              .          .          .          .          .
              .          .          .          .          .
    80        DB1.........................................
              V
              V
    84        RDB1

 (***) RUNOFF ALSO COMPUTED AT THIS LOCATION
1*****************************************                    *****************************************
 *                                       *                    *                                       *
 *    FLOOD HYDROGRAPH PACKAGE  (HEC-1)  *                    *     U.S. ARMY CORPS OF ENGINEERS      *
 *              JUN  1998                *                    *     HYDROLOGIC ENGINEERING CENTER     *
 *           VERSION 4.1                 *                    *          609 SECOND STREET            *
```

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*                                        *                                        *
*  RUN DATE   12FEB15  TIME  09:03:00    *                                        *
*                                        *                                        *
******************************************                                        *
                                                                                  *
                                                                                  *
                                                                                  
```

1	0330	15	6744.	*	2	1045	140	0.	*	3	1800	265	0.	*	5	0115	390	0.
1	0345	16	5206.	*	2	1100	141	0.	*	3	1815	266	0.	*	5	0130	391	0.
1	0400	17	3233.	*	2	1115	142	0.	*	3	1830	267	0.	*	5	0145	392	0.
1	0415	18	1914.	*	2	1130	143	0.	*	3	1845	268	0.	*	5	0200	393	0.
1	0430	19	1139.	*	2	1145	144	0.	*	3	1900	269	0.	*	5	0215	394	0.
1	0445	20	749.	*	2	1200	145	0.	*	3	1915	270	0.	*	5	0230	395	0.
1	0500	21	591.	*	2	1215	146	0.	*	3	1930	271	0.	*	5	0245	396	0.
1	0515	22	447.	*	2	1230	147	0.	*	3	1945	272	0.	*	5	0300	397	0.
1	0530	23	330.	*	2	1245	148	0.	*	3	2000	273	0.	*	5	0315	398	0.
1	0545	24	265.	*	2	1300	149	0.	*	3	2015	274	0.	*	5	0330	399	0.
1	0600	25	239.	*	2	1315	150	0.	*	3	2030	275	0.	*	5	0345	400	0.
1	0615	26	160.	*	2	1330	151	0.	*	3	2045	276	0.	*	5	0400	401	0.
1	0630	27	82.	*	2	1345	152	0.	*	3	2100	277	0.	*	5	0415	402	0.
1	0645	28	35.	*	2	1400	153	0.	*	3	2115	278	0.	*	5	0430	403	0.
1	0700	29	15.	*	2	1415	154	0.	*	3	2130	279	0.	*	5	0445	404	0.
1	0715	30	7.	*	2	1430	155	0.	*	3	2145	280	0.	*	5	0500	405	0.
1	0730	31	3.	*	2	1445	156	0.	*	3	2200	281	0.	*	5	0515	406	0.
1	0745	32	1.	*	2	1500	157	0.	*	3	2215	282	0.	*	5	0530	407	0.
1	0800	33	0.	*	2	1515	158	0.	*	3	2230	283	0.	*	5	0545	408	0.
1	0815	34	0.	*	2	1530	159	0.	*	3	2245	284	0.	*	5	0600	409	0.
1	0830	35	0.	*	2	1545	160	0.	*	3	2300	285	0.	*	5	0615	410	0.
1	0845	36	0.	*	2	1600	161	0.	*	3	2315	286	0.	*	5	0630	411	0.
1	0900	37	0.	*	2	1615	162	0.	*	3	2330	287	0.	*	5	0645	412	0.
1	0915	38	0.	*	2	1630	163	0.	*	3	2345	288	0.	*	5	0700	413	0.
1	0930	39	0.	*	2	1645	164	0.	*	4	0000	289	0.	*	5	0715	414	0.
1	0945	40	0.	*	2	1700	165	0.	*	4	0015	290	0.	*	5	0730	415	0.
1	1000	41	0.	*	2	1715	166	0.	*	4	0030	291	0.	*	5	0745	416	0.
1	1015	42	0.	*	2	1730	167	0.	*	4	0045	292	0.	*	5	0800	417	0.
1	1030	43	0.	*	2	1745	168	0.	*	4	0100	293	0.	*	5	0815	418	0.
1	1045	44	0.	*	2	1800	169	0.	*	4	0115	294	0.	*	5	0830	419	0.
1	1100	45	0.	*	2	1815	170	0.	*	4	0130	295	0.	*	5	0845	420	0.
1	1115	46	0.	*	2	1830	171	0.	*	4	0145	296	0.	*	5	0900	421	0.
1	1130	47	0.	*	2	1845	172	0.	*	4	0200	297	0.	*	5	0915	422	0.
1	1145	48	0.	*	2	1900	173	0.	*	4	0215	298	0.	*	5	0930	423	0.
1	1200	49	0.	*	2	1915	174	0.	*	4	0230	299	0.	*	5	0945	424	0.
1	1215	50	0.	*	2	1930	175	0.	*	4	0245	300	0.	*	5	1000	425	0.
1	1230	51	0.	*	2	1945	176	0.	*	4	0300	301	0.	*	5	1015	426	0.
1	1245	52	0.	*	2	2000	177	0.	*	4	0315	302	0.	*	5	1030	427	0.
1	1300	53	0.	*	2	2015	178	0.	*	4	0330	303	0.	*	5	1045	428	0.
1	1315	54	0.	*	2	2030	179	0.	*	4	0345	304	0.	*	5	1100	429	0.
1	1330	55	0.	*	2	2045	180	0.	*	4	0400	305	0.	*	5	1115	430	0.
1	1345	56	0.	*	2	2100	181	0.	*	4	0415	306	0.	*	5	1130	431	0.
1	1400	57	0.	*	2	2115	182	0.	*	4	0430	307	0.	*	5	1145	432	0.
1	1415	58	0.	*	2	2130	183	0.	*	4	0445	308	0.	*	5	1200	433	0.
1	1430	59	0.	*	2	2145	184	0.	*	4	0500	309	0.	*	5	1215	434	0.
1	1445	60	0.	*	2	2200	185	0.	*	4	0515	310	0.	*	5	1230	435	0.
1	1500	61	0.	*	2	2215	186	0.	*	4	0530	311	0.	*	5	1245	436	0.
1	1515	62	0.	*	2	2230	187	0.	*	4	0545	312	0.	*	5	1300	437	0.
1	1530	63	0.	*	2	2245	188	0.	*	4	0600	313	0.	*	5	1315	438	0.
1	1545	64	0.	*	2	2300	189	0.	*	4	0615	314	0.	*	5	1330	439	0.
1	1600	65	0.	*	2	2315	190	0.	*	4	0630	315	0.	*	5	1345	440	0.
1	1615	66	0.	*	2	2330	191	0.	*	4	0645	316	0.	*	5	1400	441	0.
1	1630	67	0.	*	2	2345	192	0.	*	4	0700	317	0.	*	5	1415	442	0.
1	1645	68	0.	*	3	0000	193	0.	*	4	0715	318	0.	*	5	1430	443	0.
1	1700	69	0.	*	3	0015	194	0.	*	4	0730	319	0.	*	5	1445	444	0.
1	1715	70	0.	*	3	0030	195	0.	*	4	0745	320	0.	*	5	1500	445	0.
1	1730	71	0.	*	3	0045	196	0.	*	4	0800	321	0.	*	5	1515	446	0.
1	1745	72	0.	*	3	0100	197	0.	*	4	0815	322	0.	*	5	1530	447	0.
1	1800	73	0.	*	3	0115	198	0.	*	4	0830	323	0.	*	5	1545	448	0.
1	1815	74	0.	*	3	0130	199	0.	*	4	0845	324	0.	*	5	1600	449	0.
1	1830	75	0.	*	3	0145	200	0.	*	4	0900	325	0.	*	5	1615	450	0.
1	1845	76	0.	*	3	0200	201	0.	*	4	0915	326	0.	*	5	1630	451	0.
1	1900	77	0.	*	3	0215	202	0.	*	4	0930	327	0.	*	5	1645	452	0.
1	1915	78	0.	*	3	0230	203	0.	*	4	0945	328	0.	*	5	1700	453	0.
1	1930	79	0.	*	3	0245	204	0.	*	4	1000	329	0.	*	5	1715	454	0.
1	1945	80	0.	*	3	0300	205	0.	*	4	1015	330	0.	*	5	1730	455	0.
1	2000	81	0.	*	3	0315	206	0.	*	4	1030	331	0.	*	5	1745	456	0.
1	2015	82	0.	*	3	0330	207	0.	*	4	1045	332	0.	*	5	1800	457	0.
1	2030	83	0.	*	3	0345	208	0.	*	4	1100	333	0.	*	5	1815	458	0.
1	2045	84	0.	*	3	0400	209	0.	*	4	1115	334	0.	*	5	1830	459	0.
1	2100	85	0.	*	3	0415	210	0.	*	4	1130	335	0.	*	5	1845	460	0.
1	2115	86	0.	*	3	0430	211	0.	*	4	1145	336	0.	*	5	1900	461	0.
1	2130	87	0.	*	3	0445	212	0.	*	4	1200	337	0.	*	5	1915	462	0.
1	2145	88	0.	*	3	0500	213	0.	*	4	1215	338	0.	*	5	1930	463	0.
1	2200	89	0.	*	3	0515	214	0.	*	4	1230	339	0.	*	5	1945	464	0.
1	2215	90	0.	*	3	0530	215	0.	*	4	1245	340	0.	*	5	2000	465	0.
1	2230	91	0.	*	3	0545	216	0.	*	4	1300	341	0.	*	5	2015	466	0.
1	2245	92	0.	*	3	0600	217	0.	*	4	1315	342	0.	*	5	2030	467	0.
1	2300	93	0.	*	3	0615	218	0.	*	4	1330	343	0.	*	5	2045	468	0.
1	2315	94	0.	*	3	0630	219	0.	*	4	1345	344	0.	*	5	2100	469	0.
1	2330	95	0.	*	3	0645	220	0.	*	4	1400	345	0.	*	5	2115	470	0.
1	2345	96	0.	*	3	0700	221	0.	*	4	1415	346	0.	*	5	2130	471	0.
2	0000	97	0.	*	3	0715	222	0.	*	4	1430	347	0.	*	5	2145	472	0.
2	0015	98	0.	*	3	0730	223	0.	*	4	1445	348	0.	*	5	2200	473	0.
2	0030	99	0.	*	3	0745	224	0.	*	4	1500	349	0.	*	5	2215	474	0.
2	0045	100	0.	*	3	0800	225	0.	*	4	1515	350	0.	*	5	2230	475	0.
2	0100	101	0.	*	3	0815	226	0.	*	4	1530	351	0.	*	5	2245	476	0.
2	0115	102	0.	*	3	0830	227	0.	*	4	1545	352	0.	*	5	2300	477	0.
2	0130	103	0.	*	3	0845	228	0.	*	4	1600	353	0.	*	5	2315	478	0.
2	0145	104	0.	*	3	0900	229	0.	*	4	1615	354	0.	*	5	2330	479	0.
2	0200	105	0.	*	3	0915	230	0.	*	4	1630	355	0.	*	5	2345	480	0.
2	0215	106	0.	*	3	0930	231	0.	*	4	1645	356	0.	*	6	0000	481	0.
2	0230	107	0.	*	3	0945	232	0.	*	4	1700	357	0.	*	6	0015	482	0.
2	0245	108	0.	*	3	1000	233	0.	*	4	1715	358	0.	*	6	0030	483	0.
2	0300	109	0.	*	3	1015	234	0.	*	4	1730	359	0.	*	6	0045	484	0.
2	0315	110	0.	*	3	1030	235	0.	*	4	1745	360	0.	*	6	0100	485	0.
2	0330	111	0.	*	3	1045	236	0.	*	4	1800	361	0.	*	6	0115	486	0.
2	0345	112	0.	*	3	1100	237	0.	*	4	1815	362	0.	*	6	0130	487	0.
2	0400	113	0.	*	3	1115	238	0.	*	4	1830	363	0.	*	6	0145	488	0.
2	0415	114	0.	*	3	1130	239	0.	*	4	1845	364	0.	*	6	0200	489	0.
2	0430	115	0.	*	3	1145	240	0.	*	4	1900	365	0.	*	6	0215	490	0.
2	0445	116	0.	*	3	1200	241	0.	*	4	1915	366	0.	*	6	0230	491	0.
2	0500	117	0.	*	3	1215	242	0.	*	4	1930	367	0.	*	6	0245	492	0.
2	0515	118	0.	*	3	1230	243	0.	*	4	1945	368	0.	*	6	0300	493	0.
2	0530	119	0.	*	3	1245	244	0.	*	4	2000	369	0.	*	6	0315	494	0.
2	0545	120	0.	*	3	1300	245	0.	*	4	2015	370	0.	*	6	0330	495	0.

2	0600	121	0.	*	3	1315	246	0.	*	4	2030	371	0.	*	6	0345	496	0.
2	0615	122	0.	*	3	1330	247	0.	*	4	2045	372	0.	*	6	0400	497	0.
2	0630	123	0.	*	3	1345	248	0.	*	4	2100	373	0.	*	6	0415	498	0.
2	0645	124	0.	*	3	1400	249	0.	*	4	2115	374	0.	*	6	0430	499	0.
2	0700	125	0.	*	3	1415	250	0.	*	4	2130	375	0.	*	6	0445	500	0.
				*					*					*						

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PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
			6-HR	24-HR	72-HR	124.75-HR
+ (CFS)	(HR)	(CFS)				
+ 6744.	3.50		1173.	293.	98.	56.
		(INCHES)	12.424	12.429	12.429	12.429
		(AC-FT)	582.	582.	582.	582.

CUMULATIVE AREA = .88 SQ MI

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HYDROGRAPH AT STATION DB1
SUM OF 5 HYDROGRAPHS
PLAN 1, RATIO = .98

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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.	*	2		0715	126	0.	*	3		1430	251	0.	*	4		2145	376	0.
1		0015	2	0.	*	2		0730	127	0.	*	3		1445	252	0.	*	4		2200	377	0.
1		0030	3	0.	*	2		0745	128	0.	*	3		1500	253	0.	*	4		2215	378	0.
1		0045	4	1.	*	2		0800	129	0.	*	3		1515	254	0.	*	4		2230	379	0.
1		0100	5	1.	*	2		0815	130	0.	*	3		1530	255	0.	*	4		2245	380	0.
1		0115	6	5.	*	2		0830	131	0.	*	3		1545	256	0.	*	4		2300	381	0.
1		0130	7	13.	*	2		0845	132	0.	*	3		1600	257	0.	*	4		2315	382	0.
1		0145	8	32.	*	2		0900	133	0.	*	3		1615	258	0.	*	4		2330	383	0.
1		0200	9	57.	*	2		0915	134	0.	*	3		1630	259	0.	*	4		2345	384	0.
1		0215	10	180.	*	2		0930	135	0.	*	3		1645	260	0.	*	5		0000	385	0.
1		0230	11	336.	*	2		0945	136	0.	*	3		1700	261	0.	*	5		0015	386	0.
1		0245	12	481.	*	2		1000	137	0.	*	3		1715	262	0.	*	5		0030	387	0.
1		0300	13	582.	*	2		1015	138	0.	*	3		1730	263	0.	*	5		0045	388	0.
1		0315	14	5137.	*	2		1030	139	0.	*	3		1745	264	0.	*	5		0100	389	0.
1		0330	15	6596.	*	2		1045	140	0.	*	3		1800	265	0.	*	5		0115	390	0.
1		0345	16	5093.	*	2		1100	141	0.	*	3		1815	266	0.	*	5		0130	391	0.
1		0400	17	3164.	*	2		1115	142	0.	*	3		1830	267	0.	*	5		0145	392	0.
1		0415	18	1873.	*	2		1130	143	0.	*	3		1845	268	0.	*	5		0200	393	0.
1		0430	19	1115.	*	2		1145	144	0.	*	3		1900	269	0.	*	5		0215	394	0.
1		0445	20	733.	*	2		1200	145	0.	*	3		1915	270	0.	*	5		0230	395	0.
1		0500	21	579.	*	2		1215	146	0.	*	3		1930	271	0.	*	5		0245	396	0.
1		0515	22	437.	*	2		1230	147	0.	*	3		1945	272	0.	*	5		0300	397	0.
1		0530	23	323.	*	2		1245	148	0.	*	3		2000	273	0.	*	5		0315	398	0.
1		0545	24	259.	*	2		1300	149	0.	*	3		2015	274	0.	*	5		0330	399	0.
1		0600	25	235.	*	2		1315	150	0.	*	3		2030	275	0.	*	5		0345	400	0.
1		0615	26	157.	*	2		1330	151	0.	*	3		2045	276	0.	*	5		0400	401	0.
1		0630	27	80.	*	2		1345	152	0.	*	3		2100	277	0.	*	5		0415	402	0.
1		0645	28	34.	*	2		1400	153	0.	*	3		2115	278	0.	*	5		0430	403	0.
1		0700	29	15.	*	2		1415	154	0.	*	3		2130	279	0.	*	5		0445	404	0.
1		0715	30	7.	*	2		1430	155	0.	*	3		2145	280	0.	*	5		0500	405	0.
1		0730	31	3.	*	2		1445	156	0.	*	3		2200	281	0.	*	5		0515	406	0.
1		0745	32	1.	*	2		1500	157	0.	*	3		2215	282	0.	*	5		0530	407	0.
1		0800	33	0.	*	2		1515	158	0.	*	3		2230	283	0.	*	5		0545	408	0.
1		0815	34	0.	*	2		1530	159	0.	*	3		2245	284	0.	*	5		0600	409	0.
1		0830	35	0.	*	2		1545	160	0.	*	3		2300	285	0.	*	5		0615	410	0.
1		0845	36	0.	*	2		1600	161	0.	*	3		2315	286	0.	*	5		0630	411	0.
1		0900	37	0.	*	2		1615	162	0.	*	3		2330	287	0.	*	5		0645	412	0.
1		0915	38	0.	*	2		1630	163	0.	*	3		2345	288	0.	*	5		0700	413	0.
1		0930	39	0.	*	2		1645	164	0.	*	4		0000	289	0.	*	5		0715	414	0.
1		0945	40	0.	*	2		1700	165	0.	*	4		0015	290	0.	*	5		0730	415	0.
1		1000	41	0.	*	2		1715	166	0.	*	4		0030	291	0.	*	5		0745	416	0.
1		1015	42	0.	*	2		1730	167	0.	*	4		0045	292	0.	*	5		0800	417	0.
1		1030	43	0.	*	2		1745	168	0.	*	4		0100	293	0.	*	5		0815	418	0.
1		1045	44	0.	*	2		1800	169	0.	*	4		0115	294	0.	*	5		0830	419	0.
1		1100	45	0.	*	2		1815	170	0.	*	4		0130	295	0.	*	5		0845	420	0.
1		1115	46	0.	*	2		1830	171	0.	*	4		0145	296	0.	*	5		0900	421	0.
1		1130	47	0.	*	2		1845	172	0.	*	4		0200	297	0.	*	5		0915	422	0.
1		1145	48	0.	*	2		1900	173	0.	*	4		0215	298	0.	*	5		0930	423	0.
1		1200	49	0.	*	2		1915	174	0.	*	4		0230	299	0.	*	5		0945	424	0.
1		1215	50	0.	*	2		1930	175	0.	*	4		0245	300	0.	*	5		1000	425	0.
1		1230	51	0.	*	2		1945	176	0.	*	4		0300	301	0.	*	5		1015	426	0.
1		1245	52	0.	*	2		2000	177	0.	*	4		0315	302	0.	*	5		1030	427	0.
1		1300	53	0.	*	2		2015	178	0.	*	4		0330	303	0.	*	5		1045	428	0.
1		1315	54	0.	*	2		2030	179	0.	*	4		0345	304	0.	*	5		1100	429	0.
1		1330	55	0.	*	2		2045	180	0.	*	4		0400	305	0.	*	5		1115	430	0.
1		1345	56	0.	*	2		2100	181	0.	*	4		0415	306	0.	*	5		1130	431	0.
1		1400	57	0.	*	2		2115	182	0.	*	4		0430	307	0.	*	5		1145	432	0.
1		1415	58	0.	*	2		2130	183	0.	*	4		0445	308	0.	*	5		1200	433	0.
1		1430	59	0.	*	2		2145	184	0.	*	4		0500	309	0.	*	5		1215	434	0.
1		1445	60	0.	*	2		2200	185	0.	*	4		0515	310	0.	*	5		1230	435	0.
1		1500	61	0.	*	2		2215	186	0.	*	4		0530	311	0.	*	5		1245	436	0.
1		1515	62	0.	*	2		2230	187	0.	*	4		0545	312	0.	*	5		1300	437	0.
1		1530	63	0.	*	2		2245	188	0.	*	4		0600	313	0.	*	5		1315	438	0.
1		1545	64	0.	*	2		2300	189	0.	*	4		0615	314	0.	*	5		1330	439	0.
1		1600	65	0.	*	2		2315	190	0.	*	4		0630	315	0.	*	5		1345	440	0.
1		1615	66	0.	*	2		2330	191	0.	*	4		0645	316	0.	*	5		1400	441	0.
1		1630	67	0.	*	2		2345	192	0.	*	4		0700	317	0.	*	5		1415	442	0.
1		1645	68	0.	*	3		0000	193	0.	*	4		0715	318	0.	*	5		1430	443	0.
1		1700	69	0.	*	3		0015	194	0.	*	4		0730	319	0.	*	5		1445	444	0.
1		1715	70	0.	*	3		0030	195	0.	*	4		0745	320	0.	*	5		1500	445	0.
1		1730	71	0.	*	3		0045	196	0.	*	4		0800	321	0.	*	5		1515	446	0.
1		1745	72	0.	*	3		0100	197	0.	*	4		0815	322	0.	*	5		1530	447	0.
1		1800	73	0.	*	3		0115	198	0.	*	4		0830	323	0.	*	5		1545	448	0.
1		1815	74	0.	*	3		0130	199	0.	*	4		0845	324	0.	*	5		1600	449	0.
1		1830	75	0.	*	3		0145	200	0.	*	4		0900	325	0.	*	5		1615	450	0.
1		1845	76	0.	*	3		0200	201	0.	*	4		0915	326	0.	*	5		1630	451	0.
1		1900	77	0.	*	3		0215	202	0.	*	4		0930	327	0.	*	5		1645	452	0.

1	1915	78	0.	*	3	0230	203	0.	*	4	0945	328	0.	*	5	1700	453	0.
1	1930	79	0.	*	3	0245	204	0.	*	4	1000	329	0.	*	5	1715	454	0.
1	1945	80	0.	*	3	0300	205	0.	*	4	1015	330	0.	*	5	1730	455	0.
1	2000	81	0.	*	3	0315	206	0.	*	4	1030	331	0.	*	5	1745	456	0.
1	2015	82	0.	*	3	0330	207	0.	*	4	1045	332	0.	*	5	1800	457	0.
1	2030	83	0.	*	3	0345	208	0.	*	4	1100	333	0.	*	5	1815	458	0.
1	2045	84	0.	*	3	0400	209	0.	*	4	1115	334	0.	*	5	1830	459	0.
1	2100	85	0.	*	3	0415	210	0.	*	4	1130	335	0.	*	5	1845	460	0.
1	2115	86	0.	*	3	0430	211	0.	*	4	1145	336	0.	*	5	1900	461	0.
1	2130	87	0.	*	3	0445	212	0.	*	4	1200	337	0.	*	5	1915	462	0.
1	2145	88	0.	*	3	0500	213	0.	*	4	1215	338	0.	*	5	1930	463	0.
1	2200	89	0.	*	3	0515	214	0.	*	4	1230	339	0.	*	5	1945	464	0.
1	2215	90	0.	*	3	0530	215	0.	*	4	1245	340	0.	*	5	2000	465	0.
1	2230	91	0.	*	3	0545	216	0.	*	4	1300	341	0.	*	5	2015	466	0.
1	2245	92	0.	*	3	0600	217	0.	*	4	1315	342	0.	*	5	2030	467	0.
1	2300	93	0.	*	3	0615	218	0.	*	4	1330	343	0.	*	5	2045	468	0.
1	2315	94	0.	*	3	0630	219	0.	*	4	1345	344	0.	*	5	2100	469	0.
1	2330	95	0.	*	3	0645	220	0.	*	4	1400	345	0.	*	5	2115	470	0.
1	2345	96	0.	*	3	0700	221	0.	*	4	1415	346	0.	*	5	2130	471	0.
2	0000	97	0.	*	3	0715	222	0.	*	4	1430	347	0.	*	5	2145	472	0.
2	0015	98	0.	*	3	0730	223	0.	*	4	1445	348	0.	*	5	2200	473	0.
2	0030	99	0.	*	3	0745	224	0.	*	4	1500	349	0.	*	5	2215	474	0.
2	0045	100	0.	*	3	0800	225	0.	*	4	1515	350	0.	*	5	2230	475	0.
2	0100	101	0.	*	3	0815	226	0.	*	4	1530	351	0.	*	5	2245	476	0.
2	0115	102	0.	*	3	0830	227	0.	*	4	1545	352	0.	*	5	2300	477	0.
2	0130	103	0.	*	3	0845	228	0.	*	4	1600	353	0.	*	5	2315	478	0.
2	0145	104	0.	*	3	0900	229	0.	*	4	1615	354	0.	*	5	2330	479	0.
2	0200	105	0.	*	3	0915	230	0.	*	4	1630	355	0.	*	5	2345	480	0.
2	0215	106	0.	*	3	0930	231	0.	*	4	1645	356	0.	*	6	0000	481	0.
2	0230	107	0.	*	3	0945	232	0.	*	4	1700	357	0.	*	6	0015	482	0.
2	0245	108	0.	*	3	1000	233	0.	*	4	1715	358	0.	*	6	0030	483	0.
2	0300	109	0.	*	3	1015	234	0.	*	4	1730	359	0.	*	6	0045	484	0.
2	0315	110	0.	*	3	1030	235	0.	*	4	1745	360	0.	*	6	0100	485	0.
2	0330	111	0.	*	3	1045	236	0.	*	4	1800	361	0.	*	6	0115	486	0.
2	0345	112	0.	*	3	1100	237	0.	*	4	1815	362	0.	*	6	0130	487	0.
2	0400	113	0.	*	3	1115	238	0.	*	4	1830	363	0.	*	6	0145	488	0.
2	0415	114	0.	*	3	1130	239	0.	*	4	1845	364	0.	*	6	0200	489	0.
2	0430	115	0.	*	3	1145	240	0.	*	4	1900	365	0.	*	6	0215	490	0.
2	0445	116	0.	*	3	1200	241	0.	*	4	1915	366	0.	*	6	0230	491	0.
2	0500	117	0.	*	3	1215	242	0.	*	4	1930	367	0.	*	6	0245	492	0.
2	0515	118	0.	*	3	1230	243	0.	*	4	1945	368	0.	*	6	0300	493	0.
2	0530	119	0.	*	3	1245	244	0.	*	4	2000	369	0.	*	6	0315	494	0.
2	0545	120	0.	*	3	1300	245	0.	*	4	2015	370	0.	*	6	0330	495	0.
2	0600	121	0.	*	3	1315	246	0.	*	4	2030	371	0.	*	6	0345	496	0.
2	0615	122	0.	*	3	1330	247	0.	*	4	2045	372	0.	*	6	0400	497	0.
2	0630	123	0.	*	3	1345	248	0.	*	4	2100	373	0.	*	6	0415	498	0.
2	0645	124	0.	*	3	1400	249	0.	*	4	2115	374	0.	*	6	0430	499	0.
2	0700	125	0.	*	3	1415	250	0.	*	4	2130	375	0.	*	6	0445	500	0.
				*					*					*				

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PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
			6-HR	24-HR	72-HR	124.75-HR
+ (CFS)	(HR)	(CFS)				
+ 6596.	3.50		1147.	287.	96.	55.
		(INCHES)	12.145	12.150	12.150	12.150
		(AC-FT)	569.	569.	569.	569.

CUMULATIVE AREA = .88 SQ MI

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          ***************
          *             *
84 KK     *     RDB1    *
          *             *
          ***************

86 KO          OUTPUT CONTROL VARIABLES
                    IPRNT          1  PRINT CONTROL
                    IPLOT          0  PLOT CONTROL
                    QSCAL          0.  HYDROGRAPH PLOT SCALE

               HYDROGRAPH ROUTING DATA

87 RS          STORAGE ROUTING
                    NSTPS          1  NUMBER OF SUBREACHES
                     ITYP        VOL  TYPE OF INITIAL CONDITION
                   RSVRIC      -1.00  INITIAL CONDITION
                        X        .00 WORKING R AND D COEFFICIENT

88 SV            STORAGE          .0       7.8      13.4      19.3      58.0      96.2     132.2     141.7

89 SE            ELEVATION      25.50     27.00     28.00     29.00     35.00     40.00     44.00     45.00

90 SQ            DISCHARGE        0.       26.       36.       44.       77.      342.     1445.     3014.     4936.     6011.

91 SE            ELEVATION      25.50     29.00     30.00     31.00     37.00     38.00     40.00     42.00     44.00     45.00

                                                        ***

                                  COMPUTED STORAGE-OUTFLOW-ELEVATION DATA

                 STORAGE          .00      7.78     13.43     19.26     25.72     32.18     58.03     73.30     80.94     96.21
                 OUTFLOW          .00     10.97     18.28     25.59     36.20     44.33     65.96     76.78    341.94   1444.86
               ELEVATION        25.50     27.00     28.00     29.00     30.00     31.00     35.00     37.00     38.00     40.00

                 STORAGE       114.21    132.22    141.70
                 OUTFLOW      3013.84   4936.17   6011.29
```

ELEVATION 42.00 44.00 45.00

*** WARNING *** MODIFIED PULS ROUTING MAY BE NUMERICALLY UNSTABLE FOR OUTFLOWS BETWEEN 3014. TO 6011.
THE ROUTED HYDROGRAPH SHOULD BE EXAMINED FOR OSCILLATIONS OR OUTFLOWS GREATER THAN PEAK INFLOWS.
THIS CAN BE CORRECTED BY DECREASING THE TIME INTERVAL OR INCREASING STORAGE (USE A LONGER REACH.)

****

HYDROGRAPH AT STATION RDB1
PLAN 1, RATIO = 1.00

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	25.5	2		1745	168	2.	1.5	25.8	4		1130	335	0.	.0	25.5
1		0015	2	0.	.0	25.5	2		1800	169	2.	1.5	25.8	4		1145	336	0.	.0	25.5
1		0030	3	0.	.0	25.5	2		1815	170	2.	1.5	25.8	4		1200	337	0.	.0	25.5
1		0045	4	0.	.0	25.5	2		1830	171	2.	1.4	25.8	4		1215	338	0.	.0	25.5
1		0100	5	0.	.0	25.5	2		1845	172	2.	1.4	25.8	4		1230	339	0.	.0	25.5
1		0115	6	0.	.1	25.5	2		1900	173	2.	1.3	25.8	4		1245	340	0.	.0	25.5
1		0130	7	0.	.3	25.6	2		1915	174	2.	1.3	25.8	4		1300	341	0.	.0	25.5
1		0145	8	1.	.8	25.6	2		1930	175	2.	1.3	25.7	4		1315	342	0.	.0	25.5
1		0200	9	2.	1.7	25.8	2		1945	176	2.	1.2	25.7	4		1330	343	0.	.0	25.5
1		0215	10	6.	4.2	26.3	2		2000	177	2.	1.2	25.7	4		1345	344	0.	.0	25.5
1		0230	11	13.	9.5	27.3	2		2015	178	2.	1.2	25.7	4		1400	345	0.	.0	25.5
1		0245	12	24.	17.9	28.8	2		2030	179	2.	1.1	25.7	4		1415	346	0.	.0	25.5
1		0300	13	40.	28.5	30.4	2		2045	180	2.	1.1	25.7	4		1430	347	0.	.0	25.5
1		0315	14	513.	83.3	38.3	2		2100	181	1.	1.1	25.7	4		1445	348	0.	.0	25.5
1		0330	15	5916.	140.9	44.9	2		2115	182	1.	1.0	25.7	4		1500	349	0.	.0	25.5
1		0345	16	5980.	141.4	45.0	2		2130	183	1.	1.0	25.7	4		1515	350	0.	.0	25.5
1		0400	17	4104.	124.4	43.1	2		2145	184	1.	1.0	25.7	4		1530	351	0.	.0	25.5
1		0415	18	2548.	108.9	41.4	2		2200	185	1.	.9	25.7	4		1545	352	0.	.0	25.5
1		0430	19	1580.	97.8	40.2	2		2215	186	1.	.9	25.7	4		1600	353	0.	.0	25.5
1		0445	20	1023.	90.4	39.2	2		2230	187	1.	.9	25.7	4		1615	354	0.	.0	25.5
1		0500	21	722.	86.2	38.7	2		2245	188	1.	.9	25.7	4		1630	355	0.	.0	25.5
1		0515	22	548.	83.8	38.4	2		2300	189	1.	.8	25.7	4		1645	356	0.	.0	25.5
1		0530	23	412.	81.9	38.1	2		2315	190	1.	.8	25.7	4		1700	357	0.	.0	25.5
1		0545	24	325.	80.4	37.9	2		2330	191	1.	.8	25.7	4		1715	358	0.	.0	25.5
1		0600	25	286.	79.3	37.8	2		2345	192	1.	.8	25.6	4		1730	359	0.	.0	25.5
1		0615	26	241.	78.0	37.6	3		0000	193	1.	.7	25.6	4		1745	360	0.	.0	25.5
1		0630	27	178.	76.2	37.4	3		0015	194	1.	.7	25.6	4		1800	361	0.	.0	25.5
1		0645	28	115.	74.4	37.1	3		0030	195	1.	.7	25.6	4		1815	362	0.	.0	25.5
1		0700	29	77.	72.9	37.0	3		0045	196	1.	.7	25.6	4		1830	363	0.	.0	25.5
1		0715	30	76.	71.6	36.8	3		0100	197	1.	.7	25.6	4		1845	364	0.	.0	25.5
1		0730	31	75.	70.1	36.6	3		0115	198	1.	.6	25.6	4		1900	365	0.	.0	25.5
1		0745	32	73.	68.7	36.4	3		0130	199	1.	.6	25.6	4		1915	366	0.	.0	25.5
1		0800	33	72.	67.2	36.2	3		0145	200	1.	.6	25.6	4		1930	367	0.	.0	25.5
1		0815	34	71.	65.7	36.0	3		0200	201	1.	.6	25.6	4		1945	368	0.	.0	25.5
1		0830	35	70.	64.2	35.8	3		0215	202	1.	.6	25.6	4		2000	369	0.	.0	25.5
1		0845	36	69.	62.8	35.6	3		0230	203	1.	.6	25.6	4		2015	370	0.	.0	25.5
1		0900	37	68.	61.4	35.4	3		0245	204	1.	.5	25.6	4		2030	371	0.	.0	25.5
1		0915	38	67.	60.0	35.3	3		0300	205	1.	.5	25.6	4		2045	372	0.	.0	25.5
1		0930	39	66.	58.6	35.1	3		0315	206	1.	.5	25.6	4		2100	373	0.	.0	25.5
1		0945	40	65.	57.2	34.9	3		0330	207	1.	.5	25.6	4		2115	374	0.	.0	25.5
1		1000	41	64.	55.9	34.7	3		0345	208	1.	.5	25.6	4		2130	375	0.	.0	25.5
1		1015	42	63.	54.6	34.5	3		0400	209	1.	.5	25.6	4		2145	376	0.	.0	25.5
1		1030	43	62.	53.3	34.3	3		0415	210	1.	.5	25.6	4		2200	377	0.	.0	25.5
1		1045	44	61.	52.0	34.1	3		0430	211	1.	.4	25.6	4		2215	378	0.	.0	25.5
1		1100	45	60.	50.8	33.9	3		0445	212	1.	.4	25.6	4		2230	379	0.	.0	25.5
1		1115	46	59.	49.5	33.7	3		0500	213	1.	.4	25.6	4		2245	380	0.	.0	25.5
1		1130	47	58.	48.3	33.5	3		0515	214	1.	.4	25.6	4		2300	381	0.	.0	25.5
1		1145	48	57.	47.1	33.3	3		0530	215	1.	.4	25.6	4		2315	382	0.	.0	25.5
1		1200	49	56.	46.0	33.1	3		0545	216	1.	.4	25.6	4		2330	383	0.	.0	25.5
1		1215	50	55.	44.8	33.0	3		0600	217	1.	.4	25.6	4		2345	384	0.	.0	25.5
1		1230	51	54.	43.7	32.8	3		0615	218	1.	.4	25.6	5		0000	385	0.	.0	25.5
1		1245	52	53.	42.6	32.6	3		0630	219	0.	.3	25.6	5		0015	386	0.	.0	25.5
1		1300	53	52.	41.5	32.4	3		0645	220	0.	.3	25.6	5		0030	387	0.	.0	25.5
1		1315	54	51.	40.4	32.3	3		0700	221	0.	.3	25.6	5		0045	388	0.	.0	25.5
1		1330	55	50.	39.4	32.1	3		0715	222	0.	.3	25.6	5		0100	389	0.	.0	25.5
1		1345	56	50.	38.4	32.0	3		0730	223	0.	.3	25.6	5		0115	390	0.	.0	25.5
1		1400	57	49.	37.4	31.8	3		0745	224	0.	.3	25.6	5		0130	391	0.	.0	25.5
1		1415	58	48.	36.4	31.6	3		0800	225	0.	.3	25.6	5		0145	392	0.	.0	25.5
1		1430	59	47.	35.4	31.5	3		0815	226	0.	.3	25.6	5		0200	393	0.	.0	25.5
1		1445	60	46.	34.4	31.3	3		0830	227	0.	.3	25.6	5		0215	394	0.	.0	25.5
1		1500	61	45.	33.5	31.2	3		0845	228	0.	.3	25.6	5		0230	395	0.	.0	25.5
1		1515	62	45.	32.5	31.1	3		0900	229	0.	.3	25.6	5		0245	396	0.	.0	25.5
1		1530	63	44.	31.6	30.9	3		0915	230	0.	.3	25.5	5		0300	397	0.	.0	25.5
1		1545	64	43.	30.7	30.8	3		0930	231	0.	.2	25.5	5		0315	398	0.	.0	25.5
1		1600	65	41.	29.9	30.6	3		0945	232	0.	.2	25.5	5		0330	399	0.	.0	25.5
1		1615	66	40.	29.0	30.5	3		1000	233	0.	.2	25.5	5		0345	400	0.	.0	25.5
1		1630	67	39.	28.2	30.4	3		1015	234	0.	.2	25.5	5		0400	401	0.	.0	25.5
1		1645	68	38.	27.4	30.3	3		1030	235	0.	.2	25.5	5		0415	402	0.	.0	25.5
1		1700	69	37.	26.6	30.1	3		1045	236	0.	.2	25.5	5		0430	403	0.	.0	25.5
1		1715	70	36.	25.9	30.0	3		1100	237	0.	.2	25.5	5		0445	404	0.	.0	25.5
1		1730	71	35.	25.1	29.9	3		1115	238	0.	.2	25.5	5		0500	405	0.	.0	25.5
1		1745	72	34.	24.4	29.8	3		1130	239	0.	.2	25.5	5		0515	406	0.	.0	25.5
1		1800	73	33.	23.7	29.7	3		1145	240	0.	.2	25.5	5		0530	407	0.	.0	25.5
1		1815	74	32.	23.0	29.6	3		1200	241	0.	.2	25.5	5		0545	408	0.	.0	25.5
1		1830	75	31.	22.4	29.5	3		1215	242	0.	.2	25.5	5		0600	409	0.	.0	25.5
1		1845	76	30.	21.8	29.4	3		1230	243	0.	.2	25.5	5		0615	410	0.	.0	25.5
1		1900	77	29.	21.2	29.3	3		1245	244	0.	.2	25.5	5		0630	411	0.	.0	25.5
1		1915	78	28.	20.6	29.2	3		1300	245	0.	.2	25.5	5		0645	412	0.	.0	25.5
1		1930	79	27.	20.0	29.1	3		1315	246	0.	.2	25.5	5		0700	413	0.	.0	25.5
1		1945	80	26.	19.5	29.0	3		1330	247	0.	.2	25.5	5		0715	414	0.	.0	25.5
1		2000	81	25.	18.9	28.9	3		1345	248	0.	.2	25.5	5		0730	415	0.	.0	25.5
1		2015	82	25.	18.4	28.9	3		1400	249	0.	.1	25.5	5		0745	416	0.	.0	25.5
1		2030	83	24.	17.9	28.8	3		1415	250	0.	.1	25.5	5		0800	417	0.	.0	25.5
1		2045	84	23.	17.4	28.7	3		1430	251	0.	.1	25.5	5		0815	418	0.	.0	25.5
1		2100	85	23.	17.0	28.6	3		1445	252	0.	.1	25.5	5		0830	419	0.	.0	25.5
1		2115	86	22.	16.5	28.5	3		1500	253	0.	.1	25.5	5		0845	420	0.	.0	25.5
1		2130	87	22.	16.1	28.4	3		1515	254	0.	.1	25.5	5		0900	421	0.	.0	25.5
1		2145	88	21.	15.6	28.4	3		1530	255	0.	.1	25.5	5		0915	422	0.	.0	25.5
1		2200	89	20.	15.2	28.3	3		1545	256	0.	.1	25.5	5		0930	423	0.	.0	25.5
1		2215	90	20.	14.8	28.2	3		1600	257	0.	.1	25.5	5		0945	424	0.	.0	25.5
1		2230	91	19.	14.4	28.2	3		1615	258	0.	.1	25.5	5		1000	425	0.	.0	25.5

1	2245	92	19.	14.0	28.1 *	3	1630	259	0.	.1	25.5 *	5	1015	426	0.	.0	25.5
1	2300	93	18.	13.6	28.0 *	3	1645	260	0.	.1	25.5 *	5	1030	427	0.	.0	25.5
1	2315	94	18.	13.2	28.0 *	3	1700	261	0.	.1	25.5 *	5	1045	428	0.	.0	25.5
1	2330	95	18.	12.8	27.9 *	3	1715	262	0.	.1	25.5 *	5	1100	429	0.	.0	25.5
1	2345	96	17.	12.5	27.8 *	3	1730	263	0.	.1	25.5 *	5	1115	430	0.	.0	25.5
2	0000	97	17.	12.1	27.8 *	3	1745	264	0.	.1	25.5 *	5	1130	431	0.	.0	25.5
2	0015	98	16.	11.8	27.7 *	3	1800	265	0.	.1	25.5 *	5	1145	432	0.	.0	25.5
2	0030	99	16.	11.5	27.7 *	3	1815	266	0.	.1	25.5 *	5	1200	433	0.	.0	25.5
2	0045	100	15.	11.1	27.6 *	3	1830	267	0.	.1	25.5 *	5	1215	434	0.	.0	25.5
2	0100	101	15.	10.8	27.5 *	3	1845	268	0.	.1	25.5 *	5	1230	435	0.	.0	25.5
2	0115	102	15.	10.5	27.5 *	3	1900	269	0.	.1	25.5 *	5	1245	436	0.	.0	25.5
2	0130	103	14.	10.2	27.4 *	3	1915	270	0.	.1	25.5 *	5	1300	437	0.	.0	25.5
2	0145	104	14.	9.9	27.4 *	3	1930	271	0.	.1	25.5 *	5	1315	438	0.	.0	25.5
2	0200	105	13.	9.7	27.3 *	3	1945	272	0.	.1	25.5 *	5	1330	439	0.	.0	25.5
2	0215	106	13.	9.4	27.3 *	3	2000	273	0.	.1	25.5 *	5	1345	440	0.	.0	25.5
2	0230	107	13.	9.1	27.2 *	3	2015	274	0.	.1	25.5 *	5	1400	441	0.	.0	25.5
2	0245	108	12.	8.9	27.2 *	3	2030	275	0.	.1	25.5 *	5	1415	442	0.	.0	25.5
2	0300	109	12.	8.6	27.1 *	3	2045	276	0.	.1	25.5 *	5	1430	443	0.	.0	25.5
2	0315	110	12.	8.4	27.1 *	3	2100	277	0.	.1	25.5 *	5	1445	444	0.	.0	25.5
2	0330	111	11.	8.1	27.1 *	3	2115	278	0.	.1	25.5 *	5	1500	445	0.	.0	25.5
2	0345	112	11.	7.9	27.0 *	3	2130	279	0.	.1	25.5 *	5	1515	446	0.	.0	25.5
2	0400	113	11.	7.7	27.0 *	3	2145	280	0.	.1	25.5 *	5	1530	447	0.	.0	25.5
2	0415	114	10.	7.4	26.9 *	3	2200	281	0.	.1	25.5 *	5	1545	448	0.	.0	25.5
2	0430	115	10.	7.2	26.9 *	3	2215	282	0.	.1	25.5 *	5	1600	449	0.	.0	25.5
2	0445	116	10.	7.0	26.9 *	3	2230	283	0.	.1	25.5 *	5	1615	450	0.	.0	25.5
2	0500	117	10.	6.8	26.8 *	3	2245	284	0.	.1	25.5 *	5	1630	451	0.	.0	25.5
2	0515	118	9.	6.6	26.8 *	3	2300	285	0.	.1	25.5 *	5	1645	452	0.	.0	25.5
2	0530	119	9.	6.4	26.7 *	3	2315	286	0.	.0	25.5 *	5	1700	453	0.	.0	25.5
2	0545	120	9.	6.3	26.7 *	3	2330	287	0.	.0	25.5 *	5	1715	454	0.	.0	25.5
2	0600	121	9.	6.1	26.7 *	3	2345	288	0.	.0	25.5 *	5	1730	455	0.	.0	25.5
2	0615	122	8.	5.9	26.6 *	4	0000	289	0.	.0	25.5 *	5	1745	456	0.	.0	25.5
2	0630	123	8.	5.7	26.6 *	4	0015	290	0.	.0	25.5 *	5	1800	457	0.	.0	25.5
2	0645	124	8.	5.6	26.6 *	4	0030	291	0.	.0	25.5 *	5	1815	458	0.	.0	25.5
2	0700	125	8.	5.4	26.5 *	4	0045	292	0.	.0	25.5 *	5	1830	459	0.	.0	25.5
2	0715	126	7.	5.2	26.5 *	4	0100	293	0.	.0	25.5 *	5	1845	460	0.	.0	25.5
2	0730	127	7.	5.1	26.5 *	4	0115	294	0.	.0	25.5 *	5	1900	461	0.	.0	25.5
2	0745	128	7.	5.0	26.5 *	4	0130	295	0.	.0	25.5 *	5	1915	462	0.	.0	25.5
2	0800	129	7.	4.8	26.4 *	4	0145	296	0.	.0	25.5 *	5	1930	463	0.	.0	25.5
2	0815	130	7.	4.7	26.4 *	4	0200	297	0.	.0	25.5 *	5	1945	464	0.	.0	25.5
2	0830	131	6.	4.5	26.4 *	4	0215	298	0.	.0	25.5 *	5	2000	465	0.	.0	25.5
2	0845	132	6.	4.4	26.3 *	4	0230	299	0.	.0	25.5 *	5	2015	466	0.	.0	25.5
2	0900	133	6.	4.3	26.3 *	4	0245	300	0.	.0	25.5 *	5	2030	467	0.	.0	25.5
2	0915	134	6.	4.2	26.3 *	4	0300	301	0.	.0	25.5 *	5	2045	468	0.	.0	25.5
2	0930	135	6.	4.0	26.3 *	4	0315	302	0.	.0	25.5 *	5	2100	469	0.	.0	25.5
2	0945	136	6.	3.9	26.3 *	4	0330	303	0.	.0	25.5 *	5	2115	470	0.	.0	25.5
2	1000	137	5.	3.8	26.2 *	4	0345	304	0.	.0	25.5 *	5	2130	471	0.	.0	25.5
2	1015	138	5.	3.7	26.2 *	4	0400	305	0.	.0	25.5 *	5	2145	472	0.	.0	25.5
2	1030	139	5.	3.6	26.2 *	4	0415	306	0.	.0	25.5 *	5	2200	473	0.	.0	25.5
2	1045	140	5.	3.5	26.2 *	4	0430	307	0.	.0	25.5 *	5	2215	474	0.	.0	25.5
2	1100	141	5.	3.4	26.2 *	4	0445	308	0.	.0	25.5 *	5	2230	475	0.	.0	25.5
2	1115	142	5.	3.3	26.1 *	4	0500	309	0.	.0	25.5 *	5	2245	476	0.	.0	25.5
2	1130	143	5.	3.2	26.1 *	4	0515	310	0.	.0	25.5 *	5	2300	477	0.	.0	25.5
2	1145	144	4.	3.1	26.1 *	4	0530	311	0.	.0	25.5 *	5	2315	478	0.	.0	25.5
2	1200	145	4.	3.0	26.1 *	4	0545	312	0.	.0	25.5 *	5	2330	479	0.	.0	25.5
2	1215	146	4.	2.9	26.1 *	4	0600	313	0.	.0	25.5 *	5	2345	480	0.	.0	25.5
2	1230	147	4.	2.8	26.0 *	4	0615	314	0.	.0	25.5 *	6	0000	481	0.	.0	25.5
2	1245	148	4.	2.8	26.0 *	4	0630	315	0.	.0	25.5 *	6	0015	482	0.	.0	25.5
2	1300	149	4.	2.7	26.0 *	4	0645	316	0.	.0	25.5 *	6	0030	483	0.	.0	25.5
2	1315	150	4.	2.6	26.0 *	4	0700	317	0.	.0	25.5 *	6	0045	484	0.	.0	25.5
2	1330	151	4.	2.5	26.0 *	4	0715	318	0.	.0	25.5 *	6	0100	485	0.	.0	25.5
2	1345	152	3.	2.5	26.0 *	4	0730	319	0.	.0	25.5 *	6	0115	486	0.	.0	25.5
2	1400	153	3.	2.4	26.0 *	4	0745	320	0.	.0	25.5 *	6	0130	487	0.	.0	25.5
2	1415	154	3.	2.3	25.9 *	4	0800	321	0.	.0	25.5 *	6	0145	488	0.	.0	25.5
2	1430	155	3.	2.3	25.9 *	4	0815	322	0.	.0	25.5 *	6	0200	489	0.	.0	25.5
2	1445	156	3.	2.2	25.9 *	4	0830	323	0.	.0	25.5 *	6	0215	490	0.	.0	25.5
2	1500	157	3.	2.1	25.9 *	4	0845	324	0.	.0	25.5 *	6	0230	491	0.	.0	25.5
2	1515	158	3.	2.1	25.9 *	4	0900	325	0.	.0	25.5 *	6	0245	492	0.	.0	25.5
2	1530	159	3.	2.0	25.9 *	4	0915	326	0.	.0	25.5 *	6	0300	493	0.	.0	25.5
2	1545	160	3.	1.9	25.9 *	4	0930	327	0.	.0	25.5 *	6	0315	494	0.	.0	25.5
2	1600	161	3.	1.9	25.9 *	4	0945	328	0.	.0	25.5 *	6	0330	495	0.	.0	25.5
2	1615	162	3.	1.8	25.9 *	4	1000	329	0.	.0	25.5 *	6	0345	496	0.	.0	25.5
2	1630	163	3.	1.8	25.8 *	4	1015	330	0.	.0	25.5 *	6	0400	497	0.	.0	25.5
2	1645	164	2.	1.7	25.8 *	4	1030	331	0.	.0	25.5 *	6	0415	498	0.	.0	25.5
2	1700	165	2.	1.7	25.8 *	4	1045	332	0.	.0	25.5 *	6	0430	499	0.	.0	25.5
2	1715	166	2.	1.6	25.8 *	4	1100	333	0.	.0	25.5 *	6	0445	500	0.	.0	25.5
2	1730	167	2.	1.6	25.8 *	4	1115	334	0.	.0	25.5 *						
					*						*						

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PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
			6-HR	24-HR	72-HR	124.75-HR
+ (CFS)	(HR)	(CFS)				
+ 5980.	3.75		1047.	289.	98.	56.
		(INCHES)	11.089	12.227	12.429	12.429
		(AC-FT)	519.	572.	582.	582.

PEAK STORAGE	TIME	MAXIMUM AVERAGE STORAGE			
		6-HR	24-HR	72-HR	124.75-HR
+ (AC-FT)	(HR)				
+ 141.	3.75	84.	42.	15.	9.

PEAK STAGE	TIME	MAXIMUM AVERAGE STAGE			
		6-HR	24-HR	72-HR	124.75-HR
+ (FEET)	(HR)				
+ 44.97	3.75	38.31	32.30	27.98	26.93

CUMULATIVE AREA = .88 SQ MI

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HYDROGRAPH AT STATION RDB1
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	25.5	2		1745	168	2.	1.5	25.8	4		1130	335	0.	.0	25.5
1		0015	2	0.	.0	25.5	2		1800	169	2.	1.5	25.8	4		1145	336	0.	.0	25.5
1		0030	3	0.	.0	25.5	2		1815	170	2.	1.5	25.8	4		1200	337	0.	.0	25.5
1		0045	4	0.	.0	25.5	2		1830	171	2.	1.4	25.8	4		1215	338	0.	.0	25.5
1		0100	5	0.	.0	25.5	2		1845	172	2.	1.4	25.8	4		1230	339	0.	.0	25.5
1		0115	6	0.	.1	25.5	2		1900	173	2.	1.3	25.8	4		1245	340	0.	.0	25.5
1		0130	7	0.	.3	25.6	2		1915	174	2.	1.3	25.7	4		1300	341	0.	.0	25.5
1		0145	8	1.	.7	25.6	2		1930	175	2.	1.3	25.7	4		1315	342	0.	.0	25.5
1		0200	9	2.	1.6	25.8	2		1945	176	2.	1.2	25.7	4		1330	343	0.	.0	25.5
1		0215	10	6.	4.0	26.3	2		2000	177	2.	1.2	25.7	4		1345	344	0.	.0	25.5
1		0230	11	13.	9.1	27.2	2		2015	178	2.	1.2	25.7	4		1400	345	0.	.0	25.5
1		0245	12	23.	17.2	28.6	2		2030	179	2.	1.1	25.7	4		1415	346	0.	.0	25.5
1		0300	13	38.	27.5	30.3	2		2045	180	2.	1.1	25.7	4		1430	347	0.	.0	25.5
1		0315	14	413.	81.9	38.1	2		2100	181	1.	1.1	25.7	4		1445	348	0.	.0	25.5
1		0330	15	5754.	139.4	44.8	2		2115	182	1.	1.0	25.7	4		1500	349	0.	.0	25.5
1		0345	16	5852.	140.3	44.9	2		2130	183	1.	1.0	25.7	4		1515	350	0.	.0	25.5
1		0400	17	4019.	123.6	43.0	2		2145	184	1.	1.0	25.7	4		1530	351	0.	.0	25.5
1		0415	18	2500.	108.3	41.3	2		2200	185	1.	.9	25.7	4		1545	352	0.	.0	25.5
1		0430	19	1547.	97.4	40.1	2		2215	186	1.	.9	25.7	4		1600	353	0.	.0	25.5
1		0445	20	1005.	90.1	39.2	2		2230	187	1.	.9	25.7	4		1615	354	0.	.0	25.5
1		0500	21	707.	86.0	38.7	2		2245	188	1.	.9	25.7	4		1630	355	0.	.0	25.5
1		0515	22	537.	83.6	38.4	2		2300	189	1.	.8	25.7	4		1645	356	0.	.0	25.5
1		0530	23	403.	81.8	38.1	2		2315	190	1.	.8	25.7	4		1700	357	0.	.0	25.5
1		0545	24	321.	80.3	37.9	2		2330	191	1.	.8	25.7	4		1715	358	0.	.0	25.5
1		0600	25	282.	79.2	37.8	2		2345	192	1.	.8	25.6	4		1730	359	0.	.0	25.5
1		0615	26	236.	77.9	37.6	3		0000	193	1.	.7	25.6	4		1745	360	0.	.0	25.5
1		0630	27	174.	76.1	37.4	3		0015	194	1.	.7	25.6	4		1800	361	0.	.0	25.5
1		0645	28	112.	74.3	37.1	3		0030	195	1.	.7	25.6	4		1815	362	0.	.0	25.5
1		0700	29	76.	72.9	36.9	3		0045	196	1.	.7	25.6	4		1830	363	0.	.0	25.5
1		0715	30	76.	71.5	36.8	3		0100	197	1.	.7	25.6	4		1845	364	0.	.0	25.5
1		0730	31	75.	70.1	36.6	3		0115	198	1.	.6	25.6	4		1900	365	0.	.0	25.5
1		0745	32	73.	68.6	36.4	3		0130	199	1.	.6	25.6	4		1915	366	0.	.0	25.5
1		0800	33	72.	67.1	36.2	3		0145	200	1.	.6	25.6	4		1930	367	0.	.0	25.5
1		0815	34	71.	65.6	36.0	3		0200	201	1.	.6	25.6	4		1945	368	0.	.0	25.5
1		0830	35	70.	64.2	35.8	3		0215	202	1.	.6	25.6	4		2000	369	0.	.0	25.5
1		0845	36	69.	62.7	35.6	3		0230	203	1.	.6	25.6	4		2015	370	0.	.0	25.5
1		0900	37	68.	61.3	35.4	3		0245	204	1.	.5	25.6	4		2030	371	0.	.0	25.5
1		0915	38	67.	59.9	35.2	3		0300	205	1.	.5	25.6	4		2045	372	0.	.0	25.5
1		0930	39	66.	58.5	35.1	3		0315	206	1.	.5	25.6	4		2100	373	0.	.0	25.5
1		0945	40	65.	57.2	34.9	3		0330	207	1.	.5	25.6	4		2115	374	0.	.0	25.5
1		1000	41	64.	55.8	34.7	3		0345	208	1.	.5	25.6	4		2130	375	0.	.0	25.5
1		1015	42	63.	54.5	34.5	3		0400	209	1.	.5	25.6	4		2145	376	0.	.0	25.5
1		1030	43	62.	53.2	34.3	3		0415	210	1.	.5	25.6	4		2200	377	0.	.0	25.5
1		1045	44	61.	52.0	34.1	3		0430	211	1.	.4	25.6	4		2215	378	0.	.0	25.5
1		1100	45	60.	50.7	33.9	3		0445	212	1.	.4	25.6	4		2230	379	0.	.0	25.5
1		1115	46	59.	49.5	33.7	3		0500	213	1.	.4	25.6	4		2245	380	0.	.0	25.5
1		1130	47	58.	48.3	33.5	3		0515	214	1.	.4	25.6	4		2300	381	0.	.0	25.5
1		1145	48	57.	47.1	33.3	3		0530	215	1.	.4	25.6	4		2315	382	0.	.0	25.5
1		1200	49	56.	45.9	33.1	3		0545	216	1.	.4	25.6	4		2330	383	0.	.0	25.5
1		1215	50	55.	44.8	33.0	3		0600	217	1.	.4	25.6	4		2345	384	0.	.0	25.5
1		1230	51	54.	43.7	32.8	3		0615	218	1.	.4	25.6	5		0000	385	0.	.0	25.5
1		1245	52	53.	42.6	32.6	3		0630	219	0.	.3	25.6	5		0015	386	0.	.0	25.5
1		1300	53	52.	41.5	32.4	3		0645	220	0.	.3	25.6	5		0030	387	0.	.0	25.5
1		1315	54	51.	40.4	32.3	3		0700	221	0.	.3	25.6	5		0045	388	0.	.0	25.5
1		1330	55	50.	39.4	32.1	3		0715	222	0.	.3	25.6	5		0100	389	0.	.0	25.5
1		1345	56	49.	38.3	32.0	3		0730	223	0.	.3	25.6	5		0115	390	0.	.0	25.5
1		1400	57	49.	37.3	31.8	3		0745	224	0.	.3	25.6	5		0130	391	0.	.0	25.5
1		1415	58	48.	36.3	31.6	3		0800	225	0.	.3	25.6	5		0145	392	0.	.0	25.5
1		1430	59	47.	35.3	31.5	3		0815	226	0.	.3	25.6	5		0200	393	0.	.0	25.5
1		1445	60	46.	34.4	31.3	3		0830	227	0.	.3	25.6	5		0215	394	0.	.0	25.5
1		1500	61	45.	33.4	31.2	3		0845	228	0.	.3	25.6	5		0230	395	0.	.0	25.5
1		1515	62	45.	32.5	31.0	3		0900	229	0.	.3	25.6	5		0245	396	0.	.0	25.5
1		1530	63	44.	31.6	30.9	3		0915	230	0.	.3	25.5	5		0300	397	0.	.0	25.5
1		1545	64	42.	30.7	30.8	3		0930	231	0.	.2	25.5	5		0315	398	0.	.0	25.5
1		1600	65	41.	29.8	30.6	3		0945	232	0.	.2	25.5	5		0330	399	0.	.0	25.5
1		1615	66	40.	29.0	30.5	3		1000	233	0.	.2	25.5	5		0345	400	0.	.0	25.5
1		1630	67	39.	28.2	30.4	3		1015	234	0.	.2	25.5	5		0400	401	0.	.0	25.5
1		1645	68	38.	27.4	30.3	3		1030	235	0.	.2	25.5	5		0415	402	0.	.0	25.5
1		1700	69	37.	26.6	30.1	3		1045	236	0.	.2	25.5	5		0430	403	0.	.0	25.5
1		1715	70	36.	25.8	30.0	3		1100	237	0.	.2	25.5	5		0445	404	0.	.0	25.5
1		1730	71	35.	25.1	29.9	3		1115	238	0.	.2	25.5	5		0500	405	0.	.0	25.5
1		1745	72	34.	24.4	29.8	3		1130	239	0.	.2	25.5	5		0515	406	0.	.0	25.5
1		1800	73	33.	23.7	29.7	3		1145	240	0.	.2	25.5	5		0530	407	0.	.0	25.5
1		1815	74	32.	23.0	29.6	3		1200	241	0.	.2	25.5	5		0545	408	0.	.0	25.5
1		1830	75	31.	22.4	29.5	3		1215	242	0.	.2	25.5	5		0600	409	0.	.0	25.5
1		1845	76	30.	21.7	29.4	3		1230	243	0.	.2	25.5	5		0615	410	0.	.0	25.5
1		1900	77	29.	21.1	29.3	3		1245	244	0.	.2	25.5	5		0630	411	0.	.0	25.5
1		1915	78	28.	20.6	29.2	3		1300	245	0.	.2	25.5	5		0645	412	0.	.0	25.5
1		1930	79	27.	20.0	29.1	3		1315	246	0.	.2	25.5	5		0700	413	0.	.0	25.5
1		1945	80	26.	19.5	29.0	3		1330	247	0.	.2	25.5	5		0715	414	0.	.0	25.5
1		2000	81	25.	18.9	28.9	3		1345	248	0.	.2	25.5	5		0730	415	0.	.0	25.5
1		2015	82	25.	18.4	28.9	3		1400	249	0.	.1	25.5	5		0745	416	0.	.0	25.5
1		2030	83	24.	17.9	28.8	3		1415	250	0.	.1	25.5	5		0800	417	0.	.0	25.5
1		2045	84	23.	17.4	28.7	3		1430	251	0.	.1	25.5	5		0815	418	0.	.0	25.5
1		2100	85	23.	16.9	28.6	3		1445	252	0.	.1	25.5	5		0830	419	0.	.0	25.5
1		2115	86	22.	16.5	28.5	3		1500	253	0.	.1	25.5	5		0845	420	0.	.0	25.5
1		2130	87	22.	16.0	28.4	3		1515	254	0.	.1	25.5	5		0900	421	0.	.0	25.5
1		2145	88	21.	15.6	28.4	3		1530	255	0.	.1	25.5	5		0915	422	0.	.0	25.5
1		2200	89	20.	15.2	28.3	3		1545	256	0.	.1	25.5	5		0930	423	0.	.0	25.5
1		2215	90	20.	14.8	28.2	3		1600	257	0.	.1	25.5	5		0945	424	0.	.0	25.5
1		2230	91	19.	14.3	28.2	3		1615	258	0.	.1	25.5	5		1000	425	0.	.0	25.5
1		2245	92	19.	13.9	28.1	3		1630	259	0.	.1	25.5	5		1015	426	0.	.0	25.5
1		2300	93	18.	13.6	28.0	3		1645	260	0.	.1	25.5	5		1030	427	0.	.0	25.5
1		2315	94	18.	13.2	28.0	3		1700	261	0.	.1	25.5	5		1045	428	0.	.0	25.5
1		2330	95	17.	12.8	27.9	3		1715	262	0.	.1	25.5	5		1100	429	0.	.0	25.5
1		2345	96	17.	12.5	27.8	3		1730	263	0.	.1	25.5	5		1115	430	0.	.0	25.5
2		0000	97	17.	12.1	27.8	3		1745	264	0.	.1	25.5	5		1130	431	0.	.0	25.5
2		0015	98	16.	11.8	27.7	3		1800	265	0.	.1	25.5	5		1145	432	0.	.0	25.5
2		0030	99	16.	11.4	27.6	3		1815	266	0.	.1	25.5	5		1200	433	0.	.0	25.5
2		0045	100	15.	11.1	27.6	3		1830	267	0.	.1	25.5	5		1215	434	0.	.0	25.5
2		0100	101	15.	10.8	27.5	3		1845	268	0.	.1	25.5	5		1230	435	0.	.0	25.5
2		0115	102	15.	10.5	27.5	3		1900	269	0.	.1	25.5	5		1245	436	0.	.0	25.5
2		0130	103	14.	10.2	27.4	3		1915	270	0.	.1	25.5	5		1300	437	0.	.0	25.5

2	0145 104	14.	9.9	27.4 *	3	1930 271	0.	.1	25.5 *	5	1315 438	0.	.0	25.5
2	0200 105	13.	9.6	27.3 *	3	1945 272	0.	.1	25.5 *	5	1330 439	0.	.0	25.5
2	0215 106	13.	9.4	27.3 *	3	2000 273	0.	.1	25.5 *	5	1345 440	0.	.0	25.5
2	0230 107	13.	9.1	27.2 *	3	2015 274	0.	.1	25.5 *	5	1400 441	0.	.0	25.5
2	0245 108	12.	8.9	27.2 *	3	2030 275	0.	.1	25.5 *	5	1415 442	0.	.0	25.5
2	0300 109	12.	8.6	27.1 *	3	2045 276	0.	.1	25.5 *	5	1430 443	0.	.0	25.5
2	0315 110	12.	8.4	27.1 *	3	2100 277	0.	.1	25.5 *	5	1445 444	0.	.0	25.5
2	0330 111	11.	8.1	27.1 *	3	2115 278	0.	.1	25.5 *	5	1500 445	0.	.0	25.5
2	0345 112	11.	7.9	27.0 *	3	2130 279	0.	.1	25.5 *	5	1515 446	0.	.0	25.5
2	0400 113	11.	7.7	27.0 *	3	2145 280	0.	.1	25.5 *	5	1530 447	0.	.0	25.5
2	0415 114	10.	7.4	26.9 *	3	2200 281	0.	.1	25.5 *	5	1545 448	0.	.0	25.5
2	0430 115	10.	7.2	26.9 *	3	2215 282	0.	.1	25.5 *	5	1600 449	0.	.0	25.5
2	0445 116	10.	7.0	26.9 *	3	2230 283	0.	.1	25.5 *	5	1615 450	0.	.0	25.5
2	0500 117	10.	6.8	26.8 *	3	2245 284	0.	.1	25.5 *	5	1630 451	0.	.0	25.5
2	0515 118	9.	6.6	26.8 *	3	2300 285	0.	.1	25.5 *	5	1645 452	0.	.0	25.5
2	0530 119	9.	6.4	26.7 *	3	2315 286	0.	.0	25.5 *	5	1700 453	0.	.0	25.5
2	0545 120	9.	6.2	26.7 *	3	2330 287	0.	.0	25.5 *	5	1715 454	0.	.0	25.5
2	0600 121	9.	6.1	26.7 *	3	2345 288	0.	.0	25.5 *	5	1730 455	0.	.0	25.5
2	0615 122	8.	5.9	26.6 *	4	0000 289	0.	.0	25.5 *	5	1745 456	0.	.0	25.5
2	0630 123	8.	5.7	26.6 *	4	0015 290	0.	.0	25.5 *	5	1800 457	0.	.0	25.5
2	0645 124	8.	5.6	26.6 *	4	0030 291	0.	.0	25.5 *	5	1815 458	0.	.0	25.5
2	0700 125	8.	5.4	26.5 *	4	0045 292	0.	.0	25.5 *	5	1830 459	0.	.0	25.5
2	0715 126	7.	5.2	26.5 *	4	0100 293	0.	.0	25.5 *	5	1845 460	0.	.0	25.5
2	0730 127	7.	5.1	26.5 *	4	0115 294	0.	.0	25.5 *	5	1900 461	0.	.0	25.5
2	0745 128	7.	4.9	26.5 *	4	0130 295	0.	.0	25.5 *	5	1915 462	0.	.0	25.5
2	0800 129	7.	4.8	26.4 *	4	0145 296	0.	.0	25.5 *	5	1930 463	0.	.0	25.5
2	0815 130	7.	4.7	26.4 *	4	0200 297	0.	.0	25.5 *	5	1945 464	0.	.0	25.5
2	0830 131	6.	4.5	26.4 *	4	0215 298	0.	.0	25.5 *	5	2000 465	0.	.0	25.5
2	0845 132	6.	4.4	26.3 *	4	0230 299	0.	.0	25.5 *	5	2015 466	0.	.0	25.5
2	0900 133	6.	4.3	26.3 *	4	0245 300	0.	.0	25.5 *	5	2030 467	0.	.0	25.5
2	0915 134	6.	4.2	26.3 *	4	0300 301	0.	.0	25.5 *	5	2045 468	0.	.0	25.5
2	0930 135	6.	4.0	26.3 *	4	0315 302	0.	.0	25.5 *	5	2100 469	0.	.0	25.5
2	0945 136	6.	3.9	26.3 *	4	0330 303	0.	.0	25.5 *	5	2115 470	0.	.0	25.5
2	1000 137	5.	3.8	26.2 *	4	0345 304	0.	.0	25.5 *	5	2130 471	0.	.0	25.5
2	1015 138	5.	3.7	26.2 *	4	0400 305	0.	.0	25.5 *	5	2145 472	0.	.0	25.5
2	1030 139	5.	3.6	26.2 *	4	0415 306	0.	.0	25.5 *	5	2200 473	0.	.0	25.5
2	1045 140	5.	3.5	26.2 *	4	0430 307	0.	.0	25.5 *	5	2215 474	0.	.0	25.5
2	1100 141	5.	3.4	26.2 *	4	0445 308	0.	.0	25.5 *	5	2230 475	0.	.0	25.5
2	1115 142	5.	3.3	26.1 *	4	0500 309	0.	.0	25.5 *	5	2245 476	0.	.0	25.5
2	1130 143	5.	3.2	26.1 *	4	0515 310	0.	.0	25.5 *	5	2300 477	0.	.0	25.5
2	1145 144	4.	3.1	26.1 *	4	0530 311	0.	.0	25.5 *	5	2315 478	0.	.0	25.5
2	1200 145	4.	3.0	26.1 *	4	0545 312	0.	.0	25.5 *	5	2330 479	0.	.0	25.5
2	1215 146	4.	2.9	26.1 *	4	0600 313	0.	.0	25.5 *	5	2345 480	0.	.0	25.5
2	1230 147	4.	2.8	26.0 *	4	0615 314	0.	.0	25.5 *	6	0000 481	0.	.0	25.5
2	1245 148	4.	2.8	26.0 *	4	0630 315	0.	.0	25.5 *	6	0015 482	0.	.0	25.5
2	1300 149	4.	2.7	26.0 *	4	0645 316	0.	.0	25.5 *	6	0030 483	0.	.0	25.5
2	1315 150	4.	2.6	26.0 *	4	0700 317	0.	.0	25.5 *	6	0045 484	0.	.0	25.5
2	1330 151	4.	2.5	26.0 *	4	0715 318	0.	.0	25.5 *	6	0100 485	0.	.0	25.5
2	1345 152	3.	2.5	26.0 *	4	0730 319	0.	.0	25.5 *	6	0115 486	0.	.0	25.5
2	1400 153	3.	2.4	26.0 *	4	0745 320	0.	.0	25.5 *	6	0130 487	0.	.0	25.5
2	1415 154	3.	2.3	25.9 *	4	0800 321	0.	.0	25.5 *	6	0145 488	0.	.0	25.5
2	1430 155	3.	2.3	25.9 *	4	0815 322	0.	.0	25.5 *	6	0200 489	0.	.0	25.5
2	1445 156	3.	2.2	25.9 *	4	0830 323	0.	.0	25.5 *	6	0215 490	0.	.0	25.5
2	1500 157	3.	2.1	25.9 *	4	0845 324	0.	.0	25.5 *	6	0230 491	0.	.0	25.5
2	1515 158	3.	2.1	25.9 *	4	0900 325	0.	.0	25.5 *	6	0245 492	0.	.0	25.5
2	1530 159	3.	2.0	25.9 *	4	0915 326	0.	.0	25.5 *	6	0300 493	0.	.0	25.5
2	1545 160	3.	1.9	25.9 *	4	0930 327	0.	.0	25.5 *	6	0315 494	0.	.0	25.5
2	1600 161	3.	1.9	25.9 *	4	0945 328	0.	.0	25.5 *	6	0330 495	0.	.0	25.5
2	1615 162	3.	1.8	25.9 *	4	1000 329	0.	.0	25.5 *	6	0345 496	0.	.0	25.5
2	1630 163	3.	1.8	25.8 *	4	1015 330	0.	.0	25.5 *	6	0400 497	0.	.0	25.5
2	1645 164	2.	1.7	25.8 *	4	1030 331	0.	.0	25.5 *	6	0415 498	0.	.0	25.5
2	1700 165	2.	1.7	25.8 *	4	1045 332	0.	.0	25.5 *	6	0430 499	0.	.0	25.5
2	1715 166	2.	1.6	25.8 *	4	1100 333	0.	.0	25.5 *	6	0445 500	0.	.0	25.5
2	1730 167	2.	1.6	25.8 *	4	1115 334	0.	.0	25.5 *					
				*					*					

****

PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
			6-HR	24-HR	72-HR	124.75-HR
+ (CFS)	(HR)	(CFS)				
+ 5852.	3.75		1021.	282.	96.	55.
		(INCHES)	10.812	11.949	12.150	12.150
		(AC-FT)	506.	559.	569.	569.

PEAK STORAGE	TIME	MAXIMUM AVERAGE STORAGE			
		6-HR	24-HR	72-HR	124.75-HR
+ (AC-FT)	(HR)				
140.	3.75	84.	42.	15.	9.

PEAK STAGE	TIME	MAXIMUM AVERAGE STAGE			
		6-HR	24-HR	72-HR	124.75-HR
+ (FEET)	(HR)				
44.85	3.75	38.28	32.28	27.98	26.93

CUMULATIVE AREA = .88 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 .98
HYDROGRAPH AT						
+	OFF1	.41	1	FLOW	3322.	3248.
				TIME	3.50	3.50
HYDROGRAPH AT						
+	OFF7	.03	1	FLOW	398.	390.
				TIME	3.25	3.25

2 COMBINED AT						
+	CP2	.44	1	FLOW	3535.	3457.
				TIME	3.50	3.50
HYDROGRAPH AT						
+	OFF2	.04	1	FLOW	425.	416.
				TIME	3.25	3.25
HYDROGRAPH AT						
+	OFF3	.03	1	FLOW	344.	336.
				TIME	3.25	3.25
3 COMBINED AT						
+	CP1	.50	1	FLOW	3997.	3909.
				TIME	3.50	3.50
HYDROGRAPH AT						
+	OFF4	.06	1	FLOW	739.	723.
				TIME	3.25	3.25
HYDROGRAPH AT						
+	OFF5	.26	1	FLOW	1824.	1783.
				TIME	3.50	3.50
HYDROGRAPH AT						
+	OFF6	.04	1	FLOW	530.	518.
				TIME	3.25	3.25
HYDROGRAPH AT						
+	ON1	.03	1	FLOW	364.	357.
				TIME	3.25	3.25
5 COMBINED AT						
+	DB1	.88	1	FLOW	6744.	6596.
				TIME	3.50	3.50
ROUTED TO						
+	RDB1	.88	1	FLOW	5980.	5852.
				TIME	3.75	3.75
			** PEAK STAGES IN FEET **			
			1	STAGE	44.97	44.85
				TIME	3.75	3.75

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

DB2 - Flow Summary

Stage (elevation)	Outfall Pipe Flow (cfs)	Spillway Flow (cfs)	Total Flow (cfs)
2993	0	0	0
2994	0	0	0
2995	0	0	0
2996	0	0	0
2997	0	0	0
2998	25.59	0	25.59
2999	36.2	0	36.2
3000	44.33	0	44.33
3001	51.19	0	51.19
3002	57.23	0	57.23
3003	62.69	0	62.69
3004	67.72	0	67.72
3005	72.39	0	72.39
3006	76.78	0	76.78
3007	80.94	0	80.94
3008	84.89	0	84.89
3009	88.66	0	88.66
3010	92.28	92.28	184.56
3012	99.13	1031.69	1130.82
3014	105.53	2491.49	2597.02
3016	111.56	4325.24	4436.8
3018	117.29	6467.98	6585.27

DB2 - PMF 30" Orifice Outfall
Rating Table for Circular Orifice

Project Description	
Worksheet	DB2 - PMF 30" Orifice Outfall
Type	Circular Orifice
Solve For	Discharge

Input Data	
Centroid Elevation	2,995.75 ft
Tailwater Elevation	2,997.00 ft
Discharge Coefficient	0.65
Diameter	30.0 in

Attribute	Minimum	Maximum	Increment
Headwater Elevation (ft)	2,997.00	3,020.00	1.00

Headwater Elevation (ft)	Discharge (cfs)	Velocity (ft/s)
2,997.00	N/A	N/A
2,998.00	25.59	5.21
2,999.00	36.20	7.37
3,000.00	44.33	9.03
3,001.00	51.19	10.43
3,002.00	57.23	11.66
3,003.00	62.69	12.77
3,004.00	67.72	13.80
3,005.00	72.39	14.75
3,006.00	76.78	15.64
3,007.00	80.94	16.49
3,008.00	84.89	17.29
3,009.00	88.66	18.06
3,010.00	92.28	18.80
3,011.00	95.77	19.51
3,012.00	99.13	20.19
3,013.00	102.38	20.86
3,014.00	105.53	21.50
3,015.00	108.59	22.12
3,016.00	111.56	22.73
3,017.00	114.46	23.32
3,018.00	117.29	23.89
3,019.00	120.05	24.46
3,020.00	122.75	25.01

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DB2 - PMF Spillway (Weir)
Rating Table for Generic Weir

Project Description	
Worksheet	DB2 - PMF Spillway (Weir)
Type	Generic Weir
Solve For	Discharge

Input Data		
Crest Elevation	3,009.50	ft
Discharge Coefficient	3.00	US
Crest Length	87.00	ft

Attribute	Minimum	Maximum	Increment
Headwater Elevation (ft)	3,009.00	3,020.00	1.00

Headwater Elevation (ft)	Discharge (cfs)	Velocity (ft/s)
3,009.00	N/A	N/A
3,010.00	92.28	2.12
3,011.00	479.49	3.67
3,012.00	1,031.69	4.74
3,013.00	1,709.00	5.61
3,014.00	2,491.49	6.36
3,015.00	3,366.55	7.04
3,016.00	4,325.24	7.65
3,017.00	5,360.83	8.22
3,018.00	6,467.98	8.75
3,019.00	7,642.33	9.25
3,020.00	8,880.23	9.72

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1*****************************************
*                                       *
*    FLOOD HYDROGRAPH PACKAGE  (HEC-1)  *
*              JUN  1998                *
*            VERSION 4.1                *
*                                       *
*  RUN DATE   12FEB15  TIME  09:47:43   *
*                                       *
*****************************************
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*****************************************
*                                       *
*    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
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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
    1         ID     SLATER HANIFAN GROUP
    2         ID     NINETY-FIVE MANAGEMENT, LLC.
    3         ID     SKYE CANYON
    4         ID     MASTER DRAINAGE STUDY UPDATE
    5         ID     PMF DRAINAGE CONDITION - DETENTION BASIN 2
    6         ID
    7         ID     RETURN PERIOD ------- 100-YEAR
    8         ID     DISTRIBUTION -------- 6-HOUR SDN3
    9         ID     PROJECT NO. --------- OLY1401.004
   10         ID     FILENAME ------------ PMF-DB2.H1
   11         ID     DATE ---------------- 10/15/14
   12         ID     MODELED BY ---------- ETM
   13         ID
   14         ID        SIX HOUR DEPTH-AREA REDUCTION FACTORS
   15         ID        DRAINAGE AREA (MI^2)     RATIO
   16         ID        0.0-0.49                 1.00
   17         ID        0.5-0.99                 0.98
   18         ID        1.0-1.99                 0.97
   19         ID
   20         IT      5       0       0     500
   21         IO      5       0       0
   22         IN     15       0       0
   23         JR    PREC    1.00    0.98    0.97
              *
   24         KK    OFF7
   25         KM   EXISTING OFFSITE DRAINAGE BASIN
   26         KM   DISCHARGES INTO DETENTION BASIN "DB2"
   27         PC   0.000   0.004   0.007   0.011   0.014   0.023   0.032   0.041   0.050   0.078
   28         PC   0.106   0.135   0.163   0.681   0.816   0.872   0.915   0.929   0.943   0.957
   29         PC   0.972   0.979   0.986   0.993   1.000
   30         PB    14.1
   31         BA   .0068
   32         LS      0    86.2
   33         UD   0.100
              *
   34         KK    OFF8
   35         KM   EXISTING OFFSITE DRAINAGE BASIN
   36         KM   DISCHARGES INTO DETENTION BASIN "DB2"
   37         BA   .2141
   38         LS      0    86.3
   39         UD   0.302
              *
   40         KK    CP2
   41         KM   COMBINE OFF7, AND OFF8
   42         HC      2
              *
```



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

   43         KK    OFF9
   44         KM   EXISTING OFFSITE DRAINAGE BASIN
   45         KM   DISCHARGES INTO DETENTION BASIN "DB2"
   46         BA   .1164
   47         LS      0    86.2
   48         UD   0.203
              *
   49         KK   OFF10
   50         KM   EXISTING OFFSITE DRAINAGE BASIN
   51         KM   DISCHARGES INTO DETENTION BASIN "DB2"
   52         BA   .6524
   53         LS      0    86.6
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```
            54          UD   0.615
                        *

            55          KK     ON2
            56          KM   PROPOSED ONSITE DRAINAGE BASIN
            57          BA   .0241
            58          LS      0    92.8
            59          UD   0.084
                        *

            60          KK     DB2
            61          KM   COMBINE CP2, OFF9, OFF10 AND ON2
            62          HC      4
                        *

            63          KK    RDB2
            64          KM   OUTLET = 30" ORIFICE @ INVERT ELEVATION = 2994.5-FT
            65          KO      1
            66          RS      1     VOL      -1
            67          SV      0    3.27    6.87   10.63   14.56   75.03   81.24  115.25  154.20
            68          SE 2993.0  2994.0  2995.0  2996.0  2997.0  3009.0  3010.0  3015.0  3020.0
            69          SQ      0   25.59   36.20   44.33   88.66  184.56 1130.82 2597.02 4436.80 6585.27
            70          SE 2993.0  2998.0  2999.0  3000.0  3009.0  3010.0  3012.0  3014.0  3016.0  3018.0
                        *

            71          ZZ
1
                SCHEMATIC DIAGRAM OF STREAM NETWORK

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

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

    24        OFF7
                .
                .
    34          .        OFF8
                .          .
                .          .
    40         CP2.........
                .
                .
    43          .        OFF9
                .          .
                .          .
    49          .          .       OFF10
                .          .         .
                .          .         .
    55          .          .         .        ON2
                .          .         .         .
                .          .         .         .
    60         DB2.....................................
                V
                V
    63        RDB2

 (***) RUNOFF ALSO COMPUTED AT THIS LOCATION
1*****************************************
 *                                       *
 *   FLOOD HYDROGRAPH PACKAGE  (HEC-1)   *
 *             JUN  1998                 *
 *          VERSION 4.1                  *
 *                                       *
 *  RUN DATE   12FEB15  TIME  09:47:43   *
 *                                       *
 *****************************************

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

SLATER HANIFAN GROUP
NINETY-FIVE MANAGEMENT, LLC.
SKYE CANYON
MASTER DRAINAGE STUDY UPDATE
PMF DRAINAGE CONDITION - DETENTION BASIN 2

RETURN PERIOD ------- 100-YEAR
DISTRIBUTION -------- 6-HOUR SDN3
PROJECT NO. --------- OLY1401.004
FILENAME ------------ PMF-DB2.H1
DATE ---------------- 10/15/14
MODELED BY ---------- ETM

   SIX HOUR DEPTH-AREA REDUCTION FACTORS
   DRAINAGE AREA (MI^2)     RATIO
   0.0-0.49                 1.00
   0.5-0.99                 0.98
   1.0-1.99                 0.97

   21 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         500  NUMBER OF HYDROGRAPH ORDINATES
                      NDDATE      2   0  ENDING DATE
                      NDTIME        1735  ENDING TIME
                      ICENT           19  CENTURY MARK

                    COMPUTATION INTERVAL      .08 HOURS
                        TOTAL TIME BASE    41.58 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       .98       .97

*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***

          ***************
          *             *
63 KK     *      RDB2   *
          *             *
          ***************

65 KO          OUTPUT CONTROL VARIABLES
                    IPRNT          1  PRINT CONTROL
                    IPLOT          0  PLOT CONTROL
                    QSCAL          0.  HYDROGRAPH PLOT SCALE

               HYDROGRAPH ROUTING DATA

66 RS          STORAGE ROUTING
                    NSTPS          1  NUMBER OF SUBREACHES
                     ITYP        VOL  TYPE OF INITIAL CONDITION
                   RSVRIC      -1.00  INITIAL CONDITION
                        X        .00 WORKING R AND D COEFFICIENT

67 SV            STORAGE          .0       3.3       6.9      10.6      14.6      75.0      81.2     115.3     154.2

68 SE            ELEVATION    2993.00   2994.00   2995.00   2996.00   2997.00   3009.00   3010.00   3015.00   3020.00

69 SQ            DISCHARGE        0.       26.       36.       44.       89.      185.     1131.     2597.     4437.     6585.

70 SE            ELEVATION    2993.00   2998.00   2999.00   3000.00   3009.00   3010.00   3012.00   3014.00   3016.00   3018.00

                                                        ***

                                  COMPUTED STORAGE-OUTFLOW-ELEVATION DATA

                STORAGE          .00      3.27      6.87     10.63     14.56     19.60     24.64     29.68     75.03     81.24
                OUTFLOW          .00      5.12     10.24     15.35     20.47     25.59     36.20     44.33     88.66    184.56
              ELEVATION      2993.00   2994.00   2995.00   2996.00   2997.00   2998.00   2999.00   3000.00   3009.00   3010.00

                STORAGE        94.84    108.45    115.25    123.04    138.62    154.20
                OUTFLOW      1130.82   2597.02   3516.91   4436.80   6585.27   8733.74
              ELEVATION      3012.00   3014.00   3015.00   3016.00   3018.00   3020.00
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HYDROGRAPH AT STATION RDB2
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	2993.0	1		1355	168	53.	38.5	3001.8	2		0350	335	11.	7.5	2995.2
1		0005	2	0.	.0	2993.0	1		1400	169	53.	38.2	3001.7	2		0355	336	11.	7.4	2995.2
1		0010	3	0.	.0	2993.0	1		1405	170	52.	37.8	3001.6	2		0400	337	11.	7.4	2995.1
1		0015	4	0.	.0	2993.0	1		1410	171	52.	37.4	3001.5	2		0405	338	11.	7.3	2995.1
1		0020	5	0.	.0	2993.0	1		1415	172	52.	37.1	3001.5	2		0410	339	11.	7.2	2995.1
1		0025	6	0.	.0	2993.0	1		1420	173	51.	36.7	3001.4	2		0415	340	11.	7.1	2995.1
1		0030	7	0.	.0	2993.0	1		1425	174	51.	36.4	3001.3	2		0420	341	11.	7.1	2995.1
1		0035	8	0.	.0	2993.0	1		1430	175	51.	36.0	3001.3	2		0425	342	10.	7.0	2995.0
1		0040	9	0.	.0	2993.0	1		1435	176	50.	35.7	3001.2	2		0430	343	10.	6.9	2995.0
1		0045	10	0.	.0	2993.0	1		1440	177	50.	35.3	3001.1	2		0435	344	10.	6.9	2995.0
1		0050	11	0.	.0	2993.0	1		1445	178	50.	35.0	3001.1	2		0440	345	10.	6.8	2995.0
1		0055	12	0.	.0	2993.0	1		1450	179	49.	34.7	3001.0	2		0445	346	10.	6.7	2995.0
1		0100	13	0.	.0	2993.0	1		1455	180	49.	34.3	3000.9	2		0450	347	10.	6.7	2994.9
1		0105	14	0.	.0	2993.0	1		1500	181	49.	34.0	3000.9	2		0455	348	10.	6.6	2994.9
1		0110	15	0.	.0	2993.0	1		1505	182	48.	33.6	3000.8	2		0500	349	10.	6.5	2994.9
1		0115	16	0.	.0	2993.0	1		1510	183	48.	33.3	3000.7	2		0505	350	10.	6.4	2994.9
1		0120	17	0.	.0	2993.0	1		1515	184	48.	33.0	3000.7	2		0510	351	10.	6.4	2994.9
1		0125	18	0.	.1	2993.0	1		1520	185	47.	32.7	3000.6	2		0515	352	9.	6.3	2994.8
1		0130	19	0.	.1	2993.0	1		1525	186	47.	32.3	3000.5	2		0520	353	9.	6.3	2994.8
1		0135	20	0.	.1	2993.0	1		1530	187	47.	32.0	3000.5	2		0525	354	9.	6.2	2994.8
1		0140	21	0.	.2	2993.1	1		1535	188	46.	31.7	3000.4	2		0530	355	9.	6.1	2994.8
1		0145	22	1.	.4	2993.1	1		1540	189	46.	31.4	3000.3	2		0535	356	9.	6.1	2994.8
1		0150	23	1.	.5	2993.2	1		1545	190	46.	31.1	3000.3	2		0540	357	9.	6.0	2994.8
1		0155	24	1.	.7	2993.2	1		1550	191	45.	30.8	3000.2	2		0545	358	9.	5.9	2994.7
1		0200	25	2.	1.0	2993.3	1		1555	192	45.	30.4	3000.2	2		0550	359	9.	5.9	2994.7
1		0205	26	2.	1.4	2993.4	1		1600	193	45.	30.1	3000.1	2		0555	360	9.	5.8	2994.7
1		0210	27	3.	1.9	2993.6	1		1605	194	44.	29.8	3000.0	2		0600	361	9.	5.8	2994.7
1		0215	28	4.	2.7	2993.8	1		1610	195	44.	29.5	3000.0	2		0605	362	9.	5.7	2994.7
1		0220	29	6.	3.8	2994.1	1		1615	196	44.	29.2	2999.9	2		0610	363	8.	5.6	2994.7
1		0225	30	8.	5.1	2994.5	1		1620	197	43.	28.9	2999.8	2		0615	364	8.	5.6	2994.6
1		0230	31	10.	6.8	2995.0	1		1625	198	43.	28.6	2999.8	2		0620	365	8.	5.5	2994.6
1		0235	32	13.	8.9	2995.5	1		1630	199	42.	28.3	2999.7	2		0625	366	8.	5.5	2994.6
1		0240	33	16.	11.3	2996.2	1		1635	200	42.	28.0	2999.7	2		0630	367	8.	5.4	2994.6
1		0245	34	20.	14.1	2996.9	1		1640	201	41.	27.8	2999.6	2		0635	368	8.	5.4	2994.6

1	0250	35	23.	17.2	2997.5	*	1	1645	202	41.	27.5	2999.6	*	2	0640	369	8.	5.3	2994.6
1	0255	36	28.	20.6	2998.2	*	1	1650	203	40.	27.2	2999.5	*	2	0645	370	8.	5.2	2994.5
1	0300	37	35.	24.3	2998.9	*	1	1655	204	40.	26.9	2999.5	*	2	0650	371	8.	5.2	2994.5
1	0305	38	44.	29.7	3000.0	*	1	1700	205	39.	26.6	2999.4	*	2	0655	372	8.	5.1	2994.5
1	0310	39	55.	40.3	3002.1	*	1	1705	206	39.	26.4	2999.3	*	2	0700	373	8.	5.1	2994.5
1	0315	40	74.	59.6	3005.9	*	1	1710	207	39.	26.1	2999.3	*	2	0705	374	8.	5.0	2994.5
1	0320	41	556.	86.6	3010.8	*	1	1715	208	38.	25.8	2999.2	*	2	0710	375	8.	5.0	2994.5
1	0325	42	2942.	111.0	3014.4	*	1	1720	209	38.	25.6	2999.2	*	2	0715	376	7.	4.9	2994.5
1	0330	43	4761.	125.4	3016.3	*	1	1725	210	37.	25.3	2999.1	*	2	0720	377	7.	4.9	2994.4
1	0335	44	5718.	132.3	3017.2	*	1	1730	211	37.	25.1	2999.1	*	2	0725	378	7.	4.8	2994.4
1	0340	45	6077.	134.9	3017.5	*	1	1735	212	36.	24.8	2999.0	*	2	0730	379	7.	4.8	2994.4
1	0345	46	6104.	135.1	3017.6	*	1	1740	213	36.	24.6	2999.0	*	2	0735	380	7.	4.7	2994.4
1	0350	47	5939.	133.9	3017.4	*	1	1745	214	36.	24.3	2998.9	*	2	0740	381	7.	4.7	2994.4
1	0355	48	5656.	131.9	3017.1	*	1	1750	215	35.	24.1	2998.9	*	2	0745	382	7.	4.6	2994.4
1	0400	49	5286.	129.2	3016.8	*	1	1755	216	35.	23.8	2998.8	*	2	0750	383	7.	4.6	2994.4
1	0405	50	4840.	126.0	3016.4	*	1	1800	217	34.	23.6	2998.8	*	2	0755	384	7.	4.5	2994.3
1	0410	51	4345.	122.3	3015.9	*	1	1805	218	34.	23.4	2998.7	*	2	0800	385	7.	4.5	2994.3
1	0415	52	3863.	118.2	3015.4	*	1	1810	219	33.	23.1	2998.7	*	2	0805	386	7.	4.4	2994.3
1	0420	53	3363.	114.1	3014.8	*	1	1815	220	33.	22.9	2998.7	*	2	0810	387	7.	4.4	2994.3
1	0425	54	2881.	110.6	3014.3	*	1	1820	221	32.	22.7	2998.6	*	2	0815	388	7.	4.3	2994.3
1	0430	55	2498.	107.5	3013.9	*	1	1825	222	32.	22.5	2998.6	*	2	0820	389	7.	4.3	2994.3
1	0435	56	2201.	104.8	3013.5	*	1	1830	223	31.	22.3	2998.5	*	2	0825	390	7.	4.3	2994.3
1	0440	57	1927.	102.2	3013.1	*	1	1835	224	31.	22.0	2998.5	*	2	0830	391	6.	4.2	2994.3
1	0445	58	1683.	100.0	3012.8	*	1	1840	225	30.	21.8	2998.4	*	2	0835	392	6.	4.2	2994.2
1	0450	59	1474.	98.0	3012.5	*	1	1845	226	30.	21.6	2998.4	*	2	0840	393	6.	4.1	2994.2
1	0455	60	1298.	96.4	3012.2	*	1	1850	227	29.	21.4	2998.4	*	2	0845	394	6.	4.1	2994.2
1	0500	61	1152.	95.0	3012.0	*	1	1855	228	29.	21.2	2998.3	*	2	0850	395	6.	4.0	2994.2
1	0505	62	1060.	93.8	3011.8	*	1	1900	229	29.	21.0	2998.3	*	2	0855	396	6.	4.0	2994.2
1	0510	63	975.	92.6	3011.7	*	1	1905	230	28.	20.8	2998.2	*	2	0900	397	6.	3.9	2994.2
1	0515	64	892.	91.4	3011.5	*	1	1910	231	28.	20.6	2998.2	*	2	0905	398	6.	3.9	2994.2
1	0520	65	813.	90.3	3011.3	*	1	1915	232	27.	20.4	2998.2	*	2	0910	399	6.	3.9	2994.2
1	0525	66	738.	89.2	3011.2	*	1	1920	233	27.	20.3	2998.1	*	2	0915	400	6.	3.8	2994.2
1	0530	67	671.	88.2	3011.0	*	1	1925	234	27.	20.1	2998.1	*	2	0920	401	6.	3.8	2994.1
1	0535	68	609.	87.3	3010.9	*	1	1930	235	26.	19.9	2998.1	*	2	0925	402	6.	3.7	2994.1
1	0540	69	555.	86.6	3010.8	*	1	1935	236	26.	19.7	2998.0	*	2	0930	403	6.	3.7	2994.1
1	0545	70	508.	85.9	3010.7	*	1	1940	237	26.	19.5	2998.0	*	2	0935	404	6.	3.7	2994.1
1	0550	71	466.	85.3	3010.6	*	1	1945	238	25.	19.4	2998.0	*	2	0940	405	6.	3.6	2994.1
1	0555	72	431.	84.8	3010.5	*	1	1950	239	25.	19.2	2997.9	*	2	0945	406	6.	3.6	2994.1
1	0600	73	400.	84.3	3010.5	*	1	1955	240	25.	19.0	2997.9	*	2	0950	407	6.	3.5	2994.1
1	0605	74	373.	83.9	3010.4	*	1	2000	241	25.	18.8	2997.8	*	2	0955	408	5.	3.5	2994.1
1	0610	75	345.	83.5	3010.3	*	1	2005	242	25.	18.7	2997.8	*	2	1000	409	5.	3.5	2994.1
1	0615	76	316.	83.1	3010.3	*	1	2010	243	24.	18.5	2997.8	*	2	1005	410	5.	3.4	2994.0
1	0620	77	285.	82.7	3010.2	*	1	2015	244	24.	18.3	2997.7	*	2	1010	411	5.	3.4	2994.0
1	0625	78	253.	82.2	3010.1	*	1	2020	245	24.	18.2	2997.7	*	2	1015	412	5.	3.4	2994.0
1	0630	79	222.	81.8	3010.1	*	1	2025	246	24.	18.0	2997.7	*	2	1020	413	5.	3.3	2994.0
1	0635	80	193.	81.4	3010.0	*	1	2030	247	24.	17.8	2997.7	*	2	1025	414	5.	3.3	2994.0
1	0640	81	180.	80.9	3009.9	*	1	2035	248	24.	17.7	2997.6	*	2	1030	415	5.	3.3	2994.0
1	0645	82	172.	80.4	3009.9	*	1	2040	249	23.	17.5	2997.6	*	2	1035	416	5.	3.2	2994.0
1	0650	83	163.	79.8	3009.8	*	1	2045	250	23.	17.3	2997.6	*	2	1040	417	5.	3.2	2994.0
1	0655	84	153.	79.2	3009.7	*	1	2050	251	23.	17.2	2997.5	*	2	1045	418	5.	3.2	2994.0
1	0700	85	143.	78.5	3009.6	*	1	2055	252	23.	17.0	2997.5	*	2	1050	419	5.	3.1	2994.0
1	0705	86	133.	77.9	3009.5	*	1	2100	253	23.	16.9	2997.5	*	2	1055	420	5.	3.1	2993.9
1	0710	87	123.	77.2	3009.4	*	1	2105	254	23.	16.7	2997.4	*	2	1100	421	5.	3.1	2993.9
1	0715	88	113.	76.6	3009.3	*	1	2110	255	23.	16.6	2997.4	*	2	1105	422	5.	3.0	2993.9
1	0720	89	104.	76.0	3009.2	*	1	2115	256	22.	16.4	2997.4	*	2	1110	423	5.	3.0	2993.9
1	0725	90	95.	75.5	3009.1	*	1	2120	257	22.	16.3	2997.3	*	2	1115	424	5.	3.0	2993.9
1	0730	91	89.	74.9	3009.0	*	1	2125	258	22.	16.1	2997.3	*	2	1120	425	5.	2.9	2993.9
1	0735	92	88.	74.4	3008.9	*	1	2130	259	22.	15.9	2997.3	*	2	1125	426	5.	2.9	2993.9
1	0740	93	88.	73.9	3008.8	*	1	2135	260	22.	15.8	2997.2	*	2	1130	427	4.	2.9	2993.9
1	0745	94	87.	73.3	3008.7	*	1	2140	261	22.	15.6	2997.2	*	2	1135	428	4.	2.8	2993.9
1	0750	95	86.	72.8	3008.6	*	1	2145	262	21.	15.5	2997.2	*	2	1140	429	4.	2.8	2993.9
1	0755	96	86.	72.2	3008.4	*	1	2150	263	21.	15.4	2997.2	*	2	1145	430	4.	2.8	2993.8
1	0800	97	85.	71.6	3008.3	*	1	2155	264	21.	15.2	2997.1	*	2	1150	431	4.	2.7	2993.8
1	0805	98	85.	71.1	3008.2	*	1	2200	265	21.	15.1	2997.1	*	2	1155	432	4.	2.7	2993.8
1	0810	99	84.	70.5	3008.1	*	1	2205	266	21.	14.9	2997.1	*	2	1200	433	4.	2.7	2993.8
1	0815	100	84.	69.9	3008.0	*	1	2210	267	21.	14.8	2997.0	*	2	1205	434	4.	2.7	2993.8
1	0820	101	83.	69.4	3007.9	*	1	2215	268	21.	14.6	2997.0	*	2	1210	435	4.	2.6	2993.8
1	0825	102	83.	68.8	3007.8	*	1	2220	269	20.	14.5	2997.0	*	2	1215	436	4.	2.6	2993.8
1	0830	103	82.	68.3	3007.7	*	1	2225	270	20.	14.4	2996.9	*	2	1220	437	4.	2.6	2993.8
1	0835	104	81.	67.7	3007.5	*	1	2230	271	20.	14.2	2996.9	*	2	1225	438	4.	2.5	2993.8
1	0840	105	81.	67.1	3007.4	*	1	2235	272	20.	14.1	2996.9	*	2	1230	439	4.	2.5	2993.8
1	0845	106	80.	66.6	3007.3	*	1	2240	273	20.	13.9	2996.8	*	2	1235	440	4.	2.5	2993.8
1	0850	107	80.	66.0	3007.2	*	1	2245	274	19.	13.8	2996.8	*	2	1240	441	4.	2.5	2993.8
1	0855	108	79.	65.5	3007.1	*	1	2250	275	19.	13.7	2996.8	*	2	1245	442	4.	2.4	2993.7
1	0900	109	79.	65.0	3007.0	*	1	2255	276	19.	13.5	2996.7	*	2	1250	443	4.	2.4	2993.7
1	0905	110	78.	64.4	3006.9	*	1	2300	277	19.	13.4	2996.7	*	2	1255	444	4.	2.4	2993.7
1	0910	111	78.	63.9	3006.8	*	1	2305	278	19.	13.3	2996.7	*	2	1300	445	4.	2.4	2993.7
1	0915	112	77.	63.3	3006.7	*	1	2310	279	19.	13.2	2996.6	*	2	1305	446	4.	2.3	2993.7
1	0920	113	77.	62.8	3006.6	*	1	2315	280	18.	13.0	2996.6	*	2	1310	447	4.	2.3	2993.7
1	0925	114	76.	62.3	3006.5	*	1	2320	281	18.	12.9	2996.6	*	2	1315	448	4.	2.3	2993.7
1	0930	115	76.	61.8	3006.4	*	1	2325	282	18.	12.8	2996.5	*	2	1320	449	4.	2.3	2993.7
1	0935	116	75.	61.2	3006.3	*	1	2330	283	18.	12.6	2996.5	*	2	1325	450	3.	2.2	2993.7
1	0940	117	75.	60.7	3006.2	*	1	2335	284	18.	12.5	2996.5	*	2	1330	451	3.	2.2	2993.7
1	0945	118	74.	60.2	3006.1	*	1	2340	285	18.	12.4	2996.5	*	2	1335	452	3.	2.2	2993.7
1	0950	119	74.	59.7	3006.0	*	1	2345	286	18.	12.3	2996.4	*	2	1340	453	3.	2.2	2993.7
1	0955	120	73.	59.2	3005.9	*	1	2350	287	17.	12.2	2996.4	*	2	1345	454	3.	2.1	2993.7
1	1000	121	73.	58.7	3005.8	*	1	2355	288	17.	12.0	2996.4	*	2	1350	455	3.	2.1	2993.6
1	1005	122	72.	58.2	3005.7	*	2	0000	289	17.	11.9	2996.3	*	2	1355	456	3.	2.1	2993.6
1	1010	123	72.	57.7	3005.6	*	2	0005	290	17.	11.8	2996.3	*	2	1400	457	3.	2.1	2993.6
1	1015	124	71.	57.2	3005.5	*	2	0010	291	17.	11.7	2996.3	*	2	1405	458	3.	2.0	2993.6
1	1020	125	71.	56.7	3005.4	*	2	0015	292	17.	11.6	2996.2	*	2	1410	459	3.	2.0	2993.6
1	1025	126	70.	56.2	3005.3	*	2	0020	293	16.	11.5	2996.2	*	2	1415	460	3.	2.0	2993.6
1	1030	127	70.	55.8	3005.2	*	2	0025	294	16.	11.3	2996.2	*	2	1420	461	3.	2.0	2993.6
1	1035	128	69.	55.3	3005.1	*	2	0030	295	16.	11.2	2996.2	*	2	1425	462	3.	2.0	2993.6
1	1040	129	69.	54.8	3005.0	*	2	0035	296	16.	11.1	2996.1	*	2	1430	463	3.	1.9	2993.6
1	1045	130	68.	54.3	3004.9	*	2	0040	297	16.	11.0	2996.1	*	2	1435	464	3.	1.9	2993.6
1	1050	131	68.	53.9	3004.8	*	2	0045	298	16.	10.9	2996.1	*	2	1440	465	3.	1.9	2993.6
1	1055	132	68.	53.4	3004.7	*	2	0050	299	16.	10.8	2996.0	*	2	1445	466	3.	1.9	2993.6
1	1100	133	67.	52.9	3004.6	*	2	0055	300	15.	10.7	2996.0	*	2	1450	467	3.	1.9	2993.6
1	1105	134	67.	52.5	3004.5	*	2	0100	301	15.	10.6	2996.0	*	2	1455	468	3.	1.8	2993.6
1	1110	135	66.	52.0	3004.4	*	2	0105	302	15.	10.5	2996.0	*	2	1500	469	3.	1.8	2993.6
1	1115	136	66.	51.6	3004.3	*	2	0110	303	15.	10.4	2995.9	*	2	1505	470	3.	1.8	2993.6
1	1120	137	65.	51.1	3004.3	*	2	0115	304	15.	10.3	2995.9	*	2	1510	471	3.	1.8	2993.5
1	1125	138	65.	50.7	3004.2	*	2	0120	305	15.	10.2	2995.9	*	2	1515	472	3.	1.8	2993.5
1	1130	139	64.	50.2	3004.1	*	2	0125	306	15.	10.1	2995.9	*	2	1520	473	3.	1.7	2993.5
1	1135	140	64.	49.8	3004.0	*	2	0130	307	14.	10.0	2995.8	*	2	1525	474	3.	1.7	2993.5

1	1140	141	64.	49.3	3003.9	2	0135	308	14.	9.9	2995.8	2	1530	475	3.	1.7	2993.5
1	1145	142	63.	48.9	3003.8	2	0140	309	14.	9.8	2995.8	2	1535	476	3.	1.7	2993.5
1	1150	143	63.	48.5	3003.7	2	0145	310	14.	9.7	2995.7	2	1540	477	3.	1.7	2993.5
1	1155	144	62.	48.0	3003.6	2	0150	311	14.	9.6	2995.7	2	1545	478	3.	1.7	2993.5
1	1200	145	62.	47.6	3003.6	2	0155	312	14.	9.5	2995.7	2	1550	479	3.	1.6	2993.5
1	1205	146	61.	47.2	3003.5	2	0200	313	14.	9.4	2995.7	2	1555	480	3.	1.6	2993.5
1	1210	147	61.	46.8	3003.4	2	0205	314	14.	9.3	2995.6	2	1600	481	3.	1.6	2993.5
1	1215	148	61.	46.3	3003.3	2	0210	315	13.	9.2	2995.6	2	1605	482	2.	1.6	2993.5
1	1220	149	60.	45.9	3003.2	2	0215	316	13.	9.1	2995.6	2	1610	483	2.	1.6	2993.5
1	1225	150	60.	45.5	3003.1	2	0220	317	13.	9.0	2995.6	2	1615	484	2.	1.5	2993.5
1	1230	151	59.	45.1	3003.1	2	0225	318	13.	8.9	2995.5	2	1620	485	2.	1.5	2993.5
1	1235	152	59.	44.7	3003.0	2	0230	319	13.	8.8	2995.5	2	1625	486	2.	1.5	2993.5
1	1240	153	59.	44.3	3002.9	2	0235	320	13.	8.8	2995.5	2	1630	487	2.	1.5	2993.5
1	1245	154	58.	43.9	3002.8	2	0240	321	13.	8.7	2995.5	2	1635	488	2.	1.5	2993.5
1	1250	155	58.	43.5	3002.7	2	0245	322	13.	8.6	2995.5	2	1640	489	2.	1.5	2993.4
1	1255	156	57.	43.1	3002.7	2	0250	323	12.	8.5	2995.4	2	1645	490	2.	1.5	2993.4
1	1300	157	57.	42.7	3002.6	2	0255	324	12.	8.4	2995.4	2	1650	491	2.	1.4	2993.4
1	1305	158	57.	42.3	3002.5	2	0300	325	12.	8.3	2995.4	2	1655	492	2.	1.4	2993.4
1	1310	159	56.	41.9	3002.4	2	0305	326	12.	8.2	2995.4	2	1700	493	2.	1.4	2993.4
1	1315	160	56.	41.5	3002.4	2	0310	327	12.	8.2	2995.3	2	1705	494	2.	1.4	2993.4
1	1320	161	56.	41.1	3002.3	2	0315	328	12.	8.1	2995.3	2	1710	495	2.	1.4	2993.4
1	1325	162	55.	40.8	3002.2	2	0320	329	12.	8.0	2995.3	2	1715	496	2.	1.4	2993.4
1	1330	163	55.	40.4	3002.1	2	0325	330	12.	7.9	2995.3	2	1720	497	2.	1.3	2993.4
1	1335	164	54.	40.0	3002.0	2	0330	331	12.	7.8	2995.3	2	1725	498	2.	1.3	2993.4
1	1340	165	54.	39.6	3002.0	2	0335	332	11.	7.8	2995.2	2	1730	499	2.	1.3	2993.4
1	1345	166	54.	39.3	3001.9	2	0340	333	11.	7.7	2995.2	2	1735	500	2.	1.3	2993.4
1	1350	167	53.	38.9	3001.8	2	0345	334	11.	7.6	2995.2	2					

PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
			6-HR	24-HR	72-HR	41.58-HR
+ (CFS)	(HR)	(CFS)				
+ 6104.	3.75		1220.	334.	195.	195.
		(INCHES)	11.193	12.236	12.379	12.379
		(AC-FT)	605.	662.	669.	669.

PEAK STORAGE	TIME	MAXIMUM AVERAGE STORAGE			
		6-HR	24-HR	72-HR	41.58-HR
+ (AC-FT)	(HR)				
135.	3.75	88.	43.	26.	26.

PEAK STAGE	TIME	MAXIMUM AVERAGE STAGE			
		6-HR	24-HR	72-HR	41.58-HR
+ (FEET)	(HR)				
3017.55	3.75	3010.87	3002.44	2998.89	2998.89

CUMULATIVE AREA = 1.01 SQ MI

HYDROGRAPH AT STATION RDB2
PLAN 1, RATIO = .98

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	2993.0	1		1355	168	53.	38.5	3001.7	2		0350	335	11.	7.5	2995.2
1		0005	2	0.	.0	2993.0	1		1400	169	53.	38.1	3001.7	2		0355	336	11.	7.4	2995.2
1		0010	3	0.	.0	2993.0	1		1405	170	52.	37.8	3001.6	2		0400	337	11.	7.4	2995.1
1		0015	4	0.	.0	2993.0	1		1410	171	52.	37.4	3001.5	2		0405	338	11.	7.3	2995.1
1		0020	5	0.	.0	2993.0	1		1415	172	52.	37.0	3001.5	2		0410	339	11.	7.2	2995.1
1		0025	6	0.	.0	2993.0	1		1420	173	51.	36.7	3001.4	2		0415	340	11.	7.1	2995.1
1		0030	7	0.	.0	2993.0	1		1425	174	51.	36.3	3001.3	2		0420	341	11.	7.1	2995.1
1		0035	8	0.	.0	2993.0	1		1430	175	51.	36.0	3001.3	2		0425	342	10.	7.0	2995.0
1		0040	9	0.	.0	2993.0	1		1435	176	50.	35.6	3001.2	2		0430	343	10.	6.9	2995.0
1		0045	10	0.	.0	2993.0	1		1440	177	50.	35.3	3001.1	2		0435	344	10.	6.9	2995.0
1		0050	11	0.	.0	2993.0	1		1445	178	49.	35.0	3001.0	2		0440	345	10.	6.8	2995.0
1		0055	12	0.	.0	2993.0	1		1450	179	49.	34.6	3001.0	2		0445	346	10.	6.7	2995.0
1		0100	13	0.	.0	2993.0	1		1455	180	49.	34.3	3000.9	2		0450	347	10.	6.6	2994.9
1		0105	14	0.	.0	2993.0	1		1500	181	49.	33.9	3000.8	2		0455	348	10.	6.6	2994.9
1		0110	15	0.	.0	2993.0	1		1505	182	48.	33.6	3000.8	2		0500	349	10.	6.5	2994.9
1		0115	16	0.	.0	2993.0	1		1510	183	48.	33.3	3000.7	2		0505	350	10.	6.4	2994.9
1		0120	17	0.	.0	2993.0	1		1515	184	48.	33.0	3000.7	2		0510	351	10.	6.4	2994.9
1		0125	18	0.	.1	2993.0	1		1520	185	47.	32.6	3000.6	2		0515	352	9.	6.3	2994.8
1		0130	19	0.	.1	2993.0	1		1525	186	47.	32.3	3000.5	2		0520	353	9.	6.2	2994.8
1		0135	20	0.	.1	2993.0	1		1530	187	47.	32.0	3000.5	2		0525	354	9.	6.2	2994.8
1		0140	21	0.	.2	2993.1	1		1535	188	46.	31.7	3000.4	2		0530	355	9.	6.1	2994.8
1		0145	22	1.	.3	2993.1	1		1540	189	46.	31.3	3000.3	2		0535	356	9.	6.1	2994.8
1		0150	23	1.	.5	2993.1	1		1545	190	46.	31.0	3000.3	2		0540	357	9.	6.0	2994.8
1		0155	24	1.	.7	2993.2	1		1550	191	45.	30.7	3000.2	2		0545	358	9.	5.9	2994.7
1		0200	25	1.	.9	2993.3	1		1555	192	45.	30.4	3000.1	2		0550	359	9.	5.9	2994.7
1		0205	26	2.	1.3	2993.4	1		1600	193	45.	30.1	3000.1	2		0555	360	9.	5.8	2994.7
1		0210	27	3.	1.8	2993.6	1		1605	194	44.	29.8	3000.0	2		0600	361	9.	5.8	2994.7
1		0215	28	4.	2.5	2993.8	1		1610	195	44.	29.5	3000.0	2		0605	362	9.	5.7	2994.7
1		0220	29	6.	3.5	2994.1	1		1615	196	44.	29.2	2999.9	2		0610	363	8.	5.6	2994.7
1		0225	30	7.	4.9	2994.4	1		1620	197	43.	28.9	2999.8	2		0615	364	8.	5.6	2994.6
1		0230	31	10.	6.5	2994.9	1		1625	198	43.	28.6	2999.8	2		0620	365	8.	5.5	2994.6
1		0235	32	12.	8.5	2995.4	1		1630	199	42.	28.3	2999.7	2		0625	366	8.	5.5	2994.6
1		0240	33	16.	10.8	2996.1	1		1635	200	42.	28.0	2999.7	2		0630	367	8.	5.4	2994.6
1		0245	34	19.	13.5	2996.7	1		1640	201	41.	27.7	2999.6	2		0635	368	8.	5.3	2994.6
1		0250	35	22.	16.5	2997.4	1		1645	202	41.	27.4	2999.6	2		0640	369	8.	5.3	2994.6
1		0255	36	26.	19.8	2998.0	1		1650	203	40.	27.2	2999.5	2		0645	370	8.	5.2	2994.5
1		0300	37	34.	23.4	2998.8	1		1655	204	40.	26.9	2999.4	2		0650	371	8.	5.2	2994.5
1		0305	38	43.	28.6	2999.8	1		1700	205	39.	26.6	2999.4	2		0655	372	8.	5.1	2994.5
1		0310	39	53.	39.0	3001.8	1		1705	206	39.	26.3	2999.3	2		0700	373	8.	5.1	2994.5
1		0315	40	72.	57.8	3005.6	1		1710	207	39.	26.1	2999.3	2		0705	374	8.	5.0	2994.5
1		0320	41	418.	84.6	3010.5	1		1715	208	38.	25.8	2999.2	2		0710	375	8.	5.0	2994.5
1		0325	42	2726.	109.4	3014.1	1		1720	209	38.	25.6	2999.2	2		0715	376	7.	4.9	2994.5
1		0330	43	4595.	124.2	3016.1	1		1725	210	37.	25.3	2999.1	2		0720	377	7.	4.9	2994.4
1		0335	44	5570.	131.3	3017.1	1		1730	211	37.	25.0	2999.1	2		0725	378	7.	4.8	2994.4
1		0340	45	5935.	133.9	3017.4	1		1735	212	36.	24.8	2999.0	2		0730	379	7.	4.8	2994.4
1		0345	46	5967.	134.1	3017.4	1		1740	213	36.	24.5	2999.0	2		0735	380	7.	4.7	2994.4

1	0350	47	5808.	133.0	3017.3	*	1	1745	214	35.	24.3	2998.9	*	2	0740	381	7.	4.7	2994.4
1	0355	48	5533.	131.0	3017.0	*	1	1750	215	35.	24.1	2998.9	*	2	0745	382	7.	4.6	2994.4
1	0400	49	5172.	128.4	3016.7	*	1	1755	216	34.	23.8	2998.8	*	2	0750	383	7.	4.6	2994.4
1	0405	50	4736.	125.2	3016.3	*	1	1800	217	34.	23.6	2998.8	*	2	0755	384	7.	4.5	2994.3
1	0410	51	4261.	121.6	3015.8	*	1	1805	218	33.	23.3	2998.7	*	2	0800	385	7.	4.5	2994.3
1	0415	52	3784.	117.5	3015.3	*	1	1810	219	33.	23.1	2998.7	*	2	0805	386	7.	4.4	2994.3
1	0420	53	3286.	113.5	3014.7	*	1	1815	220	33.	22.9	2998.7	*	2	0810	387	7.	4.4	2994.3
1	0425	54	2818.	110.1	3014.2	*	1	1820	221	32.	22.7	2998.6	*	2	0815	388	7.	4.3	2994.3
1	0430	55	2452.	107.1	3013.8	*	1	1825	222	32.	22.4	2998.6	*	2	0820	389	7.	4.3	2994.3
1	0435	56	2158.	104.4	3013.4	*	1	1830	223	31.	22.2	2998.5	*	2	0825	390	7.	4.2	2994.3
1	0440	57	1887.	101.9	3013.0	*	1	1835	224	31.	22.0	2998.5	*	2	0830	391	6.	4.2	2994.3
1	0445	58	1649.	99.6	3012.7	*	1	1840	225	30.	21.8	2998.4	*	2	0835	392	6.	4.2	2994.2
1	0450	59	1444.	97.7	3012.4	*	1	1845	226	30.	21.6	2998.4	*	2	0840	393	6.	4.1	2994.2
1	0455	60	1271.	96.1	3012.2	*	1	1850	227	29.	21.4	2998.4	*	2	0845	394	6.	4.1	2994.2
1	0500	61	1129.	94.8	3012.0	*	1	1855	228	29.	21.2	2998.3	*	2	0850	395	6.	4.0	2994.2
1	0505	62	1044.	93.6	3011.8	*	1	1900	229	29.	21.0	2998.3	*	2	0855	396	6.	4.0	2994.2
1	0510	63	959.	92.4	3011.6	*	1	1905	230	28.	20.8	2998.2	*	2	0900	397	6.	3.9	2994.2
1	0515	64	876.	91.2	3011.5	*	1	1910	231	28.	20.6	2998.2	*	2	0905	398	6.	3.9	2994.2
1	0520	65	797.	90.0	3011.3	*	1	1915	232	27.	20.4	2998.2	*	2	0910	399	6.	3.9	2994.2
1	0525	66	724.	89.0	3011.1	*	1	1920	233	27.	20.2	2998.1	*	2	0915	400	6.	3.8	2994.2
1	0530	67	657.	88.0	3011.0	*	1	1925	234	27.	20.1	2998.1	*	2	0920	401	6.	3.8	2994.1
1	0535	68	597.	87.2	3010.9	*	1	1930	235	26.	19.9	2998.1	*	2	0925	402	6.	3.7	2994.1
1	0540	69	544.	86.4	3010.8	*	1	1935	236	26.	19.7	2998.0	*	2	0930	403	6.	3.7	2994.1
1	0545	70	497.	85.7	3010.7	*	1	1940	237	26.	19.5	2998.0	*	2	0935	404	6.	3.7	2994.1
1	0550	71	457.	85.2	3010.6	*	1	1945	238	25.	19.3	2997.9	*	2	0940	405	6.	3.6	2994.1
1	0555	72	422.	84.7	3010.5	*	1	1950	239	25.	19.2	2997.9	*	2	0945	406	6.	3.6	2994.1
1	0600	73	392.	84.2	3010.4	*	1	1955	240	25.	19.0	2997.9	*	2	0950	407	6.	3.5	2994.1
1	0605	74	365.	83.8	3010.4	*	1	2000	241	25.	18.8	2997.8	*	2	0955	408	5.	3.5	2994.1
1	0610	75	338.	83.4	3010.3	*	1	2005	242	25.	18.7	2997.8	*	2	1000	409	5.	3.5	2994.1
1	0615	76	310.	83.0	3010.3	*	1	2010	243	24.	18.5	2997.8	*	2	1005	410	5.	3.4	2994.0
1	0620	77	279.	82.6	3010.2	*	1	2015	244	24.	18.3	2997.7	*	2	1010	411	5.	3.4	2994.0
1	0625	78	248.	82.2	3010.1	*	1	2020	245	24.	18.1	2997.7	*	2	1015	412	5.	3.4	2994.0
1	0630	79	218.	81.7	3010.1	*	1	2025	246	24.	18.0	2997.7	*	2	1020	413	5.	3.3	2994.0
1	0635	80	189.	81.3	3010.0	*	1	2030	247	24.	17.8	2997.6	*	2	1025	414	5.	3.3	2994.0
1	0640	81	179.	80.9	3009.9	*	1	2035	248	24.	17.7	2997.6	*	2	1030	415	5.	3.3	2994.0
1	0645	82	171.	80.3	3009.9	*	1	2040	249	23.	17.5	2997.6	*	2	1035	416	5.	3.2	2994.0
1	0650	83	162.	79.8	3009.8	*	1	2045	250	23.	17.3	2997.6	*	2	1040	417	5.	3.2	2994.0
1	0655	84	152.	79.1	3009.7	*	1	2050	251	23.	17.2	2997.5	*	2	1045	418	5.	3.2	2994.0
1	0700	85	142.	78.5	3009.6	*	1	2055	252	23.	17.0	2997.5	*	2	1050	419	5.	3.1	2994.0
1	0705	86	132.	77.8	3009.4	*	1	2100	253	23.	16.9	2997.5	*	2	1055	420	5.	3.1	2993.9
1	0710	87	122.	77.2	3009.3	*	1	2105	254	23.	16.7	2997.4	*	2	1100	421	5.	3.1	2993.9
1	0715	88	112.	76.6	3009.2	*	1	2110	255	22.	16.5	2997.4	*	2	1105	422	5.	3.0	2993.9
1	0720	89	103.	76.0	3009.2	*	1	2115	256	22.	16.4	2997.4	*	2	1110	423	5.	3.0	2993.9
1	0725	90	95.	75.4	3009.1	*	1	2120	257	22.	16.2	2997.3	*	2	1115	424	5.	3.0	2993.9
1	0730	91	89.	74.9	3009.0	*	1	2125	258	22.	16.1	2997.3	*	2	1120	425	5.	2.9	2993.9
1	0735	92	88.	74.3	3008.9	*	1	2130	259	22.	15.9	2997.3	*	2	1125	426	5.	2.9	2993.9
1	0740	93	87.	73.8	3008.8	*	1	2135	260	22.	15.8	2997.2	*	2	1130	427	4.	2.9	2993.9
1	0745	94	87.	73.3	3008.6	*	1	2140	261	22.	15.6	2997.2	*	2	1135	428	4.	2.8	2993.9
1	0750	95	86.	72.7	3008.5	*	1	2145	262	21.	15.5	2997.2	*	2	1140	429	4.	2.8	2993.9
1	0755	96	86.	72.1	3008.4	*	1	2150	263	21.	15.3	2997.2	*	2	1145	430	4.	2.8	2993.8
1	0800	97	85.	71.6	3008.3	*	1	2155	264	21.	15.2	2997.1	*	2	1150	431	4.	2.7	2993.8
1	0805	98	85.	71.0	3008.2	*	1	2200	265	21.	15.0	2997.1	*	2	1155	432	4.	2.7	2993.8
1	0810	99	84.	70.5	3008.1	*	1	2205	266	21.	14.9	2997.1	*	2	1200	433	4.	2.7	2993.8
1	0815	100	84.	69.9	3008.0	*	1	2210	267	21.	14.8	2997.0	*	2	1205	434	4.	2.7	2993.8
1	0820	101	83.	69.3	3007.9	*	1	2215	268	21.	14.6	2997.0	*	2	1210	435	4.	2.6	2993.8
1	0825	102	83.	68.8	3007.8	*	1	2220	269	20.	14.5	2997.0	*	2	1215	436	4.	2.6	2993.8
1	0830	103	82.	68.2	3007.6	*	1	2225	270	20.	14.3	2996.9	*	2	1220	437	4.	2.6	2993.8
1	0835	104	81.	67.6	3007.5	*	1	2230	271	20.	14.2	2996.9	*	2	1225	438	4.	2.5	2993.8
1	0840	105	81.	67.1	3007.4	*	1	2235	272	20.	14.1	2996.9	*	2	1230	439	4.	2.5	2993.8
1	0845	106	80.	66.5	3007.3	*	1	2240	273	20.	13.9	2996.8	*	2	1235	440	4.	2.5	2993.8
1	0850	107	80.	66.0	3007.2	*	1	2245	274	19.	13.8	2996.8	*	2	1240	441	4.	2.5	2993.8
1	0855	108	79.	65.4	3007.1	*	1	2250	275	19.	13.7	2996.8	*	2	1245	442	4.	2.4	2993.7
1	0900	109	79.	64.9	3007.0	*	1	2255	276	19.	13.5	2996.7	*	2	1250	443	4.	2.4	2993.7
1	0905	110	78.	64.4	3006.9	*	1	2300	277	19.	13.4	2996.7	*	2	1255	444	4.	2.4	2993.7
1	0910	111	78.	63.8	3006.8	*	1	2305	278	19.	13.3	2996.7	*	2	1300	445	4.	2.4	2993.7
1	0915	112	77.	63.3	3006.7	*	1	2310	279	19.	13.1	2996.6	*	2	1305	446	4.	2.3	2993.7
1	0920	113	77.	62.8	3006.6	*	1	2315	280	18.	13.0	2996.6	*	2	1310	447	4.	2.3	2993.7
1	0925	114	76.	62.2	3006.5	*	1	2320	281	18.	12.9	2996.6	*	2	1315	448	4.	2.3	2993.7
1	0930	115	76.	61.7	3006.4	*	1	2325	282	18.	12.8	2996.5	*	2	1320	449	4.	2.3	2993.7
1	0935	116	75.	61.2	3006.3	*	1	2330	283	18.	12.6	2996.5	*	2	1325	450	3.	2.2	2993.7
1	0940	117	75.	60.7	3006.2	*	1	2335	284	18.	12.5	2996.5	*	2	1330	451	3.	2.2	2993.7
1	0945	118	74.	60.2	3006.0	*	1	2340	285	18.	12.4	2996.4	*	2	1335	452	3.	2.2	2993.7
1	0950	119	74.	59.7	3005.9	*	1	2345	286	17.	12.3	2996.4	*	2	1340	453	3.	2.2	2993.7
1	0955	120	73.	59.1	3005.8	*	1	2350	287	17.	12.1	2996.4	*	2	1345	454	3.	2.1	2993.7
1	1000	121	73.	58.6	3005.7	*	1	2355	288	17.	12.0	2996.4	*	2	1350	455	3.	2.1	2993.6
1	1005	122	72.	58.1	3005.6	*	2	0000	289	17.	11.9	2996.3	*	2	1355	456	3.	2.1	2993.6
1	1010	123	72.	57.7	3005.6	*	2	0005	290	17.	11.8	2996.3	*	2	1400	457	3.	2.1	2993.6
1	1015	124	71.	57.2	3005.5	*	2	0010	291	17.	11.7	2996.3	*	2	1405	458	3.	2.0	2993.6
1	1020	125	71.	56.7	3005.4	*	2	0015	292	17.	11.6	2996.2	*	2	1410	459	3.	2.0	2993.6
1	1025	126	70.	56.2	3005.3	*	2	0020	293	16.	11.5	2996.2	*	2	1415	460	3.	2.0	2993.6
1	1030	127	70.	55.7	3005.2	*	2	0025	294	16.	11.3	2996.2	*	2	1420	461	3.	2.0	2993.6
1	1035	128	69.	55.2	3005.1	*	2	0030	295	16.	11.2	2996.2	*	2	1425	462	3.	2.0	2993.6
1	1040	129	69.	54.7	3005.0	*	2	0035	296	16.	11.1	2996.1	*	2	1430	463	3.	1.9	2993.6
1	1045	130	68.	54.3	3004.9	*	2	0040	297	16.	11.0	2996.1	*	2	1435	464	3.	1.9	2993.6
1	1050	131	68.	53.8	3004.8	*	2	0045	298	16.	10.9	2996.1	*	2	1440	465	3.	1.9	2993.6
1	1055	132	67.	53.3	3004.7	*	2	0050	299	16.	10.8	2996.0	*	2	1445	466	3.	1.9	2993.6
1	1100	133	67.	52.9	3004.6	*	2	0055	300	15.	10.7	2996.0	*	2	1450	467	3.	1.9	2993.6
1	1105	134	67.	52.4	3004.5	*	2	0100	301	15.	10.6	2996.0	*	2	1455	468	3.	1.8	2993.6
1	1110	135	66.	52.0	3004.4	*	2	0105	302	15.	10.5	2996.0	*	2	1500	469	3.	1.8	2993.6
1	1115	136	66.	51.5	3004.3	*	2	0110	303	15.	10.4	2995.9	*	2	1505	470	3.	1.8	2993.6
1	1120	137	65.	51.1	3004.2	*	2	0115	304	15.	10.3	2995.9	*	2	1510	471	3.	1.8	2993.5
1	1125	138	65.	50.6	3004.2	*	2	0120	305	15.	10.2	2995.9	*	2	1515	472	3.	1.8	2993.5
1	1130	139	64.	50.2	3004.1	*	2	0125	306	15.	10.1	2995.8	*	2	1520	473	3.	1.7	2993.5
1	1135	140	64.	49.7	3004.0	*	2	0130	307	14.	10.0	2995.8	*	2	1525	474	3.	1.7	2993.5
1	1140	141	63.	49.3	3003.9	*	2	0135	308	14.	9.9	2995.8	*	2	1530	475	3.	1.7	2993.5
1	1145	142	63.	48.8	3003.8	*	2	0140	309	14.	9.8	2995.8	*	2	1535	476	3.	1.7	2993.5
1	1150	143	63.	48.4	3003.7	*	2	0145	310	14.	9.7	2995.7	*	2	1540	477	3.	1.7	2993.5
1	1155	144	62.	48.0	3003.6	*	2	0150	311	14.	9.6	2995.7	*	2	1545	478	3.	1.6	2993.5
1	1200	145	62.	47.6	3003.5	*	2	0155	312	14.	9.5	2995.7	*	2	1550	479	3.	1.6	2993.5
1	1205	146	61.	47.1	3003.5	*	2	0200	313	14.	9.4	2995.7	*	2	1555	480	3.	1.6	2993.5
1	1210	147	61.	46.7	3003.4	*	2	0205	314	14.	9.3	2995.6	*	2	1600	481	3.	1.6	2993.5
1	1215	148	61.	46.3	3003.3	*	2	0210	315	13.	9.2	2995.6	*	2	1605	482	2.	1.6	2993.5
1	1220	149	60.	45.9	3003.2	*	2	0215	316	13.	9.1	2995.6	*	2	1610	483	2.	1.6	2993.5
1	1225	150	60.	45.5	3003.1	*	2	0220	317	13.	9.0	2995.6	*	2	1615	484	2.	1.5	2993.5
1	1230	151	59.	45.1	3003.1	*	2	0225	318	13.	8.9	2995.5	*	2	1620	485	2.	1.5	2993.5
1	1235	152	59.	44.6	3003.0	*	2	0230	319	13.	8.8	2995.5	*	2	1625	486	2.	1.5	2993.5

1	1240	153	59.	44.2	3002.9	*	2	0235	320	13.	8.7	2995.5	*	2	1630	487	2.	1.5	2993.5
1	1245	154	58.	43.8	3002.8	*	2	0240	321	13.	8.7	2995.5	*	2	1635	488	2.	1.5	2993.5
1	1250	155	58.	43.4	3002.7	*	2	0245	322	13.	8.6	2995.5	*	2	1640	489	2.	1.5	2993.4
1	1255	156	57.	43.0	3002.7	*	2	0250	323	12.	8.5	2995.4	*	2	1645	490	2.	1.4	2993.4
1	1300	157	57.	42.6	3002.6	*	2	0255	324	12.	8.4	2995.4	*	2	1650	491	2.	1.4	2993.4
1	1305	158	57.	42.3	3002.5	*	2	0300	325	12.	8.3	2995.4	*	2	1655	492	2.	1.4	2993.4
1	1310	159	56.	41.9	3002.4	*	2	0305	326	12.	8.2	2995.4	*	2	1700	493	2.	1.4	2993.4
1	1315	160	56.	41.5	3002.3	*	2	0310	327	12.	8.1	2995.3	*	2	1705	494	2.	1.4	2993.4
1	1320	161	55.	41.1	3002.3	*	2	0315	328	12.	8.1	2995.3	*	2	1710	495	2.	1.4	2993.4
1	1325	162	55.	40.7	3002.2	*	2	0320	329	12.	8.0	2995.3	*	2	1715	496	2.	1.4	2993.4
1	1330	163	55.	40.3	3002.1	*	2	0325	330	12.	7.9	2995.3	*	2	1720	497	2.	1.3	2993.4
1	1335	164	54.	40.0	3002.0	*	2	0330	331	12.	7.8	2995.3	*	2	1725	498	2.	1.3	2993.4
1	1340	165	54.	39.6	3002.0	*	2	0335	332	11.	7.7	2995.2	*	2	1730	499	2.	1.3	2993.4
1	1345	166	54.	39.2	3001.9	*	2	0340	333	11.	7.7	2995.2	*	2	1735	500	2.	1.3	2993.4
1	1350	167	53.	38.9	3001.8	*	2	0345	334	11.	7.6	2995.2	*						
						*							*						

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PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
			6-HR	24-HR	72-HR	41.58-HR
+ (CFS)	(HR)	(CFS)				
+ 5967.	3.75		1190.	326.	190.	190.
		(INCHES)	10.916	11.957	12.100	12.100
		(AC-FT)	590.	647.	654.	654.

PEAK STORAGE	TIME	MAXIMUM AVERAGE STORAGE			
		6-HR	24-HR	72-HR	41.58-HR
+ (AC-FT)	(HR)				
+ 134.	3.75	88.	43.	26.	26.

PEAK STAGE	TIME	MAXIMUM AVERAGE STAGE			
		6-HR	24-HR	72-HR	41.58-HR
+ (FEET)	(HR)				
+ 3017.42	3.75	3010.83	3002.42	2998.87	2998.87

CUMULATIVE AREA = 1.01 SQ MI

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HYDROGRAPH AT STATION RDB2
PLAN 1, RATIO = .97

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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	2993.0	1		1355	168	53.	38.5	3001.7	2		0350	335	11.	7.5	2995.2
1		0005	2	0.	.0	2993.0	1		1400	169	53.	38.1	3001.7	2		0355	336	11.	7.4	2995.1
1		0010	3	0.	.0	2993.0	1		1405	170	52.	37.7	3001.6	2		0400	337	11.	7.4	2995.1
1		0015	4	0.	.0	2993.0	1		1410	171	52.	37.4	3001.5	2		0405	338	11.	7.3	2995.1
1		0020	5	0.	.0	2993.0	1		1415	172	52.	37.0	3001.5	2		0410	339	11.	7.2	2995.1
1		0025	6	0.	.0	2993.0	1		1420	173	51.	36.7	3001.4	2		0415	340	11.	7.1	2995.1
1		0030	7	0.	.0	2993.0	1		1425	174	51.	36.3	3001.3	2		0420	341	10.	7.1	2995.1
1		0035	8	0.	.0	2993.0	1		1430	175	50.	36.0	3001.2	2		0425	342	10.	7.0	2995.0
1		0040	9	0.	.0	2993.0	1		1435	176	50.	35.6	3001.2	2		0430	343	10.	6.9	2995.0
1		0045	10	0.	.0	2993.0	1		1440	177	50.	35.3	3001.1	2		0435	344	10.	6.8	2995.0
1		0050	11	0.	.0	2993.0	1		1445	178	49.	34.9	3001.0	2		0440	345	10.	6.8	2995.0
1		0055	12	0.	.0	2993.0	1		1450	179	49.	34.6	3001.0	2		0445	346	10.	6.7	2995.0
1		0100	13	0.	.0	2993.0	1		1455	180	49.	34.3	3000.9	2		0450	347	10.	6.6	2994.9
1		0105	14	0.	.0	2993.0	1		1500	181	48.	33.9	3000.8	2		0455	348	10.	6.6	2994.9
1		0110	15	0.	.0	2993.0	1		1505	182	48.	33.6	3000.8	2		0500	349	10.	6.5	2994.9
1		0115	16	0.	.0	2993.0	1		1510	183	48.	33.3	3000.7	2		0505	350	10.	6.4	2994.9
1		0120	17	0.	.0	2993.0	1		1515	184	48.	32.9	3000.6	2		0510	351	10.	6.4	2994.9
1		0125	18	0.	.0	2993.0	1		1520	185	47.	32.6	3000.6	2		0515	352	9.	6.3	2994.8
1		0130	19	0.	.1	2993.0	1		1525	186	47.	32.3	3000.5	2		0520	353	9.	6.2	2994.8
1		0135	20	0.	.1	2993.0	1		1530	187	47.	32.0	3000.5	2		0525	354	9.	6.2	2994.8
1		0140	21	0.	.2	2993.1	1		1535	188	46.	31.6	3000.4	2		0530	355	9.	6.1	2994.8
1		0145	22	0.	.3	2993.1	1		1540	189	46.	31.3	3000.3	2		0535	356	9.	6.1	2994.8
1		0150	23	1.	.5	2993.1	1		1545	190	46.	31.0	3000.3	2		0540	357	9.	6.0	2994.8
1		0155	24	1.	.7	2993.2	1		1550	191	45.	30.7	3000.2	2		0545	358	9.	5.9	2994.7
1		0200	25	1.	.9	2993.3	1		1555	192	45.	30.4	3000.1	2		0550	359	9.	5.9	2994.7
1		0205	26	2.	1.2	2993.4	1		1600	193	45.	30.1	3000.1	2		0555	360	9.	5.8	2994.7
1		0210	27	3.	1.7	2993.5	1		1605	194	44.	29.8	3000.0	2		0600	361	9.	5.7	2994.7
1		0215	28	4.	2.5	2993.8	1		1610	195	44.	29.5	3000.0	2		0605	362	9.	5.7	2994.7
1		0220	29	5.	3.4	2994.0	1		1615	196	44.	29.2	2999.9	2		0610	363	8.	5.6	2994.7
1		0225	30	7.	4.7	2994.4	1		1620	197	43.	28.9	2999.8	2		0615	364	8.	5.6	2994.6
1		0230	31	9.	6.3	2994.9	1		1625	198	43.	28.6	2999.8	2		0620	365	8.	5.5	2994.6
1		0235	32	12.	8.3	2995.4	1		1630	199	42.	28.3	2999.7	2		0625	366	8.	5.5	2994.6
1		0240	33	15.	10.6	2996.0	1		1635	200	42.	28.0	2999.7	2		0630	367	8.	5.4	2994.6
1		0245	34	19.	13.2	2996.7	1		1640	201	41.	27.7	2999.6	2		0635	368	8.	5.3	2994.6
1		0250	35	22.	16.2	2997.3	1		1645	202	41.	27.4	2999.6	2		0640	369	8.	5.3	2994.6
1		0255	36	25.	19.4	2998.0	1		1650	203	40.	27.2	2999.5	2		0645	370	8.	5.2	2994.5
1		0300	37	33.	22.9	2998.7	1		1655	204	40.	26.9	2999.4	2		0650	371	8.	5.2	2994.5
1		0305	38	42.	28.1	2999.7	1		1700	205	39.	26.6	2999.4	2		0655	372	8.	5.1	2994.5
1		0310	39	53.	38.3	3001.7	1		1705	206	39.	26.3	2999.3	2		0700	373	8.	5.1	2994.5
1		0315	40	71.	56.9	3005.4	1		1710	207	39.	26.1	2999.3	2		0705	374	8.	5.0	2994.5
1		0320	41	349.	83.6	3010.3	1		1715	208	38.	25.8	2999.2	2		0710	375	8.	5.0	2994.5
1		0325	42	2618.	108.6	3014.0	1		1720	209	38.	25.5	2999.2	2		0715	376	7.	4.9	2994.5
1		0330	43	4513.	123.6	3016.1	1		1725	210	37.	25.3	2999.1	2		0720	377	7.	4.9	2994.4
1		0335	44	5496.	130.7	3017.0	1		1730	211	37.	25.0	2999.1	2		0725	378	7.	4.8	2994.4
1		0340	45	5864.	133.4	3017.3	1		1735	212	36.	24.8	2999.0	2		0730	379	7.	4.8	2994.4
1		0345	46	5899.	133.6	3017.4	1		1740	213	36.	24.5	2999.0	2		0735	380	7.	4.7	2994.4
1		0350	47	5743.	132.5	3017.2	1		1745	214	35.	24.3	2998.9	2		0740	381	7.	4.7	2994.4
1		0355	48	5471.	130.5	3017.0	1		1750	215	35.	24.0	2998.9	2		0745	382	7.	4.6	2994.4
1		0400	49	5114.	128.0	3016.6	1		1755	216	34.	23.8	2998.8	2		0750	383	7.	4.6	2994.4
1		0405	50	4684.	124.8	3016.2	1		1800	217	34.	23.6	2998.8	2		0755	384	7.	4.5	2994.3
1		0410	51	4219.	121.2	3015.8	1		1805	218	33.	23.3	2998.7	2		0800	385	7.	4.5	2994.3
1		0415	52	3745.	117.2	3015.2	1		1810	219	33.	23.1	2998.7	2		0805	386	7.	4.4	2994.3
1		0420	53	3247.	113.3	3014.7	1		1815	220	32.	22.9	2998.7	2		0810	387	7.	4.4	2994.3
1		0425	54	2787.	109.8	3014.2	1		1820	221	32.	22.7	2998.6	2		0815	388	7.	4.3	2994.3
1		0430	55	2430.	106.9	3013.8	1		1825	222	32.	22.4	2998.6	2		0820	389	7.	4.3	2994.3
1		0435	56	2136.	104.2	3013.4	1		1830	223	31.	22.2	2998.5	2		0825	390	7.	4.2	2994.3
1		0440	57	1868.	101.7	3013.0	1		1835	224	31.	22.0	2998.5	2		0830	391	6.	4.2	2994.3
1		0445	58	1631.	99.5	3012.7	1		1840	225	30.	21.8	2998.4	2		0835	392	6.	4.2	2994.2

1	0450	59	1428.	97.6	3012.4	*	1	1845	226	30.	21.6	2998.4	*	2	0840	393	6.	4.1	2994.2
1	0455	60	1258.	96.0	3012.2	*	1	1850	227	29.	21.4	2998.4	*	2	0845	394	6.	4.1	2994.2
1	0500	61	1120.	94.7	3012.0	*	1	1855	228	29.	21.2	2998.3	*	2	0850	395	6.	4.0	2994.2
1	0505	62	1035.	93.5	3011.8	*	1	1900	229	29.	21.0	2998.3	*	2	0855	396	6.	4.0	2994.2
1	0510	63	950.	92.2	3011.6	*	1	1905	230	28.	20.8	2998.2	*	2	0900	397	6.	3.9	2994.2
1	0515	64	867.	91.1	3011.4	*	1	1910	231	28.	20.6	2998.2	*	2	0905	398	6.	3.9	2994.2
1	0520	65	789.	89.9	3011.3	*	1	1915	232	27.	20.4	2998.2	*	2	0910	399	6.	3.9	2994.2
1	0525	66	717.	88.9	3011.1	*	1	1920	233	27.	20.2	2998.1	*	2	0915	400	6.	3.8	2994.2
1	0530	67	650.	87.9	3011.0	*	1	1925	234	27.	20.0	2998.1	*	2	0920	401	6.	3.8	2994.1
1	0535	68	591.	87.1	3010.9	*	1	1930	235	26.	19.9	2998.1	*	2	0925	402	6.	3.7	2994.1
1	0540	69	538.	86.3	3010.7	*	1	1935	236	26.	19.7	2998.0	*	2	0930	403	6.	3.7	2994.1
1	0545	70	492.	85.7	3010.7	*	1	1940	237	25.	19.5	2998.0	*	2	0935	404	6.	3.7	2994.1
1	0550	71	452.	85.1	3010.6	*	1	1945	238	25.	19.3	2997.9	*	2	0940	405	6.	3.6	2994.1
1	0555	72	418.	84.6	3010.5	*	1	1950	239	25.	19.2	2997.9	*	2	0945	406	6.	3.6	2994.1
1	0600	73	388.	84.2	3010.4	*	1	1955	240	25.	19.0	2997.9	*	2	0950	407	6.	3.5	2994.1
1	0605	74	361.	83.8	3010.4	*	1	2000	241	25.	18.8	2997.8	*	2	0955	408	5.	3.5	2994.1
1	0610	75	335.	83.4	3010.3	*	1	2005	242	25.	18.6	2997.8	*	2	1000	409	5.	3.5	2994.1
1	0615	76	306.	83.0	3010.3	*	1	2010	243	24.	18.5	2997.8	*	2	1005	410	5.	3.4	2994.0
1	0620	77	276.	82.6	3010.2	*	1	2015	244	24.	18.3	2997.7	*	2	1010	411	5.	3.4	2994.0
1	0625	78	246.	82.1	3010.1	*	1	2020	245	24.	18.1	2997.7	*	2	1015	412	5.	3.4	2994.0
1	0630	79	216.	81.7	3010.1	*	1	2025	246	24.	18.0	2997.7	*	2	1020	413	5.	3.3	2994.0
1	0635	80	187.	81.3	3010.0	*	1	2030	247	24.	17.8	2997.6	*	2	1025	414	5.	3.3	2994.0
1	0640	81	178.	80.8	3009.9	*	1	2035	248	24.	17.6	2997.6	*	2	1030	415	5.	3.3	2994.0
1	0645	82	170.	80.3	3009.9	*	1	2040	249	23.	17.5	2997.6	*	2	1035	416	5.	3.2	2994.0
1	0650	83	161.	79.7	3009.8	*	1	2045	250	23.	17.3	2997.5	*	2	1040	417	5.	3.2	2994.0
1	0655	84	151.	79.1	3009.7	*	1	2050	251	23.	17.2	2997.5	*	2	1045	418	5.	3.1	2994.0
1	0700	85	141.	78.4	3009.5	*	1	2055	252	23.	17.0	2997.5	*	2	1050	419	5.	3.1	2994.0
1	0705	86	131.	77.8	3009.4	*	1	2100	253	23.	16.8	2997.5	*	2	1055	420	5.	3.1	2993.9
1	0710	87	121.	77.1	3009.3	*	1	2105	254	23.	16.7	2997.4	*	2	1100	421	5.	3.0	2993.9
1	0715	88	112.	76.5	3009.2	*	1	2110	255	22.	16.5	2997.4	*	2	1105	422	5.	3.0	2993.9
1	0720	89	103.	75.9	3009.1	*	1	2115	256	22.	16.4	2997.4	*	2	1110	423	5.	3.0	2993.9
1	0725	90	94.	75.4	3009.1	*	1	2120	257	22.	16.2	2997.3	*	2	1115	424	5.	3.0	2993.9
1	0730	91	88.	74.9	3009.0	*	1	2125	258	22.	16.1	2997.3	*	2	1120	425	5.	2.9	2993.9
1	0735	92	88.	74.3	3008.9	*	1	2130	259	22.	15.9	2997.3	*	2	1125	426	5.	2.9	2993.9
1	0740	93	87.	73.8	3008.8	*	1	2135	260	22.	15.8	2997.2	*	2	1130	427	4.	2.9	2993.9
1	0745	94	87.	73.2	3008.6	*	1	2140	261	22.	15.6	2997.2	*	2	1135	428	4.	2.8	2993.9
1	0750	95	86.	72.7	3008.5	*	1	2145	262	21.	15.5	2997.2	*	2	1140	429	4.	2.8	2993.9
1	0755	96	86.	72.1	3008.4	*	1	2150	263	21.	15.3	2997.2	*	2	1145	430	4.	2.8	2993.8
1	0800	97	85.	71.6	3008.3	*	1	2155	264	21.	15.2	2997.1	*	2	1150	431	4.	2.7	2993.8
1	0805	98	85.	71.0	3008.2	*	1	2200	265	21.	15.0	2997.1	*	2	1155	432	4.	2.7	2993.8
1	0810	99	84.	70.4	3008.1	*	1	2205	266	21.	14.9	2997.1	*	2	1200	433	4.	2.7	2993.8
1	0815	100	84.	69.9	3008.0	*	1	2210	267	21.	14.8	2997.0	*	2	1205	434	4.	2.6	2993.8
1	0820	101	83.	69.3	3007.9	*	1	2215	268	21.	14.6	2997.0	*	2	1210	435	4.	2.6	2993.8
1	0825	102	83.	68.7	3007.8	*	1	2220	269	20.	14.5	2997.0	*	2	1215	436	4.	2.6	2993.8
1	0830	103	82.	68.2	3007.6	*	1	2225	270	20.	14.3	2996.9	*	2	1220	437	4.	2.6	2993.8
1	0835	104	81.	67.6	3007.5	*	1	2230	271	20.	14.2	2996.9	*	2	1225	438	4.	2.5	2993.8
1	0840	105	81.	67.1	3007.4	*	1	2235	272	20.	14.1	2996.9	*	2	1230	439	4.	2.5	2993.8
1	0845	106	80.	66.5	3007.3	*	1	2240	273	20.	13.9	2996.8	*	2	1235	440	4.	2.5	2993.8
1	0850	107	80.	66.0	3007.2	*	1	2245	274	19.	13.8	2996.8	*	2	1240	441	4.	2.5	2993.8
1	0855	108	79.	65.4	3007.1	*	1	2250	275	19.	13.7	2996.8	*	2	1245	442	4.	2.4	2993.7
1	0900	109	79.	64.9	3007.0	*	1	2255	276	19.	13.5	2996.7	*	2	1250	443	4.	2.4	2993.7
1	0905	110	78.	64.3	3006.9	*	1	2300	277	19.	13.4	2996.7	*	2	1255	444	4.	2.4	2993.7
1	0910	111	78.	63.8	3006.8	*	1	2305	278	19.	13.3	2996.7	*	2	1300	445	4.	2.4	2993.7
1	0915	112	77.	63.3	3006.7	*	1	2310	279	19.	13.1	2996.6	*	2	1305	446	4.	2.3	2993.7
1	0920	113	77.	62.7	3006.6	*	1	2315	280	18.	13.0	2996.6	*	2	1310	447	4.	2.3	2993.7
1	0925	114	76.	62.2	3006.5	*	1	2320	281	18.	12.9	2996.6	*	2	1315	448	4.	2.3	2993.7
1	0930	115	76.	61.7	3006.4	*	1	2325	282	18.	12.8	2996.5	*	2	1320	449	4.	2.3	2993.7
1	0935	116	75.	61.2	3006.2	*	1	2330	283	18.	12.6	2996.5	*	2	1325	450	3.	2.2	2993.7
1	0940	117	75.	60.6	3006.1	*	1	2335	284	18.	12.5	2996.5	*	2	1330	451	3.	2.2	2993.7
1	0945	118	74.	60.1	3006.0	*	1	2340	285	18.	12.4	2996.4	*	2	1335	452	3.	2.2	2993.7
1	0950	119	74.	59.6	3005.9	*	1	2345	286	17.	12.3	2996.4	*	2	1340	453	3.	2.2	2993.7
1	0955	120	73.	59.1	3005.8	*	1	2350	287	17.	12.1	2996.4	*	2	1345	454	3.	2.1	2993.7
1	1000	121	73.	58.6	3005.7	*	1	2355	288	17.	12.0	2996.4	*	2	1350	455	3.	2.1	2993.6
1	1005	122	72.	58.1	3005.6	*	2	0000	289	17.	11.9	2996.3	*	2	1355	456	3.	2.1	2993.6
1	1010	123	72.	57.6	3005.5	*	2	0005	290	17.	11.8	2996.3	*	2	1400	457	3.	2.1	2993.6
1	1015	124	71.	57.1	3005.4	*	2	0010	291	17.	11.7	2996.3	*	2	1405	458	3.	2.0	2993.6
1	1020	125	71.	56.6	3005.4	*	2	0015	292	17.	11.6	2996.2	*	2	1410	459	3.	2.0	2993.6
1	1025	126	70.	56.2	3005.3	*	2	0020	293	16.	11.4	2996.2	*	2	1415	460	3.	2.0	2993.6
1	1030	127	70.	55.7	3005.2	*	2	0025	294	16.	11.3	2996.2	*	2	1420	461	3.	2.0	2993.6
1	1035	128	69.	55.2	3005.1	*	2	0030	295	16.	11.2	2996.2	*	2	1425	462	3.	2.0	2993.6
1	1040	129	69.	54.7	3005.0	*	2	0035	296	16.	11.1	2996.1	*	2	1430	463	3.	1.9	2993.6
1	1045	130	68.	54.3	3004.9	*	2	0040	297	16.	11.0	2996.1	*	2	1435	464	3.	1.9	2993.6
1	1050	131	68.	53.8	3004.8	*	2	0045	298	16.	10.9	2996.1	*	2	1440	465	3.	1.9	2993.6
1	1055	132	67.	53.3	3004.7	*	2	0050	299	16.	10.8	2996.0	*	2	1445	466	3.	1.9	2993.6
1	1100	133	67.	52.9	3004.6	*	2	0055	300	15.	10.7	2996.0	*	2	1450	467	3.	1.9	2993.6
1	1105	134	67.	52.4	3004.5	*	2	0100	301	15.	10.6	2996.0	*	2	1455	468	3.	1.8	2993.6
1	1110	135	66.	51.9	3004.4	*	2	0105	302	15.	10.5	2996.0	*	2	1500	469	3.	1.8	2993.6
1	1115	136	66.	51.5	3004.3	*	2	0110	303	15.	10.4	2995.9	*	2	1505	470	3.	1.8	2993.5
1	1120	137	65.	51.0	3004.2	*	2	0115	304	15.	10.3	2995.9	*	2	1510	471	3.	1.8	2993.5
1	1125	138	65.	50.6	3004.1	*	2	0120	305	15.	10.2	2995.9	*	2	1515	472	3.	1.8	2993.5
1	1130	139	64.	50.1	3004.1	*	2	0125	306	15.	10.1	2995.8	*	2	1520	473	3.	1.7	2993.5
1	1135	140	64.	49.7	3004.0	*	2	0130	307	14.	10.0	2995.8	*	2	1525	474	3.	1.7	2993.5
1	1140	141	63.	49.3	3003.9	*	2	0135	308	14.	9.9	2995.8	*	2	1530	475	3.	1.7	2993.5
1	1145	142	63.	48.8	3003.8	*	2	0140	309	14.	9.8	2995.8	*	2	1535	476	3.	1.7	2993.5
1	1150	143	63.	48.4	3003.7	*	2	0145	310	14.	9.7	2995.7	*	2	1540	477	3.	1.7	2993.5
1	1155	144	62.	48.0	3003.6	*	2	0150	311	14.	9.6	2995.7	*	2	1545	478	3.	1.6	2993.5
1	1200	145	62.	47.5	3003.5	*	2	0155	312	14.	9.5	2995.7	*	2	1550	479	3.	1.6	2993.5
1	1205	146	61.	47.1	3003.5	*	2	0200	313	14.	9.4	2995.7	*	2	1555	480	3.	1.6	2993.5
1	1210	147	61.	46.7	3003.4	*	2	0205	314	14.	9.3	2995.6	*	2	1600	481	2.	1.6	2993.5
1	1215	148	61.	46.3	3003.3	*	2	0210	315	13.	9.2	2995.6	*	2	1605	482	2.	1.6	2993.5
1	1220	149	60.	45.9	3003.2	*	2	0215	316	13.	9.1	2995.6	*	2	1610	483	2.	1.6	2993.5
1	1225	150	60.	45.4	3003.1	*	2	0220	317	13.	9.0	2995.6	*	2	1615	484	2.	1.5	2993.5
1	1230	151	59.	45.0	3003.0	*	2	0225	318	13.	8.9	2995.5	*	2	1620	485	2.	1.5	2993.5
1	1235	152	59.	44.6	3003.0	*	2	0230	319	13.	8.8	2995.5	*	2	1625	486	2.	1.5	2993.5
1	1240	153	59.	44.2	3002.9	*	2	0235	320	13.	8.7	2995.5	*	2	1630	487	2.	1.5	2993.5
1	1245	154	58.	43.8	3002.8	*	2	0240	321	13.	8.7	2995.5	*	2	1635	488	2.	1.5	2993.5
1	1250	155	58.	43.4	3002.7	*	2	0245	322	13.	8.6	2995.5	*	2	1640	489	2.	1.5	2993.4
1	1255	156	57.	43.0	3002.6	*	2	0250	323	12.	8.5	2995.4	*	2	1645	490	2.	1.4	2993.4
1	1300	157	57.	42.6	3002.6	*	2	0255	324	12.	8.4	2995.4	*	2	1650	491	2.	1.4	2993.4
1	1305	158	57.	42.2	3002.5	*	2	0300	325	12.	8.3	2995.4	*	2	1655	492	2.	1.4	2993.4
1	1310	159	56.	41.8	3002.4	*	2	0305	326	12.	8.2	2995.4	*	2	1700	493	2.	1.4	2993.4
1	1315	160	56.	41.5	3002.3	*	2	0310	327	12.	8.1	2995.3	*	2	1705	494	2.	1.4	2993.4
1	1320	161	55.	41.1	3002.3	*	2	0315	328	12.	8.1	2995.3	*	2	1710	495	2.	1.4	2993.4
1	1325	162	55.	40.7	3002.2	*	2	0320	329	12.	8.0	2995.3	*	2	1715	496	2.	1.4	2993.4
1	1330	163	55.	40.3	3002.1	*	2	0325	330	12.	7.9	2995.3	*	2	1720	497	2.	1.3	2993.4
1	1335	164	54.	39.9	3002.0	*	2	0330	331	12.	7.8	2995.3	*	2	1725	498	2.	1.3	2993.4

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  1     1340 165      54.     39.6   3002.0 *  2      0335 332      11.      7.7   2995.2 *  2     1730 499      2.      1.3  2993.4
  1     1345 166      54.     39.2   3001.9 *  2      0340 333      11.      7.7   2995.2 *  2     1735 500      2.      1.3  2993.4
  1     1350 167      53.     38.8   3001.8 *  2      0345 334      11.      7.6   2995.2 *
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PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW 6-HR	24-HR	72-HR	41.58-HR
(CFS)	(HR)	(CFS)				
5899.	3.75		1175.	322.	188.	188.
		(INCHES)	10.778	11.818	11.961	11.961
		(AC-FT)	583.	639.	647.	647.

PEAK STORAGE	TIME	MAXIMUM AVERAGE STORAGE 6-HR	24-HR	72-HR	41.58-HR
(AC-FT)	(HR)				
134.	3.75	88.	43.	26.	26.

PEAK STAGE	TIME	MAXIMUM AVERAGE STAGE 6-HR	24-HR	72-HR	41.58-HR
(FEET)	(HR)				
3017.36	3.75	3010.80	3002.41	2998.87	2998.87

CUMULATIVE AREA = 1.01 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 .98	RATIO 3 .97
HYDROGRAPH AT	OFF7	.01	1	FLOW	108.	105.	104.
				TIME	3.25	3.25	3.25
HYDROGRAPH AT	OFF8	.21	1	FLOW	2137.	2090.	2067.
				TIME	3.50	3.50	3.50
2 COMBINED AT	CP2	.22	1	FLOW	2179.	2132.	2108.
				TIME	3.50	3.50	3.50
HYDROGRAPH AT	OFF9	.12	1	FLOW	1422.	1390.	1375.
				TIME	3.33	3.33	3.33
HYDROGRAPH AT	OFF10	.65	1	FLOW	4194.	4102.	4056.
				TIME	3.83	3.83	3.83
HYDROGRAPH AT	ON2	.02	1	FLOW	417.	408.	404.
				TIME	3.25	3.25	3.25
4 COMBINED AT	DB2	1.01	1	FLOW	6318.	6178.	6108.
				TIME	3.58	3.58	3.58
ROUTED TO	RDB2	1.01	1	FLOW	6104.	5967.	5899.
				TIME	3.75	3.75	3.75

** PEAK STAGES IN FEET **

1	STAGE	3017.55	3017.42	3017.36
	TIME	3.75	3.75	3.75

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

APPENDIX D

Additional Revision

(Modified Basins PH2L3A & PH2L3B)

Proposed Condition HEC-1

```
1*****************************************
*                                       *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)   *
*             JUN  1998                 *
*           VERSION 4.1                 *
*                                       *
*  RUN DATE   11FEB15  TIME  09:28:48   *
*                                       *
*****************************************
```

```
*****************************************
*                                       *
*    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
    1     ID     SLATER HANIFAN GROUP
    2     ID     OLYMPIA COMPANIES
    3     ID     SKYE CANYON - MASTER DRAINAGE STUDY UPDATE
    4     ID     OVERALL PROPERTY PROPOSED DRAINAGE CONDITION
    5     ID
    6     ID     RETURN PERIOD ------- 100 & 10-YEAR
    7     ID     DISTRIBUTION -------- 6-HOUR SDN3
    8     ID     PROJECT NO. --------- OLY1401.004
    9     ID     FILENAME ------------ Proposed.H1
   10     ID     DATE ---------------- 02/10/2015
   11     ID     MODELED BY ---------- SMJ/ETM
   12     ID
   13     ID        SIX HOUR DEPTH-AREA REDUCTION FACTORS
   14     ID        DRAINAGE AREA (MI^2)    DARF
   15     ID        0.0-0.49                1.00
   16     ID        0.5-0.99                0.98
   17     ID        1.0-1.99                0.97
   18     ID        2.0-3.99                0.93
   19     ID        4.0-5.99                0.91
   20     ID        6.0-7.99                0.90
   21     ID        25-YR                   0.70
   22     ID        10-YR                   0.57
   23     ID
   24     IT       5       0       0     300
   25     IO       5       0       0
   26     IN       5       0       0
   27     JR    PREC    1.00    0.98    0.97    0.93    0.91    0.90    0.70    0.57
          *
   28     KK   WOFF1
   29     KM   EXISTING OFFSITE DRAINAGE BASIN
   30     KM   DISCHARGES INTO DETENTION BASIN "DB1"
   31     PB    3.00
   32     PC       0   0.020   0.057   0.070   0.087   0.108   0.124   0.130   0.130   0.130
   33     PC   0.130   0.130   0.130   0.133   0.140   0.142   0.148   0.158   0.172   0.181
   34     PC   0.190   0.197   0.199   0.200   0.201   0.204   0.214   0.229   0.241   0.249
   35     PC   0.251   0.256   0.270   0.278   0.281   0.283   0.295   0.322   0.352   0.409
   36     PC   0.499   0.590   0.710   0.744   0.781   0.812   0.819   0.835   0.851   0.856
   37     PC   0.860   0.868   0.876   0.888   0.910   0.926   0.937   0.950   0.970   0.976
   38     PC   0.982   0.985   0.987   0.989   0.990   0.993   0.993   0.994   0.995   0.998
   39     PC   0.998   0.999       1
   40     BA   .4291
   41     LS       0    86.1
   42     UD   0.420
          *
   43     KK   WOFF2
   44     KM   EXISTING OFFSITE DRAINAGE BASIN
   45     KM   DISCHARGES INTO DETENTION BASIN "DB1"
   46     BA   .0419
   47     LS       0    84.0
   48     UD   0.150
          *
```



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

   49     KK   WOFF3
   50     KM   EXISTING OFFSITE DRAINAGE BASIN
   51     KM   DISCHARGES INTO DETENTION BASIN "DB1"
   52     BA   .0259
   53     LS       0    86.2
   54     UD   0.112
          *
   55     KK     CP1
   56     KM   COMBINE OFF1, OFF2, AND OFF3
   57     HC       3
          *
   58     KK   WOFF4
   59     KM   EXISTING OFFSITE DRAINAGE BASIN
   60     KM   DISCHARGES INTO DETENTION BASIN "DB1"
   61     BA   .0581
   62     LS       0    86.2
   63     UD   0.136
          *
   64     KK   WOFF5
   65     KM   EXISTING OFFSITE DRAINAGE BASIN
   66     KM   DISCHARGES INTO DETENTION BASIN "DB1"
   67     BA   .2569
   68     LS       0    86.5
   69     UD   0.419
          *
   70     KK   WOFF6
   71     KM   EXISTING OFFSITE DRAINAGE BASIN
   72     KM   DISCHARGES INTO DETENTION BASIN "DB1"
```

```
 73          BA   .0399
 74          LS      0    86.2
 75          UD   0.121
             *

 76          KK     ON1
 77          KM   PROPOSED ONSITE DRAINAGE BASIN
 78          BA   .0261
 79          LS      0    92.8
 80          UD   0.116
             *

 81          KK     DB1
 82          KM   COMBINE CP1, OFF4, OFF5, OFF6 AND ON1
 83          HC      5
             *
1                                        HEC-1 INPUT                                        PAGE  3

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

 84          KK    RDB1
 85          KM   OUTLET = 30" ORIFICE @ INVERT ELEVATION = 3025.5-FT
 86          RS      1     VOL      -1
 87          SV      0    7.78   13.43   19.26   58.03   96.21  132.22
 88          SE   25.5      27      28      29      35      40      44
 89          SQ      0   25.59   36.20   44.33   76.78  335.94 1413.68 2946.76 4825.05
 90          SE   25.5      29      30      31      37      38      40      42      44
             *

 91          KK   AROY1
 92          KM   DOWNSTREAM OF SOUTHERN MAINTAINED ARROYO OUTFALL DISCHARGE
 93          BA   .0028
 94          PB    3.00
 95          LS      0    88.0
 96          UD    .100
             *

 97          KK   WPRK5
 98          BA   .0037
 99          PB    3.00
100          LS      0    84.0
101          UD    .066
             *

102          KK  SHEEP1
103          KM   UNDEVELOPED FUTURE SHEEP MOUNTAIN PARKWAY
104          BA   .1011
105          PB    3.00
106          LS      0    87.9
107          UD    .168
             *

108          KK  SHEPAB
109          KM   DIVERT DISCHARGE INTO IRON MOUNTAIN DISCHARGE
110          DT  DSHEPC
111          DI      0     148
112          DQ      0      33
             *

113          KK  DSHEPA
114          KM   DIVERT DISCHARGE INTO NORTHERN MAINTAINED ARROYO
115          DT  DSHEPB
116          DI      0     115
117          DQ      0      70
             *

118          KK   AROY2
119          KM   DOWNSTREAM OF SOUTHERN MAINTAINED ARROYO DISCHARGE
120          BA   .0081
121          PB    3.00
122          LS      0    88.0
123          UD    .100
             *
1                                        HEC-1 INPUT                                        PAGE  4

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

124          KK   DUMMY
125          HC      5
             *

126          KK   PH2L4
127          BA   .0186
128          PB    3.00
129          LS      0    90.0
130          UD    .097
             *

131          KK   PH2L8
132          BA   .0126
133          PB    3.00
134          LS      0    90.0
135          UD    .102
             *

136          KK   PH2L9
137          BA   .0291
138          PB    3.00
139          LS      0    90.0
140          UD    .093
             *

141          KK   EGAN2
142          BA   .0044
143          PB    3.00
144          LS      0    98.0
145          UD    .073
             *

146          KK   DUMMY
147          HC      5
             *

148          KK  WPRK2A
149          BA   .0059
150          PB    3.00
151          LS      0    84.0
152          UD    .074
             *

153          KK  PH2PK1
154          BA   .0086
155          PB    3.00
156          LS      0    84.0
157          UD    .084
             *
1                                        HEC-1 INPUT                                        PAGE  5
```

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

 158          KK  PH2L3B
 159          BA   .0096
 160          PB    3.00
 161          LS       0    90.0
 162          UD    .097
              *

 163          KK   DUMMY
 164          HC       4
              *

 165          KK   PH2PK
 166          BA   .0205
 167          PB    3.00
 168          LS       0    84.0
 169          UD    .099
              *

 170          KK  HORSE2
 171          BA   .0110
 172          PB    3.00
 173          LS       0    98.0
 174          UD    .103
              *

 175          KK   DUMMY
 176          HC       3
              *

 177          KK  PH2PK2
 178          BA   .0025
 179          PB    3.00
 180          LS       0    84.0
 181          UD    .061
              *

 182          KK  PH2ML4
 183          BA   .0354
 184          PB    3.00
 185          LS       0    93.1
 186          UD    .110
              *

 187          KK  SHAUM1
 188          BA   .0066
 189          PB    3.00
 190          LS       0    98.0
 191          UD    .155
              *
```



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

 192          KK   HU-HO
 193          KM   TOTAL FLOW AT INTERSECTION OF HUALAPAI AND HORSE
 194          KM   ROUTED NORTH IN  HUALAPAI
 195          HC       4
              *

 196          KK    WML5
 197          BA   .0370
 198          PB    3.00
 199          LS       0    95.0
 200          UD    .096
              *

 201          KK  WSCHL2
 202          BA   .0171
 203          PB    3.00
 204          LS       0    91.0
 205          UD    .079
              *

 206          KK   WPRK1
 207          BA   .0115
 208          PB    3.00
 209          LS       0    84.0
 210          UD    .066
              *

 211          KK   STRT5
 212          BA   .0065
 213          PB    3.00
 214          LS       0    98.0
 215          UD    .081
              *

 216          KK   DUMMY
 217          HC       5
              *

 218          KK  DSHEPB
 219          KM   UNDEVELOPED SHEEP MOUNTAIN PARKWAY DISCHARGE INTO NORTHERN MAINTAINED ARROYO
 220          DR  DSHEPB
              *

 221          KK   AROY5
 222          BA   .0122
 223          PB    3.00
 224          LS       0    88.0
 225          UD    .100
              *
```



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

 226          KK   WMLA1
 227          BA   .0697
 228          PB    3.00
 229          LS       0    95.0
 230          UD    .129
              *

 231          KK  HUAL2B
 232          BA   .0124
 233          PB    3.00
 234          LS       0    98.0
 235          UD    .250
              *

 236          KK   DUMMY
 237          HC       5
              *
```

```
238          KK   AROY4
239          KM   DOWNSTREAM OF NORTHERN MAINTAINED ARROYO OUTFALL DISCHARGE
240          BA   .0080
241          PB    3.00
242          LS       0    88.0
243          UD    .100
             *

244          KK    WML7
245          BA   .0380
246          PB    3.00
247          LS       0    95.0
248          UD    .097
             *

249          KK   WPRK4
250          BA   .0048
251          PB    3.00
252          LS       0    84.0
253          UD    .083
             *

254          KK  SHAUM2
255          BA   .0080
256          PB    3.00
257          LS       0    98.0
258          UD    .110
             *

259          KK   DUMMY
260          HC       4
             *
1                                        HEC-1 INPUT                                    PAGE  8

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

261          KK     WL7
262          BA   .0207
263          PB    3.00
264          LS       0    90.0
265          UD    .101
             *

266          KK   WNVE2
267          BA   .0018
268          PB    3.00
269          LS       0    88.0
270          UD    .131
             *

271          KK     WL6
272          BA   .0060
273          PB    3.00
274          LS       0    90.0
275          UD    .078
             *

276          KK  HORS1A
277          BA   .0086
278          PB    3.00
279          LS       0    98.0
280          UD    .095
             *

281          KK   SH-HO
282          KM   TOTAL FLOW AT INTERSECTION OF SHAUMBER AND HORSE
283          KM   ROUTED NORTH IN SHAUMBER
284          HC       5
             *

285          KK   WOFF7
286          KM   EXISTING OFFSITE DRAINAGE BASIN
287          KM   DISCHARGES INTO DETENTION BASIN "DB2"
288          BA   .0068
289          LS       0    86.2
290          UD   0.100
             *

291          KK   WOFF8
292          KM   EXISTING OFFSITE DRAINAGE BASIN
293          KM   DISCHARGES INTO DETENTION BASIN "DB2"
294          BA   .2141
295          LS       0    86.3
296          UD   0.302
             *
1                                        HEC-1 INPUT                                    PAGE  9

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

297          KK     CP2
298          KM   COMBINE OFF7, AND OFF8
299          HC       2
             *

300          KK   WOFF9
301          KM   EXISTING OFFSITE DRAINAGE BASIN
302          KM   DISCHARGES INTO DETENTION BASIN "DB2"
303          BA   .1164
304          LS       0    86.2
305          UD   0.203
             *

306          KK  WOFF10
307          KM   EXISTING OFFSITE DRAINAGE BASIN
308          KM   DISCHARGES INTO DETENTION BASIN "DB2"
309          BA   .6524
310          LS       0    86.6
311          UD   0.615
             *

312          KK     ON2
313          KM   PROPOSED ONSITE DRAINAGE BASIN
314          BA   .0241
315          LS       0    92.8
316          UD   0.084
             *

317          KK     DB2
318          KM   COMBINE CP2, OFF9, OFF10 AND ON2
319          HC       4
             *

320          KK    RDB2
321          KM   OUTLET = 27" ORIFICE @ INVERT ELEVATION = 2993-FT
322          RS       1     VOL      -1
323          SV       0    3.27    6.87   10.63   27.34   46.77   75.03
```

```
SE    2993    2994    2995    2996    3000    3004    3009
SQ       0   17.95   27.43   34.38   40.15   45.18   57.71   67.97   76.88
SE    2993    2996    2997    2998    2999    3000    3003    3006    3009
*

KK     WL8
BA   .0133
PB    3.00
LS       0    90.0
UD    .085
*
```



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

KK    WNVE3
BA   .0028
PB    3.00
LS       0    88.0
UD    .159
*

KK     WL5
BA   .0402
PB    3.00
LS       0    90.0
UD    .107
*

KK   IRON1A
BA   .0055
PB    3.00
LS       0    98.0
UD    .087
*

KK    DUMMY
HC        5
*

KK   SHAUM3
BA   .0048
PB    3.00
LS       0    98.0
UD    .064
*

KK    IR-SH
KM    TOTAL FLOW AT INTERSECTION OF IRON MOUNTAIN AND SHAUMBER
KM    ROUTED EAST IN IRON MOUNTAIN
HC        3
*

KK    WML6
BA   .0284
PB    3.00
LS       0    95.0
UD    .085
*

KK   HORS1B
BA   .0032
PB    3.00
LS       0    98.0
UD    .050
*
```



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

KK     WL4
BA   .0492
PB    3.00
LS       0    90.0
UD    .133
*

KK    DUMMY
HC        4
*

KK   DSHEPC
KM    UNDEVELOPED SHEEP MOUNTAIN PARKWAY DISCHARGE INTO IRON MOUNTAIN ROAD
DR   DSHEPC
*

KK   IRON1B
BA   .0044
PB    3.00
LS       0    98.0
UD    .101
*

KK    HU-IR
KM    TOTAL FLOW AT INTERSECTION OF HUALAPAI AND IRON MOUNTAIN
KM    ROUTED NORTH IN REGIONAL FACILITY ALIGNMENT
HC        4
*

KK     OFFG
KM    REFERENCED FROM GCW MASTER DRAINAGE STUDY
BA   .0397
PB    2.79
LS       0    86.5
UD   0.186
*

KK    WPT40
KM    COMBINE HU-IR, OFFG
HC        2
*

KK    OFF10
KM    REFERENCED FROM GCW MASTER DRAINAGE STUDY
BA   .6710
PB    3.39
LS       0    86.2
UD   0.573
*
```



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

KK   ROFF10
KM    REFERENCED FROM GCW MASTER DRAINAGE STUDY
KM    STEPS      K X-FACTOR
```

```
405          RM       7   0.583    0.15
             *

406          KK   OFFFA
407          KM   REFERENCED FROM GCW MASTER DRAINAGE STUDY
408          BA   .9938
409          PB    3.19
410          LS      0    83.8
411          UD   0.441
             *

412          KK  ROFFFA
413          KM   REFERENCED FROM GCW MASTER DRAINAGE STUDY
414          KM   STEPS       K X-FACTOR
415          RM       3   0.238    0.15
             *

416          KK   OFFFB
417          KM   REFERENCED FROM GCW MASTER DRAINAGE STUDY
418          BA   .5974
419          PB    2.89
420          LS      0    84.1
421          UD   0.490
             *

422          KK  COFFF1
423          KM   REFERENCED FROM GCW MASTER DRAINAGE STUDY
424          KM   COMBINE OFF10, OFFFA, OFFFB
425          HC       3
             *

426          KK   WPRK6
427          KM   IRON MOUNTAIN PARK
428          BA   .0157
429          PB    2.79
430          LS      0    84.0
431          UD   0.084
             *

432          KK  COFFF2
433          KM   COMBINE WPT40, COFFF1
434          HC       3
             *

435          KK    OFFE
436          KM   REFERENCED FROM GCW MASTER DRAINAGE STUDY
437          BA   .0382
438          PB    2.78
439          LS      0    77.4
440          UD   0.232
             *
```



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

441          KK    OFFV
442          BA   .0055
443          PB    2.77
444          LS      0    77.0
445          UD   0.156
             *

446          KK    CKC5
447          KM   COMBINE COFFF2, OFFE, OFFV
448          HC       3
             *

449          KK   DCKC5
450          KM   DIVERT ALL FLOWS ACROSS US-95
451          KM   REFERENCED FROM GCW MASTER DRAINAGE STUDY
452          DT   DCKC7
453          DI       0     100     500    1000    5000
454          DQ       0     100     500    1000    5000
             *

455          KK  OFF17B
456          KM   REFERENCED FROM GCW MASTER DRAINAGE STUDY
457          KM   ADDED FROM HORSE INTERCHANGE MODEL
458          BA   .0080
459          PB   2.773
460          LS      0    92.1
461          UD   0.069
             *

462          KK  OFF17A
463          KM   REFERENCED FROM GCW MASTER DRAINAGE STUDY
464          KM   ADDED FROM HORSE INTERCHANGE MODEL
465          BA   .0305
466          PB   2.773
467          LS      0    92.1
468          UD   0.104
             *

469          KK  COFF17
470          KM   REFERENCED FROM GCW MASTER DRAINAGE STUDY
471          KM   ADDED FROM HORSE INTERCHANGE MODEL
472          KM   COMBINE OFF17A, OFF17B
473          KM   CULVERT AT BASIN OFF24B
474          HC       2
             *

475          KK  DCOF17
476          KM   FACILITY E-14
477          KM   FLOW SPLIT AT VTN CULVERT 8
478          KM   FLOW SPLITS TO BETWEEN FRONTAGE AND SB ROADS OF US-95
479          KM   ALL FLOW DIVERTED - DEVELOPMENT EXISTS ADJACENT TO FRONTAGE ROAD
480          KM   REFERENCED FROM GCW MASTER DRAINAGE STUDY
481          DT  DVCUL8
482          DI       0    5000
```



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

483          DQ       0    5000
             *

484          KK     ON1
485          KM   START CENTENNIAL POINT HEC-1 DATA
486          BA   .0042
487          PB    2.86
488          LS      0    91.2
489          UD   0.085
             *

490          KK    ON4A
491          BA   .0045
492          LS      0    91.2
493          UD   0.077
```

```
                *
494             KK      C1
495             KM   COMBINE ON1 AND ON4A
496             HC       2
                *
497             KK      D1
498             KM   DIVERT FLOW INTO BASIN ON6
499             DT    DIV1
500             DI       0      16
501             DQ       0      13
                *
502             KK     ON5
503             BA   .0052
504             LS       0    91.2
505             UD   0.080
                *
506             KK      C2
507             KM   COMBINE C1 AND ON5
508             HC       2
                *
509             KK     D1A
510             KM   DIVERT FLOW FOR LATER USE IN HEC-1 RUN
511             DT   DIV1A
512             DI       0      50
513             DQ       0      50
                *
514             KK    ON4B
515             BA   .0031
516             LS       0    91.2
517             UD   0.085
                *
1                                        HEC-1 INPUT                                        PAGE 15

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

518             KK    RET1
519             KM   RETRIEVE FLOW FROM D1
520             DR    DIV1
                *
521             KK     ON6
522             BA   .0039
523             LS       0    91.2
524             UD   0.074
                *
525             KK      C3
526             KM   COMBINE RET1 AND ON6
527             HC       2
                *
528             KK     D1B
529             KM   DIVERT FLOW FOR LATER USE IN HEC-1 RUN
530             DT   DIV1B
531             DI       0      50
532             DQ       0      50
                *
533             KK     ON2
534             BA   .0050
535             LS       0    91.2
536             UD   0.080
                *
537             KK     ON3
538             BA   .0063
539             LS       0    91.5
540             UD   0.079
                *
541             KK     ON9
542             BA   .0045
543             LS       0    91.4
544             UD   0.096
                *
545             KK      C4
546             KM   COMBINE ON2, ON3 AND ON9
547             HC       3
                *
548             KK      D2
549             KM   DIVERT FLOW INTO BASIN ON8
550             DT    DIV2
551             DI       0      29
552             DQ       0      24
                *
1                                        HEC-1 INPUT                                        PAGE 16

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

553             KK    ON10
554             BA   .0025
555             LS       0    91.5
556             UD   0.071
                *
557             KK      C5
558             KM   COMBINE C4 AND ON10
559             HC       2
                *
560             KK      D3
561             KM   DIVERT FLOW INTO BASIN ON7
562             DT    DIV3
563             DI       0      10
564             DQ       0       8
                *
565             KK    ON11
566             BA   .0025
567             LS       0    91.5
568             UD   0.067
                *
569             KK      C6
570             KM   COMBINE C5 AND ON11
571             HC       2
                *
572             KK     D1C
```

```
573          KM   DIVERT FLOW FOR LATER USE IN HEC-1 RUN
574          DT   DIV1C
575          DI       0      50
576          DQ       0      50
             *

577          KK    CD1C
578          KM   COMBINE D1A, ON4B, D1B AND D1C
579          KM   PICK UP AT OFF23
580          HC       4
             *

581          KK   RCD1C
582          KM   ROUTE CD1C TO BASIN OFF23
583          RK    2640  0.0346    0.02            TRAP     100       2
             *

584          KK  DRCD1C
585          KM   DIVERT FLOW TO BASIN OFF23
586          DT  DOFF23
587          DI       0      50     100
588          DQ       0      50     100
             *
```



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

589          KK     ON8
590          BA   .0042
591          LS       0    83.5
592          UD   0.074
             *

593          KK    RET2
594          KM   RETRIEVE FLOW FROM D2
595          DR    DIV2
             *

596          KK      C7
597          KM   COMBINE ON11 AND RET2
598          HC       2
             *

599          KK    RET3
600          KM   RETRIEVE FLOW FROM D3
601          DR    DIV3
             *

602          KK     ON7
603          BA   .0073
604          LS       0    91.3
605          UD   0.077
             *

606          KK      C8
607          KM   COMBINE C7, RET3 AND ON7
608          HC       3
             *

609          KK   RET1A
610          KM   RETRIEVE FLOW FROM D1A IN TEE PEE
611          DR   DIV1A
             *

612          KK   RET1B
613          KM   RETRIEVE FLOW FROM D1B IN TEE PEE
614          DR   DIV1B
             *

615          KK   RET1C
616          KM   RETRIEVE FLOW FROM D1C IN TEE PEE
617          DR   DIV1C
             *

618          KK      C9
619          KM   COMBINE C8, RET1A, RET1B, RET1C IN TEE PEE
620          KM   END CENTENNIAL POINT HEC-1 DATA
621          HC       3
             *
```



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

622          KK    ON2D
623          KM   START GRAND CANYON APARTMENTS HEC-1 DATA
624          BA   .0105
625          PB    2.90
626          LS       0      95
627          UD   0.094
             *

628          KK    ON5D
629          BA   .0038
630          LS       0      95
631          UD   0.067
             *

632          KK     CP1
633          KM   COMBINE ON2D AND ON5D
634          HC       2
             *

635          KK    ON3D
636          BA   .0036
637          LS       0      95
638          UD   0.084
             *

639          KK     CP2
640          KM   COMBINE CP1 AND ON3D
641          HC       2
             *

642          KK    ON1D
643          BA   .0075
644          LS       0      95
645          UD   0.079
             *

646          KK    ON4D
647          BA   .0041
648          LS       0      95
649          UD   0.096
             *

650          KK     CP3
651          KM   COMBINE ON1D AND ON4D
```

```
652           HC       2
              *

653           KK     CP4
654           KM   COMBINE CP2 AND CP3
655           KM   END GRAND CANYON APARTMENTS HEC-1 DATA
656           HC       2
              *
```



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

657           KK  CENGCA
658           KM   COMBINE DRCD1C, C9, CP4
659           KM   CD1C IS DIVERSION OF FLOW ON TEE PEE FROM CENTENNIAL POINT
660           KM   CP4 AND C9 ARE ENDING OF THE APARTMENT COMPLEX AND DEVELOPMENT
661           HC       4
              *

662           KK  PH2ML3
663           BA   .0448
664           PB    3.00
665           LS       0    92.7
666           UD    .121
              *

667           KK   PH2L6
668           BA   .0468
669           PB    3.00
670           LS       0    89.6
671           UD    .128
              *

672           KK   EGAN1
673           BA   .0058
674           PB    3.00
675           LS       0    98.0
676           UD    .104
              *

677           KK   DUMMY
678           HC       3
              *

679           KK   PH2L5
680           BA   .0043
681           PB    3.00
682           LS       0    90.0
683           UD    .087
              *

684           KK   PH2L7
685           BA   .0130
686           PB    3.00
687           LS       0    90.0
688           UD    .097
              *

689           KK  RACL1A
690           BA   .0059
691           PB    3.00
692           LS       0    98.0
693           UD    .084
              *
```



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

694           KK   RA-EG
695           KM   TOTAL FLOW AT INTERSECTION OF RACEL AND EGAN CREST
696           KM   ROUTED EAST IN RACEL
697           HC       4
              *

698           KK  PH2ML1
699           BA   .0294
700           PB    3.00
701           LS       0    95.0
702           UD    .101
              *

703           KK  PH2ML2
704           BA   .0283
705           PB    3.00
706           LS       0    94.9
707           UD    .091
              *

708           KK   PH2L1
709           BA   .0272
710           PB    3.00
711           LS       0    90.0
712           UD    .126
              *

713           KK   PH2L2
714           BA   .0180
715           PB    3.00
716           LS       0    90.0
717           UD    .103
              *

718           KK   DUMMY
719           HC       5
              *

720           KK  PH2L3A
721           BA   .0164
722           PB    3.00
723           LS       0    90.0
724           UD    .102
              *

725           KK   HUAL1
726           BA   .0070
727           PB    3.00
728           LS       0    98.0
729           UD    .130
              *
```



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

730           KK  RACL1B
731           BA   .0051
732           PB    3.00
```

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733          LS       0    98.0
734          UD    .070
             *

735          KK  HUAL2A
736          BA   .0063
737          PB    3.00
738          LS       0    98.0
739          UD    .129
             *

740          KK   RA-HU
741          KM   TOTAL FLOW AT INTERSECTION OF RACEL AND HUALAPAI
742          KM   ROUTED EAST IN RACEL
743          HC       5
             *

744          KK   PH1-3
745          KM   ONSITE BASIN NORTH OF RACEL AND WEST OF CONQUISTADOR
746          PB    2.93
747          BA   .0232
748          LS       0    91.2
749          UD   0.116
             *

750          KK    CONQ
751          KM   STREET BASIN FOR CONQUISTADOR ST
752          PB    2.93
753          BA   .0035
754          LS       0    92.5
755          UD   0.133
             *

756          KK   DUMMY
757          KM   COMBINES RA-HU, PH1-3 AND CONQ
758          HC       3
             *

759          KK   PH1-5
760          KM   SOUTHWEST QUAD ONSITE BASIN
761          PB    2.93
762          BA   .0583
763          LS       0    94.6
764          UD   0.139
             *
```



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

765          KK  PH1PRK
766          KM   ONSITE BASIN FOR COMMUNITY PARK
767          PB    2.93
768          BA   .0028
769          LS       0    81.5
770          UD   0.082
             *

771          KK  RACL1C
772          BA   .0071
773          PB    2.93
774          LS       0    92.5
775          UD    .097
             *

776          KK   DUMMY
777          KM   COMBINES CP0, PH1-5, PH1PRK AND RACLIC
778          HC       4
             *

779          KK   PH1-4
780          KM   ONSITE BASIN NORTH OF RACEL AND EAST OF CONQUISTADOR ST
781          PB    2.93
782          BA   .0252
783          LS       0    94.6
784          UD   0.105
             *

785          KK   PH1-6
786          KM   SOUTHEAST QUAD ONSITE BASIN
787          PB    2.93
788          BA   .0505
789          LS       0    94.6
790          UD   0.128
             *

791          KK     GCD
792          BA   .0053
793          PB    2.93
794          LS       0    93.8
795          UD    .137
             *

796          KK    CP26
797          KM   KYLE CANYON DEVELOPMENT TOTAL DISCHARGE AT GRAND CANYON AND OSTINATO
798          KM   ROUTED THRU CENTENNIAL POINT TOWARD US-95
799          HC       4
             *
```



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

800          KK    CCP4
801          KM   COMBINE DRCD1C, C9, CP4, CP26
802          KM   REFERENCED FROM GCW MASTER DRAINAGE STUDY
803          HC       2
             *

804          KK  OFF21B
805          KM   REFERENCED FROM GCW MASTER DRAINAGE STUDY
806          KM   BASIN IS DEVELOPED, CHECK FOR REFERENCE MATERIAL
807          BA   .0414
808          PB   2.775
809          LS       0      95
810          UD   0.110
             *

811          KK  COF21B
812          KM   COMBINE OFF21B WITH FLOW FROM CENTENNIAL POINT AND GRAND CANYON APTS
813          KM   REFERENCED FROM GCW MASTER DRAINAGE STUDY
814          HC       2
             *

815          KK  DOF21B
816          KM   FACILITY E-15
817          KM   FLOW SPLIT AT VTN CULVERT 9
818          KM   FLOW SPLITS TO BETWEEN FRONTAGE AND SB ROADS OF US-95
819          KM   REFERENCED FROM GCW MASTER DRAINAGE STUDY
```

```
820          DT  DVCUL9
821          DI       0    5000
822          DQ       0    5000
             *

823          KK  ROFF23
824          KM   RETRIEVE FLOW FROM DIVOFF23
825          KM   REFERENCED FROM GCW MASTER DRAINAGE STUDY
826          DR  DOFF23
             *

827          KK   OFF23
828          KM   REFERENCED FROM GCW MASTER DRAINAGE STUDY
829          BA   .0091
830          PB   2.787
831          LS       0      95
832          UD   0.109
             *

833          KK  COFF23
834          KM   COMBINE OFF23,RDOF21B, DOFF23, DCOFF17
835          KM   REFERENCED FROM GCW MASTER DRAINAGE STUDY
836          HC       4
             *
```



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

837          KK  DCOF23
838          KM   FACILITY E-16
839          KM   FLOW SPLIT AT VTN CULVERT 10
840          KM   DIVERSION TO BETWEEN FRONTAGE AND SB ROADS OF US-95
841          KM   REFERENCED FROM GCW MASTER DRAINAGE STUDY
842          DT  DCUL10
843          DI       0     300     600     748    1080    1398    1614
844          DQ       0     299     599     700     799     859     891
             *

845          KK    GT1
846          BA   .0243
847          PB    3.00
848          LS       0    98.0
849          UD    .256
             *

850          KK    OFFU
851          KM   ADD INTERIM FLOW SPLIT FROM GRAND TETON STORM DRAIN TOWARD VTN CULVERT 11
852          BF     203
853          BA   .0398
854          PB    2.93
855          LS       0    83.6
856          UD   0.196
             *

857          KK  CP26WT
858          KM   COMBINE DCUL10, GT1, OFFU, INTERIM FLOW SPLIT FROM GRAND TETON STORM DRAIN
859          HC       3
             *

860          KK  DC26WT
861          KM   FACILITY E-17
862          KM   FLOW SPLIT AT VTN CULVERT 11
863          KM   DCUL11 = EAST THRU CULVERT
864          KM   DC26WT = SOUTH IN DITCH WEST OF FRONTAGE ROAD
865          KM   REFERENCED FROM GCW MASTER DRAINAGE STUDY
866          DT  DCUL11
867          DI       0     100     700     900    1056
868          DQ       0      99     699     899    1000
             *

869          KK    95-5
870          KM   REVISED FROM GCW MASTER DRAINAGE STUDY, MINUS OFFV
871          BF       0
872          BA   .0303
873          PB    2.77
874          LS       0    89.1
875          UD   0.082
             *
```



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

876          KK  DHD01B
877          KM   FACILITY E-9
878          KM   FLOW SPLIT AT VTN CULVERT 1
879          KM   FLOW SPLITS TO BETWEEN NB AND SB ROADS OF US-95
880          KM   REFERENCED FROM GCW MASTER DRAINAGE STUDY
881          DT  DCHD1B
882          DI       0     133     187     250
883          DQ       0     120     135     150
             *

884          KK    OFF8
885          KM   REFERENCED FROM GCW MASTER DRAINAGE STUDY
886          BA   .0133
887          PB    2.77
888          LS       0    89.1
889          UD   0.111
             *

890          KK    OFFY
891          BA   .0125
892          PB    2.77
893          LS       0    77.0
894          UD   0.217
             *

895          KK  WGED1B
896          BA   .0367
897          PB    2.77
898          LS       0    92.8
899          UD    .110
             *

900          KK  CHD02B
901          KM   COMBINE RDHD1B, OFF8, OFFY, WGED1B
902          KM   REFERENCED FROM GCW MASTER DRAINAGE STUDY
903          HC       4
             *

904          KK  DHD02B
905          KM   FACILITY E-10
906          KM   FLOW SPLIT AT VTN CULVERT 2
907          KM   FLOW SPLITS TO BETWEEN NB AND SB ROADS OF US-95
908          KM   REFERENCED FROM GCW MASTER DRAINAGE STUDY
909          DT  DCHD2B
910          DI       0     100     138
```

```
 911          DQ       0      99     135
              *

 912          KK  WGED1A
 913          BA   .0167
 914          PB    2.93
 915          LS       0    94.6
 916          UD    .096
              *
```



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

 917          KK   STRT3
 918          BA   .0016
 919          PB    2.93
 920          LS       0    98.0
 921          UD    .050
              *

 922          KK   WPT49
 923          KM   TOTAL KYLE CANYON DEVELOPMENT DISCHARGE TOWARD VTN CULVERT 4
 924          HC       2
              *

 925          KK    95-6
 926          KM   REFERENCED FROM GCW MASTER DRAINAGE STUDY
 927          BA   .0104
 928          PB    2.77
 929          LS       0    89.9
 930          UD   0.095
              *

 931          KK    OFFW
 932          BA   .0120
 933          PB    2.77
 934          LS       0    77.1
 935          UD    .184
              *

 936          KK  CHD04B
 937          KM   COMBINE RDHD2B, WPT49, 95-6, OFFW
 938          KM   REFERENCED FROM GCW MASTER DRAINAGE STUDY
 939          HC       4
              *

 940          KK  DHD04B
 941          KM   FACILITY E-11
 942          KM   FLOW SPLIT AT VTN CULVERT 4
 943          KM   FLOW SPLITS TO BETWEEN NB AND SB ROADS OF US-95
 944          KM   REFERENCED FROM GCW MASTER DRAINAGE STUDY
 945          DT   DCHD4B
 946          DI       0     611     811    1102    1379    1647
 947          DQ       0     611     733     855     977    1099
              *

 948          KK    WBU3
 949          BA   .0661
 950          PB    2.93
 951          LS       0    95.0
 952          UD    .127
              *
```



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

 953          KK   STRT2
 954          BA   .0035
 955          PB    2.93
 956          LS       0    98.0
 957          UD    .078
              *

 958          KK  GRAND3
 959          BA   .0100
 960          PB    2.93
 961          LS       0    98.0
 962          UD    .124
              *

 963          KK   WBU2B
 964          BA   .0214
 965          PB    2.93
 966          LS       0    95.0
 967          UD    .092
              *

 968          KK    WGC1
 969          BA   .0187
 970          PB    2.93
 971          LS       0    95.0
 972          UD    .070
              *

 973          KK   WPT48
 974          KM   TOTAL KYLE CANYON DEVELOPMENT DISCHARGE TOWARD VTN CULVERT 5
 975          HC       5
              *

 976          KK   95-7A
 977          KM   REFERENCED FROM GCW MASTER DRAINAGE STUDY
 978          BA   .0069
 979          PB    2.77
 980          LS       0    92.6
 981          UD   0.075
              *

 982          KK  CHD05B
 983          KM   COMBINE RDHD4B, WPT48, 95-7A
 984          KM   REFERENCED FROM GCW MASTER DRAINAGE STUDY
 985          KM   DISCHARGE DIRECTLY INTO EXISTING US-95 INTERIM MPU FACILITY
 986          HC       3
              *

 987          KK    WBU1
 988          BA   .0358
 989          PB    2.93
 990          LS       0    95.0
 991          UD    .102
              *
```



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

 992          KK   STRT1
 993          BA   .0048
```

```
 994          PB    2.93
 995          LS       0    98.0
 996          UD    .090
              *

 997          KK   WBU2A
 998          BA   .0505
 999          PB    2.93
1000          LS       0    95.0
1001          UD    .114
              *

1002          KK   DUMMY
1003          HC       3
              *

1004          KK   PH1-1
1005          KM   NORTHWEST QUAD ONSITE BASIN
1006          PB    2.93
1007          BA   .0278
1008          LS       0    91.2
1009          UD   0.114
              *

1010          KK   PH1-2
1011          KM   NORTHEAST QUAD ONSITE BASIN
1012          PB    2.93
1013          BA   .0301
1014          LS       0    88.8
1015          UD   0.152
              *

1016          KK  GRAND2
1017          BA   .0033
1018          PB    2.93
1019          LS       0    98.0
1020          UD    .146
              *

1021          KK  HORSE3
1022          BA   .0117
1023          PB    2.93
1024          LS       0    98.0
1025          UD    .098
              *

1026          KK   WPT46
1027          KM   TOTAL KYLE CANYON DEVELOPMENT DISCHARGE TOWARD VTN CULVERT 6
1028          HC       5
              *
```



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

1029          KK   95-8A
1030          KM   REFERENCED FROM GCW MASTER DRAINAGE STUDY
1031          BA   .0052
1032          PB    2.77
1033          LS       0    92.6
1034          UD   0.064
              *

1035          KK   OFF14
1036          KM   REFERENCED FROM GCW MASTER DRAINAGE STUDY
1037          BA   .0128
1038          PB    2.77
1039          LS       0    86.9
1040          UD   0.090
              *

1041          KK  CHD06B
1042          KM   COMBINE WPT46, 95-8A, OFF14
1043          KM   REVISED FROM GCW MASTER DRAINAGE STUDY
1044          KM   TO ACCOUNT FOR DIRECT CONNECTION FROM CHD05B TO US-95 INTERIM MPU FACILITY
1045          HC       3
              *

1046          KK  RCHD6B
1047          KM   FLOW SPLIT INTO US-95 MPU FACILITY
1048          KM   33% FLOW INTO 8'X6' MPU FACILITY
1049          DT  DCMPU6
1050          DI       0     425
1051          DQ       0     142
              *

1052          KK  DHD06B
1053          KM   FACILITY E-13
1054          KM   FLOW SPLIT AT VTN CULVERT 6
1055          KM   FLOW SPLITS TO BETWEEN NB AND SB ROADS OF US-95
1056          KM   REFERENCED FROM GCW MASTER DRAINAGE STUDY
1057          DT  DCHD6B
1058          DI       0     580     881    1846    2671    3498    4331
1059          DQ       0     580     725     869    1014    1159    1304
              *

1060          KK   95-9A
1061          KM   REFERENCED FROM GCW MASTER DRAINAGE STUDY
1062          BA   .0110
1063          PB    2.77
1064          LS       0    92.6
1065          UD   0.098
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1066          KK  CHD07B
1067          KM   COMBINE RDHD6B, 95-9A
1068          KM   REFERENCED FROM GCW MASTER DRAINAGE STUDY
1069          HC       2
              *

1070          KK   OFF15
1071          KM   REFERENCED FROM GCW MASTER DRAINAGE STUDY
1072          BA   .0348
1073          PB    2.77
1074          LS       0    86.9
1075          UD   0.126
              *

1076          KK  CHD7B2
1077          KM   COMBINE CHD05B, CHD07B, OFF15
1078          KM   COMBINE FLOWS IN MPU FACILITY
1079          KM   REVISED FROM GCW MASTER DRAINAGE STUDY
1080          KM   TO ACCOUNT FOR DIRECT CONNECTION FROM CHD05B TO US-95 INTERIM MPU FACILITY
1081          HC       3
              *
```

```
1082          KK   CRET8
1083          KM   RETRIEVE FLOW FROM DVCUL8
1084          KM   FLOW BETWEEN FRONTAGE AND US-95, NOT IN FACILITY
1085          KM   REFERENCED FROM GCW MASTER DRAINAGE STUDY
1086          DR  DVCUL8
              *

1087          KK  DCRET8
1088          KM   FACILITY E-14A
1089          KM   FLOW SPLIT AT VTN CULVERT 8
1090          KM   DIVERSION TO BETWEEN NB AND SB ROADS OF US-95
1091          KM   BECAUSE PROPOSED MPU FACILITY REDUCES FLOW AT CULVERT 8,
1092          KM   SIDE WEIR RAISED TO MATCH EXISTING DIVERSION AS MUCH AS POSSIBLE
1093          KM   REFERENCED FROM GCW MASTER DRAINAGE STUDY
1094          DT   DIV8A
1095          DI       0     117     240     431     556     618    1137
1096          DQ       0     117     159     179     207     219     329
              *

1097          KK    RET9
1098          KM   RETRIEVE FLOW FROM DVCUL9
1099          KM   REFERENCED FROM GCW MASTER DRAINAGE STUDY
1100          DR  DVCUL9
              *

1101          KK   CRET9
1102          KM   COMBINE RET9 AND RET8
1103          KM   REFERENCED FROM GCW MASTER DRAINAGE STUDY
1104          HC       2
              *
1                                        HEC-1 INPUT                                                PAGE 31

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

1105          KK  DCCUL9
1106          KM   FACILITY E-15A
1107          KM   FLOW SPLIT AT VTN CULVERT 9
1108          KM   DIVERSION TO EAST SIDE OF US-95
1109          KM   BECAUSE PROPOSED MPU FACILITY REDUCES FLOW AT CULVERT 9,
1110          KM   SIDE WEIR RAISED TO MATCH EXISTING DIVERSION
1111          KM   REFERENCED FROM GCW MASTER DRAINAGE STUDY
1112          DT   DIV9A
1113          DI       0     165     377     791     920    1065    2170
1114          DQ       0     165     203     241     250     260     437
              *

1115          KK   RET10
1116          KM   RETRIEVE FLOW FROM DCUL10
1117          KM   REFERENCED FROM GCW MASTER DRAINAGE STUDY
1118          DR  DCUL10
              *

1119          KK  CRET10
1120          KM   COMBINE RET10 AND RDCUL9
1121          KM   REFERENCED FROM GCW MASTER DRAINAGE STUDY
1122          HC       2
              *

1123          KK  DCU10A
1124          KM   FACILITY E-16A
1125          KM   FLOW SPLIT AT VTN CULVERT 10
1126          KM   DIVERSION TO EAST SIDE OF US-95
1127          KM   BECAUSE PROPOSED MPU FACILITY REDUCES FLOW AT CULVERT 10,
1128          KM   SIDE WEIR RAISED TO MATCH EXISTING DIVERSION
1129          KM   REFERENCED FROM GCW MASTER DRAINAGE STUDY
1130          DT   DIV10A
1131          DI       0     146     312     675    1424    2223
1132          DQ       0     146     291     360     437     583
              *

1133          KK   RET11
1134          KM   RETRIEVE FLOW FROM DCUL11
1135          KM   REFERENCED FROM GCW MASTER DRAINAGE STUDY
1136          DR  DCUL11
              *

1137          KK    RET6
1138          KM   RETRIEVE FLOW THAT SPLITS INTO MPU FACILITY AT VTN CULVERT 6
1139          DR  DCMPU6
              *

1140          KK  DIV11A
1141          KM   COMBINE RET11, RDCU10, CHD7B2, RET6
1142          KM   REFERENCED FROM GCW MASTER DRAINAGE STUDY
1143          HC       4
              *
1                                        HEC-1 INPUT                                                PAGE 32

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

1144          KK   DUMMY
1145          KM   CLEAR HEC-1 STACK
1146          HC       2
              *

1147          KK  RETD1B
1148          KM   RETRIEVE FLOW FROM VTN CULVERT 1
1149          KM   REFERENCED FROM GCW MASTER DRAINAGE STUDY
1150          DR  DCHD1B
              *

1151          KK   DHD1C
1152          KM   FACILITY E-9A
1153          KM   FLOW SPLIT AT VTN CULVERT 1
1154          KM   DIVERSION TO EAST SIDE OF US-95
1155          KM   REFERENCED FROM GCW MASTER DRAINAGE STUDY
1156          DT  DCHD1C
1157          DI       0      10      50
1158          DQ       0      10      50
              *

1159          KK  RETD2B
1160          KM   RETRIEVE FLOW FROM VTN CULVERT 2
1161          KM   REFERENCED FROM GCW MASTER DRAINAGE STUDY
1162          DR  DCHD2B
              *

1163          KK  CHD02C
1164          KM   COMBINE DCHD2B, RDHD1C
1165          KM   REFERENCED FROM GCW MASTER DRAINAGE STUDY
1166          HC       2
              *

1167          KK   DHD2C
1168          KM   FACILITY E-10A
1169          KM   FLOW SPLIT AT VTN CULVERT 2
```

```
1170          KM   DIVERSION TO EAST SIDE OF US-95
1171          KM   REFERENCED FROM GCW MASTER DRAINAGE STUDY
1172          DT  DCHD2C
1173          DI       0     100     200     250     400     500     600     700     800     900
1174          DI    1000
1175          DQ       0      65     100     122     201     258     323     384     447     514
1176          DQ     581
              *

1177          KK  RETD4B
1178          KM   RETRIEVE FLOW FROM VTN CULVERT 4
1179          KM   REFERENCED FROM GCW MASTER DRAINAGE STUDY
1180          DR  DCHD4B
              *
```



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

1181          KK  CHD04C
1182          KM   COMBINE DCHD4B, RDHD2C
1183          KM   REFERENCED FROM GCW MASTER DRAINAGE STUDY
1184          HC       2
              *

1185          KK   DHD4C
1186          KM   FACILITY E-11A
1187          KM   FLOW SPLIT AT VTN CULVERT 4
1188          KM   DIVERSION TO EAST SIDE OF US-95
1189          KM   REFERENCED FROM GCW MASTER DRAINAGE STUDY
1190          DT  DCHD4C
1191          DI       0     200     400     600     800    1000    1200    1400    1600    1800
1192          DI    2000
1193          DQ       0     181     212     262     336     416     503     609     719     823
1194          DQ     933
              *

1195          KK   DHD5C
1196          KM   FACILITY E-12A
1197          KM   FLOW SPLIT AT VTN CULVERT 5
1198          KM   DIVERSION TO EAST SIDE OF US-95
1199          KM   REFERENCED FROM GCW MASTER DRAINAGE STUDY
1200          DT  DCHD5C
1201          DI       0     150     300     450     600     750     800    1050    1200    1350
1202          DI    1500
1203          DQ       0     132     171     193     208     232     245     321     380     444
1204          DQ     513
              *

1205          KK  RETD6B
1206          KM   RETRIEVE FLOW FROM VTN CULVERT 6
1207          KM   REFERENCED FROM GCW MASTER DRAINAGE STUDY
1208          DR  DCHD6B
              *

1209          KK  CHD06C
1210          KM   COMBINE DCHD6B, RDHD5C
1211          KM   REFERENCED FROM GCW MASTER DRAINAGE STUDY
1212          HC       2
              *

1213          KK   DHD6C
1214          KM   FACILITY E-13A
1215          KM   FLOW SPLIT AT VTN CULVERT 6
1216          KM   DIVERSION TO EAST SIDE OF US-95
1217          KM   REFERENCED FROM GCW MASTER DRAINAGE STUDY
1218          DT  DCHD6C
1219          DI       0     200     400     600     800    1000    1200    1400    1600    1680
1220          DI    2000
1221          DQ       0   199.9   399.9     560     647     713     786     860     948     988
1222          DQ    1142
              *
```



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

1223          KK   DUMMY
1224          KM   EMPTY HEC-1 STACK
1225          HC       2
              *

1226          KK  RETC5C
1227          KM   RETRIEVE FLOW FROM VTN CULVERT 5
1228          KM   REFERENCED FROM GCW MASTER DRAINAGE STUDY
1229          DR  DCHD5C
              *

1230          KK   95-7B
1231          KM   REFERENCED FROM GCW MASTER DRAINAGE STUDY
1232          BA   .0081
1233          PB    2.77
1234          LS       0    92.6
1235          UD   0.087
              *

1236          KK  C95-7B
1237          KM   COMBINE DCHD5C, 95-7B
1238          KM   REFERENCED FROM GCW MASTER DRAINAGE STUDY
1239          HC       2
              *

1240          KK  RETC6C
1241          KM   RETRIEVE FLOW FROM VTN CULVERT 6
1242          KM   REFERENCED FROM GCW MASTER DRAINAGE STUDY
1243          DR  DCHD6C
              *

1244          KK   95-8B
1245          KM   REFERENCED FROM GCW MASTER DRAINAGE STUDY
1246          BA   .0031
1247          PB    2.77
1248          LS       0    92.6
1249          UD   0.052
              *

1250          KK  C95-8B
1251          KM   COMBINE DSHD5C, DCHD6C, 95-8B
1252          KM   REFERENCED FROM GCW MASTER DRAINAGE STUDY
1253          HC       2
              *

1254          KK    SKY2
1255          BA   .0074
1256          PB    2.93
1257          LS       0    98.0
1258          UD    .099
              *
```

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

1259          KK  EMLA1A
1260          BA   .0135
1261          PB    2.93
1262          LS       0    95.0
1263          UD    .100
              *

1264          KK     TP1
1265          BA   .0009
1266          PB    2.93
1267          LS       0    98.0
1268          UD    .082
              *

1269          KK   BR-TP
1270          KM   TOTAL FLOW AT INTERSECTION OF BRENT AND TEE PEE
1271          KM   FLOW ROUTED EAST IN BRENT
1272          HC       5
              *

1273          KK     ES2
1274          KM   REFERENCED FROM GCW MASTER DRAINAGE STUDY
1275          BA   .0491
1276          PB    2.77
1277          LS       0    94.7
1278          UD   0.149
              *

1279          KK  BRENT1
1280          BA   .0018
1281          PB    2.93
1282          LS       0    98.0
1283          UD    .062
              *

1284          KK    EGC3
1285          BA   .0215
1286          PB    2.93
1287          LS       0    95.0
1288          UD    .091
              *

1289          KK  HORSE5
1290          BA   .0048
1291          PB    2.93
1292          LS       0    98.0
1293          UD    .063
              *
```



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

1294          KK    CP44
1295          KM   TOTAL KYLE CANYON DEVELOPMENT DISCHARGE AT INTERSECTION OF BRENT LANE AND FOR
1296          KM   PROPOSED FLOW SPLIT INTO EXISTING STORM DRAIN SOUTH
1297          HC       5
              *

1298          KK   SOUTH
1299          KM   FLOW SPLIT AT BRENT/FT. APACHE
1300          KM   DIVERT STORM DRAIN DESIGN FLOW 65 CFS SOUTH IN FORT APACHE
1301          DT   BRENT
1302          DI       0     212     425
1303          DQ       0     160     373
              *

1304          KK    SKY1
1305          BA   .0074
1306          PB    2.93
1307          LS       0    98.1
1308          UD    .084
              *

1309          KK  HORSE4
1310          BA   .0035
1311          PB    2.93
1312          LS       0    98.0
1313          UD    .050
              *

1314          KK    EGC1
1315          BA   .0076
1316          PB    2.93
1317          LS       0    95.0
1318          UD    .070
              *

1319          KK    EGC2
1320          BA   .0121
1321          PB    2.93
1322          LS       0    95.0
1323          UD    .095
              *

1324          KK   DUMMY
1325          HC       5
              *

1326          KK   95-9B
1327          KM   REFERENCED FROM GCW MASTER DRAINAGE STUDY
1328          BA   .0133
1329          PB    2.77
1330          LS       0    92.6
1331          UD   0.139
              *
```



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

1332          KK    CP45
1333          KM   TOTAL KYLE CANYON DISCHARGE AT INTERSECTION OF FORT APACHE AND HORSE
1334          KM   PROPOSED FLOW SPLIT AT INTERSECTION
1335          HC       2
              *

1336          KK   HORSE
1337          KM   FLOW SPLIT AT HORSE/RACEL
1338          KM   DIVERT NWNS 101 CFS SOUTH IN FORT APACHE/RACEL
1339          DT   RACEL
1340          DI       0     101    1000
1341          DQ       0     101     101
              *
```

```
1342          KK  RETC4C
1343          KM   RETRIEVE FLOW FROM VTN CULVERT 4
1344          KM   REFERENCED FROM GCW MASTER DRAINAGE STUDY
1345          DR  DCHD4C
              *

1346          KK    SKY3
1347          BA   .0068
1348          PB    2.77
1349          LS       0    98.0
1350          UD    .146
              *

1351          KK    OFFH
1352          KM   REFERENCED FROM GCW MASTER DRAINAGE STUDY
1353          BA   .0074
1354          PB    2.77
1355          LS       0    89.5
1356          UD  0.082
              *

1357          KK   SK-IR
1358          KM   COMBINE DCHD4C, SKY3, OFFH
1359          HC       3
              *

1360          KK   EML1A
1361          BA   .0293
1362          PB    2.77
1363          LS       0    92.0
1364          UD    .124
              *

1365          KK   IRON2
1366          BA   .0041
1367          PB    2.93
1368          LS       0    98.0
1369          UD    .063
              *
```



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

1370          KK  EMLA1B
1371          BA   .0221
1372          PB    2.93
1373          LS       0    94.6
1374          UD    .104
              *

1375          KK    TP2
1376          BA   .0009
1377          PB    2.93
1378          LS       0    98.0
1379          UD    .079
              *

1380          KK   IR-TP
1381          KM   COMBINE SK-IR, EML1A, IRON2, EMLA1B, TP2
1382          HC       5
              *

1383          KK    ES1
1384          KM   REFERENCED FROM GCW MASTER DRAINAGE STUDY
1385          BA   .0173
1386          PB    2.77
1387          LS       0    92.7
1388          UD  0.109
              *

1389          KK   IRON3
1390          BA   .0021
1391          PB    2.93
1392          LS       0    98.0
1393          UD    .062
              *

1394          KK   IR-FT
1395          KM   COMBINE IR-TP, ES1, IRON3
1396          HC       3
              *

1397          KK   FTNOR
1398          KM   FLOW SPLIT AT IRON MOUNTAIN/FORT APACHE
1399          KM   DIVERT FLOW EAST IN IRON MOUNTAIN ROAD
1400          KM   DIVERT MAX. SD FLOW + MAX. STREET FLOW (118/98 CFS) LESS THAN NWNS 235/98 CFS
1401          DT  IREAST
1402          DI       0     115     242
1403          DQ       0      98     118
              *

1404          KK   FTNOR
1405          DT   FTNOR
1406          DI       0    1000
1407          DQ       0    1000
              *
```



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

1408          KK   DUMMY
1409          HC       4
              *

1410          KK  RETC1C
1411          KM   RETRIEVE FLOW FROM VTN CULVERT 1
1412          KM   REFERENCED FROM GCW MASTER DRAINAGE STUDY
1413          DR  DCHD1C
              *

1414          KK  RETC2C
1415          KM   RETRIEVE FLOW FROM VTN CULVERT 2
1416          KM   REFERENCED FROM GCW MASTER DRAINAGE STUDY
1417          DR  DCHD2C
              *

1418          KK    OFF9
1419          KM   REFERENCED FROM GCW MASTER DRAINAGE STUDY
1420          BA   .0424
1421          PB    2.77
1422          LS       0    89.1
1423          UD  0.194
              *

1424          KK   COFF9
1425          KM   COMBINE OFF9, DCHD1C, DCHD2C
1426          HC       3
```

```
                *

1427            KK    OFFS
1428            BA   .0109
1429            PB    2.77
1430            LS       0    77.0
1431            UD   0.172
                *

1432            KK    SKY4
1433            BA   .0095
1434            PB    2.77
1435            LS       0    98.0
1436            UD    .183
                *

1437            KK   LC-SK
1438            KM   TOTAL FLOW AT INTERSECTION OF LOG CABIN AND SKY
1439            KM   FLOW ROUTED EAST IN LOG CABIN
1440            HC       3
                *
```



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

1441            KK   EML1B
1442            BA   .0749
1443            PB    2.77
1444            LS       0    92.0
1445            UD    .129
                *

1446            KK  ESCHL1
1447            BA   .0249
1448            PB    2.77
1449            LS       0    83.5
1450            UD    .126
                *

1451            KK   EPRK1
1452            BA   .0123
1453            PB    2.77
1454            LS       0    69.0
1455            UD    .122
                *

1456            KK   STRT6
1457            BA   .0055
1458            PB    2.77
1459            LS       0    98.0
1460            UD    .141
                *

1461            KK   EML2A
1462            BA   .0665
1463            PB    2.77
1464            LS       0    92.0
1465            UD    .138
                *

1466            KK   DUMMY
1467            HC       5
                *

1468            KK     TP3
1469            BA   .0068
1470            PB    2.77
1471            LS       0    98.0
1472            UD    .231
                *

1473            KK    TP4A
1474            BA   .0029
1475            PB    2.77
1476            LS       0    98.0
1477            UD    .115
                *
```



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

1478            KK    LOG1
1479            BA   .0073
1480            PB    2.77
1481            LS       0    98.0
1482            UD    .088
                *

1483            KK   LC-TP
1484            KM   TOTAL FLOW AT INTERSECTION OF LOG CABIN AND TEE PEE
1485            KM   FLOW ROUTED EAST IN LOG CABIN
1486            HC       5
                *

1487            KK     EL1
1488            BA   .1161
1489            PB    2.77
1490            LS       0    82.0
1491            UD    .184
                *

1492            KK    LOG2
1493            BA   .0042
1494            PB    2.77
1495            LS       0    98.0
1496            UD    .065
                *

1497            KK   FORT1
1498            BA   .0091
1499            PB    2.77
1500            LS       0    98.0
1501            UD    .238
                *

1502            KK   FTNOR
1503            DR   FTNOR
                *

1504            KK   FT-LC
1505            KM   TOTAL FLOW AT INTERSECTION OF FORT APACHE AND LOG CABIN
1506            KM   FLOW ROUTED NORTH IN FORT APACHE
1507            HC       5
                *

1508            KK   RFTLC
1509            KM   DIVERT FLOW SPLIT INTO O'HARE ROAD
```

```
1510          DT   OHARE
1511          DI       0     276     697
1512          DQ       0       0      47
              *
```



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

1513          KK  R2FTLC
1514          KM   DIVERT FLOW SPLIT INTO LOG CABIN WAY
1515          DT  LOGCAB
1516          DI       0     276     650
1517          DQ       0      73     187
              *

1518          KK   EML2B
1519          BA   .0412
1520          PB    2.77
1521          LS       0    92.0
1522          UD    .120
              *

1523          KK    TP4B
1524          BA   .0036
1525          PB    2.77
1526          LS       0    98.0
1527          UD    .085
              *

1528          KK    EML3
1529          BA   .0575
1530          PB    2.77
1531          LS       0    92.0
1532          UD    .153
              *

1533          KK   STRT7
1534          BA   .0039
1535          PB    2.77
1536          LS       0    98.0
1537          UD    .071
              *

1538          KK   DUMMY
1539          HC       5
              *

1540          KK    EML4
1541          BA   .0718
1542          PB    2.77
1543          LS       0    92.0
1544          UD    .153
              *

1545          KK   ENVE2
1546          BA   .0144
1547          PB    2.77
1548          LS       0    77.0
1549          UD    .157
              *
```



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

1550          KK   FORT2
1551          BA   .0090
1552          PB    2.77
1553          LS       0    98.0
1554          UD    .253
              *

1555          KK   FT-MO
1556          KM   TOTAL KYLE CANYON DEVELOPMENT DISCHARGE IN FORT APACHE @ MOCCASIN
1557          KM   FLOW ROUTED EAST ADJACENT TO MOCCASIN
1558          HC       4
              *

1559          KK    OFFC
1560          KM   REFERENCED FROM GCW MASTER DRAINAGE STUDY
1561          BA   .1333
1562          PB    2.79
1563          LS       0    77.4
1564          UD  0.313
              *

1565          KK    95-3
1566          KM   REFERENCED FROM GCW MASTER DRAINAGE STUDY
1567          BA   .0095
1568          PB    2.77
1569          LS       0    89.1
1570          UD  0.095
              *

1571          KK    OFFB
1572          KM   REFERENCED FROM GCW MASTER DRAINAGE STUDY
1573          BA   .1337
1574          PB    2.81
1575          LS       0    77.4
1576          UD  0.392
              *

1577          KK    95-2
1578          KM   REFERENCED FROM GCW MASTER DRAINAGE STUDY
1579          BA   .0044
1580          PB    2.77
1581          LS       0    89.1
1582          UD  0.090
              *

1583          KK   DUMMY
1584          HC       4
              *
```



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

1585          KK    OFFA
1586          KM   REFERENCED FROM GCW MASTER DRAINAGE STUDY
1587          BA   .0203
1588          PB    2.77
1589          LS       0    77.4
1590          UD  0.149
              *

1591          KK    95-1
1592          KM   REFERENCED FROM GCW MASTER DRAINAGE STUDY
```

```
1593          BA   .0042
1594          PB    2.77
1595          LS       0    89.1
1596          UD   0.069
              *

1597          KK   CP27B
1598          KM   REFERENCED FROM GCW MASTER DRAINAGE STUDY
1599          KM   COMBINE OFFC, 95-3, OFFB, 95-2, OFFA, 95-1
1600          HC       3
              *

1601          KK    OFFZ
1602          BA   .0521
1603          PB    2.77
1604          LS       0    77.0
1605          UD   0.223
              *

1606          KK   COFFZ
1607          KM   COMBINE CP27B, OFFZ
1608          HC       2
              *

1609          KK   OFFDA
1610          KM   REFERENCED FROM GCW MASTER DRAINAGE STUDY
1611          BA   .6430
1612          PB    3.09
1613          LS       0    77.4
1614          UD   0.530
              *

1615          KK  ROFFDA
1616          KM   REFERENCED FROM GCW MASTER DRAINAGE STUDY
1617          KM   STEPS      K X-FACTOR
1618          RM       5   0.400    0.15
              *

1619          KK   OFFDB
1620          KM   REFERENCED FROM GCW MASTER DRAINAGE STUDY
1621          BA   .4948
1622          PB    2.84
1623          LS       0    77.4
1624          UD   0.522
              *
```



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

1625          KK   CP27A
1626          KM   COMBINE OFFDA, OFFDB
1627          HC       2
              *

1628          KK   DCKC7
1629          KM   RETRIEVE FLOW THAT CROSSES US-95 IN CCRFCD FACILITY
1630          DR   DCKC7
              *

1631          KK    OFFX
1632          BA   .0177
1633          PB    2.77
1634          LS       0    77.0
1635          UD   0.187
              *

1636          KK    OFFT
1637          BA   .0173
1638          PB    2.77
1639          LS       0    77.0
1640          UD   0.203
              *

1641          KK   EPT16
1642          KM   TOTAL OFFSITE & KC WEST FLOW CONVEYED THRU EAST-SHEEP MOUNTAIN PKWY
1643          KM   COMBINE CP27A, DCKC7, OFFX, OFFT
1644          HC       4
              *

1645          KK  SHEEP2
1646          BA   .0627
1647          PB    2.77
1648          LS       0    77.0
1649          UD    .218
              *

1650          KK  SHEEP3
1651          BA   .0137
1652          PB    2.77
1653          LS       0    77.0
1654          UD    .198
              *

1655          KK   EMLA2
1656          BA   .1368
1657          PB    2.77
1658          LS       0    92.0
1659          UD    .225
              *
```



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

1660          KK   DUMMY
1661          HC       4
              *

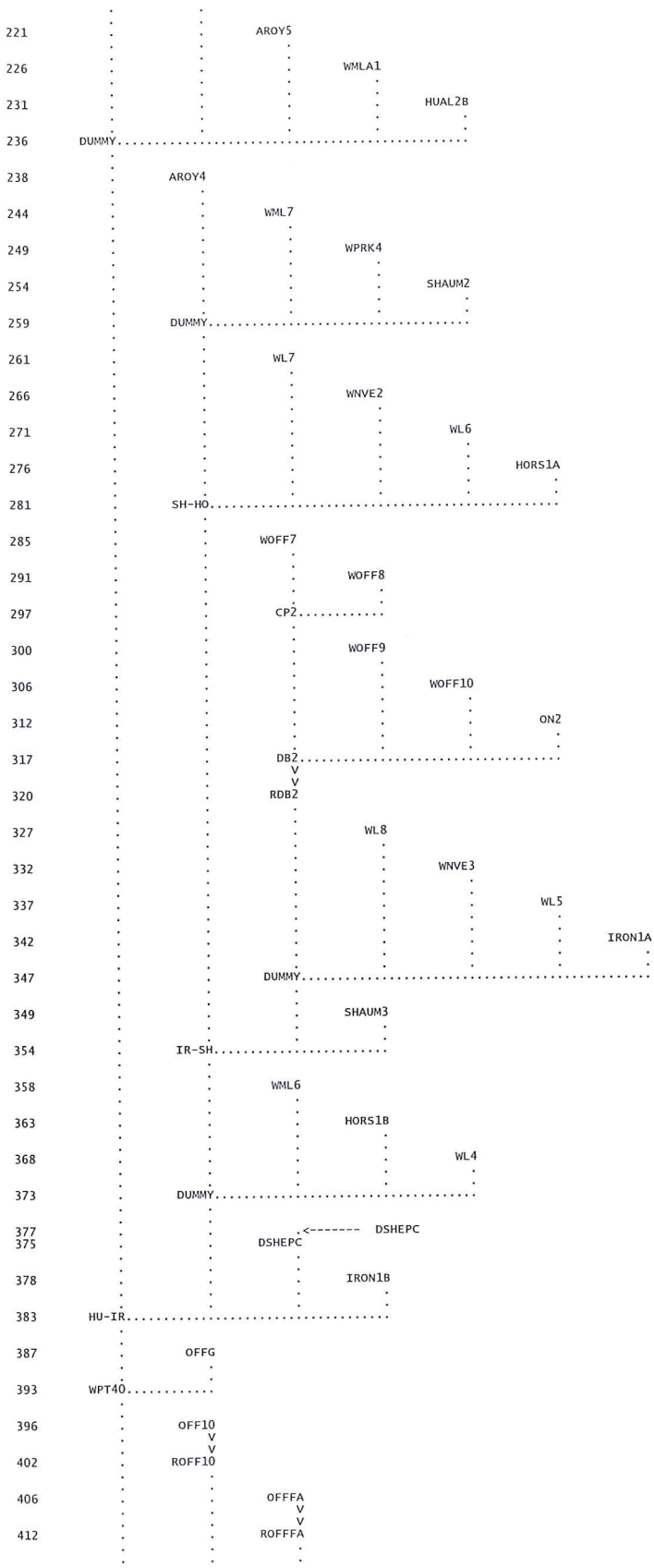
1662          KK   ENVE1
1663          BA   .0341
1664          PB    2.77
1665          LS       0    77.0
1666          UD    .210
              *

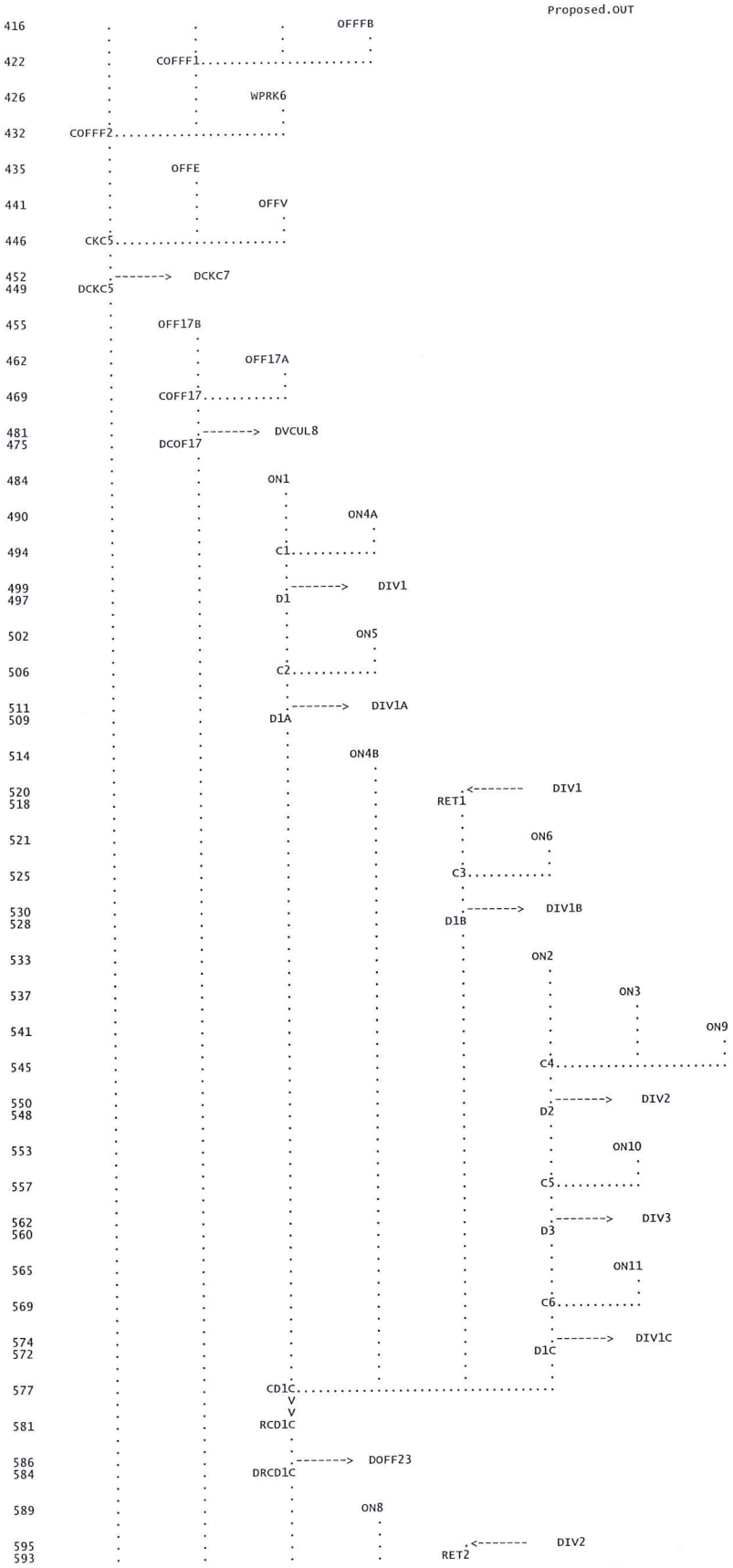
1667          KK   HUAL3
1668          BA   .0037
1669          PB    2.77
1670          LS       0    98.0
1671          UD    .177
              *

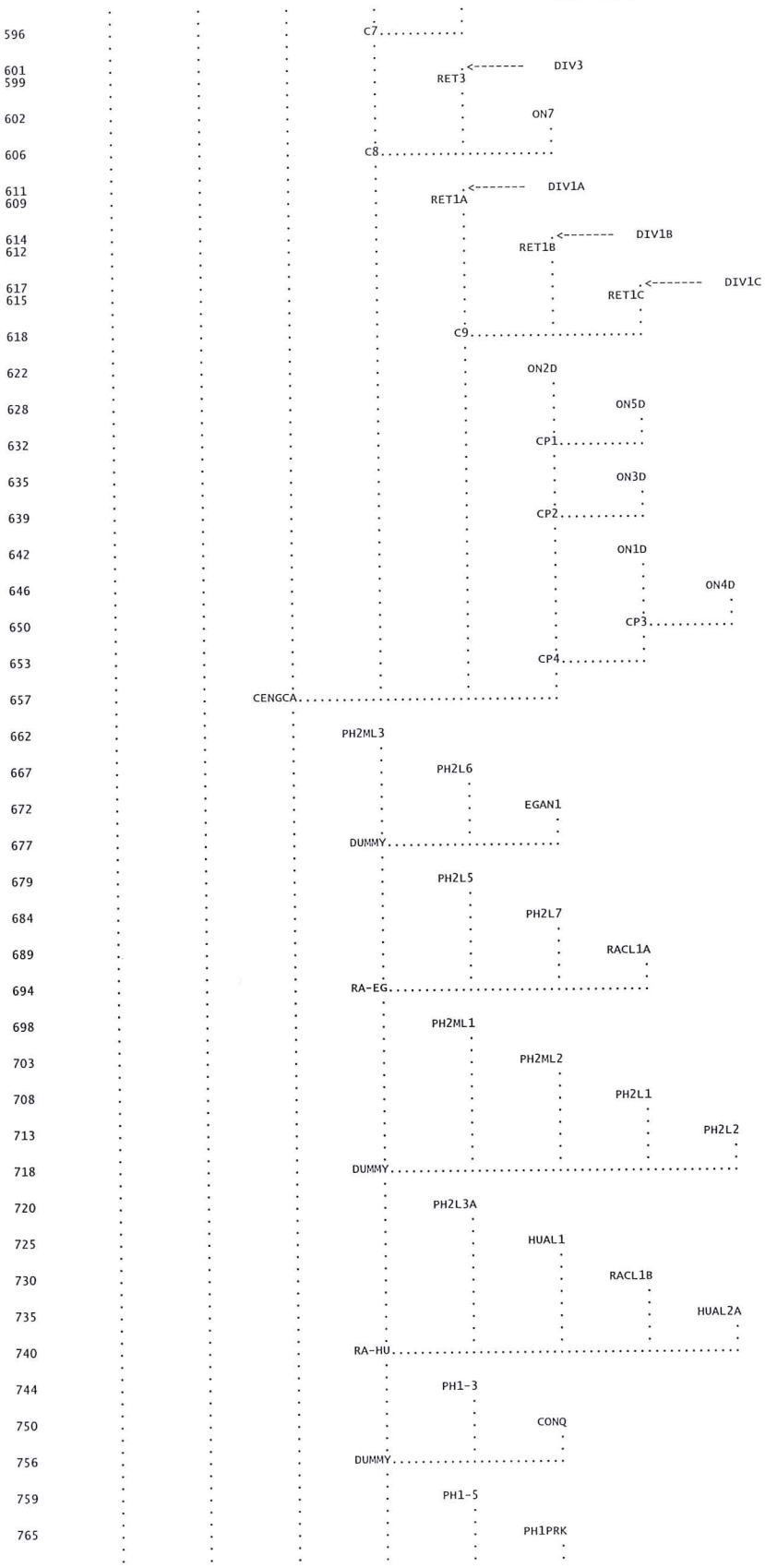
1672          KK   SH-MO
1673          KM   TOTAL KYLE CANYON DEVELOPMENT DISCHARGE IN SHEEP MOUNTAIN PKWY @ MOCCASIN
1674          HC       4
              *

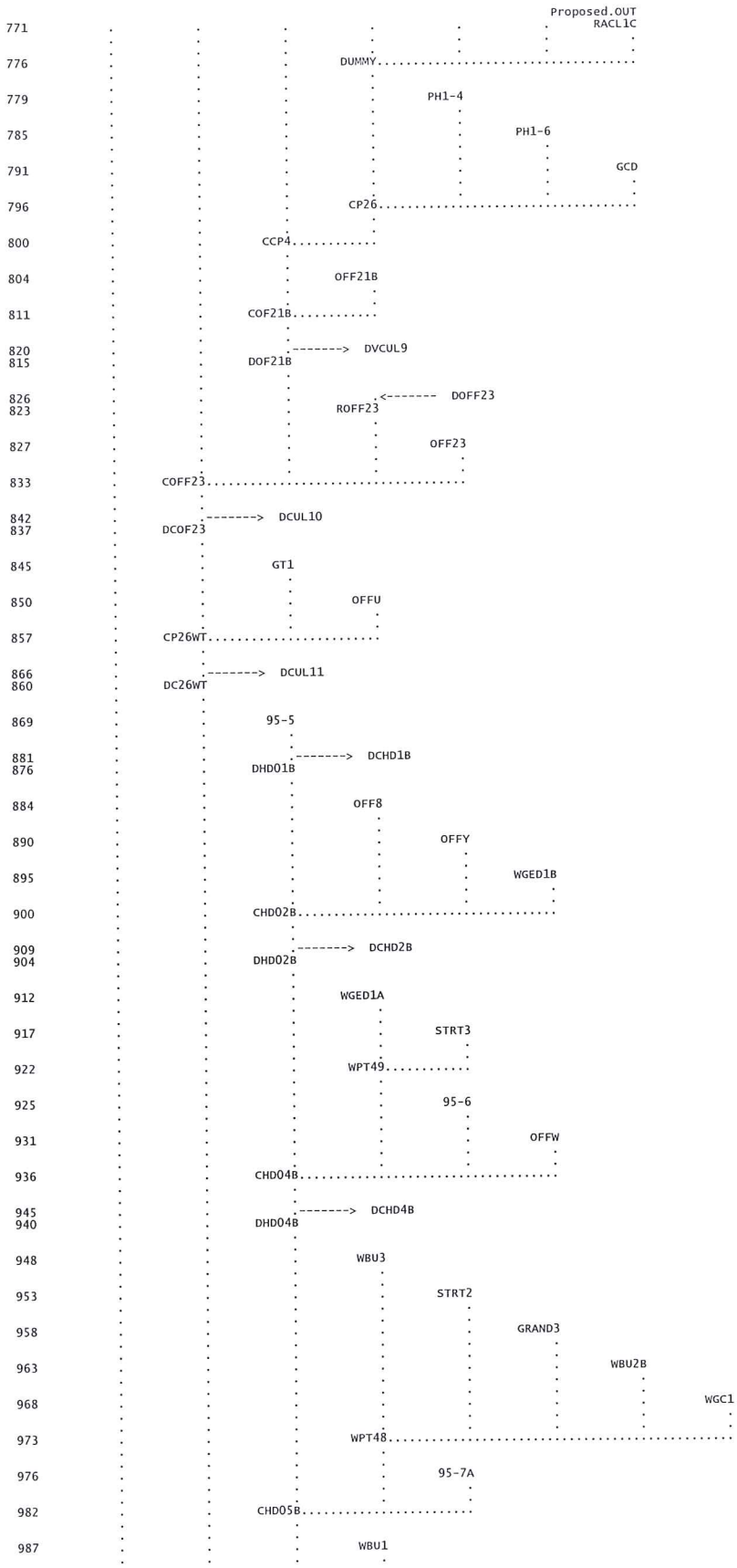
1675          KK    CP43
```

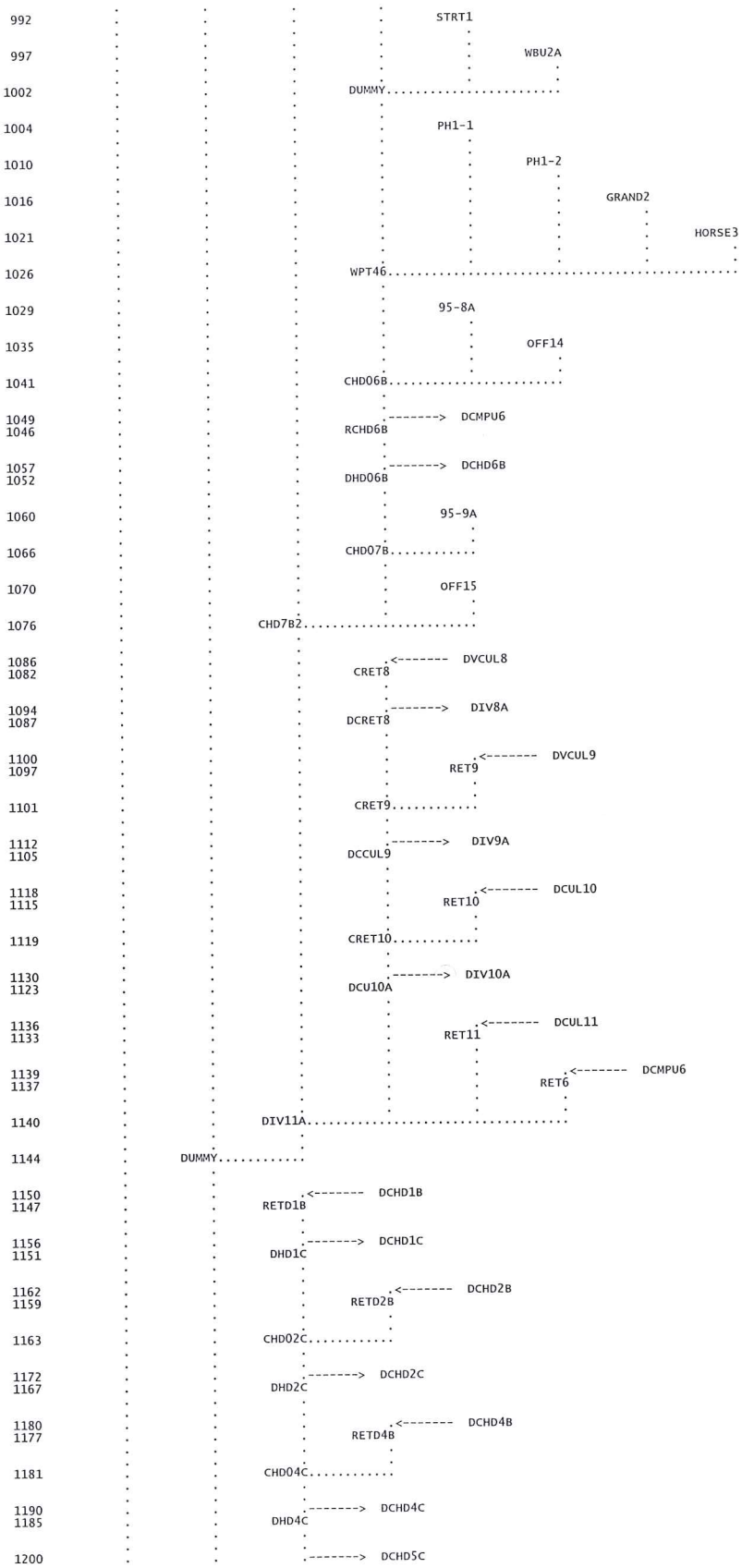
```
1676          KM   TOTAL KYLE CANYON DEVELOPMENT DISCHARGE IN MOCCASIN REGIONAL ALIGNMENT
1677          HC       2
              *
1678          ZZ
1
           SCHEMATIC DIAGRAM OF STREAM NETWORK
 INPUT
  LINE      (V) ROUTING           (--->) DIVERSION OR PUMP FLOW
   NO.      (.) CONNECTOR         (<---) RETURN OF DIVERTED OR PUMPED FLOW
    28       WOFF1
                .
                .
    43          .       WOFF2
                .          .
                .          .
    49          .          .       WOFF3
                .          .          .
                .          .          .
    55        CP1.....................
                .
                .
    58          .       WOFF4
                .          .
                .          .
    64          .          .       WOFF5
                .          .          .
                .          .          .
    70          .          .          .       WOFF6
                .          .          .          .
                .          .          .          .
    76          .          .          .          .          ON1
                .          .          .          .           .
                .          .          .          .           .
    81        DB1.....................................................
              V
              V
    84       RDB1
                .
                .
    91          .       AROY1
                .          .
                .          .
    97          .          .       WPRK5
                .          .          .
                .          .          .
   102          .          .          .       SHEEP1
                .          .          .          .
                .          .          .          .
   110          .          .          .          .-------->  DSHEPC
   108          .          .          .       SHEPAB
                .          .          .          .
                .          .          .          .
   115          .          .          .          .-------->  DSHEPB
   113          .          .          .       DSHEPA
                .          .          .          .
                .          .          .          .
   118          .          .          .          .       AROY2
                .          .          .          .        .
                .          .          .          .        .
   124       DUMMY.....................................................
                .
                .
   126          .       PH2L4
                .          .
                .          .
   131          .          .       PH2L8
                .          .          .
                .          .          .
   136          .          .          .       PH2L9
                .          .          .          .
                .          .          .          .
   141          .          .          .          .       EGAN2
                .          .          .          .        .
                .          .          .          .        .
   146       DUMMY.....................................................
                .
                .
   148          .      WPRK2A
                .          .
                .          .
   153          .          .       PH2PK1
                .          .          .
                .          .          .
   158          .          .          .       PH2L3B
                .          .          .          .
                .          .          .          .
   163       DUMMY.....................................
                .
                .
   165          .       PH2PK
                .          .
                .          .
   170          .          .       HORSE2
                .          .          .
                .          .          .
   175       DUMMY.....................
                .
                .
   177          .      PH2PK2
                .          .
                .          .
   182          .          .       PH2ML4
                .          .          .
                .          .          .
   187          .          .          .       SHAUM1
                .          .          .          .
                .          .          .          .
   192       HU-HO.....................................
                .
                .
   196          .        WML5
                .          .
                .          .
   201          .          .       WSCHL2
                .          .          .
                .          .          .
   206          .          .          .       WPRK1
                .          .          .          .
                .          .          .          .
   211          .          .          .          .       STRT5
                .          .          .          .        .
                .          .          .          .        .
   216       DUMMY.....................................................
                .
                .
   220          .           .<-------  DSHEPB
   218          .       DSHEPB
```

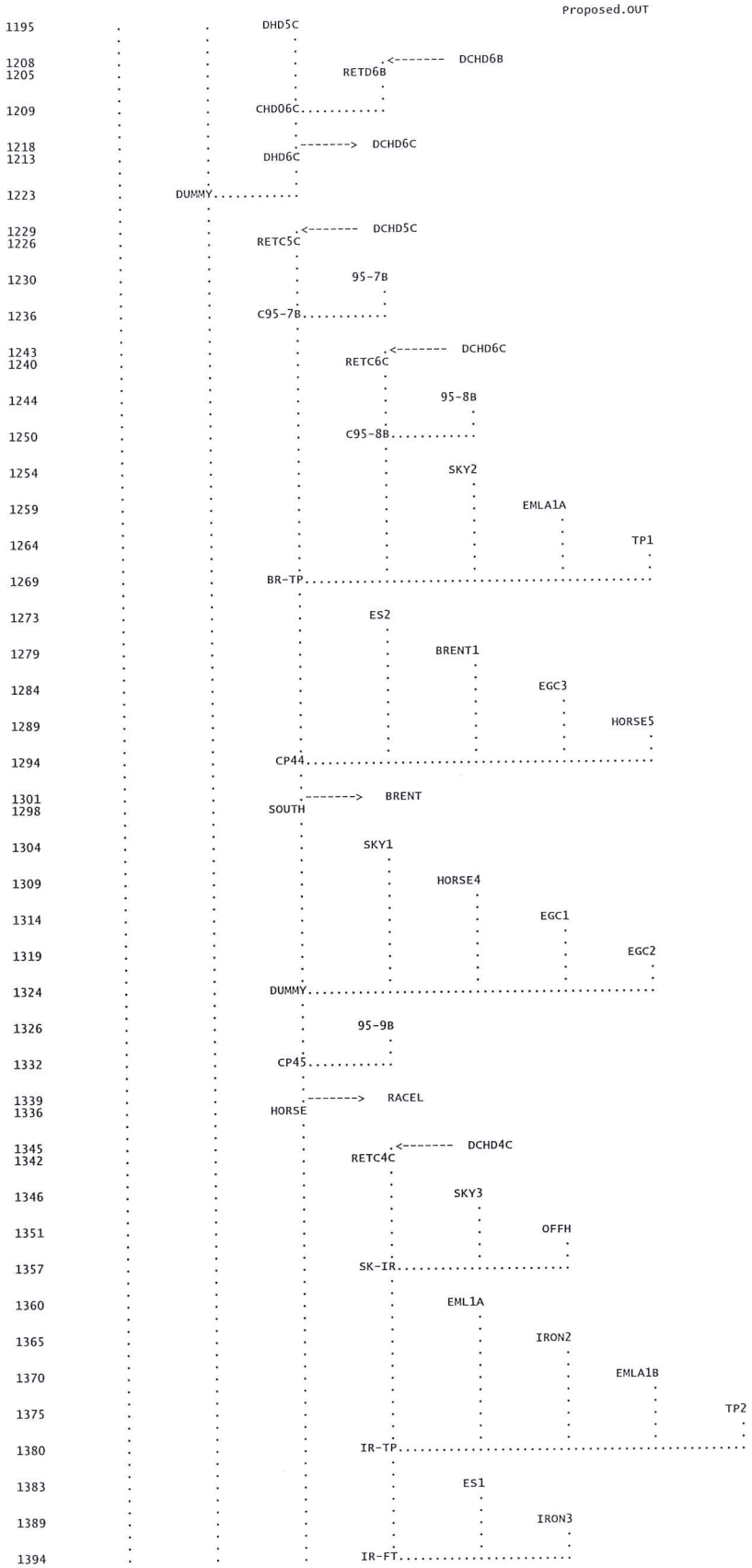

221 AROY5
226 WMLA1
231 HUAL2B
236 DUMMY
238 AROY4
244 WML7
249 WPRK4
254 SHAUM2
259 DUMMY
261 WL7
266 WNVE2
271 WL6
276 HORS1A
281 SH-HO
285 WOFF7
291 WOFF8
297 CP2
300 WOFF9
306 WOFF10
312 ON2
317 DB2
320 RDB2
327 WL8
332 WNVE3
337 WL5
342 IRON1A
347 DUMMY
349 SHAUM3
354 IR-SH
358 WML6
363 HORS1B
368 WL4
373 DUMMY
377 DSHEPC
375 DSHEPC
378 IRON1B
383 HU-IR
387 OFFG
393 WPT40
396 OFF10
402 ROFF10
406 OFFFA
412 ROFFFA


OFFFB
COFFF1
WPRK6
COFFF2
OFFE
OFFV
CKC5
DCKC7
DCKC5
OFF17B
OFF17A
COFF17
DVCUL8
DCOF17
ON1
ON4A
C1
DIV1
D1
ON5
C2
DIV1A
D1A
ON4B
DIV1
RET1
ON6
C3
DIV1B
D1B
ON2
ON3
ON9
C4
DIV2
D2
ON10
C5
DIV3
D3
ON11
C6
DIV1C
D1C
CD1C
RCD1C
DOFF23
DRCD1C
ON8
DIV2
RET2


596 C7
601 .<------- DIV3
599 RET3
602 ON7
606 C8
611 .<------- DIV1A
609 RET1A
614 .<------- DIV1B
612 RET1B
617 .<------- DIV1C
615 RET1C
618 C9
622 ON2D
628 ON5D
632 CP1
635 ON3D
639 CP2
642 ON1D
646 ON4D
650 CP3
653 CP4
657 CENGCA
662 PH2ML3
667 PH2L6
672 EGAN1
677 DUMMY
679 PH2L5
684 PH2L7
689 RACL1A
694 RA-EG
698 PH2ML1
703 PH2ML2
708 PH2L1
713 PH2L2
718 DUMMY
720 PH2L3A
725 HUAL1
730 RACL1B
735 HUAL2A
740 RA-HU
744 PH1-3
750 CONQ
756 DUMMY
759 PH1-5
765 PH1PRK


RACL1C
DUMMY
PH1-4
PH1-6
GCD
CP26
CCP4
OFF21B
COF21B
DVCUL9
DOF21B
DOFF23
ROFF23
OFF23
COFF23
DCUL10
DCOF23
GT1
OFFU
CP26WT
DCUL11
DC26WT
95-5
DCHD1B
DHD01B
OFF8
OFFY
WGED1B
CHD02B
DCHD2B
DHD02B
WGED1A
STRT3
WPT49
95-6
OFFW
CHD04B
DCHD4B
DHD04B
WBU3
STRT2
GRAND3
WBU2B
WGC1
WPT48
95-7A
CHD05B
WBU1


992
STRT1
997
WBU2A
1002
DUMMY
1004
PH1-1
1010
PH1-2
1016
GRAND2
1021
HORSE3
1026
WPT46
1029
95-8A
1035
OFF14
1041
CHD06B
1049
1046
DCMPU6
RCHD6B
1057
1052
DCHD6B
DHD06B
1060
95-9A
1066
CHD07B
1070
OFF15
1076
CHD7B2
1086
1082
DVCUL8
CRET8
1094
1087
DIV8A
DCRET8
1100
1097
DVCUL9
RET9
1101
CRET9
1112
1105
DIV9A
DCCUL9
1118
1115
DCUL10
RET10
1119
CRET10
1130
1123
DIV10A
DCU10A
1136
1133
DCUL11
RET11
1139
1137
DCMPU6
RET6
1140
DIV11A
1144
DUMMY
1150
1147
DCHD1B
RETD1B
1156
1151
DCHD1C
DHD1C
1162
1159
DCHD2B
RETD2B
1163
CHD02C
1172
1167
DCHD2C
DHD2C
1180
1177
DCHD4B
RETD4B
1181
CHD04C
1190
1185
DCHD4C
DHD4C
1200
DCHD5C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1205 RETD6B
1209 CHDO6C.....
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1223 DUMMY.....
1229 .<------- DCHD5C
1226 RETC5C
1230 95-7B
1236 C95-7B.....
1243 .<------- DCHD6C
1240 RETC6C
1244 95-8B
1250 C95-8B.....
1254 SKY2
1259 EMLA1A
1264 TP1
1269 BR-TP.....
1273 ES2
1279 BRENT1
1284 EGC3
1289 HORSE5
1294 CP44.....
1301 .-------> BRENT
1298 SOUTH
1304 SKY1
1309 HORSE4
1314 EGC1
1319 EGC2
1324 DUMMY.....
1326 95-9B
1332 CP45.....
1339 .-------> RACEL
1336 HORSE
1345 .<------- DCHD4C
1342 RETC4C
1346 SKY3
1351 OFFH
1357 SK-IR.....
1360 EML1A
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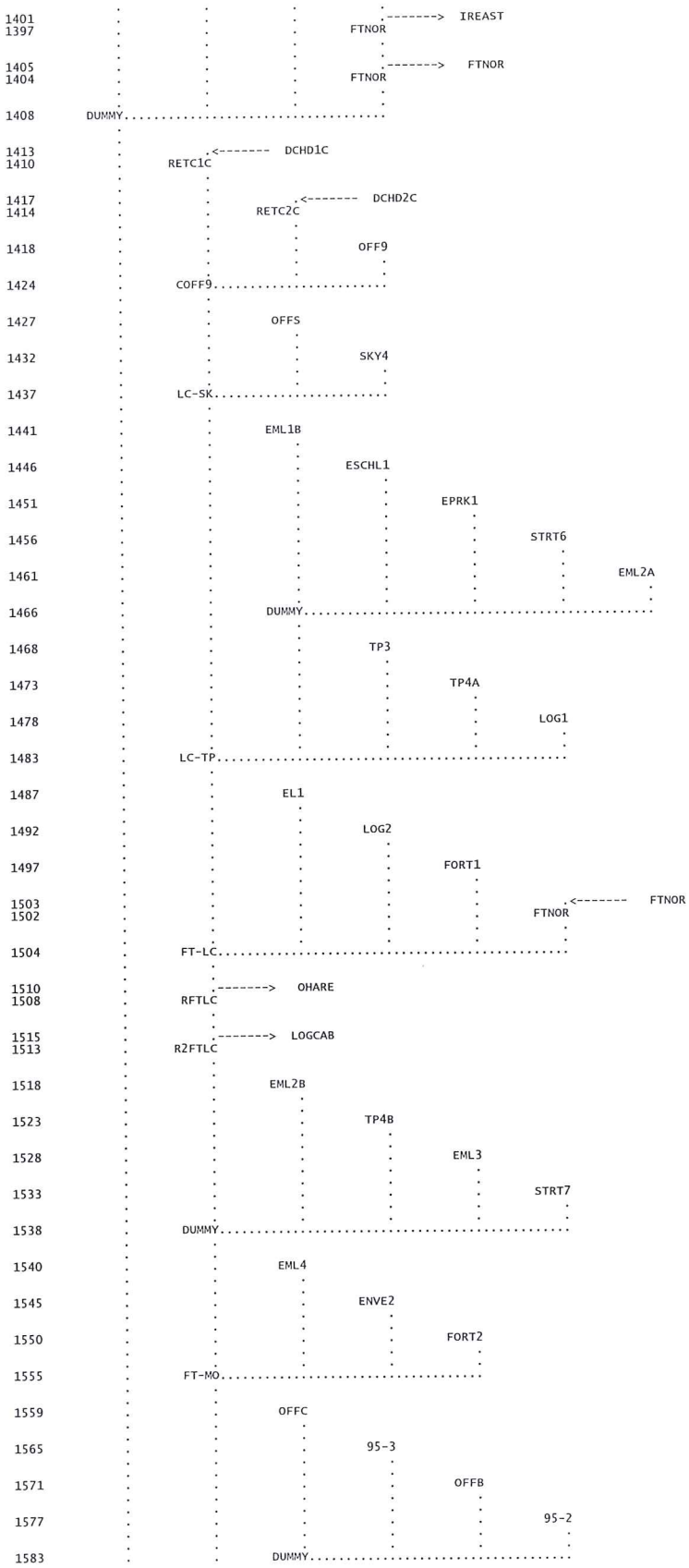
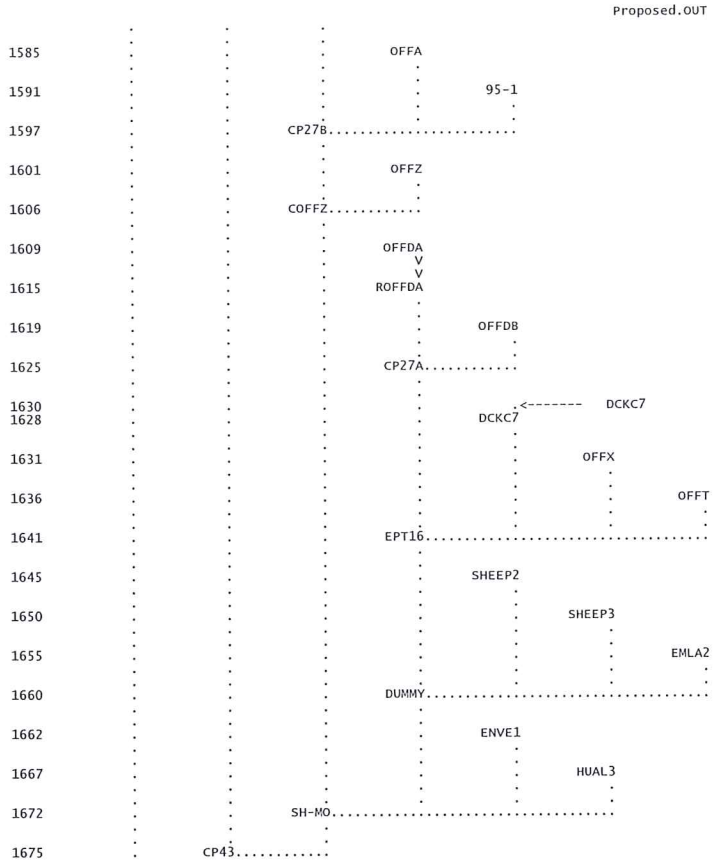
1370 EMLA1B
1375 TP2
1380 IR-TP.....
1383 ES1
1389 IRON3
1394 IR-FT.....


1401
1397
IREAST
FTNOR
1405
1404
FTNOR
FTNOR
1408
DUMMY
1413
1410
DCHD1C
RETC1C
1417
1414
DCHD2C
RETC2C
1418
OFF9
1424
COFF9
1427
OFFS
1432
SKY4
1437
LC-SK
1441
EML1B
1446
ESCHL1
1451
EPRK1
1456
STRT6
1461
EML2A
1466
DUMMY
1468
TP3
1473
TP4A
1478
LOG1
1483
LC-TP
1487
EL1
1492
LOG2
1497
FORT1
1503
1502
FTNOR
FTNOR
1504
FT-LC
1510
1508
OHARE
RFTLC
1515
1513
LOGCAB
R2FTLC
1518
EML2B
1523
TP4B
1528
EML3
1533
STRT7
1538
DUMMY
1540
EML4
1545
ENVE2
1550
FORT2
1555
FT-MO
1559
OFFC
1565
95-3
1571
OFFB
1577
95-2
1583
DUMMY



(***) RUNOFF ALSO COMPUTED AT THIS LOCATION

```
1*****************************************
*                                       *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)   *
*              JUN  1998                *
*            VERSION 4.1                *
*                                       *
*  RUN DATE   11FEB15  TIME  09:28:48   *
*                                       *
*****************************************
```

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

SLATER HANIFAN GROUP
OLYMPIA COMPANIES
SKYE CANYON - MASTER DRAINAGE STUDY UPDATE
OVERALL PROPERTY PROPOSED DRAINAGE CONDITION

RETURN PERIOD ------- 100 & 10-YEAR
DISTRIBUTION -------- 6-HOUR SDN3
PROJECT NO. --------- OLY1401.004
FILENAME ------------ Proposed.H1
DATE ---------------- 02/10/2015
MODELED BY ---------- SMJ/ETM

SIX HOUR DEPTH-AREA REDUCTION FACTORS

DRAINAGE AREA (MI^2)	DARF
0.0-0.49	1.00
0.5-0.99	0.98
1.0-1.99	0.97
2.0-3.99	0.93
4.0-5.99	0.91
6.0-7.99	0.90
25-YR	0.70
10-YR	0.57

25 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       .98       .97       .93       .91       .90       .70       .57

 WARNING --- ROUTED OUTFLOW (     77.) IS GREATER THAN MAXIMUM OUTFLOW (     77.) IN STORAGE-OUTFLOW TABLE

 WARNING --- ROUTED OUTFLOW (     77.) IS GREATER THAN MAXIMUM OUTFLOW (     77.) IN STORAGE-OUTFLOW TABLE

 WARNING --- ROUTED OUTFLOW (     77.) IS GREATER THAN MAXIMUM OUTFLOW (     77.) IN STORAGE-OUTFLOW TABLE

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 WARNING --- ROUTED OUTFLOW (     77.) IS GREATER THAN MAXIMUM OUTFLOW (     77.) IN STORAGE-OUTFLOW TABLE

 WARNING --- ROUTED OUTFLOW (     77.) IS GREATER THAN MAXIMUM OUTFLOW (     77.) IN STORAGE-OUTFLOW TABLE
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 .98	RATIO 3 .97	RATIO 4 .93	RATIO 5 .91	RATIO 6 .90	RATIO 7 .70	RATIO 8 .57
HYDROGRAPH AT +	WOFF1	.43	1	FLOW	387.	376.	370.	347.	335.	330.	218.	150.
				TIME	3.83	3.83	3.83	3.83	3.83	3.83	3.83	3.92
HYDROGRAPH AT +	WOFF2	.04	1	FLOW	54.	53.	52.	48.	47.	46.	30.	20.
				TIME	3.58	3.58	3.58	3.58	3.58	3.58	3.58	3.58
HYDROGRAPH AT +	WOFF3	.03	1	FLOW	38.	37.	36.	34.	33.	33.	22.	15.
				TIME	3.58	3.58	3.58	3.58	3.58	3.58	3.58	3.58
3 COMBINED AT +	CP1	.50	1	FLOW	430.	417.	411.	386.	373.	367.	243.	167.
				TIME	3.83	3.83	3.83	3.83	3.83	3.83	3.83	3.83
HYDROGRAPH AT +	WOFF4	.06	1	FLOW	84.	82.	81.	76.	73.	72.	48.	34.
				TIME	3.58	3.58	3.58	3.58	3.58	3.58	3.58	3.58
HYDROGRAPH AT +	WOFF5	.26	1	FLOW	236.	229.	226.	212.	205.	201.	134.	93.
				TIME	3.83	3.83	3.83	3.83	3.83	3.83	3.83	3.92
HYDROGRAPH AT +	WOFF6	.04	1	FLOW	59.	57.	56.	53.	51.	50.	34.	24.
				TIME	3.58	3.58	3.58	3.58	3.58	3.58	3.58	3.58
HYDROGRAPH AT +	ON1	.03	1	FLOW	47.	46.	46.	43.	42.	42.	31.	23.
				TIME	3.58	3.58	3.58	3.58	3.58	3.58	3.58	3.58
5 COMBINED AT +	DB1	.88	1	FLOW	754.	731.	720.	675.	653.	642.	427.	296.
				TIME	3.75	3.75	3.75	3.75	3.75	3.75	3.83	3.83
ROUTED TO +	RDB1	.88	1	FLOW	71.	70.	69.	66.	65.	64.	48.	35.
				TIME	5.58	5.58	5.58	5.58	5.58	5.58	5.58	5.58
			** PEAK STAGES IN FEET **									
			1	STAGE	35.99	35.72	35.58	35.05	34.74	34.59	31.60	29.88
				TIME	5.58	5.58	5.58	5.58	5.58	5.58	5.58	5.58
HYDROGRAPH AT +	AROY1	.00	1	FLOW	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
HYDROGRAPH AT +	WPRK5	.00	1	FLOW	6.	6.	6.	5.	5.	5.	3.	2.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
HYDROGRAPH AT +	SHEEP1	.10	1	FLOW	148.	144.	141.	133.	129.	127.	87.	61.
				TIME	3.58	3.58	3.58	3.58	3.58	3.58	3.58	3.58
DIVERSION TO +	DSHEPC	.10	1	FLOW	33.	32.	32.	30.	29.	28.	19.	14.
				TIME	3.58	3.58	3.58	3.58	3.58	3.58	3.58	3.58
HYDROGRAPH AT +	SHEPAB	.10	1	FLOW	115.	112.	110.	104.	100.	99.	67.	48.
				TIME	3.58	3.58	3.58	3.58	3.58	3.58	3.58	3.58
DIVERSION TO +	DSHEPB	.10	1	FLOW	70.	68.	67.	63.	61.	60.	41.	29.
				TIME	3.58	3.58	3.58	3.58	3.58	3.58	3.58	3.58
HYDROGRAPH AT +	DSHEPA	.10	1	FLOW	45.	44.	43.	41.	39.	39.	26.	19.
				TIME	3.58	3.58	3.58	3.58	3.58	3.58	3.58	3.58
HYDROGRAPH AT +	AROY2	.01	1	FLOW	13.	13.	13.	12.	12.	11.	8.	6.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
5 COMBINED AT +	DUMMY	.99	1	FLOW	88.	85.	84.	78.	76.	75.	53.	37.
				TIME	3.58	3.58	3.58	3.58	3.58	3.58	4.92	4.92
HYDROGRAPH AT +	PH2L4	.02	1	FLOW	33.	32.	32.	30.	29.	29.	20.	15.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
HYDROGRAPH AT +	PH2L8	.01	1	FLOW	22.	21.	21.	20.	19.	19.	13.	10.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
HYDROGRAPH AT +	PH2L9	.03	1	FLOW	52.	51.	50.	48.	46.	46.	32.	23.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
HYDROGRAPH AT +	EGAN2	.00	1	FLOW	10.	10.	10.	10.	9.	9.	7.	6.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50

+ 5 COMBINED AT	DUMMY	1.06	1	FLOW	196.	191.	188.	177.	172.	169.	116.	83.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.58
+ HYDROGRAPH AT	WPRK2A	.01	1	FLOW	9.	9.	9.	8.	8.	8.	5.	3.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
+ HYDROGRAPH AT	PH2PK1	.01	1	FLOW	13.	12.	12.	11.	11.	11.	7.	5.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
+ HYDROGRAPH AT	PH2L3B	.01	1	FLOW	17.	17.	16.	15.	15.	15.	10.	8.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
+ 4 COMBINED AT	DUMMY	1.08	1	FLOW	235.	229.	225.	212.	206.	202.	138.	98.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
+ HYDROGRAPH AT	PH2PK	.02	1	FLOW	29.	28.	27.	25.	25.	24.	15.	10.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.58
+ HYDROGRAPH AT	HORSE2	.01	1	FLOW	23.	23.	23.	22.	21.	21.	16.	13.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
+ 3 COMBINED AT	DUMMY	1.11	1	FLOW	287.	279.	275.	259.	251.	247.	170.	121.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
+ HYDROGRAPH AT	PH2PK2	.00	1	FLOW	4.	4.	4.	4.	4.	3.	2.	2.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
+ HYDROGRAPH AT	PH2ML4	.04	1	FLOW	66.	64.	64.	61.	59.	58.	42.	32.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
+ HYDROGRAPH AT	SHAUM1	.01	1	FLOW	13.	13.	13.	12.	12.	12.	9.	7.
				TIME	3.58	3.58	3.58	3.58	3.58	3.58	3.58	3.58
+ 4 COMBINED AT	HU-HO	1.16	1	FLOW	369.	359.	354.	334.	325.	320.	223.	162.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
+ HYDROGRAPH AT	WML5	.04	1	FLOW	76.	75.	74.	70.	69.	68.	51.	40.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
+ HYDROGRAPH AT	WSCHL2	.02	1	FLOW	33.	33.	32.	31.	30.	29.	21.	16.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
+ HYDROGRAPH AT	WPRK1	.01	1	FLOW	18.	18.	18.	17.	16.	16.	10.	7.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
+ HYDROGRAPH AT	STRT5	.01	1	FLOW	15.	15.	14.	14.	13.	13.	10.	8.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
+ 5 COMBINED AT	DUMMY	1.23	1	FLOW	512.	499.	492.	466.	452.	446.	315.	232.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
+ HYDROGRAPH AT	DSHEPB	.00	1	FLOW	70.	68.	67.	63.	61.	60.	41.	29.
				TIME	3.58	3.58	3.58	3.58	3.58	3.58	3.58	3.58
+ HYDROGRAPH AT	AROY5	.01	1	FLOW	20.	19.	19.	18.	17.	17.	12.	8.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
+ HYDROGRAPH AT	WMLA1	.07	1	FLOW	133.	130.	129.	123.	120.	119.	89.	69.
				TIME	3.58	3.58	3.58	3.58	3.58	3.58	3.58	3.58
+ HYDROGRAPH AT	HUAL2B	.01	1	FLOW	21.	20.	20.	19.	19.	19.	14.	11.
				TIME	3.67	3.67	3.67	3.67	3.67	3.67	3.67	3.67
+ 5 COMBINED AT	DUMMY	1.32	1	FLOW	736.	717.	707.	670.	651.	642.	456.	338.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
+ HYDROGRAPH AT	AROY4	.01	1	FLOW	13.	13.	13.	12.	11.	11.	8.	5.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
+ HYDROGRAPH AT	WML7	.04	1	FLOW	78.	76.	76.	72.	70.	69.	52.	40.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
+ HYDROGRAPH AT	WPRK4	.00	1	FLOW	7.	7.	7.	6.	6.	6.	4.	3.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
+ HYDROGRAPH AT	SHAUM2	.01	1	FLOW	17.	16.	16.	15.	15.	15.	12.	9.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
+ 4 COMBINED AT	DUMMY	.06	1	FLOW	115.	112.	111.	106.	103.	102.	75.	58.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
+ HYDROGRAPH AT	WL7	.02	1	FLOW	36.	35.	35.	33.	32.	31.	22.	16.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
+ HYDROGRAPH AT	WNVE2	.00	1	FLOW	3.	3.	3.	3.	2.	2.	2.	1.
				TIME	3.58	3.58	3.58	3.58	3.58	3.58	3.58	3.58
+ HYDROGRAPH AT	WL6	.01	1	FLOW	11.	11.	11.	10.	10.	10.	7.	5.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
+ HYDROGRAPH AT	HORS1A	.01	1	FLOW	19.	18.	18.	17.	17.	17.	13.	10.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
+ 5 COMBINED AT	SH-HO	.10	1	FLOW	184.	180.	177.	169.	164.	162.	119.	91.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50

HYDROGRAPH AT	WOFF7	.01	1	FLOW	10.	10.	10.	9.	9.	9.	6.	4.
+				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
HYDROGRAPH AT	WOFF8	.21	1	FLOW	230.	223.	220.	206.	200.	196.	131.	90.
+				TIME	3.75	3.75	3.75	3.75	3.75	3.75	3.75	3.75
2 COMBINED AT	CP2	.22	1	FLOW	235.	228.	225.	211.	204.	201.	134.	93.
+				TIME	3.75	3.75	3.75	3.75	3.75	3.75	3.75	3.75
HYDROGRAPH AT	WOFF9	.12	1	FLOW	144.	140.	138.	129.	125.	123.	82.	57.
+				TIME	3.58	3.58	3.58	3.67	3.67	3.67	3.67	3.67
HYDROGRAPH AT	WOFF10	.65	1	FLOW	481.	467.	460.	432.	418.	411.	274.	190.
+				TIME	4.08	4.08	4.08	4.08	4.08	4.08	4.08	4.08
HYDROGRAPH AT	ON2	.02	1	FLOW	49.	48.	47.	45.	44.	43.	31.	24.
+				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
4 COMBINED AT	DB2	1.01	1	FLOW	729.	707.	696.	653.	632.	621.	413.	284.
+				TIME	3.83	3.83	3.83	3.83	3.83	3.83	3.83	3.83
ROUTED TO	RDB2	1.01	1	FLOW	77.	76.	75.	73.	72.	71.	57.	46.
+				TIME	5.92	5.92	5.92	5.92	5.92	5.92	5.83	5.75
			**	PEAK STAGES IN FEET	**							
			1	STAGE	3009.12	3008.69	3008.48	3007.62	3007.20	3006.99	3002.81	3000.10
				TIME	5.92	5.92	5.92	5.92	5.92	5.92	5.83	5.75
HYDROGRAPH AT	WL8	.01	1	FLOW	25.	24.	24.	22.	22.	21.	15.	11.
+				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
HYDROGRAPH AT	WNVE3	.00	1	FLOW	4.	4.	4.	4.	4.	4.	2.	2.
+				TIME	3.58	3.58	3.58	3.58	3.58	3.58	3.58	3.58
HYDROGRAPH AT	WL5	.04	1	FLOW	69.	67.	66.	62.	61.	60.	42.	30.
+				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.58
HYDROGRAPH AT	IRON1A	.01	1	FLOW	12.	12.	12.	11.	11.	11.	9.	7.
+				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
5 COMBINED AT	DUMMY	1.08	1	FLOW	129.	125.	123.	116.	112.	110.	76.	54.
+				TIME	3.58	3.58	3.58	3.50	3.50	3.50	3.50	3.50
HYDROGRAPH AT	SHAUM3	.00	1	FLOW	12.	11.	11.	11.	11.	10.	8.	6.
+				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
3 COMBINED AT	IR-SH	1.18	1	FLOW	324.	316.	311.	295.	287.	283.	202.	151.
+				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
HYDROGRAPH AT	WML6	.03	1	FLOW	61.	59.	59.	56.	55.	54.	40.	32.
+				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
HYDROGRAPH AT	HORS1B	.00	1	FLOW	8.	8.	8.	7.	7.	7.	6.	5.
+				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
HYDROGRAPH AT	WL4	.05	1	FLOW	82.	80.	79.	74.	72.	71.	50.	37.
+				TIME	3.58	3.58	3.58	3.58	3.58	3.58	3.58	3.58
4 COMBINED AT	DUMMY	1.26	1	FLOW	469.	457.	451.	428.	416.	410.	294.	221.
+				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
HYDROGRAPH AT	DSHEPC	.00	1	FLOW	33.	32.	32.	30.	29.	28.	19.	14.
+				TIME	3.58	3.58	3.58	3.58	3.58	3.58	3.58	3.58
HYDROGRAPH AT	IRON1B	.00	1	FLOW	9.	9.	9.	9.	9.	8.	7.	5.
+				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
4 COMBINED AT	HU-IR	2.59	1	FLOW	1242.	1210.	1194.	1131.	1100.	1084.	773.	575.
+				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
HYDROGRAPH AT	OFFG	.04	1	FLOW	47.	46.	45.	42.	41.	40.	26.	18.
+				TIME	3.58	3.58	3.58	3.58	3.58	3.58	3.58	3.58
2 COMBINED AT	WPT40	2.63	1	FLOW	1280.	1247.	1230.	1165.	1132.	1116.	793.	589.
+				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
HYDROGRAPH AT	OFF10	.67	1	FLOW	608.	591.	582.	547.	530.	521.	352.	248.
+				TIME	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.08
ROUTED TO	ROFF10	.67	1	FLOW	548.	532.	524.	493.	477.	469.	318.	224.
+				TIME	4.58	4.58	4.58	4.58	4.58	4.58	4.67	4.67
HYDROGRAPH AT	OFFFA	.99	1	FLOW	870.	843.	830.	776.	750.	736.	479.	322.
+				TIME	3.92	3.92	3.92	3.92	3.92	3.92	3.92	3.92
ROUTED TO	ROFFFA	.99	1	FLOW	819.	793.	781.	730.	705.	693.	450.	303.
+				TIME	4.17	4.17	4.17	4.17	4.17	4.17	4.17	4.17
HYDROGRAPH AT	OFFFB	.60	1	FLOW	428.	414.	407.	379.	366.	359.	229.	152.
+				TIME	3.92	3.92	3.92	3.92	3.92	3.92	4.00	4.00
3 COMBINED AT	COFFF1	2.26	1	FLOW	1469.	1423.	1400.	1310.	1265.	1242.	809.	549.
+				TIME	4.17	4.17	4.17	4.17	4.17	4.17	4.25	4.25
HYDROGRAPH AT	WPRK6	.02	1	FLOW	21.	20.	20.	18.	18.	17.	11.	7.
+				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
3 COMBINED AT												

+	COFFF2	4.90	1	FLOW	1770.	1717.	1691.	1585.	1533.	1507.	994.	704.
				TIME	4.08	4.08	4.08	4.08	4.08	4.08	4.08	3.58
HYDROGRAPH AT +	OFFE	.04	1	FLOW	26.	25.	25.	22.	21.	21.	11.	6.
				TIME	3.67	3.67	3.67	3.67	3.67	3.67	3.67	3.75
HYDROGRAPH AT +	OFFV	.01	1	FLOW	4.	4.	4.	4.	4.	3.	2.	1.
				TIME	3.58	3.58	3.58	3.58	3.58	3.58	3.58	3.67
3 COMBINED AT +	CKC5	4.95	1	FLOW	1782.	1729.	1702.	1596.	1543.	1517.	1002.	710.
				TIME	4.08	4.08	4.08	4.08	4.08	4.08	3.58	3.58
DIVERSION TO +	DCKC7	4.95	1	FLOW	1782.	1729.	1702.	1596.	1543.	1517.	1002.	710.
				TIME	4.08	4.08	4.08	4.08	4.08	4.08	3.58	3.58
HYDROGRAPH AT +	DCKC5	4.95	1	FLOW	0.	0.	0.	0.	0.	0.	0.	0.
				TIME	.00	.00	.00	.00	.00	.00	.00	.00
HYDROGRAPH AT +	OFF17B	.01	1	FLOW	15.	15.	15.	14.	14.	13.	10.	7.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
HYDROGRAPH AT +	OFF17A	.03	1	FLOW	51.	50.	49.	47.	45.	45.	32.	24.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
2 COMBINED AT +	COFF17	.04	1	FLOW	66.	65.	64.	61.	59.	58.	42.	31.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
DIVERSION TO +	DVCUL8	.04	1	FLOW	66.	65.	64.	61.	59.	58.	42.	31.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
HYDROGRAPH AT +	DCOF17	.04	1	FLOW	0.	0.	0.	0.	0.	0.	0.	0.
				TIME	.00	.00	.00	.00	.00	.00	.00	.00
HYDROGRAPH AT +	ON1	.00	1	FLOW	8.	7.	7.	7.	7.	7.	5.	4.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
HYDROGRAPH AT +	ON4A	.00	1	FLOW	8.	8.	8.	8.	7.	7.	5.	4.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
2 COMBINED AT +	C1	.01	1	FLOW	16.	16.	15.	15.	14.	14.	10.	7.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
DIVERSION TO +	DIV1	.01	1	FLOW	13.	13.	13.	12.	12.	11.	8.	6.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
HYDROGRAPH AT +	D1	.01	1	FLOW	3.	3.	3.	3.	3.	3.	2.	1.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
HYDROGRAPH AT +	ON5	.01	1	FLOW	10.	9.	9.	9.	9.	8.	6.	4.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
2 COMBINED AT +	C2	.01	1	FLOW	13.	12.	12.	12.	11.	11.	8.	6.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
DIVERSION TO +	DIV1A	.01	1	FLOW	13.	12.	12.	12.	11.	11.	8.	6.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
HYDROGRAPH AT +	D1A	.01	1	FLOW	0.	0.	0.	0.	0.	0.	0.	0.
				TIME	.00	.00	.00	.00	.00	.00	.00	.00
HYDROGRAPH AT +	ON4B	.00	1	FLOW	6.	5.	5.	5.	5.	5.	3.	3.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
HYDROGRAPH AT +	RET1	.00	1	FLOW	13.	13.	13.	12.	12.	11.	8.	6.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
HYDROGRAPH AT +	ON6	.00	1	FLOW	7.	7.	7.	7.	7.	6.	5.	3.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
2 COMBINED AT +	C3	.00	1	FLOW	20.	20.	20.	19.	18.	18.	13.	9.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
DIVERSION TO +	DIV1B	.00	1	FLOW	20.	20.	20.	19.	18.	18.	13.	9.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
HYDROGRAPH AT +	D1B	.00	1	FLOW	0.	0.	0.	0.	0.	0.	0.	0.
				TIME	.00	.00	.00	.00	.00	.00	.00	.00
HYDROGRAPH AT +	ON2	.00	1	FLOW	9.	9.	9.	8.	8.	8.	6.	4.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
HYDROGRAPH AT +	ON3	.01	1	FLOW	12.	12.	11.	11.	10.	10.	7.	6.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
HYDROGRAPH AT +	ON9	.00	1	FLOW	8.	8.	8.	7.	7.	7.	5.	4.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
3 COMBINED AT +	C4	.02	1	FLOW	29.	28.	28.	26.	26.	25.	18.	13.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
DIVERSION TO +	DIV2	.02	1	FLOW	24.	23.	23.	22.	21.	21.	15.	11.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
HYDROGRAPH AT +	D2	.02	1	FLOW	5.	5.	5.	5.	4.	4.	3.	2.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
HYDROGRAPH AT +	ON10	.00	1	FLOW	5.	5.	5.	4.	4.	4.	3.	2.

				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
+ 2 COMBINED AT	C5	.02	1	FLOW	10.	10.	9.	9.	9.	9.	6.	5.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
+ DIVERSION TO	DIV3	.02	1	FLOW	8.	8.	8.	7.	7.	7.	5.	4.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
+ HYDROGRAPH AT	D3	.02	1	FLOW	2.	2.	2.	2.	2.	2.	1.	1.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
+ HYDROGRAPH AT	ON11	.00	1	FLOW	5.	5.	5.	4.	4.	4.	3.	2.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
+ 2 COMBINED AT	C6	.02	1	FLOW	7.	7.	7.	6.	6.	6.	4.	3.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
+ DIVERSION TO	DIV1C	.02	1	FLOW	7.	7.	7.	6.	6.	6.	4.	3.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
+ HYDROGRAPH AT	D1C	.02	1	FLOW	0.	0.	0.	0.	0.	0.	0.	0.
				TIME	.00	.00	.00	.00	.00	.00	.00	.00
+ 4 COMBINED AT	CD1C	.04	1	FLOW	6.	5.	5.	5.	5.	5.	3.	3.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
+ ROUTED TO	RCD1C	.04	1	FLOW	5.	5.	5.	5.	5.	4.	3.	2.
				TIME	3.67	3.67	3.67	3.75	3.75	3.75	3.75	3.83
+ DIVERSION TO	DOFF23	.04	1	FLOW	5.	5.	5.	5.	5.	4.	3.	2.
				TIME	3.67	3.67	3.67	3.75	3.75	3.75	3.75	3.83
+ HYDROGRAPH AT	DRCD1C	.04	1	FLOW	0.	0.	0.	0.	0.	0.	0.	0.
				TIME	.00	.00	.00	.00	.00	.00	.00	.00
+ HYDROGRAPH AT	ON8	.00	1	FLOW	6.	6.	6.	5.	5.	5.	3.	2.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
+ HYDROGRAPH AT	RET2	.00	1	FLOW	24.	23.	23.	22.	21.	21.	15.	11.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
+ 2 COMBINED AT	C7	.00	1	FLOW	30.	29.	29.	27.	26.	26.	18.	13.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
+ HYDROGRAPH AT	RET3	.00	1	FLOW	8.	8.	8.	7.	7.	7.	5.	4.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
+ HYDROGRAPH AT	ON7	.01	1	FLOW	14.	13.	13.	12.	12.	12.	9.	6.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
+ 3 COMBINED AT	C8	.01	1	FLOW	51.	50.	49.	47.	45.	45.	32.	23.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
+ HYDROGRAPH AT	RET1A	.00	1	FLOW	13.	12.	12.	12.	11.	11.	8.	6.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
+ HYDROGRAPH AT	RET1B	.00	1	FLOW	20.	20.	20.	19.	18.	18.	13.	9.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
+ HYDROGRAPH AT	RET1C	.00	1	FLOW	7.	7.	7.	6.	6.	6.	4.	3.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
+ 3 COMBINED AT	C9	.00	1	FLOW	40.	39.	38.	36.	35.	35.	25.	18.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
+ HYDROGRAPH AT	ON2D	.01	1	FLOW	21.	21.	20.	19.	19.	19.	14.	11.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
+ HYDROGRAPH AT	ON5D	.00	1	FLOW	8.	8.	8.	8.	7.	7.	6.	4.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
+ 2 COMBINED AT	CP1	.01	1	FLOW	29.	29.	28.	27.	26.	26.	19.	15.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
+ HYDROGRAPH AT	ON3D	.00	1	FLOW	7.	7.	7.	7.	7.	7.	5.	4.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
+ 2 COMBINED AT	CP2	.02	1	FLOW	37.	36.	36.	34.	33.	33.	24.	19.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
+ HYDROGRAPH AT	ON1D	.01	1	FLOW	16.	15.	15.	15.	14.	14.	10.	8.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
+ HYDROGRAPH AT	ON4D	.00	1	FLOW	8.	8.	8.	8.	7.	7.	5.	4.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
+ 2 COMBINED AT	CP3	.01	1	FLOW	24.	23.	23.	22.	21.	21.	16.	12.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
+ 2 COMBINED AT	CP4	.03	1	FLOW	61.	59.	59.	56.	55.	54.	40.	31.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
+ 4 COMBINED AT	CENGCA	.08	1	FLOW	152.	148.	146.	139.	135.	134.	97.	73.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
+ HYDROGRAPH AT	PH2ML3	.04	1	FLOW	81.	79.	78.	74.	72.	71.	52.	40.
				TIME	3.58	3.58	3.58	3.58	3.58	3.58	3.58	3.58

+ HYDROGRAPH AT	PH2L6	.05	1	FLOW	77.	75.	74.	70.	68.	67.	47.	34.
				TIME	3.58	3.58	3.58	3.58	3.58	3.58	3.58	3.58
+ HYDROGRAPH AT	EGAN1	.01	1	FLOW	12.	12.	12.	11.	11.	11.	9.	7.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
+ 3 COMBINED AT	DUMMY	.10	1	FLOW	170.	165.	163.	155.	151.	149.	107.	81.
				TIME	3.58	3.58	3.58	3.58	3.58	3.58	3.58	3.58
+ HYDROGRAPH AT	PH2L5	.00	1	FLOW	8.	8.	8.	7.	7.	7.	5.	4.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
+ HYDROGRAPH AT	PH2L7	.01	1	FLOW	23.	22.	22.	21.	20.	20.	14.	10.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
+ HYDROGRAPH AT	RACL1A	.01	1	FLOW	13.	13.	13.	12.	12.	12.	9.	7.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
+ 4 COMBINED AT	RA-EG	.12	1	FLOW	209.	204.	201.	191.	186.	183.	132.	100.
				TIME	3.50	3.50	3.50	3.58	3.58	3.58	3.58	3.58
+ HYDROGRAPH AT	PH2ML1	.03	1	FLOW	60.	58.	58.	55.	54.	53.	40.	31.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
+ HYDROGRAPH AT	PH2ML2	.03	1	FLOW	59.	58.	57.	55.	53.	53.	39.	31.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
+ HYDROGRAPH AT	PH2L1	.03	1	FLOW	45.	44.	44.	41.	40.	40.	28.	21.
				TIME	3.58	3.58	3.58	3.58	3.58	3.58	3.58	3.58
+ HYDROGRAPH AT	PH2L2	.02	1	FLOW	31.	30.	30.	28.	28.	27.	19.	14.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
+ 5 COMBINED AT	DUMMY	.22	1	FLOW	402.	392.	387.	367.	358.	353.	255.	192.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
+ HYDROGRAPH AT	PH2L3A	.02	1	FLOW	29.	28.	27.	26.	25.	25.	17.	13.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
+ HYDROGRAPH AT	HUAL1	.01	1	FLOW	14.	14.	14.	13.	13.	13.	10.	8.
				TIME	3.58	3.58	3.58	3.58	3.58	3.58	3.58	3.58
+ HYDROGRAPH AT	RACL1B	.01	1	FLOW	12.	12.	12.	11.	11.	11.	8.	7.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
+ HYDROGRAPH AT	HUAL2A	.01	1	FLOW	13.	12.	12.	12.	12.	11.	9.	7.
				TIME	3.58	3.58	3.58	3.58	3.58	3.58	3.58	3.58
+ 5 COMBINED AT	RA-HU	.26	1	FLOW	469.	457.	451.	429.	417.	412.	298.	226.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
+ HYDROGRAPH AT	PH1-3	.02	1	FLOW	39.	38.	38.	36.	35.	34.	25.	18.
				TIME	3.58	3.58	3.58	3.58	3.58	3.58	3.58	3.58
+ HYDROGRAPH AT	CONQ	.00	1	FLOW	6.	6.	6.	6.	5.	5.	4.	3.
				TIME	3.58	3.58	3.58	3.58	3.58	3.58	3.58	3.58
+ 3 COMBINED AT	DUMMY	.28	1	FLOW	513.	500.	494.	469.	457.	450.	326.	246.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
+ HYDROGRAPH AT	PH1-5	.06	1	FLOW	107.	104.	103.	98.	96.	95.	71.	55.
				TIME	3.58	3.58	3.58	3.58	3.58	3.58	3.58	3.58
+ HYDROGRAPH AT	PH1PRK	.00	1	FLOW	4.	3.	3.	3.	3.	3.	2.	1.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
+ HYDROGRAPH AT	RACL1C	.01	1	FLOW	13.	13.	13.	12.	12.	12.	8.	6.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
+ 4 COMBINED AT	DUMMY	.35	1	FLOW	630.	615.	607.	577.	561.	554.	402.	305.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.58
+ HYDROGRAPH AT	PH1-4	.03	1	FLOW	49.	47.	47.	45.	44.	43.	32.	25.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
+ HYDROGRAPH AT	PH1-6	.05	1	FLOW	93.	91.	90.	86.	84.	83.	62.	48.
				TIME	3.58	3.58	3.58	3.58	3.58	3.58	3.58	3.58
+ HYDROGRAPH AT	GCD	.01	1	FLOW	10.	9.	9.	9.	9.	8.	6.	5.
				TIME	3.58	3.58	3.58	3.58	3.58	3.58	3.58	3.58
+ 4 COMBINED AT	CP26	.43	1	FLOW	777.	759.	749.	712.	694.	684.	498.	381.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.58
+ 2 COMBINED AT	CCP4	.52	1	FLOW	929.	907.	896.	851.	829.	818.	595.	451.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
+ HYDROGRAPH AT	OFF21B	.04	1	FLOW	75.	73.	72.	69.	67.	66.	49.	38.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
+ 2 COMBINED AT	COF21B	.56	1	FLOW	1004.	980.	968.	920.	896.	884.	644.	489.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
+ DIVERSION TO	DVCUL9	.56	1	FLOW	1004.	980.	968.	920.	896.	884.	644.	489.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50

HYDROGRAPH AT	DOF21B	.56	1	FLOW	0.	0.	0.	0.	0.	0.	0.	0.
+				TIME	.00	.00	.00	.00	.00	.00	.00	.00
HYDROGRAPH AT	ROFF23	.00	1	FLOW	5.	5.	5.	5.	5.	4.	3.	2.
+				TIME	3.67	3.67	3.67	3.75	3.75	3.75	3.75	3.83
HYDROGRAPH AT	OFF23	.01	1	FLOW	17.	16.	16.	15.	15.	15.	11.	8.
+				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
4 COMBINED AT	COFF23	.61	1	FLOW	19.	18.	18.	17.	17.	16.	11.	9.
+				TIME	3.58	3.58	3.58	3.58	3.58	3.58	3.58	3.50
DIVERSION TO	DCUL10	.61	1	FLOW	19.	18.	18.	17.	17.	16.	11.	8.
+				TIME	3.58	3.58	3.58	3.58	3.58	3.58	3.58	3.50
HYDROGRAPH AT	DCOF23	.61	1	FLOW	0.	0.	0.	0.	0.	0.	0.	0.
+				TIME	3.58	3.58	3.58	3.58	3.58	3.58	3.50	3.50
HYDROGRAPH AT	GT1	.02	1	FLOW	40.	39.	39.	37.	36.	36.	28.	22.
+				TIME	3.67	3.67	3.67	3.67	3.67	3.67	3.67	3.67
HYDROGRAPH AT	OFFU	.04	1	FLOW	246.	245.	244.	241.	240.	239.	226.	218.
+				TIME	3.58	3.58	3.58	3.58	3.58	3.58	3.67	3.67
3 COMBINED AT	CP26WT	.67	1	FLOW	286.	284.	283.	278.	276.	275.	254.	241.
+				TIME	3.67	3.67	3.67	3.67	3.67	3.67	3.67	3.67
DIVERSION TO	DCUL11	.67	1	FLOW	285.	283.	282.	277.	275.	274.	253.	240.
+				TIME	3.67	3.67	3.67	3.67	3.67	3.67	3.67	3.67
HYDROGRAPH AT	DC26WT	.67	1	FLOW	1.	1.	1.	1.	1.	1.	1.	1.
+				TIME	.00	.00	.00	.00	.00	.00	.00	.00
HYDROGRAPH AT	95-5	.03	1	FLOW	50.	48.	48.	45.	43.	43.	29.	21.
+				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
DIVERSION TO	DCHD1B	.03	1	FLOW	45.	43.	43.	40.	39.	39.	27.	19.
+				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
HYDROGRAPH AT	DHD01B	.03	1	FLOW	5.	5.	5.	4.	4.	4.	3.	2.
+				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
HYDROGRAPH AT	OFF8	.01	1	FLOW	19.	19.	19.	18.	17.	17.	12.	8.
+				TIME	3.58	3.58	3.58	3.58	3.58	3.58	3.58	3.58
HYDROGRAPH AT	OFFY	.01	1	FLOW	9.	8.	8.	7.	7.	7.	4.	2.
+				TIME	3.67	3.67	3.67	3.67	3.67	3.67	3.67	3.75
HYDROGRAPH AT	WGED1B	.04	1	FLOW	62.	60.	59.	56.	55.	54.	39.	29.
+				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.58
4 COMBINED AT	CHD02B	.09	1	FLOW	92.	89.	88.	83.	81.	80.	56.	41.
+				TIME	3.58	3.58	3.58	3.58	3.58	3.58	3.58	3.58
DIVERSION TO	DCHD2B	.09	1	FLOW	91.	88.	87.	82.	80.	79.	55.	41.
+				TIME	3.58	3.58	3.58	3.58	3.58	3.58	3.58	3.58
HYDROGRAPH AT	DHD02B	.09	1	FLOW	1.	1.	1.	1.	1.	1.	1.	0.
+				TIME	3.50	3.50	3.58	3.58	3.58	3.58	3.58	3.58
HYDROGRAPH AT	WGED1A	.02	1	FLOW	33.	32.	32.	31.	30.	29.	22.	17.
+				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
HYDROGRAPH AT	STRT3	.00	1	FLOW	4.	4.	4.	4.	4.	4.	3.	2.
+				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
2 COMBINED AT	WPT49	.02	1	FLOW	37.	36.	36.	34.	33.	33.	25.	19.
+				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
HYDROGRAPH AT	95-6	.01	1	FLOW	17.	16.	16.	15.	15.	14.	10.	7.
+				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
HYDROGRAPH AT	OFFW	.01	1	FLOW	9.	8.	8.	7.	7.	7.	4.	2.
+				TIME	3.58	3.67	3.67	3.67	3.67	3.67	3.67	3.67
4 COMBINED AT	CHD04B	.13	1	FLOW	61.	60.	59.	56.	54.	53.	38.	28.
+				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
DIVERSION TO	DCHD4B	.13	1	FLOW	61.	60.	59.	56.	54.	53.	38.	28.
+				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
HYDROGRAPH AT	DHD04B	.13	1	FLOW	0.	0.	0.	0.	0.	0.	0.	0.
+				TIME	.00	.00	.00	.00	.00	.00	.00	.00
HYDROGRAPH AT	WBU3	.07	1	FLOW	123.	120.	119.	114.	111.	110.	82.	64.
+				TIME	3.58	3.58	3.58	3.58	3.58	3.58	3.58	3.58
HYDROGRAPH AT	STRT2	.00	1	FLOW	8.	8.	8.	7.	7.	7.	5.	4.
+				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
HYDROGRAPH AT	GRAND3	.01	1	FLOW	20.	19.	19.	18.	18.	18.	14.	11.
+				TIME	3.58	3.58	3.58	3.58	3.58	3.58	3.58	3.58
HYDROGRAPH AT	WBU2B	.02	1	FLOW	44.	43.	42.	40.	39.	39.	29.	23.
+				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
HYDROGRAPH AT												

+	WGC1	.02	1	FLOW	41.	40.	40.	38.	37.	36.	27.	21.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
5 COMBINED AT												
+	WPT48	.12	1	FLOW	231.	226.	224.	213.	208.	206.	154.	120.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
HYDROGRAPH AT												
+	95-7A	.01	1	FLOW	13.	13.	13.	12.	12.	11.	8.	6.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
3 COMBINED AT												
+	CHD05B	.26	1	FLOW	244.	239.	236.	225.	220.	217.	162.	126.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
HYDROGRAPH AT												
+	WBU1	.04	1	FLOW	70.	69.	68.	65.	63.	63.	47.	36.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
HYDROGRAPH AT												
+	STRT1	.00	1	FLOW	10.	10.	10.	10.	9.	9.	7.	6.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
HYDROGRAPH AT												
+	WBU2A	.05	1	FLOW	95.	93.	92.	88.	86.	85.	63.	49.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
3 COMBINED AT												
+	DUMMY	.09	1	FLOW	176.	172.	170.	162.	158.	156.	117.	91.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
HYDROGRAPH AT												
+	PH1-1	.03	1	FLOW	47.	46.	45.	43.	42.	41.	29.	22.
				TIME	3.58	3.58	3.58	3.58	3.58	3.58	3.58	3.58
HYDROGRAPH AT												
+	PH1-2	.03	1	FLOW	45.	44.	44.	41.	40.	39.	27.	19.
				TIME	3.58	3.58	3.58	3.58	3.58	3.58	3.58	3.58
HYDROGRAPH AT												
+	GRAND2	.00	1	FLOW	6.	6.	6.	6.	6.	6.	4.	4.
				TIME	3.58	3.58	3.58	3.58	3.58	3.58	3.58	3.58
HYDROGRAPH AT												
+	HORSE3	.01	1	FLOW	25.	24.	24.	23.	22.	22.	17.	14.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
5 COMBINED AT												
+	WPT46	.16	1	FLOW	293.	287.	283.	269.	262.	259.	190.	146.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
HYDROGRAPH AT												
+	95-8A	.01	1	FLOW	10.	10.	10.	9.	9.	9.	7.	5.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
HYDROGRAPH AT												
+	OFF14	.01	1	FLOW	19.	18.	18.	17.	16.	16.	11.	7.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
3 COMBINED AT												
+	CHD06B	.18	1	FLOW	322.	315.	311.	295.	288.	284.	207.	158.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
DIVERSION TO												
+	DCMPU6	.18	1	FLOW	108.	105.	104.	99.	96.	95.	69.	53.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
HYDROGRAPH AT												
+	RCHD6B	.18	1	FLOW	215.	209.	207.	197.	192.	189.	138.	105.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
DIVERSION TO												
+	DCHD6B	.18	1	FLOW	215.	209.	207.	197.	192.	189.	138.	105.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
HYDROGRAPH AT												
+	DHD06B	.18	1	FLOW	0.	0.	0.	0.	0.	0.	0.	0.
				TIME	.00	.00	.00	.00	.00	.00	.00	.00
HYDROGRAPH AT												
+	95-9A	.01	1	FLOW	19.	19.	18.	18.	17.	17.	12.	9.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
2 COMBINED AT												
+	CHD07B	.19	1	FLOW	19.	19.	18.	18.	17.	17.	12.	9.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
HYDROGRAPH AT												
+	OFF15	.03	1	FLOW	47.	45.	45.	42.	41.	40.	27.	19.
				TIME	3.58	3.58	3.58	3.58	3.58	3.58	3.58	3.58
3 COMBINED AT												
+	CHD7B2	.49	1	FLOW	307.	300.	296.	282.	274.	271.	199.	152.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
HYDROGRAPH AT												
+	CRET8	.00	1	FLOW	66.	65.	64.	61.	59.	58.	42.	31.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
DIVERSION TO												
+	DIV8A	.00	1	FLOW	66.	65.	64.	61.	59.	58.	42.	31.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
HYDROGRAPH AT												
+	DCRET8	.00	1	FLOW	0.	0.	0.	0.	0.	0.	0.	0.
				TIME	.00	.00	.00	.00	.00	.00	.00	.00
HYDROGRAPH AT												
+	RET9	.00	1	FLOW	1004.	980.	968.	920.	896.	884.	644.	489.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
2 COMBINED AT												
+	CRET9	.00	1	FLOW	1004.	980.	968.	920.	896.	884.	644.	489.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
DIVERSION TO												
+	DIV9A	.00	1	FLOW	256.	254.	253.	250.	248.	247.	228.	213.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
HYDROGRAPH AT												
+	DCCUL9	.00	1	FLOW	748.	726.	715.	670.	648.	636.	417.	276.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
HYDROGRAPH AT												
+	RET10	.00	1	FLOW	19.	18.	18.	17.	17.	16.	11.	8.
				TIME	3.58	3.58	3.58	3.58	3.58	3.58	3.58	3.50
2 COMBINED AT												
+	CRET10	.00	1	FLOW	766.	743.	732.	686.	663.	652.	428.	285.

				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
DIVERSION TO												
+	DIV10A	.00	1	FLOW	369.	367.	366.	361.	358.	356.	313.	267.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
HYDROGRAPH AT												
+	DCU10A	.00	1	FLOW	397.	376.	366.	325.	306.	296.	115.	18.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
HYDROGRAPH AT												
+	RET11	.00	1	FLOW	285.	283.	282.	277.	275.	274.	253.	240.
				TIME	3.67	3.67	3.67	3.67	3.67	3.67	3.67	3.67
HYDROGRAPH AT												
+	RET6	.00	1	FLOW	108.	105.	104.	99.	96.	95.	69.	53.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
4 COMBINED AT												
+	DIV11A	.49	1	FLOW	1077.	1045.	1029.	965.	934.	919.	622.	452.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.58
2 COMBINED AT												
+	DUMMY	1.16	1	FLOW	1078.	1046.	1030.	966.	935.	920.	623.	453.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.58
HYDROGRAPH AT												
+	RETD1B	.00	1	FLOW	45.	43.	43.	40.	39.	39.	27.	19.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
DIVERSION TO												
+	DCHD1C	.00	1	FLOW	45.	43.	43.	40.	39.	39.	27.	19.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
HYDROGRAPH AT												
+	DHD1C	.00	1	FLOW	0.	0.	0.	0.	0.	0.	0.	0.
				TIME	.00	.00	.00	.00	.00	.00	.00	.00
HYDROGRAPH AT												
+	RETD2B	.00	1	FLOW	91.	88.	87.	82.	80.	79.	55.	41.
				TIME	3.58	3.58	3.58	3.58	3.58	3.58	3.58	3.58
2 COMBINED AT												
+	CHD02C	.00	1	FLOW	91.	88.	87.	82.	80.	79.	55.	41.
				TIME	3.58	3.58	3.58	3.58	3.58	3.58	3.58	3.58
DIVERSION TO												
+	DCHD2C	.00	1	FLOW	59.	57.	57.	53.	52.	51.	36.	26.
				TIME	3.58	3.58	3.58	3.58	3.58	3.58	3.58	3.58
HYDROGRAPH AT												
+	DHD2C	.00	1	FLOW	32.	31.	30.	29.	28.	28.	19.	14.
				TIME	3.58	3.58	3.58	3.58	3.58	3.58	3.58	3.58
HYDROGRAPH AT												
+	RETD4B	.00	1	FLOW	61.	60.	59.	56.	54.	53.	38.	28.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
2 COMBINED AT												
+	CHD04C	.00	1	FLOW	93.	90.	89.	84.	82.	81.	57.	42.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
DIVERSION TO												
+	DCHD4C	.00	1	FLOW	84.	82.	81.	76.	74.	73.	51.	38.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
HYDROGRAPH AT												
+	DHD4C	.00	1	FLOW	9.	9.	8.	8.	8.	8.	5.	4.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
DIVERSION TO												
+	DCHD5C	.00	1	FLOW	8.	8.	7.	7.	7.	7.	5.	3.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
HYDROGRAPH AT												
+	DHD5C	.00	1	FLOW	1.	1.	1.	1.	1.	1.	1.	0.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
HYDROGRAPH AT												
+	RETD6B	.00	1	FLOW	215.	209.	207.	197.	192.	189.	138.	105.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
2 COMBINED AT												
+	CHD06C	.00	1	FLOW	216.	211.	208.	198.	193.	190.	139.	106.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
DIVERSION TO												
+	DCHD6C	.00	1	FLOW	216.	210.	208.	198.	192.	190.	139.	106.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
HYDROGRAPH AT												
+	DHD6C	.00	1	FLOW	0.	0.	0.	0.	0.	0.	0.	0.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
2 COMBINED AT												
+	DUMMY	1.16	1	FLOW	1078.	1046.	1030.	966.	935.	920.	623.	453.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.58
HYDROGRAPH AT												
+	RETC5C	.00	1	FLOW	8.	8.	7.	7.	7.	7.	5.	3.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
HYDROGRAPH AT												
+	95-7B	.01	1	FLOW	15.	14.	14.	13.	13.	13.	9.	7.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
2 COMBINED AT												
+	C95-7B	.01	1	FLOW	22.	22.	22.	20.	20.	20.	14.	11.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
HYDROGRAPH AT												
+	RETC6C	.00	1	FLOW	216.	210.	208.	198.	192.	190.	139.	106.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
HYDROGRAPH AT												
+	95-8B	.00	1	FLOW	6.	6.	6.	6.	6.	6.	4.	3.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
2 COMBINED AT												
+	C95-8B	.00	1	FLOW	222.	217.	214.	203.	198.	195.	143.	109.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
HYDROGRAPH AT												
+	SKY2	.01	1	FLOW	16.	15.	15.	14.	14.	14.	11.	9.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
HYDROGRAPH AT												
+	EMLA1A	.01	1	FLOW	27.	26.	26.	25.	24.	24.	18.	14.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50

+ HYDROGRAPH AT	TP1	.00	1	FLOW	2.	2.	2.	2.	2.	2.	1.	1.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
+ 5 COMBINED AT	BR-TP	.03	1	FLOW	289.	282.	278.	265.	258.	255.	187.	143.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
+ HYDROGRAPH AT	ES2	.05	1	FLOW	84.	82.	81.	77.	75.	74.	55.	43.
				TIME	3.58	3.58	3.58	3.58	3.58	3.58	3.58	3.58
+ HYDROGRAPH AT	BRENT1	.00	1	FLOW	4.	4.	4.	4.	4.	4.	3.	2.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
+ HYDROGRAPH AT	EGC3	.02	1	FLOW	44.	43.	42.	40.	39.	39.	29.	23.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
+ HYDROGRAPH AT	HORSE5	.00	1	FLOW	11.	11.	11.	11.	10.	10.	8.	6.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
+ 5 COMBINED AT	CP44	.11	1	FLOW	425.	415.	410.	390.	380.	375.	276.	212.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
+ DIVERSION TO	BRENT	.11	1	FLOW	373.	363.	358.	338.	328.	323.	224.	160.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
+ HYDROGRAPH AT	SOUTH	.11	1	FLOW	52.	52.	52.	52.	52.	52.	52.	52.
				TIME	3.33	3.33	3.33	3.33	3.42	3.42	3.42	3.50
+ HYDROGRAPH AT	SKY1	.01	1	FLOW	16.	16.	16.	15.	15.	15.	11.	9.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
+ HYDROGRAPH AT	HORSE4	.00	1	FLOW	9.	8.	8.	8.	8.	8.	6.	5.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
+ HYDROGRAPH AT	EGC1	.01	1	FLOW	17.	16.	16.	15.	15.	15.	11.	9.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
+ HYDROGRAPH AT	EGC2	.01	1	FLOW	24.	24.	24.	22.	22.	22.	16.	13.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
+ 5 COMBINED AT	DUMMY	.14	1	FLOW	118.	117.	116.	113.	112.	111.	97.	87.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
+ HYDROGRAPH AT	95-9B	.01	1	FLOW	22.	21.	21.	20.	19.	19.	14.	10.
				TIME	3.58	3.58	3.58	3.58	3.58	3.58	3.58	3.58
+ 2 COMBINED AT	CP45	.15	1	FLOW	138.	136.	135.	131.	129.	128.	109.	97.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
+ DIVERSION TO	RACEL	.15	1	FLOW	101.	101.	101.	101.	101.	101.	101.	97.
				TIME	3.33	3.33	3.33	3.42	3.42	3.42	3.50	3.50
+ HYDROGRAPH AT	HORSE	.15	1	FLOW	37.	35.	34.	30.	28.	27.	8.	0.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	.00
+ HYDROGRAPH AT	RETC4C	.00	1	FLOW	84.	82.	81.	76.	74.	73.	51.	38.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
+ HYDROGRAPH AT	SKY3	.01	1	FLOW	12.	12.	12.	12.	11.	11.	9.	7.
				TIME	3.58	3.58	3.58	3.58	3.58	3.58	3.58	3.58
+ HYDROGRAPH AT	OFFH	.01	1	FLOW	12.	12.	12.	11.	11.	11.	7.	5.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
+ 3 COMBINED AT	SK-IR	.01	1	FLOW	108.	105.	104.	98.	95.	94.	67.	50.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
+ HYDROGRAPH AT	EML1A	.03	1	FLOW	47.	46.	45.	43.	42.	41.	30.	22.
				TIME	3.58	3.58	3.58	3.58	3.58	3.58	3.58	3.58
+ HYDROGRAPH AT	IRON2	.00	1	FLOW	10.	9.	9.	9.	9.	9.	7.	5.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
+ HYDROGRAPH AT	EMLA1B	.02	1	FLOW	43.	42.	41.	39.	38.	38.	28.	22.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
+ HYDROGRAPH AT	TP2	.00	1	FLOW	2.	2.	2.	2.	2.	2.	1.	1.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
+ 5 COMBINED AT	IR-TP	.07	1	FLOW	208.	203.	200.	190.	185.	182.	131.	99.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
+ HYDROGRAPH AT	ES1	.02	1	FLOW	29.	28.	28.	27.	26.	25.	18.	14.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
+ HYDROGRAPH AT	IRON3	.00	1	FLOW	5.	5.	5.	5.	5.	4.	3.	3.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
+ 3 COMBINED AT	IR-FT	.09	1	FLOW	242.	236.	233.	221.	215.	212.	153.	115.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
+ DIVERSION TO	IREAST	.09	1	FLOW	118.	117.	117.	115.	114.	113.	104.	98.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
+ HYDROGRAPH AT	FTNOR	.09	1	FLOW	124.	119.	116.	106.	101.	99.	49.	17.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50

DIVERSION TO												
+	FTNOR	.09	1	FLOW	124.	119.	116.	106.	101.	99.	49.	17.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
HYDROGRAPH AT												
+	FTNOR	.09	1	FLOW	0.	0.	0.	0.	0.	0.	0.	0.
				TIME	.00	.00	.00	.00	.00	.00	.00	.00
4 COMBINED AT												
+	DUMMY	6.35	1	FLOW	1115.	1081.	1064.	996.	963.	947.	631.	453.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.58
HYDROGRAPH AT												
+	RETC1C	.00	1	FLOW	45.	43.	43.	40.	39.	39.	27.	19.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
HYDROGRAPH AT												
+	RETC2C	.00	1	FLOW	59.	57.	57.	53.	52.	51.	36.	26.
				TIME	3.58	3.58	3.58	3.58	3.58	3.58	3.58	3.58
HYDROGRAPH AT												
+	OFF9	.04	1	FLOW	54.	53.	52.	49.	47.	47.	32.	23.
				TIME	3.58	3.58	3.58	3.58	3.58	3.58	3.58	3.58
3 COMBINED AT												
+	COFF9	.04	1	FLOW	150.	146.	144.	136.	132.	130.	90.	65.
				TIME	3.58	3.58	3.58	3.58	3.58	3.58	3.58	3.58
HYDROGRAPH AT												
+	OFFS	.01	1	FLOW	8.	8.	8.	7.	7.	6.	3.	2.
				TIME	3.58	3.58	3.58	3.58	3.58	3.58	3.67	3.67
HYDROGRAPH AT												
+	SKY4	.01	1	FLOW	16.	16.	16.	15.	15.	15.	11.	9.
				TIME	3.58	3.58	3.58	3.58	3.58	3.58	3.58	3.58
3 COMBINED AT												
+	LC-SK	.06	1	FLOW	175.	170.	168.	158.	154.	151.	105.	76.
				TIME	3.58	3.58	3.58	3.58	3.58	3.58	3.58	3.58
HYDROGRAPH AT												
+	EML1B	.07	1	FLOW	120.	117.	116.	110.	107.	106.	76.	57.
				TIME	3.58	3.58	3.58	3.58	3.58	3.58	3.58	3.58
HYDROGRAPH AT												
+	ESCHL1	.02	1	FLOW	29.	28.	27.	26.	25.	24.	15.	10.
				TIME	3.58	3.58	3.58	3.58	3.58	3.58	3.58	3.58
HYDROGRAPH AT												
+	EPRK1	.01	1	FLOW	6.	6.	6.	5.	5.	4.	2.	1.
				TIME	3.58	3.58	3.58	3.58	3.58	3.58	3.58	3.75
HYDROGRAPH AT												
+	STRT6	.01	1	FLOW	10.	10.	10.	9.	9.	9.	7.	6.
				TIME	3.58	3.58	3.58	3.58	3.58	3.58	3.58	3.58
HYDROGRAPH AT												
+	EML2A	.07	1	FLOW	106.	103.	102.	97.	94.	93.	67.	50.
				TIME	3.58	3.58	3.58	3.58	3.58	3.58	3.58	3.58
5 COMBINED AT												
+	DUMMY	.18	1	FLOW	272.	264.	261.	247.	240.	236.	167.	123.
				TIME	3.58	3.58	3.58	3.58	3.58	3.58	3.58	3.58
HYDROGRAPH AT												
+	TP3	.01	1	FLOW	11.	10.	10.	10.	10.	10.	7.	6.
				TIME	3.67	3.67	3.67	3.67	3.67	3.67	3.67	3.67
HYDROGRAPH AT												
+	TP4A	.00	1	FLOW	5.	5.	5.	5.	5.	5.	4.	3.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
HYDROGRAPH AT												
+	LOG1	.01	1	FLOW	15.	15.	15.	14.	14.	13.	10.	8.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
5 COMBINED AT												
+	LC-TP	.26	1	FLOW	475.	462.	456.	432.	419.	413.	291.	215.
				TIME	3.58	3.58	3.58	3.58	3.58	3.58	3.58	3.58
HYDROGRAPH AT												
+	EL1	.12	1	FLOW	110.	106.	104.	96.	93.	91.	55.	35.
				TIME	3.58	3.58	3.58	3.58	3.58	3.58	3.67	3.67
HYDROGRAPH AT												
+	LOG2	.00	1	FLOW	9.	9.	9.	9.	8.	8.	6.	5.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
HYDROGRAPH AT												
+	FORT1	.01	1	FLOW	14.	14.	14.	13.	13.	13.	10.	8.
				TIME	3.67	3.67	3.67	3.67	3.67	3.67	3.67	3.67
HYDROGRAPH AT												
+	FTNOR	.00	1	FLOW	124.	119.	116.	106.	101.	99.	49.	17.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
5 COMBINED AT												
+	FT-LC	.39	1	FLOW	718.	697.	686.	643.	622.	612.	403.	276.
				TIME	3.58	3.58	3.58	3.58	3.58	3.58	3.58	3.58
DIVERSION TO												
+	OHARE	.39	1	FLOW	49.	47.	46.	41.	39.	37.	14.	0.
				TIME	3.58	3.58	3.58	3.58	3.58	3.58	3.58	.00
HYDROGRAPH AT												
+	RFTLC	.39	1	FLOW	669.	650.	640.	602.	584.	574.	389.	276.
				TIME	3.58	3.58	3.58	3.58	3.58	3.58	3.58	3.58
DIVERSION TO												
+	LOGCAB	.39	1	FLOW	193.	187.	184.	172.	167.	164.	107.	73.
				TIME	3.58	3.58	3.58	3.58	3.58	3.58	3.58	3.58
HYDROGRAPH AT												
+	R2FTLC	.39	1	FLOW	476.	463.	456.	430.	417.	410.	282.	203.
				TIME	3.58	3.58	3.58	3.58	3.58	3.58	3.58	3.58
HYDROGRAPH AT												
+	EML2B	.04	1	FLOW	66.	65.	64.	61.	59.	58.	42.	31.
				TIME	3.58	3.58	3.58	3.58	3.58	3.58	3.58	3.58
HYDROGRAPH AT												
+	TP4B	.00	1	FLOW	7.	7.	7.	7.	7.	7.	5.	4.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
HYDROGRAPH AT												
+	EML3	.06	1	FLOW	90.	88.	87.	82.	80.	79.	56.	42.
				TIME	3.58	3.58	3.58	3.58	3.58	3.58	3.58	3.58
HYDROGRAPH AT												

+	STRT7	.00	1	FLOW	8.	8.	8.	8.	8.	8.	6.	5.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
+ 5 COMBINED AT	DUMMY	.50	1	FLOW	645.	627.	619.	584.	567.	558.	388.	283.
				TIME	3.58	3.58	3.58	3.58	3.58	3.58	3.58	3.58
+ HYDROGRAPH AT	EML4	.07	1	FLOW	112.	109.	108.	102.	100.	98.	70.	52.
				TIME	3.58	3.58	3.58	3.58	3.58	3.58	3.58	3.58
+ HYDROGRAPH AT	ENVE2	.01	1	FLOW	11.	11.	11.	10.	9.	9.	5.	3.
				TIME	3.58	3.58	3.58	3.58	3.58	3.58	3.58	3.67
+ HYDROGRAPH AT	FORT2	.01	1	FLOW	14.	13.	13.	13.	12.	12.	9.	8.
				TIME	3.67	3.67	3.67	3.67	3.67	3.67	3.67	3.67
+ 4 COMBINED AT	FT-MO	.59	1	FLOW	781.	760.	750.	708.	687.	677.	472.	345.
				TIME	3.58	3.58	3.58	3.58	3.58	3.58	3.58	3.58
+ HYDROGRAPH AT	OFFC	.13	1	FLOW	80.	77.	75.	69.	66.	64.	36.	20.
				TIME	3.75	3.75	3.75	3.75	3.75	3.75	3.83	3.83
+ HYDROGRAPH AT	95-3	.01	1	FLOW	15.	14.	14.	13.	13.	13.	9.	6.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
+ HYDROGRAPH AT	OFFB	.13	1	FLOW	73.	70.	68.	63.	60.	58.	32.	18.
				TIME	3.83	3.83	3.83	3.83	3.83	3.83	3.92	3.92
+ HYDROGRAPH AT	95-2	.00	1	FLOW	7.	7.	7.	6.	6.	6.	4.	3.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
+ 4 COMBINED AT	DUMMY	.28	1	FLOW	158.	152.	149.	137.	131.	128.	72.	40.
				TIME	3.75	3.75	3.75	3.83	3.83	3.83	3.83	3.83
+ HYDROGRAPH AT	OFFA	.02	1	FLOW	17.	16.	16.	14.	14.	13.	7.	4.
				TIME	3.58	3.58	3.58	3.58	3.58	3.58	3.58	3.58
+ HYDROGRAPH AT	95-1	.00	1	FLOW	7.	7.	7.	7.	6.	6.	4.	3.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
+ 3 COMBINED AT	CP27B	.31	1	FLOW	173.	166.	163.	149.	142.	139.	77.	44.
				TIME	3.75	3.75	3.75	3.75	3.75	3.75	3.75	3.83
+ HYDROGRAPH AT	OFFZ	.05	1	FLOW	35.	34.	33.	30.	29.	28.	15.	8.
				TIME	3.67	3.67	3.67	3.67	3.67	3.67	3.67	3.75
+ 2 COMBINED AT	COFFZ	.36	1	FLOW	206.	198.	194.	178.	170.	166.	92.	52.
				TIME	3.75	3.75	3.75	3.75	3.75	3.75	3.75	3.83
+ HYDROGRAPH AT	OFFDA	.64	1	FLOW	357.	343.	337.	310.	296.	290.	166.	97.
				TIME	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.08
+ ROUTED TO	ROFFDA	.64	1	FLOW	330.	317.	311.	286.	274.	268.	153.	90.
				TIME	4.42	4.42	4.42	4.42	4.42	4.42	4.42	4.50
+ HYDROGRAPH AT	OFFDB	.49	1	FLOW	235.	226.	221.	202.	193.	189.	104.	59.
				TIME	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.08
+ 2 COMBINED AT	CP27A	1.14	1	FLOW	492.	473.	463.	426.	408.	398.	227.	131.
				TIME	4.25	4.25	4.25	4.33	4.33	4.33	4.33	4.42
+ HYDROGRAPH AT	DCKC7	.00	1	FLOW	1782.	1729.	1702.	1596.	1543.	1517.	1002.	710.
				TIME	4.08	4.08	4.08	4.08	4.08	4.08	3.58	3.58
+ HYDROGRAPH AT	OFFX	.02	1	FLOW	13.	12.	12.	11.	10.	10.	6.	3.
				TIME	3.67	3.67	3.67	3.67	3.67	3.67	3.67	3.67
+ HYDROGRAPH AT	OFFT	.02	1	FLOW	12.	12.	11.	10.	10.	10.	5.	3.
				TIME	3.67	3.67	3.67	3.67	3.67	3.67	3.67	3.67
+ 4 COMBINED AT	EPT16	1.17	1	FLOW	2235.	2163.	2128.	1985.	1915.	1880.	1199.	799.
				TIME	4.08	4.08	4.08	4.08	4.08	4.08	4.17	4.50
+ HYDROGRAPH AT	SHEEP2	.06	1	FLOW	43.	41.	40.	37.	35.	34.	19.	10.
				TIME	3.67	3.67	3.67	3.67	3.67	3.67	3.67	3.75
+ HYDROGRAPH AT	SHEEP3	.01	1	FLOW	10.	9.	9.	8.	8.	8.	4.	2.
				TIME	3.67	3.67	3.67	3.67	3.67	3.67	3.67	3.67
+ HYDROGRAPH AT	EMLA2	.14	1	FLOW	184.	180.	177.	168.	163.	161.	115.	86.
				TIME	3.67	3.67	3.67	3.67	3.67	3.67	3.67	3.67
+ 4 COMBINED AT	DUMMY	1.39	1	FLOW	2318.	2244.	2207.	2060.	1988.	1951.	1247.	825.
				TIME	4.08	4.08	4.08	4.08	4.08	4.08	4.08	4.08
+ HYDROGRAPH AT	ENVE1	.03	1	FLOW	24.	23.	22.	20.	19.	19.	10.	6.
				TIME	3.67	3.67	3.67	3.67	3.67	3.67	3.67	3.75
+ HYDROGRAPH AT	HUAL3	.00	1	FLOW	6.	6.	6.	6.	6.	6.	4.	4.
				TIME	3.58	3.58	3.58	3.58	3.58	3.58	3.58	3.58
+ 4 COMBINED AT	SH-MO	1.78	1	FLOW	2458.	2379.	2339.	2183.	2105.	2066.	1316.	867.
				TIME	4.08	4.08	4.08	4.08	4.08	4.08	4.08	4.08
+ 2 COMBINED AT	CP43	2.38	1	FLOW	3074.	2981.	2935.	2750.	2658.	2612.	1734.	1212.
				TIME	3.58	3.58	3.58	3.58	3.58	3.58	3.58	3.58

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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= 1.00									
	RCD1C MANE	5.00	5.67	221.08	.16	5.00	5.16	220.00	.16

CONTINUITY SUMMARY (AC-FT) - INFLOW= .3238E+00 EXCESS= .0000E+00 OUTFLOW= .3523E+00 BASIN STORAGE= .1286E-03 PERCENT ERROR= -8.8

FOR PLAN = 1 RATIO= .98									
	RCD1C MANE	5.00	5.11	219.85	.15	5.00	5.11	220.00	.15

CONTINUITY SUMMARY (AC-FT) - INFLOW= .3150E+00 EXCESS= .0000E+00 OUTFLOW= .3298E+00 BASIN STORAGE= .1227E-03 PERCENT ERROR= -4.7

FOR PLAN = 1 RATIO= .97									
	RCD1C MANE	5.00	5.16	220.26	.15	5.00	5.04	220.00	.15

CONTINUITY SUMMARY (AC-FT) - INFLOW= .3106E+00 EXCESS= .0000E+00 OUTFLOW= .3258E+00 BASIN STORAGE= .1231E-03 PERCENT ERROR= -4.9

FOR PLAN = 1 RATIO= .93									
	RCD1C MANE	5.00	4.93	223.66	.14	5.00	4.64	225.00	.14

CONTINUITY SUMMARY (AC-FT) - INFLOW= .2932E+00 EXCESS= .0000E+00 OUTFLOW= .3030E+00 BASIN STORAGE= .1264E-03 PERCENT ERROR= -3.4

FOR PLAN = 1 RATIO= .91									
	RCD1C MANE	5.00	4.66	225.48	.13	5.00	4.59	225.00	.13

CONTINUITY SUMMARY (AC-FT) - INFLOW= .2845E+00 EXCESS= .0000E+00 OUTFLOW= .2939E+00 BASIN STORAGE= .1102E-03 PERCENT ERROR= -3.4

FOR PLAN = 1 RATIO= .90									
	RCD1C MANE	5.00	4.29	226.36	.13	5.00	4.22	225.00	.13

CONTINUITY SUMMARY (AC-FT) - INFLOW= .2801E+00 EXCESS= .0000E+00 OUTFLOW= .2856E+00 BASIN STORAGE= .1289E-03 PERCENT ERROR= -2.0

FOR PLAN = 1 RATIO= .70									
	RCD1C MANE	4.95	3.43	226.03	.09	5.00	3.07	225.00	.09

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1951E+00 EXCESS= .0000E+00 OUTFLOW= .2013E+00 BASIN STORAGE= .1055E-03 PERCENT ERROR= -3.2

FOR PLAN = 1 RATIO= .57									
	RCD1C MANE	5.00	2.44	230.11	.07	5.00	2.42	230.00	.07

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1422E+00 EXCESS= .0000E+00 OUTFLOW= .1470E+00 BASIN STORAGE= .1296E-03 PERCENT ERROR= -3.5

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

Ultimate Condition HEC-1

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1*****************************************
*                                       *
*    FLOOD HYDROGRAPH PACKAGE  (HEC-1)  *
*              JUN  1998                *
*            VERSION 4.1                *
*                                       *
*  RUN DATE   11FEB15  TIME  09:32:22   *
*                                       *
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*****************************************
*                                       *
*    U.S. ARMY CORPS OF ENGINEERS       *
*    HYDROLOGIC ENGINEERING CENTER      *
*          609 SECOND STREET            *
*       DAVIS, CALIFORNIA 95616         *
*           (916) 756-1104              *
*                                       *
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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
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THIS PROGRAM REPLACES ALL PREVIOUS VERSIONS OF HEC-1 KNOWN AS HEC1 (JAN 73), HEC1GS, HEC1DB, AND HEC1KW.

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

1 HEC-1 INPUT PAGE 1

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

              *DIAGRAM
    1         ID     SLATER HANIFAN GROUP
    2         ID     OLYMPIA COMPANIES
    3         ID     SKYE CANYON - MASTER DRAINAGE STUDY UPDATE
    4         ID     OVERALL PROPERTY ULTIMATE DRAINAGE CONDITION
    5         ID
    6         ID     RETURN PERIOD ------- 100 & 10-YEAR
    7         ID     DISTRIBUTION -------- 6-HOUR SDN3
    8         ID     PROJECT NO. --------- OLY1401.004
    9         ID     FILENAME ------------ Ultimate3.H1
   10         ID     DATE ---------------- 02/10/15
   11         ID     MODELED BY ---------- SMJ/ETM
   12         ID
   13         ID        SIX HOUR DEPTH-AREA REDUCTION FACTORS
   14         ID        DRAINAGE AREA (MI^2)    DARF
   15         ID        0.0-0.49                1.00
   16         ID        0.5-0.99                0.98
   17         ID        1.0-1.99                0.97
   18         ID        2.0-3.99                0.93
   19         ID        4.0-5.99                0.91
   20         ID        6.0-7.99                0.90
   21         ID        25-YR                   0.70
   22         ID        10-YR                   0.57
   23         ID
   24         IT      5       0       0     300
   25         IO      5       0       0
   26         IN      5       0       0
   27         JR    PREC    1.00    0.98    0.97    0.93    0.91    0.90    0.70    0.57
              *
   28         KK    95-5
   29         KM    REVISED FROM GCW MASTER DRAINAGE STUDY, MINUS OFFV
   30         BA    .0303
   31         PB     2.77
   32         PC       0   0.020   0.057   0.070   0.087   0.108   0.124   0.130   0.130   0.130
   33         PC   0.130   0.130   0.130   0.133   0.140   0.142   0.148   0.158   0.172   0.181
   34         PC   0.190   0.197   0.199   0.200   0.201   0.204   0.214   0.229   0.241   0.249
   35         PC   0.251   0.256   0.270   0.278   0.281   0.283   0.295   0.322   0.352   0.409
   36         PC   0.499   0.590   0.710   0.744   0.781   0.812   0.819   0.835   0.851   0.856
   37         PC   0.860   0.868   0.876   0.888   0.910   0.926   0.937   0.950   0.970   0.976
   38         PC   0.982   0.985   0.987   0.989   0.990   0.993   0.993   0.994   0.995   0.998
   39         PC   0.998   0.999   1.000
   40         LS       0    92.2
   41         UD    0.074
              *
   42         KK  DHD01B
   43         KM   FACILITY E-9
   44         KM   FLOW SPLIT AT VTN CULVERT 1
   45         KM   FLOW SPLITS TO BETWEEN NB AND SB ROADS OF US-95
   46         KM   REFERENCED FROM GCW MASTER DRAINAGE STUDY
   47         DT  DCHD1B
   48         DI       0     133     187     250
   49         DQ       0     120     135     150
              *
```

1 HEC-1 INPUT PAGE 2

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

   50         KK    OFF8
   51         KM   REFERENCED FROM GCW MASTER DRAINAGE STUDY
   52         BA   .0133
   53         PB    2.77
   54         LS       0    92.2
   55         UD   0.103
              *
   56         KK    OFFY
   57         BA   .0125
   58         PB    2.77
   59         LS       0    95.0
   60         UD   0.113
              *
   61         KK  CHD02B
   62         KM   COMBINE RDHD1B, OFF8, OFFY
   63         KM   REFERENCED FROM GCW MASTER DRAINAGE STUDY
   64         HC       3
              *
   65         KK  DHD02B
   66         KM   FACILITY E-10
   67         KM   FLOW SPLIT AT VTN CULVERT 2
   68         KM   FLOW SPLITS TO BETWEEN NB AND SB ROADS OF US-95
   69         KM   REFERENCED FROM GCW MASTER DRAINAGE STUDY
   70         DT  DCHD2B
   71         DI       0     100     138
   72         DQ       0      99     135
              *
```

```
 73          KK  WGED1A
 74          BA   .0167
 75          PB    2.93
 76          LS       0    94.6
 77          UD    .096
             *

 78          KK  WGED1B
 79          BA   .0367
 80          PB    2.77
 81          LS       0    92.8
 82          UD    .110
             *

 83          KK   STRT3
 84          BA   .0016
 85          PB    2.93
 86          LS       0    98.0
 87          UD    .050
             *
```



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

 88          KK   WPT49
 89          KM   TOTAL KYLE CANYON DEVELOPMENT DISCHARGE TOWARD VTN CULVERT 4
 90          HC       3
             *

 91          KK    OFFW
 92          BA   .0122
 93          PB    2.77
 94          LS       0    92.0
 95          UD    .089
             *

 96          KK  CHD04B
 97          KM   COMBINE RDHD2B, WPT49, OFFW
 98          KM   REFERENCED FROM GCW MASTER DRAINAGE STUDY
 99          HC       3
             *

100          KK    WBU3
101          BA   .0661
102          PB    2.93
103          LS       0    95.0
104          UD    .127
             *

105          KK   STRT2
106          BA   .0035
107          PB    2.93
108          LS       0    98.0
109          UD    .078
             *

110          KK  GRAND3
111          BA   .0100
112          PB    2.93
113          LS       0    98.0
114          UD    .124
             *

115          KK   WBU2B
116          BA   .0214
117          PB    2.93
118          LS       0    95.0
119          UD    .092
             *

120          KK    WGC1
121          BA   .0187
122          PB    2.93
123          LS       0    95.0
124          UD    .070
             *
```



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

125          KK   WPT48
126          KM   TOTAL KYLE CANYON DEVELOPMENT DISCHARGE TOWARD VTN CULVERT 5
127          HC       5
             *

128          KK  CHD05B
129          KM   COMBINE CHD04B, WPT48
130          KM   REFERENCED FROM GCW MASTER DRAINAGE STUDY
131          KM   DISCHARGE DIRECTLY INTO EXISTING US-95 INTERIM MPU FACILITY
132          HC       2
             *

133          KK    WBU1
134          BA   .0358
135          PB    2.93
136          LS       0    95.0
137          UD    .102
             *

138          KK   STRT1
139          BA   .0048
140          PB    2.93
141          LS       0    98.0
142          UD    .090
             *

143          KK   WBU2A
144          BA   .0505
145          PB    2.93
146          LS       0    95.0
147          UD    .114
             *

148          KK   DUMMY
149          HC       3
             *

150          KK   PH1-1
151          KM   NORTHWEST QUAD ONSITE BASIN
152          PB    2.93
153          BA   .0278
154          LS       0    91.2
155          UD   0.114
             *

156          KK   PH1-2
157          KM   NORTHEAST QUAD ONSITE BASIN
```

```
 158          PB    2.93
 159          BA   .0301
 160          LS      0    88.8
 161          UD   0.152
              *
1                                        HEC-1 INPUT                                                    PAGE  5

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

 162          KK  GRAND2
 163          BA   .0033
 164          PB    2.93
 165          LS      0    98.0
 166          UD    .146
              *

 167          KK  HORSE3
 168          BA   .0117
 169          PB    2.93
 170          LS      0    98.0
 171          UD    .098
              *

 172          KK   WPT46
 173          KM   TOTAL KYLE CANYON DEVELOPMENT DISCHARGE TOWARD VTN CULVERT 6
 174          HC      5
              *

 175          KK   OFF14
 176          KM   REFERENCED FROM GCW MASTER DRAINAGE STUDY
 177          BA   .0128
 178          PB    2.77
 179          LS      0    94.7
 180          UD   0.074
              *

 181          KK  CHD06B
 182          KM   COMBINE CHD05B, WPT46, OFF14
 183          KM   REVISED FROM GCW MASTER DRAINAGE STUDY
 184          KM   TO ACCOUNT FOR DIRECT CONNECTION FROM CHD05B TO US-95 INTERIM MPU FACILITY
 185          HC      3
              *

 186          KK   95-9A
 187          KM   REFERENCED FROM GCW MASTER DRAINAGE STUDY
 188          BA   .0110
 189          PB    2.77
 190          LS      0    94.7
 191          UD   0.095
              *

 192          KK  CHD07B
 193          KM   COMBINE CHD06B, 95-9A
 194          KM   REFERENCED FROM GCW MASTER DRAINAGE STUDY
 195          HC      2
              *

 196          KK   OFF15
 197          KM   REFERENCED FROM GCW MASTER DRAINAGE STUDY
 198          BA   .0348
 199          PB    2.77
 200          LS      0    94.7
 201          UD   0.108
              *
1                                        HEC-1 INPUT                                                    PAGE  6

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

 202          KK  CHD7B2
 203          KM   COMBINE CHD07B, OFF15
 204          KM   COMBINE FLOWS IN MPU FACILITY
 205          KM   REVISED FROM GCW MASTER DRAINAGE STUDY
 206          HC      2
              *

 207          KK  OFF17B
 208          KM   REFERENCED FROM GCW MASTER DRAINAGE STUDY
 209          KM   ADDED FROM HORSE INTERCHANGE MODEL
 210          BA   .0080
 211          PB   2.773
 212          LS      0    92.1
 213          UD   0.069
              *

 214          KK  OFF17A
 215          KM   REFERENCED FROM GCW MASTER DRAINAGE STUDY
 216          KM   ADDED FROM HORSE INTERCHANGE MODEL
 217          BA   .0305
 218          PB   2.773
 219          LS      0    92.1
 220          UD   0.104
              *

 221          KK  COFF17
 222          KM   REFERENCED FROM GCW MASTER DRAINAGE STUDY
 223          KM   ADDED FROM HORSE INTERCHANGE MODEL
 224          KM   COMBINE OFF17A, OFF17B
 225          KM   CULVERT AT BASIN OFF24B
 226          HC      2
              *

 227          KK    ON1
 228          KM   START CENTENNIAL POINT HEC-1 DATA
 229          BA   .0042
 230          PB    2.86
 231          LS      0    91.2
 232          UD   0.085
              *

 233          KK   ON4A
 234          BA   .0045
 235          LS      0    91.2
 236          UD   0.077
              *

 237          KK     C1
 238          KM   COMBINE ON1 AND ON4A
 239          HC      2
              *
1                                        HEC-1 INPUT                                                    PAGE  7

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

 240          KK     D1
 241          KM   DIVERT FLOW INTO BASIN ON6
 242          DT    DIV1
```

```
243          DI       0      16
244          DQ       0      13
             *

245          KK     ON5
246          BA   .0052
247          LS       0    91.2
248          UD   0.080
             *

249          KK      C2
250          KM   COMBINE C1 AND ON5
251          HC       2
             *

252          KK     D1A
253          KM   DIVERT FLOW FOR LATER USE IN HEC-1 RUN
254          DT   DIV1A
255          DI       0      50
256          DQ       0      50
             *

257          KK    ON4B
258          BA   .0031
259          LS       0    91.2
260          UD   0.085
             *

261          KK    RET1
262          KM   RETRIEVE FLOW FROM D1
263          DR    DIV1
             *

264          KK     ON6
265          BA   .0039
266          LS       0    91.2
267          UD   0.074
             *

268          KK      C3
269          KM   COMBINE RET1 AND ON6
270          HC       2
             *

271          KK     D1B
272          KM   DIVERT FLOW FOR LATER USE IN HEC-1 RUN
273          DT   DIV1B
274          DI       0      50
275          DQ       0      50
             *
```

1 HEC-1 INPUT PAGE 8

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

276          KK     ON2
277          BA   .0050
278          LS       0    91.2
279          UD   0.080
             *

280          KK     ON3
281          BA   .0063
282          LS       0    91.5
283          UD   0.079
             *

284          KK     ON9
285          BA   .0045
286          LS       0    91.4
287          UD   0.096
             *

288          KK      C4
289          KM   COMBINE ON2, ON3 AND ON9
290          HC       3
             *

291          KK      D2
292          KM   DIVERT FLOW INTO BASIN ON8
293          DT    DIV2
294          DI       0      29
295          DQ       0      24
             *

296          KK    ON10
297          BA   .0025
298          LS       0    91.5
299          UD   0.071
             *

300          KK      C5
301          KM   COMBINE C4 AND ON10
302          HC       2
             *

303          KK      D3
304          KM   DIVERT FLOW INTO BASIN ON7
305          DT    DIV3
306          DI       0      10
307          DQ       0       8
             *

308          KK    ON11
309          BA   .0025
310          LS       0    91.5
311          UD   0.067
             *
```

1 HEC-1 INPUT PAGE 9

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

312          KK      C6
313          KM   COMBINE C5 AND ON11
314          HC       2
             *

315          KK     D1C
316          KM   DIVERT FLOW FOR LATER USE IN HEC-1 RUN
317          DT   DIV1C
318          DI       0      50
319          DQ       0      50
             *

320          KK    CD1C
321          KM   COMBINE D1A, ON4B, D1B AND D1C
322          KM   PICK UP AT OFF23
323          HC       4
```

```
                *
324             KK   RCD1C
325             KM   ROUTE CD1C TO BASIN OFF23
326             RK    2640  0.0346    0.02            TRAP     100       2
                *
327             KK  DRCD1C
328             KM   DIVERT FLOW TO BASIN OFF23
329             DT  DOFF23
330             DI       0       50      100
331             DQ       0       50      100
                *
332             KK     ON8
333             BA   .0042
334             LS       0    83.5
335             UD   0.074
                *
336             KK    RET2
337             KM   RETRIEVE FLOW FROM D2
338             DR    DIV2
                *
339             KK      C7
340             KM   COMBINE ON11 AND RET2
341             HC       2
                *
342             KK    RET3
343             KM   RETRIEVE FLOW FROM D3
344             DR    DIV3
                *
1                                        HEC-1 INPUT                                                    PAGE 10

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

345             KK     ON7
346             BA   .0073
347             LS       0    91.3
348             UD   0.077
                *
349             KK      C8
350             KM   COMBINE C7, RET3 AND ON7
351             HC       3
                *
352             KK   RET1A
353             KM   RETRIEVE FLOW FROM D1A IN TEE PEE
354             DR   DIV1A
                *
355             KK   RET1B
356             KM   RETRIEVE FLOW FROM D1B IN TEE PEE
357             DR   DIV1B
                *
358             KK   RET1C
359             KM   RETRIEVE FLOW FROM D1C IN TEE PEE
360             DR   DIV1C
                *
361             KK      C9
362             KM   COMBINE C8, RET1A, RET1B, RET1C IN TEE PEE
363             KM   END CENTENNIAL POINT HEC-1 DATA
364             HC       3
                *
365             KK    ON2D
366             KM   START GRAND CANYON APARTMENTS HEC-1 DATA
367             BA   .0105
368             PB    2.90
369             LS       0       95
370             UD   0.094
                *
371             KK    ON5D
372             BA   .0038
373             LS       0       95
374             UD   0.067
                *
375             KK     CP1
376             KM   COMBINE ON2D AND ON5D
377             HC       2
                *
1                                        HEC-1 INPUT                                                    PAGE 11

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

378             KK    ON3D
379             BA   .0036
380             LS       0       95
381             UD   0.084
                *
382             KK     CP2
383             KM   COMBINE CP1 AND ON3D
384             HC       2
                *
385             KK    ON1D
386             BA   .0075
387             LS       0       95
388             UD   0.079
                *
389             KK    ON4D
390             BA   .0041
391             LS       0       95
392             UD   0.096
                *
393             KK     CP3
394             KM   COMBINE ON1D AND ON4D
395             HC       2
                *
396             KK     CP4
397             KM   COMBINE CP2 AND CP3
398             KM   END GRAND CANYON APARTMENTS HEC-1 DATA
399             HC       2
                *
400             KK  CENGCA
```

```
401          KM   COMBINE DRCD1C, C9, CP4
402          KM   CD1C IS DIVERSION OF FLOW ON TEE PEE FROM CENTENNIAL POINT
403          KM   CP4 AND C9 ARE ENDING OF THE APARTMENT COMPLEX AND DEVELOPMENT
404          HC       4
             *

405          KK  PH2ML3
406          BA   .0448
407          PB    3.00
408          LS       0    92.7
409          UD    .121
             *

410          KK   PH2L6
411          BA   .0468
412          PB    3.00
413          LS       0    89.6
414          UD    .128
             *
```



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

415          KK   EGAN1
416          BA   .0058
417          PB    3.00
418          LS       0    98.0
419          UD    .104
             *

420          KK   DUMMY
421          HC       3
             *

422          KK   PH2L5
423          BA   .0043
424          PB    3.00
425          LS       0    90.0
426          UD    .087
             *

427          KK   PH2L7
428          BA   .0130
429          PB    3.00
430          LS       0    90.0
431          UD    .097
             *

432          KK  RACL1A
433          BA   .0059
434          PB    3.00
435          LS       0    98.0
436          UD    .084
             *

437          KK   RA-EG
438          KM   TOTAL FLOW AT INTERSECTION OF RACEL AND EGAN CREST
439          KM   ROUTED EAST IN RACEL
440          HC       4
             *

441          KK  PH2ML1
442          BA   .0294
443          PB    3.00
444          LS       0    95.0
445          UD    .101
             *

446          KK  PH2ML2
447          BA   .0283
448          PB    3.00
449          LS       0    94.9
450          UD    .091
             *
```



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

451          KK   PH2L1
452          BA   .0272
453          PB    3.00
454          LS       0    90.0
455          UD    .126
             *

456          KK   PH2L2
457          BA   .0180
458          PB    3.00
459          LS       0    90.0
460          UD    .103
             *

461          KK   DUMMY
462          HC       5
             *

463          KK  PH2L3A
464          BA   .0164
465          PB    3.00
466          LS       0    90.0
467          UD    .102
             *

468          KK   HUAL1
469          BA   .0070
470          PB    3.00
471          LS       0    98.0
472          UD    .130
             *

473          KK  RACL1B
474          BA   .0051
475          PB    3.00
476          LS       0    98.0
477          UD    .070
             *

478          KK  HUAL2A
479          BA   .0063
480          PB    3.00
481          LS       0    98.0
482          UD    .129
             *

483          KK   RA-HU
484          KM   TOTAL FLOW AT INTERSECTION OF RACEL AND HUALAPAI
485          KM   ROUTED EAST IN RACEL
```

```
 486          HC       5
              *
1                                        HEC-1 INPUT                                                    PAGE 14

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

 487          KK   PH1-3
 488          KM   ONSITE BASIN NORTH OF RACEL AND WEST OF CONQUISTADOR
 489          PB    2.93
 490          BA   .0232
 491          LS       0    91.2
 492          UD   0.116
              *

 493          KK    CONQ
 494          KM   STREET BASIN FOR CONQUISTADOR ST
 495          PB    2.93
 496          BA   .0035
 497          LS       0    92.5
 498          UD   0.133
              *

 499          KK   DUMMY
 500          KM   COMBINES RA-HU, PH1-3 AND CONQ
 501          HC       3
              *

 502          KK   PH1-5
 503          KM   SOUTHWEST QUAD ONSITE BASIN
 504          PB    2.93
 505          BA   .0583
 506          LS       0    94.6
 507          UD   0.139
              *

 508          KK  PH1PRK
 509          KM   ONSITE BASIN FOR COMMUNITY PARK
 510          PB    2.93
 511          BA   .0028
 512          LS       0    81.5
 513          UD   0.082
              *

 514          KK  RACL1C
 515          BA   .0071
 516          PB    2.93
 517          LS       0    92.5
 518          UD    .097
              *

 519          KK   DUMMY
 520          KM   COMBINES CP0, PH1-5, PH1PRK AND RACLIC
 521          HC       4
              *
1                                        HEC-1 INPUT                                                    PAGE 15

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

 522          KK   PH1-4
 523          KM   ONSITE BASIN NORTH OF RACEL AND EAST OF CONQUISTADOR ST
 524          PB    2.93
 525          BA   .0252
 526          LS       0    94.6
 527          UD   0.105
              *

 528          KK   PH1-6
 529          KM   SOUTHEAST QUAD ONSITE BASIN
 530          PB    2.93
 531          BA   .0505
 532          LS       0    94.6
 533          UD   0.128
              *

 534          KK     GCD
 535          BA   .0053
 536          PB    2.93
 537          LS       0    93.8
 538          UD    .137
              *

 539          KK    CP26
 540          KM   KYLE CANYON DEVELOPMENT TOTAL DISCHARGE AT GRAND CANYON AND OSTINATO
 541          KM   ROUTED THRU CENTENNIAL POINT TOWARD US-95
 542          HC       4
              *

 543          KK    CCP4
 544          KM   COMBINE DRCD1C, C9, CP4, CP26
 545          KM   REFERENCED FROM GCW MASTER DRAINAGE STUDY
 546          HC       2
              *

 547          KK  OFF21B
 548          KM   REFERENCED FROM GCW MASTER DRAINAGE STUDY
 549          KM   BASIN IS DEVELOPED, CHECK FOR REFERENCE MATERIAL
 550          BA   .0414
 551          PB   2.775
 552          LS       0      95
 553          UD   0.110
              *

 554          KK  COF21B
 555          KM   COMBINE OFF21B WITH FLOW FROM CENTENNIAL POINT AND GRAND CANYON APTS
 556          KM   REFERENCED FROM GCW MASTER DRAINAGE STUDY
 557          HC       2
              *
1                                        HEC-1 INPUT                                                    PAGE 16

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

 558          KK  ROFF23
 559          KM   RETRIEVE FLOW FROM DIVOFF23
 560          KM   REFERENCED FROM GCW MASTER DRAINAGE STUDY
 561          DR  DOFF23
              *

 562          KK   OFF23
 563          KM   REFERENCED FROM GCW MASTER DRAINAGE STUDY
 564          BA   .0091
 565          PB   2.787
 566          LS       0      95
 567          UD   0.109
              *

 568          KK  COFF23
```

```
569           KM   COMBINE OFF23, DOFF23
570           KM   REFERENCED FROM GCW MASTER DRAINAGE STUDY
571           HC       2
              *

572           KK  NW29-C
573           KM   REFERENCED FROM 2008 MPU
574           BA   0.132
575           PB    3.00
576           LS       0    92.4
577           UD   0.214
              *

578           KK  RNW29C
579           KM  ROUTE NW29-C TO CNW71-W
580           KM  FACILITY = CENTENNIAL PARKWAY CHANNEL WEST/GRAND TETON BRANCH
581           KM  FACILITY ID-MILE = CNGT 0118
582           KM  LINING = ARCH CON
583           KM   REFERENCED FROM 2008 MPU
584           RD    2100   0.037   0.015       0    TRAP       6       0
              *

585           KK  NW71-W
586           KM   REFERENCED FROM 2008 MPU
587           BA   0.104
588           PB    2.92
589           LS       0    92.5
590           UD   0.206
              *

591           KK  CNW71W
592           KM  COMBINE RNW29C AND NW71-W
593           KM  CENTENNIAL PKWY CHANNEL WEST/GRAND TETON BRANCH @ HUALAPAI
594           KM   REFERENCED FROM 2008 MPU
595           HC       2
              *
1                                        HEC-1 INPUT                                                    PAGE 17

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

596           KK  RCNW71-W
597           KM  ROUTE CNW71-W TO CNW71-E
598           KM  FACILITY = CENTENNIAL PARKWAY CHANNEL WEST/GRAND TETON BRANCH
599           KM  FACILITY ID-MILE = CNGT 0000,0043
600           KM  LINING = RCB
601           KM   REFERENCED FROM 2008 MPU
602           RD    6270   0.030   0.015       0    TRAP       6       0
              *

603           KK  NW71-E
604           KM   REFERENCED FROM 2008 MPU
605           BA   0.238
606           PB    2.85
607           LS       0    88.3
608           UD   0.293
              *

609           KK  CNW71E
610           KM  COMBINE NW71-E AND RCNW71-W
611           KM  CENTENNIAL PKWY CHANNEL WEST/GRAND TETON BRANCH @ US 95
612           KM   REFERENCED FROM 2008 MPU
613           HC       2
              *

614           KK     GT1
615           BA   .0243
616           PB    3.00
617           LS       0    98.0
618           UD    .256
              *

619           KK    OFFU
620           BA   .0398
621           PB    2.93
622           LS       0    94.8
623           UD   0.118
              *

624           KK  CP26WT
625           KM   COMBINE CNW71-E, GT1, OFFU
626           HC       3
              *

627           KK   95STH
628           KM   FLOW CONVEYED SOUTH IN US-95 AT GRAND TETON
629           KM   FLOW CONVEYED IN FACILITY ID = CN95 0167
630           KM   COMBINE CP26WT, COFF23, COF21B, COFF17, CHD7B2
631           HC       5
              *
1                                        HEC-1 INPUT                                                    PAGE 18

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

632           KK   WOFF1
633           KM   EXISTING OFFSITE DRAINAGE BASIN
634           KM   DISCHARGES INTO DETENTION BASIN "DB1"
635           BA   .4073
636           PB    3.00
637           LS       0    86.4
638           UD   0.356
              *

639           KK  WOFF11
640           KM   DEVELOPED OFFSITE DRAINAGE BASIN
641           KM   DISCHARGES INTO DETENTION BASIN "DB2"
642           BA   .0281
643           LS       0    96.0
644           UD   0.118
              *

645           KK   WOFF2
646           KM   EXISTING OFFSITE DRAINAGE BASIN
647           KM   DISCHARGES INTO DETENTION BASIN "DB1"
648           BA   .0355
649           LS       0    85.0
650           UD   0.148
              *

651           KK   WOFF3
652           KM   EXISTING OFFSITE DRAINAGE BASIN
653           KM   DISCHARGES INTO DETENTION BASIN "DB1"
654           BA   .0259
655           LS       0    86.2
656           UD   0.112
              *

657           KK     CP1
```

```
658          KM   COMBINE OFF1, OFF11, OFF2, AND OFF3
659          HC       4
             *

660          KK   WOFF4
661          KM   EXISTING OFFSITE DRAINAGE BASIN
662          KM   DISCHARGES INTO DETENTION BASIN "DB1"
663          BA   .0581
664          LS      0    86.2
665          UD   0.136
             *

666          KK   WOFF5
667          KM   EXISTING OFFSITE DRAINAGE BASIN
668          KM   DISCHARGES INTO DETENTION BASIN "DB1"
669          BA   .2569
670          LS      0    86.5
671          UD   0.419
             *
```



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

672          KK   WOFF6
673          KM   EXISTING OFFSITE DRAINAGE BASIN
674          KM   DISCHARGES INTO DETENTION BASIN "DB1"
675          BA   .0399
676          LS      0    86.2
677          UD   0.121
             *

678          KK    ON1
679          KM   PROPOSED ONSITE DRAINAGE BASIN
680          BA   .0261
681          LS      0    92.8
682          UD   0.116
             *

683          KK    DB1
684          KM   COMBINE CP1, OFF4, OFF5, OFF6 AND ON1
685          HC       5
             *

686          KK    RDB1
687          KM   OUTLET = 30" ORIFICE @ INVERT ELEVATION = 3025.5-FT
688          RS       1    VOL     -1
689          SV       0   7.78   13.43   19.26   58.03   96.21  132.22
690          SE    25.5     27      28      29      35      40      44
691          SQ       0  25.59   36.20   44.33   76.78  335.94 1413.68 2946.76 4825.05
692          SE    25.5     29      30      31      37      38      40      42      44
             *

693          KK   AROY1
694          KM   DOWNSTREAM OF SOUTHERN MAINTAINED ARROYO OUTFALL DISCHARGE
695          BA   .0028
696          PB    3.00
697          LS       0    88.0
698          UD    .100
             *

699          KK   WPRK5
700          BA   .0037
701          PB    3.00
702          LS       0    84.0
703          UD    .066
             *

704          KK  SHEEP1
705          KM   FUTURE DEVELOPED SHEEP MOUNTAIN PARKWAY
706          BA   .1008
707          PB    3.00
708          LS       0    93.8
709          UD   0.287
             *
```



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

710          KK  SHEPAB
711          KM   DIVERT DISCHARGE INTO IRON MOUNTAIN DISCHARGE
712          DT  DSHEPC
713          DI       0     148
714          DQ       0      33
             *

715          KK  DSHEPA
716          KM   DIVERT DISCHARGE INTO NORTHERN MAINTAINED ARROYO
717          DT  DSHEPB
718          DI       0     115
719          DQ       0      70
             *

720          KK   AROY2
721          KM   DOWNSTREAM OF SOUTHERN MAINTAINED ARROYO DISCHARGE
722          BA   .0081
723          PB    3.00
724          LS       0    88.0
725          UD    .100
             *

726          KK   DUMMY
727          HC       5
             *

728          KK   PH2L4
729          BA   .0186
730          PB    3.00
731          LS       0    90.0
732          UD    .097
             *

733          KK   PH2L8
734          BA   .0126
735          PB    3.00
736          LS       0    90.0
737          UD    .102
             *

738          KK   PH2L9
739          BA   .0291
740          PB    3.00
741          LS       0    90.0
742          UD    .093
             *

743          KK   EGAN2
744          BA   .0044
```

```
745          PB     3.00
746          LS        0    98.0
747          UD     .073
             *
```



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

748          KK    DUMMY
749          HC        5
             *

750          KK   WPRK2A
751          BA    .0059
752          PB     3.00
753          LS        0    84.0
754          UD     .074
             *

755          KK   PH2PK1
756          BA    .0086
757          PB     3.00
758          LS        0    84.0
759          UD     .084
             *

760          KK   PH2L3B
761          BA    .0096
762          PB     3.00
763          LS        0    90.0
764          UD     .097
             *

765          KK    DUMMY
766          HC        4
             *

767          KK    PH2PK
768          BA    .0205
769          PB     3.00
770          LS        0    84.0
771          UD     .099
             *

772          KK   HORSE2
773          BA    .0110
774          PB     3.00
775          LS        0    98.0
776          UD     .103
             *

777          KK    DUMMY
778          HC        3
             *

779          KK   PH2PK2
780          BA    .0025
781          PB     3.00
782          LS        0    84.0
783          UD     .061
             *
```



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

784          KK   PH2ML4
785          BA    .0354
786          PB     3.00
787          LS        0    93.1
788          UD     .110
             *

789          KK   SHAUM1
790          BA    .0066
791          PB     3.00
792          LS        0    98.0
793          UD     .155
             *

794          KK    HU-HO
795          KM    TOTAL FLOW AT INTERSECTION OF HUALAPAI AND HORSE
796          KM    ROUTED NORTH IN  HUALAPAI
797          HC        4
             *

798          KK     WML5
799          BA    .0370
800          PB     3.00
801          LS        0    95.0
802          UD     .096
             *

803          KK   WSCHL2
804          BA    .0171
805          PB     3.00
806          LS        0    91.0
807          UD     .079
             *

808          KK    WPRK1
809          BA    .0115
810          PB     3.00
811          LS        0    84.0
812          UD     .066
             *

813          KK    STRT5
814          BA    .0065
815          PB     3.00
816          LS        0    98.0
817          UD     .081
             *

818          KK    DUMMY
819          HC        5
             *
```



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

820          KK   DSHEPB
821          KM    UNDEVELOPED SHEEP MOUNTAIN PARKWAY DISCHARGE INTO NORTHERN MAINTAINED ARROYO
822          DR   DSHEPB
             *

823          KK    AROY5
```

```
824          BA   .0122
825          PB    3.00
826          LS       0    88.0
827          UD    .100
             *

828          KK   WMLA1
829          BA   .0697
830          PB    3.00
831          LS       0    95.0
832          UD    .129
             *

833          KK  HUAL2B
834          BA   .0124
835          PB    3.00
836          LS       0    98.0
837          UD    .250
             *

838          KK   DUMMY
839          HC       5
             *

840          KK   AROY4
841          KM   DOWNSTREAM OF NORTHERN MAINTAINED ARROYO OUTFALL DISCHARGE
842          BA   .0080
843          PB    3.00
844          LS       0    88.0
845          UD    .100
             *

846          KK    WML7
847          BA   .0380
848          PB    3.00
849          LS       0    95.0
850          UD    .097
             *

851          KK   WPRK4
852          BA   .0048
853          PB    3.00
854          LS       0    84.0
855          UD    .083
             *
```



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

856          KK  SHAUM2
857          BA   .0080
858          PB    3.00
859          LS       0    98.0
860          UD    .110
             *

861          KK   DUMMY
862          HC       4
             *

863          KK    WL7
864          BA   .0207
865          PB    3.00
866          LS       0    90.0
867          UD    .101
             *

868          KK   WNVE2
869          BA   .0018
870          PB    3.00
871          LS       0    88.0
872          UD    .131
             *

873          KK    WL6
874          BA   .0060
875          PB    3.00
876          LS       0    90.0
877          UD    .078
             *

878          KK  HORS1A
879          BA   .0086
880          PB    3.00
881          LS       0    98.0
882          UD    .095
             *

883          KK   SH-HO
884          KM   TOTAL FLOW AT INTERSECTION OF SHAUMBER AND HORSE
885          KM   ROUTED NORTH IN SHAUMBER
886          HC       5
             *

887          KK   WOFF7
888          KM   EXISTING OFFSITE DRAINAGE BASIN
889          KM   DISCHARGES INTO DETENTION BASIN "DB2"
890          BA   .0068
891          PB    3.00
892          LS       0    86.2
893          UD   0.100
             *
```



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

894          KK   WOFF8
895          KM   EXISTING OFFSITE DRAINAGE BASIN
896          KM   DISCHARGES INTO DETENTION BASIN "DB2"
897          BA   .1663
898          LS       0    86.2
899          UD   0.239
             *

900          KK     CP2
901          KM   COMBINE OFF7, AND OFF8
902          HC       2
             *

903          KK   WOFF9
904          KM   EXISTING OFFSITE DRAINAGE BASIN
905          KM   DISCHARGES INTO DETENTION BASIN "DB2"
906          BA   .1164
907          LS       0    86.2
908          UD   0.203
             *
```

```
909          KK  WOFF10
910          KM   EXISTING OFFSITE DRAINAGE BASIN
911          KM   DISCHARGES INTO DETENTION BASIN "DB2"
912          BA   .2463
913          LS      0    86.5
914          UD   0.248
             *

915          KK     ON2
916          KM   PROPOSED ONSITE DRAINAGE BASIN
917          BA   .0241
918          LS      0    92.8
919          UD   0.084
             *

920          KK     DB2
921          KM   COMBINE CP2, OFF9, OFF10 AND ON2
922          HC      4
             *

923          KK    RDB2
924          KM   OUTLET = 27" ORIFICE @ INVERT ELEVATION = 2993-FT
925          RS      1     VOL      -1
926          SV      0    3.27    6.87   10.63   27.34   46.77   75.03
927          SE   2993    2994    2995    2996    3000    3004    3009
928          SQ      0   17.95   27.43   34.38   40.15   45.18   57.71   67.97   76.88
929          SE   2993    2996    2997    2998    2999    3000    3003    3006    3009
             *
```



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

930          KK     WL8
931          BA   .0133
932          PB    3.00
933          LS       0    90.0
934          UD    .085
             *

935          KK    WNVE3
936          BA   .0028
937          PB    3.00
938          LS       0    88.0
939          UD    .159
             *

940          KK     WL5
941          BA   .0402
942          PB    3.00
943          LS       0    90.0
944          UD    .107
             *

945          KK   IRON1A
946          BA   .0055
947          PB    3.00
948          LS       0    98.0
949          UD    .087
             *

950          KK   DUMMY
951          HC       5
             *

952          KK  SHAUM3
953          BA   .0048
954          PB    3.00
955          LS       0    98.0
956          UD    .064
             *

957          KK   IR-SH
958          KM   TOTAL FLOW AT INTERSECTION OF IRON MOUNTAIN AND SHAUMBER
959          KM   ROUTED EAST IN IRON MOUNTAIN
960          HC       3
             *

961          KK    WML6
962          BA   .0284
963          PB    3.00
964          LS       0    95.0
965          UD    .085
             *
```



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

966          KK  HORS1B
967          BA   .0032
968          PB    3.00
969          LS       0    98.0
970          UD    .050
             *

971          KK     WL4
972          BA   .0492
973          PB    3.00
974          LS       0    90.0
975          UD    .133
             *

976          KK   DUMMY
977          HC       3
             *

978          KK   SM-IR
979          KM   UNDEVELOPED SHEEP MOUNTAIN PARKWAY DISCHARGE INTO IRON MOUNTAIN ROAD
980          DR  DSHEPC
             *

981          KK  IRON1B
982          BA   .0044
983          PB    3.00
984          LS       0    98.0
985          UD    .101
             *

986          KK   HU-IR
987          KM   TOTAL FLOW AT INTERSECTION OF HUALAPAI AND IRON MOUNTAIN
988          KM   ROUTED NORTH IN REGIONAL FACILITY ALIGNMENT
989          HC       5
             *

990          KK  OFF4-1
991          KM  REFERENCED FROM 2008 MPU
992          BA   0.301
993          PB    3.40
```

```
 994          LS       0    86.8
 995          UD   0.295
              *

 996          KK  ROFF41
 997          KM  ROUTE OFF4-1 TO COFF4-2
 998          KM  KYLE CANYON ROAD
 999          KM  REFERENCED FROM 2008 MPU
1000          RD    5800  0.0414   0.016       0    TRAP       0      50
              *
```



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

1001          KK  OFF4-2
1002          KM  REFERENCED FROM 2008 MPU
1003          BA   0.420
1004          PB    3.34
1005          LS       0    85.2
1006          UD   0.140
              *

1007          KK  COFF42
1008          KM  COMBINE ROFF4-1 AND OFF4-2
1009          KM  REFERENCED FROM 2008 MPU
1010          HC       2
              *

1011          KK  RCOFF4-2
1012          KM  ROUTE COFF4-2 TO COFF5-1
1013          KM  KYLE CANYON ROAD
1014          KM  REFERENCED FROM 2008 MPU
1015          RD    2800  0.0392   0.016       0    TRAP       0      50
              *

1016          KK  OFF5-1
1017          KM  REFERENCED FROM 2008 MPU
1018          BA   0.296
1019          PB    3.26
1020          LS       0    84.1
1021          UD   0.222
              *

1022          KK  COFF51
1023          KM  COMBINE RCOFF4-2 AND OFF5-1
1024          KM  REFERENCED FROM 2008 MPU
1025          HC       2
              *

1026          KK  RCOFF5-1
1027          KM  ROUTE COFF5-1 TO 2CNW1-C
1028          KM  FACILITY = MOCCASIN AND KYLE CANYON ROAD
1029          KM  FACILITY ID-MILE = MOKC 0380
1030          KM  LINING = RCP
1031          KM  REFERENCED FROM 2008 MPU
1032          RD    5800  0.0373   0.013       0    CIRC     7.5       0
              *

1033          KK  OFF5-2
1034          KM  REFERENCED FROM 2008 MPU
1035          BA   0.395
1036          PB    3.20
1037          LS       0    86.9
1038          UD   0.317
              *
```



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

1039          KK  ROFF52
1040          KM  ROUTE OFF5-2 TO CNW1-C
1041          KM  FACILITY =KYLE CANYON ROAD AND UNKNOWN
1042          KM  FACILITY ID-MILE = KCUN 0000
1043          KM  LINING = RCP
1044          KM  REFERENCED FROM 2008 MPU
1045          RD    2300   0.022   0.013       0    CIRC       7       0
              *

1046          KK   NW1-C
1047          KM  REFERENCED FROM 2008 MPU
1048          BA   0.293
1049          PB    3.12
1050          LS       0    84.3
1051          UD   0.263
              *

1052          KK  CNW1-C
1053          KM  COMBINE ROFF5-2 AND NW1-C
1054          KM  REFERENCED FROM 2008 MPU
1055          HC       2
              *

1056          KK  2CNW1C
1057          KM  COMBINE RCOFF5-1 AND CNW1-C
1058          KM  REFERENCED FROM 2008 MPU
1059          HC       2
              *

1060          KK  R2CNW1-C
1061          KM  ROUTE 2CNW1-C TO CNW-7
1062          KM  FACILITY =MOCCASIN AND KYLE CANYON ROAD
1063          KM  FACILITY ID-MILE = MOKC 0325
1064          KM  LINING = RCB
1065          KM  REFERENCED FROM 2008 MPU
1066          RD    5700  0.0365   0.015       0    TRAP       9       0
              *

1067          KK   NW7-C
1068          KM  REFERENCED FROM 2008 MPU
1069          BA   0.488
1070          PB    3.03
1071          LS       0    87.2
1072          UD   0.364
              *

1073          KK   CNW-7
1074          KM  COMBINE NW7-C AND R2CNW1-C
1075          KM  REFERENCED FROM 2008 MPU
1076          HC       2
              *
```



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

1077          KK  RCNW7C
1078          KM  ROUTE CNW7-C TO CNW21-C
```

```
1079          KM  FACILITY =MOCCASIN AND KYLE CANYON ROAD
1080          KM  FACILITY ID-MILE = MOKC
1081          KM  LINING = RCB
1082          KM  REVISED FROM 2008 MPU
1083          RD    2660  0.0338   0.015       0    TRAP       20        0
              *

1084          KK  NW21-C
1085          KM   PROPOSED ULTIMATE CONDITION MPA BASIN
1086          BA   .1552
1087          PB    3.00
1088          LS       0    92.0
1089          UD   0.199
              *

1090          KK  CNW21C
1091          KM   COMBINE NW21-C AND CNW-7
1092          HC       2
              *

1093          KK  RCNW21-C
1094          KM  ROUTE CNW21-C TO CNW35-C
1095          KM  FACILITY =MOCCASIN AND KYLE CANYON ROAD
1096          KM  FACILITY ID-MILE = MOKC
1097          KM  LINING = RCB
1098          KM  REVISED FROM 2008 MPU
1099          RD    5450  0.0339   0.015       0    TRAP       20        0
              *

1100          KK  NW35-C
1101          KM   PROPOSED ULTIMATE CONDITION MPA BASIN
1102          BA   .3447
1103          PB    2.93
1104          LS       0    90.5
1105          UD   0.291
              *

1106          KK  CNW35C
1107          KM   COMBINE NW35-C AND CNW21-C
1108          HC       2
              *

1109          KK    CKC5
1110          KM   COMBINE HU-IR, CNW35C
1111          HC       2
              *
```



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

1112          KK  NW50-C
1113          KM   PROPOSED ULTIMATE CONDITION MPA BASIN
1114          BA   .1677
1115          PB    2.92
1116          LS       0    87.8
1117          UD   0.179
              *

1118          KK    CKC6
1119          KM   COMBINE CKC5, NW50-C
1120          HC       2
              *

1121          KK  OFF1A-1
1122          KM  REFERENCED FROM 2008 MPU
1123          BA   1.144
1124          PB    3.40
1125          LS       0    77.0
1126          UD   0.546
              *

1127          KK  ROFF1A-1
1128          KM  ROUTE OFF1A-1 TO COFF1A-2
1129          KM  GRAND TETON
1130          KM  REFERENCED FROM 2008 MPU
1131          RD    2600  0.0392   0.016       0    TRAP        0       50
              *

1132          KK  OFF1A-2
1133          KM  REFERENCED FROM 2008 MPU
1134          BA   0.387
1135          PB    3.36
1136          LS       0    84.1
1137          UD   0.268
              *

1138          KK  COFF1A-2
1139          KM  COMBINE ROFF1A-1 AND OFF1A-2
1140          KM  GRAND TETON AND SCOTTIE
1141          KM  REFERENCED FROM 2008 MPU
1142          HC       2
              *

1143          KK  RCFF1A-2
1144          KM  ROUTE COFF1A-2 TO OFF1A-3
1145          KM  SCOTTIE AND RACEL
1146          KM  REFERENCED FROM 2008 MPU
1147          RD    3600  0.0333   0.016       0    TRAP        0       50
              *
```



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

1148          KK  OFF1A-3
1149          KM  REFERENCED FROM 2008 MPU
1150          BA   0.303
1151          PB    3.34
1152          LS       0    83.0
1153          UD   0.319
              *

1154          KK  COFF1A-3
1155          KM  COMBINE RCFF1A-2 AND OFF1A-3
1156          KM  RACEL AND HURTADO
1157          KM  REFERENCED FROM 2008 MPU
1158          HC       2
              *

1159          KK  RCFF1A-3
1160          KM  ROUTE COFF1A-3 TO COFF1A-4
1161          KM  HURTADO AND HORSE
1162          KM  REFERENCED FROM 2008 MPU
1163          RD    3900  0.0308   0.016       0    TRAP        0       50
              *

1164          KK  OFF1A-4
1165          KM  REFERENCED FROM 2008 MPU
```

```
1166          BA   0.274
1167          PB    3.29
1168          LS       0    79.8
1169          UD   0.295
              *

1170          KK  COFF1A-4
1171          KM  COMBINE RCFF1A-3 AND OFF1A-4
1172          KM  HORSE AND REYMORE
1173          KM  REFERENCED FROM 2008 MPU
1174          HC       2
              *

1175          KK  RCFF1A-4
1176          KM  ROUTE COFF1A-4 TO COFF1A-5
1177          KM  HORSE AND UNKNOWN STREET
1178          KM  REFERENCED FROM 2008 MPU
1179          RD    5100  0.0255   0.016       0    TRAP       0       50
              *

1180          KK  OFF1A-5
1181          KM  REFERENCED FROM 2008 MPU
1182          BA   0.418
1183          PB    3.21
1184          LS       0    78.9
1185          UD   0.354
              *
```



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

1186          KK  COFF1A-5
1187          KM  COMBINE RCFF1A-4 AND OFF1A-5
1188          KM  REFERENCED FROM 2008 MPU
1189          HC       2
              *

1190          KK  ROFF1A-5
1191          KM  ROUTE COFF1A-5 TO COFF2A
1192          KM  IRON MOUNTAIN
1193          KM  REFERENCED FROM 2008 MPU
1194          RD    2600  0.0288   0.016       0    TRAP       0       50
              *

1195          KK   OFF2A
1196          KM  REFERENCED FROM 2008 MPU
1197          BA   0.318
1198          PB    3.16
1199          LS       0    79.0
1200          UD   0.303
              *

1201          KK  COFF2A
1202          KM  COMBINE RCFF1A-5 AND OFF2A
1203          KM  REFERENCED FROM 2008 MPU
1204          HC       2
              *

1205          KK  RCOFF2A
1206          KM  ROUTE COFF2A AND COFF3
1207          KM  IRON MOUNTAIN
1208          KM  REFERENCED FROM 2008 MPU
1209          RD    2600  0.0333   0.016       0    TRAP       0       50
              *

1210          KK    OFF3
1211          KM  REFERENCED FROM 2008 MPU
1212          BA   0.222
1213          PB    3.11
1214          LS       0    79.0
1215          UD   0.272
              *

1216          KK   COFF3
1217          KM  COMBINE RCOFF2A AND OFF3
1218          KM  REFERENCED FROM 2008 MPU
1219          HC       2
              *

1220          KK  RCOFF3
1221          KM  ROUTE COFF3 AND COFF2B
1222          KM  FACILITY = MOCCASIN AND SHEEP MOUNTAIN
1223          KM  FACILITY ID-MILE = MOSH 0053
1224          KM  LINING = CONCRETE
1225          KM  REFERENCED FROM 2008 MPU
```



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

1226          RD    2640  0.0139   0.015       0    TRAP      12       0
              *

1227          KK   OFF2B
1228          KM  REFERENCED FROM 2008 MPU
1229          BA   0.160
1230          PB    3.06
1231          LS       0    77.0
1232          UD   0.216
              *

1233          KK  COFF2B
1234          KM  COMBINE RCOFF3 AND OFF2B
1235          KM  REFERENCED FROM 2008 MPU
1236          HC       2
              *

1237          KK  RCOFF2B
1238          KM  ROUTE COFF2B TO COFF1A-6
1239          KM  FACILITY = MOCCASIN AND SHEEP MOUNTAIN
1240          KM  FACILITY ID-MILE = MOSH 0000
1241          KM  LINING = CONCRETE
1242          KM  REFERENCED FROM 2008 MPU
1243          RD    2640  0.0271   0.015       0    TRAP      12       0
              *

1244          KK  OFF1A-6
1245          KM  REFERENCED FROM 2008 MPU
1246          BA   0.473
1247          PB    3.05
1248          LS       0    77.0
1249          UD   0.355
              *

1250          KK  COFF1A-6
1251          KM  COMBINE RCOFF2B AND OFF1A-6
1252          KM  REFERENCED FROM 2008 MPU
1253          HC       2
              *
```

```
1254          KK  RCFF1A-6
1255          KM  ROUTE COFF1A-6 TO 2CNW5-C
1256          KM  FACILITY = LAS VEGAS WASH - MOCCASIN
1257          KM  FACILITY ID-MILE = LVMO 0494
1258          KM  LINING = CONCRETE
1259          KM  REFERENCED FROM 2008 MPU
1260          RD    2800  0.0288   0.015       0    TRAP       16        0
              *

1261          KK   NW2-C
1262          KM  REFERENCED FROM 2008 MPU
1263          BA   0.395
1264          PB    3.04
1265          LS       0    82.1
1266          UD   0.351
              *
1                                        HEC-1 INPUT                                        PAGE 35

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

1267          KK  RNW2-C
1268          KM  ROUTE NW2-C TO CNW5-C
1269          KM  RANTOOL
1270          KM  REFERENCED FROM 2008 MPU
1271          RD    2600   0.025   0.016       0    TRAP        0       50
              *

1272          KK   NW5-C
1273          KM  REFERENCED FROM 2008 MPU
1274          BA   0.274
1275          PB    2.96
1276          LS       0    79.7
1277          UD   0.419
              *

1278          KK  CNW5-C
1279          KM  COMBINE RNW2-C AND NW5-C
1280          KM  REFERENCED FROM 2008 MPU
1281          HC       2
              *

1282          KK  2CNW5-C
1283          KM  COMBINE RCFF1A-6 AND CNW5-C
1284          KM  REFERENCED FROM 2008 MPU
1285          HC       2
              *

1286          KK  RCNW5-C
1287          KM  ROUTE 2CNW5-C TO 2CNW11-C
1288          KM  FACILITY = LAS VEGAS WASH - MOCCASIN
1289          KM  FACILITY ID-MILE = LVMO 0445
1290          KM  LINING = CONCRETE
1291          KM  REFERENCED FROM 2008 MPU
1292          RD    2600  0.0288   0.015       0    TRAP       16        0
              *

1293          KK   NW9-C
1294          KM  REFERENCED FROM 2008 MPU
1295          BA   0.272
1296          PB    2.99
1297          LS       0    87.1
1298          UD   0.295
              *

1299          KK  RNW9-C
1300          KM  ROUTE NW9-C TO CNW11-C
1301          KM  WITCH MOUNTAIN
1302          KM  REFERENCED FROM 2008 MPU
1303          RD    2600  0.0192   0.016       0    TRAP        0       50
              *
1                                        HEC-1 INPUT                                        PAGE 36

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

1304          KK  NW11-C
1305          KM  REFERENCED FROM 2008 MPU
1306          BA   0.270
1307          PB    2.93
1308          LS       0    80.6
1309          UD   0.275
              *

1310          KK  CNW11-C
1311          KM  COMBINE RNW9-C AND NW11-C
1312          KM  WITCH MOUNTAIN AND MOCCASIN
1313          KM  REFERENCED FROM 2008 MPU
1314          HC       2
              *

1315          KK  2CNW11-C
1316          KM  COMBINE RCNW5-C AND CNW11-C
1317          KM  WITCH MOUNTAIN AND MOCCASIN
1318          KM  REFERENCED FROM 2008 MPU
1319          HC       2
              *

1320          KK  RCNW11-C
1321          KM  ROUTE 2CNW11-C TO CNW17-C
1322          KM  FACILITY = LAS VEGAS WASH - MOCCASIN
1323          KM  FACILITY ID-MILE = LVMO 0396
1324          KM  LINING = CONCRETE
1325          KM  REFERENCED FROM 2008 MPU
1326          RD    2600  0.0327   0.015       0    TRAP       16        0
              *

1327          KK  NW17-C
1328          KM  REFERENCED FROM 2008 MPU
1329          BA   0.429
1330          PB    2.89
1331          LS       0    86.4
1332          UD   0.357
              *

1333          KK  CNW17-C
1334          KM  COMBINE RCNW11-C AND NW17-C
1335          KM  RUFUS AND MOCCASIN
1336          KM  REFERENCED FROM 2008 MPU
1337          HC       2
              *

1338          KK  RCNW17-C
1339          KM  ROUTE CNW17-C TO CNW23-C
1340          KM  FACILITY = LAS VEGAS WASH AND MOCCASIN
1341          KM  FACILITY ID-MILE = LVMO 0346
1342          KM  LINING = CONCRETE
1343          KM  REFERENCED FROM 2008 MPU
```

```
1344          RD    2600  0.0287   0.015       0    TRAP      16       0
              *
```



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

1345          KK  NW23-C
1346          KM  REFERENCED FROM 2008 MPU
1347          BA   0.376
1348          PB    2.84
1349          LS       0    87.1
1350          UD   0.330
              *

1351          KK  CNW23-C
1352          KM  COMBINE RCNW17-C AND NW23-C
1353          KM  MAINWAL AND MOCCASIN
1354          KM  REFERENCED FROM 2008 MPU
1355          HC       2
              *

1356          KK  RCNW23-C
1357          KM  ROUTE CNW23-C TO 2C213B-5
1358          KM  FACILITY = LAS VEGAS WASH AND MOCCASIN
1359          KM  FACILITY ID-MILE = LVMO 0280
1360          KM  LINING = CONCRETE
1361          KM  REFERENCED FROM 2008 MPU
1362          RD    3500  0.0286   0.015       0    TRAP      16       0
              *

1363          KK  NW51-C
1364          KM   PROPOSED ULTIMATE CONDITION MPA BASIN
1365          BA   .4950
1366          PB    2.93
1367          LS       0    87.1
1368          UD   0.342
              *

1369          KK  CNW51-C
1370          KM   COMBINE NW51-C AND CNW23-C
1371          HC       2
              *

1372          KK     202
1373          KM  REFERENCED FROM 2008 MPU
1374          BA   5.550
1375          PB    4.19
1376          LS       0    80.0
1377          UD   0.438
              *

1378          KK    R202
1379          KM  ROUTE 202 TO C203
1380          KM  NATURAL WASH
1381          KM  TRAVEL LENGTH = 13,500
1382          KM  SLOPE = 5.3%
1383          KM  N = 0.040
1384          KM  HYDRAULIC RADIUS = 1.5
1385          KM  VELOCITY = 18.0
1386          KM  REFERENCED FROM 2008 MPU
```



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

1387          RM       3   0.209    0.15
              *

1388          KK     203
1389          KM  REFERENCED FROM 2008 MPU
1390          BA   6.405
1391          PB    4.20
1392          LS       0    80.0
1393          UD   0.561
              *

1394          KK     204
1395          KM  REFERENCED FROM 2008 MPU
1396          BA   2.712
1397          PB    4.04
1398          LS       0    80.0
1399          UD   0.521
              *

1400          KK    C203
1401          KM  COMBINE R202, 203 AND 204
1402          KM  REFERENCED FROM 2008 MPU
1403          HC       3
              *

1404          KK   RC203
1405          KM  ROUTE C203 TO C209-A
1406          KM  NATURAL WASH
1407          KM  TRAVEL LENGTH = 26,500
1408          KM  SLOPE = 5.4%
1409          KM  N = 0.040
1410          KM  HYDRAULIC RADIUS = 1.5
1411          KM  VELOCITY = 18.1
1412          KM  REFERENCED FROM 2008 MPU
1413          RM       5   0.406    0.15
              *

1414          KK   209-A
1415          KM  REFERENCED FROM 2008 MPU
1416          BA   5.196
1417          PB    4.00
1418          LS       0    69.0
1419          UD   0.900
              *

1420          KK  C209-A
1421          KM  COMBINE RC203 AND 209-A
1422          KM  REFERENCED FROM 2008 MPU
1423          HC       2
              *
```



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

1424          KK  210-C
1425          KM  REFERENCED FROM 2008 MPU
1426          BA  12.044
1427          PB    3.84
1428          LS       0    77.0
1429          UD   0.960
              *

1430          KK  C210-C
```

```
1431          KM  COMBINE C209-A AND 210-C
1432          KM  REFERENCED FROM 2008 MPU
1433          HC        2
              *

1434          KK  RC210-C
1435          KM  ROUTE C210-C TO C210-A
1436          KM  NATURAL WASH
1437          KM  TRAVEL LENGTH = 5,000
1438          KM  SLOPE = 4.4%
1439          KM  N = 0.040
1440          KM  HYDRAULIC RADIUS = 1.5
1441          KM  VELOCITY = 16.4
1442          KM  REFERENCED FROM 2008 MPU
1443          RM        1   0.085    0.15
              *

1444          KK   210-A
1445          KM  REFERENCED FROM 2008 MPU
1446          BA   2.523
1447          PB    3.58
1448          LS       0    77.0
1449          UD   0.541
              *

1450          KK  C210-A
1451          KM  COMBINE RC210-C AND 210-A
1452          KM  REFERENCED FROM 2008 MPU
1453          HC        2
              *

1454          KK  RC210-A
1455          KM  ROUTE C210-A TO C209-B
1456          KM  NATURAL WASH
1457          KM  TRAVEL LENGTH = 8,000
1458          KM  SLOPE = 3.8%
1459          KM  N = 0.040
1460          KM  HYDRAULIC RADIUS = 1.5
1461          KM  VELOCITY = 15.2
1462          KM  REFERENCED FROM 2008 MPU
1463          RM        2   0.146    0.15
              *
```

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

1464          KK   209-B
1465          KM  REFERENCED FROM 2008 MPU
1466          BA   1.622
1467          PB    3.53
1468          LS       0    69.0
1469          UD   0.619
              *

1470          KK  C209-B
1471          KM  COMBINE RC210-A AND 209-B
1472          KM  REFERENCED FROM 2008 MPU
1473          HC        2
              *

1474          KK  RC209-B
1475          KM  ROUTE C209-B TO C213A-1
1476          KM  NATURAL WASH
1477          KM  TRAVEL LENGTH = 20,500
1478          KM  SLOPE = 4.1%
1479          KM  N = 0.040
1480          KM  HYDRAULIC RADIUS = 1.5
1481          KM  VELOCITY = 15.8
1482          KM  REFERENCED FROM 2008 MPU
1483          RM        4    0.36    0.15
              *

1484          KK  213A-1
1485          KM  REFERENCED FROM 2008 MPU
1486          BA   2.970
1487          PB    3.39
1488          LS       0    77.0
1489          UD   0.852
              *

1490          KK  C213A-1
1491          KM  COMBINE RC209-B AND 213A-1
1492          KM  REFERENCED FROM 2008 MPU
1493          HC        2
              *

1494          KK  RC213A-1
1495          KM  ROUTE C213A-1 TO C213A-2
1496          KM  IRON MOUNTAIN
1497          KM  REFERENCED FROM 2008 MPU
1498          RD     4600  0.0326   0.016       0    TRAP       0      50
              *

1499          KK  213A-2
1500          KM  REFERENCED FROM 2008 MPU
1501          BA   0.500
1502          PB    3.28
1503          LS       0    78.9
1504          UD   0.345
              *
```

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

1505          KK  C213A-2
1506          KM  ROUTE RC213A-1 AND 213A-2
1507          KM  IRON MOUNTAIN AND SCOTTIE
1508          KM  REFERENCED FROM 2008 MPU
1509          HC        2
              *

1510          KK  RC213A-2
1511          KM  ROUTE C213A-2 TO C213A-3
1512          KM  IRON MOUNTAIN
1513          KM  REFERENCED FROM 2008 MPU
1514          RD     2600  0.0269   0.016       0    TRAP       0      50
              *

1515          KK  213A-3
1516          KM  REFERENCED FROM 2008 MPU
1517          BA   0.371
1518          PB    3.26
1519          LS       0    79.0
1520          UD   0.319
              *

1521          KK  C213A-3
```

```
1522          KM  COMBINE RC213A-2 TO 213A-3
1523          KM  IRON MOUNTAIN AND HURTADO
1524          KM  REFERENCED FROM 2008 MPU
1525          HC        2
              *

1526          KK  RC213A-3
1527          KM  ROUTE C213A-3 TO C213A-4
1528          KM  IRON MOUNTAIN
1529          KM  REFERENCED FROM 2008 MPU
1530          RD    2600  0.0346   0.016       0    TRAP       0      50
              *

1531          KK  213A-4
1532          KM  REFERENCED FROM 2008 MPU
1533          BA   0.251
1534          PB    3.21
1535          LS       0    78.6
1536          UD   0.281
              *

1537          KK  C213A-4
1538          KM  COMBINE RC213A-3 AND 213A-4
1539          KM  IRON MOUNTAIN AND REYMORE
1540          KM  REFERENCED FROM 2008 MPU
1541          HC        2
              *
```



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

1542          KK  RC213A-4
1543          KM  ROUTE C213A-4 TO C213A-5
1544          KM  NATURAL WASH
1545          KM  TRAVEL LENGTH = 13,000
1546          KM  SLOPE = 3.5%
1547          KM  N = 0.040
1548          KM  HYDRAULIC RADIUS = 1.5
1549          KM  VELOCITY = 14.6
1550          KM  REFERENCED FROM 2008 MPU
1551          RM        3   0.247    0.15
              *

1552          KK  213A-5
1553          KM  REFERENCED FROM 2008 MPU
1554          BA   2.058
1555          PB    3.06
1556          LS       0    77.0
1557          UD   0.703
              *

1558          KK  C213A-5
1559          KM  COMBINE RC213A-4 AND 213A-5
1560          KM  REFERENCED FROM 2008 MPU
1561          HC        2
              *

1562          KK  RC213A-5
1563          KM  ROUTE C213A-5 TO C213A-10
1564          KM  REFERENCED FROM 2008 MPU
1565          RD    2600  0.0288   0.016       0    TRAP       0      50
              *

1566          KK  213A-10
1567          KM  REFERENCED FROM 2008 MPU
1568          BA   0.252
1569          PB    2.91
1570          LS       0    94.7
1571          UD   0.256
              *

1572          KK  C213A-10
1573          KM  COMBINE RC213A-5 AND 213A-10
1574          KM  REFERENCED FROM 2008 MPU
1575          HC        2
              *

1576          KK  RC13A-10
1577          KM  ROUTE C213A-10 TO C213A-11
1578          KM  REFERENCED FROM 2008 MPU
1579          RD    2600  0.0288   0.016       0    TRAP       0      50
              *
```



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

1580          KK  213A-11
1581          KM  REFERENCED FROM 2008 MPU
1582          BA   0.256
1583          PB    2.83
1584          LS       0    95.0
1585          UD   0.250
              *

1586          KK  C213A-11
1587          KM  COMBINE RC13A-10 AND 213A-11
1588          KM  REFERENCED FROM 2008 MPU
1589          HC        2
              *

1590          KK  RC13A-11
1591          KM  ROUTE C213A-11 TO C213B-6
1592          KM  REFERENCED FROM 2008 MPU
1593          RD    2600  0.0231   0.016       0    TRAP       0      50
              *

1594          KK  213B-6
1595          KM  REFERENCED FROM 2008 MPU
1596          BA   0.244
1597          PB    2.78
1598          LS       0    95.0
1599          UD   0.255
              *

1600          KK  C213B-6
1601          KM  COMBINE RC13A-11 TO 213B-6
1602          KM  REFERENCED FROM 2008 MPU
1603          HC        2
              *

1604          KK  RC213B-6
1605          KM  ROUTE C213B-6 TO 2C213A-9
1606          KM  REFERENCED FROM 2008 MPU
1607          RD    1100  0.0318   0.016       0    TRAP       0      50
              *

1608          KK  2C213A-9
```

```
1609          KM  COMBINE RC213B-6 AND C213A-9
1610          KM  REFERENCED FROM 2008 MPU
1611          HC       2
              *

1612          KK  RC213A-9
1613          KM  ROUTE C213A-9 TO C213B-7
1614          KM  FACILITY = RANCHO/ MOCCASIN
1615          KM  FACILITY ID-MILE = MORC 0070
1616          KM  LINING = CONCRETE
1617          KM  REFERENCED FROM 2008 MPU
1618          RD    3700  0.0080   0.015       0    TRAP      34       0
              *
```



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

1619          KK  213B-7
1620          KM  REFERENCED FROM 2008 MPU
1621          BA   0.249
1622          PB    2.77
1623          LS       0    94.5
1624          UD   0.320
              *

1625          KK  C213B-7
1626          KM  COMBINE RC213A-9 AND 231B-7
1627          KM  REFERENCED FROM 2008 MPU
1628          HC       2
              *

1629          KK  213B-1
1630          KM  REFERENCED FROM 2008 MPU
1631          BA   0.261
1632          PB    2.92
1633          LS       0    94.7
1634          UD   0.251
              *

1635          KK  RC213B-1
1636          KM  ROUTE 213B-1 TO C213B-2
1637          KM  REFERENCED FROM 2008 MPU
1638          RD    2600  0.0288   0.016       0    TRAP      0       50
              *

1639          KK  213B-2
1640          KM  REFERENCED FROM 2008 MPU
1641          BA   0.262
1642          PB    2.87
1643          LS       0    95.0
1644          UD   0.248
              *

1645          KK  C213B-2
1646          KM  COMBINE R213B-1 AND 213B-2
1647          KM  REFERENCED FROM 2008 MPU
1648          HC       2
              *

1649          KK  RC213B-2
1650          KM  ROUTE C213B-2 TO C213B-3
1651          KM  REFERENCED FROM 2008 MPU
1652          RD    2600  0.0269   0.016       0    TRAP      0       50
              *

1653          KK  213B-3
1654          KM  REFERENCED FROM 2008 MPU
1655          BA   0.253
1656          PB    2.82
1657          LS       0    94.9
1658          UD   0.245
              *
```



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

1659          KK  C213B-3
1660          KM  ROUTE RC213B-2 AND 213B-3
1661          KM  REFERENCED FROM 2008 MPU
1662          HC       2
              *

1663          KK  RC213B-3
1664          KM  ROUTE C213B-3 TO C213B-4
1665          KM  REFERENCED FROM 2008 MPU
1666          RD    2600  0.0269   0.016       0    TRAP      0       50
              *

1667          KK  213B-4
1668          KM  REFERENCED FROM 2008 MPU
1669          BA   0.255
1670          PB    2.78
1671          LS       0    95.0
1672          UD   0.259
              *

1673          KK  C213B-4
1674          KM  COMBINE RC213B-3 AND 213B-4
1675          KM  REFERENCED FROM 2008 MPU
1676          HC       2
              *

1677          KK  RC213B-4
1678          KM  ROUTE C213B-4 TO 2C213B-7
1679          KM  REFERENCED FROM 2008 MPU
1680          RD    1100  0.0318  0.0273       0    TRAP      0       50
              *

1681          KK  2C213B-7
1682          KM  COMBINE C213B-7 AND RC213B-4
1683          KM  REFERENCED FROM 2008 MPU
1684          HC       2
              *

1685          KK  RC213B-7
1686          KM  ROUTE C213B-7 TO C213B-5
1687          KM  FACILITY = RANCHO/ MOCCASIN
1688          KM  FACILITY ID-MILE = MORC 0000
1689          KM  LINING = CONCRETE
1690          KM  REFERENCED FROM 2008 MPU
1691          RD    3700  0.0100   0.015       0    TRAP      34       0
              *

1692          KK  213B-5
1693          KM  REFERENCED FROM 2008 MPU
1694          BA   0.240
1695          PB    2.77
```

```
1696          LS       0    94.3
1697          UD   0.294
              *
1                                        HEC-1 INPUT                                                    PAGE 46

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

1698          KK  C213B5
1699          KM  COMBINE RC213B-7 AND 213B-5
1700          KM  REFERENCED FROM 2008 MPU
1701          HC        2
              *

1702          KK    OFFT
1703          BA   .0173
1704          PB    2.77
1705          LS       0    90.0
1706          UD   0.111
              *

1707          KK  SHEEP2
1708          BA   .0627
1709          PB    2.77
1710          LS       0    86.6
1711          UD    .176
              *

1712          KK  SHEEP3
1713          BA   .0137
1714          PB    2.77
1715          LS       0    86.6
1716          UD    .152
              *

1717          KK   EMLA2
1718          BA   .1368
1719          PB    2.77
1720          LS       0    92.0
1721          UD    .225
              *

1722          KK   DUMMY
1723          HC        5
              *

1724          KK   ENVE1
1725          BA   .0341
1726          PB    2.77
1727          LS       0    77.0
1728          UD    .210
              *

1729          KK    OFFZ
1730          BA   .0523
1731          PB    2.77
1732          LS       0    87.0
1733          UD   0.138
              *
1                                        HEC-1 INPUT                                                    PAGE 47

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

1734          KK   HUAL3
1735          BA   .0037
1736          PB    2.77
1737          LS       0    98.0
1738          UD    .177
              *

1739          KK   SH-MO
1740          KM   TOTAL KYLE CANYON DEVELOPMENT DISCHARGE IN SHEEP MOUNTAIN PKWY @ MOCCASIN
1741          HC        5
              *

1742          KK    SKY3
1743          BA   .0068
1744          PB    2.77
1745          LS       0    98.0
1746          UD    .146
              *

1747          KK    95-6
1748          KM   REFERENCED FROM GCW MASTER DRAINAGE STUDY
1749          BA   .0104
1750          PB    2.77
1751          LS       0    92.8
1752          UD   0.091
              *

1753          KK    OFFH
1754          KM   REFERENCED FROM GCW MASTER DRAINAGE STUDY
1755          BA   .0074
1756          PB    2.77
1757          LS       0    92.5
1758          UD   0.076
              *

1759          KK   SK-IR
1760          KM   COMBINE SKY3, 95-6, OFFH
1761          HC        3
              *

1762          KK   EML1A
1763          BA   .0293
1764          PB    2.77
1765          LS       0    92.0
1766          UD    .124
              *

1767          KK   IRON2
1768          BA   .0041
1769          PB    2.93
1770          LS       0    98.0
1771          UD    .063
              *
1                                        HEC-1 INPUT                                                    PAGE 48

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

1772          KK  EMLA1B
1773          BA   .0221
1774          PB    2.93
1775          LS       0    94.6
1776          UD    .104
              *
```

```
1777          KK     TP2
1778          BA   .0009
1779          PB    2.93
1780          LS       0    98.0
1781          UD    .079
              *

1782          KK    IR-TP
1783          KM    COMBINE SK-IR, EML1A, IRON2, EMLA1B, TP2
1784          HC        5
              *

1785          KK     ES1
1786          KM    REFERENCED FROM GCW MASTER DRAINAGE STUDY
1787          BA   .0173
1788          PB    2.77
1789          LS       0    92.7
1790          UD   0.109
              *

1791          KK    IRON3
1792          BA   .0021
1793          PB    2.93
1794          LS       0    98.0
1795          UD    .062
              *

1796          KK    IR-FT
1797          KM    COMBINE IR-TP, ES1, IRON3
1798          HC        3
              *

1799          KK    FTNOR
1800          KM    FLOW SPLIT AT IRON MOUNTAIN/FORT APACHE
1801          KM    DIVERT FLOW EAST IN IRON MOUNTAIN ROAD
1802          KM    DIVERT MAX. SD FLOW + MAX. STREET FLOW (118/98 CFS) LESS THAN NWNS 235/98 CFS
1803          DT  IREAST
1804          DI        0       98      178
1805          DQ        0       98      118
              *

1806          KK  RETD1B
1807          KM    RETRIEVE FLOW FROM VTN CULVERT 1
1808          KM    REFERENCED FROM GCW MASTER DRAINAGE STUDY
1809          DR  DCHD1B
              *
```



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

1810          KK  RETD2B
1811          KM    RETRIEVE FLOW FROM VTN CULVERT 2
1812          KM    REFERENCED FROM GCW MASTER DRAINAGE STUDY
1813          DR  DCHD2B
              *

1814          KK     OFF9
1815          KM    REFERENCED FROM GCW MASTER DRAINAGE STUDY
1816          BA   .0424
1817          PB    2.77
1818          LS       0    92.2
1819          UD   0.186
              *

1820          KK    COFF9
1821          KM    COMBINE OFF9, DCHD1C, DCHD2C
1822          HC        3
              *

1823          KK     OFFS
1824          BA   .0109
1825          PB    2.77
1826          LS       0    90.0
1827          UD   0.082
              *

1828          KK     SKY4
1829          BA   .0095
1830          PB    2.77
1831          LS       0    98.0
1832          UD    .183
              *

1833          KK    LC-SK
1834          KM    TOTAL FLOW AT INTERSECTION OF LOG CABIN AND SKY
1835          KM    FLOW ROUTED EAST IN LOG CABIN
1836          HC        3
              *

1837          KK    EML1B
1838          BA   .0749
1839          PB    2.77
1840          LS       0    92.0
1841          UD    .129
              *

1842          KK  ESCHL1
1843          BA   .0249
1844          PB    2.77
1845          LS       0    83.5
1846          UD    .126
              *
```



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

1847          KK    EPRK1
1848          BA   .0123
1849          PB    2.77
1850          LS       0    69.0
1851          UD    .122
              *

1852          KK    STRT6
1853          BA   .0055
1854          PB    2.77
1855          LS       0    98.0
1856          UD    .141
              *

1857          KK    EML2A
1858          BA   .0665
1859          PB    2.77
1860          LS       0    92.0
1861          UD    .138
              *
```

```
1862          KK   DUMMY
1863          HC       5
              *

1864          KK    TP3
1865          BA  .0068
1866          PB   2.77
1867          LS      0    98.0
1868          UD   .231
              *

1869          KK    TP4A
1870          BA  .0029
1871          PB   2.77
1872          LS      0    98.0
1873          UD   .115
              *

1874          KK    LOG1
1875          BA  .0073
1876          PB   2.77
1877          LS      0    98.0
1878          UD   .088
              *

1879          KK   LC-TP
1880          KM   TOTAL FLOW AT INTERSECTION OF LOG CABIN AND TEE PEE
1881          KM   FLOW ROUTED EAST IN LOG CABIN
1882          HC       5
              *
```



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

1883          KK    EL1
1884          BA  .1161
1885          PB   2.77
1886          LS      0    82.0
1887          UD   .184
              *

1888          KK    LOG2
1889          BA  .0042
1890          PB   2.77
1891          LS      0    98.0
1892          UD   .065
              *

1893          KK   FORT1
1894          BA  .0091
1895          PB   2.77
1896          LS      0    98.0
1897          UD   .238
              *

1898          KK   FT-LC
1899          KM   TOTAL FLOW AT INTERSECTION OF FORT APACHE AND LOG CABIN
1900          KM   FLOW ROUTED NORTH IN FORT APACHE
1901          HC       5
              *

1902          KK   RFTLC
1903          KM   DIVERT FLOW SPLIT INTO O'HARE ROAD
1904          DT   OHARE
1905          DI       0     271     642
1906          DQ       0       0      47
              *

1907          KK  R2FTLC
1908          KM   DIVERT FLOW SPLIT INTO LOG CABIN WAY
1909          DT  LOGCAB
1910          DI       0     271     595
1911          DQ       0      73     187
              *

1912          KK   EML2B
1913          BA  .0412
1914          PB   2.77
1915          LS      0    92.0
1916          UD   .120
              *

1917          KK    TP4B
1918          BA  .0036
1919          PB   2.77
1920          LS      0    98.0
1921          UD   .085
              *
```



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

1922          KK    EML3
1923          BA  .0575
1924          PB   2.77
1925          LS      0    92.0
1926          UD   .153
              *

1927          KK   STRT7
1928          BA  .0039
1929          PB   2.77
1930          LS      0    98.0
1931          UD   .071
              *

1932          KK   DUMMY
1933          HC       5
              *

1934          KK    EML4
1935          BA  .0718
1936          PB   2.77
1937          LS      0    92.0
1938          UD   .153
              *

1939          KK   ENVE2
1940          BA  .0144
1941          PB   2.77
1942          LS      0    77.0
1943          UD   .157
              *

1944          KK   FORT2
1945          BA  .0090
1946          PB   2.77
```

```
1947          LS       0    98.0
1948          UD    .253
              *

1949          KK   FT-MO
1950          KM   TOTAL KYLE CANYON DEVELOPMENT DISCHARGE IN FORT APACHE @ MOCCASIN
1951          KM   FLOW ROUTED EAST ADJACENT TO MOCCASIN
1952          HC       4
              *

1953          KK    CP43
1954          KM   TOTAL KYLE CANYON DEVELOPMENT DISCHARGE IN MOCCASIN REGIONAL ALIGNMENT
1955          HC       2
              *
```



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

1956          KK   95-7A
1957          KM   REFERENCED FROM GCW MASTER DRAINAGE STUDY
1958          BA   .0069
1959          PB    2.77
1960          LS       0    94.7
1961          UD   0.073
              *

1962          KK   95-7B
1963          KM   REFERENCED FROM GCW MASTER DRAINAGE STUDY
1964          BA   .0081
1965          PB    2.77
1966          LS       0    94.7
1967          UD   0.084
              *

1968          KK   95-8A
1969          KM   REFERENCED FROM GCW MASTER DRAINAGE STUDY
1970          BA   .0052
1971          PB    2.77
1972          LS       0    94.7
1973          UD   0.061
              *

1974          KK   95-8B
1975          KM   REFERENCED FROM GCW MASTER DRAINAGE STUDY
1976          BA   .0031
1977          PB    2.77
1978          LS       0    94.7
1979          UD   0.050
              *

1980          KK  C95-8B
1981          KM   COMBINE 95-7A, 95-7B, 95-8A, 95-8B
1982          HC       4
              *

1983          KK    SKY2
1984          BA   .0074
1985          PB    2.93
1986          LS       0    98.0
1987          UD    .099
              *

1988          KK  EMLA1A
1989          BA   .0135
1990          PB    2.93
1991          LS       0    95.0
1992          UD    .100
              *
```



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

1993          KK     TP1
1994          BA   .0009
1995          PB    2.93
1996          LS       0    98.0
1997          UD    .082
              *

1998          KK   BR-TP
1999          KM   TOTAL FLOW AT INTERSECTION OF BRENT AND TEE PEE
2000          KM   FLOW ROUTED EAST IN BRENT
2001          HC       4
              *

2002          KK     ES2
2003          KM   REFERENCED FROM GCW MASTER DRAINAGE STUDY
2004          BA   .0491
2005          PB    2.77
2006          LS       0    94.7
2007          UD   0.149
              *

2008          KK  BRENT1
2009          BA   .0018
2010          PB    2.93
2011          LS       0    98.0
2012          UD    .062
              *

2013          KK    EGC3
2014          BA   .0215
2015          PB    2.93
2016          LS       0    95.0
2017          UD    .091
              *

2018          KK  HORSE5
2019          BA   .0048
2020          PB    2.93
2021          LS       0    98.0
2022          UD    .063
              *

2023          KK    CP44
2024          KM   TOTAL KYLE CANYON DEVELOPMENT DISCHARGE AT INTERSECTION OF BRENT LANE AND FOR
2025          KM   PROPOSED FLOW SPLIT INTO EXISTING STORM DRAIN SOUTH
2026          HC       5
              *

2027          KK   SOUTH
2028          KM   FLOW SPLIT AT BRENT/FT. APACHE
2029          KM   DIVERT STORM DRAIN DESIGN FLOW 65 CFS SOUTH IN FORT APACHE
2030          DT   BRENT
2031          DI       0     118     228
2032          DQ       0      68     178
              *
```

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

          2033          KK    SKY1
          2034          BA   .0074
          2035          PB    2.93
          2036          LS       0    98.1
          2037          UD    .084
                        *

          2038          KK  HORSE4
          2039          BA   .0035
          2040          PB    2.93
          2041          LS       0    98.0
          2042          UD    .050
                        *

          2043          KK    EGC1
          2044          BA   .0076
          2045          PB    2.93
          2046          LS       0    95.0
          2047          UD    .070
                        *

          2048          KK    EGC2
          2049          BA   .0121
          2050          PB    2.93
          2051          LS       0    95.0
          2052          UD    .095
                        *

          2053          KK   DUMMY
          2054          HC       5
                        *

          2055          KK   95-9B
          2056          KM   REFERENCED FROM GCW MASTER DRAINAGE STUDY
          2057          BA   .0133
          2058          PB    2.77
          2059          LS       0    94.7
          2060          UD   0.136
                        *

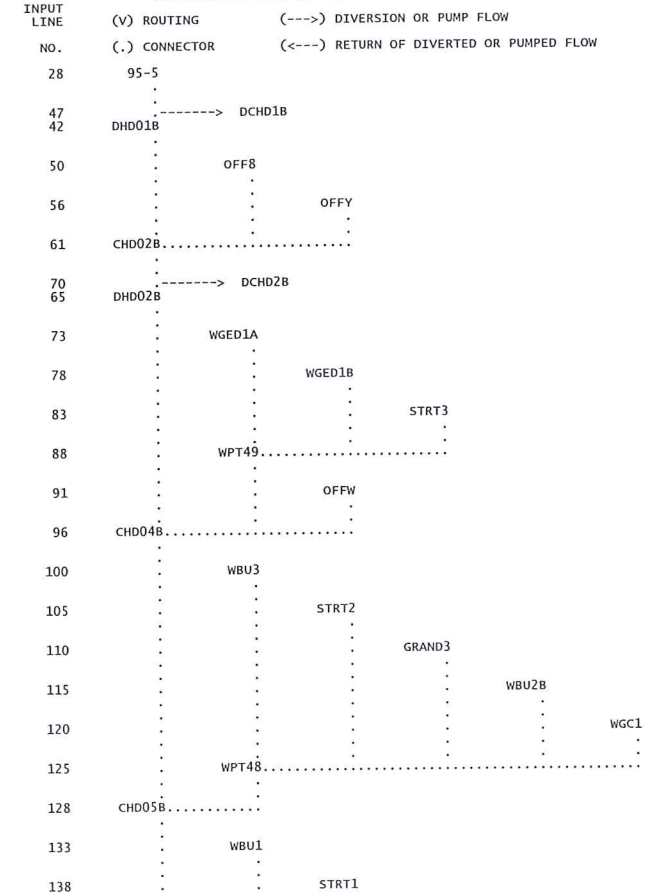
          2061          KK    CP45
          2062          KM   TOTAL KYLE CANYON DISCHARGE AT INTERSECTION OF FORT APACHE AND HORSE
          2063          KM   PROPOSED FLOW SPLIT AT INTERSECTION
          2064          HC       2
                        *

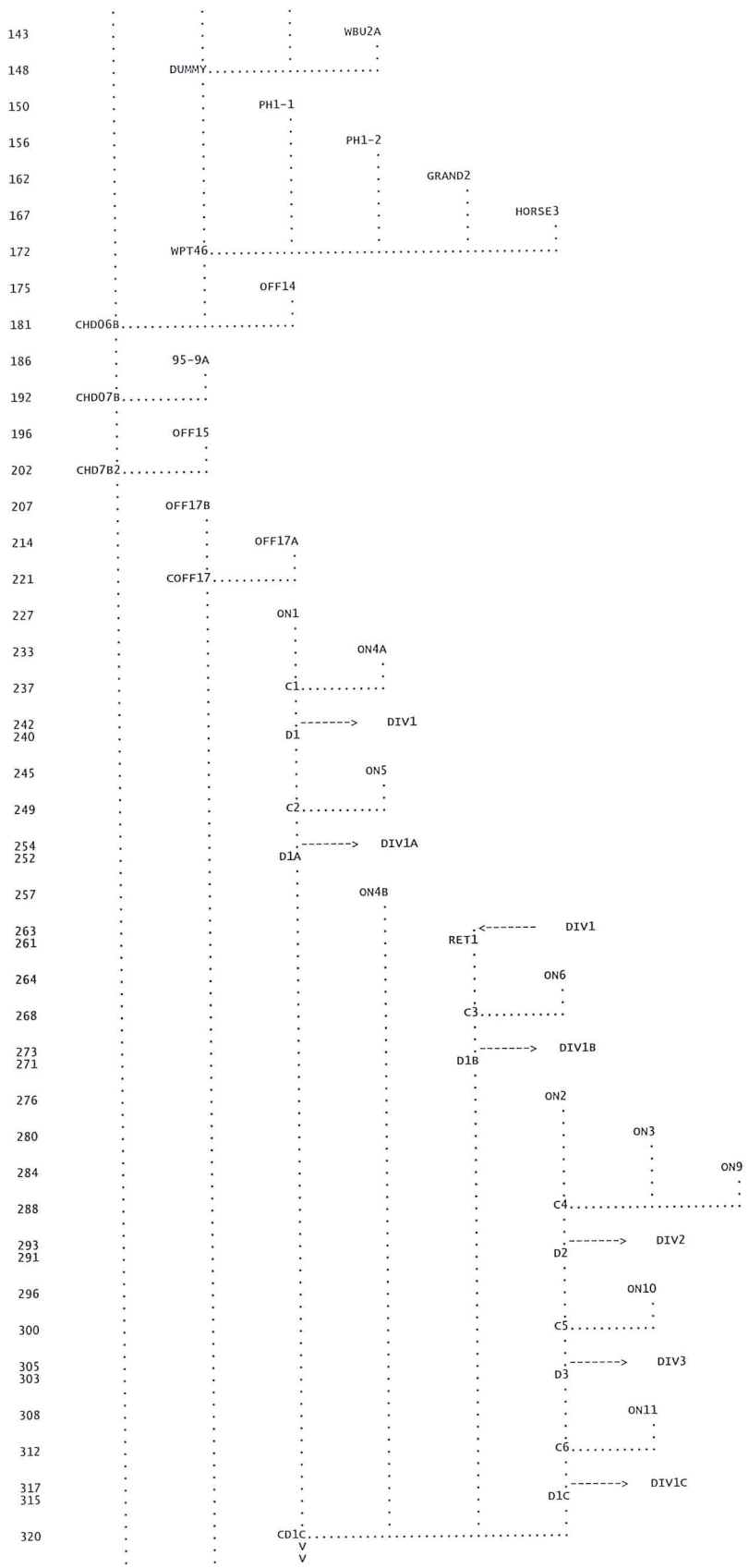
          2065          KK   HORSE
          2066          KM   FLOW SPLIT AT HORSE/RACEL
          2067          KM   DIVERT NWNS 101 CFS SOUTH IN FORT APACHE/RACEL
          2068          DT   RACEL
          2069          DI       0     101    1000
          2070          DQ       0     101     101
                        *

          2071          ZZ
```

1

SCHEMATIC DIAGRAM OF STREAM NETWORK

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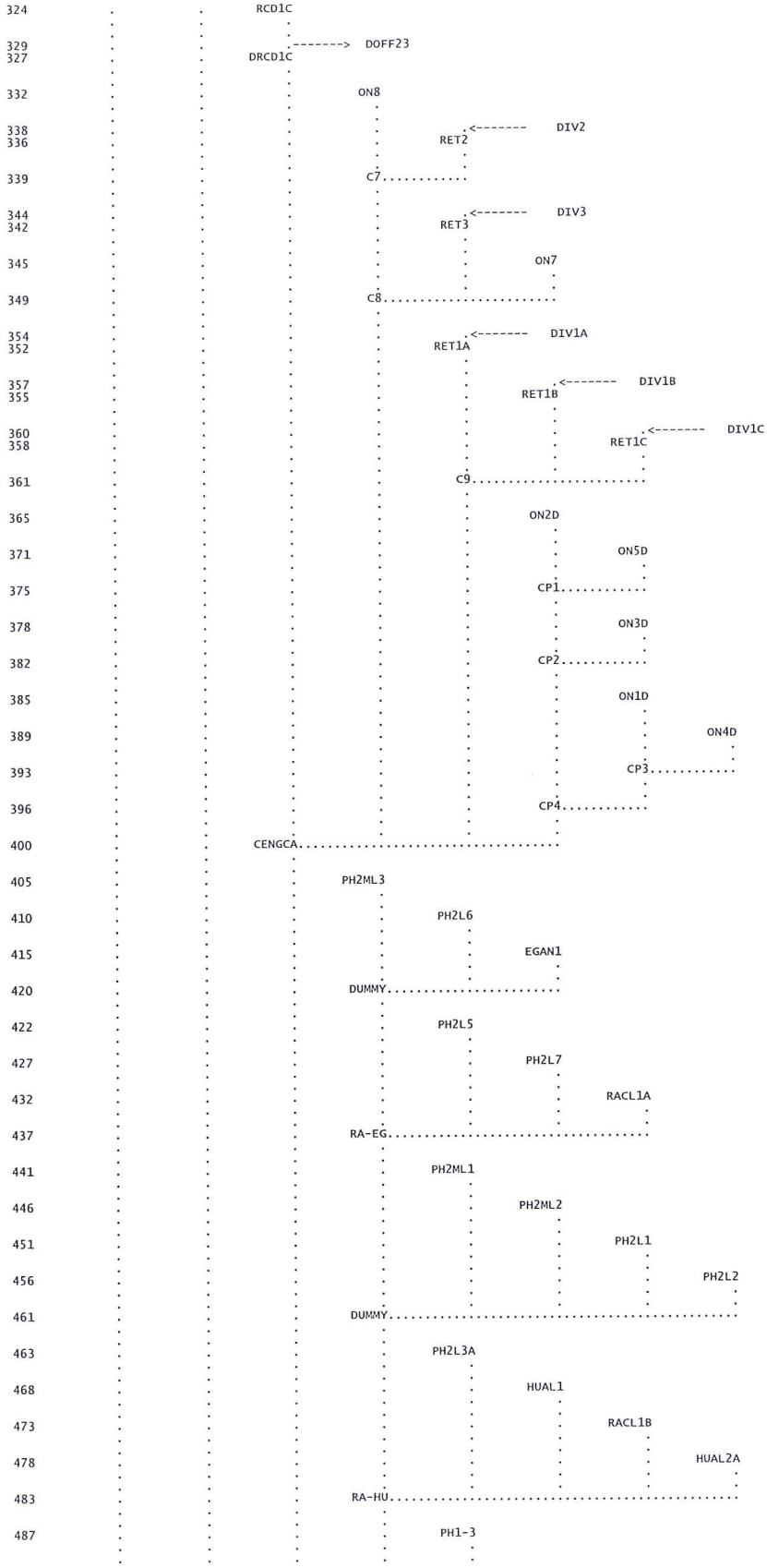
148 DUMMY
150 PH1-1
156 PH1-2
162 GRAND2
167 HORSE3
172 WPT46
175 OFF14
181 CHD06B
186 95-9A
192 CHD07B
196 OFF15
202 CHD7B2
207 OFF17B
214 OFF17A
221 COFF17
227 ON1
233 ON4A
237 C1
242 DIV1
240 D1
245 ON5
249 C2
254 DIV1A
252 D1A
257 ON4B
263 DIV1
261 RET1
264 ON6
268 C3
273 DIV1B
271 D1B
276 ON2
280 ON3
284 ON9
288 C4
293 DIV2
291 D2
296 ON10
300 C5
305 DIV3
303 D3
308 ON11
312 C6
317 DIV1C
315 D1C
320 CD1C


RCD1C
DOFF23
DRCD1C
ON8
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RET2
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DIV3
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C8
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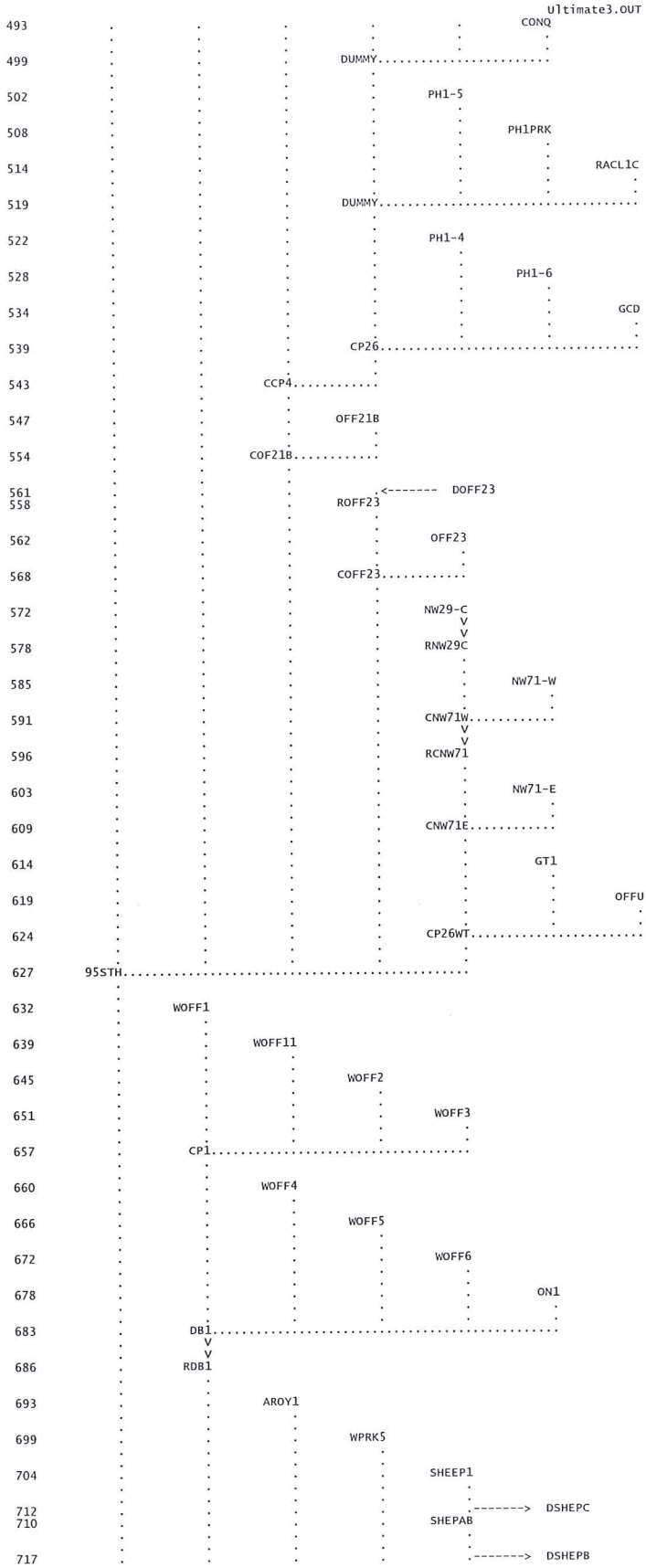
DIV1B
RET1B
DIV1C
RET1C
C9
ON2D
ON5D
CP1
ON3D
CP2
ON1D
ON4D
CP3
CP4
CENGCA
PH2ML3
PH2L6
EGAN1
DUMMY
PH2L5
PH2L7
RACL1A
RA-EG
PH2ML1
PH2ML2
PH2L1
PH2L2
DUMMY
PH2L3A
HUAL1
RACL1B
HUAL2A
RA-HU
PH1-3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CONQ
499
DUMMY
502
PH1-5
508
PH1PRK
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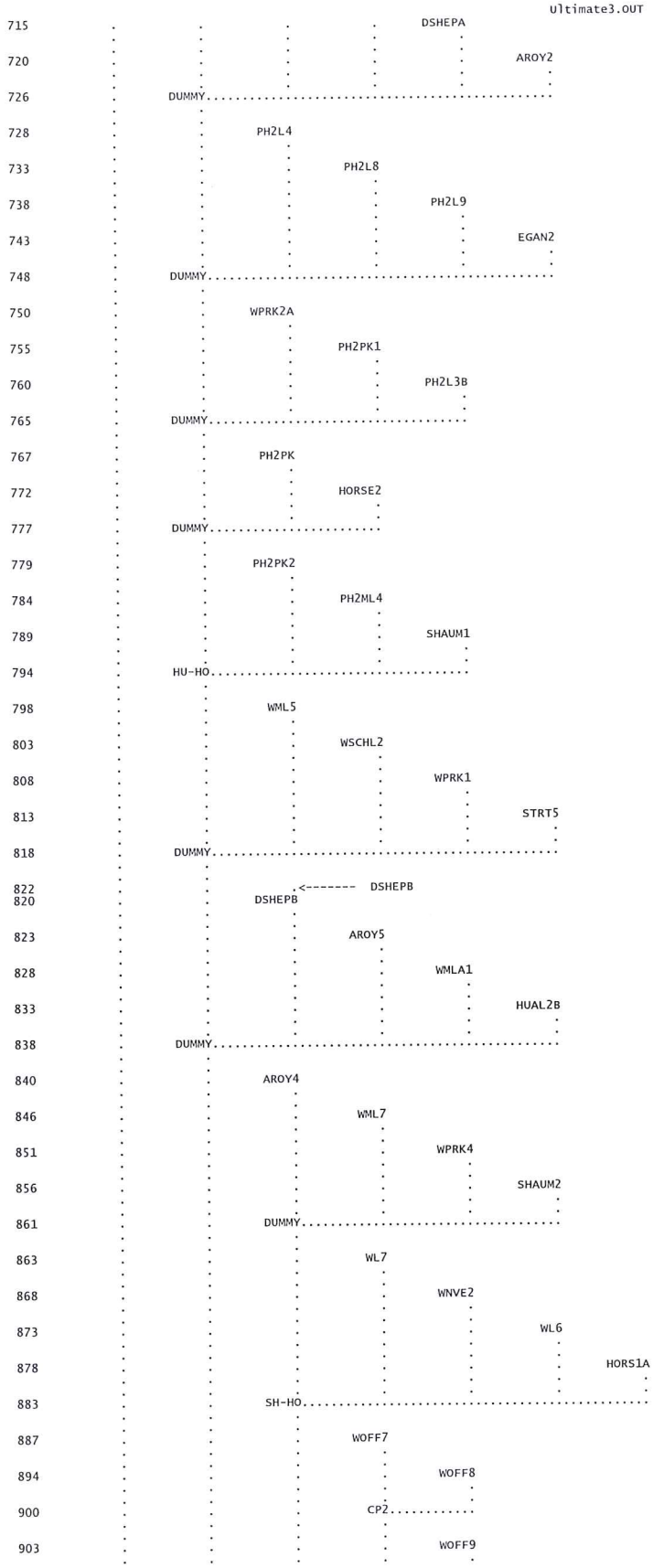
RACL1C
519
DUMMY
522
PH1-4
528
PH1-6
534
GCD
539
CP26
543
CCP4
547
OFF21B
554
COF21B
561
<------- DOFF23
558
ROFF23
562
OFF23
568
COFF23
572
NW29-C
578
RNW29C
585
NW71-W
591
CNW71W
596
RCNW71
603
NW71-E
609
CNW71E
614
GT1
619
OFFU
624
CP26WT
627
95STH
632
WOFF1
639
WOFF11
645
WOFF2
651
WOFF3
657
CP1
660
WOFF4
666
WOFF5
672
WOFF6
678
ON1
683
DB1
686
RDB1
693
AROY1
699
WPRK5
704
SHEEP1
712
-------> DSHEPC
710
SHEPAB
717
-------> DSHEPB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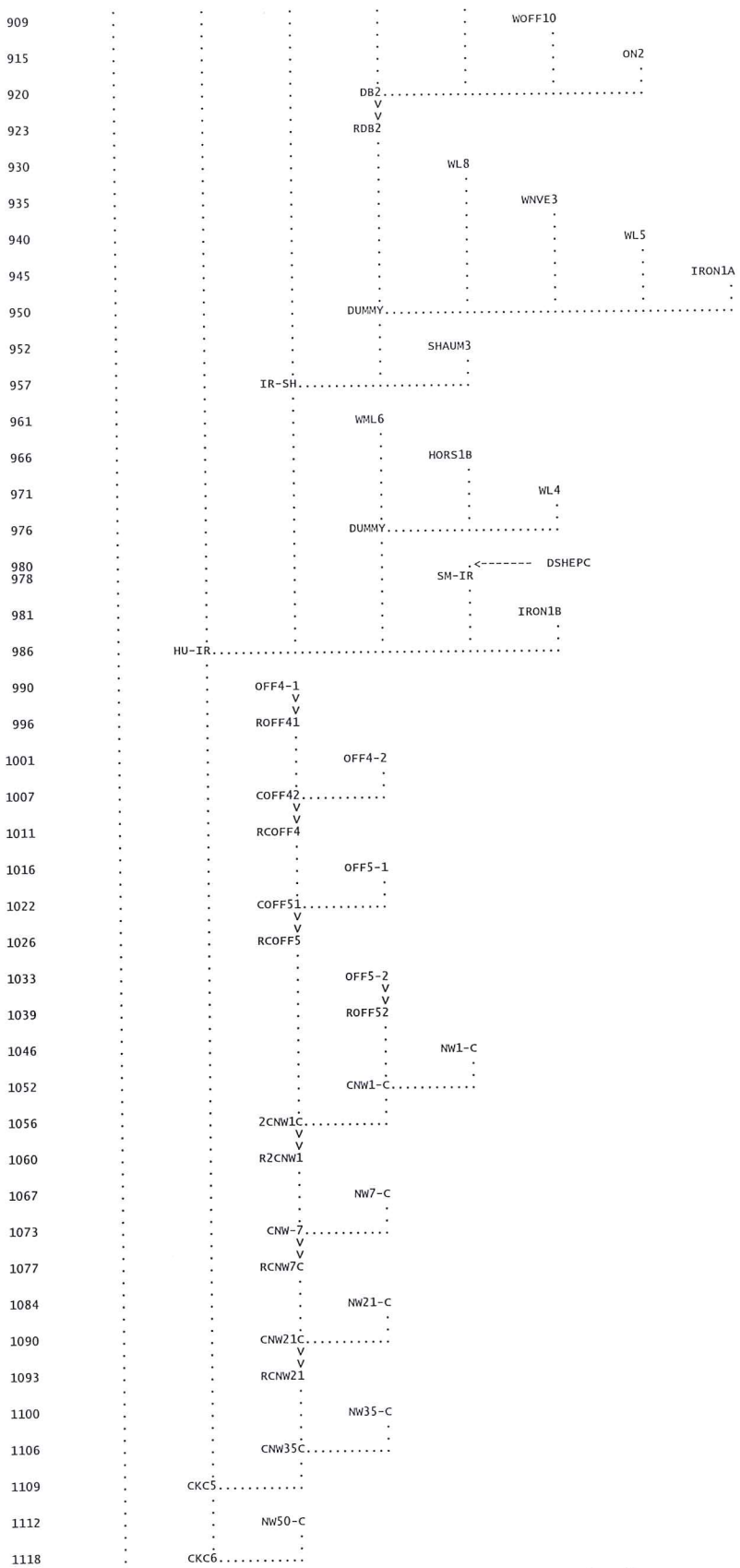
720 AROY2
726 DUMMY
728 PH2L4
733 PH2L8
738 PH2L9
743 EGAN2
748 DUMMY
750 WPRK2A
755 PH2PK1
760 PH2L3B
765 DUMMY
767 PH2PK
772 HORSE2
777 DUMMY
779 PH2PK2
784 PH2ML4
789 SHAUM1
794 HU-HO
798 WML5
803 WSCHL2
808 WPRK1
813 STRT5
818 DUMMY
822 <------- DSHEPB
820 DSHEPB
823 AROY5
828 WMLA1
833 HUAL2B
838 DUMMY
840 AROY4
846 WML7
851 WPRK4
856 SHAUM2
861 DUMMY
863 WL7
868 WNVE2
873 WL6
878 HORS1A
883 SH-HO
887 WOFF7
894 WOFF8
900 CP2
903 WOFF9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915
ON2
920
DB2
923
RDB2
930
WL8
935
WNVE3
940
WL5
945
IRON1A
950
DUMMY
952
SHAUM3
957
IR-SH
961
WML6
966
HORS1B
971
WL4
976
DUMMY
980
DSHEPC
978
SM-IR
981
IRON1B
986
HU-IR
990
OFF4-1
996
ROFF41
1001
OFF4-2
1007
COFF42
1011
RCOFF4
1016
OFF5-1
1022
COFF51
1026
RCOFF5
1033
OFF5-2
1039
ROFF52
1046
NW1-C
1052
CNW1-C
1056
2CNW1C
1060
R2CNW1
1067
NW7-C
1073
CNW-7
1077
RCNW7C
1084
NW21-C
1090
CNW21C
1093
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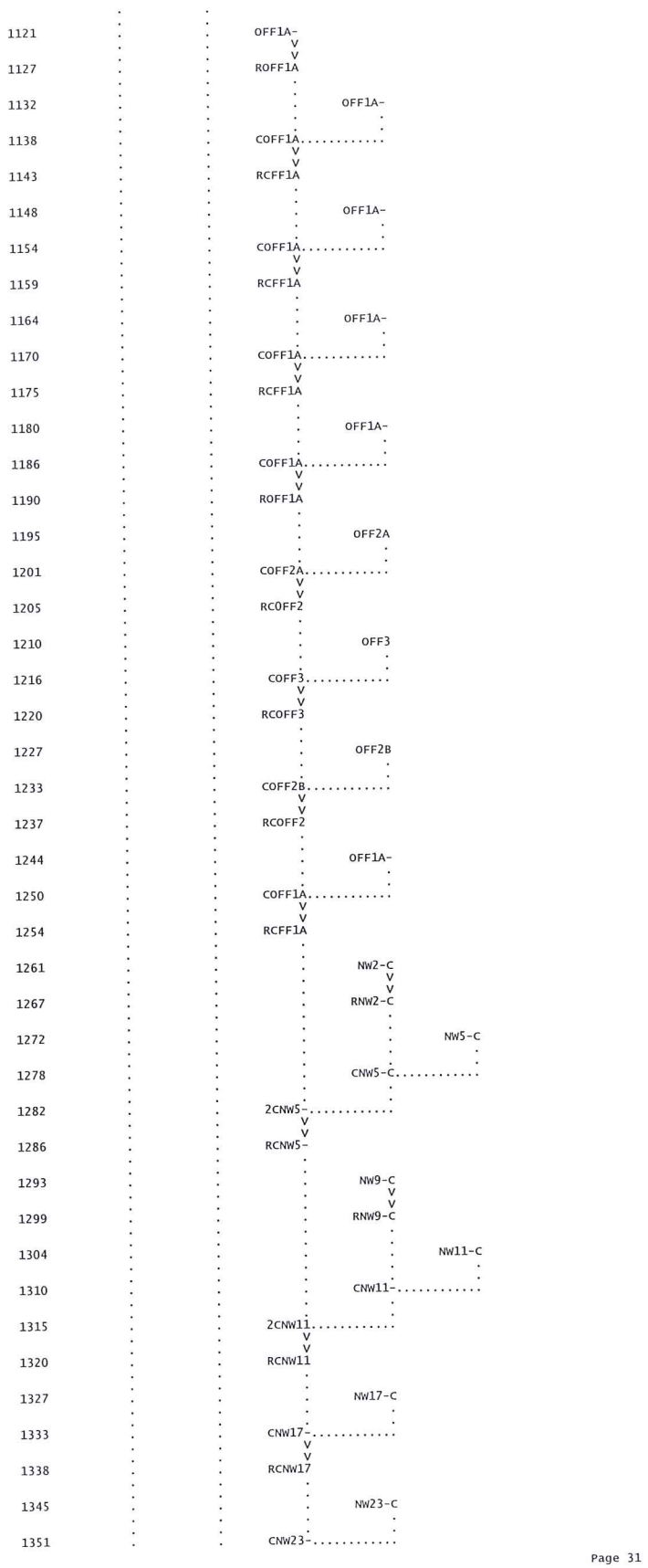
1100
NW35-C
1106
CNW35C
1109
CKC5
1112
NW50-C
1118
CKC6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ROFF1A
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RCFF1A
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OFF1A-
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COFF1A
1159
RCFF1A
1164
OFF1A-
1170
COFF1A
1175
RCFF1A
1180
OFF1A-
1186
COFF1A
1190
ROFF1A
1195
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OFF3
1216
COFF3
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COFF1A
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RCFF1A
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NW2-C
1267
RNW2-C
1272
NW5-C
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CNW5-C
1282
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NW9-C
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RNW9-C
1304
NW11-C
1310
CNW11-
1315
2CNW11
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NW23-C
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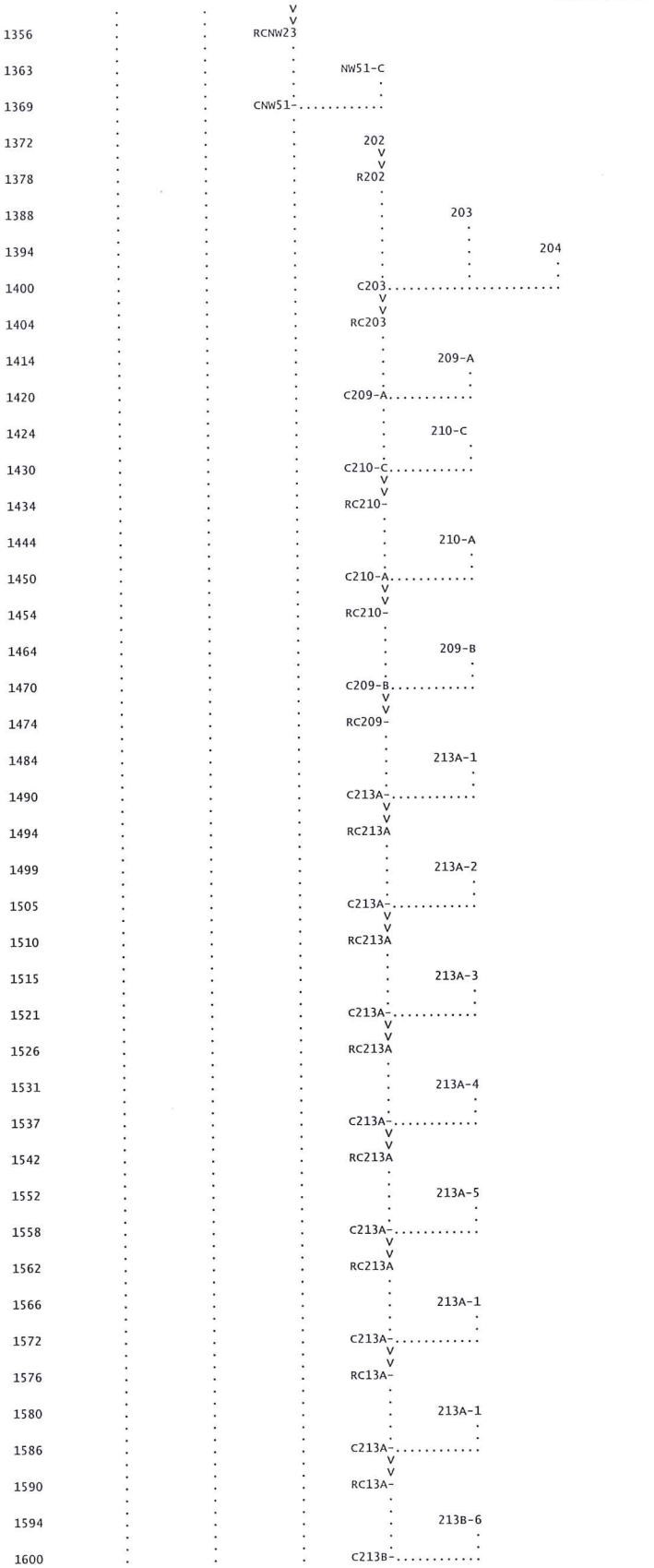
CNW23-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C203
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RC203
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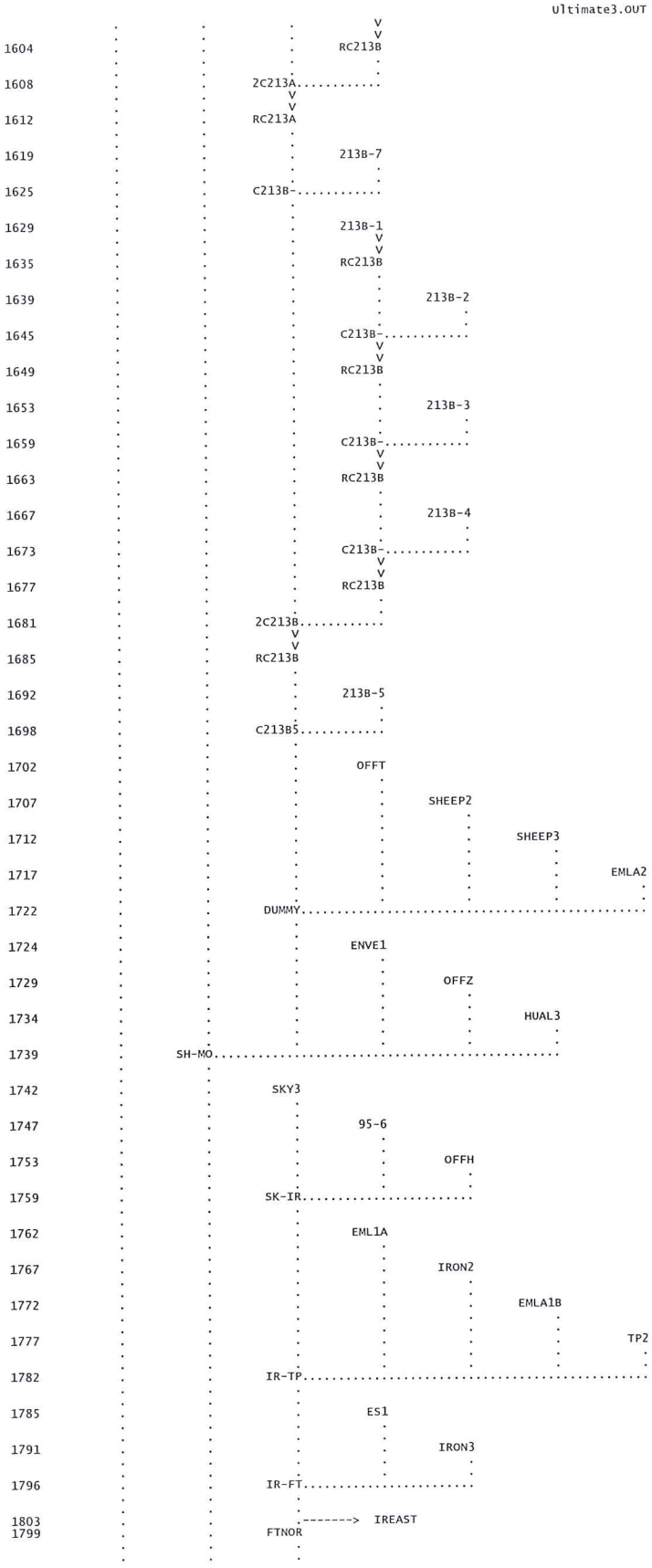
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1663
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213B-4
1673
C213B-
1677
RC213B
1681
2C213B
1685
RC213B
1692
213B-5
1698
C213B5
1702
OFFT
1707
SHEEP2
1712
SHEEP3
1717
EMLA2
1722
DUMMY
1724
ENVE1
1729
OFFZ
1734
HUAL3
1739
SH-MO
1742
SKY3
1747
95-6
1753
OFFH
1759
SK-IR
1762
EML1A
1767
IRON2
1772
EMLA1B
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IR-FT
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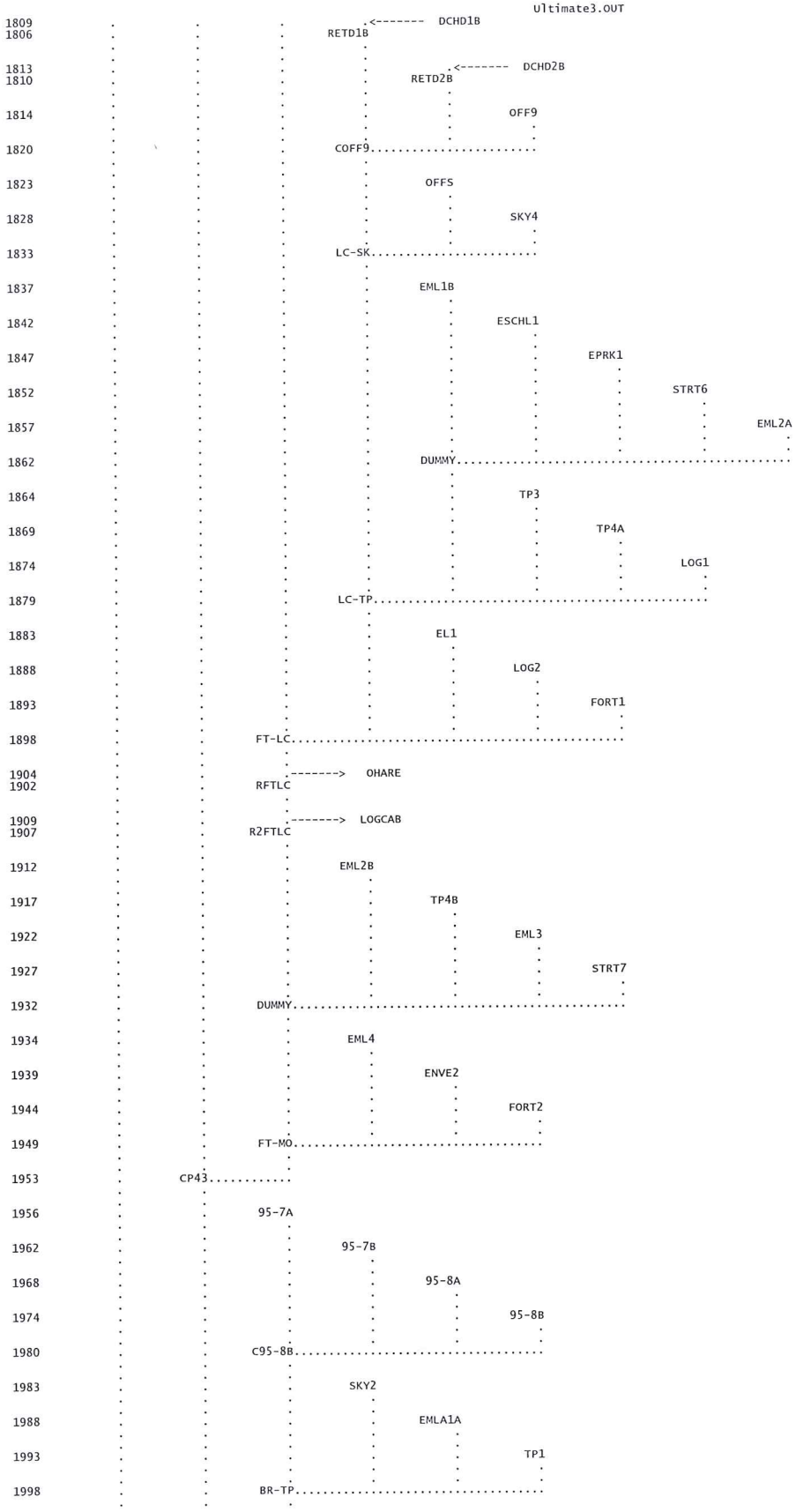
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EPRK1
STRT6
EML2A
DUMMY
TP3
TP4A
LOG1
LC-TP
EL1
LOG2
FORT1
FT-LC
OHARE
RFTLC
LOGCAB
R2FTLC
EML2B
TP4B
EML3
STRT7
DUMMY
EML4
ENVE2
FORT2
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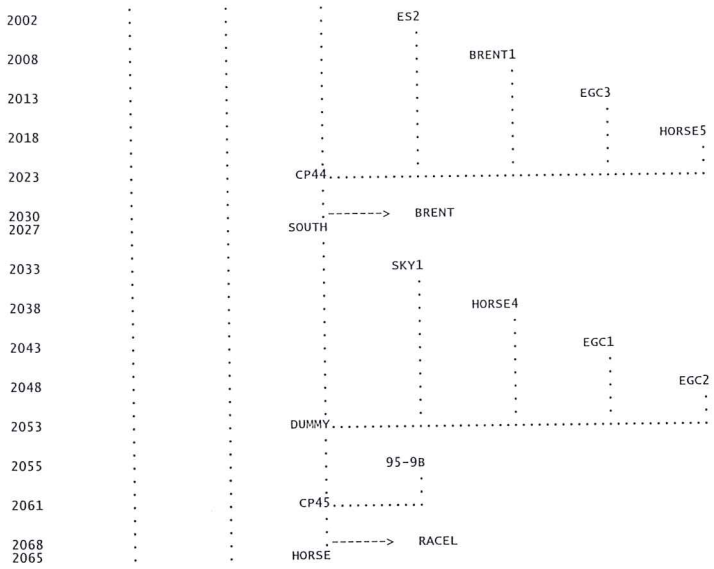

(***) RUNOFF ALSO COMPUTED AT THIS LOCATION

1

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*****************************************
*                                       *
*    FLOOD HYDROGRAPH PACKAGE  (HEC-1)  *
*              JUN  1998                *
*            VERSION 4.1                *
*                                       *
*  RUN DATE   11FEB15  TIME  09:32:22   *
*                                       *
*****************************************
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****************************************
*                                      *
*    U.S. ARMY CORPS OF ENGINEERS      *
*    HYDROLOGIC ENGINEERING CENTER     *
*          609 SECOND STREET           *
*       DAVIS, CALIFORNIA 95616        *
*           (916) 756-1104             *
*                                      *
****************************************
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SLATER HANIFAN GROUP
OLYMPIA COMPANIES
SKYE CANYON - MASTER DRAINAGE STUDY UPDATE
OVERALL PROPERTY ULTIMATE DRAINAGE CONDITION

RETURN PERIOD ------- 100 & 10-YEAR
DISTRIBUTION -------- 6-HOUR SDN3
PROJECT NO. --------- OLY1401.004
FILENAME ------------ Ultimate3.H1
DATE ---------------- 02/10/15
MODELED BY ---------- SMJ/ETM

SIX HOUR DEPTH-AREA REDUCTION FACTORS

DRAINAGE AREA (MI^2)	DARF
0.0-0.49	1.00
0.5-0.99	0.98
1.0-1.99	0.97
2.0-3.99	0.93
4.0-5.99	0.91
6.0-7.99	0.90
25-YR	0.70
10-YR	0.57

25 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 .98 .97 .93 .91 .90 .70 .57

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 .98	RATIO 3 .97	RATIO 4 .93	RATIO 5 .91	RATIO 6 .90	RATIO 7 .70	RATIO 8 .57
HYDROGRAPH AT												
+	95-5	.03	1	FLOW	57.	55.	55.	52.	51.	50.	36.	27.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50

+ DIVERSION TO	DCHD1B	.03	1	FLOW	51.	50.	49.	47.	46.	45.	32.	24.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
+ HYDROGRAPH AT	DHD01B	.03	1	FLOW	6.	5.	5.	5.	5.	5.	4.	3.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
+ HYDROGRAPH AT	OFF8	.01	1	FLOW	22.	22.	22.	20.	20.	20.	14.	10.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
+ HYDROGRAPH AT	OFFY	.01	1	FLOW	22.	22.	21.	20.	20.	20.	15.	11.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
+ 3 COMBINED AT	CHD02B	.06	1	FLOW	50.	49.	48.	46.	45.	44.	32.	24.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
+ DIVERSION TO	DCHD2B	.06	1	FLOW	50.	49.	48.	46.	44.	44.	32.	24.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
+ HYDROGRAPH AT	DHD02B	.06	1	FLOW	1.	0.	0.	0.	0.	0.	0.	0.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
+ HYDROGRAPH AT	WGED1A	.02	1	FLOW	33.	32.	32.	31.	30.	29.	22.	17.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
+ HYDROGRAPH AT	WGED1B	.04	1	FLOW	62.	60.	59.	56.	55.	54.	39.	29.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.58
+ HYDROGRAPH AT	STRT3	.00	1	FLOW	4.	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 COMBINED AT	WPT49	.05	1	FLOW	99.	96.	95.	91.	88.	87.	64.	48.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
+ HYDROGRAPH AT	OFFW	.01	1	FLOW	22.	21.	21.	20.	19.	19.	14.	10.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
+ 3 COMBINED AT	CHD04B	.12	1	FLOW	121.	118.	116.	111.	108.	106.	77.	59.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
+ HYDROGRAPH AT	WBU3	.07	1	FLOW	123.	120.	119.	114.	111.	110.	82.	64.
				TIME	3.58	3.58	3.58	3.58	3.58	3.58	3.58	3.58
+ HYDROGRAPH AT	STRT2	.00	1	FLOW	8.	8.	8.	7.	7.	7.	5.	4.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
+ HYDROGRAPH AT	GRAND3	.01	1	FLOW	20.	19.	19.	18.	18.	18.	14.	11.
				TIME	3.58	3.58	3.58	3.58	3.58	3.58	3.58	3.58
+ HYDROGRAPH AT	WBU2B	.02	1	FLOW	44.	43.	42.	40.	39.	39.	29.	23.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
+ HYDROGRAPH AT	WGC1	.02	1	FLOW	41.	40.	40.	38.	37.	36.	27.	21.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
+ 5 COMBINED AT	WPT48	.12	1	FLOW	231.	226.	224.	213.	208.	206.	154.	120.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
+ 2 COMBINED AT	CHD05B	.24	1	FLOW	352.	344.	340.	324.	316.	312.	231.	179.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
+ HYDROGRAPH AT	WBU1	.04	1	FLOW	70.	69.	68.	65.	63.	63.	47.	36.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
+ HYDROGRAPH AT	STRT1	.00	1	FLOW	10.	10.	10.	10.	9.	9.	7.	6.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
+ HYDROGRAPH AT	WBU2A	.05	1	FLOW	95.	93.	92.	88.	86.	85.	63.	49.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
+ 3 COMBINED AT	DUMMY	.09	1	FLOW	176.	172.	170.	162.	158.	156.	117.	91.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
+ HYDROGRAPH AT	PH1-1	.03	1	FLOW	47.	46.	45.	43.	42.	41.	29.	22.
				TIME	3.58	3.58	3.58	3.58	3.58	3.58	3.58	3.58
+ HYDROGRAPH AT	PH1-2	.03	1	FLOW	45.	44.	44.	41.	40.	39.	27.	19.
				TIME	3.58	3.58	3.58	3.58	3.58	3.58	3.58	3.58
+ HYDROGRAPH AT	GRAND2	.00	1	FLOW	6.	6.	6.	6.	6.	6.	4.	4.
				TIME	3.58	3.58	3.58	3.58	3.58	3.58	3.58	3.58
+ HYDROGRAPH AT	HORSE3	.01	1	FLOW	25.	24.	24.	23.	22.	22.	17.	14.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
+ 5 COMBINED AT	WPT46	.16	1	FLOW	293.	287.	283.	269.	262.	259.	190.	146.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
+ HYDROGRAPH AT	OFF14	.01	1	FLOW	26.	25.	25.	24.	23.	23.	17.	13.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
+ 3 COMBINED AT	CHD06B	.42	1	FLOW	671.	656.	648.	617.	602.	594.	439.	338.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
+ HYDROGRAPH AT	95-9A	.01	1	FLOW	21.	20.	20.	19.	19.	18.	14.	10.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50

+ 2 COMBINED AT	CHD07B	.43	1	FLOW	692.	676.	668.	636.	620.	612.	452.	348.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
+ HYDROGRAPH AT	OFF15	.03	1	FLOW	62.	61.	60.	57.	56.	55.	41.	32.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
+ 2 COMBINED AT	CHD7B2	.47	1	FLOW	754.	737.	728.	694.	676.	667.	493.	380.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
+ HYDROGRAPH AT	OFF17B	.01	1	FLOW	15.	15.	15.	14.	14.	13.	10.	7.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
+ HYDROGRAPH AT	OFF17A	.03	1	FLOW	51.	50.	49.	47.	45.	45.	32.	24.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
+ 2 COMBINED AT	COFF17	.04	1	FLOW	66.	65.	64.	61.	59.	58.	42.	31.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
+ HYDROGRAPH AT	ON1	.00	1	FLOW	8.	7.	7.	7.	7.	7.	5.	4.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
+ HYDROGRAPH AT	ON4A	.00	1	FLOW	8.	8.	8.	8.	7.	7.	5.	4.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
+ 2 COMBINED AT	C1	.01	1	FLOW	16.	16.	15.	15.	14.	14.	10.	7.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
+ DIVERSION TO	DIV1	.01	1	FLOW	13.	13.	13.	12.	12.	11.	8.	6.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
+ HYDROGRAPH AT	D1	.01	1	FLOW	3.	3.	3.	3.	3.	3.	2.	1.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
+ HYDROGRAPH AT	ON5	.01	1	FLOW	10.	9.	9.	9.	9.	8.	6.	4.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
+ 2 COMBINED AT	C2	.01	1	FLOW	13.	12.	12.	12.	11.	11.	8.	6.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
+ DIVERSION TO	DIV1A	.01	1	FLOW	13.	12.	12.	12.	11.	11.	8.	6.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
+ HYDROGRAPH AT	D1A	.01	1	FLOW	0.	0.	0.	0.	0.	0.	0.	0.
				TIME	.00	.00	.00	.00	.00	.00	.00	.00
+ HYDROGRAPH AT	ON4B	.00	1	FLOW	6.	5.	5.	5.	5.	5.	3.	3.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
+ HYDROGRAPH AT	RET1	.00	1	FLOW	13.	13.	13.	12.	12.	11.	8.	6.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
+ HYDROGRAPH AT	ON6	.00	1	FLOW	7.	7.	7.	7.	7.	6.	5.	3.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
+ 2 COMBINED AT	C3	.00	1	FLOW	20.	20.	20.	19.	18.	18.	13.	9.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
+ DIVERSION TO	DIV1B	.00	1	FLOW	20.	20.	20.	19.	18.	18.	13.	9.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
+ HYDROGRAPH AT	D1B	.00	1	FLOW	0.	0.	0.	0.	0.	0.	0.	0.
				TIME	.00	.00	.00	.00	.00	.00	.00	.00
+ HYDROGRAPH AT	ON2	.00	1	FLOW	9.	9.	9.	8.	8.	8.	6.	4.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
+ HYDROGRAPH AT	ON3	.01	1	FLOW	12.	12.	11.	11.	10.	10.	7.	6.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
+ HYDROGRAPH AT	ON9	.00	1	FLOW	8.	8.	8.	7.	7.	7.	5.	4.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
+ 3 COMBINED AT	C4	.02	1	FLOW	29.	28.	28.	26.	26.	25.	18.	13.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
+ DIVERSION TO	DIV2	.02	1	FLOW	24.	23.	23.	22.	21.	21.	15.	11.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
+ HYDROGRAPH AT	D2	.02	1	FLOW	5.	5.	5.	5.	4.	4.	3.	2.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
+ HYDROGRAPH AT	ON10	.00	1	FLOW	5.	5.	5.	4.	4.	4.	3.	2.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
+ 2 COMBINED AT	C5	.02	1	FLOW	10.	10.	9.	9.	9.	9.	6.	5.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
+ DIVERSION TO	DIV3	.02	1	FLOW	8.	8.	8.	7.	7.	7.	5.	4.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
+ HYDROGRAPH AT	D3	.02	1	FLOW	2.	2.	2.	2.	2.	2.	1.	1.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
+ HYDROGRAPH AT	ON11	.00	1	FLOW	5.	5.	5.	4.	4.	4.	3.	2.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
2 COMBINED AT												

+	C6	.02	1	FLOW	7.	7.	7.	6.	6.	6.	4.	3.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
DIVERSION TO												
+	DIV1C	.02	1	FLOW	7.	7.	7.	6.	6.	6.	4.	3.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
HYDROGRAPH AT												
+	D1C	.02	1	FLOW	0.	0.	0.	0.	0.	0.	0.	0.
				TIME	.00	.00	.00	.00	.00	.00	.00	.00
4 COMBINED AT												
+	CD1C	.04	1	FLOW	6.	5.	5.	5.	5.	5.	3.	3.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
ROUTED TO												
+	RCD1C	.04	1	FLOW	5.	5.	5.	5.	5.	4.	3.	2.
				TIME	3.67	3.67	3.67	3.75	3.75	3.75	3.75	3.83
DIVERSION TO												
+	DOFF23	.04	1	FLOW	5.	5.	5.	5.	5.	4.	3.	2.
				TIME	3.67	3.67	3.67	3.75	3.75	3.75	3.75	3.83
HYDROGRAPH AT												
+	DRCD1C	.04	1	FLOW	0.	0.	0.	0.	0.	0.	0.	0.
				TIME	.00	.00	.00	.00	.00	.00	.00	.00
HYDROGRAPH AT												
+	ON8	.00	1	FLOW	6.	6.	6.	5.	5.	5.	3.	2.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
HYDROGRAPH AT												
+	RET2	.00	1	FLOW	24.	23.	23.	22.	21.	21.	15.	11.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
2 COMBINED AT												
+	C7	.00	1	FLOW	30.	29.	29.	27.	26.	26.	18.	13.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
HYDROGRAPH AT												
+	RET3	.00	1	FLOW	8.	8.	8.	7.	7.	7.	5.	4.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
HYDROGRAPH AT												
+	ON7	.01	1	FLOW	14.	13.	13.	12.	12.	12.	9.	6.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
3 COMBINED AT												
+	C8	.01	1	FLOW	51.	50.	49.	47.	45.	45.	32.	23.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
HYDROGRAPH AT												
+	RET1A	.00	1	FLOW	13.	12.	12.	12.	11.	11.	8.	6.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
HYDROGRAPH AT												
+	RET1B	.00	1	FLOW	20.	20.	20.	19.	18.	18.	13.	9.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
HYDROGRAPH AT												
+	RET1C	.00	1	FLOW	7.	7.	7.	6.	6.	6.	4.	3.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
3 COMBINED AT												
+	C9	.00	1	FLOW	40.	39.	38.	36.	35.	35.	25.	18.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
HYDROGRAPH AT												
+	ON2D	.01	1	FLOW	21.	21.	20.	19.	19.	19.	14.	11.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
HYDROGRAPH AT												
+	ON5D	.00	1	FLOW	8.	8.	8.	8.	7.	7.	6.	4.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
2 COMBINED AT												
+	CP1	.01	1	FLOW	29.	29.	28.	27.	26.	26.	19.	15.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
HYDROGRAPH AT												
+	ON3D	.00	1	FLOW	7.	7.	7.	7.	7.	7.	5.	4.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
2 COMBINED AT												
+	CP2	.02	1	FLOW	37.	36.	36.	34.	33.	33.	24.	19.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
HYDROGRAPH AT												
+	ON1D	.01	1	FLOW	16.	15.	15.	15.	14.	14.	10.	8.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
HYDROGRAPH AT												
+	ON4D	.00	1	FLOW	8.	8.	8.	8.	7.	7.	5.	4.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
2 COMBINED AT												
+	CP3	.01	1	FLOW	24.	23.	23.	22.	21.	21.	16.	12.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
2 COMBINED AT												
+	CP4	.03	1	FLOW	61.	59.	59.	56.	55.	54.	40.	31.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
4 COMBINED AT												
+	CENGCA	.08	1	FLOW	152.	148.	146.	139.	135.	134.	97.	73.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
HYDROGRAPH AT												
+	PH2ML3	.04	1	FLOW	81.	79.	78.	74.	72.	71.	52.	40.
				TIME	3.58	3.58	3.58	3.58	3.58	3.58	3.58	3.58
HYDROGRAPH AT												
+	PH2L6	.05	1	FLOW	77.	75.	74.	70.	68.	67.	47.	34.
				TIME	3.58	3.58	3.58	3.58	3.58	3.58	3.58	3.58
HYDROGRAPH AT												
+	EGAN1	.01	1	FLOW	12.	12.	12.	11.	11.	11.	9.	7.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
3 COMBINED AT												
+	DUMMY	.10	1	FLOW	170.	165.	163.	155.	151.	149.	107.	81.
				TIME	3.58	3.58	3.58	3.58	3.58	3.58	3.58	3.58
HYDROGRAPH AT												
+	PH2L5	.00	1	FLOW	8.	8.	8.	7.	7.	7.	5.	4.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
HYDROGRAPH AT												
+	PH2L7	.01	1	FLOW	23.	22.	22.	21.	20.	20.	14.	10.

				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
HYDROGRAPH AT												
+	RACL1A	.01	1	FLOW	13.	13.	13.	12.	12.	12.	9.	7.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
4 COMBINED AT												
+	RA-EG	.12	1	FLOW	209.	204.	201.	191.	186.	183.	132.	100.
				TIME	3.50	3.50	3.50	3.58	3.58	3.58	3.58	3.58
HYDROGRAPH AT												
+	PH2ML1	.03	1	FLOW	60.	58.	58.	55.	54.	53.	40.	31.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
HYDROGRAPH AT												
+	PH2ML2	.03	1	FLOW	59.	58.	57.	55.	53.	53.	39.	31.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
HYDROGRAPH AT												
+	PH2L1	.03	1	FLOW	45.	44.	44.	41.	40.	40.	28.	21.
				TIME	3.58	3.58	3.58	3.58	3.58	3.58	3.58	3.58
HYDROGRAPH AT												
+	PH2L2	.02	1	FLOW	31.	30.	30.	28.	28.	27.	19.	14.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
5 COMBINED AT												
+	DUMMY	.22	1	FLOW	402.	392.	387.	367.	358.	353.	255.	192.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
HYDROGRAPH AT												
+	PH2L3A	.02	1	FLOW	29.	28.	27.	26.	25.	25.	17.	13.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
HYDROGRAPH AT												
+	HUAL1	.01	1	FLOW	14.	14.	14.	13.	13.	13.	10.	8.
				TIME	3.58	3.58	3.58	3.58	3.58	3.58	3.58	3.58
HYDROGRAPH AT												
+	RACL1B	.01	1	FLOW	12.	12.	12.	11.	11.	11.	8.	7.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
HYDROGRAPH AT												
+	HUAL2A	.01	1	FLOW	13.	12.	12.	12.	12.	11.	9.	7.
				TIME	3.58	3.58	3.58	3.58	3.58	3.58	3.58	3.58
5 COMBINED AT												
+	RA-HU	.26	1	FLOW	469.	457.	451.	429.	417.	412.	298.	226.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
HYDROGRAPH AT												
+	PH1-3	.02	1	FLOW	39.	38.	38.	36.	35.	34.	25.	18.
				TIME	3.58	3.58	3.58	3.58	3.58	3.58	3.58	3.58
HYDROGRAPH AT												
+	CONQ	.00	1	FLOW	6.	6.	6.	6.	5.	5.	4.	3.
				TIME	3.58	3.58	3.58	3.58	3.58	3.58	3.58	3.58
3 COMBINED AT												
+	DUMMY	.28	1	FLOW	513.	500.	494.	469.	457.	450.	326.	246.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
HYDROGRAPH AT												
+	PH1-5	.06	1	FLOW	107.	104.	103.	98.	96.	95.	71.	55.
				TIME	3.58	3.58	3.58	3.58	3.58	3.58	3.58	3.58
HYDROGRAPH AT												
+	PH1PRK	.00	1	FLOW	4.	3.	3.	3.	3.	3.	2.	1.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
HYDROGRAPH AT												
+	RACL1C	.01	1	FLOW	13.	13.	13.	12.	12.	12.	8.	6.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
4 COMBINED AT												
+	DUMMY	.35	1	FLOW	630.	615.	607.	577.	561.	554.	402.	305.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.58
HYDROGRAPH AT												
+	PH1-4	.03	1	FLOW	49.	47.	47.	45.	44.	43.	32.	25.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
HYDROGRAPH AT												
+	PH1-6	.05	1	FLOW	93.	91.	90.	86.	84.	83.	62.	48.
				TIME	3.58	3.58	3.58	3.58	3.58	3.58	3.58	3.58
HYDROGRAPH AT												
+	GCD	.01	1	FLOW	10.	9.	9.	9.	9.	8.	6.	5.
				TIME	3.58	3.58	3.58	3.58	3.58	3.58	3.58	3.58
4 COMBINED AT												
+	CP26	.43	1	FLOW	777.	759.	749.	712.	694.	684.	498.	381.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.58
2 COMBINED AT												
+	CCP4	.52	1	FLOW	929.	907.	896.	851.	829.	818.	595.	451.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
HYDROGRAPH AT												
+	OFF21B	.04	1	FLOW	75.	73.	72.	69.	67.	66.	49.	38.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
2 COMBINED AT												
+	COF21B	.56	1	FLOW	1004.	980.	968.	920.	896.	884.	644.	489.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
HYDROGRAPH AT												
+	ROFF23	.00	1	FLOW	5.	5.	5.	5.	5.	4.	3.	2.
				TIME	3.67	3.67	3.67	3.75	3.75	3.75	3.75	3.83
HYDROGRAPH AT												
+	OFF23	.01	1	FLOW	17.	16.	16.	15.	15.	15.	11.	8.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
2 COMBINED AT												
+	COFF23	.01	1	FLOW	19.	18.	18.	17.	17.	16.	11.	9.
				TIME	3.58	3.58	3.58	3.58	3.58	3.58	3.58	3.50
HYDROGRAPH AT												
+	NW29-C	.13	1	FLOW	200.	195.	193.	183.	178.	176.	128.	96.
				TIME	3.67	3.67	3.67	3.67	3.67	3.67	3.67	3.67
ROUTED TO												
+	RNW29C	.13	1	FLOW	200.	195.	193.	184.	179.	176.	127.	96.
				TIME	3.67	3.67	3.67	3.67	3.67	3.67	3.67	3.67
HYDROGRAPH AT												
+	NW71-W	.10	1	FLOW	156.	153.	151.	143.	139.	137.	99.	74.
				TIME	3.58	3.58	3.58	3.58	3.58	3.58	3.58	3.67

+ 2 COMBINED AT	CNW71W	.24	1	FLOW	354.	345.	341.	324.	316.	312.	225.	170.
				TIME	3.67	3.67	3.67	3.67	3.67	3.67	3.67	3.67
+ ROUTED TO	RCNW71	.24	1	FLOW	354.	344.	341.	322.	315.	310.	222.	165.
				TIME	3.67	3.67	3.67	3.67	3.67	3.67	3.67	3.67
+ HYDROGRAPH AT	NW71-E	.24	1	FLOW	259.	252.	249.	234.	227.	223.	152.	108.
				TIME	3.75	3.75	3.75	3.75	3.75	3.75	3.75	3.75
+ 2 COMBINED AT	CNW71E	.47	1	FLOW	610.	593.	585.	552.	537.	529.	370.	272.
				TIME	3.67	3.67	3.67	3.67	3.67	3.67	3.67	3.75
+ HYDROGRAPH AT	GT1	.02	1	FLOW	40.	39.	39.	37.	36.	36.	28.	22.
				TIME	3.67	3.67	3.67	3.67	3.67	3.67	3.67	3.67
+ HYDROGRAPH AT	OFFU	.04	1	FLOW	74.	72.	71.	68.	66.	66.	49.	38.
				TIME	3.58	3.58	3.58	3.58	3.58	3.58	3.58	3.58
+ 3 COMBINED AT	CP26WT	.54	1	FLOW	704.	685.	676.	639.	622.	613.	433.	319.
				TIME	3.67	3.67	3.67	3.67	3.67	3.67	3.67	3.67
+ 5 COMBINED AT	95STH	1.61	1	FLOW	2404.	2344.	2317.	2200.	2144.	2113.	1536.	1163.
				TIME	3.58	3.58	3.58	3.58	3.58	3.58	3.58	3.58
+ HYDROGRAPH AT	WOFF1	.41	1	FLOW	403.	391.	385.	361.	349.	343.	230.	160.
				TIME	3.75	3.75	3.75	3.75	3.83	3.83	3.83	3.83
+ HYDROGRAPH AT	WOFF11	.03	1	FLOW	55.	54.	53.	51.	50.	49.	37.	29.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.58	3.58
+ HYDROGRAPH AT	WOFF2	.04	1	FLOW	48.	47.	46.	43.	42.	41.	27.	18.
				TIME	3.58	3.58	3.58	3.58	3.58	3.58	3.58	3.58
+ HYDROGRAPH AT	WOFF3	.03	1	FLOW	38.	37.	36.	34.	33.	33.	22.	15.
				TIME	3.58	3.58	3.58	3.58	3.58	3.58	3.58	3.58
+ 4 COMBINED AT	CP1	.50	1	FLOW	485.	471.	464.	435.	421.	415.	278.	194.
				TIME	3.75	3.75	3.75	3.75	3.75	3.75	3.75	3.75
+ HYDROGRAPH AT	WOFF4	.06	1	FLOW	84.	82.	81.	76.	73.	72.	48.	34.
				TIME	3.58	3.58	3.58	3.58	3.58	3.58	3.58	3.58
+ HYDROGRAPH AT	WOFF5	.26	1	FLOW	236.	229.	226.	212.	205.	201.	134.	93.
				TIME	3.83	3.83	3.83	3.83	3.83	3.83	3.83	3.92
+ HYDROGRAPH AT	WOFF6	.04	1	FLOW	59.	57.	56.	53.	51.	50.	34.	24.
				TIME	3.58	3.58	3.58	3.58	3.58	3.58	3.58	3.58
+ HYDROGRAPH AT	ON1	.03	1	FLOW	47.	46.	46.	43.	42.	42.	31.	23.
				TIME	3.58	3.58	3.58	3.58	3.58	3.58	3.58	3.58
+ 5 COMBINED AT	DB1	.88	1	FLOW	817.	794.	782.	734.	711.	699.	469.	327.
				TIME	3.75	3.75	3.75	3.75	3.75	3.75	3.75	3.75
+ ROUTED TO	RDB1	.88	1	FLOW	73.	71.	70.	67.	66.	65.	49.	37.
				TIME	5.58	5.58	5.58	5.58	5.58	5.58	5.50	5.50
			** PEAK STAGES IN FEET **									
			1	STAGE	36.22	35.95	35.81	35.27	35.00	34.84	31.82	30.06
				TIME	5.58	5.58	5.58	5.58	5.58	5.58	5.50	5.50
+ HYDROGRAPH AT	AROY1	.00	1	FLOW	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
+ HYDROGRAPH AT	WPRK5	.00	1	FLOW	6.	6.	6.	5.	5.	5.	3.	2.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
+ HYDROGRAPH AT	SHEEP1	.10	1	FLOW	143.	140.	138.	131.	128.	126.	93.	71.
				TIME	3.67	3.67	3.67	3.67	3.67	3.67	3.67	3.67
+ DIVERSION TO	DSHEPC	.10	1	FLOW	32.	31.	31.	29.	29.	28.	21.	16.
				TIME	3.67	3.67	3.67	3.67	3.67	3.67	3.67	3.67
+ HYDROGRAPH AT	SHEPAB	.10	1	FLOW	111.	109.	107.	102.	100.	98.	72.	55.
				TIME	3.67	3.67	3.67	3.67	3.67	3.67	3.67	3.67
+ DIVERSION TO	DSHEPB	.10	1	FLOW	68.	66.	65.	62.	61.	60.	44.	34.
				TIME	3.67	3.67	3.67	3.67	3.67	3.67	3.67	3.67
+ HYDROGRAPH AT	DSHEPA	.10	1	FLOW	44.	43.	42.	40.	39.	38.	28.	22.
				TIME	3.67	3.67	3.67	3.67	3.67	3.67	3.67	3.67
+ HYDROGRAPH AT	AROY2	.01	1	FLOW	13.	13.	13.	12.	12.	11.	8.	6.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
+ 5 COMBINED AT	DUMMY	.99	1	FLOW	95.	93.	91.	86.	83.	82.	55.	41.
				TIME	3.75	3.75	3.75	3.75	3.75	3.75	4.92	5.00
+ HYDROGRAPH AT	PH2L4	.02	1	FLOW	33.	32.	32.	30.	29.	29.	20.	15.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
+ HYDROGRAPH AT	PH2L8	.01	1	FLOW	22.	21.	21.	20.	19.	19.	13.	10.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
+ HYDROGRAPH AT	PH2L9	.03	1	FLOW	52.	51.	50.	48.	46.	46.	32.	23.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50

HYDROGRAPH AT	EGAN2	.00	1	FLOW	10.	10.	10.	10.	9.	9.	7.	6.
+				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
5 COMBINED AT	DUMMY	1.06	1	FLOW	190.	185.	183.	173.	168.	165.	116.	85.
+				TIME	3.50	3.58	3.58	3.58	3.58	3.58	3.58	3.58
HYDROGRAPH AT	WPRK2A	.01	1	FLOW	9.	9.	9.	8.	8.	8.	5.	3.
+				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
HYDROGRAPH AT	PH2PK1	.01	1	FLOW	13.	12.	12.	11.	11.	11.	7.	5.
+				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
HYDROGRAPH AT	PH2L3B	.01	1	FLOW	17.	17.	16.	15.	15.	15.	10.	8.
+				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
4 COMBINED AT	DUMMY	1.08	1	FLOW	229.	223.	220.	207.	201.	198.	137.	99.
+				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.58
HYDROGRAPH AT	PH2PK	.02	1	FLOW	29.	28.	27.	25.	25.	24.	15.	10.
+				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.58
HYDROGRAPH AT	HORSE2	.01	1	FLOW	23.	23.	23.	22.	21.	21.	16.	13.
+				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
3 COMBINED AT	DUMMY	1.11	1	FLOW	281.	273.	270.	254.	247.	243.	168.	122.
+				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
HYDROGRAPH AT	PH2PK2	.00	1	FLOW	4.	4.	4.	4.	4.	3.	2.	2.
+				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
HYDROGRAPH AT	PH2ML4	.04	1	FLOW	66.	64.	64.	61.	59.	58.	42.	32.
+				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
HYDROGRAPH AT	SHAUM1	.01	1	FLOW	13.	13.	13.	12.	12.	12.	9.	7.
+				TIME	3.58	3.58	3.58	3.58	3.58	3.58	3.58	3.58
4 COMBINED AT	HU-HO	1.16	1	FLOW	363.	354.	349.	330.	320.	315.	221.	162.
+				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
HYDROGRAPH AT	WML5	.04	1	FLOW	76.	75.	74.	70.	69.	68.	51.	40.
+				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
HYDROGRAPH AT	WSCHL2	.02	1	FLOW	33.	33.	32.	31.	30.	29.	21.	16.
+				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
HYDROGRAPH AT	WPRK1	.01	1	FLOW	18.	18.	18.	17.	16.	16.	10.	7.
+				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
HYDROGRAPH AT	STRT5	.01	1	FLOW	15.	15.	14.	14.	13.	13.	10.	8.
+				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
5 COMBINED AT	DUMMY	1.23	1	FLOW	506.	493.	487.	461.	448.	441.	313.	232.
+				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
HYDROGRAPH AT	DSHEPB	.00	1	FLOW	68.	66.	65.	62.	61.	60.	44.	34.
+				TIME	3.67	3.67	3.67	3.67	3.67	3.67	3.67	3.67
HYDROGRAPH AT	AROY5	.01	1	FLOW	20.	19.	19.	18.	17.	17.	12.	8.
+				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
HYDROGRAPH AT	WMLA1	.07	1	FLOW	133.	130.	129.	123.	120.	119.	89.	69.
+				TIME	3.58	3.58	3.58	3.58	3.58	3.58	3.58	3.58
HYDROGRAPH AT	HUAL2B	.01	1	FLOW	21.	20.	20.	19.	19.	19.	14.	11.
+				TIME	3.67	3.67	3.67	3.67	3.67	3.67	3.67	3.67
5 COMBINED AT	DUMMY	1.32	1	FLOW	716.	698.	689.	653.	636.	627.	450.	339.
+				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.58
HYDROGRAPH AT	AROY4	.01	1	FLOW	13.	13.	13.	12.	11.	11.	8.	5.
+				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
HYDROGRAPH AT	WML7	.04	1	FLOW	78.	76.	76.	72.	70.	69.	52.	40.
+				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
HYDROGRAPH AT	WPRK4	.00	1	FLOW	7.	7.	7.	6.	6.	6.	4.	3.
+				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
HYDROGRAPH AT	SHAUM2	.01	1	FLOW	17.	16.	16.	15.	15.	15.	12.	9.
+				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
4 COMBINED AT	DUMMY	.06	1	FLOW	115.	112.	111.	106.	103.	102.	75.	58.
+				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
HYDROGRAPH AT	WL7	.02	1	FLOW	36.	35.	35.	33.	32.	31.	22.	16.
+				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
HYDROGRAPH AT	WNVE2	.00	1	FLOW	3.	3.	3.	3.	2.	2.	2.	1.
+				TIME	3.58	3.58	3.58	3.58	3.58	3.58	3.58	3.58
HYDROGRAPH AT	WL6	.01	1	FLOW	11.	11.	11.	10.	10.	10.	7.	5.
+				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
HYDROGRAPH AT	HORS1A	.01	1	FLOW	19.	18.	18.	17.	17.	17.	13.	10.
+				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
5 COMBINED AT												

+	SH-HO	.10	1	FLOW	184.	180.	177.	169.	164.	162.	119.	91.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
HYDROGRAPH AT +	WOFF7	.01	1	FLOW	10.	10.	10.	9.	9.	9.	6.	4.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
HYDROGRAPH AT +	WOFF8	.17	1	FLOW	198.	192.	189.	177.	171.	169.	112.	77.
				TIME	3.67	3.67	3.67	3.67	3.67	3.67	3.67	3.67
2 COMBINED AT +	CP2	.17	1	FLOW	204.	198.	195.	183.	177.	174.	116.	80.
				TIME	3.67	3.67	3.67	3.67	3.67	3.67	3.67	3.67
HYDROGRAPH AT +	WOFF9	.12	1	FLOW	144.	140.	138.	129.	125.	123.	82.	57.
				TIME	3.58	3.58	3.58	3.67	3.67	3.67	3.67	3.67
HYDROGRAPH AT +	WOFF10	.25	1	FLOW	292.	283.	279.	262.	253.	249.	166.	115.
				TIME	3.67	3.67	3.67	3.67	3.67	3.67	3.67	3.67
HYDROGRAPH AT +	ON2	.02	1	FLOW	49.	48.	47.	45.	44.	43.	31.	24.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
4 COMBINED AT +	DB2	.56	1	FLOW	666.	647.	637.	599.	579.	570.	382.	265.
				TIME	3.67	3.67	3.67	3.67	3.67	3.67	3.67	3.67
ROUTED TO +	RDB2	.56	1	FLOW	57.	56.	55.	53.	52.	51.	39.	29.
				TIME	5.33	5.33	5.33	5.33	5.33	5.33	5.33	5.33
			** PEAK STAGES IN FEET **									
			1	STAGE	3002.84	3002.57	3002.44	3001.90	3001.64	3001.51	2998.87	2997.22
				TIME	5.33	5.33	5.33	5.33	5.33	5.33	5.33	5.33
HYDROGRAPH AT +	WL8	.01	1	FLOW	25.	24.	24.	22.	22.	21.	15.	11.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
HYDROGRAPH AT +	WNVE3	.00	1	FLOW	4.	4.	4.	4.	4.	4.	2.	2.
				TIME	3.58	3.58	3.58	3.58	3.58	3.58	3.58	3.58
HYDROGRAPH AT +	WL5	.04	1	FLOW	69.	67.	66.	62.	61.	60.	42.	30.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.58
HYDROGRAPH AT +	IRON1A	.01	1	FLOW	12.	12.	12.	11.	11.	11.	9.	7.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
5 COMBINED AT +	DUMMY	.62	1	FLOW	128.	125.	123.	115.	112.	110.	76.	55.
				TIME	3.58	3.58	3.58	3.58	3.58	3.58	3.58	3.58
HYDROGRAPH AT +	SHAUM3	.00	1	FLOW	12.	11.	11.	11.	11.	10.	8.	6.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
3 COMBINED AT +	IR-SH	.72	1	FLOW	322.	314.	310.	294.	286.	282.	203.	152.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
HYDROGRAPH AT +	WML6	.03	1	FLOW	61.	59.	59.	56.	55.	54.	40.	32.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
HYDROGRAPH AT +	HORS1B	.00	1	FLOW	8.	8.	8.	7.	7.	7.	6.	5.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
HYDROGRAPH AT +	WL4	.05	1	FLOW	82.	80.	79.	74.	72.	71.	50.	37.
				TIME	3.58	3.58	3.58	3.58	3.58	3.58	3.58	3.58
3 COMBINED AT +	DUMMY	.08	1	FLOW	145.	141.	140.	133.	129.	127.	92.	69.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
HYDROGRAPH AT +	SM-IR	.00	1	FLOW	32.	31.	31.	29.	29.	28.	21.	16.
				TIME	3.67	3.67	3.67	3.67	3.67	3.67	3.67	3.67
HYDROGRAPH AT +	IRON1B	.00	1	FLOW	9.	9.	9.	9.	9.	8.	7.	5.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
5 COMBINED AT +	HU-IR	2.13	1	FLOW	1214.	1184.	1169.	1109.	1078.	1063.	764.	574.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
HYDROGRAPH AT +	OFF4-1	.30	1	FLOW	397.	386.	380.	358.	347.	342.	234.	167.
				TIME	3.75	3.75	3.75	3.75	3.75	3.75	3.75	3.75
ROUTED TO +	ROFF41	.30	1	FLOW	402.	390.	385.	362.	351.	346.	235.	166.
				TIME	3.83	3.83	3.83	3.83	3.83	3.83	3.83	3.92
HYDROGRAPH AT +	OFF4-2	.42	1	FLOW	682.	662.	652.	613.	594.	584.	393.	274.
				TIME	3.58	3.58	3.58	3.58	3.58	3.58	3.58	3.58
2 COMBINED AT +	COFF42	.72	1	FLOW	871.	844.	830.	777.	751.	737.	480.	325.
				TIME	3.58	3.58	3.58	3.58	3.58	3.58	3.58	3.67
ROUTED TO +	RCOFF4	.72	1	FLOW	866.	841.	824.	772.	749.	734.	476.	326.
				TIME	3.67	3.67	3.67	3.67	3.67	3.67	3.67	3.67
HYDROGRAPH AT +	OFF5-1	.30	1	FLOW	375.	364.	358.	335.	324.	319.	209.	143.
				TIME	3.67	3.67	3.67	3.67	3.67	3.67	3.67	3.67
2 COMBINED AT +	COFF51	1.02	1	FLOW	1241.	1205.	1182.	1108.	1074.	1052.	685.	469.
				TIME	3.67	3.67	3.67	3.67	3.67	3.67	3.67	3.67
ROUTED TO +	RCOFF5	1.02	1	FLOW	1206.	1167.	1151.	1078.	1043.	1025.	682.	464.
				TIME	3.67	3.67	3.67	3.75	3.67	3.75	3.75	3.75
HYDROGRAPH AT +	OFF5-2	.40	1	FLOW	467.	454.	447.	421.	408.	401.	272.	191.

				TIME	3.75	3.75	3.75	3.75	3.75	3.75	3.75	
ROUTED TO	ROFF52	.40	1	FLOW	462.	449.	441.	415.	402.	396.	267.	187.
+				TIME	3.75	3.75	3.75	3.75	3.75	3.75	3.75	3.75
HYDROGRAPH AT	NW1-C	.29	1	FLOW	327.	317.	312.	291.	281.	276.	179.	121.
+				TIME	3.67	3.67	3.67	3.67	3.67	3.67	3.67	3.75
2 COMBINED AT	CNW1-C	.69	1	FLOW	780.	757.	746.	700.	677.	666.	445.	308.
+				TIME	3.75	3.75	3.75	3.75	3.75	3.75	3.75	3.75
2 COMBINED AT	2CNW1C	1.70	1	FLOW	1985.	1914.	1895.	1778.	1716.	1691.	1126.	772.
+				TIME	3.75	3.75	3.75	3.75	3.75	3.75	3.75	3.75
ROUTED TO	R2CNW1	1.70	1	FLOW	1975.	1904.	1886.	1766.	1706.	1676.	1109.	755.
+				TIME	3.75	3.75	3.75	3.75	3.75	3.75	3.75	3.75
HYDROGRAPH AT	NW7-C	.49	1	FLOW	500.	486.	479.	450.	436.	429.	290.	204.
+				TIME	3.83	3.83	3.83	3.83	3.83	3.83	3.83	3.83
2 COMBINED AT	CNW-7	2.19	1	FLOW	2473.	2388.	2363.	2213.	2140.	2103.	1394.	955.
+				TIME	3.75	3.75	3.75	3.75	3.75	3.75	3.75	3.83
ROUTED TO	RCNW7C	2.19	1	FLOW	2451.	2369.	2342.	2191.	2118.	2081.	1373.	954.
+				TIME	3.75	3.75	3.75	3.75	3.75	3.75	3.75	3.83
HYDROGRAPH AT	NW21-C	.16	1	FLOW	242.	236.	233.	221.	215.	212.	152.	114.
+				TIME	3.58	3.58	3.58	3.58	3.58	3.58	3.58	3.58
2 COMBINED AT	CNW21C	2.35	1	FLOW	2649.	2562.	2533.	2373.	2295.	2255.	1500.	1030.
+				TIME	3.75	3.75	3.75	3.75	3.75	3.75	3.75	3.83
ROUTED TO	RCNW21	2.35	1	FLOW	2605.	2517.	2486.	2323.	2251.	2209.	1483.	1030.
+				TIME	3.75	3.75	3.75	3.75	3.75	3.75	3.83	3.83
HYDROGRAPH AT	NW35-C	.34	1	FLOW	423.	413.	407.	385.	374.	369.	260.	191.
+				TIME	3.75	3.75	3.75	3.75	3.75	3.75	3.75	3.75
2 COMBINED AT	CNW35C	2.69	1	FLOW	3028.	2929.	2893.	2709.	2626.	2578.	1721.	1206.
+				TIME	3.75	3.75	3.75	3.75	3.75	3.75	3.83	3.83
2 COMBINED AT	CKC5	4.82	1	FLOW	3793.	3675.	3630.	3409.	3308.	3251.	2198.	1539.
+				TIME	3.75	3.75	3.75	3.75	3.75	3.75	3.75	3.75
HYDROGRAPH AT	NW50-C	.17	1	FLOW	228.	222.	218.	205.	199.	196.	132.	93.
+				TIME	3.58	3.58	3.58	3.58	3.58	3.58	3.58	3.58
2 COMBINED AT	CKC6	4.99	1	FLOW	3967.	3845.	3797.	3567.	3461.	3402.	2303.	1614.
+				TIME	3.75	3.75	3.75	3.75	3.75	3.75	3.75	3.75
HYDROGRAPH AT	OFF1A-	1.14	1	FLOW	731.	704.	691.	637.	611.	598.	352.	213.
+				TIME	4.00	4.00	4.00	4.00	4.00	4.00	4.08	4.08
ROUTED TO	ROFF1A	1.14	1	FLOW	726.	700.	687.	635.	609.	596.	352.	211.
+				TIME	4.08	4.08	4.08	4.08	4.08	4.08	4.08	4.17
HYDROGRAPH AT	OFF1A-	.39	1	FLOW	475.	460.	453.	424.	410.	403.	264.	181.
+				TIME	3.67	3.67	3.67	3.67	3.67	3.67	3.67	3.75
2 COMBINED AT	COFF1A	1.53	1	FLOW	1007.	971.	954.	883.	848.	830.	501.	309.
+				TIME	3.92	3.92	3.92	3.92	3.92	3.92	3.92	3.92
ROUTED TO	RCFF1A	1.53	1	FLOW	1002.	963.	946.	876.	845.	824.	502.	310.
+				TIME	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
HYDROGRAPH AT	OFF1A-	.30	1	FLOW	328.	318.	312.	292.	282.	277.	179.	120.
+				TIME	3.75	3.75	3.75	3.75	3.75	3.75	3.75	3.75
2 COMBINED AT	COFF1A	1.83	1	FLOW	1276.	1225.	1204.	1118.	1075.	1051.	648.	407.
+				TIME	3.92	3.92	3.92	3.92	3.92	3.92	3.92	3.92
ROUTED TO	RCFF1A	1.83	1	FLOW	1259.	1219.	1192.	1107.	1065.	1048.	648.	408.
+				TIME	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
HYDROGRAPH AT	OFF1A-	.27	1	FLOW	261.	252.	248.	230.	222.	217.	134.	84.
+				TIME	3.75	3.75	3.75	3.75	3.75	3.75	3.75	3.75
2 COMBINED AT	COFF1A	2.11	1	FLOW	1464.	1415.	1387.	1287.	1236.	1216.	749.	469.
+				TIME	3.92	3.92	3.92	3.92	3.92	3.92	3.92	4.00
ROUTED TO	RCFF1A	2.11	1	FLOW	1466.	1418.	1390.	1289.	1238.	1219.	750.	475.
+				TIME	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.08
HYDROGRAPH AT	OFF1A-	.42	1	FLOW	334.	322.	317.	293.	282.	276.	166.	102.
+				TIME	3.83	3.83	3.83	3.83	3.83	3.83	3.83	3.83
2 COMBINED AT	COFF1A	2.53	1	FLOW	1740.	1682.	1650.	1531.	1470.	1447.	891.	552.
+				TIME	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.08
ROUTED TO	ROFF1A	2.53	1	FLOW	1739.	1680.	1641.	1524.	1463.	1439.	878.	550.
+				TIME	4.00	4.00	4.00	4.00	4.00	4.00	4.08	4.08
HYDROGRAPH AT	OFF2A	.32	1	FLOW	269.	260.	255.	236.	226.	222.	132.	81.
+				TIME	3.75	3.75	3.75	3.75	3.75	3.75	3.75	3.75
2 COMBINED AT	COFF2A	2.84	1	FLOW	1923.	1858.	1817.	1687.	1620.	1593.	963.	602.
+				TIME	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.08

ROUTED TO	RCOFF2	2.84	1	FLOW	1913.	1847.	1801.	1667.	1606.	1568.	963.	598.
+				TIME	4.00	4.00	4.00	4.00	4.00	4.08	4.08	4.17
HYDROGRAPH AT	OFF3	.22	1	FLOW	190.	183.	180.	166.	160.	156.	94.	57.
+				TIME	3.75	3.75	3.75	3.75	3.75	3.75	3.75	3.75
2 COMBINED AT	COFF3	3.07	1	FLOW	2030.	1960.	1912.	1770.	1705.	1664.	1013.	625.
+				TIME	4.00	4.00	4.00	4.00	4.00	4.00	4.08	4.17
ROUTED TO	RCOFF3	3.07	1	FLOW	2016.	1945.	1898.	1754.	1689.	1650.	1006.	622.
+				TIME	4.00	4.00	4.00	4.00	4.00	4.08	4.08	4.17
HYDROGRAPH AT	OFF2B	.16	1	FLOW	133.	128.	126.	116.	111.	108.	62.	35.
+				TIME	3.67	3.67	3.67	3.67	3.67	3.67	3.67	3.67
2 COMBINED AT	COFF2B	3.23	1	FLOW	2079.	2005.	1958.	1810.	1743.	1698.	1032.	636.
+				TIME	4.00	4.00	4.00	4.00	4.00	4.00	4.08	4.17
ROUTED TO	RCOFF2	3.23	1	FLOW	2066.	1992.	1945.	1796.	1728.	1692.	1024.	632.
+				TIME	4.00	4.00	4.00	4.00	4.00	4.08	4.08	4.17
HYDROGRAPH AT	OFF1A-	.47	1	FLOW	313.	301.	295.	271.	259.	254.	144.	82.
+				TIME	3.83	3.83	3.83	3.83	3.83	3.83	3.83	3.83
2 COMBINED AT	COFF1A	3.70	1	FLOW	2327.	2243.	2192.	2024.	1946.	1896.	1132.	689.
+				TIME	4.00	4.00	4.00	4.00	4.00	4.00	4.08	4.17
ROUTED TO	RCFF1A	3.70	1	FLOW	2314.	2229.	2179.	2009.	1929.	1880.	1123.	684.
+				TIME	4.00	4.00	4.00	4.00	4.00	4.00	4.08	4.17
HYDROGRAPH AT	NW2-C	.40	1	FLOW	334.	323.	317.	296.	285.	279.	176.	114.
+				TIME	3.83	3.83	3.83	3.83	3.83	3.83	3.83	3.83
ROUTED TO	RNW2-C	.40	1	FLOW	333.	318.	315.	291.	283.	274.	175.	112.
+				TIME	3.83	3.83	3.83	3.83	3.83	3.83	3.92	3.92
HYDROGRAPH AT	NW5-C	.27	1	FLOW	180.	173.	170.	157.	151.	148.	88.	54.
+				TIME	3.92	3.92	3.92	3.92	3.92	3.92	3.92	3.92
2 COMBINED AT	CNW5-C	.67	1	FLOW	512.	490.	484.	447.	433.	421.	263.	165.
+				TIME	3.83	3.83	3.83	3.83	3.83	3.92	3.92	3.92
2 COMBINED AT	2CNW5-	4.37	1	FLOW	2783.	2681.	2623.	2422.	2330.	2272.	1343.	810.
+				TIME	4.00	4.00	4.00	4.00	4.00	4.00	4.08	4.17
ROUTED TO	RCNW5-	4.37	1	FLOW	2776.	2670.	2614.	2411.	2317.	2258.	1337.	807.
+				TIME	4.00	4.00	4.00	4.00	4.00	4.00	4.08	4.17
HYDROGRAPH AT	NW9-C	.27	1	FLOW	302.	294.	289.	272.	263.	259.	175.	122.
+				TIME	3.75	3.75	3.75	3.75	3.75	3.75	3.75	3.75
ROUTED TO	RNW9-C	.27	1	FLOW	302.	294.	290.	273.	264.	260.	176.	123.
+				TIME	3.83	3.83	3.83	3.83	3.83	3.83	3.83	3.83
HYDROGRAPH AT	NW11-C	.27	1	FLOW	223.	216.	212.	196.	189.	185.	112.	70.
+				TIME	3.75	3.75	3.75	3.75	3.75	3.75	3.75	3.75
2 COMBINED AT	CNW11-	.54	1	FLOW	522.	506.	497.	464.	448.	439.	281.	190.
+				TIME	3.75	3.75	3.75	3.75	3.75	3.75	3.83	3.83
2 COMBINED AT	2CNW11	4.91	1	FLOW	3149.	3032.	2971.	2746.	2641.	2577.	1514.	910.
+				TIME	4.00	4.00	4.00	4.00	4.00	4.00	4.08	4.08
ROUTED TO	RCNW11	4.91	1	FLOW	3145.	3028.	2967.	2741.	2635.	2571.	1512.	909.
+				TIME	4.00	4.00	4.00	4.00	4.00	4.00	4.08	4.17
HYDROGRAPH AT	NW17-C	.43	1	FLOW	400.	388.	382.	359.	347.	341.	227.	156.
+				TIME	3.75	3.83	3.83	3.83	3.83	3.83	3.83	3.83
2 COMBINED AT	CNW17-	5.34	1	FLOW	3471.	3340.	3275.	3030.	2914.	2846.	1672.	1010.
+				TIME	3.92	4.00	4.00	4.00	4.00	4.00	4.00	4.08
ROUTED TO	RCNW17	5.34	1	FLOW	3466.	3339.	3273.	3028.	2910.	2841.	1668.	1004.
+				TIME	4.00	4.00	4.00	4.00	4.00	4.00	4.08	4.17
HYDROGRAPH AT	NW23-C	.38	1	FLOW	370.	359.	354.	332.	321.	316.	210.	145.
+				TIME	3.75	3.75	3.75	3.75	3.75	3.75	3.75	3.75
2 COMBINED AT	CNW23-	5.71	1	FLOW	3763.	3620.	3551.	3271.	3144.	3072.	1814.	1096.
+				TIME	3.92	3.92	3.92	3.92	4.00	4.00	4.00	4.08
ROUTED TO	RCNW23	5.71	1	FLOW	3737.	3601.	3531.	3269.	3141.	3069.	1800.	1089.
+				TIME	4.00	4.00	4.00	4.00	4.00	4.00	4.08	4.08
HYDROGRAPH AT	NW51-C	.50	1	FLOW	500.	485.	478.	449.	434.	427.	285.	198.
+				TIME	3.75	3.75	3.75	3.75	3.75	3.75	3.75	3.83
2 COMBINED AT	CNW51-	6.21	1	FLOW	4172.	4019.	3943.	3637.	3485.	3408.	2021.	1221.
+				TIME	3.92	3.92	3.92	3.92	3.92	3.92	4.00	4.08
HYDROGRAPH AT	202	5.55	1	FLOW	6455.	6256.	6157.	5763.	5567.	5469.	3567.	2410.
+				TIME	3.92	3.92	3.92	3.92	3.92	3.92	3.92	3.92
ROUTED TO	R202	5.55	1	FLOW	6180.	5988.	5892.	5510.	5320.	5226.	3388.	2284.
+				TIME	4.08	4.08	4.08	4.08	4.08	4.08	4.08	4.17

+ HYDROGRAPH AT	203	6.41	1	FLOW	6508.	6305.	6204.	5802.	5602.	5503.	3568.	2408.
				TIME	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.08
+ HYDROGRAPH AT	204	2.71	1	FLOW	2705.	2620.	2578.	2410.	2326.	2285.	1476.	988.
				TIME	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
+ 3 COMBINED AT	C203	14.67	1	FLOW	15193.	14724.	14490.	13559.	13096.	12865.	8375.	5649.
				TIME	4.08	4.08	4.08	4.08	4.08	4.08	4.08	4.08
+ ROUTED TO	RC203	14.67	1	FLOW	14023.	13590.	13374.	12513.	12085.	11872.	7724.	5207.
				TIME	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50
+ HYDROGRAPH AT	209-A	5.20	1	FLOW	2197.	2104.	2057.	1875.	1785.	1740.	933.	508.
				TIME	4.42	4.42	4.42	4.42	4.42	4.42	4.50	4.58
+ 2 COMBINED AT	C209-A	19.86	1	FLOW	16209.	15684.	15422.	14382.	13866.	13609.	8657.	5711.
				TIME	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50
+ HYDROGRAPH AT	210-C	12.04	1	FLOW	6558.	6330.	6217.	5767.	5544.	5433.	3315.	2082.
				TIME	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.58
+ 2 COMBINED AT	C210-C	31.91	1	FLOW	22767.	22014.	21639.	20149.	19410.	19042.	11972.	7793.
				TIME	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50
+ ROUTED TO	RC210-	31.91	1	FLOW	22508.	21763.	21392.	19917.	19186.	18822.	11827.	7694.
				TIME	4.58	4.58	4.58	4.58	4.58	4.58	4.58	4.58
+ HYDROGRAPH AT	210-A	2.52	1	FLOW	1783.	1719.	1687.	1561.	1498.	1467.	875.	539.
				TIME	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.08
+ 2 COMBINED AT	C210-A	34.43	1	FLOW	23430.	22644.	22253.	20708.	19948.	19570.	12300.	8003.
				TIME	4.50	4.50	4.50	4.58	4.58	4.58	4.58	4.58
+ ROUTED TO	RC210-	34.43	1	FLOW	23113.	22340.	21955.	20425.	19667.	19289.	12085.	7873.
				TIME	4.67	4.67	4.67	4.67	4.67	4.67	4.75	4.75
+ HYDROGRAPH AT	209-B	1.62	1	FLOW	671.	640.	625.	566.	537.	522.	261.	130.
				TIME	4.17	4.17	4.17	4.17	4.17	4.17	4.17	4.25
+ 2 COMBINED AT	C209-B	36.05	1	FLOW	23523.	22734.	22340.	20778.	20003.	19618.	12258.	7970.
				TIME	4.67	4.67	4.67	4.67	4.67	4.67	4.75	4.75
+ ROUTED TO	RC209-	36.05	1	FLOW	22532.	21781.	21407.	19919.	19182.	18815.	11773.	7625.
				TIME	5.08	5.08	5.08	5.08	5.08	5.08	5.08	5.08
+ HYDROGRAPH AT	213A-1	2.97	1	FLOW	1405.	1353.	1327.	1224.	1174.	1148.	675.	407.
				TIME	4.33	4.33	4.33	4.33	4.33	4.33	4.42	4.42
+ 2 COMBINED AT	C213A-	39.02	1	FLOW	23452.	22669.	22280.	20732.	19965.	19583.	12254.	7936.
				TIME	5.08	5.08	5.08	5.08	5.08	5.08	5.08	5.08
+ ROUTED TO	RC213A	39.02	1	FLOW	23498.	22706.	22259.	20708.	19946.	19553.	12195.	7925.
				TIME	5.08	5.08	5.08	5.08	5.08	5.08	5.08	5.17
+ HYDROGRAPH AT	213A-2	.50	1	FLOW	419.	405.	397.	369.	354.	347.	211.	131.
				TIME	3.83	3.83	3.83	3.83	3.83	3.83	3.83	3.83
+ 2 COMBINED AT	C213A-	39.52	1	FLOW	23620.	22824.	22376.	20818.	20052.	19657.	12266.	7970.
				TIME	5.08	5.08	5.08	5.08	5.08	5.08	5.08	5.17
+ ROUTED TO	RC213A	39.52	1	FLOW	23540.	22748.	22300.	20737.	19964.	19573.	12247.	7942.
				TIME	5.08	5.08	5.08	5.08	5.08	5.08	5.17	5.17
+ HYDROGRAPH AT	213A-3	.37	1	FLOW	324.	312.	307.	284.	273.	267.	160.	100.
				TIME	3.75	3.75	3.75	3.75	3.75	3.75	3.75	3.83
+ 2 COMBINED AT	C213A-	39.89	1	FLOW	23628.	22834.	22384.	20816.	20041.	19648.	12292.	7973.
				TIME	5.08	5.08	5.08	5.08	5.08	5.08	5.17	5.17
+ ROUTED TO	RC213A	39.89	1	FLOW	23532.	22734.	22293.	20750.	19995.	19598.	12266.	7934.
				TIME	5.08	5.17	5.17	5.17	5.17	5.17	5.17	5.25
+ HYDROGRAPH AT	213A-4	.25	1	FLOW	221.	213.	209.	193.	186.	182.	109.	67.
				TIME	3.75	3.75	3.75	3.75	3.75	3.75	3.75	3.75
+ 2 COMBINED AT	C213A-	40.14	1	FLOW	23588.	22785.	22338.	20793.	20036.	19638.	12294.	7952.
				TIME	5.08	5.08	5.17	5.17	5.17	5.17	5.17	5.17
+ ROUTED TO	RC213A	40.14	1	FLOW	23064.	22287.	21859.	20348.	19606.	19218.	12019.	7782.
				TIME	5.33	5.42	5.42	5.42	5.42	5.42	5.42	5.50
+ HYDROGRAPH AT	213A-5	2.06	1	FLOW	914.	878.	860.	790.	755.	738.	419.	242.
				TIME	4.17	4.17	4.17	4.17	4.17	4.17	4.25	4.25
+ 2 COMBINED AT	C213A-	42.20	1	FLOW	23505.	22705.	22261.	20716.	19961.	19566.	12241.	7918.
				TIME	5.33	5.33	5.33	5.42	5.42	5.42	5.42	5.50
+ ROUTED TO	RC213A	42.20	1	FLOW	23477.	22687.	22250.	20705.	19944.	19551.	12196.	7914.
				TIME	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.50
+ HYDROGRAPH AT	213A-1	.25	1	FLOW	376.	367.	363.	346.	338.	333.	247.	191.
				TIME	3.67	3.67	3.67	3.67	3.67	3.67	3.67	3.67
+ 2 COMBINED AT	C213A-	42.45	1	FLOW	23500.	22710.	22273.	20726.	19966.	19572.	12212.	7924.
				TIME	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.50
ROUTED TO												

+	RC13A-	42.45	1	FLOW	23472.	22679.	22240.	20687.	19923.	19530.	12181.	7904.
				TIME	5.42	5.42	5.42	5.42	5.42	5.42	5.50	5.50
+ HYDROGRAPH AT	213A-1	.26	1	FLOW	376.	368.	364.	347.	338.	334.	248.	193.
				TIME	3.67	3.67	3.67	3.67	3.67	3.67	3.67	3.67
+ 2 COMBINED AT	C213A-	42.71	1	FLOW	23494.	22701.	22262.	20708.	19943.	19550.	12193.	7913.
				TIME	5.42	5.42	5.42	5.42	5.42	5.42	5.50	5.50
+ ROUTED TO	RC13A-	42.71	1	FLOW	23426.	22634.	22194.	20631.	19864.	19473.	12180.	7881.
				TIME	5.42	5.42	5.42	5.42	5.42	5.42	5.50	5.58
+ HYDROGRAPH AT	213B-6	.24	1	FLOW	349.	341.	337.	321.	313.	309.	230.	178.
				TIME	3.67	3.67	3.67	3.67	3.67	3.67	3.67	3.67
+ 2 COMBINED AT	C213B-	42.95	1	FLOW	23447.	22656.	22215.	20651.	19883.	19493.	12191.	7888.
				TIME	5.42	5.42	5.42	5.42	5.42	5.42	5.50	5.58
+ ROUTED TO	RC213B	42.95	1	FLOW	23410.	22620.	22177.	20613.	19844.	19454.	12176.	7887.
				TIME	5.42	5.42	5.42	5.42	5.42	5.42	5.50	5.58
+ 2 COMBINED AT	2C213A	49.16	1	FLOW	24570.	23749.	23291.	21665.	20866.	20460.	12803.	8315.
				TIME	5.42	5.42	5.42	5.42	5.42	5.42	5.50	5.50
+ ROUTED TO	RC213A	49.16	1	FLOW	24529.	23711.	23248.	21619.	20820.	20413.	12788.	8297.
				TIME	5.42	5.42	5.42	5.42	5.42	5.42	5.50	5.58
+ HYDROGRAPH AT	213B-7	.25	1	FLOW	315.	308.	304.	290.	282.	279.	206.	158.
				TIME	3.75	3.75	3.75	3.75	3.75	3.75	3.75	3.75
+ 2 COMBINED AT	C213B-	49.41	1	FLOW	24558.	23739.	23277.	21647.	20846.	20439.	12804.	8307.
				TIME	5.42	5.42	5.42	5.42	5.42	5.42	5.50	5.58
+ HYDROGRAPH AT	213B-1	.26	1	FLOW	394.	385.	380.	363.	354.	349.	259.	201.
				TIME	3.67	3.67	3.67	3.67	3.67	3.67	3.67	3.67
+ ROUTED TO	RC213B	.26	1	FLOW	381.	374.	374.	351.	347.	344.	253.	195.
				TIME	3.75	3.75	3.75	3.75	3.75	3.75	3.75	3.75
+ HYDROGRAPH AT	213B-2	.26	1	FLOW	392.	384.	379.	362.	353.	348.	259.	201.
				TIME	3.67	3.67	3.67	3.67	3.67	3.67	3.67	3.67
+ 2 COMBINED AT	C213B-	.52	1	FLOW	763.	750.	742.	702.	689.	678.	502.	384.
				TIME	3.67	3.67	3.67	3.67	3.67	3.67	3.67	3.67
+ ROUTED TO	RC213B	.52	1	FLOW	752.	738.	734.	691.	685.	675.	494.	386.
				TIME	3.75	3.75	3.75	3.75	3.75	3.75	3.75	3.75
+ HYDROGRAPH AT	213B-3	.25	1	FLOW	372.	364.	359.	343.	334.	330.	245.	190.
				TIME	3.67	3.67	3.67	3.67	3.67	3.67	3.67	3.67
+ 2 COMBINED AT	C213B-	.78	1	FLOW	1093.	1071.	1064.	1006.	992.	978.	720.	562.
				TIME	3.75	3.75	3.75	3.75	3.75	3.75	3.75	3.75
+ ROUTED TO	RC213B	.78	1	FLOW	1085.	1067.	1054.	1000.	979.	961.	708.	544.
				TIME	3.75	3.75	3.75	3.75	3.75	3.75	3.75	3.75
+ HYDROGRAPH AT	213B-4	.25	1	FLOW	363.	354.	350.	334.	326.	321.	239.	185.
				TIME	3.67	3.67	3.67	3.67	3.67	3.67	3.67	3.67
+ 2 COMBINED AT	C213B-	1.03	1	FLOW	1425.	1400.	1384.	1314.	1286.	1264.	934.	720.
				TIME	3.75	3.75	3.75	3.75	3.75	3.75	3.75	3.75
+ ROUTED TO	RC213B	1.03	1	FLOW	1399.	1375.	1357.	1289.	1257.	1239.	909.	705.
				TIME	3.75	3.75	3.75	3.75	3.75	3.75	3.83	3.83
+ 2 COMBINED AT	2C213B	50.44	1	FLOW	24726.	23904.	23440.	21803.	21000.	20591.	12900.	8373.
				TIME	5.42	5.42	5.42	5.42	5.42	5.42	5.50	5.50
+ ROUTED TO	RC213B	50.44	1	FLOW	24686.	23861.	23397.	21758.	20956.	20544.	12883.	8370.
				TIME	5.42	5.42	5.42	5.42	5.42	5.42	5.50	5.58
+ HYDROGRAPH AT	213B-5	.24	1	FLOW	311.	303.	300.	285.	278.	274.	202.	155.
				TIME	3.67	3.67	3.67	3.67	3.67	3.67	3.75	3.75
+ 2 COMBINED AT	C213B5	50.68	1	FLOW	24711.	23886.	23421.	21782.	20979.	20566.	12896.	8378.
				TIME	5.42	5.42	5.42	5.42	5.42	5.42	5.50	5.58
+ HYDROGRAPH AT	OFFT	.02	1	FLOW	26.	25.	25.	24.	23.	23.	16.	12.
				TIME	3.50	3.50	3.50	3.50	3.58	3.58	3.58	3.58
+ HYDROGRAPH AT	SHEEP2	.06	1	FLOW	76.	73.	72.	68.	65.	64.	42.	29.
				TIME	3.58	3.58	3.58	3.58	3.58	3.58	3.58	3.58
+ HYDROGRAPH AT	SHEEP3	.01	1	FLOW	17.	17.	17.	16.	15.	15.	10.	7.
				TIME	3.58	3.58	3.58	3.58	3.58	3.58	3.58	3.58
+ HYDROGRAPH AT	EMLA2	.14	1	FLOW	184.	180.	177.	168.	163.	161.	115.	86.
				TIME	3.67	3.67	3.67	3.67	3.67	3.67	3.67	3.67
+ 5 COMBINED AT	DUMMY	50.91	1	FLOW	24725.	23899.	23435.	21795.	20992.	20579.	12904.	8383.
				TIME	5.42	5.42	5.42	5.42	5.42	5.42	5.50	5.58
+ HYDROGRAPH AT	ENVE1	.03	1	FLOW	24.	23.	22.	20.	19.	19.	10.	6.
				TIME	3.67	3.67	3.67	3.67	3.67	3.67	3.67	3.75
+ HYDROGRAPH AT	OFFZ	.05	1	FLOW	69.	67.	66.	62.	60.	59.	40.	28.

				TIME	3.58	3.58	3.58	3.58	3.58	3.58	3.58	3.58
HYDROGRAPH AT	HUAL3	.00	1	FLOW	6.	6.	6.	6.	6.	6.	4.	4.
+				TIME	3.58	3.58	3.58	3.58	3.58	3.58	3.58	3.58
5 COMBINED AT	SH-MO	56.00	1	FLOW	25332.	24494.	24023.	22356.	21540.	21121.	13256.	8625.
+				TIME	5.42	5.42	5.42	5.42	5.42	5.42	5.50	5.50
HYDROGRAPH AT	SKY3	.01	1	FLOW	12.	12.	12.	12.	11.	11.	9.	7.
+				TIME	3.58	3.58	3.58	3.58	3.58	3.58	3.58	3.58
HYDROGRAPH AT	95-6	.01	1	FLOW	19.	18.	18.	17.	17.	16.	12.	9.
+				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
HYDROGRAPH AT	OFFH	.01	1	FLOW	14.	14.	13.	13.	12.	12.	9.	7.
+				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
3 COMBINED AT	SK-IR	.02	1	FLOW	44.	43.	43.	41.	40.	39.	29.	22.
+				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
HYDROGRAPH AT	EML1A	.03	1	FLOW	47.	46.	45.	43.	42.	41.	30.	22.
+				TIME	3.58	3.58	3.58	3.58	3.58	3.58	3.58	3.58
HYDROGRAPH AT	IRON2	.00	1	FLOW	10.	9.	9.	9.	9.	9.	7.	5.
+				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
HYDROGRAPH AT	EMLA1B	.02	1	FLOW	43.	42.	41.	39.	38.	38.	28.	22.
+				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
HYDROGRAPH AT	TP2	.00	1	FLOW	2.	2.	2.	2.	2.	2.	1.	1.
+				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
5 COMBINED AT	IR-TP	.08	1	FLOW	144.	141.	139.	132.	129.	127.	93.	71.
+				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
HYDROGRAPH AT	ES1	.02	1	FLOW	29.	28.	28.	27.	26.	25.	18.	14.
+				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
HYDROGRAPH AT	IRON3	.00	1	FLOW	5.	5.	5.	5.	5.	4.	3.	3.
+				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
3 COMBINED AT	IR-FT	.10	1	FLOW	178.	174.	172.	163.	159.	157.	115.	88.
+				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
DIVERSION TO	IREAST	.10	1	FLOW	118.	117.	116.	114.	113.	113.	102.	88.
+				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
HYDROGRAPH AT	FTNOR	.10	1	FLOW	60.	57.	55.	49.	46.	44.	13.	0.
+				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	.00
HYDROGRAPH AT	RETD1B	.00	1	FLOW	51.	50.	49.	47.	46.	45.	32.	24.
+				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
HYDROGRAPH AT	RETD2B	.00	1	FLOW	50.	49.	48.	46.	44.	44.	32.	24.
+				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
HYDROGRAPH AT	OFF9	.04	1	FLOW	62.	61.	60.	57.	55.	55.	39.	29.
+				TIME	3.58	3.58	3.58	3.58	3.58	3.58	3.58	3.58
3 COMBINED AT	COFF9	.04	1	FLOW	153.	150.	148.	140.	136.	134.	96.	72.
+				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
HYDROGRAPH AT	OFFS	.01	1	FLOW	18.	18.	18.	17.	16.	16.	11.	8.
+				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
HYDROGRAPH AT	SKY4	.01	1	FLOW	16.	16.	16.	15.	15.	15.	11.	9.
+				TIME	3.58	3.58	3.58	3.58	3.58	3.58	3.58	3.58
3 COMBINED AT	LC-SK	.06	1	FLOW	186.	181.	179.	170.	165.	163.	117.	88.
+				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
HYDROGRAPH AT	EML1B	.07	1	FLOW	120.	117.	116.	110.	107.	106.	76.	57.
+				TIME	3.58	3.58	3.58	3.58	3.58	3.58	3.58	3.58
HYDROGRAPH AT	ESCHL1	.02	1	FLOW	29.	28.	27.	26.	25.	24.	15.	10.
+				TIME	3.58	3.58	3.58	3.58	3.58	3.58	3.58	3.58
HYDROGRAPH AT	EPRK1	.01	1	FLOW	6.	6.	6.	5.	5.	4.	2.	1.
+				TIME	3.58	3.58	3.58	3.58	3.58	3.58	3.58	3.75
HYDROGRAPH AT	STRT6	.01	1	FLOW	10.	10.	10.	9.	9.	9.	7.	6.
+				TIME	3.58	3.58	3.58	3.58	3.58	3.58	3.58	3.58
HYDROGRAPH AT	EML2A	.07	1	FLOW	106.	103.	102.	97.	94.	93.	67.	50.
+				TIME	3.58	3.58	3.58	3.58	3.58	3.58	3.58	3.58
5 COMBINED AT	DUMMY	.18	1	FLOW	272.	264.	261.	247.	240.	236.	167.	123.
+				TIME	3.58	3.58	3.58	3.58	3.58	3.58	3.58	3.58
HYDROGRAPH AT	TP3	.01	1	FLOW	11.	10.	10.	10.	10.	10.	7.	6.
+				TIME	3.67	3.67	3.67	3.67	3.67	3.67	3.67	3.67
HYDROGRAPH AT	TP4A	.00	1	FLOW	5.	5.	5.	5.	5.	5.	4.	3.
+				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
HYDROGRAPH AT	LOG1	.01	1	FLOW	15.	15.	15.	14.	14.	13.	10.	8.
+				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50

+ 5 COMBINED AT	LC-TP	.26	1	FLOW	480.	468.	462.	438.	426.	420.	302.	226.
				TIME	3.58	3.58	3.58	3.58	3.58	3.58	3.58	3.58
+ HYDROGRAPH AT	EL1	.12	1	FLOW	110.	106.	104.	96.	93.	91.	55.	35.
				TIME	3.58	3.58	3.58	3.58	3.58	3.58	3.67	3.67
+ HYDROGRAPH AT	LOG2	.00	1	FLOW	9.	9.	9.	9.	8.	8.	6.	5.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
+ HYDROGRAPH AT	FORT1	.01	1	FLOW	14.	14.	14.	13.	13.	13.	10.	8.
				TIME	3.67	3.67	3.67	3.67	3.67	3.67	3.67	3.67
+ 5 COMBINED AT	FT-LC	.49	1	FLOW	661.	642.	633.	594.	575.	566.	378.	271.
				TIME	3.58	3.58	3.58	3.58	3.58	3.58	3.58	3.58
+ DIVERSION TO	OHARE	.49	1	FLOW	49.	47.	46.	41.	39.	37.	14.	0.
				TIME	3.58	3.58	3.58	3.58	3.58	3.58	3.58	.00
+ HYDROGRAPH AT	RFTLC	.49	1	FLOW	612.	595.	587.	553.	537.	528.	364.	271.
				TIME	3.58	3.58	3.58	3.58	3.58	3.58	3.58	3.58
+ DIVERSION TO	LOGCAB	.49	1	FLOW	193.	187.	184.	172.	166.	164.	106.	73.
				TIME	3.58	3.58	3.58	3.58	3.58	3.58	3.58	3.58
+ HYDROGRAPH AT	R2FTLC	.49	1	FLOW	419.	408.	403.	381.	370.	365.	258.	198.
				TIME	3.58	3.58	3.58	3.58	3.58	3.58	3.58	3.58
+ HYDROGRAPH AT	EML2B	.04	1	FLOW	66.	65.	64.	61.	59.	58.	42.	31.
				TIME	3.58	3.58	3.58	3.58	3.58	3.58	3.58	3.58
+ HYDROGRAPH AT	TP4B	.00	1	FLOW	7.	7.	7.	7.	7.	7.	5.	4.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
+ HYDROGRAPH AT	EML3	.06	1	FLOW	90.	88.	87.	82.	80.	79.	56.	42.
				TIME	3.58	3.58	3.58	3.58	3.58	3.58	3.58	3.58
+ HYDROGRAPH AT	STRT7	.00	1	FLOW	8.	8.	8.	8.	8.	8.	6.	5.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
+ 5 COMBINED AT	DUMMY	.60	1	FLOW	588.	573.	565.	535.	520.	513.	365.	278.
				TIME	3.58	3.58	3.58	3.58	3.58	3.58	3.58	3.58
+ HYDROGRAPH AT	EML4	.07	1	FLOW	112.	109.	108.	102.	100.	98.	70.	52.
				TIME	3.58	3.58	3.58	3.58	3.58	3.58	3.58	3.58
+ HYDROGRAPH AT	ENVE2	.01	1	FLOW	11.	11.	11.	10.	9.	9.	5.	3.
				TIME	3.58	3.58	3.58	3.58	3.58	3.58	3.58	3.67
+ HYDROGRAPH AT	FORT2	.01	1	FLOW	14.	13.	13.	13.	12.	12.	9.	8.
				TIME	3.67	3.67	3.67	3.67	3.67	3.67	3.67	3.67
+ 4 COMBINED AT	FT-MO	.70	1	FLOW	724.	705.	696.	659.	641.	632.	449.	340.
				TIME	3.58	3.58	3.58	3.58	3.58	3.58	3.58	3.58
+ 2 COMBINED AT	CP43	56.69	1	FLOW	25356.	24517.	24046.	22378.	21562.	21142.	13269.	8635.
				TIME	5.42	5.42	5.42	5.42	5.42	5.42	5.50	5.50
+ HYDROGRAPH AT	95-7A	.01	1	FLOW	14.	14.	13.	13.	13.	12.	9.	7.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
+ HYDROGRAPH AT	95-7B	.01	1	FLOW	16.	15.	15.	15.	14.	14.	10.	8.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
+ HYDROGRAPH AT	95-8A	.01	1	FLOW	11.	11.	11.	10.	10.	10.	7.	6.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
+ HYDROGRAPH AT	95-8B	.00	1	FLOW	7.	7.	7.	6.	6.	6.	4.	3.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
+ 4 COMBINED AT	C95-8B	.02	1	FLOW	47.	46.	46.	44.	43.	42.	31.	24.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
+ HYDROGRAPH AT	SKY2	.01	1	FLOW	16.	15.	15.	14.	14.	14.	11.	9.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
+ HYDROGRAPH AT	EMLA1A	.01	1	FLOW	27.	26.	26.	25.	24.	24.	18.	14.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
+ HYDROGRAPH AT	TP1	.00	1	FLOW	2.	2.	2.	2.	2.	2.	1.	1.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
+ 4 COMBINED AT	BR-TP	.05	1	FLOW	92.	90.	89.	85.	83.	82.	61.	48.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
+ HYDROGRAPH AT	ES2	.05	1	FLOW	84.	82.	81.	77.	75.	74.	55.	43.
				TIME	3.58	3.58	3.58	3.58	3.58	3.58	3.58	3.58
+ HYDROGRAPH AT	BRENT1	.00	1	FLOW	4.	4.	4.	4.	4.	4.	3.	2.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
+ HYDROGRAPH AT	EGC3	.02	1	FLOW	44.	43.	42.	40.	39.	39.	29.	23.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
+ HYDROGRAPH AT	HORSE5	.00	1	FLOW	11.	11.	11.	11.	10.	10.	8.	6.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50

5 COMBINED AT												
+	CP44	.12	1	FLOW	228.	223.	220.	210.	205.	202.	151.	118.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
DIVERSION TO												
+	BRENT	.12	1	FLOW	178.	173.	170.	160.	155.	152.	101.	68.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
HYDROGRAPH AT												
+	SOUTH	.12	1	FLOW	50.	50.	50.	50.	50.	50.	50.	50.
				TIME	3.33	3.33	3.33	3.33	3.42	3.42	3.50	3.50
HYDROGRAPH AT												
+	SKY1	.01	1	FLOW	16.	16.	16.	15.	15.	15.	11.	9.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
HYDROGRAPH AT												
+	HORSE4	.00	1	FLOW	9.	8.	8.	8.	8.	8.	6.	5.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
HYDROGRAPH AT												
+	EGC1	.01	1	FLOW	17.	16.	16.	15.	15.	15.	11.	9.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
HYDROGRAPH AT												
+	EGC2	.01	1	FLOW	24.	24.	24.	22.	22.	22.	16.	13.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
5 COMBINED AT												
+	DUMMY	.15	1	FLOW	116.	115.	114.	111.	110.	109.	95.	85.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
HYDROGRAPH AT												
+	95-9B	.01	1	FLOW	23.	22.	22.	21.	21.	20.	15.	12.
				TIME	3.58	3.58	3.58	3.58	3.58	3.58	3.58	3.58
2 COMBINED AT												
+	CP45	.17	1	FLOW	138.	136.	135.	131.	129.	128.	109.	96.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
DIVERSION TO												
+	RACEL	.17	1	FLOW	101.	101.	101.	101.	101.	101.	101.	96.
				TIME	3.33	3.33	3.42	3.42	3.42	3.42	3.50	3.50
HYDROGRAPH AT												
+	HORSE	.17	1	FLOW	37.	35.	34.	30.	28.	27.	8.	0.
				TIME	3.50	3.50	3.50	3.50	3.50	3.50	3.50	.00

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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	INTERPOLATED TO COMPUTATION INTERVAL DT	PEAK	TIME TO PEAK	VOLUME
		(MIN)	(CFS)	(MIN)	(IN)	(MIN)	(CFS)	(MIN)	(IN)
FOR PLAN = 1 RATIO= 1.00									
RCD1C	MANE	5.00	5.67	221.08	.16	5.00	5.16	220.00	.16
CONTINUITY SUMMARY (AC-FT) - INFLOW= .3238E+00 EXCESS= .0000E+00 OUTFLOW= .3523E+00 BASIN STORAGE= .1286E-03 PERCENT ERROR= -8.8									
FOR PLAN = 1 RATIO= .98									
RCD1C	MANE	5.00	5.11	219.85	.15	5.00	5.11	220.00	.15
CONTINUITY SUMMARY (AC-FT) - INFLOW= .3150E+00 EXCESS= .0000E+00 OUTFLOW= .3298E+00 BASIN STORAGE= .1227E-03 PERCENT ERROR= -4.7									
FOR PLAN = 1 RATIO= .97									
RCD1C	MANE	5.00	5.16	220.26	.15	5.00	5.04	220.00	.15
CONTINUITY SUMMARY (AC-FT) - INFLOW= .3106E+00 EXCESS= .0000E+00 OUTFLOW= .3258E+00 BASIN STORAGE= .1231E-03 PERCENT ERROR= -4.9									
FOR PLAN = 1 RATIO= .93									
RCD1C	MANE	5.00	4.93	223.66	.14	5.00	4.64	225.00	.14
CONTINUITY SUMMARY (AC-FT) - INFLOW= .2932E+00 EXCESS= .0000E+00 OUTFLOW= .3030E+00 BASIN STORAGE= .1264E-03 PERCENT ERROR= -3.4									
FOR PLAN = 1 RATIO= .91									
RCD1C	MANE	5.00	4.66	225.48	.13	5.00	4.59	225.00	.13
CONTINUITY SUMMARY (AC-FT) - INFLOW= .2845E+00 EXCESS= .0000E+00 OUTFLOW= .2939E+00 BASIN STORAGE= .1102E-03 PERCENT ERROR= -3.4									
FOR PLAN = 1 RATIO= .90									
RCD1C	MANE	5.00	4.29	226.36	.13	5.00	4.22	225.00	.13
CONTINUITY SUMMARY (AC-FT) - INFLOW= .2801E+00 EXCESS= .0000E+00 OUTFLOW= .2856E+00 BASIN STORAGE= .1289E-03 PERCENT ERROR= -2.0									
FOR PLAN = 1 RATIO= .70									
RCD1C	MANE	4.95	3.43	226.03	.09	5.00	3.07	225.00	.09
CONTINUITY SUMMARY (AC-FT) - INFLOW= .1951E+00 EXCESS= .0000E+00 OUTFLOW= .2013E+00 BASIN STORAGE= .1055E-03 PERCENT ERROR= -3.2									
FOR PLAN = 1 RATIO= .57									
RCD1C	MANE	5.00	2.44	230.11	.07	5.00	2.42	230.00	.07
CONTINUITY SUMMARY (AC-FT) - INFLOW= .1422E+00 EXCESS= .0000E+00 OUTFLOW= .1470E+00 BASIN STORAGE= .1296E-03 PERCENT ERROR= -3.5									
FOR PLAN = 1 RATIO= .00									
RNW29C	MANE	1.16	200.70	216.99	2.20	5.00	199.82	220.00	2.20
CONTINUITY SUMMARY (AC-FT) - INFLOW= .1547E+02 EXCESS= .0000E+00 OUTFLOW= .1547E+02 BASIN STORAGE= .1101E-02 PERCENT ERROR= .0									
FOR PLAN = 1 RATIO= .00									
RNW29C	MANE	1.17	195.60	216.78	2.14	5.00	195.08	220.00	2.14
CONTINUITY SUMMARY (AC-FT) - INFLOW= .1507E+02 EXCESS= .0000E+00 OUTFLOW= .1507E+02 BASIN STORAGE= .1164E-02 PERCENT ERROR= .0									
FOR PLAN = 1 RATIO= .00									
RNW29C	MANE	1.18	193.06	216.68	2.11	5.00	192.77	220.00	2.12

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1487E+02 EXCESS= .0000E+00 OUTFLOW= .1487E+02 BASIN STORAGE= .1183E-02 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00

RNW29C	MANE	1.20	183.62	219.98	2.00	5.00	183.59	220.00	2.00

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1408E+02 EXCESS= .0000E+00 OUTFLOW= .1408E+02 BASIN STORAGE= .1103E-02 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00

RNW29C	MANE	1.21	178.86	219.91	1.94	5.00	178.72	220.00	1.95

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1368E+02 EXCESS= .0000E+00 OUTFLOW= .1368E+02 BASIN STORAGE= .1120E-02 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00

RNW29C	MANE	1.22	176.46	219.89	1.91	5.00	176.30	220.00	1.92

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1348E+02 EXCESS= .0000E+00 OUTFLOW= .1348E+02 BASIN STORAGE= .1152E-02 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00

RNW29C	MANE	1.39	127.40	220.84	1.36	5.00	126.98	220.00	1.36

CONTINUITY SUMMARY (AC-FT) - INFLOW= .9562E+01 EXCESS= .0000E+00 OUTFLOW= .9563E+01 BASIN STORAGE= .1193E-02 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00

RNW29C	MANE	1.55	95.94	220.65	1.01	5.00	95.76	220.00	1.01

CONTINUITY SUMMARY (AC-FT) - INFLOW= .7101E+01 EXCESS= .0000E+00 OUTFLOW= .7101E+01 BASIN STORAGE= .1210E-02 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00

RCNW71	MANE	2.94	355.46	220.39	2.17	5.00	354.10	220.00	2.17

CONTINUITY SUMMARY (AC-FT) - INFLOW= .2731E+02 EXCESS= .0000E+00 OUTFLOW= .2733E+02 BASIN STORAGE= .3491E-02 PERCENT ERROR= -.1

FOR PLAN = 1 RATIO= .00

RCNW71	MANE	2.97	345.10	219.57	2.11	5.00	344.48	220.00	2.11

CONTINUITY SUMMARY (AC-FT) - INFLOW= .2660E+02 EXCESS= .0000E+00 OUTFLOW= .2662E+02 BASIN STORAGE= .4070E-02 PERCENT ERROR= -.1

FOR PLAN = 1 RATIO= .00

RCNW71	MANE	2.98	342.49	220.64	2.09	5.00	340.66	220.00	2.09

CONTINUITY SUMMARY (AC-FT) - INFLOW= .2625E+02 EXCESS= .0000E+00 OUTFLOW= .2627E+02 BASIN STORAGE= .4628E-02 PERCENT ERROR= -.1

FOR PLAN = 1 RATIO= .00

RCNW71	MANE	3.04	322.83	222.04	1.98	5.00	322.13	220.00	1.97

CONTINUITY SUMMARY (AC-FT) - INFLOW= .2485E+02 EXCESS= .0000E+00 OUTFLOW= .2486E+02 BASIN STORAGE= .3489E-02 PERCENT ERROR= -.1

FOR PLAN = 1 RATIO= .00

RCNW71	MANE	3.07	316.43	221.36	1.92	5.00	314.51	220.00	1.92

CONTINUITY SUMMARY (AC-FT) - INFLOW= .2415E+02 EXCESS= .0000E+00 OUTFLOW= .2416E+02 BASIN STORAGE= .3970E-02 PERCENT ERROR= -.1

FOR PLAN = 1 RATIO= .00

RCNW71	MANE	3.09	310.02	219.48	1.89	5.00	309.77	220.00	1.89

CONTINUITY SUMMARY (AC-FT) - INFLOW= .2379E+02 EXCESS= .0000E+00 OUTFLOW= .2381E+02 BASIN STORAGE= .4236E-02 PERCENT ERROR= -.1

FOR PLAN = 1 RATIO= .00

RCNW71	MANE	3.52	224.69	221.80	1.34	5.00	222.14	220.00	1.34

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1687E+02 EXCESS= .0000E+00 OUTFLOW= .1688E+02 BASIN STORAGE= .4211E-02 PERCENT ERROR= -.1

FOR PLAN = 1 RATIO= .00

RCNW71	MANE	3.94	167.37	220.66	.99	5.00	164.87	220.00	.99

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1251E+02 EXCESS= .0000E+00 OUTFLOW= .1252E+02 BASIN STORAGE= .4172E-02 PERCENT ERROR= -.1

FOR PLAN = 1 RATIO= .00

ROFF41	MANE	5.00	401.70	230.00	2.08	5.00	401.70	230.00	2.08

CONTINUITY SUMMARY (AC-FT) - INFLOW= .3333E+02 EXCESS= .0000E+00 OUTFLOW= .3335E+02 BASIN STORAGE= .1750E-02 PERCENT ERROR= -.1

FOR PLAN = 1 RATIO= .00

ROFF41	MANE	5.00	390.47	230.00	2.02	5.00	390.47	230.00	2.02

CONTINUITY SUMMARY (AC-FT) - INFLOW= .3236E+02 EXCESS= .0000E+00 OUTFLOW= .3237E+02 BASIN STORAGE= .2744E-02 PERCENT ERROR= -.1

FOR PLAN = 1 RATIO= .00

ROFF41	MANE	5.00	384.86	230.00	1.99	5.00	384.86	230.00	1.99

CONTINUITY SUMMARY (AC-FT) - INFLOW= .3187E+02 EXCESS= .0000E+00 OUTFLOW= .3189E+02 BASIN STORAGE= .2723E-02 PERCENT ERROR= -.1

FOR PLAN = 1 RATIO= .00

ROFF41	MANE	5.00	362.42	230.00	1.87	5.00	362.42	230.00	1.87

CONTINUITY SUMMARY (AC-FT) - INFLOW= .2994E+02 EXCESS= .0000E+00 OUTFLOW= .2996E+02 BASIN STORAGE= .2637E-02 PERCENT ERROR= -.1

FOR PLAN = 1 RATIO= .00

ROFF41	MANE	5.00	351.22	230.00	1.81	5.00	351.22	230.00	1.81

CONTINUITY SUMMARY (AC-FT) - INFLOW= .2899E+02 EXCESS= .0000E+00 OUTFLOW= .2900E+02 BASIN STORAGE= .2593E-02 PERCENT ERROR= -.1

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          FOR PLAN = 1  RATIO=  .00
            ROFF41  MANE          5.00    345.62    230.00      1.78      5.00    345.62    230.00         1.78

CONTINUITY SUMMARY (AC-FT) - INFLOW= .2851E+02 EXCESS= .0000E+00 OUTFLOW= .2853E+02 BASIN STORAGE= .2571E-02 PERCENT ERROR=   -.1

          FOR PLAN = 1  RATIO=  .00
            ROFF41  MANE          5.00    235.01    230.00      1.20      5.00    235.01    230.00         1.20

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1923E+02 EXCESS= .0000E+00 OUTFLOW= .1925E+02 BASIN STORAGE= .2167E-02 PERCENT ERROR=   -.1

          FOR PLAN = 1  RATIO=  .00
            ROFF41  MANE          5.00    166.38    235.00       .85      5.00    166.38    235.00          .85

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1358E+02 EXCESS= .0000E+00 OUTFLOW= .1360E+02 BASIN STORAGE= .1829E-02 PERCENT ERROR=   -.1

          FOR PLAN = 1  RATIO=  .00
            RCOFF4  MANE          3.24    865.73    220.01      1.97      5.00    865.68    220.00         1.97

CONTINUITY SUMMARY (AC-FT) - INFLOW= .7577E+02 EXCESS= .0000E+00 OUTFLOW= .7578E+02 BASIN STORAGE= .1079E-02 PERCENT ERROR=    .0

          FOR PLAN = 1  RATIO=  .00
            RCOFF4  MANE          3.26    842.05    221.73      1.91      5.00    840.86    220.00         1.91

CONTINUITY SUMMARY (AC-FT) - INFLOW= .7352E+02 EXCESS= .0000E+00 OUTFLOW= .7352E+02 BASIN STORAGE= .9388E-03 PERCENT ERROR=    .0

          FOR PLAN = 1  RATIO=  .00
            RCOFF4  MANE          3.27    825.35    219.35      1.88      5.00    824.16    220.00         1.88

CONTINUITY SUMMARY (AC-FT) - INFLOW= .7236E+02 EXCESS= .0000E+00 OUTFLOW= .7237E+02 BASIN STORAGE= .1105E-02 PERCENT ERROR=    .0

          FOR PLAN = 1  RATIO=  .00
            RCOFF4  MANE          3.33    772.80    219.69      1.77      5.00    772.08    220.00         1.77

CONTINUITY SUMMARY (AC-FT) - INFLOW= .6788E+02 EXCESS= .0000E+00 OUTFLOW= .6788E+02 BASIN STORAGE= .9246E-03 PERCENT ERROR=    .0

          FOR PLAN = 1  RATIO=  .00
            RCOFF4  MANE          3.36    752.34    221.60      1.71      5.00    749.29    220.00         1.71

CONTINUITY SUMMARY (AC-FT) - INFLOW= .6567E+02 EXCESS= .0000E+00 OUTFLOW= .6567E+02 BASIN STORAGE= .1193E-02 PERCENT ERROR=    .0

          FOR PLAN = 1  RATIO=  .00
            RCOFF4  MANE          3.37    734.27    219.22      1.68      5.00    733.69    220.00         1.68

CONTINUITY SUMMARY (AC-FT) - INFLOW= .6454E+02 EXCESS= .0000E+00 OUTFLOW= .6455E+02 BASIN STORAGE= .9505E-03 PERCENT ERROR=    .0

          FOR PLAN = 1  RATIO=  .00
            RCOFF4  MANE          3.76    482.18    221.57      1.12      5.00    476.02    220.00         1.12

CONTINUITY SUMMARY (AC-FT) - INFLOW= .4305E+02 EXCESS= .0000E+00 OUTFLOW= .4306E+02 BASIN STORAGE= .1196E-02 PERCENT ERROR=    .0

          FOR PLAN = 1  RATIO=  .00
            RCOFF4  MANE          4.14    330.33    223.45       .78      5.00    326.15    220.00          .78

CONTINUITY SUMMARY (AC-FT) - INFLOW= .3008E+02 EXCESS= .0000E+00 OUTFLOW= .3009E+02 BASIN STORAGE= .1165E-02 PERCENT ERROR=    .0

          FOR PLAN = 1  RATIO=  .00
            RCOFF5  MANE          2.25   1228.06    222.36      1.90      5.00   1205.92    220.00         1.90

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1033E+03 EXCESS= .0000E+00 OUTFLOW= .1033E+03 BASIN STORAGE= .3651E-03 PERCENT ERROR=    .0

          FOR PLAN = 1  RATIO=  .00
            RCOFF5  MANE          2.26   1185.89    223.68      1.85      5.00   1167.37    220.00         1.85

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1001E+03 EXCESS= .0000E+00 OUTFLOW= .1001E+03 BASIN STORAGE= .4261E-03 PERCENT ERROR=    .0

          FOR PLAN = 1  RATIO=  .00
            RCOFF5  MANE          2.27   1169.63    222.25      1.82      5.00   1150.99    220.00         1.82

CONTINUITY SUMMARY (AC-FT) - INFLOW= .9855E+02 EXCESS= .0000E+00 OUTFLOW= .9855E+02 BASIN STORAGE= .4446E-03 PERCENT ERROR=    .0

          FOR PLAN = 1  RATIO=  .00
            RCOFF5  MANE          2.30   1095.29    222.88      1.70      5.00   1077.77    225.00         1.70

CONTINUITY SUMMARY (AC-FT) - INFLOW= .9234E+02 EXCESS= .0000E+00 OUTFLOW= .9234E+02 BASIN STORAGE= .4656E-03 PERCENT ERROR=    .0

          FOR PLAN = 1  RATIO=  .00
            RCOFF5  MANE          2.31   1055.93    224.27      1.65      5.00   1042.62    220.00         1.65

CONTINUITY SUMMARY (AC-FT) - INFLOW= .8931E+02 EXCESS= .0000E+00 OUTFLOW= .8932E+02 BASIN STORAGE= .4131E-03 PERCENT ERROR=    .0

          FOR PLAN = 1  RATIO=  .00
            RCOFF5  MANE          2.32   1040.15    222.85      1.62      5.00   1024.57    225.00         1.62

CONTINUITY SUMMARY (AC-FT) - INFLOW= .8773E+02 EXCESS= .0000E+00 OUTFLOW= .8773E+02 BASIN STORAGE= .4439E-03 PERCENT ERROR=    .0

          FOR PLAN = 1  RATIO=  .00
            RCOFF5  MANE          2.53    681.78    225.10      1.07      5.00    681.59    225.00         1.07

CONTINUITY SUMMARY (AC-FT) - INFLOW= .5812E+02 EXCESS= .0000E+00 OUTFLOW= .5812E+02 BASIN STORAGE= .3873E-03 PERCENT ERROR=    .0

          FOR PLAN = 1  RATIO=  .00
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ROFF5	MANE	2.73	465.13	223.77	.74	5.00	463.68	225.00	.74

CONTINUITY SUMMARY (AC-FT) - INFLOW= .4036E+02 EXCESS= .0000E+00 OUTFLOW= .4036E+02 BASIN STORAGE= .3573E-03 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00

ROFF52	MANE	1.35	464.06	226.77	1.91	5.00	461.60	225.00	1.91

CONTINUITY SUMMARY (AC-FT) - INFLOW= .4017E+02 EXCESS= .0000E+00 OUTFLOW= .4017E+02 BASIN STORAGE= .1739E-03 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00

ROFF52	MANE	1.36	451.14	226.72	1.85	5.00	448.50	225.00	1.85

CONTINUITY SUMMARY (AC-FT) - INFLOW= .3898E+02 EXCESS= .0000E+00 OUTFLOW= .3898E+02 BASIN STORAGE= .2037E-03 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00

ROFF52	MANE	1.36	445.36	226.03	1.82	5.00	441.49	225.00	1.82

CONTINUITY SUMMARY (AC-FT) - INFLOW= .3839E+02 EXCESS= .0000E+00 OUTFLOW= .3839E+02 BASIN STORAGE= .2024E-03 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00

ROFF52	MANE	1.38	419.07	226.04	1.71	5.00	415.13	225.00	1.71

CONTINUITY SUMMARY (AC-FT) - INFLOW= .3603E+02 EXCESS= .0000E+00 OUTFLOW= .3603E+02 BASIN STORAGE= .1941E-03 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00

ROFF52	MANE	1.39	406.06	226.09	1.65	5.00	402.05	225.00	1.66

CONTINUITY SUMMARY (AC-FT) - INFLOW= .3486E+02 EXCESS= .0000E+00 OUTFLOW= .3486E+02 BASIN STORAGE= .1879E-03 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00

ROFF52	MANE	1.39	398.62	226.83	1.63	5.00	395.81	225.00	1.63

CONTINUITY SUMMARY (AC-FT) - INFLOW= .3428E+02 EXCESS= .0000E+00 OUTFLOW= .3428E+02 BASIN STORAGE= .1844E-03 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00

ROFF52	MANE	1.50	270.32	227.13	1.09	5.00	267.08	225.00	1.09

CONTINUITY SUMMARY (AC-FT) - INFLOW= .2297E+02 EXCESS= .0000E+00 OUTFLOW= .2297E+02 BASIN STORAGE= .1880E-03 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00

ROFF52	MANE	1.61	190.57	227.49	.76	5.00	187.21	225.00	.77

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1611E+02 EXCESS= .0000E+00 OUTFLOW= .1611E+02 BASIN STORAGE= .2012E-03 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00

R2CNW1	MANE	1.49	1981.82	225.82	1.86	5.00	1974.68	225.00	1.86

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1690E+03 EXCESS= .0000E+00 OUTFLOW= .1691E+03 BASIN STORAGE= .3892E-02 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00

R2CNW1	MANE	1.51	1912.07	223.11	1.80	5.00	1904.02	225.00	1.80

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1639E+03 EXCESS= .0000E+00 OUTFLOW= .1639E+03 BASIN STORAGE= .3878E-02 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00

R2CNW1	MANE	1.51	1888.16	225.53	1.77	5.00	1886.09	225.00	1.78

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1613E+03 EXCESS= .0000E+00 OUTFLOW= .1613E+03 BASIN STORAGE= .3547E-02 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00

R2CNW1	MANE	1.55	1769.31	226.69	1.66	5.00	1765.56	225.00	1.66

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1511E+03 EXCESS= .0000E+00 OUTFLOW= .1512E+03 BASIN STORAGE= .3480E-02 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00

R2CNW1	MANE	1.57	1707.90	223.62	1.61	5.00	1706.46	225.00	1.61

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1462E+03 EXCESS= .0000E+00 OUTFLOW= .1462E+03 BASIN STORAGE= .3701E-02 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00

R2CNW1	MANE	1.58	1687.56	226.52	1.58	5.00	1676.39	225.00	1.58

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1436E+03 EXCESS= .0000E+00 OUTFLOW= .1436E+03 BASIN STORAGE= .4003E-02 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00

R2CNW1	MANE	1.86	1120.27	227.36	1.05	5.00	1108.60	225.00	1.05

CONTINUITY SUMMARY (AC-FT) - INFLOW= .9509E+02 EXCESS= .0000E+00 OUTFLOW= .9509E+02 BASIN STORAGE= .3506E-02 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00

R2CNW1	MANE	2.17	766.32	227.62	.72	5.00	755.28	225.00	.72

CONTINUITY SUMMARY (AC-FT) - INFLOW= .6589E+02 EXCESS= .0000E+00 OUTFLOW= .6590E+02 BASIN STORAGE= .3445E-02 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00

RCNW7C	MANE	.89	2462.18	226.26	1.84	5.00	2451.36	225.00	1.84

CONTINUITY SUMMARY (AC-FT) - INFLOW= .2155E+03 EXCESS= .0000E+00 OUTFLOW= .2155E+03 BASIN STORAGE= .2461E-02 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00

RCNW7C	MANE	.91	2383.87	225.83	1.79	5.00	2368.76	225.00	1.79

CONTINUITY SUMMARY (AC-FT) - INFLOW= .2089E+03 EXCESS= .0000E+00 OUTFLOW= .2089E+03 BASIN STORAGE= .2472E-02 PERCENT ERROR= .0

FOR PLAN = 1	RATIO=	.00							
RCNW7C	MANE	.91	2359.23	225.87	1.76	5.00	2342.07	225.00	1.76

CONTINUITY SUMMARY (AC-FT) - INFLOW= .2057E+03 EXCESS= .0000E+00 OUTFLOW= .2057E+03 BASIN STORAGE= .2299E-02 PERCENT ERROR= .0

FOR PLAN = 1	RATIO=	.00							
RCNW7C	MANE	.93	2206.43	226.24	1.65	5.00	2191.30	225.00	1.65

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1928E+03 EXCESS= .0000E+00 OUTFLOW= .1928E+03 BASIN STORAGE= .2334E-02 PERCENT ERROR= .0

FOR PLAN = 1	RATIO=	.00							
RCNW7C	MANE	.95	2130.60	225.53	1.59	5.00	2118.47	225.00	1.60

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1864E+03 EXCESS= .0000E+00 OUTFLOW= .1864E+03 BASIN STORAGE= .2256E-02 PERCENT ERROR= .0

FOR PLAN = 1	RATIO=	.00							
RCNW7C	MANE	.95	2098.20	226.16	1.57	5.00	2080.99	225.00	1.57

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1831E+03 EXCESS= .0000E+00 OUTFLOW= .1831E+03 BASIN STORAGE= .2490E-02 PERCENT ERROR= .0

FOR PLAN = 1	RATIO=	.00							
RCNW7C	MANE	1.12	1392.22	226.06	1.04	5.00	1373.42	225.00	1.04

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1214E+03 EXCESS= .0000E+00 OUTFLOW= .1214E+03 BASIN STORAGE= .2317E-02 PERCENT ERROR= .0

FOR PLAN = 1	RATIO=	.00							
RCNW7C	MANE	1.31	957.73	227.73	.72	5.00	954.41	230.00	.72

CONTINUITY SUMMARY (AC-FT) - INFLOW= .8430E+02 EXCESS= .0000E+00 OUTFLOW= .8430E+02 BASIN STORAGE= .2502E-02 PERCENT ERROR= .0

FOR PLAN = 1	RATIO=	.00							
RCNW21	MANE	1.78	2629.57	226.17	1.87	5.00	2604.73	225.00	1.87

CONTINUITY SUMMARY (AC-FT) - INFLOW= .2336E+03 EXCESS= .0000E+00 OUTFLOW= .2336E+03 BASIN STORAGE= .4681E-02 PERCENT ERROR= .0

FOR PLAN = 1	RATIO=	.00							
RCNW21	MANE	1.80	2550.70	227.42	1.81	5.00	2516.67	225.00	1.81

CONTINUITY SUMMARY (AC-FT) - INFLOW= .2265E+03 EXCESS= .0000E+00 OUTFLOW= .2265E+03 BASIN STORAGE= .4816E-02 PERCENT ERROR= .0

FOR PLAN = 1	RATIO=	.00							
RCNW21	MANE	1.81	2525.46	226.65	1.78	5.00	2485.75	225.00	1.78

CONTINUITY SUMMARY (AC-FT) - INFLOW= .2231E+03 EXCESS= .0000E+00 OUTFLOW= .2231E+03 BASIN STORAGE= .5740E-02 PERCENT ERROR= .0

FOR PLAN = 1	RATIO=	.00							
RCNW21	MANE	1.86	2368.81	227.07	1.67	5.00	2323.41	225.00	1.67

CONTINUITY SUMMARY (AC-FT) - INFLOW= .2092E+03 EXCESS= .0000E+00 OUTFLOW= .2092E+03 BASIN STORAGE= .4579E-02 PERCENT ERROR= .0

FOR PLAN = 1	RATIO=	.00							
RCNW21	MANE	1.89	2276.25	226.34	1.62	5.00	2251.38	225.00	1.62

CONTINUITY SUMMARY (AC-FT) - INFLOW= .2024E+03 EXCESS= .0000E+00 OUTFLOW= .2024E+03 BASIN STORAGE= .4940E-02 PERCENT ERROR= .0

FOR PLAN = 1	RATIO=	.00							
RCNW21	MANE	1.90	2242.47	227.93	1.59	5.00	2209.02	225.00	1.59

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1988E+03 EXCESS= .0000E+00 OUTFLOW= .1988E+03 BASIN STORAGE= .5501E-02 PERCENT ERROR= .0

FOR PLAN = 1	RATIO=	.00							
RCNW21	MANE	2.24	1497.78	228.05	1.06	5.00	1483.14	230.00	1.06

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1325E+03 EXCESS= .0000E+00 OUTFLOW= .1325E+03 BASIN STORAGE= .4606E-02 PERCENT ERROR= .0

FOR PLAN = 1	RATIO=	.00							
RCNW21	MANE	2.60	1030.60	228.67	.74	5.00	1030.01	230.00	.74

CONTINUITY SUMMARY (AC-FT) - INFLOW= .9245E+02 EXCESS= .0000E+00 OUTFLOW= .9247E+02 BASIN STORAGE= .4743E-02 PERCENT ERROR= .0

FOR PLAN = 1	RATIO=	.00							
ROFF1A	MANE	3.14	726.65	244.77	1.36	5.00	726.17	245.00	1.36

CONTINUITY SUMMARY (AC-FT) - INFLOW= .8277E+02 EXCESS= .0000E+00 OUTFLOW= .8278E+02 BASIN STORAGE= .1118E-02 PERCENT ERROR= .0

FOR PLAN = 1	RATIO=	.00							
ROFF1A	MANE	3.17	702.02	243.92	1.31	5.00	700.26	245.00	1.31

CONTINUITY SUMMARY (AC-FT) - INFLOW= .7974E+02 EXCESS= .0000E+00 OUTFLOW= .7975E+02 BASIN STORAGE= .8961E-03 PERCENT ERROR= .0

FOR PLAN = 1	RATIO=	.00							
ROFF1A	MANE	3.18	686.97	241.92	1.28	5.00	686.64	245.00	1.28

CONTINUITY SUMMARY (AC-FT) - INFLOW= .7824E+02 EXCESS= .0000E+00 OUTFLOW= .7824E+02 BASIN STORAGE= .9853E-03 PERCENT ERROR= .0

FOR PLAN = 1	RATIO=	.00							
ROFF1A	MANE	3.25	637.22	243.58	1.18	5.00	635.17	245.00	1.18

CONTINUITY SUMMARY (AC-FT) - INFLOW= .7229E+02 EXCESS= .0000E+00 OUTFLOW= .7229E+02 BASIN STORAGE= .8390E-03 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00
ROFF1A MANE 3.28 610.61 242.88 1.14 5.00 608.60 245.00 1.14

CONTINUITY SUMMARY (AC-FT) - INFLOW= .6935E+02 EXCESS= .0000E+00 OUTFLOW= .6935E+02 BASIN STORAGE= .9038E-03 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00
ROFF1A MANE 3.30 596.89 244.20 1.11 5.00 595.86 245.00 1.11

CONTINUITY SUMMARY (AC-FT) - INFLOW= .6789E+02 EXCESS= .0000E+00 OUTFLOW= .6790E+02 BASIN STORAGE= .9733E-03 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00
ROFF1A MANE 3.77 351.62 244.92 .67 5.00 351.60 245.00 .67

CONTINUITY SUMMARY (AC-FT) - INFLOW= .4065E+02 EXCESS= .0000E+00 OUTFLOW= .4066E+02 BASIN STORAGE= .8282E-03 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00
ROFF1A MANE 3.25 212.34 247.00 .42 5.00 210.92 250.00 .42

CONTINUITY SUMMARY (AC-FT) - INFLOW= .2534E+02 EXCESS= .0000E+00 OUTFLOW= .2534E+02 BASIN STORAGE= .8581E-03 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00
RCFF1A MANE 4.26 1007.35 238.77 1.47 5.00 1001.61 240.00 1.47

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1204E+03 EXCESS= .0000E+00 OUTFLOW= .1204E+03 BASIN STORAGE= .1595E-02 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00
RCFF1A MANE 4.30 966.42 236.69 1.42 5.00 963.42 240.00 1.42

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1163E+03 EXCESS= .0000E+00 OUTFLOW= .1163E+03 BASIN STORAGE= .1437E-02 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00
RCFF1A MANE 4.32 951.08 237.74 1.40 5.00 945.51 240.00 1.40

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1142E+03 EXCESS= .0000E+00 OUTFLOW= .1142E+03 BASIN STORAGE= .1784E-02 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00
RCFF1A MANE 4.41 880.80 237.96 1.30 5.00 875.86 240.00 1.30

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1059E+03 EXCESS= .0000E+00 OUTFLOW= .1059E+03 BASIN STORAGE= .1464E-02 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00
RCFF1A MANE 4.45 845.25 240.35 1.25 5.00 844.98 240.00 1.25

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1017E+03 EXCESS= .0000E+00 OUTFLOW= .1018E+03 BASIN STORAGE= .1320E-02 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00
RCFF1A MANE 4.47 826.55 237.15 1.22 5.00 823.91 240.00 1.22

CONTINUITY SUMMARY (AC-FT) - INFLOW= .9975E+02 EXCESS= .0000E+00 OUTFLOW= .9976E+02 BASIN STORAGE= .1604E-02 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00
RCFF1A MANE 5.00 501.79 240.00 .75 5.00 501.79 240.00 .75

CONTINUITY SUMMARY (AC-FT) - INFLOW= .6147E+02 EXCESS= .0000E+00 OUTFLOW= .6149E+02 BASIN STORAGE= .1638E-02 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00
RCFF1A MANE 5.00 310.21 240.00 .48 5.00 310.21 240.00 .48

CONTINUITY SUMMARY (AC-FT) - INFLOW= .3957E+02 EXCESS= .0000E+00 OUTFLOW= .3958E+02 BASIN STORAGE= .1416E-02 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00
RCFF1A MANE 4.48 1270.78 237.63 1.52 5.00 1258.74 240.00 1.52

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1483E+03 EXCESS= .0000E+00 OUTFLOW= .1484E+03 BASIN STORAGE= .1902E-02 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00
RCFF1A MANE 4.53 1218.63 240.05 1.46 5.00 1218.62 240.00 1.47

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1432E+03 EXCESS= .0000E+00 OUTFLOW= .1433E+03 BASIN STORAGE= .1662E-02 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00
RCFF1A MANE 4.55 1200.06 236.53 1.44 5.00 1191.69 240.00 1.44

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1407E+03 EXCESS= .0000E+00 OUTFLOW= .1407E+03 BASIN STORAGE= .1360E-02 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00
RCFF1A MANE 4.63 1112.81 236.34 1.34 5.00 1107.05 240.00 1.34

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1307E+03 EXCESS= .0000E+00 OUTFLOW= .1307E+03 BASIN STORAGE= .1912E-02 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00
RCFF1A MANE 4.68 1071.98 238.64 1.28 5.00 1065.32 240.00 1.28

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1256E+03 EXCESS= .0000E+00 OUTFLOW= .1257E+03 BASIN STORAGE= .1826E-02 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00
RCFF1A MANE 4.71 1047.94 239.99 1.26 5.00 1047.86 240.00 1.26

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1233E+03 EXCESS= .0000E+00 OUTFLOW= .1233E+03 BASIN STORAGE= .1366E-02 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00
RCFF1A MANE 5.00 648.35 240.00 .78 5.00 648.35 240.00 .78

CONTINUITY SUMMARY (AC-FT) - INFLOW= .7660E+02 EXCESS= .0000E+00 OUTFLOW= .7662E+02 BASIN STORAGE= .1312E-02 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00										
RCFF1A	MANE	5.00	407.90	240.00	.51	5.00	407.90	240.00	.51	

CONTINUITY SUMMARY (AC-FT) - INFLOW= .4976E+02 EXCESS= .0000E+00 OUTFLOW= .4978E+02 BASIN STORAGE= .1720E-02 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00										
RCFF1A	MANE	5.00	1466.07	240.00	1.51	5.00	1466.07	240.00	1.51	

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1696E+03 EXCESS= .0000E+00 OUTFLOW= .1697E+03 BASIN STORAGE= .2235E-02 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00										
RCFF1A	MANE	5.00	1417.95	240.00	1.46	5.00	1417.95	240.00	1.46	

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1639E+03 EXCESS= .0000E+00 OUTFLOW= .1639E+03 BASIN STORAGE= .2230E-02 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00										
RCFF1A	MANE	5.00	1390.04	240.00	1.43	5.00	1390.04	240.00	1.43	

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1608E+03 EXCESS= .0000E+00 OUTFLOW= .1609E+03 BASIN STORAGE= .2284E-02 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00										
RCFF1A	MANE	5.00	1289.48	240.00	1.33	5.00	1289.48	240.00	1.33	

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1495E+03 EXCESS= .0000E+00 OUTFLOW= .1495E+03 BASIN STORAGE= .2721E-02 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00										
RCFF1A	MANE	5.00	1238.01	240.00	1.28	5.00	1238.01	240.00	1.28	

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1436E+03 EXCESS= .0000E+00 OUTFLOW= .1437E+03 BASIN STORAGE= .2757E-02 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00										
RCFF1A	MANE	5.00	1218.88	240.00	1.26	5.00	1218.88	240.00	1.26	

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1411E+03 EXCESS= .0000E+00 OUTFLOW= .1412E+03 BASIN STORAGE= .1841E-02 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00										
RCFF1A	MANE	5.00	749.72	240.00	.78	5.00	749.72	240.00	.78	

CONTINUITY SUMMARY (AC-FT) - INFLOW= .8752E+02 EXCESS= .0000E+00 OUTFLOW= .8756E+02 BASIN STORAGE= .2568E-02 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00										
RCFF1A	MANE	5.00	475.16	245.00	.51	5.00	475.16	245.00	.51	

CONTINUITY SUMMARY (AC-FT) - INFLOW= .5680E+02 EXCESS= .0000E+00 OUTFLOW= .5683E+02 BASIN STORAGE= .2137E-02 PERCENT ERROR= -.1

FOR PLAN = 1 RATIO= .00										
ROFF1A	MANE	2.84	1747.85	241.10	1.48	5.00	1738.74	240.00	1.48	

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1995E+03 EXCESS= .0000E+00 OUTFLOW= .1995E+03 BASIN STORAGE= .1164E-02 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00										
ROFF1A	MANE	2.86	1682.14	240.27	1.43	5.00	1679.55	240.00	1.43	

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1927E+03 EXCESS= .0000E+00 OUTFLOW= .1927E+03 BASIN STORAGE= .9298E-03 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00										
ROFF1A	MANE	2.87	1653.80	241.45	1.40	5.00	1641.06	240.00	1.40	

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1891E+03 EXCESS= .0000E+00 OUTFLOW= .1891E+03 BASIN STORAGE= .9542E-03 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00										
ROFF1A	MANE	2.93	1525.26	240.14	1.30	5.00	1523.84	240.00	1.30	

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1756E+03 EXCESS= .0000E+00 OUTFLOW= .1757E+03 BASIN STORAGE= .1140E-02 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00										
ROFF1A	MANE	2.96	1468.42	242.58	1.25	5.00	1462.93	240.00	1.25	

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1688E+03 EXCESS= .0000E+00 OUTFLOW= .1688E+03 BASIN STORAGE= .1154E-02 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00										
ROFF1A	MANE	2.97	1444.58	240.59	1.23	5.00	1438.99	240.00	1.23	

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1657E+03 EXCESS= .0000E+00 OUTFLOW= .1658E+03 BASIN STORAGE= .9582E-03 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00										
ROFF1A	MANE	3.35	882.22	241.43	.76	5.00	878.20	245.00	.76	

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1025E+03 EXCESS= .0000E+00 OUTFLOW= .1025E+03 BASIN STORAGE= .9777E-03 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00										
ROFF1A	MANE	3.78	552.31	245.62	.49	5.00	549.84	245.00	.49	

CONTINUITY SUMMARY (AC-FT) - INFLOW= .6625E+02 EXCESS= .0000E+00 OUTFLOW= .6626E+02 BASIN STORAGE= .9268E-03 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00										
RCOFF2	MANE	2.62	1923.25	241.00	1.46	5.00	1913.33	240.00	1.46	

CONTINUITY SUMMARY (AC-FT) - INFLOW= .2216E+03 EXCESS= .0000E+00 OUTFLOW= .2216E+03 BASIN STORAGE= .8924E-03 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00
RCOFF2 MANE 2.64 1855.03 240.45 1.41 5.00 1847.08 240.00 1.41

CONTINUITY SUMMARY (AC-FT) - INFLOW= .2141E+03 EXCESS= .0000E+00 OUTFLOW= .2141E+03 BASIN STORAGE= .9242E-03 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00
RCOFF2 MANE 2.66 1809.23 241.82 1.38 5.00 1801.45 240.00 1.38

CONTINUITY SUMMARY (AC-FT) - INFLOW= .2100E+03 EXCESS= .0000E+00 OUTFLOW= .2100E+03 BASIN STORAGE= .8809E-03 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00
RCOFF2 MANE 2.71 1681.51 240.91 1.29 5.00 1666.50 240.00 1.29

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1951E+03 EXCESS= .0000E+00 OUTFLOW= .1951E+03 BASIN STORAGE= .1021E-02 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00
RCOFF2 MANE 2.73 1616.25 240.63 1.24 5.00 1606.04 240.00 1.24

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1874E+03 EXCESS= .0000E+00 OUTFLOW= .1874E+03 BASIN STORAGE= .9506E-03 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00
RCOFF2 MANE 2.75 1585.35 241.64 1.21 5.00 1568.03 245.00 1.21

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1840E+03 EXCESS= .0000E+00 OUTFLOW= .1840E+03 BASIN STORAGE= .1075E-02 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00
RCOFF2 MANE 3.11 964.41 246.01 .75 5.00 963.22 245.00 .75

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1135E+03 EXCESS= .0000E+00 OUTFLOW= .1135E+03 BASIN STORAGE= .8593E-03 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00
RCOFF2 MANE 3.50 602.93 248.65 .48 5.00 597.93 250.00 .48

CONTINUITY SUMMARY (AC-FT) - INFLOW= .7322E+02 EXCESS= .0000E+00 OUTFLOW= .7323E+02 BASIN STORAGE= .1048E-02 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00
RCOFF3 MANE 1.02 2026.40 241.24 1.45 5.00 2016.06 240.00 1.45

CONTINUITY SUMMARY (AC-FT) - INFLOW= .2365E+03 EXCESS= .0000E+00 OUTFLOW= .2365E+03 BASIN STORAGE= .2383E-02 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00
RCOFF3 MANE 1.04 1955.59 241.54 1.40 5.00 1944.56 240.00 1.40

CONTINUITY SUMMARY (AC-FT) - INFLOW= .2286E+03 EXCESS= .0000E+00 OUTFLOW= .2286E+03 BASIN STORAGE= .2379E-02 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00
RCOFF3 MANE 1.05 1907.78 240.79 1.37 5.00 1898.39 240.00 1.37

CONTINUITY SUMMARY (AC-FT) - INFLOW= .2242E+03 EXCESS= .0000E+00 OUTFLOW= .2242E+03 BASIN STORAGE= .2627E-02 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00
RCOFF3 MANE 1.08 1766.43 241.89 1.27 5.00 1754.22 240.00 1.27

CONTINUITY SUMMARY (AC-FT) - INFLOW= .2082E+03 EXCESS= .0000E+00 OUTFLOW= .2082E+03 BASIN STORAGE= .2603E-02 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00
RCOFF3 MANE 1.10 1704.28 241.11 1.22 5.00 1689.48 240.00 1.22

CONTINUITY SUMMARY (AC-FT) - INFLOW= .2000E+03 EXCESS= .0000E+00 OUTFLOW= .2000E+03 BASIN STORAGE= .2490E-02 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00
RCOFF3 MANE 1.11 1663.28 241.29 1.20 5.00 1649.88 245.00 1.20

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1963E+03 EXCESS= .0000E+00 OUTFLOW= .1963E+03 BASIN STORAGE= .2629E-02 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00
RCOFF3 MANE 1.35 1010.25 245.63 .74 5.00 1005.78 245.00 .74

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1210E+03 EXCESS= .0000E+00 OUTFLOW= .1210E+03 BASIN STORAGE= .2489E-02 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00
RCOFF3 MANE 1.64 622.44 250.58 .48 5.00 622.24 250.00 .48

CONTINUITY SUMMARY (AC-FT) - INFLOW= .7790E+02 EXCESS= .0000E+00 OUTFLOW= .7791E+02 BASIN STORAGE= .2625E-02 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00
RCOFF2 MANE .83 2075.73 241.15 1.43 5.00 2066.35 240.00 1.43

CONTINUITY SUMMARY (AC-FT) - INFLOW= .2461E+03 EXCESS= .0000E+00 OUTFLOW= .2461E+03 BASIN STORAGE= .1962E-02 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00
RCOFF2 MANE .84 2002.83 241.29 1.38 5.00 1991.64 240.00 1.38

CONTINUITY SUMMARY (AC-FT) - INFLOW= .2378E+03 EXCESS= .0000E+00 OUTFLOW= .2378E+03 BASIN STORAGE= .1961E-02 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00
RCOFF2 MANE .85 1956.45 241.06 1.36 5.00 1945.48 240.00 1.36

CONTINUITY SUMMARY (AC-FT) - INFLOW= .2332E+03 EXCESS= .0000E+00 OUTFLOW= .2332E+03 BASIN STORAGE= .2102E-02 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00
RCOFF2 MANE .88 1809.49 240.90 1.26 5.00 1796.25 240.00 1.26

CONTINUITY SUMMARY (AC-FT) - INFLOW= .2165E+03 EXCESS= .0000E+00 OUTFLOW= .2165E+03 BASIN STORAGE= .1961E-02 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00

RCOFF2	MANE	.89	1742.49	241.00	1.21	5.00	1727.65	240.00	1.21

CONTINUITY SUMMARY (AC-FT) - INFLOW= .2080E+03 EXCESS= .0000E+00 OUTFLOW= .2080E+03 BASIN STORAGE= .2172E-02 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00

RCOFF2	MANE	.90	1699.18	241.70	1.19	5.00	1692.04	245.00	1.19

CONTINUITY SUMMARY (AC-FT) - INFLOW= .2041E+03 EXCESS= .0000E+00 OUTFLOW= .2041E+03 BASIN STORAGE= .2090E-02 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00

RCOFF2	MANE	1.10	1028.22	246.77	.73	5.00	1023.84	245.00	.73

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1255E+03 EXCESS= .0000E+00 OUTFLOW= .1255E+03 BASIN STORAGE= .2126E-02 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00

RCOFF2	MANE	1.33	633.63	250.27	.47	5.00	632.35	250.00	.47

CONTINUITY SUMMARY (AC-FT) - INFLOW= .8063E+02 EXCESS= .0000E+00 OUTFLOW= .8063E+02 BASIN STORAGE= .2197E-02 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00

RCFF1A	MANE	.93	2322.69	240.67	1.39	5.00	2313.98	240.00	1.39

CONTINUITY SUMMARY (AC-FT) - INFLOW= .2741E+03 EXCESS= .0000E+00 OUTFLOW= .2741E+03 BASIN STORAGE= .2535E-02 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00

RCFF1A	MANE	.94	2236.73	241.42	1.34	5.00	2228.89	240.00	1.34

CONTINUITY SUMMARY (AC-FT) - INFLOW= .2648E+03 EXCESS= .0000E+00 OUTFLOW= .2648E+03 BASIN STORAGE= .2376E-02 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00

RCFF1A	MANE	.95	2189.09	240.81	1.32	5.00	2178.67	240.00	1.32

CONTINUITY SUMMARY (AC-FT) - INFLOW= .2596E+03 EXCESS= .0000E+00 OUTFLOW= .2596E+03 BASIN STORAGE= .2559E-02 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00

RCFF1A	MANE	.98	2020.58	240.78	1.22	5.00	2008.60	240.00	1.22

CONTINUITY SUMMARY (AC-FT) - INFLOW= .2408E+03 EXCESS= .0000E+00 OUTFLOW= .2408E+03 BASIN STORAGE= .2389E-02 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00

RCFF1A	MANE	.99	1941.94	241.61	1.17	5.00	1929.08	240.00	1.17

CONTINUITY SUMMARY (AC-FT) - INFLOW= .2313E+03 EXCESS= .0000E+00 OUTFLOW= .2313E+03 BASIN STORAGE= .2500E-02 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00

RCFF1A	MANE	1.00	1896.22	241.10	1.15	5.00	1879.70	240.00	1.15

CONTINUITY SUMMARY (AC-FT) - INFLOW= .2268E+03 EXCESS= .0000E+00 OUTFLOW= .2268E+03 BASIN STORAGE= .2486E-02 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00

RCFF1A	MANE	1.23	1127.73	245.75	.70	5.00	1122.77	245.00	.70

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1387E+03 EXCESS= .0000E+00 OUTFLOW= .1387E+03 BASIN STORAGE= .2382E-02 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00

RCFF1A	MANE	1.51	688.42	251.49	.45	5.00	684.04	250.00	.45

CONTINUITY SUMMARY (AC-FT) - INFLOW= .8862E+02 EXCESS= .0000E+00 OUTFLOW= .8863E+02 BASIN STORAGE= .2398E-02 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00

RNW2-C	MANE	4.52	334.88	230.47	1.42	5.00	332.55	230.00	1.42

CONTINUITY SUMMARY (AC-FT) - INFLOW= .2987E+02 EXCESS= .0000E+00 OUTFLOW= .2987E+02 BASIN STORAGE= .1417E-02 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00

RNW2-C	MANE	4.56	322.08	232.41	1.37	5.00	317.74	230.00	1.37

CONTINUITY SUMMARY (AC-FT) - INFLOW= .2882E+02 EXCESS= .0000E+00 OUTFLOW= .2882E+02 BASIN STORAGE= .9642E-03 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00

RNW2-C	MANE	4.58	315.84	233.41	1.35	5.00	314.74	230.00	1.35

CONTINUITY SUMMARY (AC-FT) - INFLOW= .2835E+02 EXCESS= .0000E+00 OUTFLOW= .2835E+02 BASIN STORAGE= .1253E-02 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00

RNW2-C	MANE	4.66	294.45	232.94	1.25	5.00	290.67	230.00	1.25

CONTINUITY SUMMARY (AC-FT) - INFLOW= .2631E+02 EXCESS= .0000E+00 OUTFLOW= .2631E+02 BASIN STORAGE= .1309E-02 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00

RNW2-C	MANE	4.70	285.05	230.42	1.21	5.00	282.99	230.00	1.21

CONTINUITY SUMMARY (AC-FT) - INFLOW= .2540E+02 EXCESS= .0000E+00 OUTFLOW= .2540E+02 BASIN STORAGE= .1320E-02 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00

RNW2-C	MANE	4.72	279.02	231.52	1.18	5.00	273.86	230.00	1.18

CONTINUITY SUMMARY (AC-FT) - INFLOW= .2485E+02 EXCESS= .0000E+00 OUTFLOW= .2486E+02 BASIN STORAGE= .1064E-02 PERCENT ERROR= .0

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          FOR PLAN = 1  RATIO=  .00
            RNW2-C  MANE          5.00    175.14    235.00       .74      5.00    175.14    235.00         .74

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1557E+02 EXCESS= .0000E+00 OUTFLOW= .1558E+02 BASIN STORAGE= .1056E-02 PERCENT ERROR=    .0

          FOR PLAN = 1  RATIO=  .00
            RNW2-C  MANE          4.00    111.88    236.00       .48      5.00    111.72    235.00         .48

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1019E+02 EXCESS= .0000E+00 OUTFLOW= .1019E+02 BASIN STORAGE= .1168E-02 PERCENT ERROR=    .0

          FOR PLAN = 1  RATIO=  .00
            RCNW5-  MANE           .80   2779.60    240.82      1.38      5.00   2775.91    240.00        1.38

CONTINUITY SUMMARY (AC-FT) - INFLOW= .3217E+03 EXCESS= .0000E+00 OUTFLOW= .3217E+03 BASIN STORAGE= .2113E-02 PERCENT ERROR=    .0

          FOR PLAN = 1  RATIO=  .00
            RCNW5-  MANE           .81   2674.96    240.41      1.33      5.00   2670.41    240.00        1.33

CONTINUITY SUMMARY (AC-FT) - INFLOW= .3106E+03 EXCESS= .0000E+00 OUTFLOW= .3106E+03 BASIN STORAGE= .2164E-02 PERCENT ERROR=    .0

          FOR PLAN = 1  RATIO=  .00
            RCNW5-  MANE           .82   2619.14    240.88      1.31      5.00   2614.39    240.00        1.31

CONTINUITY SUMMARY (AC-FT) - INFLOW= .3047E+03 EXCESS= .0000E+00 OUTFLOW= .3047E+03 BASIN STORAGE= .2160E-02 PERCENT ERROR=    .0

          FOR PLAN = 1  RATIO=  .00
            RCNW5-  MANE           .85   2417.85    241.05      1.21      5.00   2410.96    240.00        1.21

CONTINUITY SUMMARY (AC-FT) - INFLOW= .2825E+03 EXCESS= .0000E+00 OUTFLOW= .2825E+03 BASIN STORAGE= .2135E-02 PERCENT ERROR=    .0

          FOR PLAN = 1  RATIO=  .00
            RCNW5-  MANE           .86   2324.62    240.53      1.17      5.00   2316.66    240.00        1.17

CONTINUITY SUMMARY (AC-FT) - INFLOW= .2716E+03 EXCESS= .0000E+00 OUTFLOW= .2716E+03 BASIN STORAGE= .2117E-02 PERCENT ERROR=    .0

          FOR PLAN = 1  RATIO=  .00
            RCNW5-  MANE           .87   2267.01    241.25      1.14      5.00   2257.97    240.00        1.14

CONTINUITY SUMMARY (AC-FT) - INFLOW= .2662E+03 EXCESS= .0000E+00 OUTFLOW= .2662E+03 BASIN STORAGE= .2130E-02 PERCENT ERROR=    .0

          FOR PLAN = 1  RATIO=  .00
            RCNW5-  MANE          1.07   1340.05    246.27       .70      5.00   1337.06    245.00         .70

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1630E+03 EXCESS= .0000E+00 OUTFLOW= .1630E+03 BASIN STORAGE= .2342E-02 PERCENT ERROR=    .0

          FOR PLAN = 1  RATIO=  .00
            RCNW5-  MANE          1.31    808.49    250.41       .45      5.00    807.05    250.00         .45

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1043E+03 EXCESS= .0000E+00 OUTFLOW= .1043E+03 BASIN STORAGE= .2418E-02 PERCENT ERROR=    .0

          FOR PLAN = 1  RATIO=  .00
            RNW9-C  MANE          5.00    302.38    230.00      1.74      5.00    302.38    230.00        1.74

CONTINUITY SUMMARY (AC-FT) - INFLOW= .2521E+02 EXCESS= .0000E+00 OUTFLOW= .2522E+02 BASIN STORAGE= .1582E-02 PERCENT ERROR=    .0

          FOR PLAN = 1  RATIO=  .00
            RNW9-C  MANE          5.00    293.84    230.00      1.69      5.00    293.84    230.00        1.69

CONTINUITY SUMMARY (AC-FT) - INFLOW= .2446E+02 EXCESS= .0000E+00 OUTFLOW= .2447E+02 BASIN STORAGE= .1556E-02 PERCENT ERROR=    .0

          FOR PLAN = 1  RATIO=  .00
            RNW9-C  MANE          5.00    289.57    230.00      1.66      5.00    289.57    230.00        1.66

CONTINUITY SUMMARY (AC-FT) - INFLOW= .2408E+02 EXCESS= .0000E+00 OUTFLOW= .2409E+02 BASIN STORAGE= .1543E-02 PERCENT ERROR=    .0

          FOR PLAN = 1  RATIO=  .00
            RNW9-C  MANE          5.00    272.54    230.00      1.56      5.00    272.54    230.00        1.56

CONTINUITY SUMMARY (AC-FT) - INFLOW= .2258E+02 EXCESS= .0000E+00 OUTFLOW= .2259E+02 BASIN STORAGE= .1490E-02 PERCENT ERROR=    .0

          FOR PLAN = 1  RATIO=  .00
            RNW9-C  MANE          5.00    264.04    230.00      1.51      5.00    264.04    230.00        1.51

CONTINUITY SUMMARY (AC-FT) - INFLOW= .2184E+02 EXCESS= .0000E+00 OUTFLOW= .2184E+02 BASIN STORAGE= .1463E-02 PERCENT ERROR=    .0

          FOR PLAN = 1  RATIO=  .00
            RNW9-C  MANE          5.00    259.79    230.00      1.48      5.00    259.79    230.00        1.48

CONTINUITY SUMMARY (AC-FT) - INFLOW= .2147E+02 EXCESS= .0000E+00 OUTFLOW= .2147E+02 BASIN STORAGE= .1449E-02 PERCENT ERROR=    .0

          FOR PLAN = 1  RATIO=  .00
            RNW9-C  MANE          5.00    175.97    230.00       .99      5.00    175.97    230.00         .99

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1429E+02 EXCESS= .0000E+00 OUTFLOW= .1429E+02 BASIN STORAGE= .1120E-02 PERCENT ERROR=    .0

          FOR PLAN = 1  RATIO=  .00
            RNW9-C  MANE          5.00    123.30    230.00       .69      5.00    123.30    230.00         .69

CONTINUITY SUMMARY (AC-FT) - INFLOW= .9955E+01 EXCESS= .0000E+00 OUTFLOW= .9959E+01 BASIN STORAGE= .1492E-02 PERCENT ERROR=   -.1

          FOR PLAN = 1  RATIO=  .00
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RCNW11	MANE	.73	3145.61	239.73	1.39	5.00	3145.29	240.00	1.39	

CONTINUITY SUMMARY (AC-FT) - INFLOW= .3648E+03 EXCESS= .0000E+00 OUTFLOW= .3648E+03 BASIN STORAGE= .2230E-02 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00

RCNW11	MANE	.74	3028.58	240.38	1.35	5.00	3028.15	240.00	1.35	

CONTINUITY SUMMARY (AC-FT) - INFLOW= .3523E+03 EXCESS= .0000E+00 OUTFLOW= .3523E+03 BASIN STORAGE= .2237E-02 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00

RCNW11	MANE	.75	2967.80	240.10	1.32	5.00	2967.42	240.00	1.32	

CONTINUITY SUMMARY (AC-FT) - INFLOW= .3458E+03 EXCESS= .0000E+00 OUTFLOW= .3458E+03 BASIN STORAGE= .2132E-02 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00

RCNW11	MANE	.77	2742.09	240.81	1.23	5.00	2741.38	240.00	1.23	

CONTINUITY SUMMARY (AC-FT) - INFLOW= .3209E+03 EXCESS= .0000E+00 OUTFLOW= .3209E+03 BASIN STORAGE= .2184E-02 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00

RCNW11	MANE	.79	2637.51	240.66	1.18	5.00	2634.58	240.00	1.18	

CONTINUITY SUMMARY (AC-FT) - INFLOW= .3085E+03 EXCESS= .0000E+00 OUTFLOW= .3085E+03 BASIN STORAGE= .2108E-02 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00

RCNW11	MANE	.79	2573.70	240.65	1.16	5.00	2570.50	240.00	1.16	

CONTINUITY SUMMARY (AC-FT) - INFLOW= .3025E+03 EXCESS= .0000E+00 OUTFLOW= .3025E+03 BASIN STORAGE= .2215E-02 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00

RCNW11	MANE	.98	1512.22	245.61	.71	5.00	1511.87	245.00	.71	

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1863E+03 EXCESS= .0000E+00 OUTFLOW= .1863E+03 BASIN STORAGE= .2233E-02 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00

RCNW11	MANE	1.20	911.11	246.90	.46	5.00	909.14	250.00	.46	

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1199E+03 EXCESS= .0000E+00 OUTFLOW= .1199E+03 BASIN STORAGE= .2078E-02 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00

RCNW17	MANE	.73	3472.96	236.10	1.41	5.00	3465.70	240.00	1.41	

CONTINUITY SUMMARY (AC-FT) - INFLOW= .4016E+03 EXCESS= .0000E+00 OUTFLOW= .4016E+03 BASIN STORAGE= .2317E-02 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00

RCNW17	MANE	.74	3339.80	239.75	1.36	5.00	3338.63	240.00	1.36	

CONTINUITY SUMMARY (AC-FT) - INFLOW= .3879E+03 EXCESS= .0000E+00 OUTFLOW= .3879E+03 BASIN STORAGE= .2274E-02 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00

RCNW17	MANE	.75	3275.79	236.40	1.34	5.00	3273.45	240.00	1.34	

CONTINUITY SUMMARY (AC-FT) - INFLOW= .3808E+03 EXCESS= .0000E+00 OUTFLOW= .3808E+03 BASIN STORAGE= .2272E-02 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00

RCNW17	MANE	.77	3028.15	239.98	1.24	5.00	3028.09	240.00	1.24	

CONTINUITY SUMMARY (AC-FT) - INFLOW= .3537E+03 EXCESS= .0000E+00 OUTFLOW= .3537E+03 BASIN STORAGE= .2313E-02 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00

RCNW17	MANE	.79	2910.14	240.61	1.19	5.00	2909.88	240.00	1.20	

CONTINUITY SUMMARY (AC-FT) - INFLOW= .3402E+03 EXCESS= .0000E+00 OUTFLOW= .3402E+03 BASIN STORAGE= .2223E-02 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00

RCNW17	MANE	.79	2841.72	240.53	1.17	5.00	2841.01	240.00	1.17	

CONTINUITY SUMMARY (AC-FT) - INFLOW= .3336E+03 EXCESS= .0000E+00 OUTFLOW= .3336E+03 BASIN STORAGE= .2272E-02 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00

RCNW17	MANE	.98	1672.50	241.60	.73	5.00	1667.68	245.00	.73	

CONTINUITY SUMMARY (AC-FT) - INFLOW= .2068E+03 EXCESS= .0000E+00 OUTFLOW= .2068E+03 BASIN STORAGE= .2394E-02 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00

RCNW17	MANE	1.20	1009.80	246.26	.47	5.00	1003.83	250.00	.47	

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1340E+03 EXCESS= .0000E+00 OUTFLOW= .1340E+03 BASIN STORAGE= .2472E-02 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00

RCNW23	MANE	.96	3762.38	236.30	1.42	5.00	3736.55	240.00	1.42	

CONTINUITY SUMMARY (AC-FT) - INFLOW= .4340E+03 EXCESS= .0000E+00 OUTFLOW= .4340E+03 BASIN STORAGE= .2966E-02 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00

RCNW23	MANE	.97	3621.34	236.08	1.38	5.00	3600.73	240.00	1.38	

CONTINUITY SUMMARY (AC-FT) - INFLOW= .4194E+03 EXCESS= .0000E+00 OUTFLOW= .4194E+03 BASIN STORAGE= .3292E-02 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00

RCNW23	MANE	.98	3551.70	235.95	1.35	5.00	3531.26	240.00	1.35	

CONTINUITY SUMMARY (AC-FT) - INFLOW= .4117E+03 EXCESS= .0000E+00 OUTFLOW= .4117E+03 BASIN STORAGE= .3038E-02 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00

RCNW23	MANE	1.01	3274.40	236.76	1.26	5.00	3268.57	240.00	1.26

CONTINUITY SUMMARY (AC-FT) - INFLOW= .3827E+03 EXCESS= .0000E+00 OUTFLOW= .3827E+03 BASIN STORAGE= .3271E-02 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00

RCNW23	MANE	1.03	3142.33	239.50	1.21	5.00	3140.91	240.00	1.21

CONTINUITY SUMMARY (AC-FT) - INFLOW= .3682E+03 EXCESS= .0000E+00 OUTFLOW= .3682E+03 BASIN STORAGE= .2994E-02 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00

RCNW23	MANE	1.04	3069.75	239.68	1.18	5.00	3068.78	240.00	1.19

CONTINUITY SUMMARY (AC-FT) - INFLOW= .3611E+03 EXCESS= .0000E+00 OUTFLOW= .3611E+03 BASIN STORAGE= .3026E-02 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00

RCNW23	MANE	1.28	1812.47	242.07	.74	5.00	1800.25	245.00	.74

CONTINUITY SUMMARY (AC-FT) - INFLOW= .2249E+03 EXCESS= .0000E+00 OUTFLOW= .2249E+03 BASIN STORAGE= .2932E-02 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00

RCNW23	MANE	1.57	1093.70	245.98	.48	5.00	1088.96	245.00	.48

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1466E+03 EXCESS= .0000E+00 OUTFLOW= .1466E+03 BASIN STORAGE= .3346E-02 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00

RC213A	MANE	2.50	23498.96	305.01	1.75	5.00	23498.43	305.00	1.75

CONTINUITY SUMMARY (AC-FT) - INFLOW= .3639E+04 EXCESS= .0000E+00 OUTFLOW= .3639E+04 BASIN STORAGE= .1975E-02 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00

RC213A	MANE	2.52	22709.79	305.09	1.69	5.00	22705.68	305.00	1.69

CONTINUITY SUMMARY (AC-FT) - INFLOW= .3514E+04 EXCESS= .0000E+00 OUTFLOW= .3514E+04 BASIN STORAGE= .1722E-02 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00

RC213A	MANE	2.53	22260.09	303.88	1.66	5.00	22259.10	305.00	1.66

CONTINUITY SUMMARY (AC-FT) - INFLOW= .3451E+04 EXCESS= .0000E+00 OUTFLOW= .3451E+04 BASIN STORAGE= .1626E-02 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00

RC213A	MANE	2.58	20712.76	304.24	1.54	5.00	20708.34	305.00	1.54

CONTINUITY SUMMARY (AC-FT) - INFLOW= .3205E+04 EXCESS= .0000E+00 OUTFLOW= .3205E+04 BASIN STORAGE= .1592E-02 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00

RC213A	MANE	2.60	19951.13	304.52	1.48	5.00	19945.90	305.00	1.48

CONTINUITY SUMMARY (AC-FT) - INFLOW= .3083E+04 EXCESS= .0000E+00 OUTFLOW= .3083E+04 BASIN STORAGE= .1735E-02 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00

RC213A	MANE	2.62	19581.13	306.00	1.45	5.00	19553.11	305.00	1.45

CONTINUITY SUMMARY (AC-FT) - INFLOW= .3023E+04 EXCESS= .0000E+00 OUTFLOW= .3023E+04 BASIN STORAGE= .1604E-02 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00

RC213A	MANE	2.94	12223.62	305.82	.90	5.00	12195.37	305.00	.90

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1879E+04 EXCESS= .0000E+00 OUTFLOW= .1879E+04 BASIN STORAGE= .1831E-02 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00

RC213A	MANE	3.28	7937.77	308.12	.59	5.00	7925.33	310.00	.59

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1222E+04 EXCESS= .0000E+00 OUTFLOW= .1222E+04 BASIN STORAGE= .1772E-02 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00

RC213A	MANE	1.52	23603.49	306.23	1.74	5.00	23540.46	305.00	1.74

CONTINUITY SUMMARY (AC-FT) - INFLOW= .3676E+04 EXCESS= .0000E+00 OUTFLOW= .3676E+04 BASIN STORAGE= .9370E-03 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00

RC213A	MANE	1.53	22788.35	305.81	1.68	5.00	22748.28	305.00	1.68

CONTINUITY SUMMARY (AC-FT) - INFLOW= .3551E+04 EXCESS= .0000E+00 OUTFLOW= .3551E+04 BASIN STORAGE= .9372E-03 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00

RC213A	MANE	1.54	22338.35	305.79	1.65	5.00	22299.61	305.00	1.65

CONTINUITY SUMMARY (AC-FT) - INFLOW= .3486E+04 EXCESS= .0000E+00 OUTFLOW= .3486E+04 BASIN STORAGE= .1117E-02 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00

RC213A	MANE	1.56	20809.33	306.66	1.54	5.00	20737.02	305.00	1.54

CONTINUITY SUMMARY (AC-FT) - INFLOW= .3237E+04 EXCESS= .0000E+00 OUTFLOW= .3237E+04 BASIN STORAGE= .1001E-02 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00

RC213A	MANE	1.58	20041.79	306.39	1.48	5.00	19964.37	305.00	1.48

CONTINUITY SUMMARY (AC-FT) - INFLOW= .3115E+04 EXCESS= .0000E+00 OUTFLOW= .3115E+04 BASIN STORAGE= .9195E-03 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00
RC213A MANE 1.59 19645.11 306.33 1.45 5.00 19573.11 305.00 1.45

CONTINUITY SUMMARY (AC-FT) - INFLOW= .3053E+04 EXCESS= .0000E+00 OUTFLOW= .3053E+04 BASIN STORAGE= .1127E-02 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00
RC213A MANE 1.79 12271.75 307.16 .90 5.00 12247.12 310.00 .90

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1898E+04 EXCESS= .0000E+00 OUTFLOW= .1898E+04 BASIN STORAGE= .9310E-03 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00
RC213A MANE 1.99 7958.11 312.29 .59 5.00 7941.93 310.00 .59

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1234E+04 EXCESS= .0000E+00 OUTFLOW= .1234E+04 BASIN STORAGE= .1155E-02 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00
RC213A MANE 1.38 23612.79 306.20 1.74 5.00 23532.01 305.00 1.74

CONTINUITY SUMMARY (AC-FT) - INFLOW= .3704E+04 EXCESS= .0000E+00 OUTFLOW= .3704E+04 BASIN STORAGE= .8615E-03 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00
RC213A MANE 1.39 22813.65 307.44 1.68 5.00 22734.15 310.00 1.68

CONTINUITY SUMMARY (AC-FT) - INFLOW= .3578E+04 EXCESS= .0000E+00 OUTFLOW= .3578E+04 BASIN STORAGE= .1006E-02 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00
RC213A MANE 1.40 22367.10 306.18 1.65 5.00 22293.13 310.00 1.65

CONTINUITY SUMMARY (AC-FT) - INFLOW= .3512E+04 EXCESS= .0000E+00 OUTFLOW= .3512E+04 BASIN STORAGE= .8683E-03 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00
RC213A MANE 1.42 20805.79 307.52 1.53 5.00 20750.07 310.00 1.53

CONTINUITY SUMMARY (AC-FT) - INFLOW= .3261E+04 EXCESS= .0000E+00 OUTFLOW= .3261E+04 BASIN STORAGE= .1040E-02 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00
RC213A MANE 1.44 20037.29 307.58 1.47 5.00 19995.20 310.00 1.47

CONTINUITY SUMMARY (AC-FT) - INFLOW= .3138E+04 EXCESS= .0000E+00 OUTFLOW= .3138E+04 BASIN STORAGE= .8461E-03 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00
RC213A MANE 1.44 19643.38 307.66 1.45 5.00 19597.95 310.00 1.45

CONTINUITY SUMMARY (AC-FT) - INFLOW= .3076E+04 EXCESS= .0000E+00 OUTFLOW= .3076E+04 BASIN STORAGE= .9898E-03 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00
RC213A MANE 1.62 12278.84 311.83 .90 5.00 12266.45 310.00 .90

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1911E+04 EXCESS= .0000E+00 OUTFLOW= .1911E+04 BASIN STORAGE= .8691E-03 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00
RC213A MANE 1.81 7964.64 313.08 .58 5.00 7934.32 315.00 .58

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1242E+04 EXCESS= .0000E+00 OUTFLOW= .1242E+04 BASIN STORAGE= .9359E-03 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00
RC213A MANE 1.48 23507.08 322.53 1.71 5.00 23476.93 325.00 1.71

CONTINUITY SUMMARY (AC-FT) - INFLOW= .3844E+04 EXCESS= .0000E+00 OUTFLOW= .3844E+04 BASIN STORAGE= .1049E-02 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00
RC213A MANE 1.49 22708.73 322.34 1.65 5.00 22686.89 325.00 1.65

CONTINUITY SUMMARY (AC-FT) - INFLOW= .3712E+04 EXCESS= .0000E+00 OUTFLOW= .3712E+04 BASIN STORAGE= .1010E-02 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00
RC213A MANE 1.50 22267.34 322.44 1.62 5.00 22250.27 325.00 1.62

CONTINUITY SUMMARY (AC-FT) - INFLOW= .3644E+04 EXCESS= .0000E+00 OUTFLOW= .3644E+04 BASIN STORAGE= .9119E-03 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00
RC213A MANE 1.53 20709.48 323.71 1.50 5.00 20704.71 325.00 1.50

CONTINUITY SUMMARY (AC-FT) - INFLOW= .3383E+04 EXCESS= .0000E+00 OUTFLOW= .3383E+04 BASIN STORAGE= .9346E-03 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00
RC213A MANE 1.54 19946.40 323.65 1.45 5.00 19944.49 325.00 1.45

CONTINUITY SUMMARY (AC-FT) - INFLOW= .3254E+04 EXCESS= .0000E+00 OUTFLOW= .3254E+04 BASIN STORAGE= .1034E-02 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00
RC213A MANE 1.55 19552.94 323.72 1.42 5.00 19551.09 325.00 1.42

CONTINUITY SUMMARY (AC-FT) - INFLOW= .3190E+04 EXCESS= .0000E+00 OUTFLOW= .3190E+04 BASIN STORAGE= .9489E-03 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00
RC213A MANE 1.74 12227.48 327.42 .88 5.00 12195.80 325.00 .88

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1978E+04 EXCESS= .0000E+00 OUTFLOW= .1978E+04 BASIN STORAGE= .9191E-03 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00
RC213A MANE 1.94 7924.22 328.20 .57 5.00 7914.08 330.00 .57

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1283E+04 EXCESS= .0000E+00 OUTFLOW= .1283E+04 BASIN STORAGE= .9120E-03 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00

RC13A-	MANE	1.48	23479.75	325.50	1.71	5.00	23471.62	325.00	1.71

CONTINUITY SUMMARY (AC-FT) - INFLOW= .3875E+04 EXCESS= .0000E+00 OUTFLOW= .3875E+04 BASIN STORAGE= .9421E-03 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00

RC13A-	MANE	1.49	22683.61	325.31	1.65	5.00	22679.18	325.00	1.65

CONTINUITY SUMMARY (AC-FT) - INFLOW= .3743E+04 EXCESS= .0000E+00 OUTFLOW= .3743E+04 BASIN STORAGE= .9124E-03 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00

RC13A-	MANE	1.50	22246.64	325.40	1.62	5.00	22240.11	325.00	1.62

CONTINUITY SUMMARY (AC-FT) - INFLOW= .3675E+04 EXCESS= .0000E+00 OUTFLOW= .3675E+04 BASIN STORAGE= .1052E-02 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00

RC13A-	MANE	1.53	20705.82	326.73	1.51	5.00	20687.46	325.00	1.51

CONTINUITY SUMMARY (AC-FT) - INFLOW= .3412E+04 EXCESS= .0000E+00 OUTFLOW= .3412E+04 BASIN STORAGE= .1073E-02 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00

RC13A-	MANE	1.54	19948.74	326.71	1.45	5.00	19922.66	325.00	1.45

CONTINUITY SUMMARY (AC-FT) - INFLOW= .3282E+04 EXCESS= .0000E+00 OUTFLOW= .3283E+04 BASIN STORAGE= .9321E-03 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00

RC13A-	MANE	1.55	19552.25	326.79	1.42	5.00	19530.24	325.00	1.42

CONTINUITY SUMMARY (AC-FT) - INFLOW= .3218E+04 EXCESS= .0000E+00 OUTFLOW= .3218E+04 BASIN STORAGE= .1082E-02 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00

RC13A-	MANE	1.74	12210.76	327.61	.88	5.00	12180.95	330.00	.88

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1998E+04 EXCESS= .0000E+00 OUTFLOW= .1998E+04 BASIN STORAGE= .9520E-03 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00

RC13A-	MANE	1.94	7917.02	332.02	.57	5.00	7903.79	330.00	.57

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1298E+04 EXCESS= .0000E+00 OUTFLOW= .1298E+04 BASIN STORAGE= .1043E-02 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00

RC13A-	MANE	1.61	23475.10	326.27	1.72	5.00	23425.66	325.00	1.72

CONTINUITY SUMMARY (AC-FT) - INFLOW= .3907E+04 EXCESS= .0000E+00 OUTFLOW= .3907E+04 BASIN STORAGE= .1176E-02 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00

RC13A-	MANE	1.62	22664.00	325.84	1.66	5.00	22634.44	325.00	1.66

CONTINUITY SUMMARY (AC-FT) - INFLOW= .3774E+04 EXCESS= .0000E+00 OUTFLOW= .3774E+04 BASIN STORAGE= .1214E-02 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00

RC13A-	MANE	1.63	22223.94	327.43	1.63	5.00	22193.65	325.00	1.63

CONTINUITY SUMMARY (AC-FT) - INFLOW= .3705E+04 EXCESS= .0000E+00 OUTFLOW= .3705E+04 BASIN STORAGE= .1160E-02 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00

RC13A-	MANE	1.66	20700.71	326.77	1.51	5.00	20631.43	325.00	1.51

CONTINUITY SUMMARY (AC-FT) - INFLOW= .3440E+04 EXCESS= .0000E+00 OUTFLOW= .3440E+04 BASIN STORAGE= .1047E-02 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00

RC13A-	MANE	1.67	19932.44	326.52	1.45	5.00	19863.85	325.00	1.45

CONTINUITY SUMMARY (AC-FT) - INFLOW= .3311E+04 EXCESS= .0000E+00 OUTFLOW= .3311E+04 BASIN STORAGE= .9887E-03 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00

RC13A-	MANE	1.68	19536.82	326.46	1.42	5.00	19473.35	325.00	1.42

CONTINUITY SUMMARY (AC-FT) - INFLOW= .3245E+04 EXCESS= .0000E+00 OUTFLOW= .3245E+04 BASIN STORAGE= .1238E-02 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00

RC13A-	MANE	1.89	12180.61	329.49	.89	5.00	12179.89	330.00	.89

CONTINUITY SUMMARY (AC-FT) - INFLOW= .2018E+04 EXCESS= .0000E+00 OUTFLOW= .2018E+04 BASIN STORAGE= .1089E-02 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00

RC13A-	MANE	2.11	7908.30	333.34	.58	5.00	7881.10	335.00	.58

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1313E+04 EXCESS= .0000E+00 OUTFLOW= .1313E+04 BASIN STORAGE= .1036E-02 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00

RC213B	MANE	.60	23440.04	325.87	1.72	5.00	23410.42	325.00	1.72

CONTINUITY SUMMARY (AC-FT) - INFLOW= .3936E+04 EXCESS= .0000E+00 OUTFLOW= .3936E+04 BASIN STORAGE= .4097E-03 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00

RC213B	MANE	.61	22651.67	325.64	1.66	5.00	22620.33	325.00	1.66

CONTINUITY SUMMARY (AC-FT) - INFLOW= .3802E+04 EXCESS= .0000E+00 OUTFLOW= .3802E+04 BASIN STORAGE= .3946E-03 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00
RC213B MANE .61 22208.25 326.02 1.63 5.00 22177.28 325.00 1.63

CONTINUITY SUMMARY (AC-FT) - INFLOW= .3733E+04 EXCESS= .0000E+00 OUTFLOW= .3733E+04 BASIN STORAGE= .3962E-03 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00
RC213B MANE .62 20648.76 325.80 1.51 5.00 20612.80 325.00 1.51

CONTINUITY SUMMARY (AC-FT) - INFLOW= .3467E+04 EXCESS= .0000E+00 OUTFLOW= .3467E+04 BASIN STORAGE= .3740E-03 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00
RC213B MANE .63 19881.67 325.75 1.46 5.00 19844.13 325.00 1.46

CONTINUITY SUMMARY (AC-FT) - INFLOW= .3336E+04 EXCESS= .0000E+00 OUTFLOW= .3336E+04 BASIN STORAGE= .4111E-03 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00
RC213B MANE .63 19492.00 326.11 1.43 5.00 19453.76 325.00 1.43

CONTINUITY SUMMARY (AC-FT) - INFLOW= .3271E+04 EXCESS= .0000E+00 OUTFLOW= .3271E+04 BASIN STORAGE= .3652E-03 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00
RC213B MANE .71 12184.34 330.46 .89 5.00 12176.28 330.00 .89

CONTINUITY SUMMARY (AC-FT) - INFLOW= .2037E+04 EXCESS= .0000E+00 OUTFLOW= .2037E+04 BASIN STORAGE= .4105E-03 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00
RC213B MANE .79 7887.30 335.18 .58 5.00 7887.30 335.00 .58

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1327E+04 EXCESS= .0000E+00 OUTFLOW= .1327E+04 BASIN STORAGE= .4043E-03 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00
RC213A MANE .95 24544.12 325.40 1.68 5.00 24528.79 325.00 1.68

CONTINUITY SUMMARY (AC-FT) - INFLOW= .4415E+04 EXCESS= .0000E+00 OUTFLOW= .4415E+04 BASIN STORAGE= .6280E-02 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00
RC213A MANE .96 23735.09 326.02 1.63 5.00 23710.57 325.00 1.63

CONTINUITY SUMMARY (AC-FT) - INFLOW= .4265E+04 EXCESS= .0000E+00 OUTFLOW= .4265E+04 BASIN STORAGE= .5991E-02 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00
RC213A MANE .97 23271.34 325.67 1.60 5.00 23248.28 325.00 1.60

CONTINUITY SUMMARY (AC-FT) - INFLOW= .4188E+04 EXCESS= .0000E+00 OUTFLOW= .4188E+04 BASIN STORAGE= .5976E-02 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00
RC213A MANE .99 21649.86 326.28 1.48 5.00 21619.38 325.00 1.48

CONTINUITY SUMMARY (AC-FT) - INFLOW= .3890E+04 EXCESS= .0000E+00 OUTFLOW= .3890E+04 BASIN STORAGE= .6464E-02 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00
RC213A MANE 1.01 20855.08 326.18 1.43 5.00 20819.61 325.00 1.43

CONTINUITY SUMMARY (AC-FT) - INFLOW= .3744E+04 EXCESS= .0000E+00 OUTFLOW= .3744E+04 BASIN STORAGE= .6274E-02 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00
RC213A MANE 1.02 20441.48 326.71 1.40 5.00 20412.95 325.00 1.40

CONTINUITY SUMMARY (AC-FT) - INFLOW= .3670E+04 EXCESS= .0000E+00 OUTFLOW= .3670E+04 BASIN STORAGE= .6753E-02 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00
RC213A MANE 1.23 12791.35 330.25 .87 5.00 12787.79 330.00 .87

CONTINUITY SUMMARY (AC-FT) - INFLOW= .2287E+04 EXCESS= .0000E+00 OUTFLOW= .2287E+04 BASIN STORAGE= .6852E-02 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00
RC213A MANE 1.46 8312.09 332.66 .57 5.00 8297.11 335.00 .57

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1491E+04 EXCESS= .0000E+00 OUTFLOW= .1491E+04 BASIN STORAGE= .5926E-02 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00
RC213B MANE 4.11 385.25 222.05 2.34 5.00 381.14 225.00 2.34

CONTINUITY SUMMARY (AC-FT) - INFLOW= .3258E+02 EXCESS= .0000E+00 OUTFLOW= .3259E+02 BASIN STORAGE= .1063E-02 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00
RC213B MANE 4.14 382.94 223.33 2.29 5.00 374.39 225.00 2.29

CONTINUITY SUMMARY (AC-FT) - INFLOW= .3181E+02 EXCESS= .0000E+00 OUTFLOW= .3182E+02 BASIN STORAGE= .1273E-02 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00
RC213B MANE 4.15 379.44 223.98 2.26 5.00 373.57 225.00 2.26

CONTINUITY SUMMARY (AC-FT) - INFLOW= .3142E+02 EXCESS= .0000E+00 OUTFLOW= .3143E+02 BASIN STORAGE= .1082E-02 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00
RC213B MANE 4.20 356.05 222.49 2.14 5.00 350.53 225.00 2.14

CONTINUITY SUMMARY (AC-FT) - INFLOW= .2981E+02 EXCESS= .0000E+00 OUTFLOW= .2982E+02 BASIN STORAGE= .9519E-03 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00
RC213B MANE 4.22 352.57 223.89 2.09 5.00 346.80 225.00 2.09

CONTINUITY SUMMARY (AC-FT) - INFLOW= .2906E+02 EXCESS= .0000E+00 OUTFLOW= .2906E+02 BASIN STORAGE= .1083E-02 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00

RC213B	MANE	4.24	346.67	224.60	2.06	5.00	344.45	225.00	2.06

CONTINUITY SUMMARY (AC-FT) - INFLOW= .2866E+02 EXCESS= .0000E+00 OUTFLOW= .2867E+02 BASIN STORAGE= .9433E-03 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00

RC213B	MANE	4.57	257.00	223.69	1.50	5.00	253.21	225.00	1.50

CONTINUITY SUMMARY (AC-FT) - INFLOW= .2086E+02 EXCESS= .0000E+00 OUTFLOW= .2087E+02 BASIN STORAGE= .1050E-02 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00

RC213B	MANE	4.75	197.08	223.25	1.14	5.00	194.91	225.00	1.14

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1587E+02 EXCESS= .0000E+00 OUTFLOW= .1588E+02 BASIN STORAGE= .1051E-02 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00

RC213B	MANE	3.58	753.14	225.30	2.33	5.00	752.13	225.00	2.33

CONTINUITY SUMMARY (AC-FT) - INFLOW= .6503E+02 EXCESS= .0000E+00 OUTFLOW= .6504E+02 BASIN STORAGE= .9567E-03 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00

RC213B	MANE	3.59	740.18	222.64	2.28	5.00	737.64	225.00	2.28

CONTINUITY SUMMARY (AC-FT) - INFLOW= .6349E+02 EXCESS= .0000E+00 OUTFLOW= .6350E+02 BASIN STORAGE= .1138E-02 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00

RC213B	MANE	3.60	738.48	223.24	2.25	5.00	734.25	225.00	2.25

CONTINUITY SUMMARY (AC-FT) - INFLOW= .6272E+02 EXCESS= .0000E+00 OUTFLOW= .6273E+02 BASIN STORAGE= .1001E-02 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00

RC213B	MANE	3.65	693.68	222.71	2.13	5.00	691.24	225.00	2.14

CONTINUITY SUMMARY (AC-FT) - INFLOW= .5954E+02 EXCESS= .0000E+00 OUTFLOW= .5955E+02 BASIN STORAGE= .1109E-02 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00

RC213B	MANE	3.67	689.46	223.74	2.08	5.00	685.19	225.00	2.08

CONTINUITY SUMMARY (AC-FT) - INFLOW= .5802E+02 EXCESS= .0000E+00 OUTFLOW= .5803E+02 BASIN STORAGE= .1322E-02 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00

RC213B	MANE	3.68	676.70	224.62	2.05	5.00	675.26	225.00	2.05

CONTINUITY SUMMARY (AC-FT) - INFLOW= .5724E+02 EXCESS= .0000E+00 OUTFLOW= .5725E+02 BASIN STORAGE= .1081E-02 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00

RC213B	MANE	3.97	496.71	226.32	1.50	5.00	493.71	225.00	1.50

CONTINUITY SUMMARY (AC-FT) - INFLOW= .4170E+02 EXCESS= .0000E+00 OUTFLOW= .4171E+02 BASIN STORAGE= .1051E-02 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00

RC213B	MANE	4.24	386.42	224.95	1.14	5.00	386.33	225.00	1.14

CONTINUITY SUMMARY (AC-FT) - INFLOW= .3178E+02 EXCESS= .0000E+00 OUTFLOW= .3179E+02 BASIN STORAGE= .1324E-02 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00

RC213B	MANE	3.27	1089.77	225.52	2.31	5.00	1084.61	225.00	2.31

CONTINUITY SUMMARY (AC-FT) - INFLOW= .9557E+02 EXCESS= .0000E+00 OUTFLOW= .9558E+02 BASIN STORAGE= .1138E-02 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00

RC213B	MANE	3.29	1074.62	226.68	2.26	5.00	1066.75	225.00	2.26

CONTINUITY SUMMARY (AC-FT) - INFLOW= .9333E+02 EXCESS= .0000E+00 OUTFLOW= .9334E+02 BASIN STORAGE= .1260E-02 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00

RC213B	MANE	3.29	1063.56	227.06	2.23	5.00	1054.21	225.00	2.23

CONTINUITY SUMMARY (AC-FT) - INFLOW= .9216E+02 EXCESS= .0000E+00 OUTFLOW= .9217E+02 BASIN STORAGE= .1144E-02 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00

RC213B	MANE	3.34	1008.02	226.94	2.12	5.00	1000.18	225.00	2.11

CONTINUITY SUMMARY (AC-FT) - INFLOW= .8752E+02 EXCESS= .0000E+00 OUTFLOW= .8753E+02 BASIN STORAGE= .1152E-02 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00

RC213B	MANE	3.35	988.22	227.72	2.06	5.00	979.23	225.00	2.06

CONTINUITY SUMMARY (AC-FT) - INFLOW= .8528E+02 EXCESS= .0000E+00 OUTFLOW= .8529E+02 BASIN STORAGE= .9758E-03 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00

RC213B	MANE	3.36	970.00	228.52	2.03	5.00	961.45	225.00	2.03

CONTINUITY SUMMARY (AC-FT) - INFLOW= .8410E+02 EXCESS= .0000E+00 OUTFLOW= .8412E+02 BASIN STORAGE= .1221E-02 PERCENT ERROR= .0

FOR PLAN = 1 RATIO= .00

RC213B	MANE	3.63	717.51	228.59	1.48	5.00	708.28	225.00	1.48

CONTINUITY SUMMARY (AC-FT) - INFLOW= .6126E+02 EXCESS= .0000E+00 OUTFLOW= .6127E+02 BASIN STORAGE= .1118E-02 PERCENT ERROR= .0

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          FOR PLAN = 1  RATIO=  .00
            RC213B  MANE          3.86    558.27    227.72      1.13      5.00    544.04    225.00        1.13

CONTINUITY SUMMARY (AC-FT) - INFLOW= .4672E+02 EXCESS= .0000E+00 OUTFLOW= .4673E+02 BASIN STORAGE= .1309E-02 PERCENT ERROR=    .0

          FOR PLAN = 1  RATIO=  .00
            RC213B  MANE          1.81   1421.15    226.80      2.29      5.00   1398.85    225.00        2.29

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1260E+03 EXCESS= .0000E+00 OUTFLOW= .1260E+03 BASIN STORAGE= .6918E-03 PERCENT ERROR=    .0

          FOR PLAN = 1  RATIO=  .00
            RC213B  MANE          1.82   1382.88    227.82      2.24      5.00   1375.00    225.00        2.24

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1230E+03 EXCESS= .0000E+00 OUTFLOW= .1230E+03 BASIN STORAGE= .6535E-03 PERCENT ERROR=    .0

          FOR PLAN = 1  RATIO=  .00
            RC213B  MANE          1.83   1376.51    226.66      2.21      5.00   1357.26    225.00        2.21

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1215E+03 EXCESS= .0000E+00 OUTFLOW= .1215E+03 BASIN STORAGE= .6996E-03 PERCENT ERROR=    .0

          FOR PLAN = 1  RATIO=  .00
            RC213B  MANE          1.85   1301.06    227.74      2.10      5.00   1289.02    225.00        2.10

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1154E+03 EXCESS= .0000E+00 OUTFLOW= .1154E+03 BASIN STORAGE= .6618E-03 PERCENT ERROR=    .0

          FOR PLAN = 1  RATIO=  .00
            RC213B  MANE          1.86   1279.85    227.14      2.04      5.00   1256.97    225.00        2.04

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1124E+03 EXCESS= .0000E+00 OUTFLOW= .1124E+03 BASIN STORAGE= .6352E-03 PERCENT ERROR=    .0

          FOR PLAN = 1  RATIO=  .00
            RC213B  MANE          1.87   1251.52    228.10      2.02      5.00   1238.58    225.00        2.02

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1108E+03 EXCESS= .0000E+00 OUTFLOW= .1108E+03 BASIN STORAGE= .5988E-03 PERCENT ERROR=    .0

          FOR PLAN = 1  RATIO=  .00
            RC213B  MANE          2.02    929.47    227.88      1.47      5.00    908.81    230.00        1.47

CONTINUITY SUMMARY (AC-FT) - INFLOW= .8076E+02 EXCESS= .0000E+00 OUTFLOW= .8076E+02 BASIN STORAGE= .5836E-03 PERCENT ERROR=    .0

          FOR PLAN = 1  RATIO=  .00
            RC213B  MANE          2.15    716.48    228.17      1.12      5.00    704.50    230.00        1.12

CONTINUITY SUMMARY (AC-FT) - INFLOW= .6158E+02 EXCESS= .0000E+00 OUTFLOW= .6158E+02 BASIN STORAGE= .6663E-03 PERCENT ERROR=    .0

          FOR PLAN = 1  RATIO=  .00
            RC213B  MANE           .88  24708.90    325.62      1.70      5.00  24685.60    325.00        1.70

CONTINUITY SUMMARY (AC-FT) - INFLOW= .4571E+04 EXCESS= .0000E+00 OUTFLOW= .4571E+04 BASIN STORAGE= .6444E-02 PERCENT ERROR=    .0

          FOR PLAN = 1  RATIO=  .00
            RC213B  MANE           .89  23885.10    325.58      1.64      5.00  23860.85    325.00        1.64

CONTINUITY SUMMARY (AC-FT) - INFLOW= .4417E+04 EXCESS= .0000E+00 OUTFLOW= .4417E+04 BASIN STORAGE= .6254E-02 PERCENT ERROR=    .0

          FOR PLAN = 1  RATIO=  .00
            RC213B  MANE           .90  23420.90    326.34      1.61      5.00  23396.90    325.00        1.61

CONTINUITY SUMMARY (AC-FT) - INFLOW= .4338E+04 EXCESS= .0000E+00 OUTFLOW= .4338E+04 BASIN STORAGE= .5613E-02 PERCENT ERROR=    .0

          FOR PLAN = 1  RATIO=  .00
            RC213B  MANE           .93  21789.49    325.72      1.50      5.00  21758.04    325.00        1.50

CONTINUITY SUMMARY (AC-FT) - INFLOW= .4032E+04 EXCESS= .0000E+00 OUTFLOW= .4032E+04 BASIN STORAGE= .5613E-02 PERCENT ERROR=    .0

          FOR PLAN = 1  RATIO=  .00
            RC213B  MANE           .94  20994.76    325.94      1.44      5.00  20956.08    325.00        1.44

CONTINUITY SUMMARY (AC-FT) - INFLOW= .3882E+04 EXCESS= .0000E+00 OUTFLOW= .3882E+04 BASIN STORAGE= .5588E-02 PERCENT ERROR=    .0

          FOR PLAN = 1  RATIO=  .00
            RC213B  MANE           .95  20579.12    326.61      1.42      5.00  20543.79    325.00        1.42

CONTINUITY SUMMARY (AC-FT) - INFLOW= .3807E+04 EXCESS= .0000E+00 OUTFLOW= .3807E+04 BASIN STORAGE= .6507E-02 PERCENT ERROR=    .0

          FOR PLAN = 1  RATIO=  .00
            RC213B  MANE          1.14  12889.52    330.83       .89      5.00  12882.68    330.00         .89

CONTINUITY SUMMARY (AC-FT) - INFLOW= .2386E+04 EXCESS= .0000E+00 OUTFLOW= .2386E+04 BASIN STORAGE= .5651E-02 PERCENT ERROR=    .0

          FOR PLAN = 1  RATIO=  .00
            RC213B  MANE          1.36   8374.14    332.04       .58      5.00   8369.76    335.00         .58

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1567E+04 EXCESS= .0000E+00 OUTFLOW= .1567E+04 BASIN STORAGE= .5896E-02 PERCENT ERROR=    .0


*** NORMAL END OF HEC-1 ***
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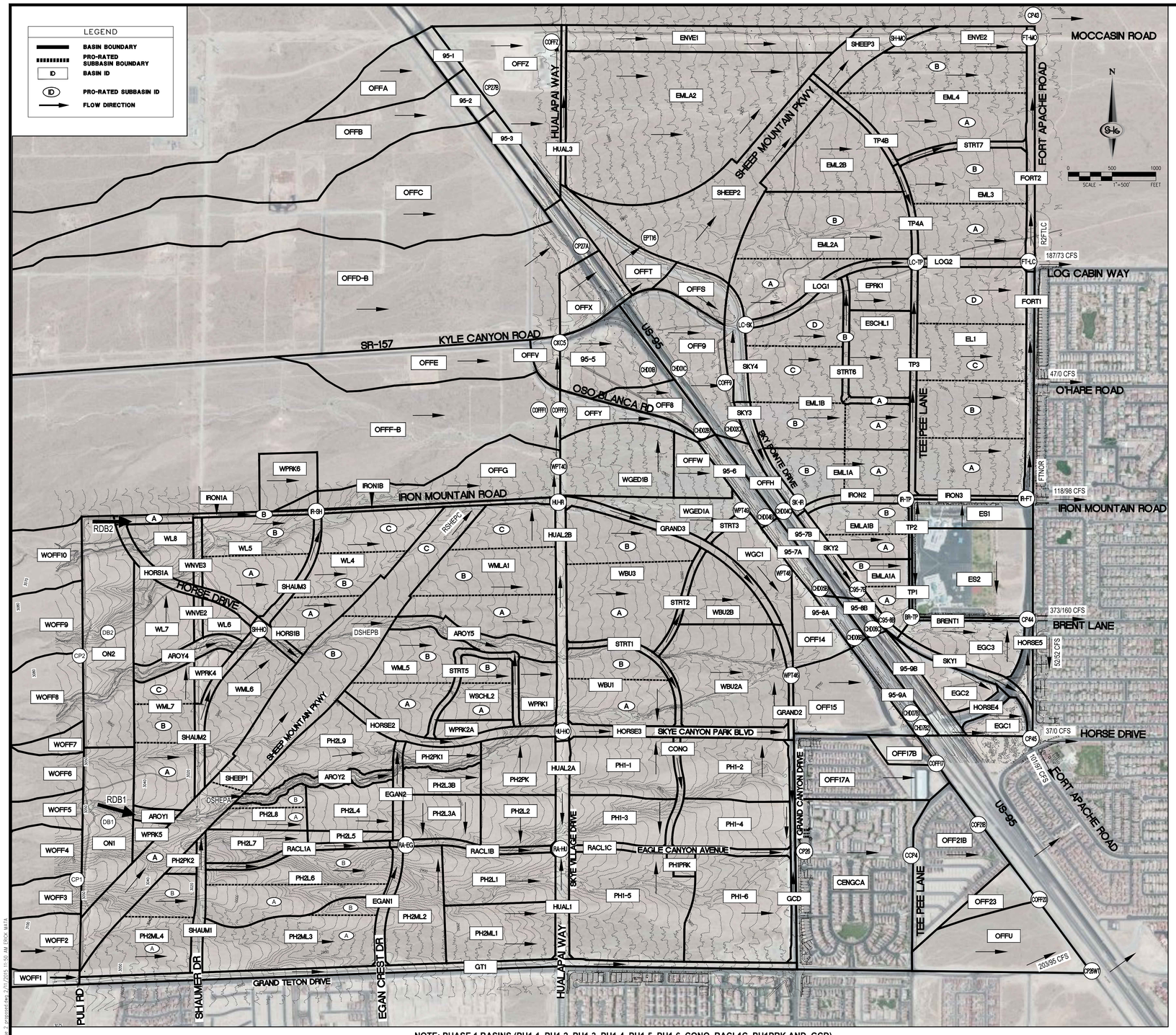
APPENDIX E

Revised Drainage Exhibits



NOTE: PHASE 1 BASINS (PH1-1, PH1-2, PH1-3, PH1-4, PH1-5, PH1-6, CONQ, RACL1C, PH1PRK AND GCD) HAVE BEEN REFERENCED FROM THE APPROVED SKYE CANYON PHASE 1 INFRASTRUCTURE STUDY

Storm Flow Summary
Skye Canyon East Basins
Proposed Conditions

Basin ID	Area (ac)	Q_{100} (cfs)	Q_{10} (cfs)
EL1	74.3	110	35
EML1A	18.7	47	22
EML1B	47.9	120	57
EML2A	42.6	106	50
EML2B	26.4	66	31
EML3	36.8	90	42
EML4	46.0	112	52
EMLA1A	8.7	27	14
EMLA1B	14.1	43	22
EMLA2	87.6	184	86
EGC1	4.8	17	9
EGC2	7.8	24	13
EGC3	13.8	44	23
ESCHL1	15.9	29	10
EPRK1	7.8	6	1
ENVE1	21.8	24	6
ENVE2	9.2	11	3
SHEEP2	40.1	43	10
SHEEP3	8.8	10	2
HORSE4	2.2	9	5
HORSE5	3.1	11	6
HUAL3	2.4	6	4
IRON2	2.6	10	5
IRON3	1.4	5	3
STRT6	3.5	10	6
STRT7	2.5	8	5
SKY1	4.8	16	9
SKY2	4.7	16	9
SKY3	4.3	12	7
SKY4	6.1	16	9
TP1	0.6	2	1
TP2	0.6	2	1
TP3	4.4	11	6
TP4A	1.8	5	3
TP4B	2.3	7	4
BRENT1	1.2	4	2
LOG1	4.7	15	8
LOG2	2.7	9	5
FORT1	5.8	14	8
FORT2	5.7	14	8

Storm Flow Summary
Skye Canyon East Concentration Points
Proposed Condition

Concentration Point	Area (mi^2)	Q_{100} (cfs)	Q_{10} (cfs)
BR-TP = C95-7B + C95-6B + SKY2 + EML1A + TP1	0.32	289	143
CP44 = BR-TP + EC2 + BRENT1 + EGC3 + HORSE5	0.40	425	212
CP45 = SOUTH + SKY1 + HORSE4 + EGC1 + EGC2 + 95-9B	0.44	138	97
SK-R = RETOAC + SKY3 + OFFH	0.11	108	50
IR-TP = SK-IR + EML1A + IRON2 + EMLA1B + TP2	0.17	208	99
IR-FT = R-TP + ES1 + IRON3	0.09	242	115
LC-SK = CDP78 + OFF9 + SKY4	0.15	175	76
LC-TP = LC-SK + EML1B + ESCHL1 + EPRK1 + STRT6 + EML2A + TP3 +TP4A + LOG1	0.35	475	215
FT-LC = LC-TP + EL1 + LOG2 + FORT1 + FT-ATC	0.61	697	276
FT-MO = RDFTLC + EML2B + TP4B + EML3 + STRT7 + EML4 + ENVE2 + FORT2	0.81	760	345
EPT16 = CP27A + CKKC7 + OFFX + OFFT	6.12	1880	799
SH-MO = COFFZ + EPT16 + SHEEP2 + SHEEP3 + EMLA2 + ENVE1 + HUAL3	6.73	2096	867
CP43 = FT-MO + SH-MO	7.55	2612	1212

Prorated Flow Computations (East)

Subbasin	Q_{100} (cfs)	Area (acres)	100-yr Unit Flow (cfs/ac)
EML2A	106	42.6	2.5
EML1A	47	18.7	2.5
EML1B	120	47.9	2.5
STRT6	10	3.5	2.9
EMLA1A	27	8.7	3.1
EMLA1B	43	14.1	3.0
EL1	110	74.3	1.5
EML3	90	36.8	2.4
EML4	112	46.0	2.4
FORT1	14	5.8	2.4
FORT2	14	5.7	2.5
Prorated Subbasin	**Q_{100} (cfs)**	**Area (acres)**	**100-yr Unit Flow (cfs/ac)**
EML2A-A	34	13.8	2.5
EML2A-B	36	14.4	2.5
EML2A-C	36	14.4	2.5
TOTAL	***106***	***42.6***	***2.5***
EML1A-A	22	8.8	2.5
EML1A-B	25	9.9	2.5
TOTAL	***47***	***18.7***	***2.5***
EML1B-A	22	8.8	2.5
EML1B-B	31	12.2	2.5
EML1B-C	40	15.9	2.5
EML1B-D	28	11.0	2.5
TOTAL	***120***	***47.9***	***2.5***
STRT6-A	3	1.2	2.9
STRT6-B	7	2.3	2.9
TOTAL	***10***	***3.5***	***2.9***
EMLA1A-A	12	4.0	3.1
EMLA1A-B	15	4.7	3.1
TOTAL	***27***	***8.7***	***3.1***
EMLA1B-A	17	5.6	3.0
EMLA1B-B	26	8.5	3.0
TOTAL	***43***	***14.1***	***3.0***
EL1-A	28	18.7	1.5
EL1-B	28	18.7	1.5
EL1-C	27	18.5	1.5
EL1-D	27	18.4	1.5
TOTAL	***110***	***74.3***	***1.5***
EML3-A	44	17.9	2.4
EML3-B	46	18.9	2.4
TOTAL	***90***	***36.8***	***2.4***
EML4-A	62	25.5	2.4
EML4-B	50	20.5	2.4
TOTAL	***112***	***46.0***	***2.4***
FORT1-A	7	2.9	2.4
FORT1-B	7	2.9	2.4
TOTAL	***14***	***5.8***	***2.4***
FORT2-A	7	2.8	2.5
FORT2-B	7	2.9	2.5
TOTAL	***14***	***5.7***	***2.5***

Detention Basin Flow Rate Summary
(Proposed Condition)

Basin ID	Area (ac)	Q_{100} (cfs)
WOFF1	274.6	387
WOFF2	26.8	54
WOFF3	16.6	38
WOFF4	37.2	84
WOFF5	164.4	236
WOFF6	25.5	59
WOFF7	4.3	10
WOFF8	137.0	230
WOFF9	74.5	144
WOFF10	417.5	467
ON1	16.7	47
ON2	15.4	49

Storm Flow Summary
Skye Canyon Offsite Basins
Proposed Conditions

Basin ID	Area (ac)	Q_{100} (cfs)	Q_{10} (cfs)
CENGCA	51.2	152	73
ES1	11.1	29	14
ES2	31.4	84	43
OFF10	429.5	591	248
OFF14	8.2	19	7
OFF15	22.3	47	19
OFF17A	19.5	51	24
OFF17B	5.1	15	7
OFF21B	26.5	75	38
OFF23	5.8	17	8
OFFA	13.0	17	4
OFFB	85.6	73	18
OFFC	85.3	80	20
OFFDA	411.5	343	97
OFFDB	316.6	235	59
OFFE	24.5	26	6
OFFFA	636.0	843	322
OFFFB	384.0	414	152
OFFG	25.5	47	18
OFFS	7.0	8	2
OFFT	11.0	12	3
OFFU	25.4	246	110
OFFV	3.6	4	1
OFFW	7.8	9	2
OFFY	8.0	9	2
OFFZ	33.5	35	8

Basins OFFS, OFFT, OFFU, OFFV, OFFW, OFFY and OFFZ have NOT been referenced from the GC Wallace Master Drainage Study. All other offsite basins have been referenced from GC Wallace Master Drainage Study.

Areas for Basins OFFFB and OFFG have been adjusted to account for addition from Mountain Park (Basin WPRK6).

Basin CENGCA is a combination of multiple basins referenced from the Centennial Point and Grand Canyon Apartments HEC-1 models.

Storm Flow Summary
Skye Canyon Offsite Concentration Points
Proposed Conditions

Concentration Point	Area (mi^2)	Q_{100} (cfs)	Q_{10} (cfs)
WPT40 = HU-R + OFFG	2.73	1159	591
COFFF1 = COFF3 + COFFF4 + OFFFB	2.26	1310	549
COFFF2 = WPT40 + COFFF1 + WPRK6	5.00	1620	731
CKC5 = COFFF2 + COFFE + OFFV	4.95	1543	710
COF4 = CENGCA + CP26	0.54	693	438
COFF9 = DCH01C + SCHDD1 + OFF9	0.04	150	65
CP27A = CP12A + CP30	1.14	463	131
COFFZ = CP27B + OFFZ	0.36	206	52

Storm Flow Summary
Skye Canyon US-95 Basins
Proposed Conditions

Basin ID	Area (ac)	Q_{100} (cfs)	Q_{10} (cfs)
95-1	2.7	7	3
95-2	2.8	7	3
95-3	6.1	15	6
95-5	19.4	50	21
95-6	6.7	17	7
95-7A	4.4	13	6
95-7B	5.2	15	7
95-8A	3.3	10	5
95-8B	2	6	3
95-9A	7.1	19	9
95-9B	8.5	22	10
OFF8	8.5	19	8
OFF9	27.2	54	23
OFFH	4.8	12	5
OFFX	11.3	13	3

Basins 95-5 and OFFX have NOT been referenced from the GC Wallace Master Drainage Study. All other basins have been referenced from the GC Wallace Master Drainage Study.

Storm Flow Summary
Skye Canyon US-95 Concentration Points
Proposed Conditions

Concentration Point	Area (mi^2)	Q_{100} (cfs)	Q_{10} (cfs)
CHD01B = 95-5	0.03	50	21
CHD02B = CHD01B + OFF9 + OFFY + WGED1B	0.09	92	41
CHD04B = CHD02B + WPT49 + 95-6 + OFFW	0.04	61	28
CHD05B = CHD04B + WPT49 + 95-7A	0.13	244	126
CHD06B = WPT46 + 95-8A + OFF14	0.18	322	158
CHD07B = CHD05B + 95-9A	0.01	19	9
CHD78D = CHD06B + CHD07B + OFF15	0.17	307	152
COFF17 = OFF15 + OFF17A	0.04	66	31
COF21B = COF4 + OFF21B	0.58	966	476
COFF23 = DCCF17 + DCF21B + DCFF23 + OFF23	0.01	19	9
CP26WT = DCCF23 + CP7 + OFFU + 30365 cfs (Interim Grand Teton Storm Drain)	0.06	286	133
CHD01C = CHD01B	0.03	45	19
CHD02C = CHD01C + CHD02B	0.09	91	41
CHD04C = CHD02C + CHD04B	0.04	93	42
CHD05C = CHD02C + CHD04B	0.19	216	106
CRET5 = CKCK5	0.04	66	31
CRET6 = CRET5 + CKCK9	0.58	966	476
CRET10 = CCCK5 + CCCK10	0.01	730	272
DIV11A = CHDT2D + DCU10A + DCUL11 + DCMP06	0.59	1034	453
CSC-7B = DCHC6C + 95-7B	0.01	22	11
CSC-8B = DCHC6C + 95-8B	0.19	222	109
CP27B = OFFC + 95-3 + OFFB + 95-2 + OFFA + 95-1	0.31	173	44

Storm Flow Summary
Skye Canyon West Concentration Points
Proposed Condition

Basin/Concentration Point ID	Area (sqmi)	Q_{100} (cfs)	Q_{10} (cfs)
CP1 WOFF1 + WOFF2 + WOFF3	0.50	417	167
DB1 CP1 + WOFF4 + WOFF5 + WOFF6 + ON1	0.88	731	296
RDB1 (DETENTION OUTFLOW)	0.88	70	35
CP2 WOFF7 + WOFF8	0.22	235	93
DB2 CP2 + WOFF9 + WOFF10 + ON2	1.01	696	284
RDB2 (DETENTION OUTFLOW)	1.01	75	46
RA-EG PH2ML3 + PH2L6 + EGAN1 + PH2L5 + PH2L7 + RACL1A	0.12	209	100
RA-HU RA-EG + PH2ML1 + PH2ML2 + PH2L1 + PH2L2 + PH2L3A + HUAL1 + RACL1B + HUAL2A	0.26	469	226
CP26 RA-HU + PH1-3 + CONQ + PH1-5 + PH1PRK + RACL1C + PH1-6 + PH1-4 + GCD	0.43	777	381
HU-HO RDB1 + AROY1 + WPRK5 + DSHEPA + AROY2 + PH2L4 + PH2L8 + PH2L9 + EGAN2 + WPRK2A + PH2PK1 + PH2L3B + PH2PK + HORSE2 + PH2PK2 + PH2ML4 + SHAUM1	1.16	354	162
SH-HO + AROY4 + WML7 + WPRK4 + SHAUM2 + WML7 + WMVE3 + WL6 + HORSE1A	0.10	184	91
IR-SH = SH-HO + ROB2 + WL8 + WMVE3 + WL5 + IRON1A + SHAUM3	1.18	311	151
HU-IR = HU-HO + WML5 + WSCHL2 + WPRK1 + STRT5 + DSHEPB + AROY5 + WML4A1 + HUAL2B + IR-SH + WML8 + HORSE1B + WL4 + DSHEPC + IRON1B	2.59	1131	575
WPT46 WBU1 + STRT1 + WBU2A + PH1-1 + PH1-2 + GRAND3 + HORSE3	0.16	293	146
WPT49 = WBU2A + STRT2 + GRAND3 + WBU2B + WGC1 + WGED1A	0.12	231	120
WPT49 = WGED1A + STRT3	0.02	37	19

Storm Flow Summary
Skye Canyon West Basins
Proposed Condition

Basin ID	Area (ac)	Q_{100} (cfs)	Q_{10} (cfs)
Modified Phase 2 Basins			
AROY2	5.2	13	6
EGAN1	3.7	12	7
EGAN2	2.8	10	6
*GRAND2	2.1	6	4
HORSE2	7.1	23	13
HUAL1	4.5	14	8
HUAL2A	4.0	13	7
PH2L1	17.4	45	21
PH2L2	11.5	31	14
PH2L3A	10.5	29	13
PH2L3B	6.1	17	8
PH2L4	11.9	33	15
PH2L5	2.7	8	4
PH2L6	30.0	77	34
PH2L7	8.3	23	10
PH2L8	8.1	22	10
PH2L9	18.6	52	23
PH2ML1	18.8	60	31
PH2ML2	18.1	59	31
PH2ML3	28.7	81	40
PH2ML4	22.7	66	32
PH2PK	13.1	29	10
PH2PK1	5.5	13	5
PH2PK2	3.2	4	2
RACL1A	3.8	13	7
RACL1B	3.3	12	7
SHAUM1	4.2	13	7
*WPRK1	7.3	18	7
*WPRK2A	3.8	9	3
Referenced Phase 1 Basins			
CONQ	2.2	6	3
GCD	3.4	10	5
PH1-1	17.8	47	21
PH1-2	19.3	45	18
PH1-3	14.8	39	17
PH1-4	16.1	49	24
PH1-5	37.3	107	52
PH1-6	32.3	93	46
PH1PRK	1.8	4	1
RACL1C	4.6	13	6
Unmodified West Basins			
AROY1	1.8	5	2
AROY4	5.1	13	5
AROY5	7.8	20	8
GRAND3	6.4	20	11
GT1	15.5	40	22
HORSE1A	5.5	19	10
HORSE1B	2.0	8	5
HORSE3	7.5	25	14
HUAL2B	7.9	21	11
IRON1A	3.5	12	7
IRON1B	2.8	9	5
SHAUM2	5.1	17	9
SHAUM3	3.1	12	6
SHEEP1	64.7	148	61
STRT1	3.1	10	6
STRT2	2.2	8	4
STRT3	1.0	4	2
STRT5	4.2	15	8
WBU1	22.9	70	36
WBU2A	32.3	95	49
WBU2B	13.7	44	23
WBU3	42.3	123	64
WGC1	12.0	41	21
WGED1A	10.7	33	17
WGED1B	23.5	62	29
WL4	31.5	82	37
WL5	25.7	69	30
WL6	3.9	11	5
WL7	13.3	36	16
WL8	8.5	25	11
WML5	23.7	76	40
WML6	18.2	61	32
WML7	24.3	78	40
WMLA1	44.6	133	69
WNVE2	1.1	3	1
WNVE3	1.8	4	2
WPRK4	3.1	7	3
WPRK5	2.4	6	2
WPRK6	10.0	21	7
WSCHL2	10.9	33	16

* Modified basin outside the Phase 2 Area

Prorated Flow Computations (West)

Subbasin	Q_{100} (cfs)	Area (acres)	100-yr Unit Flow (cfs/ac)
SHEEP1	148	64.7	2.3
WL5	69	25.7	2.7
WL4	82	31.5	2.6
WML7	78	24.3	3.2
WMLA1	133	44.6	3.0
WBU3	123	42.3	2.9
WML5	76	23.7	3.2
WSCHL2	33	10.9	3.0
Prorated Subbasin	**Q_{100} (cfs)**	**Area (acres)**	**100-yr Unit Flow (cfs/ac)**
SHEEP1-A	45	19.8	2.3
SHEEP1-B	70	30.4	2.3
SHEEP1-C	33	14.4	2.3
TOTAL	***148***	***64.7***	***2.3***
WL5-A	34	12.8	2.7
WL5-B	35	12.9	2.7
TOTAL	***69***	***25.7***	***2.7***
WL4-A	22	8.5	2.6
WL4-B	26	10.1	2.6
WL4-C	34	12.9	2.6
TOTAL	***82***	***31.5***	***2.6***
WML7-A	38	11.8	3.2
WML7-B	22	7.0	3.2
WML7-C	18	5.5	3.2
TOTAL	***78***	***24.3***	***3.2***
WMLA1-A	47	15.6	3.0
WMLA1-B	52	17.6	3.0
WMLA1-C	34	11.4	3.0
TOTAL	***133***	***44.6***	***3.0***
WBU3-A	78	26.8	2.9
WBU3-B	45	15.5	2.9
TOTAL	***123***	***42.3***	***2.9***
WML5-A	33	10.3	3.2
WML5-B	43	13.4	3.2
TOTAL	***76***	***23.7***	***3.2***
WSCHL2-A	21	7.0	3.0
WSCHL2-B	12	3.9	3.0
TOTAL	***33***	***10.9***	***3.0***

Modified Phase 2 Prorated Flow Summary

Basin	Q_{100} (cfs)	Area (acres)	Unit Flow (cfs/acre)
PH2ML3	81	28.7	2.8
PH2ML4	66	22.7	2.9
PH2L6	77	30.0	2.6
PH2L8	22	8.1	2.7
Subbasin	**Q_{100} (cfs)**	**Area (acres)**	**Unit Flow (cfs/acre)**
PH2ML3-A	73	25.8	2.8
PH2ML3-B	8	2.9	2.8
TOTAL	***81***	***28.7***	***2.8***
PH2ML4-A	47	16.0	2.9
PH2ML4-B	19	6.7	2.9
TOTAL	***66***	***22.7***	***2.9***
PH2L6-A	39	15.0	2.6
PH2L6-B	39	15.0	2.6
TOTAL	***77***	***30.0***	***2.6***
PH2L8-A	16	5.9	2.7
PH2L8-B	6	2.2	2.7
TOTAL	***22***	***8.1***	***2.7***

Storm Flow Summary
Skye Canyon West Diversions
Proposed Conditions

Diversion ID	Q_{100} (cfs)	Q_{10} (cfs)	Diverted From	Diverted To
DSHEPA	45	19	SHEEP1-A	Southern Arroyo
DSHEPB	70	29	SHEEP1-B	Northern Arroyo
RSHEPC	33	14	SHEEP1-C	Iron Mountain Road

Storm Flow Summary
Skye Canyon Offsite Diversions
Proposed Conditions

Diversion ID	Q_{100} (cfs)	Q_{10} (cfs)	Diverted From	Diverted To
DCKC7	1543	710	CKC5	EPT16

Storm Flow Summary
Skye Canyon US-95 Diversions
Proposed Conditions

Diversion ID	Q_{100} (cfs)	Q_{10} (cfs)	Diverted From	Diverted To
DCHD1B	45	19	CHD01B	CHD01C
DCHD2B	91	41	CHD02B	CHD02C
DCHD4B	61	28	CHD04B	CHD04C
DCHD6B	215	106	CHD06B	CHD06C
DCMPU6	108	53	CHD06B	DIV11A
DVCUL8	66	31	COFF17	CRET6
DVCUL9	966	476	COF21B	CRET6
DCUL10	19	8	COFF23	CRET10
DCUL11	285	240	CP26WT	DIV11A
DCHD1C	45	19	CHD01C	COFF9
DCHD2C	59	26	CHD02C	COFF9
DCHD4C	84	38	CHD04C	EPT5
DCHD5C	8	3	CHD05C	C95-7B
DCHD6C	216	106	CHD06C	C95-8B
DIV8A	66	31	CRET8	N/A
DIV9A	255	212	CRET9	N/A
DIV10A	368	256	CRET10	N/A
DIV11A	1034	453	CRET11	N/A

Storm Flow Summary
Skye Canyon East Diversions
Proposed Conditions

Diversion ID	Q_{100} (cfs)	Q_{10} (cfs)	Diverted From	Diverted To
BRENT	373	160	CP44	Brent Lane
SOUTH	52	52	CP44	Racel Street
HORSE	37	0	CP45	Horse Drive
RACEL	101	97	CP45	Racel Street
IREAST	118	98	IR-FT	Iron Mountain Road
FTNOR	124	17	IR-FT	Fort Apache Road
OHARE	47	0	FT-LC	O'Hare Road
RFTLC	650	276	FT-LC	Fort Apache Road
LOGCAB	187	73	RFTLC	Log Cabin Way
R2FTLC	463	203	RFTLC	Fort Apache Road

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NO.	DESCRIPTION	DATE	BY	APP. DATE	APP.

NINETY-FIVE MANAGEMENT, LLC.

SKYE CANYON MASTER DRAINAGE STUDY UPDATE
PHASE 2 PROPOSED CONDITION DRAINAGE MAP

DATE: FEBRUARY 2015
DRAFTER: ETM
DESIGNER: ETM
CHECKED: SMJ
PROJECT NO. OLY1401.004

EXHIBIT F
SHEET 1 OF 1

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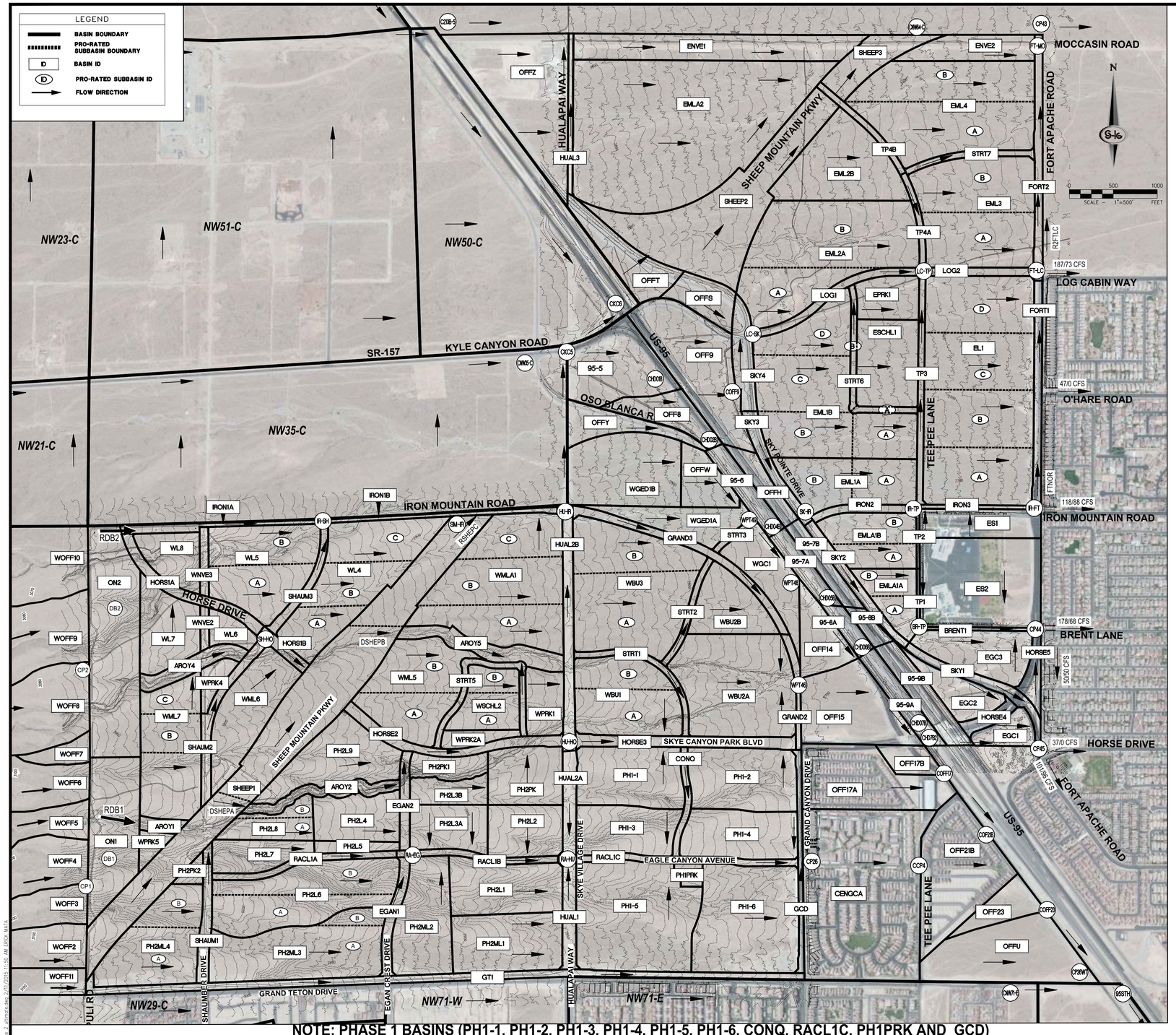

NOTE: PHASE 1 BASINS (PH1-1, PH1-2, PH1-3, PH1-4, PH1-5, PH1-6, CONQ, RACL1C, PH1PRK AND GCD) HAVE BEEN REFERENCED FROM THE APPROVED SKYE CANYON PHASE 1 INFRASTRUCTURE STUDY

Storm Flow Summary
Skye Canyon West Basins
Local Ultimate Condition

Basin ID	Area (ac)	Q_{100} (cfs)	Q_{10} (cfs)
Modified Phase 2 Basins			
AROY2	5.2	13	6
EGAN1	3.7	12	7
EGAN2	2.8	10	6
*GRAND2	2.1	6	4
HORSE2	7.1	23	13
HUAL1	4.5	14	8
HAUL2A	4.0	13	7
PH2L1	17.4	45	21
PH2L2	11.5	31	14
PH2L3A	10.5	29	13
PH2L3B	6.1	17	8
PH2L4	11.9	33	15
PH2L5	2.7	8	4
PH2L6	30.0	77	34
PH2L7	8.3	23	10
PH2L8	8.1	22	10
PH2L9	18.6	52	23
PH2ML1	18.8	60	31
PH2ML2	18.1	59	31
PH2ML3	28.7	81	40
PH2ML4	22.7	66	32
PH2PK	13.1	29	10
PH2PK1	5.5	13	5
PH2PK2	3.2	4	2
RACL1A	3.8	13	7
RACL1B	3.3	12	7
SHAUM1	4.2	13	7
*WPRK1	7.3	18	7
*WPRK2A	3.8	9	3
Referenced Phase 1 Basins			
CONQ	2.2	6	3
GCD	3.4	10	5
PH1-1	17.8	47	21
PH1-2	19.3	45	18
PH1-3	14.8	39	17
PH1-4	16.1	49	24
PH1-5	37.3	107	52
PH1-6	32.3	93	46
PH1PRK	1.8	4	1
RACL1C	4.6	13	6
Unmodified West Basins			
AROY1	1.8	9	2
AROY4	5.1	13	5
AROY5	7.8	20	8
GRAND3	6.4	20	11
GT1	15.5	40	22
HORSE1A	5.5	19	10
HORSE1B	2.0	8	5
HORSE3	7.5	25	14
HUAL2B	7.9	21	11
IRON1A	3.5	12	7
IRON1B	2.8	9	5
SHAUM2	5.1	17	9
SHAUM3	3.1	12	6
SHEEP1	64.7	148	61
STRT1	3.1	10	6
STRT2	2.2	8	4
STRT3	1.0	4	2
STRT5	4.2	15	8
WBU1	22.9	70	36
WBU2A	32.3	95	49
WBU2B	13.7	44	23
WBU3	42.3	123	64
WGC1	12.0	41	21
WGED1A	10.7	33	17
WGED1B	23.5	62	29
WL4	31.5	82	37
WL5	25.7	69	30
WL6	3.9	11	5
WL7	13.3	36	16
WL8	8.5	25	11
WML5	23.7	76	40
WML6	18.2	61	32
WML7	24.3	78	40
WNLA1	44.6	133	69
WNVE2	1.1	3	1
WNVE3	1.8	4	2
WPRK4	3.1	7	3
WPRK5	2.4	6	2
WPRK6	10.0	21	7
WSCHL2	10.9	33	16

*Modified basin outside the Phase 2 Area

Storm Flow Summary
Skye Canyon East Basins
Local Ultimate Condition

Basin ID	Area (ac)	Q_{100} (cfs)	Q_{10} (cfs)
EL1	74.3	110	35
EML1A	18.7	47	22
EML1B	47.9	120	57
EML2A	42.6	106	50
EML2B	26.4	66	31
EML3	36.8	90	42
EML4	46.0	112	52
EMLA1A	8.7	27	14
EMLA1B	14.1	43	22
EMLA2	87.6	184	86
EGC1	4.8	17	9
EGC2	7.8	24	13
EGC3	13.8	44	23
ESCHL1	15.9	29	10
EPRK1	7.8	6	1
ENVE1	21.8	24	6
ENVE2	9.2	11	3
SHEEP2	40.1	76	29
SHEEP3	8.8	17	7
HORSE4	2.2	9	5
HORSE5	3.1	11	6
HUAL3	2.4	6	4
IRON2	2.6	10	5
IRON3	1.4	5	3
STRT6	3.5	10	6
STRT7	2.5	8	5
SKY1	4.8	16	9
SKY2	4.7	16	9
SKY3	4.3	12	7
SKY4	6.1	16	9
TP1	0.6	2	1
TP2	0.6	2	1
TP3	4.4	11	6
TP4A	1.8	5	3
TP4B	2.3	7	4
BRENT1	1.2	4	2
LOG1	4.7	15	8
LOG2	2.7	9	5
FORT1	5.8	14	8
FORT2	5.7	14	8

Storm Flow Summary
Skye Canyon East Concentration Points
Local Ultimate Condition

Concentration Point	Area (ac)	Q_{100} (cfs)	Q_{10} (cfs)
CP6-IR = 95-7A + 95-7B + 95-8A + 95-8B	0.02	47	24
IR-TP = CP6-IR + SKY2 + EMLA1A + TP1	0.05	92	46
CP44 = BR-TP + EGC1 + BRENT1 + EGC3 + HORSE5	0.12	228	118
CP45 = SOUTH + SKY1 + HORSE4 + EGC1 + EGC2 + 95-9B	0.17	138	96
SK-IR = 95-6 + SKY3 + OFFH	0.02	44	22
IR-TP = SK-IR + EMLA1A + IRON2 + EMLA1B + TP2	0.08	144	71
IR-FT = IR-TP + ESI + IRON3	0.09	178	88
LC-SK = OFFH + OFF9 + SKY4	0.12	186	88
LC-TP = LC-SK + EML1B + ESCHL1 + EPRK1 + STRT6 + EML2A + TP3 +TP4A + LOG1	0.32	480	226
FT-LC = LC-TP + EL1 + LOG2 + FORT1 + FTNOR	0.54	642	271
FT-MC = R2FTLC + EMLA1B + TP4B + EML3 + STRT7 + EML4 + ENVE2 + FORT2	0.74	705	340
SH-HO* = CK2E + C213B-5 + OFFT + SHEEP2 + SHEEP3 + EMLA2 + ENVE1 + OFFE + HUAL3	54.53	10825	N/A
CP45* = FT-MO + SH-MO	55.22	10844	N/A

* - Flow Rates determined by SDNS Storm Local Ultimate Condition HEC-1 Model

Storm Flow Summary
Skye Canyon US-95 Basins
Local Ultimate Condition

Basin ID	Area (ac)	Q_{100} (cfs)	Q_{10} (cfs)
95-5	19.4	57	27
95-6	6.7	19	9
95-7A	4.4	14	7
95-7B	5.2	16	8
95-8A	3.3	11	6
95-8B	2.0	7	3
95-9A	7.1	21	10
95-9B	8.5	23	12
OFF8	8.5	22	10
OFF9	27.2	62	29
OFFH	4.8	14	7

Basin 95-5 has NOT been referenced from the GC Wallace Master Drainage Study. All other basins have been referenced from the GC Wallace Master Drainage Study.

Storm Flow Summary
Skye Canyon Offsite Basins
Local Ultimate Condition

Basin ID	Area (ac)	Q_{100} (cfs)	Q_{10} (cfs)
CENGCA	51.2	152	73
ES1	11.1	29	14
ES2	31.4	84	43
OFF14	8.2	26	13
OFF15	22.3	62	32
OFF16*	230.3	372	145
OFF17A	19.5	51	24
OFF17B	5.1	15	7
OFF18*	134.3	213	82
OFF20*	214.3	297	117
OFF21*	306.4	473	195
OFF21B	26.5	75	38
OFF23	5.8	17	8
OFFS	7.0	18	8
OFFT	11.0	26	12
OFFU	25.4	74	38
OFFW	7.8	24	12
OFFY	8.0	22	11
OFFZ	33.5	69	28
NW21-C*	99.3	242	114
NW35-C*	220.6	423	191
NW50-C*	107.3	228	93
NW51-C*	316.8	485	198

* - Basins have been revised from 2008 CCRFCD MPU, and are part of the Regional Ultimate Condition hydrologic analysis shown on Exhibit G.

Basins OFFS, OFFT, OFFU, OFFW, OFFY and OFFZ have NOT been referenced from the GC Wallace Master Drainage Study. All other offsite basins have been referenced from GC Wallace Master Drainage Study.

Basin CENGCA is a combination of multiple basins referenced from the Centennial Point and Grand Canyon Apartments HEC-1 models.

Storm Flow Summary
Skye Canyon Offsite Concentration Points
Local Ultimate Condition

Concentration Point	Area (mi^2)	Q_{100} (cfs)	Q_{10} (cfs)
CNW35-C (Future Kyle Canyon Rd MPU Facility)	2.69	2709	1206
CKC5 = HU-IR + CKM05-C	4.82	3249	1539
CKC6 = CKC5 + NW50-C	4.99	3400	1614
CCP4 = CENGCA + CP26	0.54	893	438
COFF9 = DCHD1B + DCHD2B + OFF9	0.10	153	72
C213B-5* (Future Mocassin Rd MPU Facility)	50.68	10298	N/A

* - Flow Rates determined by Regional Ultimate Condition hydrologic analysis shown on Exhibit G.

Prorated Flow Computations (East)

Subbasin	Q_{100} (cfs)	Area (acres)	100-yr Unit Flow (cfs/ac)
EML2A	106	42.6	2.5
EML1A	47	18.7	2.5
EML1B	120	47.9	2.5
STRT6	10	3.5	2.9
EMLA1A	27	8.7	3.1
EMLA1B	43	14.1	3.0
EL1	110	74.3	1.5
EML3	90	36.8	2.4
EML4	112	46.0	2.4
FORT1	14	5.8	2.4
FORT2	14	5.7	2.5
Prorated Subbasin	**Q_{100} (cfs)**	**Area (acres)**	**100-yr Unit Flow (cfs/ac)**
EML2A-A	34	13.8	2.5
EML2A-B	36	14.4	2.5
EML2A-C	36	14.4	2.5
TOTAL	***106***	***42.6***	***2.5***
EML1A-A	22	8.8	2.5
EML1A-B	25	9.9	2.5
TOTAL	***47***	***18.7***	***2.5***
EML1B-A	22	8.8	2.5
EML1B-B	31	12.2	2.5
EML1B-C	40	15.9	2.5
EML1B-D	28	11.0	2.5
TOTAL	***120***	***47.9***	***2.5***
STRT6-A	3	1.2	2.9
STRT6-B	7	2.3	2.9
TOTAL	***10***	***3.5***	***2.9***
EMLA1A-A	12	4.0	3.1
EMLA1A-B	15	4.7	3.1
TOTAL	***27***	***8.7***	***3.1***
EMLA1B-A	17	5.6	3.0
EMLA1B-B	26	8.5	3.0
TOTAL	***43***	***14.1***	***3.0***
EL1-A	28	18.7	1.5
EL1-B	28	18.7	1.5
EL1-C	27	18.5	1.5
EL1-D	27	18.4	1.5
TOTAL	***110***	***74.3***	***1.5***
EML3-A	44	17.9	2.4
EML3-B	46	18.9	2.4
TOTAL	***90***	***36.8***	***2.4***
EML4-A	62	25.5	2.4
EML4-B	50	20.5	2.4
TOTAL	***112***	***46.0***	***2.4***
FORT1-A	7	2.9	2.4
FORT1-B	7	2.9	2.4
TOTAL	***14***	***5.8***	***2.4***
FORT2-A	7	2.8	2.5
FORT2-B	7	2.9	2.5
TOTAL	***14***	***5.7***	***2.5***

Storm Flow Summary
Skye Canyon US-95 Concentration Points
Local Ultimate Condition

Concentration Point	Area (mi^2)	Q_{100} (cfs)	Q_{10} (cfs)
CHD01B = 95-5	0.03	57	27
CHD02B = CHD01B + OFF9 + OFFY	0.06	50	24
CHD03B = CHD02B + WPRK4 + OFFW	0.13	142	70
CHD05B = CHD03B + WPRK6	0.24	352	179
CHD06B = CHD05B + WPRK5 + OFF14	0.42	671	338
CHD07B = CHD06B + 95-5A	0.44	692	348
CHD07B2 = CHD07B + OFF15	0.47	755	380
COFF17 = OFF17B + OFF17A	0.04	66	31
COF21B = CCP4 + OFF21B	0.58	966	476
COFF23 = OFF23 + OFF23	0.01	19	9
CP26WT = CMWT5-E + GT1 + OFFU	0.54	685	319
95STH = CHD1B2 + COFF17 + COF21B + COFF23 + CP26WT	1.64	2332	1162

Storm Flow Summary
Skye Canyon West Concentration Points
Local Ultimate Condition

Basin/Concentration Point ID	Area (sqmi)	Q_{100} (cfs)	Q_{10} (cfs)
CP1 = WOFF1 + WOFF11 + WOFF2 + WOFF3	0.50	471	194
DB1 = CP1 + WOFF4 + WOFF5 + WOFF6 + ON1	0.88	784	327
RDB1 (DETENTION OUTFLOW)	0.87	71	37
CP2 = WOFF7 + WOFF8	0.17	204	80
DB2 = CP2 + WOFF9 + WOFF10 + ON2	0.56	647	265
RDB2 (DETENTION OUTFLOW)	0.41	56	29
RA-EG = PH2ML3 + PH2L6 + EGAN1 + PH2L5 + PH2L7 + RACL1A	0.12	209	100
RA-HU = RA-EG + PH2ML1 + PH2ML2 + PH2L1 + PH2L2 + PH2L3A + HUAL1 + RACL1B + HUAL2A	0.27	469	226
HU-HO = RDB1 + AROY1 + WPRK5 + DSHEPA + AROY2 + PH2L4 + PH2L8 + PH2L9 + EGAN2 + WPRK2A + PH2PK1 + PH2L3B + PH2PK + HORSE2 + PH2ML4 + SHAUM1	1.16	348	162
SH-HO = AROY4 + WML7 + WPRK4 + SHAUM2 + WL7 + WNVE2 + WL6 + HORSE1A	0.10	184	91
SH-IR = SH-HO + RDB2 + WL8 + WNVE3 + WL5 + IRON1A + SHAUM3	0.72	314	152
SH-IR DSHEPC	<0.01	32	16
HU-IR = HU-HO + WML5 + WSCHL2 + WPRK1 + STRT5 + DSHEPB + AROY5 + WML4A1 + HUAL2B + SH-HO + IR-SH + WML6 + HORS1B + WL4 + SM-IR + IRON1B	2.13	1108	573
CP26 = RA-HU + PH1-3 + CONQ + PH1-5 + PH1PRK + RACL1C + PH1-4 + PH1-6 + GCD	0.43	777	381
WPT46 = WBU1 + STRT1 + WBU2A + PH1-1 + PH1-2 + GRAND2 + HORSE3	0.16	293	146
WPT45 = WBU3 + STRT2 + GRAND3 + WBU2B + WGC1	0.12	231	120
WPT49 = WGED1A + WGED1B + STRT3	0.05	99	48

Detention Basin Flow Rate Summary
(Ultimate Condition)

Basin ID	Area (ac)	Q_{100} (cfs)
WOFF1	260.7	403
WOFF2	22.7	48
WOFF3	16.6	38
WOFF4	37.2	84
WOFF5	164.4	236
WOFF6	25.6	59
WOFF7	4.3	10
WOFF8	106.5	198
WOFF9	74.5	144
WOFF10	157.6	292
WOFF11	18.0	55
ON1	16.7	47
ON2	15.4	49

Modified Phase 2 Prorated Flow Summary

Basin	Q_{100} (cfs)	Area (acres)	Unit Flow (cfs/acre)
PH2ML3	81	28.7	2.8
PH2ML4	66	22.7	2.9
PH2L6	77	30.0	2.6
PH2L8	22	8.1	2.7
Subbasin	**Q_{100} (cfs)**	**Area (acres)**	**Unit Flow (cfs/acre)**
PH2ML3-A	73	25.8	2.8
PH2ML3-B	8	2.9	2.8
TOTAL	***81***	***28.7***	***2.8***
PH2ML4-A	47	16.0	2.9
PH2ML4-B	19	6.7	2.9
TOTAL	***66***	***22.7***	***2.9***
PH2L6-A	39	15.0	2.6
PH2L6-B	39	15.0	2.6
TOTAL	***77***	***30.0***	***2.6***
PH2L8-A	16	5.9	2.7
PH2L8-B	6	2.2	2.7
TOTAL	***22***	***8.1***	***2.7***

Storm Flow Summary
Skye Canyon East Diversions
Local Ultimate Condition

Diversion ID	Q_{100} (cfs)	Q_{10} (cfs)	Diverted From	Diverted To
BRENT	178	68	CP44	Brent Lane
SOUTH	50	50	CP44	CP45
HORSE	37	0	CP45	Horse Drive
RACEL	101	96	CP45	Racel Street
IREAST	118	88	IR-FT	Iron Mountain Road
FTNOR	60	0	IR-FT	Fort Apache Road
OHARE	47	0	FT-LC	O'Hare Road
R2FTLC	595	271	FT-LC	R2FTLC
LOGCAB	187	73	RFTLC	Log Cabin Way
R2FTLC	408	198	RFTLC	Fort Apache Road

Storm Flow Summary
Skye Canyon US-95 Diversions
Local Ultimate Condition

Diversion ID	Q_{100} (cfs)	Q_{10} (cfs)	Diverted From	Diverted To
DCHD1B	51	24	CHD01B	COFF9
DCHD2B	50	24	CHD02B	COFF9

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NO.	DESCRIPTION	DATE	BY	APP. DATE	APP.

NINETY-FIVE MANAGEMENT, LLC.

SKYE CANYON MASTER DRIANGE STUDY UPDATE
PHASE 2 ULTIMATE CONDITION DRAINAGE MAP

DATE: FEBRUARY 2015
DRAFTER: ETM
DESIGNER: ETM
CHECKED: SMJ
PROJECT NO. OLY1401.004

EXHIBIT G
SHEET 1 OF 1

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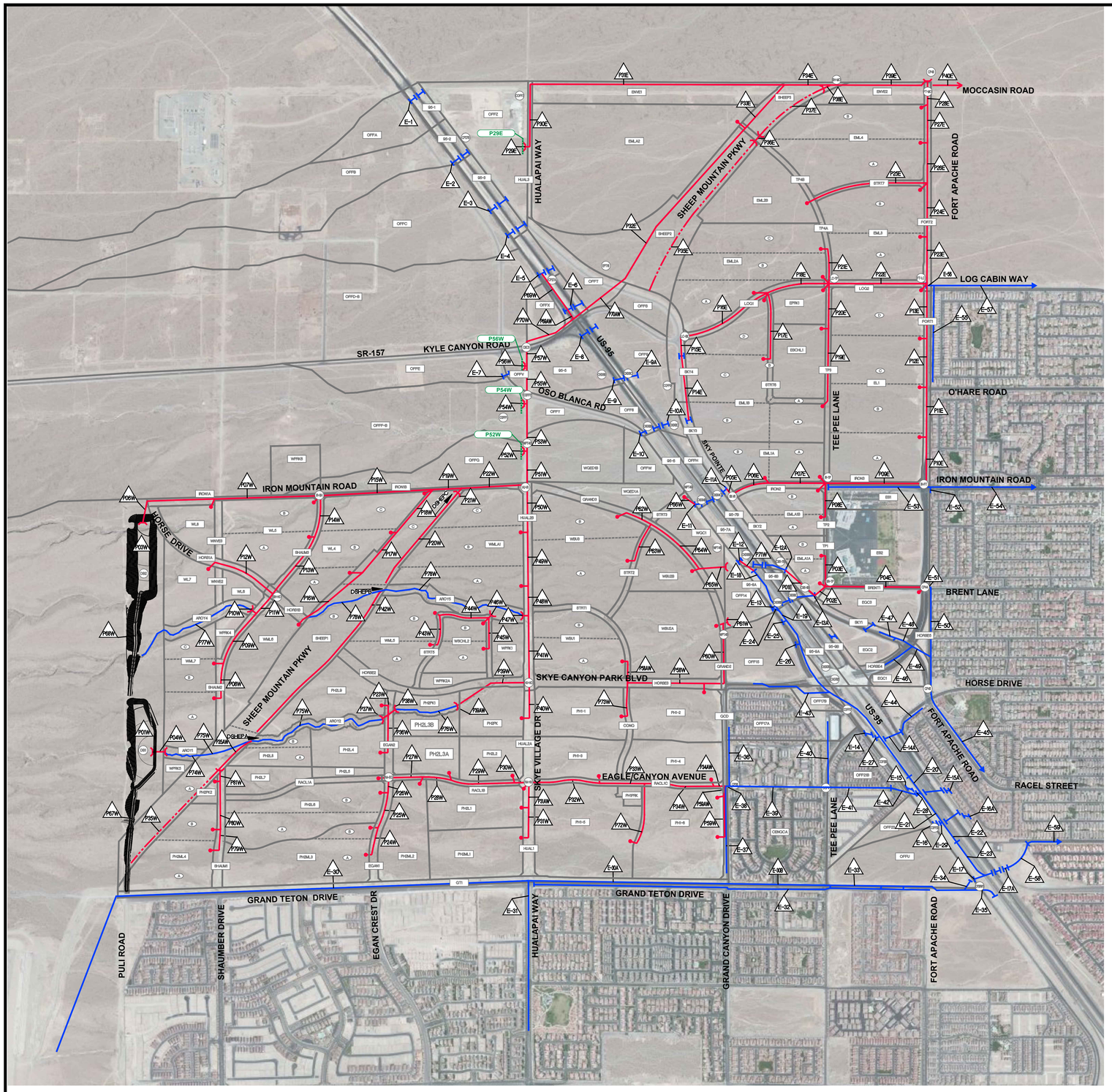

Summary of Proposed Facilities
Kyle Canyon West - Proposed Condition

Facility ID	Q_{100} (cfs)	Design Slope (%)	Length (ft)	Description	Flow Breakdown[1]
P01W	731	N/A	N/A	Orifice Size: 30-inch (Into P74W) Total Storage Volume: 70.9 acre-ft Debris Volume: 5.9 acre-ft 100-year Storage Volume: 65 acre-ft 100-year Water Surface Elevation: 3036.0-ft PMF Flow: 4,912 cfs Low Flow Conveyance at Bottom	DB1/RDB1
P02W	N/A	N/A	N/A	Detention Basin removed with this Update	N/A
P03W	695	N/A	N/A	Orifice Size: 27-inch (Into P06W) Total Storage Volume: 77.6 acre-ft Debris Volume: 5.6 acre-ft 100-year Storage Volume: 72 acre-ft 100-year Water Surface Elevation: 3006.5-ft PMF Flow: 4,653 cfs Low Flow Conveyance at Bottom	DB2/RDB2
P04W	70	2.0	223	36-inch RCP	RDB1
P04NW	N/A	N/A	N/A	Outlet from Detention removed by this Update	N/A
P05W	N/A	N/A	N/A	Outlet from Detention removed by this Update	N/A
P06W	75	3.6	1195	30-inch RCP	RDB2
P07W	100	3.6	1419	42-inch RCP	RDB2 + WL8
P08W	38	1.7	468	36-inch RCP	WML7-A
P09W	60	1.7	810	36-inch RCP	WML7-A + WML7-B
P10W	28	N/A	80	42-inch RCP Inlet	AROY4 + WML7-C
P11W	98	1.7	345	48-inch RCP	WML7 + AROY4 + WPRK4
P12W	36	2.5	895	30-inch RCP	WL7
P13W	184	3.5	950	48-inch RCP	SI-HO
P14W	218	3.5	561	54-inch RCP	SI-HO + WL5A
P15W	311	3.6	1508	60-inch RCP	IR-SI
P16W	69	3.2	1183	36-inch RCP	WML6 + HORS1B
P17W	91	3.2	707	42-inch RCP	WML6 + HORS1B + WL4-A
P18W	117	3.2	754	42-inch RCP	WML6 + HORS1B + WL4-A + WL4-B
P19W	462	3.6	386	5-ft wide by 5-ft high RCB	IR-SH + WML6 + HORSE1B + WL4
P20W	33	3.2	1551	Interim Channel, Earthen, 25' BW, 3:1 SS, d=2.5'	SHEEP1-C
P21W	33	N/A	80	30-inch RCP Inlet	SHEEP1-C
P22W	495	3.6	877	6-ft wide by 5-ft high RCB	IR-SH + WML6 + HORS1B + WL4 + SHEEP1-C
P23W	52	0.5	125	42-inch RCP	PH2L9
P24W	73	0.5	372	42-inch RCP	PH2ML3-A
P25W	120	0.5	480	54-inch RCP	PH2ML3 + PH2L6-A
P26W	158	0.5	202	60-inch RCP	PH2ML3 + PH2L6
P27W	209	3.0	460	60-inch RCP	RA-EG
P28W	268	3.0	381	60-inch RCP	RA-EG + PH2ML2
P29W	297	3.0	855	60-inch RCP	RA-EG + PH2ML2 + PH2L3A
P30W	328	3.0	192	60-inch RCP	RA-EG + PH2ML2 + PH2L3A + PH2L2
P31W	60	N/A	N/A	24-inch RCP (Phase 1)	PH2ML1
P31AW	105	N/A	N/A	42-inch RCP (Phase 1)	PH2ML1 + PH2L1
P32W	469	N/A	N/A	72-inch RCP (Phase 1)	RA-HU
P33W	526	N/A	N/A	72-inch RCP (Phase 1)	RA-HU + PH1-3
P34W	619	N/A	N/A	72-inch RCP (Phase 1)	RA-HU + PH1-3 + PH1-5 + PH1PRK
P34AW	681	N/A	N/A	6-ft wide by 6-ft high RCB (Phase 1)	RA-HU + PH1-3 + PH1-5 + PH1PRK + PH1-4 + RACL1C
P35W	45	3.2	1740	Interim Channel, Earthen, 35' BW, 3:1 SS, d=2.5'	SHEEP1-A
P35AW	128	3.2	565	Interim Channel, 35' BW, 3:1 SS, d=2.5', 8" Riprap	SHEEP1-A + PH2ML4 + PH2PK2 + SHAUM1
P36W	49	0.5	506	36-inch RCP	PH2L4 + PH2L8-A
P37W	228	N/A	63	66-inch RCP Inlet	DSHEPA + AROY2 + PH2L8-B + RDB1 + AROY1 + WPRK5 + PH2ML4 + PH2PK2 + SHAUM1
P38W	339	3.0	64	60-inch RCP	DSHEPA + AROY2 + PH2L8 + RDB1 + AROY1 + WPRK5 + PH2ML4 + PH2PK2 + SHAUM1 + PH2L4 + PH2L9 + EGAN2
P38AW	354	N/A	60	72-inch RCP Inlet	HU-HO
P39W	354	3.0	996	60-inch RCP	HU-HO
P40W	46	N/A	N/A	30-inch RCP (Phase 1)	PH2L3B + PH2PK
P41W	354	0.5	895	7-ft wide by 5-ft high RCB	HU-HO
P42W	70	3.2	2594	Interim Channel, Earthen, 35' BW, 3:1 SS, d=2.5'	SHEEP1-B
P43W	33	0.5	399	36-inch RCP	WML5-A
P44W	76	0.5	664	36-inch RCP	WML5
P45W	21	0.5	414	36-inch RCP	WSCHL2-A
P46W	124	0.5	55	60-inch RCP	WML5 + WSCHL2 + STRT5
P47W	214	N/A	78	66-inch RCP Inlet	WML5 + WSCHL2 + STRT5 + SHEEP1-B + AROY5
P48W	568	0.5	397	10-ft wide by 5-ft high RCB	HU-HO + WML5 + WSCHL2 + STRT5 + SHEEP1-B + AROY5
P49W	615	0.5	719	10-ft wide by 5-ft high RCB	HU-HO + WML5 + WSCHL2 + STRT5 + SHEEP1-B + AROY5 + WML1-A
P50W	667	0.5	637	10-ft wide by 6-ft high RCB	HU-HO + WML5 + WSCHL2 + STRT5 + SHEEP1-B + AROY5 + WML1-A + WML1-B
P51W	1131	0.5	373	10-ft wide by 8-ft high RCB	HU-IR
P52W	47	N/A	70	36-inch RCP Inlet	OFFG
P53W	1159	0.5	755	10-ft wide by 8-ft high RCB	WPT4D
P54W	1310	N/A	70	(2) 10-ft wide by 6-ft high RCBs	COFFF1
P55W	1620	0.5	461	14-ft wide by 8-ft high RCB	COFFF2
P56W	30	N/A	70	30-inch RCP Inlet	OFFE + OFFV
P57W	1543	0.5	327	14-ft wide by 8-ft high RCB	DIC5
P58AW	45	0.5	325	36-inch RCP	WBU1-A
P58W	92	N/A	N/A	42-inch RCP (Phase 1)	WBU1-A + PH1-1
P59W	62	N/A	N/A	36-inch RCP (Phase 1)	PH1-6
P59AW	93	N/A	N/A	48-inch RCP (Phase 1)	PH1-6
P60W	197	N/A	N/A	6-ft wide by 5-ft high RCB (Phase 1)	WBU1 + STRT1 + HORSE3 + PH1-1 + PH1-2
P61W	293	0.5	61	72-inch RCP	WPT4E
P62W	45	2.5	361	30-inch RCP	WBU3-B
P63W	78	1.6	538	42-inch RCP	WBU3-A
P64W	123	2.5	886	42-inch RCP	WBU3
P65W	231	0.5	358	72-inch RCP	WPT4S
P66W	37	3.0	173	42-inch RCP	WPT4S
P67W	417	0.5	1360	Collector Channel, Concrete, 12' BW, 3:1 SS, d = 5.0'	CP1
P68W	235	0.5	1200	Collector Channel, 12' BW, 3:1 SS, d = 5.0', 8" Riprap	CP2
P68W	232	1.2	592	60-inch RCP	50% CP27A
P68AW	476	1.2	145	6-ft wide by 5-ft high RCB	CP27A + OFFX
P70W	1543	3.0	707	14-ft wide by 8-ft high RCB, Crossing of US-95	CKC5
P70AW	1660	3.0	879	14-ft wide by 8-ft high RCB, Crossing of US-95	EPT16
P71W	244	1.6	235	5-ft wide by 5-ft high RCB	CHDO5B
P72W	110	N/A	N/A	36-inch RCP (Phase 1)	PH1-5 + PH1PRK
P73W	47	N/A	N/A	36-inch RCP (Phase 1)	PH1-1
P74W	79	N/A	520	Existing Arroyo	RDB1 + AROY1 + WPRK5
P75W	228	N/A	2650	Existing Arroyo	DSHEPA + AROY2 + PH2L8-B + RDB1 + AROY1 + WPRK5 + PH2ML4 + PH2PK2 + SHAUM1
P76W	338	N/A	846	Existing Arroyo	DSHEPA + AROY2 + PH2L8 + RDB1 + AROY1 + WPRK5 + PH2ML4 + PH2PK2 + SHAUM1 + PH2L4 + PH2L9 + EGAN2
P77W	28	N/A	1802	Existing Arroyo	AROY4 + WML7-C
P78W	214	N/A	3106	Existing Arroyo	WML5 + WSCHL2 + STRT5 + SHEEP1-B + AROY5
P79W	47	0.5	279	36-inch RCP	PH2ML4-A
P80W	66	0.5	645	42-inch RCP	PH2ML4
P81W	63	0.5	147	48-inch RCP	PH2ML4 + PH2PK2 + SHAUM1

[1] - Contributing HEC-1 flows obtained from Proposed Condition hydrologic analysis.

Summary of Proposed Facilities
Kyle Canyon East - Proposed Condition

Facility ID	Q_{100} (cfs)	Design Slope (%)	Length (ft)	Description	Flow Breakdown[1]
P01E	22	1.8	517	36-inch RCP	C95-7B
P02E	260	1.8	188	60-inch RCP	C95-7B + C95-8B + SKY2
P03E	15	0.5	411	30-inch RCP	EML1A-B
P04E	289	3.2	1410	60-inch RCP w/ Interim Bubbler at Brent/Ft. Apache Intersection to release Surface Flow that exceeds Storm Drain Capacity	BR-TP
P05E	84	0.5	107	48-inch RCP	DCHD4C
P06E	108	2.9	530	48-inch RCP	SK-IR
P07E	139	2.9	759	48-inch RCP	SK-IR + EML1A-B
P08E	17	0.5	454	30-inch RCP	EML1B-A
P09E	177	3.1	1351	48-inch RCP	IR-TP - 31 CFS (REMAINING CAPACITY EXISTING SD)
P10E	124	0.5	622	60-inch RCP	FTNOR
P11E	152	0.5	667	60-inch RCP	FTNOR + EL1-A
P12E	140	0.5	652	60-inch RCP	FTNOR + EL1-A + EL1-B + FORT1-A - OHARE
P13E	167	0.5	734	66-inch RCP	FTNOR + EL1-A + EL1-B + FORT1-A + EL1-C- OHARE
P14E	59	0.5	856	48-inch RCP	DCHD2C
P15E	150	0.5	262	60-inch RCP	COFF9
P16E	175	3.0	1324	60-inch RCP	LC-SK
P17E	40	0.5	890	42-inch RCP	EML1B-C
P18E	277	3.0	838	60-inch RCP	LC-SK + EML1B-C + EML1B-D + EML2A-A
P19E	53	0.5	972	42-inch RCP	EML1B-A + EML1B-B
P20E	82	0.5	603	54-inch RCP	EML1B-A + EML1B-B + ESCHL1
P21E	32	1.6	464	30-inch RCP	EML2A-C
P22E	475	3.0	1311	66-inch RCP	LC-TP
P23E	463	0.5	627	7-ft wide by 6-ft high RCB	R2FTLC
P24E	507	0.5	721	8-ft wide by 8-ft high RCB	R2FTLC + EML3-A
P25E	73	2.6	1658	36-inch RCP	EML2B + TP4B
P26E	641	0.5	537	9-ft wide by 6-ft high RCB	R2FTLC + FORT2-A + EML3 + EML2B + TP4B + STRT7
P27E	703	0.5	513	10-ft wide by 6-ft high RCB	R2FTLC + FORT2-A + EML3 + EML2B + TP4B + STRT7 + EML4-A
P28E	760	0.5	400	10-ft wide by 6-ft high RCB	FT-MO
P29E	206	N/A	60	66-inch RCP Inlet	COFFZ
P30E	206	0.5	837	66-inch RCP	COFFZ
P31E	212	2.9	3402	66-inch RCP	COFFZ + HUAL3
P32E	1880	2.4	2586	14-ft wide by 8-ft high RCB	EPT16
P33E	2064	2.4	783	14-ft wide by 8-ft high RCB	EPT16 + EML4Z
P34E	2066	2.9	619	14-ft wide by 8-ft high RCB	SH-MO
P35E	43	2.4	2456	Interim Channel, Earthen, 25' BW, 3:1 SS, d=2.5'	SHEEP2
P36E	43	2.4	110	30-inch RCP Culvert	SHEEP2
P37E	53	2.4	1065	Interim Channel, Earthen, 30' BW, 3:1 SS, d=2.5'	SHEEP2 + SHEEP3
P38E	77	N/A	110	42-inch RCP Inlet	SHEEP2 + SHEEP3 + ENVE1
P39E	2066	2.6	1296	14-ft wide by 8-ft high RCB	SH-MO
P40E	2612	N/A	7200	Interim Levee, 4 to 5-ft high, 3:1 SS, 12-ft wide with driveable access along top, extends in Moccasin alignment from Fort Apache to Upper Las Vegas Wash Channel & Levee	CP43

[1] - Contributing HEC-1 flow obtained from Proposed Condition hydrologic analysis.

Summary of Offsite Cross Sections
Kyle Canyon West

Cross Section ID	Source of Approaching Flow	Flow Rate (cfs)	Design Q_{100} (cfs)	Water Surface Elevation (ft)	Flow Depth (ft) (A)	Culvert Size	Headwater Height (ft) (B)	Depth of Hole (ft)[1] (C) = (B) + 2' - (A)
P52W	OFFG	47	47	2833.31	0.46	36-inch RCP	4.2	5.7
P54W	COFFF1	1310	1310	2833.39	1.86	(2) 10-ft x 8-ft RCBs	8.0	8.1
P56W	OFFE + OFFV	30	30	2830.13	0.87	30-inch RCP	3.3	4.4
P67W	80% OFF21	461	369	3068.31	1.59	6-ft x 6-ft RCB	9.0	9.4

1 - Depth of Hole includes 1-ft of freeboard above headwater and 1-ft provided for debris trap at culvert inlet.

Summary of Offsite Cross Sections
Kyle Canyon East

Cross Section ID	Source of Approaching Flow	Flow Rate (cfs)	Design Q_{100} (cfs)	Water Surface Elevation (ft)	Flow Depth (ft) (A)	Culvert Size	Headwater Height (ft) (B)	Depth of Hole (ft)[1] (C) = (B) + 2' - (A)
P29E	COFFZ	206	206	2812.02	1.02	66-inch RCP	6.9	7.9

1 - Depth of Hole includes 1-ft of freeboard above headwater and 1-ft provided for debris trap at culvert inlet.

LEGEND

- BASIN BOUNDARY
- BASIN ID
- FLOW DIRECTION
- CONCENTRATION POINT
- PRORATED BASIN ID
- PRORATED BASIN BOUNDARY
- EXISTING FACILITY
- PROPOSED FACILITY
- FACILITY ID
- OFFSITE CROSS SECTION

N

0 600 1200
SCALE - 1"=600' FEET

Summary of Existing US-95 Culverts - Proposed Condition

Facility ID	Q_{EXIST} (cfs)	Q_{DESIGN} (cfs)[3]	Q_{SHG} (cfs)[4]	HEC-1 Node	Description	Comments
E-1	22*	N/A	24	OFFA + 95-1	6-ft by 3-ft RCB	N/A
E-2	81*	N/A	80	OFFB + 95-2	6-ft by 3-ft RCB	N/A
E-3	44*	N/A	47.5	0.5(OFFC + 95-3)	6-ft by 3-ft RCB	N/A
E-4	44*	N/A	47.5	0.5(OFFC + 95-3)	42-inch CMP	N/A
E-5	225*	N/A	232	0.5(CP27A)	42-inch CMP	N/A
E-6	225*	N/A	244	0.5(CP27A) + OFFX	6-ft by 3-ft RCB	N/A
E-7[1]	19**	44**	26	OFFE	(2) 6-ft by 3-ft RCB	VTN Culvert 3
E-8	N/A*	N/A	N/A	N/A	(3) 36-inch CMP	N/A
E-9[1]	30**	54*	45	DCHD1B	6-ft by 3-ft RCB	VTN Culvert 1
E-9A[2]	30**	54*	45	DCHD1C	6-ft by 3-ft RCB	VTN Culvert 1
E-10[1]	360**	75**	91	DCHD2B	(2) 6-ft by 3-ft RCB	VTN Culvert 2
E-10A[2]	347**	100**	59	DCHD2C	(2) 6-ft by 3-ft RCB	VTN Culvert 2
E-11[1]	1098**	1141**	61	DCHD4B	(2) 10-ft by 4-ft RCB	VTN Culvert 4
E-11A[2]	853**	872**	84	DCHD4C	(3) 42-inch CMP	VTN Culvert 4
E-12[1]	494**	330*	244	CHD05B	6-ft by 3-ft RCB	VTN Culvert 5
E-12A[2]	346**	153**	8	DCHD5C	6-ft by 3-ft RCB	VTN Culvert 5
E-13[1]	948**	403**	215	DCHD6B	(2) 10-ft by 4-ft RCB	VTN Culvert 6
E-13A[2]	788**	403**	216	DCHD6C	(2) 10-ft by 4-ft RCB	VTN Culvert 6
E-14[1]	525**	66**	66	DVCUL8	6-ft by 3-ft RCB	VTN Culvert 8
E-14A[2]	267**	66**	66	DIV8A	6-ft by 4-ft RCB	VTN Culvert 8
E-15[1]	770**	1008**	986	DVCUL9	(2) 42-inch CMP	VTN Culvert 9
E-15A[2]	250**	256**	255	DIV9A	(2) 42-inch CMP	VTN Culvert 9
E-16[1]	15**	18**	19	DCUL10	(2) 10-ft by 4-ft RCB	VTN Culvert 10
E-16A[2]	360**	369*	368	DIV10A	10-ft by 4-ft RCB	VTN Culvert 10
E-17[1]	585**	643*	285	DCUL11	10-ft by 10-ft RCB	VTN Culvert 11
E-17A[2]	1160**	1093*	1034	DIV11A	10-ft by 10-ft RCB	VTN Culvert 11

1 - i.e. VTN Culvert 5E Flow.
2 - i.e. VTN Culvert 5AE Flow , or GCW Culvert 5DE Flow .
3 - GCW and VTN proposed condition flows were compared and the higher is shown.
4 - SHG proposed condition flows.
* - Referenced from GCW Update No. 2 to Kyle Canyon Master Drainage Study.
** - Referenced from VTN Horse Drive / US-95 Interchange Study.

Summary of Existing US-95 Interim MPU Facility - Proposed Condition

Facility ID	Description	Comments
E-18	5-ft by 5-ft RCB	
E-19	10-ft by 6-ft RCB	
E-20	15-ft by 9-ft RCB	
E-21	15-ft by 9-ft RCB	
E-22	15-ft by 9-ft RCB	
E-23	15-ft by 9-ft RCB	
E-24	8-ft by 6-ft RCB	Shares Headwall with Facility E-13
E-25	36-inch RCP	
E-26	36-inch RCP	
E-27	6-ft by 3-ft RCB	Stubbed and Capped
E-28	12-ft by 4-ft RCB	Stubbed and Capped
E-29	10-ft by 4-ft RCB	Stubbed and Capped

Summary of Existing Perimeter Facilities

Facility ID	Q_{DESIGN} (cfs)	Description	Comments	Referenced Improvement Plans
E-30	494	6-ft by 5-ft RCB	CCRFCD MPU Facility CNGT 0118	2008 CCRFCD MPU
E-30A	594	8-ft by 6-ft high RCB	CCRFCD MPU Facility CNGT 0043	Grand Teton Storm Drain - Hualapai to Tee Pee
E-30B	707	10-ft wide by 5-ft high RCB	CCRFCD MPU Facility CNGT 0020	Grand Teton Storm Drain - Hualapai to Tee Pee
E-31	231	6-ft by 4-ft RCA		Hualapai Improvements
E-32	N/A	18-inch RCP		Grand Teton Village / Grand View Apartments
E-33	761	10-ft by 5-ft RCB	Parallel 18-inch RCP on south half of road to be abandoned and flow is collected by 10-ft by 5-ft RCB	Grand Teton Drive Storm Drain
E-34	203	5-ft by 3-ft RCB	Interim condition storm drain, to be abandoned in the future	Grand Teton Drive Storm Drain
E-35	761	10-ft by 5-ft RCB	Outlets in to US-95 Channel	Grand Teton Drive Storm Drain
E-36	N/A	24-inch RCP	Flow from Grand Canyon Drive	Grand Canyon Apartments / Grand Canyon Terraces
E-37	802	Riprap Trapezoidal Channel	West Half of Grand Canyon Drive	Box Culvert for Centennial Point and Grand Canyon Apartments
E-38	802	8-ft by 8-ft RCB	Concrete Headwall	Box Culvert for Centennial Point and Grand Canyon Apartments
E-39	851	8-ft by 5-ft RCB	CCRFCD MPU Facility CNKC 0024	Box Culvert for Centennial Point and Grand Canyon Apartments
E-40	N/A	18-inch RCP		2008 CCRFCD MPU
E-41	999	10-ft by 5-ft RCB	CCRFCD MPU Facility CNKC 0007	2008 CCRFCD MPU
E-42	999	12-ft by 4-ft RCB	CCRFCD MPU Facility CNKC 0000	2008 CCRFCD MPU
E-43	9[1]	24-inch RCP	Collects roadway flow via drop inlets	Horse Drive / US-95 Interchange
E-44	234	68-inch by 43-inch HERCP	Discharges as surface flow into Horse Drive	Spring Mountain Twilight
E-45	101	48-inch HDPE		Spring Mountain Ranch Unit 90
E-46	13[1]	24-inch RCP	Collects roadway flow via drop inlets	Horse Drive / US-95 Interchange
E-47	2[1]	24-inch RCP	Collects roadway flow via drop inlets	Horse Drive / US-95 Interchange
E-48	16[1]	48-inch RCP	Stubbed to collect flow between US-95 and Sky Pointe Drive	Horse Drive / US-95 Interchange
E-49	29[1]	38-inch by 60-inch HERCP		Horse Drive / US-95 Interchange
E-50	65	54-inch RCP	18/24-inch RCP Stubs for west half of road	Spring Mountain Ranch Fort Apache Road
E-51	N/A	19-inch by 30-inch HERCP	Flow from school	James Bilbray Elementary School
E-52	N/A	18-inch RCP	Drop Inlets in Ft. Apache south of Iron Mtn.	James Bilbray Elementary School
E-53	60	30-inch HDPE	18-inch HDPE Stubs for north half of road	James Bilbray Elementary School
E-54	98	36-inch RCP		Iron Mountain Estates West Units 1 and 2
E-55	31	24-inch RCP	18-inch RCP Stubs for west half of road	Spring Mountain Ranch Unit 60 Phase 1
E-56	N/A	18-inch RCP	Stubbed and Capped	Spring Mountain Ranch Unit 60 Phase 1
E-57	73	36-inch RCP	18-inch RCP Stubs for north half of road	Spring Mountain Ranch Unit 60 Phase 1
E-58	1160**	Trapezoidal Channel	Outfall for Facility E-17	Site Visit
E-59	1160**	RCA Culvert	Outfall for Facility E-17	Site Visit

1 - 25-year Flow
** - Referenced from VTN Horse Drive / US-95 Interchange Study.

EXHIBIT H

SKYE CANYON MASTER DRAINAGE STUDY UPDATE
PROPOSED CONDITION FLOOD CONTROL FACILITIES MAP
OLY1401.004

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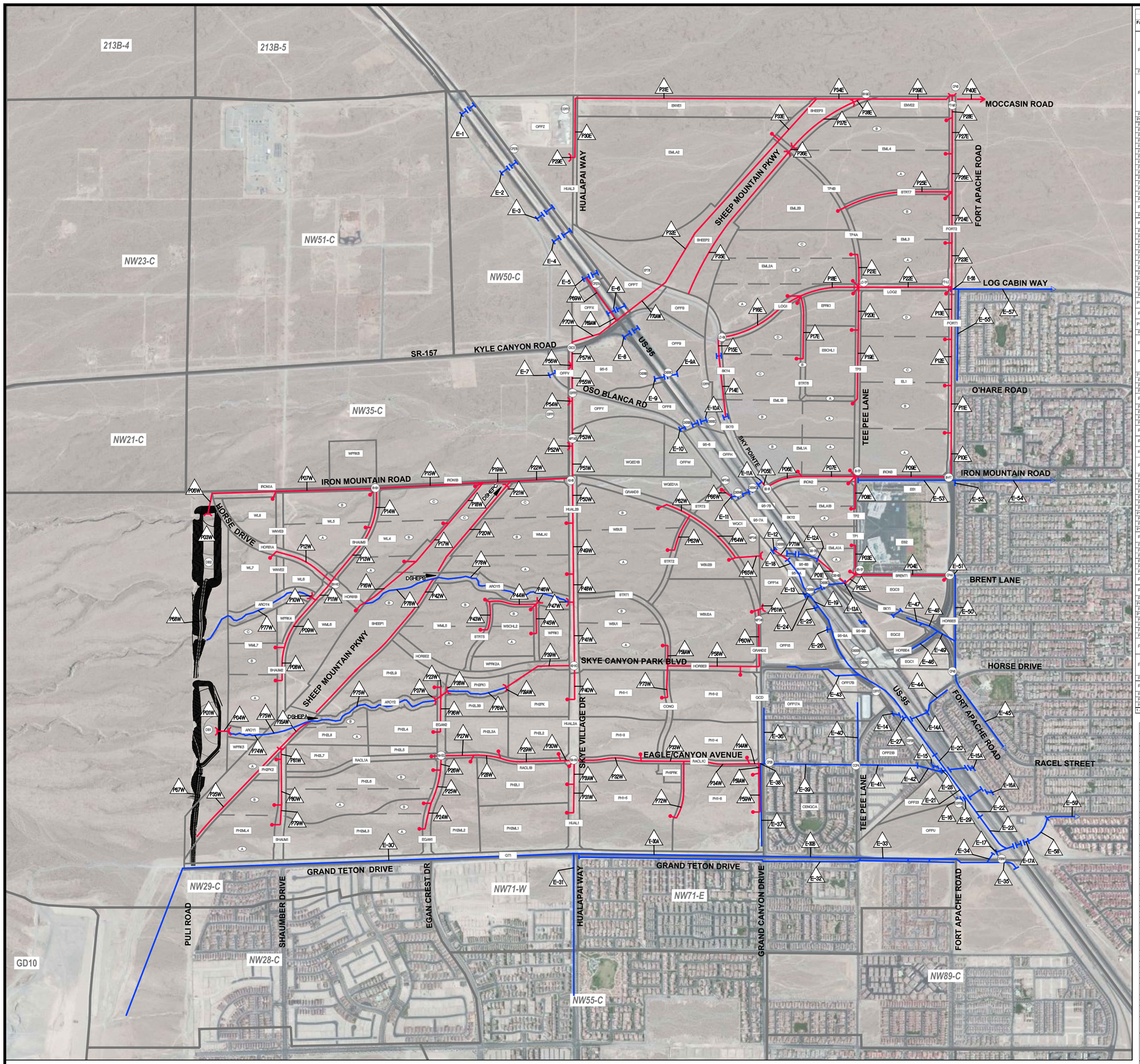
SKYE CANYON



Summary of Proposed Facilities
Kyle Canyon West - Ultimate Condition

Facility ID	Proposed Q_{100} (cfs)	Ultimate Q_{100} (cfs)	Design Slope (%)	Length (ft)	Description	Flow Breakdown[1]
P01W	731	794	N/A	N/A	Orifice Size: 30-inch (into P74W) Total Storage Volume: 70.9 acre-ft Debris Volume: 5.9 acre-ft 100-year Storage Volume: 65 acre-ft 100-year Water Surface Elevation: 3095.0-ft PMF Flow: 4,912 cfs Low Flow Conveyance at Bottom	DB1/RDB1
P02W	N/A	N/A	N/A	N/A	Detention Basin removed with this Update	N/A
P03W	695	647	N/A	N/A	Orifice Size: 27-inch (into P06W) Total Storage Volume: 77.6 acre-ft Debris Volume: 5.6 acre-ft 100-year Storage Volume: 72 acre-ft 100-year Water Surface Elevation: 3008.5-ft PMF Flow: 4,653 cfs Low Flow Conveyance at Bottom	DB2/RDB2
P04W	70	71	2.0	223	36-inch RCP	RDB1
P04AW	N/A	N/A	N/A	N/A	Outlet from Detention removed by this Update	N/A
P05W	N/A	N/A	N/A	N/A	Outlet from Detention removed by this Update	N/A
P06W	75	56	3.6	1106	30-inch RCP	RDB2
P07W	100	81	3.6	1410	42-inch RCP	RDB2 + WL8
P08W	38	38	1.7	468	36-inch RCP	WML7-A
P09W	60	60	1.7	810	36-inch RCP	WML7-A + WML7-B
P10W	28	28	N/A	80	42-inch RCP Inlet	ARCH14 + WML7-C
P11W	58	58	1.7	345	48-inch RCP	WML7 + ARCH14 + WPRK4
P12W	36	36	2.5	895	30-inch RCP	WL7
P13W	184	184	3.5	950	48-inch RCP	SHHO
P14W	218	184	3.5	561	54-inch RCP	SHHO + WL5A
P15W	311	314	3.6	1508	60-inch RCP	IR-SH
P16W	69	69	3.2	1183	36-inch RCP	WML6 + HORB1B
P17W	91	91	3.2	707	42-inch RCP	WML6 + HORB1B + WL4-A
P18W	117	117	3.2	754	42-inch RCP	WML6 + HORB1B + WL4-A + WL4-B
P19W	475	478	3.6	386	5-ft wide by 5-ft high RCB	IR-SH + WML6 + HORSE1B + WL4
P20W	33	32	3.2	1551	Interim Channel, Earthen, 25' BW, 3:1 SS, d=2.5'	SHEEP1-C
P21W	33	32	N/A	80	30-inch RCP Inlet	SHEEP1-C
P22W	465	497	3.6	877	6-ft wide by 5-ft high RCB	IR-SH + WML6 + HORSE1B + WL4 + SHEEP1-C
P23W	52	52	0.5	125	42-inch RCP	PH1L9
P24W	73	73	0.5	372	42-inch RCP	PH1ML3-A
P25W	120	120	0.5	490	54-inch RCP	PH2ML3 + PH2L6-A
P26W	158	158	0.5	202	60-inch RCP	PH2ML3 + PH2L6
P27W	209	209	3.0	460	60-inch RCP	RA-EG
P28W	268	268	3.0	381	60-inch RCP	RA-EG + PH2ML2
P29W	297	297	3.0	955	60-inch RCP	RA-EG + PH2ML2 + PH2L3A
P30W	328	328	3.0	192	60-inch RCP	RA-EG + PH2ML2 + PH2L3A + PH2L2
P31W	60	60	N/A	N/A	24-inch RCP (Phase 1)	PH2ML1
P31AW	105	105	N/A	N/A	42-inch RCP (Phase 1)	PH2ML1 + PH2L1
P32W	469	469	N/A	N/A	72-inch RCP (Phase 1)	RA-HU
P33W	508	508	N/A	N/A	72-inch RCP (Phase 1)	RA-HU + PH1-3
P34W	619	619	N/A	N/A	72-inch RCP (Phase 1)	RA-HU + PH1-3 + PH1P8K
P34AW	661	661	N/A	N/A	8-ft wide by 6-ft high RCB (Phase 1)	RA-HU + PH1-3 + PH1P8K + PH1-4 + RACL1C
P35W	45	45	3.2	1740	Interim Channel, Earthen, 35' BW, 3:1 SS, d=2.5'	SHEEP1-A
P35AW	128	128	3.2	565	Interim Channel, 35' BW, 3:1 SS, d=2.5', 8" Riprap	SHEEP1-A + PH2ML4 + PH2PK2 + SHAUM1
P36W	49	49	0.5	535	36-inch RCP	PH2L6-A + PH2L8-A
P37W	228	228	N/A	63	66-inch RCP Inlet	DSHEPA + ARO72 + PH2L8-B + RDB1 + ARCH1 + WPRK5 + PH2ML4 + PH2PK2 + SHAUM1
P38W	339	339	3.0	64	60-inch RCP	DSHEPA + ARO72 + PH2L8 + RDB1 + ARCH1 + WPRK5 + PH2ML4 + PH2PK2 + SHAUM1 + PH2L4 + PH2L8 + EGAN2
P38AW	338	332	N/A	60	72-inch RCP Inlet	HUHO
P39W	338	332	3.0	996	60-inch RCP	HUHO
P40W	46	46	N/A	N/A	30-inch RCP (Phase 1)	PH2L3B + PH2PK
P41W	336	332	0.5	595	7-ft wide by 5-ft high RCB	HUHO
P42W	70	68	3.2	2954	Interim Channel, Earthen, 35' BW, 3:1 SS, d=2.5'	SHEEP1-B
P43W	33	33	0.5	399	36-inch RCP	WML5-A
P44W	76	76	4.5	664	36-inch RCP	WML5
P45W	21	21	0.5	414	36-inch RCP	WSCH2-A
P46W	124	124	0.5	55	60-inch RCP	WML5 + WSCH2-3 + STRT5
P47W	214	212	N/A	78	66-inch RCP Inlet	WML5 + WSCH2-2 + STRT5 + ARCH15 + SHEEP1-B
P48W	562	544	0.5	397	10-ft wide by 5-ft high RCB	HUHO + WML5 + WSCH2-2 + STRT5 + ARCH15 + SHEEP1-B
P49W	609	565	0.5	719	10-ft wide by 5-ft high RCB	HUHO + WML5 + WSCH2-1 + STRT5 + ARCH15 + WML4-1-A + SHEEP1-B
P50W	661	643	0.5	837	10-ft wide by 6-ft high RCB	HUHO + WML5 + WSCH2-1 + STRT5 + ARCH15 + WML4-1-B + SHEEP1-B
P51W	1131	1108	0.5	373	10-ft wide by 8-ft high RCB	HUIR
P52W	47	N/A	N/A	70	36-inch RCP Inlet	N/A
P53W	1159	1117	0.5	755	10-ft wide by 8-ft high RCB	HUIR
P54W	1310	N/A	N/A	70	(2) 10-ft wide by 8-ft high RCBs	N/A
P55W	1020	1117	0.5	461	14-ft wide by 8-ft high RCB	HUIR
P56W	30	N/A	N/A	70	30-inch RCP Inlet	N/A
P57W	1543	1117	0.5	327	14-ft wide by 8-ft high RCB	HUIR
P58AW	45	45	0.5	325	36-inch RCP	WBU1-A
P58W	92	92	N/A	N/A	42-inch RCP (Phase 1)	WBU1-A + PH1-1
P59W	67	67	N/A	N/A	36-inch RCP (Phase 1)	PH1-6
P59AW	93	93	N/A	N/A	48-inch RCP (Phase 1)	PH1-6
P60W	197	197	N/A	N/A	6-ft wide by 5-ft high RCB (Phase 1)	WBU1 + STRT1 + HORSE3 + PH1-1 + PH1-2
P61W	203	203	0.5	61	72-inch RCP	WHT46
P62W	45	45	2.5	361	30-inch RCP	WBU3-B
P63W	78	78	1.6	538	42-inch RCP	WBU3-A
P64W	123	123	2.5	886	42-inch RCP	WBU3
P65W	231	231	0.5	958	72-inch RCP	WPT48
P66W	37	99	3.0	1494	42-inch RCP	WPT49
P67W	417	471	0.5	1360	Collector Channel, Concrete, 12' BW, 3:1 SS, d = 5.0'	CP1
P68W	235	204	0.5	1200	Collector Channel, 12' BW, 3:1 SS, d = 5.0', 8" Riprap	CP2
P69W	232	228	1.2	592	60-inch RCP	NWS0-C
P69AW	419	228	1.2	145	6-ft wide by 5-ft high RCB	NWS0-C
P70W	1543	3249	3.0	707	14-ft wide by 8-ft high RCB, Crossing of US-95	CKC5
P70AW	1680	3400	3.0	879	14-ft wide by 8-ft high RCB, Crossing of US-95	CKC6
P71W	244	352	1.6	235	5-ft wide by 5-ft high RCB	CHOX68
P72W	110	110	N/A	N/A	36-inch RCP (Phase 1)	PH1-5 + PH1PRK
P73W	47	47	N/A	N/A	36-inch RCP (Phase 1)	PH1-5
P74W	79	80	N/A	520	Existing Arroyo	RDB1 + ARO71 + WPRK5
P75W	228	229	N/A	2650	Existing Arroyo	DSHEPA + ARO72 + PH2L8-B + RDB1 + ARO71 + WPRK5 + PH2ML4 + PH2PK2 + SHAUM1 + PH2L4 + PH2L8 + EGAN2
P76W	339	339	N/A	846	Existing Arroyo	DSHEPA + ARO72 + PH2L8 + RDB1 + ARO71 + WPRK5 + PH2ML4 + PH2PK2 + SHAUM1 + PH2L4 + PH2L8 + EGAN2
P77W	28	28	N/A	1822	Existing Arroyo	ARCH14 + WML7-C
P78W	214	214	N/A	3106	Existing Arroyo	WML5 + WSCH2-7 + STRT5 + ARO75 + SHEEP1-B
P79W	47	47	0.5	379	36-inch RCP	PH2ML4-A
P80W	66	66	0.5	645	42-inch RCP	PH2ML4
P81W	83	83	0.5	147	48-inch RCP	PH2ML4 + PH2PK2 + SHAUM1

1 - Contributing HEC-1 flow is obtained from Local Ultimate Condition hydrologic analysis.

Summary of Proposed Facilities
Kyle Canyon East - Ultimate Condition

Facility ID	Proposed Q_{100} (cfs)	Ultimate Q_{100} (cfs)	Design Slope (%)	Length (ft)	Description	Flow Breakdown[1]
P01E	32	30	1.8	577	36-inch RCP	IR-SH + SH-1B
P02E	260	63	1.8	188	60-inch RCP	CI95-RB + SKY2
P03E	15	15	0.5	411	30-inch RCP	EMLA1A-B
P04E	289	92	3.2	1410	60-inch RCP w/ Bubbler at BrentP1. Apache intersection to release Surface Flow that exceeds Storm Drain Capacity	BR-TP
P05E	64	33	0.5	107	48-inch RCP	95-6 + OFFH
P06E	103	44	2.9	530	48-inch RCP	96-6F
P07E	139	75	2.9	759	48-inch RCP	SK-R + EMLTA-B
P08E	17	17	0.5	454	30-inch RCP	EMLA1B-A
P09E	177	113	3.1	1351	48-inch RCP	IR-TP - 31 CFS (REMAINING CAPACITY EXISTING SD)
P10E	124	60	0.5	622	60-inch RCP	FTNOR
P11E	152	88	0.5	667	60-inch RCP	FTNOR + EL1-A
P12E	140	76	0.5	652	60-inch RCP	FTNOR + EL1-A + EL1-B + FORT1-A - OHARE
P13E	167	103	0.5	734	66-inch RCP	FTNOR + EL1-A + EL1-B + FORT1-A + EL1-C - OHARE
P14E	59	50	0.5	866	48-inch RCP	DCH03B
P15E	150	103	0.5	262	60-inch RCP	CCFF9
P16E	175	186	3.0	1324	60-inch RCP	LC-SK
P17E	40	40	0.5	690	42-inch RCP	EML1B-C
P18E	277	288	3.0	838	60-inch RCP	LC-SK + EML1B-C + EML1B-D + EML2A-A
P19E	53	53	0.5	972	42-inch RCP	EML1B-A + EML1B-B
P20E	82	82	0.5	603	54-inch RCP	EML1B-A + EML1B-B + ESCHL1
P21E	32	32	1.6	464	30-inch RCP	EML2A-C
P22E	475	480	3.0	1311	66-inch RCP	LC-TP
P23E	463	408	0.5	627	7-ft wide by 6-ft high RCB	RDFTLC
P24E	507	462	0.5	721	8-ft wide by 6-ft high RCB	RDFTLC + EML3-A
P25E	73	73	2.6	1658	36-inch RCP	EML2B + TP4B
P26E	641	586	0.5	537	9-ft wide by 6-ft high RCB	RDFTLC + FORT2-A + EML3 + EML2B + TP4B + STRT7
P27E	703	648	0.5	513	10-ft wide by 6-ft high RCB	RDFTLC + FORT2-A + EML3 + EML2B + TP4B + STRT7 + EML4-A
P28E	760	705	0.5	400	10-ft wide by 6-ft high RCB	FT-MO
P29E	205	69	N/A	60	66-inch RCP Inlet	OFF2
P30E	205	69	0.5	837	66-inch RCP	OFF2
P31E	212	76	2.9	3402	66-inch RCP to be replaced by Facility F-5	OFF2 + HUAL3
P32E	1680	3426	2.4	2586	14-ft wide by 8-ft high RCB	CKC6 + OFFT
P33E	2064	3610	2.4	783	14-ft wide by 8-ft high RCB	CKC6 + OFFT + EML2
P34E	2066	3709	2.9	619	14-ft wide by 8-ft high RCB, to be replaced by Facility F-4	CKC6 + OFFT + EML2 + ENVE1 + OFF2 + HUAL3
P35E	43	N/A	2.4	2455	Interim Channel, Earthen, 25' BW, 3:1 SS, d=2.5'	N/A
P36E	43	N/A	2.4	110	30-inch RCP Culvert	N/A
P37E	53	N/A	2.4	1065	Interim Channel, Earthen, 30' BW, 3:1 SS, d=2.5'	N/A
P38E	77	N/A	N/A	110	42-inch RCP Inlet	N/A
P39E	2066	3602	2.6	1296	14-ft wide by 8-ft high RCB, to be replaced by Facility F-4	CKC6 + OFFT + EML3 + ENVE1 + OFF2 + HUAL3 + SHEEP2 + SHEEP3
P40E	2612	N/A	N/A	7200	Interim Levee, 4 to 5-ft high, 3:1 SS, 12-ft wide with driveable access along top, extends in Moccasin alignment from Fort Apache to Upper Las Vegas Wash Channel & Levee, to be replaced by Facility F-3	N/A

1 - Contributing HEC-1 flow is obtained from Local Ultimate Condition hydrologic analysis.

Summary of Existing US-95 Culverts - Ultimate Condition

Facility ID	Q_{EXIST} (cfs)	Q_{DESIGN} (cfs)[2]	Proposed Q_{SHO} (cfs)	Ultimate Q_{SHO} (cfs)	HEC-1 Node[4]	Description	Comments
E-1	22*	N/A	24	N/A	N/A	6-ft by 3-ft RCB	N/A
E-2	81*	N/A	80	N/A	N/A	6-ft by 3-ft RCB	N/A
E-3	44*	N/A	47.5	N/A	N/A	6-ft by 3-ft RCB	N/A
E-4	44*	N/A	47.5	N/A	N/A	42-inch CMP	N/A
E-5	225*	N/A	232	N/A	N/A	42-inch CMP	N/A
E-6	225*	N/A	244	N/A	N/A	6-ft by 3-ft RCB	N/A
E-7[1]	19**	44**	26	N/A	N/A	(2) 6-ft by 3-ft RCB	VTN Culvert 3
E-8	N/A*	N/A	N/A	N/A	N/A	(3) 36-inch CMP	N/A
E-9[1]	30**	54*	45	51	DCHD1B	6-ft by 3-ft RCB	VTN Culvert 1
E-9A[1]	30**	54*	45	51	DCHD1B	6-ft by 3-ft RCB	VTN Culvert 1
E-10[1]	360**	75**	91	50	DCHD2B	(2) 6-ft by 3-ft RCB	VTN Culvert 2
E-10A[1]	347**	100**	59	50	DCHD2B	(2) 6-ft by 3-ft RCB	VTN Culvert 2
E-11[1]	1098**	1141**	61	N/A	N/A	(2) 10-ft by 4-ft RCB	VTN Culvert 4
E-11A[1]	853**	872**	84	33	95-6 + OFFH	(3) 42-inch CMP	VTN Culvert 4
E-12[1]	494**	330*	244	231	WPT48	6-ft by 3-ft RCB	VTN Culvert 5
E-12A[1]	346**	153**	8	30	95-7A + 95-7B	6-ft by 3-ft RCB	VTN Culvert 5
E-13[1]	948**	403**	215	331	CHD06B	(2) 10-ft by 4-ft RCB	VTN Culvert 6
E-13A[1]	788**	403**	216	18	95-8A + 95-8B	(2) 10-ft by 4-ft RCB	VTN Culvert 6
E-14[1]	525**	66**	66	N/A	N/A	6-ft by 3-ft RCB	VTN Culvert 7
E-14A[1]	267**	66**	66	N/A	N/A	6-ft by 4-ft RCB	VTN Culvert 8
E-15[1]	770**	1008**	966	N/A	N/A	(2) 42-inch CMP	VTN Culvert 9
E-15A[1]	250**	256**	255	N/A	N/A	(2) 42-inch CMP	VTN Culvert 9
E-16[1]	15**	18**	19	N/A	N/A	(2) 10-ft by 4-ft RCB	VTN Culvert 10
E-16A[1]	360**	369*	368	N/A	N/A	10-ft by 4-ft RCB	VTN Culvert 10
E-17[1]	585**	643*	285	N/A	N/A	10-ft by 10-ft RCB	VTN Culvert 11
E-17A[1]	1160**	1093*	1034	N/A	N/A	10-ft by 10-ft RCB	VTN Culvert 11

1 - i.e. VTN Culvert SE Flow .
2 - i.e. VTN Culvert SAE Flow , or GCW Culvert 50E Flow
3 - GCW and VTN proposed condition flow s w ere compared and the higher is shown.
4 - Contributing HEC-1 flow s obtained from Local Ultimate Condition hydrologic analysis.
* - Referenced from GCW Update No. 2 to Kyle Canyon Master Drainage Study.
** - Referenced from VTN Horse Drive / US-95 Interchange Study.

Summary of US-95 MPU Facility - Ultimate Condition

Facility ID	Description	Comments
E-18	5-ft by 5-ft RCB	Existing CCRFCD MPU Facility ID = CN95 0333, Q_{SHO} = 327 cfs @ Regional Ultimate Condition Basin NW62-S
E-19	10-ft by 6-ft RCB	
E-20	15-ft by 9-ft RCB	
E-21	15-ft by 9-ft RCB	
E-22	15-ft by 9-ft RCB	
E-23	15-ft by 9-ft RCB	Existing CCRFCD MPU Facility ID = CN95 0199, Q_{SHO} = 1,522 cfs @ Regional Ultimate Condition Concentration Point (95STH - CNW71-E)
E-24	8-ft by 6-ft RCB	Shares Headwall with Facility E-13
E-25	36-inch RCP	
E-26	36-inch RCP	
E-27	6-ft by 3-ft RCB	Stubbed and Capped
E-28	12-ft by 4-ft RCB	Stubbed and Capped
E-29	10-ft by 4-ft RCB	Stubbed and Capped
F-1	(2) 10-ft by 6-ft RCBs	Future CCRFCD MPU Facility ID = CN95 0167, Q_{SHO} = 2,132 cfs @ Regional Ultimate Condition Concentration Point 95STH

Note that the US-95 is planned as a hydrologic cut-off for all flow generated by Kyle Canyon west of the highway.

Summary of Existing Perimeter Facilities

Facility ID	Q_{DESIGN} (cfs)	Description	Comments	Referenced Improvement Plans
E-30	494	6-ft by 5-ft RCB	CCRFCD MPU Facility CNGT 0118	2008 CCRFCD MPU
E-30A	594	8-ft by 6-ft high RCB	CCRFCD MPU Facility CNGT 0043	Grand Teton Storm Drain - Hualapai to Tee Pee
E-30B	707	10-ft wide by 5-ft high RCB	CCRFCD MPU Facility CNGT 0020	Grand Teton Storm Drain - Hualapai to Tee Pee
E-31	231	6-ft by 4-ft RCA		Hualapai Improvements
E-32	N/A	18-inch RCP		Grand Teton Village / Grand View Apartments
E-33	761	Parallel 18-inch RCP on south half of road to be abandoned and flow is collected by 10-ft by 5-ft RCB		Grand Teton Drive Storm Drain
E-35	761	10-ft by 5-ft RCB	Outlets in to US-95 Channel	Grand Teton Drive Storm Drain
E-36	N/A	24-inch RCP	Flow from Grand Canyon Drive	Grand Canyon Apartments / Grand Canyon Terraces
E-37	802	Riprap Trapezoidal Channel	West Half of Grand Canyon Drive	Box Culvert for Centennial Point and Grand Canyon Apartments
E-38	802	8-ft by 8-ft RCB	Concrete Headwall	Box Culvert for Centennial Point and Grand Canyon Apartments
E-39	851	8-ft by 5-ft RCB	CCRFCD MPU Facility CNKC 0024	Box Culvert for Centennial Point and Grand Canyon Apartments
E-40	N/A	18-inch RCP		2008 CCRFCD MPU
E-41	999	10-ft by 5-ft RCB	CCRFCD MPU Facility CNKC 0007	2008 CCRFCD MPU
E-42	999	12-ft by 4-ft RCB	CCRFCD MPU Facility CNKC 0000	2008 CCRFCD MPU
E-43	9[1]	24-inch RCP	Collects roadway flow via drop inlets	Horse Drive / US-95 Interchange
E-44	234	68-inch by 43-inch HERCP	Discharges as surface flow into Horse Drive	Spring Mountain Twilight
E-45	101	48-inch HDPE		Spring Mountain Ranch Unit 90
E-46	13[1]	24-inch RCP	Collects roadway flow via drop inlets	Horse Drive / US-95 Interchange
E-47	2[1]	24-inch RCP	Collects roadway flow via drop inlets	Horse Drive / US-95 Interchange
E-48	16[1]	48-inch RCP	Stubbed to collect flow between US-95 and Sky Pointe Drive	Horse Drive / US-95 Interchange
E-49	29[1]	38-inch by 60-inch HERCP		Horse Drive / US-95 Interchange
E-50	101	54-inch RCP	18/24-inch RCP Stubs for west half of road	Spring Mountain Ranch Fort Apache Road
E-51	N/A	19-inch by 30-inch HERCP	Flow from school	James Bilbray Elementary School
E-52	N/A	18-inch RCP	Drop Inlets in Ft. Apache south of Iron Mtn.	James Bilbray Elementary School
E-53	60	30-inch HDPE	18-inch HDPE Stubs for north half of road	James Bilbray Elementary School
E-54	98	36-inch RCP		Iron Mountain Estates West Units 1 and 2
E-55	31	24-inch RCP	18-inch RCP Stubs for west half of road	Spring Mountain Ranch Unit 60 Phase 1
E-56	N/A	18-inch RCP	Stubbed and Capped	Spring Mountain Ranch Unit 60 Phase 1
E-57	73	36-inch RCP	18-inch RCP Stubs for north half of road	Spring Mountain Ranch Unit 60 Phase 1
E-58	1160**	Trapezoidal Channel	Outfall for Facility E-17	Site Visit
E-59	1160**	RCA Culvert	Outfall for Facility E-17	Site Visit

1 - 25-year Flow
** - Referenced from VTN Horse Drive / US-95 Interchange Study.

LEGEND
- BASIN BOUNDARY
- PRO-RATED SUBBASIN BOUNDARY
- LOCAL BASIN ID
- NW45-C REGIONAL BASIN ID
- PRO-RATED SUBBASIN ID
- CONCENTRATION POINT
- EXISTING FACILITY
- PROPOSED FACILITY
- FACILITY ID

N

0 600 1200
SCALE – 1" = 60' FEET

Summary of Future Facilities
Kyle Canyon East - Ultimate Condition

Facility ID	Q_{100} (cfs)	Design Slope (%)	Length (ft)	Description	Flow Breakdown[1]
U5	93	N/A	3630	Future Offsite Local Facility (By Others)	SHEEP2 + SHEEP3
F-3	10872	N/A	N/A	Future Offsite Regional Facility (By Others)	CP43
F-4	10869	N/A	N/A	Future Onsite Regional Facility (By Others), Replaces Facilities P34E & P39E	CNW64-C
F-5	10298	N/A	N/A	Future Onsite Regional Facility (By Others), Replaces Facility P31E	C213B-5
F-6	N/A	N/A	N/A	Future Offsite Regional Facility (By Others)	N/A

1 - Contributing HEC-1 flow s to Regional Facilities obtained from Regional Ultimate Condition hydrologic analysis.

Summary of Future Facilities
Kyle Canyon West - Ultimate Condition

Facility ID	Q_{100} (cfs)	Design Slope (%)	Length (ft)	Description	Flow Breakdown[1]
U1	86	N/A	563	Future Offsite Local Facility (By Others)	WGED1B + OFFW
U2	231	N/A	202	Future Offsite Local Facility (By Others)	WPT48
U3	322	N/A	620	Future Offsite Local Facility (By Others)	WPT46 + OFF14
F-2	2709	N/A	N/A	Future Offsite Regional Facility (By Others)	CNW35-C

1 - Contributing HEC-1 flow s obtained from Local Ultimate Condition hydrologic analysis.

EXHIBIT I

SKYE CANYON MASTER DRAINAGE STUDY UPDATE
ULTIMATE CONDITION FLOOD CONTROL FACILITIES MAP
OLY1401.004

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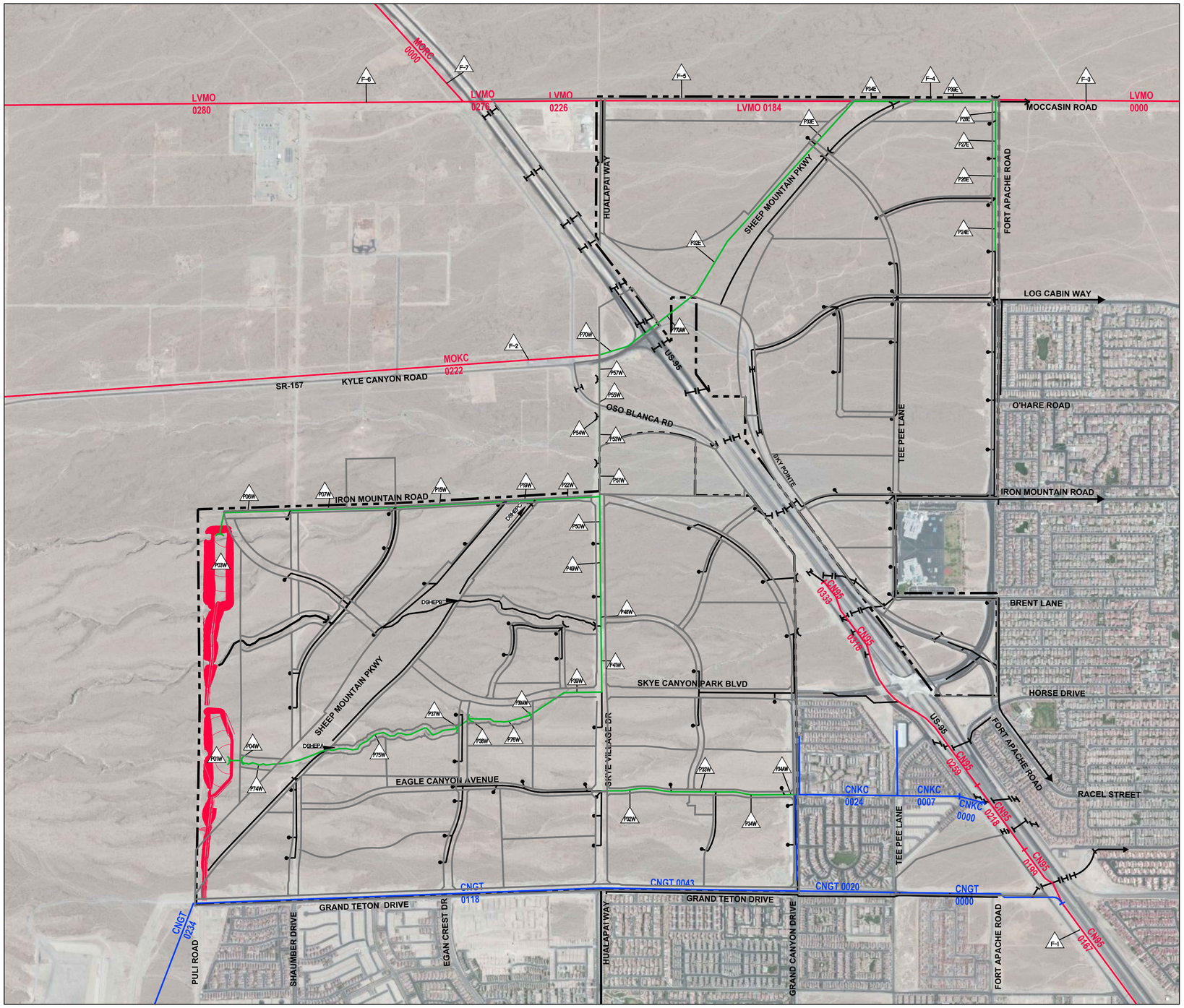
SKYE CANYON



Summary of Regional Facilities
Kyle Canyon West

Facility ID	Q_{100} (cfs)	Design Slope (%)	Length (ft)	Description	Flow Breakdown
P01W	794	N/A	N/A	Orifice Size: 30-inch (Into P74W) Total Storage Volume: 70.9 acre-ft Debris Volume: 5.9 acre-ft 100-year Storage Volume: 65 acre-ft 100-year Water Surface Elevation: 3036.0-ft PMF Flow: 4,912 cfs Low Flow Conveyance at Bottom	DB1/RDB1
P03W	695	N/A	N/A	Orifice Size: 27-inch (Into P06W) Total Storage Volume: 77.6 acre-ft Debris Volume: 5.6 acre-ft 100-year Storage Volume: 72 acre-ft 100-year Water Surface Elevation: 3008.5-ft PMF Flow: 4,653 cfs Low Flow Conveyance at Bottom	DB2/RDB2
P04W	71	2	223	36-inch RCP	RDB1
P06W	75	3.6	1195	30-inch RCP	RDB2
P07W	100	3.6	1419	42-inch RCP	RDB2 + WL8
P15W	314	3.6	1508	60-inch RCP	IR-SH
P19W	478	3.6	386	5-ft wide by 5-ft high RCB	IR-SH + WML6 + HORSE1B + WL4
P22W	497	3.6	877	6-ft wide by 5-ft high RCB	IR-SH + WML6 + HORSE1B + WL4 + SHEEP1-C
P32W	469	N/A	N/A	72-inch RCP (Phase 1)	RA-HU
P33W	508	N/A	N/A	72-inch RCP (Phase 1)	RA-HU + PH1-3
P34W	619	N/A	N/A	72-inch RCP (Phase 1)	RA-HU + PH1-3 + PH1-5 + PH1PRK
P34AW	681	N/A	N/A	8-ft wide by 6-ft high RCB	RA-HU + PH1-3 + PH1-5 + PH1PRK + PH1-4 + RACL1C
P37W	228	N/A	63	66-inch RCP Inlet	DSHEPA + AROY2 + PH2L8-B + RDB1 + AROY1 + WPRK5 + PH2ML4 + PH2PK2 + SHAUM1
P38W	339	N/A	64	60-inch RCP	DSHEPA + AROY2 + PH2L8-B + RDB1 + AROY1 + WPRK5 + PH2ML4 + PH2PK2 + SHAUM1 + PH2L4 + PH2L9 + EGAN2
P39AW	338	N/A	60	72-inch RCP Inlet	HU-HO
P39W	338	3.0	996	60-inch RCP	HU-HO
P41W	338	0.5	895	7-ft wide by 5-ft high RCB	HU-HO
P48W	562	0.5	397	10-ft wide by 5-ft high RCB	HU-HO + WML5 + WSCHL2 + STRT5 + SHEEP1-B + AROY5
P49W	609	0.5	719	10-ft wide by 5-ft high RCB	HU-HO + WML5 + WSCHL2 + STRT5 + SHEEP1-B + AROY5 + WMLA1-A
P50W	661	0.5	637	10-ft wide by 6-ft high RCB	HU-HO + WML5 + WSCHL2 + STRT5 + SHEEP1-B + AROY5 + WMLA1-A + WMLA1-B
P51W	1131	0.5	373	10-ft wide by 8-ft high RCB	HU-IR
P53W	1159	0.5	755	10-ft wide by 8-ft high RCB	WPT40
P54W	1310	N/A	70	(2) 10-ft wide by 8-ft high RCBs	COFFF1
P55W	1620	0.5	461	14-ft wide by 8-ft high RCB	COFFF2
P57W	1543	0.5	327	14-ft wide by 8-ft high RCB	CKC5
P70W	3249	3.0	707	14-ft wide by 8-ft high RCB, Crossing of US-95, Designed for Larger Ultimate Condition Flow	CKC5
P70AW	3400	3.0	879	14-ft wide by 8-ft high RCB, Crossing of US-95, Designed for Larger Ultimate Condition Flow	CKC6
P74W	80	N/A	520	Existing Arroyo	RDB1 + AROY1 + WPRK5
P75W	229	N/A	2650	Existing Arroyo	DSHEPA + AROY2 + PH2L8-B + RDB1 + AROY1 + WPRK5 + PH2ML4 + PH2PK2 + SHAUM1
P76W	339	N/A	846	Existing Arroyo	DSHEPA + AROY2 + PH2L8-B + RDB1 + AROY1 + WPRK5 + PH2ML4 + PH2PK2 + SHAUM1 + PH2L4 + PH2L9 + EGAN2
F-2	2709	N/A	N/A	Future Offsite Regional Facility (By Others)	CNW35-C

Summary of Regional Facilities
Kyle Canyon East

Facility ID	Q_{100} (cfs)	Design Slope (%)	Length (ft)	Description	Flow Breakdown
P24E	507	0.5	721	8-ft wide by 6-ft high RCB	R2FTLC + EML3-A
P26E	641	0.5	537	9-ft wide by 6-ft high RCB	R2FTLC + FORT2-A + EML3 + EML2B + TP4B + STRT7
P27E	703	0.5	513	10-ft wide by 6-ft high RCB	R2FTLC + FORT2-A + EML3 + EML2B + TP4B + STRT7 + EML4-A
P28E	760	0.5	400	10-ft wide by 6-ft high RCB	FT-MO
P32E	3426	2.4	2586	14-ft wide by 8-ft high RCB	CKC6 + OFFT
P33E	3610	2.4	783	14-ft wide by 8-ft high RCB, Designed to convey larger Ultimate Condition Flow	CKC6 + OFFT + EMLA2
P34E	3709	2.9	619	14-ft wide by 8-ft high RCB, to be replaced by Facility F-4	CKC6 + OFFT + EMLA2 + ENVE1 + OFFZ + HUAL3
P39E	3802	2.6	1296	14-ft wide by 8-ft high RCB, to be replaced by Facility F-4	CKC6 + OFFT + EMLA3 + ENVE1 + OFFZ + HUAL3 + SHEEP2 + SHEEP3
F-3	10872	N/A	N/A	Future Offsite Regional Facility (By Others)	CP43
F-4	10869	N/A	N/A	Future Onsite Regional Facility (By Others), Replaces Facilities P34E & P39E	CNW64-C
F-5	10298	N/A	N/A	Future Onsite Regional Facility (By Others), Replaces Facility P31E	C213B-5
F-6	N/A	N/A	N/A	Future Offsite Regional Facility (By Others)	N/A
F-7	N/A	N/A	N/A	Future Offsite Regional Facility (By Others)	N/A

N

SCALE – 1" = 600' FEET
0 600 1200

LEGEND

- PROJECT BOUNDARY
- EXISTING CCRFCD FACILITY
- PROPOSED CATEGORY 'A' CCRFCD FACILITY
- PROPOSED CATEGORY 'B' CCRFCD FACILITY
- LOCAL/PRIVATE FACILITY
- LVMO 0144 — 2008 CCRFCD MPU ID TAG
- ID — FACILITY SUMMARY ID

NOTES:

ALL FACILITIES IDENTIFIED AS CATEGORY 'B' ARE TO BE CONSTRUCTED BY THE KYLE CANYON MASTER PLAN.

STORM DRAIN CROSSING AT U.S. HIGHWAY 95 IS TO BE CONSTRUCTED BY KYLE CANYON MASTER PLAN, AND IS PLANNED TO BE THE PERMANENT FACILITY IN THE REGIONAL ALIGNMENT.

ADDITIONAL CCRFCD MPU FACILITIES IDENTIFIED ON THE EXHIBIT AS CATEGORY 'B' HAVE NOT BEEN IDENTIFIED WITH 2008 MPU ID TAGS SINCE THEY ARE CONSIDERED ADDED MPU FACILITIES TO BE INCORPORATED IN A FUTURE MPA.

FLOW COLLECTED BY THE CN95 MPU REGIONAL FACILITY IS CONVEYED SOUTH WITH NO FLOW SPLIT TO THE EAST.

PER 2008 MPU, FUTURE CCRFCD FACILITIES IN THE KYLE CANYON ROAD AND MOCCASIN ROAD ALINGNMENTS ARE TO TIE INTO PROPOSED FACILITIES IN SHEEP MOUNTAIN PARKWAY & MOCCASIN.

EXHIBIT J

SKYE CANYON MASTER DRAINAGE STUDY UPDATE

CCRFCD REGIONAL FACILITIES MAP

OLY1401.004

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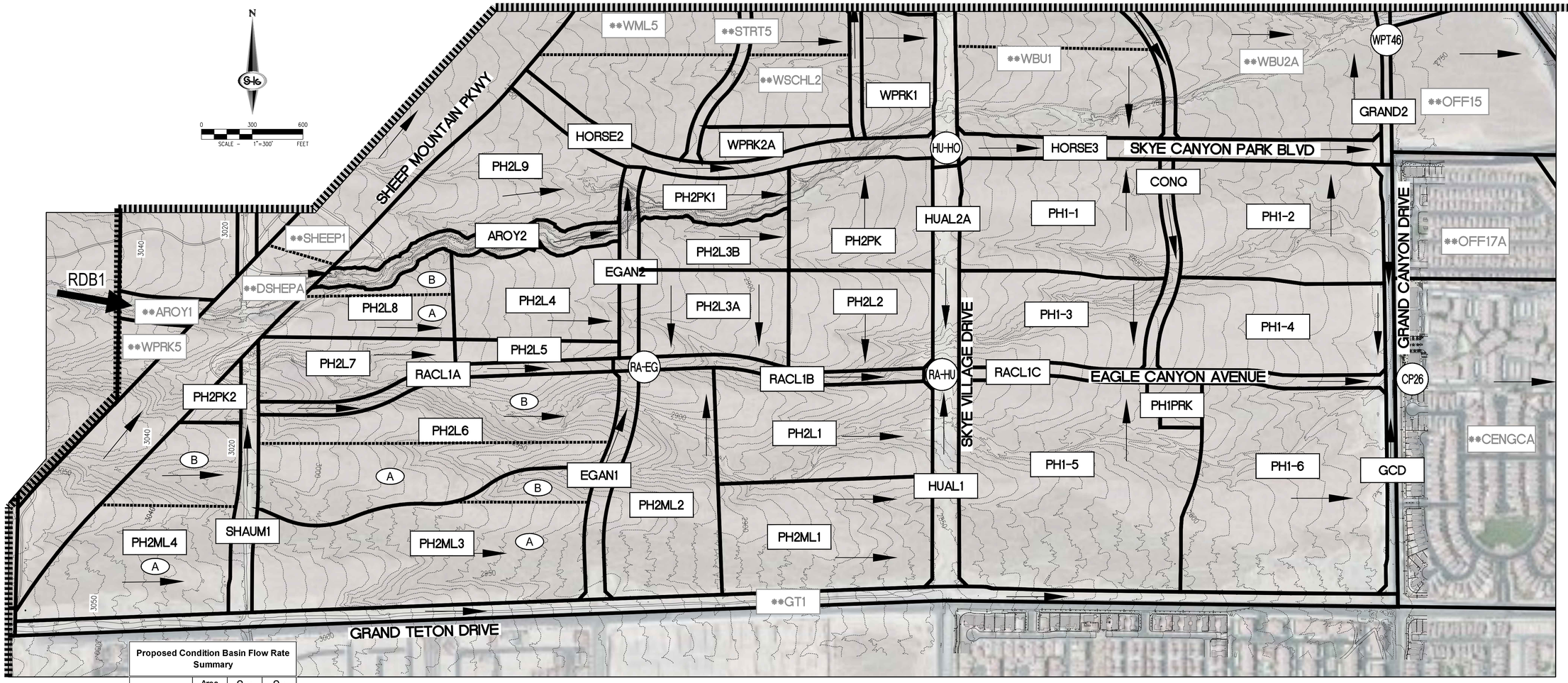
SKYE CANYON



Proposed Condition Basin Flow Rate Summary

Basin ID	Area (ac)	Q_{100} (cfs)	Q_{10} (cfs)
Modified Phase 2 Basins			
AROY2	5.2	13	6
EGAN1	3.7	12	7
EGAN2	2.8	10	6
*GRAND2	2.1	6	4
HORSE2	7.1	23	13
HUAL1	4.5	14	8
HAUL2A	4.0	13	7
PH2L1	17.4	45	21
PH2L2	11.5	31	14
PH2L3A	10.5	29	13
PH2L3B	6.1	17	8
PH2L4	11.9	33	15
PH2L5	2.7	8	4
PH2L6	30.0	77	34
PH2L7	8.3	23	10
PH2L8	8.1	22	10
PH2L9	18.6	52	23
PH2ML1	18.8	60	31
PH2ML2	18.1	59	31
PH2ML3	28.7	81	40
PH2ML4	22.7	66	32
PH2PK	13.1	29	10
PH2PK1	5.5	13	5
PH2PK2	3.2	4	2
RACL1A	3.8	13	7
RACL1B	3.3	12	7
SHAUM1	4.2	13	7
*WPRK1	7.3	18	7
*WPRK2A	3.8	9	3
Referenced Phase 1 Basins			
CONQ	2.2	6	3
GCD	3.4	10	5
PH1-1	17.8	47	21
PH1-2	19.3	45	18
PH1-3	14.8	39	17
PH1-4	16.1	49	24
PH1-5	37.3	107	52
PH1-6	32.3	93	46
PH1PRK	1.8	4	1
RACL1C	4.6	13	6

* Modified basin outside the Phase 2 Area

NOTE: PHASE 1 BASINS (PH1-1, PH1-2, PH1-3, PH1-4, PH1-5, PH1-6, CONQ, RACL1C, PH1PRK AND GCD) HAVE BEEN REFERENCED FROM THE APPROVED SKYE CANYON PHASE 1 INFRASTRUCTURE STUDY

Proposed Condition Concentration Point Flow Rate Summary

Basin/Concentration Point ID	Area (sqmi)	Q_{100} (cfs)	Q_{10} (cfs)
RA-EG *PH2ML3 + PH2L6 + EGAN1 + PH2L5 + PH2L7 + RACL1A*	0.12	209	100
RA-HU *RA-EG + PH2ML1 + PH2ML2 + PH2L1 + PH2L2 + PH2L3A + HUAL1 + RACL1B + HUAL2A*	0.26	469	226
HU-HO *RDB1 + AROY1 + WPRK5 + DSHEPA + AROY2 + PH2L4 + PH2L8 + PH2L9 + EGAN2 + WPRK2A + PH2PK1 + PH2L3B + PH2PK + HORSE2 + PH2PK2 + PH2ML4 + SHAUM1*	1.16	354	162
CP26 *RA-HU + PH1-3 + CONQ + PH1-5 + PH1PRK + RACL1C + PH1-4 + PH1-6 + GCD*	0.43	777	381
WPT46 *WBU1 + STRT1 + WBU2A + PH1-1 + PH1-2 + GRAND2 + HORSE3*	0.16	293	146

LEGEND

- BASIN BOUNDARY
- PRO-RATED SUBBASIN BOUNDARY
- ID — BASIN ID
- **ID — BASIN NOT MODIFIED
- (ID) — PRO-RATED SUBBASIN ID
- FLOW DIRECTION

Phase 2 Prorated Flow Summary

Basin	Q_{100} (cfs)	Area (acres)	Unit Flow (cfs/acre)
PH2ML3	81	28.7	2.8
PH2ML4	66	22.7	2.9
PH2L6	77	30.0	2.6
PH2L8	22	8.1	2.7
Subbasin	**Q_{100} (cfs)**	**Area (acres)**	**Unit Flow (cfs/acre)**
PH2ML3-A	73	25.8	2.8
PH2ML3-B	8	2.9	2.8
TOTAL	***81***	***28.7***	***2.8***
PH2ML4-A	47	16.0	2.9
PH2ML4-B	19	6.7	2.9
TOTAL	***66***	***22.7***	***2.9***
PH2L6-A	39	15.0	2.6
PH2L6-B	39	15.0	2.6
TOTAL	***77***	***30.0***	***2.6***
PH2L8-A	16	5.9	2.7
PH2L8-B	6	2.2	2.7
TOTAL	***22***	***8.1***	***2.7***

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NO.	DESCRIPTION	DATE	BY	APP DATE	APP

NINETY-FIVE MANAGEMENT, LLC.

SKYE CANYON MASTER DRAINAGE STUDY UPDATE
PHASE 2 PROPOSED CONDITION DRAINAGE MAP

DATE: FEBRUARY 2015
DRAFTER: ETM
DESIGNER: ETM
CHECKED: SMJ
PROJECT NO.
OLY1401.004

EXHIBIT K
SHEET 1 OF 1

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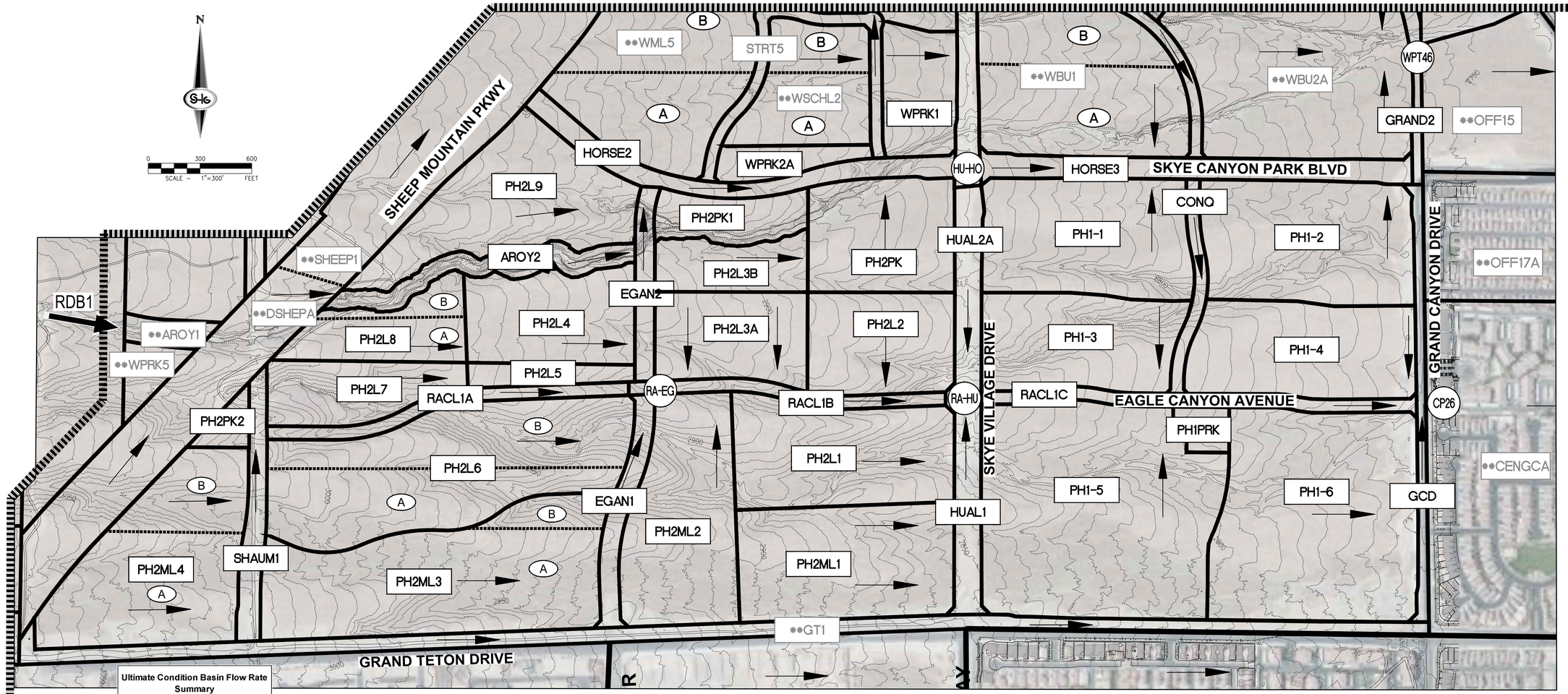

Ultimate Condition Basin Flow Rate Summary

Basin ID	Area (ac)	Q_{100} (cfs)	Q_{10} (cfs)
Modified Phase 2 Basins			
AROY2	5.2	13	6
EGAN1	3.7	12	7
EGAN2	2.8	10	6
*GRAND2	2.1	6	4
HORSE2	7.1	23	13
HUAL1	4.5	14	8
HAUL2A	4.0	13	7
PH2L1	17.4	45	21
PH2L2	11.5	31	14
PH2L3A	10.5	29	13
PH2L3B	6.1	17	8
PH2L4	11.9	33	15
PH2L5	2.7	8	4
PH2L6	30.0	77	34
PH2L7	8.3	23	10
PH2L8	8.1	22	10
PH2L9	18.6	52	23
PH2ML1	18.8	60	31
PH2ML2	18.1	59	31
PH2ML3	28.7	81	40
PH2ML4	22.7	66	32
PH2PK	13.1	29	10
PH2PK1	5.5	13	5
PH2PK2	3.2	4	2
RACL1A	3.8	13	7
RACL1B	3.3	12	7
SHAUM1	4.2	13	7
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GCD	3.4	10	5
PH1-1	17.8	47	21
PH1-2	19.3	45	18
PH1-3	14.8	39	17
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PH1-5	37.3	107	52
PH1-6	32.3	93	46
PH1PRK	1.8	4	1
RACL1C	4.6	13	6

* Modified basin outside the Phase 2 Area

NOTE: PHASE 1 BASINS (PH1-1, PH1-2, PH1-3, PH1-4, PH1-5, PH1-6, CONQ, RACL1C, PH1PRK AND GCD) HAVE BEEN REFERENCED FROM THE APPROVED SKYE CANYON PHASE 1 INFRASTRUCTURE STUDY

Ultimate Condition Concentration Point Flow Rate Summary

Basin/Concentration Point ID	Area (sqmi)	Q_{100} (cfs)	Q_{10} (cfs)
RA-EG *PH2ML3 + PH2L6 + EGAN1 + PH2L5 + PH2L7 + RACL1A*	0.12	209	100
RA-HU *RA-EG + PH2ML1 + PH2ML2 + PH2L1 + PH2L2 + PH2L3A + HUAL1 + RACL1B + HUAL2A*	0.27	469	226
HU-HO *RDB1 + AROY1 + WPRK5 + DSHEPA + AROY2 + PH2L4 + PH2L8 + PH2L9 + EGAN2 + WPRK2A + PH2PK1 + PH2L3B + PH2PK + HORSE2 + PH2PK2 + PH2ML4 + SHAUM1*	1.16	348	162
CP26 *RA-HU + PH1-3 + CONQ + PH1-5 + PH1PRK + RACL1C + PH1-4 + PH1-6 + GCD*	0.43	777	381
WPT46 *WBU1 + STRT1 + WBU2A + PH1-1 + PH1-2 + GRAND2 + HORSE3*	0.16	293	146

LEGEND

- BASIN BOUNDARY
- PRO-RATED SUBBASIN BOUNDARY
- ID — BASIN ID
- **ID — BASIN NOT MODIFIED
- (ID) — PRO-RATED SUBBASIN ID
- FLOW DIRECTION

Phase 2 Prorated Flow Summary

Basin	Q_{100} (cfs)	Area (acres)	Unit Flow (cfs/acre)
PH2ML3	81	28.7	2.8
PH2ML4	66	22.7	2.9
PH2L6	77	30.0	2.6
PH2L8	22	8.1	2.7
Subbasin	**Q_{100} (cfs)**	**Area (acres)**	**Unit Flow (cfs/acre)**
PH2ML3-A	73	25.8	2.8
PH2ML3-B	8	2.9	2.8
TOTAL	***81***	***28.7***	***2.8***
PH2ML4-A	47	16.0	2.9
PH2ML4-B	19	6.7	2.9
TOTAL	***66***	***22.7***	***2.9***
PH2L6-A	39	15.0	2.6
PH2L6-B	39	15.0	2.6
TOTAL	***77***	***30.0***	***2.6***
PH2L8-A	16	5.9	2.7
PH2L8-B	6	2.2	2.7
TOTAL	***22***	***8.1***	***2.7***

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NO.	DESCRIPTION	DATE	BY	APP DATE	APP

NINETY-FIVE MANAGEMENT, LLC.

SKYE CANYON MASTER DRAINAGE STUDY UPDATE

PHASE 2 ULTIMATE CONDITION DRAINAGE MAP

DATE: FEBRUARY 2015
DRAFTER: ETM
DESIGNER: ETM
CHECKED: SMJ
PROJECT NO. OLY1401.004

EXHIBIT L
SHEET 1 OF 1

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