LOMR
FOR
RIVERWALK PHASE 2A

JANUARY 2004
DEA PROJECT NO. ELLT0013

DAVID EVANS AND ASSOCIATES INC.

City of Phoenix
STREET TRANSPORTATION DEPARTMENT

Property of
Flood Control District of MC Library
Please Return to
2801 W. Durango
Phoenix, AZ 85009

March 3, 2004

Michael Baker Corporation
3601 Eisenhower Avenue, Suite 600
Alexandria, Virginia 22304

Case No.: 01-09-867R
Community: City of Phoenix
Maricopa County, Arizona
Community No.: 040051

RE: RIVERWALK PHASE 2A, LETTER OF MAP REVISION (LOMR)
PHOENIX, ARIZONA, FIRM PANEL 04013C2120F.

Gentlemen:

Please find enclosed a Letter of Map Revision (LOMR) application for Riverwalk Phase 2A in Phoenix, Arizona. The following items are included with this application.

ITEMS:

1- Check for $3800.
2- Payment Information Form.
3- Explanation of Forms.
4- Overview & Concurrence Form (MT-2 Form 1).
5- Riverine Hydrology & Hydraulics Form (MT-2 Form 2).
6- Conditional Letter of Map Revision (Section C).
7- Annotated FIRM Panel 04013C2120F (Section D).
8- Duplicate Effective HEC-RAS Model (Section G).
9- Revised HEC-RAS Model (Section H).
10- PAD Elevation Certification/As-built Grading and Drainage Plan.

If you have any technical questions regarding this project, please contact Mr. Patrick M. Moraca, P.E., David Evans and Associates, Inc., phone number 602-678-5151, fax 602-678-5155. For any other questions, please contact this office at 602-262-4960.

Sincerely,

Hasan Mushtaq, Ph.D., P.E., CFM
Floodplain Manager

HM/KT/aff/riverwalk phase 2 lomr.doc

Attachment

c: Mr. Moraca, P.E., David Evans and Associates, Inc.
Mr. Murphy P.E., CFM, Flood Control District of Maricopa County
Mr. Cosson, Arizona Department of Water Resources

200 West Washington Street, Fifth Floor, Phoenix, Arizona 85003 1611 602-262-6284 FAX: 602-495-2016
Recycled Paper

LOMR
FOR
RIVERWALK Phase 2A

PREPARED FOR

Elliot Homes
1400 E. Southern Avenue
Building H, Suite 720
Tempe, Arizona 85281

January 29, 2004

PREPARED BY

Patrick Moraca, P.E.
DAVID EVANS AND ASSOCIATES, INC.
2141 E. HIGHLAND AVE.
PHOENIX, AZ 85016
(602) 678-5151

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OTHER	LOCATION
Grading & Drainage AS-BUILT Pad Elevations	Back Pocket
HEC-RAS Models	Diskette

SECTION A

Explanation of Forms

EXPLANATION OF FORMS

PAYMENT INFORMATION FORM (FEMA FORM 81-107)

Check provided for the amount of $3800 from Elliot Homes

OVERVIEW & CONCURRENCE FORM (MT-2 Form 1)

A. REQUESTED RESPONSE FROM FEMA - LOMR Submittal for FEMA Case No. 040051
B. OVERVIEW
   1. No Explanation provided
   2. No Explanation provided
   3. No Explanation provided
   4. No Explanation provided
   5. Basis for Request and Type of Revision
      a. Physical Change-refers to the mass grading to elevate the specified area above the FEMA floodplain. Improved Methodology/Data-refers to the grades per the approved construction documents. See Riverwalk Phase 2A Photographs section for photographs of site conditions on November 12, 2003.
      b. Types of Flooding- Compacted fill constructed in the existing FEMA AE floodplain. Structures- Please see included Construction Inspection & Testing Company data provided for test data indicating the compacted fill test results. These results are provided per the
C. REVIEW FEE
D. SIGNATURE
   Owner- Signature provided by Developer's employee representative
   Community- Signature provided by City of Phoenix employee representative
   Registered Engineer and/or Land Surveyor - Signature/Certification provided by David Evans and Associates, Inc employee representative. Survey Data - Sealed and Signed by David Evans and Associates, Inc employee representative. Soils Data - Sealed and signed by CTI employee representative.
   Form Name and (Number)

RIVERINE HYDRAULIC ANALYSIS FORM (MT-2 Form 2)

A. HYDROLOGY
   1. No hydrology revisions were associated with this project.

B. HYDRAULICS
   1. No Explanation provided
   2. No Explanation provided
   3. No Explanation provided
   4. No Explanation provided
C. MAPPING REQUIREMENTS
   No Explanation provided
D. COMMON REGULATORY REQUIREMENTS
   1. No Explanation provided
   2. Pad elevations designed above the designated Zone AE elevation
   3. Elevated pads are out side the floodway in the floodway fringe
   4. Calculated BFE does not increase

FEMA AUGUST 22, 2001 CLOMR COMMENTS LETTER BULLET ITEMS

- DETAILED APPLICATION AND CERTIFICATION FORMS (Section B)

  Form MT-2 Form 1 provided in place of specified Form 1, entitled "Revision Requester and Community Official Form.

- DETAILED APPLICATION AND CERTIFICATION FORMS LISTED BELOW MAY BE REQUIRED IF AS-BUILT CONDITIONS DIFFER FROM THE PRELIMINARY PLANS. (Section B)

  Form MT-2 Form 2 provided in place of specified Form 4 and Form 5.

- EFFECTIVE JUNE 1, 2000, FEMA... (Section B)

  Payment Information Form (FEMA Form 81-107) and check provided for the amount of $3800 from Elliot Homes.

- AS-BUILT PLANS, CERTIFIED BY A REGISTERED... (Section I)

  Signature/Certification provided by David Evans and Associates, Inc employee representative. Survey Data - Sealed and Signed by David Evans and Associates, Inc employee representative.

- COMMUNITY ACKNOWLEDGEMENT... (Section B)

  Signature provided by City of Phoenix employee representative.

- CERTIFICATION THAT ALL FILL PLACED... (Section F)

  Soils Data - Sealed and signed by CTI employee representative.

SECTION B

FEMA Forms

FEDERAL EMERGENCY MANAGEMENT AGENCY

PAYMENT INFORMATION FORM

Community Name: Phoenix, City (040051)

Project Identifier: River Walk Villages Phase 2A

THIS FORM MUST BE MAILED, ALONG WITH THE APPROPRIATE FEE, TO ONE OF TWO POST OFFICE BOXES (SEE BELOW) OR FAXED TO THE FAX NUMBER BELOW.

Type of Request:

MT-1 application fee
MT-2 application fee } (Insert **3173** as the P.O. Box number in the address below)

External Data Requests (EDRs) (Insert **398** as the P.O. Box number in the address below)

Federal Emergency Management Agency
Revisions Fee-Collection System Administrator
P.O. Box 3173
Merrifield, Virginia 22116
Fax: (703) 849-0282

Request No.: (if known) Amount: 3800

☐ INITIAL FEE* ☐ FINAL FEE ☐ FEE BALANCE** ☐ MASTER CARD ☐ VISA ☒ CHECK ☐ MONEY ORDER

*Note: Check only for EDR and/or Alluvial Fan requests (as appropriate).

**Note: Check only if submitting a corrected fee for an ongoing request.

COMPLETE THIS SECTION ONLY IF PAYING BY CREDIT CARD

EXP. DATE

1 2 3 4 — 5 6 7 8 — 9 10 11 12 — 13 14 15 16 Month — Year

CARD NUMBER

Date _____ Signature

NAME *(AS IT APPEARS ON CARD)*:
(please print or type)

ADDRESS:
(for your credit card receipt-please print or type)

DAYTIME PHONE:

FEDERAL EMERGENCY MANAGEMENT AGENCY

OVERVIEW & CONCURRENCE FORM

O.M.B No. 3067-0148
Expires September 30, 2005

PAPERWORK BURDEN DISCLOSURE NOTICE

Public reporting burden for this form is estimated to average 1 hour per response. The burden estimate includes the time for reviewing instructions, searching existing data sources, gathering and maintaining the needed data, and completing, reviewing, and submitting the form. You are not required to respond to this collection of information unless a valid OMB control number appears in the upper right corner of this form. Send comments regarding the accuracy of the burden estimate and any suggestions for reducing this burden to: Information Collections Management, Federal Emergency Management Agency, 500 C Street, SW, Washington DC 20472, Paperwork Reduction Project (3067-0148). Submission of the form is required to obtain or retain benefits under the National Flood Insurance Program. **Please do not send your completed survey to the above address.**

A. REQUESTED RESPONSE FROM FEMA

This request is for a (check one):

☐ CLOMR: A letter from FEMA commenting on whether a proposed project, if built as proposed, would justify a map revision, or proposed hydrology changes (See 44 CFR Ch. 1, Parts 60, 65 & 72).

☒ LOMR: A letter from FEMA officially revising the current NFIP map to show the changes to floodplains, regulatory floodway or flood elevations. (See Parts 60 & 65 of the NFIP Regulations.)

B. OVERVIEW

1. The NFIP map panel(s) affected for all impacted communities is (are):

Community No.	Community Name	State	Map No.	Panel No.	Effective Date
Ex: 480301	City of Katy	TX	480301	0005D	02/08/83
480287	Harris County	TX	48201C	0220G	09/28/90
040051	Phoenix, City	AZ	04013C	2120E	07/19/01

2. Flooding Source: Salt Gila Reach 3

3. Project Name/Identifier: Riverwalk Villages Phase 2A

4. FEMA zone designations affected: AE (choices: A, AH, AO, A1-A30, A99, AE, AR, V, V1-V30, VE, B, C, D, X)

5. Basis for Request and Type of Revision:

   a. The basis for this revision request is (check all that apply)

   ☒ Physical Change ☒ Improved Methodology/Data

   ☐ Regulatory Floodway Revision ☐ Other (Attach Description)

   Note: A photograph and narrative description of the area of concern is not required, but is very helpful during review.

   b. The area of revision encompasses the following types of flooding and structures (check all that apply)

   Types of Flooding: ☒ Riverine ☐ Coastal ☐ Shallow Flooding (e.g., Zones AO and AH)

   ☐ Alluvial fan ☐ Lakes ☐ Other (Attach Description)

   Structures: ☐ Channelization ☐ Levee/Floodwall ☐ Bridge/Culvert

   ☐ Dam ☒ Fill ☐ Other, Attach Description

C. REVIEW FEE

Has the review fee for the appropriate request category been included? ☒ Yes Fee amount: $3800

☐ No, Attach Explanation

Please see the FEMA Web site at http://www.fema.gov/fhm/frm_fees.shtm for Fee Amounts and Exemptions.

D. SIGNATURE

All documents submitted in support of this request are correct to the best of my knowledge. I understand that any false statement may be punishable by fine or imprisonment under Title 18 of the United States Code, Section 1001.

Name: Jeffrey Klem, Asst. V.P.	Company: Elliot Homes	
Mailing Address: 1400 E. Southern Avenue Building H, Suite 720 Tempe, Arizona 85281	Daytime Telephone No.: (480) 831-9200	Fax No.: (480) 831-9300
	E-Mail Address: j.klem@elliotthomesaz.com	
Signature of Requester (required):		Date: 12/10/03

As the community official responsible for floodplain management, I hereby acknowledge that we have received and reviewed this Letter of Map Revision (LOMR) or conditional LOMR request. Based upon the community's review, we find the completed or proposed project meets or is designed to meet all of the community floodplain management requirements, including the requirement that no fill be placed in the regulatory floodway, and that all necessary Federal, State, and local permits have been, or in the case of a conditional LOMR, will be obtained. In addition, we have determined that the land and any existing or proposed structures to be removed from the SFHA are or will be reasonably safe from flooding as defined in 44CFR 65.2(c), and that we have available upon request by FEMA, all analyses and documentation used to make this determination.

Community Official's Name and Title: Hasan Mushtaq, Ph.D., P.E., CFM - FLoodplain Manager		Telephone No.: (602) 262-4026
Community Name: PHOENIX, CITY (040051)	Community Official's Signature (required):	Date: 3/2/04

CERTIFICATION BY REGISTERED PROFESSIONAL ENGINEER AND/OR LAND SURVEYOR

This certification is to be signed and sealed by a licensed land surveyor, registered professional engineer, or architect authorized by law to certify elevation information. All documents submitted in support of this request are correct to the best of my knowledge. I understand that any false statement may be punishable by fine or imprisonment under Title 18 of the United States Code, Section 1001.

Certifier's Name: Patrick M. Moraca	License No.: 37342	Expiration Date: 3/31/2005
Company Name: David Evans and Associates, Inc	Telephone No.: (602) 678-5151	Fax No.: (602) 678-5155
Signature:		Date: 12/08/03

Registered Professional Engineer (Environmental) CERTIFICATE NO. 37342 PATRICK M. MORACA Date Signed ARIZONA, U.S.A. Seal (Optional)

Ensure the forms that are appropriate to your revision request are included in your submittal.

Form Name and (Number)	Required if ...
☐ Riverine Hydrology and Hydraulics Form (Form 2)	New or revised discharges or water-surface elevations
☐ Riverine Structures Form (Form 3)	Channel is modified, addition/revision of bridge/culverts, addition/revision of levee/floodwall, addition/revision of dam
☐ Coastal Analysis Form (Form 4)	New or revised coastal elevations
☐ Coastal Structures Form (Form 5)	Addition/revision of coastal structure
☐ Alluvial Fan Flooding Form (Form 6)	Flood control measures on alluvial fans

FEDERAL EMERGENCY MANAGEMENT AGENCY

RIVERINE HYDROLOGY & HYDRAULICS FORM

O.M.B No. 3067-0148
Expires September 30, 2005

PAPERWORK REDUCTION ACT

Public reporting burden for this form is estimated to average 3 hours per response. The burden estimate includes the time for reviewing instructions, searching existing data sources, gathering and maintaining the needed data, and completing, reviewing, and submitting the form. You are not required to respond to this collection of information unless a valid OMB control number appears in the upper right corner of this form. Send comments regarding the accuracy of the burden estimate and any suggestions for reducing this burden to: Information Collections Management, Federal Emergency Management Agency, 500 C Street, SW, Washington DC 20472, Paperwork Reduction Project (3067-0148). Submission of the form is required to obtain or retain benefits under the National Flood Insurance Program. **Please do not send your completed survey to the above address.**

Flooding Source: Salt Gila-Reach 3
Note: Fill out one form for each flooding source studied

A. HYDROLOGY

1. Reason for New Hydrologic Analysis (check all that apply)

☒ Not revised (skip to section 2) ☐ No existing analysis ☐ Improved data
☐ Alternative methodology ☐ Proposed Conditions (CLOMR) ☐ Changed physical condition of watershed

2. Comparison of Representative 1%-Annual-Chance Discharges

Location	Drainage Area (Sq. Mi.)	FIS (cfs)	Revised (cfs)

3. Methodology for New Hydrologic Analysis (check all that apply)

☐ Statistical Analysis of Gage Records ☐ Precipitation/Runoff Model [TR-20, HEC-1, HEC-HMS etc.]
☐ Regional Regression Equations ☐ Other (please attach description)

Please enclose all relevant models in digital format, maps, computations (including computation of parameters) and documentation to support the new analysis. The document, "Numerical Models Accepted by FEMA for NFIP Usage" lists the models accepted by FEMA. This document can be found at: http://www.fema.gov/fhm/en_modl.shtm.

4. Review/Approval of Analysis

If your community requires a regional, state, or federal agency to review the hydrologic analysis, please attach evidence of approval/review.

5. Impacts of Sediment Transport on Hydrology

Was sediment transport considered? ☐ Yes ☐ No If yes, then fill out Section F (Sediment Transport) of Form 3. If No, then attach your explanation for why sediment transport was not considered.

B. HYDRAULICS

1. Reach to be Revised

	Description	Cross Section	Water-Surface Elevations (ft.)	
			Effective	Proposed/Revised
Downstream Limit	Reach 3	207.34	1009.51	1009.51
Upstream Limit	Reach 3	207.48	1011.97	1011.97

2. Hydraulic Method Used

Hydraulic Analysis HEC-RAS [HEC-2 , HEC-RAS, Other (Attach description)]

B. HYDRAULICS (CONTINUED)

3. Pre-Submittal Review of Hydraulic Models

FEMA has developed two review programs, CHECK-2 and CHECK-RAS, to aid in the review of HEC-2 and HEC-RAS hydraulic models, respectively. These review programs verify that the hydraulic estimates and assumptions in the model data are in accordance with NFIP requirements, and that the data are comparable with the assumptions and limitations of HEC-2/HEC-RAS. CHECK-2 and CHECK-RAS identify areas of potential error or concern. These tools do not replace engineering judgment. CHECK-2 and CHECK-RAS can be downloaded from http://www.fema.gov/fhm/frm_soft.shtm. We recommend that you review your HEC-2 and HEC-RAS models with CHECK-2 and CHECK-RAS. If you disagree with a message, please attach an explanation of why the message is not valid in this case. Review of your submittal and resolution of valid modeling discrepancies will result in reduced review time.

HEC-2/HEC-RAS models reviewed with CHECK-2/CHECK-RAS? ☐ Yes ☒ No

4. Models Submitted

Duplicate Effective Model*	Natural File Name: Reach3.p01	Floodway File Name: Reach3.p01
Corrected Effective Model*	Natural File Name:	Floodway File Name:
Existing or Pre-Project Conditions Model	Natural File Name:	Floodway File Name:
Revised or Post-Project Conditions Model	Natural File Name: Reach3.p02	Floodway File Name: Reach3.p02
Other - (attach description)	Natural File Name:	Floodway File Name:

*Not required for revisions to approximate 1%-annual-chance floodplains (Zone A) – for details, refer to the corresponding section of the instructions.

The document "Numerical Models Accepted by FEMA for NFIP Usage" lists the models accepted by FEMA. This document can be found at: http://www.fema.gov/fhm/en_modl.shtm.

C. MAPPING REQUIREMENTS

A **certified topographic map** must be submitted showing the following information (where applicable): the boundaries of the effective, existing, and proposed conditions 1%-annual-chance floodplain (for approximate Zone A revisions) or the boundaries of the 1%- and 0.2%-annual-chance floodplains and regulatory floodway (for detailed Zone AE, AO, and AH revisions); location and alignment of all cross sections with stationing control indicated; stream, road, and other alignments (e.g., dams, levees, etc.); current community easements and boundaries; boundaries of the requester's property; certification of a registered professional engineer registered in the subject State; location and description of reference marks; and the referenced vertical datum (NGVD, NAVD, etc.).

Note that the boundaries of the existing or proposed conditions floodplains and regulatory floodway to be shown on the revised FIRM and/or FBFM must tie-in with the effective floodplain and regulatory floodway boundaries. Please attach **a copy of the effective FIRM and/or FBFM,** annotated to show the boundaries of the revised 1%- and 0.2%-annual-chance floodplains and regulatory floodway that tie-in with the boundaries of the effective 1%- and 0.2%-annual-chance floodplain and regulatory floodway at the upstream and downstream limits of the area of revision.

D. COMMON REGULATORY REQUIREMENTS

1. For CLOMR requests, do Base Flood Elevations (BFEs) increase? ☐ Yes ☒ No

For CLOMR requests, if either of the following is true, please submit evidence of compliance with Section 65.12 of the NFIP regulations:
- The proposed project encroaches upon a regulatory floodway and would result in increases above 0.00 foot.
- The proposed project encroaches upon a SFHA with BFEs established and would result in increases above 1.00 foot.

2. Does the request involve the placement or proposed placement of fill? ☒ Yes ☐ No

If Yes, the community must be able to certify that the area to be removed from the special flood hazard area, to include any structures or proposed structures, meets all of the standards of the local floodplain ordinances, and is reasonably safe from flooding in accordance with the NFIP regulations set forth at 44 CFR 60.3(a)(3), 65.5(a)(4), and 65.6(a)(14). Please see the MT-2 instructions for more information.

3. For LOMR requests, is the regulatory floodway being revised? ☐ Yes ☒ No

If Yes, attach evidence of regulatory floodway revision notification. As per Paragraph 65.7(b)(1) of the NFIP Regulations, notification is required for requests involving revisions to the regulatory floodway. (Not required for revisions to approximate 1%-annual-chance floodplains [studied Zone A designation] unless a regulatory floodway is being added. Elements and examples of regulatory floodway revision notification can be found in the MT-2 Form 2 Instructions.)

4. For LOMR requests, does this request require property owner notification and acceptance of BFE increases? ☐ Yes ☒ No

If Yes, please attach proof of property owner notification and acceptance (if available). Elements of and examples of property owner notification can be found in the MT-2 Form 2 Instructions.

SECTION C

FEMA-CLOMR Response Letter

Federal Emergency Management Agency

Washington, D.C. 20472

AUG 22 2001

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

IN REPLY REFER TO:
Case No.: 01-09-867R

The Honorable Skip Rimsza
Mayor, City of Phoenix
200 West Washington Street, 11th Floor
Phoenix, AZ 85003-1611

Community: City of Phoenix, AZ
Community No.: 040051

104

Dear Mayor Rimsza:

This responds to a request that the Federal Emergency Management Agency (FEMA) comment on the effects that a proposed project would have on the effective Flood Insurance Rate Map (FIRM) for Maricopa County, Arizona and Incorporated Areas (the effective FIRM for your community), in accordance with Part 65 of the National Flood Insurance Program (NFIP) regulations. In a letter dated June 20, 2001, Mr. Ray Dovalina P.E., Floodplain Manager, Street Transportation Department, City of Phoenix, requested that FEMA evaluate the effects that placement of fill along the south bank of the Salt River from approximately 500 feet downstream to approximately 250 feet downstream of 51st Avenue would have on the flood hazard information shown on the effective FIRM.

All data required to complete our review of this request for a Conditional Letter of Map Revision (CLOMR) were submitted with technical report from Ms. Teri George, P.E., Water Resources Manager, David Evans and Associates, Inc., and Mr. Dovalina.

We reviewed the submitted data and the data used to prepare the effective FIRM for your community and determined that the proposed project meets the minimum floodplain management criteria of the NFIP. We believe that, if the proposed project is constructed as shown on the submitted plans entitled "Riverwalk Village 2A Phoenix, Arizona," prepared by David Evans and Associates, Inc., dated December 1, 2000, and the data listed below are received, a revision to the FIRM would be warranted.

As a result of the proposed project, the width of the Special Flood Hazard Area (SFHA), the area that would be inundated by the flood having a 1-percent chance of being equaled or exceeded in any given year (base flood), will decrease compared to the effective SFHA width along the Salt River from 51st Avenue to approximately 600 feet downstream. The maximum decrease in SFHA width, approximately 1,050 feet, will occur approximately 400 feet downstream of 51st Avenue.

Upon completion of the project, your community may submit the data listed below and request that we make a final determination on revising the effective FIRM.

- Detailed application and certification forms, which were used in processing this request, must be used for requesting final revisions to the maps. Therefore, when the map revision request for the area covered by this letter is submitted, Form 1, entitled "Revision Requester and Community Official Form," must be included. (A copy of this form is enclosed.)

- The detailed application and certification forms listed below may be required if as-built conditions differ from the preliminary plans. If required, please submit new forms (copies of which are enclosed) or annotated copies of the previously submitted forms showing the revised information.

  Form 4, entitled "Riverine Hydraulic Analysis Form"

  Form 5, entitled "Riverine/Coastal Mapping Form"

  Hydraulic analyses, for as-built conditions, of the base flood must be submitted with Form 4, and a topographic work map showing the revised floodplain and floodway boundaries must be submitted with Form 5.

- Effective June 1, 2000, FEMA revised the fee schedule for reviewing and processing requests for conditional and final modifications to published flood information and maps. In accordance with this schedule, the current fee for this map revision request is $3,400 and must be received before we can begin processing the request. Please note, however, that the fee schedule is subject to change, and requesters are required to submit the fee in effect at the time of the submittal. Payment of this fee shall be made in the form of a check or money order, made payable in U.S. funds to the National Flood Insurance Program, or by credit card. The payment must be forwarded to the following address:

  Federal Emergency Management Agency
  Fee-Charge System Administrator
  P.O. Box 3173
  Merrifield, VA 22116-3173

- As-built plans, certified by a registered professional engineer, of all proposed project elements

- Community acknowledgment of the map revision request

- Certification that all fill placed in the currently effective base floodplain and below the proposed Base Flood Elevation is compacted to 95 percent of the maximum density obtainable with the Standard Proctor Test method issued by the American Society for Testing and Materials (ASTM Standard D-698) or an acceptable equivalent method for all areas to be removed from the base floodplain

After receiving appropriate documentation to show that the project has been completed, FEMA will initiate a revision to the FIRM.

This CLOMR is based on minimum floodplain management criteria established under the NFIP. Your community is responsible for approving all floodplain development and for ensuring all necessary permits required by Federal or State law have been received. State, county, and community officials, based on knowledge of local conditions and in the interest of safety, may set higher standards for construction in the SFHA. If the State, county, or community has adopted more restrictive or comprehensive floodplain management criteria, these criteria take precedence over the minimum NFIP criteria.

If you have any questions regarding floodplain management regulations for your community or the NFIP in general, please contact the Consultation Coordination Officer (CCO) for your community. Information on the CCO for your community may be obtained by calling the Chief, Community Mitigation Programs Branch, Mitigation Division of FEMA in San Francisco, California, at (415) 923-7184. If you have any questions regarding this CLOMR, please call our Map Assistance Center, toll free, at 1-877-FEMA MAP (1-877-336-2627).

Sincerely,

Max H. Yuan, P.E., Project Engineer
Hazards Study Branch
Hazard Mapping Division

For: Matthew B. Miller, P.E., Chief
Hazards Study Branch
Hazard Mapping Division

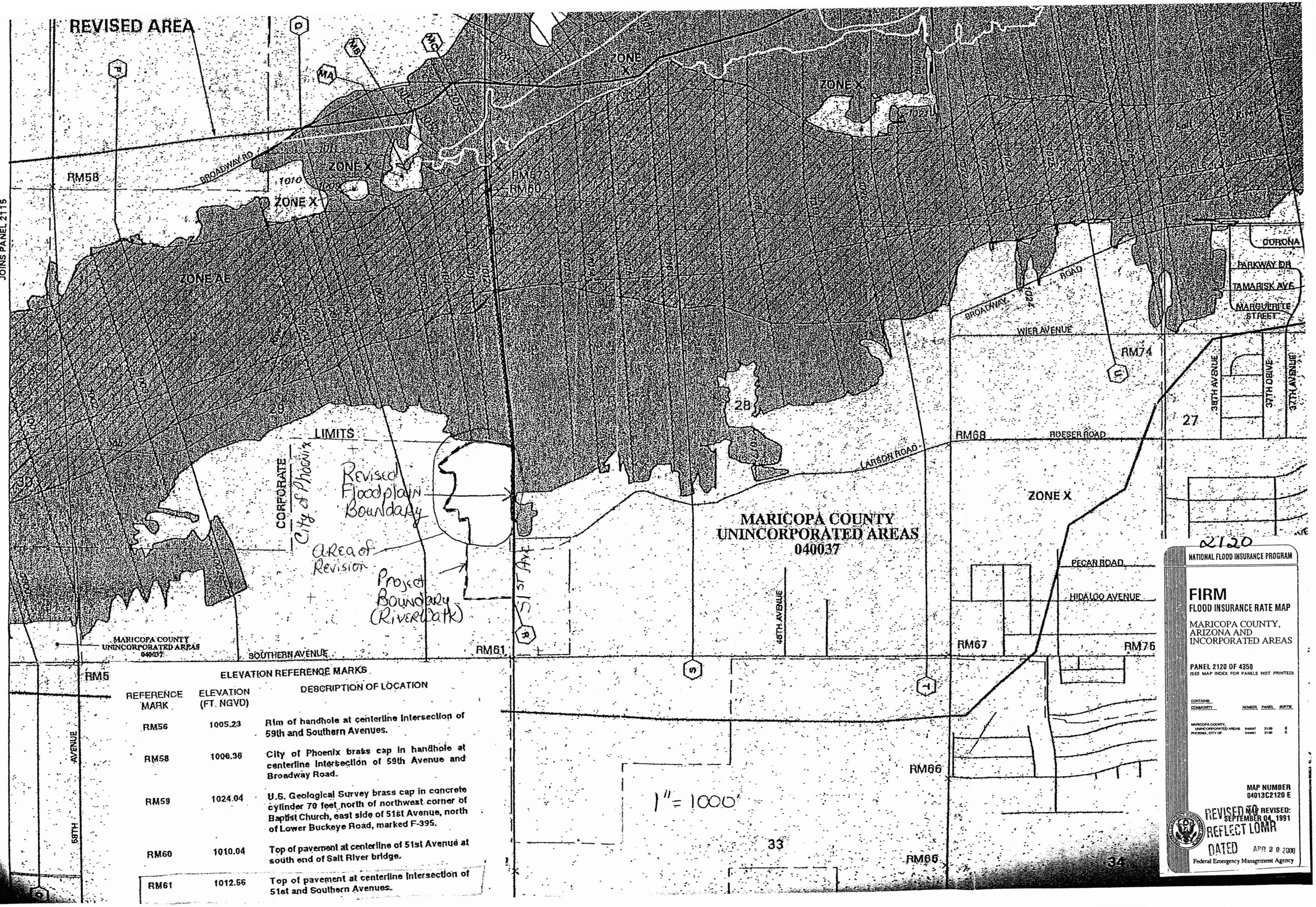
Enclosures

cc: Mr. Ray Dovalina, P.E.
Floodplain Manager
Street Transportation Department
City of Phoenix

Ms. Teri S. George, P.E.
Water Resources Manager
David Evans and Associates, Inc.

SECTION D

FIRM Panel-Revised to Reflect LOMR Dated April 20, 2000
AERIAL Exhibit with Floodplain Cross Sections
FIRM Panel-July 19, 2001



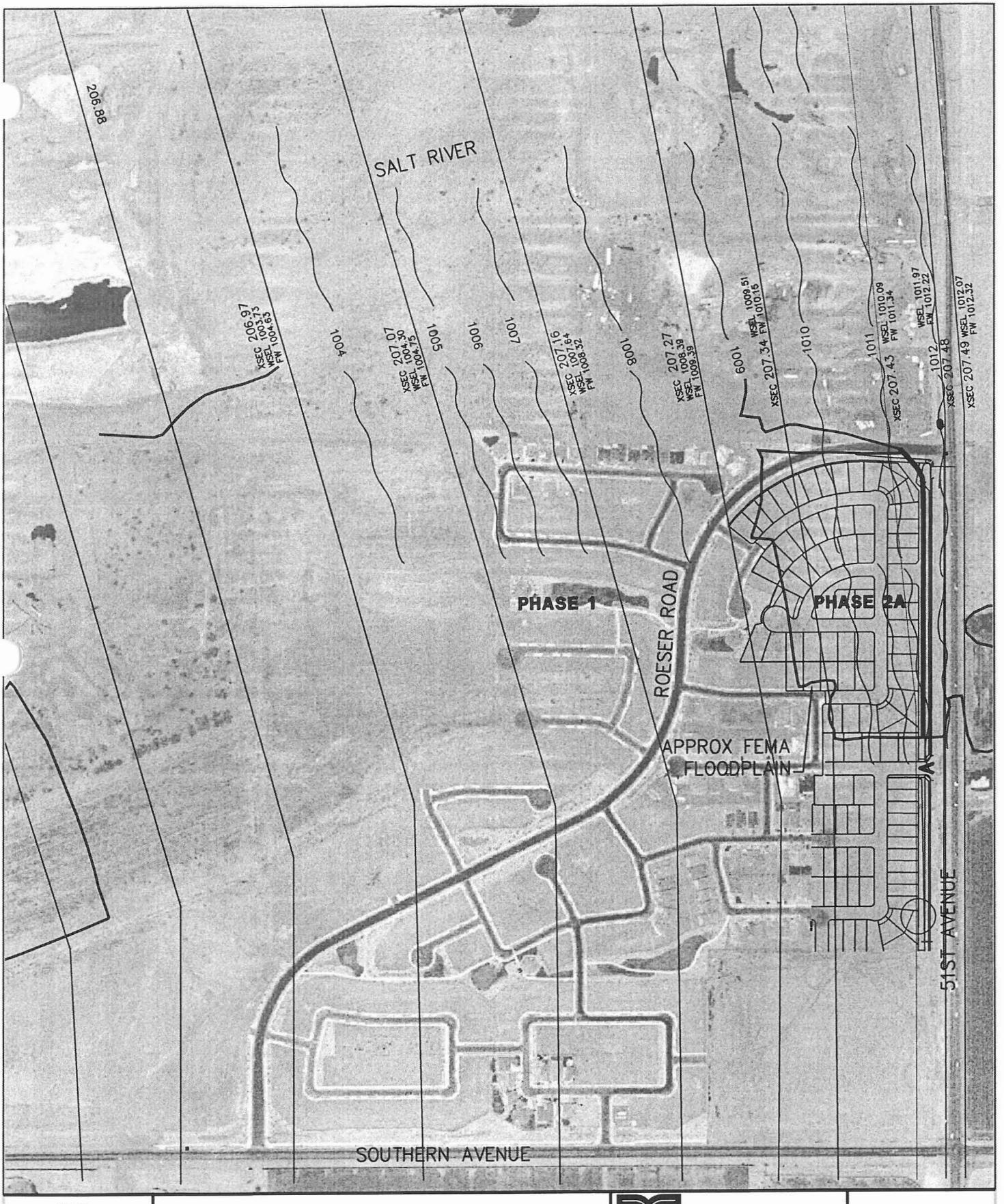
ELEVATION REFERENCE MARKS

REFERENCE MARK	ELEVATION (FT. NGVD)	DESCRIPTION OF LOCATION
RM56	1005.23	Rim of handhole at centerline intersection of 59th and Southern Avenues.
RM58	1006.36	City of Phoenix brass cap in handhole at centerline intersection of 59th Avenue and Broadway Road.
RM59	1024.04	U.S. Geological Survey brass cap in concrete cylinder 70 feet north of northwest corner of Baptist Church, east side of 51st Avenue, north of Lower Buckeye Road, marked F-395.
RM60	1010.04	Top of pavement at centerline of 51st Avenue at south end of Salt River bridge.
RM61	1012.56	Top of pavement at centerline intersection of 51st and Southern Avenues.

Cross Section	Floodplain			Floodway		
	Duplicate [1]	Revised [2]	Delta	Duplicate [1]	Revised [2]	Delta
207.34	1009.51	1009.51	0.00	1010.15	1010.15	0.00
207.43	1010.09	1010.09	0.00	1011.34	1011.34	0.00
207.48	1011.97	1011.97	0.00	1012.22	1012.22	0.00

[1] Duplicate Effective HEC-RAS Model (See Section G for Additional Data)

[2] Revised HEC-RAS Model (See Section H for Additional Data)

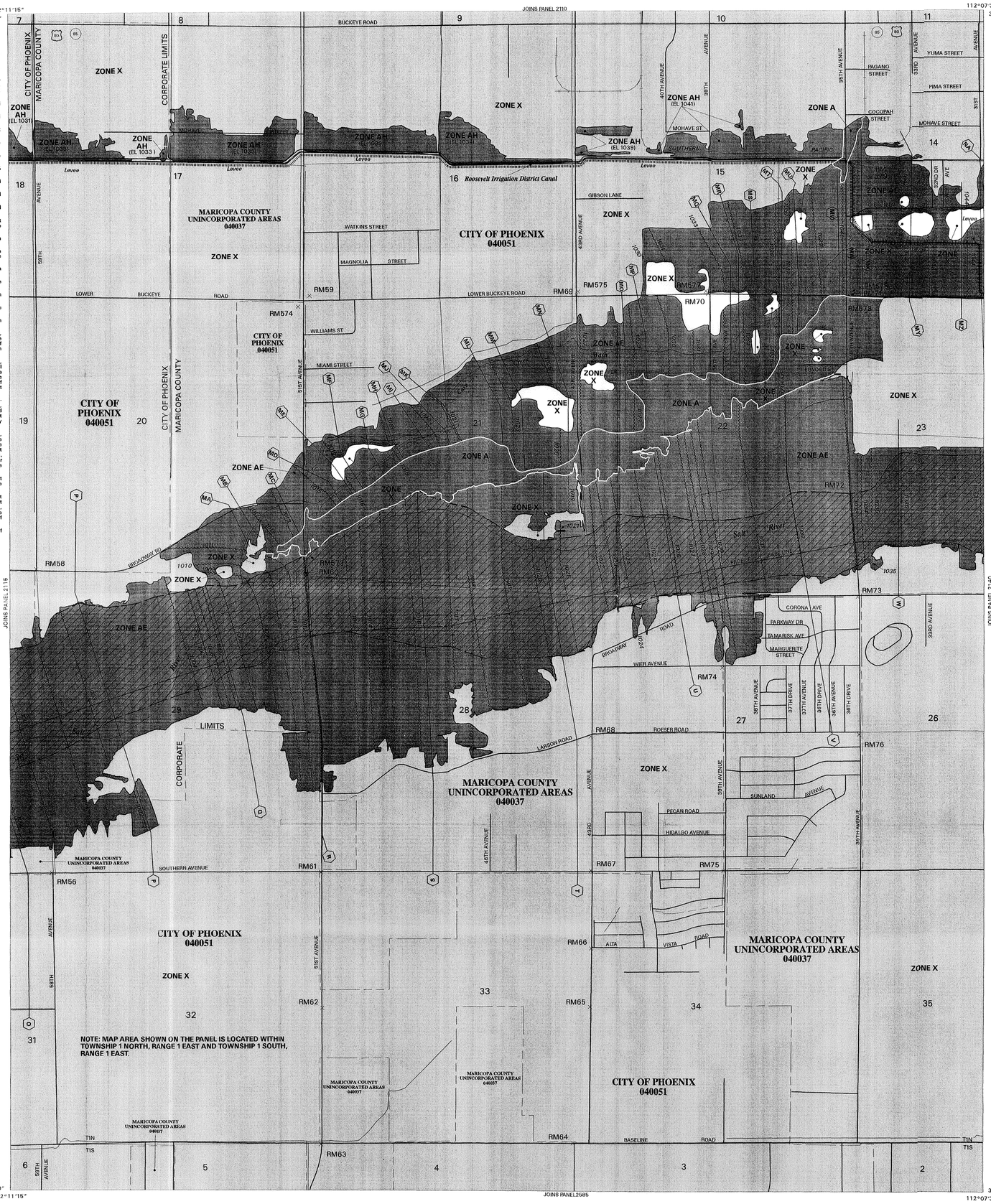


P:\ELLT0013\ '1R\dwg\ELI0013-2HyFg-04.dwg pamo Jan 29, 2004 12:45:16pm

SCALE: 1'=500'	**AERIAL EXHIBIT WITH FLOODPLAIN** **RIVERWALK PHASE 2A** **LOMR**	DAVID EVANS AND ASSOCIATES INC. 2141 East Highland Avenue, Suite 200 Phoenix Arizona 85016 Phone: 602.678.5151	DRAWN BY: PMM
SHEET 1 OF 1			CHECKED BY:
JOB NO.: ELLT0013			DATE: 12/04/03

ELEVATION REFERENCE MARKS

REFERENCE MARK	ELEVATION (FEET NGVD)	DESCRIPTION OF LOCATION
RM56	1005.23	Rim of handhole at centerline intersection of 59th and Southern Avenues.
RM58	1006.36	City of Phoenix brass cap in handhole at centerline intersection of 59th Avenue and Broadway Road.
RM59	1024.04	U.S. Geological Survey brass cap in concrete cylinder 70 feet north of northwest corner of Baptist Church, east side of 51st Avenue, north of Lower Buckeye Road, marked F-395.
RM60	1010.04	Top of pavement at centerline of 51st Avenue at south end of Salt River bridge.
RM61	1012.56	Top of pavement at centerline intersection of 51st and Southern Avenues.
RM62	1011.31	Spike in west face of power pole on east side of 51st Avenue, 0.5 mile south of Southern Avenue.
RM63	1010.52	Maricopa County brass cap in handhole at centerline intersection of 51st Avenue and Baseline Road.
RM64	1035.88	Railroad spike at centerline intersection of 43rd Avenue South and Baseline Road.
RM65	1021.92	Brass cap in handhole at centerline of 43rd Avenue, 0.5 mile south of Southern Avenue.
RM66	1021.50	Brass cap on surface at centerline intersection of 43rd Avenue and Alta Vista Road.
RM67	1020.89	Brass cap in handhole at centerline intersection of 43rd and Southern Avenues.
RM68	1026.49	Brass cap in handhole at centerline intersection of 43rd Avenue and Roeser Road extended.
RM69	1029.26	U.S. Geological Survey brass cap in concrete cylinder at the northeast corner of 43rd Avenue and Lower Buckeye Road, marked Lower.
RM70	1033.55	Brass cap in handhole at centerline intersection of 39th Avenue and Lower Buckeye Road.
RM71	1041.15	U.S. Geological Survey brass cap in irrigation structure in the northeast corner of 35th Avenue and Lower Buckeye Road, marked SRVUM.
RM72	1027.76	Top of pavement at centerline of 35th Avenue at the north end of Salt River bridge.
RM73	1035.50	Rim of handhole at centerline intersection of 35th Avenue and Broadway Road.
RM74	1030.36	Brass cap in handhole at centerline of Wier and 39th Avenues.
RM75	1026.32	0.5-inch reinforcement bar on surface at centerline intersection of 39th and Southern Avenues.
RM76	1032.67	Brass cap in handhole at centerline intersection of 35th Avenue and Roeser Road.
RM573	1023.98	Chiseled 2- by 2-inch + in the top of 8-inch-thick, 2.5-foot-high concrete wall at northeast corner of bridge abutment on 51st Avenue, approximately 30 feet east of the centerline of 51st Avenue, approximately 1 mile south of the centerline of LowerBuckeye Road.
RM574	1026.52	Brass cap stamped S.R.V.W.U.A., bench mark location, Engineering Dept., set on the top, center of the south wall of 7- by 12.5-foot concrete irrigation box, 3.3 feet above natural ground, at the southwest corner of 51st Avenue and Lower Buckeye Road,approximately 40 feet west of the centerline of 51st Avenue and approximately 55 feet south of the centerline of Lower Buckeye Road.
RM575	1034.05	Chiseled 2- by 2-inch + in the top, southeast corner of 5- by 5- foot concrete irrigation box with 0.5-foot-thick walls, 3.3 feet above natural ground, at northeast corner of 43rd Avenue and Lower Buckeye Road, approximately 33 feet east of the centerline of 43rd Avenue and approximately 42 feet north of the centerline of Lower Buckeye Road.
RM576	1041.89	Brass cap stamped S.R.V.W.U.A., bench mark location, Engineering Dept., set on the top, center of the 0.5-foot-thick northwest wall of 6- by 9-foot concrete irrigation box, 3 feet above natural ground, at the northeast corner of 35th Avenue andLower Buckeye Road, approximately 48 feet north of the centerline of Lower Buckeye Road and approximately 52 feet east of the centerline of 35th Avenue.
RM577	1037.73	Chiseled + in top, southeast corner of irrigation box at northwest corner of 39th Avenue and Lower Buckeye Road.
RM578	1053.00	Chiseled 2- by 2-inch + in top, north corner of 5- by 8-foot concrete irrigation box, 1.7 feet above natural ground, at southwest corner of Buckeye Road and 35th Avenue, approximately 56 feet south of the centerline of Buckeye Road and approximately52 feet west of the centerline of 35th Avenue.
RM579	1040.64	City of Phoenix brass cap in handhole at the intersection of 35th Avenue and Durango Street.



LEGEND

SPECIAL FLOOD HAZARD AREAS INUNDATED BY 100-YEAR FLOOD

- **ZONE A** No base flood elevations determined.
- **ZONE AE** Base flood elevations determined.
- **ZONE AH** Flood depths of 1 to 3 feet (usually areas of ponding); base flood elevations determined.
- **ZONE AO** Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined. For areas of alluvial fan flooding, velocities also determined.
- **ZONE A99** To be protected from 100-year flood by Federal flood protection system under construction; no base flood elevations determined.
- **ZONE V** Coastal flood with velocity hazard (wave action); no base flood elevations determined.
- **ZONE VE** Coastal flood with velocity hazard (wave action); base flood elevations determined.

FLOODWAY AREAS IN ZONE AE

OTHER FLOOD AREAS

- **ZONE X** Areas of 500-year flood; areas of 100-year flood with average depths of less that 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 100-year flood.

OTHER AREAS

- **ZONE X** Areas determined to be outside 500-year floodplain.
- **ZONE D** Areas in which flood hazards are undetermined.

UNDEVELOPED COASTAL BARRIERS

Identified 1983 | Identified 1990 | Otherwise Protected Areas

Coastal barrier areas are normally located within or adjacent to Special Flood Hazard Areas.

Floodplain Boundary

Floodway Boundary

Zone D Boundary

Boundary Dividing Special Flood Hazard Zones, and Boundary Dividing Areas of Different Coastal Base Flood Elevations Within Special Flood Hazard Zones.

513 — Base Flood Elevation Line; Elevation in Feet. See Map Index for Elevation Datum.

D — D — Cross Section Line

(EL 987) — Base Flood Elevation in Feet Where Uniform Within Zone. See Map Index for Elevation Datum.

RM 7 — Elevation Reference Mark

M2 — River Mile

97°07'30", 32°22'30" — Horizontal Coordinates Based on North American Datum of 1927 (NAD 27) Projection.

NOTES

This map is for use in administering the National Flood Insurance Program; it does not necessarily identify all areas subject to flooding, particularly from local drainage sources of small size, or all planimetric features outside Special Flood Hazard Areas. The community map repository should be consulted for more detailed data on BFEs, and for any information on floodway delineations, prior to use of this map for property purchase or construction purposes.

Areas of Special Flood Hazard (100-year flood) include Zones A, AE, A1-A30, AH, AO, AR, A99, V, VE and V1-V30.

Certain areas not in Special Flood Hazard Areas may be protected by flood control structures.

Boundaries of the floodways were computed at cross sections and interpolated between cross sections. The floodways were based on hydraulic considerations with regard to requirements of the Federal Emergency Management Agency.

Floodway widths in some areas may be too narrow to show to scale. Refer to Floodway Data Table where floodway width is shown at 1/20 inch.

Coastal base flood elevations apply only landward of 0.0 NGVD, and include the effects of wave action; these elevations may also differ significantly from those developed by the National Weather Service for hurricane evacuation planning.

Corporate limits shown are current as of the date of this map. The user should contact appropriate community officials to determine if corporate limits have changed subsequent to the issuance of this map.

This map may incorporate approximate boundaries of Coastal Barrier Resource System Units and/or Otherwise Protected Areas established under the Coastal Barrier Improvement Act of 1990 (PL 101-591).

For community map revision history prior to countywide mapping, see Section 6.0 of the Flood Insurance Study Report.

For adjoining map panels and base map source see separately printed Map Index.

MAP REPOSITORY

Refer to Repository Listing on Index Map

EFFECTIVE DATE OF
COUNTYWIDE FLOOD INSURANCE RATE MAP:

APRIL 15, 1988

EFFECTIVE DATE(S) OF REVISION(S) TO THIS PANEL:

SEPTEMBER 4, 1991

Map revised July 19, 2001 to update corporate limits, to change base flood elevations, to add base flood elevations, to add Special Flood Hazard Areas, to change Special Flood Hazard Areas, to change zone designations, to update map format, to add roads and road names, and to incorporate previously issued Letters of Map Revision.

To determine if flood insurance is available, contact an insurance agent or call the National Flood Insurance Program at (800) 638-6620.

APPROXIMATE SCALE IN FEET

1000 0 1000

LEGEND

To obtain more detailed information in areas where Base Flood Elevations (BFEs) and/or floodways have been determined, users are encouraged to consult the Flood Profiles and Floodway Data tables contained within the Flood Insurance Study (FIS) report that accompanies this FIRM. Users should be aware that BFEs shown on the FIRM represent rounded whole-foot elevations and therefore may not exactly reflect the flood elevation data presented in the FIS. For construction and/or floodplain management purposes, users are encouraged to use the flood elevation data presented in this FIS in conjunction with the data shown on the FIRM.

Elevation Reference Marks (ERM) elevations listed on this map were obtained and/or developed to establish vertical control for determination of flood elevations and floodplain boundaries portrayed on this map. Users should be aware that these ERM elevations may have changed since the publication of this map. To obtain up-to-date elevation information on National Geodetic Survey (NGS) ERMs shown on this map, please contact the Information Services Branch of the NGS at (301) 713-3242, or visit their website at www.ngs.noaa.gov. Map users should seek verification of non-NGS ERM monument elevations when using these elevations for construction or floodplain management purposes.

Coastal BFE's shown on this map apply only landward of 0.0' National Geodetic Vertical Datum (NGVD). Users of this FIRM should be aware that coastal flood elevations are also provided in the Summary of Stillwater Elevations table in the Flood Insurance Study report for this community. Elevations shown in the Summary of Stillwater Elevations table should be used for construction, and/or floodplain management purposes when they are higher than the elevations shown on this FIRM.

NATIONAL FLOOD INSURANCE PROGRAM

FIRM
FLOOD INSURANCE RATE MAP

MARICOPA COUNTY, ARIZONA AND INCORPORATED AREAS

PANEL 2120 OF 4350
(SEE MAP INDEX FOR PANELS NOT PRINTED)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
MARICOPA COUNTY, UNINCORPORATED AREAS	040037	2120	F
PHOENIX, CITY OF	040051	2120	F

MAP NUMBER
04013C2120 F

MAP REVISED:
JULY 19, 2001

Federal Emergency Management Agency

SECTION G

Duplicate Effective HEC-RAS Model

Cross Section	Floodplain			Floodway		
	Duplicate [1]	Revised [2]	Delta	Duplicate [1]	Revised [2]	Delta
207.34	1009.51	1009.51	0.00	1010.15	1010.15	0.00
207.43	1010.09	1010.09	0.00	1011.34	1011.34	0.00
207.48	1011.97	1011.97	0.00	1012.22	1012.22	0.00

[1] Duplicate Effective HEC-RAS Model (See Section G for Additional Data)

[2] Revised HEC-RAS Model (See Section H for Additional Data)

Duplicate effective

HEC-RAS Plan: Plan 05 River: 1 Reach: 1

Reach	River Sta	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	Vel Chnl	Max Chl Dpth	Sta W.S. Lft	Sta W.S. Rgt	Top Width	Froude # Chl
		(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/s)	(ft)	(ft)	(ft)	(ft)	
1	214.14	169000.00	1048.70	1075.49	1062.65	1077.00	9.84	26.79	19654.97	21463.55	1271.14	0.36
1	214.14	169000.00	1048.70	1075.50	1062.65	1077.00	9.84	26.80	19654.97	20381.83	726.86	0.36
1	214.04	169000.00	1048.80	1075.03	1062.61	1076.57	9.96	26.23	19637.88	20922.37	813.47	0.36
1	214.04	169000.00	1048.80	1075.04	1062.61	1076.58	9.96	26.24	19637.88	20371.77	733.89	0.36
1	213.95	169000.00	1049.30	1074.15	1063.64	1076.04	11.05	24.85	19586.53	20813.40	776.02	0.43
1	213.95	169000.00	1049.30	1074.15	1063.64	1076.05	11.04	24.85	19586.54	20331.73	745.19	0.43
1	213.85	169000.00	1048.10	1071.64	1065.13	1075.07	15.00	23.54	19303.40	20320.91	1017.51	0.58
1	213.85	169000.00	1048.10	1071.65	1065.13	1075.08	14.99	23.55	19618.33	20320.92	702.59	0.58
1	213.75	169000.00	1044.60	1071.95	1060.87	1073.92	11.26	27.35	19641.00	20297.35	656.36	0.41
1	213.75	169000.00	1044.60	1071.96	1060.87	1073.93	11.25	27.36	19641.00	20297.35	656.35	0.41
1	213.745	Bridge										
1	213.74	169000.00	1044.60	1071.65	1060.88	1073.67	11.41	27.05	19641.87	20296.60	654.73	0.42
1	213.74	169000.00	1044.60	1071.66	1060.88	1073.68	11.40	27.06	19641.87	20296.60	654.73	0.42
1	213.66	169000.00	1047.60	1069.25	1063.58	1072.98	15.51	21.65	19599.47	20253.56	586.02	0.62
1	213.66	169000.00	1047.60	1069.26	1063.58	1072.99	15.50	21.66	19687.57	20253.56	565.99	0.62
1	213.57	169000.00	1046.70	1069.18	1063.01	1071.60	12.49	22.48	18975.27	20336.66	1273.72	0.55
1	213.57	169000.00	1046.70	1069.19	1063.01	1071.61	12.48	22.49	19484.50	20336.66	852.16	0.55
1	213.47	169000.00	1045.80	1068.59	1061.30	1070.60	11.36	22.79	18842.64	20266.42	1418.72	0.52
1	213.47	169000.00	1045.80	1068.61	1061.30	1070.61	11.35	22.81	19243.30	20266.42	1023.12	0.52
1	213.38	169000.00	1045.40	1068.59	1059.33	1069.80	8.83	23.19	19196.21	20447.85	1251.64	0.37
1	213.38	169000.00	1045.40	1068.60	1059.33	1069.81	8.83	23.20	19346.10	20447.85	1101.75	0.37
1	213.33	169000.00	1045.40	1068.56	1057.67	1069.52	7.87	23.16	19109.28	20717.79	1370.78	0.33
1	213.33	169000.00	1045.40	1068.57	1057.67	1069.53	7.87	23.17	19328.90	20514.52	1185.62	0.33
1	213.26	169000.00	1040.40	1068.15	1055.56	1069.32	8.67	27.75	19497.18	20378.39	881.21	0.33
1	213.26	169000.00	1040.40	1068.16	1055.56	1069.33	8.67	27.76	19497.18	20378.39	881.21	0.32
1	213.255	Bridge										

HEC-RAS Plan: Plan 05 River: 1 Reach: 1 (Continued)

Reach	River Sta	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	Vel Chnl	Max Chl Dpth	Sta W.S. Lft	Sta W.S. Rgt	Top Width	Froude # Chl
		(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/s)	(ft)	(ft)	(ft)	(ft)	
1	213.25	169000.00	1040.40	1067.95	1055.57	1069.14	8.75	27.55	19497.55	20377.79	880.24	0.33
1	213.25	169000.00	1040.40	1067.96	1055.57	1069.15	8.75	27.56	19497.55	20377.79	880.24	0.33
1	213.21	166000.00	1044.90	1067.99	1055.85	1069.02	8.17	23.09	19408.38	20949.10	1540.71	0.31
1	213.21	166000.00	1044.90	1068.00	1055.85	1069.03	8.17	23.10	19490.30	20418.50	928.20	0.31
1	213.11	166000.00	1047.60	1067.16	1058.35	1068.63	9.73	19.56	19616.88	20544.67	927.79	0.40
1	213.11	166000.00	1047.60	1067.16	1058.35	1068.63	9.73	19.56	19616.88	20544.67	927.79	0.40
1	213.03	166000.00	1046.70	1066.57	1058.28	1068.17	10.14	19.87	19602.73	20591.82	965.54	0.42
1	213.03	166000.00	1046.70	1066.58	1058.28	1068.17	10.14	19.88	19672.09	20591.83	919.74	0.42
1	212.93	166000.00	1045.40	1065.48	1057.98	1067.55	11.53	20.08	19690.77	20754.13	850.10	0.48
1	212.93	166000.00	1045.40	1065.49	1057.98	1067.55	11.52	20.09	19690.76	20489.75	798.99	0.48
1	212.84	166000.00	1043.10	1063.54	1057.53	1066.65	14.14	20.44	19711.50	20347.25	635.75	0.58
1	212.84	166000.00	1043.10	1063.55	1057.53	1066.65	14.14	20.45	19711.50	20347.25	635.75	0.58
1	212.74	166000.00	1041.60	1063.06	1055.49	1065.57	12.71	21.46	19503.41	20367.19	721.70	0.51
1	212.74	166000.00	1041.60	1063.07	1055.49	1065.57	12.70	21.47	19690.61	20367.20	676.59	0.51
1	212.68	166000.00	1036.90	1063.02	1052.63	1065.16	11.74	26.12	19501.07	20130.09	629.02	0.44
1	212.68	166000.00	1036.90	1063.03	1052.69	1065.17	11.74	26.13	19501.07	20130.10	629.03	0.44
1	212.675	Bridge										
1	212.67	166000.00	1036.90	1062.53	1052.64	1064.77	12.00	25.63	19502.34	20128.84	626.50	0.45
1	212.67	166000.00	1036.90	1062.54	1052.64	1064.77	12.00	25.64	19502.33	20128.84	626.51	0.45
1	212.56	166000.00	1039.30	1056.87	1055.70	1063.23	20.23	17.57	19731.19	20452.05	521.49	0.90
1	212.56	166000.00	1039.30	1056.98	1055.70	1063.25	20.09	17.68	19731.05	20252.14	521.09	0.89
1	212.46	166000.00	1037.20	1056.23	1052.72	1060.77	17.11	19.03	18896.45	21448.61	1555.15	0.72
1	212.46	166000.00	1037.20	1056.29	1052.72	1060.80	17.05	19.09	19743.34	20301.00	557.66	0.72
1	212.37	166000.00	1036.60	1053.10	1051.67	1058.81	19.17	16.50	19745.63	20319.27	573.64	0.87
1	212.37	166000.00	1036.60	1053.11	1051.69	1058.81	19.16	16.51	19745.61	20319.30	573.69	0.87
1	212.27	166000.00	1035.10	1050.72	1049.53	1056.36	19.06	38.62	18308.28	21600.43	2802.81	0.89
1	212.27	166000.00	1035.10	1050.77	1049.53	1056.37	18.99	15.67	19719.91	20325.95	606.04	0.88

HEC-RAS Plan: Plan 05 River: 1 Reach: 1 (Continued)

Reach	River Sta	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	Vel Chnl	Max Chl Dpth	Sta W.S. Lft	Sta W.S. Rgt	Top Width	Froude # Chl
		(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/s)	(ft)	(ft)	(ft)	(ft)	
1	212.18	166000.00	1030.80	1050.31	1045.83	1053.98	15.37	39.71	17973.79	20651.15	2343.04	0.65
1	212.18	166000.00	1030.80	1050.37	1045.84	1054.01	15.32	19.57	19706.85	20334.57	627.72	0.65
1	212.08	166000.00	1025.90	1050.10	1041.41	1052.71	12.96	40.66	18026.72	20437.10	2181.45	0.49
1	212.08	166000.00	1025.90	1050.17	1041.39	1052.76	12.92	24.27	19681.09	20270.90	589.81	0.49
1	211.99	166000.00	1025.39	1048.63	1041.14	1051.83	14.35	39.22	18069.15	20249.64	1311.41	0.55
1	211.99	166000.00	1025.39	1048.71	1041.14	1051.89	14.29	23.32	19699.77	20249.64	549.87	0.55
1	211.89	166000.00	1024.19	1048.02	1039.98	1050.91	13.65	23.83	19685.75	20250.74	564.99	0.52
1	211.89	166000.00	1024.19	1048.11	1039.98	1050.98	13.59	23.92	19685.75	20250.74	564.99	0.51
1	211.79	166000.00	1023.84	1047.18	1039.19	1050.08	13.65	23.34	18950.00	20217.70	1191.04	0.52
1	211.79	166000.00	1023.84	1047.29	1039.19	1050.16	13.59	23.45	19649.87	20217.70	567.83	0.52
1	211.71	166000.00	1023.19	1046.47	1038.49	1049.36	13.64	23.28	18827.74	20335.89	644.81	0.52
1	211.71	166000.00	1023.19	1046.59	1038.49	1049.45	13.56	23.40	19628.43	20197.84	569.41	0.52
1	211.64	166000.00	1022.58	1045.60	1038.21	1048.68	14.09	23.02	19657.70	20619.89	857.09	0.54
1	211.64	166000.00	1022.58	1045.75	1038.21	1048.79	13.99	23.17	19657.70	20219.80	562.10	0.54
1	211.54	166000.00	1021.90	1043.70	1038.03	1047.58	15.81	21.80	19603.65	20129.64	525.99	0.62
1	211.54	166000.00	1021.90	1043.93	1038.03	1047.72	15.63	22.03	19603.65	20129.64	525.99	0.61
1	211.525	Bridge										
1	211.51	166000.00	1021.80	1042.20	1037.90	1046.67	16.97	20.40	19615.19	20137.39	522.21	0.69
1	211.51	166000.00	1021.80	1042.56	1037.90	1046.87	16.65	20.76	19615.19	20137.39	522.20	0.67
1	211.41	166000.00	1018.30	1041.78		1045.05	14.53	23.48	19638.10	20206.06	567.96	0.57
1	211.41	166000.00	1018.30	1042.19		1045.34	14.23	23.89	19638.10	20206.06	567.96	0.55
1	211.31	166000.00	1020.80	1040.76	1037.18	1043.89	14.19	19.96	19531.21	20356.09	824.88	0.66
1	211.31	166000.00	1020.80	1041.37	1037.18	1044.24	13.61	20.57	19531.21	20356.09	824.88	0.62
1	211.21	166000.00	1021.10	1040.21	1035.52	1042.40	11.86	19.11	19528.75	20521.25	992.51	0.56
1	211.21	166000.00	1021.10	1040.97	1035.52	1042.94	11.26	19.87	19528.75	20521.25	992.50	0.51
1	211.12	166000.00	1015.70	1040.58	1029.81	1041.56	7.98	24.88	19498.47	21441.21	1554.03	0.32

HEC-RAS Plan: Plan 06 River: 1 Reach: 1 (Continued)

Reach	River Sta	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	Vel Chnl	Max Chl Dpth	Sta W.S. Lft	Sta W.S. Rgt	Top Width	Froude # Chl
		(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/s)	(ft)	(ft)	(ft)	(ft)	
1	211.12	166000.00	1015.70	1041.29	1029.81	1042.21	7.71	25.59	19498.47	20610.00	1085.78	0.30
1	211.02	166000.00	1019.40	1039.37	1032.08	1041.09	10.58	19.97	19487.12	21335.25	1794.36	0.45
1	211.02	166000.00	1019.40	1040.16	1032.05	1041.78	10.23	20.76	19487.12	20550.00	1023.90	0.43
1	210.93	166000.00	1018.70	1039.25	1034.19	1040.38	9.17	20.55	19479.13	22271.03	2682.27	0.41
1	210.93	166000.00	1018.70	1039.29	1033.14	1041.16	11.00	20.59	19479.13	20530.00	1008.62	0.49
1	210.83	166000.00	1019.10	1038.81	1032.16	1039.88	8.93	19.71	19450.42	21916.98	2276.87	0.39
1	210.83	166000.00	1019.10	1038.72	1031.94	1040.43	10.55	19.62	19450.56	20530.00	1040.74	0.46
1	210.74	166000.00	1018.20	1038.47	1029.76	1039.47	8.33	20.27	19426.13	21794.83	2337.38	0.34
1	210.74	166000.00	1018.20	1038.54	1029.46	1039.80	9.02	20.34	19426.13	20560.00	1102.73	0.37
1	210.64	166000.00	1017.70	1038.32	1028.99	1039.09	7.45	20.62	19382.79	22421.30	3011.65	0.31
1	210.64	166000.00	1017.70	1038.31	1028.97	1039.36	8.32	20.61	19388.60	20800.00	1384.51	0.34
1	210.55	166000.00	1018.00	1037.82	1028.53	1038.76	7.93	19.82	19322.17	22451.94	3103.29	0.34
1	210.55	166000.00	1018.00	1038.04	1028.53	1038.98	7.91	20.04	19322.17	21110.00	1763.14	0.33
1	210.46	166000.00	1016.30	1038.08	1025.03	1038.40	4.59	21.78	19209.04	21284.00	2074.95	0.19
1	210.46	166000.00	1016.30	1038.31	1025.03	1038.63	4.53	22.01	19377.00	21284.00	1907.00	0.18
1	210.36	166000.00	1017.40	1037.78	1027.52	1038.24	5.46	20.38	19375.17	21291.16	1915.99	0.24
1	210.36	166000.00	1017.40	1038.02	1027.52	1038.47	5.38	20.62	19375.17	21291.16	1915.99	0.24
1	210.26	166000.00	1016.90	1037.67	1026.44	1038.06	5.05	20.77	19377.08	21456.62	1983.15	0.22
1	210.26	166000.00	1016.90	1037.91	1026.45	1038.30	4.98	21.01	19377.08	21331.80	1954.72	0.21
1	210.17	166000.00	1014.70	1037.42	1027.93	1037.88	5.44	22.72	19020.84	21450.75	2336.50	0.24
1	210.17	166000.00	1014.70	1037.68	1027.94	1038.13	5.35	22.98	19354.60	21334.72	1980.12	0.24
1	210.07	166000.00	1018.70	1037.31	1026.27	1037.68	4.95	18.81	18539.83	21447.34	2402.36	0.21
1	210.07	166000.00	1018.70	1037.56	1026.26	1037.94	4.97	18.86	19210.00	21225.00	2015.00	0.21
1	209.98	166000.00	1020.90	1036.91	1028.12	1037.48	4.65	18.81	19338.59	21436.26	2011.88	0.22
1	209.98	166000.00	1020.90	1037.07	1028.53	1037.71	5.14	18.97	19338.59	21207.12	1868.53	0.24
1	209.88	166000.00	1019.30	1036.53	1027.52	1037.22	7.30	21.83	19441.78	21432.52	1889.70	0.33
1	209.88	166000.00	1019.30	1036.56	1027.96	1037.40	7.93	21.86	19521.49	21220.00	1698.51	0.36

HEC-RAS Plan: Plan 05 River: 1 Reach: 1 (Continued)

Reach	River Sta	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	Vel Chnl	Max Chl Dpth	Sta W.S. Lft	Sta W.S. Rgt	Top Width	Froude # Chl
		(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/s)	(ft)	(ft)	(ft)	(ft)	
1	209.79	166000.00	1020.80	1036.46	1026.08	1036.91	5.09	29.26	19483.04	21341.64	1858.60	0.24
1	209.79	166000.00	1020.80	1036.57	1026.19	1037.03	5.18	29.37	19483.04	21290.00	1806.96	0.24
1	209.69	166000.00	1019.40	1035.94	1025.98	1036.64	5.63	25.54	19460.17	21335.01	1874.85	0.31
1	209.69	166000.00	1019.40	1036.08	1026.00	1036.76	5.59	25.68	19460.17	21335.01	1874.84	0.31
1	209.6	166000.00	1016.40	1035.16	1028.98	1036.21	8.49	23.16	19024.76	23140.69	2531.34	0.40
1	209.6	166000.00	1016.40	1035.31	1028.95	1036.34	8.42	18.91	19347.79	21003.80	1656.01	0.39
1	209.54	166000.00	992.31	1033.17	1020.15	1035.72	12.88	40.86	18778.64	22756.36	2865.75	0.44
1	209.54	166000.00	992.31	1033.35	1020.15	1035.87	12.78	41.04	19130.00	20521.00	840.07	0.44
1	209.535	Bridge										
1	209.53	166000.00	992.82	1032.53	1021.67	1035.48	13.87	39.71	18784.03	22704.02	2757.01	0.49
1	209.53	166000.00	992.82	1032.73	1021.67	1035.63	13.74	39.91	19130.00	20521.00	830.63	0.48
1	209.42	166000.00	1019.60	1032.75	1028.88	1034.19	9.62	13.15	18984.81	22779.77	3517.10	0.52
1	209.42	166000.00	1019.60	1032.99	1028.88	1034.37	9.40	13.39	19000.00	20652.63	1652.63	0.51
1	209.33	166000.00	1012.00	1032.01	1027.34	1033.29	9.05	20.01	19121.47	22614.26	3444.06	0.47
1	209.33	166000.00	1012.00	1032.32	1027.34	1033.53	8.82	20.32	19122.27	20715.20	1592.93	0.45
1	209.24	166000.00	1008.90	1031.38	1026.03	1032.61	9.33	22.48	18865.52	22543.38	3674.06	0.44
1	209.24	166000.00	1008.90	1031.37	1025.96	1032.83	9.92	22.47	19212.28	20850.00	1637.72	0.47
1	209.14	166000.00	1010.60	1030.73	1025.72	1031.97	9.46	20.13	18530.60	22293.30	3565.39	0.45
1	209.14	166000.00	1010.60	1030.65	1025.98	1032.10	10.07	20.05	19200.21	21100.00	1899.79	0.48
1	209.04	166000.00	1012.20	1030.49	1023.82	1031.36	7.98	18.29	17772.40	22468.00	4634.40	0.36
1	209.04	166000.00	1012.20	1030.44	1024.28	1031.39	8.29	18.24	19220.00	21200.00	1980.00	0.38
1	208.95	166000.00	1013.80	1026.98	1026.98	1030.33	15.12	13.18	18507.80	22186.00	3473.24	0.82
1	208.95	166000.00	1013.80	1026.98	1026.98	1030.33	15.13	13.18	19141.05	21200.00	2058.95	0.82
1	208.85	166000.00	1013.40	1025.83	1024.09	1027.72	11.30	12.43	18390.78	22047.66	2707.19	0.67
1	208.85	166000.00	1013.40	1025.84	1024.09	1027.72	11.30	12.44	19199.70	21150.00	1950.30	0.67
1	208.75	166000.00	1005.20	1024.77	1021.22	1026.30	9.91	19.57	17694.20	21709.55	3136.98	0.54

HEC-RAS Plan: Plan 06 River: 1 Reach: 1 (Continued)

Reach	River Sta	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	Vel Chnl	Max Chl Dpth	Sta W.S. Lft	Sta W.S. Rgt	Top Width	Froude # Chl
		(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/s)	(ft)	(ft)	(ft)	(ft)	
1	208.75	166000.00	1005.20	1024.78	1021.22	1026.30	9.90	19.58	19192.90	20799.20	1606.30	0.54
1	208.67	166000.00	1007.60	1023.94	1020.38	1025.37	9.59	16.34	17786.10	20908.11	2277.36	0.54
1	208.67	166000.00	1007.60	1023.95	1020.38	1025.38	9.58	16.35	19118.22	20908.11	1776.29	0.54
1	208.57	166000.00	1007.60	1021.84	1019.78	1023.98	11.74	14.24	19087.13	20989.05	1901.92	0.69
1	208.57	166000.00	1007.60	1021.86	1019.78	1023.99	11.72	14.26	19087.13	20640.00	1552.87	0.68
1	208.48	166000.00	1007.60	1021.36	1017.83	1022.45	8.36	13.76	18510.56	20680.86	2170.30	0.49
1	208.48	166000.00	1007.60	1021.38	1017.83	1022.46	8.35	13.78	18510.56	20680.86	2170.30	0.49
1	208.39	166000.00	1005.60	1020.44	1017.30	1021.56	8.49	14.84	18462.94	22041.54	2917.03	0.51
1	208.39	166000.00	1005.60	1020.47	1017.30	1021.58	8.46	14.87	18462.94	20748.79	2285.85	0.51
1	208.29	166000.00	1004.70	1019.52	1016.22	1020.55	8.14	14.82	17744.85	22009.86	2550.02	0.49
1	208.29	166000.00	1004.70	1019.57	1016.22	1020.58	8.09	14.87	18562.60	20944.07	2381.47	0.49
1	208.19	166000.00	1004.70	1018.79	1014.90	1019.66	7.49	14.09	16865.65	21343.21	2675.20	0.46
1	208.19	166000.00	1004.70	1018.85	1014.90	1019.71	7.44	14.15	18679.18	21343.20	2664.02	0.45
1	208.1	166000.00	1001.40	1018.03	1014.24	1018.84	7.22	16.63	17090.29	21767.19	3169.07	0.46
1	208.1	166000.00	1001.40	1018.12	1014.24	1018.91	7.14	16.72	18822.37	21767.18	2944.81	0.45
1	207.99	166000.00	999.90	1016.92	1013.04	1017.87	7.82	17.02	17822.01	21934.48	3550.29	0.49
1	207.99	166000.00	999.90	1017.08	1013.04	1017.99	7.66	17.18	19093.03	21934.42	2749.15	0.48
1	207.9	166000.00	1000.80	1016.38	1012.11	1017.07	6.69	15.58	18318.70	22137.56	3677.89	0.41
1	207.9	166000.00	1000.80	1016.58	1012.11	1017.24	6.53	15.78	19104.70	22137.55	3016.24	0.40
1	207.8	166000.00	999.10	1015.41	1011.91	1016.32	7.69	16.31	17096.40	21871.23	4716.85	0.47
1	207.8	166000.00	999.10	1015.66	1011.89	1016.54	7.54	16.56	19249.50	21871.22	2617.37	0.46
1	207.71	166000.00	1000.30	1014.41	1011.58	1015.43	8.24	14.11	17152.51	21704.14	3875.09	0.50
1	207.71	166000.00	1000.30	1014.58	1011.45	1015.67	8.39	14.28	19360.00	21704.11	2344.11	0.51
1	207.62	166000.00	1000.20	1012.76	1010.41	1014.28	9.99	12.56	17089.51	21472.38	4261.90	0.61
1	207.62	166000.00	1000.20	1012.97	1010.37	1014.53	10.01	12.77	19510.10	21472.33	1962.23	0.61
1	207.53	166000.00	999.10	1012.09	1008.06	1013.25	8.78	12.99	16022.70	21335.63	4480.12	0.47
1	207.53	166000.00	999.10	1012.24	1007.97	1013.50	9.02	13.14	19502.90	21175.00	1672.10	0.48

HEC-RAS Plan: Plan 05 River: 1 Reach: 1 (Continued)

Reach	River Sta	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	Vel Chnl	Max Chl Dpth	Sta W.S. Lft	Sta W.S. Rgt	Top Width	Froude # Chl
		(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/s)	(ft)	(ft)	(ft)	(ft)	
1	207.49	166000.00	992.20	1012.07	1004.70	1012.92	7.40	19.87	16795.75	21053.15	3807.62	0.35
1	207.49	166000.00	992.20	1012.32	1004.70	1013.14	7.28	20.12	19473.78	21053.15	1579.37	0.34
1	207.485	Bridge										
1	207.48	166000.00	992.20	1011.97	1004.71	1012.83	7.46	19.77	16831.55	21053.01	3764.72	0.35
1	207.48	166000.00	992.20	1012.22	1004.71	1013.05	7.33	20.02	19474.14	21053.01	1578.87	0.34
1	207.43	166000.00	999.00	1010.99	1007.62	1012.48	9.80	11.99	16504.11	21616.72	3420.48	0.54
1	207.43	166000.00	999.00	1011.34	1007.62	1012.73	9.47	12.34	19253.23	20940.00	1686.77	0.52
1	207.34	166000.00	995.90	1009.51	1006.68	1011.35	10.88	13.61	16793.04	20798.77	3295.01	0.61
1	207.34	166000.00	995.90	1010.15	1006.68	1011.77	10.21	14.25	19230.00	20798.77	1568.77	0.56
1	207.27	166000.00	993.30	1008.39	1006.05	1010.28	10.35	20.79	18622.44	20809.44	2022.03	0.62
1	207.27	166000.00	993.30	1009.39	1006.00	1010.93	9.44	21.79	18980.00	20597.90	1617.90	0.54
1	207.16	166000.00	992.70	1007.64	1004.53	1008.85	9.41	14.94	17460.15	21937.50	2942.53	0.50
1	207.16	166000.00	992.70	1008.32	1005.05	1009.81	10.16	15.62	19000.00	20734.50	1734.50	0.53
1	207.07	166000.00	992.80	1004.30	1004.30	1007.37	15.05	11.50	18413.08	20748.18	2120.20	0.86
1	207.07	166000.00	992.80	1004.75	1004.75	1008.25	15.64	11.95	18857.57	20748.18	1711.46	0.88
1	206.97	166000.00	981.70	1003.73	995.20	1004.80	8.53	22.03	18394.09	21080.21	2153.05	0.36
1	206.97	166000.00	981.70	1004.63	995.18	1005.77	8.62	22.93	18850.00	20800.00	1567.62	0.36
1	206.88	166000.00	981.80	1003.59	993.25	1004.41	7.55	21.89	17070.12	21207.47	2551.49	0.31
1	206.88	166000.00	981.80	1004.48	993.25	1005.39	7.71	22.68	18838.93	20800.00	1800.83	0.31
1	206.79	166000.00	981.80	1003.43	992.79	1004.13	6.93	21.63	16687.76	20895.15	3026.58	0.29
1	206.79	166000.00	981.80	1004.34	992.76	1005.10	7.08	22.54	18806.01	20895.15	1934.30	0.29
1	206.7	166000.00	981.80	1003.32	993.99	1003.85	6.03	21.52	16546.87	21165.36	3518.91	0.27
1	206.7	166000.00	981.80	1004.25	993.99	1004.82	6.14	22.45	18784.84	21138.11	2093.11	0.27
1	206.6	166000.00	981.80	1002.90	996.86	1003.56	6.91	21.10	16992.23	21066.25	3305.87	0.33
1	206.6	166000.00	981.80	1003.79	996.65	1004.54	7.14	21.99	18675.58	21066.25	2185.34	0.33
1	206.51	166000.00	981.80	1002.02	998.45	1003.04	8.99	20.22	16814.88	20934.67	4076.31	0.45

HEC-RAS Plan: Plan 06 River: 1 Reach: 1 (Continued)

Reach	River Sta	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	Vel Chnl	Max Chl Dpth	Sta W.S. Lft	Sta W.S. Rgt	Top Width	Froude # Chl
		(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/s)	(ft)	(ft)	(ft)	(ft)	
1	206.51	166000.00	981.80	1002.84	998.98	1004.02	9.36	21.04	18561.35	20622.10	2060.75	0.46
1	206.41	166000.00	982.50	1001.41	997.86	1002.32	8.71	18.91	16813.66	20685.21	3862.04	0.46
1	206.41	166000.00	982.50	1002.21	998.34	1003.30	9.12	19.71	18494.71	20685.21	2190.50	0.47
1	206.32	166000.00	982.80	1000.76	997.01	1001.56	8.05	17.96	16845.23	20854.87	3961.08	0.46
1	206.32	166000.00	982.80	1001.56	997.75	1002.55	8.50	18.76	18476.94	20854.87	2377.93	0.47
1	206.22	166000.00	983.00	999.83	996.52	1000.70	8.54	16.83	16857.23	20977.29	3819.70	0.52
1	206.22	166000.00	983.00	1000.69	996.67	1001.72	8.70	17.69	18435.00	20977.29	2441.69	0.51
1	206.13	166000.00	984.60	998.84		999.71	8.44	14.24	17049.27	20914.89	3610.68	0.52
1	206.13	166000.00	984.60	999.43		1000.65	9.44	14.83	18370.00	20914.89	2386.30	0.57
1	206.03	166000.00	984.50	997.19	995.38	998.47	10.05	13.19	16967.78	21127.08	3627.32	0.61
1	206.03	166000.00	984.50	997.37	995.37	999.15	11.22	13.37	18320.00	20772.60	2131.13	0.67
1	205.94	166000.00	981.00	996.28	992.59	997.17	8.09	15.28	17284.82	21536.29	3972.72	0.48
1	205.94	166000.00	981.00	996.85	992.21	997.71	7.77	15.85	18200.00	20767.00	2567.00	0.45
1	205.84	166000.00	979.50	995.78	991.08	996.43	6.80	16.28	17620.55	21637.22	3933.87	0.38
1	205.84	166000.00	979.50	996.39	991.09	997.06	6.78	16.89	18100.00	20535.70	2435.70	0.36
1	205.75	166000.00	973.90	995.10	989.65	995.78	6.71	21.20	18027.86	21466.57	3323.81	0.37
1	205.75	166000.00	973.90	995.83	989.63	996.48	6.46	21.93	18048.00	20450.30	2402.30	0.35
1	205.62	166000.00	976.00	994.55	988.64	995.07	5.99	18.55	17346.94	21549.62	4036.29	0.31
1	205.62	166000.00	976.00	995.25	988.61	995.85	6.18	19.25	18216.00	20450.10	2234.10	0.31
1	205.52	166000.00	975.90	994.29	987.04	994.75	5.67	18.39	17525.56	21799.95	4244.93	0.28
1	205.52	166000.00	975.90	994.95	987.25	995.53	6.12	19.05	18591.60	20611.50	2019.90	0.29
1	205.43	166000.00	976.10	994.00	986.90	994.50	6.04	17.90	17673.52	21788.11	3841.72	0.29
1	205.43	166000.00	976.10	994.53	986.93	995.24	6.76	18.43	18922.07	20764.44	1842.37	0.33
1	205.4	164000.00	975.50	993.99	984.66	994.40	5.41	18.49	17742.71	21840.43	4097.72	0.24
1	205.4	164000.00	975.50	994.56	984.66	995.10	5.90	19.06	19020.00	20767.80	1747.80	0.26
1	205.34	164000.00	975.57	993.64	986.68	994.20	6.45	18.07	13687.27	21833.93	7349.09	0.30
1	205.34	164000.00	975.57	993.98	986.65	994.85	7.53	18.41	19180.00	20742.96	1562.96	0.35

HEC-RAS Plan: Plan 05 River: 1 Reach: 1 (Continued)

Reach	River Sta	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	Vel Chnl	Max Chl Dpth	Sta W.S. Lft	Sta W.S. Rgt	Top Width	Froude # Chl
		(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/s)	(ft)	(ft)	(ft)	(ft)	
1	205.25	164000.00	973.40	993.26	985.26	993.82	6.64	19.86	16838.61	21361.96	4512.59	0.28
1	205.25	164000.00	973.40	993.49	985.17	994.34	7.64	20.09	19300.00	20782.30	1482.30	0.32
1	205.15	164000.00	973.10	991.75	987.56	993.21	10.40	18.65	18033.45	21134.20	3049.13	0.49
1	205.15	164000.00	973.10	992.25	987.59	993.69	10.06	19.15	19385.00	20830.00	1445.00	0.47
1	205.06	164000.00	970.50	990.84	984.94	992.22	9.62	20.34	17973.29	20907.73	2210.49	0.47
1	205.06	164000.00	970.50	991.36	984.91	992.79	9.65	20.86	19470.00	20905.30	1435.30	0.46
1	204.97	164000.00	973.30	990.56	984.94	991.30	7.35	17.26	17244.74	21034.15	3736.07	0.36
1	204.97	164000.00	973.30	990.76	985.03	991.87	8.49	17.46	19445.00	20961.30	1516.30	0.42
1	204.87	164000.00	968.10	990.19	982.85	990.80	6.60	22.09	17333.50	21045.86	3635.73	0.31
1	204.87	164000.00	968.10	990.36	982.79	991.20	7.37	22.26	19410.00	20952.20	1542.20	0.34
1	204.78	164000.00	967.60	990.01	980.95	990.45	5.68	22.41	16026.10	20982.70	4837.50	0.25
1	204.78	164000.00	967.60	990.13	980.72	990.77	6.47	22.53	19210.00	20830.43	1620.43	0.28
1	204.68	164000.00	971.40	989.36	982.88	990.10	7.28	17.96	17501.10	20971.00	3375.80	0.33
1	204.68	164000.00	971.40	989.32	982.76	990.31	8.21	17.92	18960.00	20546.28	1586.28	0.38
1	204.61	164000.00	972.60	988.59	983.50	989.64	8.79	15.99	14501.40	21895.45	7282.55	0.41
1	204.61	164000.00	972.60	988.61	983.45	989.78	9.12	16.01	18880.00	20482.90	1602.90	0.42
1	204.53	164000.00	972.70	987.68	983.01	988.93	9.22	14.98	17518.12	21890.36	4061.33	0.46
1	204.53	164000.00	972.70	987.68	982.93	989.02	9.48	14.98	18885.00	20495.90	1610.90	0.47
1	204.42	164000.00	971.40	986.40	982.73	987.76	9.40	15.00	17576.00	20679.03	2778.70	0.51
1	204.42	164000.00	971.40	986.38	982.70	987.80	9.58	14.98	19025.40	20678.96	1653.56	0.52
1	204.34	164000.00	969.30	985.28	981.49	986.65	9.39	15.98	18066.20	20814.38	2452.20	0.52
1	204.34	164000.00	969.30	985.28	981.49	986.65	9.39	15.98	19100.00	20814.38	1701.97	0.52
1	204.25	164000.00	969.22	980.90	980.90	984.46	15.13	11.68	18688.66	21390.91	1993.71	1.00
1	204.25	164000.00	969.22	980.90	980.90	984.46	15.13	11.68	19300.00	20817.18	1517.18	1.00
1	204.15	164000.00	966.00	981.17	975.80	982.09	7.72	15.17	18882.41	21031.89	2149.48	0.40
1	204.15	164000.00	966.00	981.18	975.80	982.11	7.71	15.18	19200.00	21031.89	1831.89	0.40

Reach	River Sta	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	Vel Chnl	Max Chl Dpth	Sta W.S. Lft	Sta W.S. Rgt	Top Width	Froude # Chl
		(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/s)	(ft)	(ft)	(ft)	(ft)	
1	204.05	164000.00	965.00	980.27	976.82	981.39	8.49	15.27	18963.78	21080.54	2116.76	0.50
1	204.05	164000.00	965.00	980.29	976.82	981.41	8.47	15.29	18963.78	21080.54	2116.76	0.49
1	203.96	164000.00	964.10	977.71	976.68	979.86	11.77	13.61	17155.44	20787.30	2225.52	0.80
1	203.96	164000.00	964.10	977.98	976.68	979.97	11.33	13.88	18736.54	20787.30	2050.76	0.75
1	203.86	164000.00	962.30	977.81	971.81	978.53	6.82	15.51	17758.13	20734.27	2201.57	0.36
1	203.86	164000.00	962.30	978.06	971.81	978.75	6.67	15.76	18542.49	20734.27	2191.78	0.35
1	203.77	164000.00	963.30	977.43	971.55	978.06	6.37	14.13	15935.53	20743.68	2518.53	0.35
1	203.77	164000.00	963.30	977.72	971.55	978.32	6.19	14.42	18232.41	20743.68	2511.27	0.34
1	203.67	164000.00	962.30	976.93	971.55	977.61	6.66	14.63	17048.52	20697.43	3648.90	0.37
1	203.67	164000.00	962.30	977.23	971.55	977.89	6.58	14.93	18130.00	20697.43	2567.43	0.36
1	203.58	164000.00	962.10	976.47	971.51	977.14	6.64	14.37	15989.91	20701.39	4630.90	0.37
1	203.58	164000.00	962.10	976.81	971.51	977.46	6.46	14.71	18025.00	20701.39	2676.39	0.36
1	203.48	164000.00	962.20	975.92	972.02	976.58	6.66	13.72	15930.61	20844.31	4863.74	0.41
1	203.48	164000.00	962.20	976.25	971.95	976.94	6.68	14.05	17932.60	20844.31	2911.71	0.40
1	203.39	164000.00	959.90	975.22	971.09	975.93	6.81	15.32	15500.00	21036.47	4207.55	0.42
1	203.39	164000.00	959.90	975.62	971.08	976.32	6.69	15.72	17970.80	21036.47	2930.04	0.41
1	203.29	164000.00	960.70	974.46	970.77	975.20	6.98	13.76	14525.82	21074.86	4967.77	0.45
1	203.29	164000.00	960.70	974.88	970.68	975.63	6.94	14.18	18065.60	21074.86	3009.26	0.44
1	203.19	164000.00	956.70	973.59	969.95	974.28	6.81	16.89	17459.86	20951.24	3491.38	0.42
1	203.19	164000.00	956.70	973.95	970.00	974.74	7.13	17.25	18262.10	20951.24	2689.14	0.43
1	203.09	164000.00	958.70	972.42	969.11	973.25	7.51	13.72	17691.96	20905.85	3213.89	0.46
1	203.09	164000.00	958.70	972.75	969.01	973.69	7.79	14.05	18430.00	20905.85	2475.85	0.46
1	202.99	164000.00	959.20	971.50	967.55	972.24	7.08	12.30	17673.37	20933.96	3260.60	0.42
1	202.99	164000.00	959.20	971.87	967.53	972.66	7.15	12.67	18469.40	20926.90	2457.50	0.41
1	202.9	164000.00	956.50	970.92	966.30	971.52	6.37	14.42	17365.58	20967.31	3419.55	0.36
1	202.9	164000.00	956.50	971.28	966.23	971.95	6.59	14.78	18455.60	20967.31	2511.71	0.37
1	202.8	164000.00	956.40	970.32	965.59	970.84	5.94	13.92	16524.80	21011.58	3577.43	0.34

HEC-RAS Plan: Plan 06 River: 1 Reach: 1 (Continued)

Reach	River Sta	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	Vel Chnl	Max Chl Dpth	Sta W.S. Lft	Sta W.S. Rgt	Top Width	Froude # Chl
		(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/s)	(ft)	(ft)	(ft)	(ft)	
1	202.8	164000.00	956.40	970.64	965.53	971.25	6.25	14.24	18390.80	21011.58	2620.78	0.35
1	202.69	164000.00	953.70	969.50	965.19	970.12	6.45	15.80	17011.60	21080.23	3716.99	0.37
1	202.69	164000.00	953.70	969.79	965.25	970.49	6.73	16.09	18526.82	21080.23	2553.41	0.38
1	202.59	164000.00	953.70	968.55	964.72	969.23	6.76	14.85	17055.70	21389.12	3795.69	0.40
1	202.59	164000.00	953.70	968.77	964.70	969.56	7.10	15.07	18524.36	21190.40	2606.67	0.42
1	202.48	164000.00	952.50	967.66	963.72	968.30	6.64	15.16	17009.60	21502.03	3830.27	0.40
1	202.48	164000.00	952.50	967.77	963.77	968.54	7.04	15.27	18360.00	21302.70	2826.21	0.42
1	202.37	164000.00	954.60	966.79	962.95	967.38	6.30	12.19	17046.50	21577.77	4026.49	0.39
1	202.37	164000.00	954.60	966.83	963.03	967.52	6.70	12.23	18270.00	21577.77	3165.43	0.41
1	202.29	164000.00	955.50	966.51	961.29	966.88	4.90	11.01	17742.70	22070.25	4327.56	0.29
1	202.29	164000.00	955.50	966.59	961.29	966.97	4.93	11.09	18197.40	21803.00	3605.60	0.29
1	202.18	164000.00	950.00	965.70	961.77	966.23	5.88	15.70	17213.20	21936.54	4356.29	0.38
1	202.18	164000.00	950.00	965.77	961.77	966.31	5.94	15.77	18139.70	21936.54	3692.09	0.38
1	202.09	164000.00	950.00	964.09	961.97	965.01	7.74	14.09	17755.36	21936.96	4052.05	0.57
1	202.09	164000.00	950.00	964.16	961.93	965.09	7.75	14.16	18253.40	21936.96	3682.20	0.57
1	201.99	164000.00	948.70	963.29	958.62	963.87	6.13	14.59	12423.70	21861.56	5331.46	0.38
1	201.99	164000.00	948.70	963.38	958.62	963.96	6.12	14.68	18235.10	21861.56	3219.77	0.37
1	201.9	164000.00	947.20	962.94	957.26	963.35	5.15	15.74	12498.00	21823.60	5241.54	0.31
1	201.9	164000.00	947.20	963.05	957.26	963.45	5.08	15.85	17992.63	21823.60	3830.97	0.31
1	201.81	164000.00	946.00	962.64	955.82	962.99	4.79	16.64	12574.10	21911.96	5916.44	0.28
1	201.81	164000.00	946.00	962.75	955.82	963.10	4.73	16.75	17952.48	21801.08	3650.46	0.27
1	201.71	164000.00	946.00	961.87	958.14	962.46	6.22	15.87	12659.20	22123.97	8308.13	0.40
1	201.71	164000.00	946.00	961.98	958.14	962.58	6.24	15.98	18112.81	21528.50	3415.69	0.40
1	201.62	164000.00	945.60	961.15	956.72	961.66	5.78	15.55	12723.60	23298.71	7614.59	0.35
1	201.62	164000.00	945.60	961.28	956.72	961.80	5.74	15.68	18235.69	21477.50	3241.81	0.34
1	201.52	164000.00	940.90	960.41	955.35	960.87	5.50	19.51	12786.60	23370.00	8984.44	0.33
1	201.52	164000.00	940.90	960.53	955.35	961.02	5.61	19.63	18008.55	21391.40	3382.85	0.34

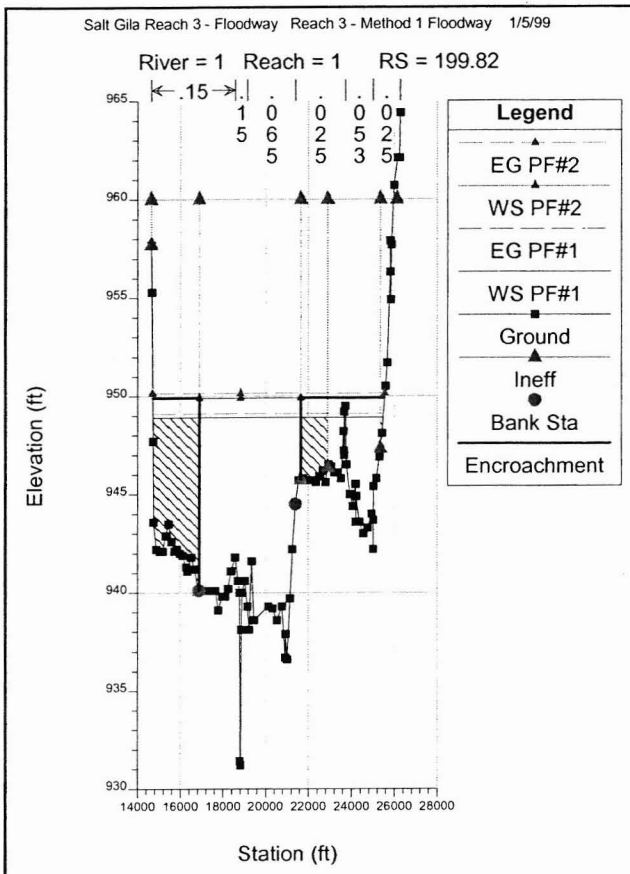
HEC-RAS Plan: Plan 06 River: 1 Reach: 1 (Continued)

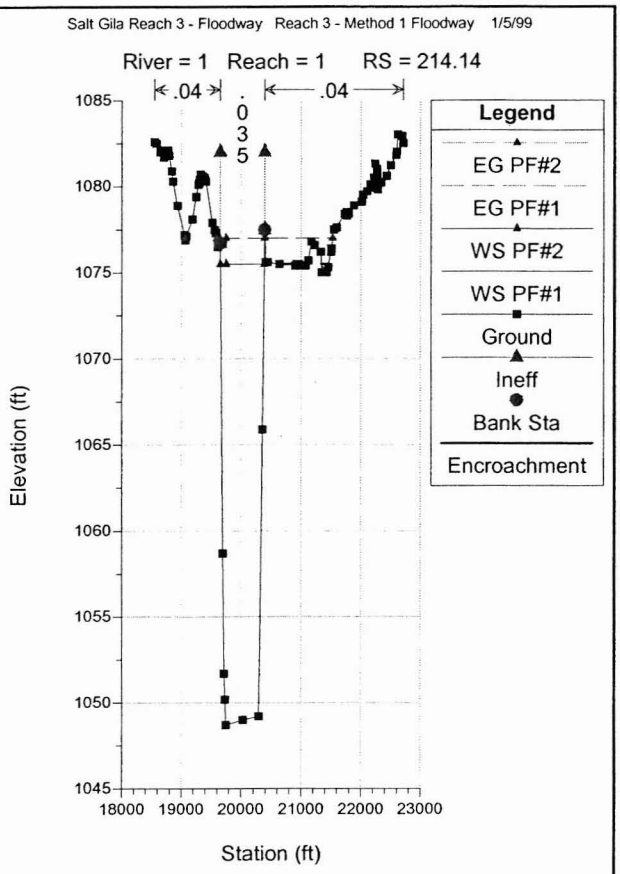
Reach	River Sta	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	Vel Chnl	Max Chl Dpth	Sta W.S. Lft	Sta W.S. Rgt	Top Width	Froude # Chl
		(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/s)	(ft)	(ft)	(ft)	(ft)	
1	201.43	164000.00	941.30	959.46	954.84	960.01	5.99	18.16	12790.40	23387.40	6525.63	0.37
1	201.43	164000.00	941.30	959.60	954.84	960.15	6.00	18.30	18053.86	21342.10	3288.24	0.37
1	201.33	164000.00	943.00	958.44	954.84	959.06	6.40	15.44	12785.70	22408.94	5744.84	0.41
1	201.33	164000.00	943.00	958.60	954.84	959.23	6.36	15.60	18074.35	21381.80	3307.45	0.40
1	201.24	164000.00	943.00	957.46	953.56	958.06	6.23	14.46	12806.00	22430.09	6935.04	0.40
1	201.24	164000.00	943.00	957.66	953.56	958.26	6.21	14.66	18069.92	21570.00	3500.08	0.40
1	201.14	164000.00	940.40	956.91	952.04	957.32	5.20	16.51	12823.90	22725.42	8631.40	0.31
1	201.14	164000.00	940.40	957.15	952.04	957.55	5.10	16.75	18040.42	21721.00	3680.58	0.30
1	201.05	164000.00	941.50	956.49	950.96	956.80	4.50	14.99	12848.30	22866.42	9250.10	0.26
1	201.05	164000.00	941.50	956.74	950.96	957.06	4.48	15.24	17950.48	21849.00	3898.52	0.26
1	200.95	164000.00	939.80	956.09	949.86	956.38	4.33	16.29	12874.80	24654.24	10045.49	0.25
1	200.95	164000.00	939.80	956.38	949.86	956.66	4.27	16.58	17952.91	21954.00	4001.09	0.24
1	200.86	164000.00	938.50	955.63	949.69	955.94	4.48	17.13	12893.00	24685.90	11080.63	0.27
1	200.86	164000.00	938.50	955.94	949.69	956.24	4.46	17.44	18000.00	22032.00	4032.00	0.26
1	200.77	164000.00	936.90	955.02	949.21	955.35	4.62	18.12	12925.10	24712.15	11450.00	0.28
1	200.77	164000.00	936.90	955.38	949.21	955.70	4.52	18.48	17828.80	21951.00	4122.20	0.27
1	200.67	164000.00	939.80	954.42	948.96	954.80	4.96	14.62	12952.70	24742.83	10368.40	0.30
1	200.67	164000.00	939.80	954.84	948.96	955.20	4.82	15.04	17640.00	21649.30	4009.30	0.28
1	200.58	164000.00	937.60	953.76	948.28	954.14	5.04	16.16	13004.20	24778.67	10091.43	0.30
1	200.58	164000.00	937.60	954.23	948.28	954.60	4.91	16.63	17510.00	21450.00	3940.00	0.28
1	200.49	164000.00	936.90	953.28	946.93	953.59	4.59	16.38	13048.90	24747.50	10978.72	0.26
1	200.49	164000.00	936.90	953.77	946.93	954.10	4.59	16.87	17380.00	21171.00	3791.00	0.25
1	200.39	164000.00	937.00	952.89	946.22	953.17	4.35	15.89	13083.90	24851.63	11315.80	0.24
1	200.39	164000.00	937.00	953.40	946.22	953.69	4.37	16.40	17300.00	21041.00	3741.00	0.23
1	200.3	179750.00	937.70	952.12	947.15	952.61	5.79	15.82	13125.50	24887.91	9118.96	0.34
1	200.3	179750.00	937.70	952.73	947.16	953.18	5.57	16.43	17205.00	20888.53	3683.53	0.31

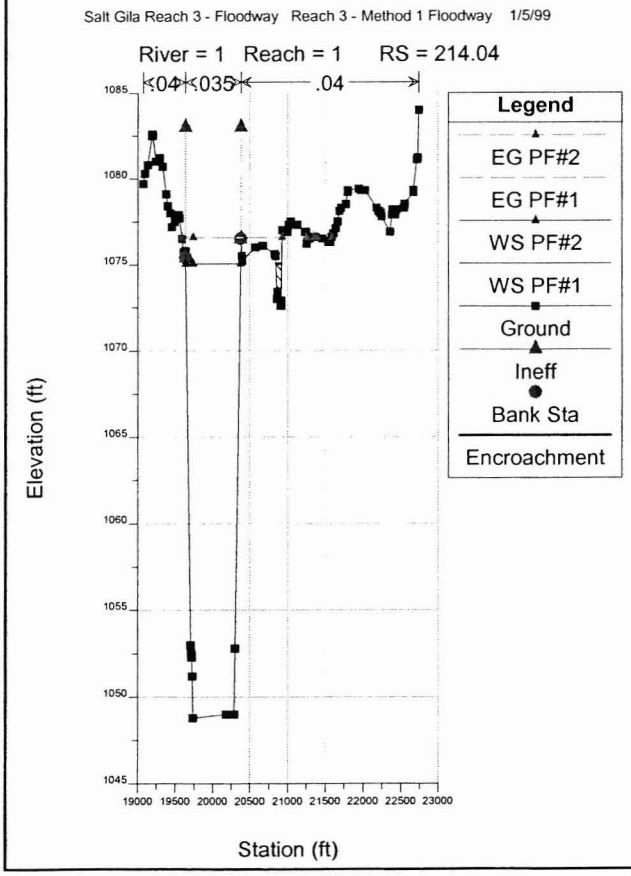
HEC-RAS Plan: Plan 06 River: 1 Reach: 1 (Continued)

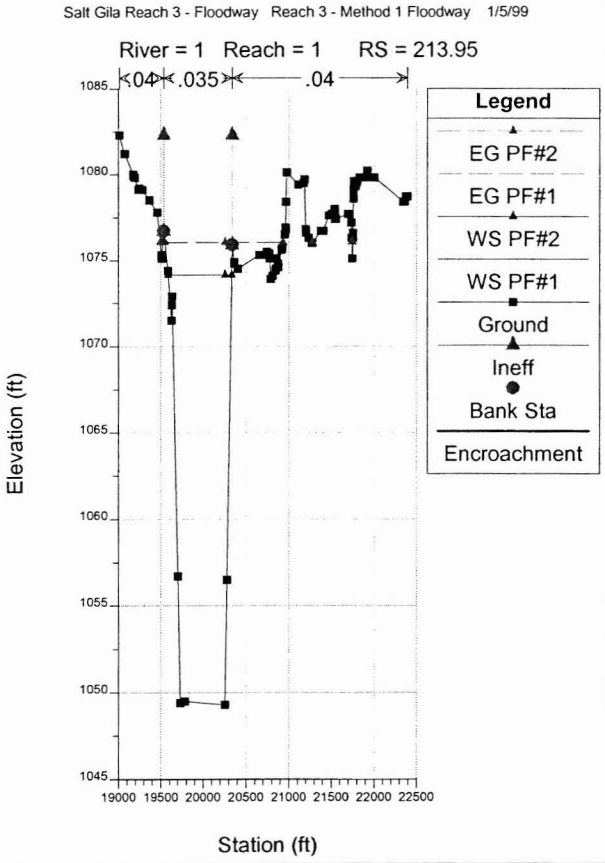
Reach	River Sta	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	Vel Chnl	Max Chl Dpth	Sta W.S. Lft	Sta W.S. Rgt	Top Width	Froude # Chl
		(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/s)	(ft)	(ft)	(ft)	(ft)	
1	200.2	179750.00	937.00	951.10	946.76	951.67	6.37	14.90	13153.30	25299.01	11857.73	0.37
1	200.2	179750.00	937.00	951.83	946.76	952.38	6.15	15.63	17115.00	20744.00	3629.00	0.35
1	200.1	179750.00	934.50	950.19	945.21	950.66	5.74	15.69	13432.80	25321.35	11254.10	0.32
1	200.1	179750.00	934.50	951.11	945.19	951.53	5.36	16.61	17030.00	20800.00	3770.00	0.29
1	200	179750.00	933.40	949.74	944.16	950.01	4.29	16.34	13790.87	25289.61	11193.60	0.24
1	200	179750.00	933.40	950.70	944.11	950.98	4.23	17.30	16950.00	21050.00	4100.00	0.23
1	199.91	179750.00	932.10	949.39	943.35	949.60	3.83	17.29	14368.37	25383.87	10846.61	0.22
1	199.91	179750.00	932.10	950.39	943.35	950.61	3.75	18.29	16800.00	21330.00	4530.00	0.20
1	199.82	179750.00	931.20	948.90	943.28	949.09	3.30	17.70	14706.94	25485.97	10752.57	0.19
1	199.82	179750.00	931.20	949.90	943.25	950.14	3.68	18.70	16870.00	21650.00	4780.00	0.20

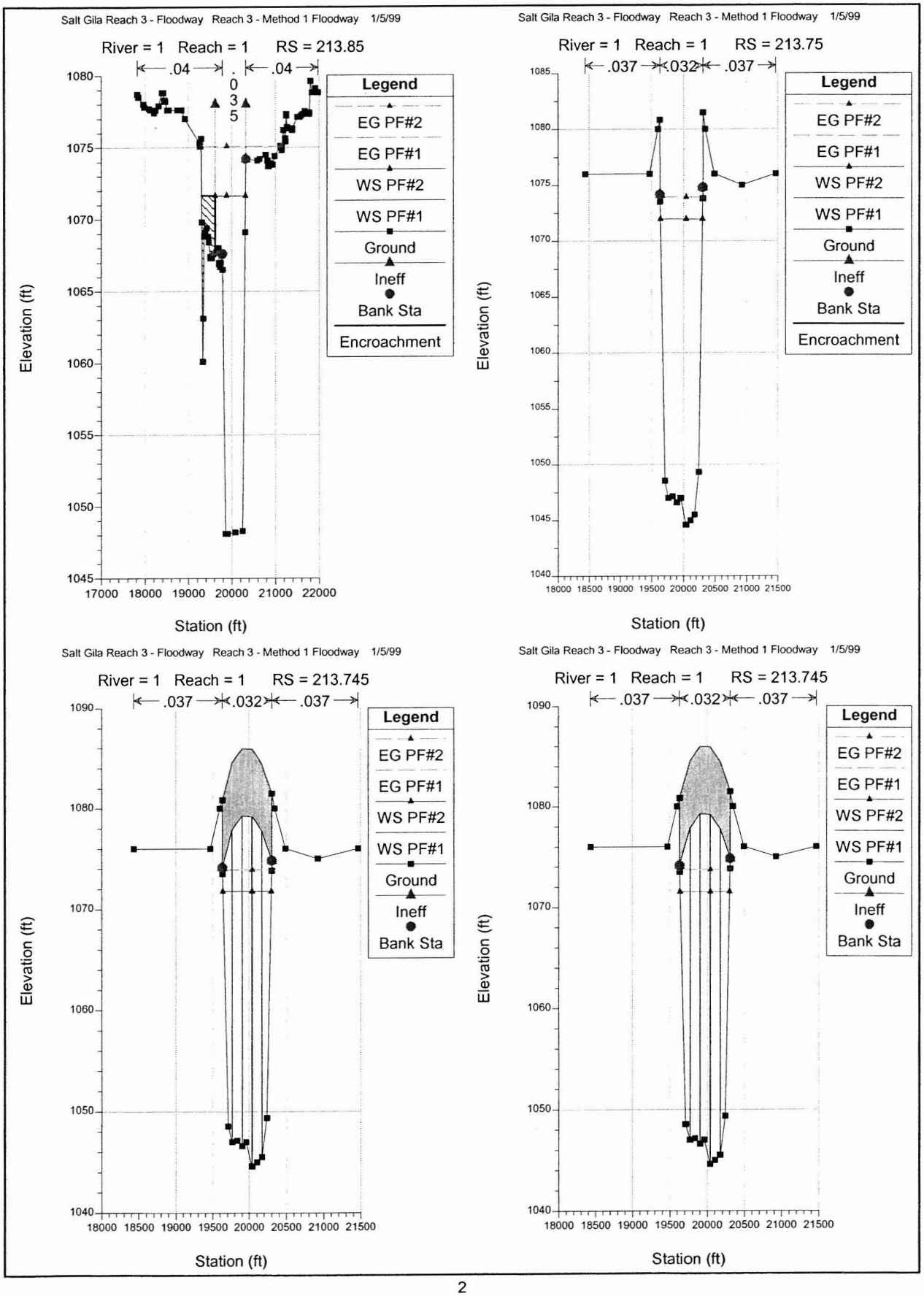
Duplicate Effective

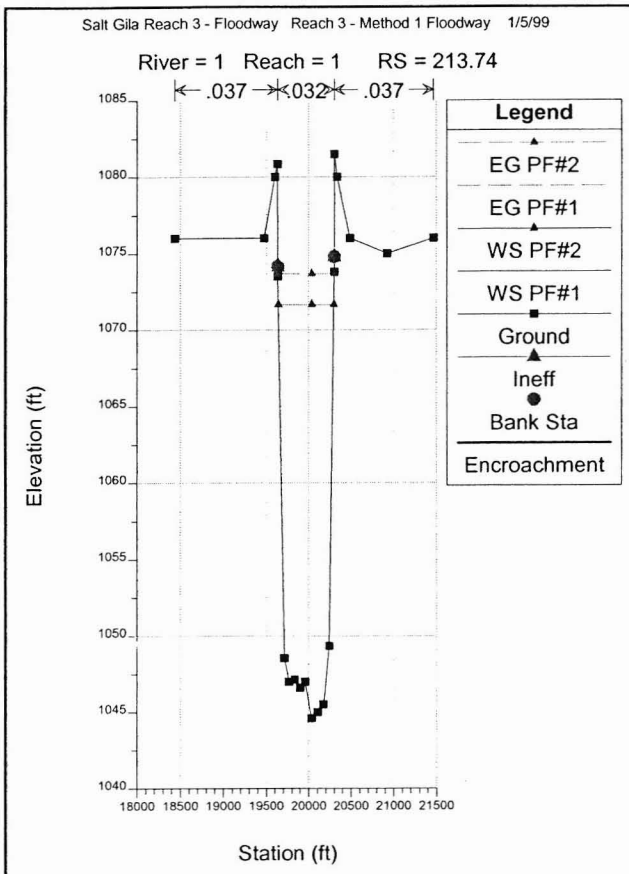


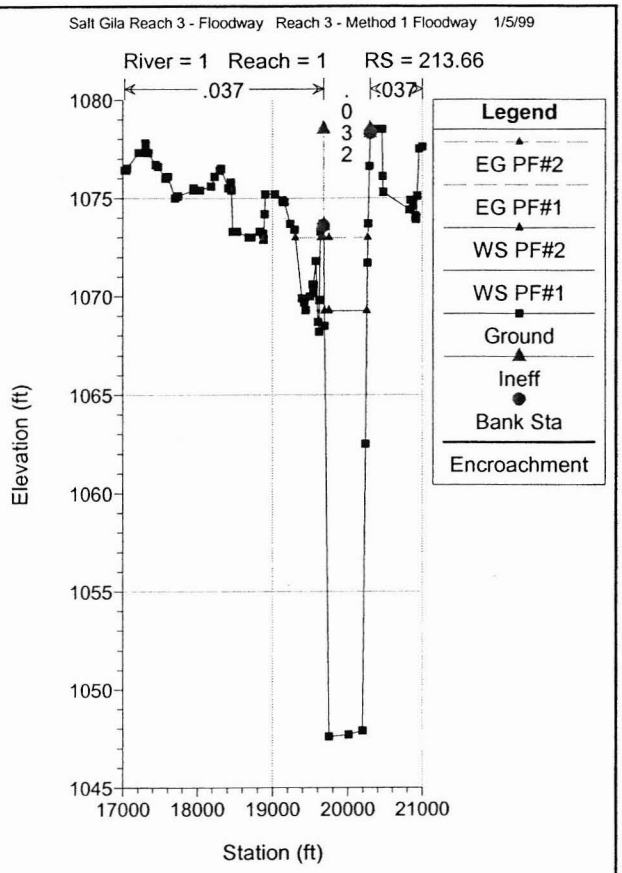


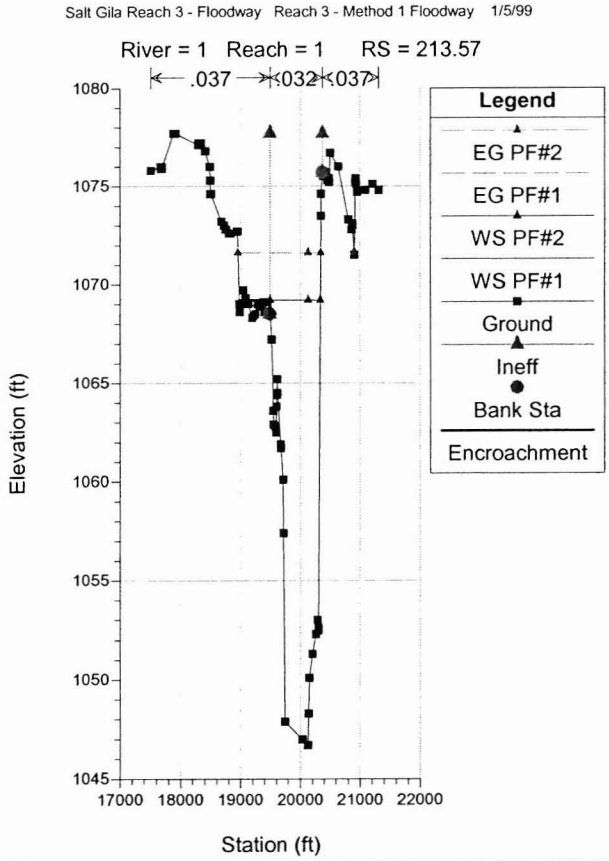


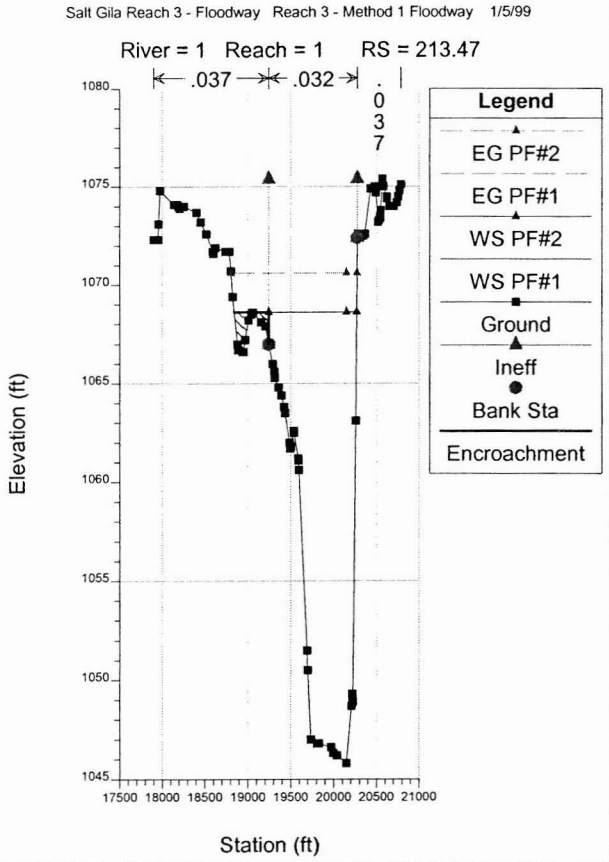


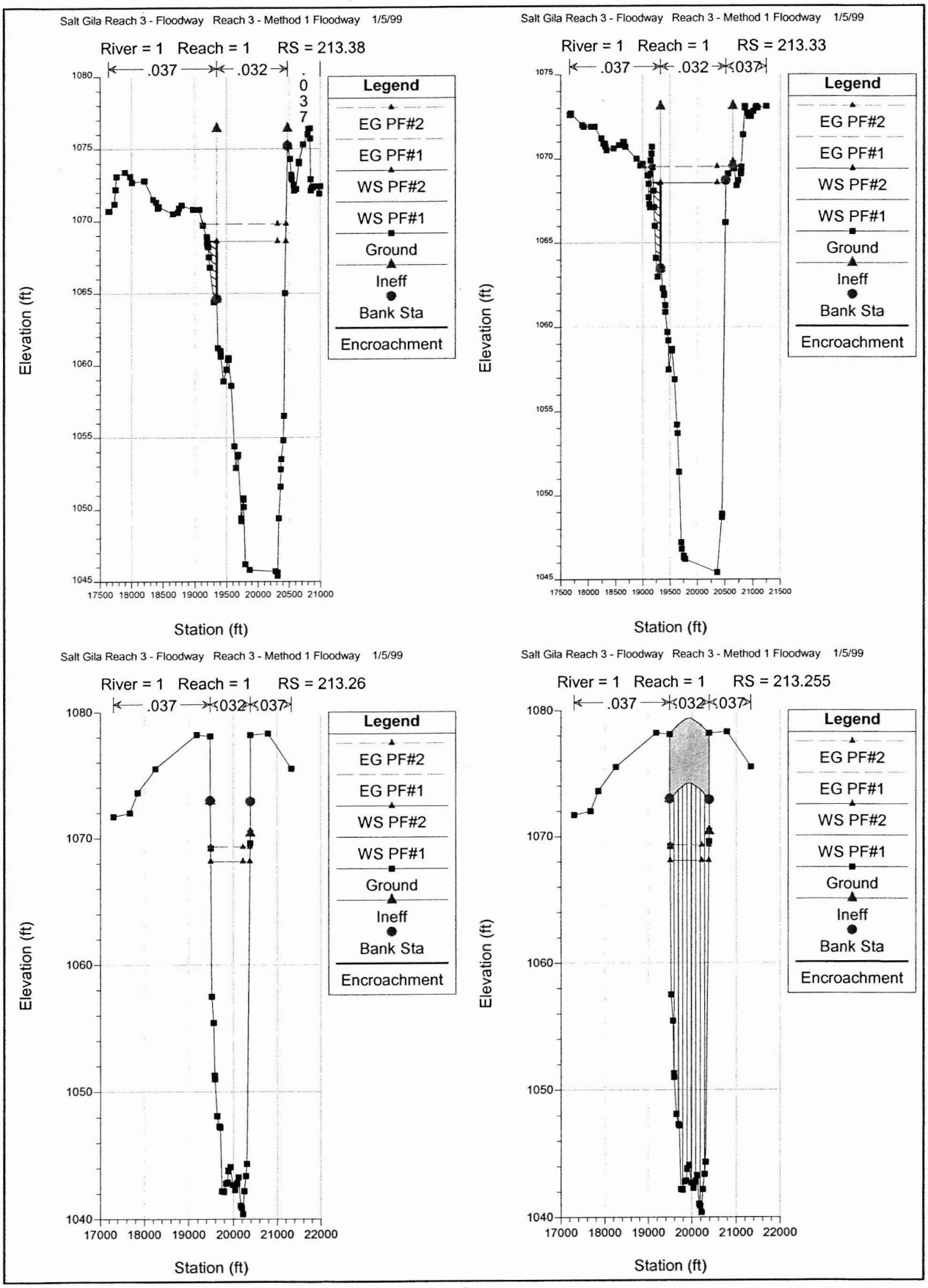

Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway 1/5/99
River = 1 Reach = 1 RS = 213.85
.04
.035
.04
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)
Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway 1/5/99
River = 1 Reach = 1 RS = 213.75
.037
.032
.037
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)
Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway 1/5/99
River = 1 Reach = 1 RS = 213.745
.037
.032
.037
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Elevation (ft)
Station (ft)
Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway 1/5/99
River = 1 Reach = 1 RS = 213.745
.037
.032
.037
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Elevation (ft)
Station (ft)

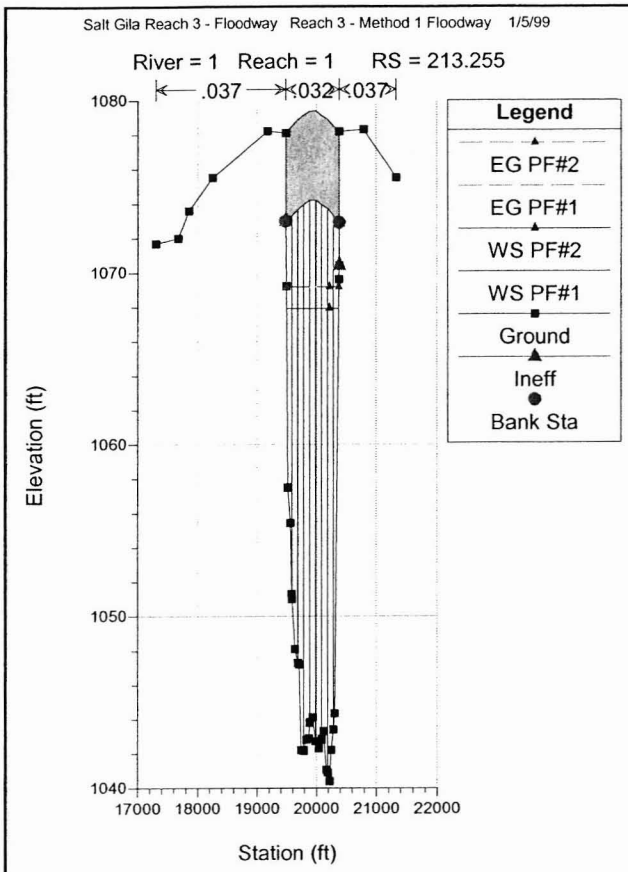

Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway 1/5/99
River = 1 Reach = 1 RS = 213.74
.037
.032
.037
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)

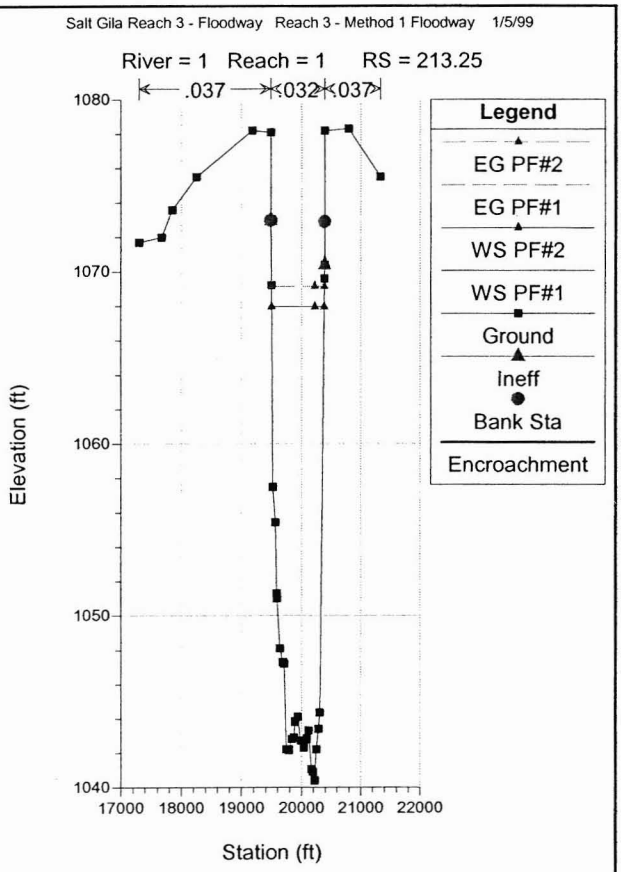

Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway 1/5/99
River = 1 Reach = 1 RS = 213.66
.037
.032
.037
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)

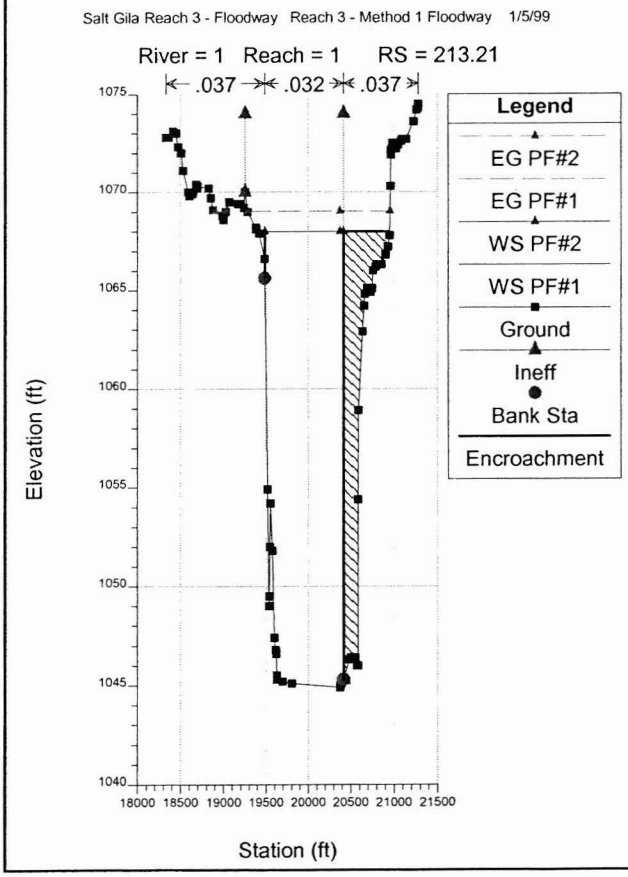

Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway 1/5/99
River = 1 Reach = 1 RS = 213.57
.037
.032
.037
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)

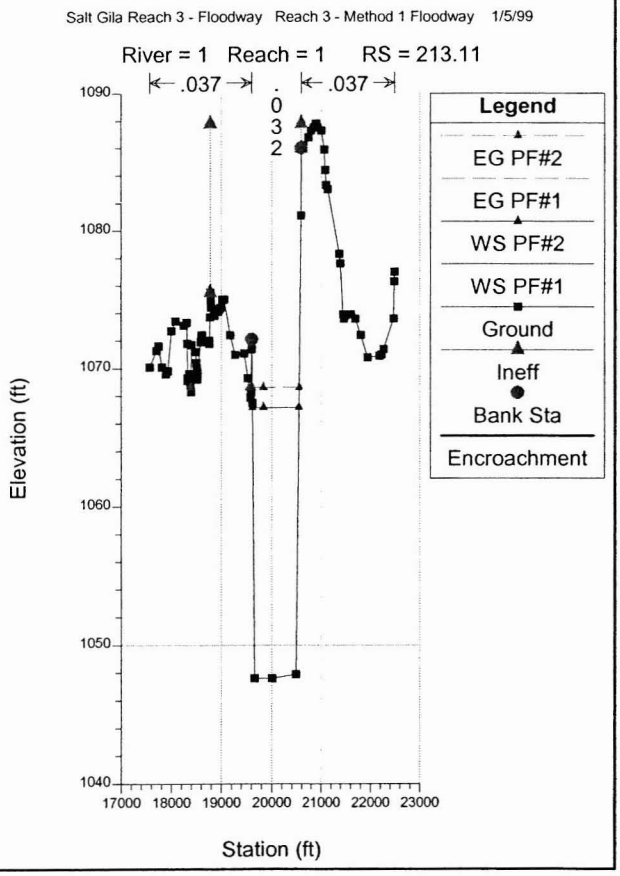

Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway 1/5/99
River = 1 Reach = 1 RS = 213.47
.037
.032
.037
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)

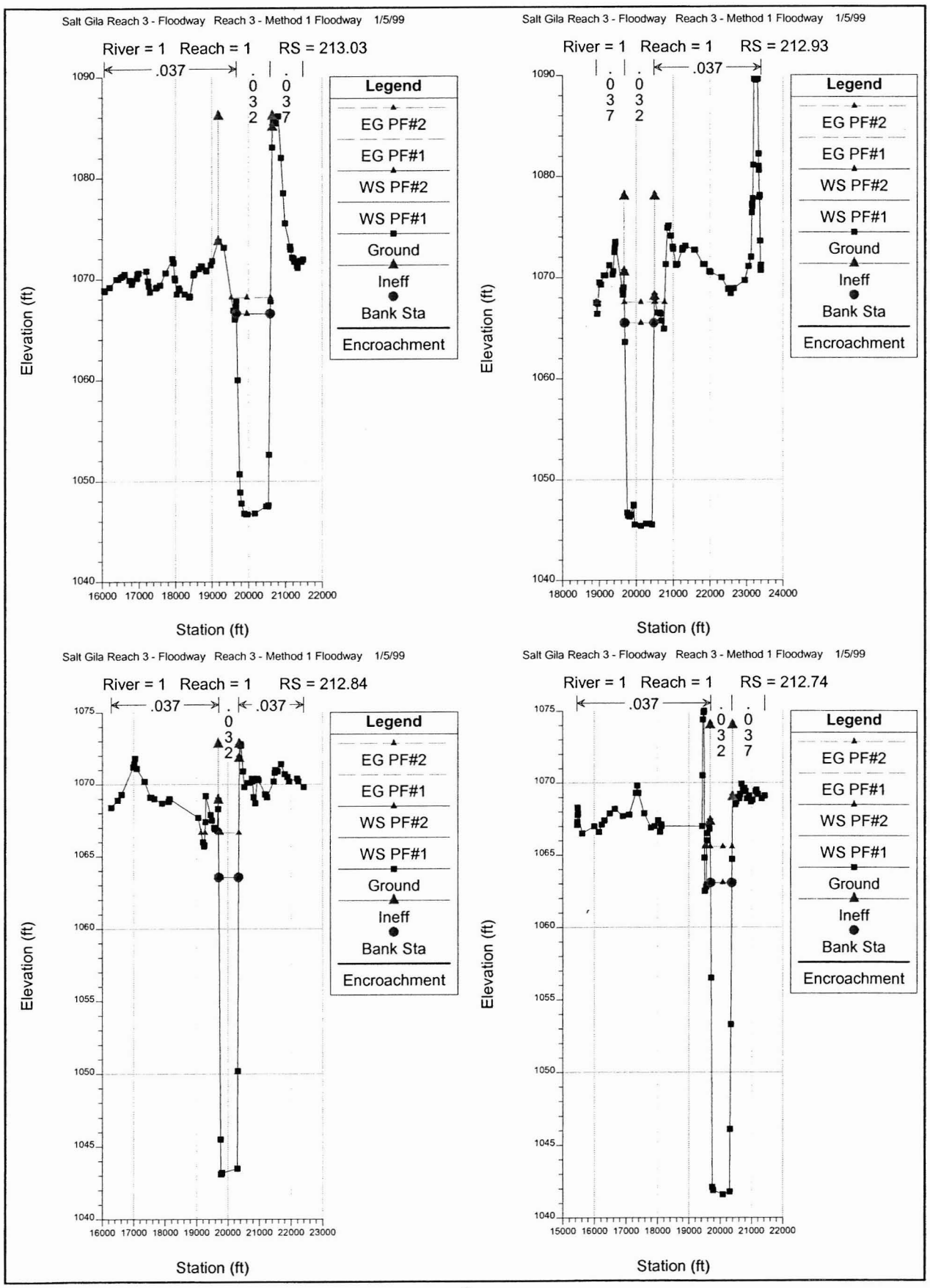

Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway 1/5/99
River = 1 Reach = 1 RS = 213.38
.037
.032
.037
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)
Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway 1/5/99
River = 1 Reach = 1 RS = 213.33
.037
.032
.037
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)
Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway 1/5/99
River = 1 Reach = 1 RS = 213.26
.037
.032
.037
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)
Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway 1/5/99
River = 1 Reach = 1 RS = 213.255
.037
.032
.037
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)

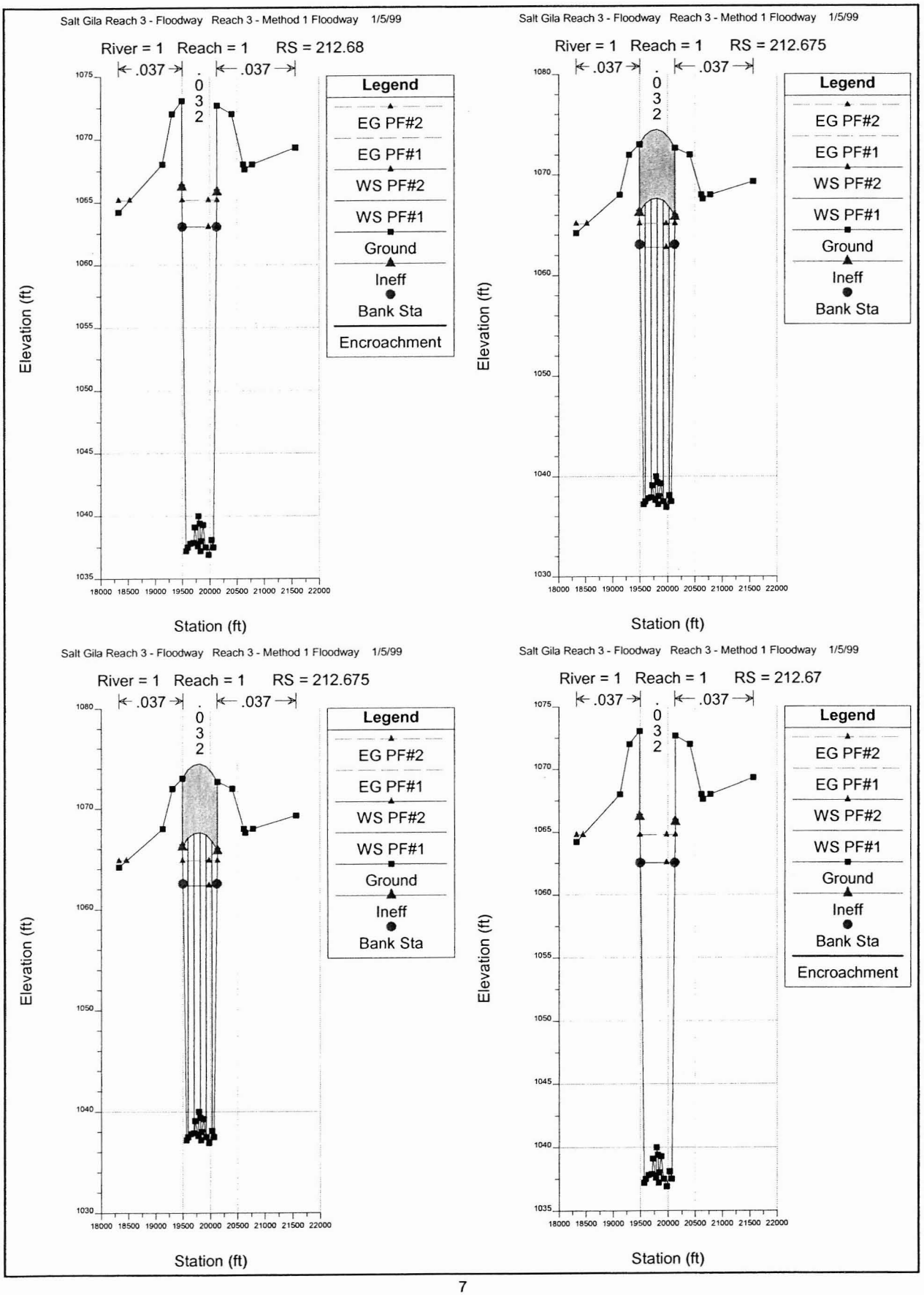

Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway 1/5/99
River = 1 Reach = 1 RS = 213.255
.037
.032
.037
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Elevation (ft)
Station (ft)

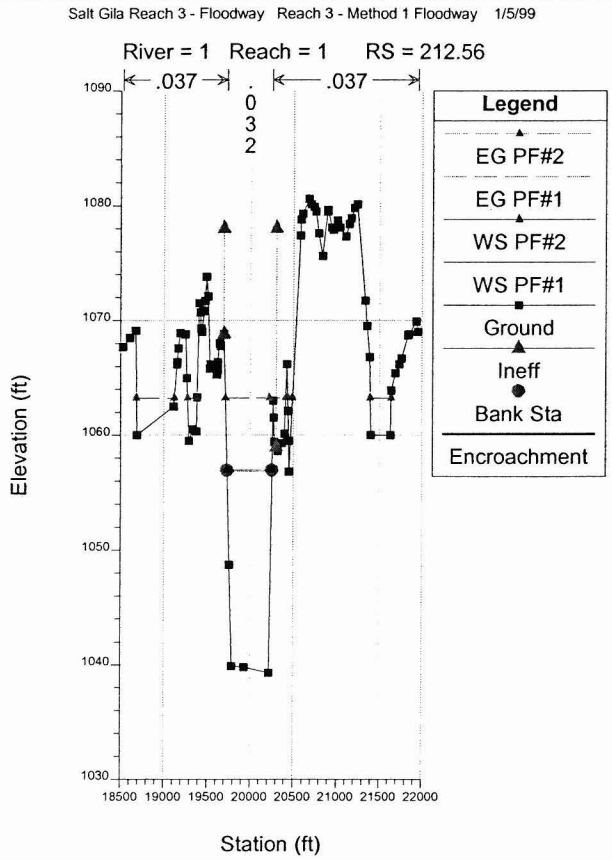

Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway 1/5/99
River = 1 Reach = 1 RS = 213.25
.037
.032
.037
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)

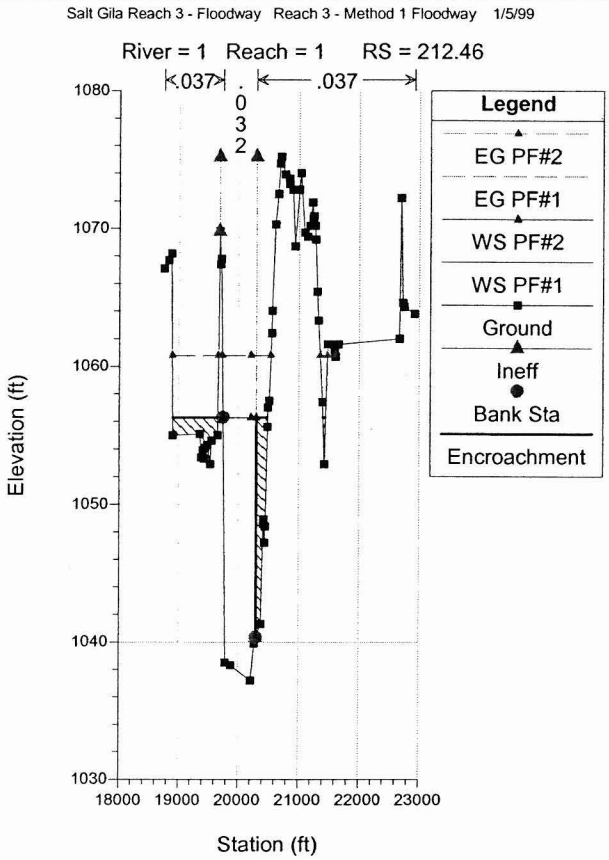

Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway 1/5/99
River = 1 Reach = 1 RS = 213.21
.037
.032
.037
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)

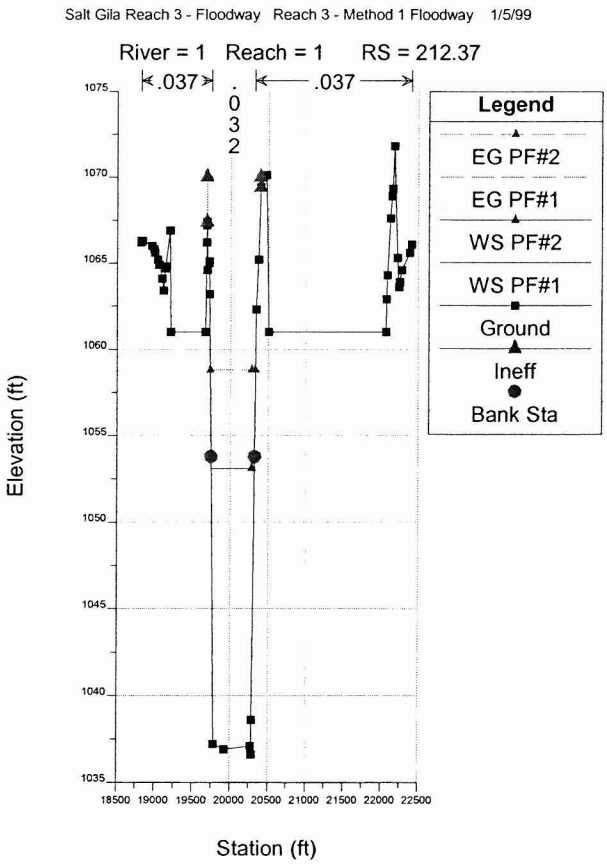

Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway 1/5/99
River = 1 Reach = 1 RS = 213.11
.037
.032
.037
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)

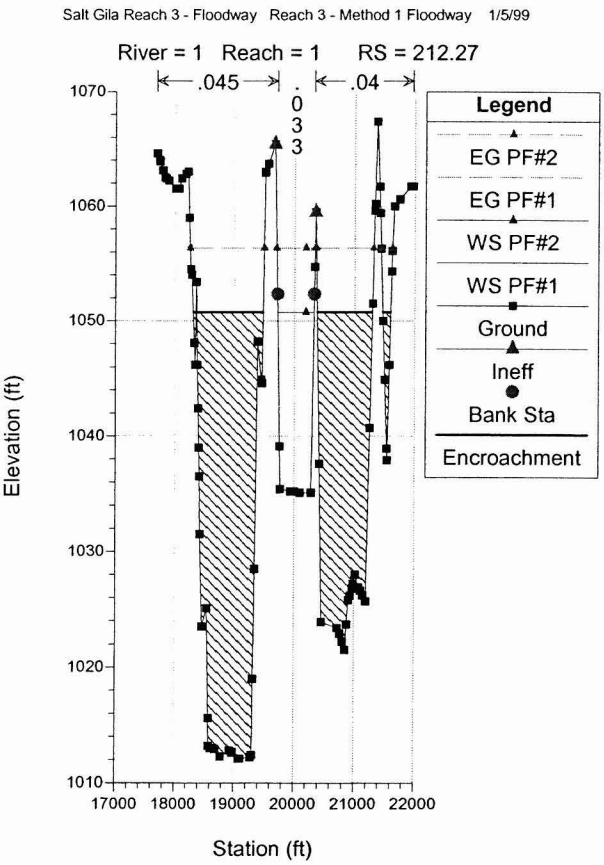

Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway 1/5/99
River = 1 Reach = 1 RS = 213.03
.037
.032
.037
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)
Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway 1/5/99
River = 1 Reach = 1 RS = 212.93
.037
.037
.032
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)
Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway 1/5/99
River = 1 Reach = 1 RS = 212.84
.037
.037
.032
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)
Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway 1/5/99
River = 1 Reach = 1 RS = 212.74
.037
.032
.037
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)

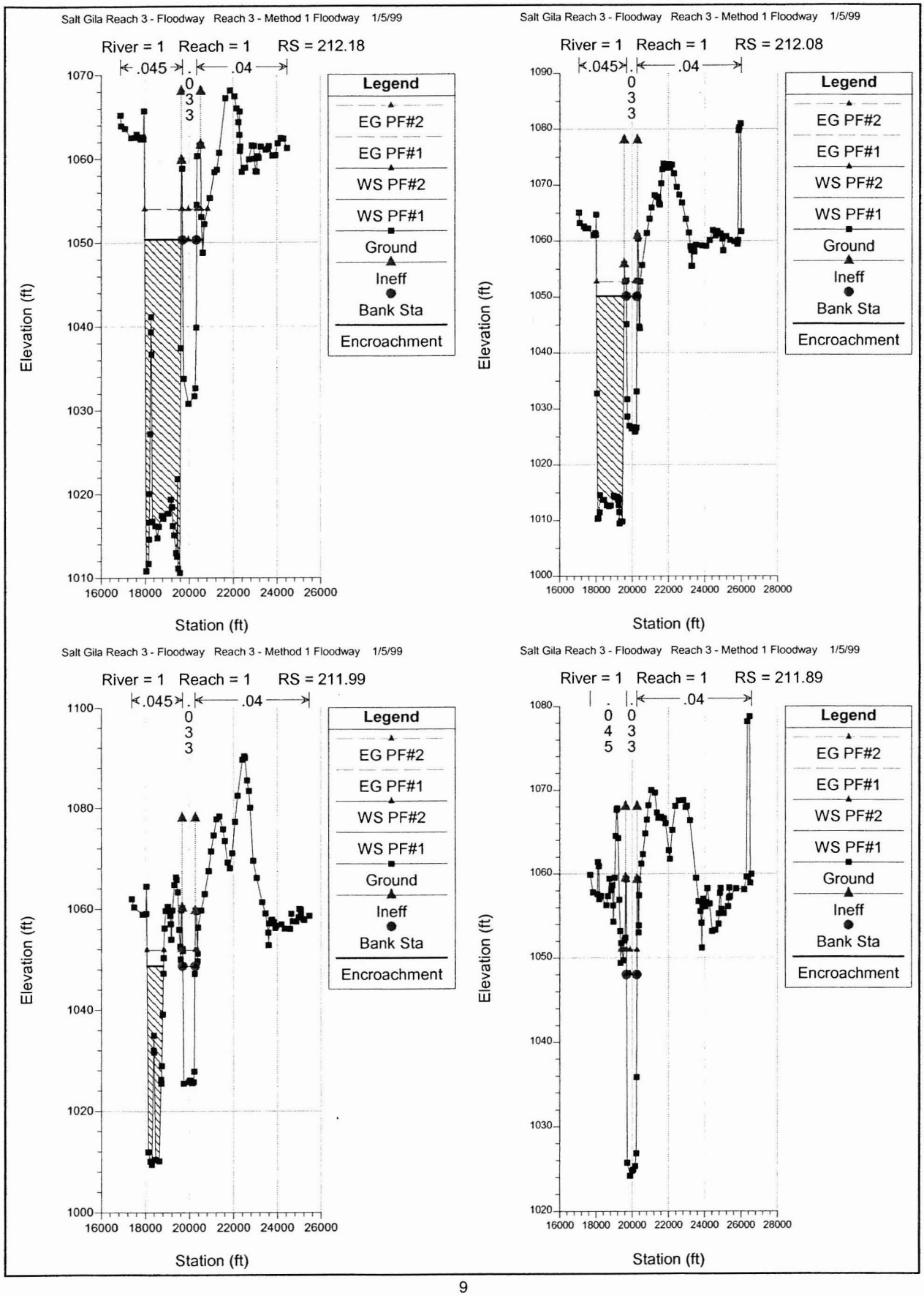

Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway 1/5/99
River = 1 Reach = 1 RS = 212.68
.037
.032
.037
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)
Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway 1/5/99
River = 1 Reach = 1 RS = 212.675
.037
.032
.037
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Elevation (ft)
Station (ft)
Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway 1/5/99
River = 1 Reach = 1 RS = 212.675
.037
.032
.037
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Elevation (ft)
Station (ft)
Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway 1/5/99
River = 1 Reach = 1 RS = 212.67
.037
.032
.037
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)

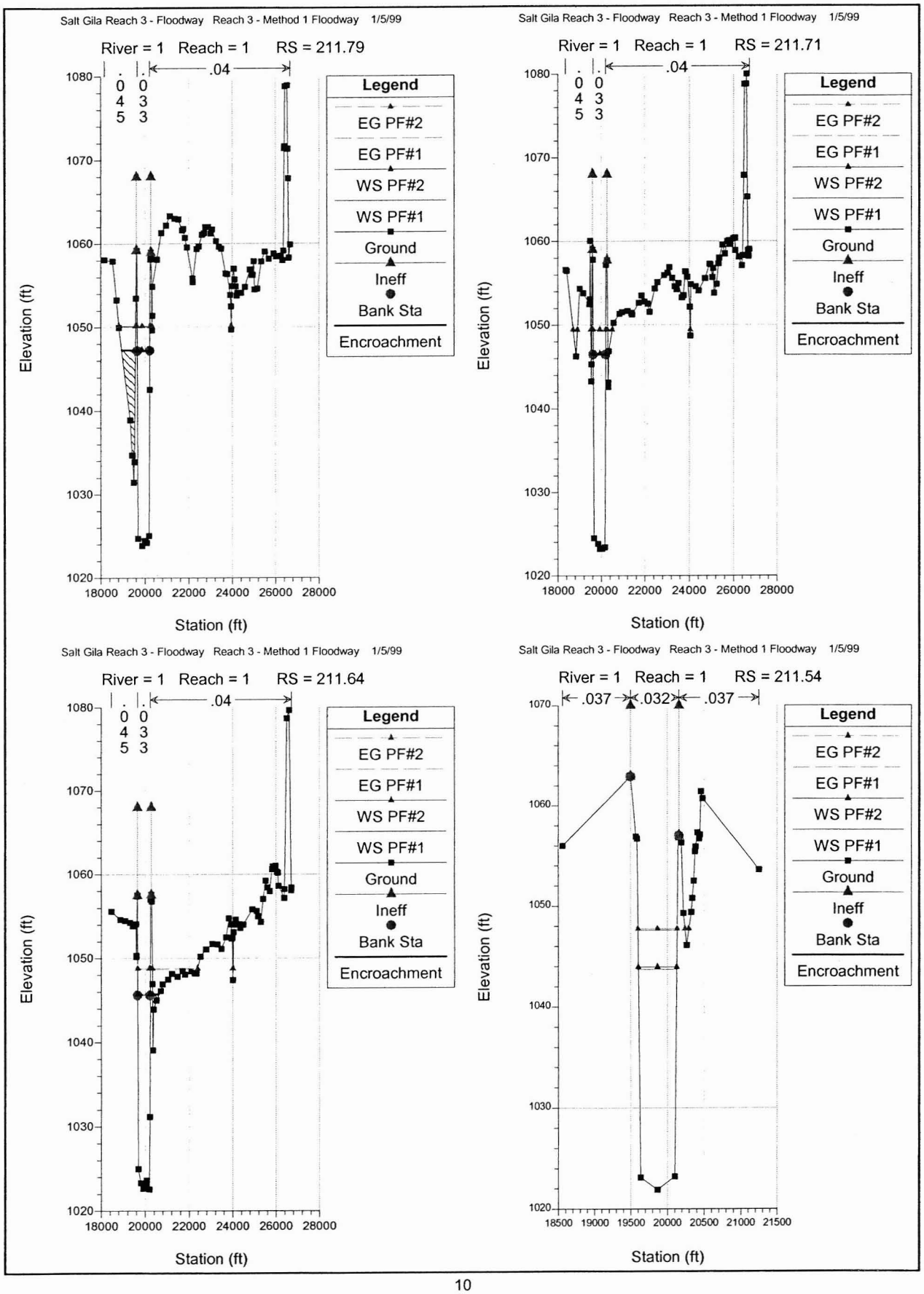

Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway 1/5/99
River = 1 Reach = 1 RS = 212.56
.037
.032
.037
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)

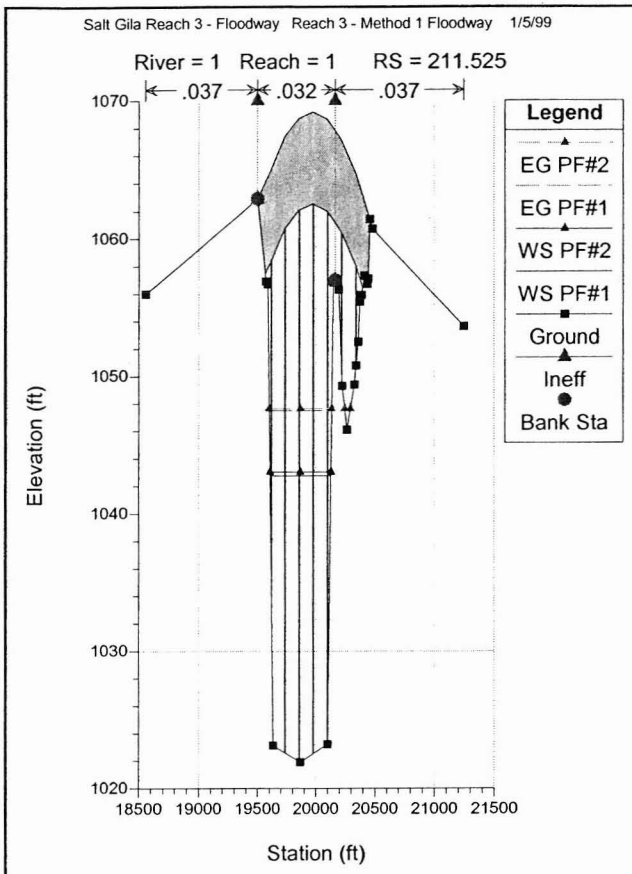

Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway 1/5/99
River = 1 Reach = 1 RS = 212.46
.037
.032
.037
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)

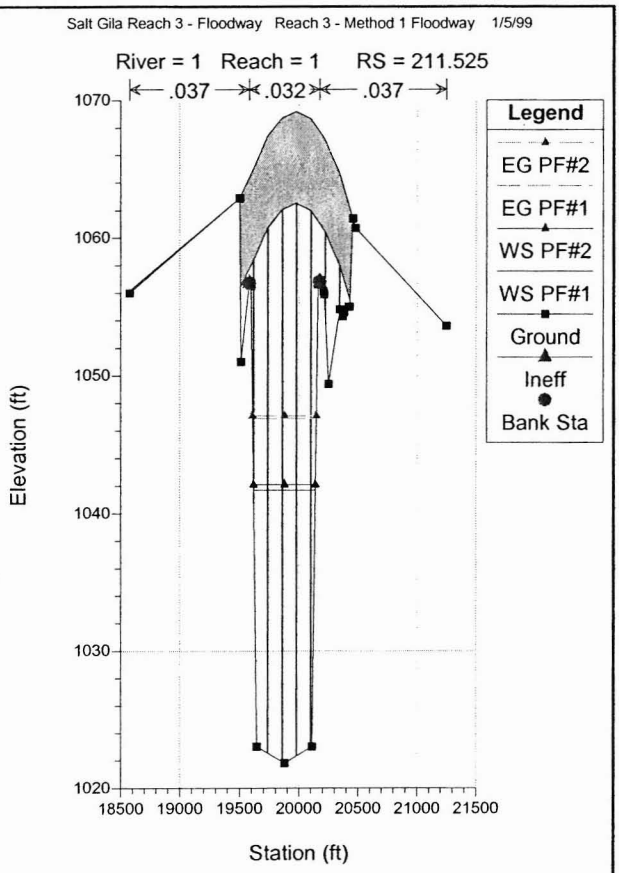

Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway 1/5/99
River = 1 Reach = 1 RS = 212.37
.037
.032
.037
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Elevation (ft)
Station (ft)

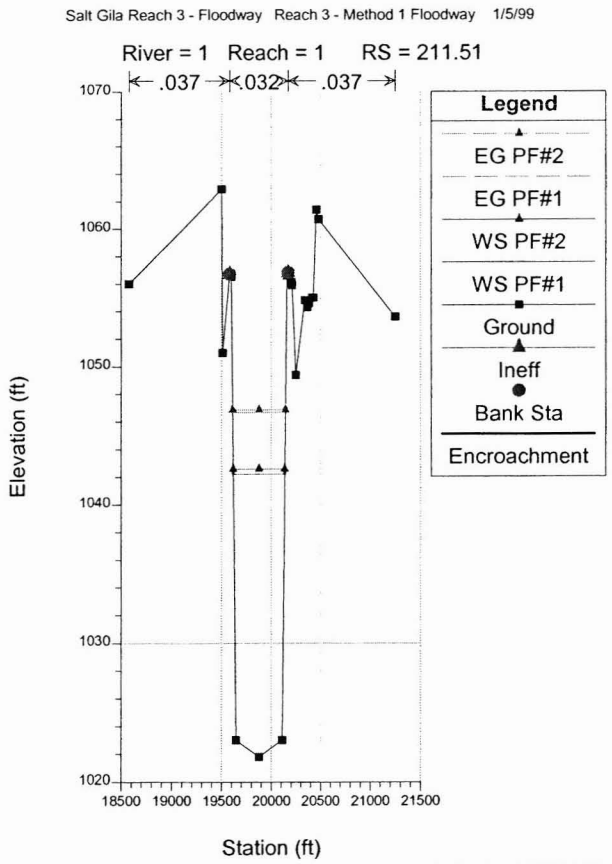

Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway 1/5/99
River = 1 Reach = 1 RS = 212.27
.045
.033
.04
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)

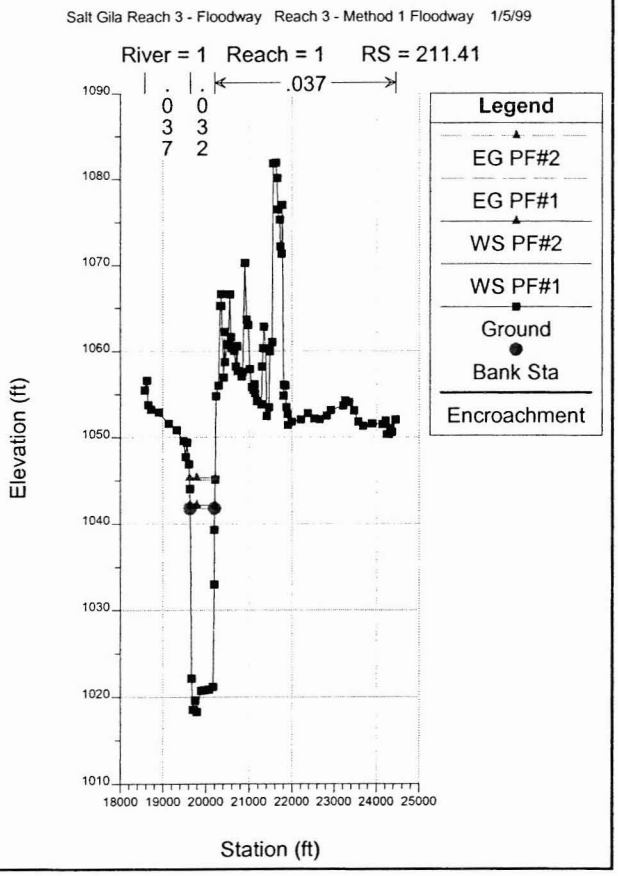

Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway 1/5/99
River = 1 Reach = 1 RS = 212.18
.045
.04
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)
Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway 1/5/99
River = 1 Reach = 1 RS = 212.08
.045
.04
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)
Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway 1/5/99
River = 1 Reach = 1 RS = 211.99
.045
.04
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)
Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway 1/5/99
River = 1 Reach = 1 RS = 211.89
.04
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)

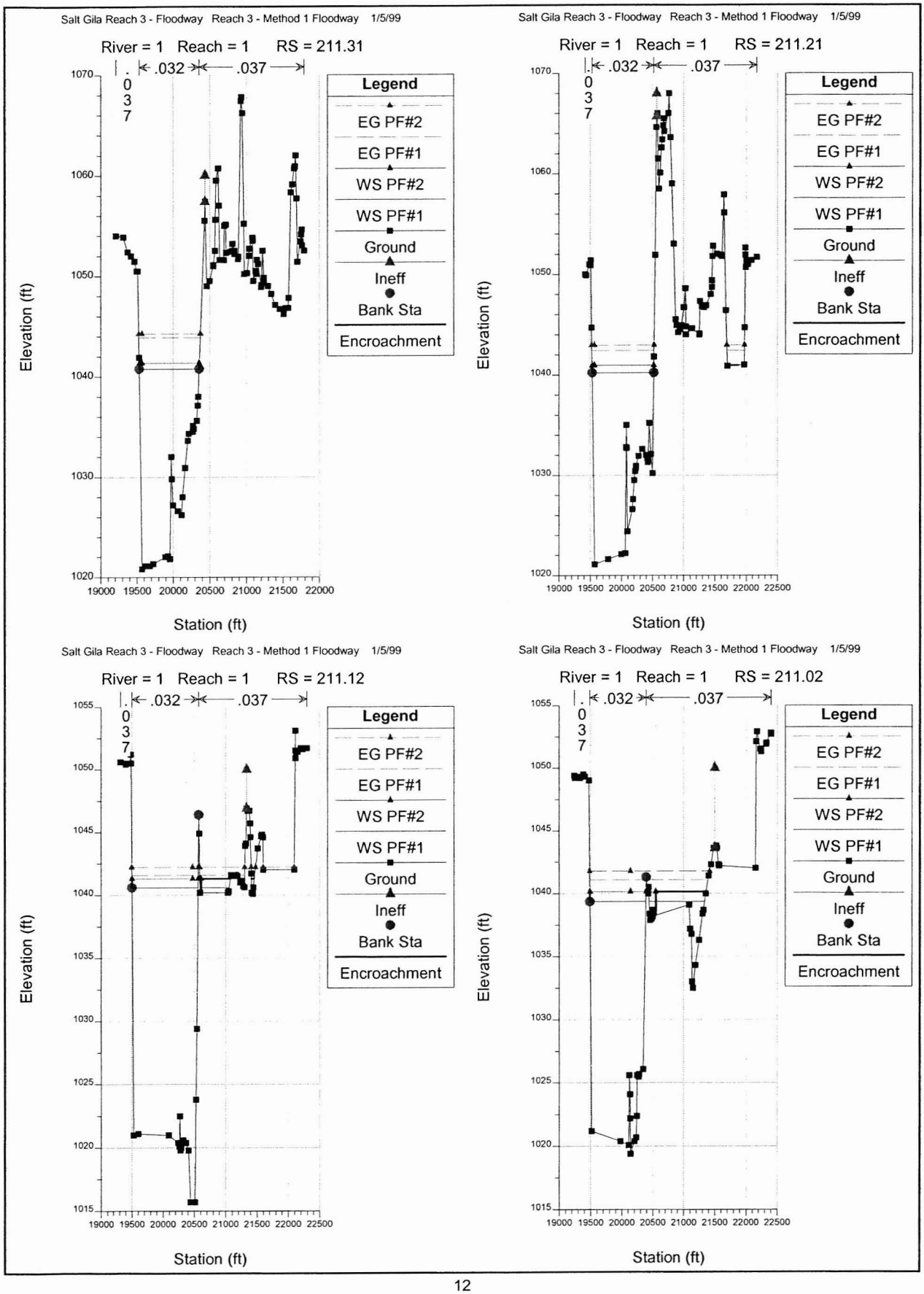

Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway 1/5/99
River = 1 Reach = 1 RS = 211.79
.04
0 0
4 3
5 3
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)
Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway 1/5/99
River = 1 Reach = 1 RS = 211.71
.04
0 0
4 3
5 3
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)
Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway 1/5/99
River = 1 Reach = 1 RS = 211.64
.04
0 0
4 3
5 3
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)
Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway 1/5/99
River = 1 Reach = 1 RS = 211.54
.037
.032
.037
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)

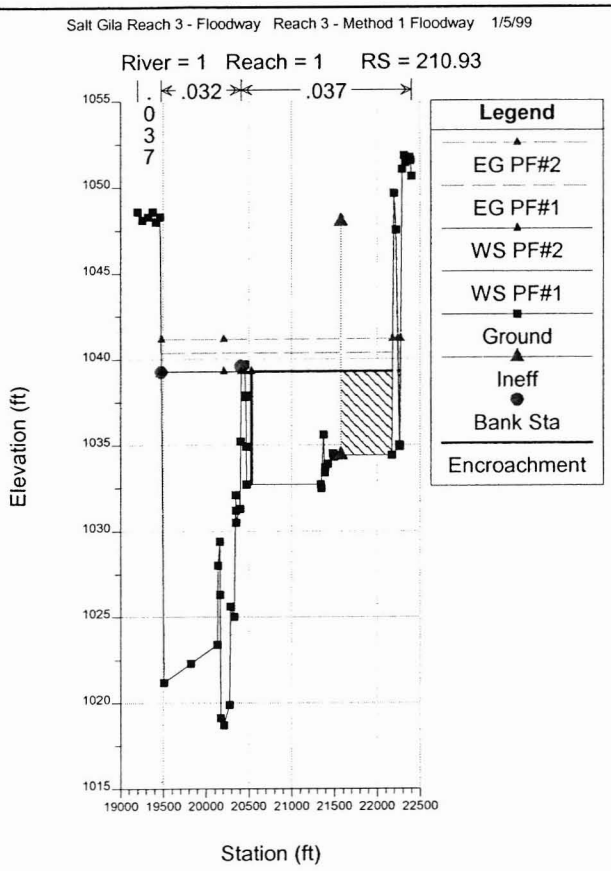

Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway 1/5/99
River = 1 Reach = 1 RS = 211.525
.037
.032
.037
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Elevation (ft)
Station (ft)

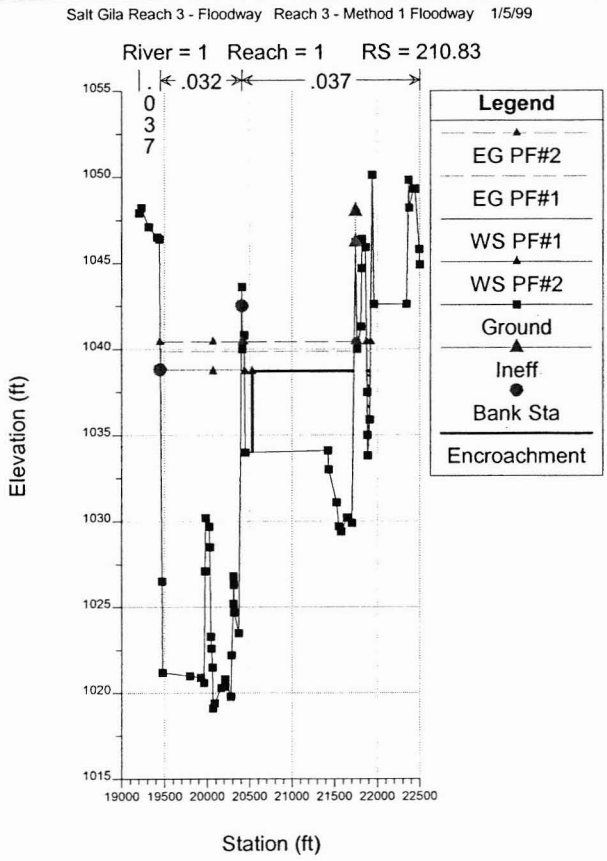

Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway 1/5/99
River = 1 Reach = 1 RS = 211.525
.037
.032
.037
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Elevation (ft)
Station (ft)

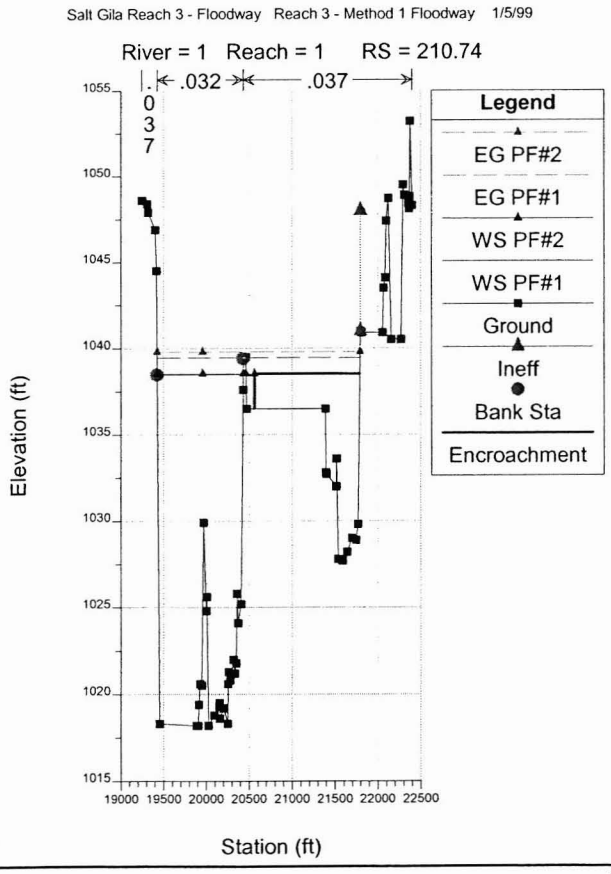

Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway 1/5/99
River = 1 Reach = 1 RS = 211.51
.037
.032
.037
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)

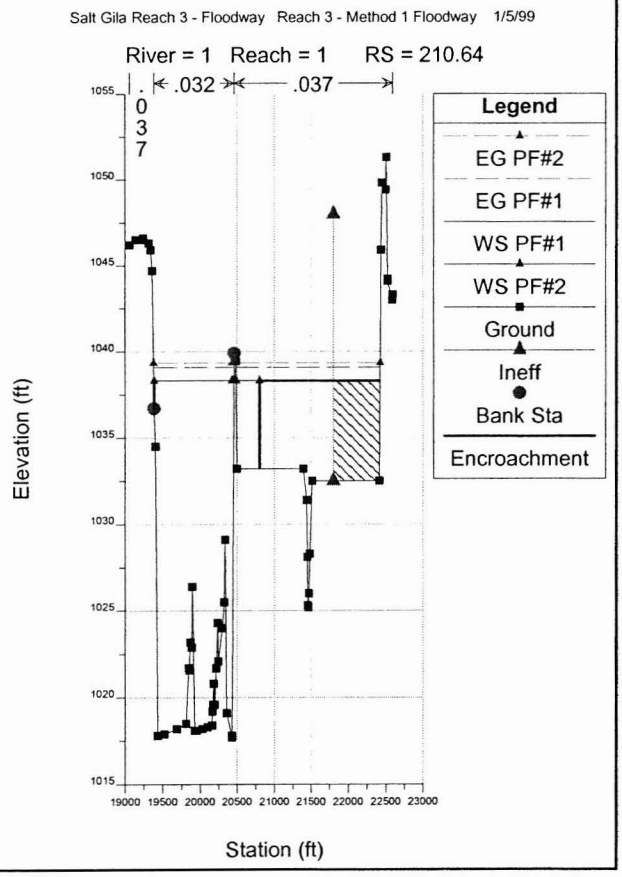

Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway 1/5/99
River = 1 Reach = 1 RS = 211.41
.037
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Bank Sta
Encroachment
Elevation (ft)
Station (ft)

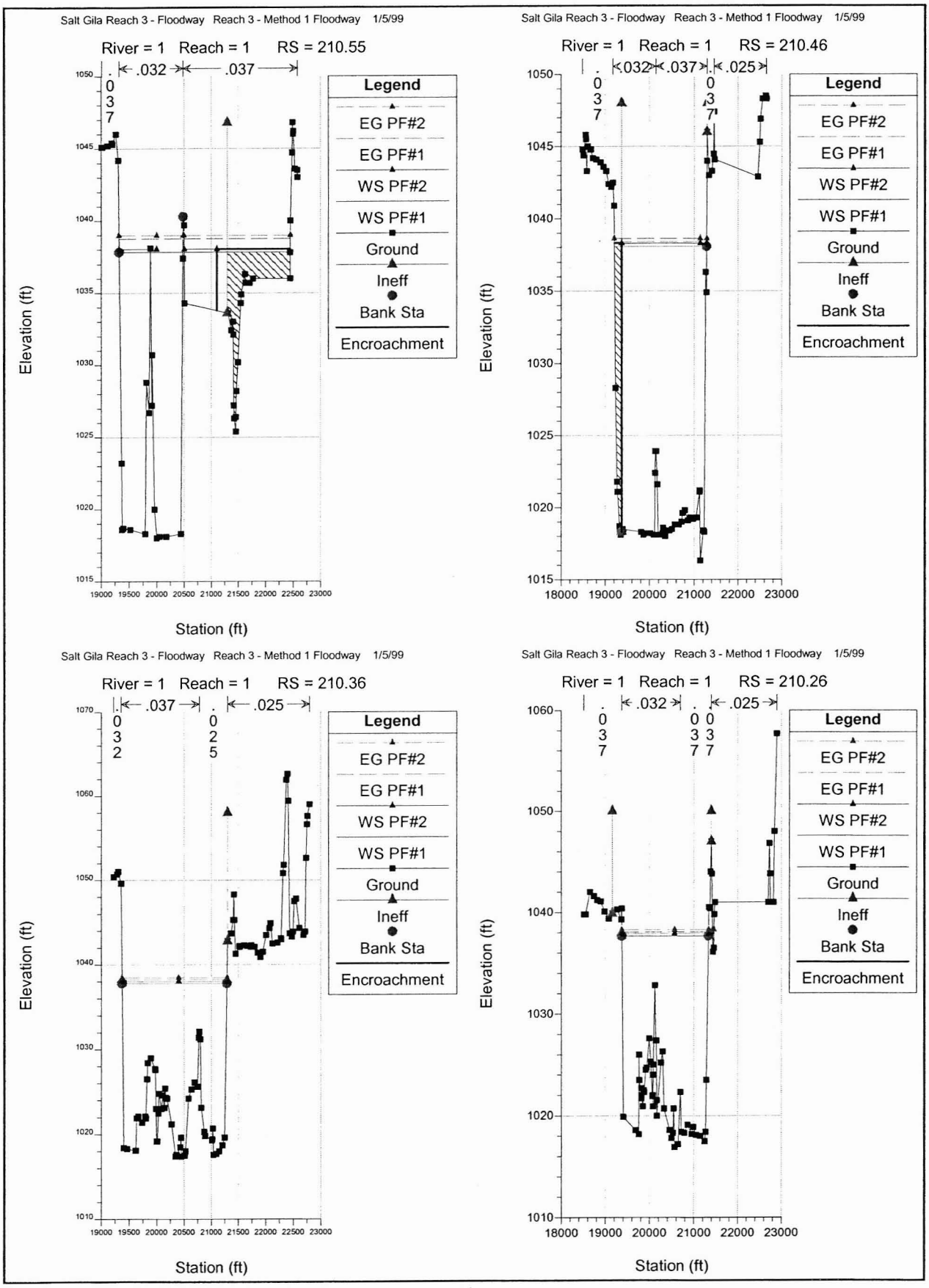

Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway 1/5/99
River = 1 Reach = 1 RS = 211.31
.037
.032
.037
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)
Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway 1/5/99
River = 1 Reach = 1 RS = 211.21
Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway 1/5/99
River = 1 Reach = 1 RS = 211.12
Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway 1/5/99
River = 1 Reach = 1 RS = 211.02

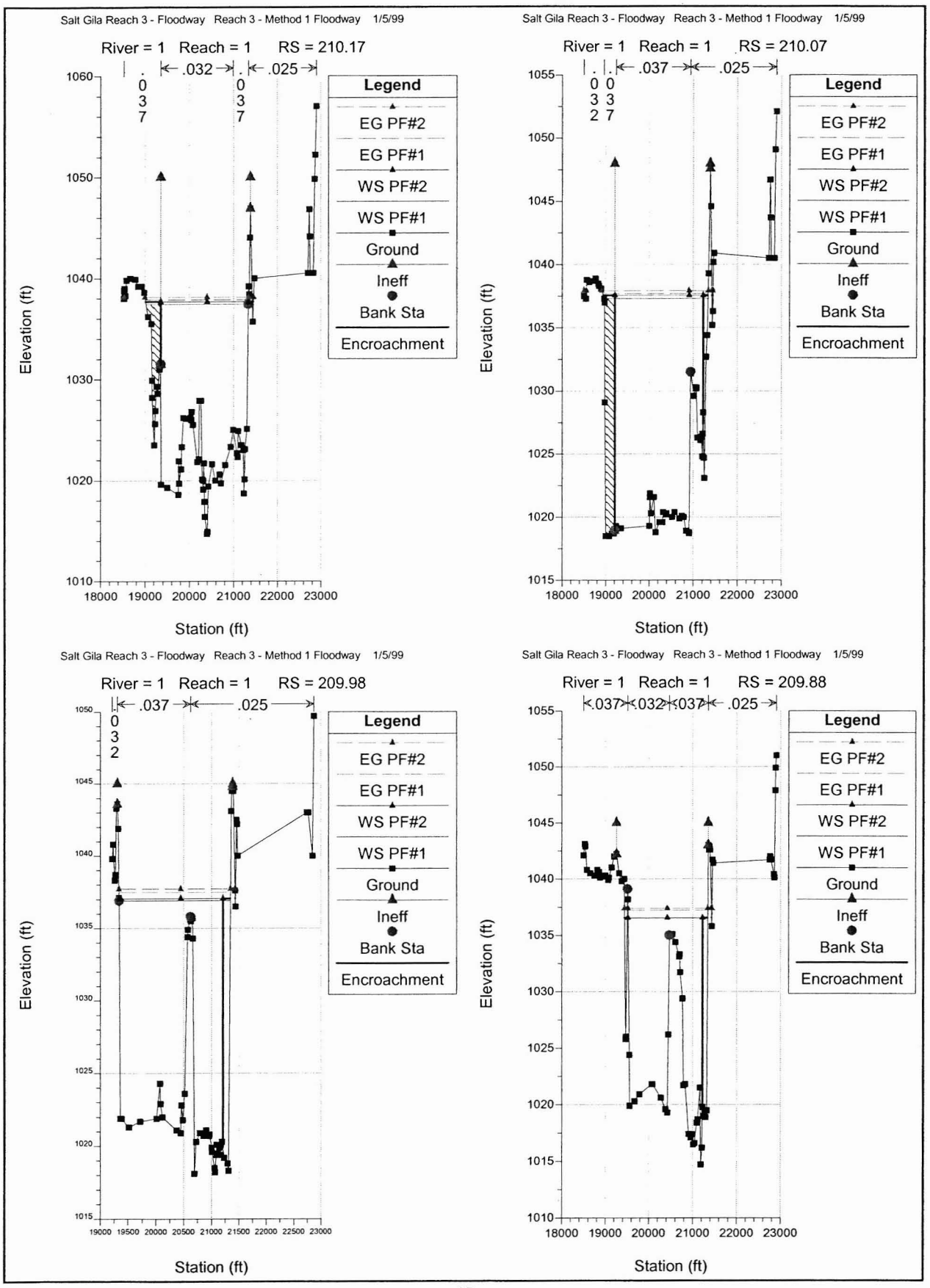

Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway 1/5/99
River = 1 Reach = 1 RS = 210.93
.037
.032
.037
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)

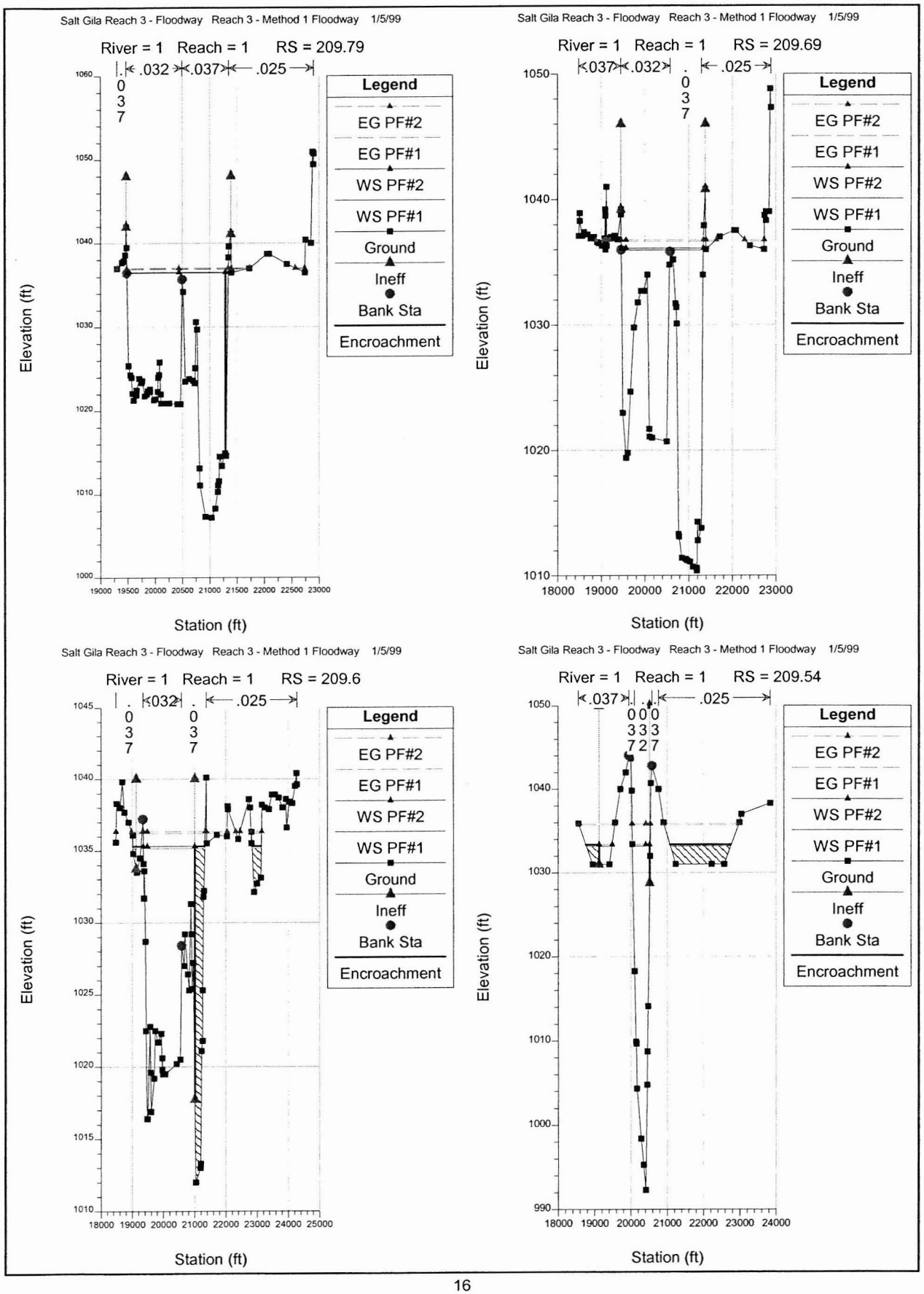

Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway 1/5/99
River = 1 Reach = 1 RS = 210.83
.037
.032
.037
Legend
EG PF#2
EG PF#1
WS PF#1
WS PF#2
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)

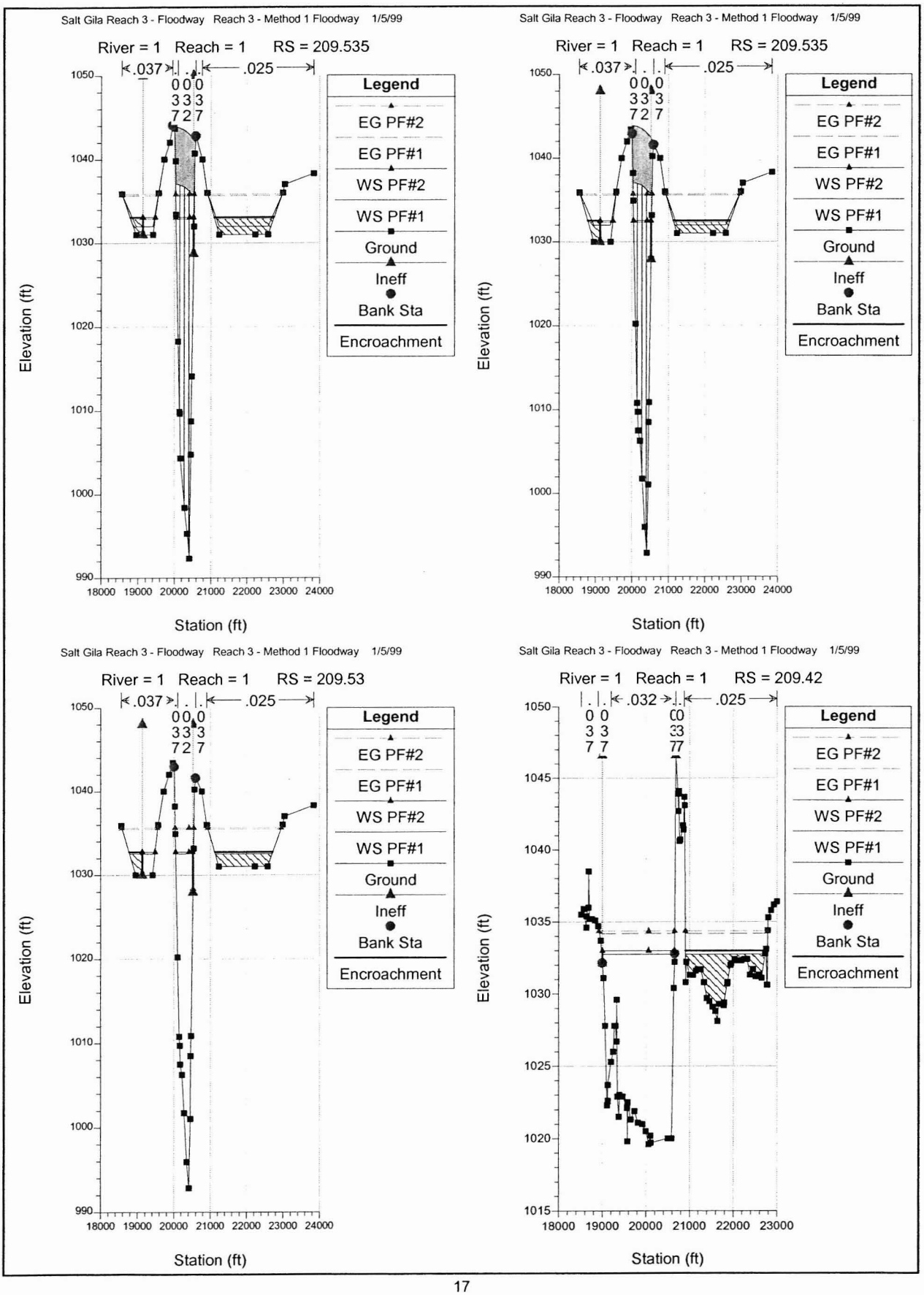

Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway 1/5/99
River = 1 Reach = 1 RS = 210.74
.037
.032
.037
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)

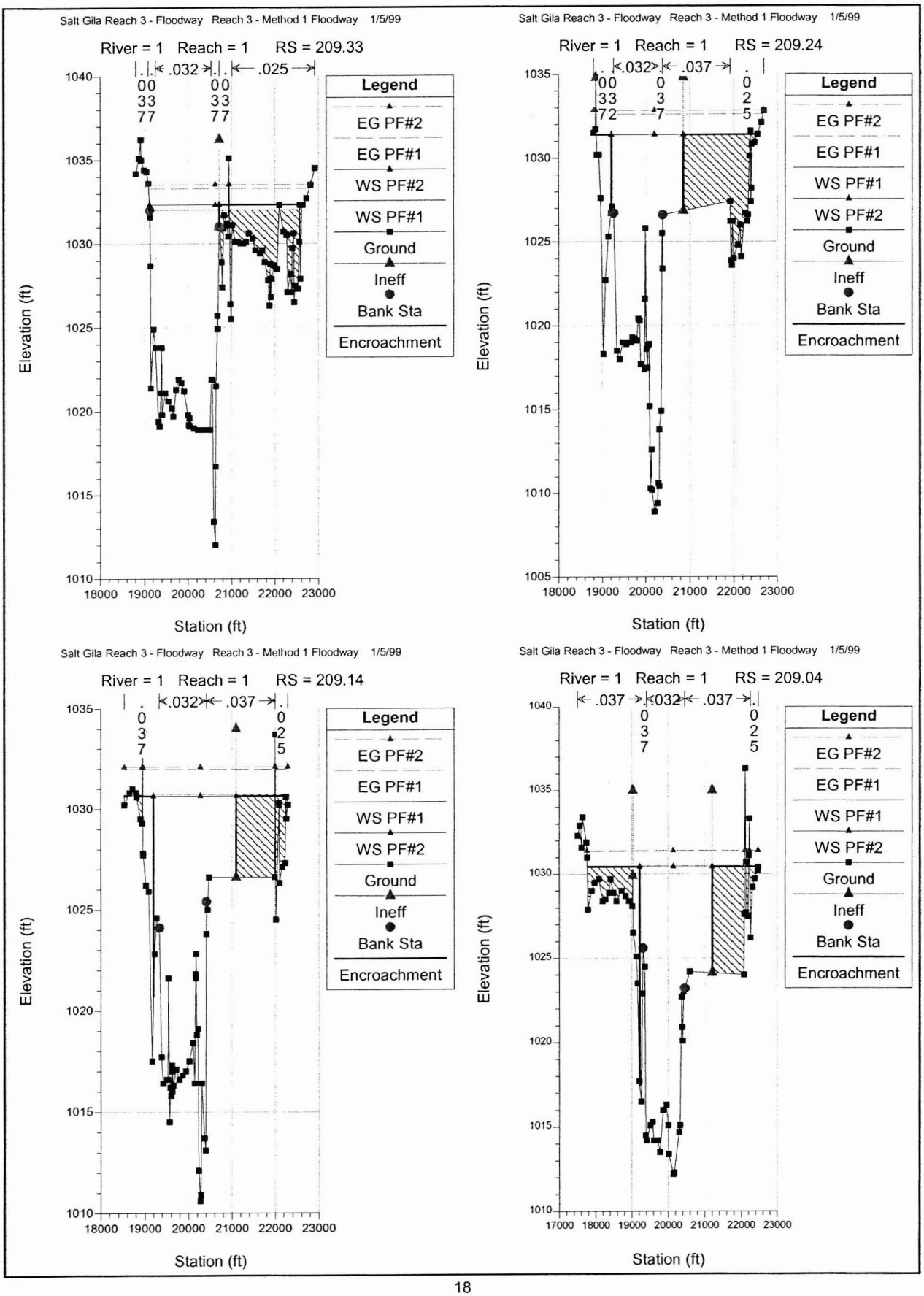

Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway 1/5/99
River = 1 Reach = 1 RS = 210.64
.037
.032
.037
Legend
EG PF#2
EG PF#1
WS PF#1
WS PF#2
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)

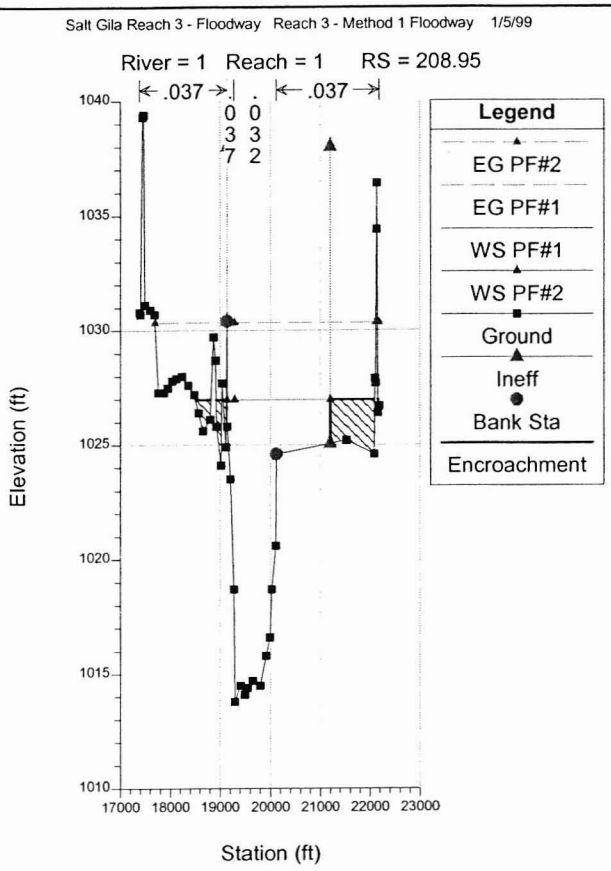

Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway 1/5/99
River = 1 Reach = 1 RS = 210.55
.032
.037
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)
Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway 1/5/99
River = 1 Reach = 1 RS = 210.46
.032
.037
.025
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)
Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway 1/5/99
River = 1 Reach = 1 RS = 210.36
.037
.025
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)
Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway 1/5/99
River = 1 Reach = 1 RS = 210.26
.032
.025
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)

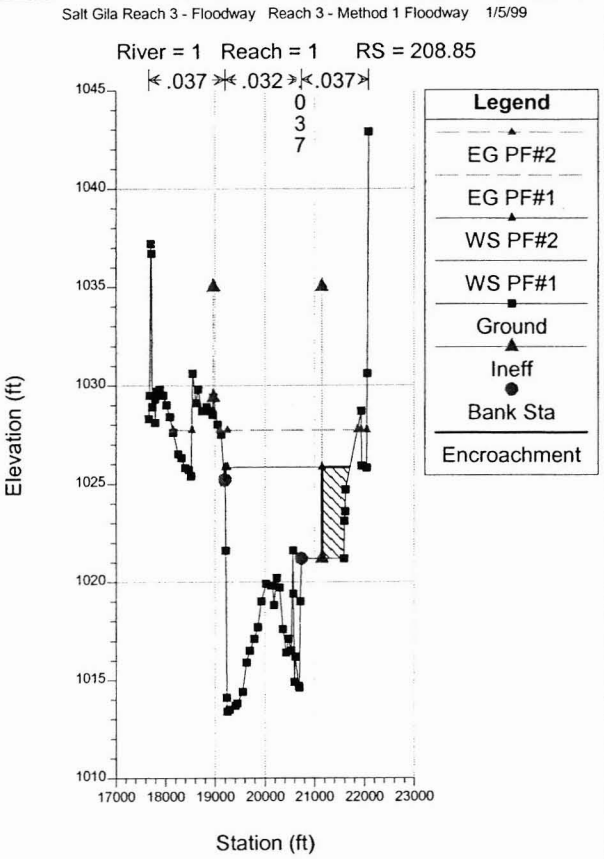

Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway 1/5/99
River = 1 Reach = 1 RS = 210.17
.037
.032
.037
.025
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)
Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway 1/5/99
River = 1 Reach = 1 RS = 210.07
.037
.032
.037
.025
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)
Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway 1/5/99
River = 1 Reach = 1 RS = 209.98
.037
.025
.032
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)
Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway 1/5/99
River = 1 Reach = 1 RS = 209.88
.037
.032
.037
.025
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)

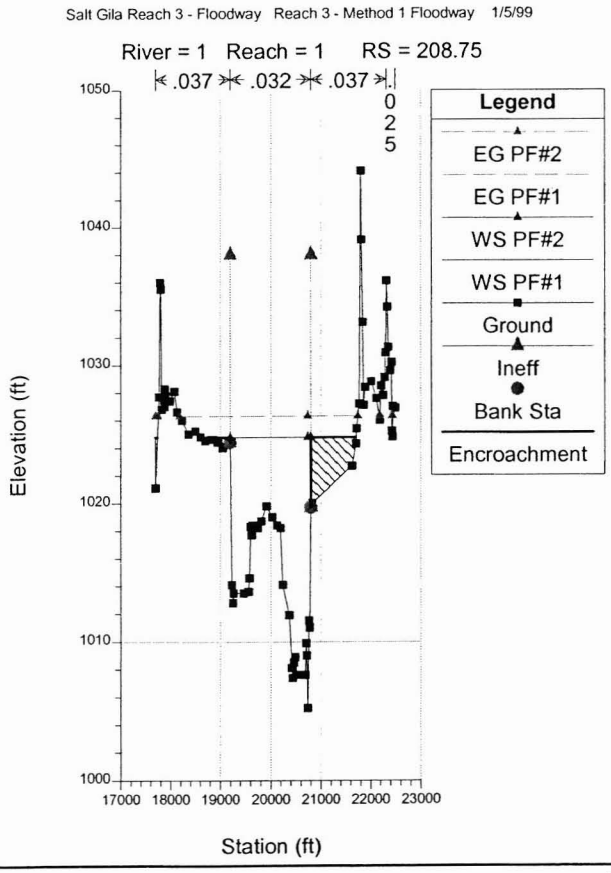

Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway 1/5/99
River = 1 Reach = 1 RS = 209.79
.032
.037
.025
.037
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)
Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway 1/5/99
River = 1 Reach = 1 RS = 209.69
.037
.032
.025
.037
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)
Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway 1/5/99
River = 1 Reach = 1 RS = 209.6
.037
.032
.037
.025
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)
Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway 1/5/99
River = 1 Reach = 1 RS = 209.54
.037
.000
.033
.027
.025
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)

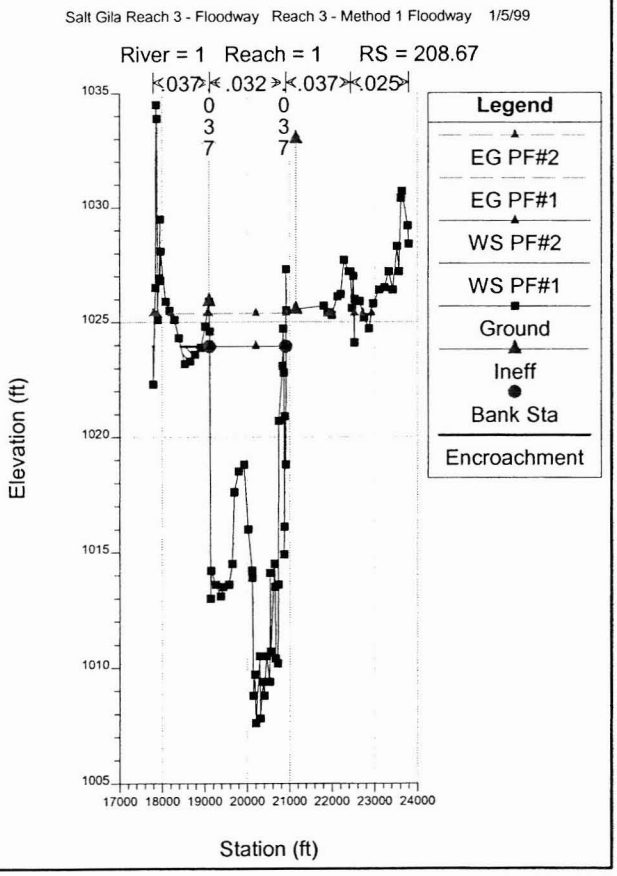

Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway 1/5/99
River = 1 Reach = 1 RS = 209.535
.037
.025
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)
Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway 1/5/99
River = 1 Reach = 1 RS = 209.535
.037
.025
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)
Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway 1/5/99
River = 1 Reach = 1 RS = 209.53
.037
.025
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)
Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway 1/5/99
River = 1 Reach = 1 RS = 209.42
.032
.025
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)

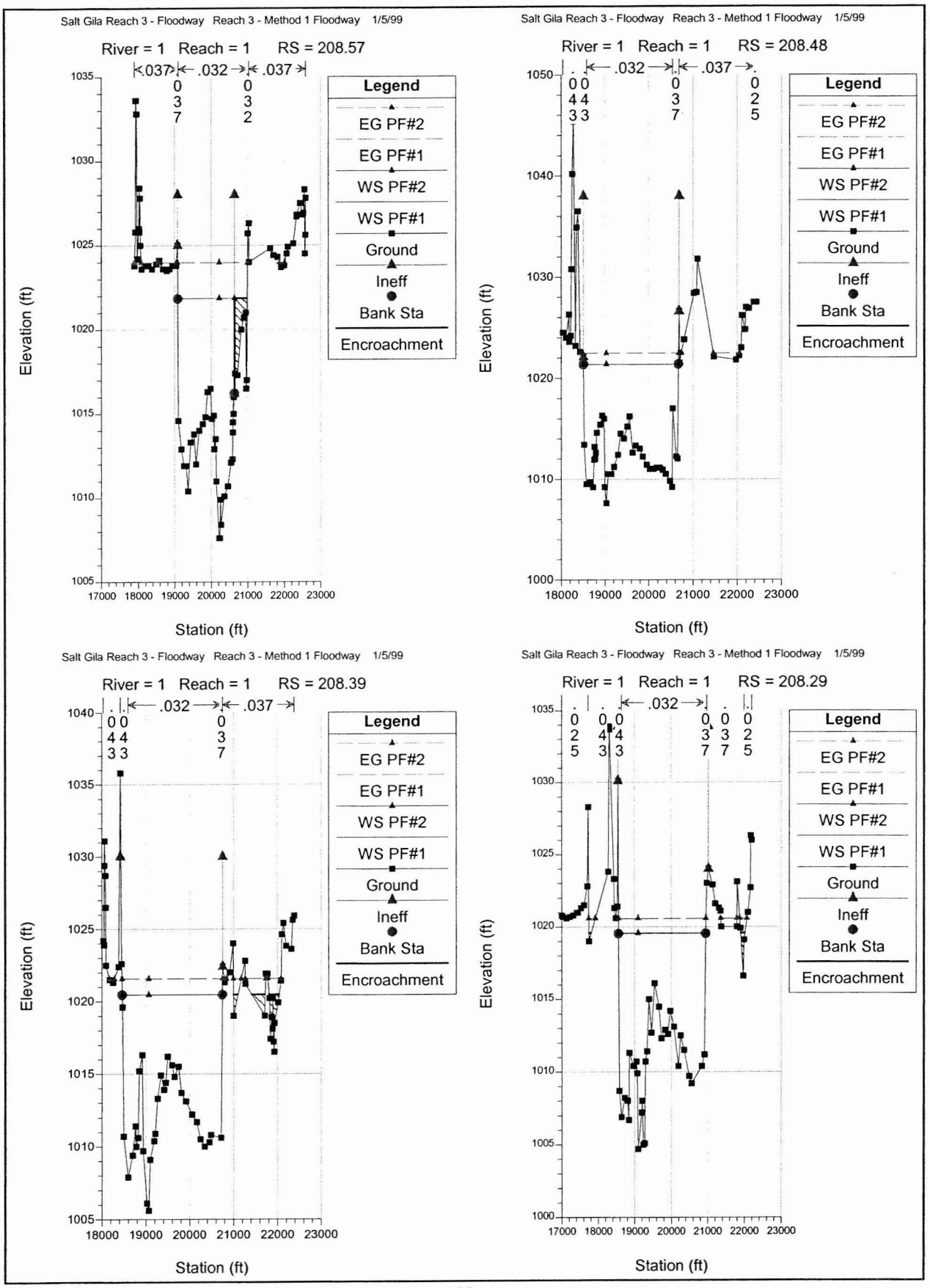

Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway 1/5/99
River = 1 Reach = 1 RS = 209.33
.032
.025
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)
Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway 1/5/99
River = 1 Reach = 1 RS = 209.24
.032
.037
Legend
EG PF#2
EG PF#1
WS PF#1
WS PF#2
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)
Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway 1/5/99
River = 1 Reach = 1 RS = 209.14
.032
.037
Legend
EG PF#2
EG PF#1
WS PF#1
WS PF#2
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)
Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway 1/5/99
River = 1 Reach = 1 RS = 209.04
.037
.032
.037
Legend
EG PF#2
EG PF#1
WS PF#1
WS PF#2
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)

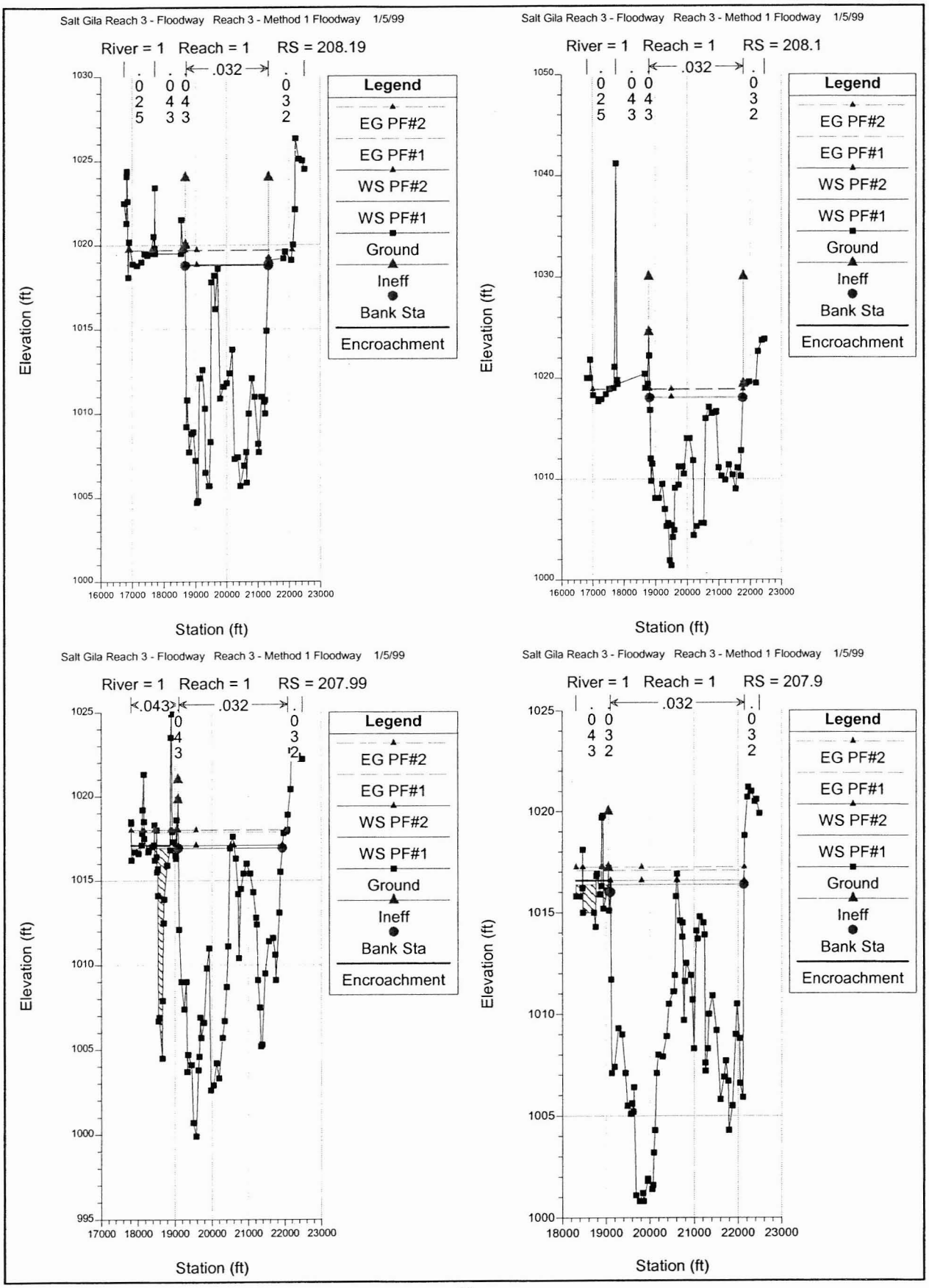

Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway 1/5/99
River = 1 Reach = 1 RS = 208.95
.037
.037
Legend
EG PF#2
EG PF#1
WS PF#1
WS PF#2
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)

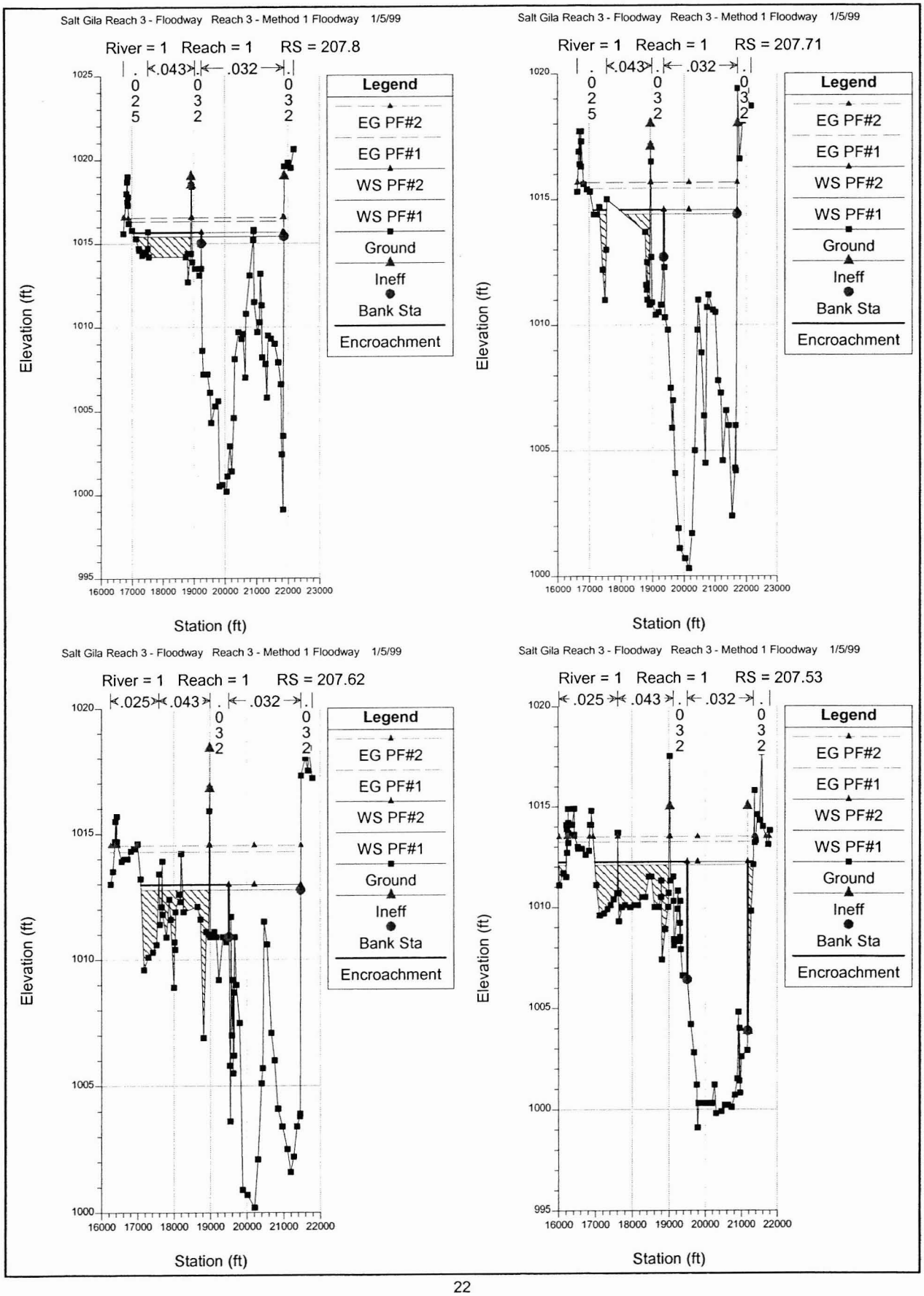

Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway 1/5/99
River = 1 Reach = 1 RS = 208.85
.037
.032
.037
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)

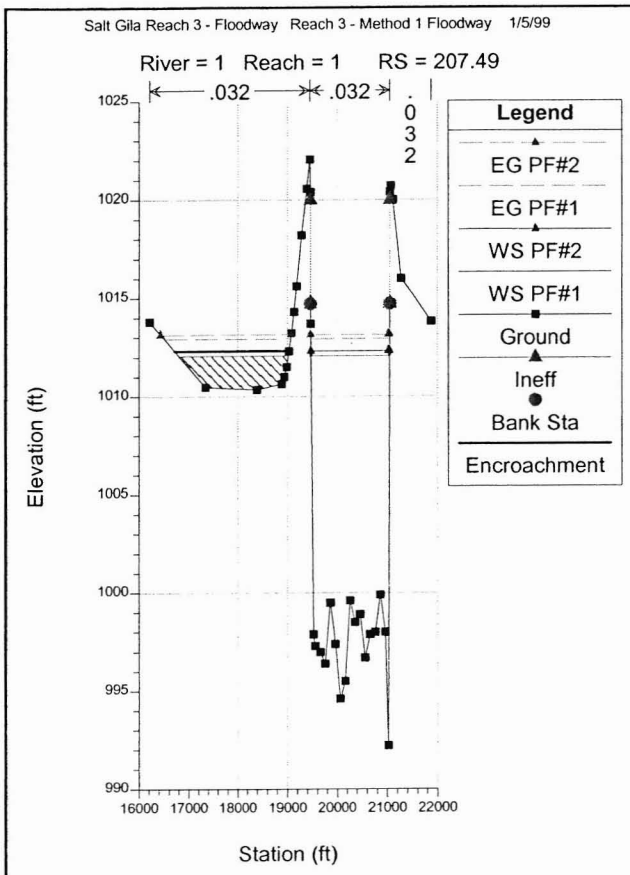

Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway 1/5/99
River = 1 Reach = 1 RS = 208.75
.037
.032
.037
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)

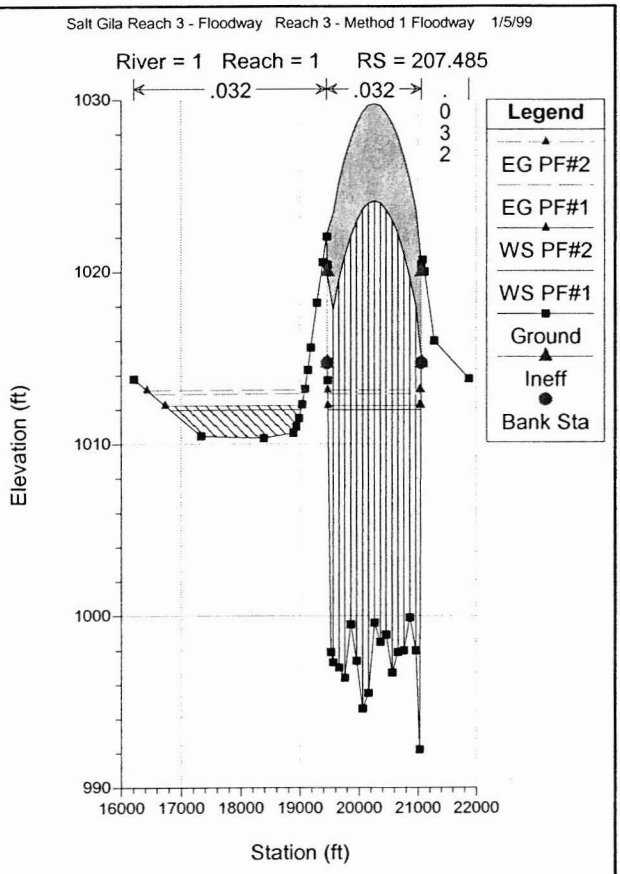

Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway 1/5/99
River = 1 Reach = 1 RS = 208.67
.037
.032
.037
.025
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)

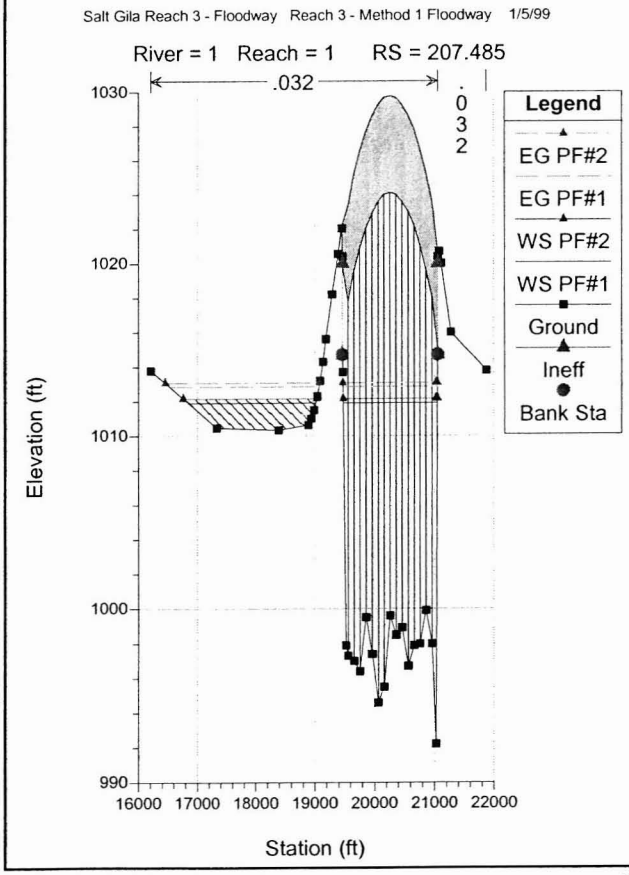

Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway 1/5/99
River = 1 Reach = 1 RS = 208.57
.037 .032 .037
0 3 7
0 3 2
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)
Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway 1/5/99
River = 1 Reach = 1 RS = 208.48
.032 .037
0 0 4 4 3 3
0 3 7
0 2 5
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)
Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway 1/5/99
River = 1 Reach = 1 RS = 208.39
.032 .037
0 0 4 4 3 3
0 3 7
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)
Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway 1/5/99
River = 1 Reach = 1 RS = 208.29
.032
0 2 5
0 4 3
0 4 3
0 3 7
0 3 7
0 2 5
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)

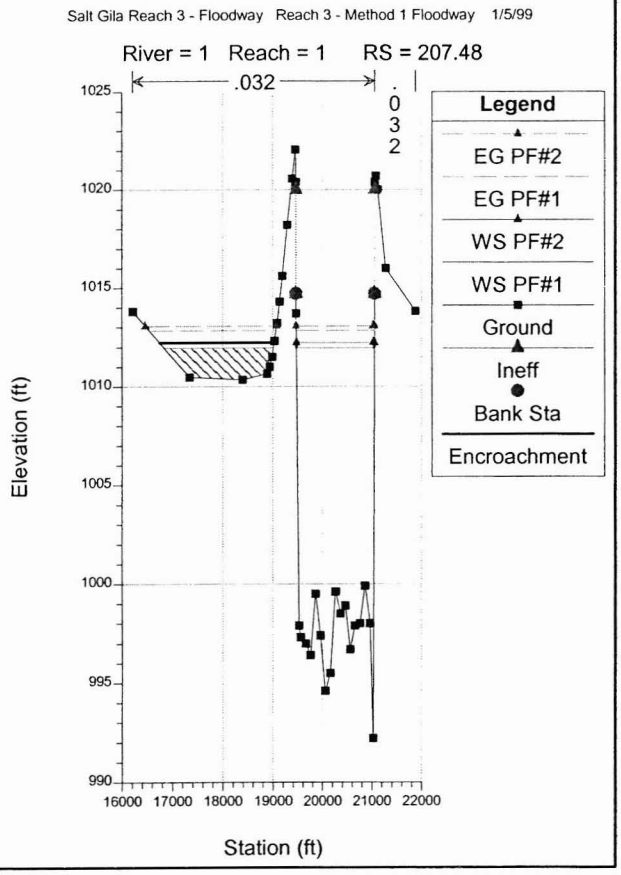

Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway 1/5/99
River = 1 Reach = 1 RS = 208.19
.032
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)
Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway 1/5/99
River = 1 Reach = 1 RS = 208.1
.032
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)
Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway 1/5/99
River = 1 Reach = 1 RS = 207.99
.043
.032
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)
Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway 1/5/99
River = 1 Reach = 1 RS = 207.9
.032
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)

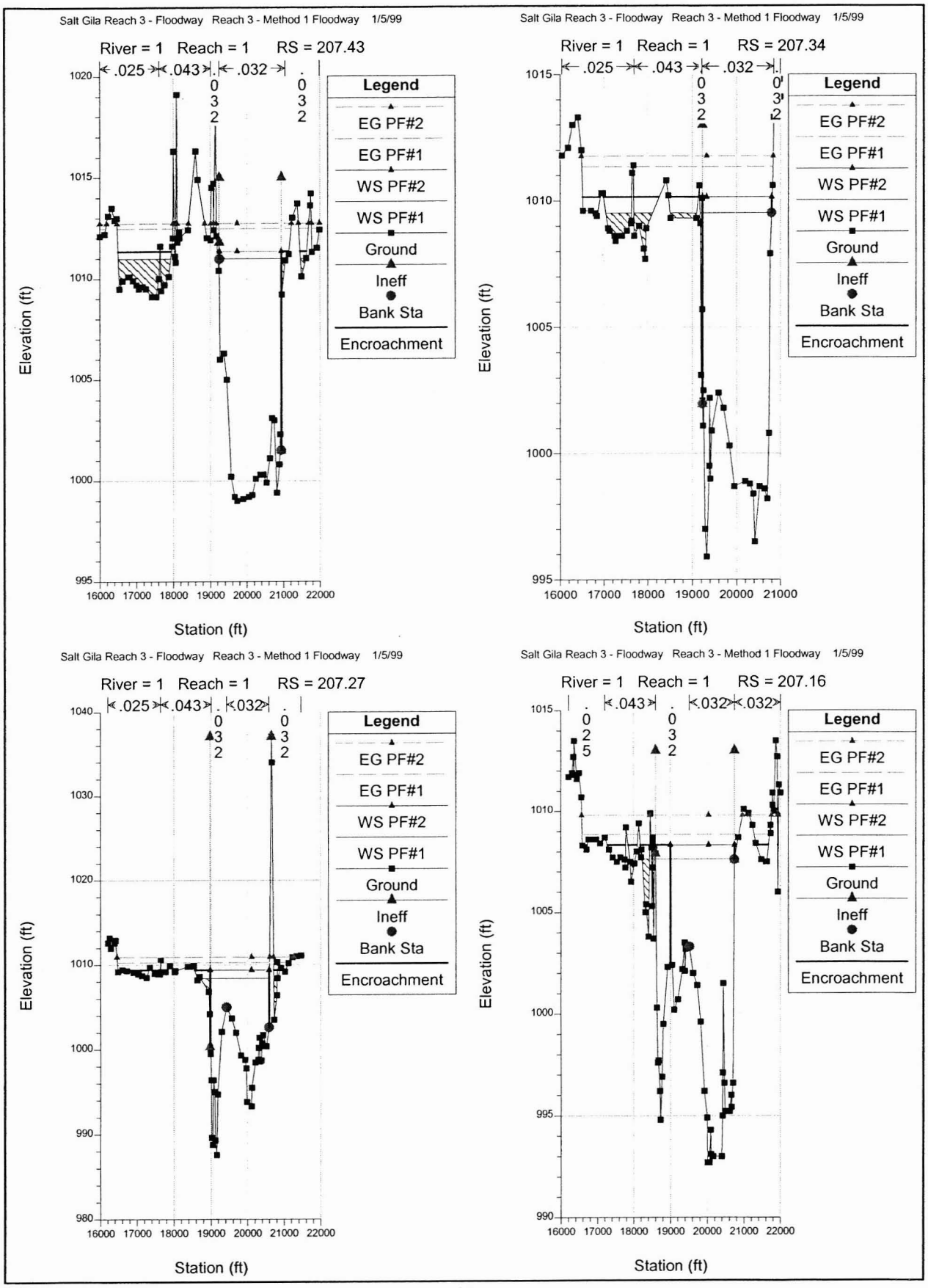

Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway 1/5/99
River = 1 Reach = 1 RS = 207.8
.043
.032
025
032
032
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)
Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway 1/5/99
River = 1 Reach = 1 RS = 207.71
.043
.032
025
032
032
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)
Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway 1/5/99
River = 1 Reach = 1 RS = 207.62
.025
.043
.032
032
032
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)
Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway 1/5/99
River = 1 Reach = 1 RS = 207.53
.025
.043
.032
032
032
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)

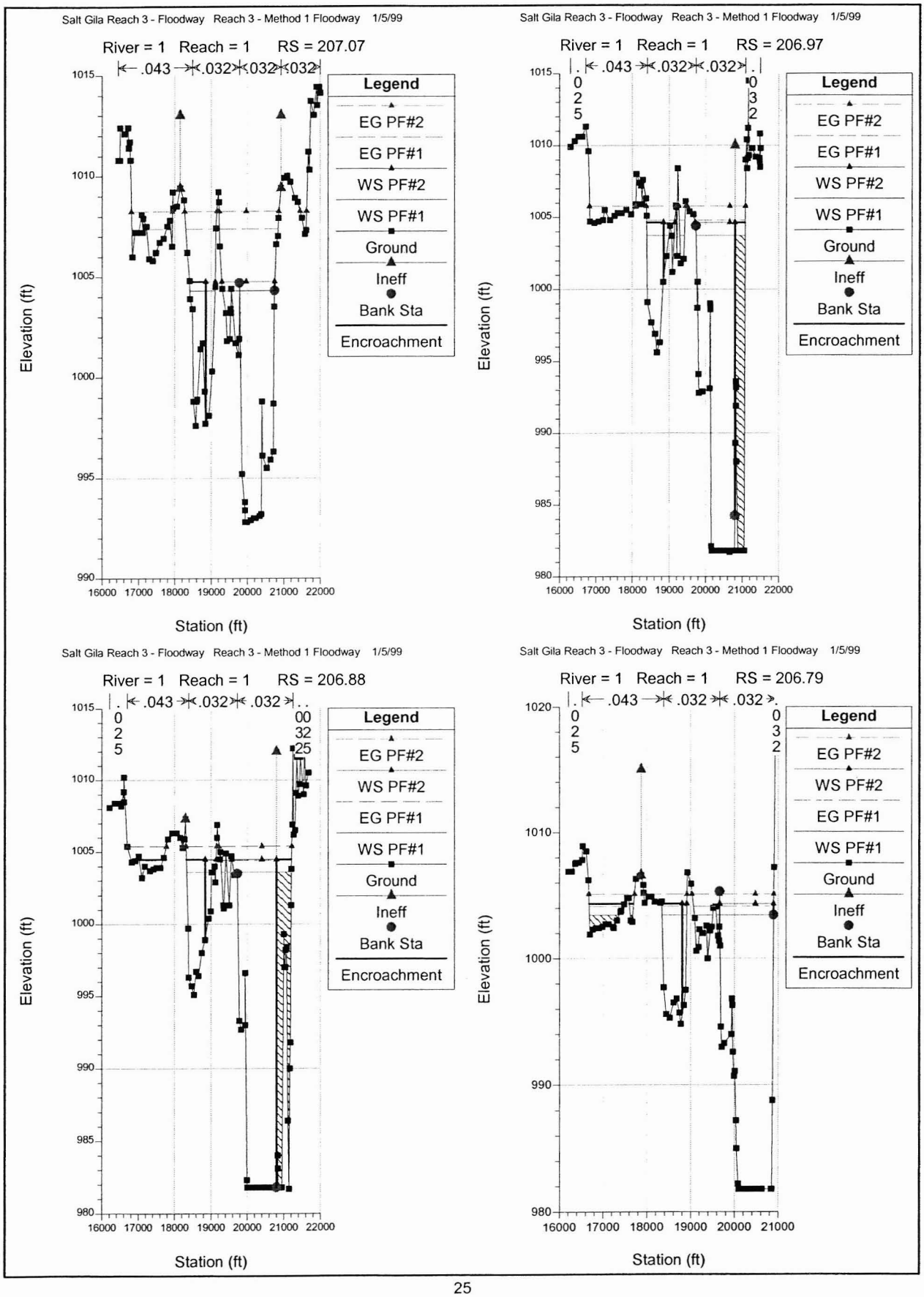

Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway 1/5/99
River = 1 Reach = 1 RS = 207.49
.032
.032
.032
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)

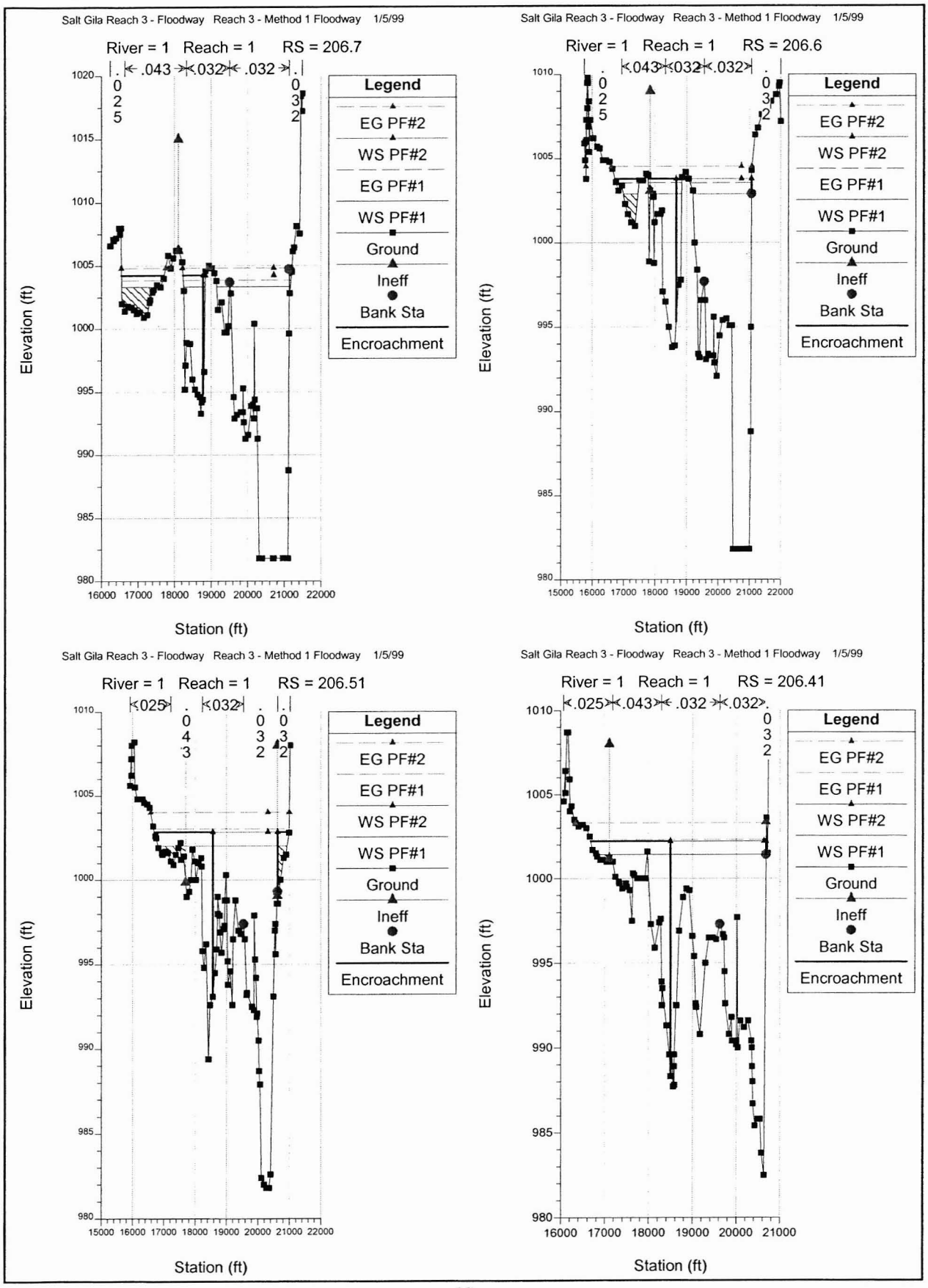

Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway 1/5/99
River = 1 Reach = 1 RS = 207.485
.032
.032
.032
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Elevation (ft)
Station (ft)

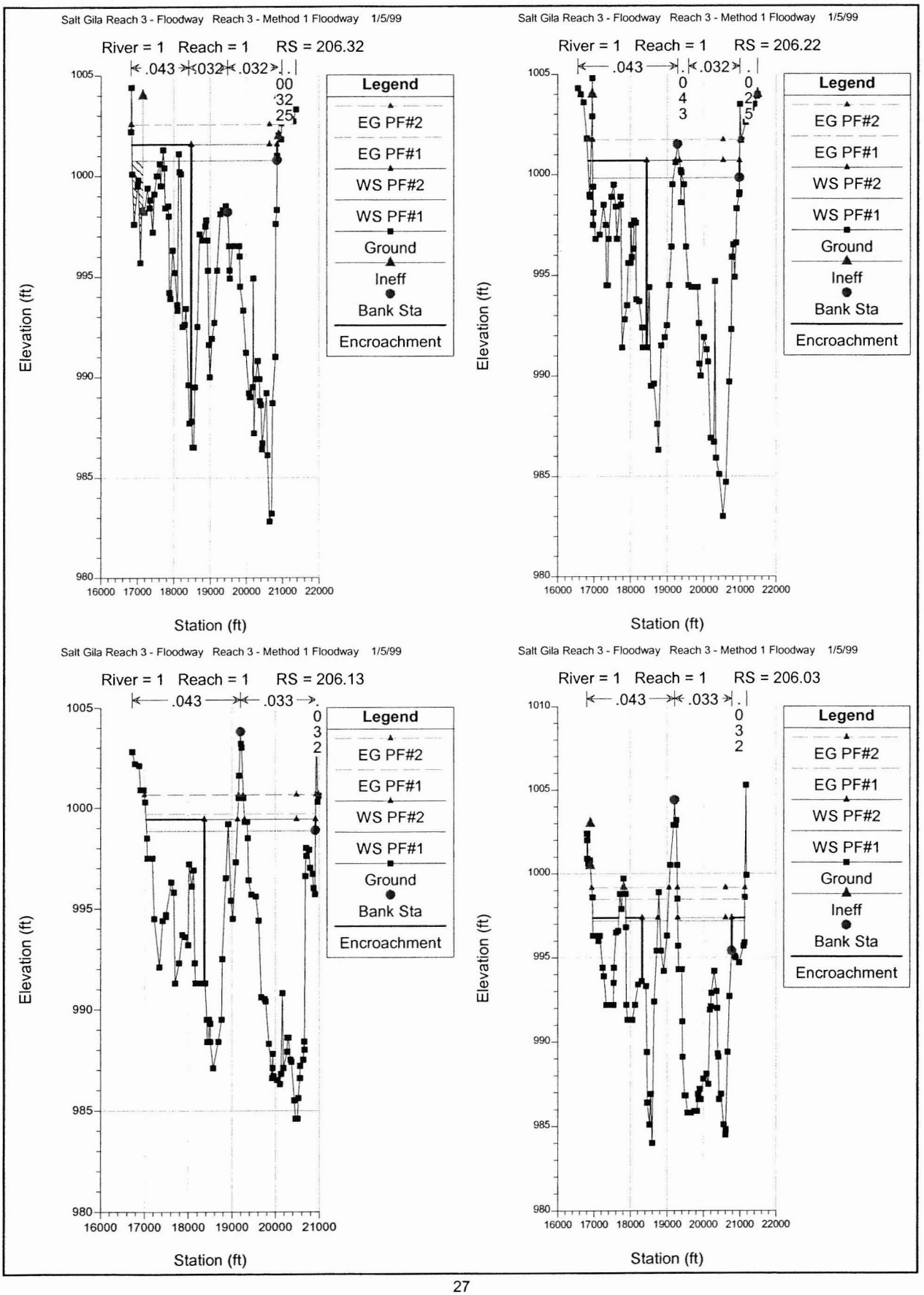

Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway 1/5/99
River = 1 Reach = 1 RS = 207.485
.032
.032
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Elevation (ft)
Station (ft)

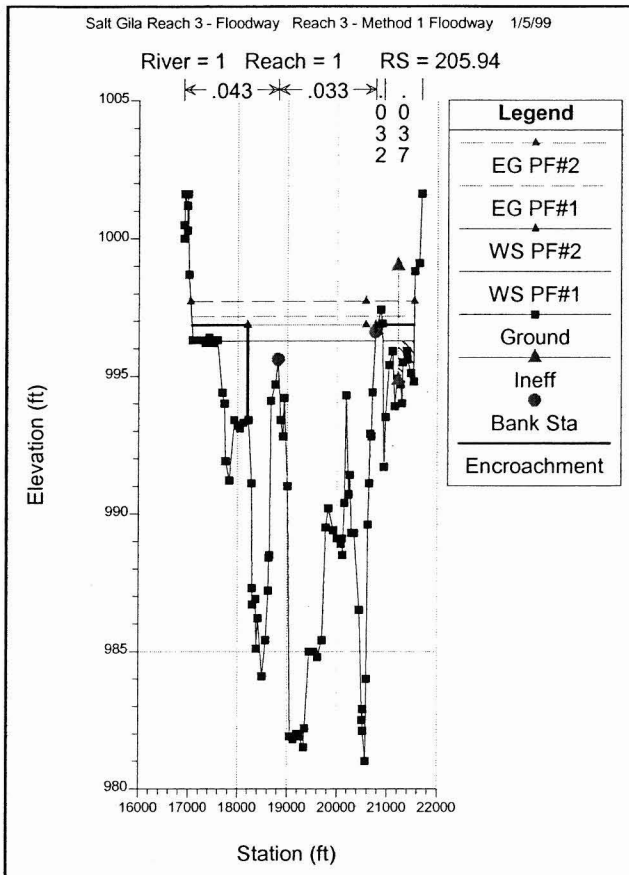

Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway 1/5/99
River = 1 Reach = 1 RS = 207.48
.032
.032
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)

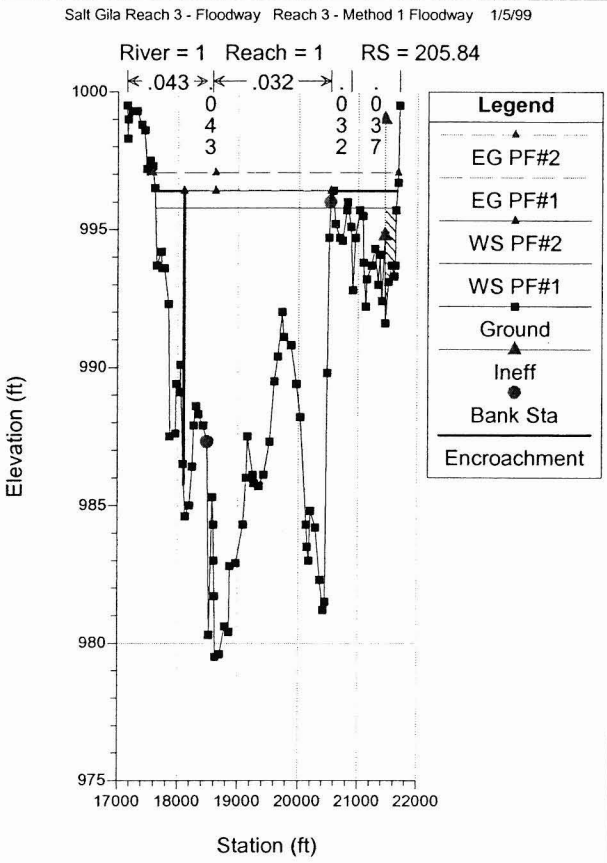

Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway 1/5/99
River = 1 Reach = 1 RS = 207.43
.025 .043 .032 .032
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)
Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway 1/5/99
River = 1 Reach = 1 RS = 207.34
.025 .043 .032 .032
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)
Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway 1/5/99
River = 1 Reach = 1 RS = 207.27
.025 .043 .032 .032
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)
Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway 1/5/99
River = 1 Reach = 1 RS = 207.16
.025 .043 .032 .032
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)

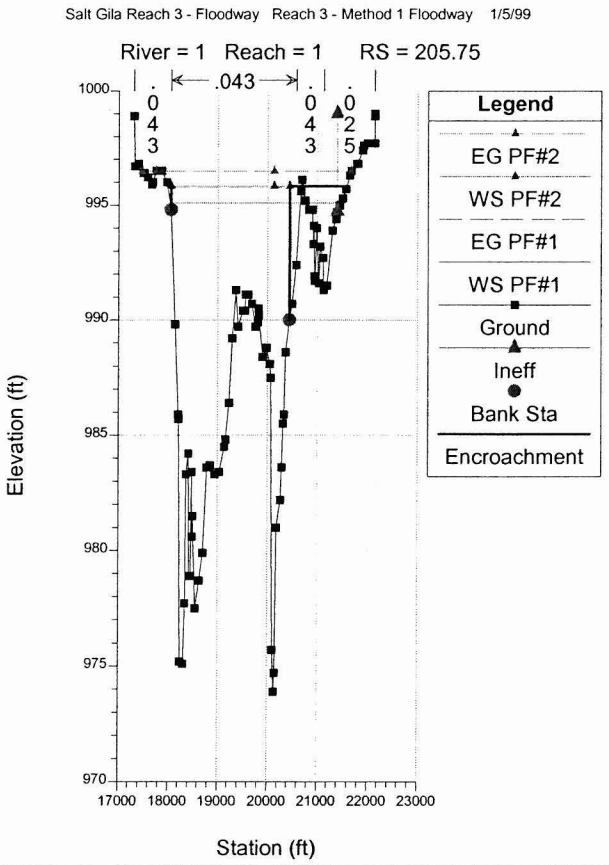

Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway 1/5/99
River = 1 Reach = 1 RS = 207.07
.043 .032 .032 .032
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)
Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway 1/5/99
River = 1 Reach = 1 RS = 206.97
.043 .032 .032
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)
Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway 1/5/99
River = 1 Reach = 1 RS = 206.88
.043 .032 .032
Legend
EG PF#2
WS PF#2
EG PF#1
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)
Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway 1/5/99
River = 1 Reach = 1 RS = 206.79
.043 .032 .032
Legend
EG PF#2
WS PF#2
EG PF#1
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)

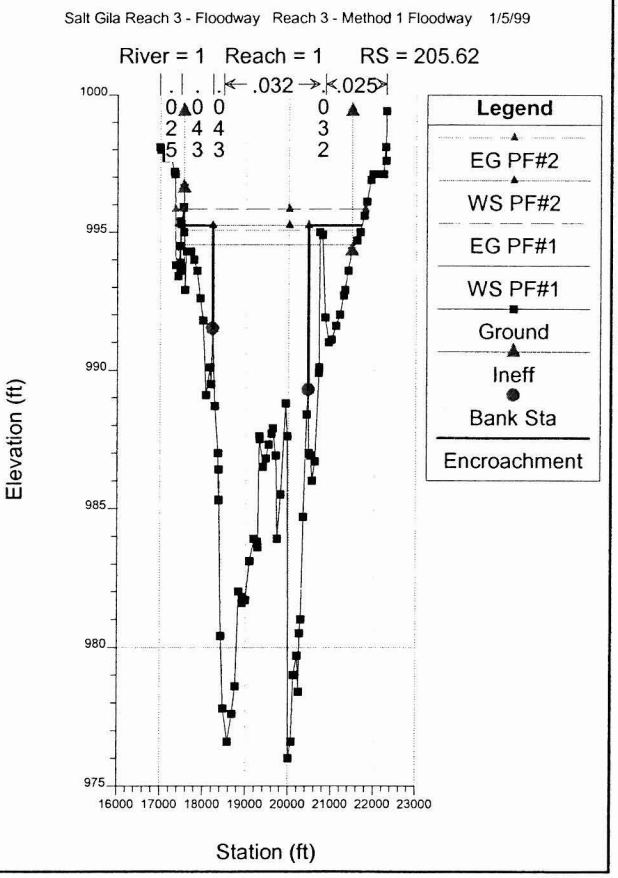

Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway 1/5/99
River = 1 Reach = 1 RS = 206.7
.043 .032 .032
0 2 5
0 3 2
Legend
EG PF#2
WS PF#2
EG PF#1
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)
Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway 1/5/99
River = 1 Reach = 1 RS = 206.6
.043 .032 .032
0 2 5
0 3 2
Legend
EG PF#2
WS PF#2
EG PF#1
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)
Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway 1/5/99
River = 1 Reach = 1 RS = 206.51
.025 .032
0 4 3
0 3 2
0 3 2
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)
Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway 1/5/99
River = 1 Reach = 1 RS = 206.41
.025 .043 .032 .032
0 3 2
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)

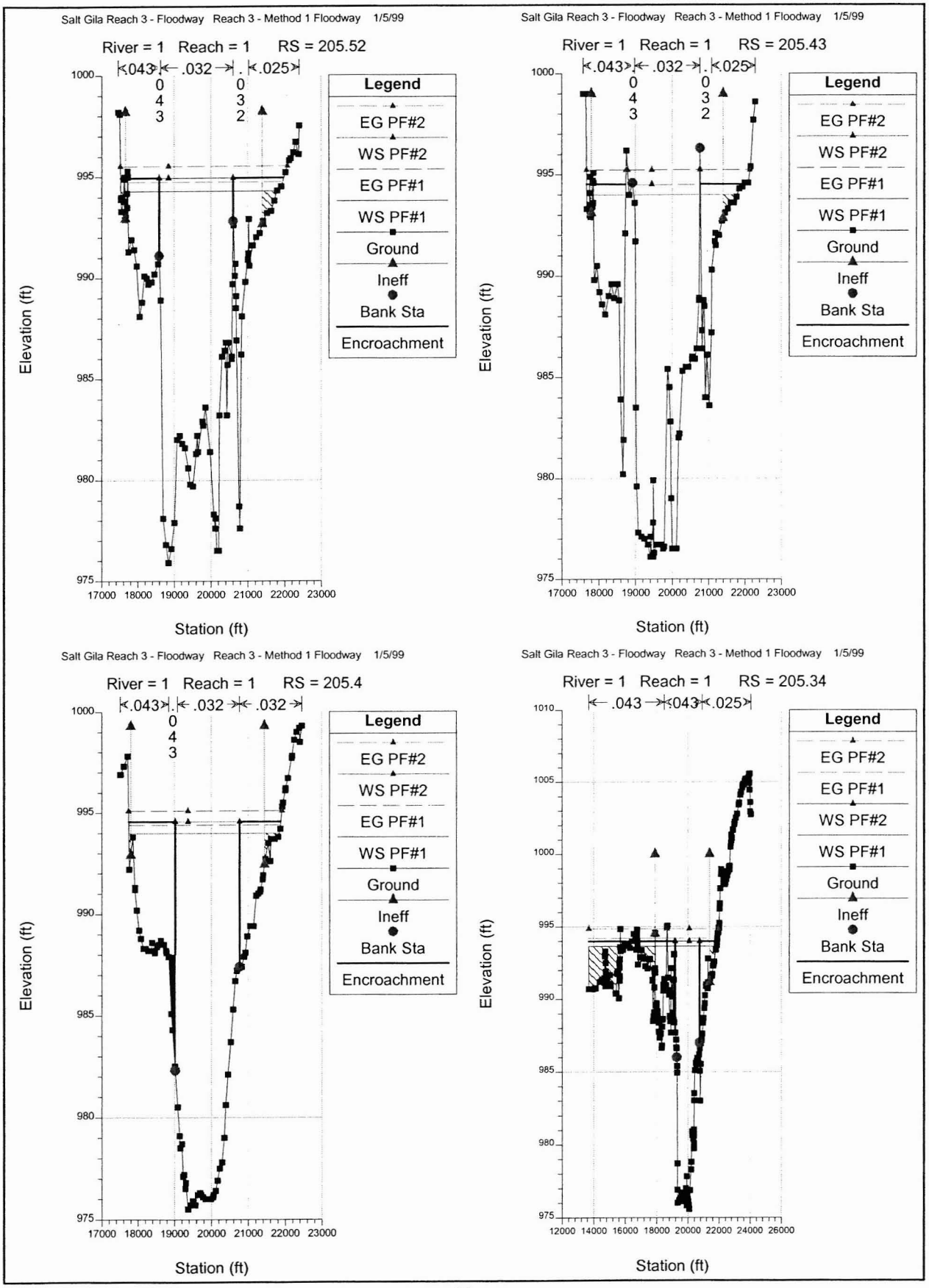

Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway 1/5/99
River = 1 Reach = 1 RS = 206.32
.043
.032
.032
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)
Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway 1/5/99
River = 1 Reach = 1 RS = 206.22
.043
.032
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)
Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway 1/5/99
River = 1 Reach = 1 RS = 206.13
.043
.033
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Bank Sta
Encroachment
Elevation (ft)
Station (ft)
Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway 1/5/99
River = 1 Reach = 1 RS = 206.03
.043
.033
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)

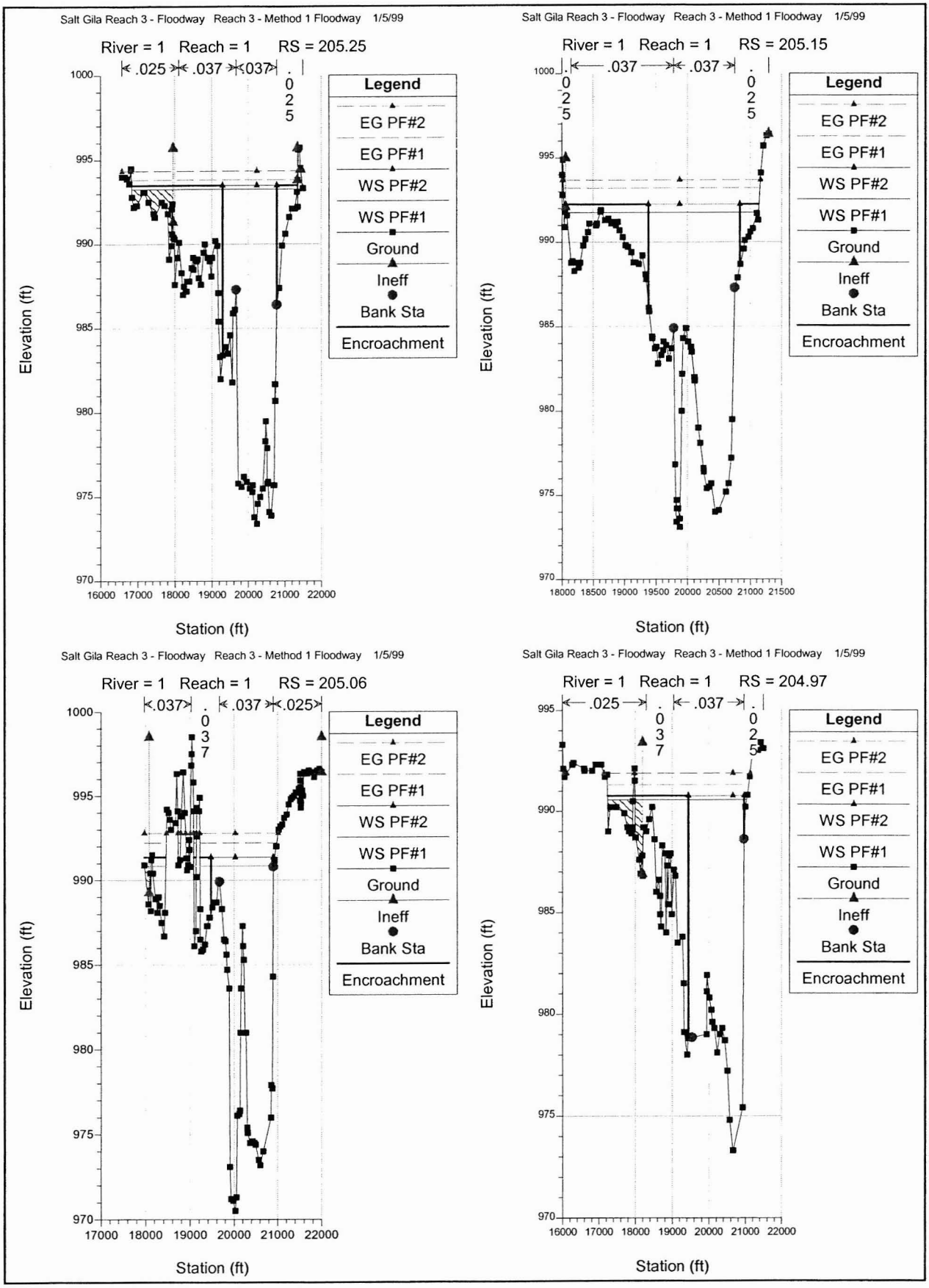

Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway 1/5/99
River = 1 Reach = 1 RS = 205.94
.043
.033
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)

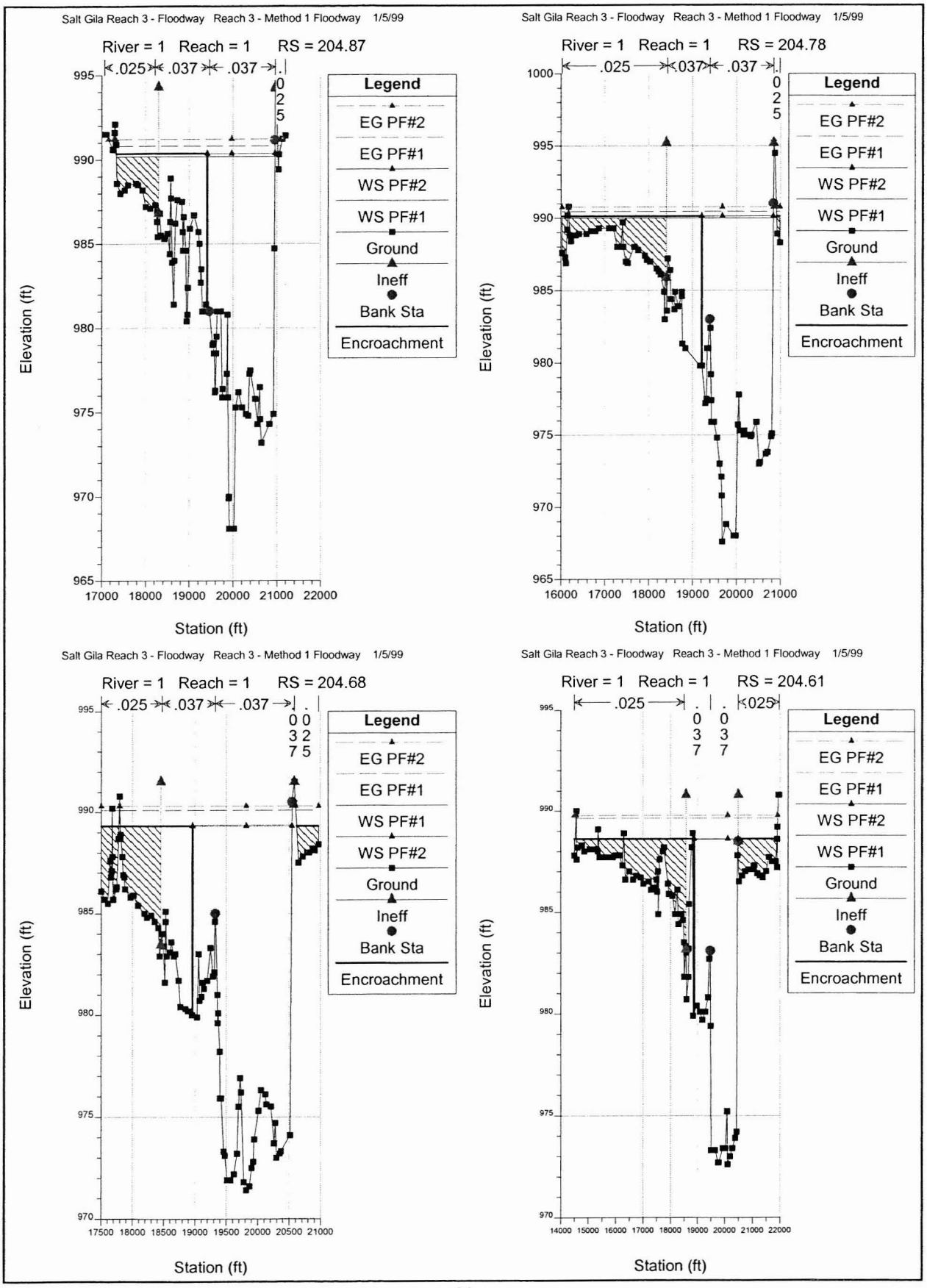

Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway 1/5/99
River = 1 Reach = 1 RS = 205.84
.043
.032
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)

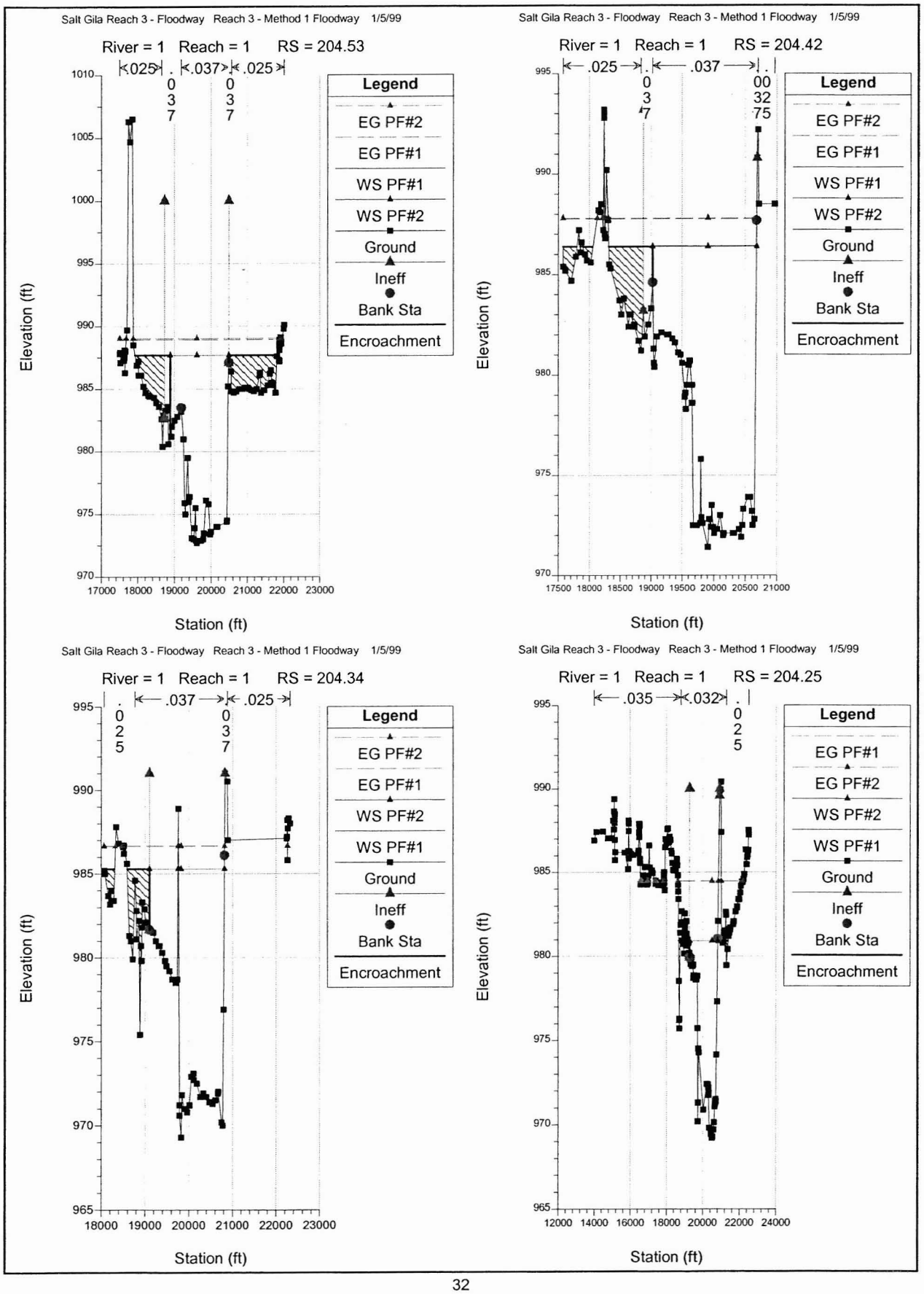

Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway 1/5/99
River = 1 Reach = 1 RS = 205.75
.043
Legend
EG PF#2
WS PF#2
EG PF#1
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)

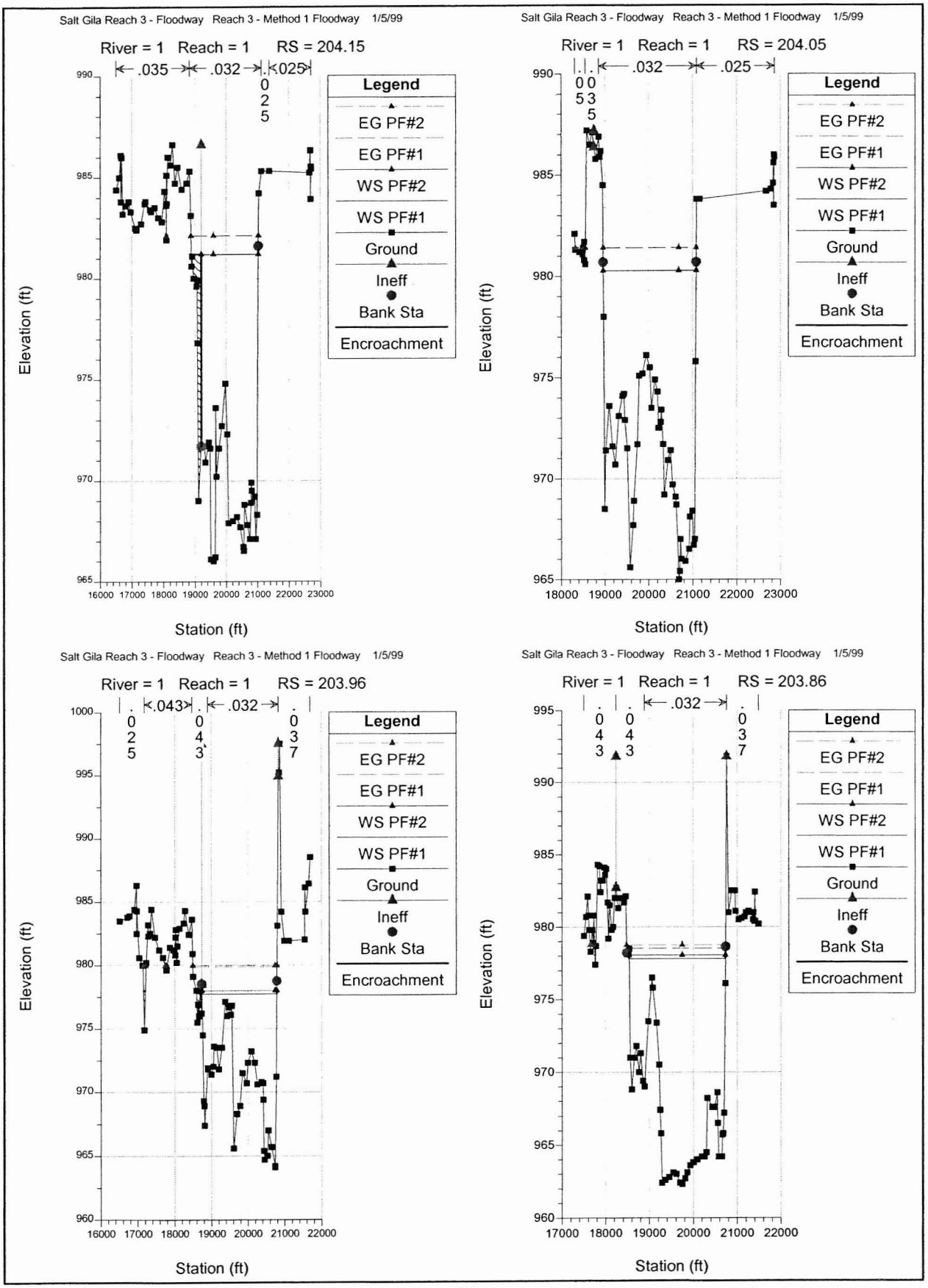

Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway 1/5/99
River = 1 Reach = 1 RS = 205.62
.032
.025
Legend
EG PF#2
WS PF#2
EG PF#1
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)

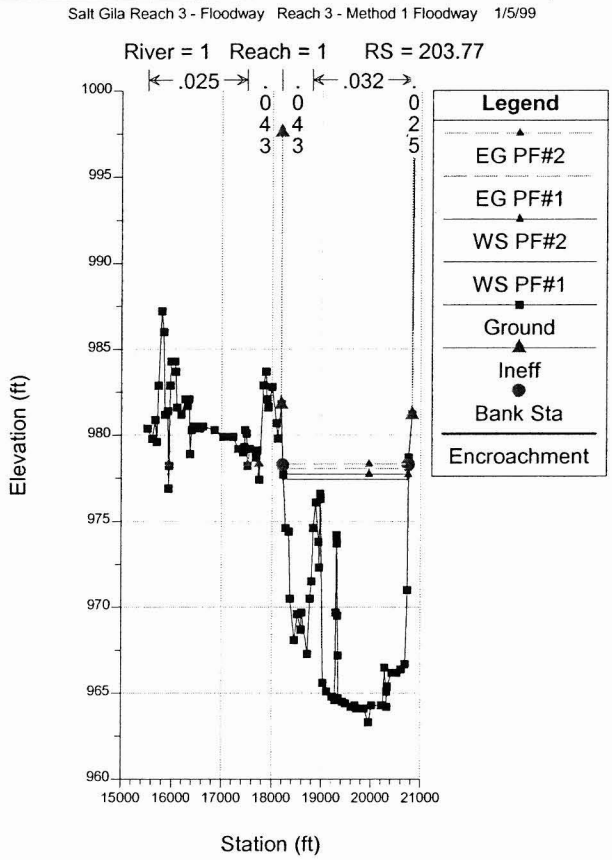

Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway 1/5/99
River = 1 Reach = 1 RS = 205.52
.043 .032 .025
Legend
EG PF#2
WS PF#2
EG PF#1
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)
Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway 1/5/99
River = 1 Reach = 1 RS = 205.43
.043 .032 .025
Legend
EG PF#2
WS PF#2
EG PF#1
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)
Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway 1/5/99
River = 1 Reach = 1 RS = 205.4
.043 .032 .032
Legend
EG PF#2
WS PF#2
EG PF#1
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)
Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway 1/5/99
River = 1 Reach = 1 RS = 205.34
.043 .043 .025
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)

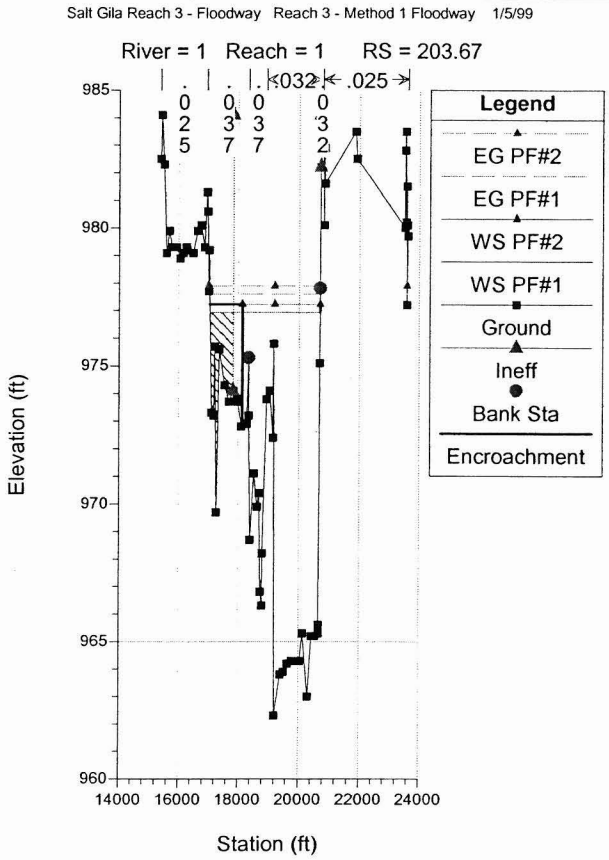

Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway 1/5/99
River = 1 Reach = 1 RS = 205.25
.025 .037 .037 .025
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)
Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway 1/5/99
River = 1 Reach = 1 RS = 205.15
.025 .037 .037 .025
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)
Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway 1/5/99
River = 1 Reach = 1 RS = 205.06
.037 .037 .025
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)
Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway 1/5/99
River = 1 Reach = 1 RS = 204.97
.025 .037 .025
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)

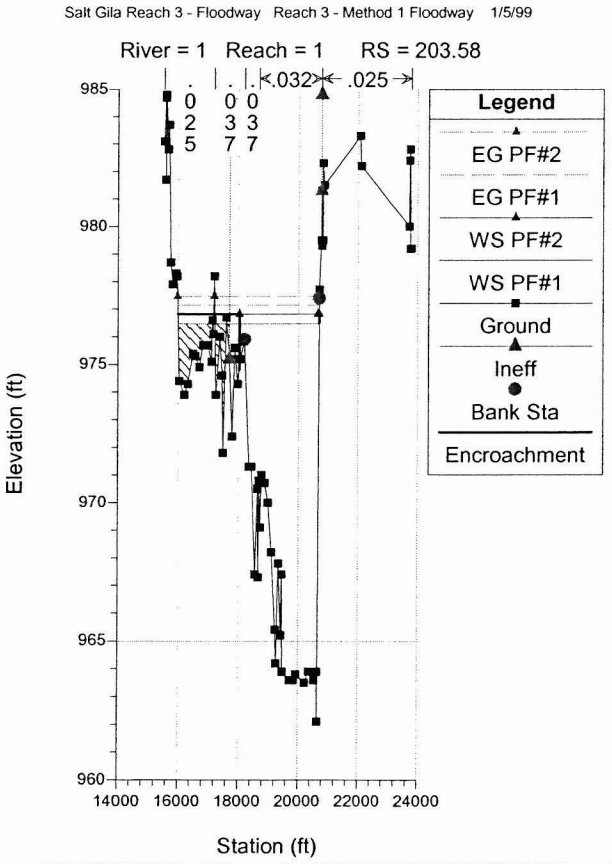

Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway 1/5/99
River = 1 Reach = 1 RS = 204.87
.025 .037 .037 .025
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)
Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway 1/5/99
River = 1 Reach = 1 RS = 204.78
.025 .037 .037 .025
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)
Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway 1/5/99
River = 1 Reach = 1 RS = 204.68
.025 .037 .037 .0325
Legend
EG PF#2
EG PF#1
WS PF#1
WS PF#2
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)
Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway 1/5/99
River = 1 Reach = 1 RS = 204.61
.025 .0037 .0037 .025
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)

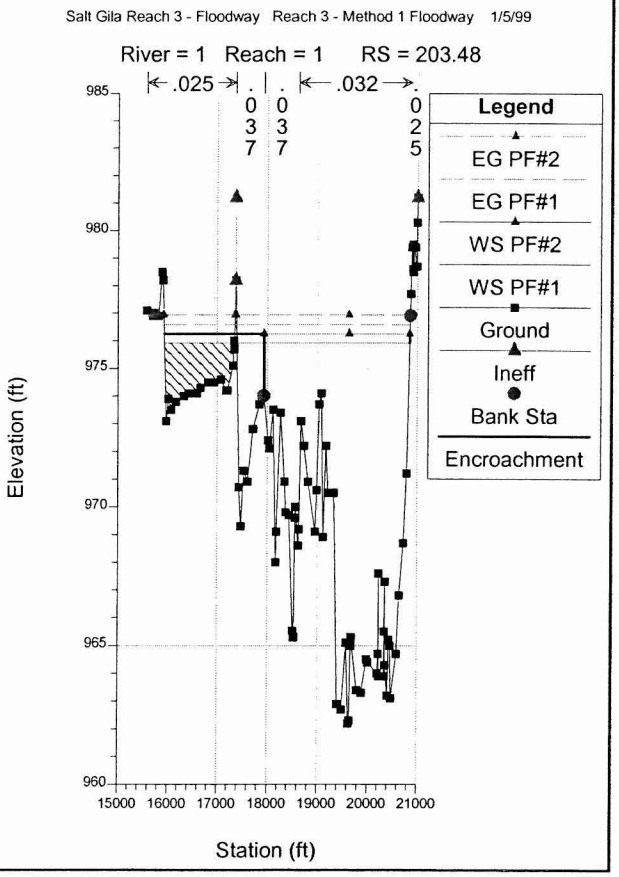

Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway 1/5/99
River = 1 Reach = 1 RS = 204.53
Legend
EG PF#2
EG PF#1
WS PF#1
WS PF#2
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)
Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway 1/5/99
River = 1 Reach = 1 RS = 204.42
Legend
EG PF#2
EG PF#1
WS PF#1
WS PF#2
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)
Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway 1/5/99
River = 1 Reach = 1 RS = 204.34
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)
Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway 1/5/99
River = 1 Reach = 1 RS = 204.25
Legend
EG PF#1
EG PF#2
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)

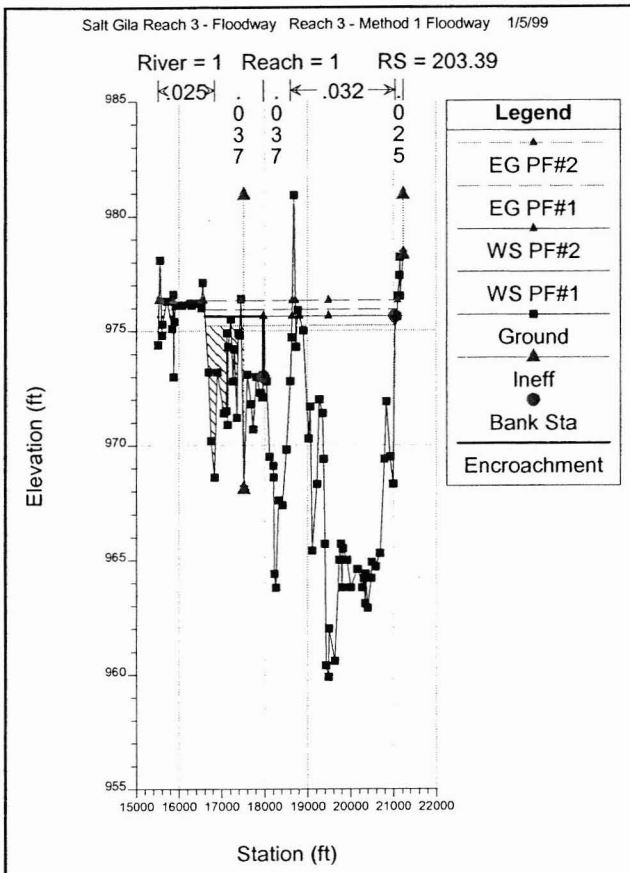

Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway 1/5/99
River = 1 Reach = 1 RS = 204.15
.035
.032
.025
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)
Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway 1/5/99
River = 1 Reach = 1 RS = 204.05
.032
.025
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)
Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway 1/5/99
River = 1 Reach = 1 RS = 203.96
.043
.032
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)
Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway 1/5/99
River = 1 Reach = 1 RS = 203.86
.032
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)

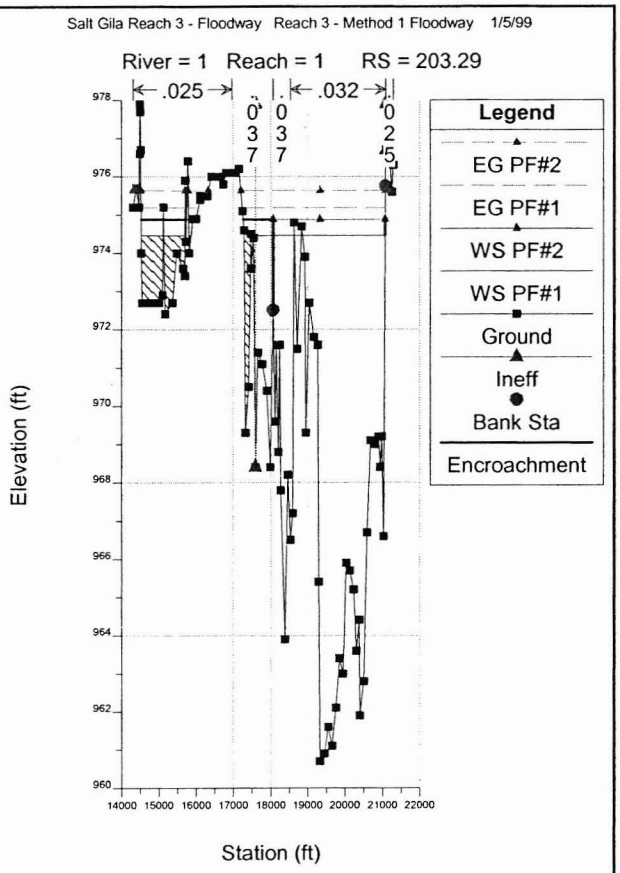

Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway 1/5/99
River = 1 Reach = 1 RS = 203.77
.025
.032
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)

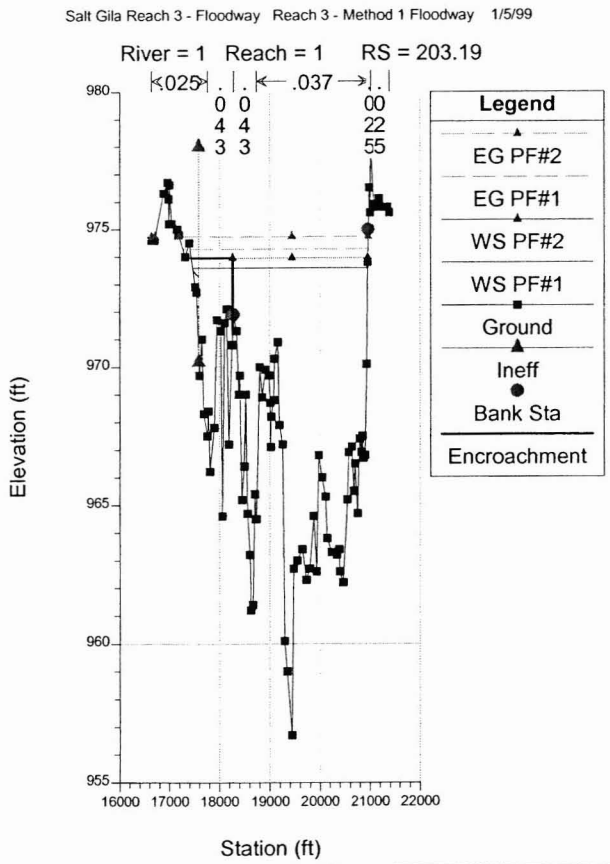

Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway 1/5/99
River = 1 Reach = 1 RS = 203.67
.032
.025
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)

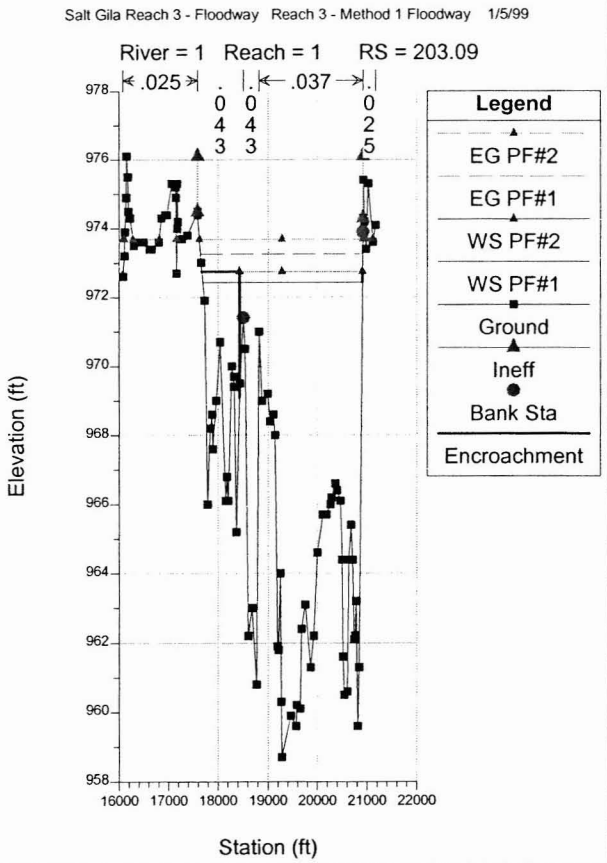

Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway 1/5/99
River = 1 Reach = 1 RS = 203.58
.032
.025
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)

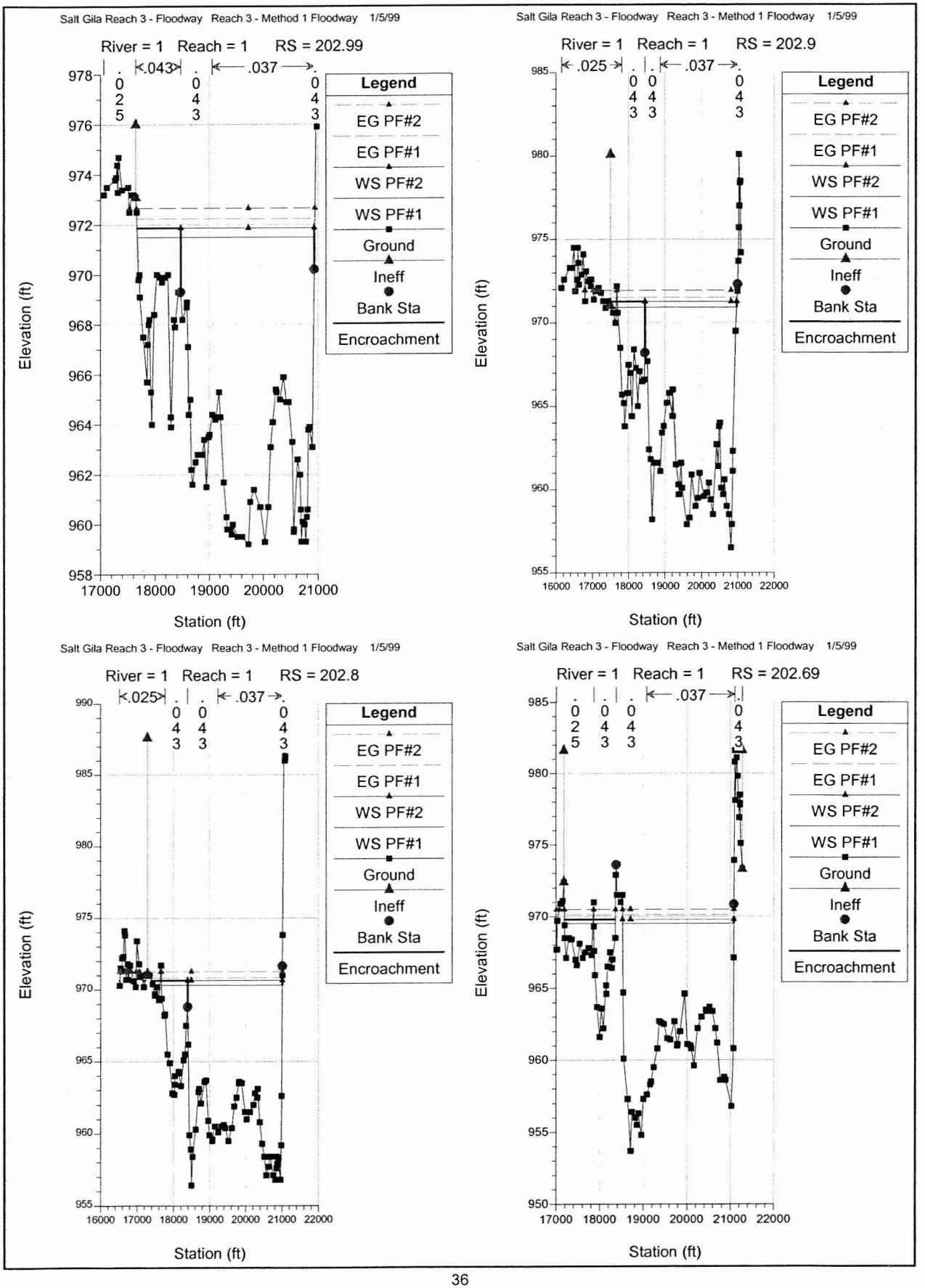

Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway 1/5/99
River = 1 Reach = 1 RS = 203.48
.025
.032
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)

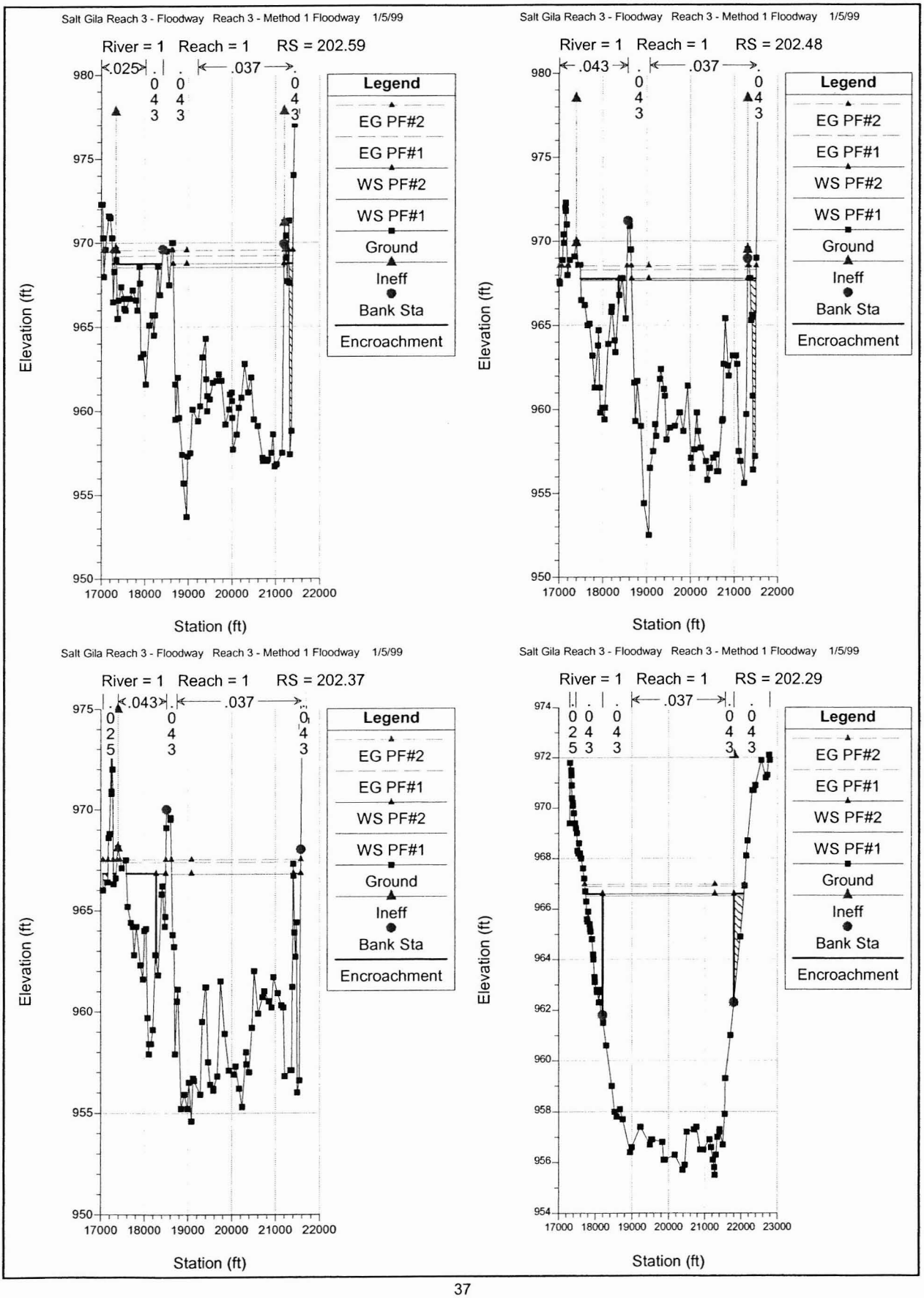

Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway 1/5/99
River = 1 Reach = 1 RS = 203.39
.025
.037
.037
.032
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)

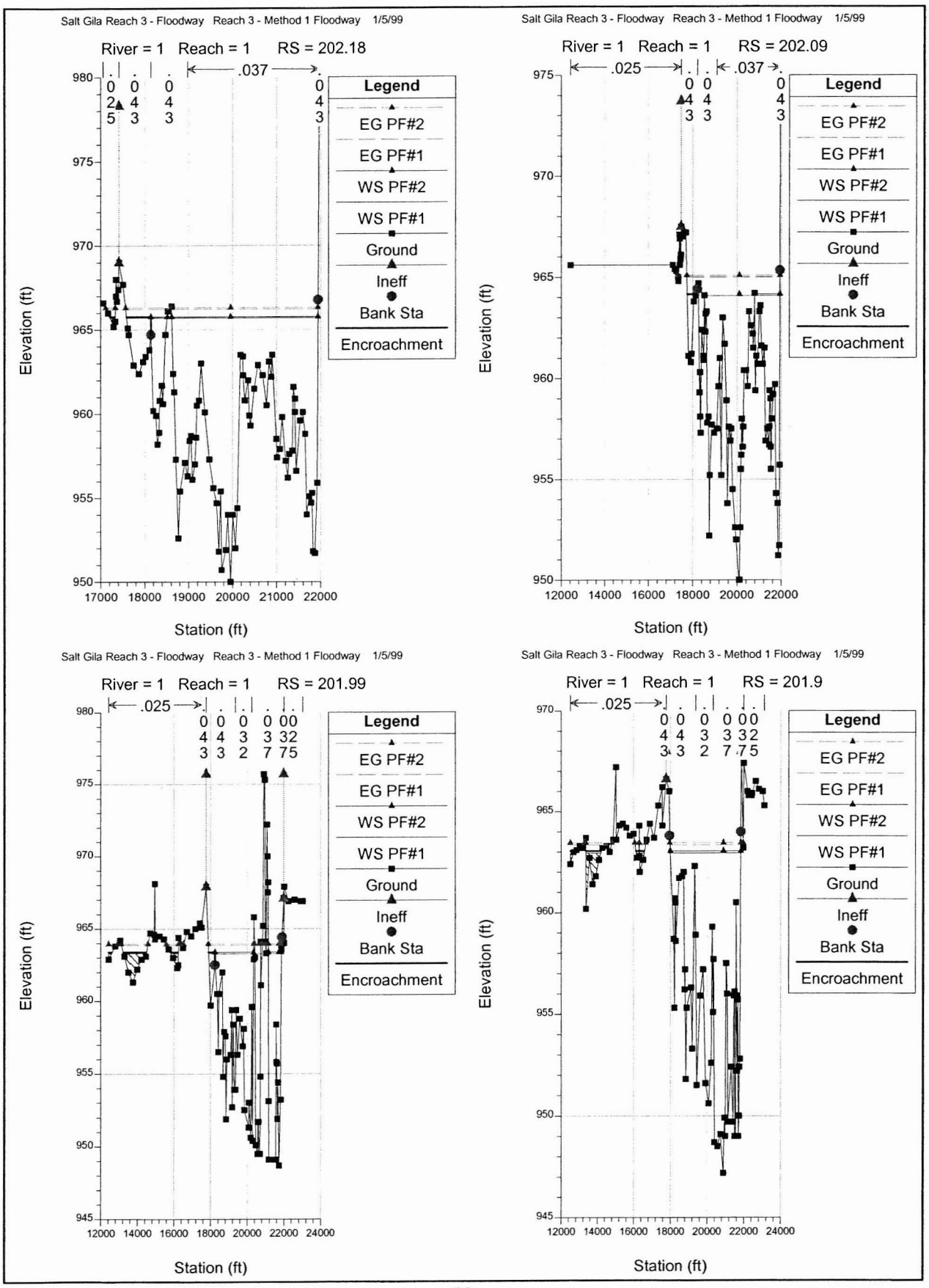

Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway 1/5/99
River = 1 Reach = 1 RS = 203.29
.025
.037
.037
.032
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)

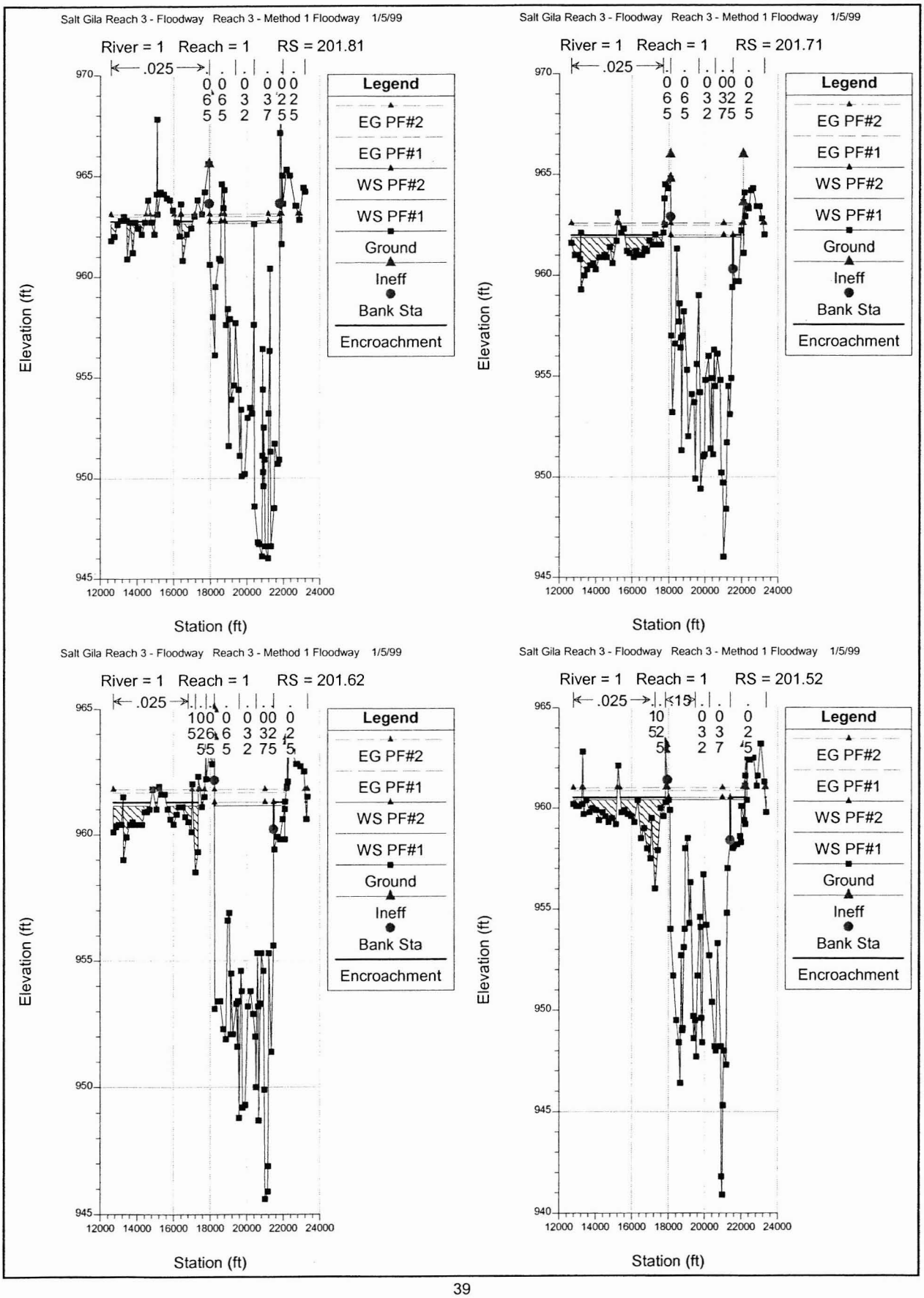

Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway 1/5/99
River = 1 Reach = 1 RS = 203.19
.025
.037
.037
.037
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)

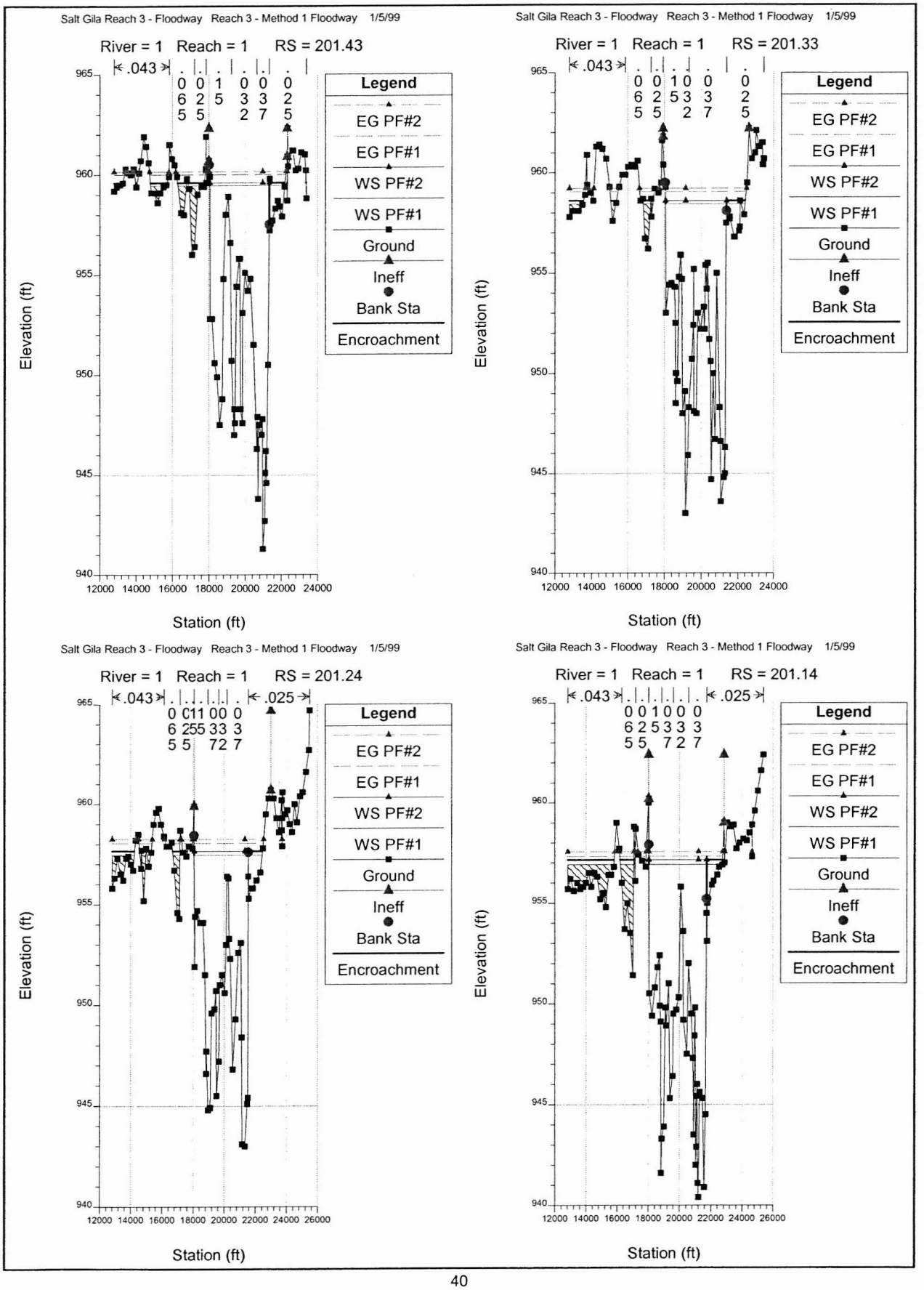

Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway 1/5/99
River = 1 Reach = 1 RS = 203.09
.025
.037
.037
.037
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)

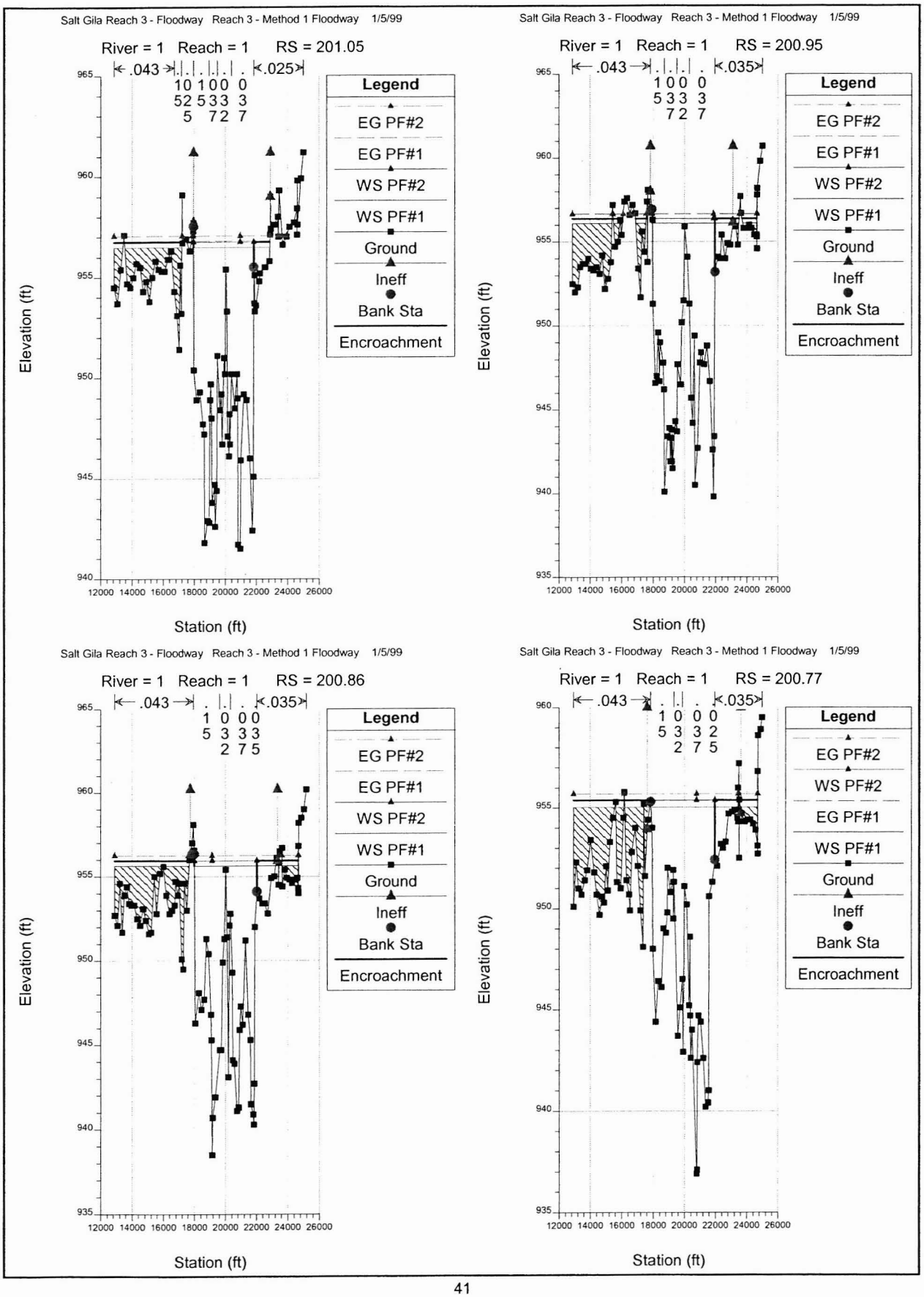

Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway 1/5/99
River = 1 Reach = 1 RS = 202.99
.025
.043
.037
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)
Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway 1/5/99
River = 1 Reach = 1 RS = 202.9
.025
.037
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)
Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway 1/5/99
River = 1 Reach = 1 RS = 202.8
.025
.037
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)
Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway 1/5/99
River = 1 Reach = 1 RS = 202.69
.037
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)

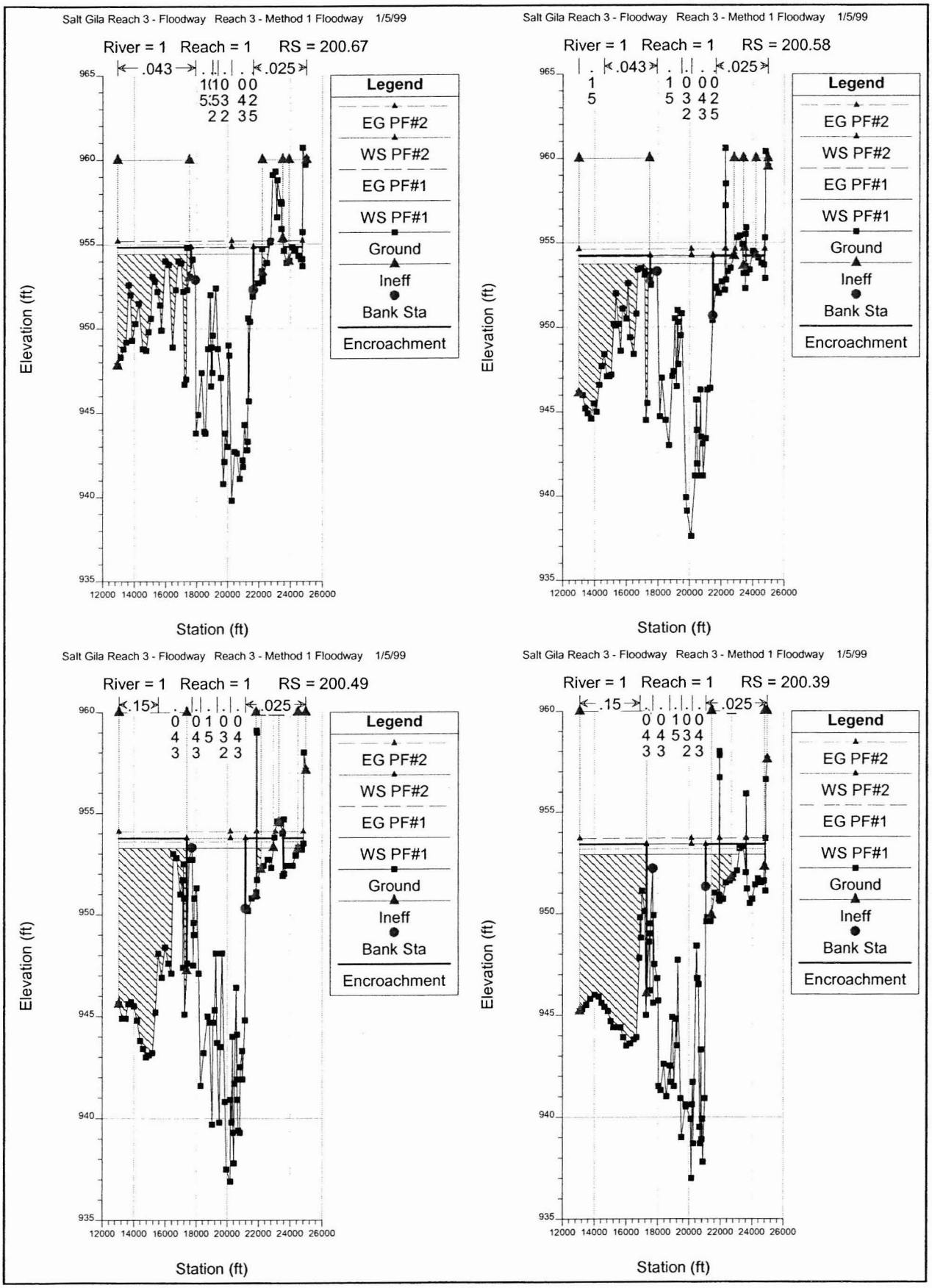

Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway 1/5/99
River = 1 Reach = 1 RS = 202.59
.025
.037
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)
Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway 1/5/99
River = 1 Reach = 1 RS = 202.48
.043
.037
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)
Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway 1/5/99
River = 1 Reach = 1 RS = 202.37
.043
.037
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)
Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway 1/5/99
River = 1 Reach = 1 RS = 202.29
.037
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)

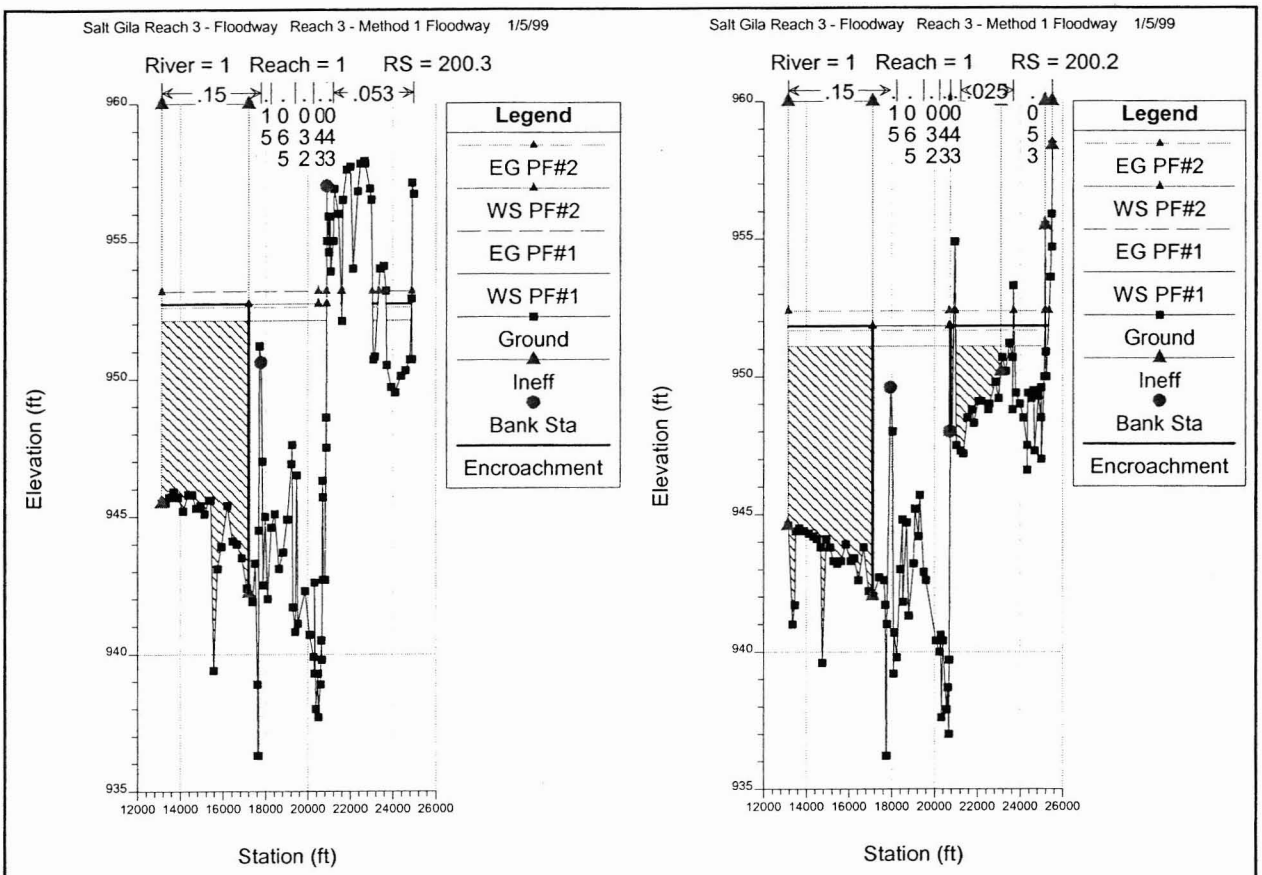

Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway 1/5/99
River = 1 Reach = 1 RS = 202.18
.037
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)
Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway 1/5/99
River = 1 Reach = 1 RS = 202.09
.025
.037
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)
Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway 1/5/99
River = 1 Reach = 1 RS = 201.99
.025
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)
Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway 1/5/99
River = 1 Reach = 1 RS = 201.9
.025
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)

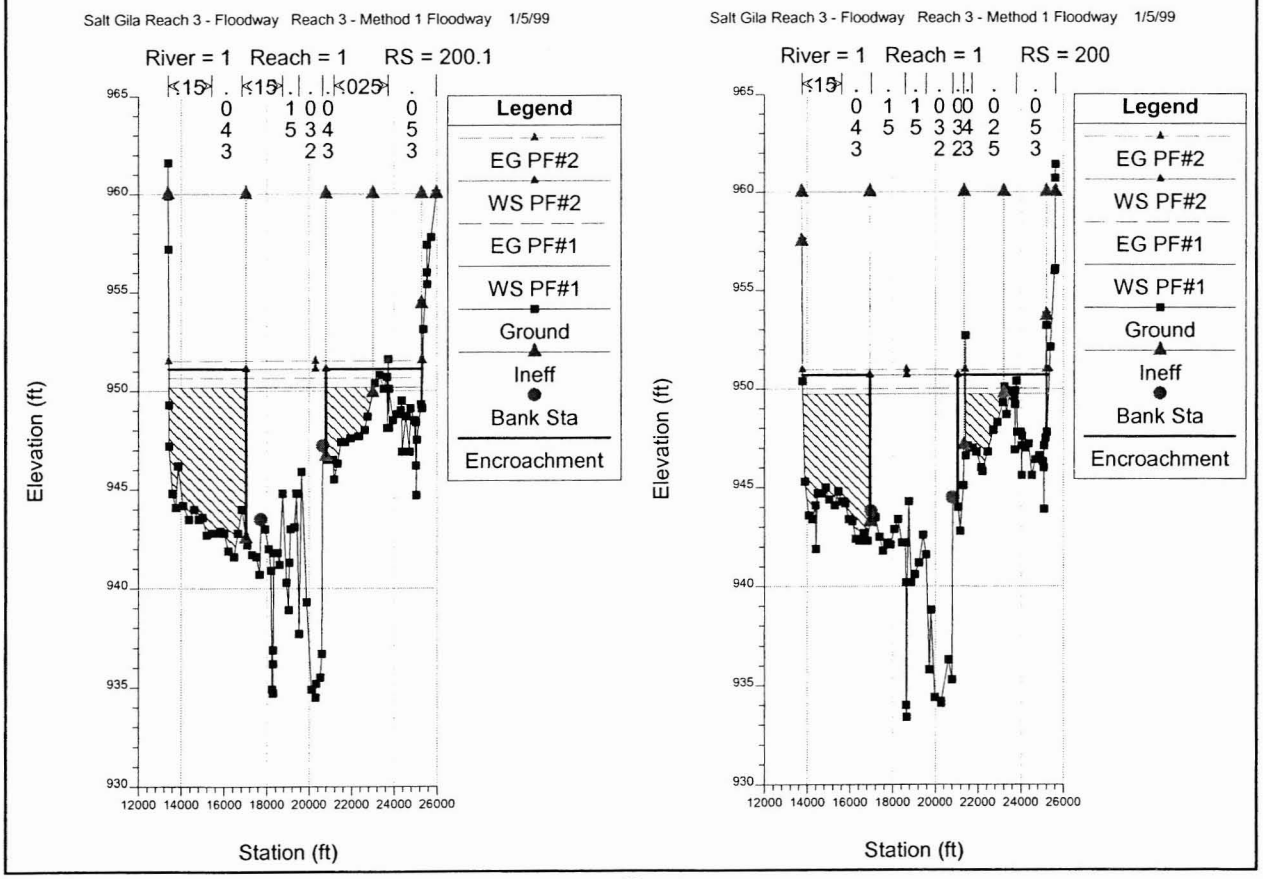

Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway 1/5/99
River = 1 Reach = 1 RS = 201.81
.025
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)
Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway 1/5/99
River = 1 Reach = 1 RS = 201.71
.025
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)
Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway 1/5/99
River = 1 Reach = 1 RS = 201.62
.025
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)
Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway 1/5/99
River = 1 Reach = 1 RS = 201.52
.025
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)


Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway 1/5/99
River = 1 Reach = 1 RS = 201.43
.043
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)
Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway 1/5/99
River = 1 Reach = 1 RS = 201.33
.043
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)
Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway 1/5/99
River = 1 Reach = 1 RS = 201.24
.043
.025
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)
Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway 1/5/99
River = 1 Reach = 1 RS = 201.14
.043
.025
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)

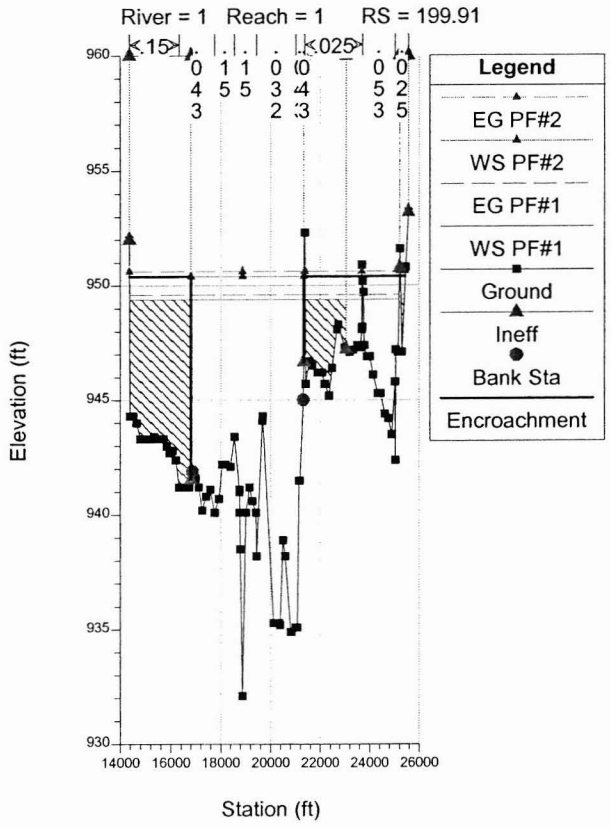

Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway 1/5/99
River = 1 Reach = 1 RS = 201.05
.043
.025
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)
Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway 1/5/99
River = 1 Reach = 1 RS = 200.95
.043
.035
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)
Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway 1/5/99
River = 1 Reach = 1 RS = 200.86
.043
.035
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)
Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway 1/5/99
River = 1 Reach = 1 RS = 200.77
.043
.035
Legend
EG PF#2
WS PF#2
EG PF#1
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)


Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway 1/5/99
River = 1 Reach = 1 RS = 200.67
.043
.025
Legend
EG PF#2
WS PF#2
EG PF#1
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)
Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway 1/5/99
River = 1 Reach = 1 RS = 200.58
.043
.025
Legend
EG PF#2
WS PF#2
EG PF#1
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)
Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway 1/5/99
River = 1 Reach = 1 RS = 200.49
.15
.025
Legend
EG PF#2
WS PF#2
EG PF#1
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)
Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway 1/5/99
River = 1 Reach = 1 RS = 200.39
.15
.025
Legend
EG PF#2
WS PF#2
EG PF#1
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)

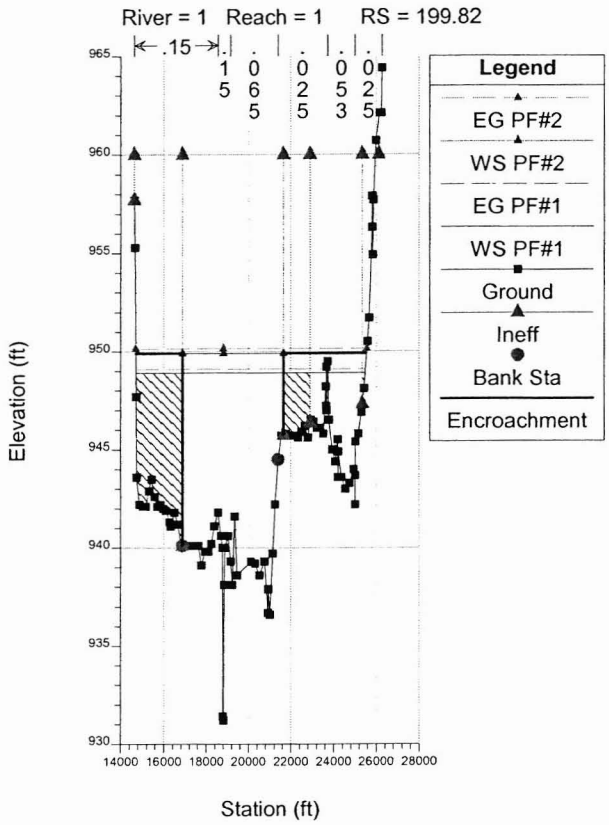

Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway 1/5/99
River = 1 Reach = 1 RS = 200.3
.15
.053
Legend
EG PF#2
WS PF#2
EG PF#1
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)
Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway 1/5/99
River = 1 Reach = 1 RS = 200.2
.15
.025
Legend
EG PF#2
WS PF#2
EG PF#1
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)


Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway 1/5/99
River = 1 Reach = 1 RS = 200.1
.15
.15
.025
Legend
EG PF#2
WS PF#2
EG PF#1
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)
Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway 1/5/99
River = 1 Reach = 1 RS = 200
.15
Legend
EG PF#2
WS PF#2
EG PF#1
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)

Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway 1/5/99



Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway 1/5/99



Duplicate Effective Model

HEC-RAS September 1998 Version 2.2
U.S. Army Corp of Engineers
Hydrologic Engineering Center
609 Second Street, Suite D
Davis, California 95616-4687
(916) 756-1104

```
X     X  XXXXXX    XXXX        XXXX       XX      XXXX
X     X  X        X    X      X   X     X  X    X
X     X  X        X           X   X    X    X   X
XXXXXXX  XXXX     X       XXX XXXX     XXXXXX    XXXX
X     X  X        X           X  X     X    X        X
X     X  X        X    X      X   X    X    X        X
X     X  XXXXXX    XXXX       X    X   X    X   XXXXX
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PROJECT DATA
Project Title: Salt Gila Reach 3 - Floodway
Project File : Reach3.prj
Run Date and Time: 1/5/99 12:23:42 PM

Project in English units

PLAN DATA

Plan Title: Reach 3 - Method 1 Floodway
Plan File : s:\DRN\ellt0013\clomr\hec-ras\Reach3.p01

Geometry Title: with landfill
Geometry File : s:\DRN\ellt0013\clomr\hec-ras\Reach3.g02

Flow Title : Reach 3 - Floodway
Flow File : s:\DRN\ellt0013\clomr\hec-ras\Reach3.f01

Plan Summary Information:
Number of: Cross Sections = 161 Mulitple Openings = 0
Culverts = 0 Inline Weirs = 0
Bridges = 6

Computational Information
Water surface calculation tolerance = 0.01
Critical depth calculaton tolerance = 0.01
Maximum number of interations = 20
Maximum difference tolerance = 0.3
Flow tolerance factor = 0.001

Computation Options
Critical depth computed only where necessary
Conveyance Calculation Method: At breaks in n values only
Friction Slope Method: Average Conveyance
Computational Flow Regime: Subcritical Flow

Encroachment Data
Equal Conveyance = True
Left Offset = 0
Right Offset = 0

River = 1 Reach = 1

RS	Profile	Method	Value1	Value2
214.14	PF#2		119654.9	720381.83
214.04	PF#2		119637.8	820371.77
213.95	PF#2		119586.5	420331.73
213.85	PF#2		119618.3	320320.92
213.75	PF#2	1	1964120	297.35
213.74	PF#2		119641.87	20296.6
213.66	PF#2		119687.5	720253.56
213.57	PF#2	1	19484.5	20336.66
213.47	PF#2	1	19243.3	20266.42
213.38	PF#2	1	19346.1	20447.85
213.33	PF#2	1	19328.9	20514.52
213.26	PF#2		119497.1	820378.39
213.255	PF#2		119497.3	720378.09
213.25	PF#2		119497.5	520377.79
213.21	PF#2	1	19490.3	20418.5
213.11	PF#2		119616.8	820544.67
213.03	PF#2	1	1967220	591.83
212.93	PF#2		119690.7	620489.75
212.84	PF#2	1	19711.5	20347.25

212.74	PF#2	119690.61	20367.2	
212.68	PF#2	119501.07	20130.1	
212.675	PF#2	119492.8920137.19		
212.67	PF#2	119502.3320128.84		
212.56	PF#2	119731.0520252.14		
212.46	PF#2	119743.34	20301	
212.37	PF#2	119744.0620320.69		
212.27	PF#2	119715.2520330.35		
212.18	PF#2	119706.8520334.57		
212.08	PF#2	119681.09	20270.9	
211.99	PF#2	119699.7720249.64		
211.89	PF#2	119685.7520250.74		
211.79	PF#2	119649.87	20217.7	
211.71	PF#2	119628.4320197.84		
211.64	PF#2	1 19657.7	20219.8	
211.54	PF#2	119603.6520129.64		
211.51	PF#2	119615.1920137.39		
211.41	PF#2	1 19638.120206.06		
211.31	PF#2	119531.2120356.09		
211.21	PF#2	119528.7520521.25		
211.12	PF#2	119498.47	20610	
211.02	PF#2	119487.12	20550	
210.93	PF#2	119479.13	20530	
210.83	PF#2	119450.42	20530	
210.74	PF#2	119426.13	20560	
210.64	PF#2	1 19388.6	20800	
210.55	PF#2	119322.17	21110	
210.46	PF#2	1 19377	21284	
210.36	PF#2	119375.1721291.16		
210.26	PF#2	119377.08	21331.8	
210.17	PF#2	1 19354.621334.72		
210.07	PF#2	1 19210	21225	
209.98	PF#2	119338.5921207.12		
209.88	PF#2	1 19513	21220	
209.79	PF#2	119483.04	21290	
209.69	PF#2	119460.1721335.01		
209.6	PF#2	1 19341.4	21003.8	
209.54	PF#2	1 19130	20521	
209.535	PF#2	1 19130	20521	
209.53	PF#2	1 19130	20521	
209.42	PF#2	1 1900020652.63		
209.33	PF#2	119122.27	20715.2	
209.24	PF#2	119212.28	20850	
209.14	PF#2	119200.21	21100	
209.04	PF#2	1 19220	21200	
208.95	PF#2	119141.04	21200	
208.85	PF#2	1 19199.7	21150	
208.75	PF#2	1 19192.9	20799.2	
208.67	PF#2	119118.2220908.11		
208.57	PF#2	119087.13	20640	
208.48	PF#2	118510.5620680.86		
208.39	PF#2	118462.9420748.79		
208.29	PF#2	1 18562.620944.07		
208.19	PF#2	118679.18	21343.2	
208.1	PF#2	118822.3721767.18		
207.99	PF#2	119093.0321934.42		
207.9	PF#2	1 19104.722137.55		
207.8	PF#2	1 19249.521871.22		
207.71	PF#2	1 1936021704.11		
207.62	PF#2	1 19510.121472.33		
207.53	PF#2	1 19502.9	21175	
207.49	PF#2	119473.7821053.15		
207.48	PF#2	119474.1421053.01		
207.43	PF#2	119253.23	20940	
207.34	PF#2	1 1923020798.77		
207.27	PF#2	1 18980	20597.9	
207.16	PF#2	1 19000	20734.5	
207.07	PF#2	118857.5720748.18		
206.97	PF#2	1 18850	20800	
206.88	PF#2	118838.93	20800	
206.79	PF#2	118806.0120895.15		
206.7	PF#2	118784.84	21138.8	
206.6	PF#2	118675.5821066.25		
206.51	PF#2	118561.35	20622.1	
206.41	PF#2	118494.7120685.21		
206.32	PF#2	118476.9420854.87		
206.22	PF#2	1 1843520977.29		
206.13	PF#2	1 1837020914.89		
206.03	PF#2	1 18320	20772.6	
205.94	PF#2	1 18200	20767	
205.84	PF#2	1 18100	20535.7	
205.75	PF#2	1 18048	20450.3	
205.62	PF#2	1 18216	20450.1	
205.52	PF#2	1 18591.6	20611.5	

205.43	PF#2	1	18917.5	20770.4
205.4	PF#2	1	19020	20767.8
205.34	PF#2	1	19180	20742.96
205.25	PF#2	1	19300	20782.3
205.15	PF#2	1	19385	20830
205.06	PF#2	1	19470	20905.3
204.97	PF#2	1	19445	20961.3
204.87	PF#2	1	19410	20952.2
204.78	PF#2	1	19210	20830.43
204.68	PF#2	1	18960	20546.37
204.61	PF#2	1	18880	20482.9
204.53	PF#2	1	18885	20495.9
204.42	PF#2	1	19025.42	0679.03
204.34	PF#2	1	19100	20814.38
204.25	PF#2	1	19300	20817.18
204.15	PF#2	1	19200	21031.89
204.05	PF#2	1	18963.78	21080.54
203.96	PF#2	1	18736.54	20787.3
203.86	PF#2	1	18542.49	20734.27
203.77	PF#2	1	18232.41	20743.68
203.67	PF#2	1	18130	20697.43
203.58	PF#2	1	18025	20701.39
203.48	PF#2	1	17932.62	0844.31
203.39	PF#2	1	17970.82	1036.47
203.29	PF#2	1	18065.62	1074.86
203.19	PF#2	1	18262.12	0951.24
203.09	PF#2	1	18430	20905.85
202.99	PF#2	1	18469.4	20926.9
202.9	PF#2	1	18455.62	0967.31
202.8	PF#2	1	18390.82	1011.58
202.69	PF#2	1	18377.82	1080.23
202.59	PF#2	1	18416.7	21190.4
202.48	PF#2	1	18360	21302.7
202.37	PF#2	1	18270	21577.77
202.29	PF#2	1	18197.4	21803
202.18	PF#2	1	18139.72	1936.54
202.09	PF#2	1	18212.92	1936.96
201.99	PF#2	1	18235.12	1861.56
201.9	PF#2	1	17992.63	21823.6
201.81	PF#2	1	17952.48	21801.08
201.71	PF#2	1	18112.81	21528.5
201.62	PF#2	1	18235.69	21477.5
201.52	PF#2	1	18008.55	21391.4
201.43	PF#2	1	18053.86	21342.1
201.33	PF#2	1	18074.35	21381.8
201.24	PF#2	1	18069.92	21570
201.14	PF#2	1	18040.42	21721
201.05	PF#2	1	17950.48	21849
200.95	PF#2	1	17952.91	21954
200.86	PF#2	1	18000	22032
200.77	PF#2	1	17828.8	21951
200.67	PF#2	1	17640	21649.3
200.58	PF#2	1	17510	21450
200.49	PF#2	1	17380	21171
200.39	PF#2	1	17300	21041
200.3	PF#2	1	17205	20896
200.2	PF#2	1	17115	20744
200.1	PF#2	1	17030	20800
200	PF#2	1	16950	21050
199.91	PF#2	1	16800	21330
199.82	PF#2	1	16870	21650

FLOW DATA

Flow Title: Reach 3 - Floodway
Flow File : s:\DRN\ellt0013\clomr\hec-ras\Reach3.f01

Flow Data (cfs)

River	Reach	RS	PF#1	PF#2
1	1	214.14	169000	169000
1	1	213.21	166000	166000
1	1	205.4	164000	164000
1	1	200.3	179750	179750

Boundary Conditions

River	Reach	Profile	Upstream	Downstream
1	1	PF#1		Known WS = 948.9

GEOMETRY DATA

Geometry Title: with landfill
Geometry File : s:\DRN\ellt0013\clamr\hec-ras\Reach3.g02

CROSS SECTION RIVER: 1
REACH: 1 RS: 214.14

INPUT
Description: 214.14
Station Elevation Data num= 96

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
18555.4	1082.6	18577.7	1082.5	18586.5	1082.5	18650.6	1082	18678.8	1082.1
18707.4	1081.7	18729.5	1082	18771.6	1082.1	18793.7	1081.8	18836	1080.9
18859.7	1080.3	18935.6	1078.9	19050.6	1077.2	19056.7	1077.2	19059.9	1077.1
19062.9	1076.9	19063.3	1077	19067.8	1077.1	19071.9	1077.1	19078.2	1077.1
19188.3	1078.1	19249.7	1079.4	19290.2	1080.1	19298.1	1080.2	19313.1	1080.4
19327.5	1080.7	19358.6	1080.6	19391.6	1080.5	19412.8	1080.3	19520.8	1077.9
19554.8	1077.5	19580.2	1077.3	19610.8	1076.5	19651.9	1076.7	19697.7	1058.7
19715.9	1051.7	19732.8	1050.2	19750.7	1048.7	20032.7	1049	20292.3	1049.2
20350.9	1065.9	20388.3	1077.5	20405.5	1075.6	20406	1075.6	20439.7	1075.6
20637.3	1075.5	20899.6	1075.4	20920.6	1075.5	20941.8	1075.4	20947.4	1075.5
20962	1075.5	20980	1075.4	20989.9	1075.4	21074.1	1075.4	21119.6	1075.7
21168.7	1076.8	21222	1076.6	21326.8	1076.2	21327.4	1076.2	21342.2	1075
21390.6	1075	21428.8	1075	21455.3	1075.3	21502.1	1076.4	21502.4	1076.2
21505.4	1076.4	21551.9	1077.5	21591.8	1077.6	21726.3	1078.4	21759.2	1078.5
21766.3	1078.3	21792.4	1078.4	21884.6	1078.9	22013	1079.1	22034.3	1079.5
22101.6	1079.7	22156.1	1080.1	22201.4	1080	22204.6	1079.9	22217.3	1080.5
22235	1081.3	22238.1	1081.3	22264.5	1081	22267.7	1080.9	22269.4	1080.7
22269.9	1080.6	22272.4	1080.4	22280.3	1079.8	22341.9	1080.2	22431	1080.6
22501.3	1081.2	22591.2	1081.8	22602.9	1082	22619.7	1083	22686.6	1082.9
22710.3	1082.5								

Manning's n Values num= 3

Sta	n Val	Sta	n Val	Sta	n Val
18555.4	.04	19651.9	.035	20388.3	.04

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
19651.9 20388.3 475 510.51 570 .1 .3
Ineffective Flow num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
18555.4	19651.9	1082	20388.3	22710.3	1082

CROSS SECTION RIVER: 1
REACH: 1 RS: 214.04

INPUT
Description: 214.04
Station Elevation Data num= 96

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
19072.9	1079.7	19093.4	1080.3	19132.2	1080.8	19189.9	1082.5	19193.8	1082.6
19198.4	1082.5	19239.2	1081	19288.1	1081.2	19324.4	1080.7	19371.7	1079.1
19395.9	1078.4	19428.8	1078	19449.6	1077.2	19490.6	1077.5	19513.1	1077.7
19544.1	1077.9	19555.9	1077.7	19588.8	1076.5	19610.7	1075.7	19613.2	1075.7
19632.1	1075.8	19635.6	1075.8	19636.8	1075.4	19702.8	1053	19711.2	1052.5
19718.8	1052.3	19726.8	1051.2	19735.4	1048.8	20175.7	1049	20286.6	1049
20298.5	1052.8	20376.6	1076.5	20387.2	1075.5	20390.3	1075.2	20574.2	1076
20667.2	1076.1	20825.6	1075.6	20839.5	1075.5	20839.8	1075.5	20855.8	1073
20864.2	1073.4	20909.3	1072.6	20914.5	1072.6	20915.6	1072.9	20928.6	1077
20951.8	1077	20990.8	1076.9	20996.8	1076.9	21016.8	1077.3	21040.9	1077.5
21130.4	1077.3	21234.3	1076.9	21246.3	1076.9	21256.8	1076.2	21294.9	1076.5
21366.4	1076.6	21461.4	1076.5	21539.2	1076.3	21557.9	1076.3	21565.1	1076.3
21586.9	1076.6	21607.7	1076.8	21639.2	1077.1	21662.1	1077.5	21690.5	1078.1
21711.2	1078.3	21774.8	1078.5	21799.9	1079.2	21800.4	1079.3	21942.9	1079.4
21971	1079.3	22001.7	1079.3	22020.7	1079.3	22177.7	1078.3	22203.1	1078.1
22217.2	1078.1	22226.8	1078	22231.1	1078	22238.5	1078	22248	1077.8
22357.9	1076.9	22384.7	1077.9	22394.1	1078.2	22399.6	1078.1	22400.9	1078.1
22428.8	1077.9	22430.1	1077.9	22450.6	1078.2	22542.8	1078.3	22554	1078.5
22667.1	1079.2	22667.7	1079.3	22717.7	1081.1	22725.6	1081.1	22727.3	1081.2
22747.1	1084								

Manning's n Values num= 3

Sta	n Val	Sta	n Val	Sta	n Val
19072.9	.04	19636.8	.035	20376.6	.04

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
19636.8 20376.6 495 493.12 480 .1 .3
Ineffective Flow num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev

19072.9	19636.8	1083	20376.6	22747.1	1083

CROSS SECTION RIVER: 1
REACH: 1 RS: 213.95

INPUT
Description: 213.95
Station Elevation Data num= 96

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
19012.2	1082.3	19071.8	1081.2	19072.8	1081.2	19073.5	1081.2	19172.6	1080
19176.1	1079.9	19177	1079.9	19191.6	1079.8	19233.8	1079.1	19245.6	1079.2
19283.7	1079.1	19366	1078.5	19459.9	1077.8	19508.7	1075.2	19510	1075.1
19510.4	1075.2	19511.8	1075.3	19534.7	1076.7	19583.1	1074.4	19622.2	1071.5
19627.4	1072.4	19631.4	1072.9	19699.3	1056.7	19729	1049.4	19783.8	1049.5
20255.4	1049.3	20277.7	1056.5	20337.1	1075.9	20360.3	1074.9	20361.6	1074.8
20403.2	1074.5	20653.5	1075.3	20691.9	1075.3	20740	1075.5	20772	1075.4
20775.5	1075.1	20784.4	1073.9	20808.5	1074.1	20840.9	1074.4	20844.2	1074.5
20853.7	1075.1	20870	1074.8	20875	1074.6	20914.9	1075.6	20922.3	1075.7
20949.7	1076.5	20960.6	1076.8	20964.2	1076.9	20966.3	1078.4	20973	1080.1
21108.8	1079.4	21171.4	1079.5	21176.1	1079.5	21183	1079.7	21200.9	1076.8
21203.1	1076.6	21232.6	1076.3	21271.1	1076	21272.6	1076	21274.1	1076
21377.7	1076.7	21386.9	1076.7	21400.8	1076.7	21470.9	1077.6	21502.4	1077.7
21528	1077.6	21534	1077.9	21534.2	1077.9	21537	1078	21542.7	1077.4
21542.9	1077.8	21554.1	1077.4	21695.2	1077.7	21731.7	1077.2	21736.1	1076.3
21743.3	1075.1	21752	1076.3	21753.2	1076.5	21753.7	1076.6	21759.1	1078.6
21760.3	1079.1	21763.3	1079.6	21764.1	1079.5	21772.7	1079.3	21784.7	1079.3
21791.6	1079.5	21806.1	1079.6	21832.6	1079.8	21918.1	1079.8	21918.4	1080.2
22000.8	1079.8	22342	1078.4	22351.4	1078.4	22362.3	1078.4	22373.8	1078.7
22391.3	1078.7								

Manning's n Values num= 3

Sta	n Val	Sta	n Val	Sta	n Val
19012.2	.04	19534.7	.035	20337.1	.04

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
19534.7	20337.1	500	504.25	500	.1	.3

Ineffective Flow num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
19012.2	19534.7	1082.3	20337.1	22391.3	1082.3

CROSS SECTION RIVER: 1
REACH: 1 RS: 213.85

INPUT
Description: 213.85
Station Elevation Data num= 96

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
17827.8	1078.7	17849.3	1078.5	17962.5	1078	17983.6	1077.8	18087.6	1077.7
18117.7	1077.6	18209	1077.4	18245.6	1077.6	18313.2	1077.9	18389.3	1078.8
18415.4	1078.8	18437.5	1078.2	18449	1078.3	18463.7	1078.2	18513.6	1077.6
18548.9	1077.6	18753.1	1077.6	18798.9	1077.6	18834.2	1077.6	18917.4	1077
19257.5	1075.3	19264.9	1075.1	19293.5	1075.6	19308	1069.8	19333.3	1060.1
19342.5	1063.1	19360.7	1068.8	19366.6	1068.9	19391	1069.1	19423.4	1069.4
19453.2	1068.8	19469.5	1068.4	19505	1067.4	19506.5	1067.3	19507.3	1067.3
19507.8	1067.3	19547.4	1067.3	19584.5	1067.6	19698.5	1068	19698.6	1068
19700.1	1067.8	19706.3	1067	19707.5	1066.9	19732.9	1066.7	19742.3	1067
19770.4	1067.6	19785.4	1067.6	19789.2	1066.5	19853.9	1048.1	19906.4	1048.1
20083.9	1048.2	20249.9	1048.3	20313.2	1069.1	20328.7	1074.2	20334.9	1074.2
20586	1074.1	20640.3	1074.2	20781.1	1074.5	20824.2	1074.1	20842	1073.7
20852.3	1073.7	20870.3	1073.9	20934.9	1073.8	20979.5	1074.4	21111.7	1075.1
21125.5	1075	21144.4	1074.8	21152.1	1075.1	21185.5	1076.2	21224.6	1075.6
21230.8	1075.4	21246.8	1077.2	21248.3	1077.3	21269	1076.4	21270.4	1076.3
21272.5	1076.3	21337.9	1076.3	21381.5	1076.2	21384.6	1076.3	21498.8	1077.1
21503.7	1077.1	21545.5	1077.1	21557.5	1077.1	21587	1077.2	21625.9	1077.3
21671.9	1077.5	21707.6	1077.4	21723.9	1077.4	21767.4	1077.3	21770.2	1077.3
21773.6	1077.4	21774.6	1077.4	21801.1	1079.6	21831.2	1078.8	21907.4	1079.1
21970.5	1078.8								

Manning's n Values num= 3

Sta	n Val	Sta	n Val	Sta	n Val
17827.8	.04	19785.4	.035	20328.7	.04

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
19785.4	20328.7	521	520.04	541	.1	.3

Ineffective Flow num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
17827.8	19618.33	1078	20328.7	21970.5	1078

CROSS SECTION RIVER: 1
REACH: 1 RS: 213.75

INPUT
Description: 213.75
Station Elevation Data num= 28

```
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
   18435    1076   19470    1076   19600    1080 19633.4 1080.84 19633.5 1074.13
 19633.6  1073.5 19636.5  1073.5   19709 1048.55   19764    1047 19769.5    1047
 19834.5 1047.15   19899  1046.6   19904  1046.6   19959    1047   20034 1044.61
   20039  1044.6   20104    1045   20169  1045.5   20174  1045.5 20240.5 1049.35
   20302  1073.8   20305  1073.8 20305.1  1074.8 20305.2  1081.5   20340    1080
   20490    1076   20925    1075   21465    1076

Manning's n Values        num=       3
     Sta   n Val     Sta   n Val     Sta   n Val
   18435    .037 19633.5    .032 20305.1    .037

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
       19633.5 20305.1              125  115.36     120              .1       .3
Ineffective Flow     num=       2
   Sta L   Sta R    Elev   Sta L   Sta R    Elev
   18435 19633.5 1074.13 20305.1   21465  1074.8

BRIDGE                  RIVER: 1
REACH: 1                   RS: 213.745

INPUT
Description: 7th Street Bridge
Distance from Upstream XS =       0
Deck/Roadway Width        =  115.36
Weir Coefficient          =     2.6
Bridge Deck/Roadway Skew  =
Upstream  Deck/Roadway Coordinates
    num=       6
     Sta Hi Cord Lo Cord     Sta Hi Cord Lo Cord     Sta Hi Cord Lo Cord
 19633.5 1080.84 1074.13   19764 1084.56 1077.81   19899 1085.96 1079.23
   20039 1085.95  1079.2   20174 1084.45  1077.7   20305 1081.53 1074.82

Upstream Bridge Cross Section Data
Station Elevation Data    num=      28
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
   18435    1076   19470    1076   19600    1080 19633.4 1080.84 19633.5 1074.13
 19633.6  1073.5 19636.5  1073.5   19709 1048.55   19764    1047 19769.5    1047
 19834.5 1047.15   19899  1046.6   19904  1046.6   19959    1047   20034 1044.61
   20039  1044.6   20104    1045   20169  1045.5   20174  1045.5 20240.5 1049.35
   20302  1073.8   20305  1073.8 20305.1  1074.8 20305.2  1081.5   20340    1080
   20490    1076   20925    1075   21465    1076

Manning's n Values        num=       3
     Sta   n Val     Sta   n Val     Sta   n Val
   18435    .037 19633.5    .032 20305.1    .037

Bank Sta: Left   Right    Coeff Contr.   Expan.
       19633.5 20305.1              .1       .3
Ineffective Flow     num=       2
   Sta L   Sta R    Elev   Sta L   Sta R    Elev
   18435 19633.5 1074.13 20305.1   21465  1074.8

Downstream  Deck/Roadway Coordinates
    num=       6
     Sta Hi Cord Lo Cord     Sta Hi Cord Lo Cord     Sta Hi Cord Lo Cord
 19633.5 1080.84 1074.13   19764 1084.56 1077.81   19899 1085.96 1079.23
   20039 1085.95  1079.2   20174 1084.45  1077.7   20305 1081.53 1074.82

Downstream Bridge Cross Section Data
Station Elevation Data    num=      28
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
   18435    1076   19470    1076   19600    1080 19633.4 1080.84 19633.5 1074.13
 19633.6  1073.5 19636.5  1073.5   19709 1048.55   19764    1047 19769.5    1047
 19834.5 1047.15   19899  1046.6   19904  1046.6   19959    1047   20034 1044.61
   20039  1044.6   20104    1045   20169  1045.5   20174  1045.5 20240.5 1049.35
   20302  1073.8   20305  1073.8 20305.1  1074.8 20305.2  1081.5   20340    1080
   20490    1076   20925    1075   21465    1076

Manning's n Values        num=       3
     Sta   n Val     Sta   n Val     Sta   n Val
   18435    .037 19633.5    .032 20305.1    .037

Bank Sta: Left   Right    Coeff Contr.   Expan.
       19633.5 20305.1              .1       .3
Ineffective Flow     num=       2
   Sta L   Sta R    Elev   Sta L   Sta R    Elev
   18435 19633.5 1074.13 20305.1   21465  1074.8

Upstream Embankment side slope              =        horiz. to 1.0 vertical
Downstream Embankment side slope            =        horiz. to 1.0 vertical
Maximum allowable submergence for weir flow =     .95
Elevation at which weir flow begins         =
Energy head used in spillway design         =
```

```
Spillway height used in design              =
Weir crest shape                            = Broad Crested

Number of Piers =  4

Pier Data
Pier Station     Upstream= 19766.5    Downstream= 19766.5
Upstream     num=       2
    Width   Elev    Width   Elev
        5    1047       5 1077.88
Downstream     num=       2
    Width   Elev    Width   Elev
        5    1047       5 1077.88

Pier Data
Pier Station     Upstream= 19901.5    Downstream= 19901.5
Upstream     num=       2
    Width   Elev    Width   Elev
        5  1046.6       5  1079.2
Downstream     num=       2
    Width   Elev    Width   Elev
        5  1046.6       5  1079.2

Pier Data
Pier Station     Upstream= 20036.5    Downstream= 20036.5
Upstream     num=       2
    Width   Elev    Width   Elev
        5  1044.6       5  1079.2
Downstream     num=       2
    Width   Elev    Width   Elev
        5  1044.6       5  1079.2

Pier Data
Pier Station     Upstream= 20171.5    Downstream= 20171.5
Upstream     num=       2
    Width   Elev    Width   Elev
        5  1045.5       5  1077.7
Downstream     num=       2
    Width   Elev    Width   Elev
        5  1045.5       5  1077.7

Number of Bridge Coefficient Sets =  1

Low Flow Methods and Data
       Energy
       Momentum                Cd   =     1.2
       Yarnell                 KVal =    1.05
Selected Low Flow Methods = Highest Energy Answer

High Flow Method
       Energy Only

Additional Bridge Parameters
       Add Friction component to Momentum
       Add Weight component to Momentum
       Class B flow critical depth computations use critical depth
           inside the bridge at the upstream end
       Criteria to check for pressure flow = Upstream energy grade line

CROSS SECTION          RIVER: 1
REACH: 1                  RS: 213.74

INPUT
Description: 213.74
Station Elevation Data     num=      28
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
   18435    1076   19470    1076   19600    1080 19633.4 1080.84 19633.5 1074.13
 19633.6  1073.5 19636.5  1073.5   19709 1048.55   19764    1047 19769.5    1047
 19834.5 1047.15   19899  1046.6   19904  1046.6   19959    1047   20034 1044.61
   20039  1044.6   20104    1045   20169  1045.5   20174  1045.5 20240.5 1049.35
   20302  1073.8   20305  1073.8 20305.1  1074.8 20305.2  1081.5   20340    1080
   20490    1076   20925    1075   21465    1076

Manning's n Values         num=       3
     Sta   n Val     Sta   n Val     Sta   n Val
   18435    .037 19633.5    .032 20305.1    .037

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
       19633.5 20305.1               391  373.47     361              .1       .3
Ineffective Flow     num=       2
   Sta L   Sta R    Elev   Sta L   Sta R    Elev
   18435 19633.5 1074.13 20305.1   21465  1074.8

CROSS SECTION          RIVER: 1
```

REACH: 1 RS: 213.66

INPUT
Description: 213.66
Station Elevation Data num= 96

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
17026.7	1076.4	17035.9	1076.4	17047	1076.4	17057.3	1076.5	17212.3	1077.3
17306.5	1077.8	17311.3	1077.7	17325.2	1077.3	17326.2	1077.3	17343.4	1077.3
17442.9	1076.7	17474.5	1076.6	17571	1076	17573.6	1076	17595.6	1076.1
17610	1076.1	17705.1	1075	17741.5	1075.1	17947.8	1075.4	17953.1	1075.5
18038.8	1075.4	18185.8	1075.6	18234.4	1076.1	18300.9	1076.4	18318.8	1076.5
18414	1075.5	18414.6	1075.5	18415.1	1075.5	18415.7	1075.5	18448.6	1075.8
18455.1	1075.4	18472.5	1073.3	18527.9	1073.3	18683	1073	18718.7	1073
18832.1	1073.3	18873.8	1073.2	18878.4	1072.9	18881.8	1072.9	18892.6	1074.2
18901.3	1075.2	19033.1	1075.2	19131.6	1074.9	19140.9	1074.8	19157.1	1074.8
19235.1	1073.7	19291.4	1073.4	19291.9	1073.4	19292.2	1073.4	19391.8	1069.9
19418.5	1069.7	19442.4	1069.3	19496.9	1070	19532.6	1070.6	19537.6	1070.2
19543	1070.6	19572.3	1071.8	19605.3	1068.7	19616.1	1068.2	19621.3	1069.8
19633.2	1073.3	19663.1	1073.7	19675.2	1073.6	19689.7	1068.5	19748.8	1047.6
19750.4	1047.6	20010.7	1047.7	20194.9	1047.9	20235	1062.5	20260.3	1071.7
20270.2	1073.7	20288.3	1076.6	20297.7	1078.3	20387.2	1078.5	20416.3	1078.5
20457.1	1078.5	20464.9	1076.1	20469.4	1075.3	20825.5	1074.4	20828.5	1074.4
20828.8	1074.4	20830.9	1074.4	20837.2	1074.9	20839.2	1074.9	20870.3	1074.9
20871.4	1074.9	20872.6	1074.6	20872.8	1074.7	20900.8	1074.1	20901.5	1074
20908.4	1073.9	20912.4	1073.9	20915.4	1074	20927	1075.1	20951.2	1077.5
20999.4	1077.6								

Manning's n Values num= 3

Sta	n Val	Sta	n Val	Sta	n Val
17026.7	.037	19675.2	.032	20297.7	.037

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
19675.2	20297.7	490	491.08	495	.1	.3

Ineffective Flow num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
17026.7	19675.2	1078.5	20297.7	20999.4	1078.5

CROSS SECTION RIVER: 1
REACH: 1 RS: 213.57

INPUT
Description: 213.57
Station Elevation Data num= 96

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
17508.1	1075.8	17669.7	1076	17677.2	1076	17679.4	1076	17681.9	1075.9
17685.3	1075.9	17879.1	1077.7	17883.6	1077.7	17891.2	1077.7	17899.7	1077.7
17907.2	1077.7	18293.4	1077.1	18302.2	1077.1	18305.6	1077.2	18335	1077.2
18409.4	1076.8	18482.1	1076	18487.1	1075.3	18493.2	1074.6	18496.9	1074.6
18674	1073.2	18717	1073	18743.5	1072.8	18755.4	1072.8	18802	1072.6
18832.6	1072.6	18934.4	1072.7	18941.7	1072.7	18977	1069	18979.3	1068.7
18979.7	1068.7	18981.1	1068.6	19032.8	1069.7	19078.3	1069.3	19123.5	1069
19190.3	1068.3	19211.6	1068.4	19212.3	1068.4	19245	1068.5	19287.9	1069
19318.4	1068.9	19384.7	1069.1	19398.3	1068.6	19484.5	1068.5	19514.1	1067.2
19542.6	1063.6	19548	1062.9	19575	1062.8	19586.3	1062.5	19595.5	1063.8
19603.2	1064.4	19612.3	1065.2	19617.4	1064.5	19668.9	1061.9	19672.3	1061.7
19674.3	1061.7	19711.7	1060.1	19720	1057.4	19743.1	1047.9	20035.4	1047
20123.9	1046.7	20135.8	1048.3	20147.5	1050.1	20202.7	1051.3	20261.3	1052.3
20286.6	1053	20301.2	1052.6	20302.5	1052.5	20345.5	1073.5	20347.7	1074.6
20347.8	1074.6	20348.2	1074.6	20373.8	1075.7	20384.8	1075.5	20390.6	1075.6
20426.7	1075.7	20435.9	1075.7	20452.6	1075.3	20481.8	1075.4	20485.6	1075.2
20501.3	1076.7	20634	1076	20804.5	1073.3	20853.6	1072.8	20858.1	1072.8
20865.8	1073.1	20870.9	1073	20902.9	1071.5	20922.6	1075.2	20923.6	1075.4
20925.3	1075.3	20936.8	1075.1	20950.5	1074.7	21085.5	1074.8	21211.9	1075.1
21311.2	1074.8								

Manning's n Values num= 3

Sta	n Val	Sta	n Val	Sta	n Val
17508.1	.037	19484.5	.032	20373.8	.037

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
19484.5	20373.8	650	500.37	390	.1	.3

Ineffective Flow num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
17508.1	19484.5	1077.7	20373.8	21311.2	1077.7

CROSS SECTION RIVER: 1
REACH: 1 RS: 213.47

INPUT
Description: 213.47
Station Elevation Data num= 96

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
17897	1072.3	17950.9	1072.3	17955.5	1073.1	17972.5	1074.8	18140.3	1074.1
18179.1	1074.1	18193.1	1074	18207.9	1073.9	18257.4	1074	18402.2	1073.7

18450.1	1073.2	18519.9	1072.6	18592.3	1071.7	18600.6	1071.6	18625.8	1071.9
18741.5	1071.7	18784.9	1071.7	18805.1	1070.7	18823.4	1069.4	18880.6	1067
18888.4	1066.7	18938.9	1066.6	18942.7	1066.6	18948.4	1066.6	18970.5	1067.2
19008	1068.2	19008.9	1068.2	19041.7	1068.5	19057.6	1068.6	19057.8	1068.6
19058.1	1068.6	19060.2	1068.6	19154.7	1068.1	19202.4	1067.9	19243.3	1067
19289	1066	19306.6	1065.6	19313.9	1065.3	19357.8	1064.8	19392.5	1064.4
19420.7	1063.8	19432.7	1063.5	19483.4	1062	19493.9	1061.7	19499.6	1061.8
19534.7	1062.6	19536.4	1062.5	19585.4	1061.2	19586.6	1061.2	19587.5	1061.2
19588.9	1061.1	19593.6	1060.6	19689.9	1051.5	19699.6	1050.5	19735.3	1047
19807.1	1046.8	19827.4	1046.8	19970.4	1046.6	19993.9	1046.3	20037.8	1046.2
20146.5	1045.8	20205.3	1048.7	20214.8	1049.3	20219.4	1049	20220.8	1048.9
20255.2	1063.1	20274.2	1072.4	20283.3	1072.6	20341.6	1072.5	20362.6	1072.6
20428.7	1074.9	20446.8	1074.9	20469.6	1074.9	20474.3	1074.9	20476.7	1075
20483.2	1074.9	20484.1	1074.9	20486.3	1074.9	20488.6	1074.7	20489.3	1074.7
20515.7	1073.2	20526.3	1073.3	20537.5	1073.5	20540.5	1073.4	20545	1073.8
20567.4	1075.2	20569.1	1075.4	20578.4	1075	20619.2	1074.5	20621.6	1074.4
20649.8	1074	20700.8	1074	20735.1	1074.2	20751.5	1074.5	20765.2	1074.8
20783.9	1075.1								

Manning's n Values num= 3

Sta	n Val	Sta	n Val	Sta	n Val
17897	.037	19243.3	.032	20274.2	.037

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
19243.3	20274.2	500	493.66	485	.1	.3

Ineffective Flow num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
17897	19243.3	1075.4	20274.2	20783.9	1075.4

CROSS SECTION RIVER: 1
REACH: 1 RS: 213.38

INPUT
Description: 213.38
Station Elevation Data num= 96

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
17634.6	1070.7	17652.1	1070.7	17729.5	1071.2	17747.9	1072.2	17763.8	1073.1
17893.9	1073.4	17976.4	1073.1	18006.5	1072.7	18006.7	1072.7	18008	1072.7
18197.8	1072.8	18341.3	1071.5	18390.9	1071.3	18419.4	1070.9	18420.4	1070.9
18423.8	1070.9	18431	1071	18656.8	1070.5	18735	1070.6	18756.6	1070.9
18796.6	1071.1	18974.7	1070.8	19012.6	1070.8	19073.3	1070.8	19129.4	1069.7
19192.7	1068.9	19195.5	1068.8	19196.5	1068.5	19204.6	1068.3	19213.9	1068.2
19225.5	1067.5	19242.1	1066.8	19303.8	1064.4	19303.9	1064.4	19304.2	1064.4
19346.1	1064.6	19365.3	1061.2	19365.5	1061.2	19401.7	1061	19405.7	1060.8
19411.2	1060.6	19452.9	1058.9	19499.7	1059.7	19523.7	1060.4	19526.3	1060.4
19530.8	1060.5	19534.1	1060.4	19575.5	1058.6	19625.5	1054.4	19648.5	1052.9
19678.5	1053.7	19684.4	1053.8	19732.6	1049.4	19735.1	1049.2	19761.4	1050.8
19767.8	1050.7	19771.9	1050.2	19796.5	1046.2	19864.4	1045.8	20277.6	1045.7
20311.6	1045.6	20311.7	1045.4	20329.1	1049.4	20361.7	1051.6	20363.3	1052.8
20364.3	1052.8	20374	1053.5	20405.3	1054.8	20417	1056.5	20434.2	1065
20473	1075.2	20473.5	1075.2	20515.6	1074.3	20532	1073.2	20533.3	1073
20535.9	1073	20539.6	1072.9	20569.9	1072.5	20578	1072.1	20607.5	1072.2
20652.6	1074	20655.9	1074.1	20722.7	1075.3	20793.4	1076	20804.4	1076.4
20831.2	1076.4	20834	1075.7	20842.3	1072.9	20845.3	1072.1	20848.9	1072.1
20860.3	1072.3	20875.9	1072.3	20895.1	1072.4	20963.7	1072.4	20982.3	1071.9
20996.7	1072.4								

Manning's n Values num= 3

Sta	n Val	Sta	n Val	Sta	n Val
17634.6	.037	19346.1	.032	20473	.037

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
19346.1	20473	210	290.06	395	.1	.3

Ineffective Flow num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
17634.6	19346.1	1076.4	20473	20996.7	1076.4

CROSS SECTION RIVER: 1
REACH: 1 RS: 213.33

INPUT
Description: 213.33
Station Elevation Data num= 96

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
17662.6	1072.6	17668	1072.6	17677	1072.6	17679.2	1072.7	17685.5	1072.7
17890.3	1072	17891.3	1072	17919.8	1071.9	18055.2	1071.9	18114.9	1071.9
18241.8	1071.2	18279.3	1070.9	18302.9	1070.9	18305.8	1070.8	18316.6	1070.7
18337.3	1070.5	18464.8	1070.6	18565.2	1070.8	18644.2	1071	18654.1	1071
18680.7	1070.7	18888.5	1070	18954.5	1069.6	19002.1	1069.7	19091.3	1069
19104.2	1069	19104.4	1069	19107.7	1069	19109.5	1068.5	19112.3	1067.7
19112.4	1067.7	19123.4	1067.3	19136.1	1067.1	19144.4	1069.1	19147.5	1069.9
19163.9	1070.3	19173.4	1070.7	19184.4	1069.5	19203.3	1068.1	19209.7	1067.1
19222.7	1066	19244.2	1064.1	19272.3	1063	19328.9	1063.5	19336.9	1063.4
19344.3	1063.4	19367.2	1062.3	19389	1062	19396.3	1061.9	19416.7	1061.3

```
 19418.1  1060.9 19453.8  1059.7 19472.5  1059.2 19476.7  1057.5 19530.4  1058.7
 19538.8  1058.7   19541  1058.6   19590  1056.9 19629.4  1054.2 19644.5  1053.7
 19671.3  1051.4 19710.3  1047.2 19715.9  1046.8 19755.6  1046.4 19757.3  1046.3
 19759.3  1046.3 19761.3  1046.3 19780.3  1046.2 20358.7  1045.4 20444.8  1048.7
 20449.3  1048.9   20508  1066.2 20514.9  1068.7 20553.2  1069.1 20640.2  1069.7
 20662.5  1069.4   20704  1068.4 20729.7  1068.7 20782.7  1069.1 20784.7  1069.2
 20789.1  1069.5 20821.1  1071.4 20854.7    1073 20856.9  1073.1 20859.1  1073.1
   20896  1072.7 20902.1  1072.7 20919.8  1072.5 20932.4  1072.6 20967.3  1072.5
 21012.3  1072.8 21051.5    1073 21059.7    1073   21066  1073.1 21092.4    1073
 21244.4  1073.1

Manning's n Values        num=      3
     Sta   n Val     Sta   n Val     Sta   n Val
 17662.6    .037 19328.9    .032 20514.9    .037

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
       19328.9 20514.9              266  316.41     426              .1       .3
Ineffective Flow     num=       2
   Sta L   Sta R    Elev   Sta L   Sta R    Elev
 17662.6 19328.9  1073.1 20640.2 21244.4  1073.1

CROSS SECTION          RIVER: 1
REACH: 1                  RS: 213.26

INPUT
Description: 213.26
Station Elevation Data    num=      45
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
   17300  1071.7   17670    1072   17850  1073.6   18250  1075.5   19180  1078.2
 19488.1  1078.1 19488.2 1072.97 19495.2  1069.2 19517.2  1057.5 19564.2 1055.45
 19584.2  1051.3 19586.9    1051 19589.4    1051 19638.2  1048.1 19686.9  1047.3
 19689.4  1047.3 19704.2  1047.2 19743.2  1042.2 19786.9 1042.15 19789.4  1042.2
 19838.2  1042.8 19871.7  1042.9 19886.9 1043.85 19889.4  1043.8 19938.2  1044.1
 19986.9  1042.7 19989.4  1042.7 20038.2  1042.3 20086.9 1042.85 20089.4  1042.8
 20121.7  1043.3 20171.2 1041.05 20188.2  1040.9 20189.4  1040.9 20223.2  1040.4
 20248.7  1042.2 20286.9  1043.4 20289.4  1043.4 20307.7 1044.35 20382.7  1069.6
 20387.9  1070.4 20387.9  1072.9   20388 1078.19   20790  1078.3   21330  1075.5

Manning's n Values        num=      3
     Sta   n Val     Sta   n Val     Sta   n Val
   17300    .037 19488.2    .032 20387.9    .037

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
       19488.2 20387.9              155  151.22     155              .1       .3
Ineffective Flow     num=       2
   Sta L   Sta R    Elev   Sta L   Sta R    Elev
   17300 19488.2 1072.97 20387.9   21330  1070.4

BRIDGE                 RIVER: 1
REACH: 1                  RS: 213.255

INPUT
Description: Central Avenue Bridge
Distance from Upstream XS =       0
Deck/Roadway Width        =  151.22
Weir Coefficient          =     2.6
Bridge Deck/Roadway Skew  =
Upstream  Deck/Roadway Coordinates
    num=      10
     Sta Hi Cord Lo Cord     Sta Hi Cord Lo Cord     Sta Hi Cord Lo Cord
 19488.2 1078.14 1072.97 19586.9  1078.5 1073.28 19686.9 1078.86 1073.64
 19786.9 1079.15 1073.93 19886.9 1079.37  1074.2 19989.4 1079.38  1074.2
 20086.9 1079.13 1073.93 20188.2 1078.89  1073.7 20286.9 1078.53 1073.32
 20387.9 1078.19 1072.98

Upstream Bridge Cross Section Data
Station Elevation Data    num=      45
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
   17300  1071.7   17670    1072   17850  1073.6   18250  1075.5   19180  1078.2
 19488.1  1078.1 19488.2 1072.97 19495.2  1069.2 19517.2  1057.5 19564.2 1055.45
 19584.2  1051.3 19586.9    1051 19589.4    1051 19638.2  1048.1 19686.9  1047.3
 19689.4  1047.3 19704.2  1047.2 19743.2  1042.2 19786.9 1042.15 19789.4  1042.2
 19838.2  1042.8 19871.7  1042.9 19886.9 1043.85 19889.4  1043.8 19938.2  1044.1
 19986.9  1042.7 19989.4  1042.7 20038.2  1042.3 20086.9 1042.85 20089.4  1042.8
 20121.7  1043.3 20171.2 1041.05 20188.2  1040.9 20189.4  1040.9 20223.2  1040.4
 20248.7  1042.2 20286.9  1043.4 20289.4  1043.4 20307.7 1044.35 20382.7  1069.6
 20387.9  1070.4 20387.9  1072.9   20388 1078.19   20790  1078.3   21330  1075.5

Manning's n Values        num=      3
     Sta   n Val     Sta   n Val     Sta   n Val
   17300    .037 19488.2    .032 20387.9    .037

Bank Sta: Left   Right    Coeff Contr.   Expan.
       19488.2 20387.9              .1       .3
```

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Ineffective Flow     num=       2
   Sta L   Sta R    Elev   Sta L   Sta R    Elev
   17300 19488.2 1072.97 20387.9   21330  1070.4

Downstream  Deck/Roadway Coordinates
    num=      10
     Sta Hi Cord Lo Cord     Sta Hi Cord Lo Cord     Sta Hi Cord Lo Cord
 19488.2 1078.14 1072.97 19586.9  1078.5 1073.28 19686.9 1078.86 1073.64
 19786.9 1079.15 1073.93 19886.9 1079.37  1074.2 19989.4 1079.38  1074.2
 20086.9 1079.13 1073.93 20188.2 1078.89  1073.7 20286.9 1078.53 1073.32
 20387.9 1078.19 1072.98

Downstream Bridge Cross Section Data
Station Elevation Data    num=      45
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
   17300  1071.7   17670    1072   17850  1073.6   18250  1075.5   19180  1078.2
 19488.1  1078.1 19488.2 1072.97 19495.2  1069.2 19517.2  1057.5 19564.2 1055.45
 19584.2  1051.3 19586.9    1051 19589.4    1051 19638.2  1048.1 19686.9  1047.3
 19689.4  1047.3 19704.2  1047.2 19743.2  1042.2 19786.9 1042.15 19789.4  1042.2
 19838.2  1042.8 19871.7  1042.9 19886.9 1043.85 19889.4  1043.8 19938.2  1044.1
 19986.9  1042.7 19989.4  1042.7 20038.2  1042.3 20086.9 1042.85 20089.4  1042.8
 20121.7  1043.3 20171.2 1041.05 20188.2  1040.9 20189.4  1040.9 20223.2  1040.4
 20248.7  1042.2 20286.9  1043.4 20289.4  1043.4 20307.7 1044.35 20382.7  1069.6
 20387.9  1070.4 20387.9  1072.9   20388 1078.19   20790  1078.3   21330  1075.5

Manning's n Values        num=       3
     Sta   n Val     Sta   n Val     Sta   n Val
   17300    .037 19488.2    .032 20387.9    .037

Bank Sta: Left   Right    Coeff Contr.   Expan.
       19488.2 20387.9            .1        .3
Ineffective Flow     num=       2
   Sta L   Sta R    Elev   Sta L   Sta R    Elev
   17300 19488.2 1072.97 20387.9   21330  1070.4

Upstream Embankment side slope              =        horiz. to 1.0 vertical
Downstream Embankment side slope            =        horiz. to 1.0 vertical
Maximum allowable submergence for weir flow =     .95
Elevation at which weir flow begins         =
Energy head used in spillway design         =
Spillway height used in design              =
Weir crest shape                            = Broad Crested

Number of Piers =  8

Pier Data
Pier Station     Upstream=19588.15    Downstream=19588.15
Upstream     num=       2
    Width   Elev    Width   Elev
     2.5    1051     2.5 1073.28
Downstream     num=       2
    Width   Elev    Width   Elev
     2.5    1051     2.5 1073.28

Pier Data
Pier Station     Upstream=19688.15    Downstream=19688.15
Upstream     num=       2
    Width   Elev    Width   Elev
     2.5  1047.3     2.5  1073.7
Downstream     num=       2
    Width   Elev    Width   Elev
     2.5  1047.3     2.5  1073.7

Pier Data
Pier Station     Upstream=19788.15    Downstream=19788.15
Upstream     num=       2
    Width   Elev    Width   Elev
     2.5 1042.15     2.5  1073.9
Downstream     num=       2
    Width   Elev    Width   Elev
     2.5 1042.15     2.5  1073.9

Pier Data
Pier Station     Upstream=19888.15    Downstream=19888.15
Upstream     num=       2
    Width   Elev    Width   Elev
     2.5  1043.8     2.5  1074.2
Downstream     num=       2
    Width   Elev    Width   Elev
     2.5  1043.8     2.5  1074.2

Pier Data
Pier Station     Upstream=19988.15    Downstream=19988.15
Upstream     num=       2
```

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    Width   Elev    Width   Elev
     2.5  1042.7     2.5  1074.2
Downstream     num=       2
    Width   Elev    Width   Elev
     2.5  1042.7     2.5  1074.2

Pier Data
Pier Station     Upstream=20088.15    Downstream=20088.15
Upstream     num=       2
    Width   Elev    Width   Elev
     2.5  1042.8     2.5  1073.9
Downstream     num=       2
    Width   Elev    Width   Elev
     2.5  1042.8     2.5  1073.9

Pier Data
Pier Station     Upstream=20189.45    Downstream=20189.45
Upstream     num=       2
    Width   Elev    Width   Elev
     2.5  1040.9     2.5  1073.7
Downstream     num=       2
    Width   Elev    Width   Elev
     2.5  1040.9     2.5  1073.7

Pier Data
Pier Station     Upstream=20288.15    Downstream=20288.15
Upstream     num=       2
    Width   Elev    Width   Elev
     2.5  1043.4     2.5  1073.3
Downstream     num=       2
    Width   Elev    Width   Elev
     2.5  1043.4     2.5  1073.3

Number of Bridge Coefficient Sets =  1

Low Flow Methods and Data
       Energy
       Momentum                Cd   =     1.2
       Yarnell                 KVal =    1.05
Selected Low Flow Methods = Highest Energy Answer

High Flow Method
       Energy Only

Additional Bridge Parameters
       Add Friction component to Momentum
       Add Weight component to Momentum
       Class B flow critical depth computations use critical depth
           inside the bridge at the upstream end
       Criteria to check for pressure flow = Upstream energy grade line

CROSS SECTION          RIVER: 1
REACH: 1                  RS: 213.25

INPUT
Description: 213.25
Station Elevation Data     num=      45
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
   17300  1071.7   17670    1072   17850  1073.6   18250  1075.5   19180  1078.2
 19488.1  1078.1 19488.2 1072.97 19495.2  1069.2 19517.2  1057.5 19564.2 1055.45
 19584.2  1051.3 19586.9    1051 19589.4    1051 19638.2  1048.1 19686.9  1047.3
 19689.4  1047.3 19704.2  1047.2 19743.2  1042.2 19786.9 1042.15 19789.4  1042.2
 19838.2  1042.8 19871.7  1042.9 19886.9 1043.85 19889.4  1043.8 19938.2  1044.1
 19986.9  1042.7 19989.4  1042.7 20038.2  1042.3 20086.9 1042.85 20089.4  1042.8
 20121.7  1043.3 20171.2 1041.05 20188.2  1040.9 20189.4  1040.9 20223.2  1040.4
 20248.7  1042.2 20286.9  1043.4 20289.4  1043.4 20307.7 1044.35 20382.7  1069.6
 20387.9  1070.4 20387.9  1072.9   20388 1078.19   20790  1078.3   21330  1075.5

Manning's n Values         num=       3
     Sta   n Val     Sta   n Val     Sta   n Val
   17300    .037 19488.2    .032 20387.9    .037

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
       19488.2 20387.9               121  123.36     121            .1       .3
Ineffective Flow     num=       2
   Sta L   Sta R    Elev   Sta L   Sta R    Elev
   17300 19488.2 1072.97 20387.9   21330  1070.4

CROSS SECTION          RIVER: 1
REACH: 1                  RS: 213.21

INPUT
Description: 213.21
```

Right Channel Bank Station Interpolated
Station Elevation Data num= 96

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
18330.9	1072.8	18364	1072.8	18412.8	1073.1	18447.9	1073	18475.1	1072.3
18506.2	1072	18530.5	1071.1	18588.6	1070	18604.7	1069.8	18607.3	1070
18638.6	1069.9	18645.2	1070	18646.8	1070	18647	1070	18648.3	1070
18679.6	1070.4	18691	1070.2	18696.8	1070.3	18826.1	1070.2	18853.1	1069.7
18879.8	1069.1	18990	1068.8	19004.3	1068.6	19030.8	1069	19071.8	1069.5
19171.4	1069.4	19189.5	1069.4	19238.8	1069.2	19251.2	1070	19253.8	1070
19283.8	1069	19284.7	1069	19384	1068.2	19385.3	1068.1	19387.8	1068.1
19391.2	1068.1	19421.7	1067.9	19486.6	1066.6	19490.3	1065.6	19518.8	1054.9
19533.4	1049	19535.9	1049.5	19545.6	1052	19551.4	1054.2	19576.8	1051.8
19595.9	1047.4	19611.2	1046.8	19618.6	1046.7	19619.1	1046.6	19626.3	1045.5
19627	1045.3	19697	1045.2	19802.7	1045.1	20377.2	1044.9	20380.6	1045
20387.2	1045.1	20389.8	1045.1	20418.5	1045.3	20484.9	1046.3	20500.9	1046.4
20506.4	1046.3	20545.8	1046.4	20547	1046.4	20573.1	1046	20581	1046
20584	1054.4	20584.6	1058.9	20634.9	1062.9	20654.9	1064.2	20663	1064.8
20687	1065.1	20732.3	1064.9	20749.5	1065.1	20761.2	1066	20787.8	1066.2
20803.3	1066.3	20840	1066.3	20853.8	1066.3	20900.8	1066.8	20929.7	1067.2
20948.4	1067.8	20957.7	1070.3	20963.6	1072.1	20965.8	1071.9	20972.5	1072.2
20980.1	1072.5	21025.3	1072.2	21041.7	1072.4	21049	1072.4	21083	1072.6
21094.6	1072.7	21137.7	1072.7	21224.3	1073.6	21258.5	1074.2	21274.1	1074.3
21278.4	1074.5								

Manning's n Values num= 3

Sta	n Val	Sta	n Val	Sta	n Val
18330.9	.037	19490.3	.032	20418.5	.037

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
19490.3	20418.5	450	531.57	745	.1	.3

Ineffective Flow num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
18330.9	19253.8	1074	20418.5	21278.4	1074

CROSS SECTION RIVER: 1
REACH: 1 RS: 213.11

INPUT
Description: 213.11
Station Elevation Data num= 85

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
17566.5	1070.1	17705.4	1071.3	17742.2	1071.6	17814.3	1070.1	17888.9	1069.6
17929.2	1069.8	17996.1	1072.7	18084.9	1073.4	18245.7	1073.1	18304.6	1073.3
18312.5	1071.8	18319.5	1069.3	18320.2	1069.1	18324.7	1069.1	18353.4	1069.6
18382.1	1068.8	18390	1068.3	18395.2	1069.2	18399.3	1071.7	18472.2	1071.2
18480.8	1071.2	18492.7	1070.4	18507.8	1070	18517.1	1069.2	18520.7	1069.6
18584	1071.9	18596.8	1072.2	18606	1072.4	18609.2	1072.4	18753.6	1072
18759.6	1071.8	18769.2	1073.7	18780.8	1075.5	18785.7	1075	18793.4	1074.4
18863.8	1073.8	18931.9	1074.1	18960.3	1074.3	18976.4	1074.4	19015.9	1075
19047.7	1075	19171.5	1072.4	19275.4	1071	19456	1071.1	19523.2	1069.3
19575	1067.9	19589.1	1068.3	19601.9	1071.4	19606.1	1072.1	19616.1	1067.5
19661.3	1047.6	20012.6	1047.6	20486.9	1047.9	20586.5	1081.1	20599.1	1086
20638.9	1086.2	20743.9	1086.8	20798.9	1087.3	20849	1087.5	20878.6	1087.6
20889.5	1087.8	20899.2	1087.8	20922	1087.5	21000.4	1087.3	21062.3	1085.9
21080.5	1084.4	21100.6	1083.3	21131.5	1083	21372.7	1078.3	21390.1	1077.6
21449.7	1073.9	21464.1	1073.6	21478.8	1073.9	21484.8	1073.8	21573.7	1073.9
21602.4	1073.9	21694.6	1073.6	21800.6	1072.4	21943.2	1070.8	22180.4	1070.9
22217.7	1071	22268.3	1071.4	22474.2	1073.6	22486.2	1076.3	22488.2	1077

Manning's n Values num= 3

Sta	n Val	Sta	n Val	Sta	n Val
17566.5	.037	19606.1	.032	20599.1	.037

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
19606.1	20599.1	425	459.38	565	.1	.3

Ineffective Flow num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
17566.5	18780.8	1087.8	20599.1	22488.2	1087.8

CROSS SECTION RIVER: 1
REACH: 1 RS: 213.03

INPUT
Description: 213.03
Station Elevation Data num= 97

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
16056.5	1068.9	16069.1	1068.8	16071.5	1068.8	16197.1	1069.2	16383.9	1070
16409	1070	16413.8	1070	16414.4	1070	16428.8	1070	16501.9	1070.2
16550	1070.3	16603.1	1070.5	16734.3	1069.9	16759	1069.9	16800.6	1069.5
16821.1	1069.8	16943.1	1070.1	16956.6	1070.5	16985.9	1070.6	17193.9	1070.8
17238.8	1069.8	17263.2	1069.3	17296.6	1068.7	17461.4	1069.1	17486.5	1069.2
17576.5	1069.4	17728.6	1070.6	17908.4	1072	17938.3	1071.6	17974.7	1070.1
17987.3	1069.9	18028.7	1068.5	18086.7	1069.1	18107.5	1068.9	18113.8	1068.9
18246.2	1068.5	18370.2	1068.2	18382.5	1068.2	18389	1068.3	18394.9	1068.3

18496	1070.4	18502.4	1070.5	18521.4	1070.6	18643.8	1071	18700.9	1071.3
18708.1	1071.2	18723.6	1071.3	18831.5	1070.9	18846.4	1070.8	18847.1	1070.8
18848.3	1070.8	18969.8	1071.4	19007.8	1071.8	19178.9	1073.7	19181.7	1073.7
19324.1	1073.1	19588.8	1066.9	19627.1	1066	19640.5	1066.2	19662.1	1067.2
19666.3	1067.8	19672.1	1066.574	19703.2	1060	19755.3	1050.7	19776.1	1048.9
19807.6	1047.8	19807.9	1047.8	19808.6	1047.8	19883.7	1046.8	19936.5	1046.7
19974.6	1046.7	20168.5	1046.8	20481.5	1047.5	20531.6	1047.5	20536.3	1047.6
20551.1	1052.6	20591.83	1066.575	20595.4	1067.8	20639.6	1083	20645.8	1085
20668.5	1085.5	20744.1	1085.4	20806.7	1086.1	20879.4	1082	20936.8	1078.5
20990.3	1075.5	21125.9	1073.2	21137.8	1072.9	21183.6	1072.1	21221	1072
21240.8	1071.7	21303.4	1071.3	21328.8	1071.1	21394.9	1071.7	21406.3	1071.8
21439	1071.7	21481.2	1071.9						

Manning's n Values num= 3

Sta	n Val	Sta	n Val	Sta	n Val
16056.5	.037	19672.1	.03	20591.83	.037

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
19672.1	20591.83		475	495 525	.1	.3

Ineffective Flow num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
16056.5	19178.9	1086.1	20645.8	21481.2	1086.1

CROSS SECTION RIVER: 1
REACH: 1 RS: 212.93

INPUT
Description: 212.93

Left and Right Channel Bank Stations Interpolated
Station Elevation Data num= 93

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
18913.7	1067.5	18940.6	1066.4	18961.6	1067.4	18996.4	1069.5	19034.7	1069.3
19121.7	1070.2	19158.8	1070.2	19269.6	1071.2	19362.4	1070.3	19381.3	1070.6
19412.2	1072.5	19420.1	1072.9	19430.8	1073.3	19436.5	1073.5	19633.3	1068.7
19645	1068.3	19645.7	1068.4	19645.9	1068.4	19653.4	1069	19673.1	1070.5
19690.76	1065.485	19697.4	1063.6	19757.3	1046.7	19779.3	1046.4	19826.6	1046.3
19850.5	1046.5	19924.2	1047.4	19928.9	1047.5	19929.5	1047.4	19958.7	1045.5
20129.7	1045.4	20271.7	1045.6	20345.4	1045.6	20426.9	1045.5	20489.75	1065.484
20489.8	1065.5	20498.7	1068.1	20501.4	1068	20587.1	1066.5	20637	1066.5
20655.9	1066.4	20685.9	1065.7	20749.1	1064.9	20804.3	1071.3	20847	1074.9
20872.4	1075.1	20941	1074.1	20990.9	1073	21005.7	1072.8	21075.3	1071.3
21079.7	1071.2	21083	1071.2	21113	1071.3	21246.3	1072.7	21249.5	1072.8
21261.8	1072.9	21268.5	1072.9	21332.8	1073.1	21571.4	1072.7	21590.1	1072.7
21815.9	1071.3	21853.1	1071.3	21982.5	1070.6	22017.6	1070.5	22314.9	1070
22499	1068.8	22548.8	1068.9	22568.2	1068.4	22648.5	1068.9	22948.3	1069.7
23054.9	1071.1	23121.6	1072	23140.9	1076.4	23143.5	1077.2	23151.2	1077.1
23159.2	1077	23162.2	1077.3	23171	1077.8	23179.9	1081.1	23202.7	1089.6
23248.6	1089.5	23303.8	1089.6	23327.8	1082.2	23331.1	1081	23333.2	1080.6
23345.9	1077.9	23350.9	1077.9	23361.3	1078.1	23377.6	1073.6	23386.3	1070.8
23389.2	1071	23392	1071.2	23394	1070.7				

Manning's n Values num= 3

Sta	n Val	Sta	n Val	Sta	n Val
18913.7	.037	19690.76	.03	20489.75	.037

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
19690.76	20489.75		495	501.9 535	.1	.3

Ineffective Flow num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
18913.7	19673.1	1078	20498.7	23394	1078

CROSS SECTION RIVER: 1
REACH: 1 RS: 212.84

INPUT
Description: 212.84

Left and Right Channel Bank Stations Interpolated
Station Elevation Data num= 66

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
16284.9	1068.4	16487.1	1068.9	16606	1069.3	16985	1071.2	17015.9	1071.4
17038.7	1071.8	17089.2	1071.1	17339.8	1070.2	17519.4	1069.1	17554.9	1069.1
17652.7	1069	17900.6	1068.7	18109.2	1068.8	18133.9	1069	19053.9	1067.7
19203.8	1066	19229.6	1065.8	19232.1	1065.8	19238.5	1065.7	19242.2	1065.7
19244.8	1065.8	19286.8	1067.4	19292.2	1069.2	19450.5	1067.9	19498.7	1067.5
19560.8	1067	19586	1066.9	19671.4	1066.8	19692.2	1068.3	19695.5	1068.9
19711.5	1063.544	19765.4	1045.5	19772.2	1043.1	19790.5	1043.1	19811.3	1043.2
20298.7	1043.5	20314.2	1050.2	20347.25	1063.544	20367.7	1071.8	20367.9	1071.8
20405.2	1072.8	20416.8	1072.7	20424.4	1072.7	20490.9	1070.9	20522.9	1069.8
20629.8	1070.1	20679.7	1070.1	20767.5	1070.4	20793.1	1070.2	20818.2	1069.1
20874.5	1068.7	20940.7	1070.4	20979.1	1070.3	21186.4	1069.3	21242.6	1069.1
21449.2	1070.2	21488.8	1070.8	21502.4	1071	21582.5	1070.9	21684.9	1071.4
21805.3	1070.7	21883.6	1070.5	21943.6	1070.2	22187.5	1070.4	22226.7	1070.2

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 22398.2  1069.8

Manning's n Values          num=       3
     Sta   n Val     Sta   n Val     Sta   n Val
 16284.9    .037 19711.5    .03220347.25    .037

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
       19711.520347.25              565  538.19     480            .1       .3
Ineffective Flow      num=       2
   Sta L   Sta R    Elev   Sta L   Sta R    Elev
 16284.9 19695.5  1072.8 20367.7 22398.2  1072.8

CROSS SECTION          RIVER: 1
REACH: 1                  RS: 212.74

INPUT
Description: 212.74

Left and Right Channel Bank Stations Interpolated
Station Elevation Data      num=      70
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
 15451.4  1067.1 15456.2  1067.3 15464.1  1067.8 15467.8  1068.3 15480.9  1067.9
 15619.6  1066.5 15997.3    1067 16142.7  1066.6   16235  1067.1 16317.5  1067.4
 16486.7  1067.9 16644.3  1068.2 16906.1  1067.7 17106.4  1067.8 17312.1  1069.3
 17351.4  1069.8 17392.8  1069.3 17578.5  1067.9   17799  1066.9 17906.3    1067
 18021.4  1067.4 18082.2  1066.6 18121.5  1067.1 18128.7    1067 19421.5    1067
 19430.3  1070.5 19440.7  1074.4 19464.5  1074.9 19479.6    1075 19498.8  1064.8
 19504.9  1062.5 19514.1  1062.5 19546.7  1062.8 19569.3    1066 19571.5  1066.5
 19577.2  1066.5 19641.5  1067.1 19653.8  1066.8 19678.6  1067.319690.611063.061
 19709.2  1056.5 19745.4  1042.1 19776.5  1041.9 20081.3  1041.6 20297.5  1041.8
 20311.1  1046.1   20335  1053.3 20367.21063.063 20372.6  1064.7 20387.5    1069
 20400.7    1069 20436.3    1069 20477.6  1068.5 20512.4  1068.7 20545.9  1068.9
 20612.1  1068.9 20630.4  1069.2 20677.9  1069.9 20719.8  1069.6 20764.1  1069.6
 20802.7  1069.4 20847.1  1068.9 20916.2  1069.1 20977.1  1068.7 21027.9  1068.8
 21126.4  1069.4   21156  1069.5 21203.9  1069.2 21326.9  1068.9 21421.2  1069.1

Manning's n Values          num=       3
     Sta   n Val     Sta   n Val     Sta   n Val
 15451.4    .03719690.61    .032 20367.2    .037

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
       19690.61 20367.2              296  242.17      66            .1       .3
Ineffective Flow      num=       2
   Sta L   Sta R    Elev   Sta L   Sta R    Elev
 15451.4 19678.6    1074 20387.5 21421.2    1074

CROSS SECTION          RIVER: 1
REACH: 1                  RS: 212.68

INPUT
Description: 212.68


            Upstream face of 7th Avenue bridge


Station Elevation Data      num=      34
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
   18325  1064.219130.38    106819307.91    1072 19492.8 1073.0319492.89 1066.21
19501.071063.02319567.36  1037.219595.08  1037.519600.27  1037.519645.74  1037.8
19703.33 1037.8819708.52 1037.8819721.94  1039.119780.83  1037.619790.36    1040
19811.58  1039.419816.77  1039.419829.76  1037.219839.72    103819878.26  1039.3
19919.83  1037.519925.02  1037.519977.41  1036.920028.08  1038.120033.27  1038.1
20064.88  1037.5 20130.11063.02520137.19  1065.820137.28 1072.6620407.73    1072
20615.57    106820641.55  1067.620780.11    106821568.17  1069.3

Manning's n Values          num=       3
     Sta   n Val     Sta   n Val     Sta   n Val
   18325    .03719501.07    .032 20130.1    .037

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
       19501.07 20130.1              155  153.01     155            .1       .3
Ineffective Flow      num=       2
   Sta L   Sta R    Elev   Sta L   Sta R    Elev
   1832519492.89 1066.2120137.1921568.17  1065.8

BRIDGE                 RIVER: 1
REACH: 1                  RS: 212.675

INPUT
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Description: 7th Avenue Bridge
Distance from Upstream XS =        0
Deck/Roadway Width        =   153.01
Weir Coefficient          =      2.6
Bridge Deck/Roadway Skew  =
Upstream  Deck/Roadway Coordinates
    num=      11
     Sta Hi Cord Lo Cord     Sta Hi Cord Lo Cord     Sta Hi Cord Lo Cord
   18325  1064.2  1064.219130.38    1068    106819307.91    1072    1072
 19492.8 1073.03 1073.0319492.89 1073.03 1066.2119595.08  1073.9 1067.07
19703.34 1074.35 1067.5219811.58 1074.48 1067.6419925.02 1074.24 1067.41
20033.27  1073.6 1066.7620137.19 1072.66 1065.84

Upstream Bridge Cross Section Data
Station Elevation Data    num=      34
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
   18325  1064.219130.38    106819307.91    1072 19492.8 1073.0319492.89 1066.21
19501.071063.02319567.36  1037.219595.08  1037.519600.27  1037.519645.74  1037.8
19703.33 1037.8819708.52 1037.8819721.94  1039.119780.83  1037.619790.36    1040
19811.58  1039.419816.77  1039.419829.76  1037.219839.72    103819878.26  1039.3
19919.83  1037.519925.02  1037.519977.41  1036.920028.08  1038.120033.27  1038.1
20064.88  1037.5 20130.11063.02520137.19  1065.820137.28 1072.6620407.73    1072
20615.57    106820641.55  1067.620780.11    106821568.17  1069.3

Manning's n Values        num=       3
     Sta   n Val     Sta   n Val     Sta   n Val
   18325    .03719501.07    .032 20130.1    .037

Bank Sta: Left   Right    Coeff Contr.   Expan.
      19501.07 20130.1            .1       .3
Ineffective Flow     num=       2
   Sta L   Sta R    Elev   Sta L   Sta R    Elev
   183219492.89 1066.2120137.1921568.17  1065.8

Downstream  Deck/Roadway Coordinates
    num=      11
     Sta Hi Cord Lo Cord     Sta Hi Cord Lo Cord     Sta Hi Cord Lo Cord
   18325  1064.2  1064.219130.38    1068    106819307.91    1072    1072
 19492.8 1073.03 1073.0319492.89 1073.03 1066.2119595.08  1073.9 1067.07
19703.34 1074.35 1067.5219811.58 1074.48 1067.6419925.02 1074.24 1067.41
20033.27  1073.6 1066.7620137.19 1072.66 1065.84

Downstream Bridge Cross Section Data
Station Elevation Data    num=      34
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
   18325  1064.219130.38    106819307.91    1072 19492.8 1073.0319492.89 1066.21
19502.331062.53319567.36  1037.219595.08  1037.519600.27  1037.519645.74  1037.8
19703.33 1037.8819708.52 1037.8819721.94  1039.119780.83  1037.619790.36    1040
19811.58  1039.419816.77  1039.419829.76  1037.219839.72    103819878.26  1039.3
19919.83  1037.519925.02  1037.519977.41  1036.920028.08  1038.120033.27  1038.1
20064.88  1037.520128.841062.53220137.19  1065.820137.28 1072.6620407.73    1072
20615.57    106820641.55  1067.620780.11    106821568.17  1069.3

Manning's n Values        num=       3
     Sta   n Val     Sta   n Val     Sta   n Val
   18325    .03719502.33    .03220128.84    .037

Bank Sta: Left   Right    Coeff Contr.   Expan.
      19502.3320128.84            .1       .3
Ineffective Flow     num=       2
   Sta L   Sta R    Elev   Sta L   Sta R    Elev
   183219492.89 1066.2120137.1921568.17  1065.8

Upstream Embankment side slope              =        horiz. to 1.0 vertical
Downstream Embankment side slope            =        horiz. to 1.0 vertical
Maximum allowable submergence for weir flow =     .95
Elevation at which weir flow begins         =
Energy head used in spillway design         =
Spillway height used in design              =
Weir crest shape                            = Broad Crested

Number of Piers =  5

Pier Data
Pier Station     Upstream=19597.67    Downstream=19597.67
Upstream     num=       2
    Width   Elev    Width   Elev
     4.8    1036     4.8    1068
Downstream     num=       2
    Width   Elev    Width   Elev
     4.8    1036     4.8    1068

Pier Data
Pier Station     Upstream=19705.06    Downstream=19705.06
```

```
Upstream     num=       2
    Width   Elev    Width   Elev
     4.8    1036     4.8    1068
Downstream     num=       2
    Width   Elev    Width   Elev
     4.8    1036     4.8    1068

Pier Data
Pier Station     Upstream=19814.17    Downstream=19814.17
Upstream     num=       2
    Width   Elev    Width   Elev
     4.8    1036     4.8    1068
Downstream     num=       2
    Width   Elev    Width   Elev
     4.8    1036     4.8    1068

Pier Data
Pier Station     Upstream=19922.42    Downstream=19922.42
Upstream     num=       2
    Width   Elev    Width   Elev
     4.8    1036     4.8    1068
Downstream     num=       2
    Width   Elev    Width   Elev
     4.8    1036     4.8    1068

Pier Data
Pier Station     Upstream=20030.67    Downstream=20030.67
Upstream     num=       2
    Width   Elev    Width   Elev
     4.8    1036     4.8    1068
Downstream     num=       2
    Width   Elev    Width   Elev
     4.8    1036     4.8    1068

Number of Bridge Coefficient Sets =  1

Low Flow Methods and Data
       Energy
       Momentum                Cd   =     1.2
       Yarnell                 KVal =    1.05
Selected Low Flow Methods = Highest Energy Answer

High Flow Method
       Energy Only

Additional Bridge Parameters
       Add Friction component to Momentum
       Add Weight component to Momentum
       Class B flow critical depth computations use critical depth
           inside the bridge at the upstream end
       Criteria to check for pressure flow = Upstream energy grade line

CROSS SECTION          RIVER: 1
REACH: 1                  RS: 212.67

INPUT
Description: 212.67

Left and Right Channel Bank Stations Interpolated
Station Elevation Data     num=      34
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
   18325  1064.219130.38    106819307.91    1072 19492.8 1073.0319492.89 1066.21
19502.331062.53319567.36  1037.219595.08  1037.519600.27  1037.519645.74  1037.8
19703.33 1037.8819708.52 1037.8819721.94  1039.119780.83  1037.619790.36    1040
19811.58  1039.419816.77  1039.419829.76  1037.219839.72    103819878.26  1039.3
19919.83  1037.519925.02  1037.519977.41  1036.920028.08  1038.120033.27  1038.1
20064.88  1037.520128.841062.53220137.19  1065.820137.28 1072.6620407.73    1072
20615.57    106820641.55  1067.620780.11    106821568.17  1069.3

Manning's n Values         num=       3
     Sta   n Val     Sta   n Val     Sta   n Val
   18325    .03719502.33    .03220128.84    .037

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
      19502.3320128.84              481  557.08     901             .1       .3
Ineffective Flow     num=       2
   Sta L   Sta R    Elev   Sta L   Sta R    Elev
   1832519492.89 1066.2120137.1921568.17  1065.8

CROSS SECTION          RIVER: 1
REACH: 1                  RS: 212.56

INPUT
Description: 212.56
```

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Left and Right Channel Bank Stations Interpolated
Station Elevation Data     num=      84
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
 18526.6  1067.7 18605.6  1068.5 18672.9  1069.1 18686.4    1060 19108.7  1062.5
 19147.3  1066.2 19151.5  1066.4 19161.7  1067.6 19184.3  1068.9 19238.8  1068.8
 19249.1  1068.8 19264.6    1065 19289.8  1059.5   19333  1060.5 19374.1  1060.3
 19381.8  1063.3 19405.9  1071.5 19420.1  1070.7 19427.9  1069.3 19436.8    1069
 19464.9  1070.8   19474  1071.7 19488.9  1073.8 19506.5  1072.1 19530.4  1065.8
   19539  1066.2   19604  1065.9 19607.1  1065.3 19613.7  1065.3 19619.1  1065.7
 19619.8  1066.4 19637.7    1068 19655.3  1067.8 19692.8  1068.819731.051056.917
 19757.5  1048.7 19785.4  1039.9   19929  1039.8 20217.8  1039.320252.141056.916
   20264    1063 20269.6  1061.5 20279.7  1059.4 20318.1  1058.6 20372.9  1059.3
 20398.1  1060.1 20425.6  1066.2 20438.5  1062.1 20445.5  1059.5 20451.6  1056.8
 20575.6  1077.4 20581.9  1078.8 20601.9  1079.3 20671.6  1080.6 20698.7  1080.1
 20732.1  1079.9 20755.7  1079.5 20791.2  1077.6 20834.9  1075.6 20892.5  1079.5
   20896  1079.6 20938.4  1078.1 20958.4  1077.9 21004.8  1078.7 21029.1  1078.1
 21101.8  1077.3 21144.7  1078.4 21165.1  1078.9 21203.3  1079.8 21236.8  1080.1
   21329  1071.7 21351.9  1069.5 21384.8  1066.8 21396.7    1060 21632.6    1060
 21640.1  1063.9 21686.7  1065.4 21688.1  1065.4 21734.9  1066.2 21757.8  1066.7
 21833.3  1068.7 21846.1  1068.8 21931.4  1069.9 21952.1    1069

Manning's n Values         num=       3
     Sta   n Val     Sta   n Val     Sta   n Val
 18526.6    .03719731.05    .03220252.14    .037

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
      19731.0520252.14              495  502.71     525              .1       .3
Ineffective Flow     num=       2
   Sta L   Sta R    Elev   Sta L   Sta R    Elev
 18526.6 19692.8    1078   20301 21952.1    1078

CROSS SECTION          RIVER: 1
REACH: 1                  RS: 212.46

INPUT
Description: 212.46

Left and Right Channel Bank Stations Interpolated
Station Elevation Data     num=      66
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
 18753.5  1067.1 18827.8  1067.7 18877.5  1068.2 18898.4    1055 19357.3  1055.1
 19382.1  1053.4   19409  1053.9 19429.7  1053.3 19445.8  1054.1 19481.5  1054.3
   19531  1052.9 19550.5  1054.6 19656.6    1055 19684.4  1069.8   19700  1067.4
 19714.7  1067.819743.341056.289 19787.6  1038.5 19877.7  1038.3 20214.4  1037.2
 20270.9  1039.9 20290.3  1040.2   203011040.331 20380.4  1041.3 20415.6  1048.6
 20422.7  1048.9 20436.9  1047.2 20446.3  1048.4 20484.2  1055.6 20494.5    1057
 20510.9  1057.5 20553.9  1062.4 20563.5    1064 20616.9  1070.3 20661.5  1072.5
 20691.8  1074.7 20705.2  1075.2 20771.8  1073.9 20836.5  1073.6 20841.8  1073.2
 20893.4  1072.8 20932.3  1068.7 20999.5  1072.8 21028.4    1074 21091.5  1069.7
 21143.4  1069.4 21187.1  1070.2 21222.4  1071.9 21234.8  1070.7 21242.4  1070.9
 21265.3  1070.2 21277.9  1069.2   21302  1065.4 21326.5  1063.3 21392.1  1057.4
 21427.4  1052.9 21482.8  1061.6 21523.6  1061.6 21591.7  1061.2 21609.9  1060.7
 21657.5  1061.6   22674    1062 22695.3  1072.2 22728.6  1064.6 22746.1  1064.3
 22917.1  1063.8

Manning's n Values         num=       3
     Sta   n Val     Sta   n Val     Sta   n Val
 18753.5    .03719743.34    .032   20301    .037

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
      19743.34   20301              495  497.81     510              .1       .3
Ineffective Flow     num=       2
   Sta L   Sta R    Elev   Sta L   Sta R    Elev
 18753.5 19684.4  1075.2   20301 22917.1  1075.2

CROSS SECTION          RIVER: 1
REACH: 1                  RS: 212.37

INPUT
Description: 212.37

Left and Right Channel Bank Stations Interpolated
Station Elevation Data     num=      53
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
 18816.9  1066.3 18818.6  1066.2 18822.9  1066.3   18834  1066.3 18957.9    1066
 18989.9  1065.8   19000  1065.6 19036.9  1065.2 19054.2  1064.9 19092.2  1064.1
 19112.5  1063.4 19137.4  1064.7 19138.3  1064.8 19139.3  1064.8 19195.1  1066.9
 19209.3    1061 19668.8    1061 19681.7  1066.2 19684.6  1067.4 19684.8  1067.3
 19685.1  1067.2 19692.2  1064.6 19715.3    1065 19717.4  1065.1 19722.1  1063.2
19744.061053.778 19782.7  1037.2 19926.2  1036.9 20272.4  1037.1 20284.2  1036.6
 20285.4  1036.6 20288.8  1038.620320.691053.776 20338.6  1062.3 20338.7  1062.3
 20369.5  1065.2 20396.5  1069.4 20454.4  1070.1 20471.3  1070.1 20508.4    1061
 22070.8    1061 22075.2  1062.9 22088.8  1064.3 22125.1  1067.6 22147.7  1068.9
```

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 22155.8  1069.3 22177.3  1071.8 22222.4  1065.3 22242.6  1063.6 22252.8  1063.9
 22275.2  1064.6 22382.7  1065.6 22407.8  1066.1

Manning's n Values        num=       3
     Sta   n Val     Sta   n Val     Sta   n Val
 18816.9    .03719744.06    .03220320.69    .037

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
      19744.0620320.69              500  495.84     485             .1       .3
Ineffective Flow     num=       2
   Sta L   Sta R    Elev   Sta L   Sta R    Elev
 18816.9 19684.6    1070 20396.5 22407.8    1070

CROSS SECTION          RIVER: 1
REACH: 1                  RS: 212.27

INPUT
Description: 212.27

Left and Right Channel Bank Stations Interpolated



Station Elevation Data     num=      95
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
 17693.1  1064.6 17697.9  1064.6 17734.8    1064 17740.4  1063.9 17785.6  1063.1
 17796.2  1063.1 17827.6  1062.5 17846.2  1062.4 17893.5  1062.2 18008.4  1061.5
 18061.8  1061.5 18108.5  1062.4 18180.8  1062.8 18221.3    1063 18239.7    1059
 18264.8  1054.5 18285.2    1054 18326.7  1048.1 18342.3  1046.2 18362.6  1053.4
 18380.3  1046.2 18395.3  1042.4 18405.4    1039 18415.2  1036.5 18431.2  1031.5
 18465.3  1023.5 18544.4  1025.1 18579.3  1015.6 18586.4  1013.2 18615.7    1013
 18649.7    1013 18693.4  1012.9 18782.3  1012.3 18931.2  1012.8 18976.1  1012.6
 18981.9  1012.7   19083  1012.1   19110  1012.1 19284.8  1012.2 19302.3  1012.4
 19314.3    1019 19342.1  1028.5 19385.1  1048.2 19442.6  1044.9 19457.4  1044.6
 19509.8  1062.9 19515.4    1063   19561  1063.7 19676.4  1065.419715.251052.334
 19754.6  1039.1 19765.4  1035.4 19935.2  1035.2 20003.5  1035.2 20097.2  1035.1
 20281.9  1035.120330.351052.334   20337  1054.7   20351  1059.5 20416.4  1037.6
   20457  1023.9 20721.5  1023.4 20766.6  1022.9 20810.1  1022.2 20848.4  1021.5
 20878.3  1023.7 20909.5  1025.8 20935.1  1026.2 20970.3  1026.8   20984  1027.2
 21016.1    1028 21073.4  1026.9 21105.5  1026.6 21138.2  1026.2 21189.1  1025.7
 21190.6  1025.7 21248.8  1040.7 21294.4  1051.5 21328.2  1059.6 21333.8  1060.2
 21373.3  1067.4 21415.5  1061.7 21426.9  1059.4 21439.1  1056.3 21473.7    1050
 21501.4  1044.9 21538.1  1038.9 21543.5  1037.9 21579.4  1046.2 21617.1  1054.3
 21626.5  1056.1 21660.7    1060 21745.2  1060.6 21930.8  1061.7 21968.2  1061.7

Manning's n Values        num=       3
     Sta   n Val     Sta   n Val     Sta   n Val
 17693.1    .04519715.25    .03320330.35     .04

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
      19715.2520330.35              510     495     475             .1       .3
Ineffective Flow     num=       2
   Sta L   Sta R    Elev   Sta L   Sta R    Elev
 17693.1 19676.4  1065.4   20351 21968.2  1059.5

CROSS SECTION          RIVER: 1
REACH: 1                  RS: 212.18

INPUT
Description: 212.18

Left and Right Channel Bank Stations Interpolated
Station Elevation Data     num=      87
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
16867.12  1065.216906.93 1063.9117072.69 1063.6217369.21 1062.4817505.56 1062.52
17612.28  1062.917794.36 1062.3317881.75 1062.5817916.47 1062.3217948.21 1065.69
18039.48  1010.818149.75 1011.6918168.39 1016.6418177.08  1014.6   18188 1020.06
18220.51  1027.218252.71 1039.3418269.64 1041.1618292.43  1036.718335.96 1016.75
18454.36  1016.218568.19 1014.7218633.81 1016.1118764.91 1017.4618823.95 1017.09
19046.22  1017.719156.65 1019.3719198.34 1018.4419223.89 1018.4919248.34 1016.23
19311.18  1015.1 19393.8 1012.98   19433 1012.5219464.03 1021.8119488.46  1011.1
19574.96  1010.619614.98 1037.4219649.87 1059.81 19685.1 1058.8119706.851050.309
19749.09  1033.819960.28 1030.820229.47 1031.720272.48 1032.6720319.31 1039.88
20334.571050.30720340.72 1054.5120354.62 1060.320472.17 1061.55 20523.7 1061.62
20551.86 1053.0420622.11 1048.820687.56 1052.220928.11 1055.2921136.97 1058.41
21257.08 1058.6921362.76 1060.7121646.22 1067.221858.08 1068.1122054.43 1067.43
22158.98 1065.9622243.23 1064.32 22279.9 1062.822295.67 1065.5922307.88 1060.91
22324.63 1061.3922394.01 1058.4322480.34 1058.922555.28 1058.9222720.83 1059.92
22855.27 1061.5422949.17 1061.4922974.76    1060 23021.3  1058.523070.19 1058.44
23114.11 1060.29 23152.9 1060.0823260.95 1061.423486.25 1061.0523586.41 1061.15
23621.07 1061.4723789.79 1060.3723929.16 1060.4 24034.7  1061.824176.57 1062.42
24281.11 1062.3324460.33 1061.22
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Manning's n Values          num=       3
     Sta   n Val     Sta   n Val     Sta   n Val
16867.12    .04519706.85    .03320334.57     .04

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
      19706.8520334.57              500  502.53     485            .1        .3
Ineffective Flow      num=       2
   Sta L   Sta R    Elev   Sta L   Sta R    Elev
16867.1219649.87    1068 20523.724460.33    1068

CROSS SECTION          RIVER: 1
REACH: 1                  RS: 212.08

INPUT
Description: 212.08

Left and Right Channel Bank Stations Interpolated
Station Elevation Data     num=      101
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
 17052.4  1065.117093.98  1063.217330.91 1062.5917423.14 1062.2117562.97 1062.23
17854.31     106117952.67 1061.3917989.42  1061.1 18003.9 1064.7218053.78 1032.77
18092.97  1010.318121.67 1010.4218204.85 1011.4918218.51 1014.5318400.47 1013.68
18430.19  1013.718591.23 1012.7318717.39 1012.5518827.36 1012.71 18982.9 1014.44
19125.21  1014.119158.95 1014.27 19197.5 1013.7219237.59 1014.0519246.24 1012.73
19261.95  1013.819287.74 1011.5219294.56 1009.4419377.18 1009.8819458.03 1009.79
19560.86  1055.919603.52 1052.7719676.09 1052.9419681.091050.10619689.85 1045.14
19720.06 1031.7419729.83  1028.619835.59 1026.9819956.58 1026.4520018.74 1026.48
20046.86 1026.7120134.08  1025.920179.54 1025.9920234.17 1026.6520245.73 1033.13
20270.89  1050.120275.07 1052.9220290.81  1060.920335.45 1060.3720383.25 1044.65
20424.79 1044.3820442.88 1052.7920545.79  1055.720813.04 1061.3820956.27 1063.95
21082.72 1065.9821252.33 1068.1621359.98  1067.921436.79 1067.7621473.77 1066.77
21529.98 1066.4821607.29  1070.321676.41  1072.821730.28 1073.8421923.53 1073.03
22030.61 1073.7622091.57 1073.1322182.24  1073.622303.01 1072.0522453.89 1069.64
22595.45 1068.2222755.09 1066.8622966.16  1063.923129.47 1061.46 23222.4 1059.05
23255.36 1058.6423268.74 1055.5123278.67  1058.323295.59 1055.5423328.26  1058.3
23417.52  1058.423428.87  1058.123519.64  1059.323868.62 1059.1724082.28 1059.08
24280.77 1060.1224441.84 1061.9124594.59  1060.924688.74 1061.7424871.91 1061.24
 24970.8 1060.3325012.15 1058.2625172.94  1060.8 25399.4 1060.1425629.95 1059.85
25800.17 1059.4125815.84 1060.0725861.96  1079.725884.17 1080.2625963.83 1080.96
26004.82 1061.65

Manning's n Values          num=       3
     Sta   n Val     Sta   n Val     Sta   n Val
 17052.4    .04519681.09    .03320270.89     .04

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
      19681.0920270.89              510  519.85     475            .1        .3
Ineffective Flow      num=       2
   Sta L   Sta R    Elev   Sta L   Sta R    Elev
 17052.419560.86    1078 20290.826004.82    1078

CROSS SECTION          RIVER: 1
REACH: 1                  RS: 211.99

INPUT
Description: 211.99

Left and Right Channel Bank Stations Interpolated
Station Elevation Data     num=       97
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
17386.75     106217493.12 1060.3617883.55  1058.918026.04 1059.0818043.61 1064.43
18128.52  1011.918212.07 1010.04 18284.3 1009.4118375.77 1031.9918386.79 1034.99
18398.32  1031.618455.15 1010.4218634.29 1010.1518715.79 1026.1718726.98 1025.43
18746.82  1028.918793.14 1039.1118826.55 1047.2218835.49 1050.27 18880.3 1056.14
18928.65  1059.619023.07 1060.4719122.51 1058.69 19147.6 1056.9819172.92  1053.9
19222.57  1059.719306.36 1064.7519387.36 1066.2619419.32 1065.7319467.92  1063.3
19535.53  1055.9 19579.8  1052.519594.04 1050.0119626.09 1059.7519669.23 1060.17
19682.93  1052.119695.13  1051.719699.771048.63219734.91 1025.3919968.68 1025.66
 20018.4     102620129.78  1025.520175.87 1025.6620205.91  1027.820236.81 1047.09
20249.651048.632 20249.8 1048.6520268.39  1059.720319.37 1059.4520355.66 1049.61
20366.72 1051.1620380.34 1056.3120536.66  1059.720697.58 1062.9120861.07 1067.46
20969.05  1071.421086.46 1074.5421220.77  1077.821348.89 1078.3521519.24 1075.76
21606.23 1073.4221740.53 1069.1421834.91     106821936.77 1071.0222068.74 1077.26
22189.17 1082.4922398.45 1089.6222486.87  1090.322515.75 1089.9422616.83 1085.49
22698.81 1083.4322757.86 1080.0622899.81  1069.523059.97  1066.123300.96 1061.35
23457.95 1059.0923578.87 1055.29 23592.8  1052.823611.42  1057.123707.16 1057.71
23758.72 1057.8423837.72 1057.31    23902 1056.223950.13 1056.5724182.97 1056.91
24332.01 1056.0724582.04 1056.0124636.44     105924704.95 1057.5324865.28 1057.45
24966.74 1058.31 24996.3 1059.9325064.88  1059.825072.86 1059.0925171.62 1057.94
25224.27 1057.7525467.18 1058.61

Manning's n Values          num=       3
     Sta   n Val     Sta   n Val     Sta   n Val
```

```
17386.75     .04519699.77     .03320249.65      .04

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
      19699.7720249.65                740  489.19     710            .1       .3
Ineffective Flow      num=       2
   Sta L   Sta R    Elev   Sta L   Sta R    Elev
17386.7519669.23     1078 20268.325467.18     1078

CROSS SECTION          RIVER: 1
REACH: 1                  RS: 211.89

INPUT
Description: 211.89

Left and Right Channel Bank Stations Interpolated
Station Elevation Data     num=      95
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
17673.64  1059.917830.52  1057.818075.45 1057.5918106.59 1061.3918156.21 1060.92
18181.64     105718268.15  1057.418570.49 1056.27 18656.7 1057.3718734.79  1059.4
18854.83  1058.1 18903.9 1058.6218933.75 1056.2618954.51  1054.319026.15 1059.53
19074.67  1064.519130.02 1067.6619166.92 1067.8219220.33 1064.2519291.97 1056.93
19339.05  1053.2 19355.5 1049.4119383.94 1051.7719506.58 1049.7319568.03 1052.09
19611.95  1052.419640.96 1059.4519668.79 1059.3319685.751048.02319719.16 1025.75
19877.45 1024.19   19996  1024.820046.95 1024.9420149.18 1025.3420215.53 1026.87
20231.37 1035.8620250.74 1048.0220268.71  1059.320317.76 1059.25 20347.9 1053.02
20357.11 1053.8720365.64 1057.4620503.92  1061.220587.79 1062.3220715.42 1064.82
20808.25 1066.4820898.25 1068.17 21050.2    107021240.42  1069.721365.85 1067.31
21444.39 1066.6721597.69 1066.8121747.36  1066.621837.61 1066.0122018.21 1062.79
22078.36 1061.7622206.84  1065.222377.75  1068.122579.85 1068.7522814.63 1068.78
22947.07 1067.96 23029.4 1068.0923191.51  1066.423528.26  1059.523662.78 1056.72
23775.83 1055.5423829.73 1054.1523844.87  1051.223876.82 1056.0923920.99     1057
23995.44 1056.4724052.85  1056.124082.77  1056.624140.98 1058.2724165.07 1058.25
24271.91 1056.4524411.05 1053.1724579.36  1053.324759.09 1054.04 24774.1 1055.28
24840.04 1057.6924883.78 1058.2624920.88  1055.825041.94 1055.2925284.44  1056.1
25336.01 1057.1325359.39 1058.3225402.51  1057.3 25726.4 1058.2326172.96 1058.11
 26295.6  1059.626333.92 1078.1726470.33  1078.826504.14  1058.926569.17 1059.94

Manning's n Values         num=       3
     Sta   n Val     Sta   n Val     Sta   n Val
17673.64    .04519685.75    .03320250.74      .04

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
      19685.7520250.74                507  527.46     640            .1       .3
Ineffective Flow      num=       2
   Sta L   Sta R    Elev   Sta L   Sta R    Elev
17673.6419640.96     1068 20268.726569.17     1068

CROSS SECTION          RIVER: 1
REACH: 1                  RS: 211.79

INPUT
Description: 211.79

Left and Right Channel Bank Stations Interpolated
Station Elevation Data     num=      85
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
18158.31  1058.118521.37 1057.9218711.98 1053.2918821.22 1049.9719332.48  1038.9
 19421.9  1034.719443.13 1034.6819494.83 1031.4519529.82 1033.8919593.73 1053.47
19613.84  1059.219631.93 1059.1219649.871047.18219683.64 1024.7119868.29 1023.84
19990.11 1024.4520071.01  1024.2   20181 1025.03 20210.4 1042.5420217.711047.186
20234.96 1058.1520266.77 1058.9620288.34  1058.220317.07 1049.6420327.91 1051.41
20334.62 1054.8620544.02 1058.1120748.52  1061.320960.89 1062.1921136.74 1063.31
21355.67 1062.99 21514.2 1062.9221680.46  1061.621736.21 1061.7621809.47 1060.69
21912.92 1059.5422164.31 1055.8622183.26  1055.422365.65 1059.3522456.33 1059.66
22607.29 1061.0722697.85 1061.2422757.13    106222877.22 1061.9822997.38 1061.21
23058.71 1061.6923238.58 1060.2923378.99  1059.623483.49 1059.3723694.55 1056.44
23766.47 1056.3523904.99 1053.8723939.63  1052.523954.41 1049.7323974.63 1054.92
24066.57 1057.0124104.95 1055.7224159.03  1054.924203.29 1053.77 24226.8 1054.13
24410.42 1054.11 24588.5 1054.8124806.33  1056.924857.28 1056.9224892.35 1056.25
 24937.4 1056.2724992.53 1057.9125025.07  1054.525154.69 1054.6325336.45 1057.87
25508.23 1059.0125689.64 1058.1825912.41  1058.826025.53 1058.4626235.18 1058.51
26315.33     105826360.96 1059.1426386.48  1071.426401.46 1071.61 26423.9  1078.8
26526.56 1078.9226547.02 1071.3226569.39  1067.826599.18 1058.2826670.85 1059.87

Manning's n Values         num=       3
     Sta   n Val     Sta   n Val     Sta   n Val
18158.31    .04519649.87    .03320217.71      .04

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
      19649.8720217.71                680  450.74     290            .1       .3
Ineffective Flow      num=       2
   Sta L   Sta R    Elev   Sta L   Sta R    Elev
18158.3119613.84     1068 20266.726670.85     1068
```

```
CROSS SECTION          RIVER: 1
REACH: 1                  RS: 211.71

INPUT
Description: 211.71

Left and Right Channel Bank Stations Interpolated
Station Elevation Data     num=      82
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
18356.24  1056.618403.32 1056.5118836.53 1046.2619011.11 1054.3319170.81  1053.8
19462.94  1052.519478.82 1053.0919497.62 1060.06   19533 1043.2819551.37 1045.32
19595.29     105919611.46 1057.8119628.43 1046.4719661.32 1024.4919846.96 1023.81
19928.43 1023.1919998.17  1023.220045.76 1023.2120158.51 1023.3920197.84 1046.47
20216.14 1057.2120266.22 1057.7620314.99  1042.620325.03 1043.14 20337.2 1046.87
20568.24 1050.2520851.05 1051.3120962.88  1051.521206.35 1051.6421388.45 1051.42
21419.92 1051.2321727.44 1052.6221848.61  1053.521981.25 1052.7822130.55 1052.51
22220.26 1051.5322459.24 1054.3422578.82  1055.122876.18 1055.9323025.66 1056.21
23117.46 1056.8923238.24 1055.61 23357.2  1054.623446.32 1054.2323535.13 1054.99
23685.75 1053.2823748.15 1053.5423836.62  1056.423904.67 1055.7524029.98 1052.16
24046.15  1048.724064.65 1054.8424297.11  1054.624417.85 1054.0824709.66 1055.58
 24914.5 1057.2724949.53 1057.2425042.76  1055.725080.42 1056.7725117.12  1053.8
25243.64 1054.8825321.41 1057.3325361.74     105825507.43 1059.54 25610.8 1058.49
25724.65 1059.9825796.42 1060.0825841.82  1059.625987.23  1060.326062.01 1060.39
26081.09 1058.8926241.81 1058.1126377.22  1057.126422.65 1058.2926467.41 1067.88
26493.74 1078.7726570.07 1078.7926595.33    1080 26627.3 1065.29 26661.5 1058.87
26693.27 1058.2226725.34 1059.01

Manning's n Values         num=       3
     Sta   n Val     Sta   n Val     Sta   n Val
18356.24    .04519628.43    .03320197.84     .04

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
      19628.4320197.84              780  392.06     500             .1       .3
Ineffective Flow     num=       2
   Sta L   Sta R    Elev   Sta L   Sta R    Elev
18356.24 19595.3    1068 20266.226725.34    1068

CROSS SECTION          RIVER: 1
REACH: 1                  RS: 211.64

INPUT
Description: 211.63

Left and Right Channel Bank Stations Interpolated
Station Elevation Data     num=      74
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
18455.22  1055.618870.41 1054.6119083.17 1054.4919308.22 1054.2519426.55 1053.86
 19582.2  1054.119594.16 1050.2119604.79 1050.3319629.34 1057.4119639.51  1057.5
 19657.71045.60119689.19     102519804.58  1023.319911.42 1022.65 19986.5 1022.75
20036.19 1022.9320060.82  1023.620181.08 1022.5820196.63 1031.17 20219.81045.602
20238.13 1057.0220265.94 1057.5920288.34  1056.820321.05 1046.9420343.65 1039.08
20371.71 1043.95 20510.4 1045.0120712.01  1046.120789.36 1046.9121038.61 1047.48
21208.66 1048.1421454.04 1047.8221685.69  1048.521805.81 1048.0822092.18 1048.45
22242.98 1048.2222332.89 1048.1922513.12  1050.222770.05 1051.0723054.32  1051.7
23295.42 1051.6523472.95 1051.1123700.42  1052.523820.77 1054.7623926.54 1054.04
23949.21 1052.3623981.01 1052.4624008.88  1047.424037.13 1053.1124090.43 1054.01
24133.79 1054.5824302.75 1054.0624347.21  1053.624484.04     105424904.87 1055.84
 25102.6 1055.6325165.57 1054.9925293.65  1054.325400.67 1057.0625522.25 1059.22
25597.17 1058.4125713.85 1057.9825824.69  1060.625850.02 1060.9225980.05 1061.02
26040.31 1060.2826085.96 1060.1626115.36  1058.626378.37 1057.1726385.52 1058.22
26496.95 1078.6826605.38 1079.6726703.24  1058.126712.22 1058.41

Manning's n Values         num=       3
     Sta   n Val     Sta   n Val     Sta   n Val
18455.22    .045 19657.7    .033 20219.8     .04

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
       19657.7 20219.8              481  521.13     221             .1       .3
Ineffective Flow     num=       2
   Sta L   Sta R    Elev   Sta L   Sta R    Elev
18455.2219639.51    1068 20265.926712.22    1068

CROSS SECTION          RIVER: 1
REACH: 1                  RS: 211.54

INPUT
Description: 211.54



Station Elevation Data     num=      24
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
```

```
   18557    105619498.08 1062.8819570.11  1056.919585.13  1056.719633.01  1023.1
19866.76  1021.920100.43  1023.220148.29  1056.820163.32    105720195.23  1056.3
 20223.6  1049.320265.59  1046.120326.25  1049.420339.59  1050.820360.21  1052.5
20374.03  1055.420382.33  1055.9 20385.6  1055.9 20412.1  1057.320434.96  1056.7
20443.92  1057.120456.54  1061.420479.34  1060.721248.52  1053.6

Manning's n Values        num=       3
     Sta   n Val     Sta   n Val     Sta   n Val
   18557    .03719498.08    .03220163.32    .037

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
      19498.0820163.32              125  124.49     120             .1       .3
Ineffective Flow     num=       2
   Sta L   Sta R    Elev   Sta L   Sta R    Elev
   1855719498.08    107020163.3221248.52    1070

BRIDGE                  RIVER: 1
REACH: 1                   RS: 211.525

INPUT
Description: 19th Avenue Bridge
Distance from Upstream XS =       0
Deck/Roadway Width        =  124.49
Weir Coefficient          =     2.6
Bridge Deck/Roadway Skew  =
Upstream  Deck/Roadway Coordinates
    num=       11
     Sta Hi Cord Lo Cord     Sta Hi Cord Lo Cord     Sta Hi Cord Lo Cord
   18557    1056    105619498.08 1062.88 1062.8819498.08 1062.88 1056.33
19617.96  1065.1 1058.4319732.91  1067.4 1060.6819853.66 1068.72 1062.03
19974.41 1069.18 1062.5120095.16 1068.67 1061.9720215.91 1067.18 1060.46
20336.66 1064.77 1058.0320456.45  1061.4 1054.73

Upstream Bridge Cross Section Data
Station Elevation Data    num=      24
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
   18557    105619498.08 1062.8819570.11  1056.919585.13  1056.719633.01  1023.1
19866.76  1021.920100.43  1023.220148.29  1056.820163.32    105720195.23  1056.3
 20223.6  1049.320265.59  1046.120326.25  1049.420339.59  1050.820360.21  1052.5
20374.03  1055.420382.33  1055.9 20385.6  1055.9 20412.1  1057.320434.96  1056.7
20443.92  1057.120456.54  1061.420479.34  1060.721248.52  1053.6

Manning's n Values        num=       3
     Sta   n Val     Sta   n Val     Sta   n Val
   18557    .03719498.08    .03220163.32    .037

Bank Sta: Left   Right    Coeff Contr.   Expan.
      19498.0820163.32             .1       .3
Ineffective Flow     num=       2
   Sta L   Sta R    Elev   Sta L   Sta R    Elev
   1855719498.08    107020163.3221248.52    1070

Downstream  Deck/Roadway Coordinates
    num=       11
     Sta Hi Cord Lo Cord     Sta Hi Cord Lo Cord     Sta Hi Cord Lo Cord
   18557    1056    105619498.08 1062.88 1062.8819498.08 1062.88 1056.33
19617.96  1065.1 1058.4319732.91  1067.4 1060.6819853.66 1068.72 1062.03
19974.41 1069.18 1062.5120095.16 1068.67 1061.9720215.91 1067.18 1060.46
20336.66 1064.77 1058.0320456.45  1061.4 1054.73

Downstream Bridge Cross Section Data
Station Elevation Data    num=      22
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
   18577    105619498.08 1062.8819510.11    105119579.82  1056.719594.75  1056.5
19642.62    102319876.38  1021.820110.04    102320157.91  1056.620172.93  1056.8
20204.85  1056.120210.17  1055.920249.54  1049.420344.26  1054.820347.44  1054.8
20366.65  1054.320380.75  1054.620418.55    105520428.15    105520456.54  1061.4
20479.34  1060.721248.52  1053.6

Manning's n Values        num=       3
     Sta   n Val     Sta   n Val     Sta   n Val
   18577    .03719579.82    .03220172.93    .037

Bank Sta: Left   Right    Coeff Contr.   Expan.
      19579.8220172.93             .1       .3
Ineffective Flow     num=       2
   Sta L   Sta R    Elev   Sta L   Sta R    Elev
   1857719579.82  1056.720172.9321248.52  1056.8

Upstream Embankment side slope              =        horiz. to 1.0 vertical
Downstream Embankment side slope            =        horiz. to 1.0 vertical
Maximum allowable submergence for weir flow =     .95
Elevation at which weir flow begins         =
Energy head used in spillway design         =
```

```
Spillway height used in design              =
Weir crest shape                            = Broad Crested

Number of Piers =  7

Pier Data
Pier Station     Upstream=19615.06    Downstream=19615.06
Upstream     num=       2
    Width   Elev    Width   Elev
     5.8  1046.9     5.8 1058.51
Downstream     num=       2
    Width   Elev    Width   Elev
     5.8  1046.9     5.8 1058.51

Pier Data
Pier Station     Upstream=19735.81    Downstream=19735.81
Upstream     num=       2
    Width   Elev    Width   Elev
     5.8    1022     5.8 1060.77
Downstream     num=       2
    Width   Elev    Width   Elev
     5.8    1022     5.8 1060.77

Pier Data
Pier Station     Upstream=19856.56    Downstream=19856.56
Upstream     num=       2
    Width   Elev    Width   Elev
     5.8 1020.85     5.8 1062.07
Downstream     num=       2
    Width   Elev    Width   Elev
     5.8 1020.85     5.8 1062.07

Pier Data
Pier Station     Upstream=19977.31    Downstream=19977.31
Upstream     num=       2
    Width   Elev    Width   Elev
     5.8 1028.55     5.8 1062.51
Downstream     num=       2
    Width   Elev    Width   Elev
     5.8 1028.55     5.8 1062.51

Pier Data
Pier Station     Upstream=20098.06    Downstream=20098.06
Upstream     num=       2
    Width   Elev    Width   Elev
     5.8 1033.84     5.8 1062.02
Downstream     num=       2
    Width   Elev    Width   Elev
     5.8 1033.84     5.8 1062.02

Pier Data
Pier Station     Upstream=20218.81    Downstream=20218.81
Upstream     num=       2
    Width   Elev    Width   Elev
     5.8 1039.95     5.8 1060.55
Downstream     num=       2
    Width   Elev    Width   Elev
     5.8 1039.95     5.8 1060.55

Pier Data
Pier Station     Upstream=20339.56    Downstream=20339.56
Upstream     num=       2
    Width   Elev    Width   Elev
     5.8 1045.78     5.8 1058.17
Downstream     num=       2
    Width   Elev    Width   Elev
     5.8 1045.78     5.8 1058.17

Number of Bridge Coefficient Sets =  1

Low Flow Methods and Data
       Energy
       Momentum              Cd   =     1.2
       Yarnell               KVal =    1.05
Selected Low Flow Methods = Highest Energy Answer

High Flow Method
       Energy Only

Additional Bridge Parameters
       Add Friction component to Momentum
       Add Weight component to Momentum
       Class B flow critical depth computations use critical depth
           inside the bridge at the upstream end
```

Criteria to check for pressure flow = Upstream energy grade line

CROSS SECTION RIVER: 1
REACH: 1 RS: 211.51

INPUT
Description: 211.51

Begin 19th Ave Landfill channelization

Station Elevation Data num= 22

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
18577	105	619498.08	1062.88	19510.11	105	119579.82	1056.71	9594.75	1056.5
19642.62	102	319876.38	1021.82	0110.04	102	320157.91	1056.62	0172.93	1056.8
20204.85	1056.12	0210.17	1055.92	0249.54	1049.42	0344.26	1054.82	0347.44	1054.8
20366.65	1054.32	0380.75	1054.62	0418.55	105	520428.15	105	520456.54	1061.4
20479.34	1060.72	1248.52	1053.6						

Manning's n Values num= 3

Sta	n Val	Sta	n Val	Sta	n Val
18577	.037	19579.82	.037	20172.93	.037

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
19579.82	20172.93	541	562.88	606	.1	.3

Ineffective Flow num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
18577	19579.82	1056.72	0172.93	21248.52	1056.8

CROSS SECTION RIVER: 1
REACH: 1 RS: 211.41

INPUT
Description: 211.41

Left and Right Channel Bank Stations Interpolated
Station Elevation Data num= 98

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
18573.85	1055.5	18621.78	1056.61	18655.14	1053.79	18722.99	1053.25	18902.93	1052.9
19132.77	1051.6	19320.33	1050.87	19480.47	1049.58	19533.31	1047.72	19566.92	1049.4
19611.4	1046.9	19634.53	1044.08	19638.09	1041.78	19668.43	1022.18	19702.69	1018.56
19754.63	1019.65	19786.92	1018.31	19889.98	1020.74	19930.16	1020.81	19994.45	1020.82
20076.61	1020.91	20167.45	1021.22	20192.38	1033.01	20195.55	1039.32	20206.06	1041.777
20220.36	1045.1	20236.46	1054.78	20293.62	105	620331.24	1065.22	20351.37	1065.23
20357.03	1066.62	20414.04	1056.96	20436.1	1062.22	0445.88	1058.74	20504.13	1060.74
20521.21	1060.79	20557.16	1066.58	20578.69	1061.62	0603.37	1060.36	20654.05	1060.04
20689.25	1058.23	20722.97	1060.58	20735.67	1057.72	0828.84	1057.06	20846.13	1057.59
20898.33	1070.25	20938.86	1063.64	20980.02	106	321017.32	1057.92	21060.66	1055.82
21097.07	1055.53	21119.44	1056.16	21132.9	1055.12	1181.47	1054.22	1283.06	1053.8
21298.44	1058.21	21320.94	1060.35	21339.43	1062.82	1380.38	1060.32	21406.09	1052.45
21459.74	1053.48	21477.97	1059.98	21533.47	106	121555.62	1081.81	21619.68	1081.91
21644.09	1080.1	21655.42	1076.48	21707.29	1075.32	1720.18	1072.15	21749.96	1071.27
21770.47	1076.99	21793.84	1054.82	21802.85	1056.12	1842.36	105	621864.05	1053.48
21891.41	1052.69	21905.23	1051.43	21991.71	1051.82	2210.76	1052.06	22373.03	1052.78
22531.21	1052.17	22650.75	1052.09	22819.43	1052.52	2919.43	1053.14	23211.23	1053.67
23252.71	1054.24	23349.12	1054.08	23463.55	1053.12	3574.33	1051.79	23680.61	1051.32
23891.22	1051.56	24133.09	1051.48	24212.43	1051.92	4237.65	1050.32	24284.73	1050.32
24320.22	105	124361.59	1050.58	24444.1	1052				

Manning's n Values num= 3

Sta	n Val	Sta	n Val	Sta	n Val
18573.85	.037	19638.09	.037	20206.06	.037

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
19638.09	20206.06	500	501.53	505	.1	.3

CROSS SECTION RIVER: 1
REACH: 1 RS: 211.31

INPUT
Description: 211.31

Left and Right Channel Bank Stations Interpolated
Station Elevation Data num= 98

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
19209.8	1054	19309.4	1053.9	19371	1052.4	19415.6	1052	19462.5	1051.5
19496.2	1050.5	19510.1	1050.5	19528.9	1041.9	19531.2	1040.766	19571.7	1020.8
19614	1021.1	19677.8	1021.1	19724.1	1021.3	19888.2	1022	19928.3	1022.1
19954.9	1021.8	19973.9	1032	19980.4	1029.8	19994.7	1027.2	20059	1026.6

```
   20112  1026.2 20123.3    1028 20158.9  1030.9 20198.7  1033.6 20212.5  1034.3
 20267.3  1034.5 20269.1  1035.1 20281.8  1034.8 20323.2  1035.6 20338.5  1037.1
   20343    1038 20356.11040.765 20425.9  1055.5 20434.4  1057.4 20457.3    1049
   20499  1049.5 20549.5  1051.1 20551.5    1051 20571.1  1052.5 20575.3  1055.6
 20584.2  1059.5   20614  1060.7 20625.4    1057   20636  1051.6 20682.5  1051.6
 20692.1  1051.6 20699.2    1055 20718.1  1055.1 20723.4  1052.3 20725.3  1052.3
 20778.6  1052.4   20806  1052.5 20808.3  1053.2 20835.4  1052.5 20836.7  1052.2
 20884.1  1051.7   20893  1051.9 20922.6  1067.4 20930.4  1067.8   20944  1066.2
 20964.4  1055.2 20970.5  1050.2 21010.5  1050.3 21036.1    1052 21040.8  1052.7
   21082  1053.8 21083.4  1053.5 21093.1  1049.5 21124.5  1050.5 21134.6  1050.2
 21141.3  1051.6 21160.1  1051.2 21201.6  1048.9 21204.4  1049.1 21219.3  1052.5
 21236.3  1049.8 21240.9  1049.4 21293.9    1049 21338.4  1048.2 21394.2  1047.1
   21457  1046.7 21459.4  1046.7 21510.1  1046.2 21538.8  1046.8   21571  1046.8
 21576.7  1047.8 21607.4  1058.3 21626.3  1059.1 21651.1  1060.7 21661.7  1060.9
 21672.8    1062 21684.6  1057.7 21696.7  1051.4 21740.6  1053.4 21745.1  1054.1
 21754.3  1054.6 21757.7    1053   21786  1052.5

Manning's n Values        num=      3
     Sta   n Val     Sta   n Val     Sta   n Val
 19209.8    .037 19531.2    .032 20356.1    .037

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
       19531.2 20356.1              540  523.28     460             .1       .3
Ineffective Flow     num=       1
   Sta L   Sta R    Elev
 20434.4   21786    1060

CROSS SECTION          RIVER: 1
REACH: 1                  RS: 211.21

INPUT
Description: 211.21

Left and Right Channel Bank Stations Interpolated
Station Elevation Data    num=      88
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
 19418.7    1050 19432.3  1049.9 19486.6    1051 19504.4  1050.9 19507.4  1051.4
   19520 1044.719528.741040.216   19566  1021.1 19781.8  1021.6 19997.4  1022.1
 20060.3  1022.2 20076.2  1032.8   20080    1035 20082.4  1032.7 20093.4  1024.4
 20174.8  1026.6 20183.9  1027.6 20204.6  1029.5 20217.4  1030.4 20229.3  1030.7
 20232.4  1030.9 20272.7  1031.9 20335.2  1032.6 20395.1    1032 20413.6  1031.7
 20425.2  1031.3 20429.3  1031.7 20447.4  1035.2 20472.4  1032.1 20501.4  1030.2
20521.261040.21620521.281040.226 20524.4  1041.8   20544  1051.9 20563.3  1064.6
 20571.8  1065.7 20580.9    1066 20589.3  1061.5 20605.5  1058.5 20622.4  1060.1
 20646.3  1062.6 20659.3  1063.4 20674.4  1064.8 20683.8  1065.5 20692.9  1064.2
 20760.3    1066   20772    1068 20791.6  1063.6 20814.8    1059 20846.6    1053
 20876.7  1045.5 20891.6  1044.9 20916.6  1044.2 20944.9  1044.5 20964.5  1044.9
 21002.8  1046.7 21028.1  1048.6 21034.5  1044.8 21035.5    1044 21113.8  1044.6
 21130.1  1044.6 21249.3    1044   21250  1044.1 21260.5  1047.3   21288  1046.8
 21324.8  1046.7 21359.3  1046.9 21432.1    1048 21449.9  1048.7 21452.1  1049.4
 21462.5  1051.8 21469.8  1052.8 21533.8    1052 21595.7  1051.9 21614.5  1051.8
 21642.6  1057.9 21645.8  1056.1 21673.8  1046.4   21698  1040.9 21967.4    1041
   21972  1044.7 21983.2  1052.6 21984.7  1051.9 21991.1  1050.7   21999  1051.3
 22028.7    1051 22088.3  1051.4   22171  1051.7

Manning's n Values        num=      3
     Sta   n Val     Sta   n Val     Sta   n Val
 19418.7   .03719528.74   .03220521.26    .037

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
      19528.7420521.26              495  493.11     475             .1       .3
Ineffective Flow     num=       1
   Sta L   Sta R    Elev
 20571.8   22171    1068

CROSS SECTION          RIVER: 1
REACH: 1                  RS: 211.12

INPUT
Description: 211.12

Left Channel Bank Station Interpolated
Station Elevation Data    num=      63
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
   19314  1050.6 19321.1  1050.6 19403.5  1050.4 19415.2  1050.5 19470.9  1050.5
 19482.5  1051.2 19483.7  1050.519498.46 1040.58 19527.6    1021 19600.2  1021.1
 20090.7    1021 20239.6  1020.4   20259  1020.1   20267  1022.5 20276.5  1019.8
 20287.8    1020 20321.5  1020.6 20364.3  1020.4 20406.5  1019.8 20438.1  1015.7
 20453.3  1015.7 20484.3  1015.7 20510.9  1015.7 20526.1  1023.8 20540.7  1029.4
 20572.2  1046.4 20577.1  1044.9 20591.9  1040.2 21035.6  1040.2 21045.7  1040.3
 21082.9  1041.6   21123  1041.5   21166  1041.6 21189.7  1041.5 21228.3    1041
 21264.3  1041.1 21277.3  1040.7 21299.3  1040.6 21311.7  1043.9 21321.5  1044.1
 21335.9  1046.9 21349.5  1046.7 21377.3  1046.7 21389.3  1045.7 21395.8  1044.6
   21409  1041.7 21414.3  1040.2 21431.9  1040.1 21441.7  1040.6 21511.5  1043.7
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 21564.5  1044.7 21580.3  1044.8   21593  1044.6   21597    1042 22094.6    1042
 22111.5  1053.1 22112.9  1051.5 22113.7  1050.9   22123  1051.4 22146.6  1051.4
 22200.7  1051.7 22225.6  1051.6 22293.4  1051.7

Manning's n Values        num=       3
     Sta   n Val     Sta   n Val     Sta   n Val
   19314    .03719498.46    .032 20572.2    .037

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
      19498.46 20572.2              500  505.73     500             .1       .3
Ineffective Flow     num=       1
   Sta L   Sta R    Elev
 21335.9 22293.4    1050

CROSS SECTION          RIVER: 1
REACH: 1                  RS: 211.02

INPUT
Description: 211.02

Left Channel Bank Station Interpolated
Station Elevation Data    num=      58
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
   19239  1049.4 19253.3  1049.2 19318.8  1049.3   19330  1049.2 19381.9  1049.5
 19409.6  1049.3 19472.3    104919487.121039.375 19515.1  1021.2 19977.7  1020.4
 20111.7  1020.1 20119.2  1025.6 20133.2  1024.1 20136.2  1022.2   20140  1019.4
 20202.9  1020.4 20228.3  1020.7 20238.9  1022.4 20243.6  1025.6 20270.1  1025.5
 20279.9  1025.7 20343.8  1026.1 20394.3  1041.3 20424.2    1040   20434  1040.5
 20448.3  1038.4 20459.5  1037.9 20468.8  1038.2 20484.1    1038 20494.6  1038.7
 20501.7  1038.2 21087.6  1039.1 21102.9  1037.2 21124.7  1036.8 21132.2    1033
 21144.9  1032.5 21184.2  1034.3 21243.7  1036.3 21300.5  1038.4 21315.9  1038.7
 21353.2     1040 21399.5  1041.4   21439  1042.3   21480  1043.6 21514.7  1043.6
 21524.4  1043.8 21535.1  1043.6 21559.7  1042.3 21570.6  1042.2 22151.3    1042
 22163.4  1052.1 22174.7  1052.9 22226.3  1051.5 22239.2  1051.3   22318  1051.9
 22324.3     1052 22393.8  1052.8 22399.8  1052.7

Manning's n Values        num=       3
     Sta   n Val     Sta   n Val     Sta   n Val
   19239    .03719487.12    .032 20394.3    .037

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
      19487.12 20394.3              485  493.19     495             .1       .3
Ineffective Flow     num=       1
   Sta L   Sta R    Elev
   21500 22399.8    1050

CROSS SECTION          RIVER: 1
REACH: 1                  RS: 210.93

INPUT
Description: 210.93

Left Channel Bank Station Interpolated
Station Elevation Data    num=      50
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
 19200.1  1048.6 19256.6  1048.1 19323.4  1048.3 19376.7  1048.6 19414.5    1048
 19464.2  1048.319479.121039.255 19508.9  1021.2 19821.8  1022.3 20131.9  1023.4
 20138.8     1028 20162.4  1029.4 20166.3  1026.3 20172.8  1019.1   20212  1018.7
 20278.3  1019.9   20290  1025.6 20331.4    1025 20349.2  1032.1 20351.6  1031.2
 20355.1  1030.5 20397.8  1031.3 20406.9  1035.2 20414.8  1039.6 20431.2  1039.4
 20455.9  1039.7 20458.7  1037.8 20465.5  1037.9 20470.4  1034.9 20474.7  1032.7
 21343.1  1032.7 21350.5  1032.5 21376.3  1035.6 21390.1  1033.4 21395.9  1033.7
 21424.3  1033.9 21484.4  1034.5 21494.9  1034.3   21537  1034.4 22171.3  1034.4
 22195.5  1049.6 22217.9  1047.5 22260.9    1035 22263.6  1034.9 22291.1    1051
 22312.1  1051.8 22326.6  1051.4 22375.7  1051.7 22388.8  1051.5 22397.4  1050.6

Manning's n Values        num=       3
     Sta   n Val     Sta   n Val     Sta   n Val
 19200.1    .03719479.12    .032 20414.8    .037

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
      19479.12 20414.8              505  505.14     505             .1       .3
Ineffective Flow     num=       1
   Sta L   Sta R    Elev
   21576 22397.4    1048

CROSS SECTION          RIVER: 1
REACH: 1                  RS: 210.83

INPUT
Description: 210.83

Left Channel Bank Station Interpolated
Station Elevation Data    num=      61
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Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
19202.3	1047.9	19230.6	1048.2	19316.1	1047.1	19412.4	1046.5	19438.4	1046.4
19450.41	1038.813	19469.9	1026.5	19479.2	1021.2	19797.6	1021	19923.9	1020.9
19961.4	1020.6	19972.9	1027.1	19981.7	1030.2	20023.7	1029.7	20030.1	1028.5
20042.7	1023.3	20047.1	1022.6	20060.1	1021.5	20068	1019.1	20084.8	1019.4
20164.7	1020.3	20209.2	1020.4	20210.1	1020.8	20276.6	1019.8	20285.1	1022.2
20306.6	1025.2	20309	1026.8	20312.4	1026.3	20316.8	1024.7	20372.8	1023.5
20408.7	1043.6	20410.4	1042.5	20412	1040	20434.3	1040.8	20448.6	1034
21423.7	1034.1	21433.7	1033	21527.5	1031.1	21554.4	1029.7	21577.9	1029.4
21646.5	1030.2	21704.4	1029.9	21742.9	1046.2	21761.3	1040	21807.2	1041.3
21814	1044.7	21818.3	1046.4	21862.5	1045.9	21879.4	1037.5	21883.7	1035
21887.9	1033.8	21911.6	1035.9	21937.9	1050.1	21957.5	1042.6	22341.8	1042.6
22364.7	1049.8	22372.9	1048.2	22423	1049.3	22443.3	1049.3	22494.1	1045.8
22499.7	1044.9								

Manning's n Values num= 3

Sta	n Val	Sta	n Val	Sta	n Val
19202.3	.037	19450.41	.032	20410.4	.037

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
19450.41	20410.4	505	505.61	500	.1	.3

Ineffective Flow num= 1

Sta L	Sta R	Elev
21742.9	22499.7	1048

CROSS SECTION RIVER: 1
REACH: 1 RS: 210.74

INPUT
Description: 210.74

Left Channel Bank Station Interpolated
Station Elevation Data num= 63

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
19243.9	1048.6	19252.9	1048.6	19306.8	1048.4	19320.5	1047.9	19400.4	1046.9
19417.4	1044.5	19426.12	1038.473	19455.3	1018.3	19887.7	1018.2	19910.2	1018.2
19912.1	1019.4	19926.7	1020.6	19947.1	1020.5	19971.2	1029.9	19999.5	1024.8
20005.9	1025.6	20026.7	1018.2	20095.6	1018.8	20149	1019.3	20154.3	1019.5
20159.1	1018.6	20206.5	1019.2	20250.3	1018.3	20256.9	1020.6	20263.3	1021.3
20281.7	1020.8	20318.1	1022	20333.5	1021.2	20349.8	1021.8	20361.7	1025.8
20373.2	1024.1	20404.6	1025.2	20432.5	1037.6	20433.7	1039.4	20462.4	1039.5
20468.2	1036.5	21389.5	1036.5	21394.6	1032.8	21404	1032.7	21513.7	1032
21520.3	1033.6	21537.2	1027.8	21587.9	1027.7	21638.9	1028.2	21695.6	1029
21747.1	1028.9	21771	1029.8	21801.8	1041	21813.2	1040.9	22057.2	1040.9
22066.5	1043.5	22085.1	1044.1	22096.2	1047.4	22123.7	1048.7	22156.7	1040.5
22272.5	1040.5	22293.7	1049.5	22308.5	1048.9	22356.6	1048.4	22365.3	1048.1
22369	1048.8	22377.5	1053.2	22399.8	1048.3				

Manning's n Values num= 3

Sta	n Val	Sta	n Val	Sta	n Val
19243.9	.037	19426.12	.032	20433.7	.037

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
19426.12	20433.7	495	503.39	500	.1	.3

Ineffective Flow num= 1

Sta L	Sta R	Elev
21801.8	22399.8	1048

CROSS SECTION RIVER: 1
REACH: 1 RS: 210.64

INPUT
Description: 210.64
Station Elevation Data num= 56

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
19062.1	1046.2	19142.3	1046.5	19216.9	1046.5	19239.3	1046.6	19313.3	1046.3
19339.3	1045.9	19359.9	1044.7	19388.6	1036.7	19405.4	1034.5	19435.6	1017.8
19522.4	1017.9	19688	1018.2	19812.5	1018.5	19845.7	1021.7	19854.2	1021.6
19868.7	1023.2	19885.6	1022.9	19894.1	1026.4	19926.9	1018.1	19954	1018.1
20029.3	1018.2	20100.6	1018.3	20159.1	1018.4	20163.7	1019.2	20174.9	1019.6
20183.1	1020.8	20192.3	1019.6	20214.4	1021.7	20234.8	1024.3	20242.8	1022.1
20298.5	1024	20323.5	1025.5	20335	1029.1	20359.6	1019.1	20427.6	1017.8
20430.1	1017.7	20460.6	1039.9	20483.4	1039.5	20493.5	1033.2	21394.6	1033.2
21442.1	1031.4	21449.1	1028.1	21453.5	1025.3	21460.9	1025.2	21472.1	1026
21483.6	1028.3	21519.7	1032.5	22411.4	1032.5	22434.2	1045.9	22446.8	1049.8
22496.5	1049.4	22507.7	1051.3	22521	1044.2	22524.9	1044.1	22586.3	1043
22591.1	1043.3								

Manning's n Values num= 3

Sta	n Val	Sta	n Val	Sta	n Val
19062.1	.037	19388.6	.032	20460.6	.037

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
19388.6	20460.6	520	515.29	495	.1	.3

Ineffective Flow num= 1

Sta L	Sta R	Elev
21800	22591.1	1048

CROSS SECTION RIVER: 1
REACH: 1 RS: 210.55

INPUT
Description: 210.55

Left Channel Bank Station Interpolated
Station Elevation Data num= 55

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
19008	1045.1	19023.1	1045.1	19106.6	1045.2	19117.1	1045.2	19188.7	1045.4
19198.2	1045.3	19263.2	1046	19303.5	1044.2	19322.16	1037.8	28 19365	1023.2
19375.9	1018.6	19396.7	1018.7	19519.3	1018.6	19791	1018.3	19813.4	1028.8
19857.3	1026.7	19886.1	1038.1	19909.3	1027.2	19915.5	1030.7	19959.6	1020
20002.1	1018	20058.3	1018.1	20175.7	1018.1	20440.7	1018.3	20476.7	1037.4
20483.2	1040.3	20500.3	1039.7	20507.6	1034.3	21313.5	1033.6	21372.5	1032.4
21406.9	1033	21409.3	1032.1	21417.2	1027.2	21429	1026.3	21456.2	1025.4
21459.3	1026.4	21468.1	1028.2	21496.9	1030.2	21548.3	1034.3	21557.5	1034.9
21626.2	1036.3	21634.2	1035.7	21643.8	1035.7	21713	1035.7	21771.2	1036
22449.6	1036	22451.9	1037.8	22455.6	1040	22484.4	1044.7	22494.2	1046.8
22499.9	1046	22506.9	1046.2	22537.1	1043.6	22580.7	1043.5	22585	1043

Manning's n Values num= 3

Sta	n Val	Sta	n Val	Sta	n Val
19008	.037	19322.16	.032	20483.2	.037

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
19322.16	20483.2	475	473.19	495	.1	.3

Ineffective Flow num= 1

Sta L	Sta R	Elev
21300	22585	1046.8

CROSS SECTION RIVER: 1
REACH: 1 RS: 210.46

INPUT
Description: 210.46

Left and Right Channel Bank Stations Interpolated
Station Elevation Data num= 74

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
18491.3	1044.8	18509.6	1044.4	18559.8	1045.8	18571.1	1045.5	18584.8	1043.3
18607.7	1045	18678	1044.8	18723.7	1044.2	18801	1044.1	18803.4	1044.1
18891.1	1043.9	18897.1	1043.9	18962.7	1043.6	19022.5	1043.3	19024.4	1043.3
19078.3	1042.4	19136.1	1042.2	19176.5	1042.5	19201.9	1040.9	19233.8	1028.3
19266.3	1021.8	19276.2	1021.1	19328.5	1018.7	19351.6	1018.1	19377	1018.33
19395.8	1018.5	19810.2	1018.3	19863.8	1018.1	19922	1018.2	20015.9	1018.2
20094.1	1018.1	20114.1	1018.1	20127.6	1022.4	20129.6	1023.9	20150.4	1023.9
20174.1	1021.6	20197.2	1018.1	20239.9	1018.1	20295.4	1018.2	20303	1018.6
20351.5	1018	20390.4	1018.4	20443.9	1018.4	20502.8	1018.5	20565.4	1018.8
20656.3	1018.8	20722.5	1019	20743	1019.6	20798.1	1019.8	20867.2	1019.1
20920.3	1019.3	20973.2	1019.2	21047.3	1019.3	21120.7	1021.1	21123	1021.2
21136.1	1016.3	21211.7	1018.4	21228.5	1018.3	21261.8	1036.3	21280.4	1034.9
21284	1038.08	21290.7	1044	21292.3	1046	21334.2	1043	21405.2	1043.3
21443.5	1044.5	21454	1047.4	21465.5	1044.1	22456.6	1042.9	22498.8	1045.3
22515	1046.9	22564.7	1048.3	22637.2	1048.5	22652	1048.3		

Manning's n Values num= 5

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
18491.3	.037	19176.5	.032	20150.4	.037	21292.3	.037	21454	.025

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
19377	21284	520	522.28	505	.1	.3

Ineffective Flow num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
18491.3	19377	1048	21292.3	22652	1048

CROSS SECTION RIVER: 1
REACH: 1 RS: 210.36

INPUT
Description: 210.36

Left and Right Channel Bank Stations Interpolated
Station Elevation Data num= 99

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
19224.5	1050.4	19284.3	1050.7	19305	1051	19357.1	1049.6	19375.16	1037.787
19404.8	1018.4	19463.3	1018.3	19612.3	1018.1	19621.3	1018.1	19634.8	1021.9
19667.3	1022.1	19733.3	1021.4	19790.5	1022.1	19802.9	1021.9	19818.6	1026.5
19827	1026.5	19834.6	1028.4	19890.9	1029	19964.7	1027.7	19973.5	1027.6
19985.2	1023	19997.6	1019.2	20010.7	1019.2	20032.2	1022.5	20039.2	1024.8

20087.1	1023	20111.8	1024.6	20144.4	1023.1	20153.9	1025.4	20168.7	1024.3
20191.7	1024.2	20273.6	1021.2	20346.9	1017.4	20363.5	1017.6	20425.8	1018.5
20437.5	1019.6	20442.7	1017.4	20510.8	1017.5	20526.1	1018	20581.3	1024.2
20636.5	1025.3	20692.9	1026.1	20742.9	1025.6	20769.6	1031.4	20776.7	1032.1
20797.4	1031.2	20811.3	1023.1	20868.1	1020.3	20886.8	1019.8	21012.2	1019.3
21017.9	1019.4	21027	1020.7	21039.6	1017.6	21095.8	1017.7	21149.8	1018
21208.9	1018.7	21245	1019.6	21291.17	1037.786	21291.23	1037.81	21303.9	1042.8
21368	1043.7	21407.5	1045.3	21418.5	1048.3	21429.5	1045.3	21450.9	1041.3
21516.4	1042.2	21531.8	1042.1	21606.4	1042.3	21664.8	1042.2	21728.4	1042.1
21735.8	1042.3	21795.8	1042.1	21853	1041.4	21904.7	1040.9	21945.9	1041.5
22007.4	1043.5	22067.8	1044.3	22085.5	1044.9	22124.1	1042.5	22213.9	1042.6
22278	1043.1	22282.5	1043	22318.4	1050.8	22330.1	1051.8	22376	1061.9
22399.2	1062.6	22410.6	1059.4	22438.3	1043.7	22476	1043.3	22498.2	1043.9
22517.5	1047.5	22554.5	1047.8	22615.4	1044.3	22685.5	1043.5	22715.7	1043.9
22733.2	1052.6	22752.7	1056.6	22761.2	1057.6	22797.5	1059		

Manning's n Values num= 4

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
19224.5	.032	19357.1	.037	20776.7	.025	21303.9	.025

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
19375.162	1291.17	480	487.62	480	.1	.3

Ineffective Flow num= 1

Sta L	Sta R	Elev
21303.9	22797.5	1058

CROSS SECTION RIVER: 1
REACH: 1 RS: 210.26

INPUT
Description: 210.26

Left and Right Channel Bank Stations Interpolated
Station Elevation Data num= 75

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
18518	1039.8	18554.5	1039.8	18657.8	1042	18741.9	1041.6	18818	1041.2
18898.6	1041.1	18982.3	1040.1	19077.8	1039.4	19162	1039.9	19268.1	1040.3
19363.8	1039.3	19372.2	1040.4	19377.07	1037.672	19408.8	1019.9	19682.2	1018.6
19755.3	1018.2	19759.5	1026	19769	1023.5	19813.4	1021.7	19816	1022.7
19816.8	1022	19849.2	1020.9	19871.6	1022.5	19881.3	1022.3	19909.8	1024.5
19932.2	1024.7	19991.1	1027.6	20032.1	1025.3	20063.9	1021.9	20070.8	1022
20075.8	1024	20075.9	1020.9	20082.4	1025	20120.1	1032.8	20142.9	1027.4
20152.1	1027.4	20162	1021.5	20166.1	1020	20257.3	1025.2	20290.7	1026.3
20327.7	1020.7	20449	1018.6	20490.7	1017.8	20521.6	1018.3	20541.8	1020.7
20564.4	1016.9	20641.9	1017.2	20694.8	1022.3	20718.8	1018.4	20789.5	1018.3
20862.3	1019.1	20960	1018.2	20989.1	1018.9	21058.3	1018.1	21141	1018
21241.8	1017.5	21265.8	1018.4	21280.3	1023.52	1331.82	1037.672	21342.1	1040.5
21367.6	1040.4	21378.7	1044	21393.2	1047	21408.2	1043.8	21433.3	1036.1
21453.3	1036.5	21462.7	1039.8	21481.6	1041	22697.5	1041	22726.9	1046.8
22740.7	1043.8	22748.5	1041	22815.8	1041	22841.3	1048	22891	1057.7

Manning's n Values num= 5

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
18518	.037	19372.2	.032	20694.8	.037	21342.1	.037	21393.2	.025

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
19377.072	1331.82	505	512.65	520	.1	.3

Ineffective Flow num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
18518	19162	1050	21393.2	22891	1050

CROSS SECTION RIVER: 1
REACH: 1 RS: 210.17

INPUT
Description: 210.17

Right Channel Bank Station Interpolated
Station Elevation Data num= 81

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
18525.7	1038	18530.7	1038	18532.2	1038.8	18540.9	1039	18542.7	1038.3
18559.1	1038.3	18583.6	1039.8	18667.3	1040	18672.2	1040	18771.1	1039.9
18843.2	1039.2	18918.6	1039.2	18975.6	1038.6	19067.9	1036.2	19141.4	1035.5
19159.7	1029.9	19162.1	1028.2	19206.3	1023.5	19232.4	1025.6	19237.8	1026.9
19267.8	1029.3	19288.9	1028.6	19327.1	1031	19354.6	1031.5	19359.6	1019.6
19498.4	1019.3	19752.3	1018.6	19761.8	1021.9	19768.4	1019.7	19807.9	1021.1
19826.4	1023.3	19861.6	1026.2	19939.7	1026.1	20019.7	1026.2	20040.5	1026
20047	1026.8	20077	1025.5	20173.1	1021.8	20204.7	1022.1	20221.8	1027.9
20260.5	1027.9	20289.3	1020.1	20308.5	1019.1	20310	1020	20324.5	1021.7
20336.8	1017.9	20348.1	1016.4	20392.6	1014.7	20407.8	1014.9	20421.1	1019.4
20505.4	1021.6	20584.7	1020	20677.5	1020.6	20713	1019.7	20811.2	1021.5
20931.9	1023.3	20991.7	1025	21079.4	1022.7	21093.5	1022.3	21106.3	1024.9
21181.2	1023.5	21223	1023	21231	1018.7	21249.3	1020.1	21260.4	1023.1

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 21302.8  1025.121334.72 1037.43 21339.3  1039.2 21359.2  1038.4 21371.3    1044
 21385.9  1046.9 21435.8  1035.7 21473.1    1040 22703.8  1040.5 22737.6  1046.8
 22750.2  1044.1 22757.2  1040.5 22826.4  1040.5   22854  1049.8 22873.2  1052.2
 22897.3    1057

Manning's n Values        num=      4
     Sta   n Val     Sta   n Val     Sta   n Val     Sta   n Val
 18525.7    .037 19354.6    .032 20991.7    .037 21339.3    .025

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
       19354.621334.72              505  497.78     495              .1       .3
Ineffective Flow     num=       2
   Sta L   Sta R    Elev   Sta L   Sta R    Elev
 18525.7 19354.6    1050 21385.9 22897.3    1050

CROSS SECTION          RIVER: 1
REACH: 1                  RS: 210.07

INPUT
Description: 210.07

Left Channel Bank Station Interpolated
Station Elevation Data    num=      71
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
 18501.7  1037.5 18541.3  1037.3 18564.5  1038.8 18619.1  1038.6 18704.2  1038.7
 18760.6  1038.9 18769.9  1038.8 18829.1  1038.5   18842  1038.3 18894.1  1038.1
 18959.6  1037.3 18970.3    1037 18978.8  1029.1 18997.2  1018.5 19080.1  1018.5
   19143  1018.7 19188.2  1018.7   192101018.946 19241.4  1019.3 19299.9  1019.1
 19351.1  1019.1 20002.2  1019.3 20010.8  1019.3 20015.9  1021.6 20017.6  1021.9
 20043.4  1020.3 20109.3  1021.6 20149.1  1018.8 20241.7  1019.6 20301.9  1019.6
 20319.7  1020.4 20385.2  1020.2   20395  1020.3 20523.6    1020   20576  1020.4
 20689.9  1019.9 20746.4  1020.1 20785.8    1020 20842.9  1018.9 20851.6  1018.9
 20907.6  1018.8 20909.5  1018.7 20945.5  1031.5 20951.8  1031.4 21011.2  1029.6
 21065.6  1030.2 21073.1  1030.3 21098.1  1026.3 21164.8  1026.1 21186.9  1026.4
 21207.2  1024.8 21212.4  1026.6 21220.7  1028.3 21237.2  1024.7 21246.8  1023.1
 21286.7  1032.7 21315.8  1034.4 21346.3  1039.3 21383.5  1047.6 21397.9  1044.6
 21428.3  1035.2 21444.5  1036.3 21455.5  1040.2   21470  1040.9 22716.5  1040.5
 22744.1  1046.7 22757.9  1043.7 22766.1  1040.5 22836.3  1040.5 22861.9  1049.1
 22885.1  1052.1

Manning's n Values        num=      4
     Sta   n Val     Sta   n Val     Sta   n Val     Sta   n Val
 18501.7    .032 18959.6    .037 19241.4    .037 20945.5    .025

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
         19210 20945.5              495  490.15     505              .1       .3
Ineffective Flow     num=       2
   Sta L   Sta R    Elev   Sta L   Sta R    Elev
 18501.7   19210    1048 21383.5 22885.1    1048

CROSS SECTION          RIVER: 1
REACH: 1                  RS: 209.98

INPUT
Description: 209.98

Left Channel Bank Station Interpolated
Station Elevation Data    num=      67
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
 19210.8  1039.8 19216.4  1039.8 19229.3  1040.8 19256.1  1038.3 19270.9  1038.7
 19289.9  1043.3 19303.8  1043.6 19320.1  1041.9 19336.2  1037.1 19338.51036.916
 19338.7  1036.9 19361.5  1021.9 19388.1  1021.9 19515.6  1021.3 19713.1  1021.7
 20015.3  1021.9 20072.9  1024.3 20080.8  1022.9 20118.2    1022 20369.3  1021.1
 20445.2  1020.9 20458.4  1022.8 20481.8  1021.8   20518  1023.6 20568.6  1034.4
   20571  1034.9 20616.8  1035.6 20623.9  1035.8 20628.3  1035.5 20657.3  1035.7
 20663.4  1034.3 20694.7  1018.1 20723.3  1020.3 20793.2  1020.9 20799.7  1020.9
 20854.2  1020.7 20860.4  1020.9 20904.8  1021.1 20914.5  1020.7 20955.4  1020.7
 20961.5  1020.8 21001.9  1019.9 21007.1  1019.6 21059.6  1018.5 21066.6  1018.2
 21088.4  1019.4 21090.3  1020.1 21106.6  1019.5 21139.4  1019.9 21169.2  1019.4
 21191.2  1020.3 21230.7  1019.2   21293  1018.8 21312.7  1018.3 21356.9  1043.1
 21366.5  1044.5 21383.9  1044.8 21395.6  1044.5   21426  1037.6   21435  1036.5
 21453.5  1042.5 21466.6  1042.2 21474.1    1040 22740.4    1043 22767.4    1043
 22845.4    1040 22872.1  1049.7

Manning's n Values        num=      3
     Sta   n Val     Sta   n Val     Sta   n Val
 19210.8    .032 19303.8    .037 20623.9    .025

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
       19338.5 20623.9              500   502.4     480              .1       .3
Ineffective Flow     num=       2
   Sta L   Sta R    Elev   Sta L   Sta R    Elev
 19210.8 19303.8    1045 21383.9 22872.1    1045
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CROSS SECTION RIVER: 1
REACH: 1 RS: 209.88

INPUT
Description: 209.88
Station Elevation Data num= 72

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
18501.6	1042.1	18528.8	1043.1	18537.8	1042.9	18574.3	1040.8	18652	1040.5
18739.9	1040.3	18813.4	1040.8	18852.6	1040.6	18874.1	1040.1	18934.3	1040.2
18997.1	1040.3	19062.4	1039.9	19081	1040.1	19142.2	1041	19204	1042
19256.5	1042.2	19318.4	1040.5	19374.2	1039.8	19432.9	1040	19434	1040
19465.8	1025.8	19472.7	1026	19513	1039.1	19517.5	1038.2	19551.2	1024.4
19557.7	1019.9	19669.3	1020.3	19783.1	1020.9	20065	1021.8	20083.9	1021.8
20276.7	1020.6	20381.4	1019.6	20422	1019.3	20445.6	1026.2	20472.5	1035
20535.1	1035.1	20607	1034.4	20691	1033.1	20702.5	1033.3	20710.2	1031.7
20764.2	1029.4	20784.7	1021.7	20827.3	1021.8	20907.6	1017.4	20952.7	1017.1
20986.8	1017.4	21010.4	1016.5	21045.1	1016.6	21090.8	1018.4	21114.2	1018.7
21168.8	1021.5	21185.4	1014.7	21210.8	1016.2	21223.3	1019.8	21245.7	1019
21292.7	1018.9	21317.4	1019.5	21351	1043	21366.2	1042.6	21378.1	1042.9
21392.6	1042.6	21430.3	1035.8	21448.3	1041.7	21461.5	1041.4	22746.5	1041.7
22760	1042	22773.5	1041.7	22844.9	1040.4	22853.4	1040.1	22878.2	1047.9
22883.5	1049.9	22895.7	1051						

Manning's n Values num= 4

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
18501.6	.037	19513	.032	20472.5	.037	21351	.025

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
19513 20472.5 500 504.74 500 .1 .3
Ineffective Flow num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
18501.6	19256.5	1045	21351	22895.7	1045

CROSS SECTION RIVER: 1
REACH: 1 RS: 209.79

INPUT
Description: 209.79

Left Channel Bank Station Interpolated
Station Elevation Data num= 69

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
19302.1	1037	19390.4	1037.7	19422.4	1037.9	19450.6	1038.6	19469.8	1042
19475.2	1039.51	9483.02	1036.471	19511.6	1025.4	19544.2	1024.3	19568.5	1024
19585.1	1022.1	19604	1021.3	19652	1021.9	19659.2	1022.5	19704.1	1023.9
19743.6	1023.4	19758.3	1023.6	19804.1	1021.8	19848.4	1022	19854.6	1022.4
19903.2	1022.6	19907.9	1022.3	19977.4	1021.3	20009.8	1021.4	20048.6	1022.3
20058.7	1024	20073.2	1024.3	20081.6	1025.8	20102.4	1022	20112.8	1020.9
20156.2	1020.9	20256.4	1020.9	20405.6	1020.8	20467	1020.8	20496.1	1035.7
20514.4	1034.2	20550.2	1023.5	20623.5	1023.8	20694.6	1023.6	20727.9	1023.3
20733.7	1025.1	20747.4	1030.6	20772.1	1029.7	20812.6	1013.1	20821.9	1011.1
20921.1	1007.3	21031.7	1007.2	21102	1008.3	21146.2	1010.3	21153.2	1011.1
21167.6	1011.6	21181.9	1014.5	21219.7	1013.4	21280.6	1014.9	21300.5	1014.6
21345.1	1038.3	21349	1039.6	21388.2	1041.1	21398.1	1036.5	21724.8	1037
22053.9	1038.7	22084.9	1038.7	22412.8	1037.5	22736.4	1036.5	22750.8	1040.4
22851	1040	22880.8	1050.9	22891.5	1049.4	22896	1050.7		

Manning's n Values num= 4

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
19302.1	.037	19469.8	.032	20496.1	.037	21349	.025

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
19483.02 20496.1 500 500.44 510 .1 .3
Ineffective Flow num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
19302.1	19469.8	1048	21388.2	22896	1048

CROSS SECTION RIVER: 1
REACH: 1 RS: 209.69

INPUT
Description: 209.69

Left Channel Bank Station Interpolated
Station Elevation Data num= 72

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
18487.6	1037.1	18511.5	1038.9	18512.2	1038.3	18570	1037.1	18609.5	1037.4
18675.1	1037.2	18686.5	1037.2	18757.5	1036.9	18831.1	1037	18905.3	1036.6
18942.8	1036.5	19014.6	1036.3	19080.4	1036.9	19089.1	1039.2	19093.3	1038.7
19097.6	1036	19108.2	1036.5	19117.9	1041	19129.1	1036.3	19223.8	1037
19236.2	1036.9	19306.7	1037.1	19377.2	1036.8	19448.9	1038.8	19451.6	1039.2
19460.14	1035.952	19494.2	1023	19567.3	1019.4	19601.3	1019.8	19663.7	1024.7
19744.5	1029.8	19834.4	1031.8	19911.5	1032.7	19977.6	1032.7	20055.2	1034
20101.5	1021.7	20107.4	1021.1	20162.6	1021	20498.8	1020.7	20560.9	1034.8

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 20578.5  1035.8 20646.6  1035.2 20702.4  1031.7 20717.4  1031.4 20730.1  1030.1
 20773.2  1013.3 20782.5  1013.1 20845.5  1011.4 20929.9  1011.3 20963.9  1011.2
 21028.3  1011.1 21095.9  1010.7 21179.3  1010.6 21186.8  1010.4 21201.5  1014.3
 21206.7  1012.8   21290  1013.8 21325.4    1034 21344.7  1037.9   21377  1040.8
   21396     1036 21716.5    1037 22044.5  1037.5 22075.5  1037.5 22405.9  1036.3
 22732.5     1036   22744  1038.7 22773.1  1038.3 22776.8    1039 22845.1    1039
 22868.7  1048.8 22887.2  1047.3

Manning's n Values        num=      4
     Sta   n Val     Sta   n Val     Sta   n Val     Sta   n Val
 18487.6    .037 19451.6    .032 20578.5    .037   21290    .025

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
      19460.14 20578.5              495  494.38     510              .1       .3
Ineffective Flow     num=      2
   Sta L   Sta R    Elev   Sta L   Sta R    Elev
 18487.6 19451.6    1046   21377 22887.2    1046

CROSS SECTION          RIVER: 1
REACH: 1                  RS: 209.6

INPUT
Description: 209.6
Station Elevation Data    num=     77
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
 18471.1  1035.6 18496.7  1038.3 18607.4    1038 18680.1  1039.8 18741.6  1037.7
 18879.8    1037 19015.9  1036.1 19028.2  1034.8 19152.5  1033.5 19250.6  1034.5
 19341.4  1037.2 19351.9  1034.1 19365.8  1031.7 19374.9  1033.6 19412.8  1028.7
 19427.6  1022.5 19468.8  1016.4 19481.8  1016.4 19564.4  1022.8 19578.3  1019.6
 19597.1  1016.9 19698.6  1019.2 19729.4  1022.5 19836.1  1021.7 19930.5  1022.3
 19965.1  1019.8 19965.5  1020.6 19987.2  1019.5 20055.5  1019.5 20413.3  1020.2
 20534.4  1020.5   20578  1028.4 20664.2    1027   20687  1029.2 20784.5  1026.4
 20818.2  1025.3 20877.5  1031.3 20903.8  1029.2 20919.4  1025.4 20952.7  1027.2
 21034.7    1012 21184.6    1013 21197.5  1013.3 21214.7  1021.1 21253.6  1021.8
 21259.3  1025.3   21285  1031.8 21303.5  1032.2 21376.6  1040.1 21388.5  1035.5
 21712.8  1036.1 22038.2    1036   22062  1038.1 22071.3  1037.9 22400.5  1035.8
 22736.6  1038.6 22771.4    1038 22816.3  1035.5 22817.7  1036.3 22900.7  1032.1
 23002.2  1032.7 23120.7  1033.1 23129.8  1033.1 23156.7  1038.2 23258.8    1038
 23383.7  1037.9 23478.9  1038.9 23571.2  1038.9 23695.4  1038.7   23813    1038
 23927.9  1038.6 23944.9  1036.6   24036  1038.4 24127.3  1038.3 24217.5  1039.5
 24260.3  1040.4 24277.2  1039.6

Manning's n Values        num=      4
     Sta   n Val     Sta   n Val     Sta   n Val     Sta   n Val
 18471.1    .037 19341.4    .032   20578    .037 21376.6    .025

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
      19341.4   20578              311  344.14     446              .1       .3
Ineffective Flow     num=      2
   Sta L   Sta R    Elev   Sta L   Sta R    Elev
 18471.1   19130    1040 21003.8 24277.2    1040

CROSS SECTION          RIVER: 1
REACH: 1                  RS: 209.54

INPUT
Description: 209.54
Station Elevation Data    num=     31
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
 18558.3  1035.9 18953.3    1031 19413.3    1031 19568.3    1036 19713.3    1040
 19863.3   104219945.14 1044.0120000.32 1043.6720022.38 1039.820036.91 1033.42
 20102.91018.25120139.23  1009.9 20153.9 1009.6620165.29 1004.3220283.58   998.4
 20352.9   995.320409.65  992.3120445.78 1004.7520453.49 1008.7320473.79 1014.13
 20531.4 1031.9820551.27 1040.6920587.06 1042.78 20763.7    1040 20898.7    1036
 21233.7    1031 22228.7    1031 22578.7    1031 22988.7    1036 23038.7    1037
 23838.7  1038.3

Manning's n Values        num=      5
     Sta   n Val     Sta   n Val     Sta   n Val     Sta   n Val     Sta   n Val
 18558.3    .03719945.14    .037 20102.9    .03220587.06    .037 20763.7    .025

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
      19945.1420587.06             46.58   46.58   46.58              .1       .3
Ineffective Flow     num=      2
   Sta L   Sta R    Elev   Sta L   Sta R    Elev
 18558.3   19130    1050   20521 23838.7    1050

BRIDGE                 RIVER: 1
REACH: 1                  RS: 209.535

INPUT
Description: 35th Avenue Bridge
Distance from Upstream XS =       0
Deck/Roadway Width        =   46.58
```

```
Weir Coefficient          =     2.6
Bridge Deck/Roadway Skew  =
Upstream  Deck/Roadway Coordinates
    num=      18
     Sta Hi Cord Lo Cord     Sta Hi Cord Lo Cord     Sta Hi Cord Lo Cord
 18558.3  1035.9  1035.9 18953.3    1032    1032 19413.3    1032    1032
 19568.3    1036    1036 19713.3    1040    1040 20020.9 1043.87 1037.09
 20147.9 1043.74 1036.96 20272.9  1043.5 1036.72 20397.9 1043.02 1036.23
   20521 1042.46 1035.68 20521.1 1042.42 1042.42 20763.7    1040    1040
 20898.7    1036    1036 21233.7    1032    1032 22578.7    1032    1032
 22988.7    1036    1036 23038.7    1037    1037 23838.7  1038.3  1038.3

Upstream Bridge Cross Section Data
Station Elevation Data    num=      31
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
 18558.3  1035.9 18953.3    1031 19413.3    1031 19568.3    1036 19713.3    1040
 19863.3    104219945.14 1044.0120000.32 1043.6720022.38  1039.820036.91 1033.42
 20102.91018.25120139.23  1009.9 20153.9 1009.6620165.29 1004.3220283.58   998.4
 20352.9   995.320409.65  992.3120445.78 1004.7520453.49 1008.7320473.79 1014.13
 20531.4 1031.9820551.27 1040.6920587.06 1042.78 20763.7    1040 20898.7    1036
 21233.7    1031 22228.7    1031 22578.7    1031 22988.7    1036 23038.7    1037
 23838.7  1038.3

Manning's n Values        num=       5
     Sta   n Val     Sta   n Val     Sta   n Val     Sta   n Val     Sta   n Val
 18558.3    .03719945.14    .037 20102.9    .03220587.06    .037 20763.7    .025

Bank Sta: Left   Right    Coeff Contr.   Expan.
      19945.1420587.06            .1       .3
Ineffective Flow     num=       2
   Sta L   Sta R    Elev   Sta L   Sta R    Elev
 18558.3   19130    1050   20521 23838.7    1050

Downstream  Deck/Roadway Coordinates
    num=      18
     Sta Hi Cord Lo Cord     Sta Hi Cord Lo Cord     Sta Hi Cord Lo Cord
 18558.3  1035.9  1035.9 18953.3    1032    1032 19413.3    1032    1032
 19568.3    1036    1036 19713.3    1040    1040 20020.9 1043.87 1037.09
 20147.9 1043.74 1036.96 20272.9  1043.5 1036.72 20397.9 1043.02 1036.23
   20521 1042.46 1035.68 20521.1 1042.42 1042.42 20763.7    1040    1040
 20898.7    1036    1036 21233.7    1032    1032 22578.7    1032    1032
 22988.7    1036    1036 23038.7    1037    1037 23838.7  1038.3  1038.3

Downstream Bridge Cross Section Data
Station Elevation Data    num=      33
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
 18558.3  1035.9 18953.3    1030 19413.3    1030 19568.3    1036 19713.3    1040
 19863.3    104219967.01  1043.420002.05 1042.91 20020.91038.21120034.22 1034.89
 20102.91020.23520147.21 1010.7820164.84 1009.7320171.51 1007.4920222.65 1006.24
 20279.2 1001.7520351.65  995.9320410.25  992.8220447.48 1001.0320457.97 1008.48
20469.59 1010.87   20521 1027.9520536.71 1033.1720558.02 1040.2320593.88 1041.57
 20763.7    1040   20898    1036 21233.7    1031 22228.7    1031 22578.7    1031
 22988.7    1036 23038.7    1037 23838.7  1038.3

Manning's n Values        num=       5
     Sta   n Val     Sta   n Val     Sta   n Val     Sta   n Val     Sta   n Val
 18558.3    .03720002.05    .037 20102.9    .03220593.88    .037   20898    .025

Bank Sta: Left   Right    Coeff Contr.   Expan.
      20002.0520593.88            .1       .3
Ineffective Flow     num=       2
   Sta L   Sta R    Elev   Sta L   Sta R    Elev
 18558.3   19130    1048   20521 23838.7    1048

Upstream Embankment side slope              =        horiz. to 1.0 vertical
Downstream Embankment side slope            =        horiz. to 1.0 vertical
Maximum allowable submergence for weir flow =     .95
Elevation at which weir flow begins         =    1032
Energy head used in spillway design         =
Spillway height used in design              =
Weir crest shape                            = Broad Crested

Number of Piers =  3

Pier Data
Pier Station     Upstream= 20145.9    Downstream= 20145.9
Upstream     num=       2
    Width   Elev    Width   Elev
        4    990        4 1036.96
Downstream     num=       2
    Width   Elev    Width   Elev
        4    990        4 1036.96

Pier Data
```

```
Pier Station     Upstream= 20270.9    Downstream= 20270.9
Upstream     num=       2
    Width   Elev    Width   Elev
        4    990        4 1036.72
Downstream     num=       2
    Width   Elev    Width   Elev
        4    990        4 1036.72

Pier Data
Pier Station     Upstream= 20395.9    Downstream= 20395.9
Upstream     num=       2
    Width   Elev    Width   Elev
        4    990       410036.23
Downstream     num=       2
    Width   Elev    Width   Elev
        4    990       410036.23

Number of Bridge Coefficient Sets =  1

Low Flow Methods and Data
       Energy
       Momentum                Cd  =     1.2
       Yarnell                 KVal =    1.05
Selected Low Flow Methods = Highest Energy Answer

High Flow Method
       Energy Only

Additional Bridge Parameters
       Add Friction component to Momentum
       Add Weight component to Momentum
       Class B flow critical depth computations use critical depth
           inside the bridge at the upstream end
       Criteria to check for pressure flow = Upstream water surface

CROSS SECTION          RIVER: 1
REACH: 1                  RS: 209.53

INPUT
Description: 209.53
Station Elevation Data     num=      33
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
 18558.3  1035.9 18953.3    1030 19413.3    1030 19568.3    1036 19713.3    1040
 19863.3    104219967.01 1043.420002.05 1042.91 20020.91038.21120034.22 1034.89
 20102.91020.23520147.21 1010.7820164.84 1009.7320171.51 1007.4920222.65 1006.24
 20279.2 1001.7520351.65  995.9320410.25  992.8220447.48 1001.0320457.97 1008.48
20469.59 1010.87   20521 1027.9520536.71 1033.1720558.02 1040.2320593.88 1041.57
 20763.7    1040   20898    1036 21233.7    1031 22228.7    1031 22578.7    1031
 22988.7    1036 23038.7    1037 23838.7  1038.3

Manning's n Values         num=       5
     Sta   n Val     Sta   n Val     Sta   n Val     Sta   n Val     Sta   n Val
 18558.3    .03720002.05    .037 20102.9    .03220593.88    .037   20898    .025

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
      20002.0520593.88              486  541.77     601              .1       .3
Ineffective Flow     num=       2
   Sta L   Sta R    Elev   Sta L   Sta R    Elev
 18558.3   19130    1048   20521 23838.7    1048

CROSS SECTION          RIVER: 1
REACH: 1                  RS: 209.42

INPUT
Description: 209.42

Left and Right Channel Bank Stations Interpolated
Station Elevation Data     num=      98
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
 18513.1  1035.5 18574.6  1035.9 18632.5  1034.6 18635.6  1035.4 18680.9    1036
 18687.8  1038.5 18701.4  1035.2 18765.3  1035.2 18835.1  1035.1 18900.1  1034.7
 18961.3  1033.7   190001032.138 19025.7  1031.1 19065.8  1027.8 19104.1  1022.3
 19120.6  1022.6 19125.1  1023.7 19197.6  1025.3   19246    1026 19272.2  1027.8
 19302.1  1027.8 19321.9  1026.7 19328.1  1029.6 19343.4  1022.9 19375.4  1021.5
 19391.1     1023 19460.5  1022.9 19564.6  1022.1 19568.3  1022.2 19574.4  1019.8
 19580.4  1022.5 19651.1  1021.3 19734.5  1021.9 19816.3  1021.1 19912.2    1021
 19990.4  1020.5 20054.5  1019.6 20101.7  1020.2 20105.2  1019.7 20498.9    1020
 20581.2     1020 20630.2  1030.4 20651.6 1032.220652.671032.771 20678.6 1046.6
 20730.3  1043.9 20738.4  1042.7 20748.3  1044.1 20763.6  1040.6 20779.3  1040.7
 20848.4  1041.7 20859.5  1041.4   20872  1043.7 20881.6  1043.1 20905.4  1030.8
 20920.2  1032.2 21002.8  1031.3 21074.4  1031.3 21080.4  1031.3 21145.3  1031.6
 21189.4  1031.7 21251.9  1031.7 21253.8  1031.7 21327.8  1030.8 21328.7  1030.8
   21393  1029.7 21454.5  1029.5 21522.8  1029.1 21585.4  1028.8 21633.2  1028.1
 21668.4  1029.3 21781.5  1029.2 21786.8  1029.4 21861.9  1030.7 21866.8  1030.8
```

21933.5	1032	21950.3	1032.1	22025.9	1032.4	22032.2	1032.3	22104.7	1032.3
22114.7	1032.3	22183.6	1032.3	22249.7	1032.4	22313.6	1032.4	22379.4	1031.3
22445.2	1031.7	22506.8	1031.2	22573.5	1031.3	22646.8	1031.1	22725.1	1032.8
22749.8	1033.1	22763.4	1030.6	22774	1030.6	22784.2	1034.4	22794.1	1035.3
22860.8	1035.8	22923.3	1036.2	22993	1036.4				

Manning's n Values num= 6

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
18513.1	.037	18900.1	.037	19197.6	.032	20581.2	.037	20678.6	.037
20872	.025								

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
19000	20652.67	510	510.73	575	.1	.3

Ineffective Flow num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
18513.1	19000	1046.6	20678.6	22993	1046.6

CROSS SECTION RIVER: 1
REACH: 1 RS: 209.33

INPUT
Description: 209.33

Left Channel Bank Station Interpolated
Station Elevation Data num= 97

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
18805.6	1034.2	18877.6	1035.1	18915.6	1036.2	18919.2	1035	18988.3	1034.4
19048	1034.3	19090.2	1033.6	19122.27	1031.972	19129.6	1031.6	19136.7	1028.7
19151.1	1021.4	19214	1024.9	19263.6	1023.8	19325.2	1019.4	19353.4	1019.1
19384.8	1021.1	19397.4	1023.8	19407.5	1019.8	19479	1021.1	19544.8	1020.6
19627.3	1020.2	19659.1	1019.7	19722.2	1021.3	19783.5	1021.9	19849	1021.7
19908.4	1021.2	19998.6	1019.8	20012.1	1019.2	20028.7	1019.6	20037.7	1019.1
20132.6	1019	20227.8	1018.9	20304.8	1018.9	20368.5	1018.9	20451.7	1018.9
20508.2	1018.9	20535	1021.9	20556.6	1021.9	20587.2	1013.4	20625	1012
20631.7	1016.7	20643.4	1021.5	20674.2	1024.9	20676.3	1025.7	20686.3	1024.9
20715.2	1031	20732.6	1031	20771.2	1028.9	20789.7	1027.4	20819.3	1030.9
20832.1	1031.7	20895.5	1031.2	20926.6	1030.4	20939	1035.1	20961.5	1031.1
20974.4	1026.4	20989.2	1025.5	21018	1031.1	21089.8	1030.1	21150.5	1030.1
21211.3	1030	21276.9	1030	21335.5	1030.1	21401.9	1030.6	21492.3	1030.3
21555.6	1029.6	21661.6	1029.4	21712.9	1029.6	21772.4	1028.9	21843.8	1027.8
21878.8	1026.3	21894.4	1028.8	21895.8	1027.9	21909.1	1026.8	21928.4	1027.9
21993.8	1028.7	22054.9	1028.5	22110.2	1032.3	22203.3	1030.7	22272.4	1030.5
22282.8	1030.5	22295.7	1027.1	22353.6	1028.2	22386.4	1027.1	22399.1	1029.7
22428.3	1030.6	22439.8	1026.5	22461	1027.5	22530.6	1027.3	22561.2	1030.1
22572.6	1032.3	22585	1027.9	22616.3	1032.3	22642.1	1032.3	22728.7	1032.7
22817.3	1033.5	22913	1034.5						

Manning's n Values num= 6

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
18805.6	.037	19090.2	.037	19263.6	.032	20535	.037	20715.2	.037
21018	.025								

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
19122.27	20715.2	485	487.54	495	.1	.3

Ineffective Flow num= 1

Sta L	Sta R	Elev
20715.2	22913	1036.2

CROSS SECTION RIVER: 1
REACH: 1 RS: 209.24

INPUT
Description: 209.24
Station Elevation Data num= 65

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
18800.9	1031.5	18845.2	1031.7	18853.7	1034.8	18869.6	1030.2	18915.9	1030.2
18963.2	1027.6	19026.2	1018.3	19072.6	1022.7	19145.5	1025.3	19204.5	1026.7
19228	1027.1	19267.6	1026.7	19336.8	1018.5	19401	1018	19469	1019
19559.6	1018.9	19600.3	1019	19664.3	1019	19693.2	1019.3	19751.6	1019.2
19788.9	1019.1	19833.6	1020.4	19858.1	1020.3	19886.4	1017.7	19971	1017.4
19982.5	1021.6	19990.5	1025.8	20018.6	1018.6	20042.8	1017.5	20058.4	1018.8
20077.7	1018.9	20090.4	1015.2	20111.7	1010.3	20135.2	1012.6	20140.8	1010.2
20203.6	1008.9	20268.9	1009.4	20288	1010.6	20307.3	1010.4	20312	1013.8
20352.1	1014.9	20376.3	1025.5	20383.4	1023.4	20390.2	1026.6	21913	1027.4
21918.5	1026.2	21937.9	1023.9	21950.8	1023.6	21971.5	1026.2	21995	1024
22089.4	1024.8	22140	1026	22164.3	1024.1	22247.4	1026.7	22301.3	1026.2
22321.1	1026.6	22357.4	1030.1	22379.9	1031.6	22389.9	1027.4	22399.6	1028.2
22408.1	1030.8	22473.3	1030.9	22546.1	1031.4	22631	1032.1	22690	1032.8

Manning's n Values num= 6

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
18800.9	.037	19228	.032	19267.6	.032	20312	.037	20390.2	.037
21913	.025								

```
Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
       19267.6 20390.2              510     515     525              .1       .3
Ineffective Flow     num=       2
   Sta L   Sta R    Elev   Sta L   Sta R    Elev
 18800.9 18853.7  1034.8   20850   22690  1034.8

CROSS SECTION          RIVER: 1
REACH: 1                  RS: 209.14

INPUT
Description: 209.14
Station Elevation Data    num=      61
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
 18530.6  1030.2 18647.3  1030.8 18717.7    1031 18799.9  1030.8 18812.7  1030.6
   18900  1029.5 18932.6  1029.3 18944.6  1034.8 18957.8  1027.8 18961.9  1027.7
 19022.8  1026.2   19085  1025.9   19166  1017.5 19223.3  1022.8 19272.5  1024.6
 19338.9  1024.1 19386.4  1017.7 19425.6  1016.4 19503.5  1016.6 19527.4  1016.6
 19538.6  1021.6 19565.5  1014.5 19580.5  1016.2 19601.3  1015.8 19617.1  1017.3
 19620.4     1016 19621.3    1017 19649.1  1016.3 19715.5  1017.1   19791  1016.6
   19861  1016.8 19939.6    1017 20018.5  1017.5 20098.7  1018.4 20136.8  1016.4
   20159  1021.8 20163.8  1021.6 20169.1  1022.8   20184  1018.8 20211.5  1019.1
 20235.1  1012.1 20271.8  1010.6 20284.5  1010.9 20305.9  1016.4 20368.5  1013.7
 20394.9  1013.1 20413.2  1023.8 20418.3  1025.4 20439.5    1025 20471.6  1026.6
 21987.9  1026.6 21999.2  1033.7 22018.9  1024.5 22092.4  1030.2 22094.4  1030.3
 22100.9  1026.3 22162.2  1027.1 22231.7  1027.3 22248.2  1030.6   22261  1029.5
 22293.3  1030.2

Manning's n Values        num=       4
     Sta   n Val     Sta   n Val     Sta   n Val     Sta   n Val
 18530.6    .037 19338.9    .032 20418.3    .037 21999.2    .025

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
       19338.9 20418.3              500  504.56     485              .1       .3
Ineffective Flow     num=       2
   Sta L   Sta R    Elev   Sta L   Sta R    Elev
 18530.6 18944.6    1034   21100 22293.3    1034

CROSS SECTION          RIVER: 1
REACH: 1                  RS: 209.04

INPUT
Description: 209.04
Station Elevation Data    num=      63
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
 17502.1  1032.3 17560.1  1032.9 17609.7  1031.6 17636.5  1033.4 17744.6  1031.9
   17770    1031 17784.7  1027.9 17886.2    1029   17976  1029.5   18087  1029.7
 18189.2  1028.4   18278  1028.5 18371.6  1028.9 18408.2  1029.7 18494.9  1028.9
 18579.6  1028.4 18720.8    1029 18831.6  1028.7 18921.3  1028.4 19009.8  1028.1
 19029.7  1029.9 19039.2  1026.5 19129.8  1025.1 19156.1  1023.5 19206.7  1017.7
 19260.8  1016.5 19291.9  1022.9 19315.3  1025.6 19358.3  1024.5 19381.5  1014.5
 19410.3  1014.2 19515.9  1015.1 19568.7  1015.3 19609.7  1014.2 19715.7  1014.2
   19776  1013.5 19864.4    1016 19951.2  1016.3 20000.4  1015.1 20015.4  1013.4
 20144.8  1012.2 20171.9  1012.3 20307.8  1014.7 20330.1  1015.1 20379.3  1022.7
 20387.8  1020.9   20406  1020.1 20427.2    1023 20461.4  1023.2   20591  1024.2
 22074.8     1024 22077.6  1027.6 22104.8  1036.3 22120.5  1030.7 22123.6  1027.7
 22179.3  1027.5 22209.6  1031.1   22217  1033.3   22254  1026.2 22313.5  1029.2
 22366.7  1029.7 22453.1  1030.2   22468  1030.4

Manning's n Values        num=       5
     Sta   n Val     Sta   n Val     Sta   n Val     Sta   n Val     Sta   n Val
 17502.1    .037 19315.3    .037 19410.3    .032 20461.4    .037   22254    .025

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
       19315.3 20461.4              495  493.26     500              .1       .3
Ineffective Flow     num=       2
   Sta L   Sta R    Elev   Sta L   Sta R    Elev
 17502.1 19029.7    1035   21200   22468    1035

CROSS SECTION          RIVER: 1
REACH: 1                  RS: 208.95

INPUT
Description: 208.95
Station Elevation Data    num=      47
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
 17388.1  1030.8   17406  1030.7 17453.4  1039.3 17470.9  1039.4   17498  1031.1
 17600.7  1030.9   17686  1030.7 17760.7  1027.3 17869.1  1027.3 17947.5  1027.5
 18034.7  1027.8 18122.9  1027.9 18229.8    1028 18362.5  1027.6 18483.7  1027.2
   18571  1026.4 18659.7  1025.6 18802.8  1026.1 18871.2  1029.7 18908.6  1028.7
 18928.4  1025.8 19016.8  1024.1 19035.5  1027.7 19114.2  1024.9 19137.7  1030.4
 19142.2  1025.8 19205.2  1023.5 19276.9  1018.7 19293.7  1013.8 19408.9  1014.5
 19496.9  1014.1   19543  1014.4 19646.8  1014.7 19794.8  1014.5 19910.6  1015.8
 19987.9  1016.6 20028.6  1018.7 20113.7  1020.6 20123.6  1024.6 21531.3  1025.2
   22092  1024.6 22101.4  1027.9 22119.6  1027.7   22135  1034.4 22141.9  1036.4
```

22162.1 1026.4 22186 1026.7

Manning's n Values num= 4

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
17388.1	.037	19137.7	.037	19276.9	.032	20123.6	.037

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
19137.7	20123.6	505	506.69	505	.1	.3

Ineffective Flow num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
17388.1	19137.7	1038	21200	22186	1038

CROSS SECTION RIVER: 1
REACH: 1 RS: 208.85

INPUT
Description: 208.85
Station Elevation Data num= 69

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
17667	1028.3	17683.4	1029.5	17702	1037.2	17712.6	1036.7	17732.2	1028.9
17793.4	1029.3	17794.3	1028.1	17811.4	1029.7	17884.4	1029.8	17954.5	1029.5
18021.3	1029	18086.8	1028.4	18155.5	1027.6	18253.7	1026.5	18321.5	1026.3
18395.4	1025.8	18469.1	1025.7	18517	1025.4	18547.8	1030.6	18614.6	1029.1
18653.1	1029.8	18743.2	1028.7	18829.7	1028.9	18902.2	1028.7	18950.5	1028.5
18968.7	1029.4	19052.5	1028	19118	1027.5	19183.9	1025.1	19199.7	1025.2
19210.3	1021.6	19228.4	1014.1	19243.7	1013.4	19285.7	1013.5	19404.4	1013.7
19442.3	1013.8	19550.1	1014.4	19628.8	1015.9	19695.2	1016.5	19784.8	1017.1
19851.9	1017.7	19926.2	1019	20020.7	1019.9	20118.1	1019.8	20148.7	1019.8
20176.3	1018.8	20233.8	1020.2	20291.9	1019.7	20357.5	1017.6	20426	1016.4
20472.5	1017.1	20530.5	1016.5	20568.5	1021.6	20573.6	1019.4	20598	1014.9
20615.5	1016.2	20685.2	1014.7	20701.9	1014.6	20716.4	1019	20745.8	1021.2
21590.5	1021.2	21595.5	1023.1	21612.9	1023.6	21620.3	1024.7	21935.6	1028.7
21943	1025.9	22047.6	1025.8	22056.8	1030.6	22086	1042.9		

Manning's n Values num= 4

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
17667	.037	19199.7	.032	20701.9	.037	20745.8	.037

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
19199.7	20745.8	510	519.42	530	.1	.3

Ineffective Flow num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
17667	18968.7	1035	21150	22086	1035

CROSS SECTION RIVER: 1
REACH: 1 RS: 208.75

INPUT
Description: 208.75
Station Elevation Data num= 81

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
17694.2	1021.1	17763.9	1027.7	17785	1036	17797.3	1035.5	17818.9	1026.8
17862.3	1027.5	17876.4	1028.3	17879.6	1027	17887.5	1027.8	17976.5	1027.4
18069.6	1028.1	18129.1	1026.6	18227.5	1026	18358.7	1025	18492.4	1025.2
18601.8	1024.8	18699.9	1024.5	18819.7	1024.6	18852.6	1024.6	18949.1	1024.4
19044.9	1024	19145.7	1024.3	19192.9	1024.4	19220.5	1014.1	19251.3	1012.8
19259.2	1013.5	19469.4	1013.5	19559.7	1013.6	19581	1014.6	19605.6	1018.3
19624.1	1017.7	19644.9	1018.4	19739.6	1018.2	19808.7	1018.7	19912.6	1019.8
20031.3	1019	20124.1	1018.4	20199.4	1018.2	20239.9	1014.1	20370.8	1011.9
20423	1008.1	20441.8	1007.4	20459.1	1008.5	20487.2	1008.9	20517.6	1007.6
20545.9	1007.6	20574.1	1007.6	20616.3	1007.6	20685.5	1007.6	20704.1	1009.9
20720.5	1009	20737	1005.2	20763.6	1011.5	20774.6	1011	20799.2	1019.7
20826.5	1020	21626	1022.7	21706	1024.3	21714.3	1025.4	21770	1027.2
21800.9	1044.1	21813.2	1039.1	21842.4	1033.1	21857.2	1027.1	21893.8	1028.4
22015.3	1028.8	22117.6	1027.6	22189.1	1026	22214.4	1028.5	22251.7	1027.8
22282.9	1029.1	22304.2	1030.9	22314.1	1036.1	22336.1	1034.2	22354	1031.3
22395.9	1029.6	22417.9	1030.2	22426.2	1025.2	22438.2	1024.8	22447	1027
22490.7	1026.9								

Manning's n Values num= 4

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
17694.2	.037	19192.9	.032	20799.2	.037	22314.1	.025

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
19192.9	20799.2	440	443.83	450	.1	.3

Ineffective Flow num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
17694.2	19192.9	1038	20799.2	22490.7	1038

CROSS SECTION RIVER: 1
REACH: 1 RS: 208.67

INPUT
Description: 208.67

Left and Right Channel Bank Stations Interpolated
Station Elevation Data num= 88

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
17786.1	1022.3	17843.6	1026.5	17855.3	1034.5	17872.2	1033.9	17892.4	1025.1
17923.9	1026.9	17935.3	1026.9	17946.1	1029.5	17954.2	1026.8	17960.6	1028.1
18085.3	1025.9	18175.8	1025.5	18284.1	1025.1	18393	1024.3	18536.6	1023.2
18662.6	1023.3	18777.1	1023.6	18913.6	1023.9	19013.8	1024.8	19102.8	1025.9
19116.6	1024.6	19118.22	1023.942	19145.2	1013	19150.7	1014.2	19263.7	1013.6
19374.5	1013.1	19435.1	1013.5	19572.8	1013.6	19645.9	1014.5	19689.8	1017.6
19797.8	1018.5	19923.6	1018.8	20022.9	1016	20112.6	1014.2	20119.4	1013.9
20139.2	1008.8	20180.9	1009.7	20203.7	1007.6	20293	1010.5	20307.2	1007.8
20372	1009.4	20399.2	1008.8	20452.2	1010.5	20523.1	1009.4	20536.1	1014.1
20548.6	1010.7	20639.2	1014.5	20652.7	1013.5	20665.3	1010.4	20713.7	1010.2
20725.6	1013.6	20738.6	1020.7	20826	1023.1	20841.3	1024.7	20857.6	1022.8
20866.3	1014.9	20871.8	1016.1	20881.2	1020.9	20902	1018.8	20908.11	1023.942
20912.1	1027.3	20915.2	1025.5	21808.2	1025.7	21897.3	1025.4	21995.2	1025.3
22131.2	1026.1	22205.3	1026.2	22276.6	1027.7	22393.1	1027.2	22428	1027.2
22464.1	1025.6	22496.5	1027	22518.1	1024.1	22529.5	1026	22649	1025.9
22747.7	1025.2	22864.8	1024.7	22963.7	1025.8	23106.8	1026.4	23231	1026.5
23328.6	1027.2	23422.1	1026.4	23522.3	1028.3	23562.9	1027.2	23612.4	1030.4
23634.1	1030.7	23767.5	1029.2	23789.9	1028.4				

Manning's n Values num= 6

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
17786.1	.037	19102.8	.037	19116.6	.032	20826	.037	20912.1	.037
22428	.025								

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
19118.22	20908.11	495	511.45	475	.1	.3

Ineffective Flow num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
17786.1	19102.8	1033	21150	23789.9	1033

CROSS SECTION RIVER: 1
REACH: 1 RS: 208.57

INPUT
Description: 208.57

Left and Right Channel Bank Stations Interpolated
Station Elevation Data num= 86

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
17892.9	1023.8	17920.6	1025.8	17926.7	1033.6	17946	1032.8	17966.2	1024.2
18010.1	1026	18022	1028.4	18027.2	1025.8	18036.6	1027.8	18048.7	1025
18090.2	1023.6	18189.1	1023.8	18284.4	1023.8	18378.8	1023.6	18492.2	1023.9
18502.6	1023.9	18575.4	1024.1	18681.9	1023.6	18705.6	1023.6	18777.9	1023.5
18853.8	1023.6	18935.4	1023.8	19041.2	1023.8	19080.9	1025	19087.13	1021.839
19101.4	1014.6	19184.3	1012.9	19255.1	1011.9	19315.3	1011.9	19368.2	1010.4
19435.4	1013.3	19524.5	1013.8	19585.9	1012	19676.3	1014	19772.4	1014.4
19846.2	1014.8	19900.7	1016.3	19982.9	1016.5	20023.8	1014.7	20071.3	1014.9
20086.3	1012.9	20123	1013.5	20146	1011	20220.3	1007.6	20240.8	1007.6
20261.8	1009.9	20276.9	1008.4	20361	1010.1	20458.8	1010.7	20541.8	1012.1
20584.9	1012.3	20595.3	1014.5	20599.2	1013.9	20607.5	1016.1	20614.3	1015
20623.9	1016	20640	1016.203	20647.7	1016.3	20654.4	1017.4	20724.7	1017.3
20827.2	1020	20901.1	1020.7	20951.9	1021	20965.4	1016.5	20974.8	1017
21000.4	1025.7	21032.4	1026.3	21033.8	1024	21616	1024.8	21707.7	1024.4
21817.1	1024.3	21913.4	1023.7	21991.5	1023.8	22065.5	1024.5	22100	1024.9
22243.4	1025.1	22248	1025.1	22334.2	1026.7	22341.3	1026.8	22434.5	1027.5
22499.8	1026.8	22523.2	1026.9	22552.2	1028.3	22565.8	1024.5	22577.9	1025.6
22585	1027.8								

Manning's n Values num= 5

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
17892.9	.037	19080.9	.037	19101.4	.032	21000.4	.032	21032.4	.037

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
19087.13	20640	560	514.75	370	.1	.3

Ineffective Flow num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
17892.9	19080.9	1028	20640	22585	1028

CROSS SECTION RIVER: 1
REACH: 1 RS: 208.48

INPUT
Description: 208.48

Left and Right Channel Bank Stations Interpolated
Station Elevation Data num= 72

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
18038.2	1024.5	18107.3	1024	18176.8	1026.3	18180.6	1023.6	18220	1024.2
18231.5	1030.8	18253	1040.2	18276.7	1045.8	18279.2	1045.4	18325.3	1023.2
18350.1	1034.9	18383.7	1036.5	18431.8	1022.6	18508.9	1022.1	18510.56	1021.363

18528.5	1013.4	18574.3	1009.5	18585	1009.5	18656.1	1009.7	18723.8	1009.2
18751.4	1011.9	18757.6	1013.2	18773.9	1012	18790	1012.6	18811.4	1014.6
18894	1015.4	18935.3	1016.3	18976.7	1016	18993.7	1009.2	19033.2	1007.6
19073.1	1010.5	19142.7	1010.5	19210.3	1011.2	19297.6	1012.4	19357.3	1014.5
19432.9	1014	19515.6	1015.2	19565.3	1016.2	19630.9	1012.6	19702.1	1013.3
19791.9	1013	19865.2	1012.2	19956.6	1011.4	20027.1	1011	20099.9	1011
20112.3	1011	20178.6	1011.1	20248.4	1011.1	20312.8	1010.9	20383.8	1010.5
20479.2	1009.8	20529.6	1009.2	20545.1	1017	20627.3	1012.2	20656.3	1012
20680.86	1021.362	20694.6	1026.6	20705.7	1021.5	20806.1	1023.8	21024.6	1028.4
21084	1028.5	21102.7	1031.8	21472.3	1022.1	21971.9	1021.8	22046.1	1022.2
22091.6	1023	22109.6	1026.2	22178.4	1024.8	22198	1027	22264.7	1026.9
22377	1027.5	22430	1027.5						

Manning's n Values num= 6

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
18038.2	.043	18508.9	.043	18585	.032	20545.1	.037	20694.6	.037
22377	.025								

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
18510.56	20680.86	500	476.54	525	.1	.3

Ineffective Flow num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
18038.2	18508.9	1038	20694.6	22430	1038

CROSS SECTION RIVER: 1
REACH: 1 RS: 208.39

INPUT
Description: 208.39

Left and Right Channel Bank Stations Interpolated
Station Elevation Data num= 72

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
18033.7	1024.2	18048.9	1023.9	18052.4	1029.4	18060.9	1031.1	18078.5	1028.7
18083.6	1026.5	18089.9	1022.5	18176.1	1021.5	18253.5	1021.3	18379.7	1022.4
18417.8	1035.8	18447	1022.6	18462.94	1020.436	18469.1	1019.6	18494.4	1010.7
18597.1	1007.9	18699.5	1009.4	18760.1	1011.4	18779.9	1010	18820.5	1010.6
18843.1	1015.2	18914.5	1016.3	18932.1	1009.7	19018.2	1006.1	19063.1	1005.6
19094.9	1009.1	19184.7	1010.4	19213.8	1010.9	19266.1	1013.3	19343.9	1014.9
19411.9	1013.9	19452.4	1014.4	19493.3	1016.2	19593.6	1015.6	19647.5	1014.8
19744.6	1015.5	19808.5	1013.7	19910.3	1013.1	20054	1012.2	20156.8	1011.7
20242.7	1010.5	20343.9	1010	20449.6	1010.3	20484.4	1010.8	20718.2	1010.6
20748.79	1020.435	20754.9	1022.4	20802.7	1021.3	20917.8	1022	20992.6	1024
21004.2	1019	21264.2	1022.8	21271.1	1021.2	21710.3	1019	21734.9	1021.9
21769.9	1021.9	21817.5	1020.2	21841.4	1017.4	21869.1	1018.9	21889.9	1018.1
21894.1	1020.2	21908.6	1017.2	21928.1	1016.5	21932.5	1018.5	22018.7	1019.9
22082.6	1021.4	22098.4	1024.6	22134	1025.4	22198	1023.8	22317.1	1023.6
22352.6	1025.6	22382	1025.9						

Manning's n Values num= 5

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
18033.7	.043	18417.8	.043	18597.1	.032	20718.2	.037	20754.9	.037

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
18462.94	20748.79	505	512.19	480	.1	.3

Ineffective Flow num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
18033.7	18417.8	1030	20754.9	22382	1030

CROSS SECTION RIVER: 1
REACH: 1 RS: 208.29

INPUT
Description: 208.29

Left and Right Channel Bank Stations Interpolated
Station Elevation Data num= 71

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
17002.6	1020.8	17033.1	1020.7	17130	1020.6	17223.7	1020.7	17316.5	1020.8
17410	1021	17443.4	1021	17527.8	1021.3	17612.8	1021.5	17700	1022.8
17725.5	1028.3	17746	1019	18278.7	1023.8	18304.6	1033.9	18306.7	1033.7
18430.1	1023.3	18444.4	1021.3	18480	1020.6	18525.3	1021.4	18545.4	1030.1
18562.61	1019.523	18580.2	1008.7	18645.9	1006.9	18729.8	1008.2	18813.6	1008
18846.3	1006.7	18858.5	1011.3	18964	1010.4	19046.3	1010.7	19068	1009.9
19095.1	1004.7	19192.2	1007.2	19204.4	1008	19237.6	1005	19274.3	1005.1
19293.9	1010.7	19341.5	1011.4	19389.6	1015	19461.9	1012.7	19548.6	1016.1
19665.7	1014.5	19730.4	1012.3	19830.2	1012.9	19905.4	1012.6	19969.1	1014.2
20073.7	1013.1	20194.6	1010.4	20258.7	1012.5	20359.4	1011.5	20498.8	1009.7
20566.1	1009.2	20843.2	1010.4	20909.3	1011.22	0944.071	1019.521	20944.4	1019.6
20975	1023	21021.7	1024	21130.5	1022.9	21208.2	1021.6	21306.6	1021.3
21351.8	1021.1	21367	1020	21795	1020	21802.7	1023.1	21891.9	1019.9
21966.6	1016.6	21987.4	1019.1	22088.4	1021	22160.2	1022.7	22169.6	1026.3
22197	1026								

```
Manning's n Values          num=       7
     Sta   n Val     Sta   n Val     Sta   n Val     Sta   n Val     Sta   n Val
 17002.6    .025 17725.5    .043 18545.4    .043 18645.9    .032 20909.3    .037
   20975    .037 21987.4    .025

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
       18562.620944.07              490  501.01     510            .1        .3
Ineffective Flow     num=       2
   Sta L   Sta R    Elev   Sta L   Sta R    Elev
 17002.6 18545.4  1033.9 21021.7   22197  1033.9

CROSS SECTION          RIVER: 1
REACH: 1                  RS: 208.19

INPUT
Description: 208.19

Left and Right Channel Bank Stations Interpolated
Station Elevation Data     num=      73
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
 16738.4  1022.5 16814.9  1021.3 16821.2  1024.1 16826.8  1024.4   16846  1022.6
 16869.2  1018.1 16892.4  1020.2 17011.8  1018.9 17149.6  1018.8 17287.4    1019
 17387.1  1019.5 17473.6  1019.4 17580.5  1019.5   17670  1020.5 17703.3  1019.8
 17715.2  1023.4 17720.4  1019.5 18540.1  1019.5 18545.5  1021.5 18598.6  1019.7
 18675.6    102018679.181018.788 18707.5  1009.2 18726.3  1010.8   18788  1007.7
 18875.7  1008.8 18927.6  1008.9 18995.2  1007.2   19040  1004.7 19071.5  1004.8
   19117  1012.1 19221.7  1012.6   19293  1010.3 19310.2  1006.5 19415.1  1005.7
   19433  1005.7 19473.9  1008.3 19506.7  1017.8 19594.5  1018.2 19623.8  1016.2
 19711.7  1018.6   19793  1010.9 19904.1  1011.6 19997.4  1011.8 20089.1  1012.4
 20178.1  1013.8 20250.4  1007.3 20363.1  1007.4 20433.4  1005.7 20559.2  1006.9
 20626.2  1007.7 20641.6  1005.9 20704.7    1010 20807.3  1012.1 20891.1    1011
 21007.8  1008.2 21027.6  1007.7 21114.3    1011 21201.9  1010.7 21231.6    1010
   21232  1010.8 21278.3  1014.9 21343.21018.788 21348.4  1019.1 21818.1  1019.2
 21871.3  1019.6 22068.3  1019.1 22125.4    1020   22187  1022.1 22200.2  1026.3
 22310.7  1025.1 22415.4    1025   22486  1024.5

Manning's n Values          num=       5
     Sta   n Val     Sta   n Val     Sta   n Val     Sta   n Val     Sta   n Val
 16738.4    .025 17715.2    .043 18675.6    .043 18707.5    .032 21348.4    .032

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
       18679.18 21343.2              550  514.57     505            .1        .3
Ineffective Flow     num=       2
   Sta L   Sta R    Elev   Sta L   Sta R    Elev
 16738.4 18675.6    1024 21348.4   22486    1024

CROSS SECTION          RIVER: 1
REACH: 1                  RS: 208.1

INPUT
Description: 208.1

Left and Right Channel Bank Stations Interpolated
Station Elevation Data     num=      69
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
 16819.7    1020 16911.7    1020 16920.8  1021.8 17013.5  1018.3 17181.5  1017.7
 17278.5  1017.9 17421.8  1018.4 17530.4  1018.9 17672.5    1019 17700.9  1021.1
   17741  1041.2 17785.3  1019.8 17794.9  1019.4 18660.8  1020.4 18677.2    1019
 18756.4  1019.4 18786.9  1024.5 18805.9  1022.218822.371018.025 18827.2  1016.8
 18834.8  1016.8   18846    1012 18862.1  1009.8 18895.6  1011.5 18990.9  1008.1
 19103.9  1008.1 19211.4  1009.5 19294.1    1007 19344.4  1005.3 19402.2  1005.6
 19441.1  1001.9 19492.5  1001.4 19507.6  1005.4 19538.7  1004.2 19589.1  1004.9
 19611.9  1009.1 19719.5  1009.4 19730.1  1011.2 19842.8  1011.2 19883.7  1010.5
 19981.4    1014 20076.5    1014 20186.6  1011.8 20200.6  1004.4 20293.1  1005.3
   20440  1005.6 20518.6  1005.6 20579.1    1016 20684.7  1017.1 20777.7  1016.5
 20898.9  1016.6 20918.1  1016.7   20993  1011.1 21084.2  1010.3 21202.2  1009.9
 21318.2  1011.4 21438.8  1010.4 21535.9    1009 21597.7  1011.1 21698.8  1010.3
 21706.3  1012.821767.181018.025 21783.2  1019.4 21878.3  1019.5 21970.4  1019.6
 22184.8  1019.5 22249.1  1022.6 22375.9  1023.7   22460  1023.8

Manning's n Values          num=       5
     Sta   n Val     Sta   n Val     Sta   n Val     Sta   n Val     Sta   n Val
 16819.7    .025   17741    .043 18786.9    .043 18805.9    .032 21783.2    .032

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
       18822.3721767.18              640  558.37     480            .1        .3
Ineffective Flow     num=       2
   Sta L   Sta R    Elev   Sta L   Sta R    Elev
 16819.7 18786.9    1030 21783.2   22460    1030

CROSS SECTION          RIVER: 1
REACH: 1                  RS: 207.99

INPUT
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Description: 207.99

Left and Right Channel Bank Stations Interpolated
Station Elevation Data num= 98

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
17809.3	1018.5	17815.5	1018.4	17825.2	1016.2	17906.9	1016.7	18020.3	1016.6
18102.9	1017.1	18116.8	1017.8	18121.1	1019.2	18156	1021.3	18162.3	1018.5
18168.8	1017.5	18272.9	1016.7	18288.2	1016.8	18385.1	1017	18430.3	1017.1
18440.8	1018.3	18447.7	1016.2	18501.8	1016.4	18510.3	1018	18514.6	1015.5
18538.2	1015.7	18541.7	1014.1	18552.7	1006.7	18579.2	1006.9	18660.4	1004.5
18672.2	1007.9	18695.7	1012.5	18709.9	1013.9	18790.3	1015.9	18865.8	1016.8
18884.7	1023.5	18901.5	1024.9	18919.6	1017.9	18933.3	1017.3	19008	1016.5
19025.7	1016.3	19034.2	1018.6	19040.9	1016.9	19083.8	1019.8	19093.03	1016.923
19108.5	1012.1	19169.3	1009	19252	1007.4	19308	1009	19330.7	1003.7
19355.3	1004.7	19441.2	1004.1	19496.6	1000.7	19571.6	999.9	19628.3	1003.8
19657.1	1004.6	19679.9	1006.9	19709	1005.7	19786.5	1006.6	19863.9	1009.8
19926.2	1011	19969.4	1002.6	20043.2	1002.9	20123.4	1004.2	20199.1	1003.3
20291.6	1005.7	20354	1006.7	20409.8	1008.7	20448.4	1011.1	20498.1	1016.9
20579	1017.6	20660.5	1016.3	20726.3	1014.2	20743.2	1010.4	20801.5	1014.5
20874.6	1015.4	20955.4	1016	21051.7	1015.4	21137.2	1014.3	21215.8	1012.8
21233.3	1012.4	21267.9	1009.1	21316.4	1007.5	21351.9	1005.2	21379.5	1005.3
21468.2	1009.5	21567.9	1011.4	21676.9	1011.6	21738.1	1010.6	21759	1009.1
21849.9	1013.1	21881	1015.52	1934.42	1016.922	21967.4	1017.8	22054.7	1017.9
22077.8	1018	22085.6	1018.9	22160.9	1020.4	22188.5	1022.7	22281.8	1022.9
22357.5	1022.4	22442	1022.2	22476.6	1022.2				

Manning's n Values num= 4

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
17809.3	.043	19083.8	.043	19108.5	.032	22085.6	.032

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
19093.03 21934.42 475 482.29 500 .1 .3
Ineffective Flow num= 1

Sta L	Sta R	Elev
17809.3	19083.8	1021

CROSS SECTION RIVER: 1
REACH: 1 RS: 207.9

INPUT
Description: 207.9

Right Channel Bank Station Interpolated
Station Elevation Data num= 89

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
18318.7	1015.8	18394.8	1015.8	18463.1	1016.2	18469.7	1018.1	18472.9	1015
18724.1	1015	18761.1	1014.3	18777.9	1016.8	18795.6	1016.9	18860.1	1015.9
18896.1	1016.3	18904.8	1019.7	18929.3	1019.8	18940.1	1015.2	19033.5	1016.1
19047.9	1016	19059.8	1017.2	19066.9	1015.1	19104.7	1016	19116.7	1011.7
19126.7	1007.1	19193.6	1007.4	19285	1009.3	19371.2	1009	19445.7	1007.1
19492.9	1005.5	19566.8	1005.1	19594	1005.6	19624.6	1005.2	19638.3	1006.4
19689	1001.1	19766	1000.8	19843.4	1001.2	19860.6	1000.8	19947.8	1001.8
19955.3	1001.9	20050.4	1001.4	20071.1	1001.6	20089.1	1003.2	20118.3	1004.3
20156	1007.1	20190.3	1008	20289.9	1007.9	20381.4	1008.9	20427.9	1010.5
20531.5	1011.1	20544.8	1011.1	20560.1	1011.9	20586.4	1015.8	20608.7	1016.9
20680.6	1014.6	20727.2	1013.8	20735.8	1014.5	20764.9	1009.7	20788.6	1011.6
20822.1	1012.5	20927.9	1011.9	20963	1010.7	20994.1	1008.3	21051.7	1014.1
21082.2	1013.7	21131.1	1014.8	21213.2	1014.5	21238.4	1013.9	21256.2	1007.6
21259.2	1007.2	21307.5	1008.3	21334.5	1010	21416.2	1010.9	21507.7	1009.2
21598.5	1005.8	21681.1	1006.9	21719.6	1007.7	21776.6	1006.7	21793.9	1004.3
21872.6	1005.5	21939.8	1009	21972.8	1010.5	22032.5	1008.8	22046.3	1006.6
22111	1005.92	2137.55	1016.374	22143.7	1018.8	22212.8	1020.7	22232.2	1021.2
22300.9	1021	22378.9	1020.5	22421.5	1020.6	22488.9	1019.9		

Manning's n Values num= 4

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
18318.7	.043	19047.9	.032	19104.7	.032	22143.7	.032

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
19104.72 2137.55 505 509.52 585 .1 .3
Ineffective Flow num= 1

Sta L	Sta R	Elev
18318.7	19059.8	1020

CROSS SECTION RIVER: 1
REACH: 1 RS: 207.8

INPUT
Description: 207.8

Right Channel Bank Station Interpolated
Station Elevation Data num= 73

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
16720.8	1015.6	16820	1018	16844.2	1018.7	16848.8	1017.5	16856.8	1019

16867.4	1017.3	16875.2	1017.8	16895	1016.2	16996.6	1015.8	17124.1	1015.3
17221.3	1014.7	17233.7	1014.6	17327.7	1014.3	17428.5	1014.5	17461.8	1014.4
17509	1014.7	17520.5	1015.7	17546.1	1014.2	18739.7	1014.2	18794.2	1014.4
18801.9	1012.7	18900.8	1014.4	18913	1018.5	18934.2	1018.4	18945.1	1013.9
19039.6	1013.5	19178.5	1013.1	19235	1013.5	19249.5	1015	19270.9	1008.6
19304.9	1007.2	19435.5	1007.2	19520.8	1006.1	19559.8	1004.3	19673.3	1005.3
19780.3	1005.6	19820.2	1000.5	19919.9	1000.6	20045.1	1000.2	20073	1001.1
20160.5	1002.9	20209	1001.4	20279.2	1004.6	20310.6	1008.1	20429.9	1009.7
20529.9	1009.3	20571.6	1009.6	20646.2	1007	20667.3	1010.8	20787.7	1013.1
20898.5	1015.2	20915	1015.8	20928.8	1011.5	21033	1009.7	21101	1010.3
21126.1	1013.2	21165.5	1011.3	21182.3	1008.2	21287.6	1007.8	21332.6	1005.8
21365.6	1009.5	21456.3	1009.3	21581.9	1009	21695.3	1007.9	21776.1	1006.6
21795.3	1002.4	21834.5	999.1	21842.9	1003.5	21871.22	1015.405	21881.2	1019.6
21991.4	1019.8	22085.9	1019.5	22180	1020.6				

Manning's n Values num= 5

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
16720.8	.025	17520.5	.043	19039.6	.032	19249.5	.032	21881.2	.032

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
19249.5	21871.22	495	494.8	505	.1	.3

Ineffective Flow num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
16720.8	18913	1019	21881.2	22180	1019

CROSS SECTION RIVER: 1
REACH: 1 RS: 207.71

INPUT
Description: 207.71

Right Channel Bank Station Interpolated
Station Elevation Data num= 69

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
16626.2	1015.3	16668.1	1016.9	16690.7	1017.7	16699.2	1016.4	16733.9	1017.7
16740.2	1016.3	16747.5	1017.3	16818.1	1015.6	16927.6	1015.4	17021	1015.3
17153.4	1014.4	17242.5	1014.4	17313.4	1014.7	17424.4	1012.2	17499	1011
17545	1013	17556.4	1015	18768.1	1013.7	18795	1011.6	18818.9	1011.4
18826.3	1012.5	18837.7	1011	18904.5	1010.8	18932.9	1017.1	18948.7	1016.5
18965.2	1012.7	18981.8	1010.9	19105.3	1010.4	19195.8	1010.5	19272.7	1010.8
19360	1012.7	19373.3	1012.3	19388.1	1010.3	19485.7	1009.8	19579.6	1007.5
19626	1005.9	19656.3	1007	19724.1	1004.1	19825	1001.9	19865.5	1001.1
20033.4	1000.7	20147.9	1000.3	20249.8	1001.7	20337.9	1005	20425.2	1009.8
20449	1011	20553.3	1008.9	20639.2	1006.4	20687.9	1004.5	20738.5	1010.7
20781.1	1011.2	20925.4	1010.6	21010.9	1010.5	21099.7	1007.8	21189.9	1007.3
21251.6	1004.6	21350.8	1006.6	21434.6	1006	21545.1	1002.4	21640.9	1004.3
21652.1	1006	21660.7	1004.2	21704.11	1014.399	21725.4	1019.4	21784.6	1016.6
21889.9	1018.1	21992.7	1019.3	22114.5	1018.7	22157	1018.7		

Manning's n Values num= 5

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
16626.2	.025	17556.4	.043	18981.8	.032	19360	.032	21725.4	.032

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
19360	21704.11	485	487.91	485	.1	.3

Ineffective Flow num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
16626.2	18932.9	1018	21725.4	22157	1018

CROSS SECTION RIVER: 1
REACH: 1 RS: 207.62

INPUT
Description: 207.62

Right Channel Bank Station Interpolated
Station Elevation Data num= 85

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
16251.6	1013	16315.4	1013.5	16374.7	1014.7	16377.5	1015.5	16395.5	1014.6
16421.5	1015.7	16422	1014.7	16556.1	1013.9	16632.1	1014	16716.9	1014
16809.1	1014.3	16813.5	1014.3	16896.9	1014.4	16907.1	1014.4	16991.8	1014.6
17078.6	1013.2	17168.3	1009.6	17287	1010.1	17414.8	1010.3	17522.4	1010.6
17591.1	1013.4	17609.8	1011.4	17662	1012.1	17679.1	1013.9	17688.4	1011.8
17788.8	1010.9	17868.6	1012.4	17910.4	1011.6	17996.3	1008.9	18009.6	1010.7
18035.1	1010.4	18045.1	1011.9	18138.2	1012.6	18185.4	1012.3	18195	1014.2
18263.6	1011.9	18647.5	1012.1	18732.3	1011.6	18815.2	1006.9	18891.8	1011.1
18961.7	1011	18978.7	1015.9	18991.8	1016.8	19005.5	1010.9	19115.1	1011.1
19173.3	1010.9	19236.3	1009.2	19351.7	1010.9	19441.1	1010.7	19518.1	1010.9
19536.8	1005.8	19551.7	1003.6	19572.3	1011.7	19592.2	1007	19618.9	1009.2
19629.6	1005.5	19641.4	1008.7	19649.6	1006.2	19667.1	1010.9	19710.7	1009
19801.1	1007.5	19885.1	1000.9	20012.8	1000.7	20210.2	1000.2	20295.5	1002.1
20395.7	1005.1	20429.1	1005.7	20464.4	1011.5	20549.3	1010.6	20664.2	1007.1
20756.4	1006	20844.7	1004.1	20964.8	1003.4	21097.7	1002.5	21189.6	1001.6
21272.9	1002.2	21361.2	1003.4	21445.5	1003.8	21449.7	1003.9	21472.33	1012.741

21484	1017.3	21597.8	1018	21670.5	1017.5	21682.6	1018.4	21786	1017.2

Manning's n Values num= 5

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
16251.6	.025	17591.1	.043	19005.5	.032	19518.1	.032	21484	.032

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
19518.1	21472.33	460	465	515	.1	.3

Ineffective Flow num= 1

Sta L	Sta R	Elev
16251.6	18991.8	1018.4

CROSS SECTION RIVER: 1
REACH: 1 RS: 207.53

INPUT
Description: 207.53

Right Channel Bank Station Interpolated
Station Elevation Data num= 97

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
16022.7	1011.1	16143.3	1011.7	16215.8	1011.5	16221.1	1014.1	16232.7	1013.9
16241.1	1012.7	16266.4	1013.7	16266.5	1014.9	16268.8	1013.2	16273.6	1014.2
16372.5	1014.1	16429	1014.9	16432.3	1013.6	16526.5	1013	16542.7	1012.9
16638.5	1012.9	16738.7	1012.6	16828.5	1012.8	16854.4	1014.1	16891.5	1014.1
16896.5	1014.8	17034.3	1011.1	17122	1009.6	17238.3	1009.7	17332.6	1009.9
17423.9	1010.1	17511.1	1010.4	17604.5	1010.7	17620.2	1013.7	17629.7	1010.7
17643.4	1009.3	17724	1010	17812.5	1010.1	17954	1010	18065.4	1010.1
18155.9	1010.1	18267.1	1010.5	18354.5	1010.5	18454.3	1011.5	18527.2	1011.5
18611.5	1010	18724.9	1010	18789.3	1010.5	18796.9	1011.3	18812.1	1007.4
18898.8	1008.9	18986.9	1010	18999.5	1010.7	19027.1	1017.5	19046.3	1011.3
19124.1	1011.5	19133.7	1010.3	19137.2	1008.4	19148.2	1008.1	19240.4	1009.9
19257.7	1010.8	19302.9	1009.2	19305.5	1008.3	19314.2	1008.5	19319	1010.3
19329.6	1007.9	19386.1	1006.6	19502.9	1006.4	19603.8	1004.2	19684.4	1002.8
19763.2	1001.2	19791	999.1	19817.3	1000.3	19986.4	1000.3	20057	1000.3
20190.1	1000.3	20256.8	1001.2	20303.8	999.8	20452.2	999.9	20549.1	1000.2
20636.9	1000.2	20732.4	1000.1	20823	1000.7	20885.5	1001.5	20917.4	1004.8
20933.9	1001.4	20947	1004	20965	1000.8	21002.6	1002.6	21159.7	1002.9
21175	1003.865	21269.1	1009.8	21336	1012.1	21366.8	1015.8	21376.8	1013.2
21407.7	1013.3	21446.9	1014.6	21511.1	1014.3	21572.1	1017.7	21609.7	1014
21754.4	1013.1	21798	1013.8						

Manning's n Values num= 5

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
16022.7	.025	17620.2	.043	19124.1	.032	19502.9	.032	21336	.032

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
19502.9	21175	231	227	201	.1	.3

Ineffective Flow num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
16022.7	19027.1	1015	21175	21798	1015

CROSS SECTION RIVER: 1
REACH: 1 RS: 207.49

INPUT
Description: 207.49
Station Elevation Data num= 55

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
16210	1013.8	17338.3	1010.47	18388.3	1010.34	18888.3	1010.64	18938.3	1011
18988.3	1011.5	19038.3	1012.3	19088.3	1013.2	19138.3	1014.3	19188.3	1015.6
19288.3	1018.2	19388.3	1020.56	19455	1022.05	19465.2	1020.4	19465.3	1014.7
19468.2	1013.7	19522.3	997.9	19560.3	997.3	19564.3	997.3	19660.3	997
19664.3	997	19760.3	996.4	19764.3	996.4	19860.3	999.5	19864.3	999.5
19960.3	997.4	19964.3	997.4	20060.3	994.6	20064.3	994.6	20160.3	995.5
20164.3	995.5	20260.3	999.6	20264.3	999.6	20360.3	998.5	20364.3	998.5
20460.3	998.9	20464.3	998.9	20560.3	996.7	20564.3	996.7	20660.3	997.9
20664.3	997.9	20760.3	998	20764.3	998	20860.3	999.9	20864.3	999.9
20960.3	998	20964.3	998	21027.8	992.2	21056.5	1014.7	21059.4	1014.7
21059.5	1020.4	21080	1020.7	21115	1020	21280	1016	21875	1013.8

Manning's n Values num= 3

Sta	n Val	Sta	n Val	Sta	n Val
16210	.032	19455	.032	21059.4	.032

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
19465.3	21059.4	50	53	35	.1	.3

Ineffective Flow num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
16210	19465.3	1020	21059.4	21875	1020

BRIDGE RIVER: 1
REACH: 1 RS: 207.485

INPUT
Description: 51st Avenue Bridge
Distance from Upstream XS = 0
Deck/Roadway Width = 50.71
Weir Coefficient = 2.6
Bridge Deck/Roadway Skew =
Upstream Deck/Roadway Coordinates
num= 28

Sta	Hi Cord	Lo Cord	Sta	Hi Cord	Lo Cord	Sta	Hi Cord	Lo Cord
17338.3	1010.47	1010.47	18388.3	1010.34	1010.34	18888.3	1010.64	1010.64
18938.3	1011	1011	18988.3	1011.5	1011.5	19038.3	1012.3	1012.3
19088.3	1013.2	1013.2	19138.3	1014.3	1014.3	19188.3	1015.6	1015.6
19288.3	1018.2	1018.2	19388.3	1020.56	1020.56	19445	1022.05	1020.2
19560.3	1023.4	1017.77	19660.3	1025.18	1019.47	19760.3	1026.58	1020.87
19860.3	1027.68	1022	19960.3	1028.58	1022.87	20060.3	1029.28	1023.59
20160.3	1029.68	1023.99	20260.3	1029.78	1024.09	20360.3	1029.68	1024
20460.3	1029.28	1023.59	20560.3	1028.68	1023.01	20660.3	1027.88	1022.21
20760.3	1026.68	1021	20860.3	1025.41	1019.67	20960.3	1023.68	1018.03
21059.4	1020.6	1014.92						

Upstream Bridge Cross Section Data
Station Elevation Data num= 55

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
16210	1013.8	17338.3	1010.47	18388.3	1010.34	18888.3	1010.64	18938.3	1011
18988.3	1011.5	19038.3	1012.3	19088.3	1013.2	19138.3	1014.3	19188.3	1015.6
19288.3	1018.2	19388.3	1020.56	19455	1022.05	19465.2	1020.4	19465.3	1014.7
19468.2	1013.7	19522.3	997.9	19560.3	997.3	19564.3	997.3	19660.3	997
19664.3	997	19760.3	996.4	19764.3	996.4	19860.3	999.5	19864.3	999.5
19960.3	997.4	19964.3	997.4	20060.3	994.6	20064.3	994.6	20160.3	995.5
20164.3	995.5	20260.3	999.6	20264.3	999.6	20360.3	998.5	20364.3	998.5
20460.3	998.9	20464.3	998.9	20560.3	996.7	20564.3	996.7	20660.3	997.9
20664.3	997.9	20760.3	998	20764.3	998	20860.3	999.9	20864.3	999.9
20960.3	998	20964.3	998	21027.8	992.2	21056.5	1014.7	21059.4	1014.7
21059.5	1020.4	21080	1020.7	21115	1020	21280	1016	21875	1013.8

Manning's n Values num= 3

Sta	n Val	Sta	n Val	Sta	n Val
16210	.032	19455	.032	21059.4	.032

Bank Sta: Left	Right	Coeff Contr.	Expan.
19465.3	21059.4	.1	.3

Ineffective Flow num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
16210	19465.3	1020	21059.4	21875	1020

Downstream Deck/Roadway Coordinates
num= 28

Sta	Hi Cord	Lo Cord	Sta	Hi Cord	Lo Cord	Sta	Hi Cord	Lo Cord
17338.3	1010.47	1010.47	18388.3	1010.34	1010.34	18888.3	1010.64	1010.64
18938.3	1011	1011	18988.3	1011.5	1011.5	19038.3	1012.3	1012.3
19088.3	1013.2	1013.2	19138.3	1014.3	1014.3	19188.3	1015.6	1015.6
19288.3	1018.2	1018.2	19388.3	1020.56	1020.56	19445	1022.05	1020.2
19560.3	1023.4	1017.77	19660.3	1025.18	1019.47	19760.3	1026.58	1020.87
19860.3	1027.68	1022	19960.3	1028.58	1022.87	20060.3	1029.28	1023.59
20160.3	1029.68	1023.99	20260.3	1029.78	1024.09	20360.3	1029.68	1024
20460.3	1029.28	1023.59	20560.3	1028.68	1023.01	20660.3	1027.88	1022.21
20760.3	1026.68	1021	20860.3	1025.41	1019.67	20960.3	1023.68	1018.03
21059.4	1020.6	1014.92						

Downstream Bridge Cross Section Data
Station Elevation Data num= 55

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
16210	1013.8	17338.3	1010.47	18388.3	1010.34	18888.3	1010.64	18938.3	1011
18988.3	1011.5	19038.3	1012.3	19088.3	1013.2	19138.3	1014.3	19188.3	1015.6
19288.3	1018.2	19388.3	1020.56	19455	1022.05	19465.2	1020.4	19465.3	1014.7
19468.2	1013.7	19522.3	997.9	19560.3	997.3	19564.3	997.3	19660.3	997
19664.3	997	19760.3	996.4	19764.3	996.4	19860.3	999.5	19864.3	999.5
19960.3	997.4	19964.3	997.4	20060.3	994.6	20064.3	994.6	20160.3	995.5
20164.3	995.5	20260.3	999.6	20264.3	999.6	20360.3	998.5	20364.3	998.5
20460.3	998.9	20464.3	998.9	20560.3	996.7	20564.3	996.7	20660.3	997.9
20664.3	997.9	20760.3	998	20764.3	998	20860.3	999.9	20864.3	999.9
20960.3	998	20964.3	998	21027.8	992.2	21056.5	1014.7	21059.4	1014.7
21059.5	1020.4	21080	1020.7	21115	1020	21280	1016	21875	1013.8

Manning's n Values num= 2

Sta	n Val	Sta	n Val
16210	.032	21059.4	.032

Bank Sta: Left	Right	Coeff Contr.	Expan.
19465.3	21059.4	.1	.3

Ineffective Flow num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
16210	19465.3	1020	21059.4	21875	1020

```
Upstream Embankment side slope              =         horiz. to 1.0 vertical
Downstream Embankment side slope            =         horiz. to 1.0 vertical
Maximum allowable submergence for weir flow =     .95
Elevation at which weir flow begins         = 1010.34
Energy head used in spillway design         =
Spillway height used in design              =
Weir crest shape                            = Broad Crested

Number of Piers =  15

Pier Data
Pier Station     Upstream= 19562.3    Downstream= 19562.3
Upstream     num=       2
    Width   Elev    Width   Elev
       4   997.3       4  1017.8
Downstream     num=       2
    Width   Elev    Width   Elev
       4   997.3       4  1017.8

Pier Data
Pier Station     Upstream= 19662.3    Downstream= 19662.3
Upstream     num=       2
    Width   Elev    Width   Elev
       4     997       4 1019.54
Downstream     num=       2
    Width   Elev    Width   Elev
       4     997       4 1019.54

Pier Data
Pier Station     Upstream= 19762.3    Downstream= 19762.3
Upstream     num=       2
    Width   Elev    Width   Elev
       4   996.4       4 1020.94
Downstream     num=       2
    Width   Elev    Width   Elev
       4   996.4       4 1020.94

Pier Data
Pier Station     Upstream= 19862.3    Downstream= 19862.3
Upstream     num=       2
    Width   Elev    Width   Elev
       4   999.5       4    1022
Downstream     num=       2
    Width   Elev    Width   Elev
       4   999.5       4    1022

Pier Data
Pier Station     Upstream= 19962.3    Downstream= 19962.3
Upstream     num=       2
    Width   Elev    Width   Elev
       4   997.4       4  1022.9
Downstream     num=       2
    Width   Elev    Width   Elev
       4   997.4       4  1022.9

Pier Data
Pier Station     Upstream= 20062.3    Downstream= 20062.3
Upstream     num=       2
    Width   Elev    Width   Elev
       4   994.6       4  1023.6
Downstream     num=       2
    Width   Elev    Width   Elev
       4   994.6       4  1023.6

Pier Data
Pier Station     Upstream= 20162.3    Downstream= 20162.3
Upstream     num=       2
    Width   Elev    Width   Elev
       4   995.5       4    1024
Downstream     num=       2
    Width   Elev    Width   Elev
       4   995.5       4    1024

Pier Data
Pier Station     Upstream= 20262.3    Downstream= 20262.3
Upstream     num=       2
    Width   Elev    Width   Elev
       4   999.6       4  1024.1
Downstream     num=       2
    Width   Elev    Width   Elev
       4   999.6       4  1024.1

Pier Data
Pier Station     Upstream= 20362.3    Downstream= 20362.3
```

```
Upstream     num=       2
    Width   Elev    Width   Elev
       4   998.5       4    1024
Downstream     num=       2
    Width   Elev    Width   Elev
       4   998.5       4    1024

Pier Data
Pier Station     Upstream= 20462.3    Downstream= 20462.3
Upstream     num=       2
    Width   Elev    Width   Elev
       4   998.9       4  1023.6
Downstream     num=       2
    Width   Elev    Width   Elev
       4   998.9       4  1023.6

Pier Data
Pier Station     Upstream= 20562.3    Downstream= 20562.3
Upstream     num=       2
    Width   Elev    Width   Elev
       4   996.7       4    1023
Downstream     num=       2
    Width   Elev    Width   Elev
       4   996.7       4    1023

Pier Data
Pier Station     Upstream= 20662.3    Downstream= 20662.3
Upstream     num=       2
    Width   Elev    Width   Elev
       4   997.9       4  1022.2
Downstream     num=       2
    Width   Elev    Width   Elev
       4   997.9       4  1022.2

Pier Data
Pier Station     Upstream= 20762.3    Downstream= 20762.3
Upstream     num=       2
    Width   Elev    Width   Elev
       4     998       4    1021
Downstream     num=       2
    Width   Elev    Width   Elev
       4     998       4    1021

Pier Data
Pier Station     Upstream= 20862.3    Downstream= 20862.3
Upstream     num=       2
    Width   Elev    Width   Elev
       4   999.9       4  1019.7
Downstream     num=       2
    Width   Elev    Width   Elev
       4   999.9       4  1019.7

Pier Data
Pier Station     Upstream= 20962.3    Downstream= 20962.3
Upstream     num=       2
    Width   Elev    Width   Elev
       4     998       4    1018
Downstream     num=       2
    Width   Elev    Width   Elev
       4     998       4    1018

Number of Bridge Coefficient Sets =  1

Low Flow Methods and Data
      Energy
      Momentum              Cd   =     1.2
      Yarnell               KVal =    1.05
Selected Low Flow Methods = Highest Energy Answer

High Flow Method
      Pressure and Weir flow
          Submerged Inlet Cd          =
          Submerged Inlet + Outlet Cd =      .8
          Max Low Cord                =

Additional Bridge Parameters
      Add Friction component to Momentum
      Add Weight component to Momentum
      Class B flow critical depth computations use critical depth
          inside the bridge at the upstream end
      Criteria to check for pressure flow = Upstream energy grade line

CROSS SECTION          RIVER: 1
REACH: 1                  RS: 207.48
```

INPUT
Description: 207.48
Station Elevation Data num= 55

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
16210	1013.8	17338.3	1010.47	18388.3	1010.34	18888.3	1010.64	18938.3	1011
18988.3	1011.5	19038.3	1012.3	19088.3	1013.2	19138.3	1014.3	19188.3	1015.6
19288.3	1018.2	19388.3	1020.56	19455	1022.05	19465.2	1020.4	19465.3	1014.7
19468.2	1013.7	19522.3	997.9	19560.3	997.3	19564.3	997.3	19660.3	997
19664.3	997	19760.3	996.4	19764.3	996.4	19860.3	999.5	19864.3	999.5
19960.3	997.4	19964.3	997.4	20060.3	994.6	20064.3	994.6	20160.3	995.5
20164.3	995.5	20260.3	999.6	20264.3	999.6	20360.3	998.5	20364.3	998.5
20460.3	998.9	20464.3	998.9	20560.3	996.7	20564.3	996.7	20660.3	997.9
20664.3	997.9	20760.3	998	20764.3	998	20860.3	999.9	20864.3	999.9
20960.3	998	20964.3	998	21027.8	992.2	21056.5	1014.7	21059.4	1014.7
21059.5	1020.4	21080	1020.7	21115	1020	21280	1016	21875	1013.8

Manning's n Values num= 2

Sta	n Val	Sta	n Val
16210	.032	21059.4	.032

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
19465.3	21059.4	251	245.54	316	.1	.3

Ineffective Flow num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
16210	19465.3	1020	21059.4	21875	1020

CROSS SECTION RIVER: 1
REACH: 1 RS: 207.43

INPUT
Description: 207.43

Left and Right Channel Bank Stations Interpolated
Station Elevation Data num= 79

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
16001	1012.1	16131.4	1012.2	16228.7	1013.1	16320.3	1013.5	16407.2	1012.9
16462.7	1013	16534.7	1009.5	16622	1009.9	16771.3	1010.1	16811.7	1010.1
16903.6	1009.9	17000.5	1009.7	17064.3	1009.5	17157.6	1009.6	17168	1009.6
17254.7	1009.5	17423.7	1009.1	17535	1009.1	17611.5	1010	17646.2	1011.6
17670.8	1009.4	17760.3	1009.7	17874.6	1010.1	17964.8	1011.6	17984.9	1012
17997.8	1016.3	18045.8	1011.1	18059.4	1010.8	18090.3	1019.1	18104.6	1011.8
18153.8	1012.3	18156.2	1012	18391.4	1012.4	18596.1	1016.3	18654.3	1014.9
18908.3	1012	19012	1011.9	19027.1	1014.5	19083.8	1014.7	19094.4	1012.4
19147.4	1018.1	19153.2	1017.8	19176.4	1012.1	19237.2	1010.4	19250.8	1011.8
19253.3	1010.962	19268.1	1006	19370.6	1006.3	19448.3	1005	19562.2	1000.2
19660.1	999.2	19729.8	999	19896.9	999.1	20054.8	999.2	20143.1	999.3
20241.9	1000.1	20361.6	1000.3	20453.3	1000.3	20539.4	999.9	20632.9	1001.1
20689.8	1003.1	20747.1	1003	20818	999.4	20892	1000.8	20911.4	1002.3
20940	1001.503	20940.1	1001.5	20958.5	1009.2	21053.7	1010.9	21146.5	1011.2
21244.1	1013	21380.1	1013.7	21490.2	1010.1	21618.6	1011	21731	1013.6
21751.5	1014.2	21777.8	1011.3	21912.6	1011.5	21985	1012.4		

Manning's n Values num= 5

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
16001	.025	17611.5	.043	19012	.032	19250.8	.032	21053.7	.032

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
19253.3	20940	450	471	575	.1	.3

Ineffective Flow num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
16001	19250.8	1015	20940	21985	1015

CROSS SECTION RIVER: 1
REACH: 1 RS: 207.34

INPUT
Description: 207.34

Left and Right Channel Bank Stations Interpolated
Station Elevation Data num= 65

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
16035.2	1011.8	16177.7	1012.1	16280.1	1013	16403.9	1013.3	16481.2	1012
16521.9	1009.6	16702.7	1009.6	16804.9	1009.5	16839.4	1009.4	16942.2	1010.3
16976.4	1010.3	17093.8	1008.9	17125.8	1008.8	17242.3	1008.6	17266.9	1008.4
17385.6	1008.6	17409.9	1008.6	17524	1008.8	17624.3	1009.1	17632.4	1009.2
17642.3	1011.1	17673.2	1011.4	17693.3	1008.6	17801.9	1009	17911.5	1008.1
17944	1007.7	17970.8	1008.9	18420.5	1010.8	18468.8	1010.2	18518.8	1009.3
19089.4	1009.3	19158.1	1010.6	19180.5	1009.1	19194.8	1003.1	19196.9	1003.1
19214.8	1010.1	19221.2	1005.7	19228.6	1002.1	19230	1001.961	19238.7	1001.1
19249	1002.5	19288.5	997	19326.4	995.9	19381	999.5	19392.5	1002.2
19404.7	999	19437.8	1000.9	19593.3	1002.4	19706.7	1001.8	19842	1000.3
19946.7	998.7	20191.8	998.9	20302.5	998.8	20382.5	998.4	20416.2	996.5
20521.3	998.7	20631.1	998.6	20696.7	998.2	20735.2	1000.8	20761.1	1007.9

```
20798.761009.511 20824.2  1010.6 20847.7  1013.3   20977  1014.8   20997  1014.1

Manning's n Values          num=       5
     Sta   n Val     Sta   n Val     Sta   n Val     Sta   n Val     Sta   n Val
 16035.2    .025 17693.3    .043 19196.9    .032 19214.8    .032 20847.7    .032

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
        1923020798.76               370  393.75     530             .1       .3
Ineffective Flow      num=       1
   Sta L   Sta R    Elev
 16035.2   19230    1013

CROSS SECTION           RIVER: 1
REACH: 1                   RS: 207.27

INPUT
Description: 207.27
Station Elevation Data      num=      73
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
 16209.3  1012.6 16252.8  1013.2 16284.2    1012 16383.8  1012.6 16415.5  1012.9
 16480.2  1009.2 16601.8  1009.4 16722.1  1009.3 16901.6  1009.1   17028  1008.9
 17034.7  1008.9 17132.7  1008.7 17256.4  1008.5 17345.1  1009.7 17477.8    1009
 17574.2  1008.9 17623.2  1008.9 17640.8  1010.6 17654.3  1009.2 17776.8  1009.2
   17890  1009.9 18017.7  1009.2 18033.8  1009.3 18373.9  1009.8 18428.4  1009.8
 18529.9  1009.9 18634.4  1008.2 18686.7  1008.6 18936.9  1006.8   18965  1004.2
   18981  1000.1 18990.9   999.5 19008.8   996.4   19021   989.6 19047.9   988.8
   19072   996.4 19107.5     995 19123.5   989.3 19162.8   987.6   19190   994.7
 19301.3  1002.1 19428.8    1005 19561.5  1003.7 19676.8    1002 19820.6   999.3
 19940.6   998.8 19971.8   997.8 19986.7   993.8 20109.9   993.3 20119.1   995.5
 20215.4   998.5 20300.7   998.8 20305.8  1000.2 20322.6  1001.4 20345.1   998.6
 20382.4   998.7 20402.9  1000.7 20414.9  1000.4 20429.2  1001.7 20526.1  1000.4
 20597.9  1002.6 20662.2  1037.1 20670.6    1034 20727.4  1003.5 20805.4  1006.4
 20813.3  1010.3 20822.2  1008.4 20916.8  1009.6   21025  1009.2 21122.8  1010.2
 21233.4  1010.9 21356.4    1011   21463  1011.1

Manning's n Values          num=       5
     Sta   n Val     Sta   n Val     Sta   n Val     Sta   n Val     Sta   n Val
 16209.3    .025 17640.8    .043 19008.8    .032 19428.8    .032 20597.9    .032

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
       19428.8 20597.9               575  572.72     585             .1       .3
Ineffective Flow      num=       2
   Sta L   Sta R    Elev   Sta L   Sta R    Elev
 16209.3   18980  1037.1 20662.2   21463  1037.1

CROSS SECTION           RIVER: 1
REACH: 1                   RS: 207.16

INPUT
Description: 207.16
Station Elevation Data      num=      96
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
 16210.1  1011.7 16309.9  1011.9 16344.7  1012.7 16358.1  1011.8 16364.1  1013.5
 16438.5  1011.6 16493.9  1011.9 16557.8  1010.7 16585.8  1008.3 16700.8  1008.1
 16756.6  1008.6 16852.6  1008.6   16969  1008.6   17076  1008.4 17204.5  1008.7
 17321.8  1008.1 17421.3  1007.7 17541.4  1007.5 17638.7  1007.7 17755.6  1007.6
 17773.4  1007.2 17787.5  1009.2 17904.3  1007.5   17925  1006.5 18023.9  1007.4
 18085.4     1008   18140  1009.4 18201.1  1007.7 18218.4  1008.1 18321.4    1005
 18342.3  1005.4 18407.3  1003.8 18456.1  1009.9 18484.8  1008.2 18498.7  1005.3
 18523.8  1008.7 18528.7  1008.4 18529.5  1007.2 18545.1  1003.7 18570.4  1008.1
 18605.9  1007.9 18638.7  1000.3 18663.3   997.6 18680.3   997.7   18717   996.2
 18733.2   994.8 18778.6   996.9 18811.7   999.5 18924.2  1002.3 19046.2  1002.4
   19107  1000.2 19209.6  1000.7 19329.8  1002.2 19395.2  1003.5 19404.5  1002.1
 19419.4  1003.2 19521.4  1003.3 19614.6    1002 19721.9  1001.4 19815.6   999.6
 19920.9   996.2 19994.2   994.9 20008.7   992.7 20062.5   992.7 20094.8   994.3
 20106.3   993.1 20160.3     993 20395.5     993   20413     995 20418.4   997.1
 20436.9  1001.5 20463.3   996.6 20488.6   995.2 20609.4   995.2 20655.2     996
 20660.9   995.4   20697   996.6 20734.5  1007.6 20838.6  1008.7 20985.3  1010.1
 21116.5  1009.9 21223.5  1009.3 21316.4  1008.4 21471.6  1007.6 21595.3  1007.5
   21624  1007.5 21725.6  1009.3 21731.8  1008.9 21782.9  1010.9   21783  1010.3
 21812.5     1010 21872.1  1013.5 21911.2  1012.7 21930.8    1006 21952.5  1011.3
   21998  1010.9

Manning's n Values          num=       5
     Sta   n Val     Sta   n Val     Sta   n Val     Sta   n Val     Sta   n Val
 16210.1    .025 17204.5    .043 18605.9    .032 19521.4    .032 20734.5    .032

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
       19521.4 20734.5               475  463.31     475             .1       .3
Ineffective Flow      num=       2
   Sta L   Sta R    Elev   Sta L   Sta R    Elev
 16210.1 18605.9    1013 20734.5   21998    1013

CROSS SECTION           RIVER: 1
```

REACH: 1 RS: 207.07

INPUT
Description: 207.07

Right Channel Bank Station Interpolated
Station Elevation Data num= 97

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
16445.4	1010.8	16477.5	1010.8	16492.9	1010.8	16495.3	1012.4	16612.3	1012.1
16706.3	1012.4	16731.4	1011.4	16754.5	1011.7	16775.6	1010.8	16823.5	1006
16897.1	1007.2	16996.9	1007.2	17084.4	1008.1	17118	1007.2	17130.1	1007.9
17215.3	1007.5	17296.8	1005.9	17391.8	1005.8	17473.1	1006.2	17581.5	1006.7
17688.2	1006.9	17793.8	1007.5	17860.3	1007.8	17918.6	1006.5	17937.7	1009.2
17950.5	1008.4	18054.6	1008.5	18145.7	1009.4	18249.2	1008.8	18339.2	1006.2
18409	1004.8	18416.3	1003.9	18490.8	1003.4	18511.6	998.8	18578.1	997.6
18602.7	998.8	18624	998.9	18705.2	1001.4	18768.4	1001.7	18825	999.3
18843.9	997.7	18938	998.1	19029.9	1000.3	19121	1004.5	19134.1	1007.4
19200.4	1009.2	19224.9	1008.7	19244.6	1006.5	19312.8	1004.4	19414.2	1003.2
19443.8	1001.8	19521.9	1001.9	19538.7	1003.4	19547.9	1003.2	19557.9	1004.4
19673.5	1001.7	19761.8	1001.1	19774.6	1001.9	19789.4	1004.7	19852.9	995.2
19935.8	993.4	19939.1	993.8	19945.4	992.8	19998	992.8	20099	992.9
20181.6	993	20237.1	993	20335	993.1	20381.8	993.2	20403	998.8
20417.1	996.1	20529.1	995.5	20635.3	995.9	20719.4	996.3	20720.5	998.7
20734.9	1003.5	20748.22	1004.3	20786.5	1006.6	20840.1	1007	20851.3	1007.9
20926.4	1009.4	21006.6	1009.9	21089.4	1010	21172.8	1009.7	21301.4	1008.9
21383.6	1008.7	21497.8	1007.9	21578.8	1007.1	21613.2	1007.3	21673.3	1011.2
21705.2	1010.3	21732.7	1013.7	21818.2	1013	21896.1	1014.4	21908.3	1013.5
21967.3	1014.4	21999.5	1014.1						

Manning's n Values num= 4

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
16445.4	.043	18490.8	.032	19789.4	.032	20926.4	.032

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
19789.4	20748.22	510	514.11	520	.1	.3

Ineffective Flow num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
16445.4	18145.7	1013	20926.4	21999.5	1013

CROSS SECTION RIVER: 1
REACH: 1 RS: 206.97

INPUT
Description: 206.97

Right Channel Bank Station Interpolated
Station Elevation Data num= 97

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
16303.3	1009.9	16422	1010.3	16524.8	1010.6	16626.6	1010.6	16719.6	1011.3
16794.5	1009.6	16836.4	1004.7	16959	1004.6	17073.2	1004.7	17198.7	1004.8
17241.8	1005.5	17390.7	1004.8	17512.3	1005.1	17603.3	1005.3	17704.7	1005.3
17836.9	1005.5	17965	1005.2	18085.7	1005.8	18094.8	1005.9	18105	1008
18196	1007.4	18235.2	1007.2	18260.5	1005.9	18283.2	1007.6	18372.2	1006.3
18390.1	1005.1	18407.6	999.1	18518.7	997.7	18623.3	996.9	18669.1	995.6
18742.3	996.3	18834	1000.5	18925.1	1002.3	19025.7	1004.4	19072.3	1003.7
19086.7	1001.2	19181.7	1005.8	19197	1005.7	19217.7	1002.3	19234.5	1008.4
19316.9	1001.8	19405.1	1002.1	19456.4	1006.1	19566.5	1005.4	19666.3	1005.2
19736.5	1004.4	19776.5	998.7	19783.2	1000.5	19808.3	994.1	19822.1	992.8
19919.1	992.9	20108.8	993.1	20124.9	999	20128.8	998.6	20159.3	982.1
20170.6	981.8	20265.5	981.8	20360.8	981.8	20399.3	981.8	20400.1	981.8
20443.8	981.8	20457.3	981.8	20522.8	981.8	20543.7	981.8	20552.2	981.8
20558.1	981.8	20559.2	981.8	20645	981.8	20661.9	981.7	20684.6	981.8
20778.2	981.8	20792.8	981.8	20800	984.2432	20814.9	989.3	20826.8	991.9
20829.6	993.6	20832.1	993.2	20841.1	988	20882.9	981.8	20888	981.8
20995.1	981.8	21051.7	981.8	21053.6	981.8	21086.6	1009	21114.5	1010.4
21124.9	1008.4	21145.7	1009.1	21151.2	1011.2	21171.8	1014.5	21174	1009.3
21270.2	1009.8	21364.9	1009.2	21463.9	1009.1	21469.9	1008.9	21475.8	1010.8
21486.9	1008.5	21498	1009.8						

Manning's n Values num= 5

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
16303.3	.025	16719.6	.043	18407.6	.032	19736.5	.032	21086.6	.032

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
19736.5	20800	480	491.78	480	.1	.3

Ineffective Flow num= 1

Sta L	Sta R	Elev
20800	21498	1010

CROSS SECTION RIVER: 1
REACH: 1 RS: 206.88

INPUT
Description: 206.88

Right Channel Bank Station Interpolated
Station Elevation Data num= 97

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
16205.8	1008.1	16348.5	1008.4	16441.8	1008.4	16531.3	1008.2	16598.3	1009.2
16605	1008.5	16606.3	1010.2	16696.6	1005.4	16819.2	1004.3	16908.4	1004.4
17006	1004.7	17092.4	1003.2	17182	1004	17323.7	1003.7	17415.5	1003.8
17503.8	1003.9	17603.8	1003.9	17703.9	1004.6	17815.8	1005.9	17930.5	1006.3
18057.4	1006.3	18152.5	1006	18216	1005.3	18267.1	1005.9	18292.7	1007.3
18373.6	999.7	18386.3	996.3	18470	995.7	18533.8	995.1	18593.4	996.7
18657.8	996.4	18748.4	998	18835.7	998.9	18932.3	1000.4	18993.2	1000.9
19018.7	1003.6	19101.5	1004	19119.7	1002.9	19166.7	1006	19168.3	1006.9
19251.9	1004.5	19258.4	1005	19341.6	1001.3	19360.8	1001.1	19415.8	1004.9
19507.2	1001.3	19566.3	1004.7	19645.5	1003.4	19728.8	1003.5	19781.8	993.3
19833	992.7	19942.2	993	19947.1	996.6	19996.5	982.3	20008.3	981.8
20016.1	981.8	20105.7	981.8	20143	981.8	20146.6	981.8	20221.6	981.8
20334.4	981.8	20459.7	981.8	20546.8	981.8	20641.2	981.8	20760.8	981.8
20800	981.8	20820.9	981.8	20832	984	20842.1	983.1	20850.4	981.8
20851.4	981.8	20928.6	981.8	20948.4	981.8	21002.4	999.3	21012.9	997
21041.1	997	21047.1	998.2	21081.4	998.4	21113.7	986.4	21142	981.7
21162.6	990	21181.8	991.8	21199.6	1001.3	21208.2	1003.8	21233.9	1006.9
21251.5	1012.2	21270.1	1006.2	21313.5	1006.5	21327.6	1009.1	21361.8	1011.6
21394.4	1008.9	21440.9	1009.7	21454	1011.6	21546.5	1009	21569.8	1012.6
21605	1009.6	21674.6	1010.5						

Manning's n Values num= 6

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
16205.8	.025	16696.6	.043	18386.3	.032	19728.8	.032	21251.5	.032
21605	.025								

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
19728.8	20800	480	487.71	505	.1	.3

Ineffective Flow num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
16205.8	18292.7	1007.3	20800	21674.6	1012

CROSS SECTION RIVER: 1
REACH: 1 RS: 206.79

INPUT
Description: 206.79

Right Channel Bank Station Interpolated
Station Elevation Data num= 97

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
16211.1	1006.9	16286.9	1006.9	16364.1	1007.5	16379.7	1007.6	16449.9	1007.6
16525.2	1007.8	16538.6	1008.9	16619.3	1008.5	16666.4	1006.2	16699.6	1001.9
16769.7	1002.3	16840	1002.4	16905.7	1002.4	16989.2	1002.5	17055.4	1002.7
17133	1002.7	17230.9	1002.5	17245.4	1002.4	17322.6	1003	17404	1003.7
17419.6	1003.8	17484.7	1004.3	17553	1004.8	17588.7	1004.8	17631.2	1003
17670.6	1002.9	17748.9	1006.3	17834.7	1006.5	17871.1	1006.6	17919.1	1005.8
17921.7	1005.2	17948.4	1004.4	18036.8	1004.9	18106	1004.9	18182.5	1004.5
18301.7	1004.4	18337	1004.5	18378.4	997.7	18439.7	995.6	18517.1	995.3
18604.7	996.5	18674.2	996.8	18740.3	995.7	18770.1	994.8	18841.6	996.3
18882	997.5	18920.6	1006.8	19010.4	1005.9	19096.2	1003.2	19138.3	1000.6
19186.5	1000.9	19206.9	1002.3	19281.9	1002	19360.7	1002.6	19391.1	1000
19450.2	1002.2	19485	1002.5	19519.3	1004	19570	1004.1	19626.2	1001.8
19645.2	1001.4	19653.2	1002.5	19663.1	1005.3	19671.5	1001	19690.4	994.6
19711.8	993	19766	993.3	19929.9	994	19943.3	996.8	19952.4	996.3
19962.3	992.6	19991	990.7	20007.7	991.1	20032.9	987.2	20042.3	985
20082.5	982.2	20100.2	981.8	20136.1	981.8	20140	981.8	20180.6	981.8
20309.2	981.8	20331	981.8	20390.5	981.8	20420.7	981.8	20422.7	981.8
20425	981.8	20501.8	981.8	20576.6	981.8	20625.3	981.8	20832.1	981.8
20847	981.8	20851.9	981.8	20865.4	988.82	0895.15	1003.436	20902.8	1007.2
20935.6	1019.6	20986	1019.6						

Manning's n Values num= 5

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
16211.1	.025	16525.2	.043	18378.4	.032	19663.1	.032	20935.6	.032

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
19663.12	0895.15	495	489.96	520	.1	.3

Ineffective Flow num= 1

Sta L	Sta R	Elev
16211.1	17871.1	1015

CROSS SECTION RIVER: 1
REACH: 1 RS: 206.7

INPUT
Description: 206.7
Station Elevation Data num= 96

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
16235.4	1006.6	16247.5	1006.6	16320.8	1007.1	16332.7	1007	16402.3	1007.2

16479.2	1008	16505.8	1007.5	16527.3	1008	16552.4	1002	16640.8	1001.4
16727.5	1001.8	16815.4	1001.7	16889.1	1001.5	16902.1	1001.5	16968.1	1001.2
17043.4	1001.3	17155	1000.9	17251.1	1001.1	17317.4	1002.1	17335.4	1002.3
17401.1	1002.9	17430.7	1003.1	17519.9	1003.5	17616.5	1003.3	17699.9	1004
17823.5	1005.8	17891.6	1004.8	17962.7	1005.6	18043.4	1006.2	18125.2	1006.2
18207.9	1005.3	18257.6	1003	18280.3	995.2	18285.8	995.2	18301.4	997.1
18329.6	998.9	18423.4	998.8	18488.5	996	18559.6	995.2	18629.1	994.8
18690.8	994.6	18728.6	993.3	18746.4	994.2	18779.5	994.4	18815.2	996.6
18848.2	1004.6	18945.8	1005	19021.2	1004.8	19092.1	1004.4	19150.1	1003.8
19192.4	1001.5	19285.5	1002.1	19293.9	1002.1	19370.4	999.7	19431.5	999.7
19468.9	1000.2	19510.1	1003.7	19543.9	1002.8	19624.5	994.6	19647.2	992.9
19711.3	993.2	19814.1	993.4	19871.2	993.4	19882.5	995.3	19901.9	992.6
19941.1	991.3	20015.4	991.6	20098.2	993.9	20143.5	994	20167.9	992.9
20185.2	1000.4	20197.8	994.4	20212.7	993.7	20259.6	993.7	20275.9	991.3
20314.8	981.8	20318.5	981.8	20393.8	981.8	20691.8	981.8	20713.3	981.8
20963.1	981.8	21002.8	981.8	21076.8	981.8	21102.7	981.8	21120	988.8
21131	999.6	21138.8	1004.7	21146.9	1002.8	21207	1004.5	21234.3	1006.1
21262.4	1006.4	21329	1008.1	21422.5	1007.5	21452.5	1018.4	21484.3	1017.2
21488	1018.6								

Manning's n Values num= 5

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
16235.4	.025	16640.8	.043	18329.6	.032	19510.1	.032	21138.8	.032

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
19510.1	21138.8	500	500.23	500	.1	.3

Ineffective Flow num= 1

Sta L	Sta R	Elev
16235.4	18110	1015

CROSS SECTION RIVER: 1
REACH: 1 RS: 206.6

INPUT
Description: 206.6

Right Channel Bank Station Interpolated
Station Elevation Data num= 97

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
15752.8	1005.9	15777	1004.9	15795.8	1006	15801	1003.8	15809.3	1007.3
15819.9	1006.1	15842.8	1009.5	15850.1	1008	15855.5	1009.8	15868.1	1009.5
15879.9	1006.9	15895.6	1008.4	15904.2	1005.4	15941.1	1007.3	16035.3	1006.2
16155.5	1005.7	16243.9	1005.6	16347.4	1004.9	16444.6	1004.9	16555.6	1004.8
16645	1004.4	16756.4	1003.6	16845.8	1003.1	16944.2	1003.4	17049.2	1002.3
17143.6	1001.7	17249.3	1001.2	17366.6	1001	17501.5	1003.7	17624.2	1003.7
17723.3	1004.1	17790.8	1004	17818	998.9	17847.9	1003.1	17937.7	1002.9
17956.2	1002.7	17971.4	998.8	17988.6	1001.2	18083.6	1001.7	18173.1	1001.7
18217.2	1001.9	18242.2	997.1	18334.4	996.5	18436.5	995	18542.1	993.8
18633.3	993.9	18742.2	997.5	18817.7	997.8	18852.6	1003.9	18965.8	1004.2
19055.2	1003.8	19184.3	1003.1	19243.2	1000	19325.9	998.4	19358	993.4
19395.9	993.2	19452.5	996.6	19546.1	997.7	19580.1	996.6	19611.2	993.1
19679	993.4	19778	993.3	19846.4	993.3	19854.8	995.6	19874.7	992.9
19953.8	992.1	20043.5	994.5	20146.1	995.4	20262.3	995.5	20371.5	995.1
20435.5	995.1	20475.7	981.8	20489.7	981.8	20608.9	981.8	20609	981.8
20738.4	981.8	20854.4	981.8	20866.2	981.8	20903.7	981.8	20931.2	981.8
20996	981.8	21003.4	981.8	21042	988.8	21050.2	995	21066.25	1002.898
21069.1	1004.3	21182.2	1006.4	21270.7	1006.8	21401.9	1007.6	21495.5	1008
21503.1	1008	21594.4	1008.1	21688	1008.4	21840.4	1008.8	21940.4	1009.3
21957.8	1009.5	21998	1007.2						

Manning's n Values num= 5

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
15752.8	.025	16944.2	.043	18334.4	.032	19546.1	.032	21069.1	.032

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
19546.1	21066.25	515	504.63	520	.1	.3

Ineffective Flow num= 1

Sta L	Sta R	Elev
15752.8	17847.9	1009

CROSS SECTION RIVER: 1
REACH: 1 RS: 206.51

INPUT
Description: 206.51
Station Elevation Data num= 96

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
15913.8	1005.6	15956.7	1007.2	15960.5	1006.2	15969.2	1008	16053.6	1008.2
16067.4	1005.5	16150.9	1004.8	16244	1004.8	16317.6	1004.8	16358.5	1004.6
16454.2	1004.5	16463	1004.5	16544	1004.3	16655.6	1003.2	16728.4	1002.6
16756.4	1002.5	16830	1001.9	16942.4	1001.6	16965.9	1001.5	17053.8	1001.7
17131.5	1001.6	17218.7	1001.1	17306.1	1000.9	17382.1	1001.5	17467	1001.9
17537	1002.2	17549.6	1001.2	17642.5	1001.4	17732.1	999	17805.5	999.3
17867.7	1000	17906.8	1001.8	17982.4	1001.1	18024.8	1000	18113.4	1001

18197.5	1001.3	18210.2	1000.8	18235.8	995.8	18284.9	994.8	18353.6	996.2
18430.7	989.4	18472.3	992.6	18563.8	993.1	18633.6	994.5	18690.9	995.9
18720.1	998	18725.5	999	18780.9	997.9	18793	996.9	18839.1	995.7
18912.5	997.1	18936.6	997.3	18950.4	998.8	18982	1000.3	19017.4	998.8
19041	995.2	19046.4	993.8	19117.4	994.6	19184.9	992.6	19190.6	992.6
19209.6	996.5	19283.6	998.8	19380.8	997	19450	996.8	19458	996.8
19546.2	997.4	19586.4	996.5	19645.9	993.2	19653.5	993.3	19813.4	992.5
19869.8	992.3	19881.5	997.9	19911.8	995.3	19937.5	994.2	19964.8	991.9
19978.6	992.1	20019.7	990.5	20038.1	988.7	20070.3	987.9	20113.5	982.4
20192.5	982	20272.4	981.8	20353.1	981.8	20395.6	982.6	20485.4	993.1
20530.4	997	20546.7	997.4	20554.3	995.6	20599.9	998.6	20622.1	999.3
20634.8	998.6	20716.6	1000	20819.1	1001.3	20897.8	1001.5	20989.4	1002.8
21021	1008								

Manning's n Values num= 5

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
15913.8	.025	17218.7	.043	18235.8	.032	19546.2	.032	20622.1	.032

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
19546.2	20622.1	495	496.45	500	.1	.3

Ineffective Flow num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
15913.8	17700	1008	20615	21021	1008

CROSS SECTION RIVER: 1
REACH: 1 RS: 206.41

INPUT
Description: 206.41

Right Channel Bank Station Interpolated
Station Elevation Data num= 97

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
16072.3	1004.6	16106.4	1006.4	16110	1005.1	16145.4	1008.7	16171	1008.7
16201.9	1005.9	16207.2	1004	16245.8	1004.3	16311.3	1003.5	16339	1003.3
16410.7	1003.1	16479.2	1003.2	16504.4	1003.2	16587.4	1003	16660.5	1002.5
16723.1	1001.7	16801.8	1001.5	16828.5	1001.3	16901.2	1001.1	16957.6	1001.1
17046.4	1001	17111	1001.2	17185.4	1001	17248.3	1000.1	17325.6	999.8
17339.6	999.7	17404.5	999.4	17486.4	999.7	17508.2	999.5	17572.4	999.3
17623.9	997.5	17651.1	1000.3	17677.5	1000.2	17744.8	1000	17841.4	1000
17924.2	1000	17975.5	1001.6	18054.4	997.3	18144.7	995.9	18247.4	997.4
18279.8	997.6	18300.2	993.9	18302.9	992.5	18313.4	993.5	18405.6	991.3
18469.8	989.6	18495.7	988.3	18533.5	989.6	18556.8	987.7	18575.5	988.9
18582.4	987.8	18584.3	989.6	18620.5	992.5	18634.5	992.5	18697.7	996.9
18786	998.9	18861.4	999.4	18929.1	999.3	18999.1	996.6	19037	995.4
19069.4	992.6	19082.5	992.4	19169.3	990.8	19285.4	995	19369.2	996.5
19395.7	996.5	19466.6	996.5	19539.8	996.4	19622.9	997.3	19694.4	996.7
19720.5	996.5	19730.2	994.5	19748.7	992.6	19835.1	990.8	19895.8	991.8
19904.5	990.4	19996.1	990.2	20002.5	990.4	20015.5	997.7	20035	990
20091.8	991.6	20171.9	991.2	20269.1	991.6	20343.1	990.4	20356.9	990
20360	988.9	20373.3	988	20379.2	986.7	20421	985.4	20490.4	985.8
20544.3	985.8	20576.7	983.8	20636.9	982.5	20685.22	1001.4	16 20690.8	1003.6
20719.8	1001.5	20729	1007.4						

Manning's n Values num= 5

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
16072.3	.025	17185.4	.043	18300.2	.032	19622.9	.032	20690.8	.032

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
19622.9	20685.22	495	494.64	490	.1	.3

Ineffective Flow num= 1

Sta L	Sta R	Elev
16072.3	17111	1008

CROSS SECTION RIVER: 1
REACH: 1 RS: 206.32

INPUT
Description: 206.32

Right Channel Bank Station Interpolated
Station Elevation Data num= 97

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
16817.7	1002.2	16831.7	1004.4	16847.7	1000.1	16903	997.6	16998.5	999.5
17015.9	999.8	17073.2	995.7	17113.2	998.3	17193.6	998.2	17277.8	999.4
17336.8	998.4	17343.9	998.8	17416.7	997.2	17461	999.1	17530.2	1000
17612	1000.6	17634.8	999.5	17703.3	1001.3	17735.8	1000.4	17761.4	998.4
17843.7	998.5	17853.7	998	17875.9	994.2	17903.4	993.9	17962.9	996.3
18028.7	995.2	18096.2	993.6	18102.6	993.3	18134.8	1001.1	18154.4	1000.2
18192.6	1000.1	18243.3	992.5	18301.4	992.6	18329.8	993.4	18404.3	989.6
18429.4	987.7	18495.6	987.8	18512.7	986.5	18544.6	986.5	18577	989.5
18647	992.5	18707.1	997.1	18782.1	996.8	18869.6	997.5	18885	997.8
18895.7	996.8	18922.1	996.8	18939.9	995.3	18961.5	991.6	18990.7	990
19055.1	991.9	19120.2	992.7	19199.6	995.3	19288	998.1	19351.7	998.3

19433.6	998.5	19488.7	998.2	19527.8	996.5	19535	995.3	19546.5	994.9
19619.6	996.5	19696.3	996.5	19801.3	996.5	19818	996	19830.1	994.5
19917.7	993.3	19992.8	991.2	20076.4	989.2	20107.3	989	20181.4	989.5
20194.5	994.9	20217.3	987.2	20265.3	989.9	20314.9	990.8	20362.4	989.9
20372.9	988.8	20409.1	988.6	20435	986.4	20447.1	986.7	20565.6	989.2
20589.2	986.1	20647.7	982.8	20703.3	983.2	20732.7	988.7	20805.2	991
20816.2	997.6	20847.3	998.3	20854.9	1000.773	20855.6	1001	20889.3	1002
20959.7	1001.8	20988.9	1002.7	21076.4	1002.8	21150.5	1002.8	21226.3	1002.8
21295.2	1002.7	21368	1003.3						

Manning's n Values num= 5

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
16817.7	.043	18404.3	.032	19488.7	.032	20889.3	.032	20988.9	.025

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
19488.7	20854.9	515	513.83	520	.1	.3

Ineffective Flow num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
16817.7	17150	1004	20899.3	21368	1004

CROSS SECTION RIVER: 1
REACH: 1 RS: 206.22

INPUT
Description: 206.22

Right Channel Bank Station Interpolated
Station Elevation Data num= 97

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
16557.5	1004.3	16639.4	1004	16713.7	1003.6	16806.6	1001.8	16878.4	999
16892.3	998.9	16946.1	1002.9	16955.9	1004.8	16975.7	997.5	16981.9	999.4
16987.4	998.1	17046.8	996.8	17159.7	997	17260.1	998.5	17320.1	997.5
17343.9	994.5	17380.4	994.5	17400.6	996.8	17408	996.8	17477.4	998.9
17541.1	999.5	17596.5	998.4	17631.6	996.8	17724.8	998.9	17740.4	998.5
17771.5	991.4	17846.4	992.8	17904.5	993.5	17940	995.6	18004.2	995.6
18016.1	997.5	18035.4	995.9	18079.4	996.3	18103.6	997.7	18147.1	997.6
18161.3	993.8	18238.9	993.7	18321.5	992.4	18333.6	991.4	18443.6	991.4
18455.9	991.4	18507.4	994.4	18550.2	989.5	18634.4	989.6	18723.2	987.6
18759.4	986.3	18833.1	991.5	18933.1	991.9	18987.8	992.5	19058	994.5
19110.4	996.4	19138.8	999.5	19223.6	1000.6	19278.4	1001.5	19361.2	1000.2
19370.9	998.6	19381.6	1000.1	19456.3	999.5	19512.1	996.4	19583	994.5
19660.7	994.4	19691.9	994.4	19781.3	994.4	19826.6	994.4	19870	992.6
19877.4	990.6	19912.2	990	20004.6	991.9	20079	991.3	20117.2	990.7
20188.2	986.9	20282	986.7	20306.6	994.7	20332.7	985.9	20338.2	985.9
20423.1	985.1	20525.8	983	20611.1	984.7	20700.7	989.7	20755.5	992.3
20766.6	995.9	20807.8	996.5	20844.2	994.9	20887.6	996.6	20898.1	998.3
20968.3	999	20974.6	999.1	20977.35	999.8423	20990.9	1003.5	21017.9	1001.7
21148.3	1002.6	21222.8	1003.1	21294.4	1003.3	21307.8	1003.3	21385.2	1003.5
21467.9	1003.9	21480	1004						

Manning's n Values num= 4

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
16557.5	.043	19278.4	.043	19583	.032	20990.9	.025

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
19278.4	20977.35	500	502.44	460	.1	.3

Ineffective Flow num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
16557.5	16955.9	1004	21480	21480	1004

CROSS SECTION RIVER: 1
REACH: 1 RS: 206.13

INPUT
Description: 206.13

Right Channel Bank Station Interpolated
Station Elevation Data num= 97

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
16722.1	1002.8	16785.1	1002.2	16877.3	1002.1	16908.3	1000.9	16979.6	1000.9
17014.5	1000.3	17057.5	998.5	17070.3	997.5	17183.2	997.5	17222.6	994.5
17342.3	992.1	17417.8	994.4	17490.8	994.6	17494	994.7	17613.2	996.3
17668.4	995.8	17699.1	991.3	17790.1	992.3	17861.7	993.7	17934.2	993.6
17996.1	993.2	18017.5	997.2	18080.8	996.1	18121.2	996.9	18147.1	992.3
18166.8	991.3	18235.4	991.3	18302.6	991.3	18386	991.3	18421.8	989.5
18432	988.4	18469.5	988.4	18475.1	989.5	18500.2	989.3	18504.2	988.4
18568.5	987.1	18688.1	988.4	18765.4	989.5	18782.8	992.5	18860.9	996.5
18915	999.2	18980.4	995.4	19020.4	994.5	19089.1	997.3	19153.9	1000.5
19162	1001.6	19203	1003.8	19205.7	1003.2	19223.2	1003	19263.9	1000.5
19294	999.3	19352.5	999.3	19369.3	998.5	19381.9	996.4	19450.5	995.7
19547.3	995.6	19615.3	994.4	19675.1	990.6	19753.3	990.5	19774.8	990.4
19852.5	988.3	19926.3	986.6	19938.1	987.1	19943.1	987.8	19956	986.6
19959	986.7	20036.9	986.5	20105.4	986.3	20129.5	986.8	20164.8	990.8
20183.5	987.1	20270.6	987.9	20276.8	988.6	20297.8	988.6	20342.4	987.5

20366.8	987.4	20431.3	985.5	20458.7	984.6	20505.9	984.6	20523.1	985.6
20557.7	986.6	20563.2	987.2	20637	987.5	20656	988.4	20660.4	988
20685	996.6	20699.6	998	20710.6	997.6	20766.4	997.9	20788.2	997
20848.3	996.7	20868.5	996	20903.4	995.7	20914.9	9998.8	7120934.1	1004.1
20964.8	1000.3	20989.1	1000.6						

Manning's n Values num= 3

Sta	n Val	Sta	n Val	Sta	n Val
16722.1	.043	19203	.033	20934.1	.032

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
19203	20914.99	490	483.44	540	.1	.3

CROSS SECTION RIVER: 1
REACH: 1 RS: 206.03

INPUT
Description: 206.03
Station Elevation Data num= 96

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
16802.9	1002.4	16810.4	1002	16813.6	1000.9	16824	1002.4	16844.6	1000.6
16890.3	1000.8	16957.6	998.6	16974.2	996.3	17051	996.3	17118.7	996
17158.8	996.3	17238.1	994.4	17268.4	993.9	17337.7	992.2	17429.7	992.2
17531.5	992.2	17538.3	993.5	17547.2	994.4	17602.5	996.5	17662	996.6
17711.8	998.8	17753.6	997.9	17811.8	999.7	17868.4	998.8	17876	996.8
17888.6	992.2	17921.7	991.3	17955.9	991.3	18046.3	991.3	18129	992.2
18208.5	993.4	18309.7	993.6	18420.9	993.3	18447.9	989.4	18457.8	986.4
18517.5	985.1	18549.4	986.9	18588	984	18644.4	992.4	18712.4	995.4
18774.2	998.9	18830	995.4	18904.6	994.2	18908.3	994.2	18995.9	996.3
19086.5	1000.5	19177	1002.9	19201.9	1004.4	19226.8	1002.9	19249.6	1003.2
19274.5	1000.5	19281.8	998.5	19300.1	995.7	19315.7	994.3	19390.1	994.3
19400.5	994.3	19413.5	991.2	19424.9	989.1	19482.5	986.8	19510.1	986.8
19554.4	985.8	19658.8	985.8	19753.3	985.9	19822.1	985.9	19854.2	986.9
19870.5	986.6	19902.2	987.2	19919.6	986.6	19994.1	987.8	20078.9	988.1
20133.4	987.5	20176.6	991.9	20201.4	992.1	20216.4	992.9	20292.1	994.2
20354	993	20378.4	992	20392	989.3	20410.4	989.1	20427.7	986.6
20479.5	986.9	20548	985.1	20601.3	984.5	20610.2	984.8	20660.5	989.4
20711.9	992.7	20772.6	995.4	20851.6	995.1	20876.8	995	20972.6	994.7
21099.7	995.7	21122.5	995.9	21132.1	998.6	21160.4	1005.3	21175.8	999.9
21184.2	999.9								

Manning's n Values num= 3

Sta	n Val	Sta	n Val	Sta	n Val
16802.9	.043	19201.9	.033	20772.6	.032

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
19201.9	20772.6	590	513.6	510	.1	.3

Ineffective Flow num= 1

Sta L	Sta R	Elev
16802.9	16900	1003

CROSS SECTION RIVER: 1
REACH: 1 RS: 205.94

INPUT
Description: 205.94
Station Elevation Data num= 96

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
16903.8	1000.5	16909.4	1000	16920.9	1001.6	16972.5	1001.2	16975.5	1000.3
16985.1	1001.6	17007.6	998.7	17082.9	996.3	17151.6	996.3	17234	996.3
17267.9	996.3	17336.5	996.2	17426	996.4	17508.2	996.2	17592.3	996.3
17688.9	994.4	17733.4	994	17754.7	991.9	17830.3	991.2	17928	993.4
17928.3	993.4	18000.5	993.2	18041.8	993.1	18116.7	993.3	18216.4	993.4
18279.7	991.1	18294.7	987.3	18302.5	986.7	18362.5	986.9	18376.8	985.1
18407.6	986.2	18496.1	984.1	18565.5	985.4	18614.9	987.2	18629.5	988.4
18642.1	988.5	18669.8	994.1	18756.5	994.7	18817.1	995.6	18869.8	993.4
18916.1	992.8	18941.2	994.2	19004.1	991	19053.5	981.9	19123.4	981.8
19199.3	982	19250	981.9	19337.5	981.5	19354.9	982.2	19448.6	985
19535.3	985	19613.6	984.8	19703.6	985.4	19775.9	989.5	19831.1	990.2
19926.3	989.4	19994.7	989.1	20082.6	988.9	20106.6	989.1	20111.2	988.5
20149.5	990.4	20183.7	994.3	20237	990.7	20262.2	991.4	20291.7	989.3
20345	989.3	20445.6	986.5	20507.2	982.5	20519.9	982.9	20520.2	982.1
20569.1	981	20589.6	984	20612	989.6	20643	991.1	20662.1	992.9
20686.6	992.8	20704.4	994.4	20767	996.6	20871.9	997.4	20903.2	996.9
20938.8	991.7	20969.6	993.5	21038.9	995.4	21103	995.9	21150.3	993.9
21195.3	994.9	21265.8	994.7	21288.8	994	21309.9	995.5	21385.6	995.9
21402.4	995.6	21473.1	995.1	21527.7	994.8	21551	998.8	21641.3	999.1
21683	1001.6								

Manning's n Values num= 4

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
16903.8	.043	18817.1	.033	20767	.032	20938.8	.037

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.

18817.1	20767		505	506.69	510		.1	.3

Ineffective Flow num= 1

Sta L	Sta R	Elev
21215	21683	999

CROSS SECTION RIVER: 1
REACH: 1 RS: 205.84

INPUT
Description: 205.84
Station Elevation Data num= 96

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
17154.7	999.5	17167.6	998.3	17173.7	999	17242.7	999.3	17319.2	999.3
17395.4	998.8	17445.8	998.6	17482.3	997.2	17534.1	997.5	17544.3	997.1
17572.5	997.3	17612.4	996.5	17644.3	993.7	17719.4	994.2	17735.7	993.6
17775	993.6	17842.8	992.3	17862.2	987.5	17958.9	987.6	17969.5	989.4
18029.4	989.1	18042.3	990.1	18085.3	986.5	18121.7	984.6	18194.4	985
18242.1	986.4	18267.7	987.9	18304.8	988.6	18343.6	988.3	18423.5	987.9
18487.6	987.3	18519.2	980.3	18575.4	985.3	18594.1	984.3	18599.2	983
18611.3	981.7	18624.5	979.5	18698.1	979.6	18782.8	980.6	18852.2	980.4
18868.5	982.8	18970.3	982.9	19086.6	984.3	19137.9	986	19161.5	987.5
19244.2	986.1	19262.6	985.8	19339.3	985.7	19420.2	986.1	19521.7	987.3
19606.4	989.5	19664.7	990.4	19734.4	992	19762.4	991.1	19876.6	990.8
19965.5	989.4	20028.7	988.2	20132.7	984.3	20147.5	983.5	20176	983
20199.7	984.8	20287.6	984.2	20364.3	982.3	20417.7	981.2	20446.2	981.5
20481.4	989.8	20508	994.7	20535.7	996	20575.3	996.4	20613.9	995.2
20691.5	994.7	20737.2	994.6	20809.8	995.7	20816.4	996	20875	995.1
20909.1	992.8	20953.5	994.7	21021.3	995.7	21074.7	995.5	21087.2	993.8
21126.7	992.2	21139.8	993.2	21222.1	993.7	21281.4	994.3	21334.2	993
21367.3	994.1	21398.1	992.4	21450.5	994.8	21460	991.6	21508.8	993.1
21563.2	993.7	21607.4	993.3	21622.3	993.7	21634.1	995.7	21671.2	996.7
21696	999.5								

Manning's n Values num= 5

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
17154.7	.043	18487.6	.043	18575.4	.032	20535.7	.032	20875	.037

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
18487.6	20535.7	495	496	480	.1	.3

Ineffective Flow num= 1

Sta L	Sta R	Elev
21450	21696	999

CROSS SECTION RIVER: 1
REACH: 1 RS: 205.75

INPUT
Description: 205.75
Station Elevation Data num= 96

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
17305.3	998.9	17323.7	996.7	17395.5	996.8	17486.9	996.4	17509.8	996.4
17581.1	996.2	17666.5	995.9	17680.3	996	17753.1	996.5	17853.4	996.5
17864.9	996.5	17966.3	996	18048	994.8	18136.2	989.8	18199.9	985.9
18204.5	985.7	18238.3	975.2	18303	975.1	18340.9	977.7	18362.6	983.3
18414.2	984.2	18425.5	978.9	18465.2	978.9	18482	983.4	18487.5	980.6
18502.7	981.5	18551.9	977.5	18634.1	978.7	18705.8	979.9	18783.7	983.6
18852.2	983.7	18938.1	983.3	19031.5	983.4	19132.6	984.5	19156	984.8
19231.1	986.4	19292.3	989.2	19362.3	991.3	19410.6	989.7	19510.1	990.4
19547	990.4	19564.3	991.1	19608.3	991.1	19685.9	990.7	19759.4	989.7
19806.7	989.9	19819.8	990.5	19830.2	990.2	19906.7	988.4	19984.6	988.8
20051.4	988.1	20065.4	987.5	20101.2	975.7	20131.5	973.9	20148.4	974.7
20183.3	981	20265.9	982.2	20296.1	983.6	20320.1	985.5	20338.8	985.9
20373.3	988.6	20450.3	990	20500.5	990.7	20583.6	992.4	20674.8	995.6
20691.1	996.1	20754.7	995.2	20833.9	994.8	20900.7	994.8	20927.8	993.3
20929.3	994.1	20943.9	991.9	20951.5	991.7	20989	994	21037.1	991.6
21060.1	993.2	21120.9	992.7	21131.3	991.3	21198.6	991.5	21306.4	993.9
21377	994.4	21386.2	994.7	21449.8	995	21502.3	995.3	21567.5	995.7
21648.1	996.3	21682	996.5	21789	996.8	21807.7	996.8	21902.8	997.4
21921	997.6	22001	997.7	22076.6	997.7	22142.9	997.7	22143.7	999
22145	998.9								

Manning's n Values num= 4

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
17305.3	.043	18048	.043	20583.6	.043	21131.3	.025

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
18048	20450.3	825	642	490	.1	.3

Ineffective Flow num= 1

Sta L	Sta R	Elev
21400	22145	999

CROSS SECTION RIVER: 1
REACH: 1 RS: 205.62

INPUT
Description: 205.62
Station Elevation Data num= 96

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
16987.1	998.1	17010.8	998	17131	997.7	17220.3	997.9	17312.3	997.2
17337.5	997.1	17349.7	993.8	17415.9	993.4	17452.1	994.5	17456	993.6
17462.6	995.4	17470.7	993.9	17481.8	995.3	17536.8	995.9	17541.4	995
17548.6	996.6	17570.5	992.9	17606.9	994.3	17705.6	994.3	17778.6	994
17854.3	993.6	17935.8	992.6	18000.5	991.8	18066.9	989.1	18154.7	990.1
18182.6	989.5	18216	991.5	18272.9	988.7	18345.5	987	18362.3	985.3
18364.3	986.4	18412.4	980.4	18471.7	977.8	18582.6	976.6	18682.4	977.6
18758.9	978.6	18831.8	982	18915	981.6	18928.4	981.8	18994.8	981.7
19088.8	983.1	19188.8	983.9	19260.2	983.8	19272.1	983.6	19307.3	987.6
19315.9	987.5	19391.2	986.5	19461.1	986.8	19526.5	987.3	19591.7	987.7
19623.7	987.9	19690.2	986.9	19701.7	986.9	19732.4	983.9	19808.3	985.5
19928.6	988.8	19968.4	987.6	20009.8	976	20075.5	976.6	20117.2	979
20204.9	979.7	20242.3	978.4	20253.8	980.5	20285.7	981	20339.5	984.7
20409.9	988.4	20450.1	989.3	20468.3	987	20504.3	986.9	20542.3	986
20605.7	986.7	20698.9	989.9	20708.2	990.1	20715.6	995	20780.9	994.9
20847	991.9	20932.4	991	21003.2	991.1	21102.3	991.6	21194.4	992
21286.6	992.7	21318.6	992.9	21388	993.6	21473.6	994.3	21596.5	994.7
21668.5	995	21758.9	995.6	21817	996.1	21920.7	996.9	21963.3	997.1
22043.7	997.1	22107.3	997.1	22215.9	997.1	22261	998.1	22277.9	997.6
22288.5	999.4								

Manning's n Values num= 6

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
16987.1	.025	17481.8	.043	18216	.043	18471.7	.032	20715.6	.032
20847	.025								

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
18216	20450.1	560	523	510	.1	.3

Ineffective Flow num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
16987.1	17548.6	999.4	21480	22288.5	999.4

CROSS SECTION RIVER: 1
REACH: 1 RS: 205.52

INPUT
Description: 205.52
Station Elevation Data num= 96

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
17458.9	998.2	17496.2	998.1	17528.6	993.9	17537	994	17538.2	993.3
17605.2	993.8	17611.5	994.9	17615.9	993.3	17622.8	995	17635.1	992.9
17665.3	993	17698.1	994.2	17701.5	993.5	17707.3	995.3	17718.9	995
17731.8	991.3	17820.7	991.9	17894	991.4	17966.9	990.6	18049.9	988.1
18115.3	988.8	18176.3	990.1	18241.5	990	18289.2	989.7	18376.9	989.8
18458.3	990.2	18560.9	990.7	18591.6	991.1	18628.8	988.9	18702.3	978.1
18778	976.8	18843.9	975.9	18919.8	976.6	19003.3	977.9	19078	982
19149.6	982.2	19216.6	981.8	19294.8	981.6	19381.8	980.6	19438.9	979.8
19513.6	979.7	19597.1	981.3	19627.4	982.2	19649.8	981.4	19768.3	982.9
19791.5	982.7	19851.9	983.6	19974.7	981.4	20083.4	978.3	20118	977.6
20126.6	978.1	20161.7	976.5	20215.1	976.5	20237.4	983.2	20307.8	986.1
20375.9	986.4	20411.3	986.8	20436.2	983.2	20454.8	985.7	20472.6	986.8
20567.5	986.1	20573.3	986	20590.7	989.7	20611.5	992.8	20623.9	992.6
20656.5	990.1	20672.2	990.7	20688.3	988.5	20695.2	989.1	20701.5	986.9
20769.2	978.7	20789.2	977.6	20827.6	986.2	20844.7	988.1	20936.4	989.8
21007.2	990.9	21024.7	991.2	21032.1	992.9	21046.7	990.6	21139.1	991.6
21236.4	992	21330.9	992.2	21420.6	992.8	21530.8	993.2	21637.9	993.3
21722.2	993.8	21801	994.3	21909.2	994.5	22026.9	995.2	22127.5	995.8
22175.4	995.9	22246.4	996.2	22303.2	996.7	22383	996.1	22389.5	996.1
22400	997.5								

Manning's n Values num= 5

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
17458.9	.043	18591.6	.043	18628.8	.032	20611.5	.032	21032.1	.025

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
18591.6	20611.5	430	470	400	.1	.3

Ineffective Flow num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
17458.9	17650	998.2	21400	22400	998.2

CROSS SECTION RIVER: 1
REACH: 1 RS: 205.43

INPUT
Description: 205.43
Station Elevation Data num= 96

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
17577.6	999	17651.4	999	17676.6	993.3	17745.1	993.5	17753.8	994.9
17756.2	993	17761.9	994.1	17779.1	992.9	17827.8	993.4	17837	994.7
17842	993.6	17850.1	995.1	17856.3	994.6	17874.1	989.8	17945.8	990.5

18015.5	989.2	18089	988.6	18171.5	988.1	18272	989	18345.2	989.6
18417.8	988.9	18513.1	989.6	18555.5	988.8	18590.9	983.9	18653.7	980.2
18675.6	981.9	18718.1	992.1	18755	996.2	18831.5	994	18917.5	994.6
18981	993.6	18995.7	991.7	19013.2	983.5	19029.3	979.6	19078	977.3
19159.1	977.1	19235.8	977	19329.8	976.7	19401.3	976.1	19408.1	977.1
19408.2	976.1	19472.5	977.8	19481.8	976.1	19482.8	979.9	19504.5	976.3
19572.1	976.7	19685.1	976.7	19752	976.5	19776.2	976.6	19871.8	985.4
19922.1	984.5	19948.6	982.8	19969.8	979	19994.4	976.5	20009.7	976.5
20115.4	976.5	20173.1	982	20198.5	982.2	20281.7	985.3	20371.1	985.5
20444.6	985.5	20542.7	985.9	20552.8	986	20628.8	985.9	20672.4	986.4
20739.7	988.8	20745.5	988.9	20770.4	996.3	20821.2	987.3	20830.8	986.4
20857.3	988.8	20888.7	988.5	20910.3	984	20959.4	986.1	21024	983.6
21078.8	987.2	21088.9	990.3	21171.4	991.7	21190.4	992.1	21193.4	991.5
21282.9	992	21368	992.7	21454.5	993.1	21528.9	993.3	21613.1	993.6
21695.1	993.6	21768.9	993.9	21849.3	994.3	21923.6	994.4	21927.2	994.4
21997.3	994.6	22016.9	994.6	22089.4	994.6	22155	995.4	22231.3	997.7
22285	998.6								

Manning's n Values num= 5

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
17577.6	.043	18917.5	.043	18981	.032	20770.4	.032	21088.9	.025

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
18917.5	20770.4	175	171.89	125	.1	.3

Ineffective Flow num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
17577.6	17800	999	21400	22285	999

CROSS SECTION RIVER: 1
REACH: 1 RS: 205.4

INPUT
Description: 205.4
Station Elevation Data num= 97

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
17511.1	996.9	17519.9	996.9	17605.2	997.3	17609	997.3	17712.9	997.8
17756.7	992.2	17854.3	993.8	17914.6	991.3	17916.5	991.2	17968.9	990.2
18031	989.2	18084.1	988.8	18154.5	988.3	18213.4	988.3	18281.7	988.2
18304.7	988.2	18362.5	988.2	18388.7	988.6	18461.3	988.1	18529.4	988.4
18564.6	988.5	18633.4	988.7	18712.8	988.5	18774.2	988.2	18787.4	988.1
18843.8	987.9	18915.9	985.1	18943.3	984.3	19013.3	982.5	19020	982.2985
19079.8	980.5	19133	979.1	19154.8	978.5	19196.1	978.7	19231.1	977.1
19260.1	977.2	19291.7	976.5	19304.1	976.8	19364.1	975.5	19377.1	975.5
19436	975.7	19498.9	975.9	19564	975.7	19635.3	976.2	19694.9	976.3
19718.4	976.2	19774.1	976.1	19840.5	976	19902.9	976	19988.4	976
20047.6	976.1	20060.4	976.2	20120.1	976.4	20173.6	976.9	20230.4	977.5
20290.1	977.8	20348.4	979	20391.6	980.6	20448.9	982.1	20522.8	983.7
20592.3	985.3	20647.3	986.7	20692.4	987.2	20767.8	987.4	20829.1	987.4
20894.3	987.9	20922.5	988.1	20978.2	988.9	21055.7	989.4	21057.2	989.4
21142	989.4	21212	990.9	21270.2	991	21321.8	991.1	21338.9	991.2
21394.1	991.7	21407.6	991.9	21469.8	992.7	21547.3	993.5	21598.6	992.6
21619.5	993.7	21690.3	993.7	21721.2	993.7	21811.7	993.8	21872.4	994.2
21923.6	995.3	21941	995.5	22005.1	996.1	22017	996.2	22078.7	996.7
22181.1	997.7	22194.2	997.8	22249.3	998.6	22318.8	999	22386.3	999.2
22404.4	998.5	22455.6	999.3						

Manning's n Values num= 4

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
17511.1	.043	18843.8	.043	19079.8	.032	20767.8	.032

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
19020	20767.8	305	315	370	.1	.3

Ineffective Flow num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
17511.1	17800	999.3	21450	22455.6	999.3

Blocked Obstructions num= 1

Sta L	Sta R	Elev
17511.1	19020	988

CROSS SECTION RIVER: 1
REACH: 1 RS: 205.34

INPUT
Description: 205.34
Station Elevation Data num= 268

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
13687.27	990.7	13918.08	990.68	13941.26	990.7	14074.31	990.74	14097.95	990.77
14379.8	991.2	14502.02	991.27	14504.17	991.32	14654.78	991.45	14667.42	991.12
14692.66	993	14709.75	992.96	14715.8	991.19	14721	993.28	14723.16	993.14
14738.13	990.9	14750.87	991.89	14755.59	992.5	14795.12	991.6	14806.23	991.16
14847.09	991.6	15017.82	991.67	15028.83	991.05	15074.2	990.9	15389.93	990.38
15426.63	990.4	15457.08	991.76	15497.69	991.91	15548.79	991.74	15599.83	990.06
15624.82	992.5	15632.81	992.18	15645.65	991.27	15655.09	992.74	15660.02	991.59
15665.1	993.6	15682.98	994.84	15701.37	993.32	15707.96	993.32	15720.14	993.51

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15863.53   993.415962.36  993.7816143.17   993.716302.48  993.5316434.69     994
16540.11   994.5 16630.9  994.0316710.83  993.4216732.11  994.2916741.14  994.53
16755.65   994.816763.06  993.9916780.42  993.7616789.57   993.416811.41  992.38
16945.01   992.917037.42  993.3817118.17   992.917138.04  992.7817279.36  992.27
17420.37   992.117527.98  992.75 17560.1   992.78 17728.5  991.3317729.54  991.26
17753.81   988.517789.02   988.817833.72    989.117845.57  991.9517853.64   990.8
17860.73     99217869.58     99217881.45  991.8417895.69  992.1317897.64  994.57
17904.21   994.517909.94  991.8217920.11  988.7917940.57  989.6117986.35  989.54
18002.56   989.718065.95  989.1618080.07  988.8318116.41  988.3818122.12  987.76
18187.93   987.418195.48  987.3618246.02  987.5818264.37  987.6418314.54  986.65
18327.91   986.818350.36  988.1118365.79  988.5818392.98  988.6518415.65  990.57
   18418     99118432.37  990.8218481.36  991.38 18548.7  990.7218596.12  990.95
 18645.9     99518660.36  994.9818676.98  995.0618724.18  991.4718772.07  990.61
18787.28   990.318822.48  988.85 18833.8  988.7918853.31  988.4818883.89  988.52
 18895.6   987.7 18912.2  992.1218970.58  990.1619022.37  991.3519035.55  989.07
19043.96   988.619066.14  988.56 19076.9  991.3319096.79  993.0719099.41  993.11
19116.55   988.419170.12   987.719232.28   987.219252.59  986.66 19258.9  986.61
19276.73   986.119284.34  985.9919293.57  985.3919297.05  984.9419318.57  978.71
 19328.6   976.919337.34     97619422.11  976.1819470.05  976.22 19524.9  976.33
19562.89   976.719632.66  976.0919705.72  976.4319754.05  976.6319843.53  976.95
19853.47     97719865.48   976.519880.46  976.3619890.89  975.8119912.96  977.83
 19933.5   976.919947.42   976.619979.26  976.26 20010.7  976.0820051.63  975.84
20062.33   975.720073.85  975.5720119.54  976.87 20199.2  978.2920212.26  978.81
20258.32   980.920264.39  980.66 20329.9  980.6420332.62  980.4120369.18  979.74
   20375   980.1 20380.1  980.6320381.06  981.0320388.75  983.0320395.38  983.51
20436.76   985.120502.38  985.6120525.59   985.520561.61  985.7420587.94  985.95
20626.14   985.820644.89  985.7420678.28  985.5520707.29  986.1820742.96     987
20746.96   986.620752.64  985.5420762.54  985.0520787.99  983.0120822.69  985.52
20836.01   987.120844.69  986.9620890.92  987.1920931.14  987.6220978.97  988.36
 21006.5   988.721057.23  989.3821083.41   989.721100.77  990.25 21161.6  990.89
21172.71     99121247.07  990.97 21252.7  990.9921266.22  990.7621277.98  990.73
21290.76   992.8   21299  991.1421333.63  991.1321435.22   991.221524.43  991.65
21554.31   991.6 21567.7  991.7221625.82   992.321657.32  992.4221684.03  992.58
21782.19   993.421851.31  993.7221863.14   993.921872.38  994.1621891.44  994.52
21949.81   994.621975.44  994.9221995.48  994.9122007.76  995.2522037.54  996.24
22051.44   996.622075.07  997.6322125.13  998.6122139.54  998.9522159.57  998.78
22179.58   998.822264.13   998.322280.55  998.0322353.16  997.9122369.37  997.91
22404.01     99822463.45  998.2722491.06   998.822531.57  998.5222560.64  998.76
22593.64   998.8 22617.2  999.0722646.25  999.1222676.56  998.9422686.88  999.19
22731.76  1000.522770.23 1000.7922779.44 1001.3422789.67 1000.9722824.65 1001.12
22886.17  1001.722901.04 1001.6722978.01 1002.0623003.78 1002.23 23080.5 1002.51
23154.45  1002.823270.34 1003.4323291.75 1003.5623364.66 1004.1223410.89 1004.31
23481.28  1004.623504.95 1004.7623548.34 1004.8523582.71 1004.8423645.08 1005.05
 23678.1  1005.223738.97 1005.2323762.47 1005.11 23813.7 1005.1223872.53 1005.28
23908.97  1005.423920.45 1005.5423934.72 1004.9423951.14 1004.4623976.71 1005.57
23998.12  1003.624004.04 1002.9424049.64 1002.74

Manning's n Values          num=      3
     Sta   n Val     Sta   n Val     Sta   n Val
13687.27    .04318481.36    .04320931.14    .025

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
      19284.3420742.96                485     492     450              .1       .3
Ineffective Flow      num=       2
   Sta L   Sta R    Elev   Sta L   Sta R    Elev
13687.27   17900    1000   2140024049.64    1000

CROSS SECTION          RIVER: 1
REACH: 1                  RS: 205.25

INPUT
Description: 205.25
Station Elevation Data      num=      96
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
 16580.4     994 16657.1     994 16708.3   993.9 16776.5   993.6 16819.1  994.5
 16845.8   992.8 16892.9   992.2 16971.6   992.3 17154.1   993.1 17172.8  993.1
 17289.2   992.5 17431.5   991.8 17455.8   991.6 17644.6   992.5 17718.9  992.3
 17808.9   991.8 17842.7   989.1 17907.9   989.9 17920.6   992.1 17926.4  990.6
 17933.2   992.4 17964.3   990.4 17989.2   990.3 17999.1   987.6   18061  989.2
 18108.7   990.1   18179   988.3 18216.3     987 18244.2   987.5 18311.6  987.2
 18329.2   987.8 18392.2   987.8 18457.1   988.6 18493.2   989.2 18509.7  988.5
 18583.8     989 18614.2   989.1 18647.4     988 18708.8   987.6 18775.5  989.5
 18807.1     990 18886.3   989.2 18946.4     989 18990.4   988.1 19012.5  989.2
   19101   990.2 19156.3   989.9 19179.1   987.1 19186.7   985.4 19228.7  983.3
 19242.4     982 19306.5   983.4 19368.3   983.9 19442.9   983.5 19503.3  984.6
   19563   981.8 19581.1   985.9 19632.5   986.1 19671.9   987.3 19726.2  975.8
 19815.7   975.6 19878.1   976.2   19957   975.9   20042   975.5 20112.8  975.3
 20121.8   975.7 20160.5   973.8   20242   973.4 20260.5   974.6 20329.5    975
 20404.8   975.5 20471.4   978.3 20486.8   979.5 20522.9   977.9   20526  975.8
 20552.9   975.9 20584.6   974.1 20632.4   973.9   20697   975.7   20712  975.7
 20738.9   981.7 20741.5   980.7 20782.3   986.4 20848.1   987.4 20923.8  989.9
 21014.3   990.6 21121.3   991.6 21201.7   992.1 21283.6   992.1 21338.5  993.1
 21347.9   993.8 21358.2   992.2 21370.3   995.6 21409.5   995.7   21424  994.5
 21499.5   993.3
```

Manning's n Values num= 4

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
16580.4	.025	18108.7	.037	19671.9	.037	20782.3	.025

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
19671.9	20782.3	505	506	485	.1	.3

Ineffective Flow num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
16580.4	17950	995.7	21347.9	21499.5	995.7

CROSS SECTION RIVER: 1
REACH: 1 RS: 205.15

INPUT
Description: 205.15
Station Elevation Data num= 96

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
18001.2	994	18008.5	992.8	18015.6	994.9	18038.3	990.9	18047.4	991.8
18061.5	992.1	18077.6	991.6	18146.4	988.8	18170.1	988.9	18200.6	988.3
18243	988.8	18269.7	988.5	18292.3	988.8	18341.7	989.8	18374.9	990.2
18415.6	990.6	18438.3	991.1	18547.3	991	18558.8	991.1	18618.4	991.8
18625.4	991.9	18687.7	991.3	18696.2	991.3	18745.4	991.4	18794.1	991.1
18810	991.2	18866.4	991	18894.1	991.2	18920.9	990.7	18973.2	990.3
19018.9	989.8	19055.8	989.7	19109.2	989.4	19141.8	988.8	19181.8	988.8
19228.5	988.7	19285.2	989.2	19335.5	988.1	19346.3	987.8	19386.8	986.1
19394.2	985.9	19440.1	984.4	19443.6	984.3	19490	983.7	19506.7	983.8
19532.2	982.8	19587.2	983.3	19612.4	983.6	19619.1	984.1	19660.7	983.9
19705.1	983.1	19747.1	983.7	19787.1	984.9	19805.2	976.8	19822.3	973.4
19827.6	974.7	19829.5	974.2	19853	974.2	19880.4	973.6	19881.2	973.1
19908.4	980	19918.9	982.2	19934	984.3	19978.1	984.9	20006.4	984.1
20054.3	983.8	20064.2	983.5	20106.6	982	20110.7	981.8	20166.7	979
20196.8	978.1	20246.3	976.6	20250.4	976.4	20298.9	975.4	20340.8	975.5
20371.6	975.7	20436.2	974	20495	974.1	20608.2	975.2	20651	975.7
20691.5	977.2	20705.2	979.5	20746.3	987.3	20793.1	987.9	20838	988.7
20896.6	989.6	20910.7	990.1	20968.3	990.3	20999	990.6	21039.8	990.8
21107	991.7	21127.2	991.3	21170.3	994.1	21206.9	995.7	21258.6	996.3
21293	996.4								

Manning's n Values num= 4

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
18001.2	.025	18146.4	.037	19787.1	.037	20746.3	.025

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
19787.1	20746.3	495	495.39	495	.1	.3

Ineffective Flow num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
18001.2	18061.5	995	21293	21293	996.4

CROSS SECTION RIVER: 1
REACH: 1 RS: 205.06

INPUT
Description: 205.06
Station Elevation Data num= 129

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
17971	990.9	18065.3	988.6	18104.6	990.4	18115.6	988.2	18128.9	991.2
18143.2	991.5	18167.1	990.4	18222.4	988.9	18239	988.9	18268	988.1
18295.2	989	18314.3	988.5	18358.9	987.5	18410.5	986.7	18435.8	988.1
18478.4	994.2	18515	994	18541.2	993.6	18567.7	993	18668.2	993.4
18694.6	996.3	18716.8	994.1	18733	990.9	18773.1	991.2	18799	993.8
18844	996.4	18879.8	994	18912.8	991.3	18929.6	990.6	18948.8	990.9
18974.6	992.4	18989	991.8	18996.9	990.8	19026.5	996.8	19033.3	997.5
19038.3	998.5	19071.8	995.8	19078.5	994.1	19097.2	986.1	19133.8	987
19136.4	990.2	19142.8	992.6	19151.6	994.3	19202.7	994.1	19217.4	994.9
19226.3	988.3	19230.3	986.5	19252.3	985.8	19287.1	985.9	19329.2	986.2
19380.3	987.3	19388.1	987.3	19434.5	987.8	19445.1	987.8	19500.6	988.4
19538.9	988.7	19598.7	988.7	19648.7	990	19669.4	989.9	19722.7	988.3
19771.5	986.5	19803.6	986.4	19827.5	985.6	19841.3	984.7	19887	983.6
19904.2	973.1	19931.3	971.2	19981.6	971.1	19982.8	971.1	20027.4	970.5
20053.2	971.3	20073.5	976.1	20120.4	976.2	20137.3	976.4	20147.5	981
20155.4	983.6	20196	987.3	20208.9	986.1	20221.7	985.3	20253.8	981
20275.4	981	20301.5	975.4	20306.9	975.1	20315.2	975.1	20365	974.5
20425.5	974.6	20470.1	974.5	20497.9	974.4	20563.5	973.5	20601.9	973.2
20671.9	974	20850.2	976	20856.8	977.9	20880.3	977.7	20892.4	984.3
20905.3	990.8	20927.2	991.2	20971.3	992	21020.6	993	21062.7	993.2
21101.6	993.3	21146	993.7	21204.6	993.9	21256.1	994.5	21300.3	994.8
21336.3	994.9	21378.2	995	21414.7	995.2	21457.8	995.2	21484.8	995.4
21512.4	994.7	21514.5	995.9	21516.2	996.3	21518.9	995.5	21525.9	994.3
21532.1	994.6	21537.4	995.2	21546	995	21560.5	995.3	21575	995
21602.5	996.4	21628.8	996.3	21672.8	996.3	21709.9	996.5	21754.4	996.4
21826.9	996.1	21895.5	996.5	21951.4	996.6	21997.9	996.4		

Manning's n Values num= 4

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
17971	.037	19026.5	.037	19669.4	.037	20905.3	.025

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
19669.4 20905.3 505 505 530 .1 .3
Ineffective Flow num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
17971	18080	998.5	21997.9	21997.9	998.5

CROSS SECTION RIVER: 1
REACH: 1 RS: 204.97

INPUT
Description: 204.97

Left Channel Bank Station Interpolated
Station Elevation Data num= 86

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
16000	993.3	16025.7	992.1	16060.7	991.7	16273.1	992.3	16303.1	992.4
16597.7	992.1	16613.7	992	16818.7	992	16912.8	992.3	17061.4	992.3
17169.3	991.7	17232.9	991.8	17259.7	989	17316.4	990.2	17470.6	990.2
17483.4	990.2	17700.5	989.9	17786.2	989.2	17832.4	989	17894.5	988.9
17924.8	989.2	17933.3	990.5	17979.7	992.1	17985.3	991.5	17994.8	988.7
18008.6	988.7	18105.1	987.6	18137.2	986.9	18189.2	987.8	18201.2	986.8
18216.4	989.2	18243.6	989.2	18301.9	989	18377.5	989.6	18462.9	990.2
18523.7	988.6	18573.9	986	18643	986.6	18672	985.8	18672.9	984.9
18697.7	984.3	18729.6	988.3	18807.2	987.9	18833	984	18865.3	987.3
18888.3	985.4	18917	987.8	18955.4	987.9	18987.3	984.9	19046.8	987.1
19093.5	986.8	19152.6	983.5	19285.8	983.8	19317.6	981.5	19332.9	979.1
19418.6	978	19438.3	978.8	19545	978.843	19934.7	979	19938.2	981.1
19945.9	981.9	20008.7	980.8	20068.2	980.2	20091.8	979.6	20151.8	979.3
20225.8	978.1	20300.7	979	20367.2	979.3	20442.3	978.7	20509.6	977.2
20568	974.8	20659.1	973.3	20662.9	973.3	20925.5	975.4	20961.3	988.6
20999.4	990.2	21056.8	990.8	21126.2	991.7	21187	992.8	21200.2	992.9
21265.2	993	21340.5	993	21356.1	993	21427.5	993.4	21492.8	993.1
21496	993.1								

Manning's n Values num= 4

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
16000	.025	18301.9	.037	19046.8	.037	20961.3	.025

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
19545 20961.3 510 503 550 .1 .3
Ineffective Flow num= 1

Sta L	Sta R	Elev
16000	18200	993.4

CROSS SECTION RIVER: 1
REACH: 1 RS: 204.87

INPUT
Description: 204.87

Right Channel Bank Station Interpolated
Station Elevation Data num= 97

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
17067.4	991.5	17111.3	991.5	17255	990.6	17291.2	991.6	17298.2	992.1
17315.9	991	17328.2	990.9	17345.3	988.6	17426.3	988	17520.6	988.2
17594.7	988.5	17781.4	988.6	17822.3	988.5	17925.1	988.2	18001	987.2
18108.5	987.1	18221.3	987.3	18261.7	986.3	18269.2	986.9	18279.6	985.4
18296.9	986.8	18325.5	986.8	18352.2	985.5	18429.1	985.3	18501.3	985.6
18553	984.4	18559.8	986.3	18565.9	988.9	18578.6	987.7	18604.1	983.9
18645.9	981.4	18657.3	984	18678.8	986.2	18730	987.6	18832.5	987.5
18855.2	985.7	18859.7	984.6	18874.5	986.6	18920.1	984.6	18942.9	980.4
18960	980.8	18970.7	982.4	19015.9	985.9	19104.6	986.7	19209.9	985.7
19234.9	985	19264.2	982.7	19275.4	983.5	19297.4	981	19382.3	981.4
19462.8	981	19532.8	979	19555.4	979.1	19566	978.5	19579.4	978.5
19588.4	976.2	19598.7	976.3	19623.4	978.5	19628	979.5	19642.3	981
19714.7	981	19730.8	981	19759.9	975.9	19765	976.4	19772.7	975.9
19854.5	975.9	19859.5	975.9	19861.3	977.3	19877.6	980.8	19890	975.9
19903.3	969.9	19909.9	970	19919.2	968.1	20001	968.1	20022.9	968.1
20059.2	975.3	20126.4	976.2	20213.9	975.3	20298.1	974.9	20351	974.8
20377.2	977.3	20393.3	977.5	20505.4	975.8	20559.1	974.3	20612	976.5
20624.2	974.6	20654.3	973.2	20826.7	974.3	20919.3	974.9	20939.9	984.7
20954.34	991.1405	20961.2	994.2	20981.5	994.3	21037.9	989.4	21047	990.3
21137.3	991.2	21197.6	991.4						

Manning's n Values num= 4

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
17067.4	.025	18221.3	.037	19462.8	.037	20961.2	.025

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
19462.82 20954.34 495 499 505 .1 .3
Ineffective Flow num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
17067.4	18300	994.3	20961.2	21197.6	994.3

CROSS SECTION RIVER: 1
REACH: 1 RS: 204.78

INPUT
Description: 204.78

Right Channel Bank Station Interpolated
Station Elevation Data num= 87

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
16026.1	987.6	16094.8	987.3	16113.5	986.9	16143.6	989.2	16147.7	990.2
16176.4	990.8	16200.6	988.8	16231.8	988.4	16338.9	988.8	16416.1	988.9
16579.2	988.9	16686	989.1	16786.7	989.1	16866.8	989.3	17093.1	989.3
17192.6	989.3	17283.5	988	17369.3	988	17407.5	989.7	17420.2	988
17479.3	987	17521.2	986.9	17670.9	988	17754.2	987.8	17912.8	987.4
17952.6	987.1	18028.5	987	18174.7	986.5	18221.6	986.3	18279.6	986.1
18350.4	984.9	18361.8	983	18373.6	985.9	18402.3	985.9	18413.2	983.6
18427.5	987.2	18487.5	986.4	18504	984.4	18585.3	983.7	18598.2	984.9
18667.6	983.9	18753.3	984.6	18756.1	984.9	18767.8	981.3	18836.7	981
19173.1	979.8	19219.1	979.8	19295.8	977.2	19323.7	977.5	19337.5	981
19356.4	981	19398.6	983	19409.2	982.4	19419.8	979.2	19429.6	977.4
19432.3	975.9	19489.4	975.9	19561.1	974.8	19621.6	973	19660.7	972.1
19667.7	970.8	19677.1	967.6	19767.4	968.8	19768	968.8	19935.5	968
19986.5	968	20033.8	975.7	20056.9	977.8	20073.7	975.3	20160.4	975
20170.8	975.3	20229.5	975	20246.7	975	20324.8	974.9	20340	975
20452	975.9	20510.9	973	20530.9	973.1	20662.3	973.7	20706.1	973.8
20782.6	974.9	20801.8	975.1	20832.3	3990.9976	20840.4	995.2	20866.6	994.5
20921.2	988.9	20982.7	988.3						

Manning's n Values num= 4

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
16026.1	.025	18427.5	.037	19398.6	.037	20840.4	.025

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
19398.6	20832.33	505	515	550	.1	.3

Ineffective Flow num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
16026.1	18400	995.2	20840.4	20982.7	995.2

CROSS SECTION RIVER: 1
REACH: 1 RS: 204.68

INPUT
Description: 204.68

Right Channel Bank Station Interpolated
Station Elevation Data num= 97

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
17501.1	986.1	17554.2	985.7	17607.9	985.5	17645.5	987.6	17657	986.8
17668.8	987.1	17674.9	990.2	17682.2	987.8	17691	985.7	17742.4	986.2
17748.2	986.3	17778	988.7	17792.2	990.8	17806.1	988.7	17807.3	988.9
17839.5	987.8	17848.5	986.9	17867.4	986.8	17881.2	986.2	17970.4	985.8
18016.4	985.9	18087.9	985.4	18189.8	985	18231.2	984.8	18295.5	984.9
18354.5	984.6	18412.6	984.3	18437.1	982.9	18472.2	984	18491.1	983.4
18518.9	981.6	18530.8	984.6	18531.9	985.1	18550.1	982.9	18601.2	983.1
18621.4	983.6	18662.6	982.9	18685.1	983	18736.6	981.7	18767.6	980.4
18849.4	980.3	18886.2	980.2	18950.6	980	19029.6	979.9	19057.5	983
19071.2	980.7	19099.7	980.9	19114	981.6	19143.3	981.3	19197.1	981.7
19249.9	983.3	19284.9	981.9	19308.1	982.1	19314.7	984.6	19321.8	985
19357.4	981	19361.7	979.6	19368.2	980.1	19394.4	978.2	19398.6	975.9
19415.9	975.9	19458.6	973.3	19479.3	973.1	19513.5	971.9	19564.9	971.9
19621.8	972.2	19668.2	973.2	19691.4	975.5	19719	976.9	19734.6	976.2
19779.1	971.8	19814.3	971.4	19869.4	971.6	19901	972.5	19927.9	972.8
19942.8	973.9	20011.2	975.3	20053.7	976.3	20121.8	976.1	20137.2	975.6
20206.4	975.5	20256.1	973.7	20273.3	974.7	20295	973	20348.3	973.2
20369.6	973.3	20516.3	974.1	20548.6	1990.5028	20548.8	990.6	20582.8	991.5
20647	987.5	20715.7	987.8	20786.9	988	20814	988	20872.4	988.2
20904.2	988.1	20971	988.4						

Manning's n Values num= 5

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
17501.1	.025	18472.2	.037	19321.8	.037	20548.8	.037	20582.8	.025

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
19321.8	20548.61	325	407	570	.1	.3

Ineffective Flow num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
17501.1	18455	991.5	20582.8	20971	991.5

CROSS SECTION RIVER: 1
REACH: 1 RS: 204.61

INPUT
Description: 204.61
Station Elevation Data num= 96

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
14501.4	987.8	14573.3	990	14582.2	987.6	14618.2	988.2	14777.3	988.3
14862.5	988	15060	988.1	15169	988.1	15293.6	988.1	15349.5	988
15354.3	989.1	15407.2	987.7	15581	987.7	15683.1	987.7	15895.1	987.7
15973.3	987.8	16138.5	987.8	16253	987.3	16305.2	988.9	16356.5	986.6
16502.7	987	16642.3	986.6	16753.7	986.8	16913.6	986.7	17015.2	986.4
17201.6	986.5	17292.3	986.1	17385	986.2	17492.5	986.6	17525.7	986
17544.8	987	17555.9	984.9	17607.1	987.6	17733.4	988	17760.1	988.2
17907	986.4	17945.4	985.9	18071.1	985.8	18171.7	984.9	18250.5	986.1
18300.1	984.4	18402.9	984.9	18466.2	984.6	18493.6	983.5	18498.9	981.8
18563.6	983.3	18578.3	983	18591.3	980.7	18665.2	981.8	18677.5	983.2
18687.3	985.4	18775.1	988.2	18821.3	988.9	18834.2	979.9	18973.9	980.4
19090.8	980.1	19180.1	979.7	19288	980.1	19386.4	980.8	19428.1	982.7
19471.3	983.1	19479.7	979.4	19500.4	973.3	19642.8	973.3	19760.9	972.7
19781	972.7	19928.9	973.4	20022	973.4	20085.3	975.2	20097.7	972.6
20188.3	973	20275.9	973.4	20374.8	973.9	20426.1	974.2	20456.1	987.8
20482.9	988.5	20507	986.5	20620.9	986.8	20726.9	987	20849.8	987.1
20944.2	987.1	21033.3	987.2	21060.5	987.3	21176.6	986.9	21261.7	986.8
21362.3	986.7	21489.6	987	21584.7	987.7	21599.3	987.7	21697.6	987.5
21835.5	987.5	21887.1	988.6	21890.1	987.2	21897.8	989.2	21930.6	990.8
21963.1	990.8								

Manning's n Values num= 4

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
14501.4	.025	18498.9	.037	19471.3	.037	20482.9	.025

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
19471.3	20482.9	395	449	545	.1	.3

Ineffective Flow num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
14501.4	18570	990.8	20482.9	21963.1	990.8

CROSS SECTION RIVER: 1
REACH: 1 RS: 204.53

INPUT
Description: 204.53
Station Elevation Data num= 96

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
17504.9	987.8	17516.3	987.9	17522.8	987.1	17597	987.9	17615.7	987.3
17634.6	987.5	17637.7	988.1	17645.9	986.3	17657.9	988	17704.2	989.7
17740.1	1006.3	17784.7	1004.7	17850.8	1006.5	17875.5	988.5	17970.4	986.9
18011.9	987.2	18027.9	986.1	18091.1	986.1	18155.5	985.2	18204.4	984.7
18283.5	984.5	18320.2	984.4	18443	984.3	18501.9	983.9	18579.8	983.6
18647	982.6	18678.7	980.4	18706.4	982.9	18747	982.6	18757	983.3
18815.9	983.6	18827.1	980.6	18916.2	981.2	18927.3	982	19007.2	982.5
19073.9	982.8	19175.3	983.2	19185.4	983.5	19240.3	981	19276	975.9
19293	975	19359.2	979.5	19386	976	19409.2	976.4	19468.7	973.1
19520.6	973	19547.6	973.9	19571.2	975.5	19585.1	972.9	19610.7	972.7
19729.3	972.9	19787.3	973	19805.5	973.5	19860.6	976.1	19930.7	975.8
19979.8	973.4	19994.9	973.6	20150.7	974	20174.8	974	20434.3	974.4
20443.5	974.5	20465.7	985.2	20495.9	987.1	20550.8	986.4	20566	984.8
20629.6	984.7	20701.1	984.8	20780.4	985	20872.2	985	20943	985.1
21022.1	985.1	21052.3	985	21118.4	984.9	21183.9	984.8	21260.2	985
21337.7	986.1	21351.7	986.3	21381.4	984.7	21472.3	984.9	21564.8	985.3
21626.7	986.2	21653.6	986.5	21678.1	985.5	21716.4	985.3	21781	984.7
21817.6	987.6	21875.1	987.3	21880.1	988.5	21884.2	988.1	21885	988.9
21887.9	987.2	21894.1	988.4	21914.7	989.1	21935.1	988.6	21999.2	989.8
22011	990.1								

Manning's n Values num= 5

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
17504.9	.025	18647	.037	19185.4	.037	20495.9	.037	20566	.025

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
19185.4	20495.9	570	552	525	.1	.3

Ineffective Flow num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
17504.9	18730	1000	20495.9	22011	1000

CROSS SECTION RIVER: 1
REACH: 1 RS: 204.42

INPUT
Description: 204.42

Right Channel Bank Station Interpolated
Station Elevation Data num= 90

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
17576	985.4	17608.5	985.2	17708	984.7	17783.2	985.9	17832.4	987.2
17853.5	986.1	17871.5	986.6	17926.9	986	17956.8	985.7	18023.8	985.6

18149.3	988.2	18169.7	988.1	18191.3	988.5	18226.7	987.2	18239	992.9
18240.3	993.2	18241.4	992.8	18249.3	987	18255.2	986.8	18279.8	990.2
18308.3	987.7	18322.1	985.5	18347.4	985.3	18488.4	983.7	18517.8	983
18560.8	983.8	18635.1	982.4	18650.1	983	18667.7	983	18723.8	982.5
18733.2	982.4	18795.2	981.7	18839.1	981.2	18874.1	983.2	18899.1	981.9
18955.6	982.5	18998.6	983.3	19025.4	984.6	19040.4	981.3	19045	980.6
19052.9	980.4	19095.4	981.9	19166.1	982.1	19255.9	982	19280.2	982
19341.8	981.8	19381.9	981.6	19437	981.1	19475.3	981	19500.2	980.6
19543.1	978.9	19552.9	979.1	19561.9	978.3	19576.9	979.5	19599.7	980.5
19616.5	980.7	19649.2	979.5	19653	978.6	19672.9	972.5	19732	972.5
19781.3	972.6	19794.7	975.8	19805.4	972.9	19824.4	972.6	19905.9	971.4
19930	972.8	19954.4	972.4	19966.8	973.5	19992	972.4	20006.4	972.1
20057.7	972.3	20101.5	973	20150.5	972	20162.2	972.1	20303.9	972.1
20322.7	972.1	20397.5	972.3	20434.6	971.9	20454.2	972.5	20468.3	973.3
20548.4	973.9	20577.1	973.9	20609.6	973.2	20616.9	972.5	20646	972.8
20682.0	9987.6	656 20689.7	990.8	20701.7	992.2	20714.4	988.5	20967	988.5

Manning's n Values num= 5

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
17576	.025	18839.1	.037	19025.4	.037	20689.7	.037	20701.7	.025

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
19025.4	20682.09		430	453	500	.1	.3

Ineffective Flow num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
17576	18874.1	993.2	20689.7	20967	993.2

CROSS SECTION RIVER: 1
REACH: 1 RS: 204.34

INPUT
Description: 204.34

Left and Right Channel Bank Stations Interpolated
Station Elevation Data num= 74

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
18066.2	985.2	18081.3	985	18158.1	983.7	18200	983.2	18226	984
18228.2	983.4	18283.2	983.4	18339.1	987.8	18395.4	986.8	18498.7	986.6
18514.4	986.2	18516	986.7	18586.8	985.6	18638.2	981.3	18678.3	981
18721.9	979.9	18774.5	984.6	18806.4	982.8	18806.6	981.1	18864.9	982.2
18888.3	975.4	18906.9	980.7	18919.1	979.8	18932.5	981.8	18936.3	983.3
18988.6	982.9	19004.9	982.1	19086.4	981.7	19100	981.6723	19184.5	981.5
19245.5	981	19310.8	980.7	19329.3	980.7	19389.4	980.3	19453.4	979.8
19487.9	979.5	19552	979.2	19615.6	978.7	19689.1	978.5	19736.5	978.7
19757.1	988.9	19782.1	971.2	19783.9	970.6	19819.5	969.3	19835.1	971.8
19891	971	19954.9	970.8	20009.4	971.2	20054.1	972.9	20100.5	973.1
20107.5	972.7	20175.2	972.5	20253	971.7	20324.6	971.9	20395.6	971.7
20465.2	971.4	20539.7	971.3	20603.2	971.5	20661.9	971.9	20671.8	972
20743.2	970.2	20773.2	970	20795.3	976.9	20816.23	986.0935	20827.4	991
20878.6	990.5	20887.2	987	22239.1	987.1	22248.4	987.2	22254.3	988.2
22259.5	985.8	22266.1	987.7	22287.1	988.3	22317.8	988		

Manning's n Values num= 4

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
18066.2	.025	18774.5	.037	20827.4	.037	20878.6	.025

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
19100	20816.23		495	488	480	.1	.3

Ineffective Flow num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
18066.2	19100	991	20827.4	22317.8	991

CROSS SECTION RIVER: 1
REACH: 1 RS: 204.25

INPUT
Description: 204.25

Left and Right Channel Bank Stations Interpolated
Station Elevation Data num= 202

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
13993.51	986.9	14130.56	987.4	14486.44	987.43	14755.8	987.03	14937.72	987.04
15050.6	988.1	15090.94	987.5	15102.07	987.57	15109.44	988.64	15116.98	989.38
15128.77	988.1	15132.01	987.97	15140	988.47	15148.98	986.93	15153.86	985.73
15173.36	986.2	15690.75	986.18	15878.25	985.18	15889.67	986.28	15904.51	988.05
15907.38	988.1	15919.42	987.92	15924.1	987.47	15931.02	985.83	15970.22	986.25
16049	986.1	16175.22	986.02	16450.56	986.16	16463.91	986.29	16480.31	987.87
16486.56	987.4	16495.93	987.1	16504.19	987.79	16511.66	987.9	16518.49	987.78
16535.99	985.8	16542.09	985.62	16555	985.55	16564.89	984.28	16584.86	984.26
16687.99	984.8	16810.65	985.29	16823.94	985.32	16873.9	984.73	16893.09	984.53
16922.74	984.6	16941.4	984.26	16960.75	984.66	16990.05	984.33	17020.18	984.79
17048.94	986.6	17091.64	985.28	17177.92	98	17208.14	985.11	17249.69	984.95
17398.31	984.3	17414.87	984.49	17522.6	984.39	17556.82	984.21	17600.03	984.35
17721.19	984.2	17812.48	984.25	17851.5	984.81	17861.89	984.59	17867.1	984.93

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17880.92     98517892.56  984.3517898.26  983.9217932.23  986.4917944.09  986.98
 17988.7   986.718005.49  986.89 18050.6  987.5718083.28  987.6218106.23  986.76
18158.97   986.818174.45   987.118185.88  987.1218240.34  986.9218277.05  986.27
18300.85   986.118323.52  985.5518372.65  985.1418410.49  985.0818449.87  985.08
18490.27   985.5 18520.4  985.1518569.61   985.8 18587.9  985.7618609.93   985.4
18633.73   984.818652.28  984.25 18660.4  983.8518672.96  983.4118703.66  978.51
18719.46   976.218724.94   975.718730.59  976.2818765.73  981.3818788.83  981.86
18812.39     98218851.86  982.6718856.84  982.0218876.79  980.9318917.58  980.72
18958.37   980.818990.64  980.15 19005.3   981.3   19038  982.5519054.34  981.71
19061.47   981.919088.33  981.0319097.24  980.6119117.27  982.08 19126.5  981.33
19134.63   980.819139.73  980.7919178.34  980.9919189.92  980.9119237.27  980.78
19263.33   980.219297.08  979.95    19300 979.93619332.52  979.7819361.32  979.52
19438.75   979.41 19458.3   979.519506.35   978.719519.13  978.8519527.66  978.72
19542.19   978.7319623.64   978.619631.41   978.619649.23  978.6319696.73  978.82
19703.53   975.7119717.53   970.2    19739  971.319747.27  974.51 19771.1  974.27
20035.47   970.8820227.56   972.420273.64  972.3620297.51  972.19 20307.7  971.98
20309.92   971.7420357.54   969.8 20436.7  969.4420448.29  969.4520499.51  969.22
20526.05   969.29 20588.3   969.720612.99  970.1420643.57  971.0820655.61  971.37
20680.85   971.2420705.02   971.520710.67  971.3720740.01  974.1420776.89  977.31
20818.53981.025320830.46  982.09 20922.2   989.620964.06  989.9520995.89  990.41
21004.86   987.3921018.73  981.0821052.72   981.121087.73  980.7921108.33  980.92
21157.66    981.421178.54  981.5221210.73   981.221262.99  982.6321279.42  982.45
21290.06   979.4521361.92  980.42 21408.6   981.221446.51   981.421456.08  981.58
21481.84   981.6121499.03  981.7121649.19   981.921681.55  982.0721787.28  982.66
21862.63    982.921876.61  982.9521939.71   983.421983.01  983.3822043.39  983.78
22083.67   984.1722130.05  984.4322172.04   984.422225.83  984.5822265.02  984.87
22339.34   986.3522389.33  985.4622416.26   985.922438.79  986.0322474.98  986.32
22486.29   987.5222500.35  987.24

Manning's n Values          num=       3
     Sta   n Val      Sta   n Val      Sta   n Val
13993.51    .03518812.39    .03221290.06    .025

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
         1930020818.53              510     508     500              .1       .3
Ineffective Flow      num=       2
   Sta L   Sta R    Elev   Sta L   Sta R    Elev
13993.51   19300     990 20922.222500.35     990

CROSS SECTION           RIVER: 1
REACH: 1                   RS: 204.15

INPUT
Description: 204.15

Left and Right Channel Bank Stations Interpolated
Station Elevation Data      num=      80
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
 16507.2   984.4   16600     985 16650.2   986.1 16657.8   983.8 16666.8     986
 16708.7   983.2 16800.2   983.6 16895.3   983.8 16963.7   983.3 17111.7   982.5
 17141.8   982.4 17289.1   982.7   17397   983.7 17427.8   983.8 17571.9   983.4
 17609.8   983.3 17719.7   983.5 17833.6     983 17949.9   982.8 18031.8   984.3
 18081.2   983.6   18087   981.9 18093.6   985.1 18094.5   983.7 18130.3     986
 18214.6   985.6 18280.4   986.6 18357.2   984.7 18446.1   985.5 18578.2   984.4
 18725.8   984.7 18824.1   985.3 18862.3   983.1 18888.3   980.6   18907   981.1
 18955.1     980 19045.1   979.6 19065.5   979.9 19074.1   976.8   19104     969
 19192.6   971.7   19200   971.7 19310.3   971.7 19331.3   970.9 19446.3   971.9
 19486.8   971.6 19501.3   966.1   19595     966 19644.2   966.2   19661   973.6
   19681   970.2 19769.8   971.6 19860.6   972.7 19968.4   974.8 20027.5   972.3
 20066.1   967.9 20074.7   967.9 20209.5     968 20337.2   968.2 20441.7   967.7
 20540.9   966.7 20554.5   966.5 20580.4   968.8 20679.7   967.8 20753.2   967.1
 20790.2   968.9 20795.8   969.9 20814.5   969.5 20911.6   969.2   20940   967.1
 20986.5   968.321033.38981.5872 21042.6   984.2 21131.4   985.3 21379.2   985.3
 22652.4   985.2 22684.9   986.3   22693   983.9 22700.1   985.5 22708.9   985.4

Manning's n Values          num=       4
     Sta   n Val      Sta   n Val      Sta   n Val      Sta   n Val
 16507.2    .035 18824.1    .032 21131.4    .025 21379.2    .025

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
         1920021033.38              510     509     510              .1       .3
Ineffective Flow      num=       1
   Sta L   Sta R    Elev
 16507.2   19200   986.6

CROSS SECTION           RIVER: 1
REACH: 1                   RS: 204.05

INPUT
Description: 204.05

Left and Right Channel Bank Stations Interpolated
Station Elevation Data      num=      73
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
```

18304.1	982.1	18322.9	981.3	18412.7	981.2	18490.1	981.1	18499.9	981.4
18523	980.8	18527.4	981.7	18530.5	980.8	18552.5	980.6	18585.3	987.2
18649.8	986.5	18710.4	987.1	18782.2	985.8	18858.9	986.9	18882.3	985.9
18903.8	986.2	18952	984.5	18962.59	980.697	18970.1	978	18992.5	968.5
19020.9	971.4	19097.5	973.6	19099.9	973.6	19168.9	971.6	19234.1	970.7
19315.1	973.1	19401.3	974.1	19432.4	974.2	19453	972.9	19510.9	971.5
19570.9	965.6	19644.7	967.7	19662	968.9	19741.3	971.7	19784.3	975.1
19860.9	975.2	19946.2	976.1	20026.3	975.5	20061.6	973.5	20142.4	974.9
20200.7	974.3	20222.7	972.5	20272.6	972.8	20286.9	973.4	20327.7	971.7
20354.5	969.2	20434.3	970.9	20491.6	971.4	20536	969.7	20605	969.1
20618.5	968.7	20679.5	965	20701.3	965.4	20715.6	967	20746.4	966
20828.1	965.9	20914.2	966.5	20930	968.1	20994	968.4	21024.5	966.7
21045.1	967	21067.8	975.8	21081.76	980.6	981	21090.6	983.8	21160.1	983.8
22668.7	984.2	22676.7	984.2	22773.1	984.3	22829	984.6	22836.3	985.6
22843	983.5	22852.2	986	22860.7	985.9				

Manning's n Values num= 4

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
18304.1	.05	18552.5	.035	18858.9	.032	21090.6	.025

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
18962.59	21081.76		510	505	520	.1	.3

Ineffective Flow num= 1

Sta L	Sta R	Elev
18304.1	18750	987.2

CROSS SECTION RIVER: 1
REACH: 1 RS: 203.96

INPUT
Description: 203.96

Right Channel Bank Staion Interpolated
Station Elevation Data num= 91

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
16511.6	983.5	16713.4	983.8	16774.3	983.9	16908.7	984.4	16963.5	986.3
16968.1	982.5	16973.8	984.3	17039.3	980.6	17126.9	980	17138.9	980
17175.8	974.9	17222.8	980.2	17277.4	983.2	17284.8	982.3	17330	982.5
17366.5	984.4	17465.6	982.2	17576.8	981.2	17680.4	980.6	17774.7	979.6
17869.9	981.4	17958.4	981.2	18010.3	980.8	18015.8	982.2	18024.6	982.8
18047.1	980.2	18070.6	981.5	18128.1	982.9	18242.5	983.3	18284.4	984.3
18384	982.4	18469.6	983.6	18481.1	980.9	18496.2	979.1	18583.4	978
18607.3	975.5	18626.7	976.9	18657.9	976	18690	978.1	18723.2	976.2
18730.8	978.5	18760	974.5	18783.2	969.3	18801.2	968.9	18811.7	967.4
18891.8	971.9	18902.5	971.8	18997.2	971.4	19057.4	972	19069.5	973.6
19145.7	973.5	19201.5	971.8	19284.9	973.5	19375	977.1	19427.1	976
19471.7	976.7	19531.2	976.1	19556.4	976.8	19606.4	965.6	19696.9	968.3
19784.2	968.9	19847.3	971.5	19965.6	970.7	19998.5	972.3	20089.8	973.2
20179.8	972.3	20254.9	970.6	20367	970.8	20411.5	970.7	20421.4	969.4
20435.9	965.4	20451.7	964.7	20529.6	965	20554.9	967	20642.7	965.7
20735.2	964.2	20738.9	964.1	20767.7	971.2	20790.38	978.7	3393	20803.5	983.1
20835.5	994.9	20850.3	995.2	20872.5	997.5	20910.1	984.2	20997.3	981.9
21108.2	981.9	21539.6	982	21552	986.1	21559.4	984.2	21657.7	986.4
21694	988.5								

Manning's n Values num= 5

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
16511.6	.025	17175.8	.043	18469.6	.043	18902.5	.032	20835.5	.037

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
18730.8	20790.38		495	502	505	.1	.3

Ineffective Flow num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
16511.6	18730.8	997.5	20835.5	21694	997.5

CROSS SECTION RIVER: 1
REACH: 1 RS: 203.86

INPUT
Description: 203.86

Right Channel Bank Staion Interpolated
Station Elevation Data num= 97

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
17504.9	979.4	17555	980.7	17589.4	982.1	17613.5	980.8	17620.6	979.8
17657.6	978.3	17694.3	979.8	17718.4	978.9	17729	980.8	17762.1	977.4
17780.7	978.7	17821.9	984.3	17861.6	984.2	17888.2	982.4	17897.5	983.2
17930.6	983.2	17969.6	984.1	17989.1	983.6	18013.3	984	18044.9	981.7
18064.4	979.2	18096.7	981.5	18136.8	979.8	18171.7	980	18207.5	982
18243.1	982.7	18290.8	981.3	18353.7	982	18421.5	981.7	18458.6	982.1
18488.1	978.2	18540.3	978.5	18564	971	18599.5	968.8	18660.4	971
18700.2	971.8	18760.2	970	18806.7	971.3	18853.4	969.4	18891.2	969
18974.3	973.5	19064.8	976.5	19077.3	975.8	19161.8	973.4	19223.1	970.5
19246.5	967.4	19268.5	965.8	19288.8	962.4	19365.2	962.6	19365.7	962.6

19450.7	962.8	19451.6	962.8	19539.2	963.1	19611.5	963	19690.6	962.4
19743.6	962.3	19811.2	962.7	19858.2	963.1	19928.9	963.6	19992.8	963.8
20013.5	963.8	20076.4	964	20099.2	964	20196.1	964.2	20254.4	964.2
20298.4	964.5	20318.1	968.2	20429.2	967.6	20486.9	967.6	20543.1	968.6
20555	966.5	20576	964.2	20634.3	964.2	20650.7	964.2	20663.3	965.7
20676.9	965.8	20697.7	967.2	20730.9	976.1	20735.9	978.6323	20761.9	991.8
20803.3	981	20878.5	982.5	20946.4	982.5	20965.7	981.1	21031.2	980.5
21099.9	980.6	21167.6	980.7	21198.2	981	21258.8	981.1	21324.9	981
21359.8	980.5	21368.4	981	21395.8	980.4	21405.9	982.4	21411.7	980.4
21482.6	980.2	21488.8	980.2						

Manning's n Values num= 4

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
17504.9	.043	18243.1	.043	18891.2	.032	20761.9	.037

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
18488.1	20735.9	505	498	480	.1	.3

Ineffective Flow num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
17504.9	18243.1	991.8	20761.9	21488.8	991.8

CROSS SECTION RIVER: 1
REACH: 1 RS: 203.77

INPUT
Description: 203.77

Left and Right Channel Bank Staions Interpolated
Station Elevation Data num= 98

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
15516.5	980.4	15611.3	979.8	15668.7	980.9	15700.1	979.6	15734.7	982.9
15797.9	987.2	15835	986	15865.2	981.2	15920	981.4	15937.6	976.9
15947.6	978.2	15969.6	982.9	15985.2	984.3	16056.9	984.3	16076.8	983.7
16103.9	981.6	16184.4	981.2	16265.9	982.1	16312.5	981.7	16348.3	982.1
16366.7	978.9	16400.4	980.3	16452.6	980.5	16569.1	980.4	16622.2	980.5
16857.6	980.3	17032.7	979.9	17052.5	979.9	17220.4	979.9	17326.1	979.2
17424.8	979	17450	979.3	17461.6	980.3	17495.9	980.1	17515.6	978.2
17558.9	979.2	17678.1	978.7	17709.3	979.1	17747.1	977.4	17826.8	982.9
17879.9	983.7	17902.1	982.1	17924.4	981.6	18003.9	982.8	18091.9	980.7
18117.2	979.8	18191	981.8	18222.6	1978.2686	18227.7	977.7	18281.9	974.6
18343.8	974.4	18371.2	970.5	18451.7	968.1	18515.7	969.6	18591.7	968.7
18603.5	969.7	18721.8	967.3	18770.9	970.5	18803.6	971.5	18834.8	974.6
18888.2	976.1	18941.5	973.8	18956.3	972.3	18974.2	976.6	18983.5	976.3
19032.5	965.6	19113.9	965.1	19224	964.8	19282.2	964.6	19290.6	969.7
19307.6	974.2	19313.1	973.7	19322.8	969.5	19338.6	967.2	19345.7	964.7
19426.8	964.5	19492.9	964.4	19606.6	964.2	19685.9	964.3	19717.5	964.1
19865.4	964.1	19957	963.3	20019.3	964.3	20221.9	964.3	20253.9	964.3
20282.3	966.5	20325.8	965.1	20328.7	964.2	20338.6	965.4	20430	966.2
20524.9	966.2	20609.1	966.4	20684.8	966.7	20728.9	97	120745.6	1978.2692
20746.6	978.7	20820.8	981.2	20854	997.6				

Manning's n Values num= 5

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
15516.5	.025	17495.9	.043	18191	.043	18803.6	.032	20820.8	.025

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
18222.6	120745.61	490	498	480	.1	.3

Ineffective Flow num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
15516.5	18191	997.6	20820.8	20854	997.6

CROSS SECTION RIVER: 1
REACH: 1 RS: 203.67

INPUT
Description: 203.67

Right Channel Bank Staion Interpolated
Station Elevation Data num= 74

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
15401.1	982.5	15424.7	984.1	15508.1	982.3	15591.4	979.1	15681.8	979.9
15787.8	979.3	15920	979.3	16055.7	978.9	16157.5	979.1	16260.6	979.3
16282.2	979.2	16477	979.1	16627.1	979.9	16750.8	980.1	16865.7	979.3
16957.3	981.3	16980.5	980.6	17002.4	977.7	17014.1	979.2	17103.7	973.3
17179.5	973.2	17215.7	975.7	17267.4	969.7	17366.5	975.6	17541.8	974.3
17694.8	973.7	17837.2	974.1	17962.6	973.8	17982.5	973.7	18104.5	972.8
18289.3	972.9	18348.9	975.3	18350.2	973.2	18394.8	968.7	18516.9	971.1
18627.3	969.9	18690.1	970.4	18740.2	966.8	18787.4	966.3	18802.9	968.2
18941.9	973.8	19049	974.1	19155.9	972.4	19180.7	975.8	19211.3	962.3
19411.4	963.8	19519	963.9	19654.3	964.2	19798.6	964.3	19832.9	964.3
20036.1	964.3	20137.2	965.3	20302.2	963	20432.8	965.2	20537.5	965.2
20656.2	965.3	20661.5	965.6	20693.5	975.1	20699.3	977.8097	20708.7	982.2
20796	983.8	20827.7	980.1	20837	982.9	20858.2	981.6	21858.6	983.5
21904.3	982.5	23520.4	980	23527.3	982.8	23545.1	983.5	23556.1	980.2

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 23584.2   981.5   23593   977.2 23603.5   980.1   23621   979.7

Manning's n Values          num=      6
     Sta   n Val     Sta   n Val     Sta   n Val     Sta   n Val     Sta   n Val
 15401.1    .025 16957.3    .037 18348.9    .037 18941.9    .032 20708.7    .032
   20796    .025

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
       18348.9 20699.3                470     490     505              .1       .3
Ineffective Flow     num=       2
   Sta L   Sta R    Elev   Sta L   Sta R    Elev
 15401.1 17837.2   984.1 20708.7   23621   984.1

CROSS SECTION          RIVER: 1
REACH: 1                  RS: 203.58

INPUT
Description: 203.58

Right Channel Bank Staion Interpolated
Station Elevation Data      num=     75
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
 15526.8   983.1 15573.8   984.7 15577.9   981.7 15586.4   984.8 15648.9   982.8
 15684.7   983.7 15735.5   978.7 15806.7   977.9 15925.6   978.3 15954.8   978.2
 16031.7   974.4 16204.9   973.9 16321.4   974.3 16490.9   975.4   16570   975.3
 16706.6   974.9 16819.9   975.7 16971.3   975.7   17120   975.1 17136.9   976.6
 17168.4   976.1 17202.6   978.2 17251.4   973.9 17388.1     976 17458.2   974.6
   17489   971.8 17596.3   976.7 17707.8   975.2 17790.7   972.4 17873.7   975.6
   17978   974.3 18064.9   975.2   18204   975.9 18355.4   971.3 18433.8   971.3
 18553.6   967.4   18636   970.5 18664.8   967.3   18681   970.8   18724   969.1
 18765.5     971 18876.6   970.7 18988.9     970 19101.4   968.2 19228.7   965.4
 19261.3   964.2 19337.3   967.8 19426.3   965.2 19456.9   967.4   19474   963.9
 19482.9   963.9 19725.9   963.6 19842.5   963.6 19929.1   963.8 20222.2   963.5
 20355.7   963.9   20380   963.9 20543.8   963.6   20636   963.9 20645.5   962.1
20704.98977.3868 20706.2   977.7 20767.4   979.5 20782.3   981.3 20788.1   979.3
 20818.3   979.5 20825.7   982.3 20859.8   981.5 22062.2   983.3   22098   982.2
 23711.2     980 23724.5   982.4 23738.8   982.8 23750.9   979.2   23783   979.2

Manning's n Values          num=      5
     Sta   n Val     Sta   n Val     Sta   n Val     Sta   n Val     Sta   n Val
 15526.8    .025 17202.6    .037   18204    .037   18681    .032 20782.3    .025

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
         1820420704.98                560     513     495              .1       .3
Ineffective Flow     num=       2
   Sta L   Sta R    Elev   Sta L   Sta R    Elev
 15526.8 17707.8   984.8 20782.3   23783   984.8

CROSS SECTION          RIVER: 1
REACH: 1                  RS: 203.48

INPUT
Description: 203.48

Right Channel Bank Staion Interpolated
Station Elevation Data      num=     97
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
 15578.8   977.1 15693.5   976.9 15717.9     977 15814.4   976.9 15880.9   978.5
 15900.7   978.2 15967.5   973.1 16013.9   973.9 16068.7   973.5 16168.1   973.8
 16324.7     974 16419.6   974.1 16584.4   974.1 16657.7   974.3 16810.8   974.5
 16932.4   974.5 17066.5   974.6 17177.1   974.2 17201.7   974.2 17312.2   975.1
 17331.6     976 17341.7   975.7 17369.6   978.2 17434.9   970.7 17473.9   969.3
 17535.6   971.3 17609.4   970.9 17714.8   972.8 17721.6   972.8 17841.5   973.7
 17932.6     974 18016.7   972.4 18039.3   972.1 18120.3   973.5 18171.8     968
   18184   969.1 18267.5   973.4 18353.5   970.9 18380.1   969.8   18439   969.7
 18521.1  965.52 18538.6   965.3 18561.3   969.6 18571.7     970 18619.2   968.6
 18635.6   969.2 18675.5   973.1 18730.7   972.2 18817.1   970.9   18956   969.1
 18991.1   970.6 19035.5   973.7 19082.7   974.1 19116.8   968.9 19177.6   972.2
 19217.3   970.5 19332.9   970.5 19399.6   962.9 19491.7   962.7 19584.5   965.1
 19624.3   962.2 19645.8   962.3 19669.3     965 19679.4   965.3 19794.5   963.4
 19884.7   963.3 19987.2   964.5 20013.9   964.4 20199.2     964 20220.6   964.7
 20227.4   967.6 20231.3   963.9 20325.6   963.9 20342.5   963.9 20345.7   965.5
 20353.5   967.3 20358.6   964.3   20404   963.2 20433.1   965.2 20458.7     965
   20480   963.1 20588.9   964.7 20638.4   966.8 20725.1   968.7 20785.1   971.2
20856.76976.9083 20866.7   977.7 20886.7   979.4 20901.8   978.6 20909.2   979.5
 20915.7   978.5 20925.9   979.4 20953.9   979.4 20960.7   978.7 20985.4   978.7
 20989.2   980.3   20999   981.2

Manning's n Values          num=      5
     Sta   n Val     Sta   n Val     Sta   n Val     Sta   n Val     Sta   n Val
 15578.8    .025 17369.6    .037 17932.6    .037 18619.2    .032 20886.7    .025

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
       17932.620856.76                500  505.82     515              .1       .3
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Ineffective Flow num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
15578.8	17369.6	981.2	20999	20999	981.2

CROSS SECTION RIVER: 1
REACH: 1 RS: 203.39

INPUT
Description: 203.39
Station Elevation Data num= 96

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
15500	974.4	15548.5	978.1	15604.9	974.8	15609.8	975.3	15717.3	976.3
15722.2	976.3	15836.5	975.1	15864.7	976.6	15875.6	973	15888.1	975.4
15914.3	976.1	16076.8	976.1	16271.9	976.2	16290.8	976.1	16376.9	976.2
16390.2	976.2	16520.6	976	16549.4	977.1	16694.9	973.2	16751.5	970.2
16832.2	968.6	16901	973.2	17053.7	971.4	17105.6	971.5	17120	974.9
17136.1	970.9	17147.5	974.3	17212	975.5	17260.9	972.8	17296.2	974.2
17353	971.2	17382.3	974.9	17417.1	974.8	17453.9	976.4	17519.2	968.1
17602.4	973.1	17694.4	971.8	17733.8	970.7	17815.5	973	17901.2	972.3
17947.7	972.1	17970.8	973	18042	972.8	18114	969.5	18199.7	969.1
18207.5	968.6	18224.3	964.4	18259.9	963.8	18330.5	967.6	18418.7	967.4
18507.8	969.8	18601.7	972.8	18629.1	974.7	18686.7	980.9	18738	974.3
18773.9	975.9	18902.4	975	19023.2	970.3	19056.6	971.7	19105.2	965.4
19218.1	968.3	19268.2	972	19346.8	971.4	19370.8	969.4	19397.9	965.7
19418.4	960.4	19479.4	959.9	19491.4	962	19633	960.6	19736.1	965
19770.9	965.7	19800.9	963.8	19816.1	965.5	19916.4	965	20010.4	963.8
20159.5	964.6	20260.9	963.8	20303.7	964.2	20330.3	963.1	20346	964.4
20389.8	962.9	20483.7	964.2	20485.1	964.9	20576.8	964.7	20682.1	965.3
20789.2	969.4	20834.2	971.9	20922.2	969.5	20993.5	968.3	21038.8	975.6
21082.9	975.6	21098.5	976.5	21138.2	977.4	21143.6	978.2	21153.1	976.5
21223	978.3								

Manning's n Values num= 5

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
15500	.025	16832.2	.037	17970.8	.037	18601.7	.032	21038.8	.025

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
17970.8	21038.8	500	505	500	.1	.3

Ineffective Flow num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
15500	17519.2	980.9	21223.3	21223	980.9

CROSS SECTION RIVER: 1
REACH: 1 RS: 203.29

INPUT
Description: 203.29

Right Channel Bank Staion Interpolated
Station Elevation Data num= 97

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
14306.7	975.2	14398.4	975.7	14462.6	975.2	14487	977.9	14491.6	976.6
14498.9	977.7	14515.3	976.7	14528	974	14553.9	972.7	14670.7	972.7
14687.5	972.7	14856.4	972.7	14867.5	972.7	15002.5	972.7	15006.1	972.7
15100.1	972.9	15122.5	975.2	15172.8	972.4	15364.8	972.7	15484.5	974
15649.2	973.6	15701.1	973.4	15710	975.9	15724.5	974.3	15776.8	976.4
15815.8	974	15918.9	974.9	15999.4	974.9	16112.9	975.4	16114.8	975.5
16293.6	975.5	16301	975.5	16411.1	976	16465.5	976	16664.1	976
16733.3	975.8	16808.3	976.1	16968.8	976.1	17062.2	976.1	17153	976.2
17251.7	975.1	17286.9	974.6	17327.4	969.3	17410.1	970.5	17467.7	974.5
17469.8	973.6	17539	974.4	17590	968.4	17649.5	971.4	17775.2	971.1
17888.5	970.4	17987.9	968.4	18065.6	972.5	18117.7	969.6	18146.3	971.6
18204.1	968.8	18247.3	971.6	18266.5	967.8	18378.2	963.9	18464	968.2
18535.2	966.5	18593.9	967.2	18627.7	974.8	18719.2	971.5	18838.7	974.7
18920	973.9	18947.9	969.3	19046.6	972.7	19166.7	971.8	19269	971.6
19295.1	965.4	19325.9	960.7	19447.7	960.9	19552.4	961.6	19655.6	961.1
19756.7	962.1	19849.6	963.4	19945.3	963	20028	965.9	20124.9	965.7
20226	965.2	20297.8	963.6	20378.8	964.4	20396.1	961.9	20494.8	962.8
20586	966.7	20676.2	969.1	20796.8	969	20894.8	969.2	20935.1	968.4
20981.6	969.2	21027.6	966.6	21082.58	975.7	482 21088.3	976.7	21155	977.1
21257.1	975.6	21295	976.3						

Manning's n Values num= 5

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
14306.7	.025	16968.8	.037	18065.6	.037	18535.2	.032	21088.3	.025

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
18065.6	21082.58	620	535	420	.1	.3

Ineffective Flow num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
14306.7	17590	977.9	21088.3	21295	977.9

CROSS SECTION RIVER: 1
REACH: 1 RS: 203.19

INPUT
Description: 203.19

Right Channel Bank Staion Interpolated
Station Elevation Data num= 97

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
16639.2	974.6	16696.5	974.6	16879.5	976.3	16960.6	976.7	16982.2	976.1
16987.1	975.2	16999.5	976.6	17045.2	975.2	17145.4	975	17180.8	974.8
17306.9	974	17389.7	974.5	17513.2	972.9	17539	972.7	17596.6	969.7
17650.2	971	17690.3	968.3	17762.5	967.5	17781.9	968.4	17812.7	966.2
17893.5	967.8	17945.6	971.7	18023.5	971.3	18058.7	964.6	18099.2	971.6
18139.8	972.1	18185.8	967.2	18251.5	970.8	18282.1	971.9	18338.2	971.3
18384.4	969	18406.2	969.7	18445.9	965.2	18495.1	966.4	18521	969
18558.4	964.7	18605.8	963.2	18623.9	961.2	18659	961.4	18701.5	965.4
18712.2	964.5	18734.5	964.5	18797.4	970	18848.7	968.9	18911.7	969.9
18983.1	969.7	19009.9	968.7	19025	967.1	19031	968.2	19080.8	968.8
19095.4	970.3	19159	970.9	19191.3	967.9	19256	967.2	19294.3	960.1
19346.5	959	19442.2	956.7	19471.8	962.7	19542.3	963	19643.7	963.4
19644.6	963.4	19721.9	962.3	19788.7	962.7	19870	964.6	19925.6	962.6
19971.9	966.8	20041.3	966	20111.2	965.3	20142.5	963.8	20233.9	963.3
20336.2	963.2	20384.6	963.4	20398.2	962.6	20462.1	962.2	20541.1	965.2
20570.6	966.9	20635.2	967.1	20669.2	965.5	20696.2	966.5	20752.9	964.7
20795.4	967.4	20825.2	966.9	20848.9	967.5	20865.3	966.7	20898.7	966.8
20928.5	970.1	20952.6	973.8	20965.3	9974.9827	20981.8	976.5	20999	975.6
21013	977.9	21075.8	975.9	21096.9	975.8	21174.9	976.1	21273.9	975.8
21344.5	975.8	21380	975.6						

Manning's n Values num= 6

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
16639.2	.025	17762.5	.043	18282.1	.043	18734.5	.037	20981.8	.025
21013	.025								

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
18282.1	20965.39	535	520	485	.1	.3

Ineffective Flow num= 1

Sta L	Sta R	Elev
16639.2	17587	978

CROSS SECTION RIVER: 1
REACH: 1 RS: 203.09

INPUT
Description: 203.09

Right Channel Bank Staion Interpolated
Station Elevation Data num= 97

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
16077.3	972.6	16108.8	973.2	16114.5	973.9	16141.2	974.9	16147	976.1
16177.1	975.5	16186.3	974.5	16217.9	974.3	16296.3	973.5	16396.3	973.6
16495.1	973.6	16619.4	973.4	16649.6	973.4	16802.2	973.6	16847.8	974.3
16927.3	974.4	16967.8	974.4	17063.1	975.3	17138.5	975.2	17150.2	974.9
17158.9	972.7	17171.5	974	17175.5	975.3	17183.4	974.2	17268	973.7
17382	973.8	17583.9	974.5	17588.1	974.4	17656.3	973	17724.5	971.9
17787.2	966	17835	968.2	17878.2	968.6	17889.9	967.6	17960.8	969
18034.5	970.7	18151.5	966.1	18178.5	966.8	18202.2	966.1	18277.6	970
18313.5	969.4	18321.1	969.7	18364.1	965.2	18437	969.5	18507	971.4
18541.2	970.5	18605.3	962.2	18681.6	963	18770.4	960.8	18814.5	971
18875.7	969	18992.4	969.2	19035.2	968.4	19104.8	968.6	19136.4	968
19190.2	961.9	19211.5	961.8	19247.1	964	19266.9	960.3	19282.4	958.7
19461.8	959.9	19573.5	959.6	19585.9	960.2	19653.1	960.1	19682.3	962.4
19752.6	963.1	19757	963.1	19865.5	961.3	19934.1	962.2	20005.1	964.6
20113.7	965.7	20184.3	965.7	20264.8	966	20287.7	966.2	20364.7	966.6
20397.2	966.4	20469.2	966.1	20498.9	964.4	20517.6	961.6	20546.5	960.5
20610.5	960.6	20636.9	964.4	20681.6	965.4	20709.6	964.4	20742.1	962.1
20765.3	962.2	20780	963.2	20812.8	959.6	20837.9	961.3	20914.8	2973.8939
20917.3	974.3	20926.9	975.4	20942.8	974.2	20972.4	973.4	21023.3	975.3
21111.6	973.6	21171	974.1						

Manning's n Values num= 5

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
16077.3	.025	17588.1	.043	18507	.043	18814.5	.037	20917.3	.025

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
18507	20914.82	520	518	500	.1	.3

Ineffective Flow num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
16077.3	17583.9	976.1	20917.3	21171	976.1

CROSS SECTION RIVER: 1
REACH: 1 RS: 202.99

INPUT
Description: 202.99

Station Elevation Data num= 96

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
17058.5	973.2	17114.3	973.5	17267.7	973.8	17289	973.9	17305.6	974.4
17316.7	973.3	17329.5	974.7	17397.2	973.4	17508.3	973.5	17530.6	972.5
17571.7	973.2	17646.3	973.1	17659.9	972.5	17696.1	969.8	17713.5	970
17723.9	969.1	17781.1	967.5	17850.9	965.7	17864.6	967.2	17879.9	968
17893	968.2	17922	965.3	17941	964	17984.7	968.4	18035.6	970
18091.7	969.9	18126.6	969.7	18186.5	969.9	18238.3	970	18288.7	964.3
18293.1	963.9	18346.5	968.2	18360.3	967.9	18420.8	969.3	18469.4	969.3
18497.6	968.2	18580.4	968.7	18586.2	968.9	18608.3	967.1	18619.4	964.4
18650.8	965	18666.5	962.2	18686.7	961.6	18748.1	962.5	18789.2	962.8
18875	962.8	18906.3	963.4	18945.7	961.5	18988.8	963.5	19005.4	963.6
19058	964.4	19119.4	964.2	19128.8	964.3	19182	965.3	19208.5	964.3
19269.4	961.7	19318.8	960.3	19334.7	959.8	19391.3	959.8	19415.3	959.6
19435.9	960	19527.6	959.5	19609.2	959.5	19725.7	959.2	19759.9	960.9
19828.4	961.4	19945.2	960.7	19948	960.7	20028.5	959.3	20090	960.7
20131.7	963.1	20172.8	964.1	20227.9	965.4	20241.1	965.3	20304	965
20364.7	965.9	20422.1	964.9	20460.6	964.9	20528.6	963.3	20552.5	959.7
20558.2	959.8	20619.9	962.6	20665.6	962	20682.4	960.6	20692.5	959.3
20713.5	960.1	20748.9	960	20773.8	959.3	20789	960.3	20808	960.6
20818.5	963.8	20841.7	963.9	20894.5	963.1	20926.9	970.2	20960.7	976.4
20976	975.9								

Manning's n Values num= 5

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
17058.5	.025	17646.3	.043	18469.4	.043	19058	.037	20926.9	.043

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
18469.4	20926.9	480	456	424	.1	.3

Ineffective Flow num= 1

Sta L	Sta R	Elev
17058.5	17646.3	976

CROSS SECTION RIVER: 1
REACH: 1 RS: 202.9

INPUT
Description: 202.9

Right Channel Bank Staion Interpolated
Station Elevation Data num= 97

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
16149.3	972.1	16219	972.6	16381.4	973.3	16446.1	973.3	16495.7	974.5
16526.4	971.9	16579.2	972.6	16597.9	974.5	16618	973.6	16631.4	972.3
16699.5	972.9	16755	974.1	16804	971.3	16823.8	973.1	16887.1	972.5
16957.5	972.2	16968.8	972.6	17046.9	971.4	17089.7	971.9	17151.8	972
17172.3	972.1	17235.7	971.8	17304.6	971.3	17369.1	970.9	17440.5	971.3
17504.7	971	17572.9	970.6	17644	970	17676.2	972.2	17699.3	970.6
17772.5	968.5	17815	965.7	17875.4	965.2	17896.7	963.8	17966.8	965.8
18000.2	967.5	18046.2	967	18087.7	964.4	18148.3	968.4	18203.5	967.3
18258.7	965	18308.6	967.1	18383	966.5	18433.6	966.6	18455.6	968.2
18517.5	967.7	18563	962.4	18611.6	961.8	18646	958.2	18714	961.6
18808.1	961.6	18872.7	961.1	18917	963.4	18971.7	963.8	19054.2	965.2
19121.2	965.8	19211.2	964.4	19215.4	966	19303.3	961.5	19368.9	960.3
19378.2	959.7	19431.8	961.6	19460.5	960.1	19592.2	957.9	19666.6	958.3
19722.9	960.9	19833.6	959	19903.1	959.5	19944.9	961	20063.7	959.6
20145.5	959.8	20206.7	960.4	20250.7	959.4	20318.7	958.5	20412.7	962.7
20460.7	961.4	20488.5	963.8	20502.9	964	20545	960.1	20596	959.7
20624.3	960.6	20694.4	959	20754.9	958.5	20806.5	956.5	20831.6	957.9
20858.2	961.1	20861.7	962.3	20936.5	969.5	20988.5	971.9	20993.5	972.3
21011	973.7	21025.1	975.7	21027.9	980.1	21042.4	977	21052.5	978.4
21066.1	978.5	21080	974.2						

Manning's n Values num= 5

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
16149.3	.025	17815	.043	18455.6	.043	18872.7	.037	21011	.043

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
18455.6	20993.5	575	538	460	.1	.3

Ineffective Flow num= 1

Sta L	Sta R	Elev
16149.3	17500	980.1

CROSS SECTION RIVER: 1
REACH: 1 RS: 202.8

INPUT
Description: 202.8

Right Channel Bank Staion Interpolated
Station Elevation Data num= 97

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
16524.8	970.3	16556.4	971.5	16586.6	971.3	16591.4	972.2	16622.9	972.3
16660.4	974.1	16671.5	973.8	16699.8	970.7	16750	971.8	16768.2	970.7

16810	971.7	16908.3	970.6	16968.5	970.2	16997.3	973.4	17058.9	971.8
17081	970.9	17148.9	971	17188.6	970.2	17279.5	971.1	17348.6	971
17423	970.4	17488.6	969.6	17496.3	969.7	17556.3	970.2	17607.5	969.3
17662.7	971.7	17678.2	969.4	17755.1	968.2	17771.4	968.3	17836.1	965.5
17897.9	964.9	17974.2	962.8	18017.4	962.7	18037.3	963.4	18039.7	964
18135.1	964.3	18137.8	964.2	18205	963.3	18273.4	965.1	18313.6	965.5
18348.1	967.5	18390.8	968.8	18406.9	966.2	18434.5	959.9	18478	958.9
18492.5	956.4	18526.7	958.4	18618	960.3	18696.7	962.9	18716.3	963.1
18761.6	962.1	18858.8	963.6	18897.8	963.7	18966.5	960.9	18996.3	959.9
19072.2	959.5	19083	959.6	19151.4	960.5	19243.7	960.1	19333.5	960.5
19396.1	960.6	19435.5	960.4	19525.6	959.5	19621.8	960.4	19685.6	961.9
19750.9	962.5	19813.5	963.5	19828.2	963.6	19893.3	963.5	19985.3	961.5
20027.7	961	20127.3	961.5	20220.9	962	20261.5	962.8	20325.2	962.5
20339.8	963.1	20397.5	960.8	20461	959.3	20525.1	958.4	20576.6	957.1
20634.6	957.7	20682.6	958.4	20759.8	957.1	20823.5	956.8	20855.2	957.6
20859.5	958.4	20873	957.9	20906.1	958.3	20955.4	956.8	20983.8	959.2
20987.6	962.6	21013.7	97	21014.96	971.6	307 21019.3	973.8	21057.4	987.6
21082.8	986	21093	986.3						

Manning's n Values num= 5

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
16524.8	.025	17771.4	.043	18390.8	.043	19243.7	.037	21019.3	.043

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
18390.82	21014.96	600	555.5	450	.1	.3

Ineffective Flow num= 1

Sta L	Sta R	Elev
16524.8	17279.5	987.6

CROSS SECTION RIVER: 1
REACH: 1 RS: 202.69

INPUT
Description: 202.69

Right Channel Bank Staion Interpolated
Station Elevation Data num= 97

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
17011.6	967.7	17023.5	967.7	17027.5	969.7	17103.8	970.9	17146.9	971.1
17176.2	972.4	17191.8	969.4	17194.6	968.5	17229	967.1	17294.2	968.5
17355.9	968.4	17445.9	967	17473.9	966.6	17539	968.1	17612.5	967.1
17670.9	967.5	17744.3	967.8	17814.2	967.3	17864	971	17864.9	969.3
17868	967.6	17892.1	965.9	17941.9	963.7	18000.1	961.6	18034.8	963.6
18086.5	962.2	18149.2	965.2	18155.1	964.6	18181.7	966.5	18238.5	967.5
18278.8	966.4	18296.3	967	18357.8	968.5	18371.8	972.9	18377.8	973.6
18394.4	971.5	18484.4	971	18522.7	971.5	18539.1	964.7	18552.9	960.1
18644.5	957.3	18707	953.7	18734.1	956.4	18813.8	956	18848.2	955.5
18893.1	956.3	18953	954.8	19004.8	957.3	19084.1	957.6	19157.7	958.3
19178.7	958.5	19240.7	959.5	19322.9	960.8	19365.9	962.7	19411.4	962.6
19474.6	962.5	19548.6	961.5	19628.5	961.4	19720.2	962.7	19779.3	961
19788.6	961.1	19848.4	962	19949.8	964.6	20005.6	961.1	20016.8	961.1
20083.2	961	20101.5	960.8	20164.7	959.6	20249.5	962.2	20340.4	963
20436.6	963.5	20463.4	963.4	20522.8	963.7	20592.1	963.4	20658.5	962.2
20698.9	961.2	20768.7	958.6	20856.6	958.8	20890.1	958.6	21023.8	956.8
21070.8	960.8	21077.4	967.1	21081.8	970.8	403 21085.4	973.9	21098	980.8
21103.6	981.6	21111.1	978.1	21139.5	981.1	21166.7	979.8	21198.8	976.9
21211.8	978.5	21216.7	978.5	21220.2	977.8	21223.7	977.9	21225.4	978.5
21238.2	975.1	21274	973.3						

Manning's n Values num= 5

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
17011.6	.025	17868	.043	18377.8	.043	19084.1	.037	21103.6	.043

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
18377.8	21081.8	585	566.1	510	.1	.3

Ineffective Flow num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
17011.6	17176.2	981.6	21274.4	21274	981.6

CROSS SECTION RIVER: 1
REACH: 1 RS: 202.59

INPUT
Description: 202.59

Right Channel Bank Staion Interpolated
Station Elevation Data num= 97

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
17002.6	972.3	17024.4	972.3	17044.5	970.3	17059.2	968	17094.8	969.6
17174.4	971.6	17206.5	971.5	17240	970.3	17269.6	966.5	17294.8	968.3
17332.9	969.6	17346.3	969	17365.3	965.5	17382.1	965.5	17399.6	966.6
17456.2	967.4	17523.1	966.7	17531.4	966.1	17557.2	966	17651.6	966.7
17719.5	967.2	17792.8	966.6	17824.5	966	17874.3	968.6	17886.2	967.6
17905.4	963.2	17965.1	963.4	18022.2	961.6	18100.5	965.1	18174.1	965.7

18210.5	964.5	18233.1	965.7	18298.3	968.6	18346.1	966.9	18416.7	969.6
18505.8	969.5	18556.9	967.5	18622.3	970	18641.7	970	18695.8	961.6
18704.2	959.5	18757.3	962	18789.4	959.6	18857.2	957.4	18891.5	955.7
18960	953.7	18984.2	957.3	19041.9	957.5	19094.7	960.1	19217.7	959.4
19264.1	960.3	19322.3	963.2	19396.6	964.3	19407.1	961.9	19425.6	960
19426	960.9	19488.2	960.7	19564.4	961.7	19640.1	961.8	19698.4	962.2
19757.8	961.8	19850.5	959.2	19935.3	960.1	19956.2	961	19994.3	961.1
20000.8	960.6	20005.1	959.6	20026.1	957.7	20112.1	958.6	20156.3	960.2
20218.5	960.8	20291.8	962.8	20371.5	961.1	20441.9	962	20501.9	959.5
20592.8	959.1	20699	957.2	20711	957	20803.1	957	20825.8	957.1
20901.9	957.5	20941	958.6	20978.1	956.7	21025	956.8	21152.1	957.5
21195.0	9969.8993	21199.6	971.2	21234.1	969.1	21236.8	970.4	21264.7	967.7
21299.7	971.3	21305.5	967.6	21325.7	957.4	21362.7	958.8	21403.9	974
21429.1	977	21478	977.8						

Manning's n Values num= 5

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
17002.6	.025	18022.2	.043	18416.7	.043	19217.7	.037	21403.9	.043

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
18416.7	21195.09	400	561.2	640	.1	.3

Ineffective Flow num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
17002.6	17332.9	977.8	21200	21478	977.8

CROSS SECTION RIVER: 1
REACH: 1 RS: 202.48

INPUT
Description: 202.48

Right Channel Bank Staion Interpolated
Station Elevation Data num= 97

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
17009.6	967.6	17022.6	967.5	17087.4	968.9	17103.6	970.4	17112.7	969.9
17147.3	972	17156.9	971.8	17158.2	972.3	17178.9	971	17194.4	968
17247.5	968.9	17346.9	969.1	17398.9	969.9	17439.3	968.6	17487.9	968.6
17510.1	966.5	17588.4	966.2	17656.6	965	17699.5	965.1	17766.7	963.2
17818.3	961.3	17890	963.8	17903.9	964.7	17928.8	961.3	17945.4	959.8
17990.2	960.1	18038.4	959.4	18049.4	960.1	18123	963.9	18190.8	965.8
18202.9	966.1	18268.8	964.1	18281.9	963.4	18373.9	966.8	18446.2	967.8
18518.9	965.4	18575.8	971.2	18611.2	970.9	18639.1	969.5	18713	961.6
18741.6	959.3	18784.7	961.7	18862.1	959	18930.8	954.4	19044.5	952.5
19074.6	956.5	19142.6	957.5	19190.4	959.1	19212.4	958.4	19300.6	961.8
19319.9	962.4	19391.1	961.2	19413.8	960.8	19449.5	958.2	19532.2	958.9
19643.4	959	19750	959.8	19755	959.8	19836.5	958.7	19940.1	961.4
20015	957.1	20042.9	956.5	20093.3	957.6	20148	959.8	20169.8	958.7
20238.1	957.7	20350.9	956.9	20382.1	955.8	20443.3	956.5	20518.7	957.1
20582.5	957.3	20605	956.3	20635.4	956.3	20720.3	959.3	20738.9	959.4
20761.4	962.7	20791.3	965.4	20855.9	962.6	20874.6	962	20962.4	963.2
21037.1	963.2	21067	962.7	21100.7	957.5	21141.9	956.9	21226.2	955.6
21274.2	959.7	21307.36	968.958	21309.3	969.5	21365.5	967.8	21385.7	965.3
21411.6	965.6	21424.5	960.8	21433.2	956.4	21477.4	957.2	21505.2	969
21532	978.5	21590.9	977.9						

Manning's n Values num= 4

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
17009.6	.043	18575.8	.043	19074.6	.037	21532	.043

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
18575.8	21307.36	700	576.2	385	.1	.3

Ineffective Flow num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
17009.6	17398.9	978.5	21309.3	21590.9	978.5

CROSS SECTION RIVER: 1
REACH: 1 RS: 202.37

INPUT
Description: 202.37

Right Channel Bank Staion Interpolated
Station Elevation Data num= 97

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
17046.5	966	17144.2	966.4	17159.7	966.4	17174.6	968.6	17199.8	968.8
17234.1	972.8	17240.1	970.8	17243.5	970.9	17244.9	973.1	17262.2	972
17288.2	966.3	17339.4	966.6	17390.7	968.1	17480.2	967.1	17572.6	967.5
17609.6	965.2	17687.4	964.4	17729	964.2	17762.4	962.8	17818.6	964.2
17908.4	962.3	17967.5	961.6	18000.2	964	18038.7	964.1	18072.2	959.7
18099.8	957.9	18104.7	958.4	18151.6	958.4	18194.7	959.1	18243.6	962.8
18315.7	961.8	18394.4	965.8	18412.7	966.2	18470.8	964.2	18481.7	964.7
18501.3	969.1	18508.1	970	18598.8	969.5	18602.7	969.6	18648.3	963.8
18679.8	963.2	18704	957.9	18743.6	960.5	18769.5	961.1	18842.5	955.2
18917.4	955.9	18993.6	955.2	19026.1	956.5	19078.6	954.6	19116.4	956.7

19134.5	956.6	19275.2	955.9	19317.5	959.5	19392.9	961.2	19411.7	961.2
19457.9	957.5	19505.5	956.4	19577.4	956.1	19580.5	956.2	19670.2	956.8
19746.9	961.5	19839.2	958.9	19936.5	957.1	20045	956.9	20086.7	957.3
20169.3	956.2	20237.2	955.3	20328.5	958	20334.1	957.4	20399.8	957
20463.4	959.2	20513.6	962	20602.6	959.9	20704.3	960.7	20742.9	961
20844.4	960.5	20908.1	960.2	20950.1	961.7	21049.7	960.9	21054.1	960.9
21135.1	960.3	21179.1	960.2	21212.7	956.8	21338.5	957.1	21366.3	957.1
21382.6	961.2	21402.5	967.3	21411.9	966.7	21431.9	963.9	21452.4	962.7
21480	964.4	21496.8	956	21544.1	956.6	21581.7	8968.0	081 21601.9	974.1
21642.4	975	21693	974.4						

Manning's n Values num= 5

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
17046.5	.025	17390.7	.043	18508.1	.043	18743.6	.037	21601.9	.043

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
18508.1	21581.78	430	400.7	360	.1	.3

Ineffective Flow num= 1

Sta L	Sta R	Elev
17046.5	17390.7	975

CROSS SECTION RIVER: 1
REACH: 1 RS: 202.29

INPUT
Description: 202.29
Station Elevation Data num= 96

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
17300	969.4	17300.2	969.4	17310.5	971.8	17342.5	971.5	17346.7	971.3
17352.1	970.9	17359.3	970.4	17377.2	970.2	17388.5	970.1	17410.3	969.8
17443.6	969.4	17469.5	969.2	17494.3	969	17512.1	968.3	17537.2	968.2
17551.3	968.6	17580.1	968.2	17588.6	968.1	17610.9	968	17662.1	967.6
17695.1	967.2	17731.2	966.7	17756	966.3	17772.6	965.6	17783.7	965.5
17806	965.9	17845.1	965.4	17859.1	965.2	17870.8	965.1	17909	964.8
17939.7	964.2	17948.3	964	17978	963.3	17983.9	963.1	18035.9	962.8
18043.8	962.7	18050.9	962.7	18093.6	962.3	18093.8	962.8	18107.2	962.7
18151	961.8	18180	961.8	18197.4	961.8	18203.9	961.7	18212.7	961.5
18297.3	960.6	18444	959	18520.4	958	18577.3	957.8	18667.8	958.1
18744.1	957.7	18943.8	956.4	18989.6	956.6	19224.4	957.4	19228.7	957.4
19485.5	956.7	19523.1	956.9	19553.4	956.9	19827.7	956.8	19864.8	956.1
19898	956.1	20171.5	956.3	20383.2	955.7	20442.4	955.9	20499.8	957.2
20499.9	957.2	20696.8	957.3	20777.7	957.4	20879.1	956.5	20964	956.5
21129.5	956.9	21176.5	956.6	21222.8	956.1	21262.9	955.8	21273.6	955.5
21305.8	956.3	21343.7	957	21400.4	957.2	21410.8	957.3	21495.3	956.7
21550.9	957.9	21563.4	959.3	21703.1	961	21803	962.3	21973.7	964.9
22093.3	966.9	22138.1	968.1	22178	968.7	22302.7	970.7	22344.1	970.7
22388.8	970.9	22553.3	971.9	22676.5	971.2	22717.7	971.3	22766.5	972.1
22785.4	971.9								

Manning's n Values num= 6

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
17300	.025	17469.5	.043	18197.4	.043	18989.6	.037	21563.4	.043
21803	.043								

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
18197.4	21803	590	583.1	600	.1	.3

Ineffective Flow num= 1

Sta L	Sta R	Elev
21803	22785.4	972.1

CROSS SECTION RIVER: 1
REACH: 1 RS: 202.18

INPUT
Description: 202.18

Right Channel Bank Staion Interpolated
Station Elevation Data num= 97

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
17052.9	966.6	17168.5	966	17288.7	965.2	17328.5	965.5	17342.3	968
17346	967	17354.3	968	17364.1	966.7	17396.2	967.4	17415.4	969
17507.1	967.7	17613.8	965.1	17631.5	964.7	17747.4	962.9	17748.5	962.9
17865.9	962.4	17961.7	963.1	18017.5	963.4	18100.5	963.8	18139.7	964.7
18194.4	960.2	18256	959.9	18292.6	958.2	18331.5	958.9	18344.2	960.8
18389	961.7	18415.9	960.6	18473.5	964.7	18525.3	966.1	18612.9	966.4
18643.2	962.4	18672.1	961.3	18707.1	957.3	18769	952.6	18804.3	955.4
18910.2	957.1	18976	956.3	19019.3	958.4	19048.9	958.7	19085.4	956.1
19142.3	957	19169.3	958.6	19183.3	960.5	19235.6	960.8	19285.1	963
19369.7	960.1	19472.8	957.3	19559.8	955.6	19630.4	954.7	19686.5	951.8
19727.7	955.4	19747.8	950.7	19844.5	951.9	19893.9	954	19954	950
20009	954	20067.8	952	20110.4	954.4	20177.3	963.5	20231.5	963.4
20240.9	962.3	20277.5	960.8	20351.6	962	20380	959.9	20405.9	959.3
20492.4	961.5	20578.7	962.9	20684.9	962.3	20769.5	960.5	20826.3	963.1
20876.8	962.2	20900.3	963.5	20997.2	958.5	21014.5	957.4	21075.2	957.9

21127.2	959.8	21207.6	957.2	21255	956.2	21287.8	957.6	21353.8	957.8
21374.8	961.6	21414.6	960.9	21415.3	960.1	21444.1	956.6	21527.2	959.6
21591.2	960.1	21643.6	958.8	21685.6	954	21737.8	955.1	21787.2	954.7
21808.8	955.3	21829.3	951.8	21869.4	951.7	21919.3	955.9	21938.4	1966.7695
21957.1	977.4	21992	978.3						

Manning's n Values num= 5

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
17052.9	.025	17415.4	.043	18139.7	.043	18976	.037	21957.1	.043

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.

18139.7	21938.41	525	511.84	500	.1	.3

Ineffective Flow num= 1

Sta L	Sta R	Elev
17052.9	17415.4	978.3

CROSS SECTION RIVER: 1
REACH: 1 RS: 202.09

INPUT
Description: 202.09

Right Channel Bank Staion Interpolated
Station Elevation Data num= 97

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
12423.7	965.6	17099.8	965.6	17186	965.4	17264.6	965.3	17349.3	965
17358.9	964.8	17418	967.1	17422.9	965.6	17428.2	966.9	17452	965.9
17476.4	966.1	17491.8	967.5	17574.4	967	17614.9	967.2	17693.5	967.2
17814.7	961.1	17920.2	960.8	17951.8	961.2	18050.9	963.8	18132.1	964.1
18212.9	964.4	18247.5	964.7	18306	959.3	18322.2	960.3	18340.5	958.1
18363.8	957.3	18389.5	962.4	18475.1	961.1	18485.9	960.9	18523.3	964.1
18558.3	962.3	18573.3	963.2	18621.2	963.3	18652.7	957.8	18708.8	958.1
18748.7	952.2	18769.9	955.2	18859.3	957.7	18962.1	957.3	18975.3	957.3
19086	957.5	19165.3	959.6	19217.9	961	19287.9	955.2	19344.8	963
19434.4	961.7	19513.8	958.9	19564.6	953.8	19623.2	957.6	19686.2	956.9
19738.7	957.5	19783.4	954.5	19908.5	952.6	19947.2	952	20093.1	950
20106.3	950	20143.3	952.6	20167.6	955.5	20187.3	956.2	20207.9	958
20254	956.6	20271.4	957.6	20297.7	960.4	20396.6	960.4	20472.8	959.6
20529.3	963.3	20613.6	962.6	20698	962.2	20720.5	961.5	20787.7	964.2
20816.2	959.4	20866.2	961.1	20916.3	960.7	20996.8	963.3	21047.5	963.6
21101.6	961.6	21155	960.7	21221.6	961.5	21280.8	956.9	21370.9	957.5
21444.4	956.7	21456.1	957.6	21466.3	959.4	21503.9	959	21516.7	956.6
21530.5	955.5	21561.3	958	21627.9	959.2	21709	959.7	21751.4	954.3
21825.3	953.8	21856.2	951.2	21912.9	951.7	21928.2	955.7	21938.26	965.332
21947	973.7	21985	973.7						

Manning's n Values num= 5

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
12423.7	.025	17491.8	.043	18212.9	.043	19086	.037	21947	.043

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.

18212.9	21938.26	510	509.32	500	.1	.3

Ineffective Flow num= 1

Sta L	Sta R	Elev
12423.7	17491.8	973.7

CROSS SECTION RIVER: 1
REACH: 1 RS: 201.99

INPUT
Description: 201.99

Right Channel Bank Staion Interpolated
Station Elevation Data num= 97

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
12423.7	962.9	12792.3	963.8	13061.9	964.2	13286.8	963.1	13510.3	962
13746.9	961.3	13984	962.2	14217.9	962.9	14443.4	963.1	14690.7	964.7
14908.9	964.6	14956.9	968.1	14966.2	964.3	15216	964.5	15450.3	964.3
15717.5	963.6	15947.7	963	16170.3	962.3	16226.7	962.5	16243.5	964.4
16481.8	963.7	16706	964.8	16931.9	964.5	17163.9	965	17409.1	965.4
17507.7	965.1	17760.7	967.9	18000.5	959.7	18235.1	962.5	18353.1	960.5
18417.7	956.5	18440	960.5	18639.2	962	18674	954.8	18737.7	957.9
18818.4	957.6	18843.9	951.9	18894.5	956	19104.7	956.3	19162.4	959.4
19182	952.7	19244.4	958.4	19290	953.9	19357.8	953.9	19392.3	959.4
19476.2	956.3	19599.7	958.8	19757.3	956.9	19806.8	958.1	19854.1	952.5
20078.1	951.3	20095.8	953	20192.9	950.6	20250.9	959.6	20290.2	950.4
20347.4	962.9	20368.6	965.8	20433.1	963	20465.1	950.1	20577.2	949.5
20589	951.7	20619.5	951.7	20638.1	949.5	20700.3	949.5	20727.6	954.8
20735.3	964.1	20750.8	961.1	20862.1	965.2	20904	975.7	20956.4	975.3
20989.8	964.1	21038.3	963.3	21074.1	972.2	21105.1	970	21109	967.5
21138.5	968.2	21163.6	953.1	21180.4	949.1	21267.5	949.1	21538.3	949.1
21555.3	949.1	21578	958.4	21595.4	955.8	21617.3	955.7	21641.7	951.9
21676.1	954.4	21726.5	948.7	21821.2	953.2	21862.8	963.6	21892.7	1964.4166
21991	967.1	22006.5	964	22019.9	967.9	22243.3	966.9	22585.6	967

```
 22917.2   966.9 23024.3   966.9

Manning's n Values          num=      7
     Sta   n Val     Sta   n Val     Sta   n Val     Sta   n Val     Sta   n Val
 12423.7    .025 17507.7    .043 17760.7    .043 19357.8    .032 20250.9    .037
   21991    .037 22006.5    .025

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
       18235.121892.71              470  477.46     490            .1        .3
Ineffective Flow     num=       2
   Sta L   Sta R    Elev   Sta L   Sta R    Elev
 12423.7 17760.7   975.7 21990.9 23024.3   975.7

CROSS SECTION          RIVER: 1
REACH: 1                  RS: 201.9

INPUT
Description: 201.9

Right Channel Bank Staion Interpolated
Station Elevation Data      num=     97
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
   12498   962.4 12680.7     963 12847.7   963.1 13015.1   963.3 13199.8   963.2
 13361.7   963.7 13371.9   960.2 13574.5   962.7 13724.8   961.4 13908.8   961.8
 14082.1   962.6   14282   963.2 14504.3   963.3 14674.9     963 14875.2   963.6
   15026   967.2 15036.6   963.6 15225.9   964.3 15398.3   964.4 15600.8   964.2
 15790.8   963.8 15996.8   963.9 16181.7   962.7 16294.9   962.8 16309.4   964.3
 16331.6     962 16525.6   962.6 16699.1   963.6 16881.9   964.4 17117.4   963.7
 17353.6   965.3 17563.8   966.2   17569   964.3 17769.9   966.6 17941.7     966
 17954.3   963.8 18181.9   958.7 18226.6   955.3 18260.2   960.7 18291.8   960.5
 18303.9   958.6 18480.2   961.7 18648.9   961.8 18745.5     962 18798.7   956.2
 18820.8   957.2 18854.3   951.8 18909.2   955.3 19138.4   956.3   19200   953.3
 19336.3   962.3 19389.1   958.9 19449.9   951.5 19624.1   955.9 19782.3   957.2
 19911.4   951.6 20081.9   950.6 20221.5   952.6 20269.4   959.3 20331.6   955.1
   20356   957.7 20398.9   948.7 20567.7   948.5 20744.7   949.1 20888.3   947.2
 20954.4   949.9 21000.8     949 21037.1   957.5 21099.1     956 21139.7   949.7
 21300.7   952.4 21411.2   949.7 21444.1   955.9 21487.9   956.1 21503.4     949
 21546.8     949 21556.2   952.2 21567.4   960.5   21588   955.9 21628.6   952.2
 21667.7   955.7 21698.6     949 21736.9     950 21748.7   952.4 21786.7   952.8
21827.41963.9898   21842     968 21955.2   963.2 21982.2   967.4 22181.8     966
 22228.4   965.8 22400.7   965.8 22432.3   965.9 22634.3   966.5 22801.2   966.1
 23008.7     966   23096   965.3

Manning's n Values          num=      7
     Sta   n Val     Sta   n Val     Sta   n Val     Sta   n Val     Sta   n Val
   12498    .025   17569    .043 17769.9    .043 19389.1    .032 20331.6    .037
   21842    .037 21982.2    .025

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
       17954.321827.41              500   495.8     500            .1        .3
Ineffective Flow     num=       2
   Sta L   Sta R    Elev   Sta L   Sta R    Elev
   12498 17769.9     968 21842.1   23096     968

CROSS SECTION          RIVER: 1
REACH: 1                  RS: 201.81

INPUT
Description: 201.81

Left and Right Channel Bank Staions Interpolated
Station Elevation Data      num=     98
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
 12574.1   961.8 12761.8     962 12923.9   962.6 13108.8   962.8 13276.3     963
 13435.2   962.8 13461.6   960.9 13640.2   962.7 13758.3   961.2 13887.4   962.7
 14049.5   962.4 14230.8   962.1   14408   962.7 14585.1   963.8 14774.2   962.7
 14940.9   962.1 15056.2   964.1   15099   967.8 15104.2   963.1 15275.2   964.2
 15444.5   964.1 15610.6   963.9 15771.8   963.8 15946.1   963.3 16142.1   962.7
 16322.1     962 16382.5   963.6 16475.3   960.8 16709.7   962.1 16947.6   962.4
   17136     963   17301   963.8 17538.6   963.1 17700.9   964.2 17890.2   965.6
 17935.7   965.617946.89963.6227   17964   960.6   18130     958 18246.7   956.1
 18277.1   959.5 18483.2   960.9 18556.4   960.8 18619.6   964.6 18716.1   963.4
   18765   964.3 18860.5   957.6   18955   958.4 19006.4   951.6 19072.9   957.9
 19139.8   953.9 19294.5   954.6 19378.9   957.7 19550.9   954.4 19605.4   951.1
 19693.5   953.4 19720.4   950.1 19883.7   950.2 20049.4     953 20182.8   953.5
 20285.8   953.2 20377.1   957.6 20392.1   962.6 20421.1   948.6   20597   946.8
   20665   946.7 20832.3   946.1 20846.8   951.1 20855.6   956.4 20869.8   954.4
 20881.2   950.3 20908.5   949.6   20924   952.5 20962.6   950.9 21000.7   946.6
 21169.8     946 21187.6   953.2 21244.2   956.3 21263.5   960.4 21295.1   951.3
 21322.9   946.6 21496.1   948.5 21522.9   951.7 21690.5   950.7   21775   950.9
21803.27963.6213   21811   967.1   21860   969.2 21904.1   961.6 21929.9     965
 21975.7   963.6 22175.4   965.3 22352.1     965   22654   963.5 22715.1   963.5
 22875.2   962.8 23093.9   964.4 23169.5   964.2
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Manning's n Values num= 7

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
12574.1	.025	17700.9	.065	17935.7	.065	19378.9	.032	20392.1	.037
21860	.025	21975.7	.025						

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
17946.89	21803.27	535	511.61	515	.1	.3

Ineffective Flow num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
12574.1	17935.7	969.2	21859.6	23169.5	969.2

CROSS SECTION RIVER: 1
REACH: 1 RS: 201.71

INPUT
Description: 201.71

Left Channel Bank Staion Interpolated
Station Elevation Data num= 97

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
12659.2	961.6	12855.6	961	13000	961	13129.9	960.8	13180.2	962.1
13187.7	959.3	13371.2	960	13521.5	960.3	13689.3	960.5	13844.9	960.6
13979.7	960.3	14193.8	960.9	14324.5	960.9	14461	961	14593.2	960.9
14774.5	961.4	14909.4	960.6	15132.5	961.7	15192.9	963.1	15384.5	962.1
15537.8	962.3	15716.6	961.2	15856.1	961.1	16082.6	960.9	16210.7	961.2
16383	961	16543.7	961	16684.4	961.3	16813.5	961.2	16941.4	961.7
17106.2	961.5	17255.2	962	17388.3	961.5	17585.2	961.5	17706.7	962.1
17766.4	963.8	17769.2	962.5	17794.4	964.5	17957.8	964.3	18096.3	964.8
18107.05	962.8899	18140.2	957	18197.6	953.2	18356.6	956.6	18441.5	961.3
18556.1	957.7	18600.1	958.6	18651.3	956.4	18676.1	956.9	18707	951.3
18764	957	18831.5	958.2	19007.5	955.3	19076.4	952	19279.5	954.1
19409.2	953.7	19475.6	949.9	19555.7	955.6	19660.9	959	19739.3	954.2
19763.1	949.4	19910.3	951	19978.4	951.1	20023.1	954.8	20199	956
20304.5	951.4	20347.1	954.9	20447.3	951.1	20499.8	956.3	20554.9	954.5
20692.6	956.1	20848.5	954.8	20899.8	950.2	20984.5	949.7	21011.3	946
21148.8	948.4	21186.8	951.7	21268.1	954.5	21355	953.1	21433.7	954.9
21490.6	959.4	21528.5	960.3	21661.1	959.7	21837.7	959.7	21975.8	962.2
22098	963.6	22111.4	961.1	22160.6	964.1	22190.7	962.9	22353.1	963.4
22385.7	963.3	22516.6	964.2	22615.8	964.3	22832.1	963.4	22981.6	963.4
23127.8	962.8	23246	962						

Manning's n Values num= 7

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
12659.2	.025	17706.7	.065	18096.3	.065	19660.9	.032	20554.9	.037
21355	.025	21528.5	.025						

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
18107.05	21528.5	505	489.63	495	.1	.3

Ineffective Flow num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
12659.2	18096.3	966	22098	23246	966

CROSS SECTION RIVER: 1
REACH: 1 RS: 201.62

INPUT
Description: 201.62

Left Channel Bank Station Interpolated
Station Elevation Data num= 97

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
12723.6	960.1	12862.6	960.3	13017.9	960.4	13156.4	960.4	13253.3	961.5
13267.4	959	13436.1	959.9	13621.5	960.4	13766.2	960.5	13909.8	960.4
14075.1	960.4	14269.1	960.4	14410.3	960.9	14542.3	960.9	14677.4	961
14845.4	961.8	15072.7	961	15207.9	961.9	15344.9	961.6	15510.2	961.6
15676.2	961	15821	960.6	15995.5	960.4	16157.9	960.8	16296	961.1
16491.6	961.1	16630.4	960.7	16799.9	960.5	16987.6	960.1	17022.4	962
17197.5	958.5	17331.6	959.3	17350.4	962.3	17555	961.1	17693.7	961.5
17788.7	963.5	17792.9	962.2	17963.6	963.3	18107	962.8	18229.7	963.9
18233.59	962.1533	18253.2	953.1	18417.5	953.4	18563.5	953.4	18723.5	952.3
18864.3	951.9	18956.1	956.6	19045.2	956.9	19129.4	952.1	19159.3	954.5
19237.7	952.1	19435.3	953.3	19483	951.6	19522	953.4	19577	948.8
19677.3	954.6	19737.2	953.8	19772.7	949.2	19918.1	949.3	20064.6	953.2
20213.3	953.8	20358.7	952.9	20472.9	952	20509.2	950	20584.5	955.3
20619.5	953.2	20653.6	948.7	20723.6	953.3	20794.2	955.3	20904.8	954.6
20962.2	949.9	20990.6	945.6	21150.5	945.9	21165.2	946.9	21199.1	955.3
21351	951.4	21457.3	955.6	21477.5	960.2	21514.2	959.4	21654.6	959.9
21824	959.8	21964.5	960.6	22074.2	961	22085	959.8	22090.5	961.3
22197.1	961.9	22233.4	963.7	22249.4	962.1	22301	963.2	22456.6	963.4
22491.4	963.3	22714.7	962.8	22775.6	962.8	22945.1	962.7	23131.5	962.5
23268.1	960.6	23318.4	961.5						

Manning's n Values num= 9

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val

12723.6	.025	16799.9	.15	17197.5	.025	17792.9	.065	18229.7	.065
19577	.032	20509.2	.037	21351	.025	21477.5	.025		

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
18233.5	21477.5	485	486.48	510	.1	.3

Ineffective Flow num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
12723.6	18229.7	965	22233.4	23318.4	963.9

CROSS SECTION RIVER: 1
REACH: 1 RS: 201.52

INPUT
Description: 201.52

Left Channel Bank Station Interpolated
Station Elevation Data num= 97

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
12786.6	960.2	12939.6	960.1	13099	960.1	13244.9	960.2	13300.5	962.8
13357.3	959.7	13501.3	960.4	13678.7	959.8	13830.9	960	14035.1	959.9
14185.2	959.4	14386.6	959.8	14539	959.6	14722.7	959.3	14894.1	959.5
15114.2	959.2	15254.5	962.1	15427.2	959.8	15592.7	959.9	15779.1	959.7
15959.1	959.6	16138.8	959.3	16313.2	960.4	16492.7	958.5	16665.8	959
16834.1	958	17009.5	957.5	17081.3	959.5	17261.7	956	17408.3	957.9
17566	960	17731.1	959.6	17842.3	960.3	17845.2	962.9	17943.73	961.3971
18009.1	960.4	18087.6	959.9	18104.5	954	18264.9	951.7	18427.6	949.5
18577.1	948.4	18651.6	946.4	18699.1	952.7	18753.8	949	18784.8	949.1
18848.6	953.1	18893.8	954	18925.3	958	19065.9	958.5	19153	954.3
19223.7	956.3	19377	949.7	19404.1	948.6	19480.7	949.5	19540.9	947.7
19607.6	951.7	19748	954.6	19781.1	954.1	19818.6	949.6	19876.6	948.4
19936	956.7	20100.5	954.2	20244	952.7	20403.3	950.4	20550.4	948.2
20608.4	948	20715.6	953.3	20891.6	948.2	20923.4	941.8	20972.4	940.9
20990.6	945.3	21048.3	948	21178	947.3	21216.5	954.8	21254.9	957
21391.4	958.4	21554.4	958	21596.8	958.1	21777.9	958.2	21934.4	958.6
21995.7	958.3	22004.2	960.1	22157.3	959.4	22212.5	961.1	22218.9	959.2
22225.8	961.6	22299.7	963.1	22311.3	960.4	22338.4	962.5	22478.8	962.4
22674.4	962.5	22848.1	961.1	22905.9	961.6	23058.8	963.2	23081.5	963.2
23263.4	961.3	23370	959.8						

Manning's n Values num= 7

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
12786.6	.025	17009.5	.15	17261.7	.025	17845.2	.15	19480.7	.032
20244	.037	21391.4	.025						

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
17943.73	21391.4	495	492.06	495	.1	.3

Ineffective Flow num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
12786.6	17845.2	963.2	22212.5	23370	963.2

CROSS SECTION RIVER: 1
REACH: 1 RS: 201.43

INPUT
Description: 201.43

Left Channel Bank Station Interpolated
Station Elevation Data num= 97

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
12790.4	959.2	12931.7	959.4	13106.1	959.5	13261.9	959.6	13426.6	960.3
13574.8	960.1	13719.2	960	13863.6	960.3	14015.4	959.4	14162.1	960.1
14260	960.7	14418.2	961.9	14556.8	961.4	14697.8	960.6	14846.1	959.1
15008.5	959.1	15194.6	958.6	15331.7	959.1	15511.6	959.4	15657.5	959.5
15799.1	959.9	15827.9	961.5	15973.4	960.8	16110.8	960.5	16254.2	959.9
16478.5	958.1	16617.9	958	16780.3	959.8	16924.1	959.3	17061.9	956
17202.1	956.4	17374.3	959	17594.2	959.4	17734	959.4	17844.3	960.3
17853.5	961.9	17859.2	959.6	18001.4	960.7	18014.99	960.4907	18053	959.9
18066.9	952.8	18179.7	952.8	18317	950.6	18459.7	949.9	18597.4	947.5
18738.8	948.8	18799.8	954.8	18924.3	958	19076.8	958.9	19195.5	956.6
19253.6	950.7	19403.4	947	19416.1	948.3	19450.8	947.6	19528.4	954.4
19671.9	955.8	19712.9	955.8	19744.1	948.3	19847.5	947.6	19851.7	953.1
19996.8	955.1	20141.7	954.2	20303.2	954.8	20474.6	951.5	20649	946.3
20689.8	947.9	20719.5	943.8	20747.5	947.5	20911.6	947	20951.8	947.8
20976.3	941.3	21080.6	942.7	21100.4	945.1	21136.4	946.2	21179.1	944.6
21271.5	950.5	21342.1	957.5	21353.3	959.8	21363.1	957.2	21516.4	957.7
21676.7	958.3	21814.1	958.7	21883	958.4	22035.4	957.9	22182.8	959.4
22322.3	960.9	22328.9	958.7	22340	962.3	22362.8	960.4	22606.3	961.2
22648.5	961.2	22787	960.2	22945.6	960.3	23094.6	961.1	23289.3	961
23341.9	960.2	23387.4	958.8						

Manning's n Values num= 7

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
12790.4	.043	15827.9	.065	17202.1	.025	17853.5	.15	19253.6	.032
20649	.037	21342.1	.025						

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
18014.9 21342.1 555 519.88 505 .1 .3
Ineffective Flow num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
12790.4	18000	962.3	22322.3	23387.4	962.3

CROSS SECTION RIVER: 1
REACH: 1 RS: 201.33

INPUT
Description: 201.33

Left ChannelBank Station Interpolated
Station Elevation Data num= 97

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
12785.7	957.8	12951.9	958.1	13134.4	958.1	13293.5	958.1	13493.4	958.4
13649.5	958.9	13744.1	960.9	13758.6	959.4	13925.5	959	14085.7	958.6
14255.8	961.3	14420.6	961.4	14593.6	961.2	14794.8	960.7	14992.6	959.3
15164	957.6	15345.7	958.5	15520.6	959.3	15694.3	959.9	15854.4	959.9
16014.9	960.3	16184.1	960.4	16362.7	960.3	16517.9	960.6	16680.1	958.6
16837.4	958.7	16937	956.7	17109.2	956.2	17266.3	958.7	17288.5	957.8
17465.9	959.2	17667.7	959	17831.2	959.5	17862	961.6	17929.5	961.8
17948.2	960.4	18049.52	959.5026	18072.4	959.3	18086.6	953	18242.2	954.4
18398.7	954.5	18556.7	954.3	18607.2	952.5	18626.2	948.5	18634.2	950
18715.7	949.6	18791	954.8	18874.7	955.9	18937.2	954.7	18984.3	948
19116.8	949.1	19140.9	943	19269.7	945.9	19315	948.3	19489.9	950.7
19565.6	952.4	19588.8	955.2	19608.2	948.1	19752.9	948	19806.6	953
19969.5	952.2	20134.6	953.3	20171.4	952.2	20226.7	955.4	20293.9	954.2
20341.3	955.5	20424.9	951.7	20512.5	950.6	20548.8	944.7	20652.6	950
20769.7	946.7	20843.2	955	21006.1	948.3	21057.8	946.6	21076.8	943.6
21236.1	944.8	21304.1	946.3	21310.7	945	21357	957.5	21381.8	958.1
21545.7	957.7	21548.3	957.8	21799.8	956.8	21810.6	956.8	22056.9	957.1
22107.8	957.3	22115	958.6	22356.1	957.9	22513.8	959.5	22624.6	962.2
22794.7	960.7	22966.1	961	23037.1	962.1	23192.4	961.3	23366.6	961.5
23397.6	960.4	23444	960.7						

Manning's n Values num= 7

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
12785.7	.043	15854.4	.065	17266.3	.025	17929.5	.15	19116.8	.032
19315	.037	21381.8	.025						

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
18049.52 21381.8 515 514.62 515 .1 .3
Ineffective Flow num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
12785.7	17929.5	962.2	22624.6	23444	962.2

CROSS SECTION RIVER: 1
REACH: 1 RS: 201.24

INPUT
Description: 201.24

Left Channel Bank Station Interpolated
Station Elevation Data num= 97

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
12806	955.8	12962.7	956.3	13145.6	957.3	13331.4	956.5	13517.2	956.2
13697.1	957.3	13855.5	957.4	14010.3	957	14164.7	956.7	14318.4	958.2
14482	958.5	14660	956.8	14688.4	957.7	14821.8	955.2	14989	957.8
15156	956.9	15324.8	957.6	15476.8	959	15632.7	959.6	15787	959.8
15939.5	959	16132.2	958.4	16296.2	957.9	16464.6	957.9	16632.1	958.1
16801.9	956.7	16986.8	954.6	17117.8	954.3	17180.2	958.7	17353.5	957.6
17566.1	957.4	17719.1	957.9	17947.6	957.8	18063.5	959.9	18067.36	958.4367
18084.6	951.9	18123.2	954.4	18273.7	954.7	18463.7	954.1	18640.4	954.1
18769.1	951.5	18834.7	946.6	18852.7	947.7	18957	944.8	19101.5	944.9
19190.4	949.6	19365.4	949.8	19479.4	950.7	19501.5	945.5	19659.5	947.2
19709.9	951	19861.9	951.5	20036.3	950.6	20116.5	953	20174.4	956.4
20272.4	956.3	20322.3	953.3	20397.8	952.3	20534.1	946.8	20728.3	949.3
20901.9	952.6	21060.4	953.1	21108.8	948.4	21143.3	943.1	21322.6	943
21477	945.1	21515.7	945.4	21547.4	956.4	21570	957.6	21573.6	955.3
21742.9	955.8	21840.8	955.8	22073.6	956.2	22315.2	956.6	22474.6	957.8
22660.5	959.5	22837.1	960.3	23006	960.7	23189	960.3	23372.7	959.3
23535.3	958.6	23693.7	960.2	23701.8	958.7	23728.6	959.3	23733.9	957.9
23745.1	960.6	23895.9	959.5	24055.3	959.7	24212	959	24364.3	958.6
24523.2	960	24683.9	959.1	24867.9	960.4	25044.2	960.6	25240.9	961.6
25449.6	962.7	25490	964.7						

Manning's n Values num= 9

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
12806	.043	16132.2	.065	17180.2	.025	17947.6	.15	18063.5	.15
18957	.037	19659.5	.032	20174.4	.037	21570	.025		

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.

```
      18067.36   21570              485  488.56     490              .1       .3
Ineffective Flow     num=       2
   Sta L   Sta R    Elev   Sta L   Sta R    Elev
   12806 18063.5   964.7   23006   25490   964.7

CROSS SECTION          RIVER: 1
REACH: 1                  RS: 201.14

INPUT
Description: 201.14

Left Channel Bank Station Interpolated
Station Elevation Data     num=      97
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
 12823.9   955.7 12999.4   956.2 13212.7   955.6 13428.9     956 13645.2   955.7
 13816.9   955.8 13992.2     956 14163.4   956.5 14335.2   955.8 14527.3   956.5
 14708.6   956.3 14909.6   955.2 15093.8   955.5   15267   954.8 15439.6   956.4
 15609.9   956.4   15791   956.8 15950.3     959 16129.2   957.7 16303.6     956
   16475   953.7 16660.8     955 16839.9   953.5 17004.5   951.4 17082.5   958.8
 17162.8   956.1 17184.4   958.7 17362.4   957.4 17598.4   957.1 17832.2   956.8
 18017.1     960   18032   960.218037.86957.9083 18056.8   950.5 18241.1   949.4
 18415.6   950.8 18585.7   951.8 18725.4   952.4 18733.1   949.9 18790.6   949.1
 18818.8   941.6 18850.4   943.3 18986.4   943.9 19077.9   949.8 19149.1   948.9
 19305.2     951 19389.8   945.3 19562.7   946.4   19610   949.5 19790.7   949.7
   19961   950.3 20069.8   955.8 20203.6   953.6 20241.8   949.2 20445.4   947.5
 20553.6     952 20738.9   949.5 20840.4   947.3 20887.4   943.5 20941.4   948.4
 20992.7   949.8 21019.8     942 21063.4   942.9 21079.7   945.4 21128.6     946
   21160   941.1 21202.5   940.4 21278.6   945.6 21455.1   945.3 21569.3   940.9
 21644.4   944.5 21697.9   954.5   21721   955.2 21725.6   953.1 21741.2     955
 22051.3   955.9 22155.8   956.1 22389.7   956.4 22512.4   956.8 22725.1   956.9
 22832.8     959 22857.1     957 23030.8     959 23238.6   958.8   23414   958.9
 23606.9   957.7 23803.1     958 24052.9   958.2 24291.1   958.1 24471.3   958.5
 24625.1   958.9 24632.8   957.3 24637.8   958.9 24815.7   959.6 25013.4   960.6
 25215.4   961.6 25365.2   962.4

Manning's n Values         num=       8
     Sta   n Val     Sta   n Val     Sta   n Val     Sta   n Val     Sta   n Val
 12823.9    .043 16303.6    .065 17184.4    .025   18032     .15 18850.4    .037
   19610    .032 20553.6    .037   21721    .025

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
      18037.86   21721              480  481.53     485              .1       .3
Ineffective Flow     num=       2
   Sta L   Sta R    Elev   Sta L   Sta R    Elev
 12823.9   18032   962.4 22832.8 25365.2   962.4

CROSS SECTION          RIVER: 1
REACH: 1                  RS: 201.05

INPUT
Description: 201.05

Left Channel Bank Station Interpolated
Station Elevation Data     num=      97
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
 12848.3   954.5 13055.4   953.7 13276.2   955.4 13483.1   957.1 13684.3   954.7
 13886.2   954.5 14079.9     955 14267.8   955.7 14489.3   955.5   14686   954.3
 14893.9   954.8 15093.5   953.8 15286.8     955   15508   955.8 15694.8   955.4
 15890.9   955.3 16093.3   955.3 16296.5   955.9 16489.7   956.3 16687.2   954.3
 16876.1   953.1 17029.6   951.4   17090   955.6 17177.7   953.2 17211.7   959.1
 17239.8   956.7 17474.3   956.9 17712.8   956.3 17920.1   957.3 17947.8   957.7
17948.21 957.514 17963.9   950.4 18149.7   948.9 18366.7   949.3 18552.6   947.7
   18642   947.2 18662.5   941.8 18877.7   942.9 18965.7   942.8 19025.5   948.9
 19069.3   949.7   19115     948 19146.2   943.8 19305.4   944.7 19341.4   942.6
 19450.5   944.4   19486   951.1 19656.3   948.4 19742.2   949.2 19800.5   946.7
 19926.9     951 19979.4   950.2 20027.5   955.4 20105.3   953.3 20157.5   947.1
 20233.6   946.1 20272.3   948.2 20302.6   946.7 20402.5   950.2 20615.4   948.5
 20746.4   950.2 20793.3     949 20816.3   941.7 20964.1   941.5 20993.4   945.9
 21193.9   949.2 21384.8   948.9 21582.1     946 21750.2   942.4 21815.9   945.1
   21849   955.5 21881.2   953.7 21901.6   955.1   21907   953.3 21990.8   953.6
 22189.8   954.8 22244.5   955.2 22537.9   955.5 22570.5   955.5   22835   955.8
 22894.6   957.1 22905.9     959 22934.1   957.4 23165.2   957.6   23380     958
   23414     957 23451.8   959.3 23684.3   956.6 23933.2     957 24126.1   957.5
   24400   957.7 24595.1   958.4 24603.3   957.1 24622.7   959.8 24638.5   957.6
 24836.5   959.9 24997.1   961.2

Manning's n Values         num=       8
     Sta   n Val     Sta   n Val     Sta   n Val     Sta   n Val     Sta   n Val
 12848.3    .043 16687.2     .15 17177.7    .025 17947.8     .15 18965.7    .037
   19486    .032 20402.5    .037   21849    .025

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
      17948.21   21849              520  512.89     510              .1       .3
Ineffective Flow     num=       2
```

Sta L	Sta R	Elev	Sta L	Sta R	Elev
12848.3	17947.8	961.2	22905.9	24997.1	961.2

CROSS SECTION RIVER: 1
REACH: 1 RS: 200.95

INPUT
Description: 200.95

Left Channel Bank Station Interpolated
Station Elevation Data num= 97

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
12874.8	952.5	13039.9	952	13212.3	952.3	13372.8	953.5	13537.8	953.7
13708.5	953.7	13872.8	954	14042.5	953.4	14205.3	953.3	14401.9	953.5
14603.1	953.1	14762	954.2	14934	952.2	15127.8	952.8	15312.6	953.8
15422.3	957.2	15583	954.7	15746.4	955	15906.8	956.3	15988.2	955.4
16164.6	957.4	16332.4	957.6	16504.4	956.6	16673	957.2	16861.4	956.7
17049	953.4	17207.8	951.7	17274	955.6	17440.2	954.4	17613.5	957.4
17631.7	953.8	17653.9	958.1	17824.4	958	17905.8	956.9189	17952.4	956.3
17964.6	951.3	18135.4	946.6	18219.9	947	18317.2	949.6	18410.9	946.7
18428.8	949	18651.9	947.8	18690.8	946.2	18729.3	940.1	18914	943.4
19040.9	943.9	19102.9	941.9	19126.2	943.3	19190.9	941.9	19216.4	943.8
19237.2	941.5	19420.9	944.3	19517.6	943.7	19555.3	947.7	19758.1	946.5
19818.9	950.2	19947.1	951.5	20006.8	955.9	20184.2	954.1	20323.1	951.3
20414.3	945.7	20527.8	944.2	20653.3	949.4	20684.2	940.5	20842.4	942.7
20989.1	947.8	21069.4	948.4	21262.3	947.7	21448.8	948.8	21631.4	946.7
21802	942.6	21869.1	939.8	21909.3	943.4	21954	953.2	22148.5	954.1
22306.3	954	22378	955.4	22594.8	954	22757.8	954.9	22935.8	954.8
23107.3	956.2	23275.4	955.9	23411.6	954.8	23573.4	957.7	23629.1	956.7
23796.3	955.8	23971.7	955.8	24129.8	956	24294.4	955.8	24466.5	955.4
24623.6	955.4	24630	955.3	24639.7	957.8	24648.4	954.6	24662.5	958.2
24836.4	959.8	24988.3	960.7						

Manning's n Values num= 6

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
12874.8	.043	17824.4	.15	18729.3	.037	19517.6	.032	20323.1	.037
21954	.035								

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
17905.8	21954	475	474.38	480	.1	.3

Ineffective Flow num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
12874.8	17824.4	960.7	23100	24988.3	960.7

CROSS SECTION RIVER: 1
REACH: 1 RS: 200.86

INPUT
Description: 200.86

Left Channel Bank Station Interpolated
Station Elevation Data num= 98

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
12893	952.7	13071.4	952.1	13217.7	954.6	13366.3	951.7	13513.8	953.9
13666	954.4	13820.1	953.4	13963.2	953.3	14149	953.3	14333.5	952.5
14509.1	952.1	14688.3	953.1	14861.7	952.4	15054.1	951.6	15210.6	951.7
15424.6	955	15571.3	952.8	15782.9	955.2	16020.2	955.6	16192.2	953.9
16399.2	952.8	16559.9	953	16714.8	953.3	16760.5	954.7	16916.6	953.9
17003.1	954.6	17168.1	950.1	17285.1	949.5	17360.5	954.6	17520.2	953
17694.7	956	17869.8	957	17934.1	958.11	7992.44	956.5698	17995.1	956.5
17996	956.3408	18052.8	946.3	18288.3	948.1	18449.5	947.1	18628.5	947.7
18762	951.3	18912.7	950.4	19061.6	946.8	19092	945.3	19141.3	938.5
19175.6	940.7	19336.6	941.9	19619.6	944.7	19730.8	944.7	19826.2	949.9
19922.8	951.3	20011.5	955.4	20112.1	951.4	20184.7	943.1	20254	952.1
20308.4	952.8	20438.4	949.3	20464.9	944.1	20568.6	943.9	20744.1	941.1
20840.6	941.3	20896.7	945.9	20979.1	947.3	21100	946.2	21279.3	951.2
21459.1	946.8	21602.1	945.3	21642.4	941.5	21792.5	940.9	21831.9	940.3
21865.4	942.7	21898	952	22032	954.1	22187.6	953.7	22377.3	953.4
22522.7	953.4	22725.4	952.8	22947.9	954.9	23137.5	955	23294.6	956.1
23413.1	955.8	23420	954.5	23482.2	956.5	23641.6	956.7	23647.7	954.4
23806	955.4	23951.6	954.9	24112	954.8	24269.9	954.6	24426.7	954.8
24604.6	954.9	24656.8	954.3	24670.5	956.8	24680.8	954	24693.9	958.2
24856.4	958.5	25029.7	959	25175	960.2				

Manning's n Values num= 6

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
12893	.043	17934.1	.15	19619.6	.032	20308.4	.037	21898	.035
22032	.035								

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
17996	22032	525	523.32	525	.1	.3

Ineffective Flow num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
12893	17750	960.2	23360	25175	960.2

CROSS SECTION RIVER: 1
REACH: 1 RS: 200.77

INPUT
Description: 200.77
Station Elevation Data num= 96

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
12925.1	950.1	13101.8	952.3	13250.4	951	13436.7	950.7	13651.1	951.4
13804.4	951.9	14027	953.4	14249.5	951.8	14401.1	950.7	14592.6	949.7
14752.3	950.6	14873.3	950.3	15006	952.1	15110.8	950.9	15249.1	953.3
15443.8	954.5	15631.2	955.3	15702.9	951.3	15936.9	951	16108.8	954.5
16172	955.8	16295.1	951.4	16462	950.7	16530.6	949.9	16652.3	952.8
16854.8	954	17022.2	952.1	17185.4	949.9	17349.4	948.1	17402.8	955.2
17473.6	951.6	17660.6	954.4	17828.8	955.3	17926.5	954	17969.3	948
18147.9	944.4	18302.9	946.4	18524.1	946.1	18650.9	949	18815.8	948.8
18902.5	949.8	18913.4	952	19097	950.8	19277	951.3	19280.8	951.9
19280.9	949.5	19321.8	951.3	19557.8	943.7	19720.4	945.1	19857.8	946.5
19911.9	942.9	19989.5	951.1	20140.5	950.2	20288.5	945.2	20339.4	948.6
20362.3	944.7	20388.7	942.6	20487.8	944	20788	936.9	20804.9	937.1
20829.2	942.4	20906.3	944.7	21056	944.4	21222.9	942.6	21375.1	940.2
21524.6	940.4	21559.7	941	21581	950.6	21785.8	951.3	21951	952.4
22102.3	952.1	22329.8	953.2	22461	953	22651.4	953.3	22824.9	954.7
23050.7	954.8	23217.5	954.9	23380.5	954.5	23421.7	954.3	23434.6	956
23439.7	954.3	23489.2	957.2	23506.4	952.5	23514.1	955.4	23706.9	954.3
23876.7	954.3	24057.8	954.4	24216.1	954.4	24385.4	954.2	24554.4	953.9
24685.3	953.1	24698.2	956.8	24704.7	952.7	24723.6	958.6	24886.7	958.9
24978	959.5								

Manning's n Values num= 6

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
12925.1	.043	17828.8	.15	19321.8	.032	19857.8	.037	21785.8	.025
21951	.035								

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
17828.8	21951	500	495.64	520	.1	.3

Ineffective Flow num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
12925.1	17630	960	23630	24978	960

CROSS SECTION RIVER: 1
REACH: 1 RS: 200.67

INPUT
Description: 200.67
Station Elevation Data num= 96

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
12952.7	947.8	13129.5	948.3	13308.2	948.8	13483.1	949.2	13641	952.6
13766	952	13870.6	949.3	14073.7	950.3	14282	951.5	14535.6	948.8
14746.4	948.7	14899.4	949.8	15045.4	950.6	15138.5	953.1	15312.3	952.8
15471.5	952.2	15651.1	951.4	15730.3	949.9	15964.5	954	16199.7	953.8
16438.6	948.9	16643.2	952.3	16796.2	954	17002.3	953.9	17133.8	952.2
17211.9	946.7	17315.9	947	17376.2	954.8	17384.7	952.3	17551.8	953.1
17732.2	954.1	17919.3	952.9	17950	943.8	18101.5	944.9	18330.6	947.4
18498.9	943.9	18565	943.8	18742.3	948.8	18888.2	952	18925.4	946.6
18962.8	948.9	19023.7	947.4	19040.9	949.6	19238.5	952.4	19366.3	948.8
19569.2	947.1	19719.3	940.8	19796.7	942.1	19832.7	943.8	19969	943
20047.1	949	20111	948.4	20263	939.8	20444.8	942.7	20609	942.6
20782.8	941.1	20963.8	942.2	20998.9	941.8	21090.6	944.3	21256.2	942.8
21298.3	943.3	21316	950.6	21367.7	945.7	21427.5	950.4	21604	951.9
21649.3	952.3	21939.5	952.7	21971.5	952.7	22194	953.4	22217.8	954.7
22233.1	953	22256.3	952.8	22476.8	953.9	22513.4	953.9	22711.5	955.1
22773.4	955.2	22873.4	959.1	23051.6	959.3	23158.6	956.6	23168.5	958.8
23393.6	957.5	23430	957.4	23431.7	955.9	23584.2	954.6	23749.1	953.9
23939.2	954	24125.4	954.8	24292.4	954.6	24492.9	954.3	24643.7	954.1
24725.3	954.1	24731.8	955.7	24741.4	953.7	24755.2	960.7	24923	959.7
24996.7	960								

Manning's n Values num= 8

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
12952.7	.043	17919.3	.15	18962.8	.032	19040.9	.15	19366.3	.032
20263	.043	21604	.025	21649.3	.025				

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
17919.3	21649.3	500	503.34	510	.1	.3

Ineffective Flow num= 3

Sta L	Sta R	Elev	Sta L	Sta R	Elev	Sta L	Sta R	Elev
12952.7	17540	960	22230	23500	960	23915	24996.7	960

CROSS SECTION RIVER: 1
REACH: 1 RS: 200.58

INPUT
Description: 200.58

Right Channel Bank Station Interpolated
Station Elevation Data num= 97

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
13004.2	946.1	13252.7	946	13406.6	945.2	13565.9	944.9	13774.2	944.6
13943.1	945.5	14116.9	945	14279.1	946.6	14438.8	947.7	14609	948.4
14768.3	947.1	14929	947.1	15050.5	947.2	15202.4	950.2	15286.6	950.1
15344.6	952	15501.3	950.2	15638.8	948.6	15758.4	951.1	15992.6	950.5
16109.8	952.6	16227.7	949.4	16451.3	948.4	16610.1	950.8	16708	953.4
16925.1	953.5	17149.3	953.1	17163.9	953.3	17234.2	944.5	17318.9	945.5
17387.8	953.1	17544.8	952.5	17768	953.3	17947	953.3	18120.4	944.7
18239.5	947	18479.6	944.5	18689.4	943	18899.8	947.1	18982.6	947.4
19060.5	950.5	19193.4	946.5	19239.2	951	19272	950.3	19281	947.8
19435	949.5	19481.5	950.8	19780.1	939.9	19839	939.1	20105.5	937.6
20341.3	941.2	20411.6	945.7	20456.8	943.9	20469.2	941.9	20590	941.2
20660	946.3	20712.1	943.5	20803.5	943.1	20830.7	941.2	21002.3	943.4
21117.8	946.3	21272	946.4	21425	950.4	21450	950.6778	21452	950.7
21643	952.3	21667.2	952.4	21820.3	952	21847.8	952	22017.1	952.7
22213.8	952.2	22244.2	960.6	22257.8	957.2	22270.2	958.5	22289.1	952.8
22392.9	953.3	22566.6	953.5	22797.3	954.2	22998.5	955.3	23151	955.4
23322.6	954.9	23399.1	953.2	23498	953.6	23506	952.3	23516.9	955.5
23555.1	955.9	23578.4	953.2	23779.1	953.4	23989.5	954.5	24174.8	954.3
24351.4	954.1	24538.2	953.8	24699.8	953.7	24771.3	955.3	24776.5	952.9
24795.5	960.4	24969.5	959.5						

Manning's n Values num= 7

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
13004.2	.15	14609	.043	17947	.15	19481.5	.032	20105.5	.043
21425	.025	21643	.025						

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
17947	21450	475	479.55	530	.1	.3

Ineffective Flow num= 3

Sta L	Sta R	Elev	Sta L	Sta R	Elev	Sta L	Sta R	Elev
13004.2	17460	960	22800	23380	960	24200	24969.5	960

CROSS SECTION RIVER: 1
REACH: 1 RS: 200.49

INPUT
Description: 200.49
Station Elevation Data num= 96

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
13048.9	945.6	13261.8	944.9	13471.4	944.9	13640.6	945.6	13821.9	945.7
13998.1	945.5	14204.4	944.8	14399.4	943.8	14586.6	943.4	14763.6	943
14951.3	943.1	15156.1	943.2	15371.2	945.2	15548.1	948.1	15769.6	946.9
15979.3	948.4	16200.3	947.6	16375.3	947.1	16493.4	953	16719	952.8
16949.5	951	17106.4	951.7	17132.4	947.4	17168	952.5	17198.4	950.8
17234.4	945.1	17404.6	947.6	17536.5	952.7	17719.3	953.3	17750.3	952.7
17791.5	947.5	17816.7	949.6	17852.9	949	17862.5	950.8	18012.9	951.3
18153.1	947.1	18273.7	941.6	18480.3	943.2	18739.9	945	18856.4	944.7
19028.1	939.7	19085	944.7	19190.4	945.3	19261.7	948.1	19342.5	943.7
19490.6	939.8	19542	943.5	19650.1	948.1	19854.1	940.8	19947.1	937.5
20192	936.9	20201.4	940.9	20275.4	939.8	20324.1	944	20367.7	939.3
20425.1	937.8	20452	941.7	20573.6	946.4	20608.5	941.9	20627	944.1
20638.3	940.9	20706.1	939.4	20811.1	939.3	20837.1	942.5	20956.7	943.3
20975.1	941.9	21136.8	944.8	21171	950.3	21342.1	950.2	21559.3	950.8
21830.5	950.9	21861.8	951.1	21876.9	959.1	21891.8	959	21905.4	951.7
22133.6	952.2	22336	952.4	22590.8	952.7	22633.1	952.7	22813.2	952.3
23018.2	953.8	23185.8	954.6	23401.6	954.5	23519	954	23540.6	951.9
23589.4	954.7	23609.6	952	23780.4	952.4	23946.1	952.4	24145	952.4
24343.4	952.9	24514.6	953.3	24725.8	953.2	24810.9	953.5	24835.6	958
24956.8	957.1								

Manning's n Values num= 7

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
13048.9	.15	15548.1	.043	17719.3	.043	18273.7	.15	19342.5	.032
20192	.043	21171	.025						

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
17719.3	21171	510	497.59	510	.1	.3

Ineffective Flow num= 4

Sta L	Sta R	Elev	Sta L	Sta R	Elev	Sta L	Sta R	Elev
13048.9	17380	960	21840	22160	960	22950	23300	960
24485	24956.8	960						

CROSS SECTION RIVER: 1
REACH: 1 RS: 200.39

INPUT
Description: 200.39
Station Elevation Data num= 96

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
13083.9	945.2	13254.6	945.3	13486.8	945.5	13742.8	945.8	14008.5	946

14273.9	945.9	14454.3	945.6	14637.7	945.4	14834.7	945.2	15022.8	944.7
15192.5	944.4	15417.5	944.4	15642.9	944.4	15819.7	943.9	16016.8	943.5
16254.5	943.6	16478.3	943.8	16652.7	943.9	16819.7	947.8	16875.2	949.8
16928.9	948.8	16992.7	951.1	17168.8	950.1	17242.1	945	17439	948.6
17484.9	949	17507.9	946.2	17527.7	949.5	17682.5	952.2	17714.9	945.6
17726.7	949.9	17781	947.5	17966.7	946.8	18026.8	945.7	18050.3	941.5
18183	941.3	18379.8	942.6	18534.2	941	18751.2	942.5	18800.2	941.7
18918.7	944.9	19025.6	941.5	19161.9	944.8	19220.8	943.5	19267.5	947.7
19444.5	940.9	19506.7	939	19763.7	940.6	19785	940.5	20110.3	939.9
20152.6	937	20199	940.6	20240.6	941.7	20272.3	938.7	20460.6	948.4
20515.5	946.8	20585.3	946.5	20659.8	939.5	20714.2	938.7	20742	943.3
20788.5	938.9	20812.7	939.9	20854.3	937.8	20978.7	940.9	21041	951.3
21062	949.6	21134.2	949.8	21326.6	949.6	21342.1	949.6	21606.3	951
21865.7	950.7	21893.4	950.9	21911.5	958	21918.5	956.7	21925.9	957.8
21937.7	950.6	22152.6	950.7	22336.4	951.5	22566.3	951.6	22807.6	951.9
23031.4	952.1	23203.3	953.2	23429.6	953.3	23573.8	952	23600	955.9
23653.9	951.2	23829	950.5	24004.5	950.7	24185.9	951.4	24362.4	951.7
24572.6	951.5	24742.1	951.6	24842.9	953.7	24848.9	951.1	24857.3	956.6
24952.5	957.6								

Manning's n Values num= 7

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
13083.9	.15	16875.2	.043	17682.5	.043	18751.2	.15	19506.7	.032
20199	.043	21041	.025						

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
17682.5	21041	550	506.5	480	.1	.3

Ineffective Flow num= 3

Sta L	Sta R	Elev	Sta L	Sta R	Elev	Sta L	Sta R	Elev
13080	17300	960	21400	22680	960	24775	24952.5	960

CROSS SECTION RIVER: 1
REACH: 1 RS: 200.3

INPUT
Description: 200.3
Station Elevation Data num= 96

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
13125.5	945.5	13316	945.5	13495.7	945.7	13687.9	945.9	13882.5	945.7
14123.9	945.2	14361.2	945.8	14546.2	945.8	14737.5	945.3	14938.1	945.4
15122.2	945.1	15335	945.6	15433	945.6	15567.6	939.4	15743.1	943.1
15926.3	943.9	16194.5	945.4	16429.4	944.1	16628.2	944	16879.3	943.5
17113.8	942.4	17377.6	941.9	17498.6	943.3	17607.2	938.9	17628.8	936.3
17658.3	936.3	17675	944.5	17697.5	951.2	17780.4	950.6	17838.1	947
17867.7	942.5	17967.1	945	18084.3	942	18261.2	944.6	18437.1	945.1
18628.2	943.1	18829.4	943.7	19025	944.9	19214.9	946.9	19248.3	947.6
19276.7	941.7	19395.7	940.8	19474.4	946.5	19525.1	941.1	19863.4	942.3
20078.8	940.7	20263.9	939.9	20310.8	939.3	20322.1	942.6	20372.8	938
20488.5	939.3	20499.7	937.7	20594.1	938.9	20626.9	940.5	20657.3	939.8
20690.1	946.3	20711.8	945.7	20725.9	942.7	20819.1	942.7	20861.5	948.6
20879.4	947.5	20896	957	20906	955	20980	955.9	20990	954.6
21051.2	955.9	21071.8	953.9	21206.4	955	21247.3	956.9	21438.7	956
21607.6	952.1	21652.6	956.5	21832	957.6	22017.2	957.7	22136.9	954
22358.1	956.8	22480.5	957.8	22661.3	957.9	22684.8	957.8	22918.3	956.9
22985.5	956.5	23086.3	950.7	23165.3	950.8	23400.3	954	23576.8	954.1
23691	953.2	23717.5	950.5	23919.1	949.7	24108.8	949.5	24379.6	950.1
24590.3	950.3	24795.9	950.7	24878.3	952.9	24883.6	950.7	24903	957.1
24983.7	956.7								

Manning's n Values num= 7

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
13125.5	.15	17780.4	.15	18261.2	.065	19395.7	.032	20263.9	.043
20896	.043	21206.4	.053						

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
17780.4	20896	520	515.72	560	.1	.3

Ineffective Flow num= 1

Sta L	Sta R	Elev
13125	17205	960

CROSS SECTION RIVER: 1
REACH: 1 RS: 200.2

INPUT
Description: 200.2

Left Channel Bank Station Interpolated
Station Elevation Data num= 97

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
13153.3	944.6	13349.8	941	13453.5	941.7	13506.2	944.4	13667.2	944.5
13896.4	944.4	14116.1	944.3	14330.9	944.2	14491.6	944.1	14677.3	943.8
14757.1	939.6	14939.8	944.1	15110.7	943.8	15278.6	943.3	15461.1	943.2
15632.4	943.3	15866.9	943.9	16084.9	943.3	16260.8	943.4	16458.2	942.6
16696.4	943.8	16928.4	942.2	17115	942.0292	17146.9	942	17406.4	942.7

17643.4	942.6	17703.7	941.7	17728.1	936.2	17754.7	936.2	17774.2	941
17960.5	949.6	18052.3	948	18086.8	939.2	18113.1	940.7	18233.7	939.8
18402.1	943	18511.7	944.8	18531.7	941.8	18707.3	944.7	18794.8	941.3
19017.2	943.2	19081.1	945.2	19247.5	944.2	19313.2	945.7	19482.3	942.9
19591.6	942.6	20062.3	940.4	20235.8	940	20296.5	940.6	20329.2	937.6
20402.2	940.4	20578.4	937.9	20633	938.7	20676	937	20686.1	939.7
20744	948	20822.3	948	20949.1	954.9	21027.6	947.5	21215	947.3
21338.5	947.2	21527.5	948.5	21746	948.8	21841.7	948.3	22059	949.1
22185.4	949.1	22507.1	948.8	22551.2	949	22836.7	949.8	22992.3	949.2
23156.3	950.7	23327.5	950.2	23492.3	951.2	23633.4	950.7	23641.6	948.8
23667.9	953.3	23785.4	949.4	23980	949	24145.7	948.5	24326	947.5
24336.6	946.6	24353.9	949.4	24529.6	949.2	24626.1	949.5	24679.5	947.3
24861.6	949.3	24983.4	948.5	24990.2	949.6	24999.2	947	25138.6	950
25169.5	955.5	25202.4	950.9	25239.2	950	25434.2	953.6	25474.7	955.9
25481.6	954.7	25498.7	958.4						

Manning's n Values num= 8

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
13153.3	.15	17960.5	.15	18233.7	.065	19482.3	.032	20235.8	.043
20744	.043	21215	.025	23667.9	.053				

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
17960.5	20744	535	525.73	515	.1	.3

Ineffective Flow num= 3

Sta L	Sta R	Elev	Sta L	Sta R	Elev	Sta L	Sta R	Elev
13150	17115	960	20744	23100	960	25169.5	25498.7	960

CROSS SECTION RIVER: 1
REACH: 1 RS: 200.1

INPUT
Description: 200.1
Station Elevation Data num= 96

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
13401.5	961.6	13404.9	959.9	13406.7	957.2	13436.1	949.3	13438.3	947.2
13608.9	944.8	13771.4	944.1	13861.6	946.2	14093.6	944.2	14363	943.5
14599.1	944	14804.9	943.5	14985.6	943.6	15188.8	942.7	15425.2	942.8
15650.8	942.8	15834.1	942.9	16015.4	942.8	16214.7	941.9	16467.4	941.6
16641.3	942.8	16821.1	944	17077.9	942.2	17313	941.7	17523.7	941.6
17672.5	940.7	17733.3	943.5	17903.5	943	18097	942	18197	940.9
18244	934.9	18278.2	934.7	18280	936.9	18289	936.2	18327.6	941.8
18505.3	941.8	18602	941.2	18752.8	944.8	18927.6	940.3	19044.3	938.9
19072.3	941.3	19130.7	943	19301.3	943.1	19402.1	944.8	19524.2	937.7
19631.9	945.9	19875.1	939.3	20104.9	934.9	20306.5	934.5	20329.5	935.2
20520.9	935.5	20604.1	936.7	20643	947.2	20857.2	946.5	21112.6	946.5
21165.6	945.5	21339.7	946.3	21499.9	947.4	21673.2	947.4	21692.7	947.4
21938.1	947.6	21976.2	947.6	22310	947.7	22366.6	947.7	22620.5	948
22748	948.7	23104.3	950.4	23323.4	950.8	23521	950.1	23671.5	950.7
23677.2	948.1	23730.1	951.6	23754.2	948.1	23760.8	950.1	23949.5	948.5
24132.7	948.8	24309.4	949	24354.9	949.5	24372.1	946.9	24561.3	948.7
24717.9	946.9	24773.6	949.1	24952.8	948.5	25016.6	946.2	25028.8	948.4
25039.1	944.7	25073.4	947.5	25256.1	949.3	25287.2	954.4	25301	949.1
25375.9	953.1	25528.9	956	25539.2	957.4	25551.8	955.4	25735.3	957.8
25963	960								

Manning's n Values num= 8

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
13401.5	.15	15425.2	.043	16821.1	.15	18752.8	.15	19524.2	.032
20643	.043	21165.6	.025	23730.1	.053				

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
17733.3	20643	490	491.65	495	.1	.3

Ineffective Flow num= 3

Sta L	Sta R	Elev	Sta L	Sta R	Elev	Sta L	Sta R	Elev
13400	17030	960	20800	23000	960	25287.2	25965	960

CROSS SECTION RIVER: 1
REACH: 1 RS: 200

INPUT
Description: 200
Station Elevation Data num= 96

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
13751.9	957.5	13774.9	950.4	13899.2	945.3	14075.2	943.6	14247.4	943.4
14390.2	944.1	14410.8	941.9	14489.5	944.7	14707.6	944.7	14871.6	945
15032.5	944.4	15300.2	944.1	15460.8	944.8	15628	944.3	15784.9	944.2
15958.7	943.4	16114	943.3	16279	942.4	16452	942.3	16652.4	942.7
16843.9	942.3	17008.1	943.8	17197.2	943.5	17388.9	942.5	17552.5	941.8
17738.6	942.2	17904	942.1	18074.8	942.9	18250.5	943.4	18433.6	942.2
18601	942.2	18626	940.2	18638.8	934	18658.5	933.4	18693.5	940.2
18768.9	944.3	18874.7	940.2	19043.7	940.6	19233.3	941.2	19416.4	942.6
19566.9	941.6	19720.1	935.8	19796.8	938.8	19975	934.4	20272.3	934.1
20276.6	934.2	20626.2	936.3	20790.5	935.3	20829	944.5	21085.6	944
21172.7	942.8	21329.4	945.1	21406.2	952.7	21433.8	946.6	21513.2	947.1

21713.7	947	21747.4	947	21906.5	946.8	21920.3	946.8	22147.8	946
22206.3	945.8	22451.9	946.8	22701.3	947.9	22901.9	948.3	23151.7	949.3
23234.2	950.1	23323.5	948.7	23510.9	949.9	23672.1	949.6	23707.3	949.9
23712.7	946.9	23720.9	949.2	23769.1	950.4	23820.8	947.8	23989.1	947.8
24020.6	947.1	24029.2	945.6	24038	947.6	24198.6	947	24361	947.2
24513.5	945.6	24672.5	946.4	24863.2	946.6	25018.9	946.3	25064.3	946
25075.8	943.9	25087.5	947.1	25163.5	947.5	25181.3	953.2	25200.7	953.7
25211	947.8	25384.8	952.1	25573.3	956	25602.8	956.1	25616.3	960.7
25622.7	961.4								

Manning's n Values num= 9

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
13751.9	.15	15628	.043	17008.1	.15	18601	.15	19566.9	.032
20829	.032	21329.4	.043	21713.7	.025	23769.1	.053		

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
17008.1	20829	520	521.67	525	.1	.3

Ineffective Flow num= 3

Sta L	Sta R	Elev	Sta L	Sta R	Elev	Sta L	Sta R	Elev
13751	16950	960	21350	23200	960	25200.7	25625	960

CROSS SECTION RIVER: 1
REACH: 1 RS: 199.91

INPUT
Description: 199.91
Station Elevation Data num= 96

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
14357	952	14390.5	944.3	14519.8	944.3	14639.2	944	14799.9	943.3
14919	943.3	15064.9	943.3	15201.6	943.3	15338.6	943.4	15454.7	943.3
15584.5	943.3	15701.7	943.3	15826.7	943	15946.8	942.7	16066.9	942.8
16186	942.4	16318.5	941.2	16444.9	941.2	16595	941.2	16734.2	941.2
16862.4	941.9	16985.5	941.6	17123.4	941.2	17256.1	940.2	17418.5	940.8
17583.3	941.1	17747.3	940.1	17924.2	940.7	18048.2	942.2	18185	942.2
18189.1	942.2	18396.1	942.1	18544.2	943.4	18752.1	941	18756.5	940.1
18757.1	941.1	18776.4	938.5	18875.1	932.1	19009.5	940.1	19154.1	941.2
19274.4	940.6	19412.9	940.1	19433.2	938.2	19665	944.1	19683.4	944.3
20122	935.3	20357	935.3	20396.2	935.2	20513.6	938.9	20603.3	938.2
20817.6	934.9	20841.2	934.9	21013	935.1	21078.3	935.1	21141.2	941.5
21181.1	941.5	21315.9	945	21377.5	952.3	21405.6	945.7	21555.3	946.7
21673.9	946.5	21886.3	946.2	22065.2	946.2	22189.8	945.7	22354.3	945.2
22462	946.4	22675.7	948.1	22731	948.3	22992.2	947.3	23079.5	947.2
23195.8	947.1	23332.1	947.2	23499	947.4	23628.6	947.3	23678.5	948.1
23685.3	950.9	23692.1	948.2	23702.9	950.2	23747.7	949.7	23766.7	947.4
23890.2	946.9	24000	946.9	24127.8	946.1	24323.2	945.3	24446.3	945.3
24602.1	944.4	24749.8	944.2	24887.7	943.5	25018.7	945.8	25033.6	942.4
25046.9	947.2	25137.9	947.1	25214.4	951.6	25285.5	947.1	25444.7	950.8
25559.1	953.2								

Manning's n Values num= 10

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
14357	.15	16318.5	.043	17747.3	.15	18544.2	.15	19433.2	.032
21013	.043	21315.9	.043	21377.5	.025	23702.9	.053	25018.7	.025

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
16862.4	21315.9	465	466.41	465	.1	.3

Ineffective Flow num= 3

Sta L	Sta R	Elev	Sta L	Sta R	Elev	Sta L	Sta R	Elev
14357	16800	960	21330	23050	960	25200	25559.1	960

CROSS SECTION RIVER: 1
REACH: 1 RS: 199.82

INPUT
Description: 199.82

Left Channel Bank Station Interpolated
Station Elevation Data num= 97

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
14626.5	957.7	14665	955.3	14714.8	947.7	14731.9	943.6	14878.2	942.2
15038.4	942.1	15177.1	942.1	15312	942.9	15442.8	943.5	15572.5	942.6
15710.4	942.1	15843.3	942.2	15981.6	942	16111.7	941.9	16269.4	941.3
16337.7	941.1	16490	941.8	16647.8	941.2	16807.1	940.1	16870	940.1
16937.5	940.1	17070.8	940.1	17202.5	940.1	17339.2	940.1	17503.8	940.1
17635.5	940.1	17774.7	939.1	17955.5	939.8	18107	939.8	18236.3	940.2
18376.6	941.1	18554.9	941.8	18684.9	940.6	18768.3	940	18787.7	931.4
18818.1	931.2	18845.4	938.1	18894.5	940	19032.4	940.6	19165.1	939.3
19236.6	938.1	19354.5	941.6	19458.6	938.6	20124.2	939.3	20322.3	939.2
20533.6	938.6	20766.2	939.3	20910.7	936.7	20926	937.9	21009.9	936.6
21146.9	939.7	21241.8	942.2	21405.4	944.5	21551.8	945.7	21756.1	945.8
21937.2	945.7	22121.7	945.7	22347.1	945.6	22491.6	945.9	22657.2	946.2
22790.5	945.6	22925.1	946.5	23055.8	946.4	23218.3	946.1	23364.5	946.1
23514.8	945.8	23642	948.2	23655.7	947.2	23663.6	949.2	23669.7	947
23724.8	949.5	23780.9	946.5	23947	945	24077.1	944.4	24199.5	945.5

24210.3	943.6	24214.2	944.9	24354.9	943.6	24545.8	943	24742.9	943.3
24928.6	944	25002.7	943.7	25010.2	942.2	25023.6	945.4	25153.6	945.8
25304.8	946.9	25434.7	948.1	25588.5	950.5	25663.5	951.7	25798.3	956.3
25810.1	957.9	25834.3	954.9	25859.3	957.7	25991.9	960.7	26149.5	962.1
26241.6	962.1	26277	964.4						

Manning's n Values num= 6

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
14626.5	.15	18554.9	.15	19165.1	.065	21405.4	.025	23724.8	.053
25002.7	.025								

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
16870	21405.4	0	0	0	.1	.3

Ineffective Flow num= 3

Sta L	Sta R	Elev	Sta L	Sta R	Elev	Sta L	Sta R	Elev
14626.5	16870	960	21650	22900	960	25350	26127	960

SECTION H

Revised HEC-RAS Model

Cross Section	Floodplain			Floodway		
	Duplicate [1]	Revised [2]	Delta	Duplicate [1]	Revised [2]	Delta
207.34	1009.51	1009.51	0.00	1010.15	1010.15	0.00
207.43	1010.09	1010.09	0.00	1011.34	1011.34	0.00
207.48	1011.97	1011.97	0.00	1012.22	1012.22	0.00

[1] Duplicate Effective HEC-RAS Model (See Section G for Additional Data)

[2] Revised HEC-RAS Model (See Section H for Additional Data)

Revised

HEC-RAS Plan: Plan 02 River: 1 Reach: 1

Reach	River Sta	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Max Chl Dpth	Sta W.S. Lft	Sta W.S. Rgt	Top Width	Froude # Chl
		(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/ft)	(ft/s)	(ft)	(ft)	(ft)	(ft)	
1	214.14	169000.00	1048.70	1075.49	1062.65	1077.00	0.000805	9.84	26.79	19654.97	21463.55	1271.14	0.36
1	214.14	169000.00	1048.70	1075.50	1062.65	1077.00	0.000804	9.84	26.80	19654.97	20381.83	726.86	0.36
1	214.04	169000.00	1048.80	1075.03	1062.61	1076.57	0.000847	9.96	26.23	19637.88	20922.37	813.47	0.36
1	214.04	169000.00	1048.80	1075.04	1062.61	1076.58	0.000846	9.96	26.24	19637.88	20371.77	733.89	0.36
1	213.95	169000.00	1049.30	1074.15	1063.64	1076.04	0.001219	11.05	24.85	19586.53	20813.40	776.02	0.43
1	213.95	169000.00	1049.30	1074.15	1063.64	1076.05	0.001218	11.04	24.85	19586.54	20331.73	745.19	0.43
1	213.85	169000.00	1048.10	1071.64	1065.13	1075.07	0.002237	15.00	23.54	19303.40	20320.91	1017.51	0.58
1	213.85	169000.00	1048.10	1071.65	1065.13	1075.08	0.002235	14.99	23.55	19618.33	20320.92	702.59	0.58
1	213.75	169000.00	1044.60	1071.95	1060.87	1073.92	0.000921	11.26	27.35	19641.00	20297.35	656.36	0.41
1	213.75	169000.00	1044.60	1071.96	1060.87	1073.93	0.000920	11.25	27.36	19641.00	20297.35	656.35	0.41
1	213.745	Bridge											
1	213.74	169000.00	1044.60	1071.65	1060.88	1073.67	0.000959	11.41	27.05	19641.87	20296.60	654.73	0.42
1	213.74	169000.00	1044.60	1071.66	1060.88	1073.68	0.000958	11.40	27.06	19641.87	20296.60	654.73	0.42
1	213.66	169000.00	1047.60	1069.25	1063.58	1072.98	0.002201	15.51	21.65	19599.47	20253.56	586.02	0.62
1	213.66	169000.00	1047.60	1069.26	1063.58	1072.99	0.002196	15.50	21.66	19687.57	20253.56	565.99	0.62
1	213.57	169000.00	1046.70	1069.18	1063.01	1071.60	0.001833	12.49	22.48	18975.27	20336.66	1273.72	0.55
1	213.57	169000.00	1046.70	1069.19	1063.01	1071.61	0.001830	12.48	22.49	19484.50	20336.66	852.16	0.55
1	213.47	169000.00	1045.80	1068.59	1061.30	1070.60	0.001697	11.36	22.79	18842.64	20266.42	1418.72	0.52
1	213.47	169000.00	1045.80	1068.61	1061.30	1070.61	0.001695	11.35	22.81	19243.30	20266.42	1023.12	0.52
1	213.38	169000.00	1045.40	1068.59	1059.33	1069.80	0.000810	8.83	23.19	19196.21	20447.85	1251.64	0.37
1	213.38	169000.00	1045.40	1068.60	1059.33	1069.81	0.000812	8.83	23.20	19346.10	20447.85	1101.75	0.37
1	213.33	169000.00	1045.40	1068.56	1057.64	1069.52	0.000607	7.87	23.16	19109.28	20717.79	1370.78	0.33
1	213.33	169000.00	1045.40	1068.57	1057.64	1069.53	0.000609	7.87	23.17	19328.90	20514.52	1185.62	0.33
1	213.26	169000.00	1040.40	1068.15	1055.56	1069.32	0.000569	8.67	27.75	19497.18	20378.39	881.21	0.33
1	213.26	169000.00	1040.40	1068.16	1055.56	1069.33	0.000568	8.67	27.76	19497.18	20378.39	881.21	0.32
1	213.255	Bridge											
1	213.25	169000.00	1040.40	1067.95	1055.57	1069.14	0.000585	8.75	27.55	19497.55	20377.79	880.24	0.33
1	213.25	169000.00	1040.40	1067.96	1055.57	1069.15	0.000584	8.75	27.56	19497.55	20377.79	880.24	0.33
1	213.21	166000.00	1044.90	1067.99	1055.85	1069.02	0.000510	8.17	23.09	19408.38	20949.10	1540.71	0.31
1	213.21	166000.00	1044.90	1068.00	1055.85	1069.03	0.000528	8.17	23.10	19490.30	20418.50	928.20	0.31

HEC-RAS Plan: Plan 02 River: 1 Reach: 1 (Continued)

Reach	River Sta	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Max Chl Dpth	Sta W.S. Lft	Sta W.S. Rgt	Top Width	Froude # Chl
		(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/ft)	(ft/s)	(ft)	(ft)	(ft)	(ft)	
1	213.11	166000.00	1047.60	1067.16	1058.35	1068.63	0.000913	9.73	19.56	19616.88	20544.67	927.79	0.40
1	213.11	166000.00	1047.60	1067.16	1058.35	1068.63	0.000913	9.73	19.56	19616.88	20544.67	927.79	0.40
1	213.03	166000.00	1046.70	1066.57	1058.28	1068.17	0.001032	10.14	19.87	19602.73	20591.82	965.54	0.42
1	213.03	166000.00	1046.70	1066.58	1058.28	1068.17	0.001032	10.14	19.88	19672.09	20591.83	919.74	0.42
1	212.93	166000.00	1045.40	1065.48	1057.98	1067.55	0.001316	11.53	20.08	19690.77	20754.13	850.10	0.48
1	212.93	166000.00	1045.40	1065.49	1057.98	1067.55	0.001316	11.52	20.09	19690.76	20489.75	798.99	0.48
1	212.84	166000.00	1043.10	1063.54	1057.53	1066.65	0.001931	14.14	20.44	19711.50	20347.25	635.75	0.58
1	212.84	166000.00	1043.10	1063.55	1057.53	1066.65	0.001929	14.14	20.45	19711.50	20347.25	635.75	0.58
1	212.74	166000.00	1041.60	1063.06	1055.49	1065.57	0.001466	12.71	21.46	19503.41	20367.19	721.70	0.51
1	212.74	166000.00	1041.60	1063.07	1055.49	1065.57	0.001464	12.70	21.47	19690.61	20367.20	676.59	0.51
1	212.68	166000.00	1036.90	1063.02	1052.63	1065.16	0.001030	11.74	26.12	19501.07	20130.09	629.02	0.44
1	212.68	166000.00	1036.90	1063.03	1052.69	1065.17	0.001029	11.74	26.13	19501.07	20130.10	629.03	0.44
1	212.675	Bridge											
1	212.67	166000.00	1036.90	1062.53	1052.64	1064.77	0.001102	12.00	25.63	19502.34	20128.84	626.50	0.45
1	212.67	166000.00	1036.90	1062.54	1052.64	1064.77	0.001101	12.00	25.64	19502.33	20128.84	626.51	0.45
1	212.56	166000.00	1039.30	1056.87	1055.70	1063.23	0.004887	20.23	17.57	19731.19	20452.05	521.49	0.90
1	212.56	166000.00	1039.30	1056.98	1055.70	1063.25	0.004781	20.09	17.68	19731.05	20252.14	521.09	0.89
1	212.46	166000.00	1037.20	1056.23	1052.72	1060.77	0.003034	17.11	19.03	18896.45	21448.61	1555.15	0.72
1	212.46	166000.00	1037.20	1056.29	1052.72	1060.80	0.003114	17.05	19.09	19743.34	20301.00	557.66	0.72
1	212.37	166000.00	1036.60	1053.10	1051.67	1058.81	0.004646	19.17	16.50	19745.63	20319.27	573.64	0.87
1	212.37	166000.00	1036.60	1053.11	1051.69	1058.81	0.004634	19.16	16.51	19745.61	20319.30	573.69	0.87
1	212.27	166000.00	1035.10	1050.72	1049.53	1056.36	0.005181	19.06	38.62	18308.28	21600.43	2802.81	0.89
1	212.27	166000.00	1035.10	1050.77	1049.53	1056.37	0.005126	18.99	15.67	19719.91	20325.95	606.04	0.88
1	212.18	166000.00	1030.80	1050.31	1045.83	1053.98	0.002663	15.37	39.71	17973.79	20651.15	2343.04	0.65
1	212.18	166000.00	1030.80	1050.37	1045.84	1054.01	0.002633	15.32	19.57	19706.85	20334.57	627.72	0.65
1	212.08	166000.00	1025.90	1050.10	1041.41	1052.71	0.001403	12.96	40.66	18026.72	20437.10	2181.45	0.49
1	212.08	166000.00	1025.90	1050.17	1041.39	1052.76	0.001389	12.92	24.27	19681.09	20270.90	589.81	0.49
1	211.99	166000.00	1025.39	1048.63	1041.14	1051.83	0.001803	14.35	39.22	18069.15	20249.64	1311.41	0.55
1	211.99	166000.00	1025.39	1048.71	1041.14	1051.89	0.001780	14.29	23.32	19699.77	20249.64	549.87	0.55

HEC-RAS Plan: Plan 02 River: 1 Reach: 1 (Continued)

Reach	River Sta	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Max Chl Dpth	Sta W.S. Lft	Sta W.S. Rgt	Top Width	Froude # Chl
		(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/ft)	(ft/s)	(ft)	(ft)	(ft)	(ft)	
1	211.89	166000.00	1024.19	1048.02	1039.98	1050.91	0.001579	13.65	23.83	19685.75	20250.74	564.99	0.52
1	211.89	166000.00	1024.19	1048.11	1039.98	1050.98	0.001558	13.59	23.92	19685.75	20250.74	564.99	0.51
1	211.79	166000.00	1023.84	1047.18	1039.19	1050.08	0.001594	13.65	23.34	18950.00	20217.70	1191.04	0.52
1	211.79	166000.00	1023.84	1047.29	1039.19	1050.16	0.001568	13.59	23.45	19649.87	20217.70	567.83	0.52
1	211.71	166000.00	1023.19	1046.47	1038.49	1049.36	0.001593	13.64	23.28	18827.74	20335.89	644.81	0.52
1	211.71	166000.00	1023.19	1046.59	1038.49	1049.45	0.001564	13.56	23.40	19628.43	20197.84	569.41	0.52
1	211.64	166000.00	1022.58	1045.60	1038.21	1048.68	0.001744	14.09	23.02	19657.70	20619.89	857.09	0.54
1	211.64	166000.00	1022.58	1045.75	1038.21	1048.79	0.001705	13.99	23.17	19657.70	20219.80	562.10	0.54
1	211.54	166000.00	1021.90	1043.70	1038.03	1047.58	0.002210	15.81	21.80	19603.65	20129.64	525.99	0.62
1	211.54	166000.00	1021.90	1043.93	1038.03	1047.72	0.002132	15.63	22.03	19603.65	20129.64	525.99	0.61
1	211.525	Bridge											
1	211.51	166000.00	1021.80	1042.20	1037.90	1046.67	0.002770	16.97	20.40	19615.19	20137.39	522.21	0.69
1	211.51	166000.00	1021.80	1042.56	1037.90	1046.87	0.002603	16.65	20.76	19615.19	20137.39	522.20	0.67
1	211.41	166000.00	1018.30	1041.78		1045.05	0.001843	14.53	23.48	19638.10	20206.06	567.96	0.57
1	211.41	166000.00	1018.30	1042.19		1045.34	0.001725	14.23	23.89	19638.10	20206.06	567.96	0.55
1	211.31	166000.00	1020.80	1040.76	1037.18	1043.89	0.002759	14.19	19.96	19531.21	20356.09	824.88	0.66
1	211.31	166000.00	1020.80	1041.37	1037.18	1044.24	0.002405	13.61	20.57	19531.21	20356.09	824.88	0.62
1	211.21	166000.00	1021.10	1040.21	1035.52	1042.40	0.001956	11.86	19.11	19528.75	20521.25	992.51	0.56
1	211.21	166000.00	1021.10	1040.97	1035.52	1042.94	0.001646	11.26	19.87	19528.75	20521.25	992.50	0.51
1	211.12	166000.00	1015.70	1040.58	1029.81	1041.56	0.000570	7.98	24.88	19498.47	21441.21	1554.03	0.32
1	211.12	166000.00	1015.70	1041.29	1029.81	1042.21	0.000508	7.71	25.59	19498.47	20610.00	1085.78	0.30
1	211.02	166000.00	1019.40	1039.37	1032.08	1041.09	0.001191	10.58	19.97	19487.12	21335.25	1794.36	0.45
1	211.02	166000.00	1019.40	1040.16	1032.05	1041.78	0.001055	10.23	20.76	19487.12	20550.00	1023.90	0.43
1	210.93	166000.00	1018.70	1039.25	1034.19	1040.38	0.000996	9.17	20.55	19479.13	22271.03	2682.27	0.41
1	210.93	166000.00	1018.70	1039.29	1033.14	1041.16	0.001429	11.00	20.59	19479.13	20530.00	1008.62	0.49
1	210.83	166000.00	1019.10	1038.81	1032.16	1039.88	0.000898	8.93	19.71	19450.42	21916.98	2276.87	0.39
1	210.83	166000.00	1019.10	1038.72	1031.94	1040.43	0.001262	10.55	19.62	19450.56	20530.00	1040.74	0.46
1	210.74	166000.00	1018.20	1038.47	1029.76	1039.47	0.000687	8.33	20.27	19426.13	21794.83	2337.38	0.34
1	210.74	166000.00	1018.20	1038.54	1029.46	1039.80	0.000801	9.02	20.34	19426.13	20560.00	1102.73	0.37
1	210.64	166000.00	1017.70	1038.32	1028.99	1039.09	0.000552	7.45	20.62	19382.79	22421.30	3011.65	0.31

HEC-RAS Plan: Plan 02 River: 1 Reach: 1 (Continued)

Reach	River Sta	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Max Chl Dpth	Sta W.S. Lft	Sta W.S. Rgt	Top Width	Froude # Chl
		(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/ft)	(ft/s)	(ft)	(ft)	(ft)	(ft)	
1	210.64	166000.00	1017.70	1038.31	1028.97	1039.36	0.000690	8.32	20.61	19388.60	20800.00	1384.51	0.34
1	210.55	166000.00	1018.00	1037.82	1028.53	1038.76	0.000667	7.93	19.82	19322.17	22451.94	3103.29	0.34
1	210.55	166000.00	1018.00	1038.04	1028.53	1038.98	0.000654	7.91	20.04	19322.17	21110.00	1763.14	0.33
1	210.46	166000.00	1016.30	1038.08	1025.03	1038.40	0.000227	4.59	21.78	19209.04	21284.00	2074.95	0.19
1	210.46	166000.00	1016.30	1038.31	1025.03	1038.63	0.000222	4.53	22.01	19377.00	21284.00	1907.00	0.18
1	210.36	166000.00	1017.40	1037.78	1027.52	1038.24	0.000357	5.46	20.38	19375.17	21291.16	1915.99	0.24
1	210.36	166000.00	1017.40	1038.02	1027.52	1038.47	0.000340	5.38	20.62	19375.17	21291.16	1915.99	0.24
1	210.26	166000.00	1016.90	1037.67	1026.44	1038.06	0.000308	5.05	20.77	19377.08	21456.62	1983.15	0.22
1	210.26	166000.00	1016.90	1037.91	1026.45	1038.30	0.000293	4.98	21.01	19377.08	21331.80	1954.72	0.21
1	210.17	166000.00	1014.70	1037.42	1027.93	1037.88	0.000373	5.44	22.72	19020.84	21450.75	2336.50	0.24
1	210.17	166000.00	1014.70	1037.68	1027.94	1038.13	0.000355	5.35	22.98	19354.60	21334.72	1980.12	0.24
1	210.07	166000.00	1018.70	1037.31	1026.27	1037.68	0.000333	4.95	18.81	18539.83	21447.34	2402.36	0.21
1	210.07	166000.00	1018.70	1037.56	1026.26	1037.94	0.000333	4.97	18.86	19210.00	21225.00	2015.00	0.21
1	209.98	166000.00	1020.90	1036.91	1028.12	1037.48	0.000395	4.65	18.81	19338.59	21436.26	2011.88	0.22
1	209.98	166000.00	1020.90	1037.07	1028.53	1037.71	0.000474	5.14	18.97	19338.59	21207.12	1868.53	0.24
1	209.88	166000.00	1019.30	1036.53	1027.52	1037.22	0.000670	7.30	21.83	19441.78	21432.52	1889.70	0.33
1	209.88	166000.00	1019.30	1036.56	1027.96	1037.40	0.000788	7.93	21.86	19521.49	21220.00	1698.51	0.36
1	209.79	166000.00	1020.80	1036.46	1026.08	1036.91	0.000358	5.09	29.26	19483.04	21341.64	1858.60	0.24
1	209.79	166000.00	1020.80	1036.57	1026.19	1037.03	0.000367	5.18	29.37	19483.04	21290.00	1806.96	0.24
1	209.69	166000.00	1019.40	1035.94	1025.98	1036.64	0.000665	5.63	25.54	19460.17	21335.01	1874.85	0.31
1	209.69	166000.00	1019.40	1036.08	1026.00	1036.76	0.000644	5.59	25.68	19460.17	21335.01	1874.84	0.31
1	209.6	166000.00	1016.40	1035.16	1028.98	1036.21	0.000976	8.49	23.16	19024.76	23140.69	2531.34	0.40
1	209.6	166000.00	1016.40	1035.31	1028.95	1036.34	0.000948	8.42	18.91	19347.79	21003.80	1656.01	0.39
1	209.54	166000.00	992.31	1033.17	1020.15	1035.72	0.000916	12.88	40.86	18778.64	22756.36	2865.75	0.44
1	209.54	166000.00	992.31	1033.35	1020.15	1035.87	0.000907	12.78	41.04	19130.00	20521.00	840.07	0.44
1	209.535	Bridge											
1	209.53	166000.00	992.82	1032.53	1021.67	1035.48	0.001314	13.87	39.71	18784.03	22704.02	2757.01	0.49
1	209.53	166000.00	992.82	1032.73	1021.67	1035.63	0.001295	13.74	39.91	19130.00	20521.00	830.63	0.48
1	209.42	166000.00	1019.60	1032.75	1028.88	1034.19	0.001853	9.62	13.15	18984.81	22779.77	3517.10	0.52
1	209.42	166000.00	1019.60	1032.99	1028.88	1034.37	0.001721	9.40	13.39	19000.00	20652.63	1652.63	0.51

HEC-RAS Plan: Plan 02 River: 1 Reach: 1 (Continued)

Reach	River Sta	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Max Chl Dpth	Sta W.S. Lft	Sta W.S. Rgt	Top Width	Froude # Chl
		(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/ft)	(ft/s)	(ft)	(ft)	(ft)	(ft)	
1	209.33	166000.00	1012.00	1032.01	1027.34	1033.29	0.001515	9.05	20.01	19121.47	22614.26	3444.06	0.47
1	209.33	166000.00	1012.00	1032.32	1027.34	1033.53	0.001390	8.82	20.32	19122.27	20715.20	1592.93	0.45
1	209.24	166000.00	1008.90	1031.38	1026.04	1032.61	0.001227	9.33	22.48	18865.52	22543.38	3674.06	0.44
1	209.24	166000.00	1008.90	1031.37	1025.96	1032.83	0.001390	9.92	22.47	19212.28	20850.00	1637.72	0.47
1	209.14	166000.00	1010.60	1030.73	1025.72	1031.97	0.001259	9.46	20.13	18530.60	22293.30	3565.39	0.45
1	209.14	166000.00	1010.60	1030.65	1025.98	1032.10	0.001438	10.07	20.05	19200.21	21100.00	1899.79	0.48
1	209.04	166000.00	1012.20	1030.49	1023.82	1031.36	0.000805	7.98	18.29	17772.40	22468.00	4634.40	0.36
1	209.04	166000.00	1012.20	1030.44	1024.28	1031.39	0.000873	8.29	18.24	19220.00	21200.00	1980.00	0.38
1	208.95	166000.00	1013.80	1026.98	1026.98	1030.33	0.004364	15.12	13.18	18507.83	22186.00	3473.19	0.82
1	208.95	166000.00	1013.80	1026.98	1026.98	1030.33	0.004367	15.13	13.18	19141.05	21200.00	2058.95	0.82
1	208.85	166000.00	1013.40	1025.83	1024.09	1027.72	0.003277	11.30	12.43	18390.78	22047.66	2707.19	0.67
1	208.85	166000.00	1013.40	1025.84	1024.09	1027.72	0.003274	11.30	12.44	19199.70	21150.00	1950.30	0.67
1	208.75	166000.00	1005.20	1024.77	1021.22	1026.30	0.002008	9.91	19.57	17694.20	21709.55	3136.98	0.54
1	208.75	166000.00	1005.20	1024.78	1021.22	1026.30	0.002013	9.90	19.58	19192.90	20799.20	1606.30	0.54
1	208.67	166000.00	1007.60	1023.94	1020.38	1025.37	0.002030	9.59	16.34	17786.10	20908.11	2277.36	0.54
1	208.67	166000.00	1007.60	1023.95	1020.38	1025.38	0.002025	9.58	16.35	19118.22	20908.11	1776.29	0.54
1	208.57	166000.00	1007.60	1021.84	1019.78	1023.98	0.003382	11.74	14.24	19087.13	20989.05	1901.92	0.69
1	208.57	166000.00	1007.60	1021.86	1019.78	1023.99	0.003380	11.72	14.26	19087.13	20640.00	1552.87	0.68
1	208.48	166000.00	1007.60	1021.36	1017.83	1022.45	0.001742	8.36	13.76	18510.56	20680.86	2170.30	0.49
1	208.48	166000.00	1007.60	1021.38	1017.83	1022.46	0.001731	8.35	13.78	18510.56	20680.86	2170.30	0.49
1	208.39	166000.00	1005.60	1020.44	1017.30	1021.56	0.002009	8.49	14.84	18462.94	22041.54	2917.03	0.51
1	208.39	166000.00	1005.60	1020.47	1017.30	1021.58	0.001987	8.46	14.87	18462.94	20748.79	2285.85	0.51
1	208.29	166000.00	1004.70	1019.52	1016.22	1020.55	0.001815	8.14	14.82	17744.85	22009.86	2550.02	0.49
1	208.29	166000.00	1004.70	1019.57	1016.22	1020.58	0.001783	8.09	14.87	18562.60	20944.07	2381.47	0.49
1	208.19	166000.00	1004.70	1018.79	1014.90	1019.66	0.001564	7.49	14.09	16865.65	21343.21	2675.20	0.46
1	208.19	166000.00	1004.70	1018.85	1014.90	1019.71	0.001524	7.44	14.15	18679.18	21343.20	2664.02	0.45
1	208.1	166000.00	1001.40	1018.03	1014.24	1018.84	0.001569	7.22	16.63	17090.29	21767.19	3169.07	0.46
1	208.1	166000.00	1001.40	1018.12	1014.24	1018.91	0.001507	7.14	16.72	18822.37	21767.18	2944.81	0.45
1	207.99	166000.00	999.90	1016.92	1013.04	1017.87	0.001846	7.82	17.02	17822.01	21934.48	3550.29	0.49
1	207.99	166000.00	999.90	1017.08	1013.04	1017.99	0.001750	7.66	17.18	19093.03	21934.42	2749.15	0.48

HEC-RAS Plan: Plan 02 River: 1 Reach: 1 (Continued)

Reach	River Sta	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Max Chl Dpth	Sta W.S. Lft	Sta W.S. Rgt	Top Width	Froude # Chl
		(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/ft)	(ft/s)	(ft)	(ft)	(ft)	(ft)	
1	207.9	166000.00	1000.80	1016.38	1012.11	1017.07	0.001249	6.69	15.58	18318.70	22137.56	3677.89	0.41
1	207.9	166000.00	1000.80	1016.58	1012.11	1017.24	0.001159	6.53	15.78	19104.70	22137.55	3016.24	0.40
1	207.8	166000.00	999.10	1015.41	1011.91	1016.32	0.001667	7.69	16.31	17096.40	21871.23	4716.85	0.47
1	207.8	166000.00	999.10	1015.66	1011.89	1016.54	0.001545	7.54	16.56	19249.50	21871.22	2617.37	0.46
1	207.71	166000.00	1000.30	1014.41	1011.58	1015.43	0.001885	8.24	14.11	17152.51	21704.14	3875.09	0.50
1	207.71	166000.00	1000.30	1014.58	1011.45	1015.67	0.001906	8.39	14.28	19360.00	21704.11	2344.11	0.51
1	207.62	166000.00	1000.20	1012.76	1010.41	1014.28	0.002780	9.99	12.56	17089.51	21472.38	4261.90	0.61
1	207.62	166000.00	1000.20	1012.97	1010.37	1014.53	0.002704	10.01	12.77	19510.10	21472.33	1962.23	0.61
1	207.53	166000.00	999.10	1012.09	1008.06	1013.25	0.001487	8.78	12.99	16022.70	21335.63	4480.12	0.47
1	207.53	166000.00	999.10	1012.24	1007.97	1013.50	0.001558	9.02	13.14	19502.90	21175.00	1672.10	0.48
1	207.49	166000.00	992.20	1012.07	1004.70	1012.92	0.000745	7.40	19.87	16795.75	21053.15	3807.62	0.35
1	207.49	166000.00	992.20	1012.32	1004.70	1013.14	0.000704	7.28	20.12	19473.78	21053.15	1579.37	0.34
1	207.485	Bridge											
1	207.48	166000.00	992.20	1011.97	1004.71	1012.83	0.000763	7.46	19.77	16831.55	21053.01	3764.72	0.35
1	207.48	166000.00	992.20	1012.22	1004.71	1013.05	0.000720	7.33	20.02	19474.14	21053.01	1578.87	0.34
1	207.43	166000.00	999.00	1010.99	1007.62	1012.48	0.002056	9.80	11.99	17477.78 *	21616.72	2446.81 *	0.54
1	207.43	166000.00	999.00	1011.34	1007.62	1012.73	0.001849	9.47	12.34	19253.23	20940.00	1686.77	0.52
1	207.34	166000.00	995.90	1009.51	1006.68	1011.35	0.002647	10.88	13.61	17618.42 *	20798.77	2660.00 *	0.61
1	207.34	166000.00	995.90	1010.15	1006.68	1011.77	0.002158	10.21	14.25	19230.00	20798.77	1568.77	0.56
1	207.27	166000.00	993.30	1008.39	1006.05	1010.28	0.002803	10.35	20.79	18622.44	20809.44	2022.03	0.62
1	207.27	166000.00	993.30	1009.39	1006.00	1010.93	0.002033	9.44	21.79	18980.00	20597.90	1617.90	0.54
1	207.16	166000.00	992.70	1007.64	1004.53	1008.85	0.001701	9.41	14.94	17460.15	21937.50	2942.53	0.50
1	207.16	166000.00	992.70	1008.32	1005.05	1009.81	0.001829	10.16	15.62	19000.00	20734.50	1734.50	0.53
1	207.07	166000.00	992.80	1004.30	1004.30	1007.37	0.005285	15.05	11.50	18413.08	20748.18	2120.20	0.86
1	207.07	166000.00	992.80	1004.75	1004.75	1008.25	0.005380	15.64	11.95	18857.57	20748.18	1711.46	0.88
1	206.97	166000.00	981.70	1003.73	995.20	1004.80	0.000773	8.53	22.03	18394.09	21080.21	2153.05	0.36
1	206.97	166000.00	981.70	1004.63	995.18	1005.77	0.000760	8.62	22.93	18850.00	20800.00	1567.62	0.36
1	206.88	166000.00	981.80	1003.59	993.25	1004.41	0.000528	7.55	21.89	17070.12	21207.47	2551.49	0.31
1	206.88	166000.00	981.80	1004.48	993.25	1005.39	0.000533	7.71	22.68	18838.93	20800.00	1800.83	0.31

* Revisions due to fill placed in ineffective flow area

HEC-RAS Plan: Plan 02 River: 1 Reach: 1 (Continued)

Reach	River Sta	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Max Chl Dpth	Sta W.S. Lft	Sta W.S. Rgt	Top Width	Froude # Chl
		(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/ft)	(ft/s)	(ft)	(ft)	(ft)	(ft)	
1	206.79	166000.00	981.80	1003.43	992.79	1004.13	0.000488	6.93	21.63	16687.76	20895.15	3026.58	0.29
1	206.79	166000.00	981.80	1004.34	992.76	1005.10	0.000478	7.08	22.54	18806.01	20895.15	1934.30	0.29
1	206.7	166000.00	981.80	1003.32	993.99	1003.85	0.000441	6.03	21.52	16546.87	21165.36	3518.91	0.27
1	206.7	166000.00	981.80	1004.25	993.99	1004.82	0.000429	6.14	22.45	18784.84	21138.11	2093.11	0.27
1	206.6	166000.00	981.80	1002.90	996.86	1003.56	0.000710	6.91	21.10	16992.23	21066.25	3305.87	0.33
1	206.6	166000.00	981.80	1003.79	996.65	1004.54	0.000695	7.14	21.99	18675.58	21066.25	2185.34	0.33
1	206.51	166000.00	981.80	1002.02	998.45	1003.04	0.001348	8.99	20.22	16814.88	20934.67	4076.31	0.45
1	206.51	166000.00	981.80	1002.84	998.98	1004.02	0.001341	9.36	21.04	18561.35	20622.10	2060.75	0.46
1	206.41	166000.00	982.50	1001.41	997.86	1002.32	0.001436	8.71	18.91	16813.66	20685.21	3862.04	0.46
1	206.41	166000.00	982.50	1002.21	998.34	1003.30	0.001436	9.12	19.71	18494.71	20685.21	2190.50	0.47
1	206.32	166000.00	982.80	1000.76	997.01	1001.56	0.001495	8.05	17.96	16845.23	20854.87	3961.08	0.46
1	206.32	166000.00	982.80	1001.56	997.75	1002.55	0.001499	8.50	18.76	18476.94	20854.87	2377.93	0.47
1	206.22	166000.00	983.00	999.83	996.52	1000.70	0.001856	8.54	16.83	16857.23	20977.29	3819.70	0.52
1	206.22	166000.00	983.00	1000.69	996.67	1001.72	0.001735	8.70	17.69	18435.00	20977.29	2441.69	0.51
1	206.13	166000.00	984.60	998.84		999.71	0.002097	8.44	14.24	17049.27	20914.89	3610.68	0.52
1	206.13	166000.00	984.60	999.43		1000.65	0.002540	9.44	14.83	18370.00	20914.89	2386.30	0.57
1	206.03	166000.00	984.50	997.19	995.38	998.47	0.002920	10.05	13.19	16967.78	21127.08	3627.32	0.61
1	206.03	166000.00	984.50	997.37	995.37	999.15	0.003548	11.22	13.37	18320.00	20772.60	2131.13	0.67
1	205.94	166000.00	981.00	996.28	992.59	997.17	0.001782	8.09	15.28	17284.82	21536.29	3972.72	0.48
1	205.94	166000.00	981.00	996.85	992.21	997.71	0.001519	7.77	15.85	18200.00	20767.00	2567.00	0.45
1	205.84	166000.00	979.50	995.78	991.08	996.43	0.001006	6.80	16.28	17620.55	21637.22	3933.87	0.38
1	205.84	166000.00	979.50	996.39	991.09	997.06	0.000928	6.78	16.89	18100.00	20535.70	2435.70	0.36
1	205.75	166000.00	973.90	995.10	989.65	995.78	0.001766	6.71	21.20	18027.86	21466.57	3323.81	0.37
1	205.75	166000.00	973.90	995.83	989.63	996.48	0.001497	6.46	21.93	18048.00	20450.30	2402.30	0.35
1	205.62	166000.00	976.00	994.55	988.64	995.07	0.000680	5.99	18.55	17346.94	21549.62	4036.29	0.31
1	205.62	166000.00	976.00	995.25	988.61	995.85	0.000671	6.18	19.25	18216.00	20450.10	2234.10	0.31
1	205.52	166000.00	975.90	994.29	987.04	994.75	0.000496	5.67	18.39	17525.56	21799.95	4244.93	0.28
1	205.52	166000.00	975.90	994.95	987.25	995.53	0.000543	6.12	19.05	18591.60	20611.50	2019.90	0.29
1	205.43	166000.00	976.10	994.00	986.90	994.50	0.000544	6.04	17.90	17673.52	21788.11	3841.72	0.29
1	205.43	166000.00	976.10	994.53	986.93	995.24	0.000647	6.76	18.43	18922.07	20764.44	1842.37	0.33

HEC-RAS Plan: Plan 02 River: 1 Reach: 1 (Continued)

Reach	River Sta	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Max Chl Dpth	Sta W.S. Lft	Sta W.S. Rgt	Top Width	Froude # Chl
		(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/ft)	(ft/s)	(ft)	(ft)	(ft)	(ft)	
1	205.4	164000.00	975.50	993.99	984.66	994.40	0.000362	5.41	18.49	17742.71	21840.43	4097.72	0.24
1	205.4	164000.00	975.50	994.56	984.66	995.10	0.000413	5.90	19.06	19020.00	20767.80	1747.80	0.26
1	205.34	164000.00	975.57	993.64	986.68	994.20	0.001005	6.45	18.07	13687.27	21833.93	7349.09	0.30
1	205.34	164000.00	975.57	993.98	986.65	994.85	0.001336	7.53	18.41	19180.00	20742.96	1562.96	0.35
1	205.25	164000.00	973.40	993.26	985.26	993.82	0.000623	6.64	19.86	16838.61	21361.96	4512.59	0.28
1	205.25	164000.00	973.40	993.49	985.17	994.34	0.000817	7.64	20.09	19300.00	20782.30	1482.30	0.32
1	205.15	164000.00	973.10	991.75	987.56	993.21	0.002039	10.40	18.65	18033.45	21134.20	3049.13	0.49
1	205.15	164000.00	973.10	992.25	987.59	993.69	0.001820	10.06	19.15	19385.00	20830.00	1445.00	0.47
1	205.06	164000.00	970.50	990.84	984.94	992.22	0.001876	9.62	20.34	17973.29	20907.73	2210.49	0.47
1	205.06	164000.00	970.50	991.36	984.91	992.79	0.001795	9.65	20.86	19470.00	20905.30	1435.30	0.46
1	204.97	164000.00	973.30	990.56	984.94	991.30	0.001134	7.35	17.26	17244.74	21034.15	3736.07	0.36
1	204.97	164000.00	973.30	990.76	985.03	991.87	0.001485	8.49	17.46	19445.00	20961.30	1516.30	0.42
1	204.87	164000.00	968.10	990.19	982.85	990.80	0.000767	6.60	22.09	17333.50	21045.86	3635.73	0.31
1	204.87	164000.00	968.10	990.36	982.79	991.20	0.000942	7.37	22.26	19410.00	20952.20	1542.20	0.34
1	204.78	164000.00	967.60	990.01	980.95	990.45	0.000477	5.68	22.41	16026.10	20982.70	4837.50	0.25
1	204.78	164000.00	967.60	990.13	980.72	990.77	0.000611	6.47	22.53	19210.00	20830.43	1620.43	0.28
1	204.68	164000.00	971.40	989.36	982.88	990.10	0.000903	7.28	17.96	17501.10	20971.00	3375.80	0.33
1	204.68	164000.00	971.40	989.32	982.76	990.31	0.001151	8.21	17.92	18960.00	20546.28	1586.28	0.38
1	204.61	164000.00	972.60	988.59	983.50	989.64	0.001360	8.79	15.99	14501.40	21895.45	7282.55	0.41
1	204.61	164000.00	972.60	988.61	983.45	989.78	0.001463	9.12	16.01	18880.00	20482.90	1602.90	0.42
1	204.53	164000.00	972.70	987.68	983.01	988.93	0.001814	9.22	14.98	17518.12	21890.36	4061.33	0.46
1	204.53	164000.00	972.70	987.68	982.93	989.02	0.001920	9.48	14.98	18885.00	20495.90	1610.90	0.47
1	204.42	164000.00	971.40	986.40	982.73	987.76	0.002432	9.40	15.00	17576.00	20679.03	2778.70	0.51
1	204.42	164000.00	971.40	986.38	982.70	987.80	0.002535	9.58	14.98	19025.40	20678.96	1653.56	0.52
1	204.34	164000.00	969.30	985.28	981.49	986.65	0.002470	9.39	15.98	18066.20	20814.38	2452.20	0.52
1	204.34	164000.00	969.30	985.28	981.49	986.65	0.002474	9.39	15.98	19100.00	20814.38	1701.97	0.52
1	204.25	164000.00	969.22	980.90	980.90	984.46	0.007743	15.13	11.68	18688.66	21390.91	1993.71	1.00
1	204.25	164000.00	969.22	980.90	980.90	984.46	0.007749	15.13	11.68	19300.00	20817.18	1517.18	1.00
1	204.15	164000.00	966.00	981.17	975.80	982.09	0.001058	7.72	15.17	18882.41	21031.89	2149.48	0.40
1	204.15	164000.00	966.00	981.18	975.80	982.11	0.001059	7.71	15.18	19200.00	21031.89	1831.89	0.40

HEC-RAS Plan: Plan 02 River: 1 Reach: 1 (Continued)

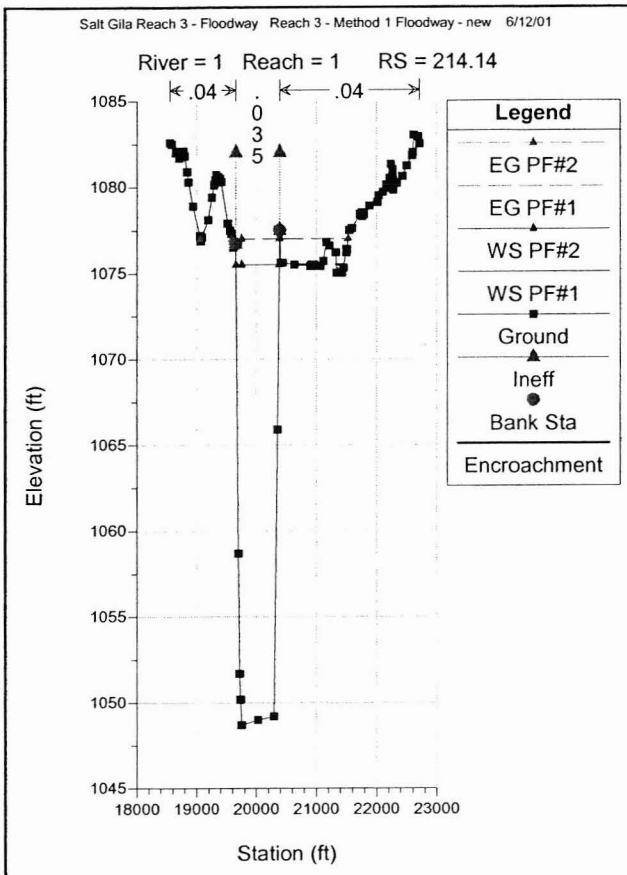
Reach	River Sta	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Max Chl Dpth	Sta W.S. Lft	Sta W.S. Rgt	Top Width	Froude # Chl
		(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/ft)	(ft/s)	(ft)	(ft)	(ft)	(ft)	
1	204.05	164000.00	965.00	980.27	976.82	981.39	0.001759	8.49	15.27	18963.78	21080.54	2116.76	0.50
1	204.05	164000.00	965.00	980.29	976.82	981.41	0.001744	8.47	15.29	18963.78	21080.54	2116.76	0.49
1	203.96	164000.00	964.10	977.71	976.68	979.86	0.005221	11.77	13.61	17155.44	20787.30	2225.51	0.80
1	203.96	164000.00	964.10	977.98	976.68	979.97	0.004601	11.33	13.88	18736.54	20787.30	2050.76	0.75
1	203.86	164000.00	962.30	977.81	971.81	978.53	0.000902	6.82	15.51	17758.13	20734.27	2201.57	0.36
1	203.86	164000.00	962.30	978.06	971.81	978.75	0.000838	6.67	15.76	18542.49	20734.27	2191.78	0.35
1	203.77	164000.00	963.30	977.43	971.55	978.06	0.000873	6.37	14.13	15935.53	20743.68	2518.53	0.35
1	203.77	164000.00	963.30	977.72	971.55	978.32	0.000799	6.19	14.42	18232.41	20743.68	2511.27	0.34
1	203.67	164000.00	962.30	976.93	971.55	977.61	0.000940	6.66	14.63	17048.52	20697.43	3648.90	0.37
1	203.67	164000.00	962.30	977.23	971.55	977.89	0.000885	6.58	14.93	18130.00	20697.43	2567.43	0.36
1	203.58	164000.00	962.10	976.47	971.51	977.14	0.000946	6.64	14.37	15989.91	20701.39	4630.90	0.37
1	203.58	164000.00	962.10	976.81	971.51	977.46	0.000858	6.46	14.71	18025.00	20701.39	2676.39	0.36
1	203.48	164000.00	962.20	975.92	972.02	976.58	0.001248	6.66	13.72	15930.61	20844.31	4863.74	0.41
1	203.48	164000.00	962.20	976.25	971.95	976.94	0.001196	6.68	14.05	17932.60	20844.31	2911.71	0.40
1	203.39	164000.00	959.90	975.22	971.09	975.93	0.001331	6.81	15.32	15500.00	21036.47	4207.55	0.42
1	203.39	164000.00	959.90	975.62	971.08	976.32	0.001254	6.69	15.72	17970.80	21036.47	2930.04	0.41
1	203.29	164000.00	960.70	974.46	970.77	975.20	0.001572	6.98	13.76	14525.82	21074.86	4967.77	0.45
1	203.29	164000.00	960.70	974.88	970.68	975.63	0.001478	6.94	14.18	18065.60	21074.86	3009.26	0.44
1	203.19	164000.00	956.70	973.59	969.95	974.28	0.001787	6.81	16.89	17459.86	20951.24	3491.38	0.42
1	203.19	164000.00	956.70	973.95	970.00	974.74	0.001849	7.13	17.25	18262.10	20951.24	2689.14	0.43
1	203.09	164000.00	958.70	972.42	969.11	973.25	0.002112	7.51	13.72	17691.96	20905.85	3213.89	0.46
1	203.09	164000.00	958.70	972.75	969.01	973.69	0.002162	7.79	14.05	18430.00	20905.85	2475.85	0.46
1	202.99	164000.00	959.20	971.50	967.55	972.24	0.001726	7.08	12.30	17673.37	20933.96	3260.60	0.42
1	202.99	164000.00	959.20	971.87	967.53	972.66	0.001673	7.15	12.67	18469.40	20926.90	2457.50	0.41
1	202.9	164000.00	956.50	970.92	966.30	971.52	0.001285	6.37	14.42	17365.58	20967.31	3419.55	0.36
1	202.9	164000.00	956.50	971.28	966.23	971.95	0.001315	6.59	14.78	18455.60	20967.31	2511.71	0.37
1	202.8	164000.00	956.40	970.32	965.59	970.84	0.001157	5.94	13.92	16524.80	21011.58	3577.43	0.34
1	202.8	164000.00	956.40	970.64	965.53	971.25	0.001223	6.25	14.24	18390.80	21011.58	2620.78	0.35
1	202.69	164000.00	953.70	969.50	965.19	970.12	0.001416	6.45	15.80	17011.60	21080.23	3716.99	0.37
1	202.69	164000.00	953.70	969.79	965.25	970.49	0.001483	6.73	16.09	18526.82	21080.23	2553.41	0.38

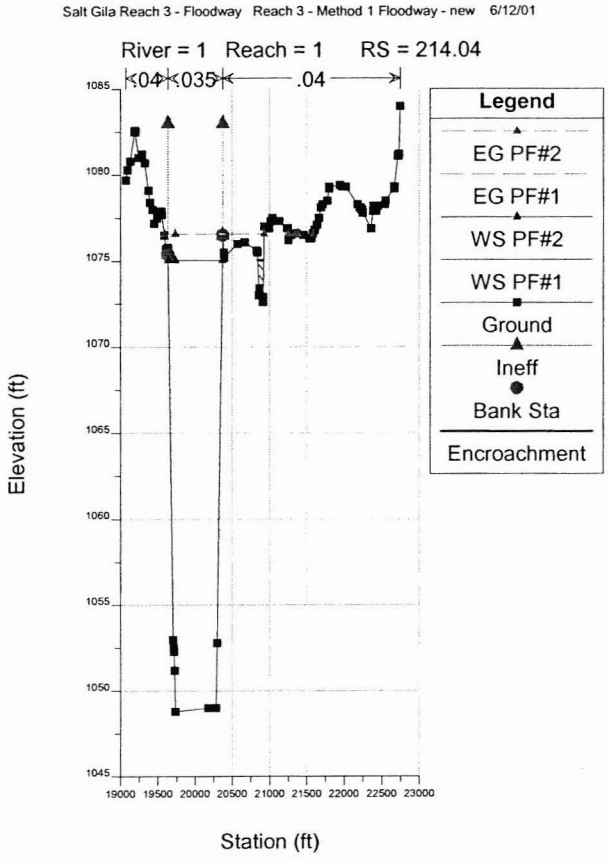
HEC-RAS Plan: Plan 02 River: 1 Reach: 1 (Continued)

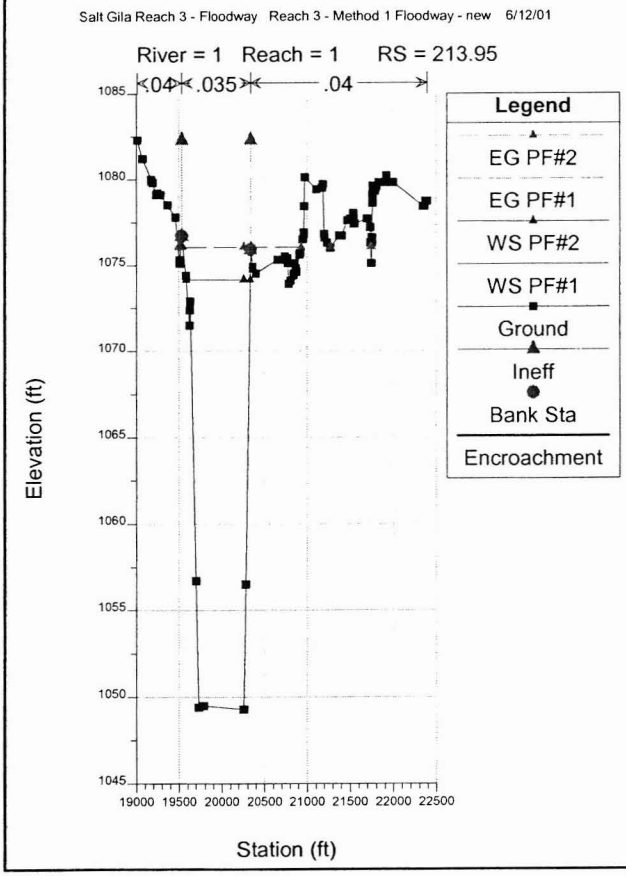
Reach	River Sta	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Max Chl Dpth	Sta W.S. Lft	Sta W.S. Rgt	Top Width	Froude # Chl
		(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/ft)	(ft/s)	(ft)	(ft)	(ft)	(ft)	
1	202.59	164000.00	953.70	968.55	964.72	969.23	0.001710	6.76	14.85	17055.70	21389.12	3795.69	0.40
1	202.59	164000.00	953.70	968.77	964.70	969.56	0.001831	7.10	15.07	18524.36	21190.40	2606.67	0.42
1	202.48	164000.00	952.50	967.66	963.72	968.30	0.001617	6.64	15.16	17009.60	21502.03	3830.27	0.40
1	202.48	164000.00	952.50	967.77	963.77	968.54	0.001788	7.04	15.27	18360.00	21302.70	2826.21	0.42
1	202.37	164000.00	954.60	966.79	962.95	967.38	0.001486	6.30	12.19	17046.50	21577.77	4026.49	0.39
1	202.37	164000.00	954.60	966.83	963.03	967.52	0.001673	6.70	12.23	18270.00	21577.77	3165.43	0.41
1	202.29	164000.00	955.50	966.51	961.29	966.88	0.000809	4.90	11.01	17742.70	22070.25	4327.56	0.29
1	202.29	164000.00	955.50	966.59	961.29	966.97	0.000812	4.93	11.09	18197.40	21803.00	3605.60	0.29
1	202.18	164000.00	950.00	965.70	961.77	966.23	0.001544	5.88	15.70	17213.20	21936.54	4356.29	0.38
1	202.18	164000.00	950.00	965.77	961.77	966.31	0.001558	5.94	15.77	18139.70	21936.54	3692.09	0.38
1	202.09	164000.00	950.00	964.09	961.97	965.01	0.003848	7.74	14.09	17755.36	21936.96	4052.05	0.57
1	202.09	164000.00	950.00	964.16	961.93	965.09	0.003803	7.75	14.16	18253.40	21936.96	3682.20	0.57
1	201.99	164000.00	948.70	963.29	958.62	963.87	0.001252	6.13	14.59	12423.70	21861.56	5331.46	0.38
1	201.99	164000.00	948.70	963.38	958.62	963.96	0.001241	6.12	14.68	18235.10	21861.56	3219.77	0.37
1	201.9	164000.00	947.20	962.94	957.26	963.35	0.000785	5.15	15.74	12498.00	21823.60	5241.54	0.31
1	201.9	164000.00	947.20	963.05	957.26	963.45	0.000756	5.08	15.85	17992.63	21823.60	3830.97	0.31
1	201.81	164000.00	946.00	962.64	955.82	962.99	0.000619	4.79	16.64	12574.10	21911.96	5916.44	0.28
1	201.81	164000.00	946.00	962.75	955.82	963.10	0.000597	4.73	16.75	17952.48	21801.08	3650.46	0.27
1	201.71	164000.00	946.00	961.87	958.14	962.46	0.001826	6.22	15.87	12659.20	22123.97	8308.13	0.40
1	201.71	164000.00	946.00	961.98	958.14	962.58	0.001807	6.24	15.98	18112.81	21528.50	3415.69	0.40
1	201.62	164000.00	945.60	961.15	956.72	961.66	0.001385	5.78	15.55	12723.60	23298.71	7614.59	0.35
1	201.62	164000.00	945.60	961.28	956.72	961.80	0.001343	5.74	15.68	18235.69	21477.50	3241.81	0.34
1	201.52	164000.00	940.90	960.41	955.35	960.87	0.001854	5.50	19.51	12786.60	23370.00	8984.44	0.33
1	201.52	164000.00	940.90	960.53	955.35	961.02	0.001898	5.61	19.63	18008.55	21391.40	3382.85	0.34
1	201.43	164000.00	941.30	959.46	954.84	960.01	0.001619	5.99	18.16	12790.40	23387.40	6525.63	0.37
1	201.43	164000.00	941.30	959.60	954.84	960.15	0.001604	6.00	18.30	18053.86	21342.10	3288.24	0.37
1	201.33	164000.00	943.00	958.44	954.84	959.06	0.002024	6.40	15.44	12785.70	22408.94	5744.84	0.41
1	201.33	164000.00	943.00	958.60	954.84	959.23	0.001959	6.36	15.60	18074.35	21381.80	3307.45	0.40
1	201.24	164000.00	943.00	957.46	953.56	958.06	0.001852	6.23	14.46	12806.00	22430.09	6935.04	0.40
1	201.24	164000.00	943.00	957.66	953.56	958.26	0.001790	6.21	14.66	18069.92	21570.00	3500.08	0.40

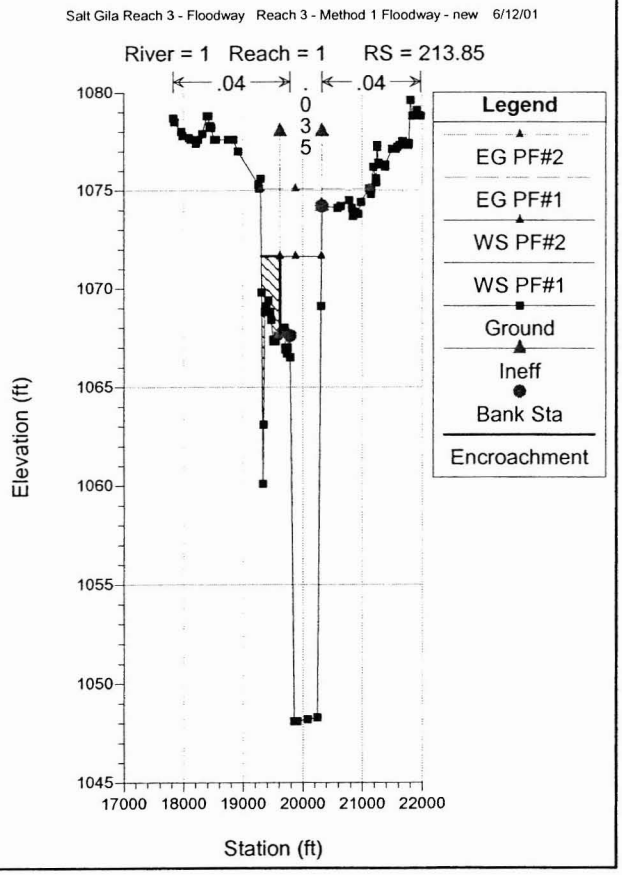
HEC-RAS Plan: Plan 02 River: 1 Reach: 1 (Continued)

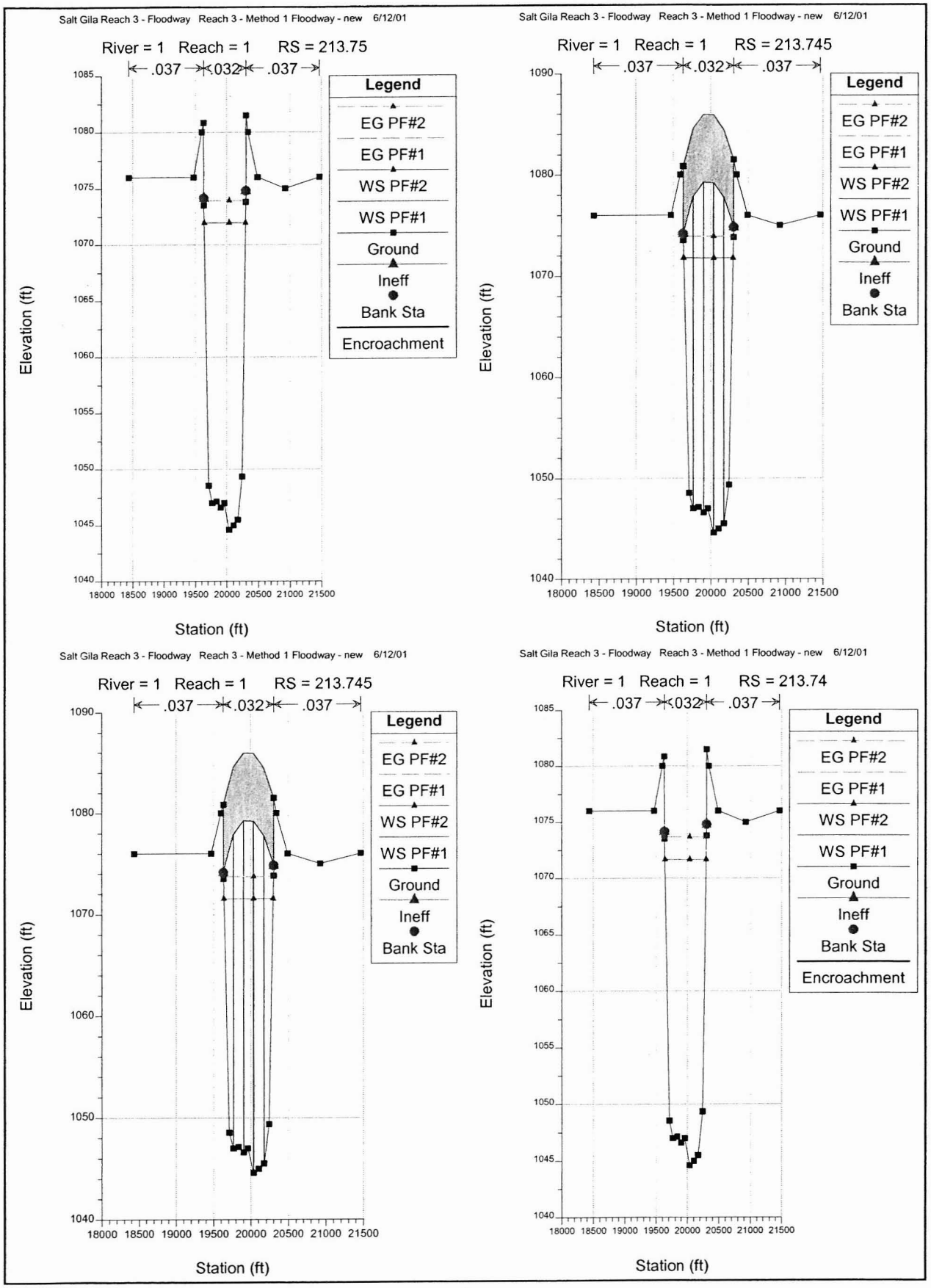
Reach	River Sta	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Max Chl Dpth	Sta W.S. Lft	Sta W.S. Rgt	Top Width	Froude # Chl
		(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/ft)	(ft/s)	(ft)	(ft)	(ft)	(ft)	
1	201.14	164000.00	940.40	956.91	952.04	957.32	0.001090	5.20	16.51	12823.90	22725.42	8631.40	0.31
1	201.14	164000.00	940.40	957.15	952.04	957.55	0.001017	5.10	16.75	18040.42	21721.00	3680.58	0.30
1	201.05	164000.00	941.50	956.49	950.96	956.80	0.000974	4.50	14.99	12848.30	22866.42	9250.10	0.26
1	201.05	164000.00	941.50	956.74	950.96	957.06	0.000928	4.48	15.24	17950.48	21849.00	3898.52	0.26
1	200.95	164000.00	939.80	956.09	949.86	956.38	0.000668	4.33	16.29	12874.80	24654.24	10045.49	0.25
1	200.95	164000.00	939.80	956.38	949.86	956.66	0.000629	4.27	16.58	17952.91	21954.00	4001.09	0.24
1	200.86	164000.00	938.50	955.63	949.69	955.94	0.001346	4.48	17.13	12893.00	24685.90	11080.63	0.27
1	200.86	164000.00	938.50	955.94	949.69	956.24	0.001276	4.46	17.44	18000.00	22032.00	4032.00	0.26
1	200.77	164000.00	936.90	955.02	949.21	955.35	0.000950	4.62	18.12	12925.10	24712.15	11450.00	0.28
1	200.77	164000.00	936.90	955.38	949.21	955.70	0.000875	4.52	18.48	17828.80	21951.00	4122.20	0.27
1	200.67	164000.00	939.80	954.42	948.96	954.80	0.001288	4.96	14.62	12952.70	24742.83	10368.40	0.30
1	200.67	164000.00	939.80	954.84	948.96	955.20	0.001158	4.82	15.04	17640.00	21649.30	4009.30	0.28
1	200.58	164000.00	937.60	953.76	948.28	954.14	0.001313	5.04	16.16	13004.20	24778.67	10091.43	0.30
1	200.58	164000.00	937.60	954.23	948.28	954.60	0.001187	4.91	16.63	17510.00	21450.00	3940.00	0.28
1	200.49	164000.00	936.90	953.28	946.93	953.59	0.000940	4.59	16.38	13048.90	24747.50	10978.72	0.26
1	200.49	164000.00	936.90	953.77	946.93	954.10	0.000893	4.59	16.87	17380.00	21171.00	3791.00	0.25
1	200.39	164000.00	937.00	952.89	946.22	953.17	0.000738	4.35	15.89	13083.90	24851.63	11315.80	0.24
1	200.39	164000.00	937.00	953.40	946.22	953.69	0.000702	4.37	16.40	17300.00	21041.00	3741.00	0.23
1	200.3	179750.00	937.70	952.12	947.15	952.61	0.001603	5.79	15.82	13125.50	24887.91	9118.96	0.34
1	200.3	179750.00	937.70	952.73	947.16	953.18	0.001382	5.57	16.43	17205.00	20888.53	3683.53	0.31
1	200.2	179750.00	937.00	951.10	946.76	951.67	0.002027	6.37	14.90	13153.30	25299.01	11857.73	0.37
1	200.2	179750.00	937.00	951.83	946.76	952.38	0.001732	6.15	15.63	17115.00	20744.00	3629.00	0.35
1	200.1	179750.00	934.50	950.19	945.21	950.66	0.001730	5.74	15.69	13432.80	25321.35	11254.10	0.32
1	200.1	179750.00	934.50	951.11	945.19	951.53	0.001392	5.36	16.61	17030.00	20800.00	3770.00	0.29
1	200	179750.00	933.40	949.74	944.16	950.01	0.000864	4.29	16.34	13790.87	25289.61	11193.60	0.24
1	200	179750.00	933.40	950.70	944.11	950.98	0.000792	4.23	17.30	16950.00	21050.00	4100.00	0.23
1	199.91	179750.00	932.10	949.39	943.35	949.60	0.000668	3.83	17.29	14368.37	25383.87	10846.61	0.22
1	199.91	179750.00	932.10	950.39	943.35	950.61	0.000573	3.75	18.29	16800.00	21330.00	4530.00	0.20
1	199.82	179750.00	931.20	948.90	943.28	949.09	0.002007	3.30	17.70	14706.94	25485.97	10752.57	0.19
1	199.82	179750.00	931.20	949.90	943.25	950.14	0.002185	3.68	18.70	16870.00	21650.00	4780.00	0.20

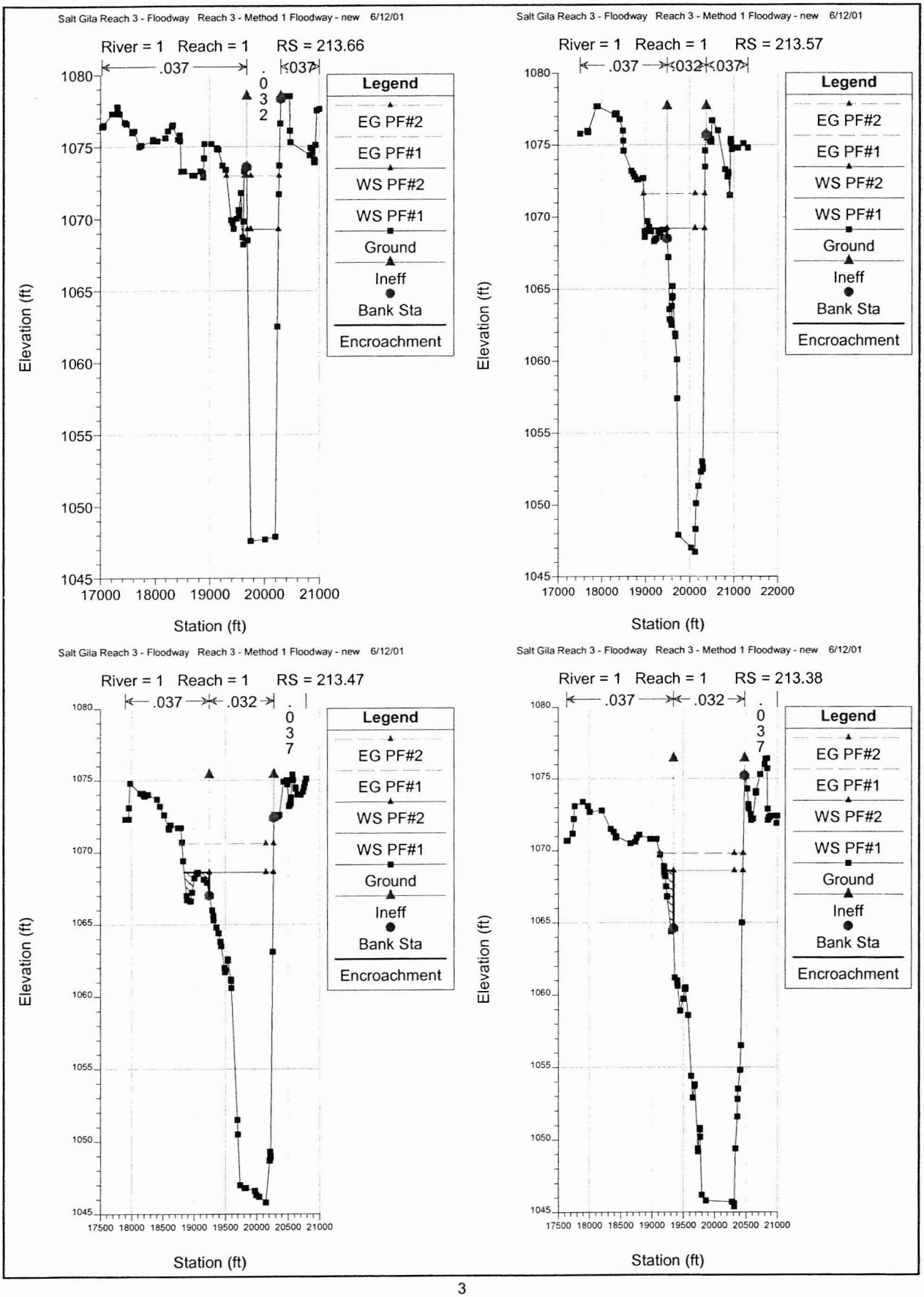

Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway - new 6/12/01
River = 1 Reach = 1 RS = 214.14
.04
.035
.04
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)

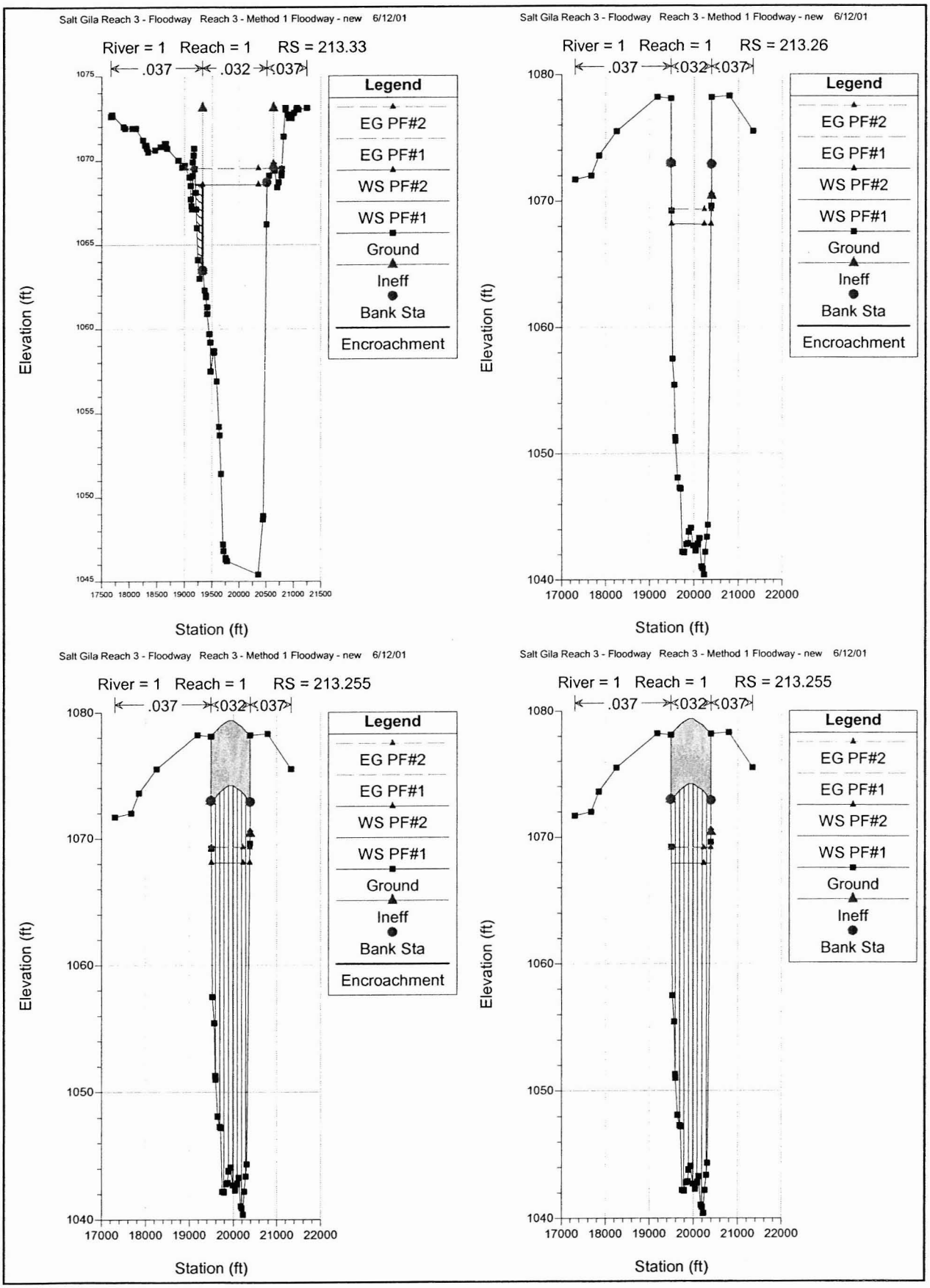

Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway - new 6/12/01
River = 1 Reach = 1 RS = 214.04
.04
.035
.04
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)

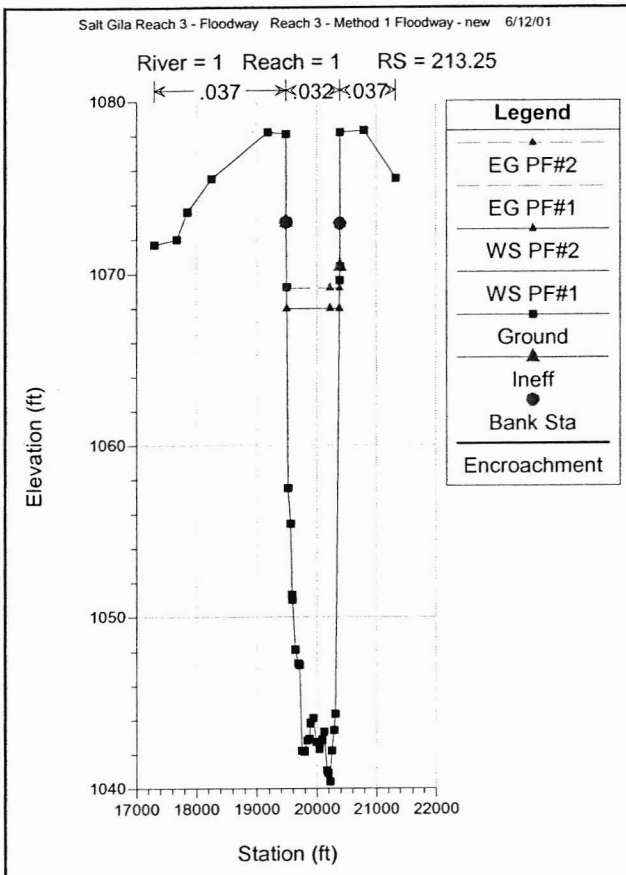

Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway - new 6/12/01
River = 1 Reach = 1 RS = 213.95
.04
.035
.04
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)

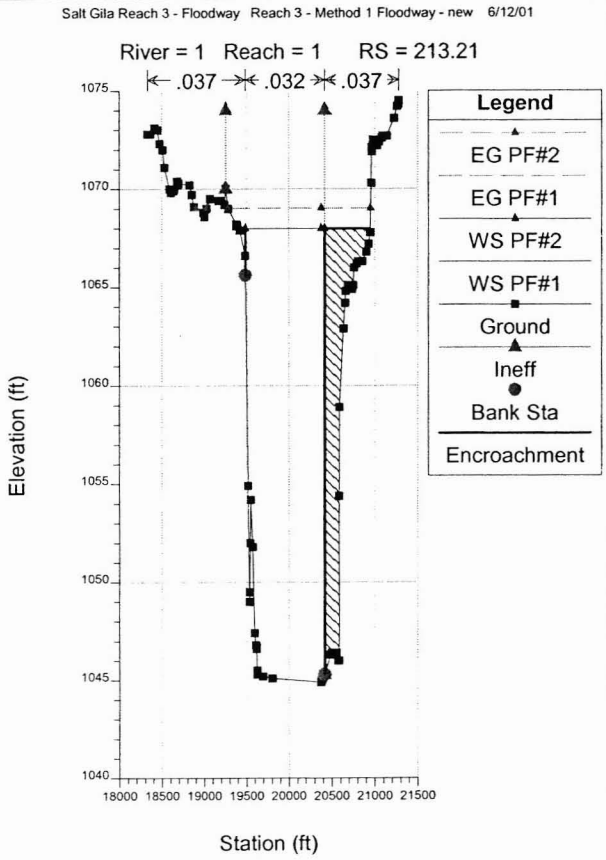

Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway - new 6/12/01
River = 1 Reach = 1 RS = 213.85
.04
.04
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)

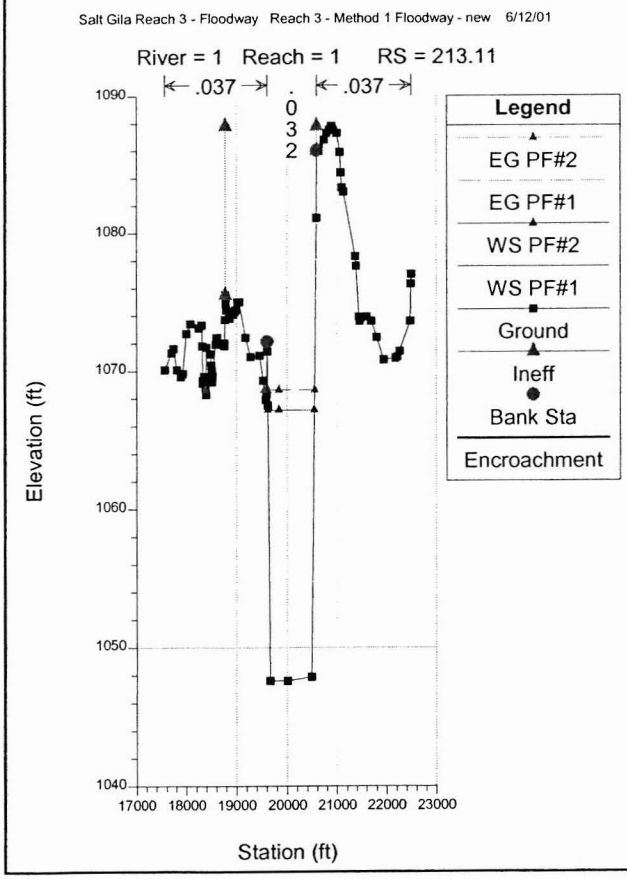

Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway - new 6/12/01
River = 1 Reach = 1 RS = 213.75
.037 .032 .037
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)
Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway - new 6/12/01
River = 1 Reach = 1 RS = 213.745
.037 .032 .037
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Elevation (ft)
Station (ft)
Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway - new 6/12/01
River = 1 Reach = 1 RS = 213.745
.037 .032 .037
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Elevation (ft)
Station (ft)
Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway - new 6/12/01
River = 1 Reach = 1 RS = 213.74
.037 .032 .037
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)

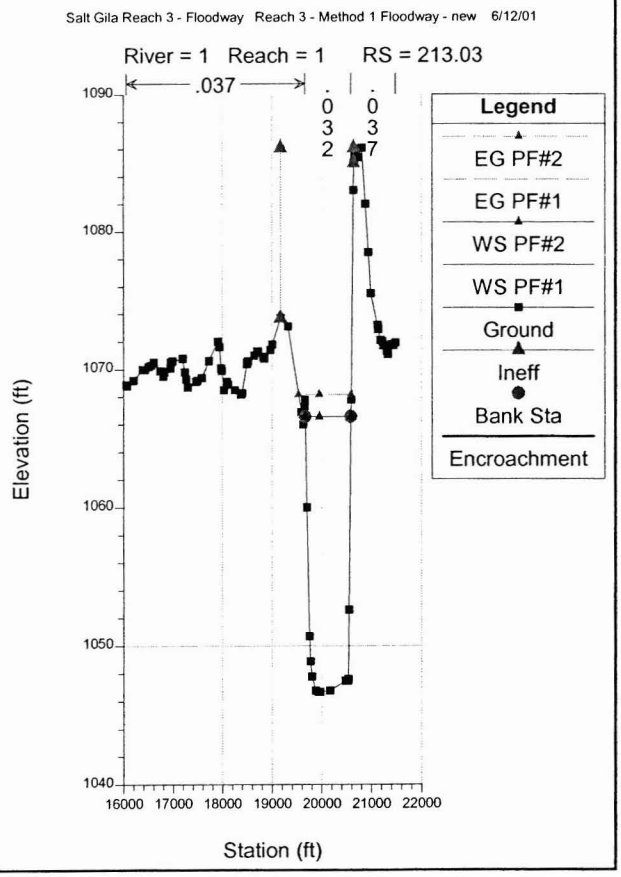

Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway - new 6/12/01
River = 1 Reach = 1 RS = 213.66
.037
.032
.037
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)
Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway - new 6/12/01
River = 1 Reach = 1 RS = 213.57
.037
.032
.037
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)
Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway - new 6/12/01
River = 1 Reach = 1 RS = 213.47
.037
.032
.037
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)
Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway - new 6/12/01
River = 1 Reach = 1 RS = 213.38
.037
.032
.037
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)

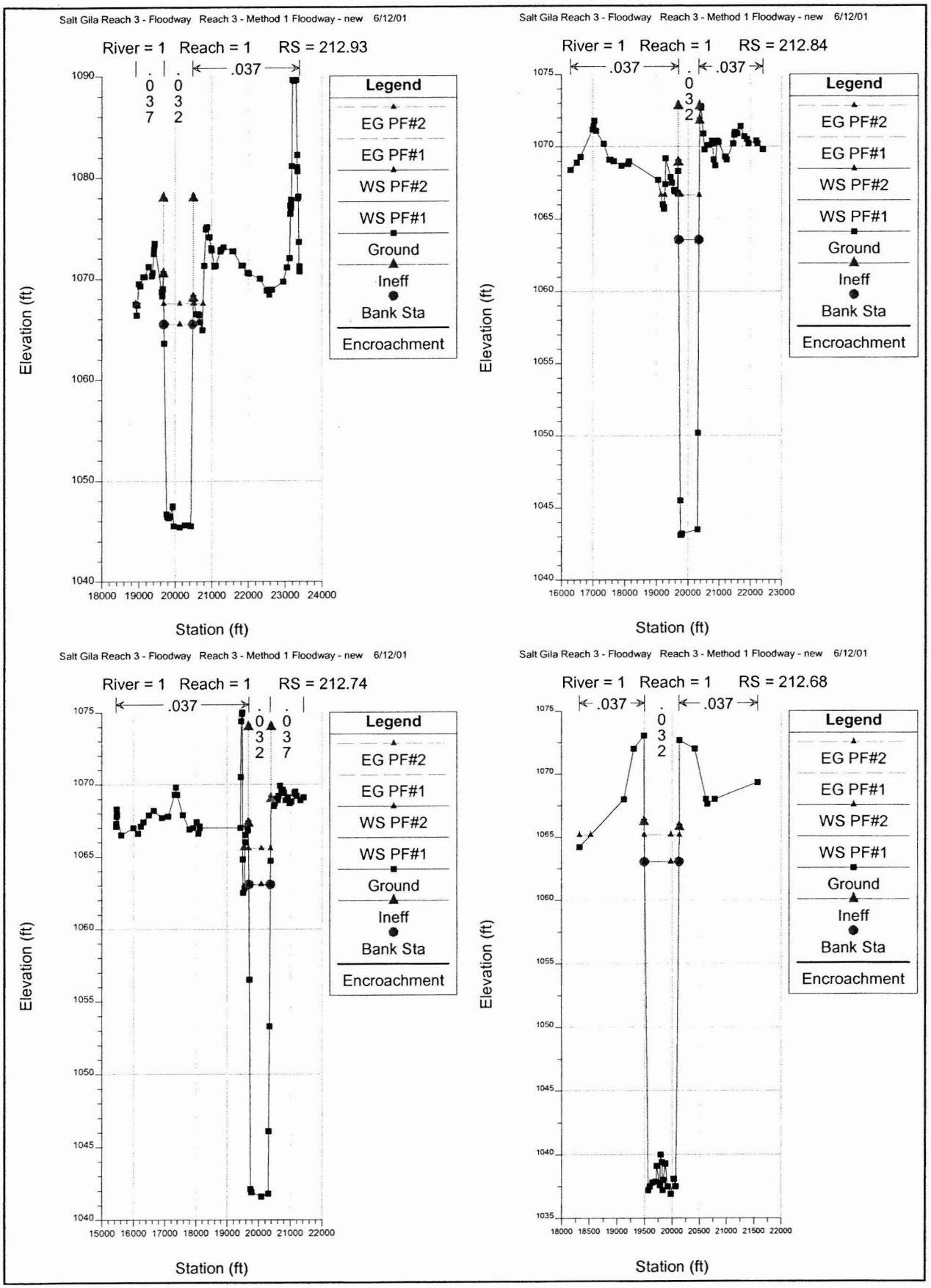

Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway - new 6/12/01
River = 1 Reach = 1 RS = 213.33
.037 .032 .037
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)
Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway - new 6/12/01
River = 1 Reach = 1 RS = 213.26
.037 .032 .037
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)
Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway - new 6/12/01
River = 1 Reach = 1 RS = 213.255
.037 .032 .037
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)
Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway - new 6/12/01
River = 1 Reach = 1 RS = 213.255
.037 .032 .037
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Elevation (ft)
Station (ft)

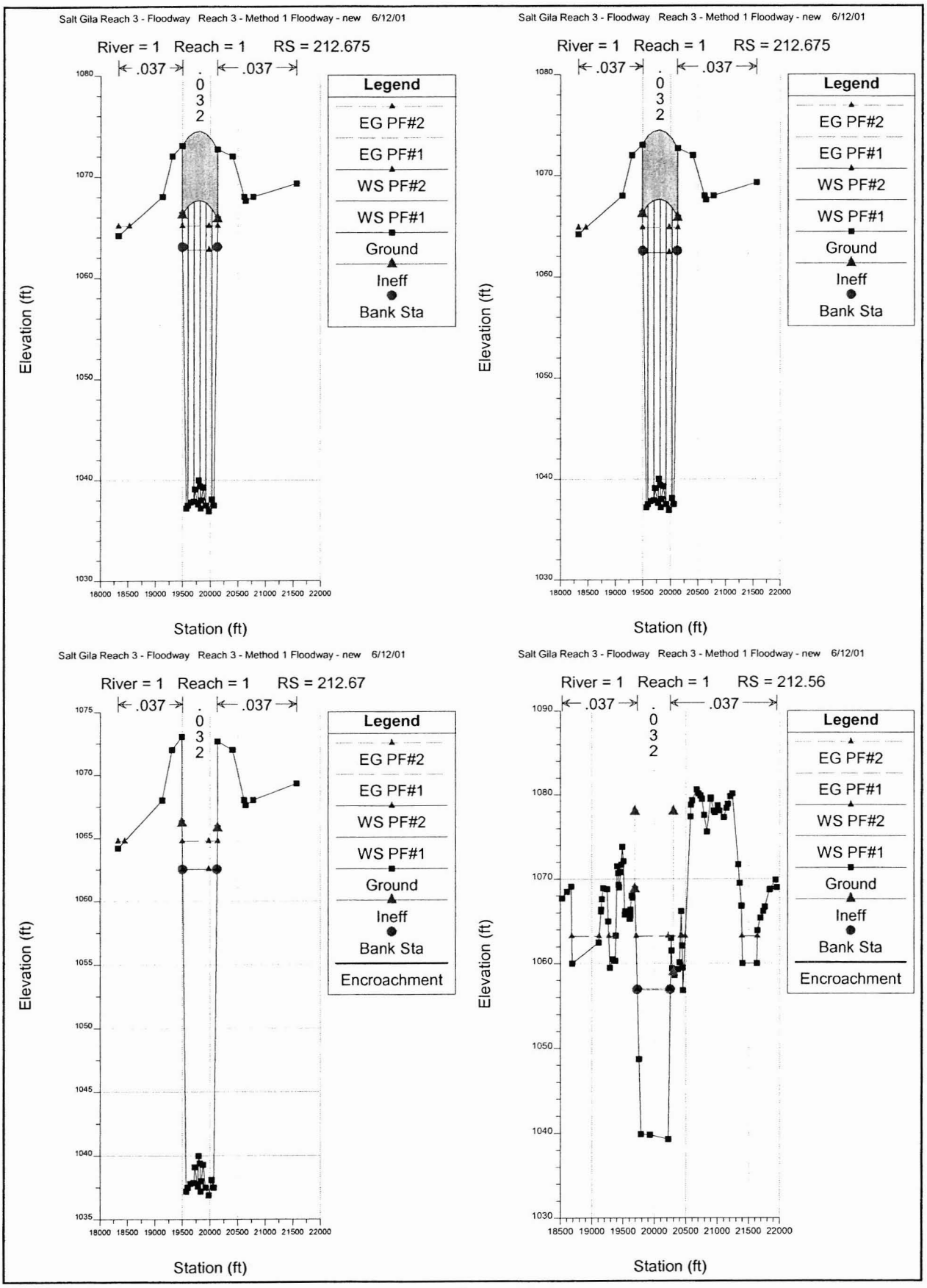

Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway - new 6/12/01
River = 1 Reach = 1 RS = 213.25
.037
.032
.037
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)

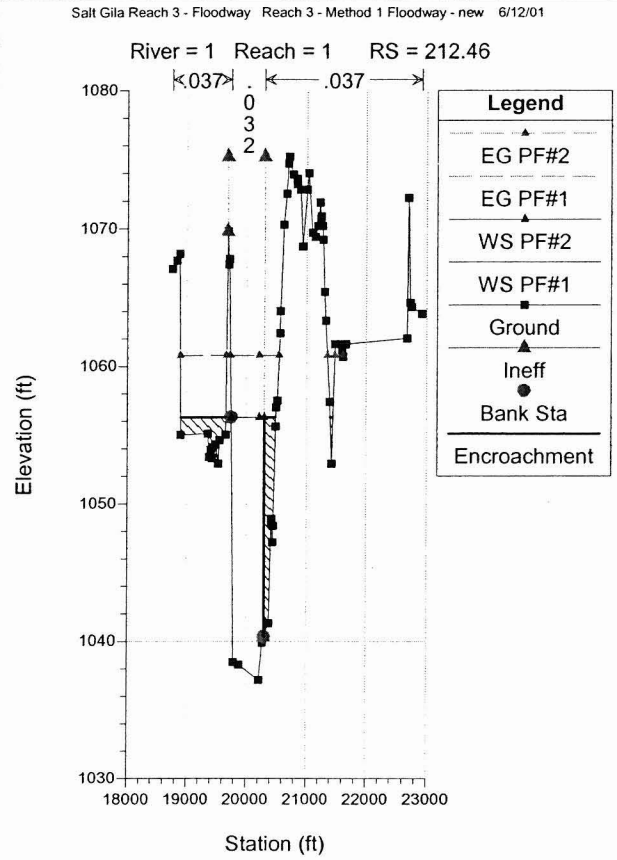

Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway - new 6/12/01
River = 1 Reach = 1 RS = 213.21
.037
.032
.037
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)

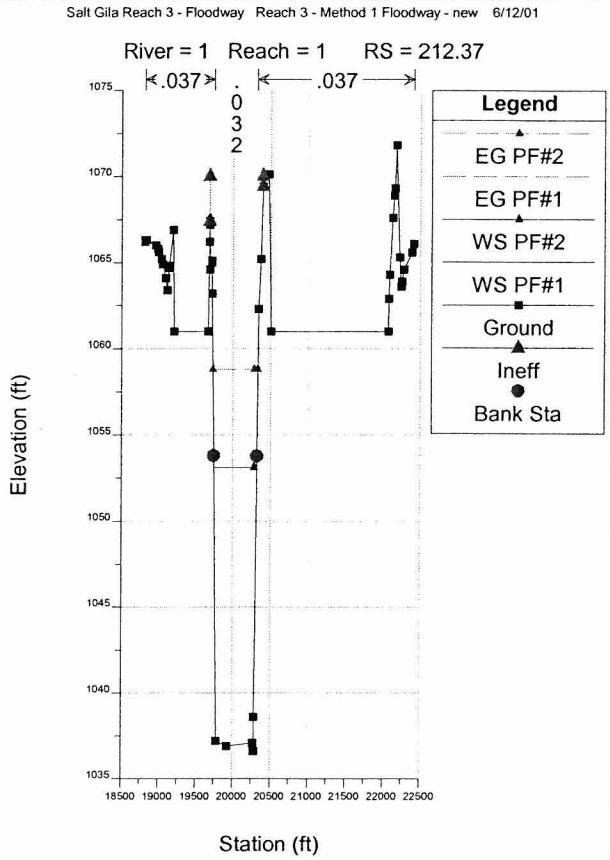

Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway - new 6/12/01
River = 1 Reach = 1 RS = 213.11
.037
.032
.037
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)

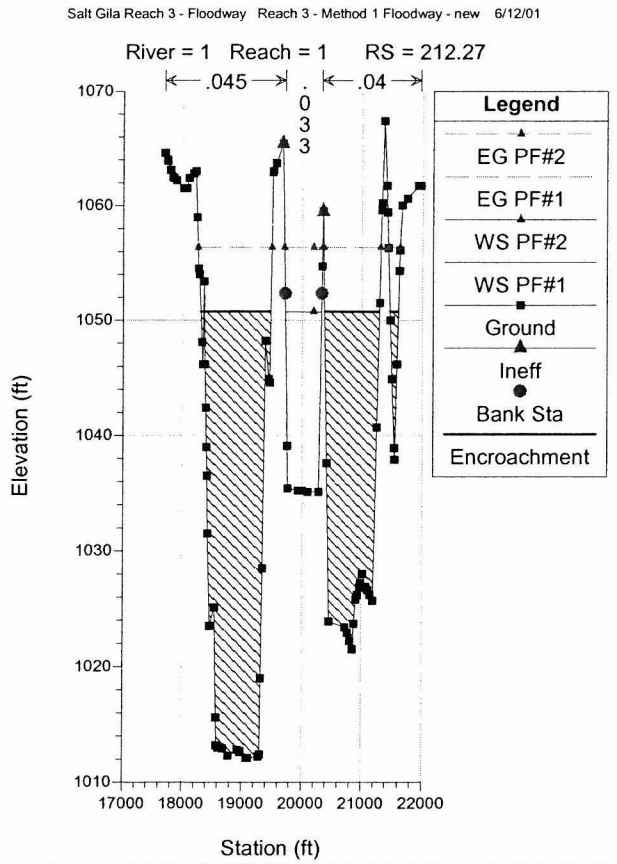

Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway - new 6/12/01
River = 1 Reach = 1 RS = 213.03
.037
.032
.037
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)

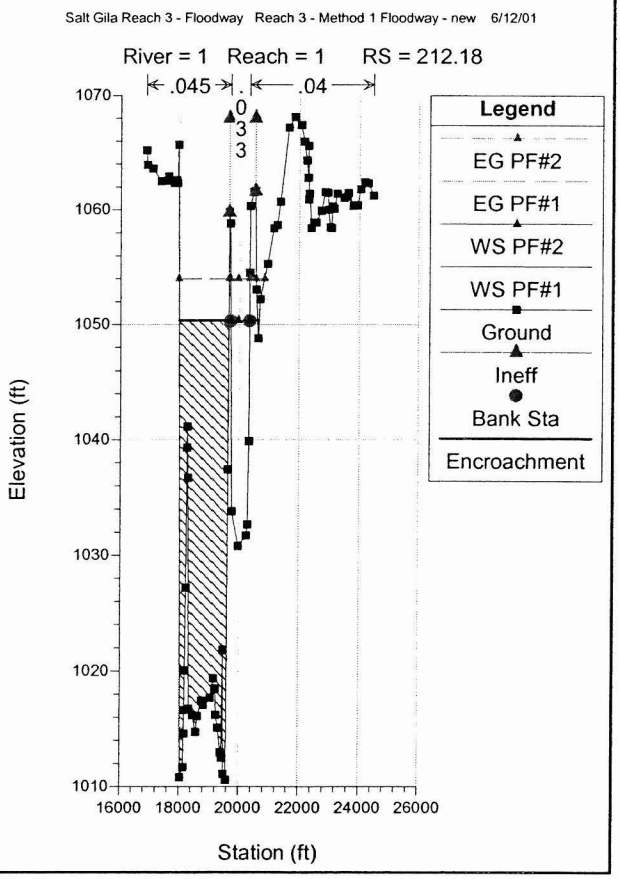

Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway - new 6/12/01
River = 1 Reach = 1 RS = 212.93
.037
.037
.032
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)
Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway - new 6/12/01
River = 1 Reach = 1 RS = 212.84
.037
.037
.032
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)
Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway - new 6/12/01
River = 1 Reach = 1 RS = 212.74
.037
.032
.037
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)
Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway - new 6/12/01
River = 1 Reach = 1 RS = 212.68
.037
.032
.037
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)

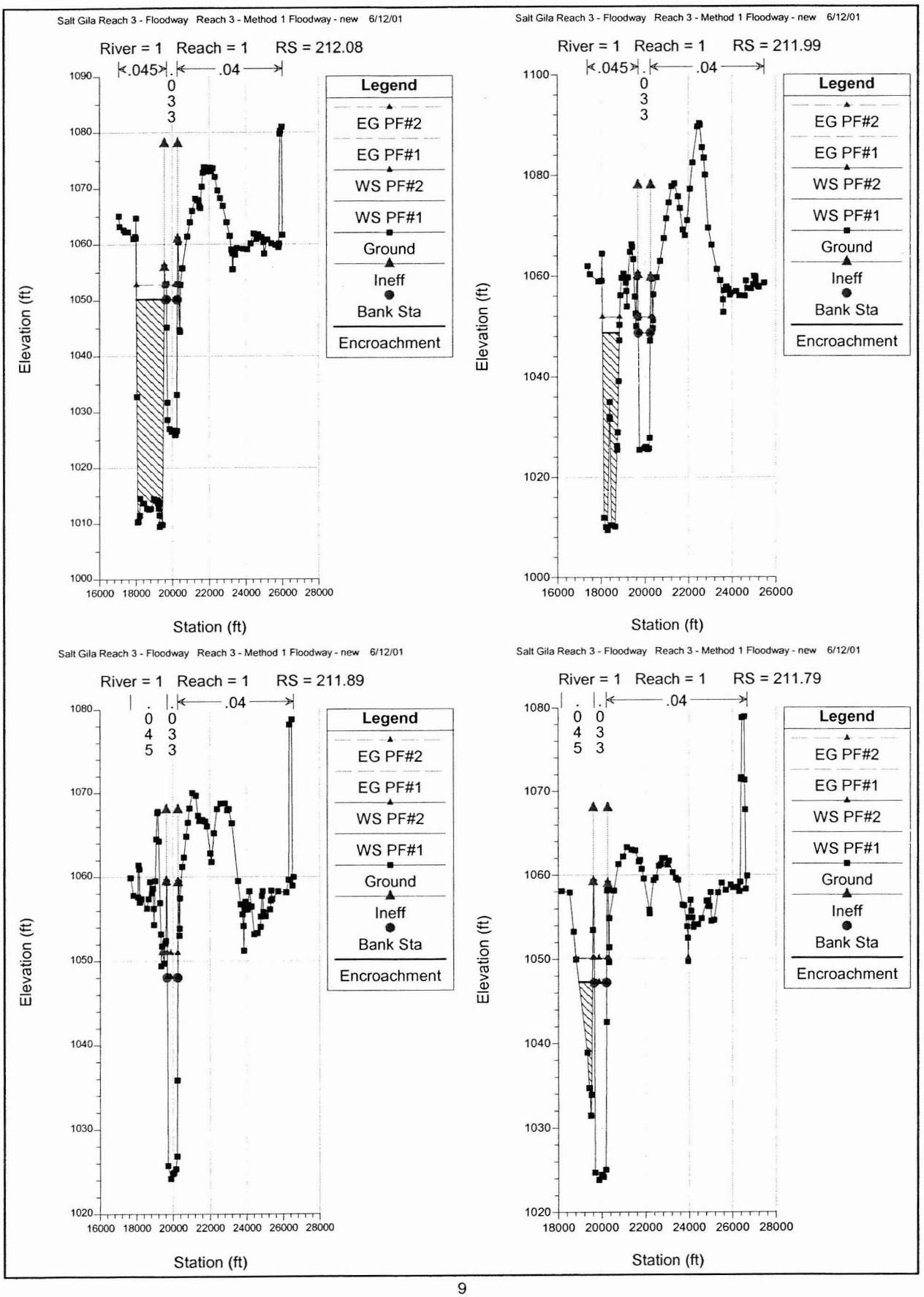

Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway - new 6/12/01
River = 1 Reach = 1 RS = 212.675
.037
.032
.037
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Elevation (ft)
Station (ft)
Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway - new 6/12/01
River = 1 Reach = 1 RS = 212.675
.037
.032
.037
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Elevation (ft)
Station (ft)
Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway - new 6/12/01
River = 1 Reach = 1 RS = 212.67
.037
.032
.037
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)
Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway - new 6/12/01
River = 1 Reach = 1 RS = 212.56
.037
.032
.037
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)

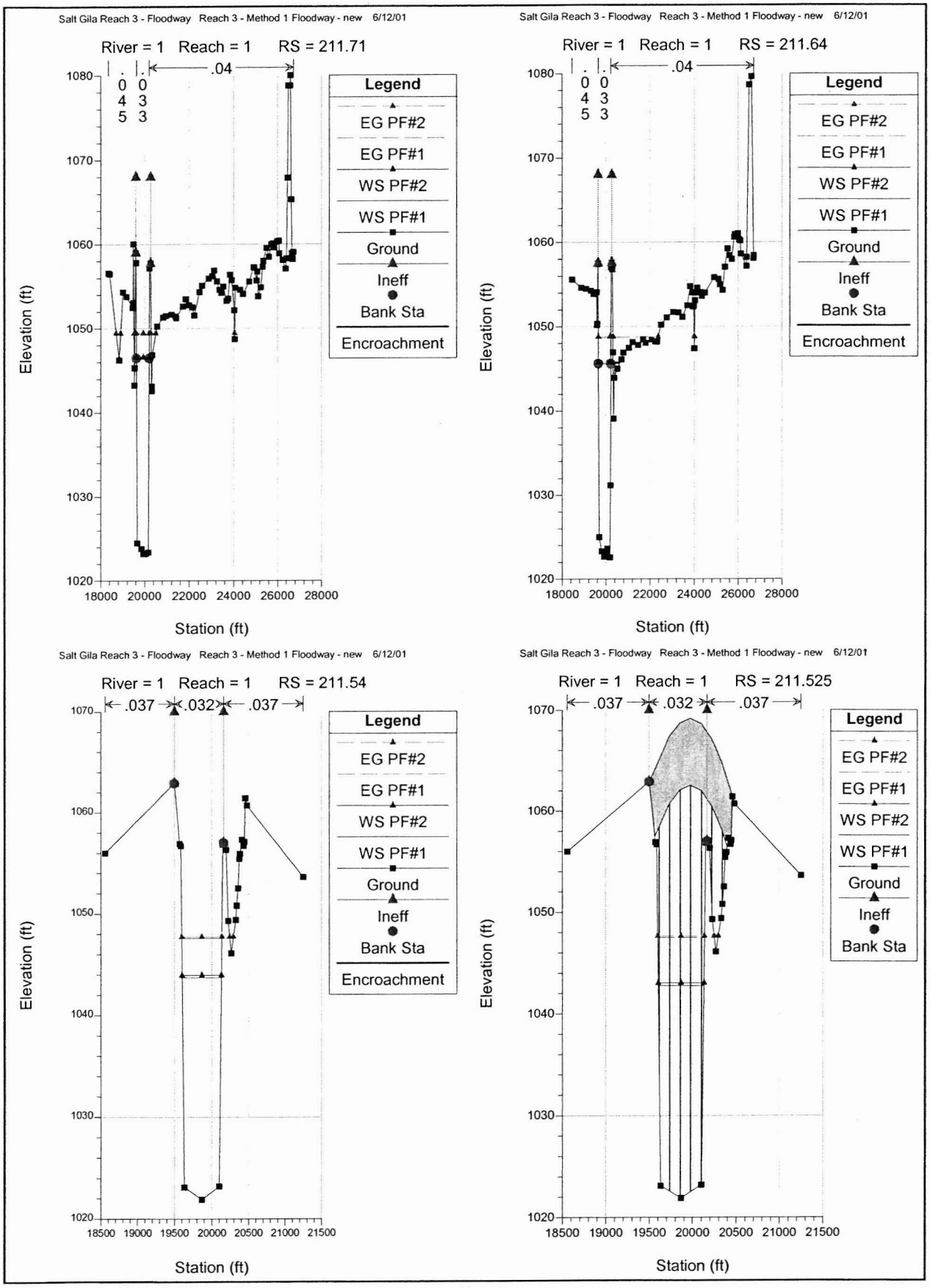

Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway - new 6/12/01
River = 1 Reach = 1 RS = 212.46
.037
.037
.032
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)

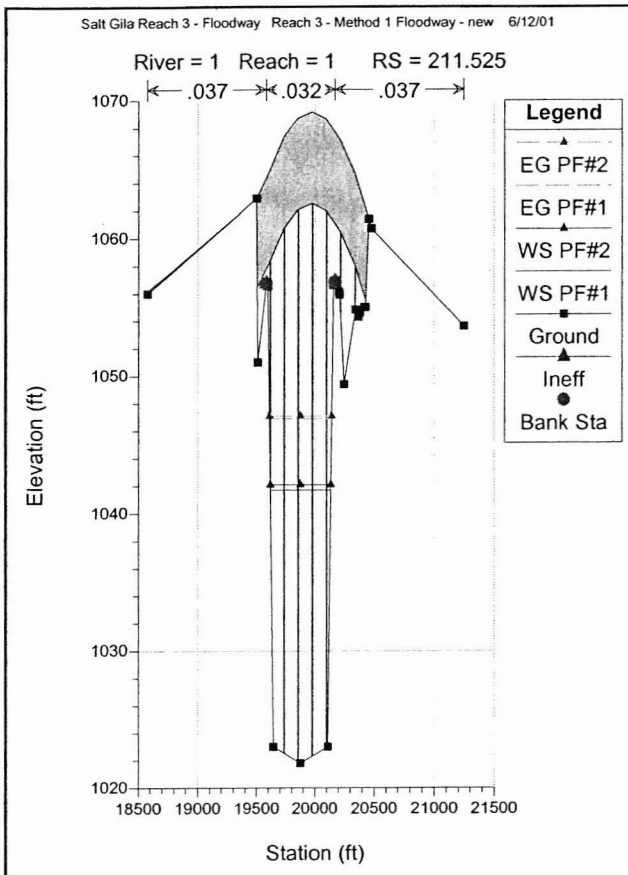

Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway - new 6/12/01
River = 1 Reach = 1 RS = 212.37
.037
.037
.032
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Elevation (ft)
Station (ft)

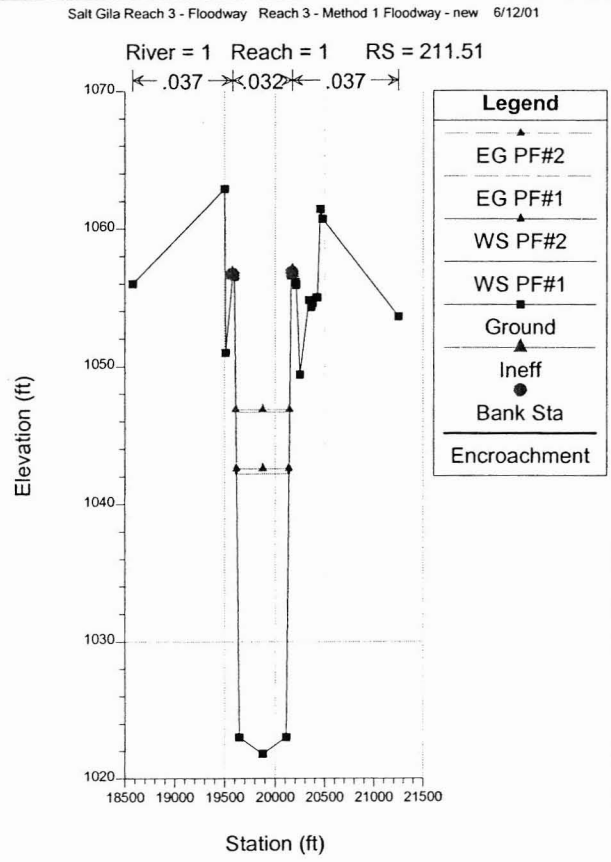

Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway - new 6/12/01
River = 1 Reach = 1 RS = 212.27
.045
.04
.033
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)

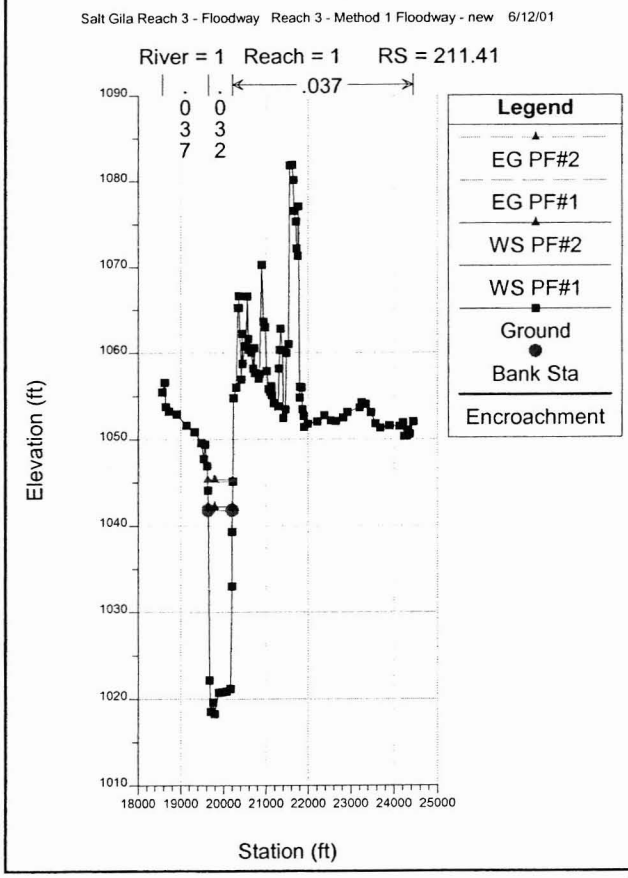

Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway - new 6/12/01
River = 1 Reach = 1 RS = 212.18
.045
.04
.033
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)

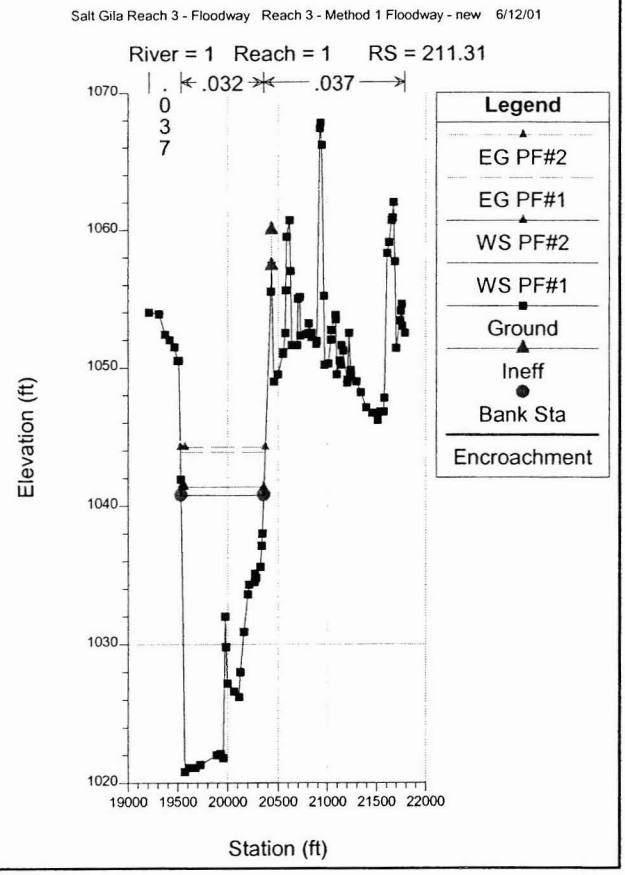

Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway - new 6/12/01
River = 1 Reach = 1 RS = 212.08
.045
.033
.04
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)
Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway - new 6/12/01
River = 1 Reach = 1 RS = 211.99
.045
.033
.04
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)
Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway - new 6/12/01
River = 1 Reach = 1 RS = 211.89
.045
.033
.04
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)
Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway - new 6/12/01
River = 1 Reach = 1 RS = 211.79
.045
.033
.04
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)

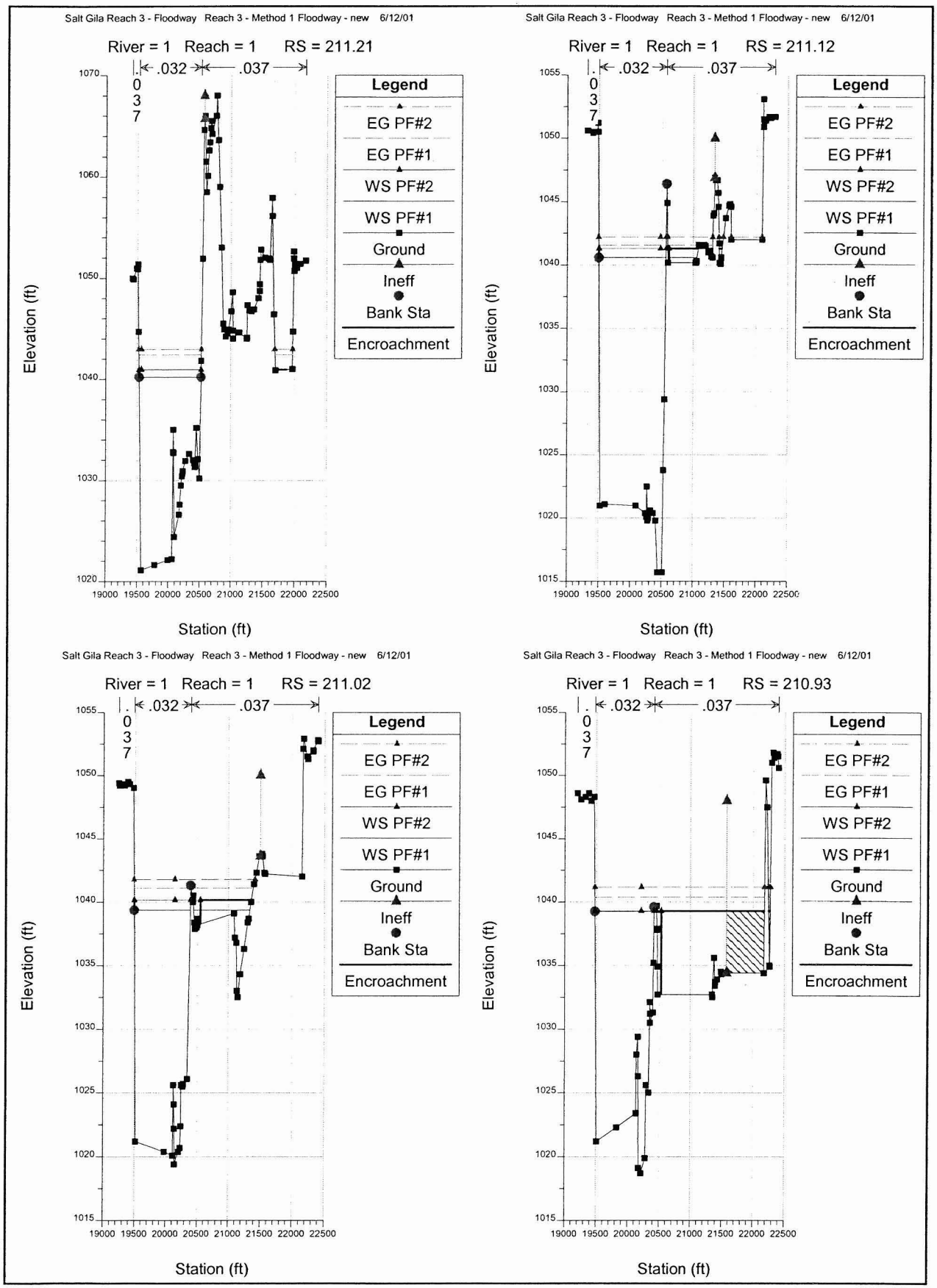

Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway - new 6/12/01
River = 1 Reach = 1 RS = 211.71
.045
.04
.03
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)
Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway - new 6/12/01
River = 1 Reach = 1 RS = 211.64
.045
.04
.03
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)
Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway - new 6/12/01
River = 1 Reach = 1 RS = 211.54
.037
.032
.037
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)
Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway - new 6/12/01
River = 1 Reach = 1 RS = 211.525
.037
.032
.037
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Elevation (ft)
Station (ft)

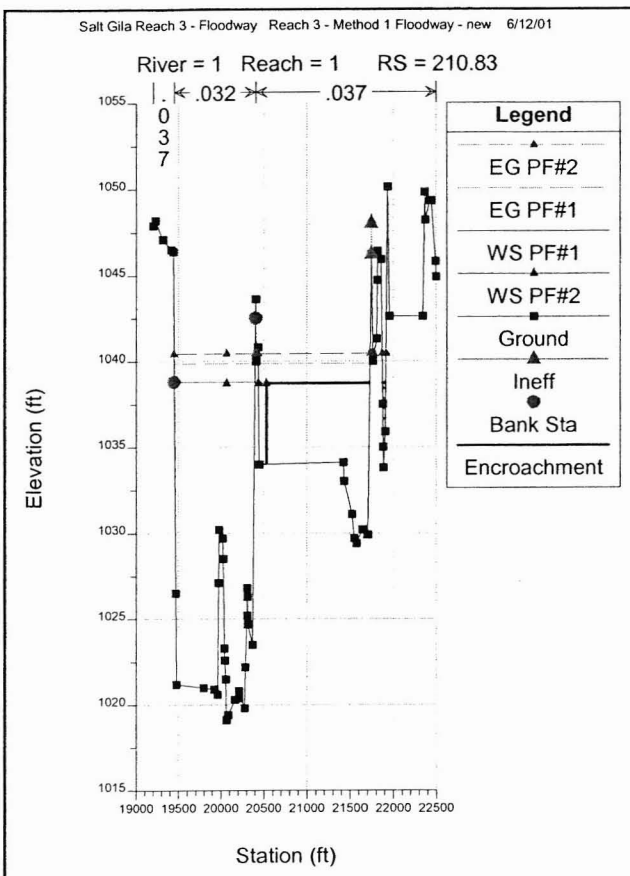

Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway - new 6/12/01
River = 1 Reach = 1 RS = 211.525
.037
.032
.037
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Elevation (ft)
Station (ft)

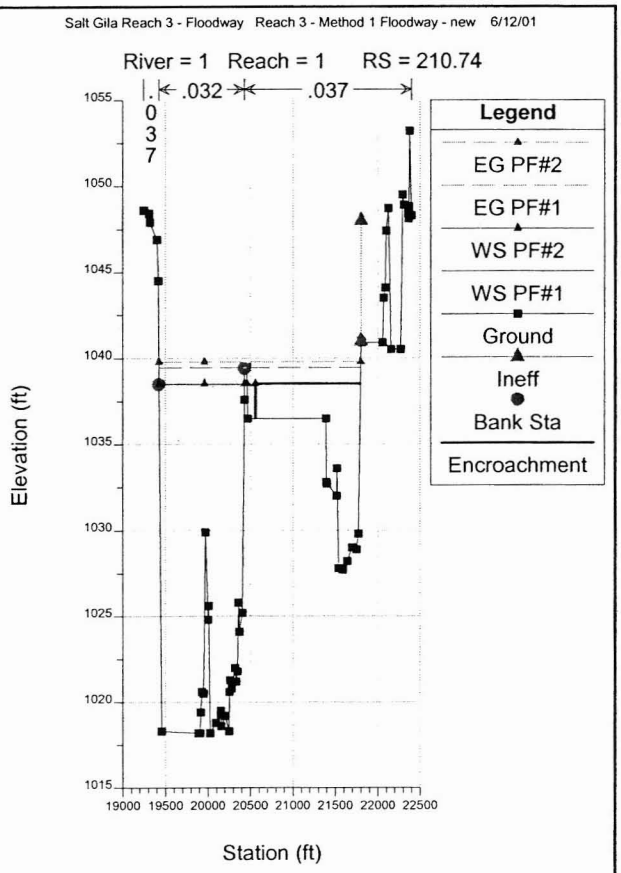

Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway - new 6/12/01
River = 1 Reach = 1 RS = 211.51
.037
.032
.037
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)

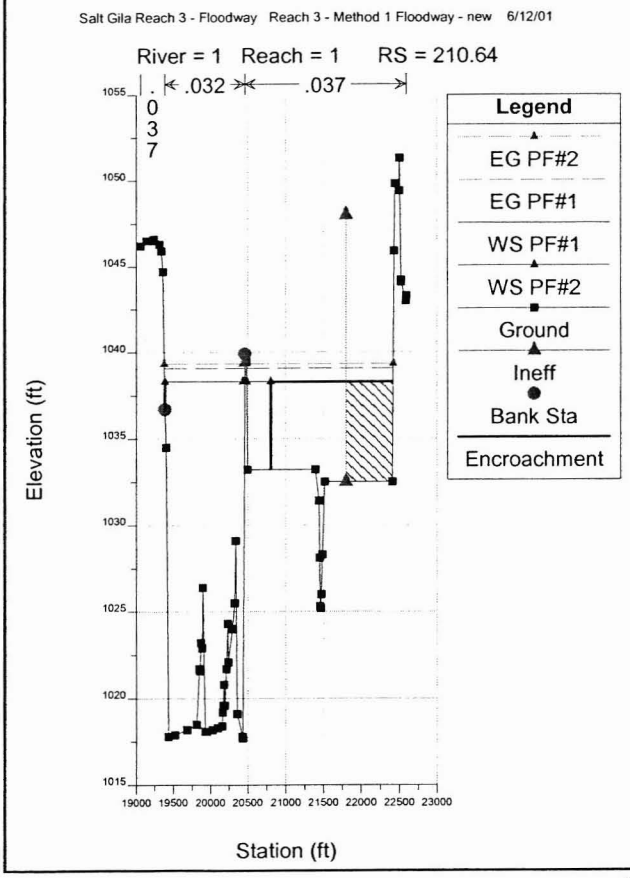

Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway - new 6/12/01
River = 1 Reach = 1 RS = 211.41
.037
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Bank Sta
Encroachment
Elevation (ft)
Station (ft)

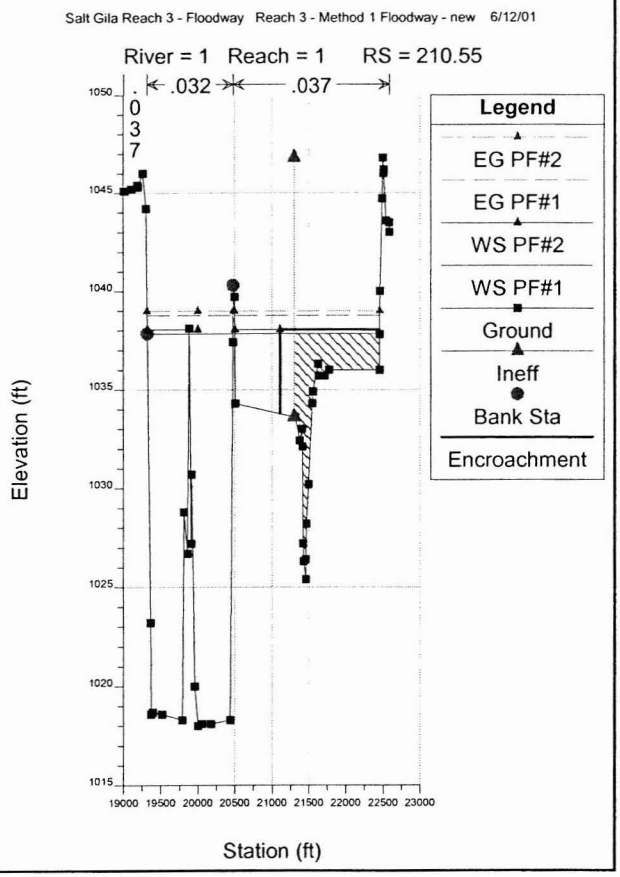

Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway - new 6/12/01
River = 1 Reach = 1 RS = 211.31
.032
.037
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)

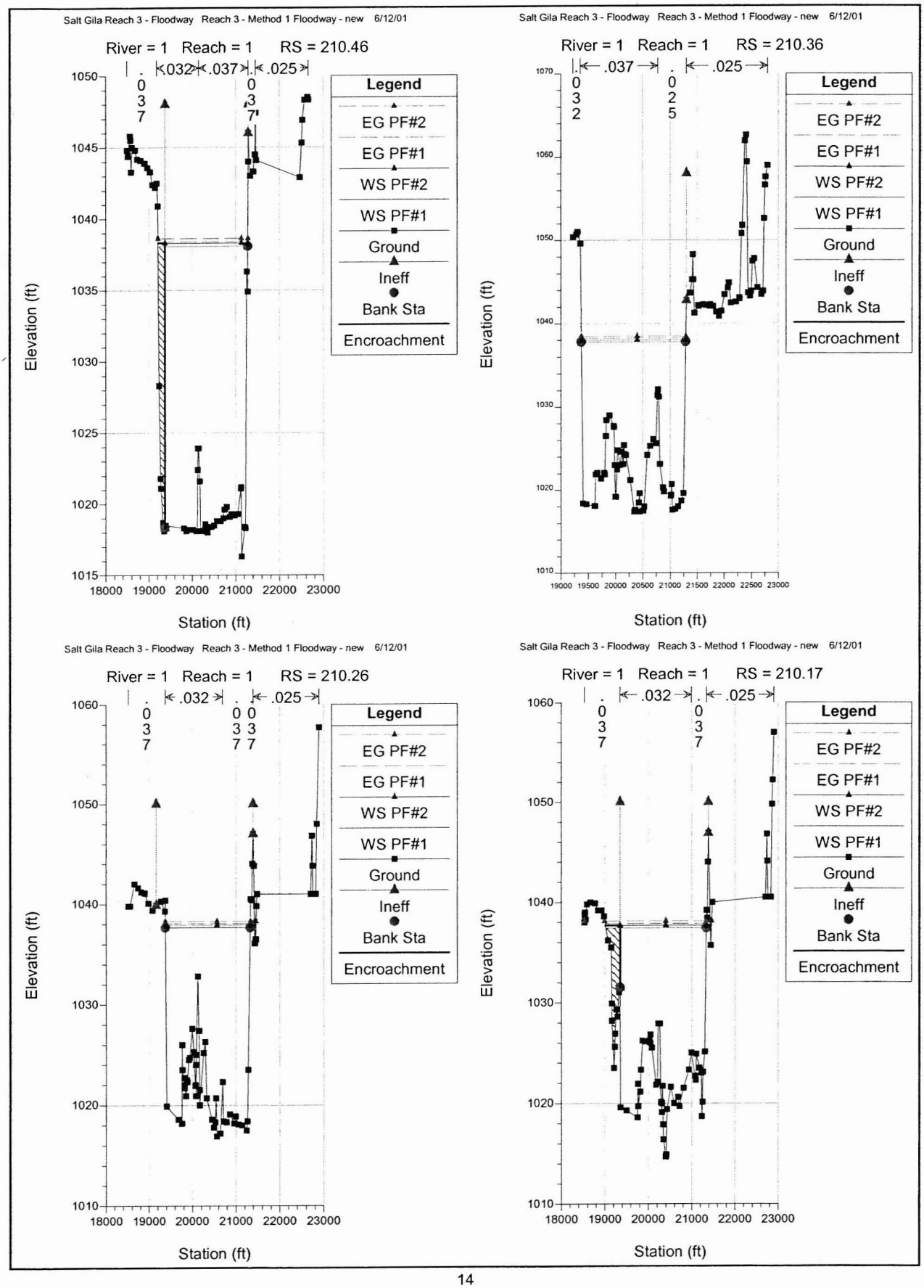

Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway - new 6/12/01
River = 1 Reach = 1 RS = 211.21
.032
.037
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)
Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway - new 6/12/01
River = 1 Reach = 1 RS = 211.12
.032
.037
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)
Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway - new 6/12/01
River = 1 Reach = 1 RS = 211.02
.032
.037
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)
Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway - new 6/12/01
River = 1 Reach = 1 RS = 210.93
.032
.037
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)

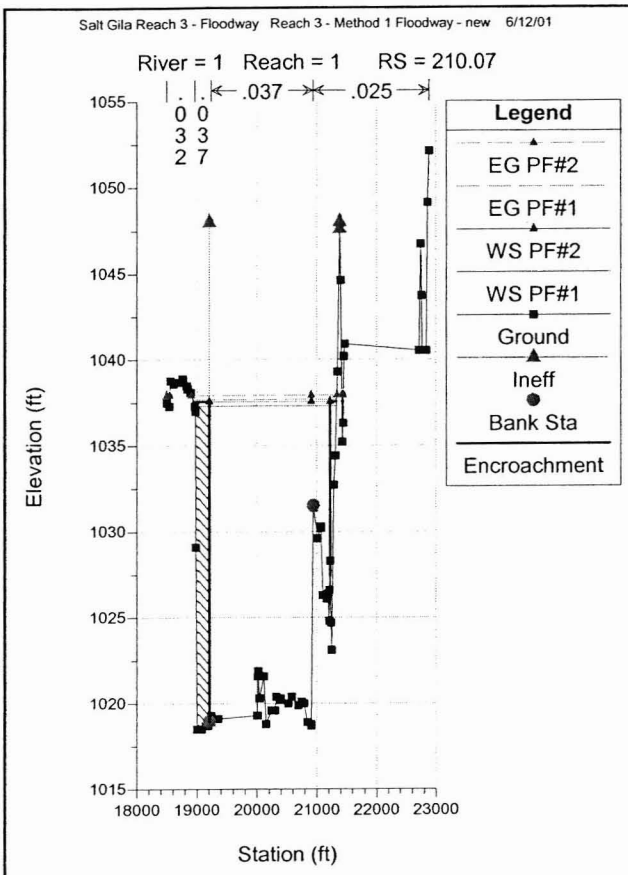

Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway - new 6/12/01
River = 1 Reach = 1 RS = 210.83
.032
.037
Legend
EG PF#2
EG PF#1
WS PF#1
WS PF#2
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)

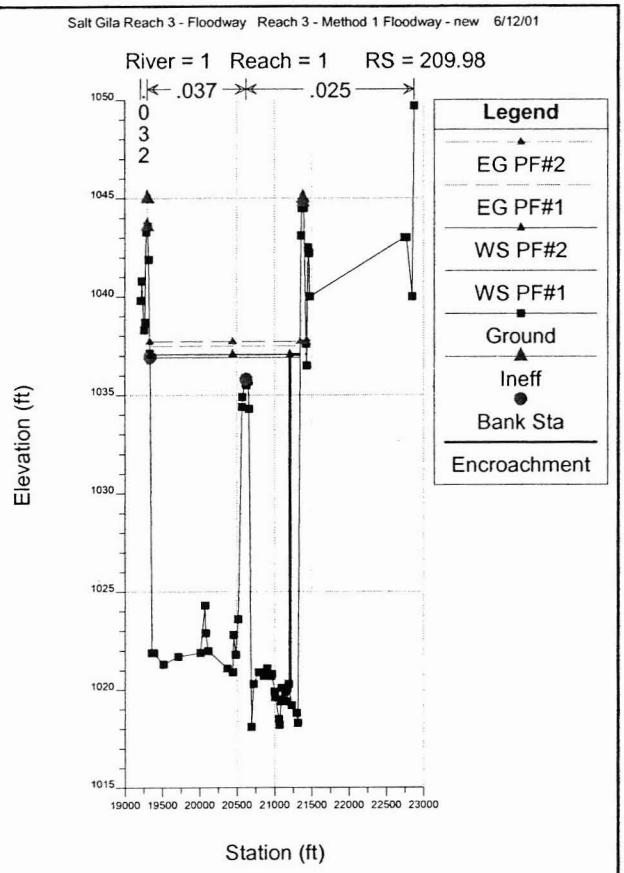

Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway - new 6/12/01
River = 1 Reach = 1 RS = 210.74
.032
.037
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)

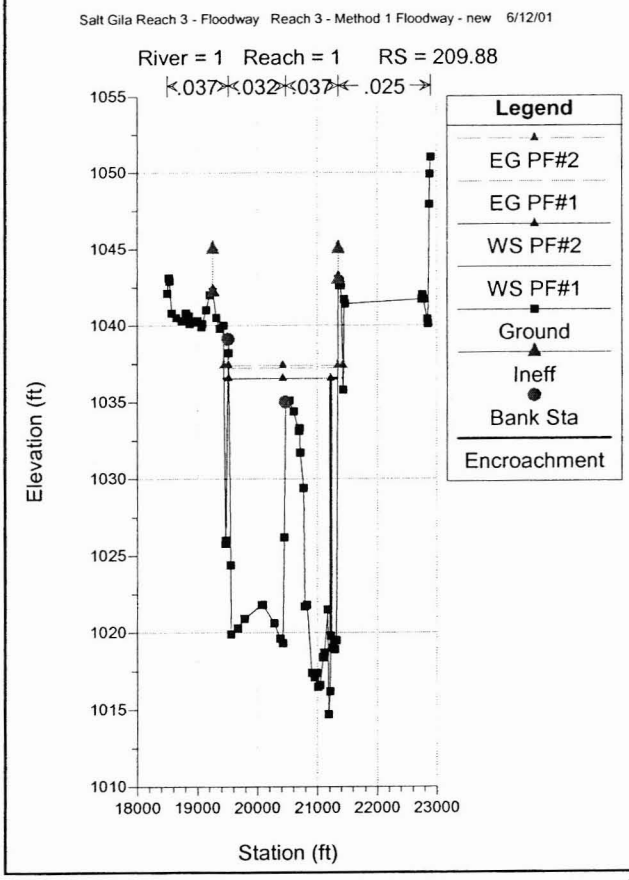

Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway - new 6/12/01
River = 1 Reach = 1 RS = 210.64
.032
.037
Legend
EG PF#2
EG PF#1
WS PF#1
WS PF#2
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)

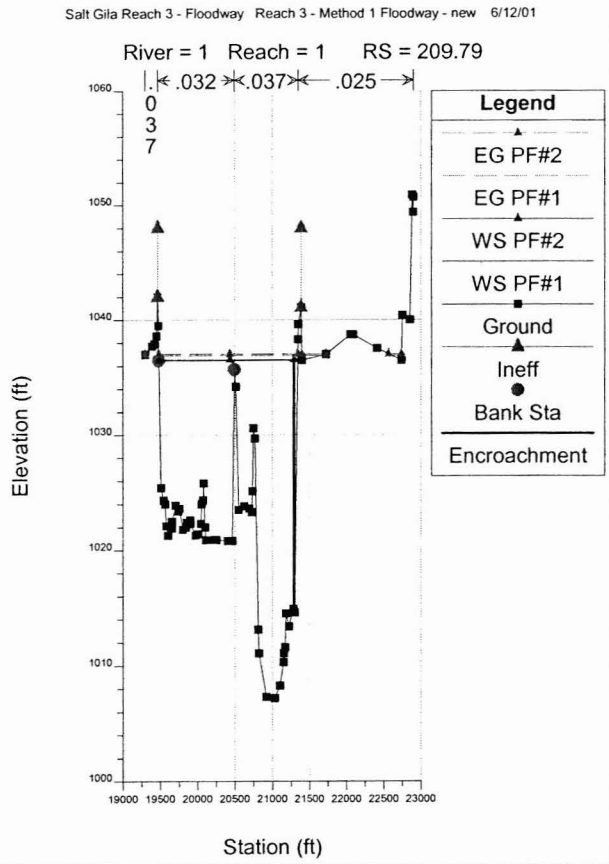

Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway - new 6/12/01
River = 1 Reach = 1 RS = 210.55
.032
.037
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)

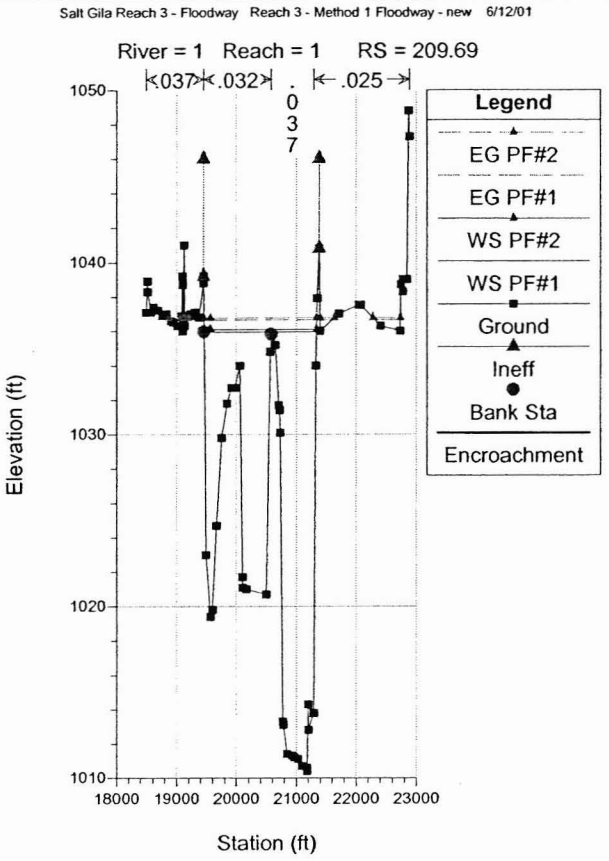

Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway - new 6/12/01
River = 1 Reach = 1 RS = 210.46
.032
.037
.025
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)
Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway - new 6/12/01
River = 1 Reach = 1 RS = 210.36
.037
.025
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)
Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway - new 6/12/01
River = 1 Reach = 1 RS = 210.26
.032
.025
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)
Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway - new 6/12/01
River = 1 Reach = 1 RS = 210.17
.032
.025
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)

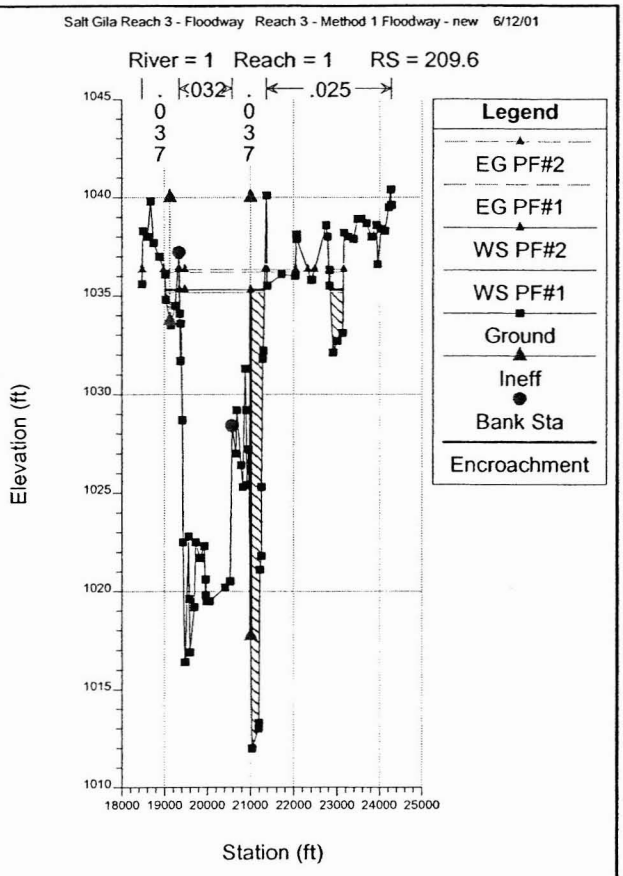

Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway - new 6/12/01
River = 1 Reach = 1 RS = 210.07
.037
.025
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)

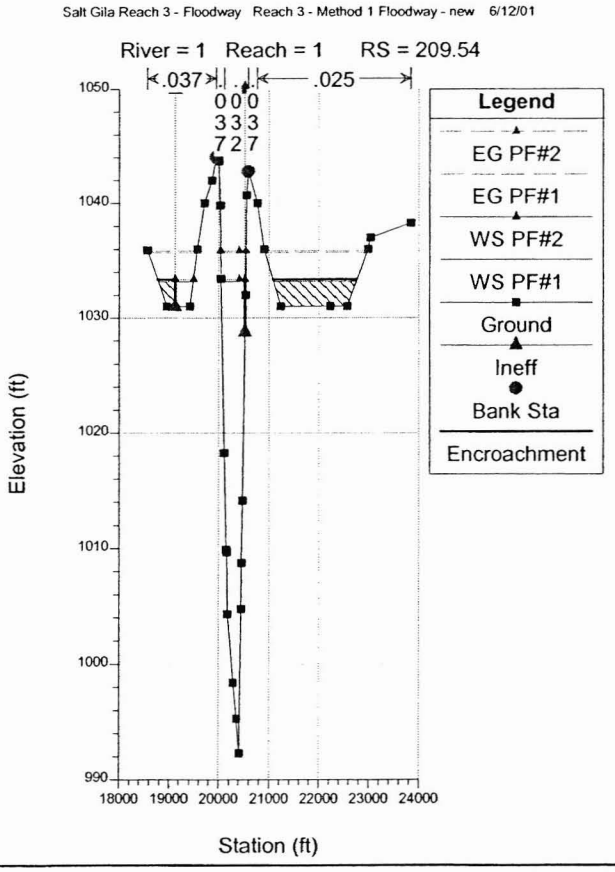

Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway - new 6/12/01
River = 1 Reach = 1 RS = 209.98
.037
.025
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)

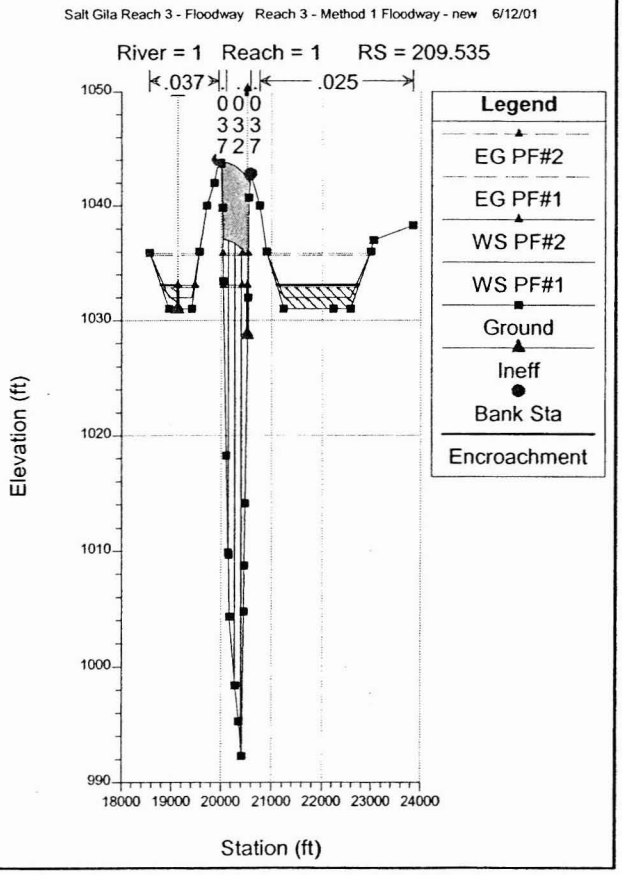

Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway - new 6/12/01
River = 1 Reach = 1 RS = 209.88
.037
.032
.037
.025
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)

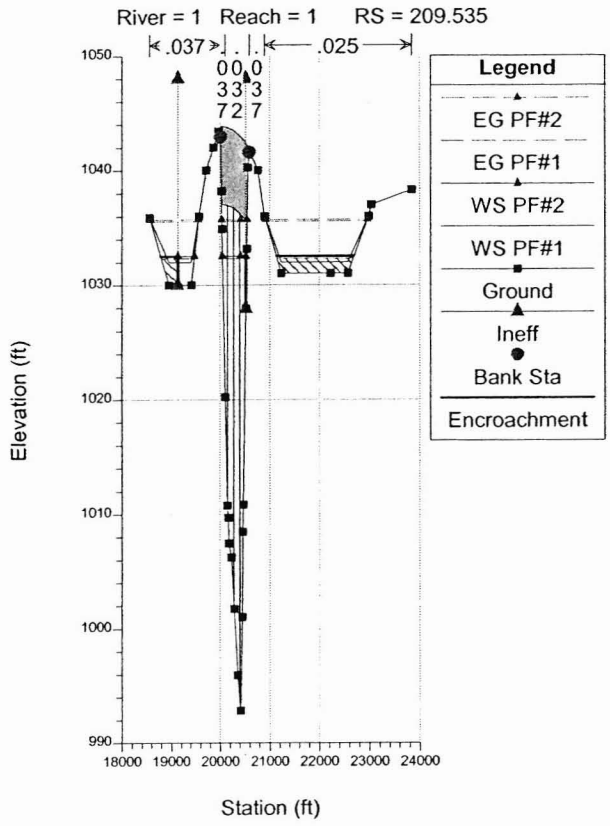

Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway - new 6/12/01
River = 1 Reach = 1 RS = 209.79
.032
.037
.025
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)

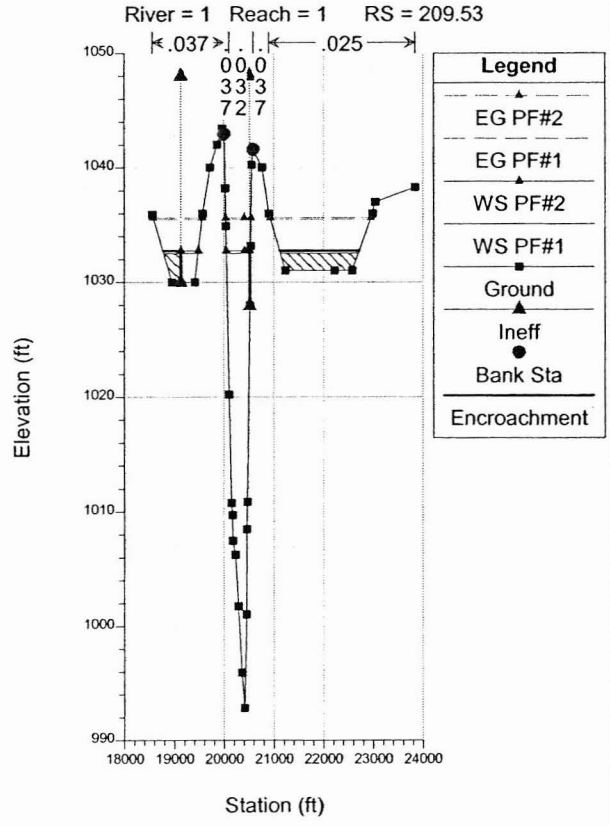

Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway - new 6/12/01
River = 1 Reach = 1 RS = 209.69
.037
.032
.025
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)

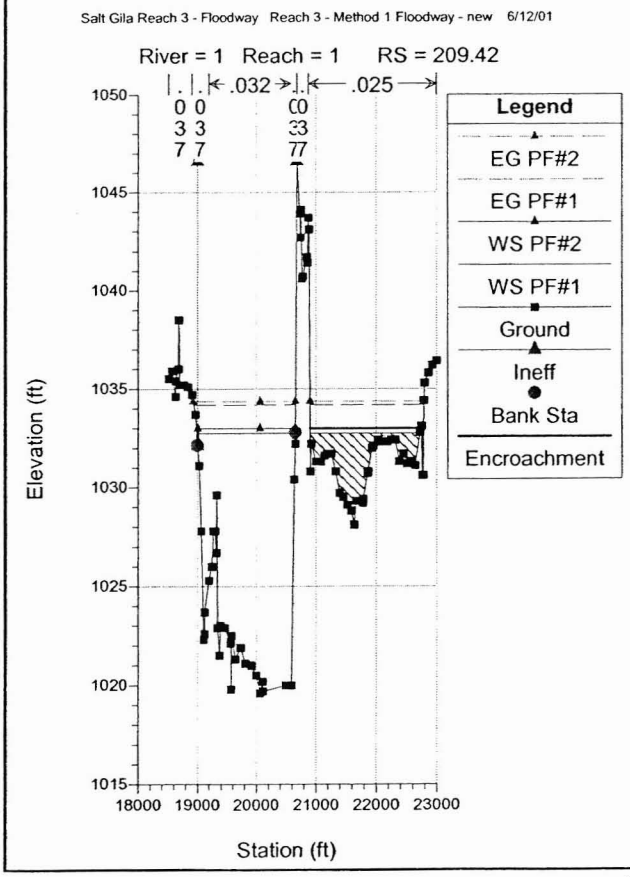

Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway - new 6/12/01
River = 1 Reach = 1 RS = 209.6
.032
.025
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)

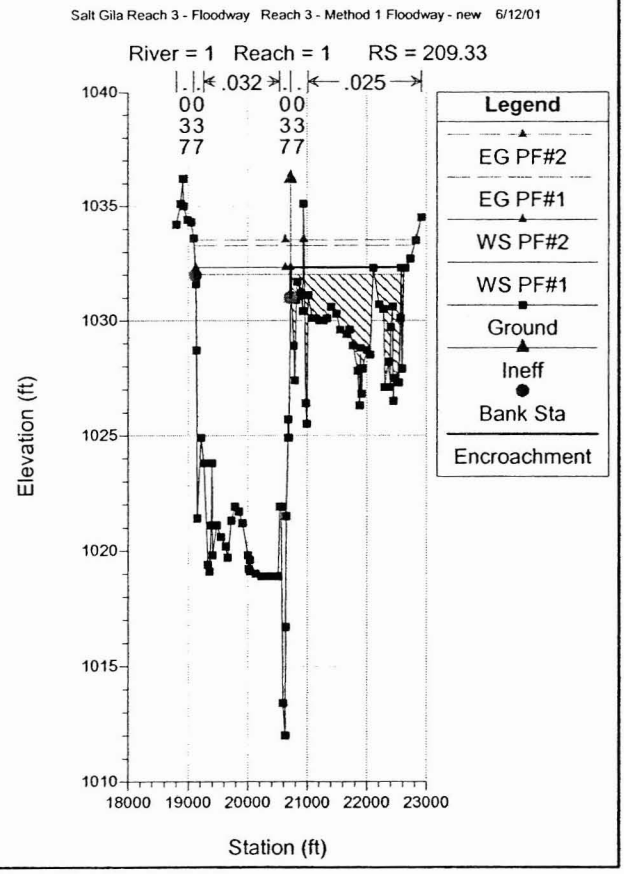

Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway - new 6/12/01
River = 1 Reach = 1 RS = 209.54
.037
.025
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)

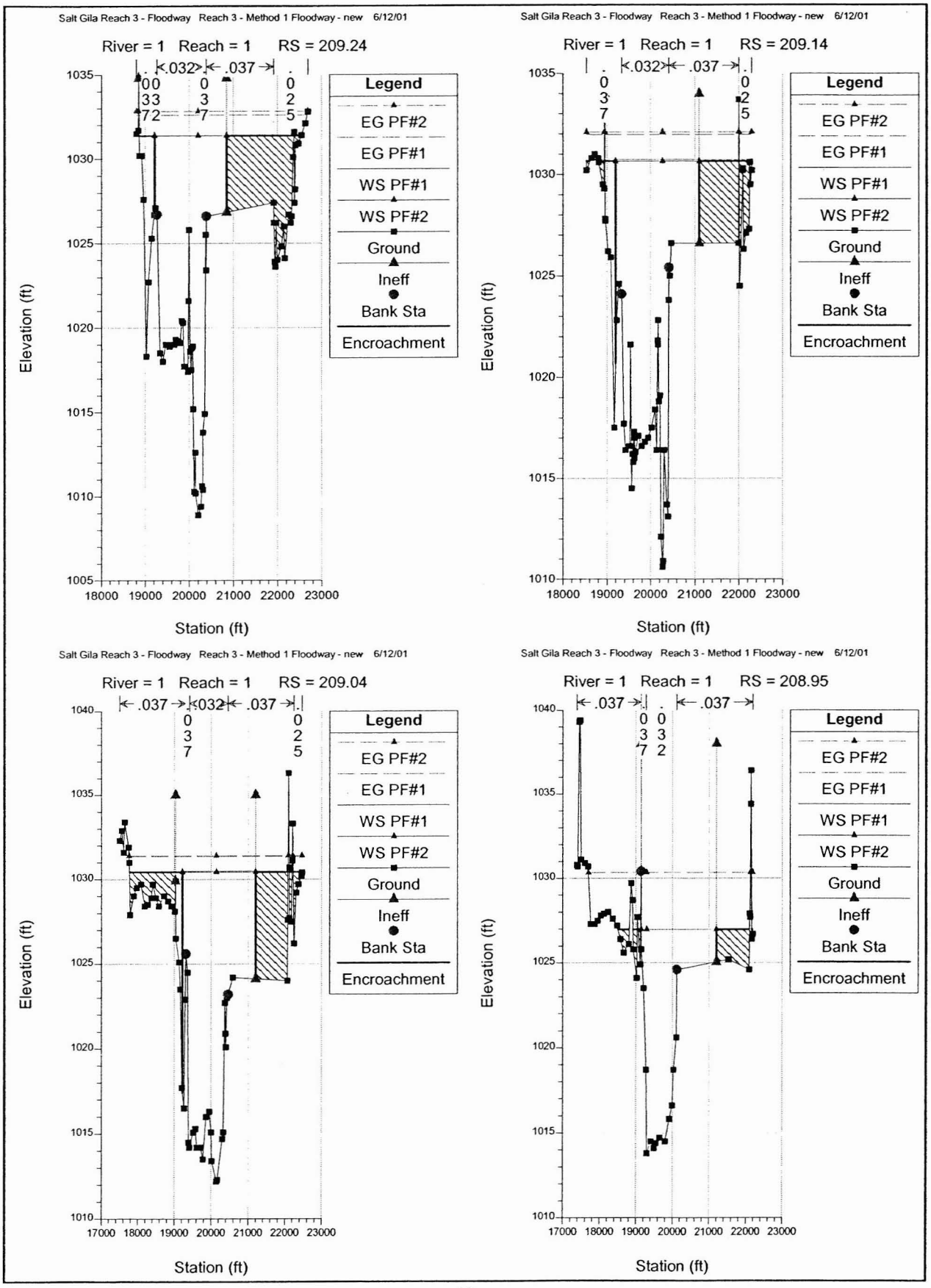

Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway - new 6/12/01
River = 1 Reach = 1 RS = 209.535
.037
.025
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)

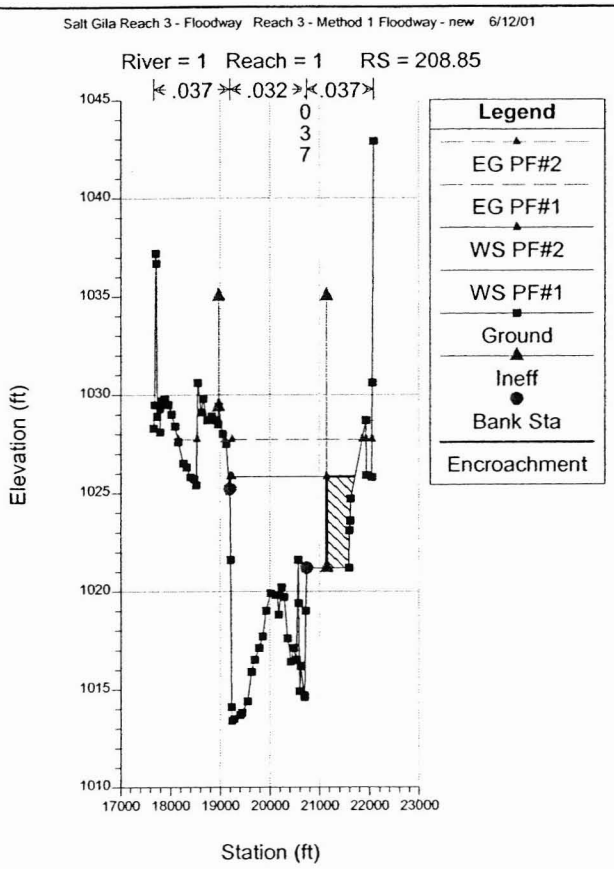

Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway - new 6/12/01
River = 1 Reach = 1 RS = 209.535
.037
.025
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)

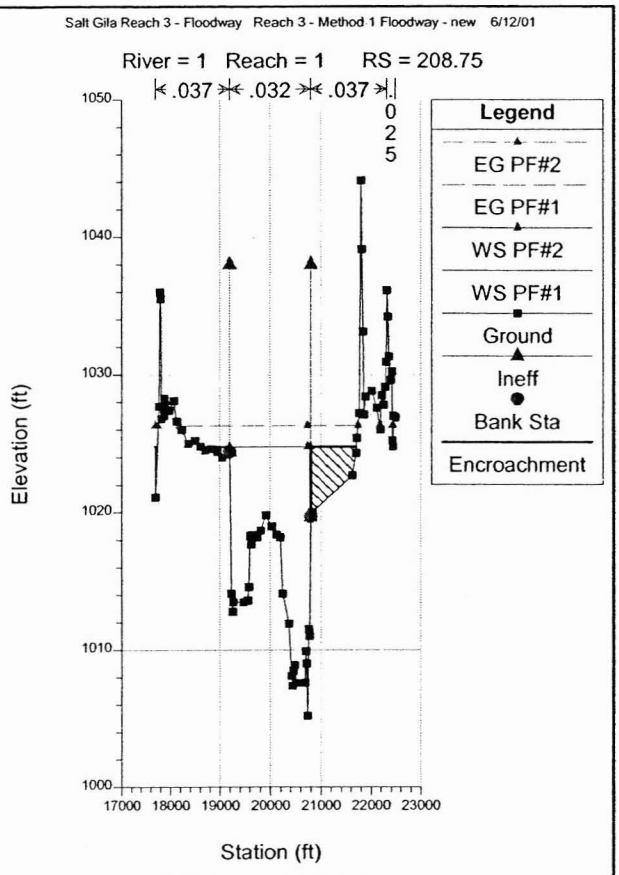

Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway - new 6/12/01
River = 1 Reach = 1 RS = 209.53
.037
.025
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)

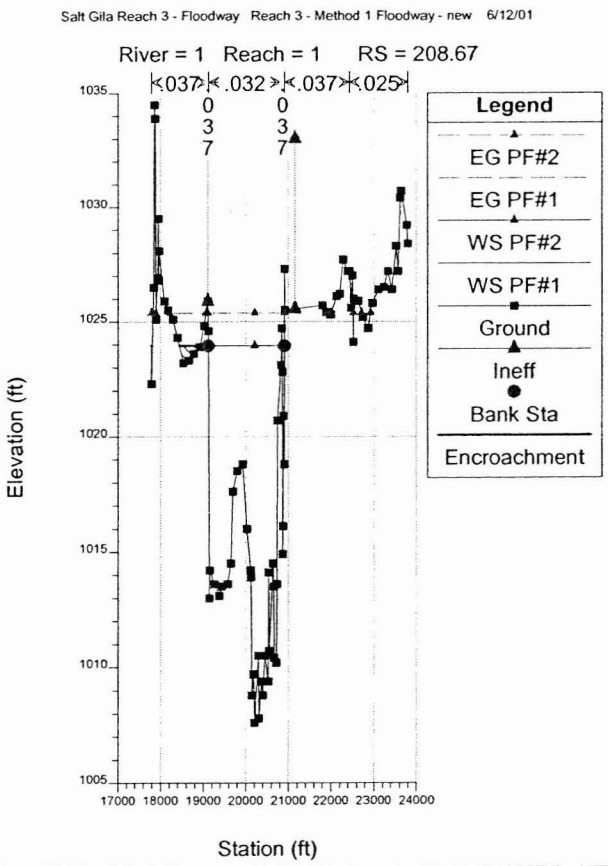

Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway - new 6/12/01
River = 1 Reach = 1 RS = 209.42
.032
.025
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)

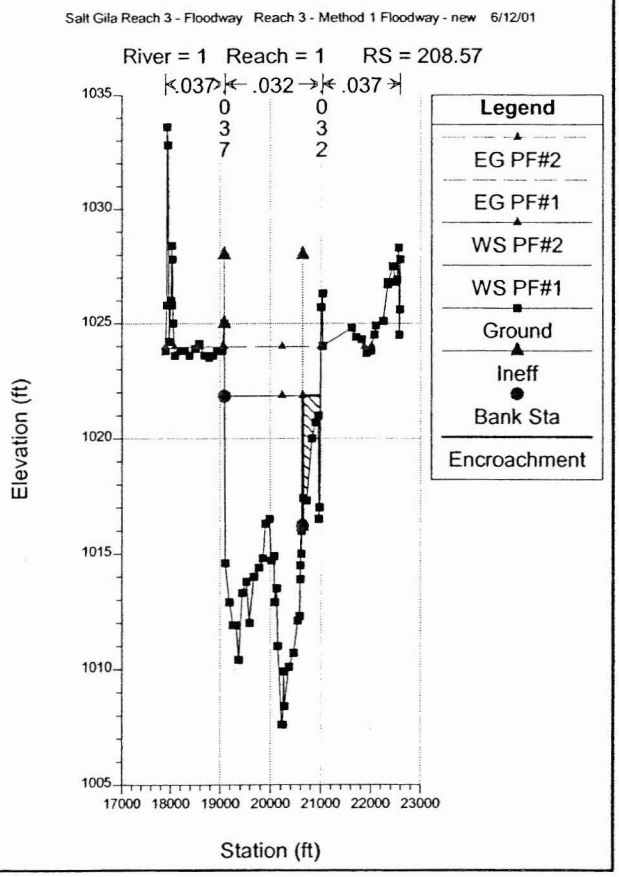

Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway - new 6/12/01
River = 1 Reach = 1 RS = 209.33
.032
.025
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)

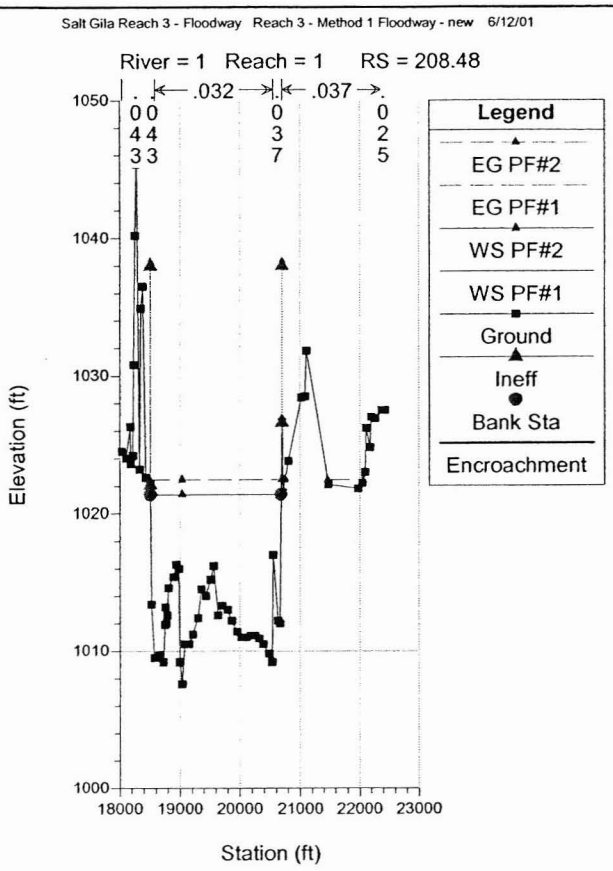

Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway - new 6/12/01
River = 1 Reach = 1 RS = 209.24
.032
.037
Legend
EG PF#2
EG PF#1
WS PF#1
WS PF#2
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)
Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway - new 6/12/01
River = 1 Reach = 1 RS = 209.14
.032
.037
Legend
EG PF#2
EG PF#1
WS PF#1
WS PF#2
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)
Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway - new 6/12/01
River = 1 Reach = 1 RS = 209.04
.037
.032
.037
Legend
EG PF#2
EG PF#1
WS PF#1
WS PF#2
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)
Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway - new 6/12/01
River = 1 Reach = 1 RS = 208.95
.037
.037
Legend
EG PF#2
EG PF#1
WS PF#1
WS PF#2
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)

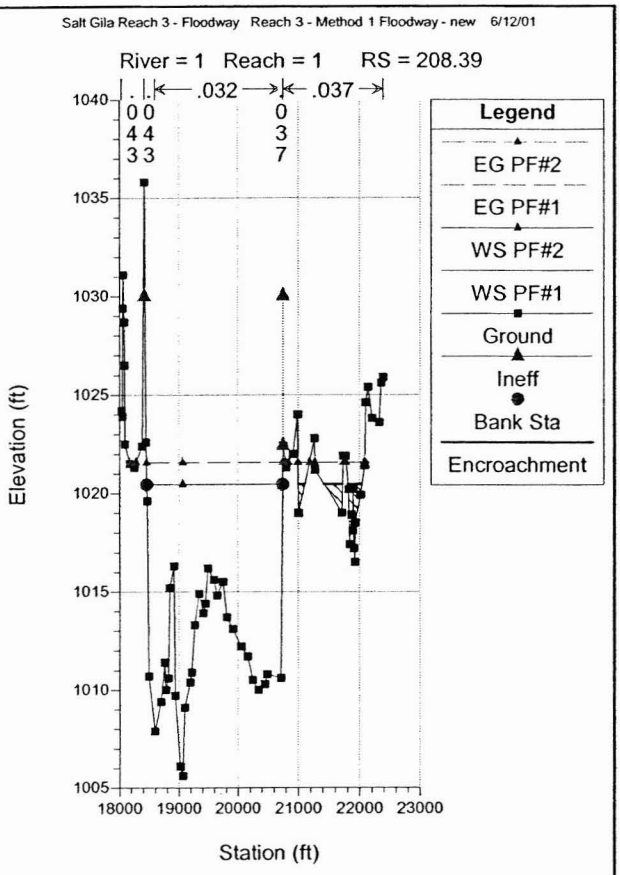

Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway - new 6/12/01
River = 1 Reach = 1 RS = 208.85
.037 .032 .037
0 3 7
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)

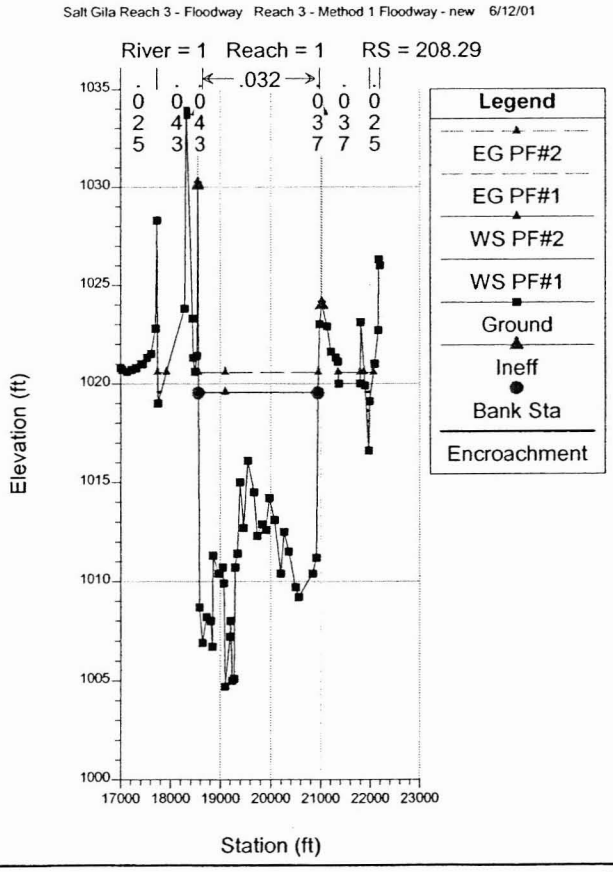

Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway - new 6/12/01
River = 1 Reach = 1 RS = 208.75
.037 .032 .037
0 2 5
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)

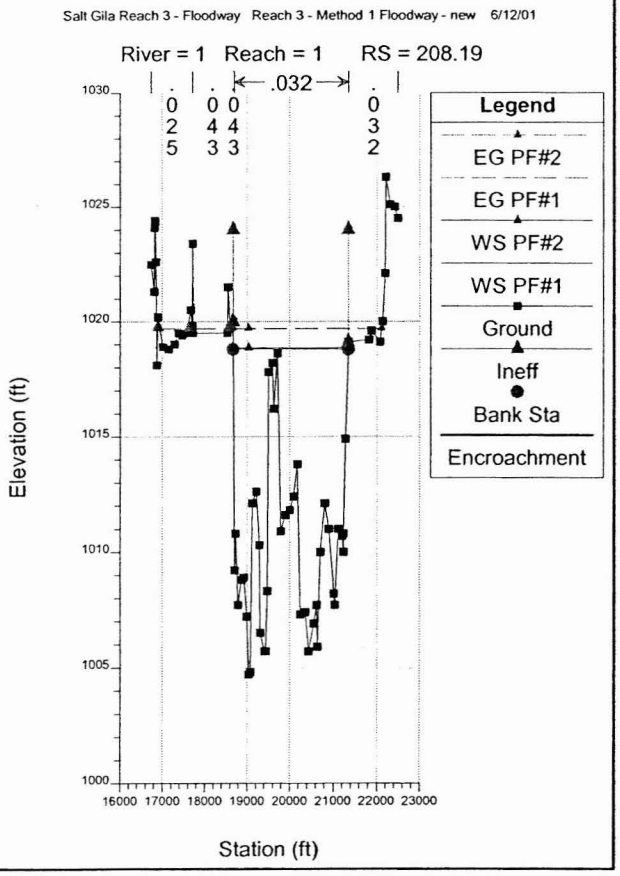

Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway - new 6/12/01
River = 1 Reach = 1 RS = 208.67
.037 .032 .037 .025
0 3 7
0 3 7
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)

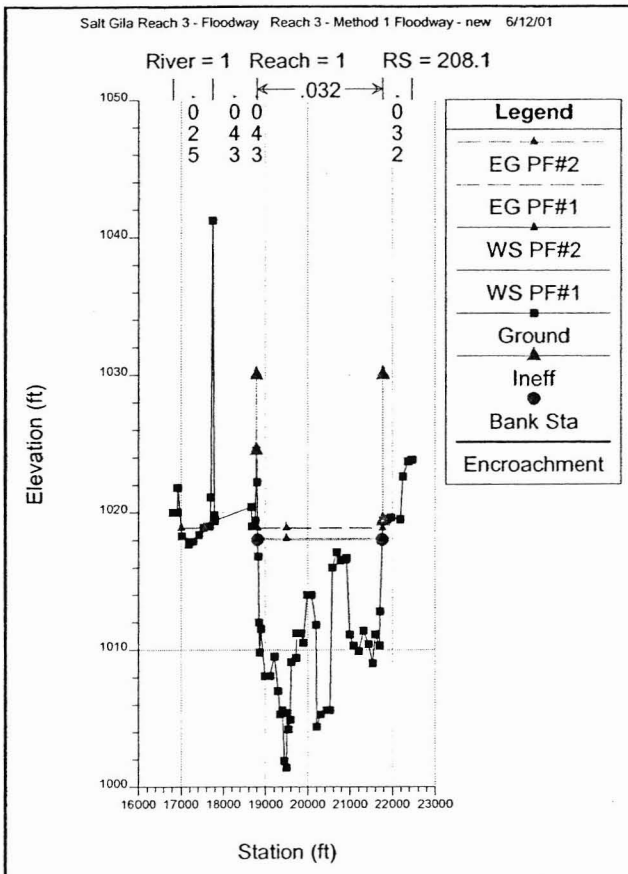

Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway - new 6/12/01
River = 1 Reach = 1 RS = 208.57
.037 .032 .037
0 3 7
0 3 2
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)

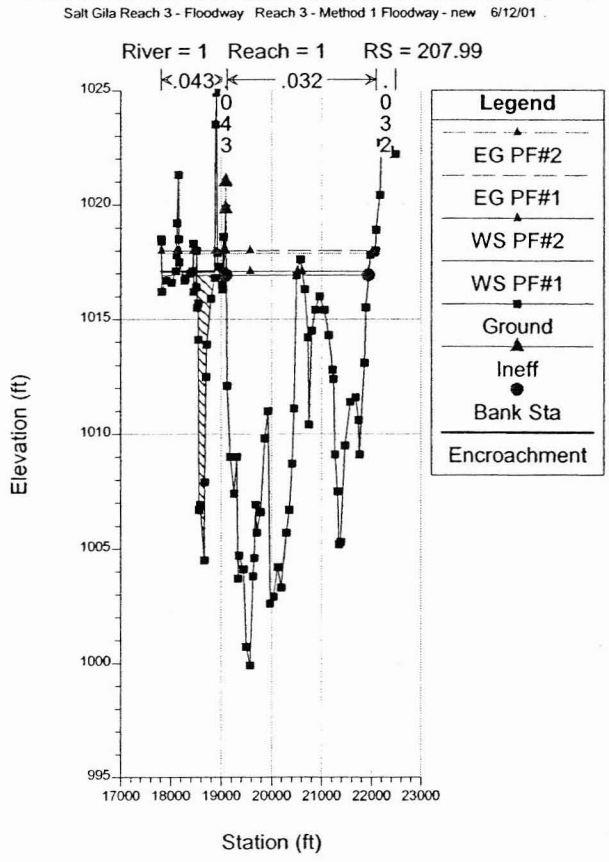

Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway - new 6/12/01
River = 1 Reach = 1 RS = 208.48
.032
.037
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)

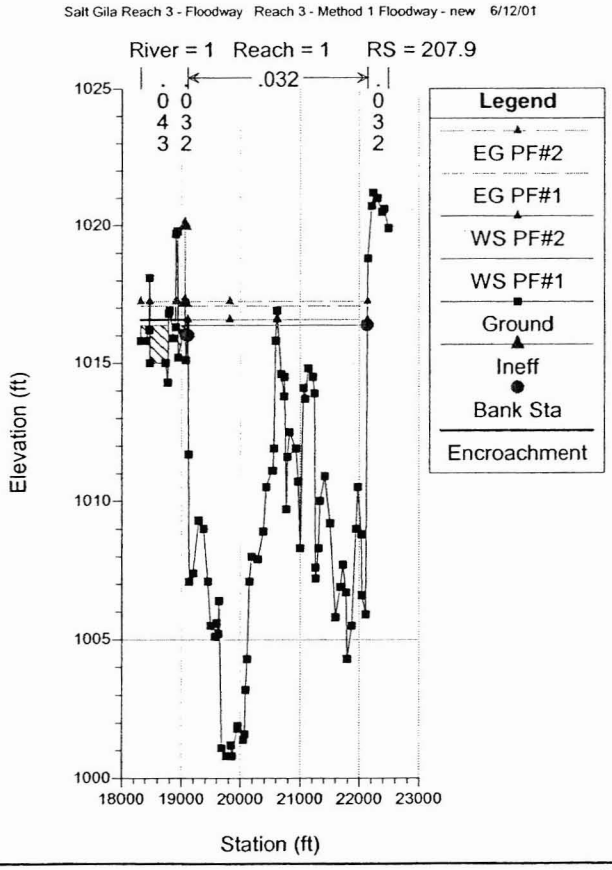

Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway - new 6/12/01
River = 1 Reach = 1 RS = 208.39
.032
.037
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)

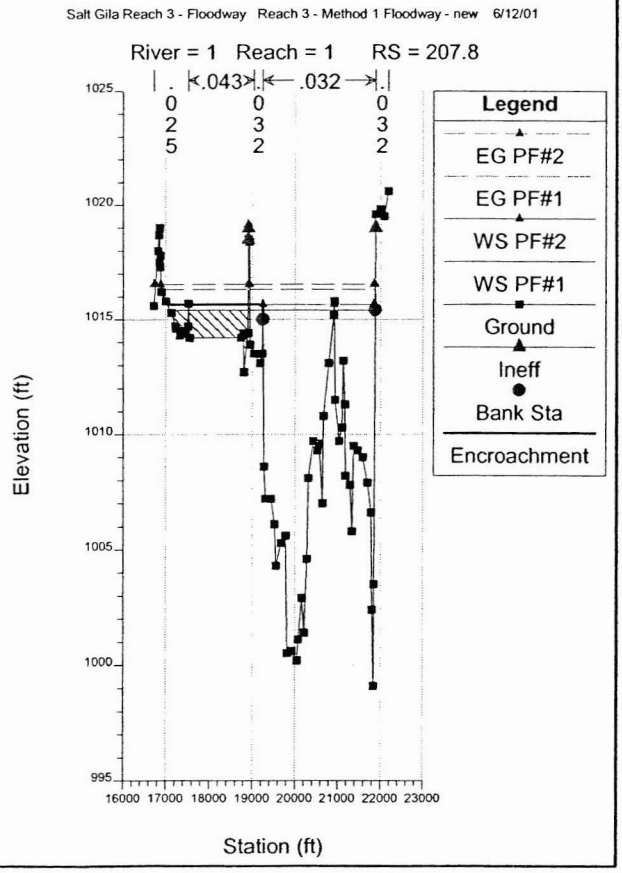

Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway - new 6/12/01
River = 1 Reach = 1 RS = 208.29
.032
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)

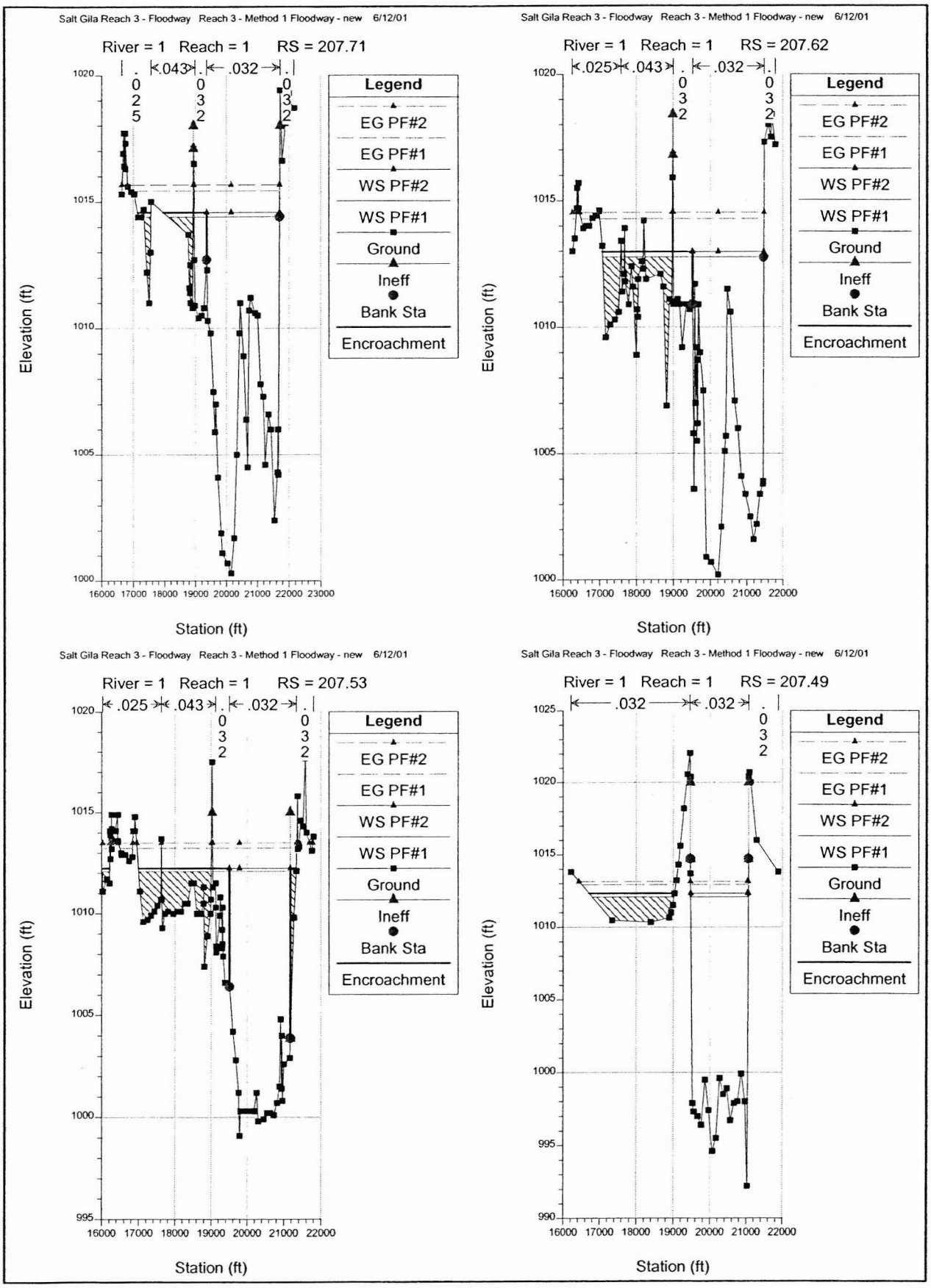

Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway - new 6/12/01
River = 1 Reach = 1 RS = 208.19
.032
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)

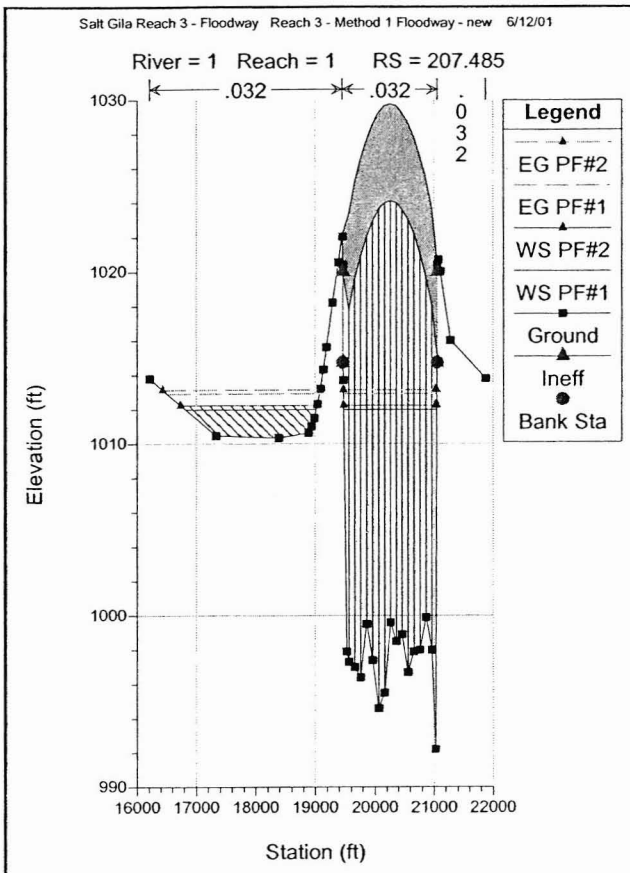

Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway - new 6/12/01
River = 1 Reach = 1 RS = 208.1
.032
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)

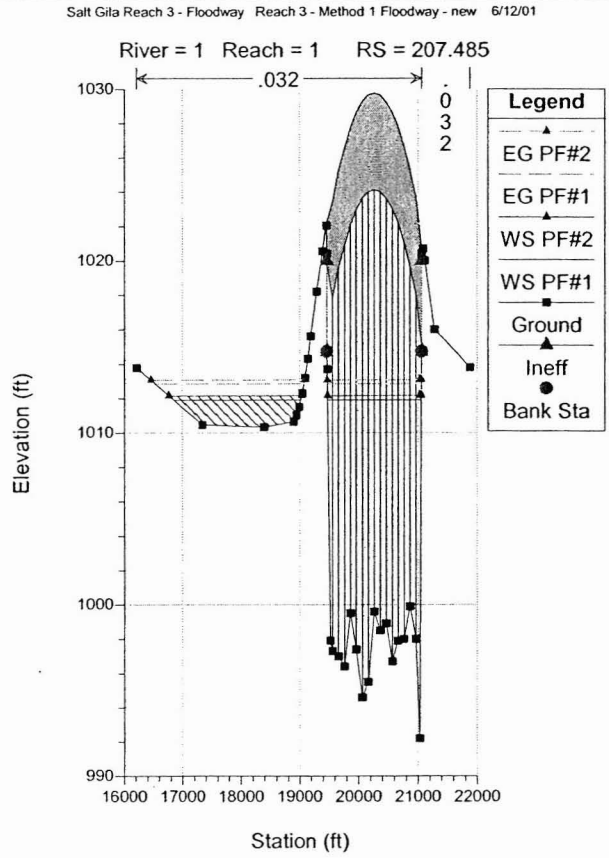

Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway - new 6/12/01
River = 1 Reach = 1 RS = 207.99
.043
.032
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)

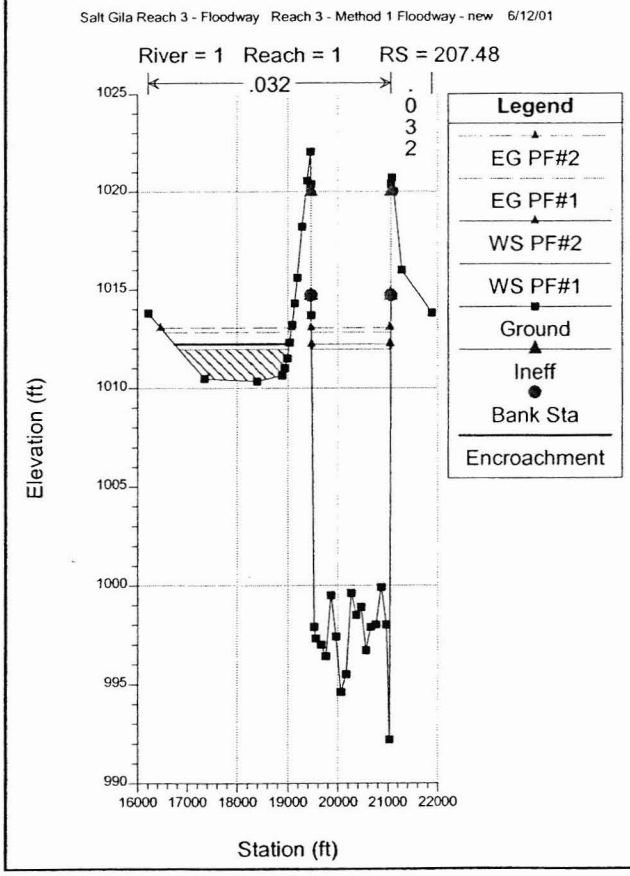

Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway - new 6/12/01
River = 1 Reach = 1 RS = 207.9
.032
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)

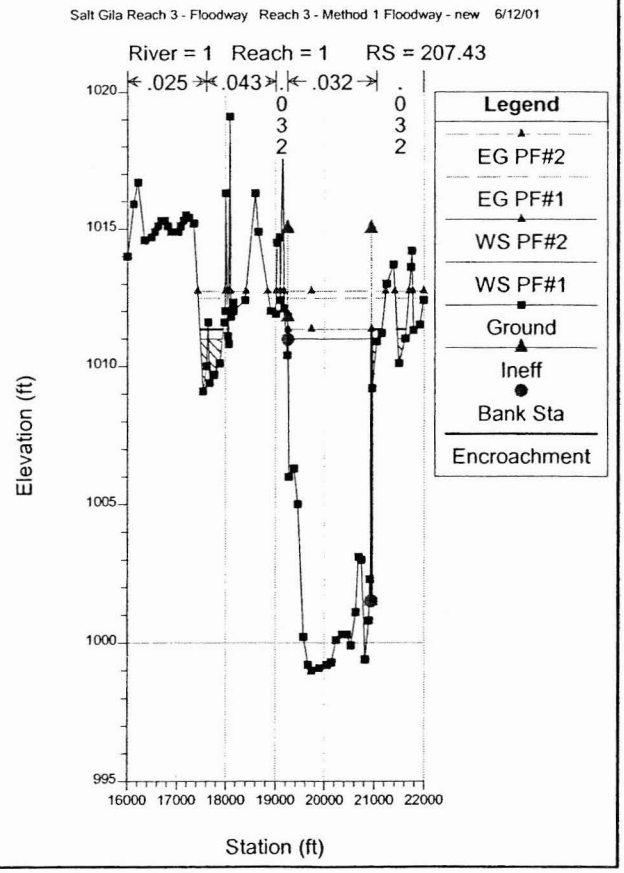

Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway - new 6/12/01
River = 1 Reach = 1 RS = 207.8
.043
.032
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)

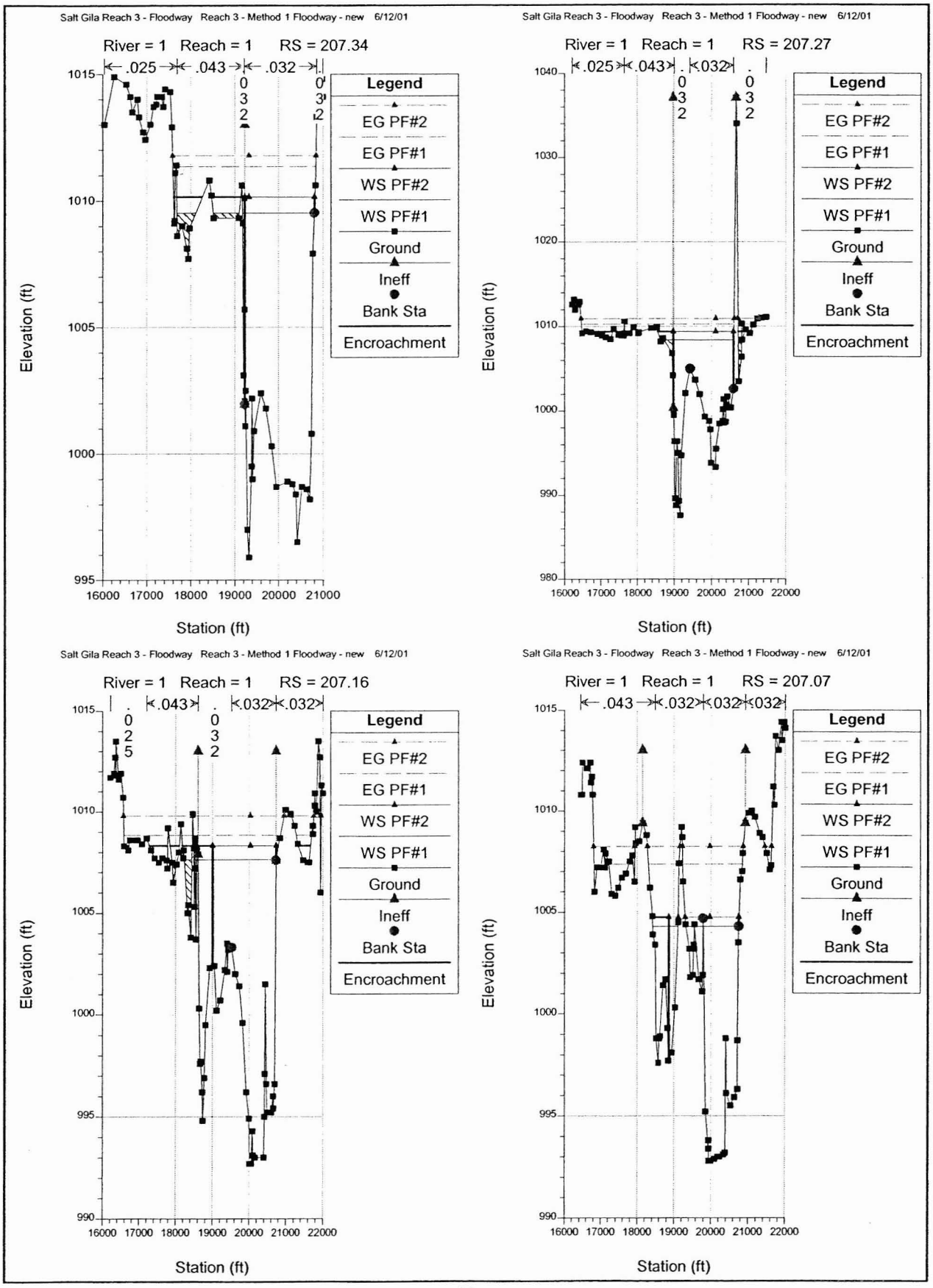

Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway - new 6/12/01
River = 1 Reach = 1 RS = 207.71
.025 .043 .032 .032
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)
Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway - new 6/12/01
River = 1 Reach = 1 RS = 207.62
.025 .043 .032 .032
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)
Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway - new 6/12/01
River = 1 Reach = 1 RS = 207.53
.025 .043 .032 .032
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)
Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway - new 6/12/01
River = 1 Reach = 1 RS = 207.49
.032 .032
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)

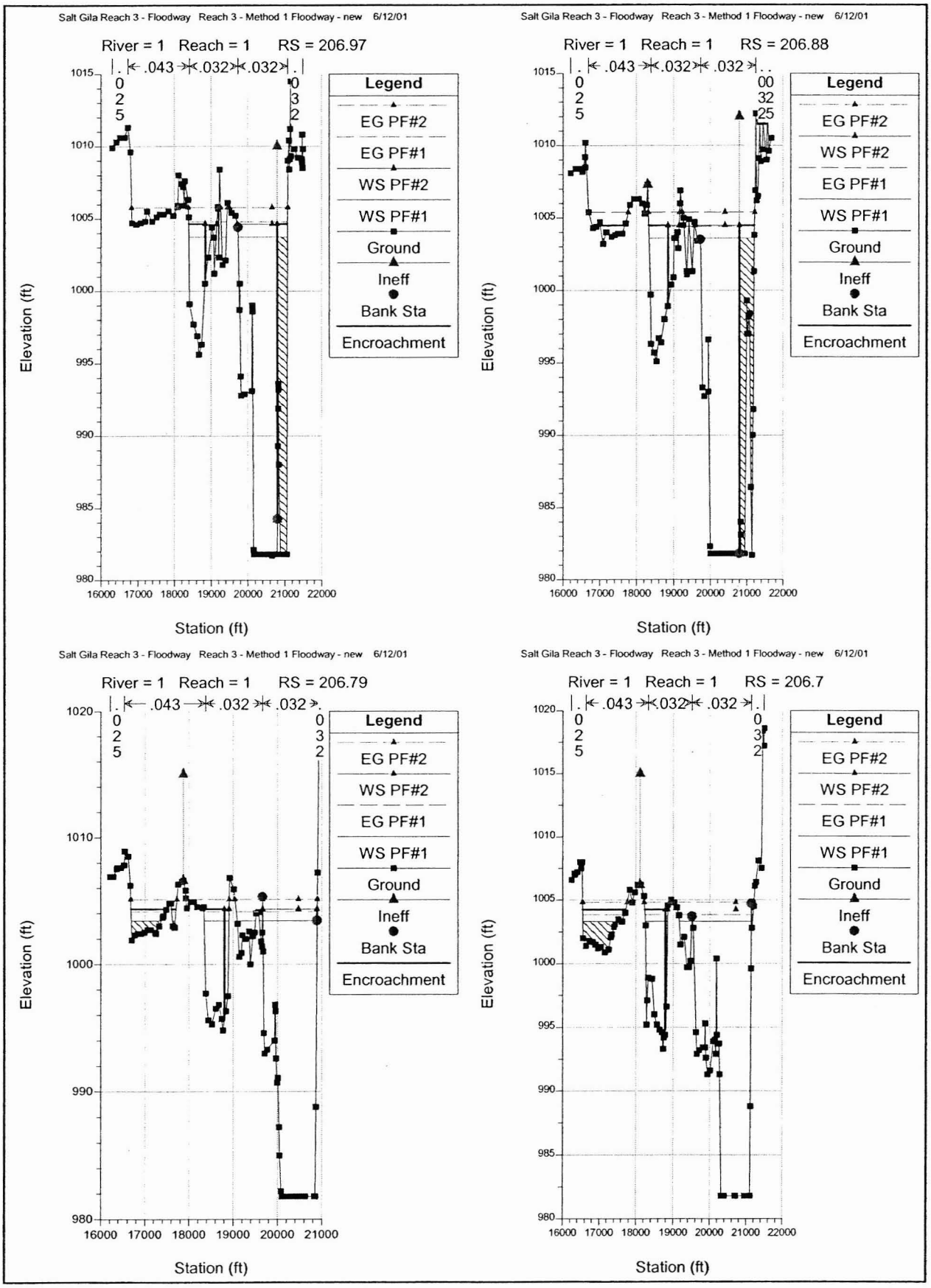

Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway - new 6/12/01
River = 1 Reach = 1 RS = 207.485
.032
.032
.032
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Elevation (ft)
Station (ft)

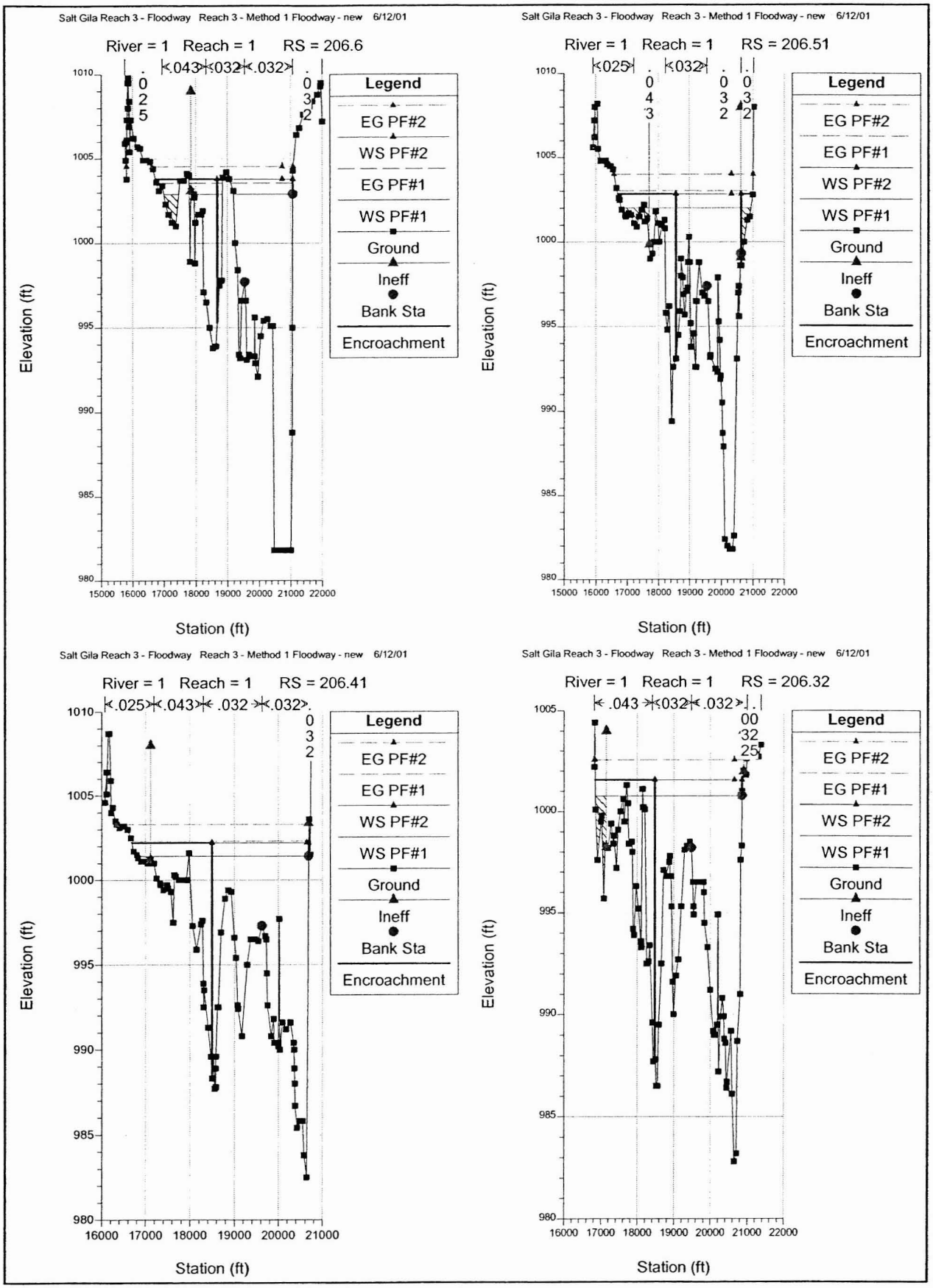

Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway - new 6/12/01
River = 1 Reach = 1 RS = 207.485
.032
.032
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Elevation (ft)
Station (ft)

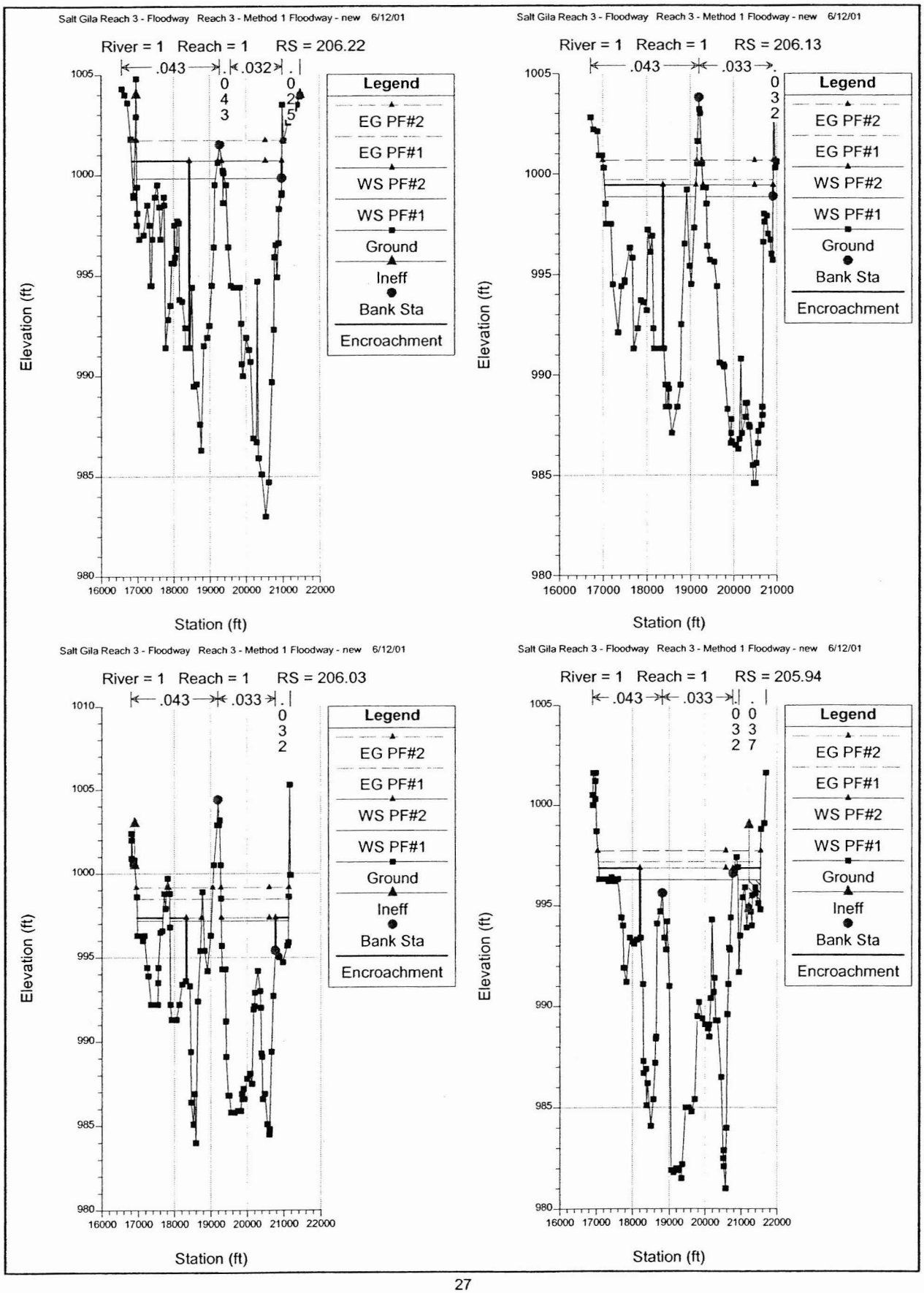

Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway - new 6/12/01
River = 1 Reach = 1 RS = 207.48
.032
.032
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)

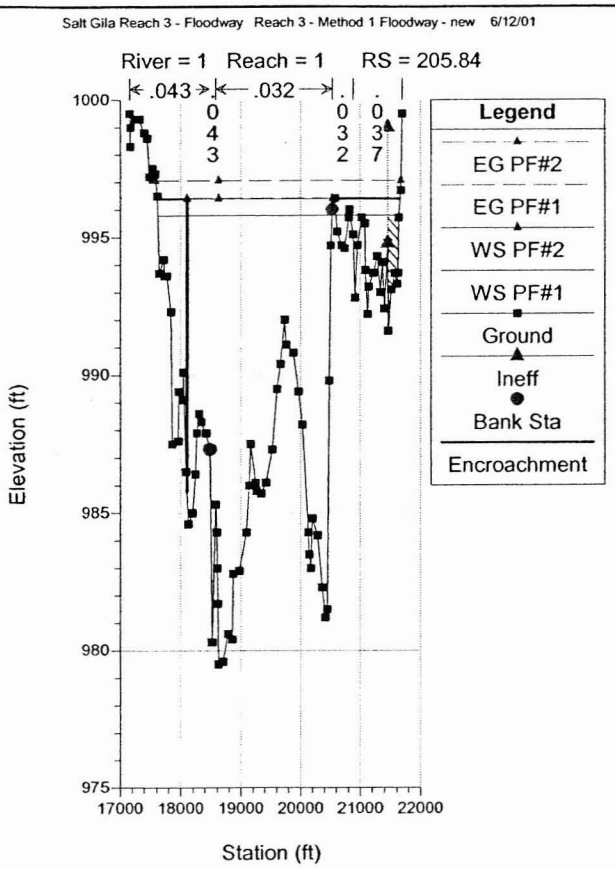

Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway - new 6/12/01
River = 1 Reach = 1 RS = 207.43
.025
.043
.032
.032
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)

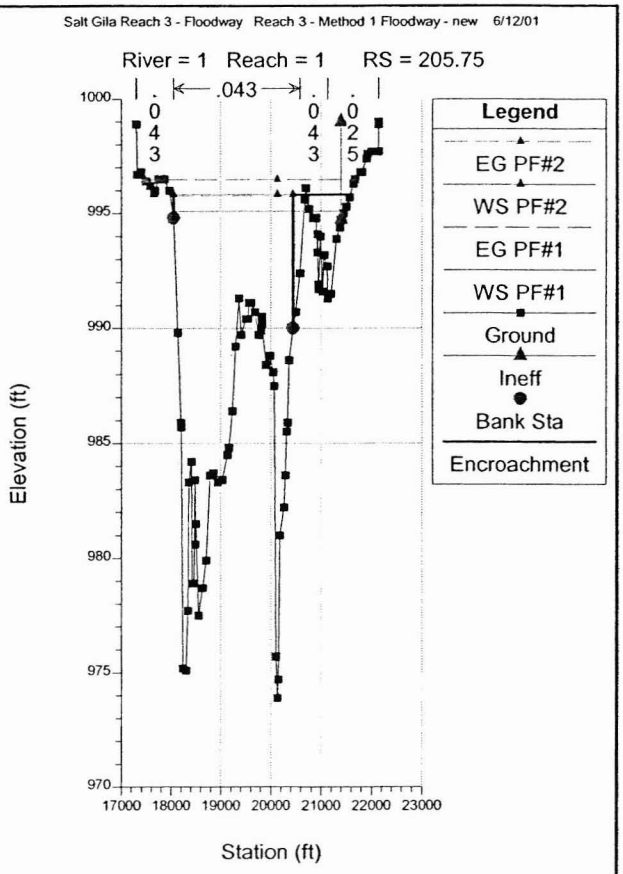

Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway - new 6/12/01
River = 1 Reach = 1 RS = 207.34
.025 .043 .032
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)
Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway - new 6/12/01
River = 1 Reach = 1 RS = 207.27
.025 .043 .032
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)
Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway - new 6/12/01
River = 1 Reach = 1 RS = 207.16
.025 .043 .032 .032 .032
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)
Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway - new 6/12/01
River = 1 Reach = 1 RS = 207.07
.043 .032 .032 .032
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)

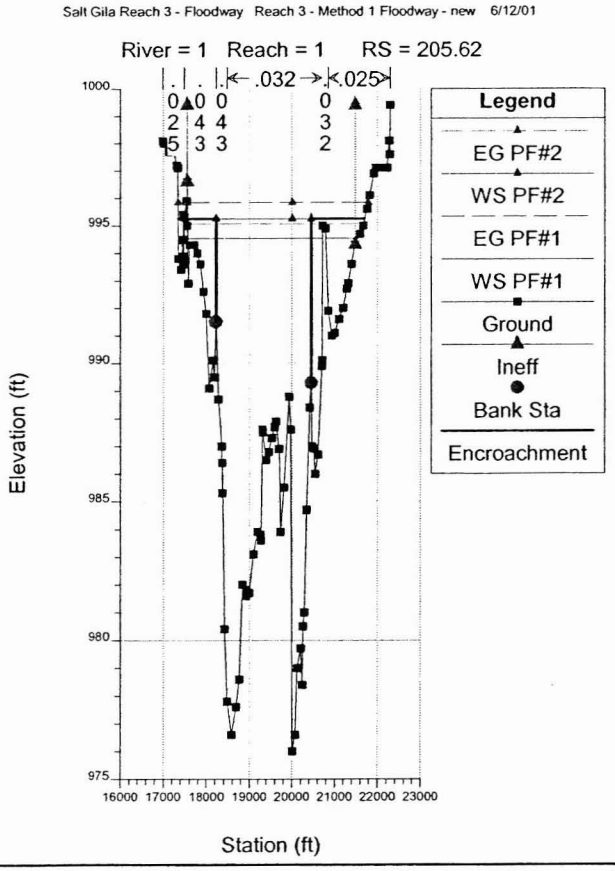

Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway - new 6/12/01
River = 1 Reach = 1 RS = 206.97
River = 1 Reach = 1 RS = 206.88
River = 1 Reach = 1 RS = 206.79
River = 1 Reach = 1 RS = 206.7
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)

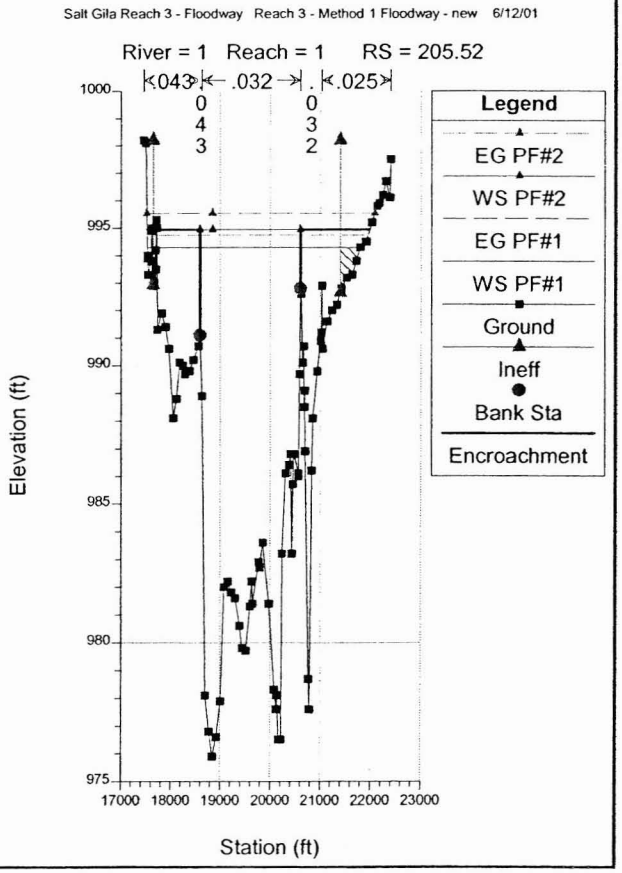

Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway - new 6/12/01
River = 1 Reach = 1 RS = 206.6
Legend
EG PF#2
WS PF#2
EG PF#1
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)
Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway - new 6/12/01
River = 1 Reach = 1 RS = 206.51
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)
Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway - new 6/12/01
River = 1 Reach = 1 RS = 206.41
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)
Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway - new 6/12/01
River = 1 Reach = 1 RS = 206.32
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)

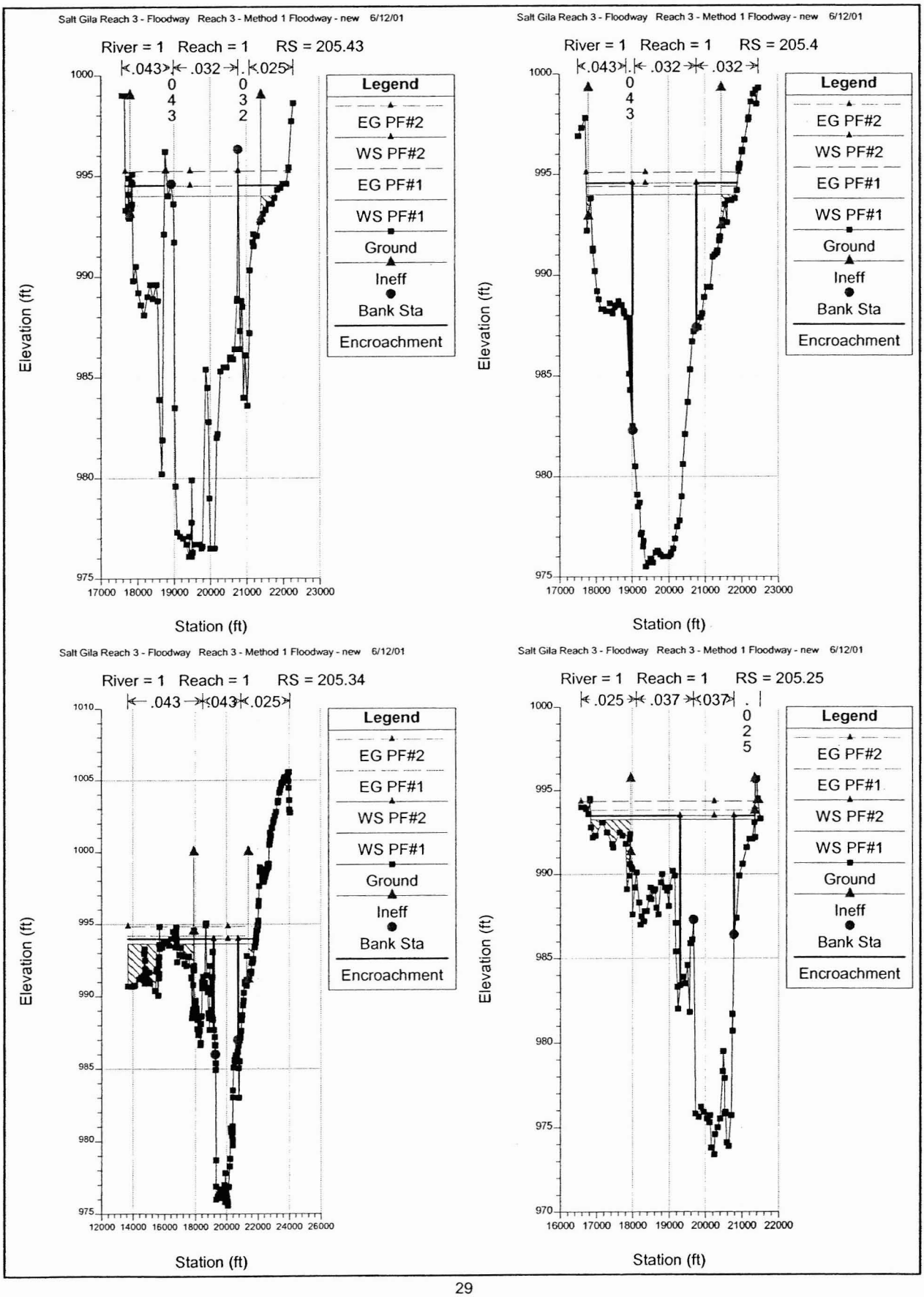

Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway - new 6/12/01
River = 1 Reach = 1 RS = 206.22
.043
.032
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)
Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway - new 6/12/01
River = 1 Reach = 1 RS = 206.13
.043
.033
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Bank Sta
Encroachment
Elevation (ft)
Station (ft)
Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway - new 6/12/01
River = 1 Reach = 1 RS = 206.03
.043
.033
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)
Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway - new 6/12/01
River = 1 Reach = 1 RS = 205.94
.043
.033
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)

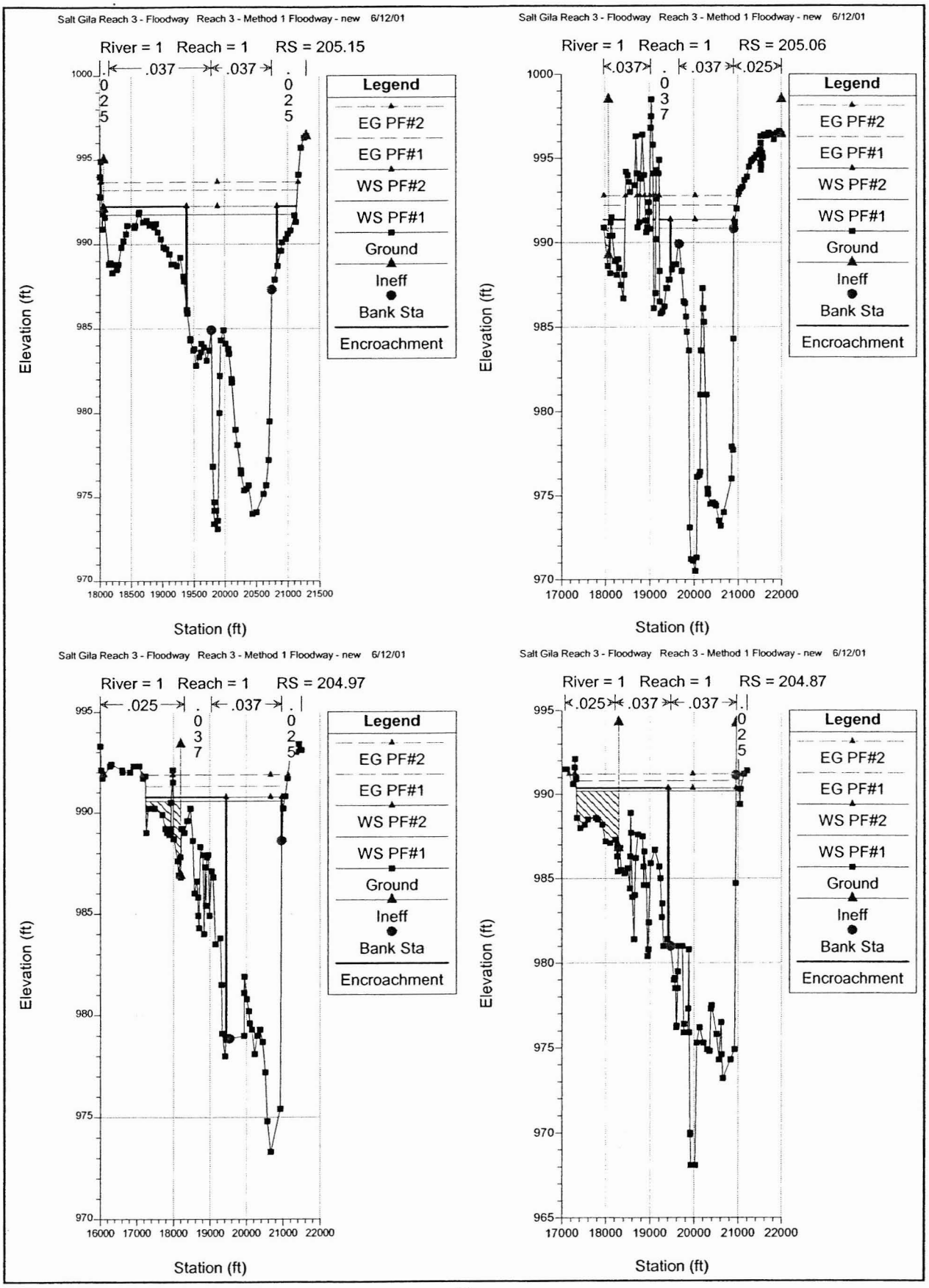

Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway - new 6/12/01
River = 1 Reach = 1 RS = 205.84
.043
.032
0 4 3
0 3 2
0 3 7
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)

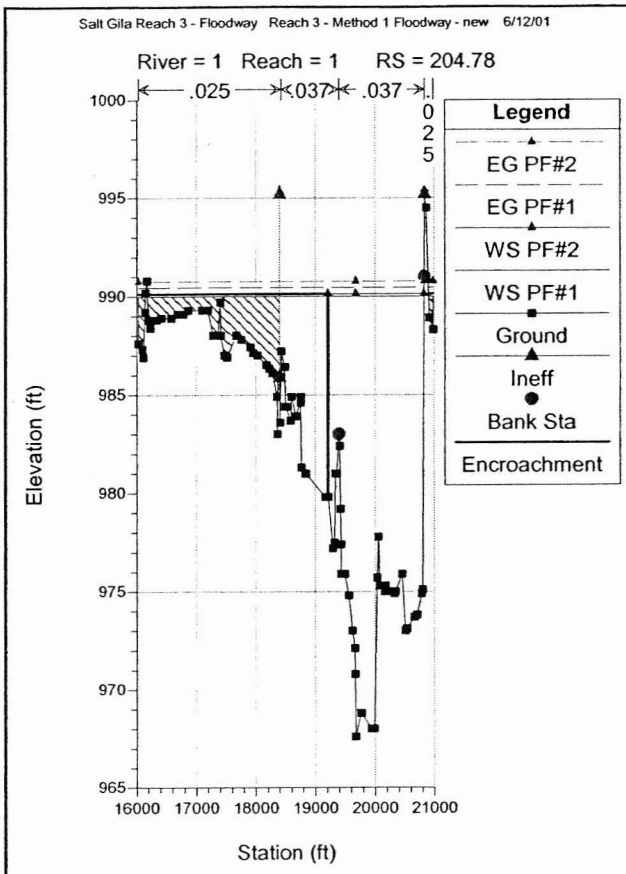

Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway - new 6/12/01
River = 1 Reach = 1 RS = 205.75
.043
0 4 3
0 4 3
0 2 5
Legend
EG PF#2
WS PF#2
EG PF#1
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)

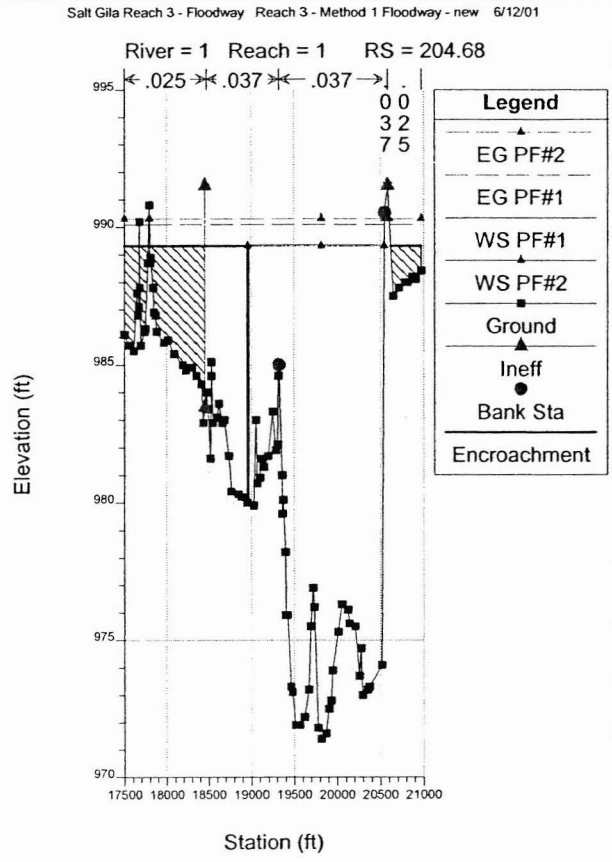

Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway - new 6/12/01
River = 1 Reach = 1 RS = 205.62
.032
.025
0 2 5
0 4 3
0 4 3
0 3 2
Legend
EG PF#2
WS PF#2
EG PF#1
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)

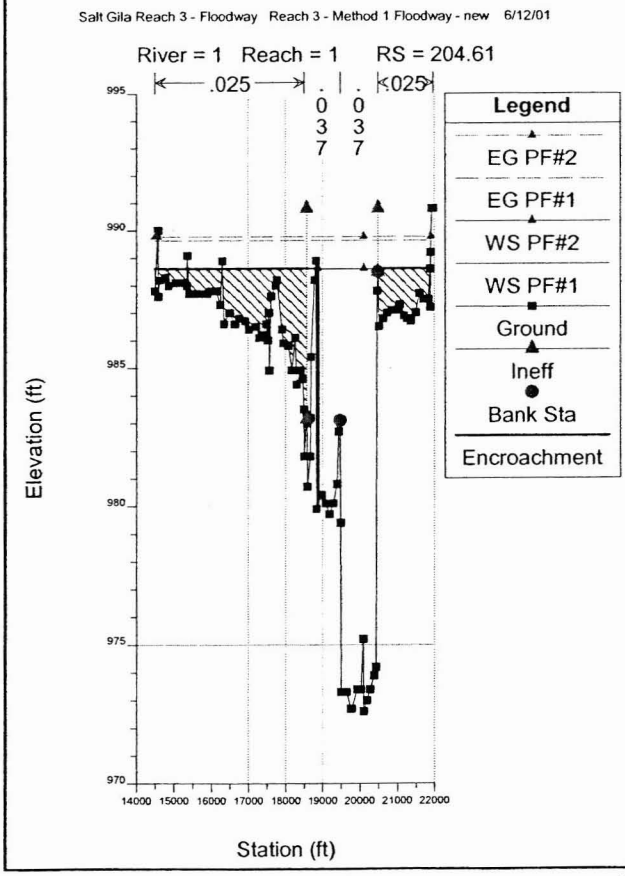

Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway - new 6/12/01
River = 1 Reach = 1 RS = 205.52
.043
.032
.025
0 4 3
0 3 2
Legend
EG PF#2
WS PF#2
EG PF#1
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)

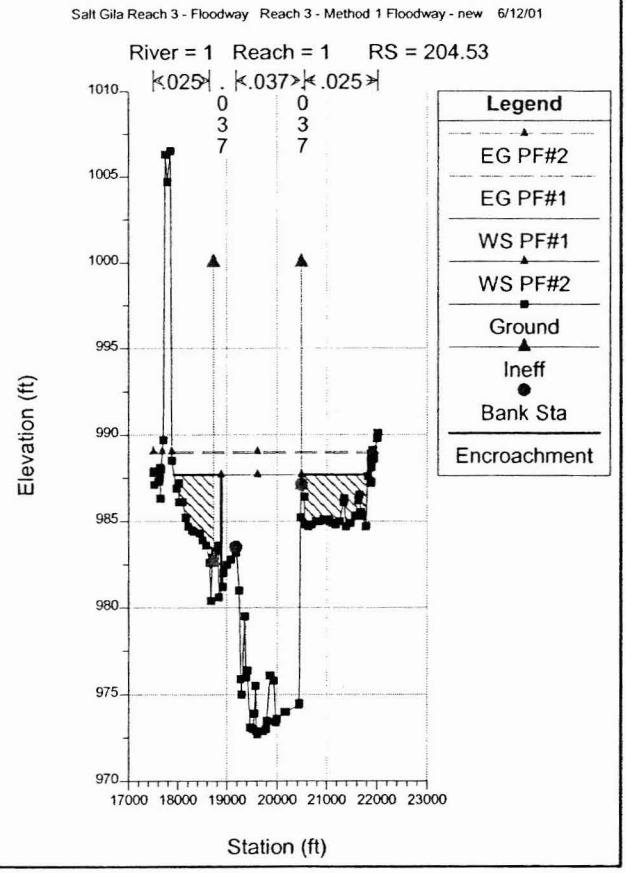

Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway - new 6/12/01
River = 1 Reach = 1 RS = 205.43
.043 .032 .025
Legend
EG PF#2
WS PF#2
EG PF#1
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)
Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway - new 6/12/01
River = 1 Reach = 1 RS = 205.4
.043 .032 .032
Legend
EG PF#2
WS PF#2
EG PF#1
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)
Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway - new 6/12/01
River = 1 Reach = 1 RS = 205.34
.043 .043 .025
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)
Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway - new 6/12/01
River = 1 Reach = 1 RS = 205.25
.025 .037 .037
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)

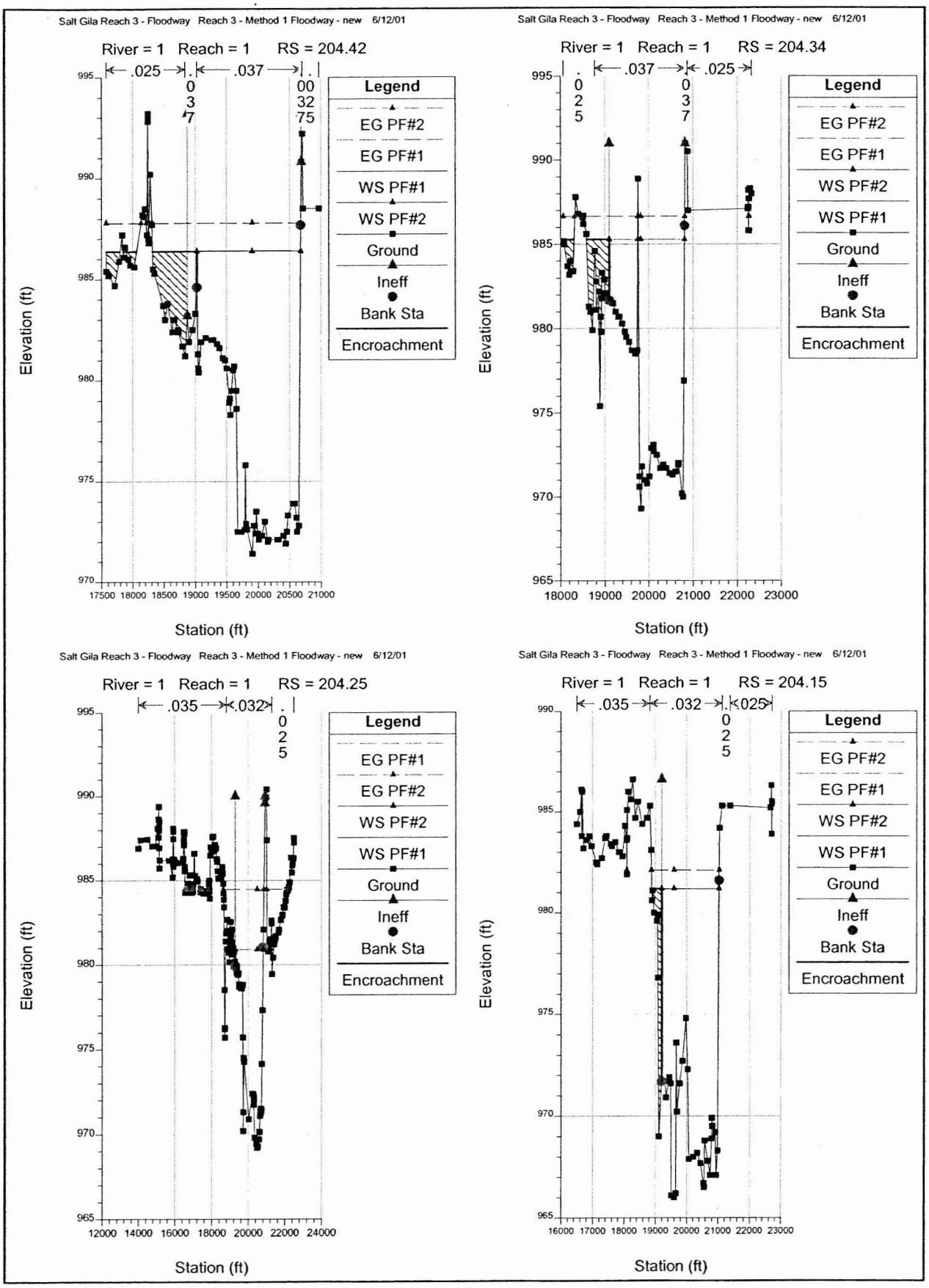

Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway - new 6/12/01
River = 1 Reach = 1 RS = 205.15
.025 .037 .037 .025
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)
Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway - new 6/12/01
River = 1 Reach = 1 RS = 205.06
.037 .037 .037 .025
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)
Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway - new 6/12/01
River = 1 Reach = 1 RS = 204.97
.025 .037 .037 .025
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)
Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway - new 6/12/01
River = 1 Reach = 1 RS = 204.87
.025 .037 .037 .025
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)

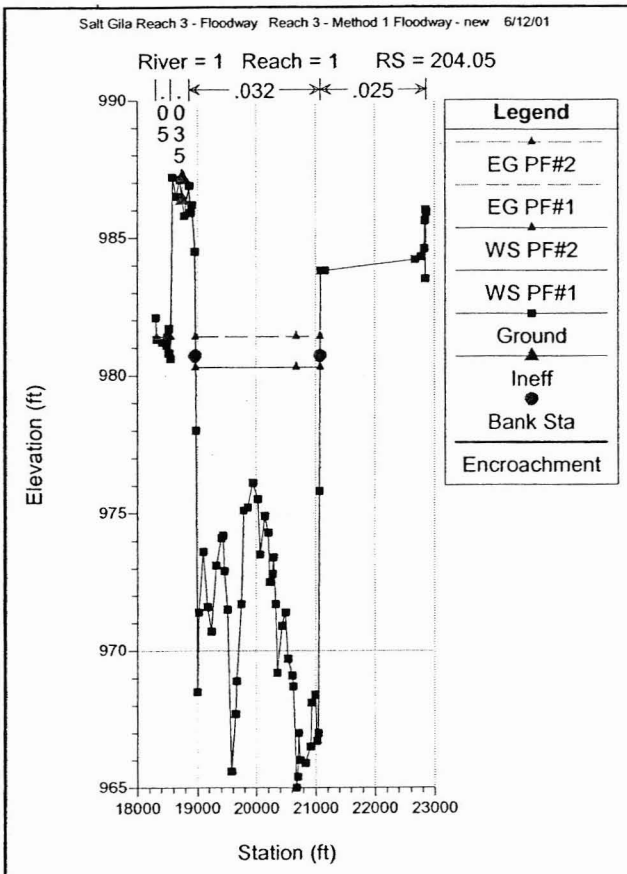

Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway - new 6/12/01
River = 1 Reach = 1 RS = 204.78
.025
.037
.037
.025
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)

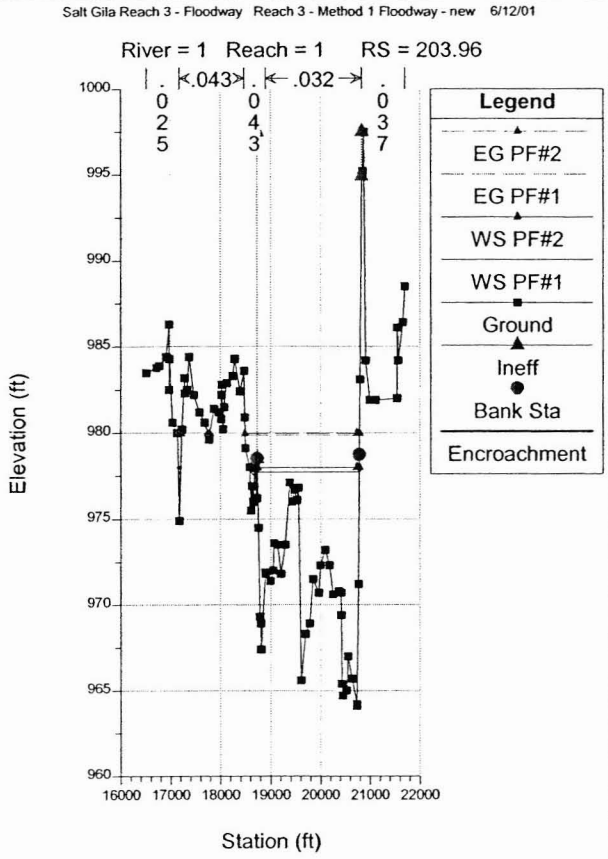

Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway - new 6/12/01
River = 1 Reach = 1 RS = 204.68
.025
.037
.037
.025
Legend
EG PF#2
EG PF#1
WS PF#1
WS PF#2
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)

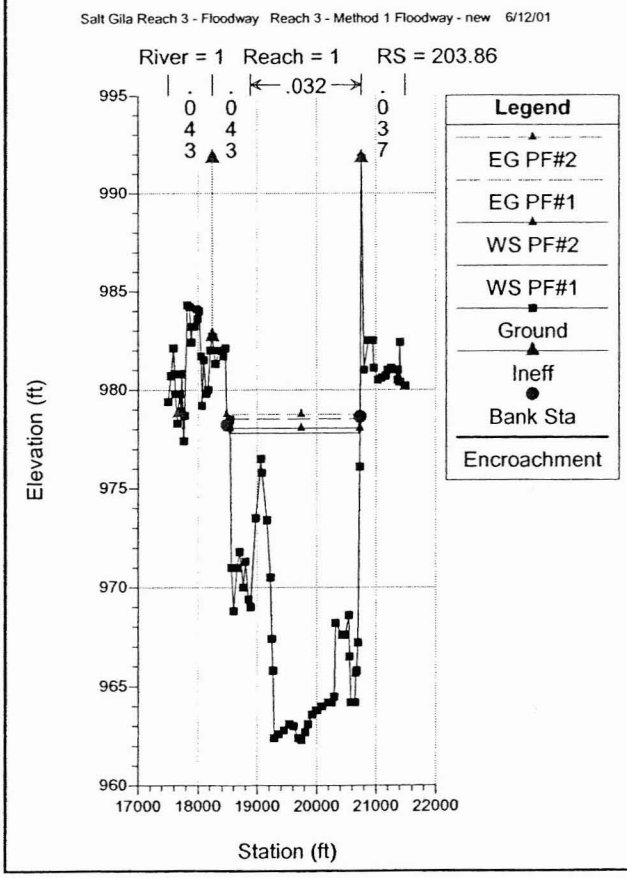

Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway - new 6/12/01
River = 1 Reach = 1 RS = 204.61
.025
.037
.037
.025
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)


Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway - new 6/12/01
River = 1 Reach = 1 RS = 204.53
.025
.037
.025
.037
Legend
EG PF#2
EG PF#1
WS PF#1
WS PF#2
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)


Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway - new 6/12/01
River = 1 Reach = 1 RS = 204.42
.025
.037
Legend
EG PF#2
EG PF#1
WS PF#1
WS PF#2
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)
Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway - new 6/12/01
River = 1 Reach = 1 RS = 204.34
.037
.025
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)
Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway - new 6/12/01
River = 1 Reach = 1 RS = 204.25
.035
.032
Legend
EG PF#1
EG PF#2
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)
Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway - new 6/12/01
River = 1 Reach = 1 RS = 204.15
.035
.032
.025
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)


Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway - new 6/12/01
River = 1 Reach = 1 RS = 204.05
.032
.025
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)


Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway - new 6/12/01
River = 1 Reach = 1 RS = 203.96
.043
.032
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)


Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway - new 6/12/01
River = 1 Reach = 1 RS = 203.86
.032
Legend
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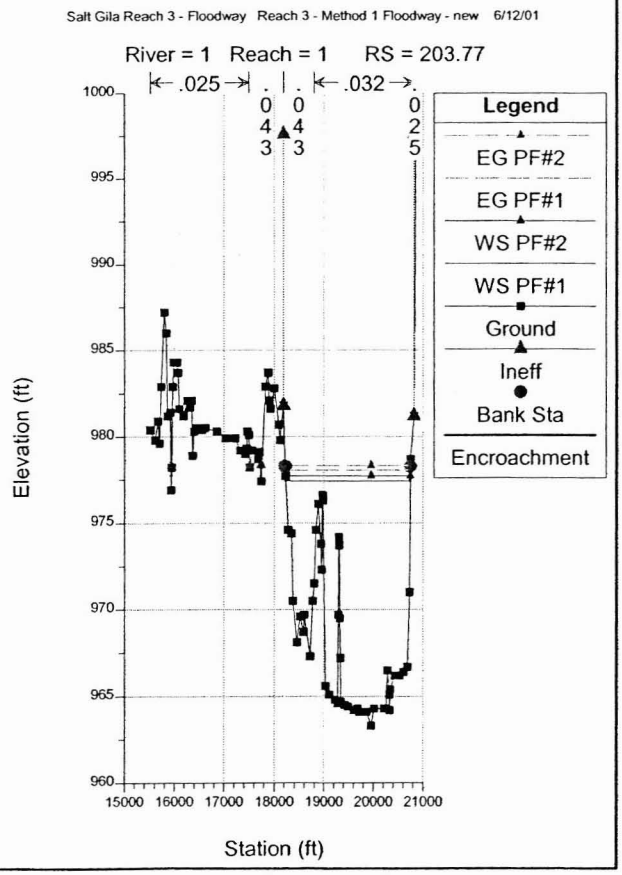
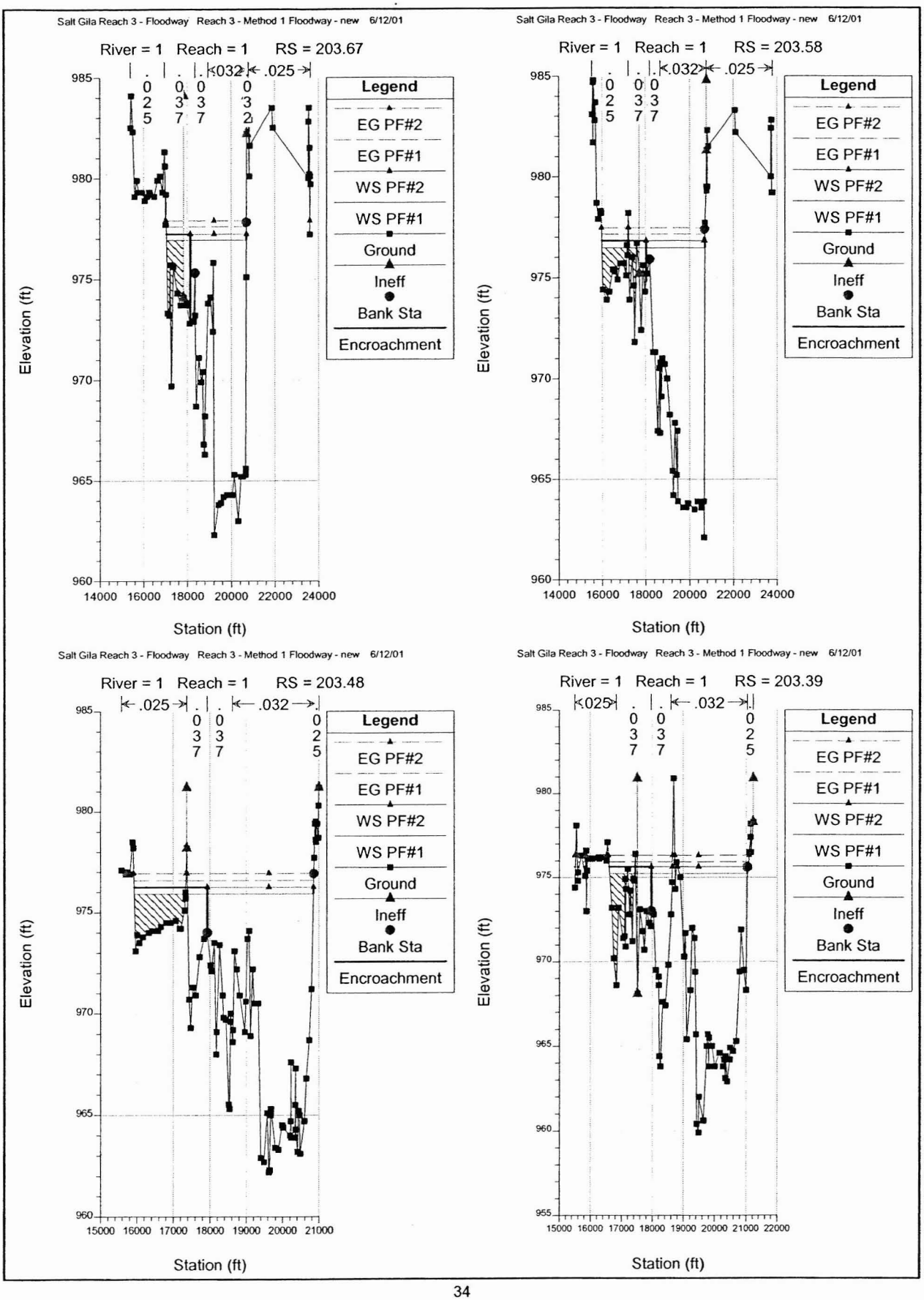
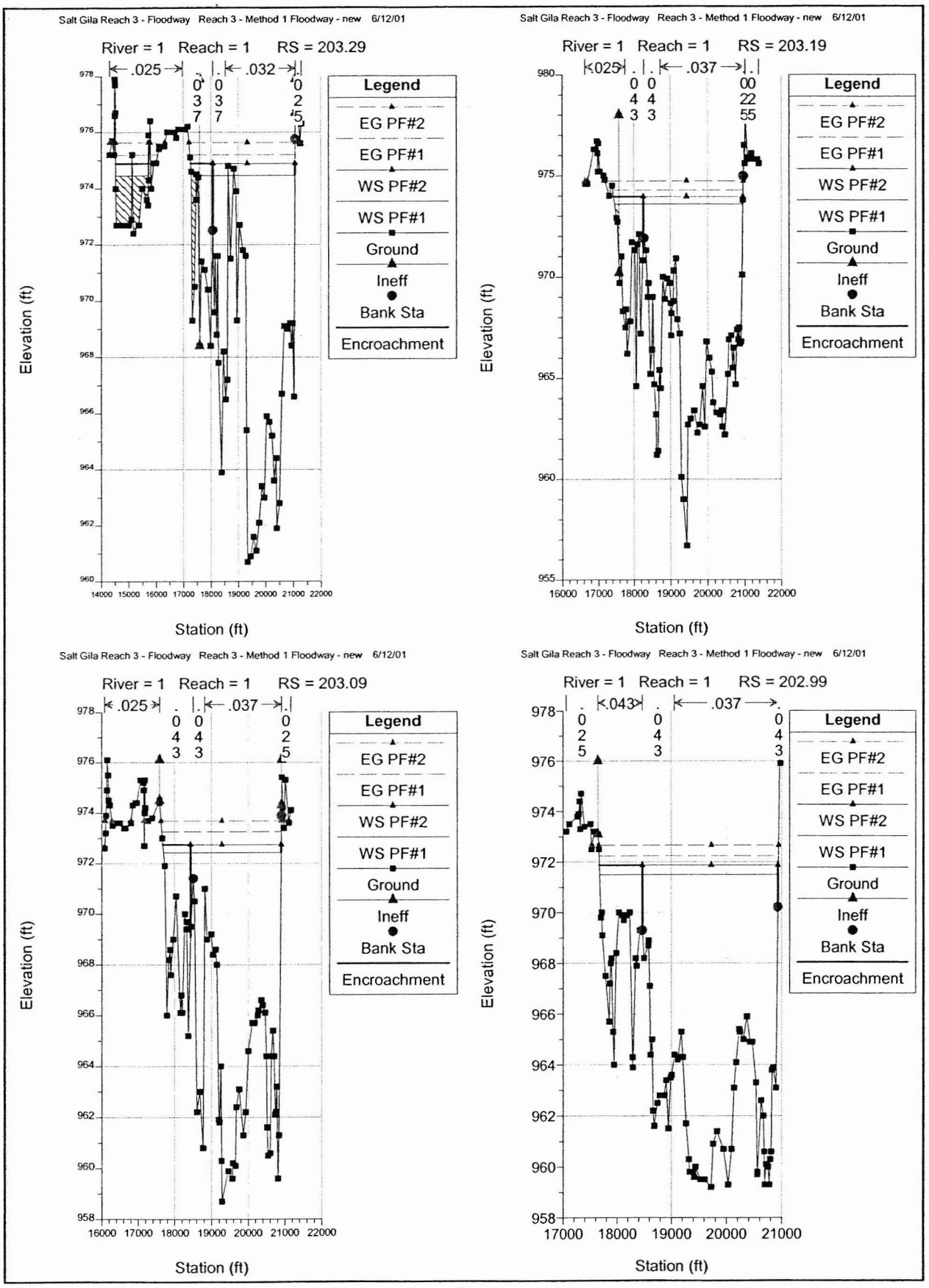
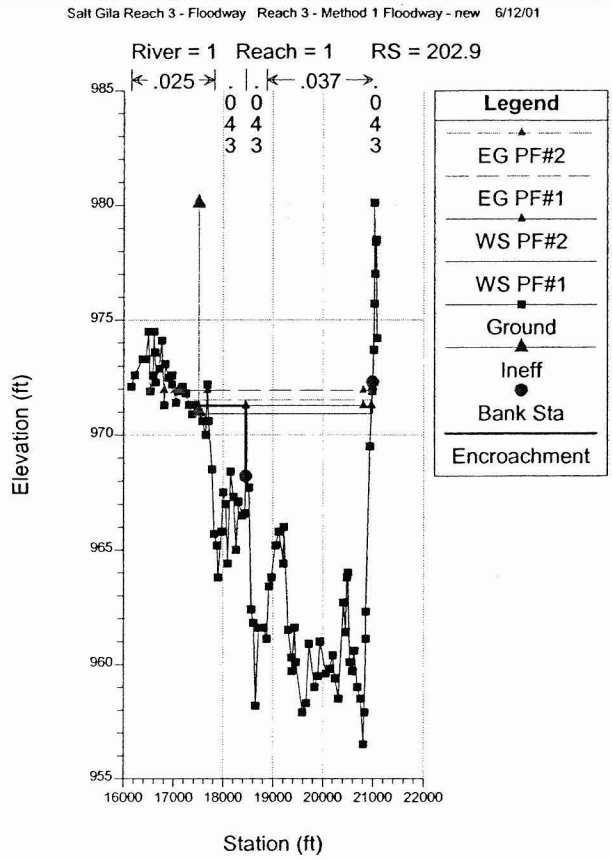
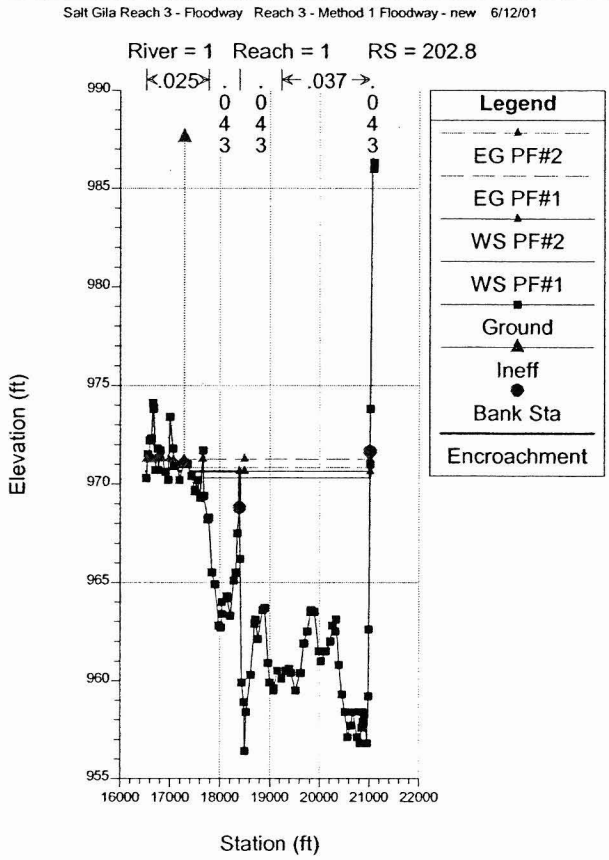
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)

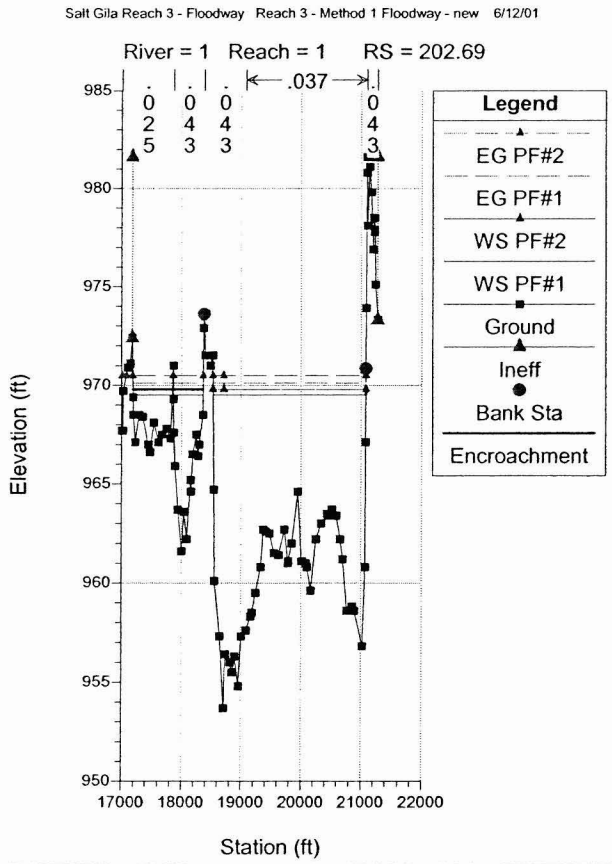

Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway - new 6/12/01
River = 1 Reach = 1 RS = 203.77
.025
.032
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)


Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway - new 6/12/01
River = 1 Reach = 1 RS = 203.67
.032
.025
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)
Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway - new 6/12/01
River = 1 Reach = 1 RS = 203.58
.032
.025
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)
Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway - new 6/12/01
River = 1 Reach = 1 RS = 203.48
.025
.032
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)
Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway - new 6/12/01
River = 1 Reach = 1 RS = 203.39
.025
.032
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)


Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway - new 6/12/01
River = 1 Reach = 1 RS = 203.29
.025
.032
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)
Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway - new 6/12/01
River = 1 Reach = 1 RS = 203.19
.025
.037
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)
Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway - new 6/12/01
River = 1 Reach = 1 RS = 203.09
.025
.037
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)
Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway - new 6/12/01
River = 1 Reach = 1 RS = 202.99
.043
.037
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)


Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway - new 6/12/01
River = 1 Reach = 1 RS = 202.9
.025
.037
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)


Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway - new 6/12/01
River = 1 Reach = 1 RS = 202.8
.025
.037
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)


Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway - new 6/12/01
River = 1 Reach = 1 RS = 202.69
.037
Legend
EG PF#2
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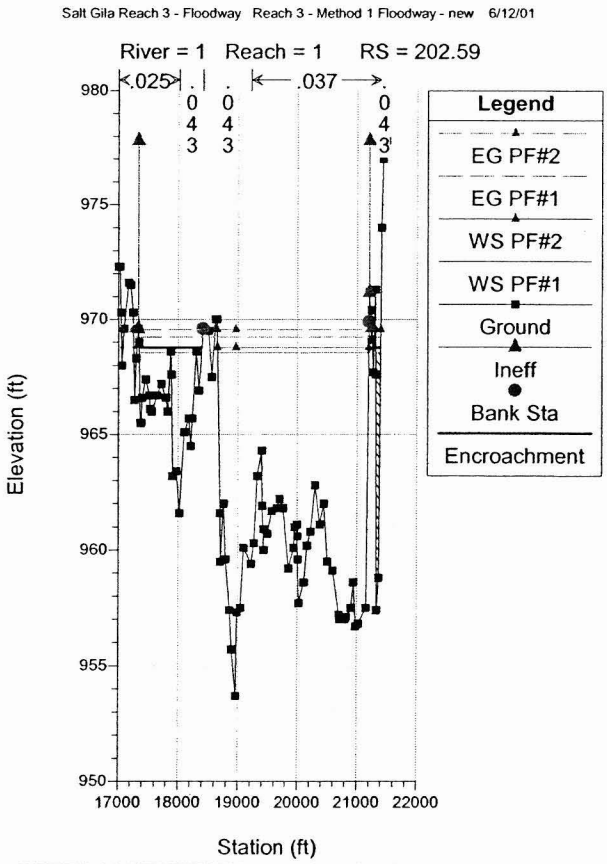
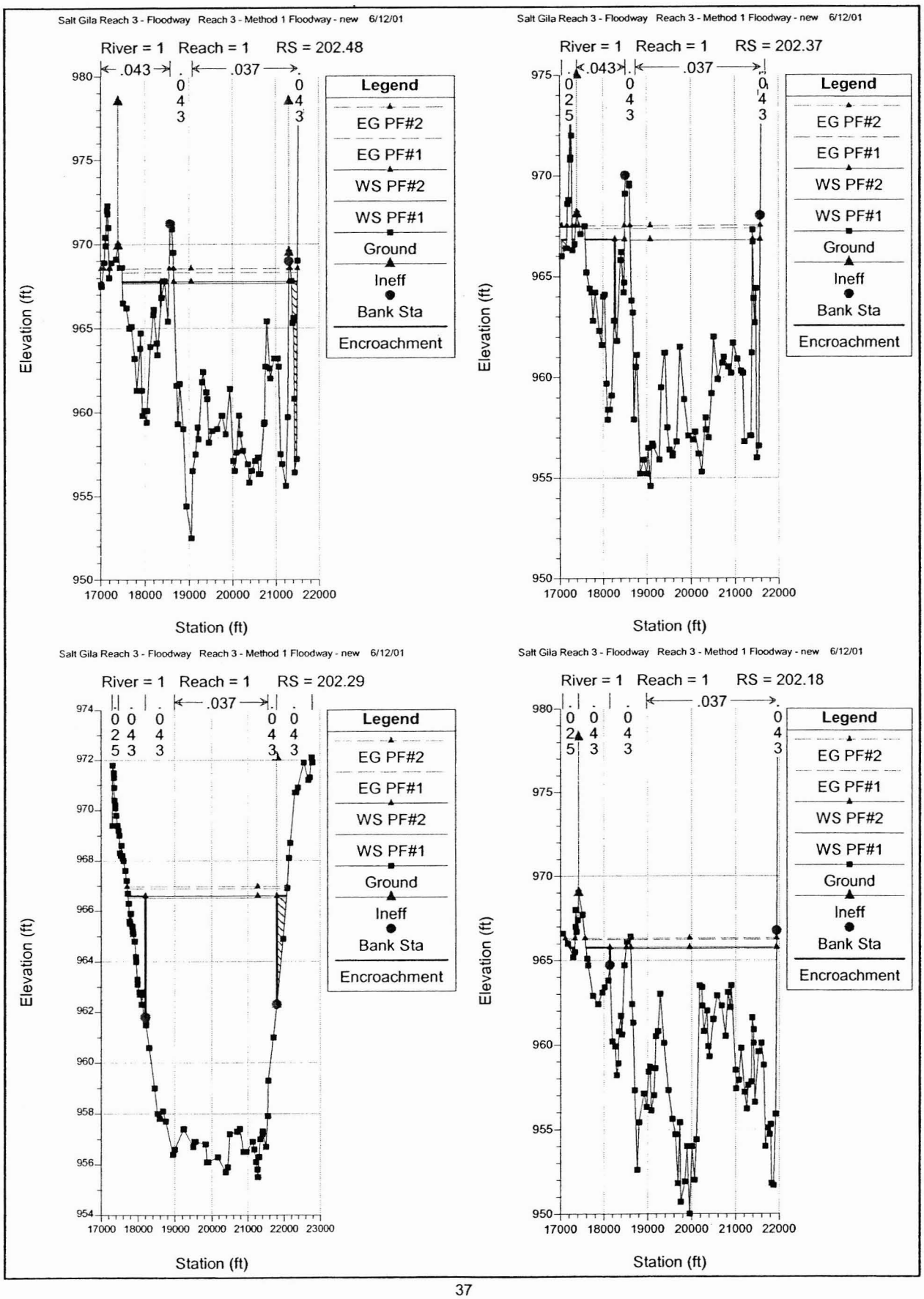
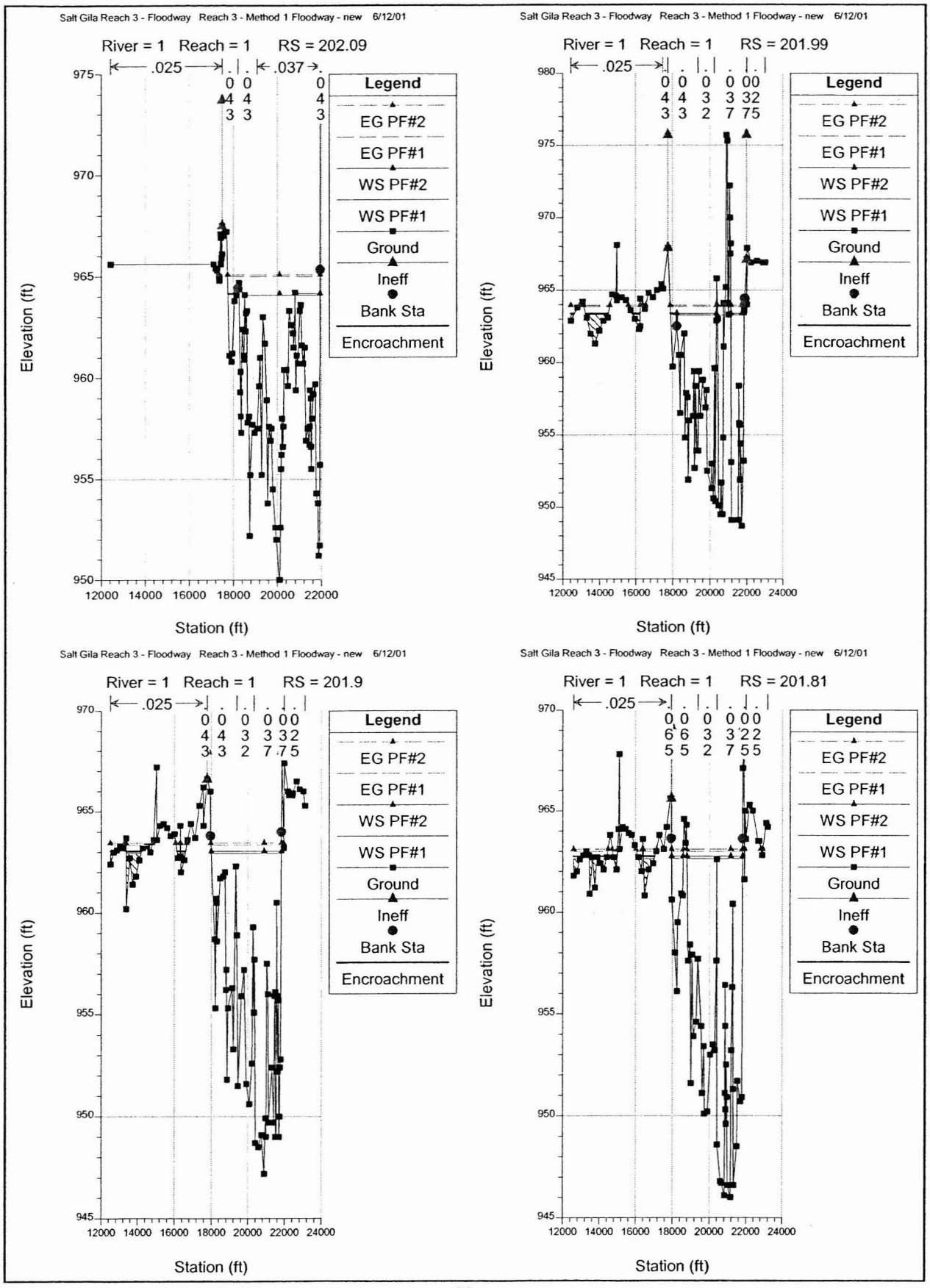
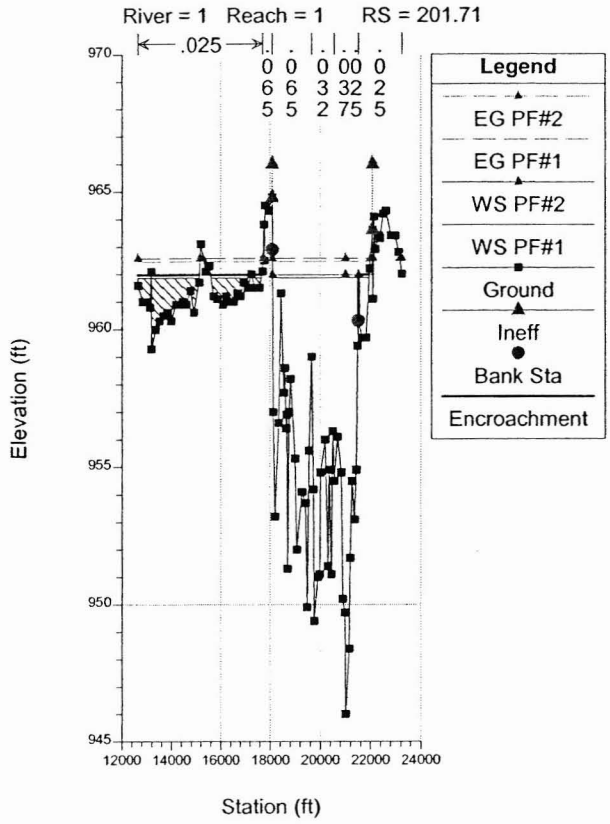
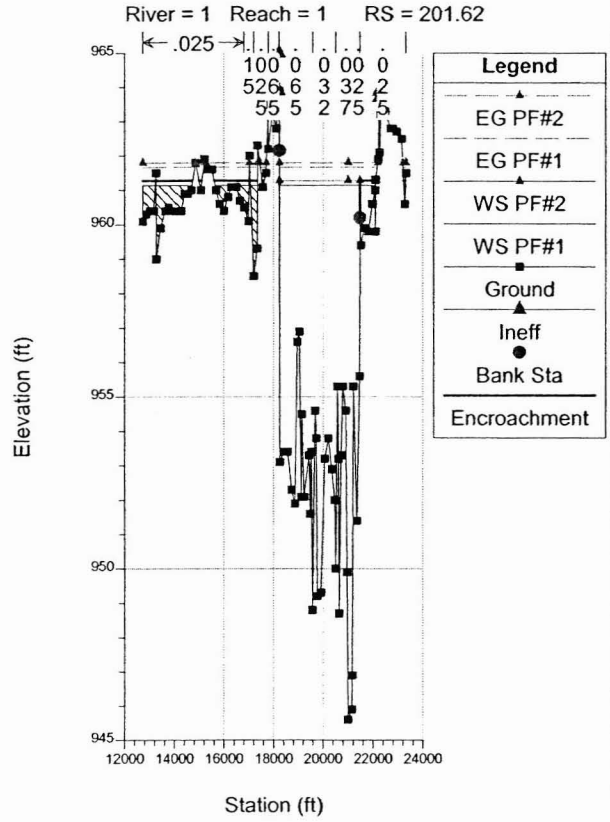
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)

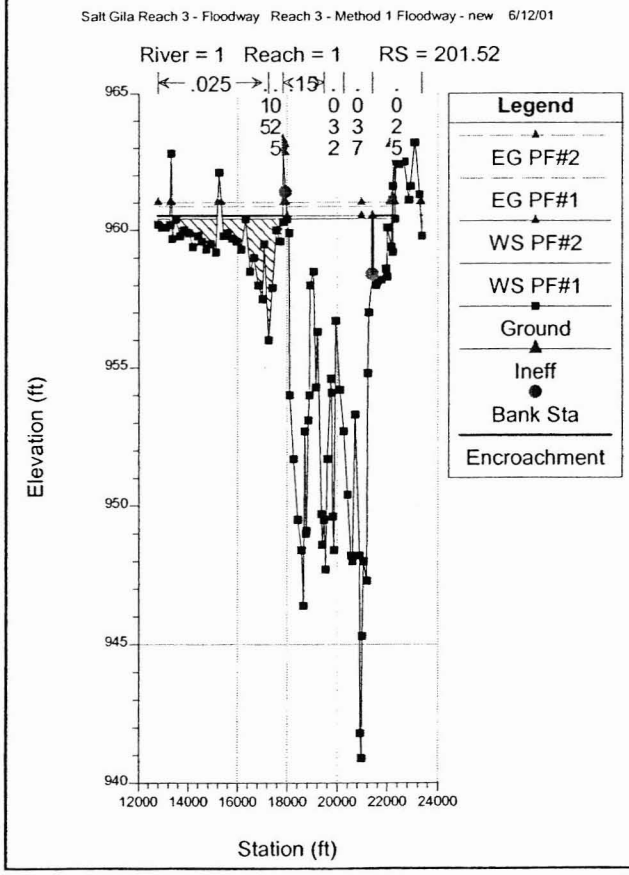

Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway - new 6/12/01
River = 1 Reach = 1 RS = 202.59
.025
.037
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)

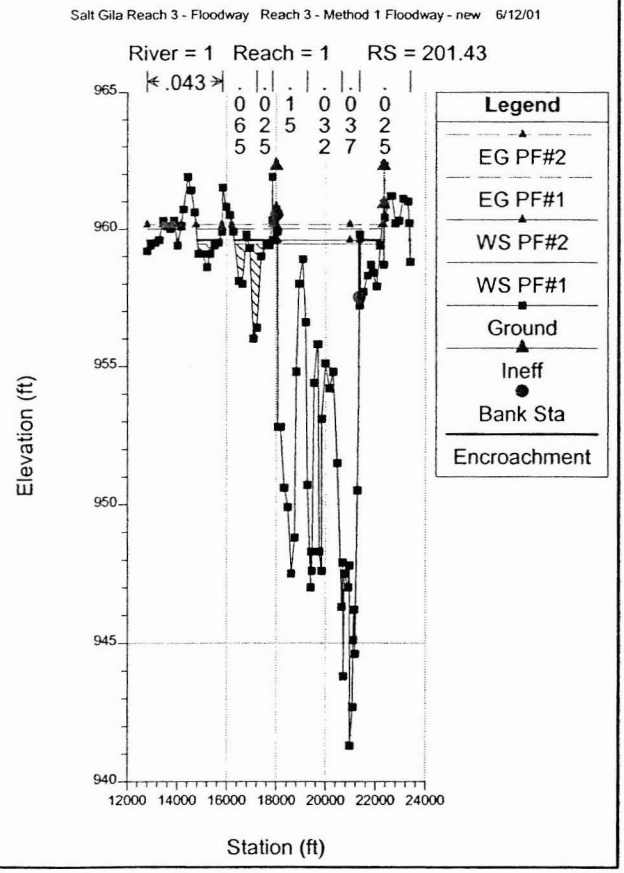

Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway - new 6/12/01
River = 1 Reach = 1 RS = 202.48
.043
.037
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)
Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway - new 6/12/01
River = 1 Reach = 1 RS = 202.37
.043
.037
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)
Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway - new 6/12/01
River = 1 Reach = 1 RS = 202.29
.037
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)
Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway - new 6/12/01
River = 1 Reach = 1 RS = 202.18
.037
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)

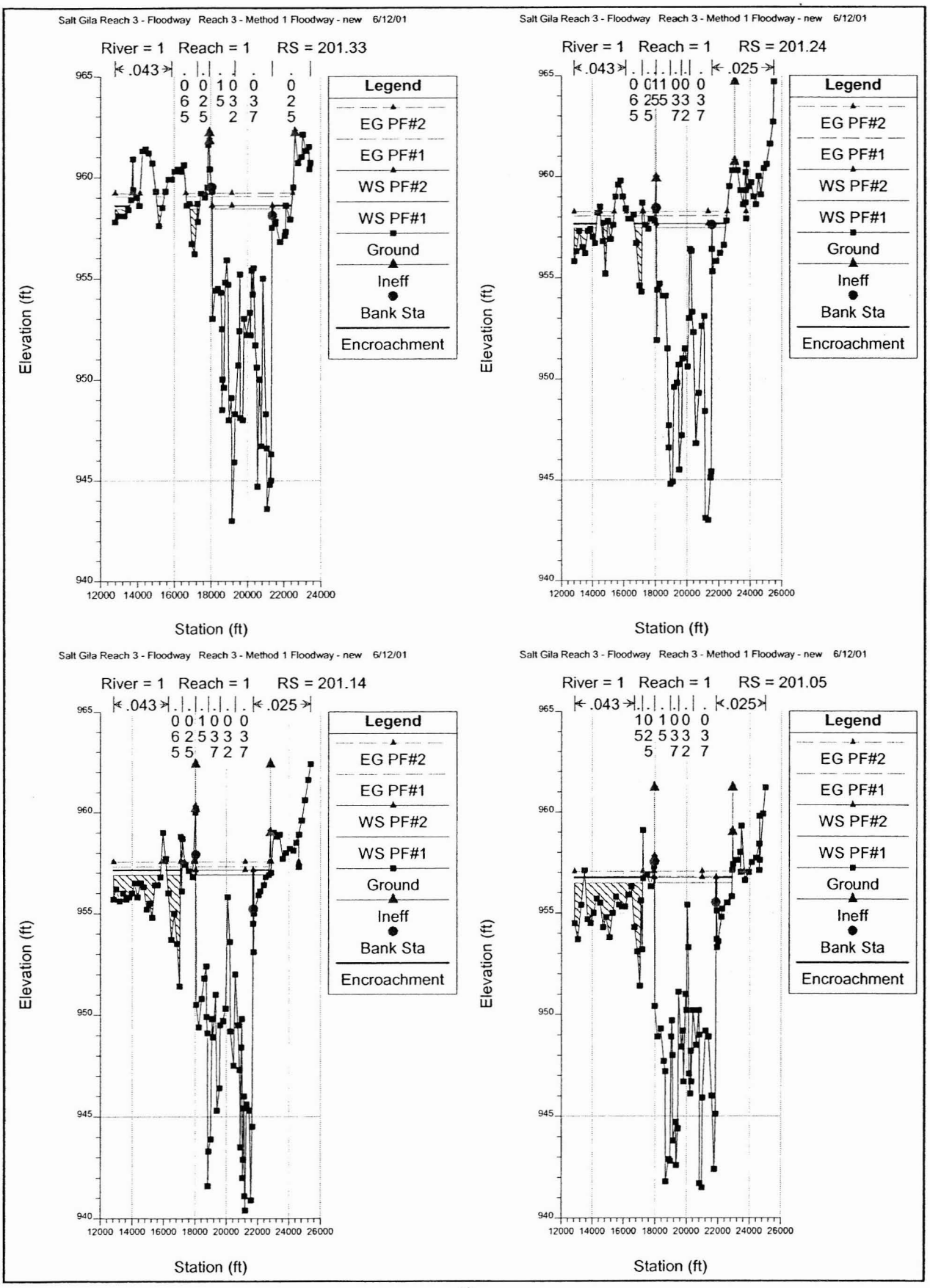

Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway - new 6/12/01
River = 1 Reach = 1 RS = 202.09
.025
.037
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)
Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway - new 6/12/01
River = 1 Reach = 1 RS = 201.99
.025
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)
Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway - new 6/12/01
River = 1 Reach = 1 RS = 201.9
.025
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)
Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway - new 6/12/01
River = 1 Reach = 1 RS = 201.81
.025
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)

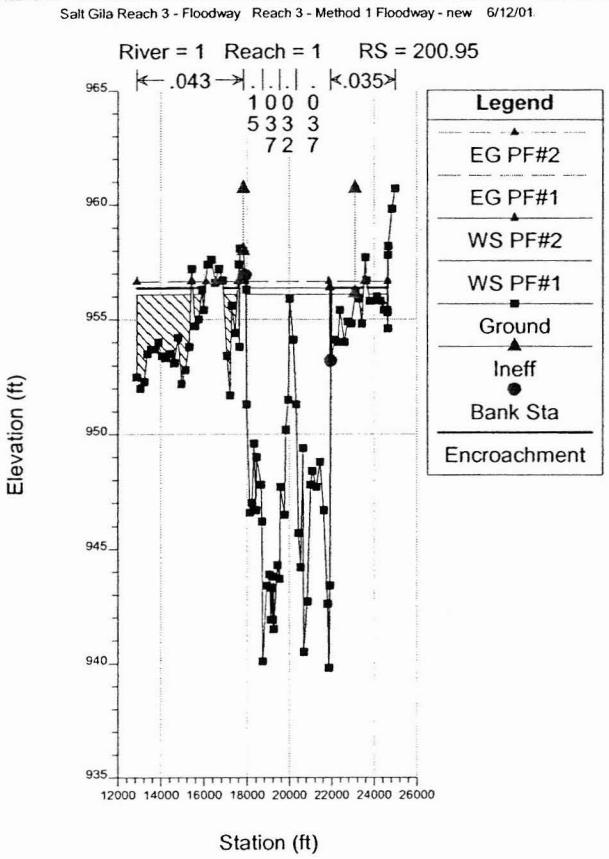

Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway - new 6/12/01
River = 1 Reach = 1 RS = 201.71
.025
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)

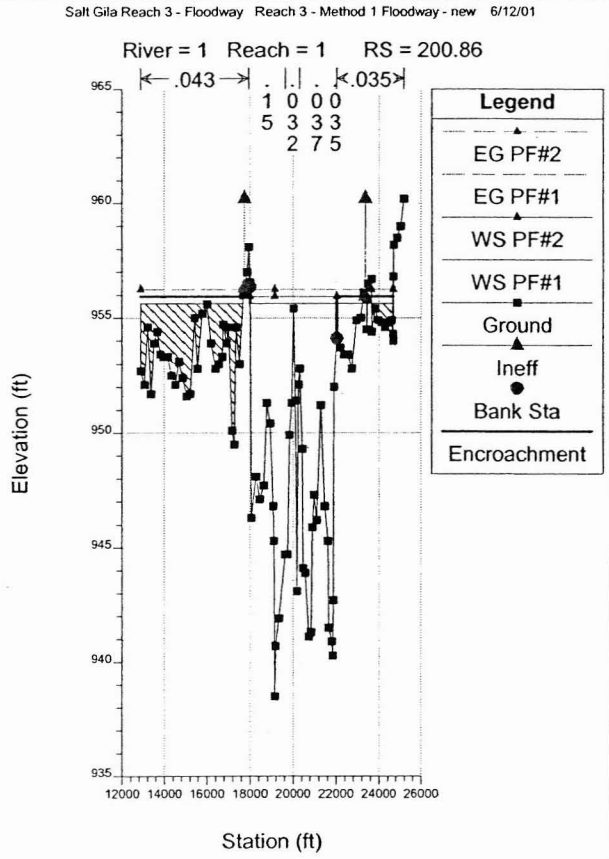

Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway - new 6/12/01
River = 1 Reach = 1 RS = 201.62
.025
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)

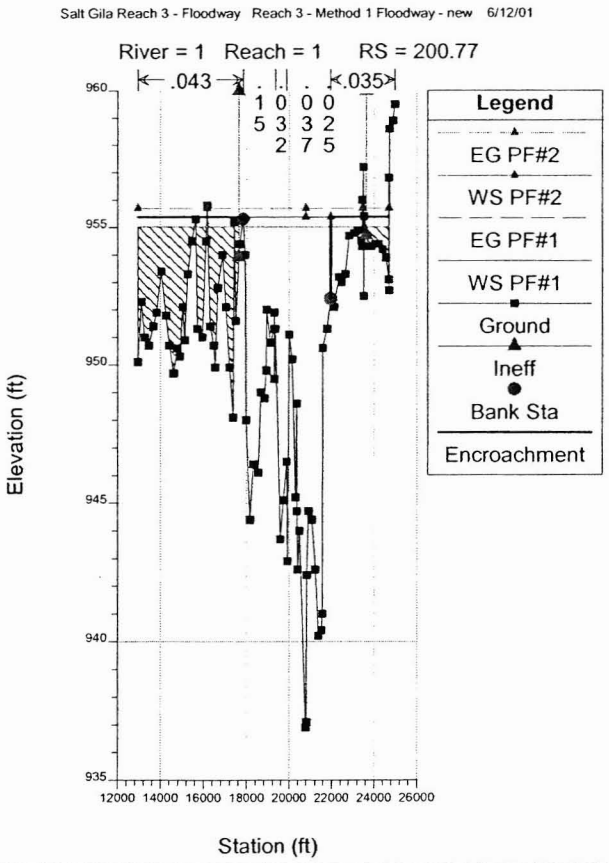

Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway - new 6/12/01
River = 1 Reach = 1 RS = 201.52
.025
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)

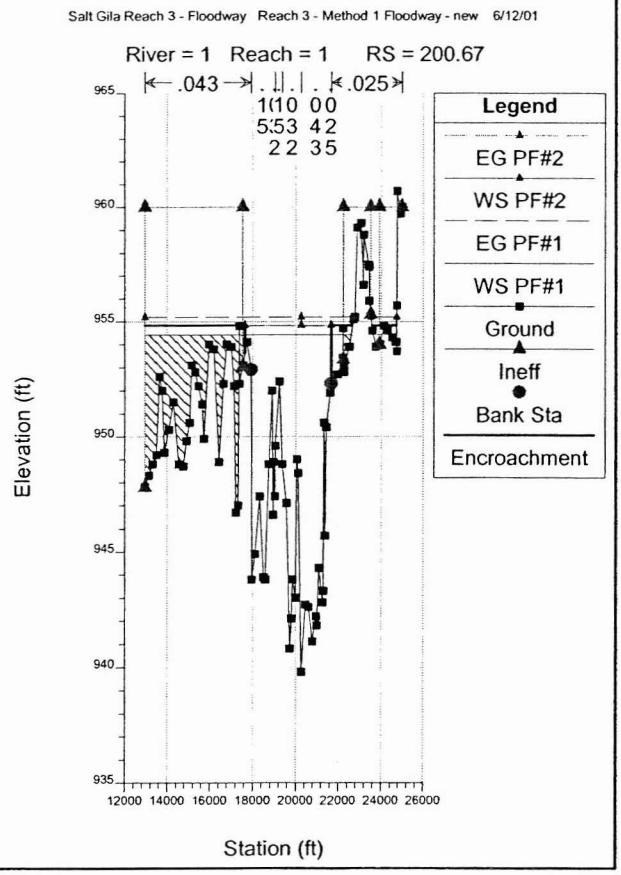

Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway - new 6/12/01
River = 1 Reach = 1 RS = 201.43
.043
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)

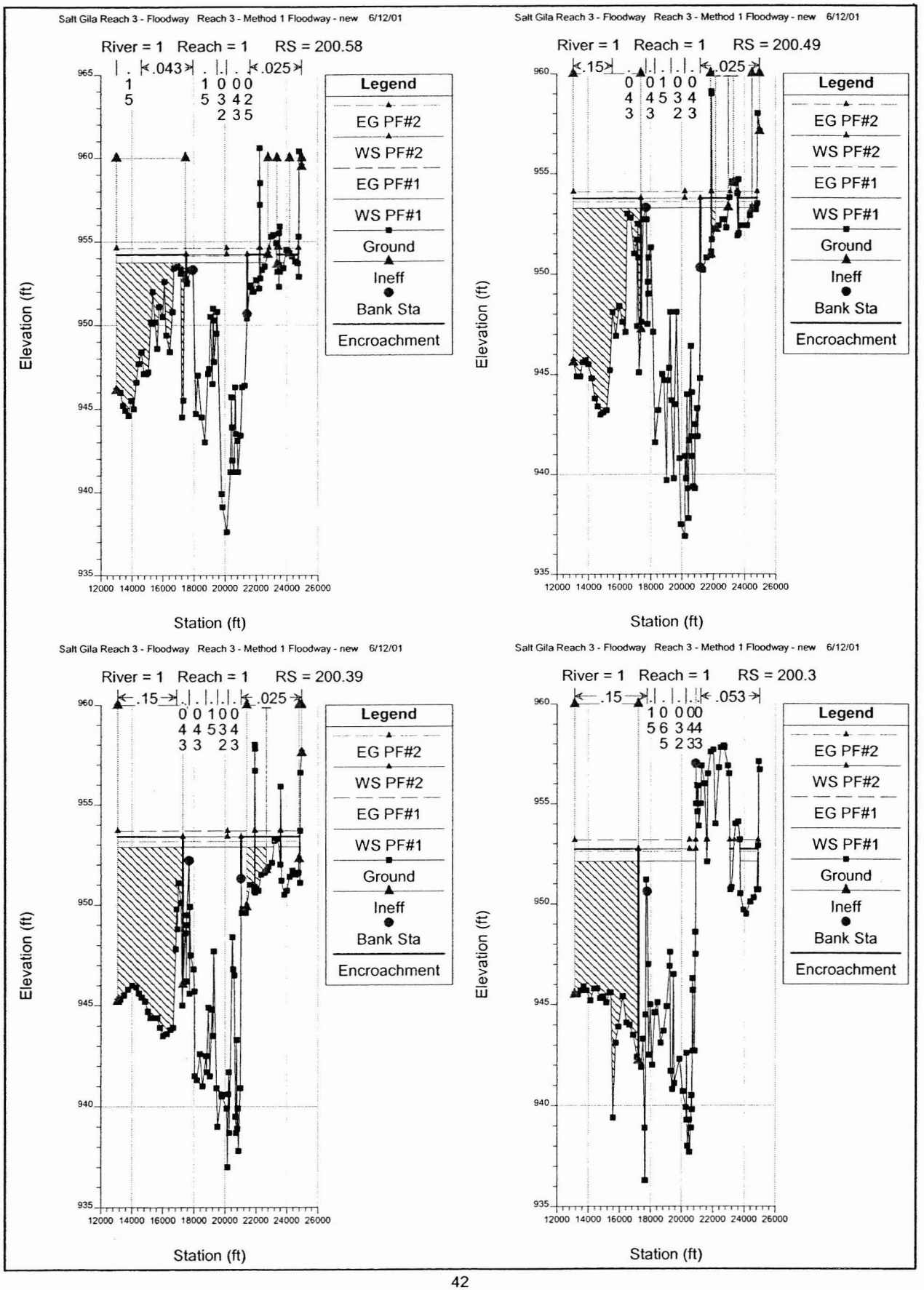

Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway - new 6/12/01
River = 1 Reach = 1 RS = 201.33
River = 1 Reach = 1 RS = 201.24
River = 1 Reach = 1 RS = 201.14
River = 1 Reach = 1 RS = 201.05
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)

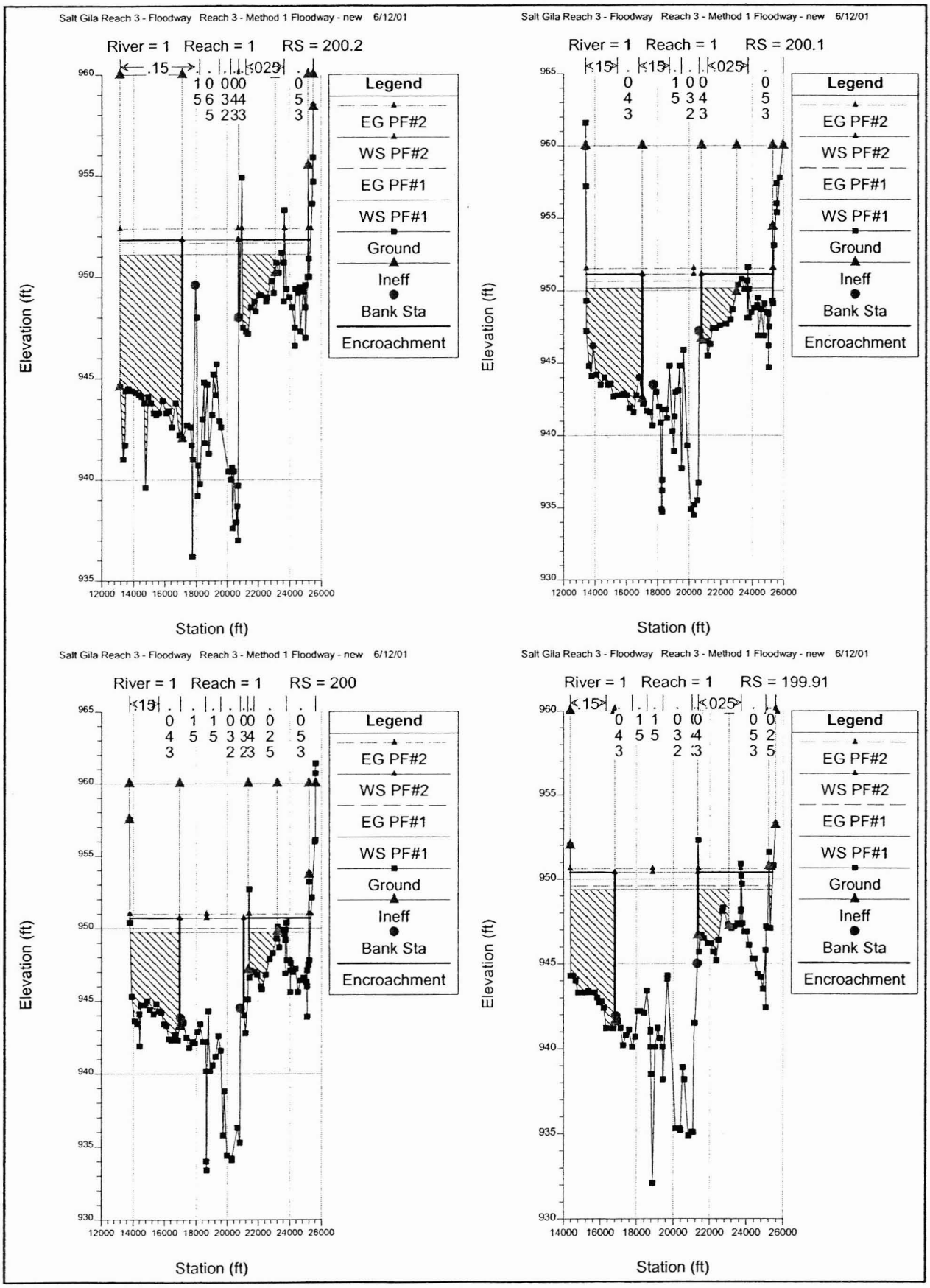

Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway - new 6/12/01
River = 1 Reach = 1 RS = 200.95
.043
.035
1000
5333
727
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)


Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway - new 6/12/01
River = 1 Reach = 1 RS = 200.86
.043
.035
1000
5333
275
Legend
EG PF#2
EG PF#1
WS PF#2
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)

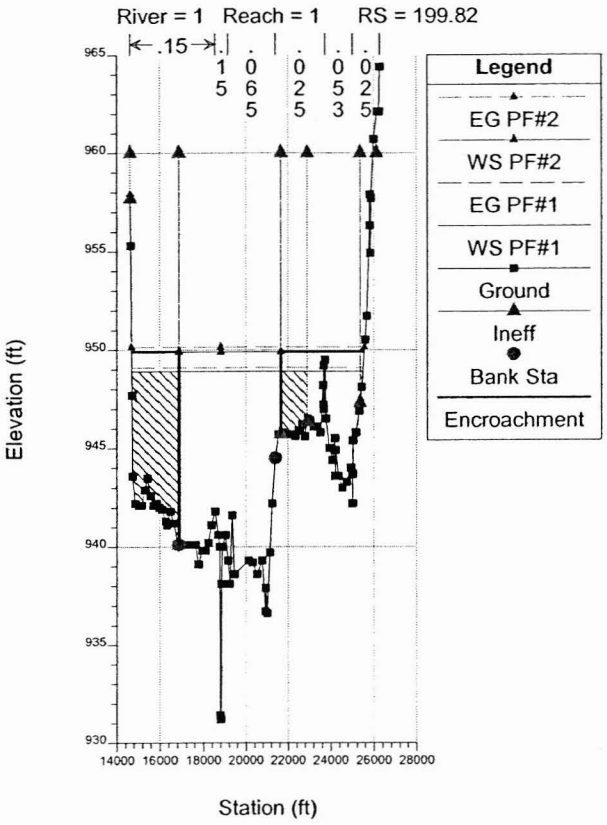

Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway - new 6/12/01
River = 1 Reach = 1 RS = 200.77
.043
.035
1000
5332
275
Legend
EG PF#2
WS PF#2
EG PF#1
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)


Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway - new 6/12/01
River = 1 Reach = 1 RS = 200.67
.043
.025
1000
5342
2235
Legend
EG PF#2
WS PF#2
EG PF#1
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)


Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway - new 6/12/01
River = 1 Reach = 1 RS = 200.58
River = 1 Reach = 1 RS = 200.49
River = 1 Reach = 1 RS = 200.39
River = 1 Reach = 1 RS = 200.3
Legend
EG PF#2
WS PF#2
EG PF#1
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)


Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway - new 6/12/01
River = 1 Reach = 1 RS = 200.2
River = 1 Reach = 1 RS = 200.1
River = 1 Reach = 1 RS = 200
River = 1 Reach = 1 RS = 199.91
Legend
EG PF#2
WS PF#2
EG PF#1
WS PF#1
Ground
Ineff
Bank Sta
Encroachment
Elevation (ft)
Station (ft)

Salt Gila Reach 3 - Floodway Reach 3 - Method 1 Floodway - new 6/12/01



Revised Model

HEC-RAS September 1998 Version 2.2
U.S. Army Corp of Engineers
Hydrologic Engineering Center
609 Second Street, Suite D
Davis, California 95616-4687
(916) 756-1104

```
X     X  XXXXXX    XXXX        XXXX       XX      XXXX
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XXXXXXX  XXXX     X       XXX  XXXX     XXXXXX    XXXX
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PROJECT DATA
Project Title: Salt Gila Reach 3 - Floodway
Project File : Reach3.prj
Run Date and Time: 6/12/01 9:24:24 AM

Project in English units

PLAN DATA

Plan Title: Reach 3 - Method 1 Floodway - new
Plan File : s:\DRN\ellt0013\clomr\hec-ras\Reach3.p02

Geometry Title: with landfill - new
Geometry File : s:\DRN\ellt0013\clomr\hec-ras\Reach3.g01

Flow Title : Reach 3 - Floodway
Flow File : s:\DRN\ellt0013\clomr\hec-ras\Reach3.f01

Plan Summary Information:
Number of: Cross Sections = 161 Mulitple Openings = 0
Culverts = 0 Inline Weirs = 0
Bridges = 6

Computational Information
Water surface calculation tolerance = 0.01
Critical depth calculaton tolerance = 0.01
Maximum number of interations = 20
Maximum difference tolerance = 0.3
Flow tolerance factor = 0.001

Computation Options
Critical depth computed only where necessary
Conveyance Calculation Method: At breaks in n values only
Friction Slope Method: Average Conveyance
Computational Flow Regime: Subcritical Flow

Encroachment Data
Equal Conveyance = True
Left Offset = 0
Right Offset = 0

River = 1 Reach = 1

RS	Profile	Method	Value1	Value2
214.14	PF#2		119654.9	720381.83
214.04	PF#2		119637.8	820371.77
213.95	PF#2		119586.5	420331.73
213.85	PF#2		119618.3	320320.92
213.75	PF#2	1	1964120	297.35
213.74	PF#2		119641.87	20296.6
213.66	PF#2		119687.5	720253.56
213.57	PF#2	1	19484.5	20336.66
213.47	PF#2	1	19243.3	20266.42
213.38	PF#2	1	19346.1	20447.85
213.33	PF#2	1	19328.9	20514.52
213.26	PF#2		119497.1	820378.39
213.255	PF#2		119497.3	720378.09
213.25	PF#2		119497.5	520377.79
213.21	PF#2	1	19490.3	20418.5
213.11	PF#2		119616.8	820544.67
213.03	PF#2	1	1967220	591.83
212.93	PF#2		119690.7	620489.75
212.84	PF#2	1	19711.5	20347.25

212.74	PF#2	119690.61	20367.2
212.68	PF#2	119501.07	20130.1
212.675	PF#2	119492.89	20137.19
212.67	PF#2	119502.33	20128.84
212.56	PF#2	119731.05	20252.14
212.46	PF#2	119743.34	20301
212.37	PF#2	119744.06	20320.69
212.27	PF#2	119715.25	20330.35
212.18	PF#2	119706.85	20334.57
212.08	PF#2	119681.09	20270.9
211.99	PF#2	119699.77	20249.64
211.89	PF#2	119685.75	20250.74
211.79	PF#2	119649.87	20217.7
211.71	PF#2	119628.43	20197.84
211.64	PF#2	119657.7	20219.8
211.54	PF#2	119603.65	20129.64
211.51	PF#2	119615.19	20137.39
211.41	PF#2	119638.12	20206.06
211.31	PF#2	119531.21	20356.09
211.21	PF#2	119528.75	20521.25
211.12	PF#2	119498.47	20610
211.02	PF#2	119487.12	20550
210.93	PF#2	119479.13	20530
210.83	PF#2	119450.42	20530
210.74	PF#2	119426.13	20560
210.64	PF#2	119388.6	20800
210.55	PF#2	119322.17	21110
210.46	PF#2	119377	21284
210.36	PF#2	119375.17	21291.16
210.26	PF#2	119377.08	21331.8
210.17	PF#2	119354.62	21334.72
210.07	PF#2	119210	21225
209.98	PF#2	119338.59	21207.12
209.88	PF#2	119513	21220
209.79	PF#2	119483.04	21290
209.69	PF#2	119460.17	21335.01
209.6	PF#2	119341.4	21003.8
209.54	PF#2	119130	20521
209.535	PF#2	119130	20521
209.53	PF#2	119130	20521
209.42	PF#2	119000	20652.63
209.33	PF#2	119122.27	20715.2
209.24	PF#2	119212.28	20850
209.14	PF#2	119200.21	21100
209.04	PF#2	119220	21200
208.95	PF#2	119141.04	21200
208.85	PF#2	119199.7	21150
208.75	PF#2	119192.9	20799.2
208.67	PF#2	119118.22	20908.11
208.57	PF#2	119087.13	20640
208.48	PF#2	118510.56	20680.86
208.39	PF#2	118462.94	20748.79
208.29	PF#2	118562.62	20944.07
208.19	PF#2	118679.18	21343.2
208.1	PF#2	118822.37	21767.18
207.99	PF#2	119093.03	21934.42
207.9	PF#2	119104.72	21137.55
207.8	PF#2	119249.52	21871.22
207.71	PF#2	119360	21704.11
207.62	PF#2	119510.12	21472.33
207.53	PF#2	119502.9	21175
207.49	PF#2	119473.78	21053.15
207.48	PF#2	119474.14	21053.01
207.43	PF#2	119253.23	20940
207.34	PF#2	119230	20798.77
207.27	PF#2	118980	20597.9
207.16	PF#2	119000	20734.5
207.07	PF#2	118857.57	20748.18
206.97	PF#2	118850	20800
206.88	PF#2	118838.93	20800
206.79	PF#2	118806.01	20895.15
206.7	PF#2	118784.84	21138.8
206.6	PF#2	118675.58	21066.25
206.51	PF#2	118561.35	20622.1
206.41	PF#2	118494.71	20685.21
206.32	PF#2	118476.94	20854.87
206.22	PF#2	118435	20977.29
206.13	PF#2	118370	20914.89
206.03	PF#2	118320	20772.6
205.94	PF#2	118200	20767
205.84	PF#2	118100	20535.7
205.75	PF#2	118048	20450.3
205.62	PF#2	118216	20450.1
205.52	PF#2	118591.6	20611.5

205.43	PF#2	1	18917.5	20770.4
205.4	PF#2	1	19020	20767.8
205.34	PF#2	1	19180	20742.96
205.25	PF#2	1	19300	20782.3
205.15	PF#2	1	19385	20830
205.06	PF#2	1	19470	20905.3
204.97	PF#2	1	19445	20961.3
204.87	PF#2	1	19410	20952.2
204.78	PF#2	1	19210	20830.43
204.68	PF#2	1	18960	20546.37
204.61	PF#2	1	18880	20482.9
204.53	PF#2	1	18885	20495.9
204.42	PF#2	1	19025.42	0679.03
204.34	PF#2	1	19100	20814.38
204.25	PF#2	1	19300	20817.18
204.15	PF#2	1	19200	21031.89
204.05	PF#2	11	8963.782	1080.54
203.96	PF#2	11	8736.54	20787.3
203.86	PF#2	11	8542.492	0734.27
203.77	PF#2	11	8232.412	0743.68
203.67	PF#2	1	18130	20697.43
203.58	PF#2	1	18025	20701.39
203.48	PF#2	1	17932.62	0844.31
203.39	PF#2	1	17970.82	1036.47
203.29	PF#2	1	18065.62	1074.86
203.19	PF#2	1	18262.12	0951.24
203.09	PF#2	1	18430	20905.85
202.99	PF#2	1	18469.4	20926.9
202.9	PF#2	1	18455.62	0967.31
202.8	PF#2	1	18390.82	1011.58
202.69	PF#2	1	18377.82	1080.23
202.59	PF#2	1	18416.7	21190.4
202.48	PF#2	1	18360	21302.7
202.37	PF#2	1	18270	21577.77
202.29	PF#2	1	18197.4	21803
202.18	PF#2	1	18139.72	1936.54
202.09	PF#2	1	18212.92	1936.96
201.99	PF#2	1	18235.12	1861.56
201.9	PF#2	11	7992.63	21823.6
201.81	PF#2	11	7952.482	1801.08
201.71	PF#2	11	8112.81	21528.5
201.62	PF#2	11	8235.69	21477.5
201.52	PF#2	11	8008.55	21391.4
201.43	PF#2	11	8053.86	21342.1
201.33	PF#2	11	8074.35	21381.8
201.24	PF#2	11	8069.92	21570
201.14	PF#2	11	8040.42	21721
201.05	PF#2	11	7950.48	21849
200.95	PF#2	11	7952.91	21954
200.86	PF#2	1	18000	22032
200.77	PF#2	1	17828.8	21951
200.67	PF#2	1	17640	21649.3
200.58	PF#2	1	17510	21450
200.49	PF#2	1	17380	21171
200.39	PF#2	1	17300	21041
200.3	PF#2	1	17205	20896
200.2	PF#2	1	17115	20744
200.1	PF#2	1	17030	20800
200	PF#2	1	16950	21050
199.91	PF#2	1	16800	21330
199.82	PF#2	1	16870	21650

FLOW DATA

Flow Title: Reach 3 - Floodway
Flow File : s:\DRN\ellt0013\clomr\hec-ras\Reach3.f01

Flow Data (cfs)

River	Reach	RS	PF#1	PF#2
1	1	214.14	169000	169000
1	1	213.21	166000	166000
1	1	205.4	164000	164000
1	1	200.3	179750	179750

Boundary Conditions

River	Reach	Profile	Upstream	Downstream
1	1	PF#1		Known WS = 948.9

GEOMETRY DATA

Geometry Title: with landfill - new
Geometry File : s:\DRN\ellt0013\clamr\hec-ras\Reach3.g01

CROSS SECTION RIVER: 1
REACH: 1 RS: 214.14

INPUT
Description: 214.14
Station Elevation Data num= 96

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
18555.4	1082.6	18577.7	1082.5	18586.5	1082.5	18650.6	1082	18678.8	1082.1
18707.4	1081.7	18729.5	1082	18771.6	1082.1	18793.7	1081.8	18836	1080.9
18859.7	1080.3	18935.6	1078.9	19050.6	1077.2	19056.7	1077.2	19059.9	1077.1
19062.9	1076.9	19063.3	1077	19067.8	1077.1	19071.9	1077.1	19078.2	1077.1
19188.3	1078.1	19249.7	1079.4	19290.2	1080.1	19298.1	1080.2	19313.1	1080.4
19327.5	1080.7	19358.6	1080.6	19391.6	1080.5	19412.8	1080.3	19520.8	1077.9
19554.8	1077.5	19580.2	1077.3	19610.8	1076.5	19651.9	1076.7	19697.7	1058.7
19715.9	1051.7	19732.8	1050.2	19750.7	1048.7	20032.7	1049	20292.3	1049.2
20350.9	1065.9	20388.3	1077.5	20405.5	1075.6	20406	1075.6	20439.7	1075.6
20637.3	1075.5	20899.6	1075.4	20920.6	1075.5	20941.8	1075.4	20947.4	1075.5
20962	1075.5	20980	1075.4	20989.9	1075.4	21074.1	1075.4	21119.6	1075.7
21168.7	1076.8	21222	1076.6	21326.8	1076.2	21327.4	1076.2	21342.2	1075
21390.6	1075	21428.8	1075	21455.3	1075.3	21502.1	1076.4	21502.4	1076.2
21505.4	1076.4	21551.9	1077.5	21591.8	1077.6	21726.3	1078.4	21759.2	1078.5
21766.3	1078.3	21792.4	1078.4	21884.6	1078.9	22013	1079.1	22034.3	1079.5
22101.6	1079.7	22156.1	1080.1	22201.4	1080	22204.6	1079.9	22217.3	1080.5
22235	1081.3	22238.1	1081.3	22264.5	1081	22267.7	1080.9	22269.4	1080.7
22269.9	1080.6	22272.4	1080.4	22280.3	1079.8	22341.9	1080.2	22431	1080.6
22501.3	1081.2	22591.2	1081.8	22602.9	1082	22619.7	1083	22686.6	1082.9
22710.3	1082.5								

Manning's n Values num= 3

Sta	n Val	Sta	n Val	Sta	n Val
18555.4	.04	19651.9	.035	20388.3	.04

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
19651.9	20388.3	475	510.51	570	.1	.3

Ineffective Flow num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
18555.4	19651.9	1082	20388.3	22710.3	1082

CROSS SECTION RIVER: 1
REACH: 1 RS: 214.04

INPUT
Description: 214.04
Station Elevation Data num= 96

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
19072.9	1079.7	19093.4	1080.3	19132.2	1080.8	19189.9	1082.5	19193.8	1082.6
19198.4	1082.5	19239.2	1081	19288.1	1081.2	19324.4	1080.7	19371.7	1079.1
19395.9	1078.4	19428.8	1078	19449.6	1077.2	19490.6	1077.5	19513.1	1077.7
19544.1	1077.9	19555.9	1077.7	19588.8	1076.5	19610.7	1075.7	19613.2	1075.7
19632.1	1075.8	19635.6	1075.8	19636.8	1075.4	19702.8	1053	19711.2	1052.5
19718.8	1052.3	19726.8	1051.2	19735.4	1048.8	20175.7	1049	20286.6	1049
20298.5	1052.8	20376.6	1076.5	20387.2	1075.5	20390.3	1075.2	20574.2	1076
20667.2	1076.1	20825.6	1075.6	20839.5	1075.5	20839.8	1075.5	20855.8	1073
20864.2	1073.4	20909.3	1072.6	20914.5	1072.6	20915.6	1072.9	20928.6	1077
20951.8	1077	20990.8	1076.9	20996.8	1076.9	21016.8	1077.3	21040.9	1077.5
21130.4	1077.3	21234.3	1076.9	21246.3	1076.9	21256.8	1076.2	21294.9	1076.5
21366.4	1076.6	21461.4	1076.5	21539.2	1076.3	21557.9	1076.3	21565.1	1076.3
21586.9	1076.6	21607.7	1076.8	21639.2	1077.1	21662.1	1077.5	21690.5	1078.1
21711.2	1078.3	21774.8	1078.5	21799.9	1079.2	21800.4	1079.3	21942.9	1079.4
21971	1079.3	22001.7	1079.3	22020.7	1079.3	22177.7	1078.3	22203.1	1078.1
22217.2	1078.1	22226.8	1078	22231.1	1078	22238.5	1078	22248	1077.8
22357.9	1076.9	22384.7	1077.9	22394.1	1078.2	22399.6	1078.1	22400.9	1078.1
22428.8	1077.9	22430.1	1077.9	22450.6	1078.2	22542.8	1078.3	22554	1078.5
22667.1	1079.2	22667.7	1079.3	22717.7	1081.1	22725.6	1081.1	22727.3	1081.2
22747.1	1084								

Manning's n Values num= 3

Sta	n Val	Sta	n Val	Sta	n Val
19072.9	.04	19636.8	.035	20376.6	.04

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
19636.8	20376.6	495	493.12	480	.1	.3

Ineffective Flow num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev

```
 19072.9 19636.8    1083 20376.6 22747.1    1083

CROSS SECTION          RIVER: 1
REACH: 1                  RS: 213.95

INPUT
Description: 213.95
Station Elevation Data    num=      96
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
 19012.2  1082.3 19071.8  1081.2 19072.8  1081.2 19073.5  1081.2 19172.6    1080
 19176.1  1079.9   19177  1079.9 19191.6  1079.8 19233.8  1079.1 19245.6  1079.2
 19283.7  1079.1   19366  1078.5 19459.9  1077.8 19508.7  1075.2   19510  1075.1
 19510.4  1075.2 19511.8  1075.3 19534.7  1076.7 19583.1  1074.4 19622.2  1071.5
 19627.4  1072.4 19631.4  1072.9 19699.3  1056.7   19729  1049.4 19783.8  1049.5
 20255.4  1049.3 20277.7  1056.5 20337.1  1075.9 20360.3  1074.9 20361.6  1074.8
 20403.2  1074.5 20653.5  1075.3 20691.9  1075.3   20740  1075.5   20772  1075.4
 20775.5  1075.1 20784.4  1073.9 20808.5  1074.1 20840.9  1074.4 20844.2  1074.5
 20853.7  1075.1   20870  1074.8   20875  1074.6 20914.9  1075.6 20922.3  1075.7
 20949.7  1076.5 20960.6  1076.8 20964.2  1076.9 20966.3  1078.4   20973  1080.1
 21108.8  1079.4 21171.4  1079.5 21176.1  1079.5   21183  1079.7 21200.9  1076.8
 21203.1  1076.6 21232.6  1076.3 21271.1    1076 21272.6    1076 21274.1    1076
 21377.7  1076.7 21386.9  1076.7 21400.8  1076.7 21470.9  1077.6 21502.4  1077.7
   21528  1077.6   21534  1077.9 21534.2  1077.9   21537    1078 21542.7  1077.4
 21542.9  1077.8 21554.1  1077.4 21695.2  1077.7 21731.7  1077.2 21736.1  1076.3
 21743.3  1075.1   21752  1076.3 21753.2  1076.5 21753.7  1076.6 21759.1  1078.6
 21760.3  1079.1 21763.3  1079.6 21764.1  1079.5 21772.7  1079.3 21784.7  1079.3
 21791.6  1079.5 21806.1  1079.6 21832.6  1079.8 21918.1  1079.8 21918.4  1080.2
 22000.8  1079.8   22342  1078.4 22351.4  1078.4 22362.3  1078.4 22373.8  1078.7
 22391.3  1078.7

Manning's n Values        num=       3
     Sta   n Val     Sta   n Val     Sta   n Val
 19012.2     .04 19534.7    .035 20337.1     .04

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
       19534.7 20337.1              500  504.25     500             .1       .3
Ineffective Flow     num=        2
   Sta L   Sta R    Elev   Sta L   Sta R    Elev
 19012.2 19534.7  1082.3 20337.1 22391.3  1082.3

CROSS SECTION          RIVER: 1
REACH: 1                  RS: 213.85

INPUT
Description: 213.85
Station Elevation Data    num=      96
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
 17827.8  1078.7 17849.3  1078.5 17962.5    1078 17983.6  1077.8 18087.6  1077.7
 18117.7  1077.6   18209  1077.4 18245.6  1077.6 18313.2  1077.9 18389.3  1078.8
 18415.4  1078.8 18437.5  1078.2   18449  1078.3 18463.7  1078.2 18513.6  1077.6
 18548.9  1077.6 18753.1  1077.6 18798.9  1077.6 18834.2  1077.6 18917.4    1077
 19257.5  1075.3 19264.9  1075.1 19293.5  1075.6   19308  1069.8 19333.3  1060.1
 19342.5  1063.1 19360.7  1068.8 19366.6  1068.9   19391  1069.1 19423.4  1069.4
 19453.2  1068.8 19469.5  1068.4   19505  1067.4 19506.5  1067.3 19507.3  1067.3
 19507.8  1067.3 19547.4  1067.3 19584.5  1067.6 19698.5    1068 19698.6    1068
 19700.1  1067.8 19706.3    1067 19707.5  1066.9 19732.9  1066.7 19742.3    1067
 19770.4  1067.6 19785.4  1067.6 19789.2  1066.5 19853.9  1048.1 19906.4  1048.1
 20083.9  1048.2 20249.9  1048.3 20313.2  1069.1 20328.7  1074.2 20334.9  1074.2
   20586  1074.1 20640.3  1074.2 20781.1  1074.5 20824.2  1074.1   20842  1073.7
 20852.3  1073.7 20870.3  1073.9 20934.9  1073.8 20979.5  1074.4 21111.7  1075.1
 21125.5    1075 21144.4  1074.8 21152.1  1075.1 21185.5  1076.2 21224.6  1075.6
 21230.8  1075.4 21246.8  1077.2 21248.3  1077.3   21269  1076.4 21270.4  1076.3
 21272.5  1076.3 21337.9  1076.3 21381.5  1076.2 21384.6  1076.3 21498.8  1077.1
 21503.7  1077.1 21545.5  1077.1 21557.5  1077.1   21587  1077.2 21625.9  1077.3
 21671.9  1077.5 21707.6  1077.4 21723.9  1077.4 21767.4  1077.3 21770.2  1077.3
 21773.6  1077.4 21774.6  1077.4 21801.1  1079.6 21831.2  1078.8 21907.4  1079.1
 21970.5  1078.8

Manning's n Values        num=       3
     Sta   n Val     Sta   n Val     Sta   n Val
 17827.8     .04 19785.4    .035 20328.7     .04

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
       19785.4 20328.7              521  520.04     541             .1       .3
Ineffective Flow     num=        2
   Sta L   Sta R    Elev   Sta L   Sta R    Elev
 17827.819618.33    1078 20328.7 21970.5    1078

CROSS SECTION          RIVER: 1
REACH: 1                  RS: 213.75

INPUT
Description: 213.75
Station Elevation Data    num=      28
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     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
   18435    1076   19470    1076   19600    1080 19633.4 1080.84 19633.5 1074.13
 19633.6  1073.5 19636.5  1073.5   19709 1048.55   19764    1047 19769.5    1047
 19834.5 1047.15   19899  1046.6   19904  1046.6   19959    1047   20034 1044.61
   20039  1044.6   20104    1045   20169  1045.5   20174  1045.5 20240.5 1049.35
   20302  1073.8   20305  1073.8 20305.1  1074.8 20305.2  1081.5   20340    1080
   20490    1076   20925    1075   21465    1076

Manning's n Values        num=       3
     Sta   n Val     Sta   n Val     Sta   n Val
   18435    .037 19633.5    .032 20305.1    .037

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
       19633.5 20305.1               125  115.36     120              .1       .3
Ineffective Flow     num=       2
   Sta L   Sta R    Elev   Sta L   Sta R    Elev
   18435 19633.5 1074.13 20305.1   21465  1074.8

BRIDGE                  RIVER: 1
REACH: 1                   RS: 213.745

INPUT
Description: 7th Street Bridge
Distance from Upstream XS =       0
Deck/Roadway Width        =  115.36
Weir Coefficient          =     2.6
Bridge Deck/Roadway Skew  =
Upstream  Deck/Roadway Coordinates
    num=       6
     Sta Hi Cord Lo Cord     Sta Hi Cord Lo Cord     Sta Hi Cord Lo Cord
 19633.5 1080.84 1074.13   19764 1084.56 1077.81   19899 1085.96 1079.23
   20039 1085.95  1079.2   20174 1084.45  1077.7   20305 1081.53 1074.82

Upstream Bridge Cross Section Data
Station Elevation Data    num=      28
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
   18435    1076   19470    1076   19600    1080 19633.4 1080.84 19633.5 1074.13
 19633.6  1073.5 19636.5  1073.5   19709 1048.55   19764    1047 19769.5    1047
 19834.5 1047.15   19899  1046.6   19904  1046.6   19959    1047   20034 1044.61
   20039  1044.6   20104    1045   20169  1045.5   20174  1045.5 20240.5 1049.35
   20302  1073.8   20305  1073.8 20305.1  1074.8 20305.2  1081.5   20340    1080
   20490    1076   20925    1075   21465    1076

Manning's n Values        num=       3
     Sta   n Val     Sta   n Val     Sta   n Val
   18435    .037 19633.5    .032 20305.1    .037

Bank Sta: Left   Right    Coeff Contr.   Expan.
       19633.5 20305.1              .1       .3
Ineffective Flow     num=       2
   Sta L   Sta R    Elev   Sta L   Sta R    Elev
   18435 19633.5 1074.13 20305.1   21465  1074.8

Downstream  Deck/Roadway Coordinates
    num=       6
     Sta Hi Cord Lo Cord     Sta Hi Cord Lo Cord     Sta Hi Cord Lo Cord
 19633.5 1080.84 1074.13   19764 1084.56 1077.81   19899 1085.96 1079.23
   20039 1085.95  1079.2   20174 1084.45  1077.7   20305 1081.53 1074.82

Downstream Bridge Cross Section Data
Station Elevation Data    num=      28
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
   18435    1076   19470    1076   19600    1080 19633.4 1080.84 19633.5 1074.13
 19633.6  1073.5 19636.5  1073.5   19709 1048.55   19764    1047 19769.5    1047
 19834.5 1047.15   19899  1046.6   19904  1046.6   19959    1047   20034 1044.61
   20039  1044.6   20104    1045   20169  1045.5   20174  1045.5 20240.5 1049.35
   20302  1073.8   20305  1073.8 20305.1  1074.8 20305.2  1081.5   20340    1080
   20490    1076   20925    1075   21465    1076

Manning's n Values        num=       3
     Sta   n Val     Sta   n Val     Sta   n Val
   18435    .037 19633.5    .032 20305.1    .037

Bank Sta: Left   Right    Coeff Contr.   Expan.
       19633.5 20305.1              .1       .3
Ineffective Flow     num=       2
   Sta L   Sta R    Elev   Sta L   Sta R    Elev
   18435 19633.5 1074.13 20305.1   21465  1074.8

Upstream Embankment side slope              =        horiz. to 1.0 vertical
Downstream Embankment side slope            =        horiz. to 1.0 vertical
Maximum allowable submergence for weir flow =     .95
Elevation at which weir flow begins         =
Energy head used in spillway design         =
```

```
Spillway height used in design              =
Weir crest shape                            = Broad Crested

Number of Piers =  4

Pier Data
Pier Station     Upstream= 19766.5    Downstream= 19766.5
Upstream     num=       2
    Width   Elev    Width   Elev
        5    1047       5 1077.88
Downstream     num=       2
    Width   Elev    Width   Elev
        5    1047       5 1077.88

Pier Data
Pier Station     Upstream= 19901.5    Downstream= 19901.5
Upstream     num=       2
    Width   Elev    Width   Elev
        5  1046.6       5  1079.2
Downstream     num=       2
    Width   Elev    Width   Elev
        5  1046.6       5  1079.2

Pier Data
Pier Station     Upstream= 20036.5    Downstream= 20036.5
Upstream     num=       2
    Width   Elev    Width   Elev
        5  1044.6       5  1079.2
Downstream     num=       2
    Width   Elev    Width   Elev
        5  1044.6       5  1079.2

Pier Data
Pier Station     Upstream= 20171.5    Downstream= 20171.5
Upstream     num=       2
    Width   Elev    Width   Elev
        5  1045.5       5  1077.7
Downstream     num=       2
    Width   Elev    Width   Elev
        5  1045.5       5  1077.7

Number of Bridge Coefficient Sets =  1

Low Flow Methods and Data
       Energy
       Momentum                Cd   =     1.2
       Yarnell                 KVal =    1.05
Selected Low Flow Methods = Highest Energy Answer

High Flow Method
       Energy Only

Additional Bridge Parameters
       Add Friction component to Momentum
       Add Weight component to Momentum
       Class B flow critical depth computations use critical depth
           inside the bridge at the upstream end
       Criteria to check for pressure flow = Upstream energy grade line

CROSS SECTION          RIVER: 1
REACH: 1                  RS: 213.74

INPUT
Description: 213.74
Station Elevation Data     num=       28
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
   18435    1076   19470    1076   19600    1080 19633.4 1080.84 19633.5 1074.13
 19633.6  1073.5 19636.5  1073.5   19709 1048.55   19764    1047 19769.5    1047
 19834.5 1047.15   19899  1046.6   19904  1046.6   19959    1047   20034 1044.61
   20039  1044.6   20104    1045   20169  1045.5   20174  1045.5 20240.5 1049.35
   20302  1073.8   20305  1073.8 20305.1  1074.8 20305.2  1081.5   20340    1080
   20490    1076   20925    1075   21465    1076

Manning's n Values         num=       3
     Sta   n Val     Sta   n Val     Sta   n Val
   18435    .037 19633.5    .032 20305.1    .037

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
       19633.5 20305.1               391  373.47     361              .1       .3
Ineffective Flow     num=       2
   Sta L   Sta R    Elev   Sta L   Sta R    Elev
   18435 19633.5 1074.13 20305.1   21465  1074.8

CROSS SECTION          RIVER: 1
```

REACH: 1 RS: 213.66

INPUT
Description: 213.66
Station Elevation Data num= 96

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
17026.7	1076.4	17035.9	1076.4	17047	1076.4	17057.3	1076.5	17212.3	1077.3
17306.5	1077.8	17311.3	1077.7	17325.2	1077.3	17326.2	1077.3	17343.4	1077.3
17442.9	1076.7	17474.5	1076.6	17571	1076	17573.6	1076	17595.6	1076.1
17610	1076.1	17705.1	1075	17741.5	1075.1	17947.8	1075.4	17953.1	1075.5
18038.8	1075.4	18185.8	1075.6	18234.4	1076.1	18300.9	1076.4	18318.8	1076.5
18414	1075.5	18414.6	1075.5	18415.1	1075.5	18415.7	1075.5	18448.6	1075.8
18455.1	1075.4	18472.5	1073.3	18527.9	1073.3	18683	1073	18718.7	1073
18832.1	1073.3	18873.8	1073.2	18878.4	1072.9	18881.8	1072.9	18892.6	1074.2
18901.3	1075.2	19033.1	1075.2	19131.6	1074.9	19140.9	1074.8	19157.1	1074.8
19235.1	1073.7	19291.4	1073.4	19291.9	1073.4	19292.2	1073.4	19391.8	1069.9
19418.5	1069.7	19442.4	1069.3	19496.9	1070	19532.6	1070.6	19537.6	1070.2
19543	1070.6	19572.3	1071.8	19605.3	1068.7	19616.1	1068.2	19621.3	1069.8
19633.2	1073.3	19663.1	1073.7	19675.2	1073.6	19689.7	1068.5	19748.8	1047.6
19750.4	1047.6	20010.7	1047.7	20194.9	1047.9	20235	1062.5	20260.3	1071.7
20270.2	1073.7	20288.3	1076.6	20297.7	1078.3	20387.2	1078.5	20416.3	1078.5
20457.1	1078.5	20464.9	1076.1	20469.4	1075.3	20825.5	1074.4	20828.5	1074.4
20828.8	1074.4	20830.9	1074.4	20837.2	1074.9	20839.2	1074.9	20870.3	1074.9
20871.4	1074.9	20872.6	1074.6	20872.8	1074.7	20900.8	1074.1	20901.5	1074
20908.4	1073.9	20912.4	1073.9	20915.4	1074	20927	1075.1	20951.2	1077.5
20999.4	1077.6								

Manning's n Values num= 3

Sta	n Val	Sta	n Val	Sta	n Val
17026.7	.037	19675.2	.032	20297.7	.037

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
19675.2	20297.7	490	491.08	495	.1	.3

Ineffective Flow num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
17026.7	19675.2	1078.5	20297.7	20999.4	1078.5

CROSS SECTION RIVER: 1
REACH: 1 RS: 213.57

INPUT
Description: 213.57
Station Elevation Data num= 96

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
17508.1	1075.8	17669.7	1076	17677.2	1076	17679.4	1076	17681.9	1075.9
17685.3	1075.9	17879.1	1077.7	17883.6	1077.7	17891.2	1077.7	17899.7	1077.7
17907.2	1077.7	18293.4	1077.1	18302.2	1077.1	18305.6	1077.2	18335	1077.2
18409.4	1076.8	18482.1	1076	18487.1	1075.3	18493.2	1074.6	18496.9	1074.6
18674	1073.2	18717	1073	18743.5	1072.8	18755.4	1072.8	18802	1072.6
18832.6	1072.6	18934.4	1072.7	18941.7	1072.7	18977	1069	18979.3	1068.7
18979.7	1068.7	18981.1	1068.6	19032.8	1069.7	19078.3	1069.3	19123.5	1069
19190.3	1068.3	19211.6	1068.4	19212.3	1068.4	19245	1068.5	19287.9	1069
19318.4	1068.9	19384.7	1069.1	19398.3	1068.6	19484.5	1068.5	19514.1	1067.2
19542.6	1063.6	19548	1062.9	19575	1062.8	19586.3	1062.5	19595.5	1063.8
19603.2	1064.4	19612.3	1065.2	19617.4	1064.5	19668.9	1061.9	19672.3	1061.7
19674.3	1061.7	19711.7	1060.1	19720	1057.4	19743.1	1047.9	20035.4	1047
20123.9	1046.7	20135.8	1048.3	20147.5	1050.1	20202.7	1051.3	20261.3	1052.3
20286.6	1053	20301.2	1052.6	20302.5	1052.5	20345.5	1073.5	20347.7	1074.6
20347.8	1074.6	20348.2	1074.6	20373.8	1075.7	20384.8	1075.5	20390.6	1075.6
20426.7	1075.7	20435.9	1075.7	20452.6	1075.3	20481.8	1075.4	20485.6	1075.2
20501.3	1076.7	20634	1076	20804.5	1073.3	20853.6	1072.8	20858.1	1072.8
20865.8	1073.1	20870.9	1073	20902.9	1071.5	20922.6	1075.2	20923.6	1075.4
20925.3	1075.3	20936.8	1075.1	20950.5	1074.7	21085.5	1074.8	21211.9	1075.1
21311.2	1074.8								

Manning's n Values num= 3

Sta	n Val	Sta	n Val	Sta	n Val
17508.1	.037	19484.5	.032	20373.8	.037

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
19484.5	20373.8	650	500.37	390	.1	.3

Ineffective Flow num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
17508.1	19484.5	1077.7	20373.8	21311.2	1077.7

CROSS SECTION RIVER: 1
REACH: 1 RS: 213.47

INPUT
Description: 213.47
Station Elevation Data num= 96

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
17897	1072.3	17950.9	1072.3	17955.5	1073.1	17972.5	1074.8	18140.3	1074.1
18179.1	1074.1	18193.1	1074	18207.9	1073.9	18257.4	1074	18402.2	1073.7

18450.1	1073.2	18519.9	1072.6	18592.3	1071.7	18600.6	1071.6	18625.8	1071.9
18741.5	1071.7	18784.9	1071.7	18805.1	1070.7	18823.4	1069.4	18880.6	1067
18888.4	1066.7	18938.9	1066.6	18942.7	1066.6	18948.4	1066.6	18970.5	1067.2
19008	1068.2	19008.9	1068.2	19041.7	1068.5	19057.6	1068.6	19057.8	1068.6
19058.1	1068.6	19060.2	1068.6	19154.7	1068.1	19202.4	1067.9	19243.3	1067
19289	1066	19306.6	1065.6	19313.9	1065.3	19357.8	1064.8	19392.5	1064.4
19420.7	1063.8	19432.7	1063.5	19483.4	1062	19493.9	1061.7	19499.6	1061.8
19534.7	1062.6	19536.4	1062.5	19585.4	1061.2	19586.6	1061.2	19587.5	1061.2
19588.9	1061.1	19593.6	1060.6	19689.9	1051.5	19699.6	1050.5	19735.3	1047
19807.1	1046.8	19827.4	1046.8	19970.4	1046.6	19993.9	1046.3	20037.8	1046.2
20146.5	1045.8	20205.3	1048.7	20214.8	1049.3	20219.4	1049	20220.8	1048.9
20255.2	1063.1	20274.2	1072.4	20283.3	1072.6	20341.6	1072.5	20362.6	1072.6
20428.7	1074.9	20446.8	1074.9	20469.6	1074.9	20474.3	1074.9	20476.7	1075
20483.2	1074.9	20484.1	1074.9	20486.3	1074.9	20488.6	1074.7	20489.3	1074.7
20515.7	1073.2	20526.3	1073.3	20537.5	1073.5	20540.5	1073.4	20545	1073.8
20567.4	1075.2	20569.1	1075.4	20578.4	1075	20619.2	1074.5	20621.6	1074.4
20649.8	1074	20700.8	1074	20735.1	1074.2	20751.5	1074.5	20765.2	1074.8
20783.9	1075.1								

Manning's n Values num= 3

Sta	n Val	Sta	n Val	Sta	n Val
17897	.037	19243.3	.032	20274.2	.037

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
19243.3	20274.2	500	493.66	485	.1	.3

Ineffective Flow num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
17897	19243.3	1075.4	20274.2	20783.9	1075.4

CROSS SECTION RIVER: 1
REACH: 1 RS: 213.38

INPUT
Description: 213.38
Station Elevation Data num= 96

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
17634.6	1070.7	17652.1	1070.7	17729.5	1071.2	17747.9	1072.2	17763.8	1073.1
17893.9	1073.4	17976.4	1073.1	18006.5	1072.7	18006.7	1072.7	18008	1072.7
18197.8	1072.8	18341.3	1071.5	18390.9	1071.3	18419.4	1070.9	18420.4	1070.9
18423.8	1070.9	18431	1071	18656.8	1070.5	18735	1070.6	18756.6	1070.9
18796.6	1071.1	18974.7	1070.8	19012.6	1070.8	19073.3	1070.8	19129.4	1069.7
19192.7	1068.9	19195.5	1068.8	19196.5	1068.5	19204.6	1068.3	19213.9	1068.2
19225.5	1067.5	19242.1	1066.8	19303.8	1064.4	19303.9	1064.4	19304.2	1064.4
19346.1	1064.6	19365.3	1061.2	19365.5	1061.2	19401.7	1061	19405.7	1060.8
19411.2	1060.6	19452.9	1058.9	19499.7	1059.7	19523.7	1060.4	19526.3	1060.4
19530.8	1060.5	19534.1	1060.4	19575.5	1058.6	19625.5	1054.4	19648.5	1052.9
19678.5	1053.7	19684.4	1053.8	19732.6	1049.4	19735.1	1049.2	19761.4	1050.8
19767.8	1050.7	19771.9	1050.2	19796.5	1046.2	19864.4	1045.8	20277.6	1045.7
20311.6	1045.6	20311.7	1045.4	20329.1	1049.4	20361.7	1051.6	20363.3	1052.8
20364.3	1052.8	20374	1053.5	20405.3	1054.8	20417	1056.5	20434.2	1065
20473	1075.2	20473.5	1075.2	20515.6	1074.3	20532	1073.2	20533.3	1073
20535.9	1073	20539.6	1072.9	20569.9	1072.5	20578	1072.1	20607.5	1072.2
20652.6	1074	20655.9	1074.1	20722.7	1075.3	20793.4	1076	20804.4	1076.4
20831.2	1076.4	20834	1075.7	20842.3	1072.9	20845.3	1072.1	20848.9	1072.1
20860.3	1072.3	20875.9	1072.3	20895.1	1072.4	20963.7	1072.4	20982.3	1071.9
20996.7	1072.4								

Manning's n Values num= 3

Sta	n Val	Sta	n Val	Sta	n Val
17634.6	.037	19346.1	.032	20473	.037

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
19346.1	20473	210	290.06	395	.1	.3

Ineffective Flow num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
17634.6	19346.1	1076.4	20473	20996.7	1076.4

CROSS SECTION RIVER: 1
REACH: 1 RS: 213.33

INPUT
Description: 213.33
Station Elevation Data num= 96

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
17662.6	1072.6	17668	1072.6	17677	1072.6	17679.2	1072.7	17685.5	1072.7
17890.3	1072	17891.3	1072	17919.8	1071.9	18055.2	1071.9	18114.9	1071.9
18241.8	1071.2	18279.3	1070.9	18302.9	1070.9	18305.8	1070.8	18316.6	1070.7
18337.3	1070.5	18464.8	1070.6	18565.2	1070.8	18644.2	1071	18654.1	1071
18680.7	1070.7	18888.5	1070	18954.5	1069.6	19002.1	1069.7	19091.3	1069
19104.2	1069	19104.4	1069	19107.7	1069	19109.5	1068.5	19112.3	1067.7
19112.4	1067.7	19123.4	1067.3	19136.1	1067.1	19144.4	1069.1	19147.5	1069.9
19163.9	1070.3	19173.4	1070.7	19184.4	1069.5	19203.3	1068.1	19209.7	1067.1
19222.7	1066	19244.2	1064.1	19272.3	1063	19328.9	1063.5	19336.9	1063.4
19344.3	1063.4	19367.2	1062.3	19389	1062	19396.3	1061.9	19416.7	1061.3

19418.1	1060.9	19453.8	1059.7	19472.5	1059.2	19476.7	1057.5	19530.4	1058.7
19538.8	1058.7	19541	1058.6	19590	1056.9	19629.4	1054.2	19644.5	1053.7
19671.3	1051.4	19710.3	1047.2	19715.9	1046.8	19755.6	1046.4	19757.3	1046.3
19759.3	1046.3	19761.3	1046.3	19780.3	1046.2	20358.7	1045.4	20444.8	1048.7
20449.3	1048.9	20508	1066.2	20514.9	1068.7	20553.2	1069.1	20640.2	1069.7
20662.5	1069.4	20704	1068.4	20729.7	1068.7	20782.7	1069.1	20784.7	1069.2
20789.1	1069.5	20821.1	1071.4	20854.7	1073	20856.9	1073.1	20859.1	1073.1
20896	1072.7	20902.1	1072.7	20919.8	1072.5	20932.4	1072.6	20967.3	1072.5
21012.3	1072.8	21051.5	1073	21059.7	1073	21066	1073.1	21092.4	1073
21244.4	1073.1								

Manning's n Values num= 3

Sta	n Val	Sta	n Val	Sta	n Val
17662.6	.037	19328.9	.032	20514.9	.037

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
19328.9	20514.9	266	316.41	426	.1	.3

Ineffective Flow num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
17662.6	19328.9	1073.1	20640.2	21244.4	1073.1

CROSS SECTION RIVER: 1
REACH: 1 RS: 213.26

INPUT
Description: 213.26
Station Elevation Data num= 45

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
17300	1071.7	17670	1072	17850	1073.6	18250	1075.5	19180	1078.2
19488.1	1078.1	19488.2	1072.97	19495.2	1069.2	19517.2	1057.5	19564.2	1055.45
19584.2	1051.3	19586.9	1051	19589.4	1051	19638.2	1048.1	19686.9	1047.3
19689.4	1047.3	19704.2	1047.2	19743.2	1042.2	19786.9	1042.15	19789.4	1042.2
19838.2	1042.8	19871.7	1042.9	19886.9	1043.85	19889.4	1043.8	19938.2	1044.1
19986.9	1042.7	19989.4	1042.7	20038.2	1042.3	20086.9	1042.85	20089.4	1042.8
20121.7	1043.3	20171.2	1041.05	20188.2	1040.9	20189.4	1040.9	20223.2	1040.4
20248.7	1042.2	20286.9	1043.4	20289.4	1043.4	20307.7	1044.35	20382.7	1069.6
20387.9	1070.4	20387.9	1072.9	20388	1078.19	20790	1078.3	21330	1075.5

Manning's n Values num= 3

Sta	n Val	Sta	n Val	Sta	n Val
17300	.037	19488.2	.032	20387.9	.037

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
19488.2	20387.9	155	151.22	155	.1	.3

Ineffective Flow num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
17300	19488.2	1072.97	20387.9	21330	1070.4

BRIDGE RIVER: 1
REACH: 1 RS: 213.255

INPUT
Description: Central Avenue Bridge
Distance from Upstream XS = 0
Deck/Roadway Width = 151.22
Weir Coefficient = 2.6
Bridge Deck/Roadway Skew =
Upstream Deck/Roadway Coordinates
num= 10

Sta	Hi Cord	Lo Cord	Sta	Hi Cord	Lo Cord	Sta	Hi Cord	Lo Cord
19488.2	1078.14	1072.97	19586.9	1078.5	1073.28	19686.9	1078.86	1073.64
19786.9	1079.15	1073.93	19886.9	1079.37	1074.2	19989.4	1079.38	1074.2
20086.9	1079.13	1073.93	20188.2	1078.89	1073.7	20286.9	1078.53	1073.32
20387.9	1078.19	1072.98						

Upstream Bridge Cross Section Data
Station Elevation Data num= 45

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
17300	1071.7	17670	1072	17850	1073.6	18250	1075.5	19180	1078.2
19488.1	1078.1	19488.2	1072.97	19495.2	1069.2	19517.2	1057.5	19564.2	1055.45
19584.2	1051.3	19586.9	1051	19589.4	1051	19638.2	1048.1	19686.9	1047.3
19689.4	1047.3	19704.2	1047.2	19743.2	1042.2	19786.9	1042.15	19789.4	1042.2
19838.2	1042.8	19871.7	1042.9	19886.9	1043.85	19889.4	1043.8	19938.2	1044.1
19986.9	1042.7	19989.4	1042.7	20038.2	1042.3	20086.9	1042.85	20089.4	1042.8
20121.7	1043.3	20171.2	1041.05	20188.2	1040.9	20189.4	1040.9	20223.2	1040.4
20248.7	1042.2	20286.9	1043.4	20289.4	1043.4	20307.7	1044.35	20382.7	1069.6
20387.9	1070.4	20387.9	1072.9	20388	1078.19	20790	1078.3	21330	1075.5

Manning's n Values num= 3

Sta	n Val	Sta	n Val	Sta	n Val
17300	.037	19488.2	.032	20387.9	.037

Bank Sta: Left	Right	Coeff Contr.	Expan.
19488.2	20387.9	.1	.3

```
Ineffective Flow     num=       2
   Sta L   Sta R    Elev   Sta L   Sta R    Elev
   17300 19488.2 1072.97 20387.9   21330  1070.4

Downstream  Deck/Roadway Coordinates
    num=       10
     Sta Hi Cord Lo Cord     Sta Hi Cord Lo Cord     Sta Hi Cord Lo Cord
 19488.2 1078.14 1072.97 19586.9  1078.5 1073.28 19686.9 1078.86 1073.64
 19786.9 1079.15 1073.93 19886.9 1079.37  1074.2 19989.4 1079.38  1074.2
 20086.9 1079.13 1073.93 20188.2 1078.89  1073.7 20286.9 1078.53 1073.32
 20387.9 1078.19 1072.98

Downstream Bridge Cross Section Data
Station Elevation Data    num=       45
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
   17300  1071.7   17670    1072   17850  1073.6   18250  1075.5   19180  1078.2
 19488.1  1078.1 19488.2 1072.97 19495.2  1069.2 19517.2  1057.5 19564.2 1055.45
 19584.2  1051.3 19586.9    1051 19589.4    1051 19638.2  1048.1 19686.9  1047.3
 19689.4  1047.3 19704.2  1047.2 19743.2  1042.2 19786.9 1042.15 19789.4  1042.2
 19838.2  1042.8 19871.7  1042.9 19886.9 1043.85 19889.4  1043.8 19938.2  1044.1
 19986.9  1042.7 19989.4  1042.7 20038.2  1042.3 20086.9 1042.85 20089.4  1042.8
 20121.7  1043.3 20171.2 1041.05 20188.2  1040.9 20189.4  1040.9 20223.2  1040.4
 20248.7  1042.2 20286.9  1043.4 20289.4  1043.4 20307.7 1044.35 20382.7  1069.6
 20387.9  1070.4 20387.9  1072.9   20388 1078.19   20790  1078.3   21330  1075.5

Manning's n Values        num=       3
     Sta   n Val     Sta   n Val     Sta   n Val
   17300    .037 19488.2    .032 20387.9    .037

Bank Sta: Left   Right    Coeff Contr.   Expan.
       19488.2 20387.9             .1       .3
Ineffective Flow     num=       2
   Sta L   Sta R    Elev   Sta L   Sta R    Elev
   17300 19488.2 1072.97 20387.9   21330  1070.4

Upstream Embankment side slope              =        horiz. to 1.0 vertical
Downstream Embankment side slope            =        horiz. to 1.0 vertical
Maximum allowable submergence for weir flow =     .95
Elevation at which weir flow begins         =
Energy head used in spillway design         =
Spillway height used in design              =
Weir crest shape                            = Broad Crested

Number of Piers =  8

Pier Data
Pier Station     Upstream=19588.15    Downstream=19588.15
Upstream     num=       2
    Width   Elev    Width   Elev
     2.5    1051     2.5 1073.28
Downstream     num=       2
    Width   Elev    Width   Elev
     2.5    1051     2.5 1073.28

Pier Data
Pier Station     Upstream=19688.15    Downstream=19688.15
Upstream     num=       2
    Width   Elev    Width   Elev
     2.5  1047.3     2.5  1073.7
Downstream     num=       2
    Width   Elev    Width   Elev
     2.5  1047.3     2.5  1073.7

Pier Data
Pier Station     Upstream=19788.15    Downstream=19788.15
Upstream     num=       2
    Width   Elev    Width   Elev
     2.5 1042.15     2.5  1073.9
Downstream     num=       2
    Width   Elev    Width   Elev
     2.5 1042.15     2.5  1073.9

Pier Data
Pier Station     Upstream=19888.15    Downstream=19888.15
Upstream     num=       2
    Width   Elev    Width   Elev
     2.5  1043.8     2.5  1074.2
Downstream     num=       2
    Width   Elev    Width   Elev
     2.5  1043.8     2.5  1074.2

Pier Data
Pier Station     Upstream=19988.15    Downstream=19988.15
Upstream     num=       2
```

```
    Width   Elev    Width   Elev
     2.5  1042.7     2.5  1074.2
Downstream     num=       2
    Width   Elev    Width   Elev
     2.5  1042.7     2.5  1074.2

Pier Data
Pier Station     Upstream=20088.15    Downstream=20088.15
Upstream     num=       2
    Width   Elev    Width   Elev
     2.5  1042.8     2.5  1073.9
Downstream     num=       2
    Width   Elev    Width   Elev
     2.5  1042.8     2.5  1073.9

Pier Data
Pier Station     Upstream=20189.45    Downstream=20189.45
Upstream     num=       2
    Width   Elev    Width   Elev
     2.5  1040.9     2.5  1073.7
Downstream     num=       2
    Width   Elev    Width   Elev
     2.5  1040.9     2.5  1073.7

Pier Data
Pier Station     Upstream=20288.15    Downstream=20288.15
Upstream     num=       2
    Width   Elev    Width   Elev
     2.5  1043.4     2.5  1073.3
Downstream     num=       2
    Width   Elev    Width   Elev
     2.5  1043.4     2.5  1073.3

Number of Bridge Coefficient Sets =  1

Low Flow Methods and Data
       Energy
       Momentum              Cd   =     1.2
       Yarnell               KVal =    1.05
Selected Low Flow Methods = Highest Energy Answer

High Flow Method
       Energy Only

Additional Bridge Parameters
       Add Friction component to Momentum
       Add Weight component to Momentum
       Class B flow critical depth computations use critical depth
           inside the bridge at the upstream end
       Criteria to check for pressure flow = Upstream energy grade line

CROSS SECTION          RIVER: 1
REACH: 1                  RS: 213.25

INPUT
Description: 213.25
Station Elevation Data    num=      45
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
   17300  1071.7   17670    1072   17850  1073.6   18250  1075.5   19180  1078.2
 19488.1  1078.1 19488.2 1072.97 19495.2  1069.2 19517.2  1057.5 19564.2 1055.45
 19584.2  1051.3 19586.9    1051 19589.4    1051 19638.2  1048.1 19686.9  1047.3
 19689.4  1047.3 19704.2  1047.2 19743.2  1042.2 19786.9 1042.15 19789.4  1042.2
 19838.2  1042.8 19871.7  1042.9 19886.9 1043.85 19889.4  1043.8 19938.2  1044.1
 19986.9  1042.7 19989.4  1042.7 20038.2  1042.3 20086.9 1042.85 20089.4  1042.8
 20121.7  1043.3 20171.2 1041.05 20188.2  1040.9 20189.4  1040.9 20223.2  1040.4
 20248.7  1042.2 20286.9  1043.4 20289.4  1043.4 20307.7 1044.35 20382.7  1069.6
 20387.9  1070.4 20387.9  1072.9   20388 1078.19   20790  1078.3   21330  1075.5

Manning's n Values        num=       3
     Sta   n Val     Sta   n Val     Sta   n Val
   17300    .037 19488.2    .032 20387.9    .037

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
       19488.2 20387.9               121  123.36     121             .1       .3
Ineffective Flow     num=       2
   Sta L   Sta R    Elev   Sta L   Sta R    Elev
   17300 19488.2 1072.97 20387.9   21330  1070.4

CROSS SECTION          RIVER: 1
REACH: 1                  RS: 213.21

INPUT
Description: 213.21
```

Right Channel Bank Station Interpolated
Station Elevation Data num= 96

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
18330.9	1072.8	18364	1072.8	18412.8	1073.1	18447.9	1073	18475.1	1072.3
18506.2	1072	18530.5	1071.1	18588.6	1070	18604.7	1069.8	18607.3	1070
18638.6	1069.9	18645.2	1070	18646.8	1070	18647	1070	18648.3	1070
18679.6	1070.4	18691	1070.2	18696.8	1070.3	18826.1	1070.2	18853.1	1069.7
18879.8	1069.1	18990	1068.8	19004.3	1068.6	19030.8	1069	19071.8	1069.5
19171.4	1069.4	19189.5	1069.4	19238.8	1069.2	19251.2	1070	19253.8	1070
19283.8	1069	19284.7	1069	19384	1068.2	19385.3	1068.1	19387.8	1068.1
19391.2	1068.1	19421.7	1067.9	19486.6	1066.6	19490.3	1065.6	19518.8	1054.9
19533.4	1049	19535.9	1049.5	19545.6	1052	19551.4	1054.2	19576.8	1051.8
19595.9	1047.4	19611.2	1046.8	19618.6	1046.7	19619.1	1046.6	19626.3	1045.5
19627	1045.3	19697	1045.2	19802.7	1045.1	20377.2	1044.9	20380.6	1045
20387.2	1045.1	20389.8	1045.1	20418.5	1045.3	20484.9	1046.3	20500.9	1046.4
20506.4	1046.3	20545.8	1046.4	20547	1046.4	20573.1	1046	20581	1046
20584	1054.4	20584.6	1058.9	20634.9	1062.9	20654.9	1064.2	20663	1064.8
20687	1065.1	20732.3	1064.9	20749.5	1065.1	20761.2	1066	20787.8	1066.2
20803.3	1066.3	20840	1066.3	20853.8	1066.3	20900.8	1066.8	20929.7	1067.2
20948.4	1067.8	20957.7	1070.3	20963.6	1072.1	20965.8	1071.9	20972.5	1072.2
20980.1	1072.5	21025.3	1072.2	21041.7	1072.4	21049	1072.4	21083	1072.6
21094.6	1072.7	21137.7	1072.7	21224.3	1073.6	21258.5	1074.2	21274.1	1074.3
21278.4	1074.5								

Manning's n Values num= 3

Sta	n Val	Sta	n Val	Sta	n Val
18330.9	.037	19490.3	.032	20418.5	.037

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
19490.3	20418.5	450	531.57	745	.1	.3

Ineffective Flow num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
18330.9	19253.8	1074	20418.5	21278.4	1074

CROSS SECTION RIVER: 1
REACH: 1 RS: 213.11

INPUT
Description: 213.11
Station Elevation Data num= 85

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
17566.5	1070.1	17705.4	1071.3	17742.2	1071.6	17814.3	1070.1	17888.9	1069.6
17929.2	1069.8	17996.1	1072.7	18084.9	1073.4	18245.7	1073.1	18304.6	1073.3
18312.5	1071.8	18319.5	1069.3	18320.2	1069.1	18324.7	1069.1	18353.4	1069.6
18382.1	1068.8	18390	1068.3	18395.2	1069.2	18399.3	1071.7	18472.2	1071.2
18480.8	1071.2	18492.7	1070.4	18507.8	1070	18517.1	1069.2	18520.7	1069.6
18584	1071.9	18596.8	1072.2	18606	1072.4	18609.2	1072.4	18753.6	1072
18759.6	1071.8	18769.2	1073.7	18780.8	1075.5	18785.7	1075	18793.4	1074.4
18863.8	1073.8	18931.9	1074.1	18960.3	1074.3	18976.4	1074.4	19015.9	1075
19047.7	1075	19171.5	1072.4	19275.4	1071	19456	1071.1	19523.2	1069.3
19575	1067.9	19589.1	1068.3	19601.9	1071.4	19606.1	1072.1	19616.1	1067.5
19661.3	1047.6	20012.6	1047.6	20486.9	1047.9	20586.5	1081.1	20599.1	1086
20638.9	1086.2	20743.9	1086.8	20798.9	1087.3	20849	1087.5	20878.6	1087.6
20889.5	1087.8	20899.2	1087.8	20922	1087.5	21000.4	1087.3	21062.3	1085.9
21080.5	1084.4	21100.6	1083.3	21131.5	1083	21372.7	1078.3	21390.1	1077.6
21449.7	1073.9	21464.1	1073.6	21478.8	1073.9	21484.8	1073.8	21573.7	1073.9
21602.4	1073.9	21694.6	1073.6	21800.6	1072.4	21943.2	1070.8	22180.4	1070.9
22217.7	1071	22268.3	1071.4	22474.2	1073.6	22486.2	1076.3	22488.2	1077

Manning's n Values num= 3

Sta	n Val	Sta	n Val	Sta	n Val
17566.5	.037	19606.1	.032	20599.1	.037

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
19606.1	20599.1	425	459.38	565	.1	.3

Ineffective Flow num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
17566.5	18780.8	1087.8	20599.1	22488.2	1087.8

CROSS SECTION RIVER: 1
REACH: 1 RS: 213.03

INPUT
Description: 213.03
Station Elevation Data num= 97

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
16056.5	1068.9	16069.1	1068.8	16071.5	1068.8	16197.1	1069.2	16383.9	1070
16409	1070	16413.8	1070	16414.4	1070	16428.8	1070	16501.9	1070.2
16550	1070.3	16603.1	1070.5	16734.3	1069.9	16759	1069.9	16800.6	1069.5
16821.1	1069.8	16943.1	1070.1	16956.6	1070.5	16985.9	1070.6	17193.9	1070.8
17238.8	1069.8	17263.2	1069.3	17296.6	1068.7	17461.4	1069.1	17486.5	1069.2
17576.5	1069.4	17728.6	1070.6	17908.4	1072	17938.3	1071.6	17974.7	1070.1
17987.3	1069.9	18028.7	1068.5	18086.7	1069.1	18107.5	1068.9	18113.8	1068.9
18246.2	1068.5	18370.2	1068.2	18382.5	1068.2	18389	1068.3	18394.9	1068.3

18496	1070.4	18502.4	1070.5	18521.4	1070.6	18643.8	1071	18700.9	1071.3
18708.1	1071.2	18723.6	1071.3	18831.5	1070.9	18846.4	1070.8	18847.1	1070.8
18848.3	1070.8	18969.8	1071.4	19007.8	1071.8	19178.9	1073.7	19181.7	1073.7
19324.1	1073.1	19588.8	1066.9	19627.1	1066	19640.5	1066.2	19662.1	1067.2
19666.3	1067.8	19672.11	1066.574	19703.2	1060	19755.3	1050.7	19776.1	1048.9
19807.6	1047.8	19807.9	1047.8	19808.6	1047.8	19883.7	1046.8	19936.5	1046.7
19974.6	1046.7	20168.5	1046.8	20481.5	1047.5	20531.6	1047.5	20536.3	1047.6
20551.1	1052.62	0591.83	1066.575	20595.4	1067.8	20639.6	1083	20645.8	1085
20668.5	1085.5	20744.1	1085.4	20806.7	1086.1	20879.4	1082	20936.8	1078.5
20990.3	1075.5	21125.9	1073.2	21137.8	1072.9	21183.6	1072.1	21221	1072
21240.8	1071.7	21303.4	1071.3	21328.8	1071.1	21394.9	1071.7	21406.3	1071.8
21439	1071.7	21481.2	1071.9						

Manning's n Values num= 3

Sta	n Val	Sta	n Val	Sta	n Val
16056.5	.037	19672.1	.03	20591.83	.037

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
19672.12	0591.83		475	495	525 .1	.3

Ineffective Flow num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
16056.5	19178.9	1086.1	20645.8	21481.2	1086.1

CROSS SECTION RIVER: 1
REACH: 1 RS: 212.93

INPUT
Description: 212.93

Left and Right Channel Bank Stations Interpolated
Station Elevation Data num= 93

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
18913.7	1067.5	18940.6	1066.4	18961.6	1067.4	18996.4	1069.5	19034.7	1069.3
19121.7	1070.2	19158.8	1070.2	19269.6	1071.2	19362.4	1070.3	19381.3	1070.6
19412.2	1072.5	19420.1	1072.9	19430.8	1073.3	19436.5	1073.5	19633.3	1068.7
19645	1068.3	19645.7	1068.4	19645.9	1068.4	19653.4	1069	19673.1	1070.5
19690.76	1065.485	19697.4	1063.6	19757.3	1046.7	19779.3	1046.4	19826.6	1046.3
19850.5	1046.5	19924.2	1047.4	19928.9	1047.5	19929.5	1047.4	19958.7	1045.5
20129.7	1045.4	20271.7	1045.6	20345.4	1045.6	20426.9	1045.52	0489.75	1065.484
20489.8	1065.5	20498.7	1068.1	20501.4	1068	20587.1	1066.5	20637	1066.5
20655.9	1066.4	20685.9	1065.7	20749.1	1064.9	20804.3	1071.3	20847	1074.9
20872.4	1075.1	20941	1074.1	20990.9	1073	21005.7	1072.8	21075.3	1071.3
21079.7	1071.2	21083	1071.2	21113	1071.3	21246.3	1072.7	21249.5	1072.8
21261.8	1072.9	21268.5	1072.9	21332.8	1073.1	21571.4	1072.7	21590.1	1072.7
21815.9	1071.3	21853.1	1071.3	21982.5	1070.6	22017.6	1070.5	22314.9	1070
22499	1068.8	22548.8	1068.9	22568.2	1068.4	22648.5	1068.9	22948.3	1069.7
23054.9	1071.1	23121.6	1072	23140.9	1076.4	23143.5	1077.2	23151.2	1077.1
23159.2	1077	23162.2	1077.3	23171	1077.8	23179.9	1081.1	23202.7	1089.6
23248.6	1089.5	23303.8	1089.6	23327.8	1082.2	23331.1	1081	23333.2	1080.6
23345.9	1077.9	23350.9	1077.9	23361.3	1078.1	23377.6	1073.6	23386.3	1070.8
23389.2	1071	23392	1071.2	23394	1070.7				

Manning's n Values num= 3

Sta	n Val	Sta	n Val	Sta	n Val
18913.7	.037	19690.76	.03	20489.75	.037

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
19690.76	20489.75		495	501.9	535 .1	.3

Ineffective Flow num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
18913.7	19673.1	1078	20498.7	23394	1078

CROSS SECTION RIVER: 1
REACH: 1 RS: 212.84

INPUT
Description: 212.84

Left and Right Channel Bank Stations Interpolated
Station Elevation Data num= 66

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
16284.9	1068.4	16487.1	1068.9	16606	1069.3	16985	1071.2	17015.9	1071.4
17038.7	1071.8	17089.2	1071.1	17339.8	1070.2	17519.4	1069.1	17554.9	1069.1
17652.7	1069	17900.6	1068.7	18109.2	1068.8	18133.9	1069	19053.9	1067.7
19203.8	1066	19229.6	1065.8	19232.1	1065.8	19238.5	1065.7	19242.2	1065.7
19244.8	1065.8	19286.8	1067.4	19292.2	1069.2	19450.5	1067.9	19498.7	1067.5
19560.8	1067	19586	1066.9	19671.4	1066.8	19692.2	1068.3	19695.5	1068.9
19711.51	1063.544	19765.4	1045.5	19772.2	1043.1	19790.5	1043.1	19811.3	1043.2
20298.7	1043.5	20314.2	1050.22	0347.25	1063.544	20367.7	1071.8	20367.9	1071.8
20405.2	1072.8	20416.8	1072.7	20424.4	1072.7	20490.9	1070.9	20522.9	1069.8
20629.8	1070.1	20679.7	1070.1	20767.5	1070.4	20793.1	1070.2	20818.2	1069.1
20874.5	1068.7	20940.7	1070.4	20979.1	1070.3	21186.4	1069.3	21242.6	1069.1
21449.2	1070.2	21488.8	1070.8	21502.4	1071	21582.5	1070.9	21684.9	1071.4
21805.3	1070.7	21883.6	1070.5	21943.6	1070.2	22187.5	1070.4	22226.7	1070.2

22398.2 1069.8

Manning's n Values num= 3

Sta	n Val	Sta	n Val	Sta	n Val
16284.9	.037	19711.5	.03	22034	7.25 .037

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.

19711.5	20347.25	565	538.19	480	.1	.3

Ineffective Flow num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
16284.9	19695.5	1072.8	20367.7	22398.2	1072.8

CROSS SECTION RIVER: 1
REACH: 1 RS: 212.74

INPUT
Description: 212.74

Left and Right Channel Bank Stations Interpolated
Station Elevation Data num= 70

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
15451.4	1067.1	15456.2	1067.3	15464.1	1067.8	15467.8	1068.3	15480.9	1067.9
15619.6	1066.5	15997.3	1067	16142.7	1066.6	16235	1067.1	16317.5	1067.4
16486.7	1067.9	16644.3	1068.2	16906.1	1067.7	17106.4	1067.8	17312.1	1069.3
17351.4	1069.8	17392.8	1069.3	17578.5	1067.9	17799	1066.9	17906.3	1067
18021.4	1067.4	18082.2	1066.6	18121.5	1067.1	18128.7	1067	19421.5	1067
19430.3	1070.5	19440.7	1074.4	19464.5	1074.9	19479.6	1075	19498.8	1064.8
19504.9	1062.5	19514.1	1062.5	19546.7	1062.8	19569.3	1066	19571.5	1066.5
19577.2	1066.5	19641.5	1067.1	19653.8	1066.8	19678.6	1067.3	19690.61	1063.061
19709.2	1056.5	19745.4	1042.1	19776.5	1041.9	20081.3	1041.6	20297.5	1041.8
20311.1	1046.1	20335	1053.3	20367.2	1063.063	20372.6	1064.7	20387.5	1069
20400.7	1069	20436.3	1069	20477.6	1068.5	20512.4	1068.7	20545.9	1068.9
20612.1	1068.9	20630.4	1069.2	20677.9	1069.9	20719.8	1069.6	20764.1	1069.6
20802.7	1069.4	20847.1	1068.9	20916.2	1069.1	20977.1	1068.7	21027.9	1068.8
21126.4	1069.4	21156	1069.5	21203.9	1069.2	21326.9	1068.9	21421.2	1069.1

Manning's n Values num= 3

Sta	n Val	Sta	n Val	Sta	n Val
15451.4	.037	19690.61	.032	20367.2	.037

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.

19690.61	20367.2	296	242.17	66	.1	.3

Ineffective Flow num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
15451.4	19678.6	1074	20387.5	21421.2	1074

CROSS SECTION RIVER: 1
REACH: 1 RS: 212.68

INPUT
Description: 212.68

Upstream face of 7th Avenue bridge

Station Elevation Data num= 34

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
18325	1064.21	19130.38	1068	19307.91	1072	19492.8	1073.03	19492.89	1066.21
19501.07	1063.02	19567.36	1037.21	9595.08	1037.5	19600.27	1037.5	19645.74	1037.8
19703.33	1037.88	19708.52	1037.88	19721.94	1039.11	9780.83	1037.6	19790.36	1040
19811.58	1039.41	9816.77	1039.41	9829.76	1037.21	9839.72	1038	19878.26	1039.3
19919.83	1037.51	9925.02	1037.51	9977.41	1036.92	0028.08	1038.12	0033.27	1038.1
20064.88	1037.5	20130.11	1063.02	520137.19	1065.82	0137.28	1072.66	20407.73	1072
20615.57	1068	20641.55	1067.62	0780.11	1068	21568.17	1069.3		

Manning's n Values num= 3

Sta	n Val	Sta	n Val	Sta	n Val
18325	.037	19501.07	.032	20130.1	.037

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.

19501.07	20130.1	155	153.01	155	.1	.3

Ineffective Flow num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
18325	19492.89	1066.21	20137.19	21568.17	1065.8

BRIDGE RIVER: 1
REACH: 1 RS: 212.675

INPUT

```
Description: 7th Avenue Bridge
Distance from Upstream XS =       0
Deck/Roadway Width        =  153.01
Weir Coefficient          =     2.6
Bridge Deck/Roadway Skew  =
Upstream  Deck/Roadway Coordinates
    num=      11
     Sta Hi Cord Lo Cord     Sta Hi Cord Lo Cord     Sta Hi Cord Lo Cord
   18325  1064.2  1064.219130.38    1068    106819307.91    1072    1072
 19492.8 1073.03 1073.0319492.89 1073.03 1066.2119595.08  1073.9 1067.07
19703.34 1074.35 1067.5219811.58 1074.48 1067.6419925.02 1074.24 1067.41
20033.27  1073.6 1066.7620137.19 1072.66 1065.84

Upstream Bridge Cross Section Data
Station Elevation Data    num=      34
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
   18325  1064.219130.38    106819307.91    1072 19492.8 1073.0319492.89 1066.21
19501.071063.02319567.36  1037.219595.08  1037.519600.27  1037.519645.74  1037.8
19703.33 1037.8819708.52 1037.8819721.94  1039.119780.83  1037.619790.36    1040
19811.58  1039.419816.77  1039.419829.76  1037.219839.72    103819878.26  1039.3
19919.83  1037.519925.02  1037.519977.41  1036.920028.08  1038.120033.27  1038.1
20064.88  1037.5 20130.11063.02520137.19  1065.820137.28 1072.6620407.73    1072
20615.57    106820641.55  1067.620780.11    106821568.17  1069.3

Manning's n Values        num=       3
     Sta   n Val     Sta   n Val     Sta   n Val
   18325    .03719501.07    .032 20130.1    .037

Bank Sta: Left   Right    Coeff Contr.   Expan.
      19501.07 20130.1              .1       .3
Ineffective Flow     num=       2
   Sta L   Sta R    Elev   Sta L   Sta R    Elev
   1832519492.89 1066.2120137.1921568.17  1065.8

Downstream  Deck/Roadway Coordinates
    num=      11
     Sta Hi Cord Lo Cord     Sta Hi Cord Lo Cord     Sta Hi Cord Lo Cord
   18325  1064.2  1064.219130.38    1068    106819307.91    1072    1072
 19492.8 1073.03 1073.0319492.89 1073.03 1066.2119595.08  1073.9 1067.07
19703.34 1074.35 1067.5219811.58 1074.48 1067.6419925.02 1074.24 1067.41
20033.27  1073.6 1066.7620137.19 1072.66 1065.84

Downstream Bridge Cross Section Data
Station Elevation Data    num=      34
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
   18325  1064.219130.38    106819307.91    1072 19492.8 1073.0319492.89 1066.21
19502.331062.53319567.36  1037.219595.08  1037.519600.27  1037.519645.74  1037.8
19703.33 1037.8819708.52 1037.8819721.94  1039.119780.83  1037.619790.36    1040
19811.58  1039.419816.77  1039.419829.76  1037.219839.72    103819878.26  1039.3
19919.83  1037.519925.02  1037.519977.41  1036.920028.08  1038.120033.27  1038.1
20064.88  1037.520128.841062.53220137.19  1065.820137.28 1072.6620407.73    1072
20615.57    106820641.55  1067.620780.11    106821568.17  1069.3

Manning's n Values        num=       3
     Sta   n Val     Sta   n Val     Sta   n Val
   18325    .03719502.33    .03220128.84    .037

Bank Sta: Left   Right    Coeff Contr.   Expan.
      19502.3320128.84              .1       .3
Ineffective Flow     num=       2
   Sta L   Sta R    Elev   Sta L   Sta R    Elev
   1832519492.89 1066.2120137.1921568.17  1065.8

Upstream Embankment side slope              =        horiz. to 1.0 vertical
Downstream Embankment side slope            =        horiz. to 1.0 vertical
Maximum allowable submergence for weir flow =     .95
Elevation at which weir flow begins         =
Energy head used in spillway design         =
Spillway height used in design              =
Weir crest shape                            = Broad Crested

Number of Piers =  5

Pier Data
Pier Station     Upstream=19597.67    Downstream=19597.67
Upstream     num=       2
    Width   Elev    Width   Elev
     4.8    1036     4.8    1068
Downstream     num=       2
    Width   Elev    Width   Elev
     4.8    1036     4.8    1068

Pier Data
Pier Station     Upstream=19705.06    Downstream=19705.06
```

```
Upstream     num=       2
    Width   Elev    Width   Elev
     4.8    1036     4.8    1068
Downstream     num=       2
    Width   Elev    Width   Elev
     4.8    1036     4.8    1068

Pier Data
Pier Station     Upstream=19814.17    Downstream=19814.17
Upstream     num=       2
    Width   Elev    Width   Elev
     4.8    1036     4.8    1068
Downstream     num=       2
    Width   Elev    Width   Elev
     4.8    1036     4.8    1068

Pier Data
Pier Station     Upstream=19922.42    Downstream=19922.42
Upstream     num=       2
    Width   Elev    Width   Elev
     4.8    1036     4.8    1068
Downstream     num=       2
    Width   Elev    Width   Elev
     4.8    1036     4.8    1068

Pier Data
Pier Station     Upstream=20030.67    Downstream=20030.67
Upstream     num=       2
    Width   Elev    Width   Elev
     4.8    1036     4.8    1068
Downstream     num=       2
    Width   Elev    Width   Elev
     4.8    1036     4.8    1068

Number of Bridge Coefficient Sets =  1

Low Flow Methods and Data
       Energy
       Momentum                Cd   =     1.2
       Yarnell                 KVal =    1.05
Selected Low Flow Methods = Highest Energy Answer

High Flow Method
       Energy Only

Additional Bridge Parameters
       Add Friction component to Momentum
       Add Weight component to Momentum
       Class B flow critical depth computations use critical depth
           inside the bridge at the upstream end
       Criteria to check for pressure flow = Upstream energy grade line

CROSS SECTION          RIVER: 1
REACH: 1                  RS: 212.67

INPUT
Description: 212.67

Left and Right Channel Bank Stations Interpolated
Station Elevation Data     num=      34
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
   18325  1064.219130.38    106819307.91    1072 19492.8 1073.0319492.89 1066.21
19502.331062.53319567.36  1037.219595.08  1037.519600.27  1037.519645.74  1037.8
19703.33 1037.8819708.52 1037.8819721.94  1039.119780.83  1037.619790.36    1040
19811.58  1039.419816.77  1039.419829.76  1037.219839.72    103819878.26  1039.3
19919.83  1037.519925.02  1037.519977.41  1036.920028.08  1038.120033.27  1038.1
20064.88  1037.520128.841062.53220137.19  1065.820137.28 1072.6620407.73    1072
20615.57    106820641.55  1067.620780.11    106821568.17  1069.3

Manning's n Values         num=       3
     Sta   n Val     Sta   n Val     Sta   n Val
   18325    .03719502.33    .03220128.84    .037

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
      19502.3320128.84               481  557.08     901              .1       .3
Ineffective Flow     num=       2
   Sta L   Sta R    Elev   Sta L   Sta R    Elev
   1832519492.89 1066.2120137.1921568.17  1065.8

CROSS SECTION          RIVER: 1
REACH: 1                  RS: 212.56

INPUT
Description: 212.56
```

Left and Right Channel Bank Stations Interpolated
Station Elevation Data num= 84

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
18526.6	1067.7	18605.6	1068.5	18672.9	1069.1	18686.4	1060	19108.7	1062.5
19147.3	1066.2	19151.5	1066.4	19161.7	1067.6	19184.3	1068.9	19238.8	1068.8
19249.1	1068.8	19264.6	1065	19289.8	1059.5	19333	1060.5	19374.1	1060.3
19381.8	1063.3	19405.9	1071.5	19420.1	1070.7	19427.9	1069.3	19436.8	1069
19464.9	1070.8	19474	1071.7	19488.9	1073.8	19506.5	1072.1	19530.4	1065.8
19539	1066.2	19604	1065.9	19607.1	1065.3	19613.7	1065.3	19619.1	1065.7
19619.8	1066.4	19637.7	1068	19655.3	1067.8	19692.8	1068.8	19731.05	1056.917
19757.5	1048.7	19785.4	1039.9	19929	1039.8	20217.8	1039.3	20252.14	1056.916
20264	1063	20269.6	1061.5	20279.7	1059.4	20318.1	1058.6	20372.9	1059.3
20398.1	1060.1	20425.6	1066.2	20438.5	1062.1	20445.5	1059.5	20451.6	1056.8
20575.6	1077.4	20581.9	1078.8	20601.9	1079.3	20671.6	1080.6	20698.7	1080.1
20732.1	1079.9	20755.7	1079.5	20791.2	1077.6	20834.9	1075.6	20892.5	1079.5
20896	1079.6	20938.4	1078.1	20958.4	1077.9	21004.8	1078.7	21029.1	1078.1
21101.8	1077.3	21144.7	1078.4	21165.1	1078.9	21203.3	1079.8	21236.8	1080.1
21329	1071.7	21351.9	1069.5	21384.8	1066.8	21396.7	1060	21632.6	1060
21640.1	1063.9	21686.7	1065.4	21688.1	1065.4	21734.9	1066.2	21757.8	1066.7
21833.3	1068.7	21846.1	1068.8	21931.4	1069.9	21952.1	1069		

Manning's n Values num= 3

Sta	n Val	Sta	n Val	Sta	n Val
18526.6	.037	19731.05	.032	20252.14	.037

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
19731.05	20252.14	495	502.71	525	.1	.3

Ineffective Flow num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
18526.6	19692.8	1078	20301	21952.1	1078

CROSS SECTION RIVER: 1
REACH: 1 RS: 212.46

INPUT
Description: 212.46

Left and Right Channel Bank Stations Interpolated
Station Elevation Data num= 66

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
18753.5	1067.1	18827.8	1067.7	18877.5	1068.2	18898.4	1055	19357.3	1055.1
19382.1	1053.4	19409	1053.9	19429.7	1053.3	19445.8	1054.1	19481.5	1054.3
19531	1052.9	19550.5	1054.6	19656.6	1055	19684.4	1069.8	19700	1067.4
19714.7	1067.8	19743.34	1056.289	19787.6	1038.5	19877.7	1038.3	20214.4	1037.2
20270.9	1039.9	20290.3	1040.2	20301	1040.331	20380.4	1041.3	20415.6	1048.6
20422.7	1048.9	20436.9	1047.2	20446.3	1048.4	20484.2	1055.6	20494.5	1057
20510.9	1057.5	20553.9	1062.4	20563.5	1064	20616.9	1070.3	20661.5	1072.5
20691.8	1074.7	20705.2	1075.2	20771.8	1073.9	20836.5	1073.6	20841.8	1073.2
20893.4	1072.8	20932.3	1068.7	20999.5	1072.8	21028.4	1074	21091.5	1069.7
21143.4	1069.4	21187.1	1070.2	21222.4	1071.9	21234.8	1070.7	21242.4	1070.9
21265.3	1070.2	21277.9	1069.2	21302	1065.4	21326.5	1063.3	21392.1	1057.4
21427.4	1052.9	21482.8	1061.6	21523.6	1061.6	21591.7	1061.2	21609.9	1060.7
21657.5	1061.6	22674	1062	22695.3	1072.2	22728.6	1064.6	22746.1	1064.3
22917.1	1063.8								

Manning's n Values num= 3

Sta	n Val	Sta	n Val	Sta	n Val
18753.5	.037	19743.34	.032	20301	.037

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
19743.34	20301	495	497.81	510	.1	.3

Ineffective Flow num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
18753.5	19684.4	1075.2	20301	22917.1	1075.2

CROSS SECTION RIVER: 1
REACH: 1 RS: 212.37

INPUT
Description: 212.37

Left and Right Channel Bank Stations Interpolated
Station Elevation Data num= 53

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
18816.9	1066.3	18818.6	1066.2	18822.9	1066.3	18834	1066.3	18957.9	1066
18989.9	1065.8	19000	1065.6	19036.9	1065.2	19054.2	1064.9	19092.2	1064.1
19112.5	1063.4	19137.4	1064.7	19138.3	1064.8	19139.3	1064.8	19195.1	1066.9
19209.3	1061	19668.8	1061	19681.7	1066.2	19684.6	1067.4	19684.8	1067.3
19685.1	1067.2	19692.2	1064.6	19715.3	1065	19717.4	1065.1	19722.1	1063.2
19744.06	1053.778	19782.7	1037.2	19926.2	1036.9	20272.4	1037.1	20284.2	1036.6
20285.4	1036.6	20288.8	1038.6	20320.69	1053.776	20338.6	1062.3	20338.7	1062.3
20369.5	1065.2	20396.5	1069.4	20454.4	1070.1	20471.3	1070.1	20508.4	1061
22070.8	1061	22075.2	1062.9	22088.8	1064.3	22125.1	1067.6	22147.7	1068.9

22155.8	1069.3	22177.3	1071.8	22222.4	1065.3	22242.6	1063.6	22252.8	1063.9
22275.2	1064.6	22382.7	1065.6	22407.8	1066.1				

Manning's n Values num= 3

Sta	n Val	Sta	n Val	Sta	n Val
18816.9	.037	19744.06	.037	20320.69	.037

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
19744.06	20320.69	500	495.84	485	.1	.3

Ineffective Flow num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
18816.9	19684.6	1070	20396.5	22407.8	1070

CROSS SECTION RIVER: 1
REACH: 1 RS: 212.27

INPUT
Description: 212.27

Left and Right Channel Bank Stations Interpolated

Station Elevation Data num= 95

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
17693.1	1064.6	17697.9	1064.6	17734.8	1064	17740.4	1063.9	17785.6	1063.1
17796.2	1063.1	17827.6	1062.5	17846.2	1062.4	17893.5	1062.2	18008.4	1061.5
18061.8	1061.5	18108.5	1062.4	18180.8	1062.8	18221.3	1063	18239.7	1059
18264.8	1054.5	18285.2	1054	18326.7	1048.1	18342.3	1046.2	18362.6	1053.4
18380.3	1046.2	18395.3	1042.4	18405.4	1039	18415.2	1036.5	18431.2	1031.5
18465.3	1023.5	18544.4	1025.1	18579.3	1015.6	18586.4	1013.2	18615.7	1013
18649.7	1013	18693.4	1012.9	18782.3	1012.3	18931.2	1012.8	18976.1	1012.6
18981.9	1012.7	19083	1012.1	19110	1012.1	19284.8	1012.2	19302.3	1012.4
19314.3	1019	19342.1	1028.5	19385.1	1048.2	19442.6	1044.9	19457.4	1044.6
19509.8	1062.9	19515.4	1063	19561	1063.7	19676.4	1065.4	19715.25	1052.334
19754.6	1039.1	19765.4	1035.4	19935.2	1035.2	20003.5	1035.2	20097.2	1035.1
20281.9	1035.1	20330.35	1052.334	20337	1054.7	20351	1059.5	20416.4	1037.6
20457	1023.9	20721.5	1023.4	20766.6	1022.9	20810.1	1022.2	20848.4	1021.5
20878.3	1023.7	20909.5	1025.8	20935.1	1026.2	20970.3	1026.8	20984	1027.2
21016.1	1028	21073.4	1026.9	21105.5	1026.6	21138.2	1026.2	21189.1	1025.7
21190.6	1025.7	21248.8	1040.7	21294.4	1051.5	21328.2	1059.6	21333.8	1060.2
21373.3	1067.4	21415.5	1061.7	21426.9	1059.4	21439.1	1056.3	21473.7	1050
21501.4	1044.9	21538.1	1038.9	21543.5	1037.9	21579.4	1046.2	21617.1	1054.3
21626.5	1056.1	21660.7	1060	21745.2	1060.6	21930.8	1061.7	21968.2	1061.7

Manning's n Values num= 3

Sta	n Val	Sta	n Val	Sta	n Val
17693.1	.04	19715.25	.03	20330.35	.04

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
19715.25	20330.35	510	495	475	.1	.3

Ineffective Flow num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
17693.1	19676.4	1065.4	20351	21968.2	1059.5

CROSS SECTION RIVER: 1
REACH: 1 RS: 212.18

INPUT
Description: 212.18

Left and Right Channel Bank Stations Interpolated
Station Elevation Data num= 87

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
16867.12	1065.2	16906.93	1063.91	17072.69	1063.62	17369.21	1062.48	17505.56	1062.52
17612.28	1062.9	17794.36	1062.33	17881.75	1062.58	17916.47	1062.32	17948.21	1065.69
18039.48	1010.8	18149.75	1011.69	18168.39	1016.64	18177.08	1014.6	18188	1020.06
18220.51	1027.2	18252.71	1039.34	18269.64	1041.16	18292.43	1036.7	18335.96	1016.75
18454.36	1016.2	18568.19	1014.72	18633.81	1016.11	18764.91	1017.46	18823.95	1017.09
19046.22	1017.7	19156.65	1019.37	19198.34	1018.44	19223.89	1018.49	19248.34	1016.23
19311.18	1015.1	19393.8	1012.98	19433	1012.52	19464.03	1021.81	19488.46	1011.1
19574.96	1010.6	19614.98	1037.42	19649.87	1059.81	19685.1	1058.81	19706.85	1050.309
19749.09	1033.8	19960.28	1030.82	20229.47	1031.72	20272.48	1032.67	20319.31	1039.88
20334.57	1050.30	20340.72	1054.51	20354.62	1060.32	20472.17	1061.55	20523.7	1061.62
20551.86	1053.04	20622.11	1048.82	20687.56	1052.22	20928.11	1055.29	21136.97	1058.41
21257.08	1058.69	21362.76	1060.71	21646.22	1067.22	21858.08	1068.11	22054.43	1067.43
22158.98	1065.96	22243.23	1064.32	22279.9	1062.82	22295.67	1065.59	22307.88	1060.91
22324.63	1061.39	22394.01	1058.43	22480.34	1058.92	22555.28	1058.92	22720.83	1059.92
22855.27	1061.54	22949.17	1061.49	22974.76	1060	23021.3	1058.52	23070.19	1058.44
23114.11	1060.29	23152.9	1060.08	23260.95	1061.42	23486.25	1061.05	23586.41	1061.15
23621.07	1061.47	23789.79	1060.37	23929.16	1060.4	24034.7	1061.82	24176.57	1062.42
24281.11	1062.33	24460.33	1061.22						

```
Manning's n Values          num=       3
     Sta   n Val     Sta   n Val     Sta   n Val
16867.12    .04519706.85    .03320334.57     .04

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
      19706.8520334.57              500  502.53    485              .1       .3
Ineffective Flow      num=       2
   Sta L   Sta R    Elev   Sta L   Sta R    Elev
16867.1219649.87    1068 20523.724460.33    1068

CROSS SECTION          RIVER: 1
REACH: 1                  RS: 212.08

INPUT
Description: 212.08

Left and Right Channel Bank Stations Interpolated
Station Elevation Data      num=      101
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
 17052.4  1065.117093.98  1063.217330.91 1062.5917423.14 1062.2117562.97 1062.23
17854.31     106117952.67 1061.3917989.42  1061.1 18003.9 1064.7218053.78 1032.77
18092.97  1010.318121.67 1010.4218204.85 1011.4918218.51 1014.5318400.47 1013.68
18430.19  1013.718591.23 1012.7318717.39 1012.5518827.36 1012.71 18982.9 1014.44
19125.21  1014.119158.95 1014.27 19197.5 1013.7219237.59 1014.0519246.24 1012.73
19261.95  1013.819287.74 1011.5219294.56 1009.4419377.18 1009.8819458.03 1009.79
19560.86  1055.919603.52 1052.7719676.09 1052.9419681.091050.10619689.85 1045.14
19720.06 1031.7419729.83  1028.619835.59 1026.9819956.58 1026.4520018.74 1026.48
20046.86 1026.7120134.08  1025.920179.54 1025.9920234.17 1026.6520245.73 1033.13
20270.89  1050.120275.07 1052.9220290.81  1060.920335.45 1060.3720383.25 1044.65
20424.79 1044.3820442.88 1052.7920545.79  1055.720813.04 1061.3820956.27 1063.95
21082.72 1065.9821252.33 1068.1621359.98 1067.921436.79 1067.7621473.77 1066.77
21529.98 1066.4821607.29  1070.321676.41 1072.821730.28 1073.8421923.53 1073.03
22030.61 1073.7622091.57 1073.1322182.24  1073.622303.01 1072.0522453.89 1069.64
22595.45 1068.2222755.09 1066.8622966.16 1063.923129.47 1061.46 23222.4 1059.05
23255.36 1058.6423268.74 1055.5123278.67 1058.323295.59 1055.5423328.26  1058.3
23417.52  1058.423428.87  1058.123519.64 1059.323868.62 1059.1724082.28 1059.08
24280.77 1060.1224441.84 1061.9124594.59 1060.924688.74 1061.7424871.91 1061.24
 24970.8 1060.3325012.15 1058.2625172.94 1060.8 25399.4 1060.1425629.95 1059.85
25800.17 1059.4125815.84 1060.0725861.96 1079.725884.17 1080.2625963.83 1080.96
26004.82 1061.65

Manning's n Values          num=       3
     Sta   n Val     Sta   n Val     Sta   n Val
 17052.4    .04519681.09    .03320270.89     .04

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
      19681.0920270.89              510  519.85    475              .1       .3
Ineffective Flow      num=       2
   Sta L   Sta R    Elev   Sta L   Sta R    Elev
 17052.419560.86    1078 20290.826004.82    1078

CROSS SECTION          RIVER: 1
REACH: 1                  RS: 211.99

INPUT
Description: 211.99

Left and Right Channel Bank Stations Interpolated
Station Elevation Data      num=       97
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
17386.75     106217493.12 1060.3617883.55  1058.918026.04 1059.0818043.61 1064.43
18128.52  1011.918212.07 1010.04 18284.3 1009.4118375.77 1031.9918386.79 1034.99
18398.32  1031.618455.15 1010.4218634.29 1010.1518715.79 1026.1718726.98 1025.43
18746.82  1028.918793.14 1039.1118826.55 1047.2218835.49 1050.27 18880.3 1056.14
18928.65  1059.619023.07 1060.4719122.51 1058.69 19147.6 1056.9819172.92  1053.9
19222.57  1059.719306.36 1064.7519387.36 1066.2619419.32 1065.7319467.92  1063.3
19535.53  1055.9 19579.8  1052.519594.04 1050.0119626.09 1059.7519669.23 1060.17
19682.93  1052.119695.13  1051.719699.771048.63219734.91 1025.3919968.68 1025.66
 20018.4     102620129.78  1025.520175.87 1025.6620205.91  1027.820236.81 1047.09
20249.651048.632 20249.8 1048.6520268.39  1059.720319.37 1059.4520355.66 1049.61
20366.72 1051.1620380.34 1056.3120536.66  1059.720697.58 1062.9120861.07 1067.46
20969.05  1071.421086.46 1074.5421220.77 1077.821348.89 1078.3521519.24 1075.76
21606.23 1073.4221740.53 1069.1421834.91     106821936.77 1071.0222068.74 1077.26
22189.17 1082.4922398.45 1089.6222486.87 1090.322515.75 1089.9422616.83 1085.49
22698.81 1083.4322757.86 1080.0622899.81 1069.523059.97  1066.123300.96 1061.35
23457.95 1059.0923578.87 1055.29 23592.8 1052.823611.42  1057.123707.16 1057.71
23758.72 1057.8423837.72 1057.31   23902 1056.223950.13 1056.5724182.97 1056.91
24332.01 1056.0724582.04 1056.0124636.44     105924704.95 1057.5324865.28 1057.45
24966.74 1058.31 24996.3 1059.9325064.88 1059.825072.86 1059.0925171.62 1057.94
25224.27 1057.7525467.18 1058.61

Manning's n Values          num=       3
     Sta   n Val     Sta   n Val     Sta   n Val
```

```
17386.75     .04519699.77     .03320249.65      .04

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
      19699.7720249.65              740  489.19     710            .1       .3
Ineffective Flow     num=       2
   Sta L   Sta R    Elev   Sta L   Sta R    Elev
17386.7519669.23    1078 20268.325467.18    1078

CROSS SECTION          RIVER: 1
REACH: 1                  RS: 211.89

INPUT
Description: 211.89

Left and Right Channel Bank Stations Interpolated
Station Elevation Data    num=      95
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
17673.64  1059.917830.52  1057.818075.45 1057.5918106.59 1061.3918156.21 1060.92
18181.64     105718268.15  1057.418570.49 1056.27 18656.7 1057.3718734.79  1059.4
18854.83  1058.1 18903.9 1058.6218933.75 1056.2618954.51  1054.319026.15 1059.53
19074.67  1064.519130.02 1067.6619166.92 1067.8219220.33 1064.2519291.97 1056.93
19339.05  1053.2 19355.5 1049.4119383.94 1051.7719506.58 1049.7319568.03 1052.09
19611.95  1052.419640.96 1059.4519668.79 1059.3319685.751048.02319719.16 1025.75
19877.45  1024.19   19996  1024.820046.95 1024.9420149.18 1025.3420215.53 1026.87
20231.37 1035.8620250.74 1048.0220268.71  1059.320317.76 1059.25 20347.9 1053.02
20357.11 1053.8720365.64 1057.4620503.92  1061.220587.79 1062.3220715.42 1064.82
20808.25 1066.4820898.25 1068.17 21050.2    107021240.42  1069.721365.85 1067.31
21444.39 1066.6721597.69 1066.8121747.36  1066.621837.61 1066.0122018.21 1062.79
22078.36 1061.7622206.84  1065.222377.75  1068.122579.85 1068.7522814.63 1068.78
22947.07 1067.96 23029.4 1068.0923191.51  1066.423528.26  1059.523662.78 1056.72
23775.83 1055.5423829.73 1054.1523844.87  1051.223876.82 1056.0923920.99     1057
23995.44 1056.4724052.85  1056.124082.77  1056.624140.98 1058.2724165.07 1058.25
24271.91 1056.4524411.05 1053.1724579.36  1053.324759.09 1054.04 24774.1 1055.28
24840.04 1057.6924883.78 1058.2624920.88  1055.825041.94 1055.2925284.44  1056.1
25336.01 1057.1325359.39 1058.3225402.51  1057.3 25726.4 1058.2326172.96 1058.11
 26295.6  1059.626333.92 1078.1726470.33  1078.826504.14  1058.926569.17 1059.94

Manning's n Values        num=       3
     Sta   n Val     Sta   n Val     Sta   n Val
17673.64     .04519685.75     .03320250.74      .04

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
      19685.7520250.74              507  527.46     640            .1       .3
Ineffective Flow     num=       2
   Sta L   Sta R    Elev   Sta L   Sta R    Elev
17673.6419640.96    1068 20268.726569.17    1068

CROSS SECTION          RIVER: 1
REACH: 1                  RS: 211.79

INPUT
Description: 211.79

Left and Right Channel Bank Stations Interpolated
Station Elevation Data    num=      85
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
18158.31  1058.118521.37 1057.9218711.98 1053.2918821.22 1049.9719332.48  1038.9
 19421.9  1034.719443.13 1034.6819494.83 1031.4519529.82 1033.8919593.73 1053.47
19613.84  1059.219631.93 1059.1219649.871047.18219683.64 1024.7119868.29 1023.84
19990.11 1024.4520071.01  1024.2   20181 1025.03 20210.4 1042.5420217.711047.186
20234.96 1058.1520266.77 1058.9620288.34  1058.220317.07 1049.6420327.91 1051.41
20334.62 1054.8620544.02 1058.1120748.52  1061.320960.89 1062.1921136.74 1063.31
21355.67 1062.99 21514.2 1062.9221680.46  1061.621736.21 1061.7621809.47 1060.69
21912.92 1059.5422164.31 1055.8622183.26  1055.422365.65 1059.3522456.33 1059.66
22607.29 1061.0722697.85 1061.2422757.13    106222877.22 1061.9822997.38 1061.21
23058.71 1061.6923238.58 1060.2923378.99  1059.623483.49 1059.3723694.55 1056.44
23766.47 1056.3523904.99 1053.8723939.63  1052.523954.41 1049.7323974.63 1054.92
24066.57 1057.0124104.95 1055.7224159.03  1054.924203.29 1053.77 24226.8 1054.13
24410.42 1054.11 24588.5 1054.8124806.33  1056.924857.28 1056.9224892.35 1056.25
 24937.4 1056.2724992.53 1057.9125025.07  1054.525154.69 1054.6325336.45 1057.87
25508.23 1059.0125689.64 1058.1825912.41  1058.826025.53 1058.4626235.18 1058.51
26315.33     105826360.96 1059.1426386.48  1071.426401.46 1071.61 26423.9  1078.8
26526.56 1078.9226547.02 1071.3226569.39  1067.826599.18 1058.2826670.85 1059.87

Manning's n Values        num=       3
     Sta   n Val     Sta   n Val     Sta   n Val
18158.31     .04519649.87     .03320217.71      .04

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
      19649.8720217.71              680  450.74     290            .1       .3
Ineffective Flow     num=       2
   Sta L   Sta R    Elev   Sta L   Sta R    Elev
18158.3119613.84    1068 20266.726670.85    1068
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CROSS SECTION          RIVER: 1
REACH: 1                  RS: 211.71

INPUT
Description: 211.71

Left and Right Channel Bank Stations Interpolated
Station Elevation Data     num=      82
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
18356.24  1056.618403.32 1056.5118836.53 1046.2619011.11 1054.3319170.81  1053.8
19462.94  1052.519478.82 1053.0919497.62 1060.06   19533 1043.2819551.37 1045.32
19595.29     105919611.46 1057.8119628.43 1046.4719661.32 1024.4919846.96 1023.81
19928.43 1023.1919998.17  1023.220045.76 1023.2120158.51 1023.3920197.84 1046.47
20216.14 1057.2120266.22 1057.7620314.99  1042.620325.03 1043.14 20337.2 1046.87
20568.24 1050.2520851.05 1051.3120962.88  1051.521206.35 1051.6421388.45 1051.42
21419.92 1051.2321727.44 1052.6221848.61  1053.521981.25 1052.7822130.55 1052.51
22220.26 1051.5322459.24 1054.3422578.82  1055.122876.18 1055.9323025.66 1056.21
23117.46 1056.8923238.24 1055.61 23357.2  1054.623446.32 1054.2323535.13 1054.99
23685.75 1053.2823748.15 1053.5423836.62  1056.423904.67 1055.7524029.98 1052.16
24046.15  1048.724064.65 1054.8424297.11  1054.624417.85 1054.0824709.66 1055.58
 24914.5 1057.2724949.53 1057.2425042.76  1055.725080.42 1056.7725117.12  1053.8
25243.64 1054.8825321.41 1057.3325361.74     105825507.43 1059.54 25610.8 1058.49
25724.65 1059.9825796.42 1060.0825841.82  1059.625987.23  1060.326062.01 1060.39
26081.09 1058.8926241.81 1058.1126377.22  1057.126422.65 1058.2926467.41 1067.88
26493.74 1078.7726570.07 1078.7926595.33    1080 26627.3 1065.29 26661.5 1058.87
26693.27 1058.2226725.34 1059.01

Manning's n Values         num=       3
     Sta   n Val     Sta   n Val     Sta   n Val
18356.24    .04519628.43    .03320197.84     .04

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
      19628.4320197.84              780  392.06     500             .1       .3
Ineffective Flow     num=        2
   Sta L   Sta R    Elev   Sta L   Sta R    Elev
18356.24 19595.3    1068 20266.226725.34    1068

CROSS SECTION          RIVER: 1
REACH: 1                  RS: 211.64

INPUT
Description: 211.63

Left and Right Channel Bank Stations Interpolated
Station Elevation Data     num=      74
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
18455.22  1055.618870.41 1054.6119083.17 1054.4919308.22 1054.2519426.55 1053.86
 19582.2  1054.119594.16 1050.2119604.79 1050.3319629.34 1057.4119639.51  1057.5
 19657.71045.60119689.19    102519804.58  1023.319911.42 1022.65 19986.5 1022.75
20036.19 1022.9320060.82  1023.620181.08 1022.5820196.63 1031.17 20219.81045.602
20238.13 1057.0220265.94 1057.5920288.34  1056.820321.05 1046.9420343.65 1039.08
20371.71 1043.95 20510.4 1045.0120712.01  1046.120789.36 1046.9121038.61 1047.48
21208.66 1048.1421454.04 1047.8221685.69  1048.521805.81 1048.0822092.18 1048.45
22242.98 1048.2222332.89 1048.1922513.12  1050.222770.05 1051.0723054.32  1051.7
23295.42 1051.6523472.95 1051.1123700.42  1052.523820.77 1054.7623926.54 1054.04
23949.21 1052.3623981.01 1052.4624008.88  1047.424037.13 1053.1124090.43 1054.01
24133.79 1054.5824302.75 1054.0624347.21  1053.624484.04    105424904.87 1055.84
 25102.6 1055.6325165.57 1054.9925293.65  1054.325400.67 1057.0625522.25 1059.22
25597.17 1058.4125713.85 1057.9825824.69  1060.625850.02 1060.9225980.05 1061.02
26040.31 1060.2826085.96 1060.1626115.36  1058.626378.37 1057.1726385.52 1058.22
26496.95 1078.6826605.38 1079.6726703.24  1058.126712.22 1058.41

Manning's n Values         num=       3
     Sta   n Val     Sta   n Val     Sta   n Val
18455.22     .045 19657.7     .033 20219.8     .04

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
       19657.7 20219.8              481  521.13     221             .1       .3
Ineffective Flow     num=        2
   Sta L   Sta R    Elev   Sta L   Sta R    Elev
18455.2219639.51    1068 20265.926712.22    1068

CROSS SECTION          RIVER: 1
REACH: 1                  RS: 211.54

INPUT
Description: 211.54



Station Elevation Data     num=      24
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
```

```
   18557    105619498.08 1062.8819570.11  1056.919585.13  1056.719633.01  1023.1
19866.76  1021.920100.43  1023.220148.29  1056.820163.32    105720195.23  1056.3
 20223.6  1049.320265.59  1046.120326.25  1049.420339.59  1050.820360.21  1052.5
20374.03  1055.420382.33  1055.9 20385.6  1055.9 20412.1  1057.320434.96  1056.7
20443.92  1057.120456.54  1061.420479.34  1060.721248.52  1053.6

Manning's n Values        num=       3
     Sta   n Val     Sta   n Val     Sta   n Val
   18557    .03719498.08    .03220163.32    .037

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
      19498.0820163.32              125  124.49     120            .1       .3
Ineffective Flow     num=       2
   Sta L   Sta R    Elev   Sta L   Sta R    Elev
   1855719498.08    107020163.3221248.52    1070

BRIDGE                  RIVER: 1
REACH: 1                  RS: 211.525

INPUT
Description: 19th Avenue Bridge
Distance from Upstream XS =       0
Deck/Roadway Width        =  124.49
Weir Coefficient          =     2.6
Bridge Deck/Roadway Skew  =
Upstream  Deck/Roadway Coordinates
    num=       11
     Sta Hi Cord Lo Cord     Sta Hi Cord Lo Cord     Sta Hi Cord Lo Cord
   18557    1056    105619498.08 1062.88 1062.8819498.08 1062.88 1056.33
19617.96  1065.1 1058.4319732.91  1067.4 1060.6819853.66 1068.72 1062.03
19974.41 1069.18 1062.5120095.16 1068.67 1061.9720215.91 1067.18 1060.46
20336.66 1064.77 1058.0320456.45  1061.4 1054.73

Upstream Bridge Cross Section Data
Station Elevation Data    num=      24
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
   18557    105619498.08 1062.8819570.11  1056.919585.13  1056.719633.01  1023.1
19866.76  1021.920100.43  1023.220148.29  1056.820163.32    105720195.23  1056.3
 20223.6  1049.320265.59  1046.120326.25  1049.420339.59  1050.820360.21  1052.5
20374.03  1055.420382.33  1055.9 20385.6  1055.9 20412.1  1057.320434.96  1056.7
20443.92  1057.120456.54  1061.420479.34  1060.721248.52  1053.6

Manning's n Values        num=       3
     Sta   n Val     Sta   n Val     Sta   n Val
   18557    .03719498.08    .03220163.32    .037

Bank Sta: Left   Right    Coeff Contr.   Expan.
      19498.0820163.32            .1       .3
Ineffective Flow     num=       2
   Sta L   Sta R    Elev   Sta L   Sta R    Elev
   1855719498.08    107020163.3221248.52    1070

Downstream  Deck/Roadway Coordinates
    num=       11
     Sta Hi Cord Lo Cord     Sta Hi Cord Lo Cord     Sta Hi Cord Lo Cord
   18557    1056    105619498.08 1062.88 1062.8819498.08 1062.88 1056.33
19617.96  1065.1 1058.4319732.91  1067.4 1060.6819853.66 1068.72 1062.03
19974.41 1069.18 1062.5120095.16 1068.67 1061.9720215.91 1067.18 1060.46
20336.66 1064.77 1058.0320456.45  1061.4 1054.73

Downstream Bridge Cross Section Data
Station Elevation Data    num=      22
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
   18577    105619498.08 1062.8819510.11    105119579.82  1056.719594.75  1056.5
19642.62    102319876.38  1021.820110.04    102320157.91  1056.620172.93  1056.8
20204.85  1056.120210.17  1055.920249.54  1049.420344.26  1054.820347.44  1054.8
20366.65  1054.320380.75  1054.620418.55    105520428.15    105520456.54  1061.4
20479.34  1060.721248.52  1053.6

Manning's n Values        num=       3
     Sta   n Val     Sta   n Val     Sta   n Val
   18577    .03719579.82    .03220172.93    .037

Bank Sta: Left   Right    Coeff Contr.   Expan.
      19579.8220172.93            .1       .3
Ineffective Flow     num=       2
   Sta L   Sta R    Elev   Sta L   Sta R    Elev
   1857719579.82  1056.720172.9321248.52  1056.8

Upstream Embankment side slope              =        horiz. to 1.0 vertical
Downstream Embankment side slope            =        horiz. to 1.0 vertical
Maximum allowable submergence for weir flow =     .95
Elevation at which weir flow begins         =
Energy head used in spillway design         =
```

```
Spillway height used in design              =
Weir crest shape                            = Broad Crested

Number of Piers =  7

Pier Data
Pier Station     Upstream=19615.06    Downstream=19615.06
Upstream     num=       2
    Width   Elev    Width   Elev
     5.8  1046.9     5.8 1058.51
Downstream     num=       2
    Width   Elev    Width   Elev
     5.8  1046.9     5.8 1058.51

Pier Data
Pier Station     Upstream=19735.81    Downstream=19735.81
Upstream     num=       2
    Width   Elev    Width   Elev
     5.8    1022     5.8 1060.77
Downstream     num=       2
    Width   Elev    Width   Elev
     5.8    1022     5.8 1060.77

Pier Data
Pier Station     Upstream=19856.56    Downstream=19856.56
Upstream     num=       2
    Width   Elev    Width   Elev
     5.8 1020.85     5.8 1062.07
Downstream     num=       2
    Width   Elev    Width   Elev
     5.8 1020.85     5.8 1062.07

Pier Data
Pier Station     Upstream=19977.31    Downstream=19977.31
Upstream     num=       2
    Width   Elev    Width   Elev
     5.8 1028.55     5.8 1062.51
Downstream     num=       2
    Width   Elev    Width   Elev
     5.8 1028.55     5.8 1062.51

Pier Data
Pier Station     Upstream=20098.06    Downstream=20098.06
Upstream     num=       2
    Width   Elev    Width   Elev
     5.8 1033.84     5.8 1062.02
Downstream     num=       2
    Width   Elev    Width   Elev
     5.8 1033.84     5.8 1062.02

Pier Data
Pier Station     Upstream=20218.81    Downstream=20218.81
Upstream     num=       2
    Width   Elev    Width   Elev
     5.8 1039.95     5.8 1060.55
Downstream     num=       2
    Width   Elev    Width   Elev
     5.8 1039.95     5.8 1060.55

Pier Data
Pier Station     Upstream=20339.56    Downstream=20339.56
Upstream     num=       2
    Width   Elev    Width   Elev
     5.8 1045.78     5.8 1058.17
Downstream     num=       2
    Width   Elev    Width   Elev
     5.8 1045.78     5.8 1058.17

Number of Bridge Coefficient Sets =  1

Low Flow Methods and Data
       Energy
       Momentum              Cd   =     1.2
       Yarnell               KVal =    1.05
Selected Low Flow Methods = Highest Energy Answer

High Flow Method
       Energy Only

Additional Bridge Parameters
       Add Friction component to Momentum
       Add Weight component to Momentum
       Class B flow critical depth computations use critical depth
           inside the bridge at the upstream end
```

Criteria to check for pressure flow = Upstream energy grade line

CROSS SECTION RIVER: 1
REACH: 1 RS: 211.51

INPUT
Description: 211.51

Begin 19th Ave Landfill channelization

Station Elevation Data num= 22

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
18577	105	619498.08	1062.88	19510.11	105	119579.82	1056.71	9594.75	1056.5
19642.62	102	319876.38	1021.82	0110.04	102	320157.91	1056.62	0172.93	1056.8
20204.85	1056.12	0210.17	1055.92	0249.54	1049.42	0344.26	1054.82	0347.44	1054.8
20366.65	1054.32	0380.75	1054.62	0418.55	105	520428.15	105	520456.54	1061.4
20479.34	1060.72	1248.52	1053.6						

Manning's n Values num= 3

Sta	n Val	Sta	n Val	Sta	n Val
18577	.037	19579.82	.037	20172.93	.037

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
19579.82	20172.93	541	562.88	606	.1	.3

Ineffective Flow num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
18577	19579.82	1056.72	0172.93	21248.52	1056.8

CROSS SECTION RIVER: 1
REACH: 1 RS: 211.41

INPUT
Description: 211.41

Left and Right Channel Bank Stations Interpolated
Station Elevation Data num= 98

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
18573.85	1055.5	18621.78	1056.61	18655.14	1053.79	18722.99	1053.25	18902.93	1052.9
19132.77	1051.6	19320.33	1050.87	19480.47	1049.58	19533.31	1047.72	19566.92	1049.4
19611.4	1046.9	19634.53	1044.08	19638.09	1041.78	19668.43	1022.18	19702.69	1018.56
19754.63	1019.65	19786.92	1018.31	19889.98	1020.74	19930.16	1020.81	19994.45	1020.82
20076.61	1020.91	20167.45	1021.22	20192.38	1033.01	20195.55	1039.32	20206.06	1041.777
20220.36	1045.12	20236.46	1054.78	20293.62	105	620331.24	1065.22	20351.37	1065.23
20357.03	1066.62	20414.04	1056.96	20436.1	1062.22	0445.88	1058.74	20504.13	1060.74
20521.21	1060.79	20557.16	1066.58	20578.69	1061.62	0603.37	1060.36	20654.05	1060.04
20689.25	1058.23	20722.97	1060.58	20735.67	1057.72	0828.84	1057.06	20846.13	1057.59
20898.33	1070.25	20938.86	1063.64	20980.02	106	321017.32	1057.92	21060.66	1055.82
21097.07	1055.53	21119.44	1056.16	21132.9	1055.12	1181.47	1054.22	1283.06	1053.8
21298.44	1058.21	21320.94	1060.35	21339.43	1062.82	1380.38	1060.32	21406.09	1052.45
21459.74	1053.48	21477.97	1059.98	21533.47	106	121555.62	1081.81	21619.68	1081.91
21644.09	1080.12	21655.42	1076.48	21707.29	1075.32	1720.18	1072.15	21749.96	1071.27
21770.47	1076.99	21793.84	1054.82	21802.85	1056.12	1842.36	105	621864.05	1053.48
21891.41	1052.69	21905.23	1051.43	21991.71	1051.82	2210.76	1052.06	22373.03	1052.78
22531.21	1052.17	22650.75	1052.09	22819.43	1052.52	2919.43	1053.14	23211.23	1053.67
23252.71	1054.24	23349.12	1054.08	23463.55	1053.12	3574.33	1051.79	23680.61	1051.32
23891.22	1051.56	24133.09	1051.48	24212.43	1051.92	4237.65	1050.32	24284.73	1050.32
24320.22	105	124361.59	1050.58	24444.1	1052				

Manning's n Values num= 3

Sta	n Val	Sta	n Val	Sta	n Val
18573.85	.037	19638.09	.037	20206.06	.037

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
19638.09	20206.06	500	501.53	505	.1	.3

CROSS SECTION RIVER: 1
REACH: 1 RS: 211.31

INPUT
Description: 211.31

Left and Right Channel Bank Stations Interpolated
Station Elevation Data num= 98

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
19209.8	1054	19309.4	1053.9	19371	1052.4	19415.6	1052	19462.5	1051.5
19496.2	1050.5	19510.1	1050.5	19528.9	1041.9	19531.2	1040.766	19571.7	1020.8
19614	1021.1	19677.8	1021.1	19724.1	1021.3	19888.2	1022	19928.3	1022.1
19954.9	1021.8	19973.9	1032	19980.4	1029.8	19994.7	1027.2	20059	1026.6

20112	1026.2	20123.3	1028	20158.9	1030.9	20198.7	1033.6	20212.5	1034.3
20267.3	1034.5	20269.1	1035.1	20281.8	1034.8	20323.2	1035.6	20338.5	1037.1
20343	1038	20356.11	040.765	20425.9	1055.5	20434.4	1057.4	20457.3	1049
20499	1049.5	20549.5	1051.1	20551.5	1051	20571.1	1052.5	20575.3	1055.6
20584.2	1059.5	20614	1060.7	20625.4	1057	20636	1051.6	20682.5	1051.6
20692.1	1051.6	20699.2	1055	20718.1	1055.1	20723.4	1052.3	20725.3	1052.3
20778.6	1052.4	20806	1052.5	20808.3	1053.2	20835.4	1052.5	20836.7	1052.2
20884.1	1051.7	20893	1051.9	20922.6	1067.4	20930.4	1067.8	20944	1066.2
20964.4	1055.2	20970.5	1050.2	21010.5	1050.3	21036.1	1052	21040.8	1052.7
21082	1053.8	21083.4	1053.5	21093.1	1049.5	21124.5	1050.5	21134.6	1050.2
21141.3	1051.6	21160.1	1051.2	21201.6	1048.9	21204.4	1049.1	21219.3	1052.5
21236.3	1049.8	21240.9	1049.4	21293.9	1049	21338.4	1048.2	21394.2	1047.1
21457	1046.7	21459.4	1046.7	21510.1	1046.2	21538.8	1046.8	21571	1046.8
21576.7	1047.8	21607.4	1058.3	21626.3	1059.1	21651.1	1060.7	21661.7	1060.9
21672.8	1062	21684.6	1057.7	21696.7	1051.4	21740.6	1053.4	21745.1	1054.1
21754.3	1054.6	21757.7	1053	21786	1052.5				

Manning's n Values num= 3

Sta	n Val	Sta	n Val	Sta	n Val
19209.8	.037	19531.2	.032	20356.1	.037

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
19531.2	20356.1	540	523.28	460	.1	.3

Ineffective Flow num= 1

Sta L	Sta R	Elev
20434.4	21786	1060

CROSS SECTION RIVER: 1
REACH: 1 RS: 211.21

INPUT
Description: 211.21

Left and Right Channel Bank Stations Interpolated
Station Elevation Data num= 88

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
19418.7	1050	19432.3	1049.9	19486.6	1051	19504.4	1050.9	19507.4	1051.4
19520	1044.7	19528.74	1040.216	19566	1021.1	19781.8	1021.6	19997.4	1022.1
20060.3	1022.2	20076.2	1032.8	20080	1035	20082.4	1032.7	20093.4	1024.4
20174.8	1026.6	20183.9	1027.6	20204.6	1029.5	20217.4	1030.4	20229.3	1030.7
20232.4	1030.9	20272.7	1031.9	20335.2	1032.6	20395.1	1032	20413.6	1031.7
20425.2	1031.3	20429.3	1031.7	20447.4	1035.2	20472.4	1032.1	20501.4	1030.2
20521.26	1040.216	20521.28	1040.226	20524.4	1041.8	20544	1051.9	20563.3	1064.6
20571.8	1065.7	20580.9	1066	20589.3	1061.5	20605.5	1058.5	20622.4	1060.1
20646.3	1062.6	20659.3	1063.4	20674.4	1064.8	20683.8	1065.5	20692.9	1064.2
20760.3	1066	20772	1068	20791.6	1063.6	20814.8	1059	20846.6	1053
20876.7	1045.5	20891.6	1044.9	20916.6	1044.2	20944.9	1044.5	20964.5	1044.9
21002.8	1046.7	21028.1	1048.6	21034.5	1044.8	21035.5	1044	21113.8	1044.6
21130.1	1044.6	21249.3	1044	21250	1044.1	21260.5	1047.3	21288	1046.8
21324.8	1046.7	21359.3	1046.9	21432.1	1048	21449.9	1048.7	21452.1	1049.4
21462.5	1051.8	21469.8	1052.8	21533.8	1052	21595.7	1051.9	21614.5	1051.8
21642.6	1057.9	21645.8	1056.1	21673.8	1046.4	21698	1040.9	21967.4	1041
21972	1044.7	21983.2	1052.6	21984.7	1051.9	21991.1	1050.7	21999	1051.3
22028.7	1051	22088.3	1051.4	22171	1051.7				

Manning's n Values num= 3

Sta	n Val	Sta	n Val	Sta	n Val
19418.7	.037	19528.74	.032	20521.26	.037

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
19528.74	20521.26	495	493.11	475	.1	.3

Ineffective Flow num= 1

Sta L	Sta R	Elev
20571.8	22171	1068

CROSS SECTION RIVER: 1
REACH: 1 RS: 211.12

INPUT
Description: 211.12

Left Channel Bank Station Interpolated
Station Elevation Data num= 63

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
19314	1050.6	19321.1	1050.6	19403.5	1050.4	19415.2	1050.5	19470.9	1050.5
19482.5	1051.2	19483.7	1050.51	9498.46	1040.58	19527.6	1021	19600.2	1021.1
20090.7	1021	20239.6	1020.4	20259	1020.1	20267	1022.5	20276.5	1019.8
20287.8	1020	20321.5	1020.6	20364.3	1020.4	20406.5	1019.8	20438.1	1015.7
20453.3	1015.7	20484.3	1015.7	20510.9	1015.7	20526.1	1023.8	20540.7	1029.4
20572.2	1046.4	20577.1	1044.9	20591.9	1040.2	21035.6	1040.2	21045.7	1040.3
21082.9	1041.6	21123	1041.5	21166	1041.6	21189.7	1041.5	21228.3	1041
21264.3	1041.1	21277.3	1040.7	21299.3	1040.6	21311.7	1043.9	21321.5	1044.1
21335.9	1046.9	21349.5	1046.7	21377.3	1046.7	21389.3	1045.7	21395.8	1044.6
21409	1041.7	21414.3	1040.2	21431.9	1040.1	21441.7	1040.6	21511.5	1043.7

```
 21564.5  1044.7 21580.3  1044.8   21593  1044.6   21597    1042 22094.6    1042
 22111.5  1053.1 22112.9  1051.5 22113.7  1050.9   22123  1051.4 22146.6  1051.4
 22200.7  1051.7 22225.6  1051.6 22293.4  1051.7

Manning's n Values        num=       3
     Sta   n Val     Sta   n Val     Sta   n Val
   19314    .03719498.46    .032 20572.2    .037

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
      19498.46 20572.2              500  505.73     500             .1       .3
Ineffective Flow     num=       1
   Sta L   Sta R    Elev
 21335.9 22293.4    1050

CROSS SECTION          RIVER: 1
REACH: 1                  RS: 211.02

INPUT
Description: 211.02

Left Channel Bank Station Interpolated
Station Elevation Data    num=      58
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
   19239  1049.4 19253.3  1049.2 19318.8  1049.3   19330  1049.2 19381.9  1049.5
 19409.6  1049.3 19472.3    104919487.121039.375 19515.1  1021.2 19977.7  1020.4
 20111.7  1020.1 20119.2  1025.6 20133.2  1024.1 20136.2  1022.2   20140  1019.4
 20202.9  1020.4 20228.3  1020.7 20238.9  1022.4 20243.6  1025.6 20270.1  1025.5
 20279.9  1025.7 20343.8  1026.1 20394.3  1041.3 20424.2    1040   20434  1040.5
 20448.3  1038.4 20459.5  1037.9 20468.8  1038.2 20484.1    1038 20494.6  1038.7
 20501.7  1038.2 21087.6  1039.1 21102.9  1037.2 21124.7  1036.8 21132.2    1033
 21144.9  1032.5 21184.2  1034.3 21243.7  1036.3 21300.5  1038.4 21315.9  1038.7
 21353.2     1040 21399.5  1041.4   21439  1042.3   21480  1043.6 21514.7  1043.6
 21524.4  1043.8 21535.1  1043.6 21559.7  1042.3 21570.6  1042.2 22151.3    1042
 22163.4  1052.1 22174.7  1052.9 22226.3  1051.5 22239.2  1051.3   22318  1051.9
 22324.3     1052 22393.8  1052.8 22399.8  1052.7

Manning's n Values        num=       3
     Sta   n Val     Sta   n Val     Sta   n Val
   19239    .03719487.12    .032 20394.3    .037

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
      19487.12 20394.3              485  493.19     495             .1       .3
Ineffective Flow     num=       1
   Sta L   Sta R    Elev
   21500 22399.8    1050

CROSS SECTION          RIVER: 1
REACH: 1                  RS: 210.93

INPUT
Description: 210.93

Left Channel Bank Station Interpolated
Station Elevation Data    num=      50
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
 19200.1  1048.6 19256.6  1048.1 19323.4  1048.3 19376.7  1048.6 19414.5    1048
 19464.2  1048.319479.121039.255 19508.9  1021.2 19821.8  1022.3 20131.9  1023.4
 20138.8     1028 20162.4  1029.4 20166.3  1026.3 20172.8  1019.1   20212  1018.7
 20278.3  1019.9   20290  1025.6 20331.4    1025 20349.2  1032.1 20351.6  1031.2
 20355.1  1030.5 20397.8  1031.3 20406.9  1035.2 20414.8  1039.6 20431.2  1039.4
 20455.9  1039.7 20458.7  1037.8 20465.5  1037.9 20470.4  1034.9 20474.7  1032.7
 21343.1  1032.7 21350.5  1032.5 21376.3  1035.6 21390.1  1033.4 21395.9  1033.7
 21424.3  1033.9 21484.4  1034.5 21494.9  1034.3   21537  1034.4 22171.3  1034.4
 22195.5  1049.6 22217.9  1047.5 22260.9    1035 22263.6  1034.9 22291.1    1051
 22312.1  1051.8 22326.6  1051.4 22375.7  1051.7 22388.8  1051.5 22397.4  1050.6

Manning's n Values        num=       3
     Sta   n Val     Sta   n Val     Sta   n Val
 19200.1    .03719479.12    .032 20414.8    .037

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
      19479.12 20414.8              505  505.14     505             .1       .3
Ineffective Flow     num=       1
   Sta L   Sta R    Elev
   21576 22397.4    1048

CROSS SECTION          RIVER: 1
REACH: 1                  RS: 210.83

INPUT
Description: 210.83

Left Channel Bank Station Interpolated
Station Elevation Data    num=      61
```

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
19202.3	1047.9	19230.6	1048.2	19316.1	1047.1	19412.4	1046.5	19438.4	1046.4
19450.41	1038.813	19469.9	1026.5	19479.2	1021.2	19797.6	1021	19923.9	1020.9
19961.4	1020.6	19972.9	1027.1	19981.7	1030.2	20023.7	1029.7	20030.1	1028.5
20042.7	1023.3	20047.1	1022.6	20060.1	1021.5	20068	1019.1	20084.8	1019.4
20164.7	1020.3	20209.2	1020.4	20210.1	1020.8	20276.6	1019.8	20285.1	1022.2
20306.6	1025.2	20309	1026.8	20312.4	1026.3	20316.8	1024.7	20372.8	1023.5
20408.7	1043.6	20410.4	1042.5	20412	1040	20434.3	1040.8	20448.6	1034
21423.7	1034.1	21433.7	1033	21527.5	1031.1	21554.4	1029.7	21577.9	1029.4
21646.5	1030.2	21704.4	1029.9	21742.9	1046.2	21761.3	1040	21807.2	1041.3
21814	1044.7	21818.3	1046.4	21862.5	1045.9	21879.4	1037.5	21883.7	1035
21887.9	1033.8	21911.6	1035.9	21937.9	1050.1	21957.5	1042.6	22341.8	1042.6
22364.7	1049.8	22372.9	1048.2	22423	1049.3	22443.3	1049.3	22494.1	1045.8
22499.7	1044.9								

Manning's n Values num= 3

Sta	n Val	Sta	n Val	Sta	n Val
19202.3	.037	19450.41	.032	20410.4	.037

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
19450.41	20410.4	505	505.61	500	.1	.3

Ineffective Flow num= 1

Sta L	Sta R	Elev
21742.9	22499.7	1048

CROSS SECTION RIVER: 1
REACH: 1 RS: 210.74

INPUT
Description: 210.74

Left Channel Bank Station Interpolated
Station Elevation Data num= 63

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
19243.9	1048.6	19252.9	1048.6	19306.8	1048.4	19320.5	1047.9	19400.4	1046.9
19417.4	1044.5	19426.12	1038.473	19455.3	1018.3	19887.7	1018.2	19910.2	1018.2
19912.1	1019.4	19926.7	1020.6	19947.1	1020.5	19971.2	1029.9	19999.5	1024.8
20005.9	1025.6	20026.7	1018.2	20095.6	1018.8	20149	1019.3	20154.3	1019.5
20159.1	1018.6	20206.5	1019.2	20250.3	1018.3	20256.9	1020.6	20263.3	1021.3
20281.7	1020.8	20318.1	1022	20333.5	1021.2	20349.8	1021.8	20361.7	1025.8
20373.2	1024.1	20404.6	1025.2	20432.5	1037.6	20433.7	1039.4	20462.4	1039.5
20468.2	1036.5	21389.5	1036.5	21394.6	1032.8	21404	1032.7	21513.7	1032
21520.3	1033.6	21537.2	1027.8	21587.9	1027.7	21638.9	1028.2	21695.6	1029
21747.1	1028.9	21771	1029.8	21801.8	1041	21813.2	1040.9	22057.2	1040.9
22066.5	1043.5	22085.1	1044.1	22096.2	1047.4	22123.7	1048.7	22156.7	1040.5
22272.5	1040.5	22293.7	1049.5	22308.5	1048.9	22356.6	1048.4	22365.3	1048.1
22369	1048.8	22377.5	1053.2	22399.8	1048.3				

Manning's n Values num= 3

Sta	n Val	Sta	n Val	Sta	n Val
19243.9	.037	19426.12	.032	20433.7	.037

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
19426.12	20433.7	495	503.39	500	.1	.3

Ineffective Flow num= 1

Sta L	Sta R	Elev
21801.8	22399.8	1048

CROSS SECTION RIVER: 1
REACH: 1 RS: 210.64

INPUT
Description: 210.64
Station Elevation Data num= 56

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
19062.1	1046.2	19142.3	1046.5	19216.9	1046.5	19239.3	1046.6	19313.3	1046.3
19339.3	1045.9	19359.9	1044.7	19388.6	1036.7	19405.4	1034.5	19435.6	1017.8
19522.4	1017.9	19688	1018.2	19812.5	1018.5	19845.7	1021.7	19854.2	1021.6
19868.7	1023.2	19885.6	1022.9	19894.1	1026.4	19926.9	1018.1	19954	1018.1
20029.3	1018.2	20100.6	1018.3	20159.1	1018.4	20163.7	1019.2	20174.9	1019.6
20183.1	1020.8	20192.3	1019.6	20214.4	1021.7	20234.8	1024.3	20242.8	1022.1
20298.5	1024	20323.5	1025.5	20335	1029.1	20359.6	1019.1	20427.6	1017.8
20430.1	1017.7	20460.6	1039.9	20483.4	1039.5	20493.5	1033.2	21394.6	1033.2
21442.1	1031.4	21449.1	1028.1	21453.5	1025.3	21460.9	1025.2	21472.1	1026
21483.6	1028.3	21519.7	1032.5	22411.4	1032.5	22434.2	1045.9	22446.8	1049.8
22496.5	1049.4	22507.7	1051.3	22521	1044.2	22524.9	1044.1	22586.3	1043
22591.1	1043.3								

Manning's n Values num= 3

Sta	n Val	Sta	n Val	Sta	n Val
19062.1	.037	19388.6	.032	20460.6	.037

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
19388.6	20460.6	520	515.29	495	.1	.3

Ineffective Flow num= 1

Sta L	Sta R	Elev
21800	22591.1	1048

CROSS SECTION RIVER: 1
REACH: 1 RS: 210.55

INPUT
Description: 210.55

Left Channel Bank Station Interpolated
Station Elevation Data num= 55

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
19008	1045.1	19023.1	1045.1	19106.6	1045.2	19117.1	1045.2	19188.7	1045.4
19198.2	1045.3	19263.2	1046	19303.5	1044.2	19322.16	1037.828	19365	1023.2
19375.9	1018.6	19396.7	1018.7	19519.3	1018.6	19791	1018.3	19813.4	1028.8
19857.3	1026.7	19886.1	1038.1	19909.3	1027.2	19915.5	1030.7	19959.6	1020
20002.1	1018	20058.3	1018.1	20175.7	1018.1	20440.7	1018.3	20476.7	1037.4
20483.2	1040.3	20500.3	1039.7	20507.6	1034.3	21313.5	1033.6	21372.5	1032.4
21406.9	1033	21409.3	1032.1	21417.2	1027.2	21429	1026.3	21456.2	1025.4
21459.3	1026.4	21468.1	1028.2	21496.9	1030.2	21548.3	1034.3	21557.5	1034.9
21626.2	1036.3	21634.2	1035.7	21643.8	1035.7	21713	1035.7	21771.2	1036
22449.6	1036	22451.9	1037.8	22455.6	1040	22484.4	1044.7	22494.2	1046.8
22499.9	1046	22506.9	1046.2	22537.1	1043.6	22580.7	1043.5	22585	1043

Manning's n Values num= 3

Sta	n Val	Sta	n Val	Sta	n Val
19008	.037	19322.16	.032	20483.2	.037

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
19322.16	20483.2		475	473.19 495	.1	.3

Ineffective Flow num= 1

Sta L	Sta R	Elev
21300	22585	1046.8

CROSS SECTION RIVER: 1
REACH: 1 RS: 210.46

INPUT
Description: 210.46

Left and Right Channel Bank Stations Interpolated
Station Elevation Data num= 74

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
18491.3	1044.8	18509.6	1044.4	18559.8	1045.8	18571.1	1045.5	18584.8	1043.3
18607.7	1045	18678	1044.8	18723.7	1044.2	18801	1044.1	18803.4	1044.1
18891.1	1043.9	18897.1	1043.9	18962.7	1043.6	19022.5	1043.3	19024.4	1043.3
19078.3	1042.4	19136.1	1042.2	19176.5	1042.5	19201.9	1040.9	19233.8	1028.3
19266.3	1021.8	19276.2	1021.1	19328.5	1018.7	19351.6	1018.1	19377	1018.33
19395.8	1018.5	19810.2	1018.3	19863.8	1018.1	19922	1018.2	20015.9	1018.2
20094.1	1018.1	20114.1	1018.1	20127.6	1022.4	20129.6	1023.9	20150.4	1023.9
20174.1	1021.6	20197.2	1018.1	20239.9	1018.1	20295.4	1018.2	20303	1018.6
20351.5	1018	20390.4	1018.4	20443.9	1018.4	20502.8	1018.5	20565.4	1018.8
20656.3	1018.8	20722.5	1019	20743	1019.6	20798.1	1019.8	20867.2	1019.1
20920.3	1019.3	20973.2	1019.2	21047.3	1019.3	21120.7	1021.1	21123	1021.2
21136.1	1016.3	21211.7	1018.4	21228.5	1018.3	21261.8	1036.3	21280.4	1034.9
21284	1038.08	21290.7	1044	21292.3	1046	21334.2	1043	21405.2	1043.3
21443.5	1044.5	21454	1047.4	21465.5	1044.1	22456.6	1042.9	22498.8	1045.3
22515	1046.9	22564.7	1048.3	22637.2	1048.5	22652	1048.3		

Manning's n Values num= 5

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
18491.3	.037	19176.5	.032	20150.4	.037	21292.3	.037	21454	.025

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
19377	21284		520	522.28 505	.1	.3

Ineffective Flow num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
18491.3	19377	1048	21292.3	22652	1048

CROSS SECTION RIVER: 1
REACH: 1 RS: 210.36

INPUT
Description: 210.36

Left and Right Channel Bank Stations Interpolated
Station Elevation Data num= 99

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
19224.5	1050.4	19284.3	1050.7	19305	1051	19357.1	1049.6	19375.16	1037.787
19404.8	1018.4	19463.3	1018.3	19612.3	1018.1	19621.3	1018.1	19634.8	1021.9
19667.3	1022.1	19733.3	1021.4	19790.5	1022.1	19802.9	1021.9	19818.6	1026.5
19827	1026.5	19834.6	1028.4	19890.9	1029	19964.7	1027.7	19973.5	1027.6
19985.2	1023	19997.6	1019.2	20010.7	1019.2	20032.2	1022.5	20039.2	1024.8

20087.1	1023	20111.8	1024.6	20144.4	1023.1	20153.9	1025.4	20168.7	1024.3
20191.7	1024.2	20273.6	1021.2	20346.9	1017.4	20363.5	1017.6	20425.8	1018.5
20437.5	1019.6	20442.7	1017.4	20510.8	1017.5	20526.1	1018	20581.3	1024.2
20636.5	1025.3	20692.9	1026.1	20742.9	1025.6	20769.6	1031.4	20776.7	1032.1
20797.4	1031.2	20811.3	1023.1	20868.1	1020.3	20886.8	1019.8	21012.2	1019.3
21017.9	1019.4	21027	1020.7	21039.6	1017.6	21095.8	1017.7	21149.8	1018
21208.9	1018.7	21245	1019.6	21291.17	1037.786	21291.23	1037.81	21303.9	1042.8
21368	1043.7	21407.5	1045.3	21418.5	1048.3	21429.5	1045.3	21450.9	1041.3
21516.4	1042.2	21531.8	1042.1	21606.4	1042.3	21664.8	1042.2	21728.4	1042.1
21735.8	1042.3	21795.8	1042.1	21853	1041.4	21904.7	1040.9	21945.9	1041.5
22007.4	1043.5	22067.8	1044.3	22085.5	1044.9	22124.1	1042.5	22213.9	1042.6
22278	1043.1	22282.5	1043	22318.4	1050.8	22330.1	1051.8	22376	1061.9
22399.2	1062.6	22410.6	1059.4	22438.3	1043.7	22476	1043.3	22498.2	1043.9
22517.5	1047.5	22554.5	1047.8	22615.4	1044.3	22685.5	1043.5	22715.7	1043.9
22733.2	1052.6	22752.7	1056.6	22761.2	1057.6	22797.5	1059		

Manning's n Values num= 4

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
19224.5	.032	19357.1	.037	20776.7	.025	21303.9	.025

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
19375.16	21291.17	480	487.62	480	.1	.3

Ineffective Flow num= 1

Sta L	Sta R	Elev
21303.9	22797.5	1058

CROSS SECTION RIVER: 1
REACH: 1 RS: 210.26

INPUT
Description: 210.26

Left and Right Channel Bank Stations Interpolated
Station Elevation Data num= 75

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
18518	1039.8	18554.5	1039.8	18657.8	1042	18741.9	1041.6	18818	1041.2
18898.6	1041.1	18982.3	1040.1	19077.8	1039.4	19162	1039.9	19268.1	1040.3
19363.8	1039.3	19372.2	1040.4	19377.07	1037.672	19408.8	1019.9	19682.2	1018.6
19755.3	1018.2	19759.5	1026	19769	1023.5	19813.4	1021.7	19816	1022.7
19816.8	1022	19849.2	1020.9	19871.6	1022.5	19881.3	1022.3	19909.8	1024.5
19932.2	1024.7	19991.1	1027.6	20032.1	1025.3	20063.9	1021.9	20070.8	1022
20075.8	1024	20075.9	1020.9	20082.4	1025	20120.1	1032.8	20142.9	1027.4
20152.1	1027.4	20162	1021.5	20166.1	1020	20257.3	1025.2	20290.7	1026.3
20327.7	1020.7	20449	1018.6	20490.7	1017.8	20521.6	1018.3	20541.8	1020.7
20564.4	1016.9	20641.9	1017.2	20694.8	1022.3	20718.8	1018.4	20789.5	1018.3
20862.3	1019.1	20960	1018.2	20989.1	1018.9	21058.3	1018.1	21141	1018
21241.8	1017.5	21265.8	1018.4	21280.3	1023.5	21331.82	1037.672	21342.1	1040.5
21367.6	1040.4	21378.7	1044	21393.2	1047	21408.2	1043.8	21433.3	1036.1
21453.3	1036.5	21462.7	1039.8	21481.6	1041	22697.5	1041	22726.9	1046.8
22740.7	1043.8	22748.5	1041	22815.8	1041	22841.3	1048	22891	1057.7

Manning's n Values num= 5

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
18518	.037	19372.2	.032	20694.8	.037	21342.1	.037	21393.2	.025

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
19377.07	21331.82	505	512.65	520	.1	.3

Ineffective Flow num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
18518	19162	1050	21393.2	22891	1050

CROSS SECTION RIVER: 1
REACH: 1 RS: 210.17

INPUT
Description: 210.17

Right Channel Bank Station Interpolated
Station Elevation Data num= 81

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
18525.7	1038	18530.7	1038	18532.2	1038.8	18540.9	1039	18542.7	1038.3
18559.1	1038.3	18583.6	1039.8	18667.3	1040	18672.2	1040	18771.1	1039.9
18843.2	1039.2	18918.6	1039.2	18975.6	1038.6	19067.9	1036.2	19141.4	1035.5
19159.7	1029.9	19162.1	1028.2	19206.3	1023.5	19232.4	1025.6	19237.8	1026.9
19267.8	1029.3	19288.9	1028.6	19327.1	1031	19354.6	1031.5	19359.6	1019.6
19498.4	1019.3	19752.3	1018.6	19761.8	1021.9	19768.4	1019.7	19807.9	1021.1
19826.4	1023.3	19861.6	1026.2	19939.7	1026.1	20019.7	1026.2	20040.5	1026
20047	1026.8	20077	1025.5	20173.1	1021.8	20204.7	1022.1	20221.8	1027.9
20260.5	1027.9	20289.3	1020.1	20308.5	1019.1	20310	1020	20324.5	1021.7
20336.8	1017.9	20348.1	1016.4	20392.6	1014.7	20407.8	1014.9	20421.1	1019.4
20505.4	1021.6	20584.7	1020	20677.5	1020.6	20713	1019.7	20811.2	1021.5
20931.9	1023.3	20991.7	1025	21079.4	1022.7	21093.5	1022.3	21106.3	1024.9
21181.2	1023.5	21223	1023	21231	1018.7	21249.3	1020.1	21260.4	1023.1

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 21302.8  1025.121334.72 1037.43 21339.3  1039.2 21359.2  1038.4 21371.3    1044
 21385.9  1046.9 21435.8  1035.7 21473.1    1040 22703.8  1040.5 22737.6  1046.8
 22750.2  1044.1 22757.2  1040.5 22826.4  1040.5   22854  1049.8 22873.2  1052.2
 22897.3    1057

Manning's n Values        num=       4
     Sta   n Val     Sta   n Val     Sta   n Val     Sta   n Val
 18525.7    .037 19354.6    .032 20991.7    .037 21339.3    .025

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
       19354.621334.72              505  497.78     495             .1       .3
Ineffective Flow     num=       2
   Sta L   Sta R    Elev   Sta L   Sta R    Elev
 18525.7 19354.6    1050 21385.9 22897.3    1050

CROSS SECTION          RIVER: 1
REACH: 1                  RS: 210.07

INPUT
Description: 210.07

Left Channel Bank Station Interpolated
Station Elevation Data    num=      71
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
 18501.7  1037.5 18541.3  1037.3 18564.5  1038.8 18619.1  1038.6 18704.2  1038.7
 18760.6  1038.9 18769.9  1038.8 18829.1  1038.5   18842  1038.3 18894.1  1038.1
 18959.6  1037.3 18970.3    1037 18978.8  1029.1 18997.2  1018.5 19080.1  1018.5
   19143  1018.7 19188.2  1018.7   192101018.946 19241.4  1019.3 19299.9  1019.1
 19351.1  1019.1 20002.2  1019.3 20010.8  1019.3 20015.9  1021.6 20017.6  1021.9
 20043.4  1020.3 20109.3  1021.6 20149.1  1018.8 20241.7  1019.6 20301.9  1019.6
 20319.7  1020.4 20385.2  1020.2   20395  1020.3 20523.6    1020   20576  1020.4
 20689.9  1019.9 20746.4  1020.1 20785.8    1020 20842.9  1018.9 20851.6  1018.9
 20907.6  1018.8 20909.5  1018.7 20945.5  1031.5 20951.8  1031.4 21011.2  1029.6
 21065.6  1030.2 21073.1  1030.3 21098.1  1026.3 21164.8  1026.1 21186.9  1026.4
 21207.2  1024.8 21212.4  1026.6 21220.7  1028.3 21237.2  1024.7 21246.8  1023.1
 21286.7  1032.7 21315.8  1034.4 21346.3  1039.3 21383.5  1047.6 21397.9  1044.6
 21428.3  1035.2 21444.5  1036.3 21455.5  1040.2   21470  1040.9 22716.5  1040.5
 22744.1  1046.7 22757.9  1043.7 22766.1  1040.5 22836.3  1040.5 22861.9  1049.1
 22885.1  1052.1

Manning's n Values        num=       4
     Sta   n Val     Sta   n Val     Sta   n Val     Sta   n Val
 18501.7    .032 18959.6    .037 19241.4    .037 20945.5    .025

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
         19210 20945.5              495  490.15     505             .1       .3
Ineffective Flow     num=       2
   Sta L   Sta R    Elev   Sta L   Sta R    Elev
 18501.7   19210    1048 21383.5 22885.1    1048

CROSS SECTION          RIVER: 1
REACH: 1                  RS: 209.98

INPUT
Description: 209.98

Left Channel Bank Station Interpolated
Station Elevation Data    num=      67
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
 19210.8  1039.8 19216.4  1039.8 19229.3  1040.8 19256.1  1038.3 19270.9  1038.7
 19289.9  1043.3 19303.8  1043.6 19320.1  1041.9 19336.2  1037.1 19338.51036.916
 19338.7  1036.9 19361.5  1021.9 19388.1  1021.9 19515.6  1021.3 19713.1  1021.7
 20015.3  1021.9 20072.9  1024.3 20080.8  1022.9 20118.2    1022 20369.3  1021.1
 20445.2  1020.9 20458.4  1022.8 20481.8  1021.8   20518  1023.6 20568.6  1034.4
   20571  1034.9 20616.8  1035.6 20623.9  1035.8 20628.3  1035.5 20657.3  1035.7
 20663.4  1034.3 20694.7  1018.1 20723.3  1020.3 20793.2  1020.9 20799.7  1020.9
 20854.2  1020.7 20860.4  1020.9 20904.8  1021.1 20914.5  1020.7 20955.4  1020.7
 20961.5  1020.8 21001.9  1019.9 21007.1  1019.6 21059.6  1018.5 21066.6  1018.2
 21088.4  1019.4 21090.3  1020.1 21106.6  1019.5 21139.4  1019.9 21169.2  1019.4
 21191.2  1020.3 21230.7  1019.2   21293  1018.8 21312.7  1018.3 21356.9  1043.1
 21366.5  1044.5 21383.9  1044.8 21395.6  1044.5   21426  1037.6   21435  1036.5
 21453.5  1042.5 21466.6  1042.2 21474.1    1040 22740.4    1043 22767.4    1043
 22845.4    1040 22872.1  1049.7

Manning's n Values        num=       3
     Sta   n Val     Sta   n Val     Sta   n Val
 19210.8    .032 19303.8    .037 20623.9    .025

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
       19338.5 20623.9              500   502.4     480             .1       .3
Ineffective Flow     num=       2
   Sta L   Sta R    Elev   Sta L   Sta R    Elev
 19210.8 19303.8    1045 21383.9 22872.1    1045
```

CROSS SECTION RIVER: 1
REACH: 1 RS: 209.88

INPUT
Description: 209.88
Station Elevation Data num= 72

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
18501.6	1042.1	18528.8	1043.1	18537.8	1042.9	18574.3	1040.8	18652	1040.5
18739.9	1040.3	18813.4	1040.8	18852.6	1040.6	18874.1	1040.1	18934.3	1040.2
18997.1	1040.3	19062.4	1039.9	19081	1040.1	19142.2	1041	19204	1042
19256.5	1042.2	19318.4	1040.5	19374.2	1039.8	19432.9	1040	19434	1040
19465.8	1025.8	19472.7	1026	19513	1039.1	19517.5	1038.2	19551.2	1024.4
19557.7	1019.9	19669.3	1020.3	19783.1	1020.9	20065	1021.8	20083.9	1021.8
20276.7	1020.6	20381.4	1019.6	20422	1019.3	20445.6	1026.2	20472.5	1035
20535.1	1035.1	20607	1034.4	20691	1033.1	20702.5	1033.3	20710.2	1031.7
20764.2	1029.4	20784.7	1021.7	20827.3	1021.8	20907.6	1017.4	20952.7	1017.1
20986.8	1017.4	21010.4	1016.5	21045.1	1016.6	21090.8	1018.4	21114.2	1018.7
21168.8	1021.5	21185.4	1014.7	21210.8	1016.2	21223.3	1019.8	21245.7	1019
21292.7	1018.9	21317.4	1019.5	21351	1043	21366.2	1042.6	21378.1	1042.9
21392.6	1042.6	21430.3	1035.8	21448.3	1041.7	21461.5	1041.4	22746.5	1041.7
22760	1042	22773.5	1041.7	22844.9	1040.4	22853.4	1040.1	22878.2	1047.9
22883.5	1049.9	22895.7	1051						

Manning's n Values num= 4

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
18501.6	.037	19513	.032	20472.5	.037	21351	.025

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
19513 20472.5 500 504.74 500 .1 .3
Ineffective Flow num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
18501.6	19256.5	1045	21351	22895.7	1045

CROSS SECTION RIVER: 1
REACH: 1 RS: 209.79

INPUT
Description: 209.79

Left Channel Bank Station Interpolated
Station Elevation Data num= 69

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
19302.1	1037	19390.4	1037.7	19422.4	1037.9	19450.6	1038.6	19469.8	1042
19475.2	1039.5	19483.02	1036.47	19511.6	1025.4	19544.2	1024.3	19568.5	1024
19585.1	1022.1	19604	1021.3	19652	1021.9	19659.2	1022.5	19704.1	1023.9
19743.6	1023.4	19758.3	1023.6	19804.1	1021.8	19848.4	1022	19854.6	1022.4
19903.2	1022.6	19907.9	1022.3	19977.4	1021.3	20009.8	1021.4	20048.6	1022.3
20058.7	1024	20073.2	1024.3	20081.6	1025.8	20102.4	1022	20112.8	1020.9
20156.2	1020.9	20256.4	1020.9	20405.6	1020.8	20467	1020.8	20496.1	1035.7
20514.4	1034.2	20550.2	1023.5	20623.5	1023.8	20694.6	1023.6	20727.9	1023.3
20733.7	1025.1	20747.4	1030.6	20772.1	1029.7	20812.6	1013.1	20821.9	1011.1
20921.1	1007.3	21031.7	1007.2	21102	1008.3	21146.2	1010.3	21153.2	1011.1
21167.6	1011.6	21181.9	1014.5	21219.7	1013.4	21280.6	1014.9	21300.5	1014.6
21345.1	1038.3	21349	1039.6	21388.2	1041.1	21398.1	1036.5	21724.8	1037
22053.9	1038.7	22084.9	1038.7	22412.8	1037.5	22736.4	1036.5	22750.8	1040.4
22851	1040	22880.8	1050.9	22891.5	1049.4	22896	1050.7		

Manning's n Values num= 4

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
19302.1	.037	19469.8	.032	20496.1	.037	21349	.025

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
19483.02 20496.1 500 500.44 510 .1 .3
Ineffective Flow num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
19302.1	19469.8	1048	21388.2	22896	1048

CROSS SECTION RIVER: 1
REACH: 1 RS: 209.69

INPUT
Description: 209.69

Left Channel Bank Station Interpolated
Station Elevation Data num= 72

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
18487.6	1037.1	18511.5	1038.9	18512.2	1038.3	18570	1037.1	18609.5	1037.4
18675.1	1037.2	18686.5	1037.2	18757.5	1036.9	18831.1	1037	18905.3	1036.6
18942.8	1036.5	19014.6	1036.3	19080.4	1036.9	19089.1	1039.2	19093.3	1038.7
19097.6	1036	19108.2	1036.5	19117.9	1041	19129.1	1036.3	19223.8	1037
19236.2	1036.9	19306.7	1037.1	19377.2	1036.8	19448.9	1038.8	19451.6	1039.2
19460.14	1035.952	19494.2	1023	19567.3	1019.4	19601.3	1019.8	19663.7	1024.7
19744.5	1029.8	19834.4	1031.8	19911.5	1032.7	19977.6	1032.7	20055.2	1034
20101.5	1021.7	20107.4	1021.1	20162.6	1021	20498.8	1020.7	20560.9	1034.8

```
 20578.5  1035.8 20646.6  1035.2 20702.4  1031.7 20717.4  1031.4 20730.1  1030.1
 20773.2  1013.3 20782.5  1013.1 20845.5  1011.4 20929.9  1011.3 20963.9  1011.2
 21028.3  1011.1 21095.9  1010.7 21179.3  1010.6 21186.8  1010.4 21201.5  1014.3
 21206.7  1012.8   21290  1013.8 21325.4    1034 21344.7  1037.9   21377  1040.8
   21396     1036 21716.5    1037 22044.5  1037.5 22075.5  1037.5 22405.9  1036.3
 22732.5     1036   22744  1038.7 22773.1  1038.3 22776.8    1039 22845.1    1039
 22868.7  1048.8 22887.2  1047.3

Manning's n Values        num=      4
     Sta   n Val     Sta   n Val     Sta   n Val     Sta   n Val
 18487.6    .037 19451.6    .032 20578.5    .037   21290    .025

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
      19460.14 20578.5              495  494.38     510              .1       .3
Ineffective Flow     num=       2
   Sta L   Sta R    Elev   Sta L   Sta R    Elev
 18487.6 19451.6    1046   21377 22887.2    1046

CROSS SECTION          RIVER: 1
REACH: 1                  RS: 209.6

INPUT
Description: 209.6
Station Elevation Data    num=      77
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
 18471.1  1035.6 18496.7  1038.3 18607.4    1038 18680.1  1039.8 18741.6  1037.7
 18879.8    1037 19015.9  1036.1 19028.2  1034.8 19152.5  1033.5 19250.6  1034.5
 19341.4  1037.2 19351.9  1034.1 19365.8  1031.7 19374.9  1033.6 19412.8  1028.7
 19427.6  1022.5 19468.8  1016.4 19481.8  1016.4 19564.4  1022.8 19578.3  1019.6
 19597.1  1016.9 19698.6  1019.2 19729.4  1022.5 19836.1  1021.7 19930.5  1022.3
 19965.1  1019.8 19965.5  1020.6 19987.2  1019.5 20055.5  1019.5 20413.3  1020.2
 20534.4  1020.5   20578  1028.4 20664.2    1027   20687  1029.2 20784.5  1026.4
 20818.2  1025.3 20877.5  1031.3 20903.8  1029.2 20919.4  1025.4 20952.7  1027.2
 21034.7     1012 21184.6    1013 21197.5  1013.3 21214.7  1021.1 21253.6  1021.8
 21259.3  1025.3   21285  1031.8 21303.5  1032.2 21376.6  1040.1 21388.5  1035.5
 21712.8  1036.1 22038.2    1036   22062  1038.1 22071.3  1037.9 22400.5  1035.8
 22736.6  1038.6 22771.4    1038 22816.3  1035.5 22817.7  1036.3 22900.7  1032.1
 23002.2  1032.7 23120.7  1033.1 23129.8  1033.1 23156.7  1038.2 23258.8    1038
 23383.7  1037.9 23478.9  1038.9 23571.2  1038.9 23695.4  1038.7   23813    1038
 23927.9  1038.6 23944.9  1036.6   24036  1038.4 24127.3  1038.3 24217.5  1039.5
 24260.3  1040.4 24277.2  1039.6

Manning's n Values        num=      4
     Sta   n Val     Sta   n Val     Sta   n Val     Sta   n Val
 18471.1    .037 19341.4    .032   20578    .037 21376.6    .025

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
      19341.4   20578              311  344.14     446              .1       .3
Ineffective Flow     num=       2
   Sta L   Sta R    Elev   Sta L   Sta R    Elev
 18471.1   19130    1040 21003.8 24277.2    1040

CROSS SECTION          RIVER: 1
REACH: 1                  RS: 209.54

INPUT
Description: 209.54
Station Elevation Data    num=      31
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
 18558.3  1035.9 18953.3    1031 19413.3    1031 19568.3    1036 19713.3    1040
 19863.3    104219945.14 1044.0120000.32 1043.6720022.38 1039.820036.91 1033.42
 20102.91018.25120139.23  1009.9 20153.9 1009.6620165.29 1004.3220283.58   998.4
 20352.9   995.320409.65  992.3120445.78 1004.7520453.49 1008.7320473.79 1014.13
 20531.4 1031.9820551.27 1040.6920587.06 1042.78 20763.7    1040 20898.7    1036
 21233.7    1031 22228.7    1031 22578.7    1031 22988.7    1036 23038.7    1037
 23838.7  1038.3

Manning's n Values        num=      5
     Sta   n Val     Sta   n Val     Sta   n Val     Sta   n Val     Sta   n Val
 18558.3    .03719945.14    .037 20102.9    .03220587.06    .037 20763.7    .025

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
      19945.1420587.06             46.58   46.58   46.58              .1       .3
Ineffective Flow     num=       2
   Sta L   Sta R    Elev   Sta L   Sta R    Elev
 18558.3   19130    1050   20521 23838.7    1050

BRIDGE                 RIVER: 1
REACH: 1                  RS: 209.535

INPUT
Description: 35th Avenue Bridge
Distance from Upstream XS =       0
Deck/Roadway Width        =   46.58
```

```
Weir Coefficient          =     2.6
Bridge Deck/Roadway Skew  =
Upstream  Deck/Roadway Coordinates
    num=      18
     Sta Hi Cord Lo Cord     Sta Hi Cord Lo Cord     Sta Hi Cord Lo Cord
 18558.3  1035.9  1035.9 18953.3    1032    1032 19413.3    1032    1032
 19568.3    1036    1036 19713.3    1040    1040 20020.9 1043.87 1037.09
 20147.9 1043.74 1036.96 20272.9  1043.5 1036.72 20397.9 1043.02 1036.23
   20521 1042.46 1035.68 20521.1 1042.42 1042.42 20763.7    1040    1040
 20898.7    1036    1036 21233.7    1032    1032 22578.7    1032    1032
 22988.7    1036    1036 23038.7    1037    1037 23838.7  1038.3  1038.3

Upstream Bridge Cross Section Data
Station Elevation Data    num=      31
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
 18558.3  1035.9 18953.3    1031 19413.3    1031 19568.3    1036 19713.3    1040
 19863.3    104219945.14 1044.0120000.32 1043.6720022.38  1039.820036.91 1033.42
 20102.91018.25120139.23  1009.9 20153.9 1009.6620165.29 1004.3220283.58   998.4
 20352.9   995.320409.65  992.3120445.78 1004.7520453.49 1008.7320473.79 1014.13
 20531.4 1031.9820551.27 1040.6920587.06 1042.78 20763.7    1040 20898.7    1036
 21233.7    1031 22228.7    1031 22578.7    1031 22988.7    1036 23038.7    1037
 23838.7  1038.3

Manning's n Values        num=       5
     Sta   n Val     Sta   n Val     Sta   n Val     Sta   n Val     Sta   n Val
 18558.3    .03719945.14    .037 20102.9    .03220587.06    .037 20763.7    .025

Bank Sta: Left   Right    Coeff Contr.   Expan.
      19945.1420587.06             .1       .3
Ineffective Flow     num=        2
   Sta L   Sta R    Elev   Sta L   Sta R    Elev
 18558.3   19130    1050   20521 23838.7    1050

Downstream  Deck/Roadway Coordinates
    num=      18
     Sta Hi Cord Lo Cord     Sta Hi Cord Lo Cord     Sta Hi Cord Lo Cord
 18558.3  1035.9  1035.9 18953.3    1032    1032 19413.3    1032    1032
 19568.3    1036    1036 19713.3    1040    1040 20020.9 1043.87 1037.09
 20147.9 1043.74 1036.96 20272.9  1043.5 1036.72 20397.9 1043.02 1036.23
   20521 1042.46 1035.68 20521.1 1042.42 1042.42 20763.7    1040    1040
 20898.7    1036    1036 21233.7    1032    1032 22578.7    1032    1032
 22988.7    1036    1036 23038.7    1037    1037 23838.7  1038.3  1038.3

Downstream Bridge Cross Section Data
Station Elevation Data    num=      33
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
 18558.3  1035.9 18953.3    1030 19413.3    1030 19568.3    1036 19713.3    1040
 19863.3    104219967.01  1043.420002.05 1042.91 20020.91038.21120034.22 1034.89
 20102.91020.23520147.21 1010.7820164.84 1009.7320171.51 1007.4920222.65 1006.24
 20279.2 1001.7520351.65  995.9320410.25  992.8220447.48 1001.0320457.97 1008.48
20469.59 1010.87   20521 1027.9520536.71 1033.1720558.02 1040.2320593.88 1041.57
 20763.7    1040   20898    1036 21233.7    1031 22228.7    1031 22578.7    1031
 22988.7    1036 23038.7    1037 23838.7  1038.3

Manning's n Values        num=       5
     Sta   n Val     Sta   n Val     Sta   n Val     Sta   n Val     Sta   n Val
 18558.3    .03720002.05    .037 20102.9    .03220593.88    .037   20898    .025

Bank Sta: Left   Right    Coeff Contr.   Expan.
      20002.0520593.88             .1       .3
Ineffective Flow     num=        2
   Sta L   Sta R    Elev   Sta L   Sta R    Elev
 18558.3   19130    1048   20521 23838.7    1048

Upstream Embankment side slope              =        horiz. to 1.0 vertical
Downstream Embankment side slope            =        horiz. to 1.0 vertical
Maximum allowable submergence for weir flow =     .95
Elevation at which weir flow begins         =    1032
Energy head used in spillway design         =
Spillway height used in design              =
Weir crest shape                            = Broad Crested

Number of Piers =  3

Pier Data
Pier Station     Upstream= 20145.9    Downstream= 20145.9
Upstream     num=        2
    Width   Elev    Width   Elev
        4    990        4 1036.96
Downstream     num=        2
    Width   Elev    Width   Elev
        4    990        4 1036.96

Pier Data
```

```
Pier Station     Upstream= 20270.9    Downstream= 20270.9
Upstream     num=       2
    Width   Elev    Width   Elev
      4     990       4 1036.72
Downstream     num=       2
    Width   Elev    Width   Elev
      4     990       4 1036.72

Pier Data
Pier Station     Upstream= 20395.9    Downstream= 20395.9
Upstream     num=       2
    Width   Elev    Width   Elev
      4     990       410036.23
Downstream     num=       2
    Width   Elev    Width   Elev
      4     990       410036.23

Number of Bridge Coefficient Sets =  1

Low Flow Methods and Data
       Energy
       Momentum                Cd   =     1.2
       Yarnell                 KVal =    1.05
Selected Low Flow Methods = Highest Energy Answer

High Flow Method
       Energy Only

Additional Bridge Parameters
       Add Friction component to Momentum
       Add Weight component to Momentum
       Class B flow critical depth computations use critical depth
           inside the bridge at the upstream end
       Criteria to check for pressure flow = Upstream water surface

CROSS SECTION           RIVER: 1
REACH: 1                   RS: 209.53

INPUT
Description: 209.53
Station Elevation Data     num=      33
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
 18558.3  1035.9 18953.3    1030 19413.3    1030 19568.3    1036 19713.3    1040
 19863.3    104219967.01  1043.420002.05 1042.91 20020.91038.21120034.22 1034.89
 20102.91020.23520147.21 1010.7820164.84 1009.7320171.51 1007.4920222.65 1006.24
 20279.2 1001.7520351.65  995.9320410.25  992.8220447.48 1001.0320457.97 1008.48
20469.59 1010.87   20521 1027.9520536.71 1033.1720558.02 1040.2320593.88 1041.57
 20763.7    1040   20898    1036 21233.7    1031 22228.7    1031 22578.7    1031
 22988.7    1036 23038.7    1037 23838.7  1038.3

Manning's n Values         num=       5
     Sta   n Val     Sta   n Val     Sta   n Val     Sta   n Val     Sta   n Val
 18558.3    .03720002.05    .037 20102.9    .03220593.88    .037   20898    .025

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
     20002.0520593.88              486  541.77     601              .1       .3
Ineffective Flow     num=       2
   Sta L   Sta R    Elev   Sta L   Sta R    Elev
 18558.3   19130    1048   20521 23838.7    1048

CROSS SECTION           RIVER: 1
REACH: 1                   RS: 209.42

INPUT
Description: 209.42

Left and Right Channel Bank Stations Interpolated
Station Elevation Data     num=      98
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
 18513.1  1035.5 18574.6  1035.9 18632.5  1034.6 18635.6  1035.4 18680.9    1036
 18687.8  1038.5 18701.4  1035.2 18765.3  1035.2 18835.1  1035.1 18900.1  1034.7
 18961.3  1033.7   190001032.138 19025.7  1031.1 19065.8  1027.8 19104.1  1022.3
 19120.6  1022.6 19125.1  1023.7 19197.6  1025.3   19246    1026 19272.2  1027.8
 19302.1  1027.8 19321.9  1026.7 19328.1  1029.6 19343.4  1022.9 19375.4  1021.5
 19391.1     1023 19460.5  1022.9 19564.6  1022.1 19568.3  1022.2 19574.4  1019.8
 19580.4  1022.5 19651.1  1021.3 19734.5  1021.9 19816.3  1021.1 19912.2    1021
 19990.4  1020.5 20054.5  1019.6 20101.7  1020.2 20105.2  1019.7 20498.9    1020
 20581.2    1020 20630.2  1030.4 20651.6  1032.220652.671032.771 20678.6  1046.6
 20730.3  1043.9 20738.4  1042.7 20748.3  1044.1 20763.6  1040.6 20779.3  1040.7
 20848.4  1041.7 20859.5  1041.4   20872  1043.7 20881.6  1043.1 20905.4  1030.8
 20920.2  1032.2 21002.8  1031.3 21074.4  1031.3 21080.4  1031.3 21145.3  1031.6
 21189.4  1031.7 21251.9  1031.7 21253.8  1031.7 21327.8  1030.8 21328.7  1030.8
   21393  1029.7 21454.5  1029.5 21522.8  1029.1 21585.4  1028.8 21633.2  1028.1
 21668.4  1029.3 21781.5  1029.2 21786.8  1029.4 21861.9  1030.7 21866.8  1030.8
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21933.5	1032	21950.3	1032.1	22025.9	1032.4	22032.2	1032.3	22104.7	1032.3
22114.7	1032.3	22183.6	1032.3	22249.7	1032.4	22313.6	1032.4	22379.4	1031.3
22445.2	1031.7	22506.8	1031.2	22573.5	1031.3	22646.8	1031.1	22725.1	1032.8
22749.8	1033.1	22763.4	1030.6	22774	1030.6	22784.2	1034.4	22794.1	1035.3
22860.8	1035.8	22923.3	1036.2	22993	1036.4				

Manning's n Values num= 6

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
18513.1	.037	18900.1	.037	19197.6	.032	20581.2	.037	20678.6	.037
20872	.025								

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
19000	20652.67	510	510.73	575	.1	.3

Ineffective Flow num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
18513.1	19000	1046.6	20678.6	22993	1046.6

CROSS SECTION RIVER: 1
REACH: 1 RS: 209.33

INPUT
Description: 209.33

Left Channel Bank Station Interpolated
Station Elevation Data num= 97

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
18805.6	1034.2	18877.6	1035.1	18915.6	1036.2	18919.2	1035	18988.3	1034.4
19048	1034.3	19090.2	1033.6	19122.27	1031.972	19129.6	1031.6	19136.7	1028.7
19151.1	1021.4	19214	1024.9	19263.6	1023.8	19325.2	1019.4	19353.4	1019.1
19384.8	1021.1	19397.4	1023.8	19407.5	1019.8	19479	1021.1	19544.8	1020.6
19627.3	1020.2	19659.1	1019.7	19722.2	1021.3	19783.5	1021.9	19849	1021.7
19908.4	1021.2	19998.6	1019.8	20012.1	1019.2	20028.7	1019.6	20037.7	1019.1
20132.6	1019	20227.8	1018.9	20304.8	1018.9	20368.5	1018.9	20451.7	1018.9
20508.2	1018.9	20535	1021.9	20556.6	1021.9	20587.2	1013.4	20625	1012
20631.7	1016.7	20643.4	1021.5	20674.2	1024.9	20676.3	1025.7	20686.3	1024.9
20715.2	1031	20732.6	1031	20771.2	1028.9	20789.7	1027.4	20819.3	1030.9
20832.1	1031.7	20895.5	1031.2	20926.6	1030.4	20939	1035.1	20961.5	1031.1
20974.4	1026.4	20989.2	1025.5	21018	1031.1	21089.8	1030.1	21150.5	1030.1
21211.3	1030	21276.9	1030	21335.5	1030.1	21401.9	1030.6	21492.3	1030.3
21555.6	1029.6	21661.6	1029.4	21712.9	1029.6	21772.4	1028.9	21843.8	1027.8
21878.8	1026.3	21894.4	1028.8	21895.8	1027.9	21909.1	1026.8	21928.4	1027.9
21993.8	1028.7	22054.9	1028.5	22110.2	1032.3	22203.3	1030.7	22272.4	1030.5
22282.8	1030.5	22295.7	1027.1	22353.6	1028.2	22386.4	1027.1	22399.1	1029.7
22428.3	1030.6	22439.8	1026.5	22461	1027.5	22530.6	1027.3	22561.2	1030.1
22572.6	1032.3	22585	1027.9	22616.3	1032.3	22642.1	1032.3	22728.7	1032.7
22817.3	1033.5	22913	1034.5						

Manning's n Values num= 6

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
18805.6	.037	19090.2	.037	19263.6	.032	20535	.037	20715.2	.037
21018	.025								

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
19122.27	20715.2	485	487.54	495	.1	.3

Ineffective Flow num= 1

Sta L	Sta R	Elev
20715.2	22913	1036.2

CROSS SECTION RIVER: 1
REACH: 1 RS: 209.24

INPUT
Description: 209.24
Station Elevation Data num= 65

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
18800.9	1031.5	18845.2	1031.7	18853.7	1034.8	18869.6	1030.2	18915.9	1030.2
18963.2	1027.6	19026.2	1018.3	19072.6	1022.7	19145.5	1025.3	19204.5	1026.7
19228	1027.1	19267.6	1026.7	19336.8	1018.5	19401	1018	19469	1019
19559.6	1018.9	19600.3	1019	19664.3	1019	19693.2	1019.3	19751.6	1019.2
19788.9	1019.1	19833.6	1020.4	19858.1	1020.3	19886.4	1017.7	19971	1017.4
19982.5	1021.6	19990.5	1025.8	20018.6	1018.6	20042.8	1017.5	20058.4	1018.8
20077.7	1018.9	20090.4	1015.2	20111.7	1010.3	20135.2	1012.6	20140.8	1010.2
20203.6	1008.9	20268.9	1009.4	20288	1010.6	20307.3	1010.4	20312	1013.8
20352.1	1014.9	20376.3	1025.5	20383.4	1023.4	20390.2	1026.6	21913	1027.4
21918.5	1026.2	21937.9	1023.9	21950.8	1023.6	21971.5	1026.2	21995	1024
22089.4	1024.8	22140	1026	22164.3	1024.1	22247.4	1026.7	22301.3	1026.2
22321.1	1026.6	22357.4	1030.1	22379.9	1031.6	22389.9	1027.4	22399.6	1028.2
22408.1	1030.8	22473.3	1030.9	22546.1	1031.4	22631	1032.1	22690	1032.8

Manning's n Values num= 6

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
18800.9	.037	19228	.032	19267.6	.032	20312	.037	20390.2	.037
21913	.025								

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.

19267.6	20390.2		510	515	525	.1	.3

Ineffective Flow num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
18800.9	18853.7	1034.8	20850	22690	1034.8

CROSS SECTION RIVER: 1
REACH: 1 RS: 209.14

INPUT
Description: 209.14
Station Elevation Data num= 61

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
18530.6	1030.2	18647.3	1030.8	18717.7	1031	18799.9	1030.8	18812.7	1030.6
18900	1029.5	18932.6	1029.3	18944.6	1034.8	18957.8	1027.8	18961.9	1027.7
19022.8	1026.2	19085	1025.9	19166	1017.5	19223.3	1022.8	19272.5	1024.6
19338.9	1024.1	19386.4	1017.7	19425.6	1016.4	19503.5	1016.6	19527.4	1016.6
19538.6	1021.6	19565.5	1014.5	19580.5	1016.2	19601.3	1015.8	19617.1	1017.3
19620.4	1016	19621.3	1017	19649.1	1016.3	19715.5	1017.1	19791	1016.6
19861	1016.8	19939.6	1017	20018.5	1017.5	20098.7	1018.4	20136.8	1016.4
20159	1021.8	20163.8	1021.6	20169.1	1022.8	20184	1018.8	20211.5	1019.1
20235.1	1012.1	20271.8	1010.6	20284.5	1010.9	20305.9	1016.4	20368.5	1013.7
20394.9	1013.1	20413.2	1023.8	20418.3	1025.4	20439.5	1025	20471.6	1026.6
21987.9	1026.6	21999.2	1033.7	22018.9	1024.5	22092.4	1030.2	22094.4	1030.3
22100.9	1026.3	22162.2	1027.1	22231.7	1027.3	22248.2	1030.6	22261	1029.5
22293.3	1030.2								

Manning's n Values num= 4

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
18530.6	.037	19338.9	.032	20418.3	.037	21999.2	.025

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.

19338.9	20418.3		500	504.56	485	.1	.3

Ineffective Flow num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
18530.6	18944.6	1034	21100	22293.3	1034

CROSS SECTION RIVER: 1
REACH: 1 RS: 209.04

INPUT
Description: 209.04
Station Elevation Data num= 63

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
17502.1	1032.3	17560.1	1032.9	17609.7	1031.6	17636.5	1033.4	17744.6	1031.9
17770	1031	17784.7	1027.9	17886.2	1029	17976	1029.5	18087	1029.7
18189.2	1028.4	18278	1028.5	18371.6	1028.9	18408.2	1029.7	18494.9	1028.9
18579.6	1028.4	18720.8	1029	18831.6	1028.7	18921.3	1028.4	19009.8	1028.1
19029.7	1029.9	19039.2	1026.5	19129.8	1025.1	19156.1	1023.5	19206.7	1017.7
19260.8	1016.5	19291.9	1022.9	19315.3	1025.6	19358.3	1024.5	19381.5	1014.5
19410.3	1014.2	19515.9	1015.1	19568.7	1015.3	19609.7	1014.2	19715.7	1014.2
19776	1013.5	19864.4	1016	19951.2	1016.3	20000.4	1015.1	20015.4	1013.4
20144.8	1012.2	20171.9	1012.3	20307.8	1014.7	20330.1	1015.1	20379.3	1022.7
20387.8	1020.9	20406	1020.1	20427.2	1023	20461.4	1023.2	20591	1024.2
22074.8	1024	22077.6	1027.6	22104.8	1036.3	22120.5	1030.7	22123.6	1027.7
22179.3	1027.5	22209.6	1031.1	22217	1033.3	22254	1026.2	22313.5	1029.2
22366.7	1029.7	22453.1	1030.2	22468	1030.4				

Manning's n Values num= 5

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
17502.1	.037	19315.3	.037	19410.3	.032	20461.4	.037	22254	.025

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.

19315.3	20461.4		495	493.26	500	.1	.3

Ineffective Flow num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
17502.1	19029.7	1035	21200	22468	1035

CROSS SECTION RIVER: 1
REACH: 1 RS: 208.95

INPUT
Description: 208.95
Station Elevation Data num= 47

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
17388.1	1030.8	17406	1030.7	17453.4	1039.3	17470.9	1039.4	17498	1031.1
17600.7	1030.9	17686	1030.7	17760.7	1027.3	17869.1	1027.3	17947.5	1027.5
18034.7	1027.8	18122.9	1027.9	18229.8	1028	18362.5	1027.6	18483.7	1027.2
18571	1026.4	18659.7	1025.6	18802.8	1026.1	18871.2	1029.7	18908.6	1028.7
18928.4	1025.8	19016.8	1024.1	19035.5	1027.7	19114.2	1024.9	19137.7	1030.4
19142.2	1025.8	19205.2	1023.5	19276.9	1018.7	19293.7	1013.8	19408.9	1014.5
19496.9	1014.1	19543	1014.4	19646.8	1014.7	19794.8	1014.5	19910.6	1015.8
19987.9	1016.6	20028.6	1018.7	20113.7	1020.6	20123.6	1024.6	21531.3	1025.2
22092	1024.6	22101.4	1027.9	22119.6	1027.7	22135	1034.4	22141.9	1036.4

22162.1 1026.4 22186 1026.7

Manning's n Values num= 4

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
17388.1	.037	19137.7	.037	19276.9	.032	20123.6	.037

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
19137.7	20123.6	505	506.69	505	.1	.3

Ineffective Flow num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
17388.1	19137.7	1038	21200	22186	1038

CROSS SECTION RIVER: 1
REACH: 1 RS: 208.85

INPUT
Description: 208.85
Station Elevation Data num= 69

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
17667	1028.3	17683.4	1029.5	17702	1037.2	17712.6	1036.7	17732.2	1028.9
17793.4	1029.3	17794.3	1028.1	17811.4	1029.7	17884.4	1029.8	17954.5	1029.5
18021.3	1029	18086.8	1028.4	18155.5	1027.6	18253.7	1026.5	18321.5	1026.3
18395.4	1025.8	18469.1	1025.7	18517	1025.4	18547.8	1030.6	18614.6	1029.1
18653.1	1029.8	18743.2	1028.7	18829.7	1028.9	18902.2	1028.7	18950.5	1028.5
18968.7	1029.4	19052.5	1028	19118	1027.5	19183.9	1025.1	19199.7	1025.2
19210.3	1021.6	19228.4	1014.1	19243.7	1013.4	19285.7	1013.5	19404.4	1013.7
19442.3	1013.8	19550.1	1014.4	19628.8	1015.9	19695.2	1016.5	19784.8	1017.1
19851.9	1017.7	19926.2	1019	20020.7	1019.9	20118.1	1019.8	20148.7	1019.8
20176.3	1018.8	20233.8	1020.2	20291.9	1019.7	20357.5	1017.6	20426	1016.4
20472.5	1017.1	20530.5	1016.5	20568.5	1021.6	20573.6	1019.4	20598	1014.9
20615.5	1016.2	20685.2	1014.7	20701.9	1014.6	20716.4	1019	20745.8	1021.2
21590.5	1021.2	21595.5	1023.1	21612.9	1023.6	21620.3	1024.7	21935.6	1028.7
21943	1025.9	22047.6	1025.8	22056.8	1030.6	22086	1042.9		

Manning's n Values num= 4

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
17667	.037	19199.7	.032	20701.9	.037	20745.8	.037

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
19199.7	20745.8	510	519.42	530	.1	.3

Ineffective Flow num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
17667	18968.7	1035	21150	22086	1035

CROSS SECTION RIVER: 1
REACH: 1 RS: 208.75

INPUT
Description: 208.75
Station Elevation Data num= 81

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
17694.2	1021.1	17763.9	1027.7	17785	1036	17797.3	1035.5	17818.9	1026.8
17862.3	1027.5	17876.4	1028.3	17879.6	1027	17887.5	1027.8	17976.5	1027.4
18069.6	1028.1	18129.1	1026.6	18227.5	1026	18358.7	1025	18492.4	1025.2
18601.8	1024.8	18699.9	1024.5	18819.7	1024.6	18852.6	1024.6	18949.1	1024.4
19044.9	1024	19145.7	1024.3	19192.9	1024.4	19220.5	1014.1	19251.3	1012.8
19259.2	1013.5	19469.4	1013.5	19559.7	1013.6	19581	1014.6	19605.6	1018.3
19624.1	1017.7	19644.9	1018.4	19739.6	1018.2	19808.7	1018.7	19912.6	1019.8
20031.3	1019	20124.1	1018.4	20199.4	1018.2	20239.9	1014.1	20370.8	1011.9
20423	1008.1	20441.8	1007.4	20459.1	1008.5	20487.2	1008.9	20517.6	1007.6
20545.9	1007.6	20574.1	1007.6	20616.3	1007.6	20685.5	1007.6	20704.1	1009.9
20720.5	1009	20737	1005.2	20763.6	1011.5	20774.6	1011	20799.2	1019.7
20826.5	1020	21626	1022.7	21706	1024.3	21714.3	1025.4	21770	1027.2
21800.9	1044.1	21813.2	1039.1	21842.4	1033.1	21857.2	1027.1	21893.8	1028.4
22015.3	1028.8	22117.6	1027.6	22189.1	1026	22214.4	1028.5	22251.7	1027.8
22282.9	1029.1	22304.2	1030.9	22314.1	1036.1	22336.1	1034.2	22354	1031.3
22395.9	1029.6	22417.9	1030.2	22426.2	1025.2	22438.2	1024.8	22447	1027
22490.7	1026.9								

Manning's n Values num= 4

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
17694.2	.037	19192.9	.032	20799.2	.037	22314.1	.025

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
19192.9	20799.2	440	443.83	450	.1	.3

Ineffective Flow num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
17694.2	19192.9	1038	20799.2	22490.7	1038

CROSS SECTION RIVER: 1
REACH: 1 RS: 208.67

INPUT
Description: 208.67

Left and Right Channel Bank Stations Interpolated
Station Elevation Data num= 88

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
17786.1	1022.3	17843.6	1026.5	17855.3	1034.5	17872.2	1033.9	17892.4	1025.1
17923.9	1026.9	17935.3	1026.9	17946.1	1029.5	17954.2	1026.8	17960.6	1028.1
18085.3	1025.9	18175.8	1025.5	18284.1	1025.1	18393	1024.3	18536.6	1023.2
18662.6	1023.3	18777.1	1023.6	18913.6	1023.9	19013.8	1024.8	19102.8	1025.9
19116.6	1024.6	19118.22	1023.942	19145.2	1013	19150.7	1014.2	19263.7	1013.6
19374.5	1013.1	19435.1	1013.5	19572.8	1013.6	19645.9	1014.5	19689.8	1017.6
19797.8	1018.5	19923.6	1018.8	20022.9	1016	20112.6	1014.2	20119.4	1013.9
20139.2	1008.8	20180.9	1009.7	20203.7	1007.6	20293	1010.5	20307.2	1007.8
20372	1009.4	20399.2	1008.8	20452.2	1010.5	20523.1	1009.4	20536.1	1014.1
20548.6	1010.7	20639.2	1014.5	20652.7	1013.5	20665.3	1010.4	20713.7	1010.2
20725.6	1013.6	20738.6	1020.7	20826	1023.1	20841.3	1024.7	20857.6	1022.8
20866.3	1014.9	20871.8	1016.1	20881.2	1020.9	20902	1018.8	20908.11	1023.942
20912.1	1027.3	20915.2	1025.5	21808.2	1025.7	21897.3	1025.4	21995.2	1025.3
22131.2	1026.1	22205.3	1026.2	22276.6	1027.7	22393.1	1027.2	22428	1027.2
22464.1	1025.6	22496.5	1027	22518.1	1024.1	22529.5	1026	22649	1025.9
22747.7	1025.2	22864.8	1024.7	22963.7	1025.8	23106.8	1026.4	23231	1026.5
23328.6	1027.2	23422.1	1026.4	23522.3	1028.3	23562.9	1027.2	23612.4	1030.4
23634.1	1030.7	23767.5	1029.2	23789.9	1028.4				

Manning's n Values num= 6

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
17786.1	.037	19102.8	.037	19116.6	.032	20826	.037	20912.1	.037
22428	.025								

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
19118.22	20908.11	495	511.45	475	.1	.3

Ineffective Flow num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
17786.1	19102.8	1033	21150	23789.9	1033

CROSS SECTION RIVER: 1
REACH: 1 RS: 208.57

INPUT
Description: 208.57

Left and Right Channel Bank Stations Interpolated
Station Elevation Data num= 86

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
17892.9	1023.8	17920.6	1025.8	17926.7	1033.6	17946	1032.8	17966.2	1024.2
18010.1	1026	18022	1028.4	18027.2	1025.8	18036.6	1027.8	18048.7	1025
18090.2	1023.6	18189.1	1023.8	18284.4	1023.8	18378.8	1023.6	18492.2	1023.9
18502.6	1023.9	18575.4	1024.1	18681.9	1023.6	18705.6	1023.6	18777.9	1023.5
18853.8	1023.6	18935.4	1023.8	19041.2	1023.8	19080.9	1025	19087.13	1021.839
19101.4	1014.6	19184.3	1012.9	19255.1	1011.9	19315.3	1011.9	19368.2	1010.4
19435.4	1013.3	19524.5	1013.8	19585.9	1012	19676.3	1014	19772.4	1014.4
19846.2	1014.8	19900.7	1016.3	19982.9	1016.5	20023.8	1014.7	20071.3	1014.9
20086.3	1012.9	20123	1013.5	20146	1011	20220.3	1007.6	20240.8	1007.6
20261.8	1009.9	20276.9	1008.4	20361	1010.1	20458.8	1010.7	20541.8	1012.1
20584.9	1012.3	20595.3	1014.5	20599.2	1013.9	20607.5	1016.1	20614.3	1015
20623.9	1016	20640	1016.203	20647.7	1016.3	20654.4	1017.4	20724.7	1017.3
20827.2	1020	20901.1	1020.7	20951.9	1021	20965.4	1016.5	20974.8	1017
21000.4	1025.7	21032.4	1026.3	21033.8	1024	21616	1024.8	21707.7	1024.4
21817.1	1024.3	21913.4	1023.7	21991.5	1023.8	22065.5	1024.5	22100	1024.9
22243.4	1025.1	22248	1025.1	22334.2	1026.7	22341.3	1026.8	22434.5	1027.5
22499.8	1026.8	22523.2	1026.9	22552.2	1028.3	22565.8	1024.5	22577.9	1025.6
22585	1027.8								

Manning's n Values num= 5

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
17892.9	.037	19080.9	.037	19101.4	.032	21000.4	.032	21032.4	.037

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
19087.13	20640	560	514.75	370	.1	.3

Ineffective Flow num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
17892.9	19080.9	1028	20640	22585	1028

CROSS SECTION RIVER: 1
REACH: 1 RS: 208.48

INPUT
Description: 208.48

Left and Right Channel Bank Stations Interpolated
Station Elevation Data num= 72

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
18038.2	1024.5	18107.3	1024	18176.8	1026.3	18180.6	1023.6	18220	1024.2
18231.5	1030.8	18253	1040.2	18276.7	1045.8	18279.2	1045.4	18325.3	1023.2
18350.1	1034.9	18383.7	1036.5	18431.8	1022.6	18508.9	1022.1	18510.56	1021.363

18528.5	1013.4	18574.3	1009.5	18585	1009.5	18656.1	1009.7	18723.8	1009.2
18751.4	1011.9	18757.6	1013.2	18773.9	1012	18790	1012.6	18811.4	1014.6
18894	1015.4	18935.3	1016.3	18976.7	1016	18993.7	1009.2	19033.2	1007.6
19073.1	1010.5	19142.7	1010.5	19210.3	1011.2	19297.6	1012.4	19357.3	1014.5
19432.9	1014	19515.6	1015.2	19565.3	1016.2	19630.9	1012.6	19702.1	1013.3
19791.9	1013	19865.2	1012.2	19956.6	1011.4	20027.1	1011	20099.9	1011
20112.3	1011	20178.6	1011.1	20248.4	1011.1	20312.8	1010.9	20383.8	1010.5
20479.2	1009.8	20529.6	1009.2	20545.1	1017	20627.3	1012.2	20656.3	1012
20680.86	1021.362	20694.6	1026.6	20705.7	1021.5	20806.1	1023.8	21024.6	1028.4
21084	1028.5	21102.7	1031.8	21472.3	1022.1	21971.9	1021.8	22046.1	1022.2
22091.6	1023	22109.6	1026.2	22178.4	1024.8	22198	1027	22264.7	1026.9
22377	1027.5	22430	1027.5						

Manning's n Values num= 6

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
18038.2	.043	18508.9	.043	18585	.032	20545.1	.037	20694.6	.037
22377	.025								

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
18510.56	20680.86	500	476.54	525	.1	.3

Ineffective Flow num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
18038.2	18508.9	1038	20694.6	22430	1038

CROSS SECTION RIVER: 1
REACH: 1 RS: 208.39

INPUT
Description: 208.39

Left and Right Channel Bank Stations Interpolated
Station Elevation Data num= 72

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
18033.7	1024.2	18048.9	1023.9	18052.4	1029.4	18060.9	1031.1	18078.5	1028.7
18083.6	1026.5	18089.9	1022.5	18176.1	1021.5	18253.5	1021.3	18379.7	1022.4
18417.8	1035.8	18447	1022.6	18462.94	1020.436	18469.1	1019.6	18494.4	1010.7
18597.1	1007.9	18699.5	1009.4	18760.1	1011.4	18779.9	1010	18820.5	1010.6
18843.1	1015.2	18914.5	1016.3	18932.1	1009.7	19018.2	1006.1	19063.1	1005.6
19094.9	1009.1	19184.7	1010.4	19213.8	1010.9	19266.1	1013.3	19343.9	1014.9
19411.9	1013.9	19452.4	1014.4	19493.3	1016.2	19593.6	1015.6	19647.5	1014.8
19744.6	1015.5	19808.5	1013.7	19910.3	1013.1	20054	1012.2	20156.8	1011.7
20242.7	1010.5	20343.9	1010	20449.6	1010.3	20484.4	1010.8	20718.2	1010.6
20748.79	1020.435	20754.9	1022.4	20802.7	1021.3	20917.8	1022	20992.6	1024
21004.2	1019	21264.2	1022.8	21271.1	1021.2	21710.3	1019	21734.9	1021.9
21769.9	1021.9	21817.5	1020.2	21841.4	1017.4	21869.1	1018.9	21889.9	1018.1
21894.1	1020.2	21908.6	1017.2	21928.1	1016.5	21932.5	1018.5	22018.7	1019.9
22082.6	1021.4	22098.4	1024.6	22134	1025.4	22198	1023.8	22317.1	1023.6
22352.6	1025.6	22382	1025.9						

Manning's n Values num= 5

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
18033.7	.043	18417.8	.043	18597.1	.032	20718.2	.037	20754.9	.037

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
18462.94	20748.79	505	512.19	480	.1	.3

Ineffective Flow num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
18033.7	18417.8	1030	20754.9	22382	1030

CROSS SECTION RIVER: 1
REACH: 1 RS: 208.29

INPUT
Description: 208.29

Left and Right Channel Bank Stations Interpolated
Station Elevation Data num= 71

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
17002.6	1020.8	17033.1	1020.7	17130	1020.6	17223.7	1020.7	17316.5	1020.8
17410	1021	17443.4	1021	17527.8	1021.3	17612.8	1021.5	17700	1022.8
17725.5	1028.3	17746	1019	18278.7	1023.8	18304.6	1033.9	18306.7	1033.7
18430.1	1023.3	18444.4	1021.3	18480	1020.6	18525.3	1021.4	18545.4	1030.1
18562.61	1019.523	18580.2	1008.7	18645.9	1006.9	18729.8	1008.2	18813.6	1008
18846.3	1006.7	18858.5	1011.3	18964	1010.4	19046.3	1010.7	19068	1009.9
19095.1	1004.7	19192.2	1007.2	19204.4	1008	19237.6	1005	19274.3	1005.1
19293.9	1010.7	19341.5	1011.4	19389.6	1015	19461.9	1012.7	19548.6	1016.1
19665.7	1014.5	19730.4	1012.3	19830.2	1012.9	19905.4	1012.6	19969.1	1014.2
20073.7	1013.1	20194.6	1010.4	20258.7	1012.5	20359.4	1011.5	20498.8	1009.7
20566.1	1009.2	20843.2	1010.4	20909.3	1011.22	0944.071	1019.521	20944.4	1019.6
20975	1023	21021.7	1024	21130.5	1022.9	21208.2	1021.6	21306.6	1021.3
21351.8	1021.1	21367	1020	21795	1020	21802.7	1023.1	21891.9	1019.9
21966.6	1016.6	21987.4	1019.1	22088.4	1021	22160.2	1022.7	22169.6	1026.3
22197	1026								

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Manning's n Values          num=       7
     Sta   n Val     Sta   n Val     Sta   n Val     Sta   n Val     Sta   n Val
 17002.6    .025 17725.5    .043 18545.4    .043 18645.9    .032 20909.3    .037
   20975    .037 21987.4    .025

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
       18562.620944.07               490  501.01     510             .1       .3
Ineffective Flow     num=       2
   Sta L   Sta R    Elev   Sta L   Sta R    Elev
 17002.6 18545.4  1033.9 21021.7   22197  1033.9

CROSS SECTION          RIVER: 1
REACH: 1                  RS: 208.19

INPUT
Description: 208.19

Left and Right Channel Bank Stations Interpolated
Station Elevation Data     num=      73
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
 16738.4  1022.5 16814.9  1021.3 16821.2  1024.1 16826.8  1024.4   16846  1022.6
 16869.2  1018.1 16892.4  1020.2 17011.8  1018.9 17149.6  1018.8 17287.4    1019
 17387.1  1019.5 17473.6  1019.4 17580.5  1019.5   17670  1020.5 17703.3  1019.8
 17715.2  1023.4 17720.4  1019.5 18540.1  1019.5 18545.5  1021.5 18598.6  1019.7
 18675.6    102018679.181018.788 18707.5  1009.2 18726.3  1010.8   18788  1007.7
 18875.7  1008.8 18927.6  1008.9 18995.2  1007.2   19040  1004.7 19071.5  1004.8
   19117  1012.1 19221.7  1012.6   19293  1010.3 19310.2  1006.5 19415.1  1005.7
   19433  1005.7 19473.9  1008.3 19506.7  1017.8 19594.5  1018.2 19623.8  1016.2
 19711.7  1018.6   19793  1010.9 19904.1  1011.6 19997.4  1011.8 20089.1  1012.4
 20178.1  1013.8 20250.4  1007.3 20363.1  1007.4 20433.4  1005.7 20559.2  1006.9
 20626.2  1007.7 20641.6  1005.9 20704.7    1010 20807.3  1012.1 20891.1    1011
 21007.8  1008.2 21027.6  1007.7 21114.3    1011 21201.9  1010.7 21231.6    1010
   21232  1010.8 21278.3  1014.9 21343.21018.788 21348.4  1019.1 21818.1  1019.2
 21871.3  1019.6 22068.3  1019.1 22125.4    1020   22187  1022.1 22200.2  1026.3
 22310.7  1025.1 22415.4    1025   22486  1024.5

Manning's n Values          num=       5
     Sta   n Val     Sta   n Val     Sta   n Val     Sta   n Val     Sta   n Val
 16738.4    .025 17715.2    .043 18675.6    .043 18707.5    .032 21348.4    .032

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
       18679.18 21343.2              550  514.57     505             .1       .3
Ineffective Flow     num=       2
   Sta L   Sta R    Elev   Sta L   Sta R    Elev
 16738.4 18675.6    1024 21348.4   22486    1024

CROSS SECTION          RIVER: 1
REACH: 1                  RS: 208.1

INPUT
Description: 208.1

Left and Right Channel Bank Stations Interpolated
Station Elevation Data     num=      69
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
 16819.7    1020 16911.7    1020 16920.8  1021.8 17013.5  1018.3 17181.5  1017.7
 17278.5  1017.9 17421.8  1018.4 17530.4  1018.9 17672.5    1019 17700.9  1021.1
   17741  1041.2 17785.3  1019.8 17794.9  1019.4 18660.8  1020.4 18677.2    1019
 18756.4  1019.4 18786.9  1024.5 18805.9  1022.218822.371018.025 18827.2  1016.8
 18834.8  1016.8   18846    1012 18862.1  1009.8 18895.6  1011.5 18990.9  1008.1
 19103.9  1008.1 19211.4  1009.5 19294.1    1007 19344.4  1005.3 19402.2  1005.6
 19441.1  1001.9 19492.5  1001.4 19507.6  1005.4 19538.7  1004.2 19589.1  1004.9
 19611.9  1009.1 19719.5  1009.4 19730.1  1011.2 19842.8  1011.2 19883.7  1010.5
 19981.4    1014 20076.5    1014 20186.6  1011.8 20200.6  1004.4 20293.1  1005.3
   20440  1005.6 20518.6  1005.6 20579.1    1016 20684.7  1017.1 20777.7  1016.5
 20898.9  1016.6 20918.1  1016.7   20993  1011.1 21084.2  1010.3 21202.2  1009.9
 21318.2  1011.4 21438.8  1010.4 21535.9    1009 21597.7  1011.1 21698.8  1010.3
 21706.3  1012.821767.181018.025 21783.2  1019.4 21878.3  1019.5 21970.4  1019.6
 22184.8  1019.5 22249.1  1022.6 22375.9  1023.7   22460  1023.8

Manning's n Values          num=       5
     Sta   n Val     Sta   n Val     Sta   n Val     Sta   n Val     Sta   n Val
 16819.7    .025   17741    .043 18786.9    .043 18805.9    .032 21783.2    .032

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
       18822.3721767.18              640  558.37     480             .1       .3
Ineffective Flow     num=       2
   Sta L   Sta R    Elev   Sta L   Sta R    Elev
 16819.7 18786.9    1030 21783.2   22460    1030

CROSS SECTION          RIVER: 1
REACH: 1                  RS: 207.99

INPUT
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Description: 207.99

Left and Right Channel Bank Stations Interpolated
Station Elevation Data num= 98

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
17809.3	1018.5	17815.5	1018.4	17825.2	1016.2	17906.9	1016.7	18020.3	1016.6
18102.9	1017.1	18116.8	1017.8	18121.1	1019.2	18156	1021.3	18162.3	1018.5
18168.8	1017.5	18272.9	1016.7	18288.2	1016.8	18385.1	1017	18430.3	1017.1
18440.8	1018.3	18447.7	1016.2	18501.8	1016.4	18510.3	1018	18514.6	1015.5
18538.2	1015.7	18541.7	1014.1	18552.7	1006.7	18579.2	1006.9	18660.4	1004.5
18672.2	1007.9	18695.7	1012.5	18709.9	1013.9	18790.3	1015.9	18865.8	1016.8
18884.7	1023.5	18901.5	1024.9	18919.6	1017.9	18933.3	1017.3	19008	1016.5
19025.7	1016.3	19034.2	1018.6	19040.9	1016.9	19083.8	1019.8	19093.03	1016.923
19108.5	1012.1	19169.3	1009	19252	1007.4	19308	1009	19330.7	1003.7
19355.3	1004.7	19441.2	1004.1	19496.6	1000.7	19571.6	999.9	19628.3	1003.8
19657.1	1004.6	19679.9	1006.9	19709	1005.7	19786.5	1006.6	19863.9	1009.8
19926.2	1011	19969.4	1002.6	20043.2	1002.9	20123.4	1004.2	20199.1	1003.3
20291.6	1005.7	20354	1006.7	20409.8	1008.7	20448.4	1011.1	20498.1	1016.9
20579	1017.6	20660.5	1016.3	20726.3	1014.2	20743.2	1010.4	20801.5	1014.5
20874.6	1015.4	20955.4	1016	21051.7	1015.4	21137.2	1014.3	21215.8	1012.8
21233.3	1012.4	21267.9	1009.1	21316.4	1007.5	21351.9	1005.2	21379.5	1005.3
21468.2	1009.5	21567.9	1011.4	21676.9	1011.6	21738.1	1010.6	21759	1009.1
21849.9	1013.1	21881	1015.52	1934.42	1016.922	21967.4	1017.8	22054.7	1017.9
22077.8	1018	22085.6	1018.9	22160.9	1020.4	22188.5	1022.7	22281.8	1022.9
22357.5	1022.4	22442	1022.2	22476.6	1022.2				

Manning's n Values num= 4

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
17809.3	.043	19083.8	.043	19108.5	.032	22085.6	.032

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
19093.03	21934.42	475	482.29	500	.1	.3

Ineffective Flow num= 1

Sta L	Sta R	Elev
17809.3	19083.8	1021

CROSS SECTION RIVER: 1
REACH: 1 RS: 207.9

INPUT
Description: 207.9

Right Channel Bank Station Interpolated
Station Elevation Data num= 89

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
18318.7	1015.8	18394.8	1015.8	18463.1	1016.2	18469.7	1018.1	18472.9	1015
18724.1	1015	18761.1	1014.3	18777.9	1016.8	18795.6	1016.9	18860.1	1015.9
18896.1	1016.3	18904.8	1019.7	18929.3	1019.8	18940.1	1015.2	19033.5	1016.1
19047.9	1016	19059.8	1017.2	19066.9	1015.1	19104.7	1016	19116.7	1011.7
19126.7	1007.1	19193.6	1007.4	19285	1009.3	19371.2	1009	19445.7	1007.1
19492.9	1005.5	19566.8	1005.1	19594	1005.6	19624.6	1005.2	19638.3	1006.4
19689	1001.1	19766	1000.8	19843.4	1001.2	19860.6	1000.8	19947.8	1001.8
19955.3	1001.9	20050.4	1001.4	20071.1	1001.6	20089.1	1003.2	20118.3	1004.3
20156	1007.1	20190.3	1008	20289.9	1007.9	20381.4	1008.9	20427.9	1010.5
20531.5	1011.1	20544.8	1011.1	20560.1	1011.9	20586.4	1015.8	20608.7	1016.9
20680.6	1014.6	20727.2	1013.8	20735.8	1014.5	20764.9	1009.7	20788.6	1011.6
20822.1	1012.5	20927.9	1011.9	20963	1010.7	20994.1	1008.3	21051.7	1014.1
21082.2	1013.7	21131.1	1014.8	21213.2	1014.5	21238.4	1013.9	21256.2	1007.6
21259.2	1007.2	21307.5	1008.3	21334.5	1010	21416.2	1010.9	21507.7	1009.2
21598.5	1005.8	21681.1	1006.9	21719.6	1007.7	21776.6	1006.7	21793.9	1004.3
21872.6	1005.5	21939.8	1009	21972.8	1010.5	22032.5	1008.8	22046.3	1006.6
22111	1005.92	2137.55	1016.374	22143.7	1018.8	22212.8	1020.7	22232.2	1021.2
22300.9	1021	22378.9	1020.5	22421.5	1020.6	22488.9	1019.9		

Manning's n Values num= 4

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
18318.7	.043	19047.9	.032	19104.7	.032	22143.7	.032

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
19104.72	2137.55	505	509.52	585	.1	.3

Ineffective Flow num= 1

Sta L	Sta R	Elev
18318.7	19059.8	1020

CROSS SECTION RIVER: 1
REACH: 1 RS: 207.8

INPUT
Description: 207.8

Right Channel Bank Station Interpolated
Station Elevation Data num= 73

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
16720.8	1015.6	16820	1018	16844.2	1018.7	16848.8	1017.5	16856.8	1019

16867.4	1017.3	16875.2	1017.8	16895	1016.2	16996.6	1015.8	17124.1	1015.3
17221.3	1014.7	17233.7	1014.6	17327.7	1014.3	17428.5	1014.5	17461.8	1014.4
17509	1014.7	17520.5	1015.7	17546.1	1014.2	18739.7	1014.2	18794.2	1014.4
18801.9	1012.7	18900.8	1014.4	18913	1018.5	18934.2	1018.4	18945.1	1013.9
19039.6	1013.5	19178.5	1013.1	19235	1013.5	19249.5	1015	19270.9	1008.6
19304.9	1007.2	19435.5	1007.2	19520.8	1006.1	19559.8	1004.3	19673.3	1005.3
19780.3	1005.6	19820.2	1000.5	19919.9	1000.6	20045.1	1000.2	20073	1001.1
20160.5	1002.9	20209	1001.4	20279.2	1004.6	20310.6	1008.1	20429.9	1009.7
20529.9	1009.3	20571.6	1009.6	20646.2	1007	20667.3	1010.8	20787.7	1013.1
20898.5	1015.2	20915	1015.8	20928.8	1011.5	21033	1009.7	21101	1010.3
21126.1	1013.2	21165.5	1011.3	21182.3	1008.2	21287.6	1007.8	21332.6	1005.8
21365.6	1009.5	21456.3	1009.3	21581.9	1009	21695.3	1007.9	21776.1	1006.6
21795.3	1002.4	21834.5	999.1	21842.9	1003.5	21871.22	1015.405	21881.2	1019.6
21991.4	1019.8	22085.9	1019.5	22180	1020.6				

Manning's n Values num= 5

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
16720.8	.025	17520.5	.043	19039.6	.032	19249.5	.032	21881.2	.032

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
19249.5	21871.22	495	494.8	505	.1	.3

Ineffective Flow num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
16720.8	18913	1019	21881.2	22180	1019

CROSS SECTION RIVER: 1
REACH: 1 RS: 207.71

INPUT
Description: 207.71

Right Channel Bank Station Interpolated
Station Elevation Data num= 69

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
16626.2	1015.3	16668.1	1016.9	16690.7	1017.7	16699.2	1016.4	16733.9	1017.7
16740.2	1016.3	16747.5	1017.3	16818.1	1015.6	16927.6	1015.4	17021	1015.3
17153.4	1014.4	17242.5	1014.4	17313.4	1014.7	17424.4	1012.2	17499	1011
17545	1013	17556.4	1015	18768.1	1013.7	18795	1011.6	18818.9	1011.4
18826.3	1012.5	18837.7	1011	18904.5	1010.8	18932.9	1017.1	18948.7	1016.5
18965.2	1012.7	18981.8	1010.9	19105.3	1010.4	19195.8	1010.5	19272.7	1010.8
19360	1012.7	19373.3	1012.3	19388.1	1010.3	19485.7	1009.8	19579.6	1007.5
19626	1005.9	19656.3	1007	19724.1	1004.1	19825	1001.9	19865.5	1001.1
20033.4	1000.7	20147.9	1000.3	20249.8	1001.7	20337.9	1005	20425.2	1009.8
20449	1011	20553.3	1008.9	20639.2	1006.4	20687.9	1004.5	20738.5	1010.7
20781.1	1011.2	20925.4	1010.6	21010.9	1010.5	21099.7	1007.8	21189.9	1007.3
21251.6	1004.6	21350.8	1006.6	21434.6	1006	21545.1	1002.4	21640.9	1004.3
21652.1	1006	21660.7	1004.2	21704.111	014.399	21725.4	1019.4	21784.6	1016.6
21889.9	1018.1	21992.7	1019.3	22114.5	1018.7	22157	1018.7		

Manning's n Values num= 5

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
16626.2	.025	17556.4	.043	18981.8	.032	19360	.032	21725.4	.032

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
19360	21704.11	485	487.91	485	.1	.3

Ineffective Flow num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
16626.2	18932.9	1018	21725.4	22157	1018

CROSS SECTION RIVER: 1
REACH: 1 RS: 207.62

INPUT
Description: 207.62

Right Channel Bank Station Interpolated
Station Elevation Data num= 85

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
16251.6	1013	16315.4	1013.5	16374.7	1014.7	16377.5	1015.5	16395.5	1014.6
16421.5	1015.7	16422	1014.7	16556.1	1013.9	16632.1	1014	16716.9	1014
16809.1	1014.3	16813.5	1014.3	16896.9	1014.4	16907.1	1014.4	16991.8	1014.6
17078.6	1013.2	17168.3	1009.6	17287	1010.1	17414.8	1010.3	17522.4	1010.6
17591.1	1013.4	17609.8	1011.4	17662	1012.1	17679.1	1013.9	17688.4	1011.8
17788.8	1010.9	17868.6	1012.4	17910.4	1011.6	17996.3	1008.9	18009.6	1010.7
18035.1	1010.4	18045.1	1011.9	18138.2	1012.6	18185.4	1012.3	18195	1014.2
18263.6	1011.9	18647.5	1012.1	18732.3	1011.6	18815.2	1006.9	18891.8	1011.1
18961.7	1011	18978.7	1015.9	18991.8	1016.8	19005.5	1010.9	19115.1	1011.1
19173.3	1010.9	19236.3	1009.2	19351.7	1010.9	19441.1	1010.7	19518.1	1010.9
19536.8	1005.8	19551.7	1003.6	19572.3	1011.7	19592.2	1007	19618.9	1009.2
19629.6	1005.5	19641.4	1008.7	19649.6	1006.2	19667.1	1010.9	19710.7	1009
19801.1	1007.5	19885.1	1000.9	20012.8	1000.7	20210.2	1000.2	20295.5	1002.1
20395.7	1005.1	20429.1	1005.7	20464.4	1011.5	20549.3	1010.6	20664.2	1007.1
20756.4	1006	20844.7	1004.1	20964.8	1003.4	21097.7	1002.5	21189.6	1001.6
21272.9	1002.2	21361.2	1003.4	21445.5	1003.8	21449.7	1003.92	21472.331	012.741

21484	1017.3	21597.8	1018	21670.5	1017.5	21682.6	1018.4	21786	1017.2

Manning's n Values num= 5

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
16251.6	.025	17591.1	.043	19005.5	.032	19518.1	.032	21484	.032

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
19518.1	21472.33	460	465	515	.1	.3

Ineffective Flow num= 1

Sta L	Sta R	Elev
16251.6	18991.8	1018.4

CROSS SECTION RIVER: 1
REACH: 1 RS: 207.53

INPUT
Description: 207.53

Right Channel Bank Station Interpolated
Station Elevation Data num= 97

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
16022.7	1011.1	16143.3	1011.7	16215.8	1011.5	16221.1	1014.1	16232.7	1013.9
16241.1	1012.7	16266.4	1013.7	16266.5	1014.9	16268.8	1013.2	16273.6	1014.2
16372.5	1014.1	16429	1014.9	16432.3	1013.6	16526.5	1013	16542.7	1012.9
16638.5	1012.9	16738.7	1012.6	16828.5	1012.8	16854.4	1014.1	16891.5	1014.1
16896.5	1014.8	17034.3	1011.1	17122	1009.6	17238.3	1009.7	17332.6	1009.9
17423.9	1010.1	17511.1	1010.4	17604.5	1010.7	17620.2	1013.7	17629.7	1010.7
17643.4	1009.3	17724	1010	17812.5	1010.1	17954	1010	18065.4	1010.1
18155.9	1010.1	18267.1	1010.5	18354.5	1010.5	18454.3	1011.5	18527.2	1011.5
18611.5	1010	18724.9	1010	18789.3	1010.5	18796.9	1011.3	18812.1	1007.4
18898.8	1008.9	18986.9	1010	18999.5	1010.7	19027.1	1017.5	19046.3	1011.3
19124.1	1011.5	19133.7	1010.3	19137.2	1008.4	19148.2	1008.1	19240.4	1009.9
19257.7	1010.8	19302.9	1009.2	19305.5	1008.3	19314.2	1008.5	19319	1010.3
19329.6	1007.9	19386.1	1006.6	19502.9	1006.4	19603.8	1004.2	19684.4	1002.8
19763.2	1001.2	19791	999.1	19817.3	1000.3	19986.4	1000.3	20057	1000.3
20190.1	1000.3	20256.8	1001.2	20303.8	999.8	20452.2	999.9	20549.1	1000.2
20636.9	1000.2	20732.4	1000.1	20823	1000.7	20885.5	1001.5	20917.4	1004.8
20933.9	1001.4	20947	1004	20965	1000.8	21002.6	1002.6	21159.7	1002.9
21175	1003.865	21269.1	1009.8	21336	1012.1	21366.8	1015.8	21376.8	1013.2
21407.7	1013.3	21446.9	1014.6	21511.1	1014.3	21572.1	1017.7	21609.7	1014
21754.4	1013.1	21798	1013.8						

Manning's n Values num= 5

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
16022.7	.025	17620.2	.043	19124.1	.032	19502.9	.032	21336	.032

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
19502.9	21175	231	227	201	.1	.3

Ineffective Flow num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
16022.7	19027.1	1015	21175	21798	1015

CROSS SECTION RIVER: 1
REACH: 1 RS: 207.49

INPUT
Description: 207.49
Station Elevation Data num= 55

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
16210	1013.8	17338.3	1010.47	18388.3	1010.34	18888.3	1010.64	18938.3	1011
18988.3	1011.5	19038.3	1012.3	19088.3	1013.2	19138.3	1014.3	19188.3	1015.6
19288.3	1018.2	19388.3	1020.56	19455	1022.05	19465.2	1020.4	19465.3	1014.7
19468.2	1013.7	19522.3	997.9	19560.3	997.3	19564.3	997.3	19660.3	997
19664.3	997	19760.3	996.4	19764.3	996.4	19860.3	999.5	19864.3	999.5
19960.3	997.4	19964.3	997.4	20060.3	994.6	20064.3	994.6	20160.3	995.5
20164.3	995.5	20260.3	999.6	20264.3	999.6	20360.3	998.5	20364.3	998.5
20460.3	998.9	20464.3	998.9	20560.3	996.7	20564.3	996.7	20660.3	997.9
20664.3	997.9	20760.3	998	20764.3	998	20860.3	999.9	20864.3	999.9
20960.3	998	20964.3	998	21027.8	992.2	21056.5	1014.7	21059.4	1014.7
21059.5	1020.4	21080	1020.7	21115	1020	21280	1016	21875	1013.8

Manning's n Values num= 3

Sta	n Val	Sta	n Val	Sta	n Val
16210	.032	19455	.032	21059.4	.032

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
19465.3	21059.4	50	53	35	.1	.3

Ineffective Flow num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
16210	19465.3	1020	21059.4	21875	1020

BRIDGE RIVER: 1
REACH: 1 RS: 207.485

INPUT
Description: 51st Avenue Bridge
Distance from Upstream XS = 0
Deck/Roadway Width = 50.71
Weir Coefficient = 2.6
Bridge Deck/Roadway Skew =
Upstream Deck/Roadway Coordinates
num= 28

Sta	Hi Cord	Lo Cord	Sta	Hi Cord	Lo Cord	Sta	Hi Cord	Lo Cord
17338.3	1010.47	1010.47	18388.3	1010.34	1010.34	18888.3	1010.64	1010.64
18938.3	1011	1011	18988.3	1011.5	1011.5	19038.3	1012.3	1012.3
19088.3	1013.2	1013.2	19138.3	1014.3	1014.3	19188.3	1015.6	1015.6
19288.3	1018.2	1018.2	19388.3	1020.56	1020.56	19445	1022.05	1020.2
19560.3	1023.4	1017.77	19660.3	1025.18	1019.47	19760.3	1026.58	1020.87
19860.3	1027.68	1022	19960.3	1028.58	1022.87	20060.3	1029.28	1023.59
20160.3	1029.68	1023.99	20260.3	1029.78	1024.09	20360.3	1029.68	1024
20460.3	1029.28	1023.59	20560.3	1028.68	1023.01	20660.3	1027.88	1022.21
20760.3	1026.68	1021	20860.3	1025.41	1019.67	20960.3	1023.68	1018.03
21059.4	1020.6	1014.92						

Upstream Bridge Cross Section Data
Station Elevation Data num= 55

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
16210	1013.8	17338.3	1010.47	18388.3	1010.34	18888.3	1010.64	18938.3	1011
18988.3	1011.5	19038.3	1012.3	19088.3	1013.2	19138.3	1014.3	19188.3	1015.6
19288.3	1018.2	19388.3	1020.56	19455	1022.05	19465.2	1020.4	19465.3	1014.7
19468.2	1013.7	19522.3	997.9	19560.3	997.3	19564.3	997.3	19660.3	997
19664.3	997	19760.3	996.4	19764.3	996.4	19860.3	999.5	19864.3	999.5
19960.3	997.4	19964.3	997.4	20060.3	994.6	20064.3	994.6	20160.3	995.5
20164.3	995.5	20260.3	999.6	20264.3	999.6	20360.3	998.5	20364.3	998.5
20460.3	998.9	20464.3	998.9	20560.3	996.7	20564.3	996.7	20660.3	997.9
20664.3	997.9	20760.3	998	20764.3	998	20860.3	999.9	20864.3	999.9
20960.3	998	20964.3	998	21027.8	992.2	21056.5	1014.7	21059.4	1014.7
21059.5	1020.4	21080	1020.7	21115	1020	21280	1016	21875	1013.8

Manning's n Values num= 3

Sta	n Val	Sta	n Val	Sta	n Val
16210	.032	19455	.032	21059.4	.032

Bank Sta: Left	Right	Coeff Contr.	Expan.
19465.3	21059.4	.1	.3

Ineffective Flow num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
16210	19465.3	1020	21059.4	21875	1020

Downstream Deck/Roadway Coordinates
num= 28

Sta	Hi Cord	Lo Cord	Sta	Hi Cord	Lo Cord	Sta	Hi Cord	Lo Cord
17338.3	1010.47	1010.47	18388.3	1010.34	1010.34	18888.3	1010.64	1010.64
18938.3	1011	1011	18988.3	1011.5	1011.5	19038.3	1012.3	1012.3
19088.3	1013.2	1013.2	19138.3	1014.3	1014.3	19188.3	1015.6	1015.6
19288.3	1018.2	1018.2	19388.3	1020.56	1020.56	19445	1022.05	1020.2
19560.3	1023.4	1017.77	19660.3	1025.18	1019.47	19760.3	1026.58	1020.87
19860.3	1027.68	1022	19960.3	1028.58	1022.87	20060.3	1029.28	1023.59
20160.3	1029.68	1023.99	20260.3	1029.78	1024.09	20360.3	1029.68	1024
20460.3	1029.28	1023.59	20560.3	1028.68	1023.01	20660.3	1027.88	1022.21
20760.3	1026.68	1021	20860.3	1025.41	1019.67	20960.3	1023.68	1018.03
21059.4	1020.6	1014.92						

Downstream Bridge Cross Section Data
Station Elevation Data num= 55

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
16210	1013.8	17338.3	1010.47	18388.3	1010.34	18888.3	1010.64	18938.3	1011
18988.3	1011.5	19038.3	1012.3	19088.3	1013.2	19138.3	1014.3	19188.3	1015.6
19288.3	1018.2	19388.3	1020.56	19455	1022.05	19465.2	1020.4	19465.3	1014.7
19468.2	1013.7	19522.3	997.9	19560.3	997.3	19564.3	997.3	19660.3	997
19664.3	997	19760.3	996.4	19764.3	996.4	19860.3	999.5	19864.3	999.5
19960.3	997.4	19964.3	997.4	20060.3	994.6	20064.3	994.6	20160.3	995.5
20164.3	995.5	20260.3	999.6	20264.3	999.6	20360.3	998.5	20364.3	998.5
20460.3	998.9	20464.3	998.9	20560.3	996.7	20564.3	996.7	20660.3	997.9
20664.3	997.9	20760.3	998	20764.3	998	20860.3	999.9	20864.3	999.9
20960.3	998	20964.3	998	21027.8	992.2	21056.5	1014.7	21059.4	1014.7
21059.5	1020.4	21080	1020.7	21115	1020	21280	1016	21875	1013.8

Manning's n Values num= 2

Sta	n Val	Sta	n Val
16210	.032	21059.4	.032

Bank Sta: Left	Right	Coeff Contr.	Expan.
19465.3	21059.4	.1	.3

Ineffective Flow num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
16210	19465.3	1020	21059.4	21875	1020

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Upstream Embankment side slope              =        horiz. to 1.0 vertical
Downstream Embankment side slope            =        horiz. to 1.0 vertical
Maximum allowable submergence for weir flow =     .95
Elevation at which weir flow begins         = 1010.34
Energy head used in spillway design         =
Spillway height used in design              =
Weir crest shape                            = Broad Crested

Number of Piers =  15

Pier Data
Pier Station     Upstream= 19562.3    Downstream= 19562.3
Upstream     num=       2
    Width   Elev    Width   Elev
       4   997.3       4  1017.8
Downstream     num=       2
    Width   Elev    Width   Elev
       4   997.3       4  1017.8

Pier Data
Pier Station     Upstream= 19662.3    Downstream= 19662.3
Upstream     num=       2
    Width   Elev    Width   Elev
       4     997       4 1019.54
Downstream     num=       2
    Width   Elev    Width   Elev
       4     997       4 1019.54

Pier Data
Pier Station     Upstream= 19762.3    Downstream= 19762.3
Upstream     num=       2
    Width   Elev    Width   Elev
       4   996.4       4 1020.94
Downstream     num=       2
    Width   Elev    Width   Elev
       4   996.4       4 1020.94

Pier Data
Pier Station     Upstream= 19862.3    Downstream= 19862.3
Upstream     num=       2
    Width   Elev    Width   Elev
       4   999.5       4    1022
Downstream     num=       2
    Width   Elev    Width   Elev
       4   999.5       4    1022

Pier Data
Pier Station     Upstream= 19962.3    Downstream= 19962.3
Upstream     num=       2
    Width   Elev    Width   Elev
       4   997.4       4  1022.9
Downstream     num=       2
    Width   Elev    Width   Elev
       4   997.4       4  1022.9

Pier Data
Pier Station     Upstream= 20062.3    Downstream= 20062.3
Upstream     num=       2
    Width   Elev    Width   Elev
       4   994.6       4  1023.6
Downstream     num=       2
    Width   Elev    Width   Elev
       4   994.6       4  1023.6

Pier Data
Pier Station     Upstream= 20162.3    Downstream= 20162.3
Upstream     num=       2
    Width   Elev    Width   Elev
       4   995.5       4    1024
Downstream     num=       2
    Width   Elev    Width   Elev
       4   995.5       4    1024

Pier Data
Pier Station     Upstream= 20262.3    Downstream= 20262.3
Upstream     num=       2
    Width   Elev    Width   Elev
       4   999.6       4  1024.1
Downstream     num=       2
    Width   Elev    Width   Elev
       4   999.6       4  1024.1

Pier Data
Pier Station     Upstream= 20362.3    Downstream= 20362.3
```

```
Upstream     num=       2
    Width   Elev    Width   Elev
       4   998.5       4    1024
Downstream     num=       2
    Width   Elev    Width   Elev
       4   998.5       4    1024

Pier Data
Pier Station     Upstream= 20462.3    Downstream= 20462.3
Upstream     num=       2
    Width   Elev    Width   Elev
       4   998.9       4  1023.6
Downstream     num=       2
    Width   Elev    Width   Elev
       4   998.9       4  1023.6

Pier Data
Pier Station     Upstream= 20562.3    Downstream= 20562.3
Upstream     num=       2
    Width   Elev    Width   Elev
       4   996.7       4    1023
Downstream     num=       2
    Width   Elev    Width   Elev
       4   996.7       4    1023

Pier Data
Pier Station     Upstream= 20662.3    Downstream= 20662.3
Upstream     num=       2
    Width   Elev    Width   Elev
       4   997.9       4  1022.2
Downstream     num=       2
    Width   Elev    Width   Elev
       4   997.9       4  1022.2

Pier Data
Pier Station     Upstream= 20762.3    Downstream= 20762.3
Upstream     num=       2
    Width   Elev    Width   Elev
       4     998       4    1021
Downstream     num=       2
    Width   Elev    Width   Elev
       4     998       4    1021

Pier Data
Pier Station     Upstream= 20862.3    Downstream= 20862.3
Upstream     num=       2
    Width   Elev    Width   Elev
       4   999.9       4  1019.7
Downstream     num=       2
    Width   Elev    Width   Elev
       4   999.9       4  1019.7

Pier Data
Pier Station     Upstream= 20962.3    Downstream= 20962.3
Upstream     num=       2
    Width   Elev    Width   Elev
       4     998       4    1018
Downstream     num=       2
    Width   Elev    Width   Elev
       4     998       4    1018

Number of Bridge Coefficient Sets =  1

Low Flow Methods and Data
       Energy
       Momentum                Cd   =     1.2
       Yarnell                 KVal =    1.05
Selected Low Flow Methods = Highest Energy Answer

High Flow Method
       Pressure and Weir flow
           Submerged Inlet Cd          =
           Submerged Inlet + Outlet Cd =       .8
           Max Low Cord                =

Additional Bridge Parameters
       Add Friction component to Momentum
       Add Weight component to Momentum
       Class B flow critical depth computations use critical depth
           inside the bridge at the upstream end
       Criteria to check for pressure flow = Upstream energy grade line

CROSS SECTION          RIVER: 1
REACH: 1                  RS: 207.48
```

INPUT
Description: 207.48
Station Elevation Data num= 55

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
16210	1013.8	17338.3	1010.47	18388.3	1010.34	18888.3	1010.64	18938.3	1011
18988.3	1011.5	19038.3	1012.3	19088.3	1013.2	19138.3	1014.3	19188.3	1015.6
19288.3	1018.2	19388.3	1020.56	19455	1022.05	19465.2	1020.4	19465.3	1014.7
19468.2	1013.7	19522.3	997.9	19560.3	997.3	19564.3	997.3	19660.3	997
19664.3	997	19760.3	996.4	19764.3	996.4	19860.3	999.5	19864.3	999.5
19960.3	997.4	19964.3	997.4	20060.3	994.6	20064.3	994.6	20160.3	995.5
20164.3	995.5	20260.3	999.6	20264.3	999.6	20360.3	998.5	20364.3	998.5
20460.3	998.9	20464.3	998.9	20560.3	996.7	20564.3	996.7	20660.3	997.9
20664.3	997.9	20760.3	998	20764.3	998	20860.3	999.9	20864.3	999.9
20960.3	998	20964.3	998	21027.8	992.2	21056.5	1014.7	21059.4	1014.7
21059.5	1020.4	21080	1020.7	21115	1020	21280	1016	21875	1013.8

Manning's n Values num= 2

Sta	n Val	Sta	n Val
16210	.032	21059.4	.032

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
19465.3	21059.4	251	245.54	316	.1	.3

Ineffective Flow num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
16210	19465.3	1020	21059.4	21875	1020

CROSS SECTION RIVER: 1
REACH: 1 RS: 207.43

INPUT
Description: 207.43

Revised XSEC (Left overbank)

Left and Right Channel Bank Stations Interpolated
Station Elevation Data num= 79

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
16001	1014	16130	1015.9	16220	1016.7	16355	1014.6	16490	1014.7
16560	1014.9	16625	1015.1	16690	1015.3	16755	1015.3	16820	1015.1
16890	1014.9	17030	1014.9	17085	1015.1	17140	1015.3	17190	1015.5
17250	1015.4	17350	1015.2	17535	1009.1	17611.5	1010	17646.2	1011.6
17670.8	1009.4	17760.3	1009.7	17874.6	1010.1	17964.8	1011.6	17984.9	1012
17997.8	1016.3	18045.8	1011.1	18059.4	1010.8	18090.3	1019.1	18104.6	1011.8
18153.8	1012.3	18156.2	1012	18391.4	1012.4	18596.1	1016.3	18654.3	1014.9
18908.3	1012	19012	1011.9	19027.1	1014.5	19083.8	1014.7	19094.4	1012.4
19147.4	1018.1	19153.2	1017.8	19176.4	1012.1	19237.2	1010.4	19250.8	1011.8
19253.3	1010.962	19268.1	1006	19370.6	1006.3	19448.3	1005	19562.2	1000.2
19660.1	999.2	19729.8	999	19896.9	999.1	20054.8	999.2	20143.1	999.3
20241.9	1000.1	20361.6	1000.3	20453.3	1000.3	20539.4	999.9	20632.9	1001.1
20689.8	1003.1	20747.1	1003	20818	999.4	20892	1000.8	20911.4	1002.3
20940	1001.503	20940.1	1001.5	20958.5	1009.2	21053.7	1010.9	21146.5	1011.2
21244.1	1013	21380.1	1013.7	21490.2	1010.1	21618.6	1011	21731	1013.6
21751.5	1014.2	21777.8	1011.3	21912.6	1011.5	21985	1012.4		

Manning's n Values num= 5

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
16001	.025	17611.5	.043	19012	.032	19250.8	.032	21053.7	.032

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
19253.3	20940	450	471	575	.1	.3

Ineffective Flow num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
16001	19250.8	1015	20940	21985	1015

CROSS SECTION RIVER: 1
REACH: 1 RS: 207.34

INPUT
Description: 207.34

Revised XSEC (Left overbank)

Left and Right Channel Bank Stations Interpolated
Station Elevation Data num= 65

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
16035.2	1013	16260	1014.9	16530	1014.6	16630	1014.1	16670	1013.5
16790	1014	16820	1013.3	16915	1012.7	16960	1012.4	17080	1013
17155	1013.7	17220	1013.8	17240	1014.1	17340	1014.1	17375	1013.7
17420	1014.4	17530	1014.3	17570	1012.9	17624.3	1009.1	17632.4	1009.2
17642.3	1011.1	17673.2	1011.4	17693.3	1008.6	17801.9	1009	17911.5	1008.1
17944	1007.7	17970.8	1008.9	18420.5	1010.8	18468.8	1010.2	18518.8	1009.3
19089.4	1009.3	19158.1	1010.6	19180.5	1009.1	19194.8	1003.1	19196.9	1003.1
19214.8	1010.1	19221.2	1005.7	19228.6	1002.1	19230	1001.961	19238.7	1001.1
19249	1002.5	19288.5	997	19326.4	995.9	19381	999.5	19392.5	1002.2
19404.7	999	19437.8	1000.9	19593.3	1002.4	19706.7	1001.8	19842	1000.3
19946.7	998.7	20191.8	998.9	20302.5	998.8	20382.5	998.4	20416.2	996.5
20521.3	998.7	20631.1	998.6	20696.7	998.2	20735.2	1000.8	20761.1	1007.9

```
20798.761009.511 20824.2  1010.6 20847.7  1013.3   20977  1014.8   20997  1014.1

Manning's n Values        num=       5
     Sta   n Val     Sta   n Val     Sta   n Val     Sta   n Val     Sta   n Val
 16035.2    .025 17693.3    .043 19196.9    .032 19214.8    .032 20847.7    .032

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
        1923020798.76               370  393.75     530             .1       .3
Ineffective Flow      num=        1
   Sta L   Sta R    Elev
 16035.2   19230    1013

CROSS SECTION          RIVER: 1
REACH: 1                  RS: 207.27

INPUT
Description: 207.27
Station Elevation Data    num=      73
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
 16209.3  1012.6 16252.8  1013.2 16284.2    1012 16383.8  1012.6 16415.5  1012.9
 16480.2  1009.2 16601.8  1009.4 16722.1  1009.3 16901.6  1009.1   17028  1008.9
 17034.7  1008.9 17132.7  1008.7 17256.4  1008.5 17345.1  1009.7 17477.8    1009
 17574.2  1008.9 17623.2  1008.9 17640.8  1010.6 17654.3  1009.2 17776.8  1009.2
   17890  1009.9 18017.7  1009.2 18033.8  1009.3 18373.9  1009.8 18428.4  1009.8
 18529.9  1009.9 18634.4  1008.2 18686.7  1008.6 18936.9  1006.8   18965  1004.2
   18981  1000.1 18990.9   999.5 19008.8   996.4   19021   989.6 19047.9   988.8
   19072   996.4 19107.5     995 19123.5   989.3 19162.8   987.6   19190   994.7
 19301.3  1002.1 19428.8    1005 19561.5  1003.7 19676.8    1002 19820.6   999.3
 19940.6   998.8 19971.8   997.8 19986.7   993.8 20109.9   993.3 20119.1   995.5
 20215.4   998.5 20300.7   998.8 20305.8  1000.2 20322.6  1001.4 20345.1   998.6
 20382.4   998.7 20402.9  1000.7 20414.9  1000.4 20429.2  1001.7 20526.1  1000.4
 20597.9  1002.6 20662.2  1037.1 20670.6    1034 20727.4  1003.5 20805.4  1006.4
 20813.3  1010.3 20822.2  1008.4 20916.8  1009.6   21025  1009.2 21122.8  1010.2
 21233.4  1010.9 21356.4    1011   21463  1011.1

Manning's n Values        num=       5
     Sta   n Val     Sta   n Val     Sta   n Val     Sta   n Val     Sta   n Val
 16209.3    .025 17640.8    .043 19008.8    .032 19428.8    .032 20597.9    .032

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
       19428.8 20597.9               575  572.72     585             .1       .3
Ineffective Flow      num=        2
   Sta L   Sta R    Elev   Sta L   Sta R    Elev
 16209.3   18980  1037.1 20662.2   21463  1037.1

CROSS SECTION          RIVER: 1
REACH: 1                  RS: 207.16

INPUT
Description: 207.16
Station Elevation Data    num=      96
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
 16210.1  1011.7 16309.9  1011.9 16344.7  1012.7 16358.1  1011.8 16364.1  1013.5
 16438.5  1011.6 16493.9  1011.9 16557.8  1010.7 16585.8  1008.3 16700.8  1008.1
 16756.6  1008.6 16852.6  1008.6   16969  1008.6   17076  1008.4 17204.5  1008.7
 17321.8  1008.1 17421.3  1007.7 17541.4  1007.5 17638.7  1007.7 17755.6  1007.6
 17773.4  1007.2 17787.5  1009.2 17904.3  1007.5   17925  1006.5 18023.9  1007.4
 18085.4     1008   18140  1009.4 18201.1  1007.7 18218.4  1008.1 18321.4    1005
 18342.3  1005.4 18407.3  1003.8 18456.1  1009.9 18484.8  1008.2 18498.7  1005.3
 18523.8  1008.7 18528.7  1008.4 18529.5  1007.2 18545.1  1003.7 18570.4  1008.1
 18605.9  1007.9 18638.7  1000.3 18663.3   997.6 18680.3   997.7   18717   996.2
 18733.2   994.8 18778.6   996.9 18811.7   999.5 18924.2  1002.3 19046.2  1002.4
   19107  1000.2 19209.6  1000.7 19329.8  1002.2 19395.2  1003.5 19404.5  1002.1
 19419.4  1003.2 19521.4  1003.3 19614.6    1002 19721.9  1001.4 19815.6   999.6
 19920.9   996.2 19994.2   994.9 20008.7   992.7 20062.5   992.7 20094.8   994.3
 20106.3   993.1 20160.3     993 20395.5     993   20413     995 20418.4   997.1
 20436.9  1001.5 20463.3   996.6 20488.6   995.2 20609.4   995.2 20655.2     996
 20660.9   995.4   20697   996.6 20734.5  1007.6 20838.6  1008.7 20985.3  1010.1
 21116.5  1009.9 21223.5  1009.3 21316.4  1008.4 21471.6  1007.6 21595.3  1007.5
   21624  1007.5 21725.6  1009.3 21731.8  1008.9 21782.9  1010.9   21783  1010.3
 21812.5     1010 21872.1  1013.5 21911.2  1012.7 21930.8    1006 21952.5  1011.3
   21998  1010.9

Manning's n Values        num=       5
     Sta   n Val     Sta   n Val     Sta   n Val     Sta   n Val     Sta   n Val
 16210.1    .025 17204.5    .043 18605.9    .032 19521.4    .032 20734.5    .032

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
       19521.4 20734.5               475  463.31     475             .1       .3
Ineffective Flow      num=        2
   Sta L   Sta R    Elev   Sta L   Sta R    Elev
 16210.1 18605.9    1013 20734.5   21998    1013

CROSS SECTION          RIVER: 1
```

REACH: 1 RS: 207.07

INPUT
Description: 207.07

Right Channel Bank Station Interpolated
Station Elevation Data num= 97

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
16445.4	1010.8	16477.5	1010.8	16492.9	1010.8	16495.3	1012.4	16612.3	1012.1
16706.3	1012.4	16731.4	1011.4	16754.5	1011.7	16775.6	1010.8	16823.5	1006
16897.1	1007.2	16996.9	1007.2	17084.4	1008.1	17118	1007.2	17130.1	1007.9
17215.3	1007.5	17296.8	1005.9	17391.8	1005.8	17473.1	1006.2	17581.5	1006.7
17688.2	1006.9	17793.8	1007.5	17860.3	1007.8	17918.6	1006.5	17937.7	1009.2
17950.5	1008.4	18054.6	1008.5	18145.7	1009.4	18249.2	1008.8	18339.2	1006.2
18409	1004.8	18416.3	1003.9	18490.8	1003.4	18511.6	998.8	18578.1	997.6
18602.7	998.8	18624	998.9	18705.2	1001.4	18768.4	1001.7	18825	999.3
18843.9	997.7	18938	998.1	19029.9	1000.3	19121	1004.5	19134.1	1007.4
19200.4	1009.2	19224.9	1008.7	19244.6	1006.5	19312.8	1004.4	19414.2	1003.2
19443.8	1001.8	19521.9	1001.9	19538.7	1003.4	19547.9	1003.2	19557.9	1004.4
19673.5	1001.7	19761.8	1001.1	19774.6	1001.9	19789.4	1004.7	19852.9	995.2
19935.8	993.4	19939.1	993.8	19945.4	992.8	19998	992.8	20099	992.9
20181.6	993	20237.1	993	20335	993.1	20381.8	993.2	20403	998.8
20417.1	996.1	20529.1	995.5	20635.3	995.9	20719.4	996.3	20720.5	998.7
20734.9	1003.5	20748.22	1004.3	20786.5	1006.6	20840.1	1007	20851.3	1007.9
20926.4	1009.4	21006.6	1009.9	21089.4	1010	21172.8	1009.7	21301.4	1008.9
21383.6	1008.7	21497.8	1007.9	21578.8	1007.1	21613.2	1007.3	21673.3	1011.2
21705.2	1010.3	21732.7	1013.7	21818.2	1013	21896.1	1014.4	21908.3	1013.5
21967.3	1014.4	21999.5	1014.1						

Manning's n Values num= 4

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
16445.4	.043	18490.8	.032	19789.4	.032	20926.4	.032

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
19789.4	20748.22	510	514.11	520	.1	.3

Ineffective Flow num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
16445.4	18145.7	1013	20926.4	21999.5	1013

CROSS SECTION RIVER: 1
REACH: 1 RS: 206.97

INPUT
Description: 206.97

Right Channel Bank Station Interpolated
Station Elevation Data num= 97

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
16303.3	1009.9	16422	1010.3	16524.8	1010.6	16626.6	1010.6	16719.6	1011.3
16794.5	1009.6	16836.4	1004.7	16959	1004.6	17073.2	1004.7	17198.7	1004.8
17241.8	1005.5	17390.7	1004.8	17512.3	1005.1	17603.3	1005.3	17704.7	1005.3
17836.9	1005.5	17965	1005.2	18085.7	1005.8	18094.8	1005.9	18105	1008
18196	1007.4	18235.2	1007.2	18260.5	1005.9	18283.2	1007.6	18372.2	1006.3
18390.1	1005.1	18407.6	999.1	18518.7	997.7	18623.3	996.9	18669.1	995.6
18742.3	996.3	18834	1000.5	18925.1	1002.3	19025.7	1004.4	19072.3	1003.7
19086.7	1001.2	19181.7	1005.8	19197	1005.7	19217.7	1002.3	19234.5	1008.4
19316.9	1001.8	19405.1	1002.1	19456.4	1006.1	19566.5	1005.4	19666.3	1005.2
19736.5	1004.4	19776.5	998.7	19783.2	1000.5	19808.3	994.1	19822.1	992.8
19919.1	992.9	20108.8	993.1	20124.9	999	20128.8	998.6	20159.3	982.1
20170.6	981.8	20265.5	981.8	20360.8	981.8	20399.3	981.8	20400.1	981.8
20443.8	981.8	20457.3	981.8	20522.8	981.8	20543.7	981.8	20552.2	981.8
20558.1	981.8	20559.2	981.8	20645	981.8	20661.9	981.7	20684.6	981.8
20778.2	981.8	20792.8	981.8	20800	984.2432	20814.9	989.3	20826.8	991.9
20829.6	993.6	20832.1	993.2	20841.1	988	20882.9	981.8	20888	981.8
20995.1	981.8	21051.7	981.8	21053.6	981.8	21086.6	1009	21114.5	1010.4
21124.9	1008.4	21145.7	1009.1	21151.2	1011.2	21171.8	1014.5	21174	1009.3
21270.2	1009.8	21364.9	1009.2	21463.9	1009.1	21469.9	1008.9	21475.8	1010.8
21486.9	1008.5	21498	1009.8						

Manning's n Values num= 5

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
16303.3	.025	16719.6	.043	18407.6	.032	19736.5	.032	21086.6	.032

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
19736.5	20800	480	491.78	480	.1	.3

Ineffective Flow num= 1

Sta L	Sta R	Elev
20800	21498	1010

CROSS SECTION RIVER: 1
REACH: 1 RS: 206.88

INPUT
Description: 206.88

Right Channel Bank Station Interpolated
Station Elevation Data num= 97

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
16205.8	1008.1	16348.5	1008.4	16441.8	1008.4	16531.3	1008.2	16598.3	1009.2
16605	1008.5	16606.3	1010.2	16696.6	1005.4	16819.2	1004.3	16908.4	1004.4
17006	1004.7	17092.4	1003.2	17182	1004	17323.7	1003.7	17415.5	1003.8
17503.8	1003.9	17603.8	1003.9	17703.9	1004.6	17815.8	1005.9	17930.5	1006.3
18057.4	1006.3	18152.5	1006	18216	1005.3	18267.1	1005.9	18292.7	1007.3
18373.6	999.7	18386.3	996.3	18470	995.7	18533.8	995.1	18593.4	996.7
18657.8	996.4	18748.4	998	18835.7	998.9	18932.3	1000.4	18993.2	1000.9
19018.7	1003.6	19101.5	1004	19119.7	1002.9	19166.7	1006	19168.3	1006.9
19251.9	1004.5	19258.4	1005	19341.6	1001.3	19360.8	1001.1	19415.8	1004.9
19507.2	1001.3	19566.3	1004.7	19645.5	1003.4	19728.8	1003.5	19781.8	993.3
19833	992.7	19942.2	993	19947.1	996.6	19996.5	982.3	20008.3	981.8
20016.1	981.8	20105.7	981.8	20143	981.8	20146.6	981.8	20221.6	981.8
20334.4	981.8	20459.7	981.8	20546.8	981.8	20641.2	981.8	20760.8	981.8
20800	981.8	20820.9	981.8	20832	984	20842.1	983.1	20850.4	981.8
20851.4	981.8	20928.6	981.8	20948.4	981.8	21002.4	999.3	21012.9	997
21041.1	997	21047.1	998.2	21081.4	998.4	21113.7	986.4	21142	981.7
21162.6	990	21181.8	991.8	21199.6	1001.3	21208.2	1003.8	21233.9	1006.9
21251.5	1012.2	21270.1	1006.2	21313.5	1006.5	21327.6	1009.1	21361.8	1011.6
21394.4	1008.9	21440.9	1009.7	21454	1011.6	21546.5	1009	21569.8	1012.6
21605	1009.6	21674.6	1010.5						

Manning's n Values num= 6

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
16205.8	.025	16696.6	.043	18386.3	.032	19728.8	.032	21251.5	.032
21605	.025								

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
19728.8	20800	480	487.71	505	.1	.3

Ineffective Flow num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
16205.8	18292.7	1007.3	20800	21674.6	1012

CROSS SECTION RIVER: 1
REACH: 1 RS: 206.79

INPUT
Description: 206.79

Right Channel Bank Station Interpolated
Station Elevation Data num= 97

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
16211.1	1006.9	16286.9	1006.9	16364.1	1007.5	16379.7	1007.6	16449.9	1007.6
16525.2	1007.8	16538.6	1008.9	16619.3	1008.5	16666.4	1006.2	16699.6	1001.9
16769.7	1002.3	16840	1002.4	16905.7	1002.4	16989.2	1002.5	17055.4	1002.7
17133	1002.7	17230.9	1002.5	17245.4	1002.4	17322.6	1003	17404	1003.7
17419.6	1003.8	17484.7	1004.3	17553	1004.8	17588.7	1004.8	17631.2	1003
17670.6	1002.9	17748.9	1006.3	17834.7	1006.5	17871.1	1006.6	17919.1	1005.8
17921.7	1005.2	17948.4	1004.4	18036.8	1004.9	18106	1004.9	18182.5	1004.5
18301.7	1004.4	18337	1004.5	18378.4	997.7	18439.7	995.6	18517.1	995.3
18604.7	996.5	18674.2	996.8	18740.3	995.7	18770.1	994.8	18841.6	996.3
18882	997.5	18920.6	1006.8	19010.4	1005.9	19096.2	1003.2	19138.3	1000.6
19186.5	1000.9	19206.9	1002.3	19281.9	1002	19360.7	1002.6	19391.1	1000
19450.2	1002.2	19485	1002.5	19519.3	1004	19570	1004.1	19626.2	1001.8
19645.2	1001.4	19653.2	1002.5	19663.1	1005.3	19671.5	1001	19690.4	994.6
19711.8	993	19766	993.3	19929.9	994	19943.3	996.8	19952.4	996.3
19962.3	992.6	19991	990.7	20007.7	991.1	20032.9	987.2	20042.3	985
20082.5	982.2	20100.2	981.8	20136.1	981.8	20140	981.8	20180.6	981.8
20309.2	981.8	20331	981.8	20390.5	981.8	20420.7	981.8	20422.7	981.8
20425	981.8	20501.8	981.8	20576.6	981.8	20625.3	981.8	20832.1	981.8
20847	981.8	20851.9	981.8	20865.4	988.82	0895.15	1003.436	20902.8	1007.2
20935.6	1019.6	20986	1019.6						

Manning's n Values num= 5

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
16211.1	.025	16525.2	.043	18378.4	.032	19663.1	.032	20935.6	.032

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
19663.12	0895.15	495	489.96	520	.1	.3

Ineffective Flow num= 1

Sta L	Sta R	Elev
16211.1	17871.1	1015

CROSS SECTION RIVER: 1
REACH: 1 RS: 206.7

INPUT
Description: 206.7
Station Elevation Data num= 96

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
16235.4	1006.6	16247.5	1006.6	16320.8	1007.1	16332.7	1007	16402.3	1007.2

16479.2	1008	16505.8	1007.5	16527.3	1008	16552.4	1002	16640.8	1001.4
16727.5	1001.8	16815.4	1001.7	16889.1	1001.5	16902.1	1001.5	16968.1	1001.2
17043.4	1001.3	17155	1000.9	17251.1	1001.1	17317.4	1002.1	17335.4	1002.3
17401.1	1002.9	17430.7	1003.1	17519.9	1003.5	17616.5	1003.3	17699.9	1004
17823.5	1005.8	17891.6	1004.8	17962.7	1005.6	18043.4	1006.2	18125.2	1006.2
18207.9	1005.3	18257.6	1003	18280.3	995.2	18285.8	995.2	18301.4	997.1
18329.6	998.9	18423.4	998.8	18488.5	996	18559.6	995.2	18629.1	994.8
18690.8	994.6	18728.6	993.3	18746.4	994.2	18779.5	994.4	18815.2	996.6
18848.2	1004.6	18945.8	1005	19021.2	1004.8	19092.1	1004.4	19150.1	1003.8
19192.4	1001.5	19285.5	1002.1	19293.9	1002.1	19370.4	999.7	19431.5	999.7
19468.9	1000.2	19510.1	1003.7	19543.9	1002.8	19624.5	994.6	19647.2	992.9
19711.3	993.2	19814.1	993.4	19871.2	993.4	19882.5	995.3	19901.9	992.6
19941.1	991.3	20015.4	991.6	20098.2	993.9	20143.5	994	20167.9	992.9
20185.2	1000.4	20197.8	994.4	20212.7	993.7	20259.6	993.7	20275.9	991.3
20314.8	981.8	20318.5	981.8	20393.8	981.8	20691.8	981.8	20713.3	981.8
20963.1	981.8	21002.8	981.8	21076.8	981.8	21102.7	981.8	21120	988.8
21131	999.6	21138.8	1004.7	21146.9	1002.8	21207	1004.5	21234.3	1006.1
21262.4	1006.4	21329	1008.1	21422.5	1007.5	21452.5	1018.4	21484.3	1017.2
21488	1018.6								

Manning's n Values num= 5

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
16235.4	.025	16640.8	.043	18329.6	.032	19510.1	.032	21138.8	.032

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
19510.1	21138.8	500	500.23	500	.1	.3

Ineffective Flow num= 1

Sta L	Sta R	Elev
16235.4	18110	1015

CROSS SECTION RIVER: 1
REACH: 1 RS: 206.6

INPUT
Description: 206.6

Right Channel Bank Station Interpolated
Station Elevation Data num= 97

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
15752.8	1005.9	15777	1004.9	15795.8	1006	15801	1003.8	15809.3	1007.3
15819.9	1006.1	15842.8	1009.5	15850.1	1008	15855.5	1009.8	15868.1	1009.5
15879.9	1006.9	15895.6	1008.4	15904.2	1005.4	15941.1	1007.3	16035.3	1006.2
16155.5	1005.7	16243.9	1005.6	16347.4	1004.9	16444.6	1004.9	16555.6	1004.8
16645	1004.4	16756.4	1003.6	16845.8	1003.1	16944.2	1003.4	17049.2	1002.3
17143.6	1001.7	17249.3	1001.2	17366.6	1001	17501.5	1003.7	17624.2	1003.7
17723.3	1004.1	17790.8	1004	17818	998.9	17847.9	1003.1	17937.7	1002.9
17956.2	1002.7	17971.4	998.8	17988.6	1001.2	18083.6	1001.7	18173.1	1001.7
18217.2	1001.9	18242.2	997.1	18334.4	996.5	18436.5	995	18542.1	993.8
18633.3	993.9	18742.2	997.5	18817.7	997.8	18852.6	1003.9	18965.8	1004.2
19055.2	1003.8	19184.3	1003.1	19243.2	1000	19325.9	998.4	19358	993.4
19395.9	993.2	19452.5	996.6	19546.1	997.7	19580.1	996.6	19611.2	993.1
19679	993.4	19778	993.3	19846.4	993.3	19854.8	995.6	19874.7	992.9
19953.8	992.1	20043.5	994.5	20146.1	995.4	20262.3	995.5	20371.5	995.1
20435.5	995.1	20475.7	981.8	20489.7	981.8	20608.9	981.8	20609	981.8
20738.4	981.8	20854.4	981.8	20866.2	981.8	20903.7	981.8	20931.2	981.8
20996	981.8	21003.4	981.8	21042	988.8	21050.2	995	21066.25	1002.898
21069.1	1004.3	21182.2	1006.4	21270.7	1006.8	21401.9	1007.6	21495.5	1008
21503.1	1008	21594.4	1008.1	21688	1008.4	21840.4	1008.8	21940.4	1009.3
21957.8	1009.5	21998	1007.2						

Manning's n Values num= 5

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
15752.8	.025	16944.2	.043	18334.4	.032	19546.1	.032	21069.1	.032

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
19546.1	21066.25	515	504.63	520	.1	.3

Ineffective Flow num= 1

Sta L	Sta R	Elev
15752.8	17847.9	1009

CROSS SECTION RIVER: 1
REACH: 1 RS: 206.51

INPUT
Description: 206.51
Station Elevation Data num= 96

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
15913.8	1005.6	15956.7	1007.2	15960.5	1006.2	15969.2	1008	16053.6	1008.2
16067.4	1005.5	16150.9	1004.8	16244	1004.8	16317.6	1004.8	16358.5	1004.6
16454.2	1004.5	16463	1004.5	16544	1004.3	16655.6	1003.2	16728.4	1002.6
16756.4	1002.5	16830	1001.9	16942.4	1001.6	16965.9	1001.5	17053.8	1001.7
17131.5	1001.6	17218.7	1001.1	17306.1	1000.9	17382.1	1001.5	17467	1001.9
17537	1002.2	17549.6	1001.2	17642.5	1001.4	17732.1	999	17805.5	999.3
17867.7	1000	17906.8	1001.8	17982.4	1001.1	18024.8	1000	18113.4	1001

18197.5	1001.3	18210.2	1000.8	18235.8	995.8	18284.9	994.8	18353.6	996.2
18430.7	989.4	18472.3	992.6	18563.8	993.1	18633.6	994.5	18690.9	995.9
18720.1	998	18725.5	999	18780.9	997.9	18793	996.9	18839.1	995.7
18912.5	997.1	18936.6	997.3	18950.4	998.8	18982	1000.3	19017.4	998.8
19041	995.2	19046.4	993.8	19117.4	994.6	19184.9	992.6	19190.6	992.6
19209.6	996.5	19283.6	998.8	19380.8	997	19450	996.8	19458	996.8
19546.2	997.4	19586.4	996.5	19645.9	993.2	19653.5	993.3	19813.4	992.5
19869.8	992.3	19881.5	997.9	19911.8	995.3	19937.5	994.2	19964.8	991.9
19978.6	992.1	20019.7	990.5	20038.1	988.7	20070.3	987.9	20113.5	982.4
20192.5	982	20272.4	981.8	20353.1	981.8	20395.6	982.6	20485.4	993.1
20530.4	997	20546.7	997.4	20554.3	995.6	20599.9	998.6	20622.1	999.3
20634.8	998.6	20716.6	1000	20819.1	1001.3	20897.8	1001.5	20989.4	1002.8
21021	1008								

Manning's n Values num= 5

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
15913.8	.025	17218.7	.043	18235.8	.032	19546.2	.032	20622.1	.032

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
19546.2	20622.1	495	496.45	500	.1	.3

Ineffective Flow num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
15913.8	17700	1008	20615	21021	1008

CROSS SECTION RIVER: 1
REACH: 1 RS: 206.41

INPUT
Description: 206.41

Right Channel Bank Station Interpolated
Station Elevation Data num= 97

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
16072.3	1004.6	16106.4	1006.4	16110	1005.1	16145.4	1008.7	16171	1008.7
16201.9	1005.9	16207.2	1004	16245.8	1004.3	16311.3	1003.5	16339	1003.3
16410.7	1003.1	16479.2	1003.2	16504.4	1003.2	16587.4	1003	16660.5	1002.5
16723.1	1001.7	16801.8	1001.5	16828.5	1001.3	16901.2	1001.1	16957.6	1001.1
17046.4	1001	17111	1001.2	17185.4	1001	17248.3	1000.1	17325.6	999.8
17339.6	999.7	17404.5	999.4	17486.4	999.7	17508.2	999.5	17572.4	999.3
17623.9	997.5	17651.1	1000.3	17677.5	1000.2	17744.8	1000	17841.4	1000
17924.2	1000	17975.5	1001.6	18054.4	997.3	18144.7	995.9	18247.4	997.4
18279.8	997.6	18300.2	993.9	18302.9	992.5	18313.4	993.5	18405.6	991.3
18469.8	989.6	18495.7	988.3	18533.5	989.6	18556.8	987.7	18575.5	988.9
18582.4	987.8	18584.3	989.6	18620.5	992.5	18634.5	992.5	18697.7	996.9
18786	998.9	18861.4	999.4	18929.1	999.3	18999.1	996.6	19037	995.4
19069.4	992.6	19082.5	992.4	19169.3	990.8	19285.4	995	19369.2	996.5
19395.7	996.5	19466.6	996.5	19539.8	996.4	19622.9	997.3	19694.4	996.7
19720.5	996.5	19730.2	994.5	19748.7	992.6	19835.1	990.8	19895.8	991.8
19904.5	990.4	19996.1	990.2	20002.5	990.4	20015.5	997.7	20035	990
20091.8	991.6	20171.9	991.2	20269.1	991.6	20343.1	990.4	20356.9	990
20360	988.9	20373.3	988	20379.2	986.7	20421	985.4	20490.4	985.8
20544.3	985.8	20576.7	983.8	20636.9	982.5	20685.22	1001.416	20690.8	1003.6
20719.8	1001.5	20729	1007.4						

Manning's n Values num= 5

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
16072.3	.025	17185.4	.043	18300.2	.032	19622.9	.032	20690.8	.032

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
19622.9	20685.22	495	494.64	490	.1	.3

Ineffective Flow num= 1

Sta L	Sta R	Elev
16072.3	17111	1008

CROSS SECTION RIVER: 1
REACH: 1 RS: 206.32

INPUT
Description: 206.32

Right Channel Bank Station Interpolated
Station Elevation Data num= 97

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
16817.7	1002.2	16831.7	1004.4	16847.7	1000.1	16903	997.6	16998.5	999.5
17015.9	999.8	17073.2	995.7	17113.2	998.3	17193.6	998.2	17277.8	999.4
17336.8	998.4	17343.9	998.8	17416.7	997.2	17461	999.1	17530.2	1000
17612	1000.6	17634.8	999.5	17703.3	1001.3	17735.8	1000.4	17761.4	998.4
17843.7	998.5	17853.7	998	17875.9	994.2	17903.4	993.9	17962.9	996.3
18028.7	995.2	18096.2	993.6	18102.6	993.3	18134.8	1001.1	18154.4	1000.2
18192.6	1000.1	18243.3	992.5	18301.4	992.6	18329.8	993.4	18404.3	989.6
18429.4	987.7	18495.6	987.8	18512.7	986.5	18544.6	986.5	18577	989.5
18647	992.5	18707.1	997.1	18782.1	996.8	18869.6	997.5	18885	997.8
18895.7	996.8	18922.1	996.8	18939.9	995.3	18961.5	991.6	18990.7	990
19055.1	991.9	19120.2	992.7	19199.6	995.3	19288	998.1	19351.7	998.3

19433.6	998.5	19488.7	998.2	19527.8	996.5	19535	995.3	19546.5	994.9
19619.6	996.5	19696.3	996.5	19801.3	996.5	19818	996	19830.1	994.5
19917.7	993.3	19992.8	991.2	20076.4	989.2	20107.3	989	20181.4	989.5
20194.5	994.9	20217.3	987.2	20265.3	989.9	20314.9	990.8	20362.4	989.9
20372.9	988.8	20409.1	988.6	20435	986.4	20447.1	986.7	20565.6	989.2
20589.2	986.1	20647.7	982.8	20703.3	983.2	20732.7	988.7	20805.2	991
20816.2	997.6	20847.3	998.3	20854.9	1000.773	20855.6	1001	20889.3	1002
20959.7	1001.8	20988.9	1002.7	21076.4	1002.8	21150.5	1002.8	21226.3	1002.8
21295.2	1002.7	21368	1003.3						

Manning's n Values num= 5

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
16817.7	.043	18404.3	.032	19488.7	.032	20889.3	.032	20988.9	.025

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
19488.7	20854.9	515	513.83	520	.1	.3

Ineffective Flow num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
16817.7	17150	1004	20899.3	21368	1004

CROSS SECTION RIVER: 1
REACH: 1 RS: 206.22

INPUT
Description: 206.22

Right Channel Bank Station Interpolated
Station Elevation Data num= 97

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
16557.5	1004.3	16639.4	1004	16713.7	1003.6	16806.6	1001.8	16878.4	999
16892.3	998.9	16946.1	1002.9	16955.9	1004.8	16975.7	997.5	16981.9	999.4
16987.4	998.1	17046.8	996.8	17159.7	997	17260.1	998.5	17320.1	997.5
17343.9	994.5	17380.4	994.5	17400.6	996.8	17408	996.8	17477.4	998.9
17541.1	999.5	17596.5	998.4	17631.6	996.8	17724.8	998.9	17740.4	998.5
17771.5	991.4	17846.4	992.8	17904.5	993.5	17940	995.6	18004.2	995.6
18016.1	997.5	18035.4	995.9	18079.4	996.3	18103.6	997.7	18147.1	997.6
18161.3	993.8	18238.9	993.7	18321.5	992.4	18333.6	991.4	18443.6	991.4
18455.9	991.4	18507.4	994.4	18550.2	989.5	18634.4	989.6	18723.2	987.6
18759.4	986.3	18833.1	991.5	18933.1	991.9	18987.8	992.5	19058	994.5
19110.4	996.4	19138.8	999.5	19223.6	1000.6	19278.4	1001.5	19361.2	1000.2
19370.9	998.6	19381.6	1000.1	19456.3	999.5	19512.1	996.4	19583	994.5
19660.7	994.4	19691.9	994.4	19781.3	994.4	19826.6	994.4	19870	992.6
19877.4	990.6	19912.2	990	20004.6	991.9	20079	991.3	20117.2	990.7
20188.2	986.9	20282	986.7	20306.6	994.7	20332.7	985.9	20338.2	985.9
20423.1	985.1	20525.8	983	20611.1	984.7	20700.7	989.7	20755.5	992.3
20766.6	995.9	20807.8	996.5	20844.2	994.9	20887.6	996.6	20898.1	998.3
20968.3	999	20974.6	999.1	20977.35	999.8423	20990.9	1003.5	21017.9	1001.7
21148.3	1002.6	21222.8	1003.1	21294.4	1003.3	21307.8	1003.3	21385.2	1003.5
21467.9	1003.9	21480	1004						

Manning's n Values num= 4

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
16557.5	.043	19278.4	.043	19583	.032	20990.9	.025

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
19278.4	20977.35	500	502.44	460	.1	.3

Ineffective Flow num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
16557.5	16955.9	1004	21480	21480	1004

CROSS SECTION RIVER: 1
REACH: 1 RS: 206.13

INPUT
Description: 206.13

Right Channel Bank Station Interpolated
Station Elevation Data num= 97

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
16722.1	1002.8	16785.1	1002.2	16877.3	1002.1	16908.3	1000.9	16979.6	1000.9
17014.5	1000.3	17057.5	998.5	17070.3	997.5	17183.2	997.5	17222.6	994.5
17342.3	992.1	17417.8	994.4	17490.8	994.6	17494	994.7	17613.2	996.3
17668.4	995.8	17699.1	991.3	17790.1	992.3	17861.7	993.7	17934.2	993.6
17996.1	993.2	18017.5	997.2	18080.8	996.1	18121.2	996.9	18147.1	992.3
18166.8	991.3	18235.4	991.3	18302.6	991.3	18386	991.3	18421.8	989.5
18432	988.4	18469.5	988.4	18475.1	989.5	18500.2	989.3	18504.2	988.4
18568.5	987.1	18688.1	988.4	18765.4	989.5	18782.8	992.5	18860.9	996.5
18915	999.2	18980.4	995.4	19020.4	994.5	19089.1	997.3	19153.9	1000.5
19162	1001.6	19203	1003.8	19205.7	1003.2	19223.2	1003	19263.9	1000.5
19294	999.3	19352.5	999.3	19369.3	998.5	19381.9	996.4	19450.5	995.7
19547.3	995.6	19615.3	994.4	19675.1	990.6	19753.3	990.5	19774.8	990.4
19852.5	988.3	19926.3	986.6	19938.1	987.1	19943.1	987.8	19956	986.6
19959	986.7	20036.9	986.5	20105.4	986.3	20129.5	986.8	20164.8	990.8
20183.5	987.1	20270.6	987.9	20276.8	988.6	20297.8	988.6	20342.4	987.5

20366.8	987.4	20431.3	985.5	20458.7	984.6	20505.9	984.6	20523.1	985.6
20557.7	986.6	20563.2	987.2	20637	987.5	20656	988.4	20660.4	988
20685	996.6	20699.6	998	20710.6	997.6	20766.4	997.9	20788.2	997
20848.3	996.7	20868.5	996	20903.4	995.7	20914.9	9998.8	7120	934.1
20964.8	1000.3	20989.1	1000.6						

Manning's n Values num= 3

Sta	n Val	Sta	n Val	Sta	n Val
16722.1	.043	19203	.033	20934.1	.032

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
19203	20914.99	490	483.44	540	.1	.3

CROSS SECTION RIVER: 1
REACH: 1 RS: 206.03

INPUT
Description: 206.03
Station Elevation Data num= 96

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
16802.9	1002.4	16810.4	1002	16813.6	1000.9	16824	1002.4	16844.6	1000.6
16890.3	1000.8	16957.6	998.6	16974.2	996.3	17051	996.3	17118.7	996
17158.8	996.3	17238.1	994.4	17268.4	993.9	17337.7	992.2	17429.7	992.2
17531.5	992.2	17538.3	993.5	17547.2	994.4	17602.5	996.5	17662	996.6
17711.8	998.8	17753.6	997.9	17811.8	999.7	17868.4	998.8	17876	996.8
17888.6	992.2	17921.7	991.3	17955.9	991.3	18046.3	991.3	18129	992.2
18208.5	993.4	18309.7	993.6	18420.9	993.3	18447.9	989.4	18457.8	986.4
18517.5	985.1	18549.4	986.9	18588	984	18644.4	992.4	18712.4	995.4
18774.2	998.9	18830	995.4	18904.6	994.2	18908.3	994.2	18995.9	996.3
19086.5	1000.5	19177	1002.9	19201.9	1004.4	19226.8	1002.9	19249.6	1003.2
19274.5	1000.5	19281.8	998.5	19300.1	995.7	19315.7	994.3	19390.1	994.3
19400.5	994.3	19413.5	991.2	19424.9	989.1	19482.5	986.8	19510.1	986.8
19554.4	985.8	19658.8	985.8	19753.3	985.9	19822.1	985.9	19854.2	986.9
19870.5	986.6	19902.2	987.2	19919.6	986.6	19994.1	987.8	20078.9	988.1
20133.4	987.5	20176.6	991.9	20201.4	992.1	20216.4	992.9	20292.1	994.2
20354	993	20378.4	992	20392	989.3	20410.4	989.1	20427.7	986.6
20479.5	986.9	20548	985.1	20601.3	984.5	20610.2	984.8	20660.5	989.4
20711.9	992.7	20772.6	995.4	20851.6	995.1	20876.8	995	20972.6	994.7
21099.7	995.7	21122.5	995.9	21132.1	998.6	21160.4	1005.3	21175.8	999.9
21184.2	999.9								

Manning's n Values num= 3

Sta	n Val	Sta	n Val	Sta	n Val
16802.9	.043	19201.9	.033	20772.6	.032

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
19201.9	20772.6	590	513.6	510	.1	.3

Ineffective Flow num= 1

Sta L	Sta R	Elev
16802.9	16900	1003

CROSS SECTION RIVER: 1
REACH: 1 RS: 205.94

INPUT
Description: 205.94
Station Elevation Data num= 96

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
16903.8	1000.5	16909.4	1000	16920.9	1001.6	16972.5	1001.2	16975.5	1000.3
16985.1	1001.6	17007.6	998.7	17082.9	996.3	17151.6	996.3	17234	996.3
17267.9	996.3	17336.5	996.2	17426	996.4	17508.2	996.2	17592.3	996.3
17688.9	994.4	17733.4	994	17754.7	991.9	17830.3	991.2	17928	993.4
17928.3	993.4	18000.5	993.2	18041.8	993.1	18116.7	993.3	18216.4	993.4
18279.7	991.1	18294.7	987.3	18302.5	986.7	18362.5	986.9	18376.8	985.1
18407.6	986.2	18496.1	984.1	18565.5	985.4	18614.9	987.2	18629.5	988.4
18642.1	988.5	18669.8	994.1	18756.5	994.7	18817.1	995.6	18869.8	993.4
18916.1	992.8	18941.2	994.2	19004.1	991	19053.5	981.9	19123.4	981.8
19199.3	982	19250	981.9	19337.5	981.5	19354.9	982.2	19448.6	985
19535.3	985	19613.6	984.8	19703.6	985.4	19775.9	989.5	19831.1	990.2
19926.3	989.4	19994.7	989.1	20082.6	988.9	20106.6	989.1	20111.2	988.5
20149.5	990.4	20183.7	994.3	20237	990.7	20262.2	991.4	20291.7	989.3
20345	989.3	20445.6	986.5	20507.2	982.5	20519.9	982.9	20520.2	982.1
20569.1	981	20589.6	984	20612	989.6	20643	991.1	20662.1	992.9
20686.6	992.8	20704.4	994.4	20767	996.6	20871.9	997.4	20903.2	996.9
20938.8	991.7	20969.6	993.5	21038.9	995.4	21103	995.9	21150.3	993.9
21195.3	994.9	21265.8	994.7	21288.8	994	21309.9	995.5	21385.6	995.9
21402.4	995.6	21473.1	995.1	21527.7	994.8	21551	998.8	21641.3	999.1
21683	1001.6								

Manning's n Values num= 4

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
16903.8	.043	18817.1	.033	20767	.032	20938.8	.037

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.

18817.1	20767		505	506.69	510		.1	.3

Ineffective Flow num= 1

Sta L	Sta R	Elev
21215	21683	999

CROSS SECTION RIVER: 1
REACH: 1 RS: 205.84

INPUT
Description: 205.84
Station Elevation Data num= 96

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
17154.7	999.5	17167.6	998.3	17173.7	999	17242.7	999.3	17319.2	999.3
17395.4	998.8	17445.8	998.6	17482.3	997.2	17534.1	997.5	17544.3	997.1
17572.5	997.3	17612.4	996.5	17644.3	993.7	17719.4	994.2	17735.7	993.6
17775	993.6	17842.8	992.3	17862.2	987.5	17958.9	987.6	17969.5	989.4
18029.4	989.1	18042.3	990.1	18085.3	986.5	18121.7	984.6	18194.4	985
18242.1	986.4	18267.7	987.9	18304.8	988.6	18343.6	988.3	18423.5	987.9
18487.6	987.3	18519.2	980.3	18575.4	985.3	18594.1	984.3	18599.2	983
18611.3	981.7	18624.5	979.5	18698.1	979.6	18782.8	980.6	18852.2	980.4
18868.5	982.8	18970.3	982.9	19086.6	984.3	19137.9	986	19161.5	987.5
19244.2	986.1	19262.6	985.8	19339.3	985.7	19420.2	986.1	19521.7	987.3
19606.4	989.5	19664.7	990.4	19734.4	992	19762.4	991.1	19876.6	990.8
19965.5	989.4	20028.7	988.2	20132.7	984.3	20147.5	983.5	20176	983
20199.7	984.8	20287.6	984.2	20364.3	982.3	20417.7	981.2	20446.2	981.5
20481.4	989.8	20508	994.7	20535.7	996	20575.3	996.4	20613.9	995.2
20691.5	994.7	20737.2	994.6	20809.8	995.7	20816.4	996	20875	995.1
20909.1	992.8	20953.5	994.7	21021.3	995.7	21074.7	995.5	21087.2	993.8
21126.7	992.2	21139.8	993.2	21222.1	993.7	21281.4	994.3	21334.2	993
21367.3	994.1	21398.1	992.4	21450.5	994.8	21460	991.6	21508.8	993.1
21563.2	993.7	21607.4	993.3	21622.3	993.7	21634.1	995.7	21671.2	996.7
21696	999.5								

Manning's n Values num= 5

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
17154.7	.043	18487.6	.043	18575.4	.032	20535.7	.032	20875	.037

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
18487.6	20535.7	495	496	480	.1	.3

Ineffective Flow num= 1

Sta L	Sta R	Elev
21450	21696	999

CROSS SECTION RIVER: 1
REACH: 1 RS: 205.75

INPUT
Description: 205.75
Station Elevation Data num= 96

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
17305.3	998.9	17323.7	996.7	17395.5	996.8	17486.9	996.4	17509.8	996.4
17581.1	996.2	17666.5	995.9	17680.3	996	17753.1	996.5	17853.4	996.5
17864.9	996.5	17966.3	996	18048	994.8	18136.2	989.8	18199.9	985.9
18204.5	985.7	18238.3	975.2	18303	975.1	18340.9	977.7	18362.6	983.3
18414.2	984.2	18425.5	978.9	18465.2	978.9	18482	983.4	18487.5	980.6
18502.7	981.5	18551.9	977.5	18634.1	978.7	18705.8	979.9	18783.7	983.6
18852.2	983.7	18938.1	983.3	19031.5	983.4	19132.6	984.5	19156	984.8
19231.1	986.4	19292.3	989.2	19362.3	991.3	19410.6	989.7	19510.1	990.4
19547	990.4	19564.3	991.1	19608.3	991.1	19685.9	990.7	19759.4	989.7
19806.7	989.9	19819.8	990.5	19830.2	990.2	19906.7	988.4	19984.6	988.8
20051.4	988.1	20065.4	987.5	20101.2	975.7	20131.5	973.9	20148.4	974.7
20183.3	981	20265.9	982.2	20296.1	983.6	20320.1	985.5	20338.8	985.9
20373.3	988.6	20450.3	990	20500.5	990.7	20583.6	992.4	20674.8	995.6
20691.1	996.1	20754.7	995.2	20833.9	994.8	20900.7	994.8	20927.8	993.3
20929.3	994.1	20943.9	991.9	20951.5	991.7	20989	994	21037.1	991.6
21060.1	993.2	21120.9	992.7	21131.3	991.3	21198.6	991.5	21306.4	993.9
21377	994.4	21386.2	994.7	21449.8	995	21502.3	995.3	21567.5	995.7
21648.1	996.3	21682	996.5	21789	996.8	21807.7	996.8	21902.8	997.4
21921	997.6	22001	997.7	22076.6	997.7	22142.9	997.7	22143.7	999
22145	998.9								

Manning's n Values num= 4

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
17305.3	.043	18048	.043	20583.6	.043	21131.3	.025

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
18048	20450.3	825	642	490	.1	.3

Ineffective Flow num= 1

Sta L	Sta R	Elev
21400	22145	999

CROSS SECTION RIVER: 1
REACH: 1 RS: 205.62

INPUT
Description: 205.62
Station Elevation Data num= 96

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
16987.1	998.1	17010.8	998	17131	997.7	17220.3	997.9	17312.3	997.2
17337.5	997.1	17349.7	993.8	17415.9	993.4	17452.1	994.5	17456	993.6
17462.6	995.4	17470.7	993.9	17481.8	995.3	17536.8	995.9	17541.4	995
17548.6	996.6	17570.5	992.9	17606.9	994.3	17705.6	994.3	17778.6	994
17854.3	993.6	17935.8	992.6	18000.5	991.8	18066.9	989.1	18154.7	990.1
18182.6	989.5	18216	991.5	18272.9	988.7	18345.5	987	18362.3	985.3
18364.3	986.4	18412.4	980.4	18471.7	977.8	18582.6	976.6	18682.4	977.6
18758.9	978.6	18831.8	982	18915	981.6	18928.4	981.8	18994.8	981.7
19088.8	983.1	19188.8	983.9	19260.2	983.8	19272.1	983.6	19307.3	987.6
19315.9	987.5	19391.2	986.5	19461.1	986.8	19526.5	987.3	19591.7	987.7
19623.7	987.9	19690.2	986.9	19701.7	986.9	19732.4	983.9	19808.3	985.5
19928.6	988.8	19968.4	987.6	20009.8	976	20075.5	976.6	20117.2	979
20204.9	979.7	20242.3	978.4	20253.8	980.5	20285.7	981	20339.5	984.7
20409.9	988.4	20450.1	989.3	20468.3	987	20504.3	986.9	20542.3	986
20605.7	986.7	20698.9	989.9	20708.2	990.1	20715.6	995	20780.9	994.9
20847	991.9	20932.4	991	21003.2	991.1	21102.3	991.6	21194.4	992
21286.6	992.7	21318.6	992.9	21388	993.6	21473.6	994.3	21596.5	994.7
21668.5	995	21758.9	995.6	21817	996.1	21920.7	996.9	21963.3	997.1
22043.7	997.1	22107.3	997.1	22215.9	997.1	22261	998.1	22277.9	997.6
22288.5	999.4								

Manning's n Values num= 6

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
16987.1	.025	17481.8	.043	18216	.043	18471.7	.032	20715.6	.032
20847	.025								

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
18216	20450.1	560	523	510	.1	.3

Ineffective Flow num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
16987.1	17548.6	999.4	21480	22288.5	999.4

CROSS SECTION RIVER: 1
REACH: 1 RS: 205.52

INPUT
Description: 205.52
Station Elevation Data num= 96

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
17458.9	998.2	17496.2	998.1	17528.6	993.9	17537	994	17538.2	993.3
17605.2	993.8	17611.5	994.9	17615.9	993.3	17622.8	995	17635.1	992.9
17665.3	993	17698.1	994.2	17701.5	993.5	17707.3	995.3	17718.9	995
17731.8	991.3	17820.7	991.9	17894	991.4	17966.9	990.6	18049.9	988.1
18115.3	988.8	18176.3	990.1	18241.5	990	18289.2	989.7	18376.9	989.8
18458.3	990.2	18560.9	990.7	18591.6	991.1	18628.8	988.9	18702.3	978.1
18778	976.8	18843.9	975.9	18919.8	976.6	19003.3	977.9	19078	982
19149.6	982.2	19216.6	981.8	19294.8	981.6	19381.8	980.6	19438.9	979.8
19513.6	979.7	19597.1	981.3	19627.4	982.2	19649.8	981.4	19768.3	982.9
19791.5	982.7	19851.9	983.6	19974.7	981.4	20083.4	978.3	20118	977.6
20126.6	978.1	20161.7	976.5	20215.1	976.5	20237.4	983.2	20307.8	986.1
20375.9	986.4	20411.3	986.8	20436.2	983.2	20454.8	985.7	20472.6	986.8
20567.5	986.1	20573.3	986	20590.7	989.7	20611.5	992.8	20623.9	992.6
20656.5	990.1	20672.2	990.7	20688.3	988.5	20695.2	989.1	20701.5	986.9
20769.2	978.7	20789.2	977.6	20827.6	986.2	20844.7	988.1	20936.4	989.8
21007.2	990.9	21024.7	991.2	21032.1	992.9	21046.7	990.6	21139.1	991.6
21236.4	992	21330.9	992.2	21420.6	992.8	21530.8	993.2	21637.9	993.3
21722.2	993.8	21801	994.3	21909.2	994.5	22026.9	995.2	22127.5	995.8
22175.4	995.9	22246.4	996.2	22303.2	996.7	22383	996.1	22389.5	996.1
22400	997.5								

Manning's n Values num= 5

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
17458.9	.043	18591.6	.043	18628.8	.032	20611.5	.032	21032.1	.025

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
18591.6	20611.5	430	470	400	.1	.3

Ineffective Flow num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
17458.9	17650	998.2	21400	22400	998.2

CROSS SECTION RIVER: 1
REACH: 1 RS: 205.43

INPUT
Description: 205.43
Station Elevation Data num= 96

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
17577.6	999	17651.4	999	17676.6	993.3	17745.1	993.5	17753.8	994.9
17756.2	993	17761.9	994.1	17779.1	992.9	17827.8	993.4	17837	994.7
17842	993.6	17850.1	995.1	17856.3	994.6	17874.1	989.8	17945.8	990.5

18015.5	989.2	18089	988.6	18171.5	988.1	18272	989	18345.2	989.6
18417.8	988.9	18513.1	989.6	18555.5	988.8	18590.9	983.9	18653.7	980.2
18675.6	981.9	18718.1	992.1	18755	996.2	18831.5	994	18917.5	994.6
18981	993.6	18995.7	991.7	19013.2	983.5	19029.3	979.6	19078	977.3
19159.1	977.1	19235.8	977	19329.8	976.7	19401.3	976.1	19408.1	977.1
19408.2	976.1	19472.5	977.8	19481.8	976.1	19482.8	979.9	19504.5	976.3
19572.1	976.7	19685.1	976.7	19752	976.5	19776.2	976.6	19871.8	985.4
19922.1	984.5	19948.6	982.8	19969.8	979	19994.4	976.5	20009.7	976.5
20115.4	976.5	20173.1	982	20198.5	982.2	20281.7	985.3	20371.1	985.5
20444.6	985.5	20542.7	985.9	20552.8	986	20628.8	985.9	20672.4	986.4
20739.7	988.8	20745.5	988.9	20770.4	996.3	20821.2	987.3	20830.8	986.4
20857.3	988.8	20888.7	988.5	20910.3	984	20959.4	986.1	21024	983.6
21078.8	987.2	21088.9	990.3	21171.4	991.7	21190.4	992.1	21193.4	991.5
21282.9	992	21368	992.7	21454.5	993.1	21528.9	993.3	21613.1	993.6
21695.1	993.6	21768.9	993.9	21849.3	994.3	21923.6	994.4	21927.2	994.4
21997.3	994.6	22016.9	994.6	22089.4	994.6	22155	995.4	22231.3	997.7
22285	998.6								

Manning's n Values num= 5

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
17577.6	.043	18917.5	.043	18981	.032	20770.4	.032	21088.9	.025

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
18917.5	20770.4	175	171.89	125	.1	.3

Ineffective Flow num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
17577.6	17800	999	21400	22285	999

CROSS SECTION RIVER: 1
REACH: 1 RS: 205.4

INPUT
Description: 205.4
Station Elevation Data num= 97

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
17511.1	996.9	17519.9	996.9	17605.2	997.3	17609	997.3	17712.9	997.8
17756.7	992.2	17854.3	993.8	17914.6	991.3	17916.5	991.2	17968.9	990.2
18031	989.2	18084.1	988.8	18154.5	988.3	18213.4	988.3	18281.7	988.2
18304.7	988.2	18362.5	988.2	18388.7	988.6	18461.3	988.1	18529.4	988.4
18564.6	988.5	18633.4	988.7	18712.8	988.5	18774.2	988.2	18787.4	988.1
18843.8	987.9	18915.9	985.1	18943.3	984.3	19013.3	982.5	19020	982.2985
19079.8	980.5	19133	979.1	19154.8	978.5	19196.1	978.7	19231.1	977.1
19260.1	977.2	19291.7	976.5	19304.1	976.8	19364.1	975.5	19377.1	975.5
19436	975.7	19498.9	975.9	19564	975.7	19635.3	976.2	19694.9	976.3
19718.4	976.2	19774.1	976.1	19840.5	976	19902.9	976	19988.4	976
20047.6	976.1	20060.4	976.2	20120.1	976.4	20173.6	976.9	20230.4	977.5
20290.1	977.8	20348.4	979	20391.6	980.6	20448.9	982.1	20522.8	983.7
20592.3	985.3	20647.3	986.7	20692.4	987.2	20767.8	987.4	20829.1	987.4
20894.3	987.9	20922.5	988.1	20978.2	988.9	21055.7	989.4	21057.2	989.4
21142	989.4	21212	990.9	21270.2	991	21321.8	991.1	21338.9	991.2
21394.1	991.7	21407.6	991.9	21469.8	992.7	21547.3	993.5	21598.6	992.6
21619.5	993.7	21690.3	993.7	21721.2	993.7	21811.7	993.8	21872.4	994.2
21923.6	995.3	21941	995.5	22005.1	996.1	22017	996.2	22078.7	996.7
22181.1	997.7	22194.2	997.8	22249.3	998.6	22318.8	999	22386.3	999.2
22404.4	998.5	22455.6	999.3						

Manning's n Values num= 4

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
17511.1	.043	18843.8	.043	19079.8	.032	20767.8	.032

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
19020	20767.8	305	315	370	.1	.3

Ineffective Flow num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
17511.1	17800	999.3	21450	22455.6	999.3

Blocked Obstructions num= 1

Sta L	Sta R	Elev
17511.1	19020	988

CROSS SECTION RIVER: 1
REACH: 1 RS: 205.34

INPUT
Description: 205.34
Station Elevation Data num= 268

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
13687.27	990.71	3918.08	990.68	13941.26	990.71	4074.31	990.74	14097.95	990.77
14379.8	991.21	4502.02	991.27	14504.17	991.32	14654.78	991.45	14667.42	991.12
14692.66	993	14709.75	992.96	14715.8	991.19	14721	993.28	14723.16	993.14
14738.13	990.91	4750.87	991.89	14755.59	992.51	4795.12	991.61	4806.23	991.16
14847.09	991.61	5017.82	991.67	15028.83	991.05	15074.2	990.91	5389.93	990.38
15426.63	990.41	5457.08	991.76	15497.69	991.91	15548.79	991.74	15599.83	990.06
15624.82	992.51	5632.81	992.18	15645.65	991.27	15655.09	992.74	15660.02	991.59
15665.1	993.61	5682.98	994.84	15701.37	993.32	15707.96	993.32	15720.14	993.51

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15863.53   993.415962.36  993.7816143.17   993.716302.48  993.5316434.69      994
16540.11   994.5 16630.9  994.0316710.83  993.4216732.11  994.2916741.14   994.53
16755.65   994.816763.06  993.9916780.42  993.7616789.57   993.416811.41   992.38
16945.01   992.917037.42  993.3817118.17   992.917138.04  992.7817279.36   992.27
17420.37   992.117527.98  992.75 17560.1   992.78 17728.5  991.3317729.54   991.26
17753.81   988.517789.02   988.817833.72   989.117845.57  991.9517853.64    990.8
17860.73     99217869.58     99217881.45  991.8417895.69  992.1317897.64   994.57
17904.21   994.517909.94  991.8217920.11  988.7917940.57  989.6117986.35   989.54
18002.56   989.718065.95  989.1618080.07  988.8318116.41  988.3818122.12   987.76
18187.93   987.418195.48  987.3618246.02  987.5818264.37  987.6418314.54   986.65
18327.91   986.818350.36  988.1118365.79  988.5818392.98  988.6518415.65   990.57
   18418     99118432.37  990.8218481.36  991.38 18548.7  990.7218596.12   990.95
 18645.9     99518660.36  994.9818676.98  995.0618724.18  991.4718772.07   990.61
18787.28   990.318822.48  988.85 18833.8  988.7918853.31  988.4818883.89   988.52
 18895.6   987.7 18912.2  992.1218970.58  990.1619022.37  991.3519035.55   989.07
19043.96   988.619066.14  988.56 19076.9  991.3319096.79  993.0719099.41   993.11
19116.55   988.419170.12   987.719232.28   987.219252.59  986.66 19258.9   986.61
19276.73   986.119284.34  985.9919293.57  985.3919297.05  984.9419318.57   978.71
 19328.6   976.919337.34     97619422.11  976.1819470.05  976.22 19524.9   976.33
19562.89   976.719632.66  976.0919705.72  976.4319754.05  976.6319843.53   976.95
19853.47     97719865.48   976.519880.46  976.3619890.89  975.8119912.96   977.83
 19933.5   976.919947.42   976.619979.26  976.26 20010.7  976.0820051.63   975.84
20062.33   975.720073.85  975.5720119.54  976.87 20199.2  978.2920212.26   978.81
20258.32   980.920264.39  980.66 20329.9  980.6420332.62  980.4120369.18   979.74
   20375   980.1 20380.1  980.6320381.06  981.0320388.75  983.0320395.38   983.51
20436.76   985.120502.38  985.6120525.59   985.520561.61  985.7420587.94   985.95
20626.14   985.820644.89  985.7420678.28  985.5520707.29  986.1820742.96      987
20746.96   986.620752.64  985.5420762.54  985.0520787.99  983.0120822.69   985.52
20836.01   987.120844.69  986.9620890.92  987.1920931.14  987.6220978.97   988.36
 21006.5   988.721057.23  989.3821083.41   989.721100.77  990.25 21161.6   990.89
21172.71     99121247.07   990.97 21252.7  990.9921266.22  990.7621277.98   990.73
21290.76   992.8   21299  991.1421333.63  991.1321435.22   991.221524.43   991.65
21554.31   991.6 21567.7  991.7221625.82   992.321657.32  992.4221684.03   992.58
21782.19   993.421851.31  993.7221863.14   993.921872.38  994.1621891.44   994.52
21949.81   994.621975.44  994.9221995.48  994.9122007.76  995.2522037.54   996.24
22051.44   996.622075.07  997.6322125.13  998.6122139.54  998.9522159.57   998.78
22179.58   998.822264.13   998.322280.55  998.0322353.16  997.9122369.37   997.91
22404.01     99822463.45  998.2722491.06   998.822531.57  998.5222560.64   998.76
22593.64   998.8 22617.2  999.0722646.25  999.1222676.56  998.9422686.88   999.19
22731.76  1000.522770.23 1000.7922779.44 1001.3422789.67 1000.9722824.65  1001.12
22886.17  1001.722901.04 1001.6722978.01 1002.0623003.78 1002.23 23080.5  1002.51
23154.45  1002.823270.34 1003.4323291.75 1003.5623364.66 1004.1223410.89  1004.31
23481.28  1004.623504.95 1004.7623548.34 1004.8523582.71 1004.8423645.08  1005.05
 23678.1  1005.223738.97 1005.2323762.47 1005.11 23813.7 1005.1223872.53  1005.28
23908.97  1005.423920.45 1005.5423934.72 1004.9423951.14 1004.4623976.71  1005.57
23998.12  1003.624004.04 1002.9424049.64 1002.74

Manning's n Values          num=      3
     Sta   n Val     Sta   n Val     Sta   n Val
13687.27    .04318481.36    .04320931.14    .025

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
      19284.3420742.96              485     492     450              .1       .3
Ineffective Flow      num=        2
   Sta L   Sta R    Elev   Sta L   Sta R    Elev
13687.27   17900    1000   2140024049.64    1000

CROSS SECTION          RIVER: 1
REACH: 1                  RS: 205.25

INPUT
Description: 205.25
Station Elevation Data     num=      96
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
 16580.4     994 16657.1     994 16708.3   993.9 16776.5   993.6 16819.1   994.5
 16845.8   992.8 16892.9   992.2 16971.6   992.3 17154.1   993.1 17172.8   993.1
 17289.2   992.5 17431.5   991.8 17455.8   991.6 17644.6   992.5 17718.9   992.3
 17808.9   991.8 17842.7   989.1 17907.9   989.9 17920.6   992.1 17926.4   990.6
 17933.2   992.4 17964.3   990.4 17989.2   990.3 17999.1   987.6   18061   989.2
 18108.7   990.1   18179   988.3 18216.3     987 18244.2   987.5 18311.6   987.2
 18329.2   987.8 18392.2   987.8 18457.1   988.6 18493.2   989.2 18509.7   988.5
 18583.8     989 18614.2   989.1 18647.4     988 18708.8   987.6 18775.5   989.5
 18807.1     990 18886.3   989.2 18946.4     989 18990.4   988.1 19012.5   989.2
   19101   990.2 19156.3   989.9 19179.1   987.1 19186.7   985.4 19228.7   983.3
 19242.4     982 19306.5   983.4 19368.3   983.9 19442.9   983.5 19503.3   984.6
   19563   981.8 19581.1   985.9 19632.5   986.1 19671.9   987.3 19726.2   975.8
 19815.7   975.6 19878.1   976.2   19957   975.9   20042   975.5 20112.8   975.3
 20121.8   975.7 20160.5   973.8   20242   973.4 20260.5   974.6 20329.5     975
 20404.8   975.5 20471.4   978.3 20486.8   979.5 20522.9   977.9   20526   975.8
 20552.9   975.9 20584.6   974.1 20632.4   973.9   20697   975.7   20712   975.7
 20738.9   981.7 20741.5   980.7 20782.3   986.4 20848.1   987.4 20923.8   989.9
 21014.3   990.6 21121.3   991.6 21201.7   992.1 21283.6   992.1 21338.5   993.1
 21347.9   993.8 21358.2   992.2 21370.3   995.6 21409.5   995.7   21424   994.5
 21499.5   993.3
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Manning's n Values num= 4

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
16580.4	.025	18108.7	.037	19671.9	.037	20782.3	.025

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
19671.9	20782.3		505	506	485	.1	.3

Ineffective Flow num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
16580.4	17950	995.7	21347.9	21499.5	995.7

CROSS SECTION RIVER: 1
REACH: 1 RS: 205.15

INPUT
Description: 205.15
Station Elevation Data num= 96

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
18001.2	994	18008.5	992.8	18015.6	994.9	18038.3	990.9	18047.4	991.8
18061.5	992.1	18077.6	991.6	18146.4	988.8	18170.1	988.9	18200.6	988.3
18243	988.8	18269.7	988.5	18292.3	988.8	18341.7	989.8	18374.9	990.2
18415.6	990.6	18438.3	991.1	18547.3	991	18558.8	991.1	18618.4	991.8
18625.4	991.9	18687.7	991.3	18696.2	991.3	18745.4	991.4	18794.1	991.1
18810	991.2	18866.4	991	18894.1	991.2	18920.9	990.7	18973.2	990.3
19018.9	989.8	19055.8	989.7	19109.2	989.4	19141.8	988.8	19181.8	988.8
19228.5	988.7	19285.2	989.2	19335.5	988.1	19346.3	987.8	19386.8	986.1
19394.2	985.9	19440.1	984.4	19443.6	984.3	19490	983.7	19506.7	983.8
19532.2	982.8	19587.2	983.3	19612.4	983.6	19619.1	984.1	19660.7	983.9
19705.1	983.1	19747.1	983.7	19787.1	984.9	19805.2	976.8	19822.3	973.4
19827.6	974.7	19829.5	974.2	19853	974.2	19880.4	973.6	19881.2	973.1
19908.4	980	19918.9	982.2	19934	984.3	19978.1	984.9	20006.4	984.1
20054.3	983.8	20064.2	983.5	20106.6	982	20110.7	981.8	20166.7	979
20196.8	978.1	20246.3	976.6	20250.4	976.4	20298.9	975.4	20340.8	975.5
20371.6	975.7	20436.2	974	20495	974.1	20608.2	975.2	20651	975.7
20691.5	977.2	20705.2	979.5	20746.3	987.3	20793.1	987.9	20838	988.7
20896.6	989.6	20910.7	990.1	20968.3	990.3	20999	990.6	21039.8	990.8
21107	991.7	21127.2	991.3	21170.3	994.1	21206.9	995.7	21258.6	996.3
21293	996.4								

Manning's n Values num= 4

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
18001.2	.025	18146.4	.037	19787.1	.037	20746.3	.025

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
19787.1	20746.3		495	495.39	495	.1	.3

Ineffective Flow num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
18001.2	18061.5	995	21293	21293	996.4

CROSS SECTION RIVER: 1
REACH: 1 RS: 205.06

INPUT
Description: 205.06
Station Elevation Data num= 129

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
17971	990.9	18065.3	988.6	18104.6	990.4	18115.6	988.2	18128.9	991.2
18143.2	991.5	18167.1	990.4	18222.4	988.9	18239	988.9	18268	988.1
18295.2	989	18314.3	988.5	18358.9	987.5	18410.5	986.7	18435.8	988.1
18478.4	994.2	18515	994	18541.2	993.6	18567.7	993	18668.2	993.4
18694.6	996.3	18716.8	994.1	18733	990.9	18773.1	991.2	18799	993.8
18844	996.4	18879.8	994	18912.8	991.3	18929.6	990.6	18948.8	990.9
18974.6	992.4	18989	991.8	18996.9	990.8	19026.5	996.8	19033.3	997.5
19038.3	998.5	19071.8	995.8	19078.5	994.1	19097.2	986.1	19133.8	987
19136.4	990.2	19142.8	992.6	19151.6	994.3	19202.7	994.1	19217.4	994.9
19226.3	988.3	19230.3	986.5	19252.3	985.8	19287.1	985.9	19329.2	986.2
19380.3	987.3	19388.1	987.3	19434.5	987.8	19445.1	987.8	19500.6	988.4
19538.9	988.7	19598.7	988.7	19648.7	990	19669.4	989.9	19722.7	988.3
19771.5	986.5	19803.6	986.4	19827.5	985.6	19841.3	984.7	19887	983.6
19904.2	973.1	19931.3	971.2	19981.6	971.1	19982.8	971.1	20027.4	970.5
20053.2	971.3	20073.5	976.1	20120.4	976.2	20137.3	976.4	20147.5	981
20155.4	983.6	20196	987.3	20208.9	986.1	20221.7	985.3	20253.8	981
20275.4	981	20301.5	975.4	20306.9	975.1	20315.2	975.1	20365	974.5
20425.5	974.6	20470.1	974.5	20497.9	974.4	20563.5	973.5	20601.9	973.2
20671.9	974	20850.2	976	20856.8	977.9	20880.3	977.7	20892.4	984.3
20905.3	990.8	20927.2	991.2	20971.3	992	21020.6	993	21062.7	993.2
21101.6	993.3	21146	993.7	21204.6	993.9	21256.1	994.5	21300.3	994.8
21336.3	994.9	21378.2	995	21414.7	995.2	21457.8	995.2	21484.8	995.4
21512.4	994.7	21514.5	995.9	21516.2	996.3	21518.9	995.5	21525.9	994.3
21532.1	994.6	21537.4	995.2	21546	995	21560.5	995.3	21575	995
21602.5	996.4	21628.8	996.3	21672.8	996.3	21709.9	996.5	21754.4	996.4
21826.9	996.1	21895.5	996.5	21951.4	996.6	21997.9	996.4		

Manning's n Values num= 4

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
17971	.037	19026.5	.037	19669.4	.037	20905.3	.025

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
19669.4	20905.3		505	505	530	.1	.3

Ineffective Flow num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
17971	18080	998.5	21997.9	21997.9	998.5

CROSS SECTION RIVER: 1
REACH: 1 RS: 204.97

INPUT
Description: 204.97

Left Channel Bank Station Interpolated
Station Elevation Data num= 86

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
16000	993.3	16025.7	992.1	16060.7	991.7	16273.1	992.3	16303.1	992.4
16597.7	992.1	16613.7	992	16818.7	992	16912.8	992.3	17061.4	992.3
17169.3	991.7	17232.9	991.8	17259.7	989	17316.4	990.2	17470.6	990.2
17483.4	990.2	17700.5	989.9	17786.2	989.2	17832.4	989	17894.5	988.9
17924.8	989.2	17933.3	990.5	17979.7	992.1	17985.3	991.5	17994.8	988.7
18008.6	988.7	18105.1	987.6	18137.2	986.9	18189.2	987.8	18201.2	986.8
18216.4	989.2	18243.6	989.2	18301.9	989	18377.5	989.6	18462.9	990.2
18523.7	988.6	18573.9	986	18643	986.6	18672	985.8	18672.9	984.9
18697.7	984.3	18729.6	988.3	18807.2	987.9	18833	984	18865.3	987.3
18888.3	985.4	18917	987.8	18955.4	987.9	18987.3	984.9	19046.8	987.1
19093.5	986.8	19152.6	983.5	19285.8	983.8	19317.6	981.5	19332.9	979.1
19418.6	978	19438.3	978.8	19545	978.843	19934.7	979	19938.2	981.1
19945.9	981.9	20008.7	980.8	20068.2	980.2	20091.8	979.6	20151.8	979.3
20225.8	978.1	20300.7	979	20367.2	979.3	20442.3	978.7	20509.6	977.2
20568	974.8	20659.1	973.3	20662.9	973.3	20925.5	975.4	20961.3	988.6
20999.4	990.2	21056.8	990.8	21126.2	991.7	21187	992.8	21200.2	992.9
21265.2	993	21340.5	993	21356.1	993	21427.5	993.4	21492.8	993.1
21496	993.1								

Manning's n Values num= 4

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
16000	.025	18301.9	.037	19046.8	.037	20961.3	.025

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
19545	20961.3		510	503	550	.1	.3

Ineffective Flow num= 1

Sta L	Sta R	Elev
16000	18200	993.4

CROSS SECTION RIVER: 1
REACH: 1 RS: 204.87

INPUT
Description: 204.87

Right Channel Bank Station Interpolated
Station Elevation Data num= 97

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
17067.4	991.5	17111.3	991.5	17255	990.6	17291.2	991.6	17298.2	992.1
17315.9	991	17328.2	990.9	17345.3	988.6	17426.3	988	17520.6	988.2
17594.7	988.5	17781.4	988.6	17822.3	988.5	17925.1	988.2	18001	987.2
18108.5	987.1	18221.3	987.3	18261.7	986.3	18269.2	986.9	18279.6	985.4
18296.9	986.8	18325.5	986.8	18352.2	985.5	18429.1	985.3	18501.3	985.6
18553	984.4	18559.8	986.3	18565.9	988.9	18578.6	987.7	18604.1	983.9
18645.9	981.4	18657.3	984	18678.8	986.2	18730	987.6	18832.5	987.5
18855.2	985.7	18859.7	984.6	18874.5	986.6	18920.1	984.6	18942.9	980.4
18960	980.8	18970.7	982.4	19015.9	985.9	19104.6	986.7	19209.9	985.7
19234.9	985	19264.2	982.7	19275.4	983.5	19297.4	981	19382.3	981.4
19462.8	981	19532.8	979	19555.4	979.1	19566	978.5	19579.4	978.5
19588.4	976.2	19598.7	976.3	19623.4	978.5	19628	979.5	19642.3	981
19714.7	981	19730.8	981	19759.9	975.9	19765	976.4	19772.7	975.9
19854.5	975.9	19859.5	975.9	19861.3	977.3	19877.6	980.8	19890	975.9
19903.3	969.9	19909.9	970	19919.2	968.1	20001	968.1	20022.9	968.1
20059.2	975.3	20126.4	976.2	20213.9	975.3	20298.1	974.9	20351	974.8
20377.2	977.3	20393.3	977.5	20505.4	975.8	20559.1	974.3	20612	976.5
20624.2	974.6	20654.3	973.2	20826.7	974.3	20919.3	974.9	20939.9	984.7
20954.34	991.1405	20961.2	994.2	20981.5	994.3	21037.9	989.4	21047	990.3
21137.3	991.2	21197.6	991.4						

Manning's n Values num= 4

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
17067.4	.025	18221.3	.037	19462.8	.037	20961.2	.025

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
19462.82	20954.34		495	499	505	.1	.3

Ineffective Flow num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
17067.4	18300	994.3	20961.2	21197.6	994.3

CROSS SECTION RIVER: 1
REACH: 1 RS: 204.78

INPUT
Description: 204.78

Right Channel Bank Station Interpolated
Station Elevation Data num= 87

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
16026.1	987.6	16094.8	987.3	16113.5	986.9	16143.6	989.2	16147.7	990.2
16176.4	990.8	16200.6	988.8	16231.8	988.4	16338.9	988.8	16416.1	988.9
16579.2	988.9	16686	989.1	16786.7	989.1	16866.8	989.3	17093.1	989.3
17192.6	989.3	17283.5	988	17369.3	988	17407.5	989.7	17420.2	988
17479.3	987	17521.2	986.9	17670.9	988	17754.2	987.8	17912.8	987.4
17952.6	987.1	18028.5	987	18174.7	986.5	18221.6	986.3	18279.6	986.1
18350.4	984.9	18361.8	983	18373.6	985.9	18402.3	985.9	18413.2	983.6
18427.5	987.2	18487.5	986.4	18504	984.4	18585.3	983.7	18598.2	984.9
18667.6	983.9	18753.3	984.6	18756.1	984.9	18767.8	981.3	18836.7	981
19173.1	979.8	19219.1	979.8	19295.8	977.2	19323.7	977.5	19337.5	981
19356.4	981	19398.6	983	19409.2	982.4	19419.8	979.2	19429.6	977.4
19432.3	975.9	19489.4	975.9	19561.1	974.8	19621.6	973	19660.7	972.1
19667.7	970.8	19677.1	967.6	19767.4	968.8	19768	968.8	19935.5	968
19986.5	968	20033.8	975.7	20056.9	977.8	20073.7	975.3	20160.4	975
20170.8	975.3	20229.5	975	20246.7	975	20324.8	974.9	20340	975
20452	975.9	20510.9	973	20530.9	973.1	20662.3	973.7	20706.1	973.8
20782.6	974.9	20801.8	975.1	20832.33	990.9976	20840.4	995.2	20866.6	994.5
20921.2	988.9	20982.7	988.3						

Manning's n Values num= 4

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
16026.1	.025	18427.5	.037	19398.6	.037	20840.4	.025

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
19398.6	20832.33	505	515	550	.1	.3

Ineffective Flow num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
16026.1	18400	995.2	20840.4	20982.7	995.2

CROSS SECTION RIVER: 1
REACH: 1 RS: 204.68

INPUT
Description: 204.68

Right Channel Bank Station Interpolated
Station Elevation Data num= 97

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
17501.1	986.1	17554.2	985.7	17607.9	985.5	17645.5	987.6	17657	986.8
17668.8	987.1	17674.9	990.2	17682.2	987.8	17691	985.7	17742.4	986.2
17748.2	986.3	17778	988.7	17792.2	990.8	17806.1	988.7	17807.3	988.9
17839.5	987.8	17848.5	986.9	17867.4	986.8	17881.2	986.2	17970.4	985.8
18016.4	985.9	18087.9	985.4	18189.8	985	18231.2	984.8	18295.5	984.9
18354.5	984.6	18412.6	984.3	18437.1	982.9	18472.2	984	18491.1	983.4
18518.9	981.6	18530.8	984.6	18531.9	985.1	18550.1	982.9	18601.2	983.1
18621.4	983.6	18662.6	982.9	18685.1	983	18736.6	981.7	18767.6	980.4
18849.4	980.3	18886.2	980.2	18950.6	980	19029.6	979.9	19057.5	983
19071.2	980.7	19099.7	980.9	19114	981.6	19143.3	981.3	19197.1	981.7
19249.9	983.3	19284.9	981.9	19308.1	982.1	19314.7	984.6	19321.8	985
19357.4	981	19361.7	979.6	19368.2	980.1	19394.4	978.2	19398.6	975.9
19415.9	975.9	19458.6	973.3	19479.3	973.1	19513.5	971.9	19564.9	971.9
19621.8	972.2	19668.2	973.2	19691.4	975.5	19719	976.9	19734.6	976.2
19779.1	971.8	19814.3	971.4	19869.4	971.6	19901	972.5	19927.9	972.8
19942.8	973.9	20011.2	975.3	20053.7	976.3	20121.8	976.1	20137.2	975.6
20206.4	975.5	20256.1	973.7	20273.3	974.7	20295	973	20348.3	973.2
20369.6	973.3	20516.3	974.1	20548.61	990.5028	20548.8	990.6	20582.8	991.5
20647	987.5	20715.7	987.8	20786.9	988	20814	988	20872.4	988.2
20904.2	988.1	20971	988.4						

Manning's n Values num= 5

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
17501.1	.025	18472.2	.037	19321.8	.037	20548.8	.037	20582.8	.025

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
19321.8	20548.61	325	407	570	.1	.3

Ineffective Flow num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
17501.1	18455	991.5	20582.8	20971	991.5

CROSS SECTION RIVER: 1
REACH: 1 RS: 204.61

INPUT
Description: 204.61
Station Elevation Data num= 96

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
14501.4	987.8	14573.3	990	14582.2	987.6	14618.2	988.2	14777.3	988.3
14862.5	988	15060	988.1	15169	988.1	15293.6	988.1	15349.5	988
15354.3	989.1	15407.2	987.7	15581	987.7	15683.1	987.7	15895.1	987.7
15973.3	987.8	16138.5	987.8	16253	987.3	16305.2	988.9	16356.5	986.6
16502.7	987	16642.3	986.6	16753.7	986.8	16913.6	986.7	17015.2	986.4
17201.6	986.5	17292.3	986.1	17385	986.2	17492.5	986.6	17525.7	986
17544.8	987	17555.9	984.9	17607.1	987.6	17733.4	988	17760.1	988.2
17907	986.4	17945.4	985.9	18071.1	985.8	18171.7	984.9	18250.5	986.1
18300.1	984.4	18402.9	984.9	18466.2	984.6	18493.6	983.5	18498.9	981.8
18563.6	983.3	18578.3	983	18591.3	980.7	18665.2	981.8	18677.5	983.2
18687.3	985.4	18775.1	988.2	18821.3	988.9	18834.2	979.9	18973.9	980.4
19090.8	980.1	19180.1	979.7	19288	980.1	19386.4	980.8	19428.1	982.7
19471.3	983.1	19479.7	979.4	19500.4	973.3	19642.8	973.3	19760.9	972.7
19781	972.7	19928.9	973.4	20022	973.4	20085.3	975.2	20097.7	972.6
20188.3	973	20275.9	973.4	20374.8	973.9	20426.1	974.2	20456.1	987.8
20482.9	988.5	20507	986.5	20620.9	986.8	20726.9	987	20849.8	987.1
20944.2	987.1	21033.3	987.2	21060.5	987.3	21176.6	986.9	21261.7	986.8
21362.3	986.7	21489.6	987	21584.7	987.7	21599.3	987.7	21697.6	987.5
21835.5	987.5	21887.1	988.6	21890.1	987.2	21897.8	989.2	21930.6	990.8
21963.1	990.8								

Manning's n Values num= 4

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
14501.4	.025	18498.9	.037	19471.3	.037	20482.9	.025

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
19471.3	20482.9		395	449	545	.1	.3

Ineffective Flow num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
14501.4	18570	990.8	20482.9	21963.1	990.8

CROSS SECTION RIVER: 1
REACH: 1 RS: 204.53

INPUT
Description: 204.53
Station Elevation Data num= 96

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
17504.9	987.8	17516.3	987.9	17522.8	987.1	17597	987.9	17615.7	987.3
17634.6	987.5	17637.7	988.1	17645.9	986.3	17657.9	988	17704.2	989.7
17740.1	1006.3	17784.7	1004.7	17850.8	1006.5	17875.5	988.5	17970.4	986.9
18011.9	987.2	18027.9	986.1	18091.1	986.1	18155.5	985.2	18204.4	984.7
18283.5	984.5	18320.2	984.4	18443	984.3	18501.9	983.9	18579.8	983.6
18647	982.6	18678.7	980.4	18706.4	982.9	18747	982.6	18757	983.3
18815.9	983.6	18827.1	980.6	18916.2	981.2	18927.3	982	19007.2	982.5
19073.9	982.8	19175.3	983.2	19185.4	983.5	19240.3	981	19276	975.9
19293	975	19359.2	979.5	19386	976	19409.2	976.4	19468.7	973.1
19520.6	973	19547.6	973.9	19571.2	975.5	19585.1	972.9	19610.7	972.7
19729.3	972.9	19787.3	973	19805.5	973.5	19860.6	976.1	19930.7	975.8
19979.8	973.4	19994.9	973.6	20150.7	974	20174.8	974	20434.3	974.4
20443.5	974.5	20465.7	985.2	20495.9	987.1	20550.8	986.4	20566	984.8
20629.6	984.7	20701.1	984.8	20780.4	985	20872.2	985	20943	985.1
21022.1	985.1	21052.3	985	21118.4	984.9	21183.9	984.8	21260.2	985
21337.7	986.1	21351.7	986.3	21381.4	984.7	21472.3	984.9	21564.8	985.3
21626.7	986.2	21653.6	986.5	21678.1	985.5	21716.4	985.3	21781	984.7
21817.6	987.6	21875.1	987.3	21880.1	988.5	21884.2	988.1	21885	988.9
21887.9	987.2	21894.1	988.4	21914.7	989.1	21935.1	988.6	21999.2	989.8
22011	990.1								

Manning's n Values num= 5

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
17504.9	.025	18647	.037	19185.4	.037	20495.9	.037	20566	.025

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
19185.4	20495.9		570	552	525	.1	.3

Ineffective Flow num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
17504.9	18730	1000	20495.9	22011	1000

CROSS SECTION RIVER: 1
REACH: 1 RS: 204.42

INPUT
Description: 204.42

Right Channel Bank Station Interpolated
Station Elevation Data num= 90

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
17576	985.4	17608.5	985.2	17708	984.7	17783.2	985.9	17832.4	987.2
17853.5	986.1	17871.5	986.6	17926.9	986	17956.8	985.7	18023.8	985.6

18149.3	988.2	18169.7	988.1	18191.3	988.5	18226.7	987.2	18239	992.9
18240.3	993.2	18241.4	992.8	18249.3	987	18255.2	986.8	18279.8	990.2
18308.3	987.7	18322.1	985.5	18347.4	985.3	18488.4	983.7	18517.8	983
18560.8	983.8	18635.1	982.4	18650.1	983	18667.7	983	18723.8	982.5
18733.2	982.4	18795.2	981.7	18839.1	981.2	18874.1	983.2	18899.1	981.9
18955.6	982.5	18998.6	983.3	19025.4	984.6	19040.4	981.3	19045	980.6
19052.9	980.4	19095.4	981.9	19166.1	982.1	19255.9	982	19280.2	982
19341.8	981.8	19381.9	981.6	19437	981.1	19475.3	981	19500.2	980.6
19543.1	978.9	19552.9	979.1	19561.9	978.3	19576.9	979.5	19599.7	980.5
19616.5	980.7	19649.2	979.5	19653	978.6	19672.9	972.5	19732	972.5
19781.3	972.6	19794.7	975.8	19805.4	972.9	19824.4	972.6	19905.9	971.4
19930	972.8	19954.4	972.4	19966.8	973.5	19992	972.4	20006.4	972.1
20057.7	972.3	20101.5	973	20150.5	972	20162.2	972.1	20303.9	972.1
20322.7	972.1	20397.5	972.3	20434.6	971.9	20454.2	972.5	20468.3	973.3
20548.4	973.9	20577.1	973.9	20609.6	973.2	20616.9	972.5	20646	972.8
20682.0	9987.6	6656 20689.7	990.8	20701.7	992.2	20714.4	988.5	20967	988.5

Manning's n Values num= 5

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
17576	.025	18839.1	.037	19025.4	.037	20689.7	.037	20701.7	.025

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
19025.4	20682.09	430	453	500	.1	.3

Ineffective Flow num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
17576	18874.1	993.2	20689.7	20967	993.2

CROSS SECTION RIVER: 1
REACH: 1 RS: 204.34

INPUT
Description: 204.34

Left and Right Channel Bank Stations Interpolated
Station Elevation Data num= 74

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
18066.2	985.2	18081.3	985	18158.1	983.7	18200	983.2	18226	984
18228.2	983.4	18283.2	983.4	18339.1	987.8	18395.4	986.8	18498.7	986.6
18514.4	986.2	18516	986.7	18586.8	985.6	18638.2	981.3	18678.3	981
18721.9	979.9	18774.5	984.6	18806.4	982.8	18806.6	981.1	18864.9	982.2
18888.3	975.4	18906.9	980.7	18919.1	979.8	18932.5	981.8	18936.3	983.3
18988.6	982.9	19004.9	982.1	19086.4	981.7	19100	981.6723	19184.5	981.5
19245.5	981	19310.8	980.7	19329.3	980.7	19389.4	980.3	19453.4	979.8
19487.9	979.5	19552	979.2	19615.6	978.7	19689.1	978.5	19736.5	978.7
19757.1	988.9	19782.1	971.2	19783.9	970.6	19819.5	969.3	19835.1	971.8
19891	971	19954.9	970.8	20009.4	971.2	20054.1	972.9	20100.5	973.1
20107.5	972.7	20175.2	972.5	20253	971.7	20324.6	971.9	20395.6	971.7
20465.2	971.4	20539.7	971.3	20603.2	971.5	20661.9	971.9	20671.8	972
20743.2	970.2	20773.2	970	20795.3	976.9	20816.23	986.0935	20827.4	991
20878.6	990.5	20887.2	987	22239.1	987.1	22248.4	987.2	22254.3	988.2
22259.5	985.8	22266.1	987.7	22287.1	988.3	22317.8	988		

Manning's n Values num= 4

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
18066.2	.025	18774.5	.037	20827.4	.037	20878.6	.025

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
19100	20816.23	495	488	480	.1	.3

Ineffective Flow num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
18066.2	19100	991	20827.4	22317.8	991

CROSS SECTION RIVER: 1
REACH: 1 RS: 204.25

INPUT
Description: 204.25

Left and Right Channel Bank Stations Interpolated
Station Elevation Data num= 202

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
13993.51	986.9	14130.56	987.4	14486.44	987.43	14755.8	987.03	14937.72	987.04
15050.6	988.1	15090.94	987.5	15102.07	987.57	15109.44	988.64	15116.98	989.38
15128.77	988.1	15132.01	987.97	15140	988.47	15148.98	986.93	15153.86	985.73
15173.36	986.2	15690.75	986.18	15878.25	985.18	15889.67	986.28	15904.51	988.05
15907.38	988.1	15919.42	987.92	15924.1	987.47	15931.02	985.83	15970.22	986.25
16049	986.1	16175.22	986.02	16450.56	986.16	16463.91	986.29	16480.31	987.87
16486.56	987.4	16495.93	987.1	16504.19	987.79	16511.66	987.91	16518.49	987.78
16535.99	985.8	16542.09	985.62	16555	985.55	16564.89	984.28	16584.86	984.26
16687.99	984.8	16810.65	985.29	16823.94	985.32	16873.9	984.73	16893.09	984.53
16922.74	984.6	16941.4	984.26	16960.75	984.66	16990.05	984.33	17020.18	984.79
17048.94	986.6	17091.64	985.28	17177.92	98	17208.14	985.11	7249.69	984.95
17398.31	984.3	17414.87	984.49	17522.6	984.39	17556.82	984.21	17600.03	984.35
17721.19	984.2	17812.48	984.25	17851.5	984.81	17861.89	984.59	17867.1	984.93

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17880.92      98517892.56  984.3517898.26  983.9217932.23  986.4917944.09  986.98
 17988.7    986.718005.49  986.89 18050.6  987.5718083.28  987.6218106.23  986.76
18158.97    986.818174.45   987.118185.88  987.1218240.34  986.9218277.05  986.27
18300.85    986.118323.52  985.5518372.65  985.1418410.49  985.0818449.87  985.08
18490.27    985.5 18520.4  985.1518569.61   985.8 18587.9  985.7618609.93   985.4
18633.73    984.818652.28  984.25 18660.4  983.8518672.96  983.4118703.66  978.51
18719.46    976.218724.94   975.718730.59  976.2818765.73  981.3818788.83  981.86
18812.39      98218851.86  982.6718856.84  982.0218876.79  980.9318917.58  980.72
18958.37    980.818990.64  980.15 19005.3   981.3    19038  982.5519054.34  981.71
19061.47    981.919088.33  981.0319097.24  980.6119117.27  982.08 19126.5  981.33
19134.63    980.819139.73  980.7919178.34  980.9919189.92  980.9119237.27  980.78
19263.33    980.219297.08  979.95    19300 979.93619332.52  979.7819361.32  979.52
19438.75   979.41 19458.3   979.519506.35   978.719519.13  978.8519527.66  978.72
19542.19   978.7319623.64   978.619631.41   978.619649.23  978.6319696.73  978.82
19703.53   975.7119717.53   970.2    19739   971.319747.27  974.51 19771.1  974.27
20035.47   970.8820227.56   972.420273.64  972.3620297.51  972.19 20307.7  971.98
20309.92   971.7420357.54   969.8 20436.7  969.4420448.29  969.4520499.51  969.22
20526.05   969.29 20588.3   969.720612.99  970.1420643.57  971.0820655.61  971.37
20680.85   971.2420705.02   971.520710.67  971.3720740.01  974.1420776.89  977.31
20818.53981.025320830.46  982.09 20922.2   989.620964.06  989.9520995.89  990.41
21004.86   987.3921018.73  981.0821052.72   981.121087.73  980.7921108.33  980.92
21157.66    981.421178.54  981.5221210.73   981.221262.99  982.6321279.42  982.45
21290.06   979.4521361.92  980.42 21408.6   981.221446.51   981.421456.08  981.58
21481.84   981.6121499.03  981.7121649.19   981.921681.55  982.0721787.28  982.66
21862.63    982.921876.61  982.9521939.71   983.421983.01  983.3822043.39  983.78
22083.67   984.1722130.05  984.4322172.04   984.422225.83  984.5822265.02  984.87
22339.34   986.3522389.33  985.4622416.26   985.922438.79  986.0322474.98  986.32
22486.29   987.5222500.35  987.24

Manning's n Values          num=       3
     Sta   n Val      Sta   n Val      Sta   n Val
13993.51    .03518812.39    .03221290.06    .025

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
         1930020818.53              510     508     500              .1       .3
Ineffective Flow      num=        2
   Sta L   Sta R    Elev   Sta L   Sta R    Elev
13993.51   19300     990 20922.222500.35     990

CROSS SECTION           RIVER: 1
REACH: 1                   RS: 204.15

INPUT
Description: 204.15

Left and Right Channel Bank Stations Interpolated
Station Elevation Data      num=       80
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
 16507.2   984.4   16600     985 16650.2   986.1 16657.8   983.8 16666.8     986
 16708.7   983.2 16800.2   983.6 16895.3   983.8 16963.7   983.3 17111.7   982.5
 17141.8   982.4 17289.1   982.7   17397   983.7 17427.8   983.8 17571.9   983.4
 17609.8   983.3 17719.7   983.5 17833.6     983 17949.9   982.8 18031.8   984.3
 18081.2   983.6   18087   981.9 18093.6   985.1 18094.5   983.7 18130.3     986
 18214.6   985.6 18280.4   986.6 18357.2   984.7 18446.1   985.5 18578.2   984.4
 18725.8   984.7 18824.1   985.3 18862.3   983.1 18888.3   980.6   18907   981.1
 18955.1     980 19045.1   979.6 19065.5   979.9 19074.1   976.8   19104     969
 19192.6   971.7   19200   971.7 19310.3   971.7 19331.3   970.9 19446.3   971.9
 19486.8   971.6 19501.3   966.1   19595     966 19644.2   966.2   19661   973.6
   19681   970.2 19769.8   971.6 19860.6   972.7 19968.4   974.8 20027.5   972.3
 20066.1   967.9 20074.7   967.9 20209.5     968 20337.2   968.2 20441.7   967.7
 20540.9   966.7 20554.5   966.5 20580.4   968.8 20679.7   967.8 20753.2   967.1
 20790.2   968.9 20795.8   969.9 20814.5   969.5 20911.6   969.2   20940   967.1
 20986.5   968.321033.38981.5872 21042.6   984.2 21131.4   985.3 21379.2   985.3
 22652.4   985.2 22684.9   986.3   22693   983.9 22700.1   985.5 22708.9   985.4

Manning's n Values          num=       4
     Sta   n Val      Sta   n Val      Sta   n Val      Sta   n Val
 16507.2    .035 18824.1    .032 21131.4    .025 21379.2    .025

Bank Sta: Left   Right    Lengths: Left Channel   Right     Coeff Contr.   Expan.
         1920021033.38              510     509     510              .1       .3
Ineffective Flow      num=        1
   Sta L   Sta R    Elev
 16507.2   19200   986.6

CROSS SECTION           RIVER: 1
REACH: 1                   RS: 204.05

INPUT
Description: 204.05

Left and Right Channel Bank Stations Interpolated
Station Elevation Data      num=       73
     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev     Sta    Elev
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18304.1	982.1	18322.9	981.3	18412.7	981.2	18490.1	981.1	18499.9	981.4
18523	980.8	18527.4	981.7	18530.5	980.8	18552.5	980.6	18585.3	987.2
18649.8	986.5	18710.4	987.1	18782.2	985.8	18858.9	986.9	18882.3	985.9
18903.8	986.2	18952	984.5	18962.59	980.697	18970.1	978	18992.5	968.5
19020.9	971.4	19097.5	973.6	19099.9	973.6	19168.9	971.6	19234.1	970.7
19315.1	973.1	19401.3	974.1	19432.4	974.2	19453	972.9	19510.9	971.5
19570.9	965.6	19644.7	967.7	19662	968.9	19741.3	971.7	19784.3	975.1
19860.9	975.2	19946.2	976.1	20026.3	975.5	20061.6	973.5	20142.4	974.9
20200.7	974.3	20222.7	972.5	20272.6	972.8	20286.9	973.4	20327.7	971.7
20354.5	969.2	20434.3	970.9	20491.6	971.4	20536	969.7	20605	969.1
20618.5	968.7	20679.5	965	20701.3	965.4	20715.6	967	20746.4	966
20828.1	965.9	20914.2	966.5	20930	968.1	20994	968.4	21024.5	966.7
21045.1	967	21067.8	975.82	1081.76	980.6	981	21090.6	983.8	21160.1	983.8
22668.7	984.2	22676.7	984.2	22773.1	984.3	22829	984.6	22836.3	985.6
22843	983.5	22852.2	986	22860.7	985.9				

Manning's n Values num= 4

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
18304.1	.05	18552.5	.035	18858.9	.032	21090.6	.025

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
18962.59	21081.76	510	505	520	.1	.3

Ineffective Flow num= 1

Sta L	Sta R	Elev
18304.1	18750	987.2

CROSS SECTION RIVER: 1
REACH: 1 RS: 203.96

INPUT
Description: 203.96

Right Channel Bank Staion Interpolated
Station Elevation Data num= 91

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
16511.6	983.5	16713.4	983.8	16774.3	983.9	16908.7	984.4	16963.5	986.3
16968.1	982.5	16973.8	984.3	17039.3	980.6	17126.9	980	17138.9	980
17175.8	974.9	17222.8	980.2	17277.4	983.2	17284.8	982.3	17330	982.5
17366.5	984.4	17465.6	982.2	17576.8	981.2	17680.4	980.6	17774.7	979.6
17869.9	981.4	17958.4	981.2	18010.3	980.8	18015.8	982.2	18024.6	982.8
18047.1	980.2	18070.6	981.5	18128.1	982.9	18242.5	983.3	18284.4	984.3
18384	982.4	18469.6	983.6	18481.1	980.9	18496.2	979.1	18583.4	978
18607.3	975.5	18626.7	976.9	18657.9	976	18690	978.1	18723.2	976.2
18730.8	978.5	18760	974.5	18783.2	969.3	18801.2	968.9	18811.7	967.4
18891.8	971.9	18902.5	971.8	18997.2	971.4	19057.4	972	19069.5	973.6
19145.7	973.5	19201.5	971.8	19284.9	973.5	19375	977.1	19427.1	976
19471.7	976.7	19531.2	976.1	19556.4	976.8	19606.4	965.6	19696.9	968.3
19784.2	968.9	19847.3	971.5	19965.6	970.7	19998.5	972.3	20089.8	973.2
20179.8	972.3	20254.9	970.6	20367	970.8	20411.5	970.7	20421.4	969.4
20435.9	965.4	20451.7	964.7	20529.6	965	20554.9	967	20642.7	965.7
20735.2	964.2	20738.9	964.1	20767.7	971.2	20790.3	8978	.7393	20803.5	983.1
20835.5	994.9	20850.3	995.2	20872.5	997.5	20910.1	984.2	20997.3	981.9
21108.2	981.9	21539.6	982	21552	986.1	21559.4	984.2	21657.7	986.4
21694	988.5								

Manning's n Values num= 5

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
16511.6	.025	17175.8	.043	18469.6	.043	18902.5	.032	20835.5	.037

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
18730.82	20790.38	495	502	505	.1	.3

Ineffective Flow num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
16511.6	18730.8	997.5	20835.5	21694	997.5

CROSS SECTION RIVER: 1
REACH: 1 RS: 203.86

INPUT
Description: 203.86

Right Channel Bank Staion Interpolated
Station Elevation Data num= 97

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
17504.9	979.4	17555	980.7	17589.4	982.1	17613.5	980.8	17620.6	979.8
17657.6	978.3	17694.3	979.8	17718.4	978.9	17729	980.8	17762.1	977.4
17780.7	978.7	17821.9	984.3	17861.6	984.2	17888.2	982.4	17897.5	983.2
17930.6	983.2	17969.6	984.1	17989.1	983.6	18013.3	984	18044.9	981.7
18064.4	979.2	18096.7	981.5	18136.8	979.8	18171.7	980	18207.5	982
18243.1	982.7	18290.8	981.3	18353.7	982	18421.5	981.7	18458.6	982.1
18488.1	978.2	18540.3	978.5	18564	971	18599.5	968.8	18660.4	971
18700.2	971.8	18760.2	970	18806.7	971.3	18853.4	969.4	18891.2	969
18974.3	973.5	19064.8	976.5	19077.3	975.8	19161.8	973.4	19223.1	970.5
19246.5	967.4	19268.5	965.8	19288.8	962.4	19365.2	962.6	19365.7	962.6

19450.7	962.8	19451.6	962.8	19539.2	963.1	19611.5	963	19690.6	962.4
19743.6	962.3	19811.2	962.7	19858.2	963.1	19928.9	963.6	19992.8	963.8
20013.5	963.8	20076.4	964	20099.2	964	20196.1	964.2	20254.4	964.2
20298.4	964.5	20318.1	968.2	20429.2	967.6	20486.9	967.6	20543.1	968.6
20555	966.5	20576	964.2	20634.3	964.2	20650.7	964.2	20663.3	965.7
20676.9	965.8	20697.7	967.2	20730.9	976.1	20735.9	978.6323	20761.9	991.8
20803.3	981	20878.5	982.5	20946.4	982.5	20965.7	981.1	21031.2	980.5
21099.9	980.6	21167.6	980.7	21198.2	981	21258.8	981.1	21324.9	981
21359.8	980.5	21368.4	981	21395.8	980.4	21405.9	982.4	21411.7	980.4
21482.6	980.2	21488.8	980.2						

Manning's n Values num= 4

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
17504.9	.043	18243.1	.043	18891.2	.032	20761.9	.037

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
18488.1	20735.9		505	498	480	.1	.3

Ineffective Flow num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
17504.9	18243.1	991.8	20761.9	21488.8	991.8

CROSS SECTION RIVER: 1
REACH: 1 RS: 203.77

INPUT
Description: 203.77

Left and Right Channel Bank Staions Interpolated
Station Elevation Data num= 98

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
15516.5	980.4	15611.3	979.8	15668.7	980.9	15700.1	979.6	15734.7	982.9
15797.9	987.2	15835	986	15865.2	981.2	15920	981.4	15937.6	976.9
15947.6	978.2	15969.6	982.9	15985.2	984.3	16056.9	984.3	16076.8	983.7
16103.9	981.6	16184.4	981.2	16265.9	982.1	16312.5	981.7	16348.3	982.1
16366.7	978.9	16400.4	980.3	16452.6	980.5	16569.1	980.4	16622.2	980.5
16857.6	980.3	17032.7	979.9	17052.5	979.9	17220.4	979.9	17326.1	979.2
17424.8	979	17450	979.3	17461.6	980.3	17495.9	980.1	17515.6	978.2
17558.9	979.2	17678.1	978.7	17709.3	979.1	17747.1	977.4	17826.8	982.9
17879.9	983.7	17902.1	982.1	17924.4	981.6	18003.9	982.8	18091.9	980.7
18117.2	979.8	18191	981.8	18222.6	1978.2686	18227.7	977.7	18281.9	974.6
18343.8	974.4	18371.2	970.5	18451.7	968.1	18515.7	969.6	18591.7	968.7
18603.5	969.7	18721.8	967.3	18770.9	970.5	18803.6	971.5	18834.8	974.6
18888.2	976.1	18941.5	973.8	18956.3	972.3	18974.2	976.6	18983.5	976.3
19032.5	965.6	19113.9	965.1	19224	964.8	19282.2	964.6	19290.6	969.7
19307.6	974.2	19313.1	973.7	19322.8	969.5	19338.6	967.2	19345.7	964.7
19426.8	964.5	19492.9	964.4	19606.6	964.2	19685.9	964.3	19717.5	964.1
19865.4	964.1	19957	963.3	20019.3	964.3	20221.9	964.3	20253.9	964.3
20282.3	966.5	20325.8	965.1	20328.7	964.2	20338.6	965.4	20430	966.2
20524.9	966.2	20609.1	966.4	20684.8	966.7	20728.9	97120745.61978.2692		
20746.6	978.7	20820.8	981.2	20854	997.6				

Manning's n Values num= 5

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
15516.5	.025	17495.9	.043	18191	.043	18803.6	.032	20820.8	.025

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
18222.6	20745.61		490	498	480	.1	.3

Ineffective Flow num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
15516.5	18191	997.6	20820.8	20854	997.6

CROSS SECTION RIVER: 1
REACH: 1 RS: 203.67

INPUT
Description: 203.67

Right Channel Bank Staion Interpolated
Station Elevation Data num= 74

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
15401.1	982.5	15424.7	984.1	15508.1	982.3	15591.4	979.1	15681.8	979.9
15787.8	979.3	15920	979.3	16055.7	978.9	16157.5	979.1	16260.6	979.3
16282.2	979.2	16477	979.1	16627.1	979.9	16750.8	980.1	16865.7	979.3
16957.3	981.3	16980.5	980.6	17002.4	977.7	17014.1	979.2	17103.7	973.3
17179.5	973.2	17215.7	975.7	17267.4	969.7	17366.5	975.6	17541.8	974.3
17694.8	973.7	17837.2	974.1	17962.6	973.8	17982.5	973.7	18104.5	972.8
18289.3	972.9	18348.9	975.3	18350.2	973.2	18394.8	968.7	18516.9	971.1
18627.3	969.9	18690.1	970.4	18740.2	966.8	18787.4	966.3	18802.9	968.2
18941.9	973.8	19049	974.1	19155.9	972.4	19180.7	975.8	19211.3	962.3
19411.4	963.8	19519	963.9	19654.3	964.2	19798.6	964.3	19832.9	964.3
20036.1	964.3	20137.2	965.3	20302.2	963	20432.8	965.2	20537.5	965.2
20656.2	965.3	20661.5	965.6	20693.5	975.1	20699.3	977.8097	20708.7	982.2
20796	983.8	20827.7	980.1	20837	982.9	20858.2	981.6	21858.6	983.5
21904.3	982.5	23520.4	980	23527.3	982.8	23545.1	983.5	23556.1	980.2

23584.2	981.5	23593	977.2	23603.5	980.1	23621	979.7

Manning's n Values num= 6

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
15401.1	.025	16957.3	.037	18348.9	.037	18941.9	.032	20708.7	.032
20796	.025								

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
18348.9	20699.3	470	490	505	.1	.3

Ineffective Flow num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
15401.1	17837.2	984.1	20708.7	23621	984.1

CROSS SECTION RIVER: 1
REACH: 1 RS: 203.58

INPUT
Description: 203.58

Right Channel Bank Staion Interpolated
Station Elevation Data num= 75

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
15526.8	983.1	15573.8	984.7	15577.9	981.7	15586.4	984.8	15648.9	982.8
15684.7	983.7	15735.5	978.7	15806.7	977.9	15925.6	978.3	15954.8	978.2
16031.7	974.4	16204.9	973.9	16321.4	974.3	16490.9	975.4	16570	975.3
16706.6	974.9	16819.9	975.7	16971.3	975.7	17120	975.1	17136.9	976.6
17168.4	976.1	17202.6	978.2	17251.4	973.9	17388.1	976	17458.2	974.6
17489	971.8	17596.3	976.7	17707.8	975.2	17790.7	972.4	17873.7	975.6
17978	974.3	18064.9	975.2	18204	975.9	18355.4	971.3	18433.8	971.3
18553.6	967.4	18636	970.5	18664.8	967.3	18681	970.8	18724	969.1
18765.5	971	18876.6	970.7	18988.9	970	19101.4	968.2	19228.7	965.4
19261.3	964.2	19337.3	967.8	19426.3	965.2	19456.9	967.4	19474	963.9
19482.9	963.9	19725.9	963.6	19842.5	963.6	19929.1	963.8	20222.2	963.5
20355.7	963.9	20380	963.9	20543.8	963.6	20636	963.9	20645.5	962.1
20704.98	977.3868	20706.2	977.7	20767.4	979.5	20782.3	981.3	20788.1	979.3
20818.3	979.5	20825.7	982.3	20859.8	981.5	22062.2	983.3	22098	982.2
23711.2	980	23724.5	982.4	23738.8	982.8	23750.9	979.2	23783	979.2

Manning's n Values num= 5

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
15526.8	.025	17202.6	.037	18204	.037	18681	.032	20782.3	.025

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
18204	20704.98	560	513	495	.1	.3

Ineffective Flow num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
15526.8	17707.8	984.8	20782.3	23783	984.8

CROSS SECTION RIVER: 1
REACH: 1 RS: 203.48

INPUT
Description: 203.48

Right Channel Bank Staion Interpolated
Station Elevation Data num= 97

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
15578.8	977.1	15693.5	976.9	15717.9	977	15814.4	976.9	15880.9	978.5
15900.7	978.2	15967.5	973.1	16013.9	973.9	16068.7	973.5	16168.1	973.8
16324.7	974	16419.6	974.1	16584.4	974.1	16657.7	974.3	16810.8	974.5
16932.4	974.5	17066.5	974.6	17177.1	974.2	17201.7	974.2	17312.2	975.1
17331.6	976	17341.7	975.7	17369.6	978.2	17434.9	970.7	17473.9	969.3
17535.6	971.3	17609.4	970.9	17714.8	972.8	17721.6	972.8	17841.5	973.7
17932.6	974	18016.7	972.4	18039.3	972.1	18120.3	973.5	18171.8	968
18184	969.1	18267.5	973.4	18353.5	970.9	18380.1	969.8	18439	969.7
18521.1	965.52	18538.6	965.3	18561.3	969.6	18571.7	970	18619.2	968.6
18635.6	969.2	18675.5	973.1	18730.7	972.2	18817.1	970.9	18956	969.1
18991.1	970.6	19035.5	973.7	19082.7	974.1	19116.8	968.9	19177.6	972.2
19217.3	970.5	19332.9	970.5	19399.6	962.9	19491.7	962.7	19584.5	965.1
19624.3	962.2	19645.8	962.3	19669.3	965	19679.4	965.3	19794.5	963.4
19884.7	963.3	19987.2	964.5	20013.9	964.4	20199.2	964	20220.6	964.7
20227.4	967.6	20231.3	963.9	20325.6	963.9	20342.5	963.9	20345.7	965.5
20353.5	967.3	20358.6	964.3	20404	963.2	20433.1	965.2	20458.7	965
20480	963.1	20588.9	964.7	20638.4	966.8	20725.1	968.7	20785.1	971.2
20856.76	976.9083	20866.7	977.7	20886.7	979.4	20901.8	978.6	20909.2	979.5
20915.7	978.5	20925.9	979.4	20953.9	979.4	20960.7	978.7	20985.4	978.7
20989.2	980.3	20999	981.2						

Manning's n Values num= 5

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
15578.8	.025	17369.6	.037	17932.6	.037	18619.2	.032	20886.7	.025

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
17932.6	20856.76	500	505.82	515	.1	.3

Ineffective Flow num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
15578.8	17369.6	981.2	20999	20999	981.2

CROSS SECTION RIVER: 1
REACH: 1 RS: 203.39

INPUT
Description: 203.39
Station Elevation Data num= 96

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
15500	974.4	15548.5	978.1	15604.9	974.8	15609.8	975.3	15717.3	976.3
15722.2	976.3	15836.5	975.1	15864.7	976.6	15875.6	973	15888.1	975.4
15914.3	976.1	16076.8	976.1	16271.9	976.2	16290.8	976.1	16376.9	976.2
16390.2	976.2	16520.6	976	16549.4	977.1	16694.9	973.2	16751.5	970.2
16832.2	968.6	16901	973.2	17053.7	971.4	17105.6	971.5	17120	974.9
17136.1	970.9	17147.5	974.3	17212	975.5	17260.9	972.8	17296.2	974.2
17353	971.2	17382.3	974.9	17417.1	974.8	17453.9	976.4	17519.2	968.1
17602.4	973.1	17694.4	971.8	17733.8	970.7	17815.5	973	17901.2	972.3
17947.7	972.1	17970.8	973	18042	972.8	18114	969.5	18199.7	969.1
18207.5	968.6	18224.3	964.4	18259.9	963.8	18330.5	967.6	18418.7	967.4
18507.8	969.8	18601.7	972.8	18629.1	974.7	18686.7	980.9	18738	974.3
18773.9	975.9	18902.4	975	19023.2	970.3	19056.6	971.7	19105.2	965.4
19218.1	968.3	19268.2	972	19346.8	971.4	19370.8	969.4	19397.9	965.7
19418.4	960.4	19479.4	959.9	19491.4	962	19633	960.6	19736.1	965
19770.9	965.7	19800.9	963.8	19816.1	965.5	19916.4	965	20010.4	963.8
20159.5	964.6	20260.9	963.8	20303.7	964.2	20330.3	963.1	20346	964.4
20389.8	962.9	20483.7	964.2	20485.1	964.9	20576.8	964.7	20682.1	965.3
20789.2	969.4	20834.2	971.9	20922.2	969.5	20993.5	968.3	21038.8	975.6
21082.9	975.6	21098.5	976.5	21138.2	977.4	21143.6	978.2	21153.1	976.5
21223	978.3								

Manning's n Values num= 5

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
15500	.025	16832.2	.037	17970.8	.037	18601.7	.032	21038.8	.025

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
17970.8	21038.8	500	505	500	.1	.3

Ineffective Flow num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
15500	17519.2	980.9	21223.3	21223	980.9

CROSS SECTION RIVER: 1
REACH: 1 RS: 203.29

INPUT
Description: 203.29

Right Channel Bank Staion Interpolated
Station Elevation Data num= 97

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
14306.7	975.2	14398.4	975.7	14462.6	975.2	14487	977.9	14491.6	976.6
14498.9	977.7	14515.3	976.7	14528	974	14553.9	972.7	14670.7	972.7
14687.5	972.7	14856.4	972.7	14867.5	972.7	15002.5	972.7	15006.1	972.7
15100.1	972.9	15122.5	975.2	15172.8	972.4	15364.8	972.7	15484.5	974
15649.2	973.6	15701.1	973.4	15710	975.9	15724.5	974.3	15776.8	976.4
15815.8	974	15918.9	974.9	15999.4	974.9	16112.9	975.4	16114.8	975.5
16293.6	975.5	16301	975.5	16411.1	976	16465.5	976	16664.1	976
16733.3	975.8	16808.3	976.1	16968.8	976.1	17062.2	976.1	17153	976.2
17251.7	975.1	17286.9	974.6	17327.4	969.3	17410.1	970.5	17467.7	974.5
17469.8	973.6	17539	974.4	17590	968.4	17649.5	971.4	17775.2	971.1
17888.5	970.4	17987.9	968.4	18065.6	972.5	18117.7	969.6	18146.3	971.6
18204.1	968.8	18247.3	971.6	18266.5	967.8	18378.2	963.9	18464	968.2
18535.2	966.5	18593.9	967.2	18627.7	974.8	18719.2	971.5	18838.7	974.7
18920	973.9	18947.9	969.3	19046.6	972.7	19166.7	971.8	19269	971.6
19295.1	965.4	19325.9	960.7	19447.7	960.9	19552.4	961.6	19655.6	961.1
19756.7	962.1	19849.6	963.4	19945.3	963	20028	965.9	20124.9	965.7
20226	965.2	20297.8	963.6	20378.8	964.4	20396.1	961.9	20494.8	962.8
20586	966.7	20676.2	969.1	20796.8	969	20894.8	969.2	20935.1	968.4
20981.6	969.2	21027.6	966.6	21082.58	975.7	482 21088.3	976.7	21155	977.1
21257.1	975.6	21295	976.3						

Manning's n Values num= 5

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
14306.7	.025	16968.8	.037	18065.6	.037	18535.2	.032	21088.3	.025

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
18065.6	21082.58	620	535	420	.1	.3

Ineffective Flow num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
14306.7	17590	977.9	21088.3	21295	977.9

CROSS SECTION RIVER: 1
REACH: 1 RS: 203.19

INPUT
Description: 203.19

Right Channel Bank Staion Interpolated
Station Elevation Data num= 97

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
16639.2	974.6	16696.5	974.6	16879.5	976.3	16960.6	976.7	16982.2	976.1
16987.1	975.2	16999.5	976.6	17045.2	975.2	17145.4	975	17180.8	974.8
17306.9	974	17389.7	974.5	17513.2	972.9	17539	972.7	17596.6	969.7
17650.2	971	17690.3	968.3	17762.5	967.5	17781.9	968.4	17812.7	966.2
17893.5	967.8	17945.6	971.7	18023.5	971.3	18058.7	964.6	18099.2	971.6
18139.8	972.1	18185.8	967.2	18251.5	970.8	18282.1	971.9	18338.2	971.3
18384.4	969	18406.2	969.7	18445.9	965.2	18495.1	966.4	18521	969
18558.4	964.7	18605.8	963.2	18623.9	961.2	18659	961.4	18701.5	965.4
18712.2	964.5	18734.5	964.5	18797.4	970	18848.7	968.9	18911.7	969.9
18983.1	969.7	19009.9	968.7	19025	967.1	19031	968.2	19080.8	968.8
19095.4	970.3	19159	970.9	19191.3	967.9	19256	967.2	19294.3	960.1
19346.5	959	19442.2	956.7	19471.8	962.7	19542.3	963	19643.7	963.4
19644.6	963.4	19721.9	962.3	19788.7	962.7	19870	964.6	19925.6	962.6
19971.9	966.8	20041.3	966	20111.2	965.3	20142.5	963.8	20233.9	963.3
20336.2	963.2	20384.6	963.4	20398.2	962.6	20462.1	962.2	20541.1	965.2
20570.6	966.9	20635.2	967.1	20669.2	965.5	20696.2	966.5	20752.9	964.7
20795.4	967.4	20825.2	966.9	20848.9	967.5	20865.3	966.7	20898.7	966.8
20928.5	970.1	20952.6	973.8	20965.3	9974.9827	20981.8	976.5	20999	975.6
21013	977.9	21075.8	975.9	21096.9	975.8	21174.9	976.1	21273.9	975.8
21344.5	975.8	21380	975.6						

Manning's n Values num= 6

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
16639.2	.025	17762.5	.043	18282.1	.043	18734.5	.037	20981.8	.025
21013	.025								

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
18282.1	20965.39		535	520	485	.1	.3

Ineffective Flow num= 1

Sta L	Sta R	Elev
16639.2	17587	978

CROSS SECTION RIVER: 1
REACH: 1 RS: 203.09

INPUT
Description: 203.09

Right Channel Bank Staion Interpolated
Station Elevation Data num= 97

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
16077.3	972.6	16108.8	973.2	16114.5	973.9	16141.2	974.9	16147	976.1
16177.1	975.5	16186.3	974.5	16217.9	974.3	16296.3	973.5	16396.3	973.6
16495.1	973.6	16619.4	973.4	16649.6	973.4	16802.2	973.6	16847.8	974.3
16927.3	974.4	16967.8	974.4	17063.1	975.3	17138.5	975.2	17150.2	974.9
17158.9	972.7	17171.5	974	17175.5	975.3	17183.4	974.2	17268	973.7
17382	973.8	17583.9	974.5	17588.1	974.4	17656.3	973	17724.5	971.9
17787.2	966	17835	968.2	17878.2	968.6	17889.9	967.6	17960.8	969
18034.5	970.7	18151.5	966.1	18178.5	966.8	18202.2	966.1	18277.6	970
18313.5	969.4	18321.1	969.7	18364.1	965.2	18437	969.5	18507	971.4
18541.2	970.5	18605.3	962.2	18681.6	963	18770.4	960.8	18814.5	971
18875.7	969	18992.4	969.2	19035.2	968.4	19104.8	968.6	19136.4	968
19190.2	961.9	19211.5	961.8	19247.1	964	19266.9	960.3	19282.4	958.7
19461.8	959.9	19573.5	959.6	19585.9	960.2	19653.1	960.1	19682.3	962.4
19752.6	963.1	19757	963.1	19865.5	961.3	19934.1	962.2	20005.1	964.6
20113.7	965.7	20184.3	965.7	20264.8	966	20287.7	966.2	20364.7	966.6
20397.2	966.4	20469.2	966.1	20498.9	964.4	20517.6	961.6	20546.5	960.5
20610.5	960.6	20636.9	964.4	20681.6	965.4	20709.6	964.4	20742.1	962.1
20765.3	962.2	20780	963.2	20812.8	959.6	20837.9	961.3	20914.8	2973.8939
20917.3	974.3	20926.9	975.4	20942.8	974.2	20972.4	973.4	21023.3	975.3
21111.6	973.6	21171	974.1						

Manning's n Values num= 5

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
16077.3	.025	17588.1	.043	18507	.043	18814.5	.037	20917.3	.025

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
18507	20914.82		520	518	500	.1	.3

Ineffective Flow num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
16077.3	17583.9	976.1	20917.3	21171	976.1

CROSS SECTION RIVER: 1
REACH: 1 RS: 202.99

INPUT
Description: 202.99

Station Elevation Data num= 96

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
17058.5	973.2	17114.3	973.5	17267.7	973.8	17289	973.9	17305.6	974.4
17316.7	973.3	17329.5	974.7	17397.2	973.4	17508.3	973.5	17530.6	972.5
17571.7	973.2	17646.3	973.1	17659.9	972.5	17696.1	969.8	17713.5	970
17723.9	969.1	17781.1	967.5	17850.9	965.7	17864.6	967.2	17879.9	968
17893	968.2	17922	965.3	17941	964	17984.7	968.4	18035.6	970
18091.7	969.9	18126.6	969.7	18186.5	969.9	18238.3	970	18288.7	964.3
18293.1	963.9	18346.5	968.2	18360.3	967.9	18420.8	969.3	18469.4	969.3
18497.6	968.2	18580.4	968.7	18586.2	968.9	18608.3	967.1	18619.4	964.4
18650.8	965	18666.5	962.2	18686.7	961.6	18748.1	962.5	18789.2	962.8
18875	962.8	18906.3	963.4	18945.7	961.5	18988.8	963.5	19005.4	963.6
19058	964.4	19119.4	964.2	19128.8	964.3	19182	965.3	19208.5	964.3
19269.4	961.7	19318.8	960.3	19334.7	959.8	19391.3	959.8	19415.3	959.6
19435.9	960	19527.6	959.5	19609.2	959.5	19725.7	959.2	19759.9	960.9
19828.4	961.4	19945.2	960.7	19948	960.7	20028.5	959.3	20090	960.7
20131.7	963.1	20172.8	964.1	20227.9	965.4	20241.1	965.3	20304	965
20364.7	965.9	20422.1	964.9	20460.6	964.9	20528.6	963.3	20552.5	959.7
20558.2	959.8	20619.9	962.6	20665.6	962	20682.4	960.6	20692.5	959.3
20713.5	960.1	20748.9	960	20773.8	959.3	20789	960.3	20808	960.6
20818.5	963.8	20841.7	963.9	20894.5	963.1	20926.9	970.2	20960.7	976.4
20976	975.9								

Manning's n Values num= 5

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
17058.5	.025	17646.3	.043	18469.4	.043	19058	.037	20926.9	.043

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
18469.4	20926.9	480	456	424	.1	.3

Ineffective Flow num= 1

Sta L	Sta R	Elev
17058.5	17646.3	976

CROSS SECTION RIVER: 1
REACH: 1 RS: 202.9

INPUT
Description: 202.9

Right Channel Bank Staion Interpolated
Station Elevation Data num= 97

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
16149.3	972.1	16219	972.6	16381.4	973.3	16446.1	973.3	16495.7	974.5
16526.4	971.9	16579.2	972.6	16597.9	974.5	16618	973.6	16631.4	972.3
16699.5	972.9	16755	974.1	16804	971.3	16823.8	973.1	16887.1	972.5
16957.5	972.2	16968.8	972.6	17046.9	971.4	17089.7	971.9	17151.8	972
17172.3	972.1	17235.7	971.8	17304.6	971.3	17369.1	970.9	17440.5	971.3
17504.7	971	17572.9	970.6	17644	970	17676.2	972.2	17699.3	970.6
17772.5	968.5	17815	965.7	17875.4	965.2	17896.7	963.8	17966.8	965.8
18000.2	967.5	18046.2	967	18087.7	964.4	18148.3	968.4	18203.5	967.3
18258.7	965	18308.6	967.1	18383	966.5	18433.6	966.6	18455.6	968.2
18517.5	967.7	18563	962.4	18611.6	961.8	18646	958.2	18714	961.6
18808.1	961.6	18872.7	961.1	18917	963.4	18971.7	963.8	19054.2	965.2
19121.2	965.8	19211.2	964.4	19215.4	966	19303.3	961.5	19368.9	960.3
19378.2	959.7	19431.8	961.6	19460.5	960.1	19592.2	957.9	19666.6	958.3
19722.9	960.9	19833.6	959	19903.1	959.5	19944.9	961	20063.7	959.6
20145.5	959.8	20206.7	960.4	20250.7	959.4	20318.7	958.5	20412.7	962.7
20460.7	961.4	20488.5	963.8	20502.9	964	20545	960.1	20596	959.7
20624.3	960.6	20694.4	959	20754.9	958.5	20806.5	956.5	20831.6	957.9
20858.2	961.1	20861.7	962.3	20936.5	969.5	20988.5	971.9	20993.5	972.3
21011	973.7	21025.1	975.7	21027.9	980.1	21042.4	977	21052.5	978.4
21066.1	978.5	21080	974.2						

Manning's n Values num= 5

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
16149.3	.025	17815	.043	18455.6	.043	18872.7	.037	21011	.043

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
18455.6	20993.5	575	538	460	.1	.3

Ineffective Flow num= 1

Sta L	Sta R	Elev
16149.3	17500	980.1

CROSS SECTION RIVER: 1
REACH: 1 RS: 202.8

INPUT
Description: 202.8

Right Channel Bank Staion Interpolated
Station Elevation Data num= 97

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
16524.8	970.3	16556.4	971.5	16586.6	971.3	16591.4	972.2	16622.9	972.3
16660.4	974.1	16671.5	973.8	16699.8	970.7	16750	971.8	16768.2	970.7

16810	971.7	16908.3	970.6	16968.5	970.2	16997.3	973.4	17058.9	971.8
17081	970.9	17148.9	971	17188.6	970.2	17279.5	971.1	17348.6	971
17423	970.4	17488.6	969.6	17496.3	969.7	17556.3	970.2	17607.5	969.3
17662.7	971.7	17678.2	969.4	17755.1	968.2	17771.4	968.3	17836.1	965.5
17897.9	964.9	17974.2	962.8	18017.4	962.7	18037.3	963.4	18039.7	964
18135.1	964.3	18137.8	964.2	18205	963.3	18273.4	965.1	18313.6	965.5
18348.1	967.5	18390.8	968.8	18406.9	966.2	18434.5	959.9	18478	958.9
18492.5	956.4	18526.7	958.4	18618	960.3	18696.7	962.9	18716.3	963.1
18761.6	962.1	18858.8	963.6	18897.8	963.7	18966.5	960.9	18996.3	959.9
19072.2	959.5	19083	959.6	19151.4	960.5	19243.7	960.1	19333.5	960.5
19396.1	960.6	19435.5	960.4	19525.6	959.5	19621.8	960.4	19685.6	961.9
19750.9	962.5	19813.5	963.5	19828.2	963.6	19893.3	963.5	19985.3	961.5
20027.7	961	20127.3	961.5	20220.9	962	20261.5	962.8	20325.2	962.5
20339.8	963.1	20397.5	960.8	20461	959.3	20525.1	958.4	20576.6	957.1
20634.6	957.7	20682.6	958.4	20759.8	957.1	20823.5	956.8	20855.2	957.6
20859.5	958.4	20873	957.9	20906.1	958.3	20955.4	956.8	20983.8	959.2
20987.6	962.6	21013.7	971	21014.9	969	71.6307	21019.3	973.8	21057.4	987.6
21082.8	986	21093	986.3						

Manning's n Values num= 5

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
16524.8	.025	17771.4	.043	18390.8	.043	19243.7	.037	21019.3	.043

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
18390.8	21014.96	600	555.5	450	.1	.3

Ineffective Flow num= 1

Sta L	Sta R	Elev
16524.8	17279.5	987.6

CROSS SECTION RIVER: 1
REACH: 1 RS: 202.69

INPUT
Description: 202.69

Right Channel Bank Staion Interpolated
Station Elevation Data num= 97

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
17011.6	967.7	17023.5	967.7	17027.5	969.7	17103.8	970.9	17146.9	971.1
17176.2	972.4	17191.8	969.4	17194.6	968.5	17229	967.1	17294.2	968.5
17355.9	968.4	17445.9	967	17473.9	966.6	17539	968.1	17612.5	967.1
17670.9	967.5	17744.3	967.8	17814.2	967.3	17864	971	17864.9	969.3
17868	967.6	17892.1	965.9	17941.9	963.7	18000.1	961.6	18034.8	963.6
18086.5	962.2	18149.2	965.2	18155.1	964.6	18181.7	966.5	18238.5	967.5
18278.8	966.4	18296.3	967	18357.8	968.5	18371.8	972.9	18377.8	973.6
18394.4	971.5	18484.4	971	18522.7	971.5	18539.1	964.7	18552.9	960.1
18644.5	957.3	18707	953.7	18734.1	956.4	18813.8	956	18848.2	955.5
18893.1	956.3	18953	954.8	19004.8	957.3	19084.1	957.6	19157.7	958.3
19178.7	958.5	19240.7	959.5	19322.9	960.8	19365.9	962.7	19411.4	962.6
19474.6	962.5	19548.6	961.5	19628.5	961.4	19720.2	962.7	19779.3	961
19788.6	961.1	19848.4	962	19949.8	964.6	20005.6	961.1	20016.8	961.1
20083.2	961	20101.5	960.8	20164.7	959.6	20249.5	962.2	20340.4	963
20436.6	963.5	20463.4	963.4	20522.8	963.7	20592.1	963.4	20658.5	962.2
20698.9	961.2	20768.7	958.6	20856.6	958.8	20890.1	958.6	21023.8	956.8
21070.8	960.8	21077.4	967.1	21081.8	970.8403	21085.4	973.9	21098	980.8
21103.6	981.6	21111.1	978.1	21139.5	981.1	21166.7	979.8	21198.8	976.9
21211.8	978.5	21216.7	978.5	21220.2	977.8	21223.7	977.9	21225.4	978.5
21238.2	975.1	21274	973.3						

Manning's n Values num= 5

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
17011.6	.025	17868	.043	18377.8	.043	19084.1	.037	21103.6	.043

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
18377.8	21081.8	585	566.1	510	.1	.3

Ineffective Flow num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
17011.6	17176.2	981.6	21274.4	21274	981.6

CROSS SECTION RIVER: 1
REACH: 1 RS: 202.59

INPUT
Description: 202.59

Right Channel Bank Staion Interpolated
Station Elevation Data num= 97

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
17002.6	972.3	17024.4	972.3	17044.5	970.3	17059.2	968	17094.8	969.6
17174.4	971.6	17206.5	971.5	17240	970.3	17269.6	966.5	17294.8	968.3
17332.9	969.6	17346.3	969	17365.3	965.5	17382.1	965.5	17399.6	966.6
17456.2	967.4	17523.1	966.7	17531.4	966.1	17557.2	966	17651.6	966.7
17719.5	967.2	17792.8	966.6	17824.5	966	17874.3	968.6	17886.2	967.6
17905.4	963.2	17965.1	963.4	18022.2	961.6	18100.5	965.1	18174.1	965.7

18210.5	964.5	18233.1	965.7	18298.3	968.6	18346.1	966.9	18416.7	969.6
18505.8	969.5	18556.9	967.5	18622.3	970	18641.7	970	18695.8	961.6
18704.2	959.5	18757.3	962	18789.4	959.6	18857.2	957.4	18891.5	955.7
18960	953.7	18984.2	957.3	19041.9	957.5	19094.7	960.1	19217.7	959.4
19264.1	960.3	19322.3	963.2	19396.6	964.3	19407.1	961.9	19425.6	960
19426	960.9	19488.2	960.7	19564.4	961.7	19640.1	961.8	19698.4	962.2
19757.8	961.8	19850.5	959.2	19935.3	960.1	19956.2	961	19994.3	961.1
20000.8	960.6	20005.1	959.6	20026.1	957.7	20112.1	958.6	20156.3	960.2
20218.5	960.8	20291.8	962.8	20371.5	961.1	20441.9	962	20501.9	959.5
20592.8	959.1	20699	957.2	20711	957	20803.1	957	20825.8	957.1
20901.9	957.5	20941	958.6	20978.1	956.7	21025	956.8	21152.1	957.5
21195.0	9969.8993	21199.6	971.2	21234.1	969.1	21236.8	970.4	21264.7	967.7
21299.7	971.3	21305.5	967.6	21325.7	957.4	21362.7	958.8	21403.9	974
21429.1	977	21478	977.8						

Manning's n Values num= 5

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
17002.6	.025	18022.2	.043	18416.7	.043	19217.7	.037	21403.9	.043

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
18416.72	1195.09		400	561.2	640	.1	.3

Ineffective Flow num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
17002.6	17332.9	977.8	21200	21478	977.8

CROSS SECTION RIVER: 1
REACH: 1 RS: 202.48

INPUT
Description: 202.48

Right Channel Bank Staion Interpolated
Station Elevation Data num= 97

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
17009.6	967.6	17022.6	967.5	17087.4	968.9	17103.6	970.4	17112.7	969.9
17147.3	972	17156.9	971.8	17158.2	972.3	17178.9	971	17194.4	968
17247.5	968.9	17346.9	969.1	17398.9	969.9	17439.3	968.6	17487.9	968.6
17510.1	966.5	17588.4	966.2	17656.6	965	17699.5	965.1	17766.7	963.2
17818.3	961.3	17890	963.8	17903.9	964.7	17928.8	961.3	17945.4	959.8
17990.2	960.1	18038.4	959.4	18049.4	960.1	18123	963.9	18190.8	965.8
18202.9	966.1	18268.8	964.1	18281.9	963.4	18373.9	966.8	18446.2	967.8
18518.9	965.4	18575.8	971.2	18611.2	970.9	18639.1	969.5	18713	961.6
18741.6	959.3	18784.7	961.7	18862.1	959	18930.8	954.4	19044.5	952.5
19074.6	956.5	19142.6	957.5	19190.4	959.1	19212.4	958.4	19300.6	961.8
19319.9	962.4	19391.1	961.2	19413.8	960.8	19449.5	958.2	19532.2	958.9
19643.4	959	19750	959.8	19755	959.8	19836.5	958.7	19940.1	961.4
20015	957.1	20042.9	956.5	20093.3	957.6	20148	959.8	20169.8	958.7
20238.1	957.7	20350.9	956.9	20382.1	955.8	20443.3	956.5	20518.7	957.1
20582.5	957.3	20605	956.3	20635.4	956.3	20720.3	959.3	20738.9	959.4
20761.4	962.7	20791.3	965.4	20855.9	962.6	20874.6	962	20962.4	963.2
21037.1	963.2	21067	962.7	21100.7	957.5	21141.9	956.9	21226.2	955.6
21274.2	959.7	21307.36	968.958	21309.3	969.5	21365.5	967.8	21385.7	965.3
21411.6	965.6	21424.5	960.8	21433.2	956.4	21477.4	957.2	21505.2	969
21532	978.5	21590.9	977.9						

Manning's n Values num= 4

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
17009.6	.043	18575.8	.043	19074.6	.037	21532	.043

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
18575.82	1307.36		700	576.2	385	.1	.3

Ineffective Flow num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
17009.6	17398.9	978.5	21309.3	21590.9	978.5

CROSS SECTION RIVER: 1
REACH: 1 RS: 202.37

INPUT
Description: 202.37

Right Channel Bank Staion Interpolated
Station Elevation Data num= 97

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
17046.5	966	17144.2	966.4	17159.7	966.4	17174.6	968.6	17199.8	968.8
17234.1	972.8	17240.1	970.8	17243.5	970.9	17244.9	973.1	17262.2	972
17288.2	966.3	17339.4	966.6	17390.7	968.1	17480.2	967.1	17572.6	967.5
17609.6	965.2	17687.4	964.4	17729	964.2	17762.4	962.8	17818.6	964.2
17908.4	962.3	17967.5	961.6	18000.2	964	18038.7	964.1	18072.2	959.7
18099.8	957.9	18104.7	958.4	18151.6	958.4	18194.7	959.1	18243.6	962.8
18315.7	961.8	18394.4	965.8	18412.7	966.2	18470.8	964.2	18481.7	964.7
18501.3	969.1	18508.1	970	18598.8	969.5	18602.7	969.6	18648.3	963.8
18679.8	963.2	18704	957.9	18743.6	960.5	18769.5	961.1	18842.5	955.2
18917.4	955.9	18993.6	955.2	19026.1	956.5	19078.6	954.6	19116.4	956.7

19134.5	956.6	19275.2	955.9	19317.5	959.5	19392.9	961.2	19411.7	961.2
19457.9	957.5	19505.5	956.4	19577.4	956.1	19580.5	956.2	19670.2	956.8
19746.9	961.5	19839.2	958.9	19936.5	957.1	20045	956.9	20086.7	957.3
20169.3	956.2	20237.2	955.3	20328.5	958	20334.1	957.4	20399.8	957
20463.4	959.2	20513.6	962	20602.6	959.9	20704.3	960.7	20742.9	961
20844.4	960.5	20908.1	960.2	20950.1	961.7	21049.7	960.9	21054.1	960.9
21135.1	960.3	21179.1	960.2	21212.7	956.8	21338.5	957.1	21366.3	957.1
21382.6	961.2	21402.5	967.3	21411.9	966.7	21431.9	963.9	21452.4	962.7
21480	964.4	21496.8	956	21544.1	956.6	21581.7	8968.0081	21601.9	974.1
21642.4	975	21693	974.4						

Manning's n Values num= 5

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
17046.5	.025	17390.7	.043	18508.1	.043	18743.6	.037	21601.9	.043

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
18508.1	21581.78	430	400.7	360	.1	.3

Ineffective Flow num= 1

Sta L	Sta R	Elev
17046.5	17390.7	975

CROSS SECTION RIVER: 1
REACH: 1 RS: 202.29

INPUT
Description: 202.29
Station Elevation Data num= 96

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
17300	969.4	17300.2	969.4	17310.5	971.8	17342.5	971.5	17346.7	971.3
17352.1	970.9	17359.3	970.4	17377.2	970.2	17388.5	970.1	17410.3	969.8
17443.6	969.4	17469.5	969.2	17494.3	969	17512.1	968.3	17537.2	968.2
17551.3	968.6	17580.1	968.2	17588.6	968.1	17610.9	968	17662.1	967.6
17695.1	967.2	17731.2	966.7	17756	966.3	17772.6	965.6	17783.7	965.5
17806	965.9	17845.1	965.4	17859.1	965.2	17870.8	965.1	17909	964.8
17939.7	964.2	17948.3	964	17978	963.3	17983.9	963.1	18035.9	962.8
18043.8	962.7	18050.9	962.7	18093.6	962.3	18093.8	962.8	18107.2	962.7
18151	961.8	18180	961.8	18197.4	961.8	18203.9	961.7	18212.7	961.5
18297.3	960.6	18444	959	18520.4	958	18577.3	957.8	18667.8	958.1
18744.1	957.7	18943.8	956.4	18989.6	956.6	19224.4	957.4	19228.7	957.4
19485.5	956.7	19523.1	956.9	19553.4	956.9	19827.7	956.8	19864.8	956.1
19898	956.1	20171.5	956.3	20383.2	955.7	20442.4	955.9	20499.8	957.2
20499.9	957.2	20696.8	957.3	20777.7	957.4	20879.1	956.5	20964	956.5
21129.5	956.9	21176.5	956.6	21222.8	956.1	21262.9	955.8	21273.6	955.5
21305.8	956.3	21343.7	957	21400.4	957.2	21410.8	957.3	21495.3	956.7
21550.9	957.9	21563.4	959.3	21703.1	961	21803	962.3	21973.7	964.9
22093.3	966.9	22138.1	968.1	22178	968.7	22302.7	970.7	22344.1	970.7
22388.8	970.9	22553.3	971.9	22676.5	971.2	22717.7	971.3	22766.5	972.1
22785.4	971.9								

Manning's n Values num= 6

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
17300	.025	17469.5	.043	18197.4	.043	18989.6	.037	21563.4	.043
21803	.043								

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
18197.4	21803	590	583.1	600	.1	.3

Ineffective Flow num= 1

Sta L	Sta R	Elev
21803	22785.4	972.1

CROSS SECTION RIVER: 1
REACH: 1 RS: 202.18

INPUT
Description: 202.18

Right Channel Bank Staion Interpolated
Station Elevation Data num= 97

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
17052.9	966.6	17168.5	966	17288.7	965.2	17328.5	965.5	17342.3	968
17346	967	17354.3	968	17364.1	966.7	17396.2	967.4	17415.4	969
17507.1	967.7	17613.8	965.1	17631.5	964.7	17747.4	962.9	17748.5	962.9
17865.9	962.4	17961.7	963.1	18017.5	963.4	18100.5	963.8	18139.7	964.7
18194.4	960.2	18256	959.9	18292.6	958.2	18331.5	958.9	18344.2	960.8
18389	961.7	18415.9	960.6	18473.5	964.7	18525.3	966.1	18612.9	966.4
18643.2	962.4	18672.1	961.3	18707.1	957.3	18769	952.6	18804.3	955.4
18910.2	957.1	18976	956.3	19019.3	958.4	19048.9	958.7	19085.4	956.1
19142.3	957	19169.3	958.6	19183.3	960.5	19235.6	960.8	19285.1	963
19369.7	960.1	19472.8	957.3	19559.8	955.6	19630.4	954.7	19686.5	951.8
19727.7	955.4	19747.8	950.7	19844.5	951.9	19893.9	954	19954	950
20009	954	20067.8	952	20110.4	954.4	20177.3	963.5	20231.5	963.4
20240.9	962.3	20277.5	960.8	20351.6	962	20380	959.9	20405.9	959.3
20492.4	961.5	20578.7	962.9	20684.9	962.3	20769.5	960.5	20826.3	963.1
20876.8	962.2	20900.3	963.5	20997.2	958.5	21014.5	957.4	21075.2	957.9

21127.2	959.8	21207.6	957.2	21255	956.2	21287.8	957.6	21353.8	957.8
21374.8	961.6	21414.6	960.9	21415.3	960.1	21444.1	956.6	21527.2	959.6
21591.2	960.1	21643.6	958.8	21685.6	954	21737.8	955.1	21787.2	954.7
21808.8	955.3	21829.3	951.8	21869.4	951.7	21919.3	955.9	21938.4	1966.7695
21957.1	977.4	21992	978.3						

Manning's n Values num= 5

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
17052.9	.025	17415.4	.043	18139.7	.043	18976	.037	21957.1	.043

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.

18139.721938.41 525 511.84 500 .1 .3

Ineffective Flow num= 1

Sta L	Sta R	Elev
17052.9	17415.4	978.3

CROSS SECTION RIVER: 1
REACH: 1 RS: 202.09

INPUT
Description: 202.09

Right Channel Bank Staion Interpolated
Station Elevation Data num= 97

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
12423.7	965.6	17099.8	965.6	17186	965.4	17264.6	965.3	17349.3	965
17358.9	964.8	17418	967.1	17422.9	965.6	17428.2	966.9	17452	965.9
17476.4	966.1	17491.8	967.5	17574.4	967	17614.9	967.2	17693.5	967.2
17814.7	961.1	17920.2	960.8	17951.8	961.2	18050.9	963.8	18132.1	964.1
18212.9	964.4	18247.5	964.7	18306	959.3	18322.2	960.3	18340.5	958.1
18363.8	957.3	18389.5	962.4	18475.1	961.1	18485.9	960.9	18523.3	964.1
18558.3	962.3	18573.3	963.2	18621.2	963.3	18652.7	957.8	18708.8	958.1
18748.7	952.2	18769.9	955.2	18859.3	957.7	18962.1	957.3	18975.3	957.3
19086	957.5	19165.3	959.6	19217.9	961	19287.9	955.2	19344.8	963
19434.4	961.7	19513.8	958.9	19564.6	953.8	19623.2	957.6	19686.2	956.9
19738.7	957.5	19783.4	954.5	19908.5	952.6	19947.2	952	20093.1	950
20106.3	950	20143.3	952.6	20167.6	955.5	20187.3	956.2	20207.9	958
20254	956.6	20271.4	957.6	20297.7	960.4	20396.6	960.4	20472.8	959.6
20529.3	963.3	20613.6	962.6	20698	962.2	20720.5	961.5	20787.7	964.2
20816.2	959.4	20866.2	961.1	20916.3	960.7	20996.8	963.3	21047.5	963.6
21101.6	961.6	21155	960.7	21221.6	961.5	21280.8	956.9	21370.9	957.5
21444.4	956.7	21456.1	957.6	21466.3	959.4	21503.9	959	21516.7	956.6
21530.5	955.5	21561.3	958	21627.9	959.2	21709	959.7	21751.4	954.3
21825.3	953.8	21856.2	951.2	21912.9	951.7	21928.2	955.7	21938.26	965.332
21947	973.7	21985	973.7						

Manning's n Values num= 5

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
12423.7	.025	17491.8	.043	18212.9	.043	19086	.037	21947	.043

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.

18212.921938.26 510 509.32 500 .1 .3

Ineffective Flow num= 1

Sta L	Sta R	Elev
12423.7	17491.8	973.7

CROSS SECTION RIVER: 1
REACH: 1 RS: 201.99

INPUT
Description: 201.99

Right Channel Bank Staion Interpolated
Station Elevation Data num= 97

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
12423.7	962.9	12792.3	963.8	13061.9	964.2	13286.8	963.1	13510.3	962
13746.9	961.3	13984	962.2	14217.9	962.9	14443.4	963.1	14690.7	964.7
14908.9	964.6	14956.9	968.1	14966.2	964.3	15216	964.5	15450.3	964.3
15717.5	963.6	15947.7	963	16170.3	962.3	16226.7	962.5	16243.5	964.4
16481.8	963.7	16706	964.8	16931.9	964.5	17163.9	965	17409.1	965.4
17507.7	965.1	17760.7	967.9	18000.5	959.7	18235.1	962.5	18353.1	960.5
18417.7	956.5	18440	960.5	18639.2	962	18674	954.8	18737.7	957.9
18818.4	957.6	18843.9	951.9	18894.5	956	19104.7	956.3	19162.4	959.4
19182	952.7	19244.4	958.4	19290	953.9	19357.8	953.9	19392.3	959.4
19476.2	956.3	19599.7	958.8	19757.3	956.9	19806.8	958.1	19854.1	952.5
20078.1	951.3	20095.8	953	20192.9	950.6	20250.9	959.6	20290.2	950.4
20347.4	962.9	20368.6	965.8	20433.1	963	20465.1	950.1	20577.2	949.5
20589	951.7	20619.5	951.7	20638.1	949.5	20700.3	949.5	20727.6	954.8
20735.3	964.1	20750.8	961.1	20862.1	965.2	20904	975.7	20956.4	975.3
20989.8	964.1	21038.3	963.3	21074.1	972.2	21105.1	970	21109	967.5
21138.5	968.2	21163.6	953.1	21180.4	949.1	21267.5	949.1	21538.3	949.1
21555.3	949.1	21578	958.4	21595.4	955.8	21617.3	955.7	21641.7	951.9
21676.1	954.4	21726.5	948.7	21821.2	953.2	21862.8	963.6	21892.7	1964.4166
21991	967.1	22006.5	964	22019.9	967.9	22243.3	966.9	22585.6	967

22917.2 966.9 23024.3 966.9

Manning's n Values num= 7

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
12423.7	.025	17507.7	.043	17760.7	.043	19357.8	.032	20250.9	.037
21991	.037	22006.5	.025						

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
18235.1	21892.71	470	477.46	490	.1	.3

Ineffective Flow num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
12423.7	17760.7	975.7	21990.9	23024.3	975.7

CROSS SECTION RIVER: 1
REACH: 1 RS: 201.9

INPUT
Description: 201.9

Right Channel Bank Staion Interpolated
Station Elevation Data num= 97

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
12498	962.4	12680.7	963	12847.7	963.1	13015.1	963.3	13199.8	963.2
13361.7	963.7	13371.9	960.2	13574.5	962.7	13724.8	961.4	13908.8	961.8
14082.1	962.6	14282	963.2	14504.3	963.3	14674.9	963	14875.2	963.6
15026	967.2	15036.6	963.6	15225.9	964.3	15398.3	964.4	15600.8	964.2
15790.8	963.8	15996.8	963.9	16181.7	962.7	16294.9	962.8	16309.4	964.3
16331.6	962	16525.6	962.6	16699.1	963.6	16881.9	964.4	17117.4	963.7
17353.6	965.3	17563.8	966.2	17569	964.3	17769.9	966.6	17941.7	966
17954.3	963.8	18181.9	958.7	18226.6	955.3	18260.2	960.7	18291.8	960.5
18303.9	958.6	18480.2	961.7	18648.9	961.8	18745.5	962	18798.7	956.2
18820.8	957.2	18854.3	951.8	18909.2	955.3	19138.4	956.3	19200	953.3
19336.3	962.3	19389.1	958.9	19449.9	951.5	19624.1	955.9	19782.3	957.2
19911.4	951.6	20081.9	950.6	20221.5	952.6	20269.4	959.3	20331.6	955.1
20356	957.7	20398.9	948.7	20567.7	948.5	20744.7	949.1	20888.3	947.2
20954.4	949.9	21000.8	949	21037.1	957.5	21099.1	956	21139.7	949.7
21300.7	952.4	21411.2	949.7	21444.1	955.9	21487.9	956.1	21503.4	949
21546.8	949	21556.2	952.2	21567.4	960.5	21588	955.9	21628.6	952.2
21667.7	955.7	21698.6	949	21736.9	950	21748.7	952.4	21786.7	952.8
21827.4	1963.9	898 21842	968	21955.2	963.2	21982.2	967.4	22181.8	966
22228.4	965.8	22400.7	965.8	22432.3	965.9	22634.3	966.5	22801.2	966.1
23008.7	966	23096	965.3						

Manning's n Values num= 7

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
12498	.025	17569	.043	17769.9	.043	19389.1	.032	20331.6	.037
21842	.037	21982.2	.025						

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
17954.3	21827.41	500	495.8	500	.1	.3

Ineffective Flow num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
12498	17769.9	968	21842.1	23096	968

CROSS SECTION RIVER: 1
REACH: 1 RS: 201.81

INPUT
Description: 201.81

Left and Right Channel Bank Staions Interpolated
Station Elevation Data num= 98

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
12574.1	961.8	12761.8	962	12923.9	962.6	13108.8	962.8	13276.3	963
13435.2	962.8	13461.6	960.9	13640.2	962.7	13758.3	961.2	13887.4	962.7
14049.5	962.4	14230.8	962.1	14408	962.7	14585.1	963.8	14774.2	962.7
14940.9	962.1	15056.2	964.1	15099	967.8	15104.2	963.1	15275.2	964.2
15444.5	964.1	15610.6	963.9	15771.8	963.8	15946.1	963.3	16142.1	962.7
16322.1	962	16382.5	963.6	16475.3	960.8	16709.7	962.1	16947.6	962.4
17136	963	17301	963.8	17538.6	963.1	17700.9	964.2	17890.2	965.6
17935.7	965.6	17946.8	9963.6	227 17964	960.6	18130	958	18246.7	956.1
18277.1	959.5	18483.2	960.9	18556.4	960.8	18619.6	964.6	18716.1	963.4
18765	964.3	18860.5	957.6	18955	958.4	19006.4	951.6	19072.9	957.9
19139.8	953.9	19294.5	954.6	19378.9	957.7	19550.9	954.4	19605.4	951.1
19693.5	953.4	19720.4	950.1	19883.7	950.2	20049.4	953	20182.8	953.5
20285.8	953.2	20377.1	957.6	20392.1	962.6	20421.1	948.6	20597	946.8
20665	946.7	20832.3	946.1	20846.8	951.1	20855.6	956.4	20869.8	954.4
20881.2	950.3	20908.5	949.6	20924	952.5	20962.6	950.9	21000.7	946.6
21169.8	946	21187.6	953.2	21244.2	956.3	21263.5	960.4	21295.1	951.3
21322.9	946.6	21496.1	948.5	21522.9	951.7	21690.5	950.7	21775	950.9
21803.2	7963.6	213 21811	967.1	21860	969.2	21904.1	961.6	21929.9	965
21975.7	963.6	22175.4	965.3	22352.1	965	22654	963.5	22715.1	963.5
22875.2	962.8	23093.9	964.4	23169.5	964.2				

Manning's n Values num= 7

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
12574.1	.025	17700.9	.065	17935.7	.065	19378.9	.032	20392.1	.037
21860	.025	21975.7	.025						

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
17946.892	1803.27	535	511.61	515	.1	.3

Ineffective Flow num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
12574.1	17935.7	969.2	21859.6	23169.5	969.2

CROSS SECTION RIVER: 1
REACH: 1 RS: 201.71

INPUT
Description: 201.71

Left Channel Bank Staion Interpolated
Station Elevation Data num= 97

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
12659.2	961.6	12855.6	961	13000	961	13129.9	960.8	13180.2	962.1
13187.7	959.3	13371.2	960	13521.5	960.3	13689.3	960.5	13844.9	960.6
13979.7	960.3	14193.8	960.9	14324.5	960.9	14461	961	14593.2	960.9
14774.5	961.4	14909.4	960.6	15132.5	961.7	15192.9	963.1	15384.5	962.1
15537.8	962.3	15716.6	961.2	15856.1	961.1	16082.6	960.9	16210.7	961.2
16383	961	16543.7	961	16684.4	961.3	16813.5	961.2	16941.4	961.7
17106.2	961.5	17255.2	962	17388.3	961.5	17585.2	961.5	17706.7	962.1
17766.4	963.8	17769.2	962.5	17794.4	964.5	17957.8	964.3	18096.3	964.8
18107.05	962.8899	18140.2	957	18197.6	953.2	18356.6	956.6	18441.5	961.3
18556.1	957.7	18600.1	958.6	18651.3	956.4	18676.1	956.9	18707	951.3
18764	957	18831.5	958.2	19007.5	955.3	19076.4	952	19279.5	954.1
19409.2	953.7	19475.6	949.9	19555.7	955.6	19660.9	959	19739.3	954.2
19763.1	949.4	19910.3	951	19978.4	951.1	20023.1	954.8	20199	956
20304.5	951.4	20347.1	954.9	20447.3	951.1	20499.8	956.3	20554.9	954.5
20692.6	956.1	20848.5	954.8	20899.8	950.2	20984.5	949.7	21011.3	946
21148.8	948.4	21186.8	951.7	21268.1	954.5	21355	953.1	21433.7	954.9
21490.6	959.4	21528.5	960.3	21661.1	959.7	21837.7	959.7	21975.8	962.2
22098	963.6	22111.4	961.1	22160.6	964.1	22190.7	962.9	22353.1	963.4
22385.7	963.3	22516.6	964.2	22615.8	964.3	22832.1	963.4	22981.6	963.4
23127.8	962.8	23246	962						

Manning's n Values num= 7

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
12659.2	.025	17706.7	.065	18096.3	.065	19660.9	.032	20554.9	.037
21355	.025	21528.5	.025						

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
18107.05	21528.5	505	489.63	495	.1	.3

Ineffective Flow num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
12659.2	18096.3	966	22098	23246	966

CROSS SECTION RIVER: 1
REACH: 1 RS: 201.62

INPUT
Description: 201.62

Left Channel Bank Station Interpolated
Station Elevation Data num= 97

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
12723.6	960.1	12862.6	960.3	13017.9	960.4	13156.4	960.4	13253.3	961.5
13267.4	959	13436.1	959.9	13621.5	960.4	13766.2	960.5	13909.8	960.4
14075.1	960.4	14269.1	960.4	14410.3	960.9	14542.3	960.9	14677.4	961
14845.4	961.8	15072.7	961	15207.9	961.9	15344.9	961.6	15510.2	961.6
15676.2	961	15821	960.6	15995.5	960.4	16157.9	960.8	16296	961.1
16491.6	961.1	16630.4	960.7	16799.9	960.5	16987.6	960.1	17022.4	962
17197.5	958.5	17331.6	959.3	17350.4	962.3	17555	961.1	17693.7	961.5
17788.7	963.5	17792.9	962.2	17963.6	963.3	18107	962.8	18229.7	963.9
18233.5	962.1533	18253.2	953.1	18417.5	953.4	18563.5	953.4	18723.5	952.3
18864.3	951.9	18956.1	956.6	19045.2	956.9	19129.4	952.1	19159.3	954.5
19237.7	952.1	19435.3	953.3	19483	951.6	19522	953.4	19577	948.8
19677.3	954.6	19737.2	953.8	19772.7	949.2	19918.1	949.3	20064.6	953.2
20213.3	953.8	20358.7	952.9	20472.9	952	20509.2	950	20584.5	955.3
20619.5	953.2	20653.6	948.7	20723.6	953.3	20794.2	955.3	20904.8	954.6
20962.2	949.9	20990.6	945.6	21150.5	945.9	21165.2	946.9	21199.1	955.3
21351	951.4	21457.3	955.6	21477.5	960.2	21514.2	959.4	21654.6	959.9
21824	959.8	21964.5	960.6	22074.2	961	22085	959.8	22090.5	961.3
22197.1	961.9	22233.4	963.7	22249.4	962.1	22301	963.2	22456.6	963.4
22491.4	963.3	22714.7	962.8	22775.6	962.8	22945.1	962.7	23131.5	962.5
23268.1	960.6	23318.4	961.5						

Manning's n Values num= 9

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val

12723.6	.025	16799.9	.15	17197.5	.025	17792.9	.065	18229.7	.065
19577	.032	20509.2	.037	21351	.025	21477.5	.025		

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
18233.5 21477.5 485 486.48 510 .1 .3
Ineffective Flow num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
12723.6	18229.7	965	22233.4	23318.4	963.9

CROSS SECTION RIVER: 1
REACH: 1 RS: 201.52

INPUT
Description: 201.52

Left Channel Bank Station Interpolated
Station Elevation Data num= 97

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
12786.6	960.2	12939.6	960.1	13099	960.1	13244.9	960.2	13300.5	962.8
13357.3	959.7	13501.3	960.4	13678.7	959.8	13830.9	960	14035.1	959.9
14185.2	959.4	14386.6	959.8	14539	959.6	14722.7	959.3	14894.1	959.5
15114.2	959.2	15254.5	962.1	15427.2	959.8	15592.7	959.9	15779.1	959.7
15959.1	959.6	16138.8	959.3	16313.2	960.4	16492.7	958.5	16665.8	959
16834.1	958	17009.5	957.5	17081.3	959.5	17261.7	956	17408.3	957.9
17566	960	17731.1	959.6	17842.3	960.3	17845.2	962.91	7943.73	961.3971
18009.1	960.4	18087.6	959.9	18104.5	954	18264.9	951.7	18427.6	949.5
18577.1	948.4	18651.6	946.4	18699.1	952.7	18753.8	949	18784.8	949.1
18848.6	953.1	18893.8	954	18925.3	958	19065.9	958.5	19153	954.3
19223.7	956.3	19377	949.7	19404.1	948.6	19480.7	949.5	19540.9	947.7
19607.6	951.7	19748	954.6	19781.1	954.1	19818.6	949.6	19876.6	948.4
19936	956.7	20100.5	954.2	20244	952.7	20403.3	950.4	20550.4	948.2
20608.4	948	20715.6	953.3	20891.6	948.2	20923.4	941.8	20972.4	940.9
20990.6	945.3	21048.3	948	21178	947.3	21216.5	954.8	21254.9	957
21391.4	958.4	21554.4	958	21596.8	958.1	21777.9	958.2	21934.4	958.6
21995.7	958.3	22004.2	960.1	22157.3	959.4	22212.5	961.1	22218.9	959.2
22225.8	961.6	22299.7	963.1	22311.3	960.4	22338.4	962.5	22478.8	962.4
22674.4	962.5	22848.1	961.1	22905.9	961.6	23058.8	963.2	23081.5	963.2
23263.4	961.3	23370	959.8						

Manning's n Values num= 7

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
12786.6	.025	17009.5	.15	17261.7	.025	17845.2	.15	19480.7	.032
20244	.037	21391.4	.025						

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
17943.73 21391.4 495 492.06 495 .1 .3
Ineffective Flow num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
12786.6	17845.2	963.2	22212.5	23370	963.2

CROSS SECTION RIVER: 1
REACH: 1 RS: 201.43

INPUT
Description: 201.43

Left Channel Bank Station Interpolated
Station Elevation Data num= 97

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
12790.4	959.2	12931.7	959.4	13106.1	959.5	13261.9	959.6	13426.6	960.3
13574.8	960.1	13719.2	960	13863.6	960.3	14015.4	959.4	14162.1	960.1
14260	960.7	14418.2	961.9	14556.8	961.4	14697.8	960.6	14846.1	959.1
15008.5	959.1	15194.6	958.6	15331.7	959.1	15511.6	959.4	15657.5	959.5
15799.1	959.9	15827.9	961.5	15973.4	960.8	16110.8	960.5	16254.2	959.9
16478.5	958.1	16617.9	958	16780.3	959.8	16924.1	959.3	17061.9	956
17202.1	956.4	17374.3	959	17594.2	959.4	17734	959.4	17844.3	960.3
17853.5	961.9	17859.2	959.6	18001.4	960.7	18014.99	60.4907	18053	959.9
18066.9	952.8	18179.7	952.8	18317	950.6	18459.7	949.9	18597.4	947.5
18738.8	948.8	18799.8	954.8	18924.3	958	19076.8	958.9	19195.5	956.6
19253.6	950.7	19403.4	947	19416.1	948.3	19450.8	947.6	19528.4	954.4
19671.9	955.8	19712.9	955.8	19744.1	948.3	19847.5	947.6	19851.7	953.1
19996.8	955.1	20141.7	954.2	20303.2	954.8	20474.6	951.5	20649	946.3
20689.8	947.9	20719.5	943.8	20747.5	947.5	20911.6	947	20951.8	947.8
20976.3	941.3	21080.6	942.7	21100.4	945.1	21136.4	946.2	21179.1	944.6
21271.5	950.5	21342.1	957.5	21353.3	959.8	21363.1	957.2	21516.4	957.7
21676.7	958.3	21814.1	958.7	21883	958.4	22035.4	957.9	22182.8	959.4
22322.3	960.9	22328.9	958.7	22340	962.3	22362.8	960.4	22606.3	961.2
22648.5	961.2	22787	960.2	22945.6	960.3	23094.6	961.1	23289.3	961
23341.9	960.2	23387.4	958.8						

Manning's n Values num= 7

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
12790.4	.043	15827.9	.065	17202.1	.025	17853.5	.15	19253.6	.032
20649	.037	21342.1	.025						

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
18014.9 21342.1 555 519.88 505 .1 .3
Ineffective Flow num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
12790.4	18000	962.3	22322.3	23387.4	962.3

CROSS SECTION RIVER: 1
REACH: 1 RS: 201.33

INPUT
Description: 201.33

Left ChannelBank Station Interpolated
Station Elevation Data num= 97

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
12785.7	957.8	12951.9	958.1	13134.4	958.1	13293.5	958.1	13493.4	958.4
13649.5	958.9	13744.1	960.9	13758.6	959.4	13925.5	959	14085.7	958.6
14255.8	961.3	14420.6	961.4	14593.6	961.2	14794.8	960.7	14992.6	959.3
15164	957.6	15345.7	958.5	15520.6	959.3	15694.3	959.9	15854.4	959.9
16014.9	960.3	16184.1	960.4	16362.7	960.3	16517.9	960.6	16680.1	958.6
16837.4	958.7	16937	956.7	17109.2	956.2	17266.3	958.7	17288.5	957.8
17465.9	959.2	17667.7	959	17831.2	959.5	17862	961.6	17929.5	961.8
17948.2	960.4	18049.52	959.5026	18072.4	959.3	18086.6	953	18242.2	954.4
18398.7	954.5	18556.7	954.3	18607.2	952.5	18626.2	948.5	18634.2	950
18715.7	949.6	18791	954.8	18874.7	955.9	18937.2	954.7	18984.3	948
19116.8	949.1	19140.9	943	19269.7	945.9	19315	948.3	19489.9	950.7
19565.6	952.4	19588.8	955.2	19608.2	948.1	19752.9	948	19806.6	953
19969.5	952.2	20134.6	953.3	20171.4	952.2	20226.7	955.4	20293.9	954.2
20341.3	955.5	20424.9	951.7	20512.5	950.6	20548.8	944.7	20652.6	950
20769.7	946.7	20843.2	955	21006.1	948.3	21057.8	946.6	21076.8	943.6
21236.1	944.8	21304.1	946.3	21310.7	945	21357	957.5	21381.8	958.1
21545.7	957.7	21548.3	957.8	21799.8	956.8	21810.6	956.8	22056.9	957.1
22107.8	957.3	22115	958.6	22356.1	957.9	22513.8	959.5	22624.6	962.2
22794.7	960.7	22966.1	961	23037.1	962.1	23192.4	961.3	23366.6	961.5
23397.6	960.4	23444	960.7						

Manning's n Values num= 7

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
12785.7	.043	15854.4	.065	17266.3	.025	17929.5	.15	19116.8	.032
19315	.037	21381.8	.025						

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
18049.52 21381.8 515 514.62 515 .1 .3
Ineffective Flow num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
12785.7	17929.5	962.2	22624.6	23444	962.2

CROSS SECTION RIVER: 1
REACH: 1 RS: 201.24

INPUT
Description: 201.24

Left Channel Bank Station Interpolated
Station Elevation Data num= 97

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
12806	955.8	12962.7	956.3	13145.6	957.3	13331.4	956.5	13517.2	956.2
13697.1	957.3	13855.5	957.4	14010.3	957	14164.7	956.7	14318.4	958.2
14482	958.5	14660	956.8	14688.4	957.7	14821.8	955.2	14989	957.8
15156	956.9	15324.8	957.6	15476.8	959	15632.7	959.6	15787	959.8
15939.5	959	16132.2	958.4	16296.2	957.9	16464.6	957.9	16632.1	958.1
16801.9	956.7	16986.8	954.6	17117.8	954.3	17180.2	958.7	17353.5	957.6
17566.1	957.4	17719.1	957.9	17947.6	957.8	18063.5	959.9	18067.36	958.4367
18084.6	951.9	18123.2	954.4	18273.7	954.7	18463.7	954.1	18640.4	954.1
18769.1	951.5	18834.7	946.6	18852.7	947.7	18957	944.8	19101.5	944.9
19190.4	949.6	19365.4	949.8	19479.4	950.7	19501.5	945.5	19659.5	947.2
19709.9	951	19861.9	951.5	20036.3	950.6	20116.5	953	20174.4	956.4
20272.4	956.3	20322.3	953.3	20397.8	952.3	20534.1	946.8	20728.3	949.3
20901.9	952.6	21060.4	953.1	21108.8	948.4	21143.3	943.1	21322.6	943
21477	945.1	21515.7	945.4	21547.4	956.4	21570	957.6	21573.6	955.3
21742.9	955.8	21840.8	955.8	22073.6	956.2	22315.2	956.6	22474.6	957.8
22660.5	959.5	22837.1	960.3	23006	960.7	23189	960.3	23372.7	959.3
23535.3	958.6	23693.7	960.2	23701.8	958.7	23728.6	959.3	23733.9	957.9
23745.1	960.6	23895.9	959.5	24055.3	959.7	24212	959	24364.3	958.6
24523.2	960	24683.9	959.1	24867.9	960.4	25044.2	960.6	25240.9	961.6
25449.6	962.7	25490	964.7						

Manning's n Values num= 9

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
12806	.043	16132.2	.065	17180.2	.025	17947.6	.15	18063.5	.15
18957	.037	19659.5	.032	20174.4	.037	21570	.025		

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.

18067.36	21570		485	488.56	490		.1	.3

Ineffective Flow num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
12806	18063.5	964.7	23006	25490	964.7

CROSS SECTION RIVER: 1
REACH: 1 RS: 201.14

INPUT
Description: 201.14

Left Channel Bank Station Interpolated
Station Elevation Data num= 97

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
12823.9	955.7	12999.4	956.2	13212.7	955.6	13428.9	956	13645.2	955.7
13816.9	955.8	13992.2	956	14163.4	956.5	14335.2	955.8	14527.3	956.5
14708.6	956.3	14909.6	955.2	15093.8	955.5	15267	954.8	15439.6	956.4
15609.9	956.4	15791	956.8	15950.3	959	16129.2	957.7	16303.6	956
16475	953.7	16660.8	955	16839.9	953.5	17004.5	951.4	17082.5	958.8
17162.8	956.1	17184.4	958.7	17362.4	957.4	17598.4	957.1	17832.2	956.8
18017.1	960	18032	960.2	18037.86	957.9	083 18056.8	950.5	18241.1	949.4
18415.6	950.8	18585.7	951.8	18725.4	952.4	18733.1	949.9	18790.6	949.1
18818.8	941.6	18850.4	943.3	18986.4	943.9	19077.9	949.8	19149.1	948.9
19305.2	951	19389.8	945.3	19562.7	946.4	19610	949.5	19790.7	949.7
19961	950.3	20069.8	955.8	20203.6	953.6	20241.8	949.2	20445.4	947.5
20553.6	952	20738.9	949.5	20840.4	947.3	20887.4	943.5	20941.4	948.4
20992.7	949.8	21019.8	942	21063.4	942.9	21079.7	945.4	21128.6	946
21160	941.1	21202.5	940.4	21278.6	945.6	21455.1	945.3	21569.3	940.9
21644.4	944.5	21697.9	954.5	21721	955.2	21725.6	953.1	21741.2	955
22051.3	955.9	22155.8	956.1	22389.7	956.4	22512.4	956.8	22725.1	956.9
22832.8	959	22857.1	957	23030.8	959	23238.6	958.8	23414	958.9
23606.9	957.7	23803.1	958	24052.9	958.2	24291.1	958.1	24471.3	958.5
24625.1	958.9	24632.8	957.3	24637.8	958.9	24815.7	959.6	25013.4	960.6
25215.4	961.6	25365.2	962.4						

Manning's n Values num= 8

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
12823.9	.043	16303.6	.065	17184.4	.025	18032	.15	18850.4	.037
19610	.032	20553.6	.037	21721	.025				

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
18037.86	21721	480	481.53	485	.1	.3

Ineffective Flow num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
12823.9	18032	962.4	22832.8	25365.2	962.4

CROSS SECTION RIVER: 1
REACH: 1 RS: 201.05

INPUT
Description: 201.05

Left Channel Bank Station Interpolated
Station Elevation Data num= 97

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
12848.3	954.5	13055.4	953.7	13276.2	955.4	13483.1	957.1	13684.3	954.7
13886.2	954.5	14079.9	955	14267.8	955.7	14489.3	955.5	14686	954.3
14893.9	954.8	15093.5	953.8	15286.8	955	15508	955.8	15694.8	955.4
15890.9	955.3	16093.3	955.3	16296.5	955.9	16489.7	956.3	16687.2	954.3
16876.1	953.1	17029.6	951.4	17090	955.6	17177.7	953.2	17211.7	959.1
17239.8	956.7	17474.3	956.9	17712.8	956.3	17920.1	957.3	17947.8	957.7
17948.21	957.514	17963.9	950.4	18149.7	948.9	18366.7	949.3	18552.6	947.7
18642	947.2	18662.5	941.8	18877.7	942.9	18965.7	942.8	19025.5	948.9
19069.3	949.7	19115	948	19146.2	943.8	19305.4	944.7	19341.4	942.6
19450.5	944.4	19486	951.1	19656.3	948.4	19742.2	949.2	19800.5	946.7
19926.9	951	19979.4	950.2	20027.5	955.4	20105.3	953.3	20157.5	947.1
20233.6	946.1	20272.3	948.2	20302.6	946.7	20402.5	950.2	20615.4	948.5
20746.4	950.2	20793.3	949	20816.3	941.7	20964.1	941.5	20993.4	945.9
21193.9	949.2	21384.8	948.9	21582.1	946	21750.2	942.4	21815.9	945.1
21849	955.5	21881.2	953.7	21901.6	955.1	21907	953.3	21990.8	953.6
22189.8	954.8	22244.5	955.2	22537.9	955.5	22570.5	955.5	22835	955.8
22894.6	957.1	22905.9	959	22934.1	957.4	23165.2	957.6	23380	958
23414	957	23451.8	959.3	23684.3	956.6	23933.2	957	24126.1	957.5
24400	957.7	24595.1	958.4	24603.3	957.1	24622.7	959.8	24638.5	957.6
24836.5	959.9	24997.1	961.2						

Manning's n Values num= 8

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
12848.3	.043	16687.2	.15	17177.7	.025	17947.8	.15	18965.7	.037
19486	.032	20402.5	.037	21849	.025				

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
17948.21	21849	520	512.89	510	.1	.3

Ineffective Flow num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
12848.3	17947.8	961.2	22905.9	24997.1	961.2

CROSS SECTION RIVER: 1
REACH: 1 RS: 200.95

INPUT
Description: 200.95

Left Channel Bank Station Interpolated
Station Elevation Data num= 97

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
12874.8	952.5	13039.9	952	13212.3	952.3	13372.8	953.5	13537.8	953.7
13708.5	953.7	13872.8	954	14042.5	953.4	14205.3	953.3	14401.9	953.5
14603.1	953.1	14762	954.2	14934	952.2	15127.8	952.8	15312.6	953.8
15422.3	957.2	15583	954.7	15746.4	955	15906.8	956.3	15988.2	955.4
16164.6	957.4	16332.4	957.6	16504.4	956.6	16673	957.2	16861.4	956.7
17049	953.4	17207.8	951.7	17274	955.6	17440.2	954.4	17613.5	957.4
17631.7	953.8	17653.9	958.1	17824.4	958	17905.8	956.9189	17952.4	956.3
17964.6	951.3	18135.4	946.6	18219.9	947	18317.2	949.6	18410.9	946.7
18428.8	949	18651.9	947.8	18690.8	946.2	18729.3	940.1	18914	943.4
19040.9	943.9	19102.9	941.9	19126.2	943.3	19190.9	941.9	19216.4	943.8
19237.2	941.5	19420.9	944.3	19517.6	943.7	19555.3	947.7	19758.1	946.5
19818.9	950.2	19947.1	951.5	20006.8	955.9	20184.2	954.1	20323.1	951.3
20414.3	945.7	20527.8	944.2	20653.3	949.4	20684.2	940.5	20842.4	942.7
20989.1	947.8	21069.4	948.4	21262.3	947.7	21448.8	948.8	21631.4	946.7
21802	942.6	21869.1	939.8	21909.3	943.4	21954	953.2	22148.5	954.1
22306.3	954	22378	955.4	22594.8	954	22757.8	954.9	22935.8	954.8
23107.3	956.2	23275.4	955.9	23411.6	954.8	23573.4	957.7	23629.1	956.7
23796.3	955.8	23971.7	955.8	24129.8	956	24294.4	955.8	24466.5	955.4
24623.6	955.4	24630	955.3	24639.7	957.8	24648.4	954.6	24662.5	958.2
24836.4	959.8	24988.3	960.7						

Manning's n Values num= 6

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
12874.8	.043	17824.4	.15	18729.3	.037	19517.6	.032	20323.1	.037
21954	.035								

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
17905.8	21954	475	474.38	480	.1	.3

Ineffective Flow num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
12874.8	17824.4	960.7	23100	24988.3	960.7

CROSS SECTION RIVER: 1
REACH: 1 RS: 200.86

INPUT
Description: 200.86

Left Channel Bank Station Interpolated
Station Elevation Data num= 98

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
12893	952.7	13071.4	952.1	13217.7	954.6	13366.3	951.7	13513.8	953.9
13666	954.4	13820.1	953.4	13963.2	953.3	14149	953.3	14333.5	952.5
14509.1	952.1	14688.3	953.1	14861.7	952.4	15054.1	951.6	15210.6	951.7
15424.6	955	15571.3	952.8	15782.9	955.2	16020.2	955.6	16192.2	953.9
16399.2	952.8	16559.9	953	16714.8	953.3	16760.5	954.7	16916.6	953.9
17003.1	954.6	17168.1	950.1	17285.1	949.5	17360.5	954.6	17520.2	953
17694.7	956	17869.8	957	17934.1	958.11	7992.44	956.5698	17995.1	956.5
17996	956.3408	18052.8	946.3	18288.3	948.1	18449.5	947.1	18628.5	947.7
18762	951.3	18912.7	950.4	19061.6	946.8	19092	945.3	19141.3	938.5
19175.6	940.7	19336.6	941.9	19619.6	944.7	19730.8	944.7	19826.2	949.9
19922.8	951.3	20011.5	955.4	20112.1	951.4	20184.7	943.1	20254	952.1
20308.4	952.8	20438.4	949.3	20464.9	944.1	20568.6	943.9	20744.1	941.1
20840.6	941.3	20896.7	945.9	20979.1	947.3	21100	946.2	21279.3	951.2
21459.1	946.8	21602.1	945.3	21642.4	941.5	21792.5	940.9	21831.9	940.3
21865.4	942.7	21898	952	22032	954.1	22187.6	953.7	22377.3	953.4
22522.7	953.4	22725.4	952.8	22947.9	954.9	23137.5	955	23294.6	956.1
23413.1	955.8	23420	954.5	23482.2	956.5	23641.6	956.7	23647.7	954.4
23806	955.4	23951.6	954.9	24112	954.8	24269.9	954.6	24426.7	954.8
24604.6	954.9	24656.8	954.3	24670.5	956.8	24680.8	954	24693.9	958.2
24856.4	958.5	25029.7	959	25175	960.2				

Manning's n Values num= 6

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
12893	.043	17934.1	.15	19619.6	.032	20308.4	.037	21898	.035
22032	.035								

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
17996	22032	525	523.32	525	.1	.3

Ineffective Flow num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
12893	17750	960.2	23360	25175	960.2

CROSS SECTION RIVER: 1
REACH: 1 RS: 200.77

INPUT
Description: 200.77
Station Elevation Data num= 96

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
12925.1	950.1	13101.8	952.3	13250.4	951	13436.7	950.7	13651.1	951.4
13804.4	951.9	14027	953.4	14249.5	951.8	14401.1	950.7	14592.6	949.7
14752.3	950.6	14873.3	950.3	15006	952.1	15110.8	950.9	15249.1	953.3
15443.8	954.5	15631.2	955.3	15702.9	951.3	15936.9	951	16108.8	954.5
16172	955.8	16295.1	951.4	16462	950.7	16530.6	949.9	16652.3	952.8
16854.8	954	17022.2	952.1	17185.4	949.9	17349.4	948.1	17402.8	955.2
17473.6	951.6	17660.6	954.4	17828.8	955.3	17926.5	954	17969.3	948
18147.9	944.4	18302.9	946.4	18524.1	946.1	18650.9	949	18815.8	948.8
18902.5	949.8	18913.4	952	19097	950.8	19277	951.3	19280.8	951.9
19280.9	949.5	19321.8	951.3	19557.8	943.7	19720.4	945.1	19857.8	946.5
19911.9	942.9	19989.5	951.1	20140.5	950.2	20288.5	945.2	20339.4	948.6
20362.3	944.7	20388.7	942.6	20487.8	944	20788	936.9	20804.9	937.1
20829.2	942.4	20906.3	944.7	21056	944.4	21222.9	942.6	21375.1	940.2
21524.6	940.4	21559.7	941	21581	950.6	21785.8	951.3	21951	952.4
22102.3	952.1	22329.8	953.2	22461	953	22651.4	953.3	22824.9	954.7
23050.7	954.8	23217.5	954.9	23380.5	954.5	23421.7	954.3	23434.6	956
23439.7	954.3	23489.2	957.2	23506.4	952.5	23514.1	955.4	23706.9	954.3
23876.7	954.3	24057.8	954.4	24216.1	954.4	24385.4	954.2	24554.4	953.9
24685.3	953.1	24698.2	956.8	24704.7	952.7	24723.6	958.6	24886.7	958.9
24978	959.5								

Manning's n Values num= 6

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
12925.1	.043	17828.8	.15	19321.8	.032	19857.8	.037	21785.8	.025
21951	.035								

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
17828.8	21951	500	495.64	520	.1	.3

Ineffective Flow num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
12925.1	17630	960	23630	24978	960

CROSS SECTION RIVER: 1
REACH: 1 RS: 200.67

INPUT
Description: 200.67
Station Elevation Data num= 96

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
12952.7	947.8	13129.5	948.3	13308.2	948.8	13483.1	949.2	13641	952.6
13766	952	13870.6	949.3	14073.7	950.3	14282	951.5	14535.6	948.8
14746.4	948.7	14899.4	949.8	15045.4	950.6	15138.5	953.1	15312.3	952.8
15471.5	952.2	15651.1	951.4	15730.3	949.9	15964.5	954	16199.7	953.8
16438.6	948.9	16643.2	952.3	16796.2	954	17002.3	953.9	17133.8	952.2
17211.9	946.7	17315.9	947	17376.2	954.8	17384.7	952.3	17551.8	953.1
17732.2	954.1	17919.3	952.9	17950	943.8	18101.5	944.9	18330.6	947.4
18498.9	943.9	18565	943.8	18742.3	948.8	18888.2	952	18925.4	946.6
18962.8	948.9	19023.7	947.4	19040.9	949.6	19238.5	952.4	19366.3	948.8
19569.2	947.1	19719.3	940.8	19796.7	942.1	19832.7	943.8	19969	943
20047.1	949	20111	948.4	20263	939.8	20444.8	942.7	20609	942.6
20782.8	941.1	20963.8	942.2	20998.9	941.8	21090.6	944.3	21256.2	942.8
21298.3	943.3	21316	950.6	21367.7	945.7	21427.5	950.4	21604	951.9
21649.3	952.3	21939.5	952.7	21971.5	952.7	22194	953.4	22217.8	954.7
22233.1	953	22256.3	952.8	22476.8	953.9	22513.4	953.9	22711.5	955.1
22773.4	955.2	22873.4	959.1	23051.6	959.3	23158.6	956.6	23168.5	958.8
23393.6	957.5	23430	957.4	23431.7	955.9	23584.2	954.6	23749.1	953.9
23939.2	954	24125.4	954.8	24292.4	954.6	24492.9	954.3	24643.7	954.1
24725.3	954.1	24731.8	955.7	24741.4	953.7	24755.2	960.7	24923	959.7
24996.7	960								

Manning's n Values num= 8

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
12952.7	.043	17919.3	.15	18962.8	.032	19040.9	.15	19366.3	.032
20263	.043	21604	.025	21649.3	.025				

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
17919.3	21649.3	500	503.34	510	.1	.3

Ineffective Flow num= 3

Sta L	Sta R	Elev	Sta L	Sta R	Elev	Sta L	Sta R	Elev
12952.7	17540	960	22230	23500	960	23915	24996.7	960

CROSS SECTION RIVER: 1
REACH: 1 RS: 200.58

INPUT
Description: 200.58

Right Channel Bank Station Interpolated
Station Elevation Data num= 97

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
13004.2	946.1	13252.7	946	13406.6	945.2	13565.9	944.9	13774.2	944.6
13943.1	945.5	14116.9	945	14279.1	946.6	14438.8	947.7	14609	948.4
14768.3	947.1	14929	947.1	15050.5	947.2	15202.4	950.2	15286.6	950.1
15344.6	952	15501.3	950.2	15638.8	948.6	15758.4	951.1	15992.6	950.5
16109.8	952.6	16227.7	949.4	16451.3	948.4	16610.1	950.8	16708	953.4
16925.1	953.5	17149.3	953.1	17163.9	953.3	17234.2	944.5	17318.9	945.5
17387.8	953.1	17544.8	952.5	17768	953.3	17947	953.3	18120.4	944.7
18239.5	947	18479.6	944.5	18689.4	943	18899.8	947.1	18982.6	947.4
19060.5	950.5	19193.4	946.5	19239.2	951	19272	950.3	19281	947.8
19435	949.5	19481.5	950.8	19780.1	939.9	19839	939.1	20105.5	937.6
20341.3	941.2	20411.6	945.7	20456.8	943.9	20469.2	941.9	20590	941.2
20660	946.3	20712.1	943.5	20803.5	943.1	20830.7	941.2	21002.3	943.4
21117.8	946.3	21272	946.4	21425	950.4	21450	950.6778	21452	950.7
21643	952.3	21667.2	952.4	21820.3	952	21847.8	952	22017.1	952.7
22213.8	952.2	22244.2	960.6	22257.8	957.2	22270.2	958.5	22289.1	952.8
22392.9	953.3	22566.6	953.5	22797.3	954.2	22998.5	955.3	23151	955.4
23322.6	954.9	23399.1	953.2	23498	953.6	23506	952.3	23516.9	955.5
23555.1	955.9	23578.4	953.2	23779.1	953.4	23989.5	954.5	24174.8	954.3
24351.4	954.1	24538.2	953.8	24699.8	953.7	24771.3	955.3	24776.5	952.9
24795.5	960.4	24969.5	959.5						

Manning's n Values num= 7

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
13004.2	.15	14609	.043	17947	.15	19481.5	.032	20105.5	.043
21425	.025	21643	.025						

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
17947	21450	475	479.55	530	.1	.3

Ineffective Flow num= 3

Sta L	Sta R	Elev	Sta L	Sta R	Elev	Sta L	Sta R	Elev
13004.2	17460	960	22800	23380	960	24200	24969.5	960

CROSS SECTION RIVER: 1
REACH: 1 RS: 200.49

INPUT
Description: 200.49
Station Elevation Data num= 96

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
13048.9	945.6	13261.8	944.9	13471.4	944.9	13640.6	945.6	13821.9	945.7
13998.1	945.5	14204.4	944.8	14399.4	943.8	14586.6	943.4	14763.6	943
14951.3	943.1	15156.1	943.2	15371.2	945.2	15548.1	948.1	15769.6	946.9
15979.3	948.4	16200.3	947.6	16375.3	947.1	16493.4	953	16719	952.8
16949.5	951	17106.4	951.7	17132.4	947.4	17168	952.5	17198.4	950.8
17234.4	945.1	17404.6	947.6	17536.5	952.7	17719.3	953.3	17750.3	952.7
17791.5	947.5	17816.7	949.6	17852.9	949	17862.5	950.8	18012.9	951.3
18153.1	947.1	18273.7	941.6	18480.3	943.2	18739.9	945	18856.4	944.7
19028.1	939.7	19085	944.7	19190.4	945.3	19261.7	948.1	19342.5	943.7
19490.6	939.8	19542	943.5	19650.1	948.1	19854.1	940.8	19947.1	937.5
20192	936.9	20201.4	940.9	20275.4	939.8	20324.1	944	20367.7	939.3
20425.1	937.8	20452	941.7	20573.6	946.4	20608.5	941.9	20627	944.1
20638.3	940.9	20706.1	939.4	20811.1	939.3	20837.1	942.5	20956.7	943.3
20975.1	941.9	21136.8	944.8	21171	950.3	21342.1	950.2	21559.3	950.8
21830.5	950.9	21861.8	951.1	21876.9	959.1	21891.8	959	21905.4	951.7
22133.6	952.2	22336	952.4	22590.8	952.7	22633.1	952.7	22813.2	952.3
23018.2	953.8	23185.8	954.6	23401.6	954.5	23519	954	23540.6	951.9
23589.4	954.7	23609.6	952	23780.4	952.4	23946.1	952.4	24145	952.4
24343.4	952.9	24514.6	953.3	24725.8	953.2	24810.9	953.5	24835.6	958
24956.8	957.1								

Manning's n Values num= 7

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
13048.9	.15	15548.1	.043	17719.3	.043	18273.7	.15	19342.5	.032
20192	.043	21171	.025						

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
17719.3	21171	510	497.59	510	.1	.3

Ineffective Flow num= 4

Sta L	Sta R	Elev	Sta L	Sta R	Elev	Sta L	Sta R	Elev
13048.9	17380	960	21840	22160	960	22950	23300	960
24485	24956.8	960						

CROSS SECTION RIVER: 1
REACH: 1 RS: 200.39

INPUT
Description: 200.39
Station Elevation Data num= 96

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
13083.9	945.2	13254.6	945.3	13486.8	945.5	13742.8	945.8	14008.5	946

14273.9	945.9	14454.3	945.6	14637.7	945.4	14834.7	945.2	15022.8	944.7
15192.5	944.4	15417.5	944.4	15642.9	944.4	15819.7	943.9	16016.8	943.5
16254.5	943.6	16478.3	943.8	16652.7	943.9	16819.7	947.8	16875.2	949.8
16928.9	948.8	16992.7	951.1	17168.8	950.1	17242.1	945	17439	948.6
17484.9	949	17507.9	946.2	17527.7	949.5	17682.5	952.2	17714.9	945.6
17726.7	949.9	17781	947.5	17966.7	946.8	18026.8	945.7	18050.3	941.5
18183	941.3	18379.8	942.6	18534.2	941	18751.2	942.5	18800.2	941.7
18918.7	944.9	19025.6	941.5	19161.9	944.8	19220.8	943.5	19267.5	947.7
19444.5	940.9	19506.7	939	19763.7	940.6	19785	940.5	20110.3	939.9
20152.6	937	20199	940.6	20240.6	941.7	20272.3	938.7	20460.6	948.4
20515.5	946.8	20585.3	946.5	20659.8	939.5	20714.2	938.7	20742	943.3
20788.5	938.9	20812.7	939.9	20854.3	937.8	20978.7	940.9	21041	951.3
21062	949.6	21134.2	949.8	21326.6	949.6	21342.1	949.6	21606.3	951
21865.7	950.7	21893.4	950.9	21911.5	958	21918.5	956.7	21925.9	957.8
21937.7	950.6	22152.6	950.7	22336.4	951.5	22566.3	951.6	22807.6	951.9
23031.4	952.1	23203.3	953.2	23429.6	953.3	23573.8	952	23600	955.9
23653.9	951.2	23829	950.5	24004.5	950.7	24185.9	951.4	24362.4	951.7
24572.6	951.5	24742.1	951.6	24842.9	953.7	24848.9	951.1	24857.3	956.6
24952.5	957.6								

Manning's n Values num= 7

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
13083.9	.15	16875.2	.043	17682.5	.043	18751.2	.15	19506.7	.032
20199	.043	21041	.025						

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
17682.5	21041	550	506.5	480	.1	.3

Ineffective Flow num= 3

Sta L	Sta R	Elev	Sta L	Sta R	Elev	Sta L	Sta R	Elev
13080	17300	960	21400	22680	960	24775	24952.5	960

CROSS SECTION RIVER: 1
REACH: 1 RS: 200.3

INPUT
Description: 200.3
Station Elevation Data num= 96

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
13125.5	945.5	13316	945.5	13495.7	945.7	13687.9	945.9	13882.5	945.7
14123.9	945.2	14361.2	945.8	14546.2	945.8	14737.5	945.3	14938.1	945.4
15122.2	945.1	15335	945.6	15433	945.6	15567.6	939.4	15743.1	943.1
15926.3	943.9	16194.5	945.4	16429.4	944.1	16628.2	944	16879.3	943.5
17113.8	942.4	17377.6	941.9	17498.6	943.3	17607.2	938.9	17628.8	936.3
17658.3	936.3	17675	944.5	17697.5	951.2	17780.4	950.6	17838.1	947
17867.7	942.5	17967.1	945	18084.3	942	18261.2	944.6	18437.1	945.1
18628.2	943.1	18829.4	943.7	19025	944.9	19214.9	946.9	19248.3	947.6
19276.7	941.7	19395.7	940.8	19474.4	946.5	19525.1	941.1	19863.4	942.3
20078.8	940.7	20263.9	939.9	20310.8	939.3	20322.1	942.6	20372.8	938
20488.5	939.3	20499.7	937.7	20594.1	938.9	20626.9	940.5	20657.3	939.8
20690.1	946.3	20711.8	945.7	20725.9	942.7	20819.1	942.7	20861.5	948.6
20879.4	947.5	20896	957	20906	955	20980	955.9	20990	954.6
21051.2	955.9	21071.8	953.9	21206.4	955	21247.3	956.9	21438.7	956
21607.6	952.1	21652.6	956.5	21832	957.6	22017.2	957.7	22136.9	954
22358.1	956.8	22480.5	957.8	22661.3	957.9	22684.8	957.8	22918.3	956.9
22985.5	956.5	23086.3	950.7	23165.3	950.8	23400.3	954	23576.8	954.1
23691	953.2	23717.5	950.5	23919.1	949.7	24108.8	949.5	24379.6	950.1
24590.3	950.3	24795.9	950.7	24878.3	952.9	24883.6	950.7	24903	957.1
24983.7	956.7								

Manning's n Values num= 7

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
13125.5	.15	17780.4	.15	18261.2	.065	19395.7	.032	20263.9	.043
20896	.043	21206.4	.053						

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
17780.4	20896	520	515.72	560	.1	.3

Ineffective Flow num= 1

Sta L	Sta R	Elev
13125	17205	960

CROSS SECTION RIVER: 1
REACH: 1 RS: 200.2

INPUT
Description: 200.2

Left Channel Bank Station Interpolated
Station Elevation Data num= 97

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
13153.3	944.6	13349.8	941	13453.5	941.7	13506.2	944.4	13667.2	944.5
13896.4	944.4	14116.1	944.3	14330.9	944.2	14491.6	944.1	14677.3	943.8
14757.1	939.6	14939.8	944.1	15110.7	943.8	15278.6	943.3	15461.1	943.2
15632.4	943.3	15866.9	943.9	16084.9	943.3	16260.8	943.4	16458.2	942.6
16696.4	943.8	16928.4	942.2	17115	942.0292	17146.9	942	17406.4	942.7

17643.4	942.6	17703.7	941.7	17728.1	936.2	17754.7	936.2	17774.2	941
17960.5	949.6	18052.3	948	18086.8	939.2	18113.1	940.7	18233.7	939.8
18402.1	943	18511.7	944.8	18531.7	941.8	18707.3	944.7	18794.8	941.3
19017.2	943.2	19081.1	945.2	19247.5	944.2	19313.2	945.7	19482.3	942.9
19591.6	942.6	20062.3	940.4	20235.8	940	20296.5	940.6	20329.2	937.6
20402.2	940.4	20578.4	937.9	20633	938.7	20676	937	20686.1	939.7
20744	948	20822.3	948	20949.1	954.9	21027.6	947.5	21215	947.3
21338.5	947.2	21527.5	948.5	21746	948.8	21841.7	948.3	22059	949.1
22185.4	949.1	22507.1	948.8	22551.2	949	22836.7	949.8	22992.3	949.2
23156.3	950.7	23327.5	950.2	23492.3	951.2	23633.4	950.7	23641.6	948.8
23667.9	953.3	23785.4	949.4	23980	949	24145.7	948.5	24326	947.5
24336.6	946.6	24353.9	949.4	24529.6	949.2	24626.1	949.5	24679.5	947.3
24861.6	949.3	24983.4	948.5	24990.2	949.6	24999.2	947	25138.6	950
25169.5	955.5	25202.4	950.9	25239.2	950	25434.2	953.6	25474.7	955.9
25481.6	954.7	25498.7	958.4						

Manning's n Values num= 8

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
13153.3	.15	17960.5	.15	18233.7	.065	19482.3	.032	20235.8	.043
20744	.043	21215	.025	23667.9	.053				

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
17960.5	20744	535	525.73	515	.1	.3

Ineffective Flow num= 3

Sta L	Sta R	Elev	Sta L	Sta R	Elev	Sta L	Sta R	Elev
13150	17115	960	20744	23100	960	25169.5	25498.7	960

CROSS SECTION RIVER: 1
REACH: 1 RS: 200.1

INPUT
Description: 200.1
Station Elevation Data num= 96

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
13401.5	961.6	13404.9	959.9	13406.7	957.2	13436.1	949.3	13438.3	947.2
13608.9	944.8	13771.4	944.1	13861.6	946.2	14093.6	944.2	14363	943.5
14599.1	944	14804.9	943.5	14985.6	943.6	15188.8	942.7	15425.2	942.8
15650.8	942.8	15834.1	942.9	16015.4	942.8	16214.7	941.9	16467.4	941.6
16641.3	942.8	16821.1	944	17077.9	942.2	17313	941.7	17523.7	941.6
17672.5	940.7	17733.3	943.5	17903.5	943	18097	942	18197	940.9
18244	934.9	18278.2	934.7	18280	936.9	18289	936.2	18327.6	941.8
18505.3	941.8	18602	941.2	18752.8	944.8	18927.6	940.3	19044.3	938.9
19072.3	941.3	19130.7	943	19301.3	943.1	19402.1	944.8	19524.2	937.7
19631.9	945.9	19875.1	939.3	20104.9	934.9	20306.5	934.5	20329.5	935.2
20520.9	935.5	20604.1	936.7	20643	947.2	20857.2	946.5	21112.6	946.5
21165.6	945.5	21339.7	946.3	21499.9	947.4	21673.2	947.4	21692.7	947.4
21938.1	947.6	21976.2	947.6	22310	947.7	22366.6	947.7	22620.5	948
22748	948.7	23104.3	950.4	23323.4	950.8	23521	950.1	23671.5	950.7
23677.2	948.1	23730.1	951.6	23754.2	948.1	23760.8	950.1	23949.5	948.5
24132.7	948.8	24309.4	949	24354.9	949.5	24372.1	946.9	24561.3	948.7
24717.9	946.9	24773.6	949.1	24952.8	948.5	25016.6	946.2	25028.8	948.4
25039.1	944.7	25073.4	947.5	25256.1	949.3	25287.2	954.4	25301	949.1
25375.9	953.1	25528.9	956	25539.2	957.4	25551.8	955.4	25735.3	957.8
25963	960								

Manning's n Values num= 8

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
13401.5	.15	15425.2	.043	16821.1	.15	18752.8	.15	19524.2	.032
20643	.043	21165.6	.025	23730.1	.053				

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
17733.3	20643	490	491.65	495	.1	.3

Ineffective Flow num= 3

Sta L	Sta R	Elev	Sta L	Sta R	Elev	Sta L	Sta R	Elev
13400	17030	960	20800	23000	960	25287.2	25965	960

CROSS SECTION RIVER: 1
REACH: 1 RS: 200

INPUT
Description: 200
Station Elevation Data num= 96

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
13751.9	957.5	13774.9	950.4	13899.2	945.3	14075.2	943.6	14247.4	943.4
14390.2	944.1	14410.8	941.9	14489.5	944.7	14707.6	944.7	14871.6	945
15032.5	944.4	15300.2	944.1	15460.8	944.8	15628	944.3	15784.9	944.2
15958.7	943.4	16114	943.3	16279	942.4	16452	942.3	16652.4	942.7
16843.9	942.3	17008.1	943.8	17197.2	943.5	17388.9	942.5	17552.5	941.8
17738.6	942.2	17904	942.1	18074.8	942.9	18250.5	943.4	18433.6	942.2
18601	942.2	18626	940.2	18638.8	934	18658.5	933.4	18693.5	940.2
18768.9	944.3	18874.7	940.2	19043.7	940.6	19233.3	941.2	19416.4	942.6
19566.9	941.6	19720.1	935.8	19796.8	938.8	19975	934.4	20272.3	934.1
20276.6	934.2	20626.2	936.3	20790.5	935.3	20829	944.5	21085.6	944
21172.7	942.8	21329.4	945.1	21406.2	952.7	21433.8	946.6	21513.2	947.1

21713.7	947	21747.4	947	21906.5	946.8	21920.3	946.8	22147.8	946
22206.3	945.8	22451.9	946.8	22701.3	947.9	22901.9	948.3	23151.7	949.3
23234.2	950.1	23323.5	948.7	23510.9	949.9	23672.1	949.6	23707.3	949.9
23712.7	946.9	23720.9	949.2	23769.1	950.4	23820.8	947.8	23989.1	947.8
24020.6	947.1	24029.2	945.6	24038	947.6	24198.6	947	24361	947.2
24513.5	945.6	24672.5	946.4	24863.2	946.6	25018.9	946.3	25064.3	946
25075.8	943.9	25087.5	947.1	25163.5	947.5	25181.3	953.2	25200.7	953.7
25211	947.8	25384.8	952.1	25573.3	956	25602.8	956.1	25616.3	960.7
25622.7	961.4								

Manning's n Values num= 9

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
13751.9	.15	15628	.043	17008.1	.15	18601	.15	19566.9	.032
20829	.032	21329.4	.043	21713.7	.025	23769.1	.053		

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
17008.1	20829	520	521.67	525	.1	.3

Ineffective Flow num= 3

Sta L	Sta R	Elev	Sta L	Sta R	Elev	Sta L	Sta R	Elev
13751	16950	960	21350	23200	960	25200.7	25625	960

CROSS SECTION RIVER: 1
REACH: 1 RS: 199.91

INPUT
Description: 199.91
Station Elevation Data num= 96

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
14357	952	14390.5	944.3	14519.8	944.3	14639.2	944	14799.9	943.3
14919	943.3	15064.9	943.3	15201.6	943.3	15338.6	943.4	15454.7	943.3
15584.5	943.3	15701.7	943.3	15826.7	943	15946.8	942.7	16066.9	942.8
16186	942.4	16318.5	941.2	16444.9	941.2	16595	941.2	16734.2	941.2
16862.4	941.9	16985.5	941.6	17123.4	941.2	17256.1	940.2	17418.5	940.8
17583.3	941.1	17747.3	940.1	17924.2	940.7	18048.2	942.2	18185	942.2
18189.1	942.2	18396.1	942.1	18544.2	943.4	18752.1	941	18756.5	940.1
18757.1	941.1	18776.4	938.5	18875.1	932.1	19009.5	940.1	19154.1	941.2
19274.4	940.6	19412.9	940.1	19433.2	938.2	19665	944.1	19683.4	944.3
20122	935.3	20357	935.3	20396.2	935.2	20513.6	938.9	20603.3	938.2
20817.6	934.9	20841.2	934.9	21013	935.1	21078.3	935.1	21141.2	941.5
21181.1	941.5	21315.9	945	21377.5	952.3	21405.6	945.7	21555.3	946.7
21673.9	946.5	21886.3	946.2	22065.2	946.2	22189.8	945.7	22354.3	945.2
22462	946.4	22675.7	948.1	22731	948.3	22992.2	947.3	23079.5	947.2
23195.8	947.1	23332.1	947.2	23499	947.4	23628.6	947.3	23678.5	948.1
23685.3	950.9	23692.1	948.2	23702.9	950.2	23747.7	949.7	23766.7	947.4
23890.2	946.9	24000	946.9	24127.8	946.1	24323.2	945.3	24446.3	945.3
24602.1	944.4	24749.8	944.2	24887.7	943.5	25018.7	945.8	25033.6	942.4
25046.9	947.2	25137.9	947.1	25214.4	951.6	25285.5	947.1	25444.7	950.8
25559.1	953.2								

Manning's n Values num= 10

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
14357	.15	16318.5	.043	17747.3	.15	18544.2	.15	19433.2	.032
21013	.043	21315.9	.043	21377.5	.025	23702.9	.053	25018.7	.025

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
16862.4	21315.9	465	466.41	465	.1	.3

Ineffective Flow num= 3

Sta L	Sta R	Elev	Sta L	Sta R	Elev	Sta L	Sta R	Elev
14357	16800	960	21330	23050	960	25200	25559.1	960

CROSS SECTION RIVER: 1
REACH: 1 RS: 199.82

INPUT
Description: 199.82

Left Channel Bank Station Interpolated
Station Elevation Data num= 97

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
14626.5	957.7	14665	955.3	14714.8	947.7	14731.9	943.6	14878.2	942.2
15038.4	942.1	15177.1	942.1	15312	942.9	15442.8	943.5	15572.5	942.6
15710.4	942.1	15843.3	942.2	15981.6	942	16111.7	941.9	16269.4	941.3
16337.7	941.1	16490	941.8	16647.8	941.2	16807.1	940.1	16870	940.1
16937.5	940.1	17070.8	940.1	17202.5	940.1	17339.2	940.1	17503.8	940.1
17635.5	940.1	17774.7	939.1	17955.5	939.8	18107	939.8	18236.3	940.2
18376.6	941.1	18554.9	941.8	18684.9	940.6	18768.3	940	18787.7	931.4
18818.1	931.2	18845.4	938.1	18894.5	940	19032.4	940.6	19165.1	939.3
19236.6	938.1	19354.5	941.6	19458.6	938.6	20124.2	939.3	20322.3	939.2
20533.6	938.6	20766.2	939.3	20910.7	936.7	20926	937.9	21009.9	936.6
21146.9	939.7	21241.8	942.2	21405.4	944.5	21551.8	945.7	21756.1	945.8
21937.2	945.7	22121.7	945.7	22347.1	945.6	22491.6	945.9	22657.2	946.2
22790.5	945.6	22925.1	946.5	23055.8	946.4	23218.3	946.1	23364.5	946.1
23514.8	945.8	23642	948.2	23655.7	947.2	23663.6	949.2	23669.7	947
23724.8	949.5	23780.9	946.5	23947	945	24077.1	944.4	24199.5	945.5

24210.3	943.6	24214.2	944.9	24354.9	943.6	24545.8	943	24742.9	943.3
24928.6	944	25002.7	943.7	25010.2	942.2	25023.6	945.4	25153.6	945.8
25304.8	946.9	25434.7	948.1	25588.5	950.5	25663.5	951.7	25798.3	956.3
25810.1	957.9	25834.3	954.9	25859.3	957.7	25991.9	960.7	26149.5	962.1
26241.6	962.1	26277	964.4						

Manning's n Values num= 6

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
14626.5	.15	18554.9	.15	19165.1	.065	21405.4	.025	23724.8	.053
25002.7	.025								

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
16870	21405.4	0	0	0	.1	.3

Ineffective Flow num= 3

Sta L	Sta R	Elev	Sta L	Sta R	Elev	Sta L	Sta R	Elev
14626.5	16870	960	21650	22900	960	25350	26127	960

SECTION I

Pad Elevation Certification

November 3, 2003

DAVID EVANS AND ASSOCIATES INC.

Mr. Jeff Klem
Elliot Homes
1400 E. Southern Avenue
Building H, Suite 720
Tempe, AZ 85281

RE: River Walk Villages – Phase 2A
DEA Job No.: ELLT0000-0017

Dear Jeff:

This is to certify that the building pads for the following lots within River Walk Villages Phase 2A have been constructed to the elevations listed as follows:

LOT	PLAN PAD ELEVATION	AS-BUILT ELEVATION	AS-BUILT DIFFERENCE
1	1016.4	1016.4	0.0
2	1015.9	1015.9	0.0
3	1015.4	1015.4	0.0
4	1014.9	1014.9	0.0
5	1014.5	1014.5	0.0
6	1014.2	1014.2	0.0
7	1013.9	1013.8	-0.1
8	1013.5	1013.4	-0.1
9	1013.2	1013.1	-0.1
10	1012.9	1012.9	0.0
11	1012.7	1012.6	-0.1
12	1012.6	1012.5	-0.1
13	1012.6	1012.6	0.0
14	1012.4	1012.4	0.0
15	1012.3	1012.3	0.0
16	1012.2	1012.2	0.0
17	1012.0	1011.9	-0.1
18	1011.7	1011.7	0.0
19	1012.1	1012.1	0.0
20	1012.4	1012.4	0.0
21	1012.7	1012.7	0.0
22	1013.0	1013.0	0.0
23	1013.3	1013.3	0.0
24	1014.5	1014.5	0.0
25	1014.2	1014.2	0.0
26	1013.9	1013.9	0.0
27	1013.6	1013.6	0.0
28	1013.3	1013.3	0.0
29	1013.3	1013.3	0.0
30	1013.6	1013.6	0.0
31	1013.9	1013.9	0.0
32	1014.2	1014.2	0.0
33	1014.5	1014.5	0.0
34	1015.8	1015.8	0.0
35	1015.3	1015.3	0.0
36	1014.9	1014.9	0.0

2141 East Highland Avenue Suite 200 Phoenix Arizona 85016 Telephone: 602.678.5151 Facsimile: 602.678.5155

LOT	PLAN PAD ELEVATION	AS-BUILT ELEVATION	AS-BUILT DIFFERENCE
37	1017.1	1017.1	0.0
38	1016.5	1016.5	0.0
39	1016.0	1016.0	0.0
40	1015.5	1015.5	0.0
41	1015.1	1015.1	0.0
42	1014.4	1014.5	0.1
43	1014.6	1014.6	0.0
44	1015.0	1014.9	-0.1
45	1015.9	1015.9	0.0
46	1015.1	1015.1	0.0
47	1015.2	1015.2	0.0
48	1015.4	1015.3	-0.1
49	1015.6	1015.6	0.0
50	1015.7	1015.7	0.0
51	1015.5	1015.5	0.0
52	1015.3	1015.3	0.0
53	1015.3	1015.3	0.0
54	1015.5	1015.5	0.0
55	1015.6	1015.6	0.0
56	1015.8	1015.8	0.0
57	1015.7	1015.7	0.0
58	1015.6	1015.6	0.0
59	1015.5	1015.4	-0.1
60	1015.3	1015.2	-0.1
61	1015.2	1015.1	-0.1
62	1015.0	1014.9	-0.1
63	1014.9	1014.9	0.0
64	1014.7	1014.7	0.0
65	1014.6	1014.6	0.0
66	1014.4	1014.3	-0.1
67	1014.3	1014.2	-0.1
68	1014.1	1014.1	0.0
69	1013.9	1013.8	-0.1
70	1014.1	1014.0	-0.1
71	1014.3	1014.2	-0.1
72	1014.5	1014.4	-0.1
73	1014.7	1014.7	0.0
74	1014.9	1014.8	-0.1
75	1015.2	1015.1	-0.1
76	1015.4	1015.4	0.0
77	1014.6	1014.6	0.0
78	1014.4	1014.4	0.0
79	1014.3	1014.3	0.0
80	1014.1	1014.1	0.0
81	1014.0	1014.0	0.0
82	1013.9	1013.8	-0.1
83	1013.4	1013.4	0.0
84	1014.1	1014.0	-0.1
85	1014.9	1014.9	0.0

LOT	PLAN PAD ELEVATION	AS-BUILT ELEVATION	AS-BUILT DIFFERENCE
86	1014.9	1014.9	0.0
87	1014.3	1014.3	0.0
88	1013.7	1013.6	-0.1
89	1013.2	1013.1	-0.1
90	1012.9	1012.9	0.0
91	1012.9	1012.9	0.0
92	1012.0	1012.0	0.0
93	1014.0	1014.0	0.0
94	1014.2	1014.1	-0.1
95	1014.4	1014.3	-0.1
96	1014.6	1014.6	0.0
97	1014.8	1014.8	0.0

Should you require any additional information, please call.

David Evans & Associates, Inc

James A.Brucci, RLS
Project Surveyor

REGISTERED LAND SURVEYOR
CERTIFICATE NO.
29855
JAMES A.
BRUCCI
Date Signed 11-4-03
ARIZONA, U.S.A.

GRADING AND DRAINAGE PLANS

FOR

RIVER WALK VILLAGES – PHASE 2A

AN R1-8 PLANNED RESIDENTIAL DEVELOPMENT SUBJECT TO SINGLE FAMILY DESIGN REVIEW.
A PORTION OF THE SOUTHEAST QUARTER AND A PORTION OF THE SOUTHWEST QUARTER
OF SECTION 29, TOWNSHIP 1 NORTH, RANGE 2 EAST, OF THE GILA AND
SALT RIVER BASE AND MERIDIAN, PHOENIX, MARICOPA COUNTY, ARIZONA

GENERAL NOTES

1. A GRADING PERMIT IS REQUIRED UNDER CHAPTER 32A OF THE PHOENIX CITY CODE.

2. HAUL PERMITS, WHEN REQUIRED, MUST BE OBTAINED PRIOR TO OR CONCURRENTLY WITH THE GRADING AND DRAINAGE PERMIT.

3. EXCAVATING CONTRACTOR MUST GIVE LOCATION FOR WASTING EXCESS EXCAVATION AND A LETTER FROM OWNER GIVING PERMISSION FOR DUMPING PRIOR TO STARTING ON-SITE CONSTRUCTION. IF EXCESS EXCAVATION EXCEEDS 100 CUBIC YARDS, THE DISPOSAL SITE WILL ALSO REQUIRE A GRADING AND DRAINAGE PERMIT.

4. DEVELOPMENT SERVICES DEPARTMENT'S FIELD INSPECTION GROUP SHALL BE NOTIFIED 48 HOURS BEFORE ON-SITE AND/OR OFF-SITE CONSTRUCTION BEGINS, TELEPHONE (602) 262-7811.

5. MINIMUM FINISH FLOOR ELEVATIONS SHOWN ARE SAFE FROM THE 100 YEAR FLOOD OR PER MINIMUM SPECIFIED IN THE CITY OF PHOENIX STORM DRAIN DESIGN MANUAL, WHICHEVER IS GREATER.

6. STAKING PAD ELEVATIONS IS THE RESPONSIBILITY OF THE OWNER AND HIS ENGINEER. THE OWNER'S ENGINEER SHALL SUBMIT THREE SEALED COPIES OF THIS GRADING AND DRAINAGE PLAN DESIGNATED AS "RECORD DRAWING" (BEARING AN ORIGINAL SIGNATURE) PRIOR TO THE REQUEST FOR FINAL INSPECTION.

7. A SEPARATE PERMIT IS NECESSARY FOR ANY OFFSITE CONSTRUCTION.

8. AN APPROVED GRADING AND DRAINAGE PLAN SHALL BE ON THE JOB SITE AT ALL TIMES. DEVIATIONS FROM THE PLAN MUST BE PRECEDED BY AN APPROVED PLAN REVISION.

9. GRADING AND DRAINAGE PLAN APPROVAL INCLUDES THE CONSTRUCTION OF ALL SURFACE IMPROVEMENTS SHOWN ON THE APPROVED PLAN, INCLUDING, BUT NOT LIMITED TO, RETENTION AREAS, SEDIMENTATION BASINS, AND/OR OTHER DRAINAGE FACILITIES, DRAINAGE PATTERNS, WALLS, CURBS, ASPHALT PAVEMENT, AND BUILDING FLOOR ELEVATIONS.

10. CONTRACTOR SHALL PROVIDE LEVEL BOTTOM IN ALL RETENTION BASINS AT ELEVATIONS SHOWN ON THE PLANS. SLOPE PROTECTION SHALL BE APPLIED TO PREVENT EROSION.

11. GRADES SHOWN IN RETENTION BASINS ARE DESIGN FINISHED GRADES. SHOULD THE CONTRACTOR OR ANY SUBCONTRACTOR PLAN TO PLACE SPOIL DIRT FROM FOOTINGS, UTILITY TRENCHES, LANDSCAPING, SWIMMING POOLS, ETC. IN THE BASINS, THEN THE BASINS SHOULD BE SUFFICIENTLY OVER-EXCAVATED DURING THE ROUGH GRADING OPERATION TO ALLOW FOR THE PLACEMENT OF THE FILL OR LANDSCAPING MATERIALS.

12. CONTRACTOR IS RESPONSIBLE FOR LOCATING AND CONFIRMING DEPTHS OF ALL THE EXISTING UTILITY LINES WITHIN PROPOSED RETENTION BASIN AREAS. IF THE BASIN CANNOT BE CONSTRUCTED PER PLAN BECAUSE OF CONFLICTS, THE CONTRACTOR SHOULD DISCUSS MODIFICATION OF BASIN CONFIGURATION WITH THE CITY INSPECTOR TO DETERMINE IF A PLAN REVISION OR A FIELD CHANGE IS REQUIRED.

13. ALL DRAINAGE PROTECTIVE DEVICES SUCH AS SWALES, INTERCEPTOR DITCHES, PIPES, PROTECTIVE BERMS, BARRIER WALLS, CONCRETE CHANNELS, OR OTHER MEASURES DESIGNED TO PROTECT ADJACENT BUILDINGS OR PROPERTY FROM STORM RUNOFF MUST BE COMPLETED PRIOR TO BUILDING CONSTRUCTION.

14. RETENTION BASIN SIDE SLOPES SHALL BE A MAXIMUM OF 4:1 UNLESS APPROVAL IS RECEIVED FROM THE PLAN REVIEWER FOR A STEEPER SLOPE.

15. ALL KNOWN EXISTING UNDERGROUND UTILITIES WITHIN PROPOSED RETENTION AREAS HAVE BEEN DESIGNED TO MAINTAIN A MINIMUM 15" OF COVER OVER CITY OWNED UTILITY LINES AND THE MINIMUM SPECIFIED BY OTHER UTILITY OWNERS.

16. REQUIRED RETAINING WALLS SHOWN ON THE GRADING AND DRAINAGE PLANS ARE TO BE REVIEWED, PERMITTED, AND INSPECTED BY THE BUILDING SAFETY BRANCH OF THE DEVELOPMENT SERVICES DEPARTMENT.

17. CERTIFICATE OF OCCUPANCY (C.OF O.) AND/OR FINAL ELECTRICAL CLEARANCE FOR ANY BUILDING IS DENIED UNTIL ALL GRADING AND DRAINAGE IMPROVEMENTS ARE COMPLETED.

18. DAMAGED AND/OR DISPLACED CONCRETE CURB, GUTTER, SIDEWALK, OR DRIVEWAY SLAB THAT IS WITHIN THE RIGHT-OF-WAY SHALL BE REPAIRED OR REPLACED, AS NOTED BY CITY INSPECTORS, BEFORE FINAL ACCEPTANCE OF THE WORK.

19. THE ENGINEERING DESIGN ON THESE PLANS ARE ONLY APPROVED BY THE CITY IN SCOPE AND NOT IN DETAIL. CONSTRUCTION QUANTITIES ON THESE PLANS ARE NOT VERIFIED BY THE CITY. APPROVAL OF THESE PLANS ARE FOR PERMIT PURPOSES ONLY AND SHALL NOT PREVENT THE CITY FROM REQUIRING CORRECTION OF ERRORS IN THE PLANS WHERE SUCH ERRORS ARE SUBSEQUENTLY FOUND TO BE IN VIOLATION OF ANY LAW, ORDINANCE, HEALTH, SAFETY OR OTHER DESIGN ISSUES.

20. CONSTRUCTION WITHIN THE RIGHT-OF-WAY SHALL CONFORM TO THE LATEST APPLICABLE MARICOPA ASSOCIATION OF GOVERNMENTS (MAG) UNIFORM STANDARD SPECIFICATIONS AND DETAILS AND THE LATEST CITY OF PHOENIX SUPPLEMENTALS TO THE MAG UNIFORM STANDARD SPECIFICATIONS AND DETAILS.

21. PLAN APPROVAL IS VALID FOR TWELVE (12) MONTHS. IF APPROVAL EXPIRES, THE PLANS MUST BE RESUBMITTED FOR CITY UPDATE REVIEW AND APPROVAL.

22. COMPACTION SHALL COMPLY WITH M.A.G. SECTION 601.

23. OBSTRUCTIONS TO PROPOSED IMPROVEMENTS IN THE RIGHT-OF-WAY SHALL BE REMOVED OR RELOCATED BEFORE BEGINNING CONSTRUCTION OF THE PROPOSED IMPROVEMENTS.

24. THE ACTUAL POINT OF PAVEMENT MATCHING AND/OR TERMINATION SHALL BE DETERMINED IN THE FIELD BY THE CITY OF PHOENIX, DEVELOPMENT SERVICES DEPARTMENT FIELD INSPECTOR.

25. TREES AND SHRUBBERY IN THE RIGHT-OF-WAY THAT CONFLICT WITH PROPOSED IMPROVEMENTS SHALL NOT BE REMOVED WITHOUT APPROVAL OF THE CITY LANDSCAPE ARCHITECT OR HIS ASSIGNEES. THE PERMITTEE SHALL BE RESPONSIBLE FOR OBTAINING AUTHORIZATION TO REMOVE AND/OR RELOCATE SAID TREES OR SHRUBBERY BY CALLING THE DEVELOPMENT SERVICES LANDSCAPE ARCHITECT AT (602) 256-4116.

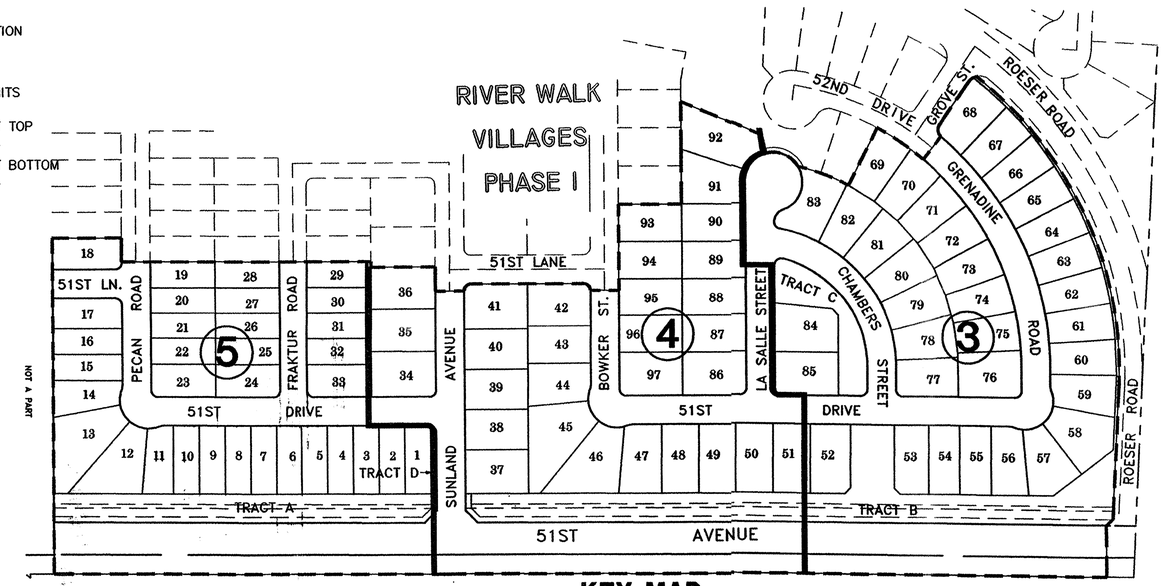
26. THE CITY OF PHOENIX POLICE DEPARTMENT ENFORCES LAWS REGULATING THE OPERATION OF COMMERCIAL VEHICLES. THIS INCLUDES ENFORCEMENT OF FEDERAL, STATE, COUNTY, AND LOCAL LAWS AND ORDINANCES.

27. QUESTIONS REGARDING COMMERCIAL VEHICLE ENFORCEMENT MAY BE DIRECTED TO THE ENFORCEMENT SUPERVISOR AT 495-7813 (SOUTH RESOURCE BUREAU) OR 495-6784 (NORTH RESOURCE BUREAU).

28. ALL WORK MUST COMPLY WITH REQUIREMENTS OF THE CURRENT C.O.P. TRAFFIC BARRICADE MANUAL.

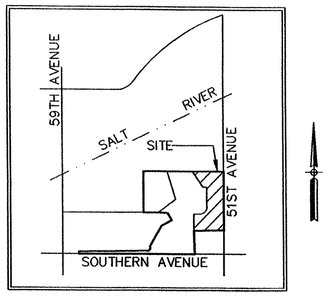
LEGEND

(4)	INDICATES SHEET NUMBER
	INDICATES MATCH LINE
DWSE	DESIGN WATER SURFACE ELEVATION
◆	INDICATES A CHANGE IN GRADE
(77.52)	INDICATES TOP OF CURB ELEVATION
→	INDICATES DIRECTION OF FLOW
FF: 98.57	INDICATES FINISH FLOOR ELEVATION
P: 97.9	INDICATES PAD ELEVATION
N.I.C	NOT IN CONTRACT
	SLOPE INDICATOR
	MULTI-USE TRAIL
(12.5)	REAR YARD ELEVATION
T.O.B.	TOP OF BERM
	PROPOSED PAD LIMITS
FGT	FINISHED GRADE AT TOP OF RETAINING WALL
FGB	FINISHED GRADE AT BOTTOM OF RETAINING WALL



KEY MAP

(NTS)



VICINITY MAP

(NTS)

ENGINEER

DAVID EVANS AND ASSOCIATES, INC.
7878 NORTH 16TH STREET, SUITE 250
PHOENIX, ARIZONA 85020
PHONE: (602) 678-5151
CONTACT: JOE CABLE

DEVELOPER

ELLIOTT HOMES
1400 E. SOUTHERN AVENUE
BUILDING H, SUITE 725
TEMPE, ARIZONA 85281
PHONE: (480) 831-9200
CONTACT: JEFF KLEM

BASIS OF BEARING

BEARINGS ARE BASED ON THE EAST LINE OF THE SOUTHEAST QUARTER OF SECTION 29, TOWNSHIP 1 NORTH, RANGE 2 EAST. WHICH BEARS S 00°07'48" W PER ALTA/ACSM LAND TITLE SURVEY PREPARED BY STANTECH CONSULTING INC., JOB NO. 28800098, DATED JUNE 30, 1997

BENCHMARK

CITY OF PHOENIX NGS SS ROD IN HANDHOLE AT THE NORTHWEST CORNER OF THE SRP PUMP STATION LOCATED AT THE SOUTHWEST CORNER OF THE INTERSECTION OF 51ST AVENUE AND SOUTHERN AVENUE. ELEV. = 1012.33 (C.O.P. DATUM)

City of Phoenix
These plans have been approved by the Development Services Department for The issuance of the following permit(s)

UPDATE JT 8/21/03

Grading	JT	Ph.___	Date 7/2/02
SWMP		Ph.___	Date___
Paving		Ph.___	Date___
Concrete		Ph.___	Date___
Drain. Fac.		Ph.___	Date___
Water		Ph.___	Date___
Wastewater		Ph.___	Date___
Misc		Ph.___	Date___

CALL TWO WORKING DAYS BEFORE YOU DIG
263-1100
BLUE STAKE CENTER

UTILITY REVIEW

1. THESE PLANS HAVE BEEN SUBMITTED TO THE FOLLOWING UTILITY COMPANIES. WHERE THE WORK TO BE DONE CONFLICTS WITH ANY OF THESE UTILITIES, THE CONFLICTS SHALL BE RESOLVED AS SPECIFIED IN THE SPECIAL PROVISIONS AND/OR AS OTHERWISE NOTED ON THESE PLANS. CONFLICTS ARISING DURING THE COURSE OF CONSTRUCTION FROM UNFORESEEN CIRCUMSTANCES SHALL BE REPORTED TO THE INTERESTED UTILITY COMPANY AND BE RESOLVED BY THEM AND THE DESIGN ENGINEER.

2. THE CITY WILL NOT PARTICIPATE IN THE COST OF CONSTRUCTION OR UTILITY RELOCATION.

SRP (602) 236-0811	VINCE FEATHERLY COMPANY REPRESENTATIVE	DATE 05/25/01
QWEST COMMUNICATIONS (602) 630-0496	ROBERT ARIETTA COMPANY REPRESENTATIVE	DATE 05/25/01
COX COMMUNICATIONS (623) 322-7220	CONFLICT REVIEW DEPT. COMPANY REPRESENTATIVE	DATE 05/25/01
SOUTHWEST GAS CORPORATION (623) 484-5308	GERALDO LOPEZ COMPANY REPRESENTATIVE	DATE 05/25/01
A. T. & T. (909) 776-3914	RUBEN MARTINEZ COMPANY REPRESENTATIVE	DATE 05/25/01
SALT RIVER IRRIGATION (602) 236-5799	SUSANA ORTEGA COMPANY REPRESENTATIVE	DATE 05/25/01

NOTE: DRYWELLS SHALL BE TESTED UPON COMPLETION OF CONSTRUCTION TO DETERMINE IF THE TOTAL PERCOLATION RATE AT ALL DRYWELLS MEETS THE REQUIREMENT TO DRAIN THE RETENTION BASINS WITHIN 36 HOURS. ADDITIONAL DRYWELLS MUST BE CONSTRUCTED TO MEET THE REQUIRED RATE TO DRAIN THE BASINS WITHIN 36 HOURS.

AS-BUILT CERTIFICATION (PADS ONLY)

I HEREBY CERTIFY THAT THE "RECORD DRAWING" MEASUREMENTS AS SHOWN HEREON WERE MADE UNDER MY SUPERVISION OR AS NOTED AND ARE CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

REGISTERED LAND SURVEYOR ___ DATE ___

REGISTERED LAND SURVEYOR CERTIFICATE NO. 14959 THOMAS J. LUTE Date Signed 2/13/02 ARIZONA, U.S.A.

14959
REGISTRATION NUMBER

SHEET INDEX

1	COVER
2	DETAILS & SECTIONS
3-5	GRADING PLAN
6	DETAILS & SECTIONS

QUANTITIES

CUT:	10,159	CU. YD.
FILL:	86,249	CU. YD.
NET:	76,090	CU. YD. IMPORT

NOTE: THESE QUANTITIES ARE ESTIMATES OF THE ENGINEER THE CONTRACTOR IS RESPONSIBLE FOR THERE OWN QUANTITY TAKE-OFFS. QUANTITIES ARE BASED ON 15% SHRINK FACTOR AND 0.15 FEET OF GROUND LOSS.

24" DIA HDPE STORM DRAIN	54 LF
HEADWALL W/ HANDRAIL	4 EA
RETAINING WALL (BY OTHERS)	1163 LF

NET ACREAGE

998,780 SQ FT = 22.9 AC.

QS# 3-16 KIVA 98-11948 (PH2A)
SDEV 99000789 CSPR 0101171

DATE	REVISION	BY

Registered Professional Engineer (Civil) CERTIFICATE NO. 33135 JOSEPH E. CABLE Date Signed 8/14/03 ARIZONA, U.S.A.

DAVID EVANS AND ASSOCIATES INC.
7878 North 16th St, Suite 250
Phoenix Arizona 85020
Phone: 602.678.5151

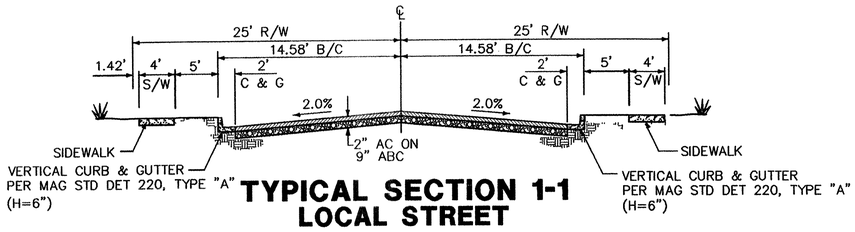
GRADING & DRAINAGE PLAN COVER SHEET

RIVER WALK VILLAGES - PHASE 2A PHOENIX, ARIZONA

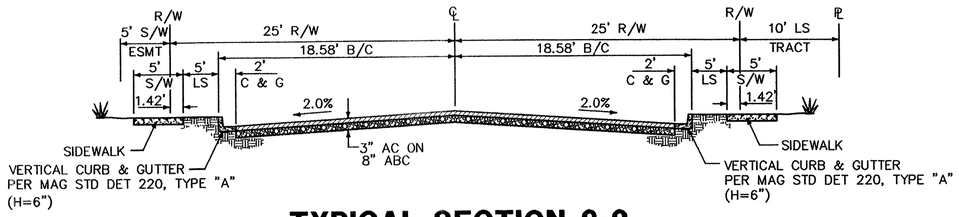
SECTION: 29	TWNSHP: 1N	RANGE: 2E	
DESIGN BY: CLZ	DATE: 6/02		
CHECKED BY: JECA	DRAWING NO.: EL13GD01		
JOB NO.: ELLT0013	SHEET 1 OF 6		

ELLT0013 clz 06/27/02 08:00:49 clz P:\ELT0013\Civil Phase 2A\Grading\EL13GD01.dwg

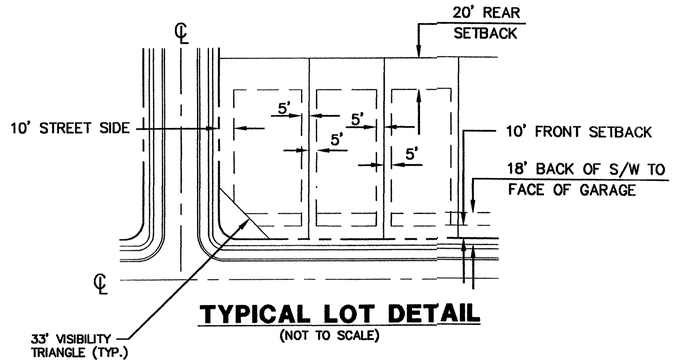
QS# 3-16 KIVA 98-11948 (PH2A) SDEV 99000789 CSPR0101171



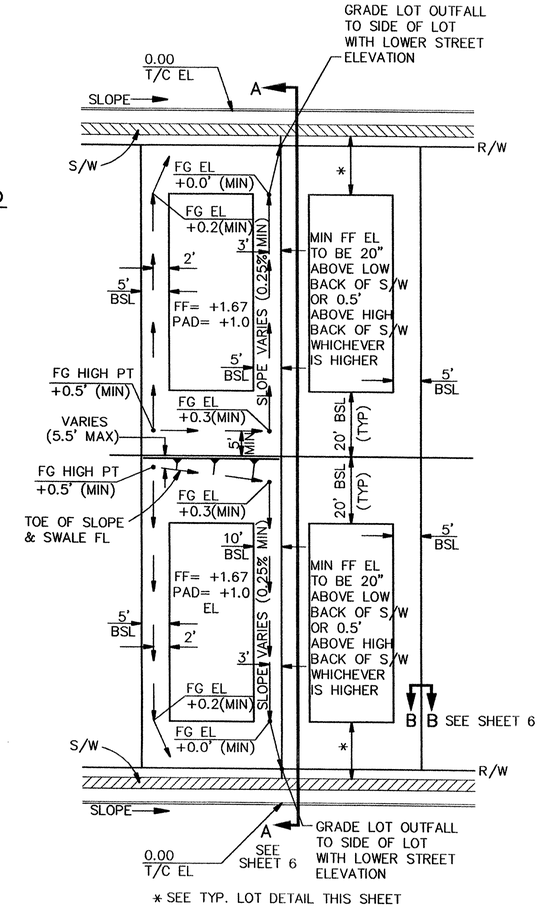
TYPICAL SECTION 1-1
LOCAL STREET



TYPICAL SECTION 2-2
SUNLAND AVENUE ENTRANCE



TYPICAL LOT DETAIL
(NOT TO SCALE)

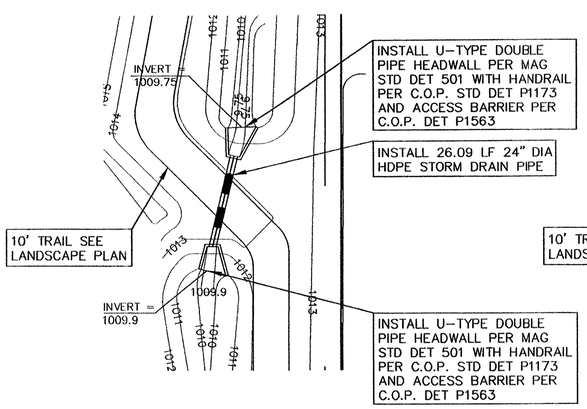


TYPICAL LOT GRADING
NTS

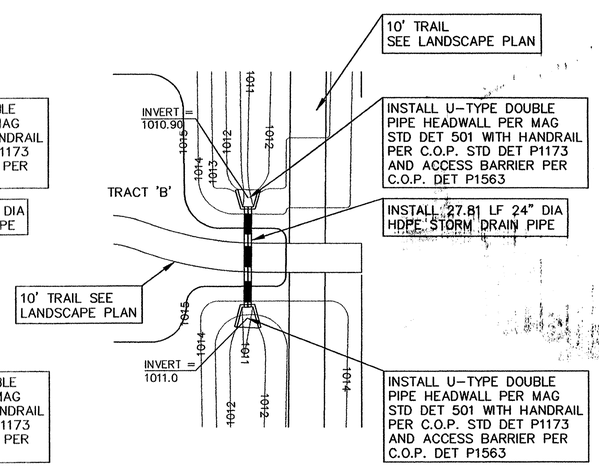
THE DEVELOPER/BUILDER SHALL BE RESPONSIBLE FOR INSURING THAT ALL ON-LOT DRAINAGE PROTECTIVE DEVICES SUCH AS SIDE YARD SWALES, DRIVEWAY SWALES, WALL OPENINGS, BERMS, ETC. ARE CONSTRUCTED ACCORDING TO THE APPROVED PLANS PRIOR TO OCCUPANCY OF ANY STRUCTURE.

ENGINEERING NOTES TO THE CONTRACTOR

1. THE CONTRACTOR SHALL NOTIFY THE ENGINEER AT LEAST 48 HOURS IN ADVANCE FOR ANY STAKING OR RESTAKING REQUIRED.
2. THE CONTRACTOR SHALL MAKE NO CLAIM AGAINST THE OWNER OR THE ENGINEER REGARDING ALLEGED INACCURACY OF CONSTRUCTION STAKES SET BY THE ENGINEER UNLESS ALL SURVEY STAKES SET BY THE ENGINEER ARE MAINTAINED INTACT AND CAN BE VERIFIED AS TO THEIR ORIGIN. IF, IN THE OPINION OF THE ENGINEER, THE STAKES ARE NOT MAINTAINED INTACT AND CANNOT BE VERIFIED AS TO THEIR ORIGIN, REMEDIAL WORK REQUIRED TO CORRECT ANY ITEM OR IMPROPER CONSTRUCTION WORK IN THIS DEVELOPMENT SHALL BE PERFORMED AT THE SOLE EXPENSE OF THE RESPONSIBLE CONTRACTOR OR SUBCONTRACTOR.
3. IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN ANY PERMITS REQUIRED AT HIS OWN EXPENSE.
4. EXISTING UTILITIES SHOWN ON THESE PLANS HAVE BEEN LOCATED ACCORDING TO INFORMATION PROVIDED BY THE AGENCY OPERATING EACH UTILITY. CONTRACTOR IS TO VERIFY ACTUAL LOCATION OF EXISTING UTILITIES PRIOR TO CONSTRUCTION OR TRENCHING. CALL BLUE STAKE AT (602) 263-1100 FOR FIELD LOCATIONS.
5. THE CONTRACTOR WILL MAKE EXPLORATORY EXCAVATIONS AND LOCATE EXISTING UNDERGROUND FACILITIES SUFFICIENTLY AHEAD OF CONSTRUCTION TO PERMIT THE REVISION OF THESE PLANS IF NECESSARY DUE TO A CONFLICT BETWEEN A FACILITY PROPOSED HEREIN AND AN EXISTING FACILITY.
6. DURING CONSTRUCTION OPERATIONS, HEAVY EQUIPMENT MAY CROSS EXISTING OR PROPOSED PIPE. THE FILL SHOULD BE SUFFICIENT TO PREVENT THE LATERAL DISPLACEMENT OF THE PIPE.
7. ANY POTENTIAL EXTRA CHARGES BY THE CONTRACTOR WILL BE BROUGHT TO THE ATTENTION OF THE OWNERS, OR THEIR REPRESENTATIVES, PRIOR TO THE OWNER INCURRING THE COST.
8. THE CONTRACTOR AGREES THAT HE SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY, THAT THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS, AND THAT THE CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD THE OWNER AND THE ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER OR ENGINEER.
9. THE ENGINEER WILL NOT BE RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES OR PROCEDURES OR FOR SAFETY PRECAUTIONS OR PROGRAMS UTILIZED IN CONNECTION WITH THE WORK, AND HE WILL NOT BE RESPONSIBLE FOR THE CONTRACTOR'S FAILURE TO CARRY OUT THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
10. THE ENGINEER AND APPLICABLE AGENCY MUST APPROVE, PRIOR TO CONSTRUCTION, ANY ALTERATION OR VARIANCE FROM THESE PLANS. ANY VARIATION FROM THESE PLANS SHALL BE PROPOSED ON CONSTRUCTION FIELD PRINTS AND TRANSMITTED TO THE ENGINEER.
11. THE CONTRACTOR SHALL PROTECT AND MAINTAIN ALL EXISTING UTILITIES ON THE SITE. ANY DAMAGE TO EXISTING UTILITIES, WHETHER SHOWN OR NOT ON THE DRAWING SHALL BE REPAIRED/REPLACED AT THE CONTRACTOR'S EXPENSE. EXISTING SURFACE FEATURES AND FENCING SHALL BE REPLACED IN KIND.
12. ANY INSPECTION BY THE CITY, COUNTY OR THE ENGINEER, SHALL NOT IN ANY WAY RELIEVE THE CONTRACTOR FROM ANY OBLIGATION TO PERFORM THE WORK IN STRICT COMPLIANCE WITH THE APPLICABLE CODES AND AGENCY REQUIREMENTS.
13. CONTRACTOR IS TO LOCATE ALL EXISTING PROPERTY MONUMENTS PRIOR TO CONSTRUCTION. A REGISTERED LAND SURVEYOR SHALL REPLACE ANY MONUMENTS DISTURBED DURING THE CONSTRUCTION OF THIS PROJECT AT THE CONTRACTOR'S EXPENSE.
14. NOTHING CONTAINED IN THE CONTRACT DOCUMENTS SHALL CREATE, NOR SHALL BE CONSTRUED TO CREATE, ANY CONTRACTUAL RELATIONSHIP BETWEEN THE ENGINEER AND THE CONTRACTOR OR ANY SUBCONTRACTOR.
15. TRAFFIC CONTROL SHALL BE MAINTAINED IN ACCORDANCE WITH THE MAG SPECIFICATION 401 AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
16. PRIOR TO FINAL APPROVAL AND ACCEPTANCE OF THE WORK THE DEVELOPER/CONTRACTOR WILL BE REQUIRED TO CLEAN AND REPAIR ADJACENT (OFF-PROJECT) ROADWAYS USED OR DAMAGED DURING THE COURSE OF CONSTRUCTION.
17. ALL CONSTRUCTION MUST BE IN ACCORDANCE WITH THE SOIL INVESTIGATION DATED 8/4/97 PREPARED BY CONSTRUCTION INSPECTION & TESTING CO. PROJECT NO. 97-6935. CONTACT: SCOTT R. SMITH, P.E.



DETAIL 3
1"=20'



DETAIL 4
1"=20'

CALL TWO WORKING DAYS BEFORE YOU DIG
263-1100
BLUE STAKE CENTER

DATE	REVISION	BY

33135 JOSEPH E. CABLE — Registered Professional Engineer (Civil) — Date Signed 6/18/02 — ARIZONA U.S.A.

DAVID EVANS AND ASSOCIATES INC.
7878 North 16th St, Suite 250
Phoenix Arizona 85020
Phone: 602.678.5151

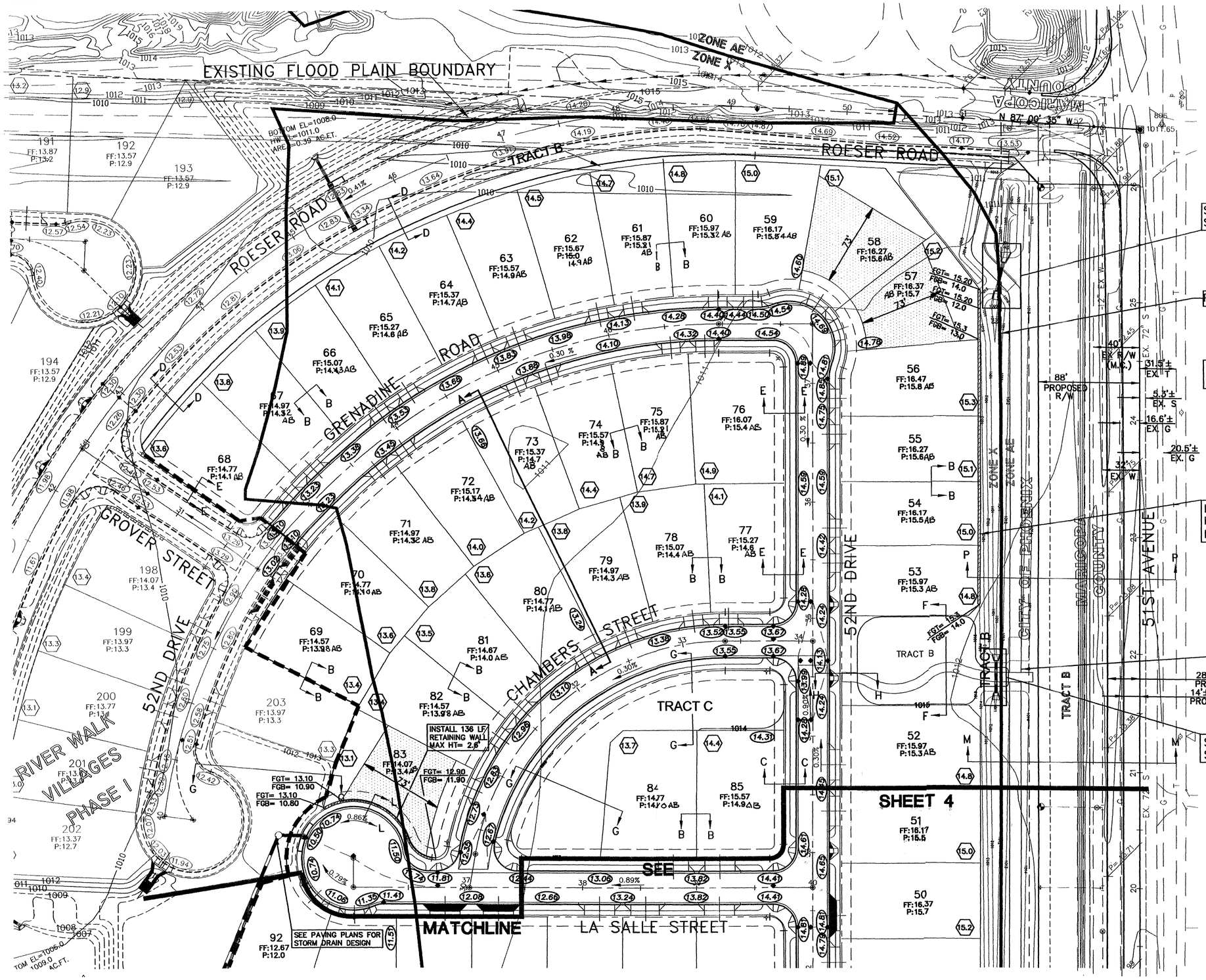
GRADING & DRAINAGE PLAN DETAILS & SECTIONS

RIVER WALK VILLAGES - PHASE 2A
PHOENIX, ARIZONA

SECTION: 29	TWNSHP: 1N	RANGE: 2E	
DESIGN BY: CLZ		DATE: 6/02	
CHECKED BY: JECA		DRAWING NO.: EL13GD02	
JOB NO.: ELLT0013		SHEET 2 OF 6	

ELLT0013 clz 06/27/02 08:52:31 clz P:\Ell\0013\Civil Phase 2A\Grading\EL13GD02.dwg

QS# 3-16 KIVA 98-11948 (PH2A) SDEV 99000789 CSPR0101171



CALL TWO WORKING DAYS BEFORE YOU DIG
263-1100
BLUE STAKE CENTER

DATE	REVISION	BY

DAVID EVANS AND ASSOCIATES INC.
7878 North 16th St, Suite 250
Phoenix Arizona 85020
Phone: 602.678.5151

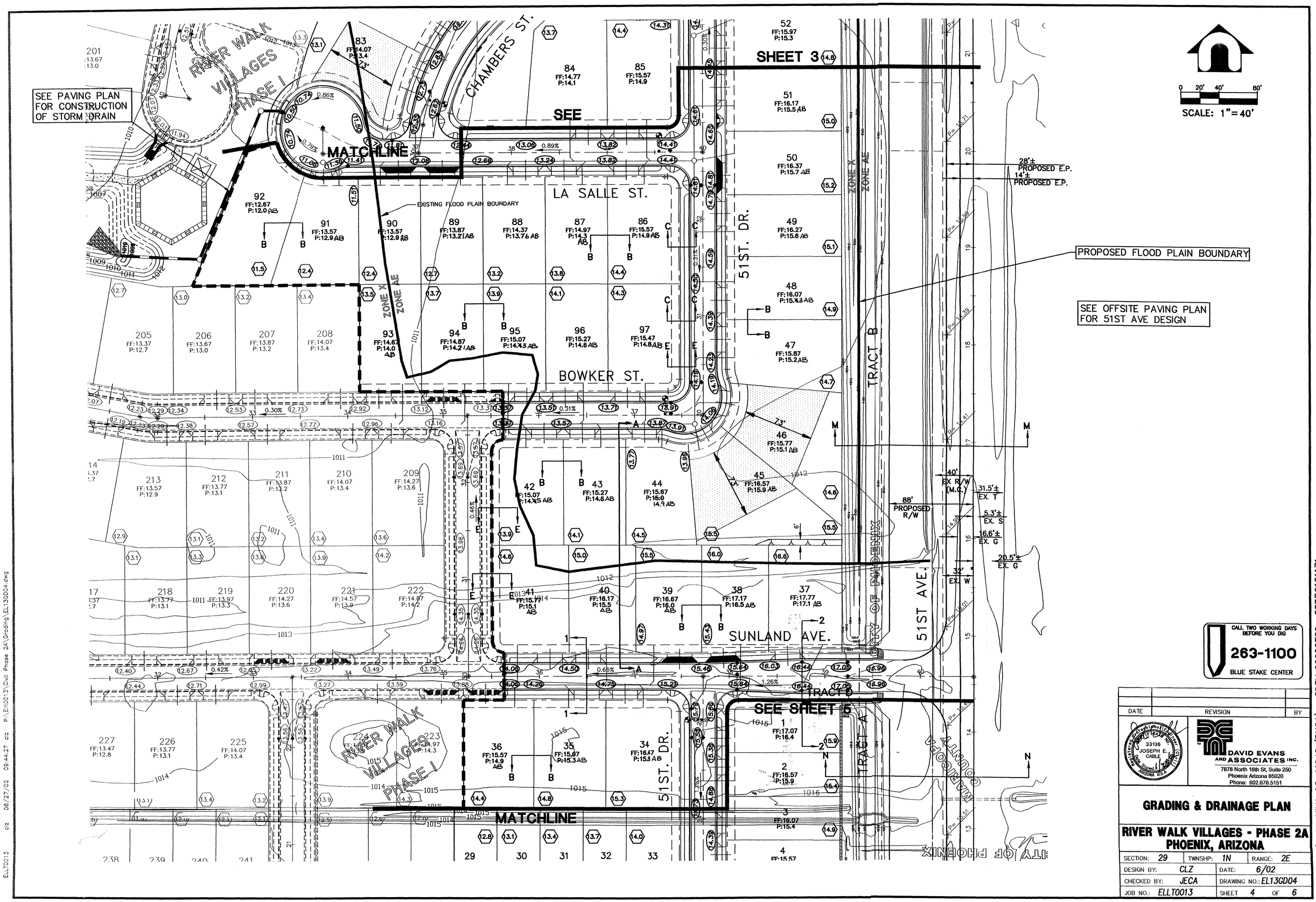
GRADING & DRAINAGE PLAN

RIVER WALK VILLAGES - PHASE 2A
PHOENIX, ARIZONA

SECTION: 29	TWNSHP: 1N	RANGE: 2E	
DESIGN BY: CLZ	DATE: 6/02		
CHECKED BY: JECA	DRAWING NO.: EL13GD03		
JOB NO.: ELLT0013	SHEET 3 OF 6		

ELLT0013 jwd 06/28/02 09:27:27 jwd P:\Ell0013\Civil Phase 2A\Grading\EL13GD03.dwg

KIVA 98-11048 (PH2A) SDFV 99000789 CSPR010171



DATE	REVISION	BY

DAVID EVANS AND ASSOCIATES INC.
7878 North 16th St, Suite 250
Phoenix Arizona 85020
Phone: 602.678.5151

GRADING & DRAINAGE PLAN

RIVER WALK VILLAGES - PHASE 2A
PHOENIX, ARIZONA

SECTION: 29	TWNSHP: 1N	RANGE: 2E	
DESIGN BY: CLZ	DATE: 6/02		
CHECKED BY: JECA	DRAWING NO.: EL13GD04		
JOB NO.: ELLT0013	SHEET 4 OF 6		

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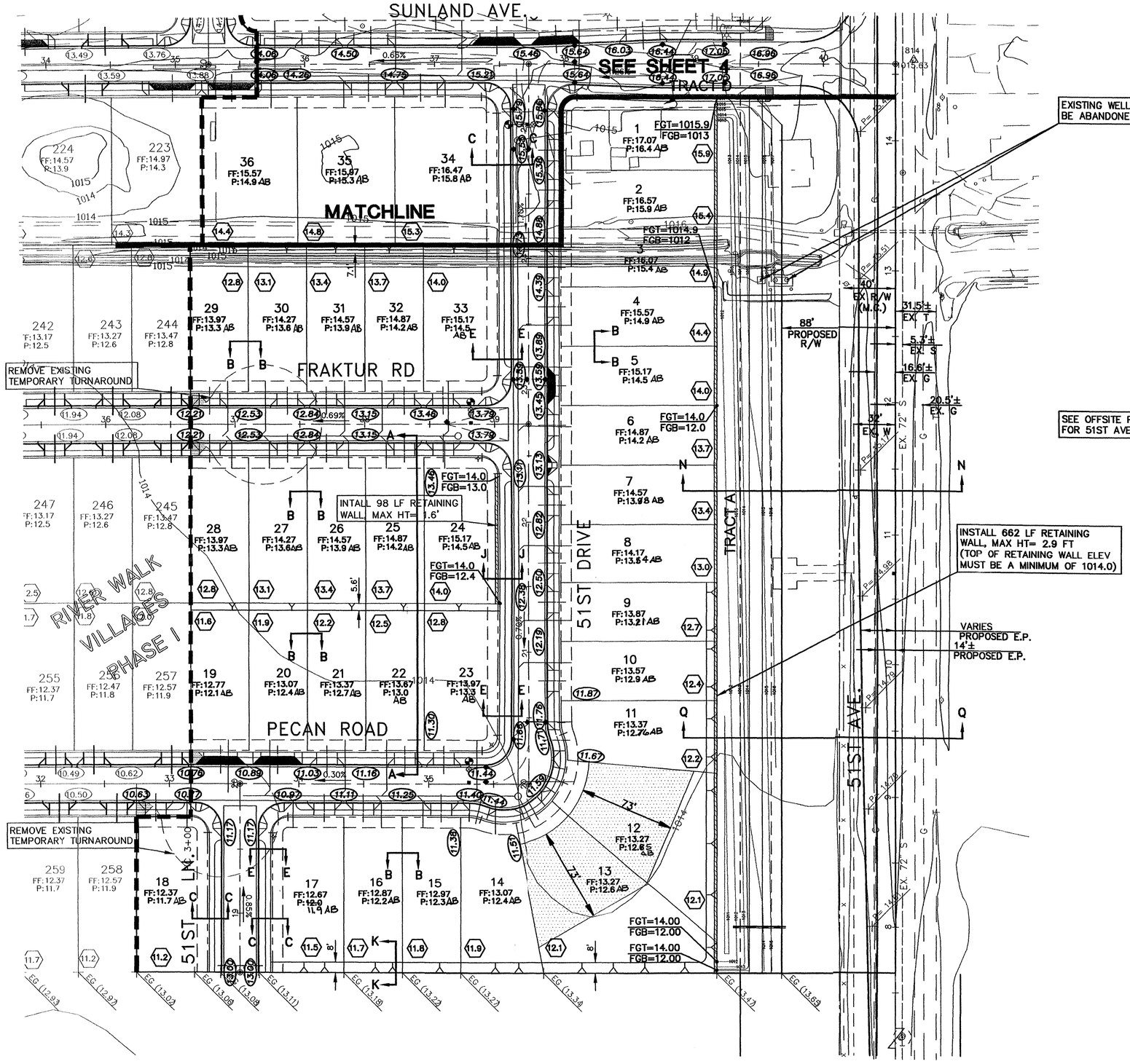
QS# 3-16 KIVA 98-11948 (PH2A) SDEV 99000789 CSPR0101171



CALL TWO WORKING DAYS BEFORE YOU DIG
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BLUE STAKE CENTER

DATE	REVISION	BY

DAVID EVANS AND ASSOCIATES INC.
7878 North 16th St, Suite 250
Phoenix Arizona 85020
Phone: 602.678.5151

GRADING & DRAINAGE PLAN

RIVER WALK VILLAGES - PHASE 2A
PHOENIX, ARIZONA

SECTION: 29	TWNSHP: 1N	RANGE: 2E	
DESIGN BY: CLZ	DATE: 6/02		
CHECKED BY: JECA	DRAWING NO.: EL13GD05		
JOB NO.: ELLT0013	SHEET 5 OF 6		

SDEV 99000789 CSPR0101171
KIVA 98-11948 (PH2A)
QS# 3-16

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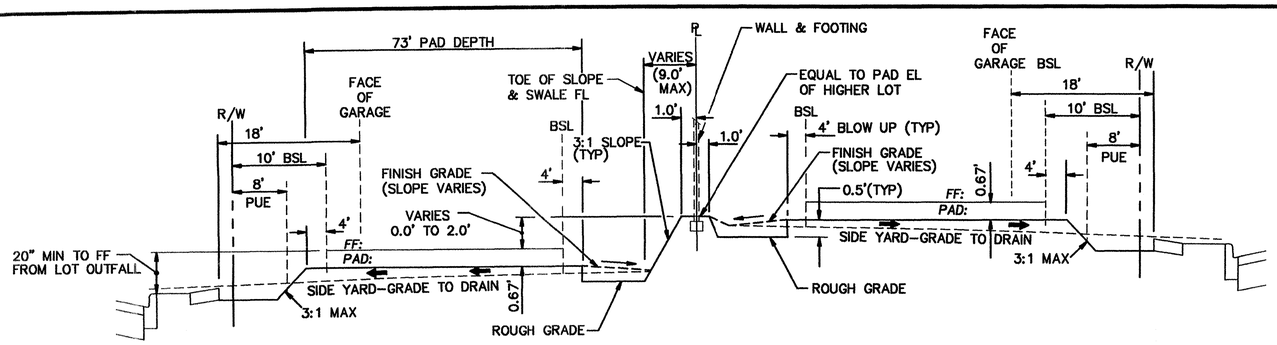
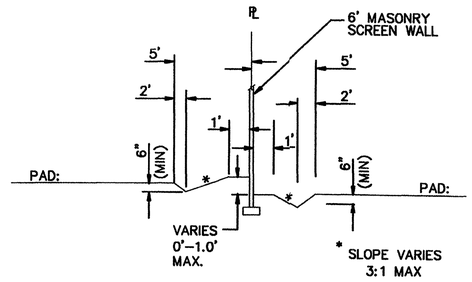


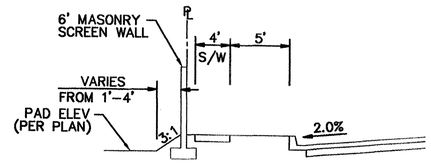
SECTION A-A

LOTS BACK TO BACK
NTS



SECTION B-B

LOTS SIDE TO SIDE
NTS



SECTION C-C

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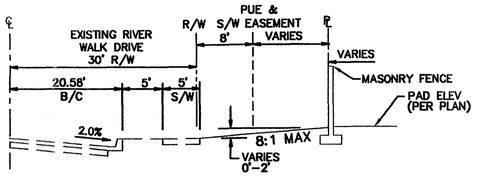

SECTION D-D

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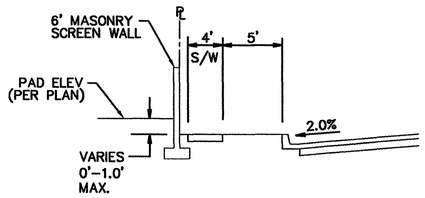

SECTION E-E

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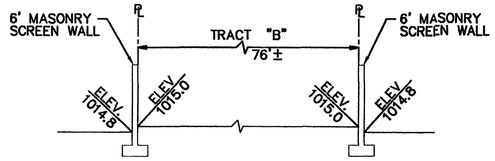

SECTION F-F

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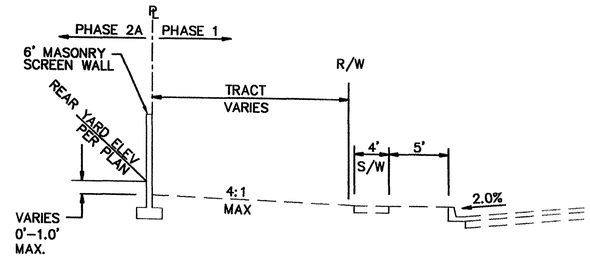

SECTION G-G

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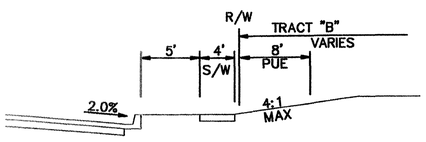

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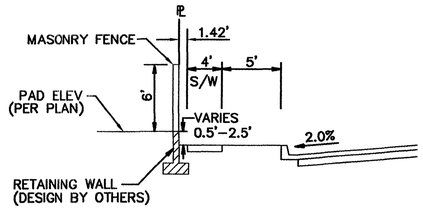
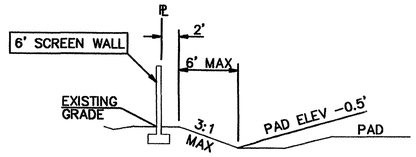


SECTION J-J

NTS



SECTION K-K

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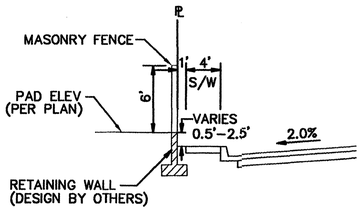
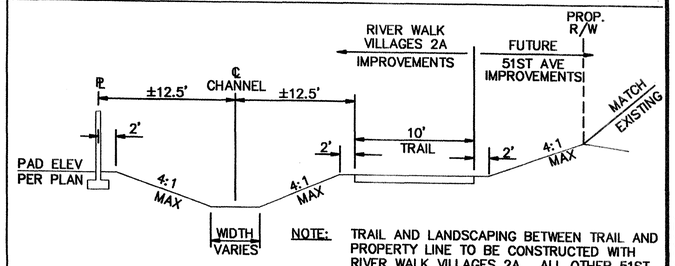


SECTION L-L

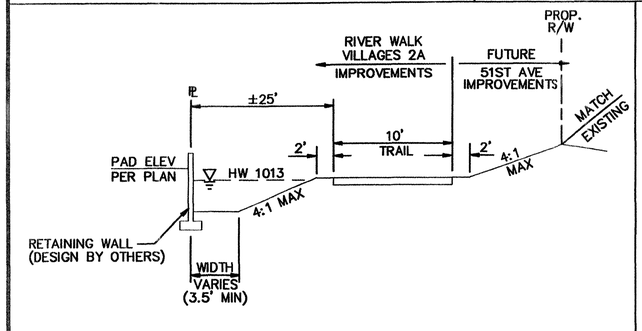
NTS



NOTE: TRAIL AND LANDSCAPING BETWEEN TRAIL AND PROPERTY LINE TO BE CONSTRUCTED WITH RIVER WALK VILLAGES 2A. ALL OTHER 51ST AVE IMPROVEMENTS TO BE CONSTRUCTED WITH PHASE 2A OFFSITE PAVING PLAN. FUTURE COUNTY PROJECT FOR 51ST AVE OR RIVER WALK VILLAGES

SECTION M-M

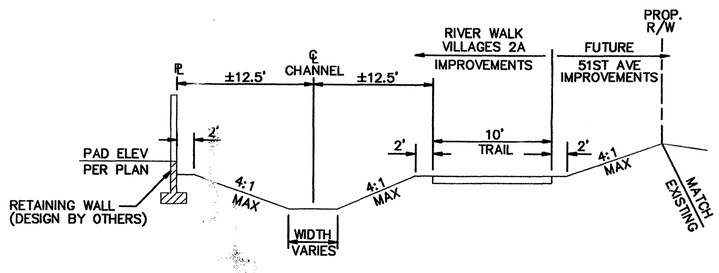
NTS



NOTE: TRAIL AND LANDSCAPING BETWEEN TRAIL AND PROPERTY LINE TO BE CONSTRUCTED WITH RIVER WALK VILLAGES 2A. ALL OTHER 51ST AVE IMPROVEMENTS TO BE CONSTRUCTED WITH FUTURE COUNTY PROJECT FOR 51ST AVE OR RIVER WALK VILLAGES PHASE 2A OFFSITE PAVING PLAN.

SECTION N-N

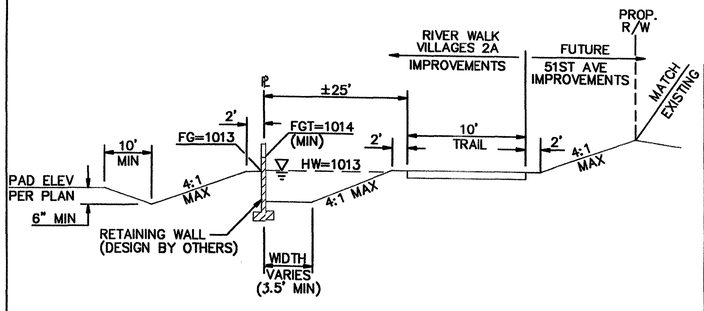
NTS



NOTE: TRAIL AND LANDSCAPING BETWEEN TRAIL AND PROPERTY LINE TO BE CONSTRUCTED WITH RIVER WALK VILLAGES 2A. ALL OTHER 51ST AVE IMPROVEMENTS TO BE CONSTRUCTED WITH FUTURE COUNTY PROJECT FOR 51ST AVE OR RIVER WALK VILLAGES PHASE 2A OFFSITE PAVING PLAN.

SECTION P-P

NTS



NOTE: TRAIL AND LANDSCAPING BETWEEN TRAIL AND PROPERTY LINE TO BE CONSTRUCTED WITH RIVER WALK VILLAGES 2A. ALL OTHER 51ST AVE IMPROVEMENTS TO BE CONSTRUCTED WITH FUTURE COUNTY PROJECT FOR 51ST AVE OR RIVER WALK VILLAGES PHASE 2A OFFSITE PAVING PLAN.

SECTION Q-Q

NTS

CALL TWO WORKING DAYS BEFORE YOU DIG
263-1100
BLUE STAKE CENTER

DATE	REVISION	BY

03135 JOSEPH E. CABLE Date Signed 6/28/02 ARIZONA, U.S.A.

DAVID EVANS AND ASSOCIATES INC.
7878 North 16th St, Suite 250
Phoenix Arizona 85020
Phone: 602.678.5151

GRADING & DRAINAGE PLAN

RIVER WALK VILLAGES - PHASE 2A
PHOENIX, ARIZONA

SECTION: 29	TWNSHP: 1N	RANGE: 2E	
DESIGN BY: CLZ	DATE: 4/02		
CHECKED BY: JECA	DRAWING NO.: EL13GD06		
JOB NO.: ELLT0013	SHEET 6 OF 6		

ELLT0013 clz 06/27/02 12:12:58 clz P:\ELT0013\Civil Phase 2A\Grading\EL13GD06.dwg

QS# 3-16 KIVA 98-11948 (PH2A) SDEV 99000789 CSPR0101171

GRADING AND DRAINAGE PLAN
WITH DRAINAGE FACILITIES
FOR
RIVER WALK VILLAGES
PHASE ONE

AN R1-8 PLANNED RESIDENTIAL DEVELOPMENT SUBJECT TO DESIGN REVIEW.
A PORTION OF THE SOUTHEAST QUARTER AND A PORTION OF THE SOUTHWEST QUARTER OF SECTION 29, TOWNSHIP 1 NORTH, RANGE 2 EAST, OF THE GILA AND SALT RIVER BASE AND MERIDIAN, PHOENIX, MARICOPA COUNTY, ARIZONA

GRADING NOTES

1. A GRADING PERMIT IS REQUIRED UNDER CHAPTER 32A OF THE PHOENIX CITY CODE.

2. HAUL PERMITS, WHEN REQUIRED, MUST BE OBTAINED PRIOR TO OR CONCURRENTLY WITH THE GRADING AND DRAINAGE PERMIT.

3. EXCAVATING CONTRACTOR MUST GIVE LOCATION FOR WASTING EXCESS EXCAVATION AND A LETTER FROM OWNER GIVING PERMISSION FOR DUMPING PRIOR TO STARTING ON-SITE CONSTRUCTION. IF EXCESS EXCAVATION EXCEEDS 100 CUBIC YARDS, THE DISPOSAL SITE WILL ALSO REQUIRE A GRADING AND DRAINAGE PERMIT.

4. DEVELOPMENT SERVICES DEPARTMENT'S FIELD INSPECTION GROUP SHALL BE NOTIFIED 48 HOURS BEFORE ON-SITE AND/OR OFF-SITE CONSTRUCTION BEGINS, TELEPHONE (602) 262-7811.

5. MINIMUM FINISH FLOOR ELEVATIONS SHOWN ARE SAFE FROM THE 100 YEAR FLOOD OR PER MINIMUM SPECIFIED IN THE CITY OF PHOENIX STORM DRAIN DESIGN MANUAL, WHICHEVER IS GREATER.

6. STAKING PAD ELEVATIONS IS THE RESPONSIBILITY OF THE OWNER AND HIS ENGINEER. THE OWNER'S ENGINEER SHALL SUBMIT THREE SEALED COPIES OF THIS GRADING AND DRAINAGE PLAN DESIGNATED AS "RECORD DRAWING" (BEARING AN ORIGINAL SIGNATURE) PROIR TO THE REQUEST FOR FINAL INSPECTION.

7. A SEPARATE PERMIT IS NECESSARY FOR ANY OFFSITE CONSTRUCTION.

8. AN APPROVED GRADING AND DRAINAGE PLAN SHALL BE ON THE JOB SITE AT ALL TIMES. DEVIATIONS FROM THE PLAN MUST BE PRECEDED BY AN APPROVED PLAN REVISION.

9. GRADING AND DRAINAGE PLAN APPROVAL INCLUDES THE CONSTRUCTION OF ALL SURFACE IMPROVEMENTS SHOWN ON THE APPROVED PLAN, INCLUDING, BUT NOT LIMITED TO, RETENTION AREAS, SEDIMENTATION BASINS, AND/OR OTHER DRAINAGE FACILITIES, DRAINAGE PATTERNS, WALLS, CURBS, ASPHALT PAVEMENT, AND BUILDING FLOOR ELEVATIONS.

10. CONTRACTOR SHALL PROVIDE LEVEL BOTTOM IN ALL RETENTION BASINS AT ELEVATIONS SHOWN ON THE PLANS. SLOPE PROTECTION SHALL BE APPLIED TO PREVENT EROSION.

11. GRADES SHOWN IN RETENTION BASINS ARE DESIGN FINISHED GRADES. SHOULD THE CONTRACTOR OR ANY SUBCONTRACTOR PLAN TO PLACE SPOIL DIRT FROM FOOTINGS, UTILITY TRENCHES, LANDSCAPING, SWIMMING POOLS, ETC. IN THE BASINS, THEN THE BASINS SHOULD BE SUFFICIENTLY OVER-EXCAVATED DURING THE ROUGH GRADING OPERATION TO ALLOW FOR THE PLACEMENT OF THE FILL OR LANDSCAPING MATERIALS.

12. CONTRACTOR IS RESPONSIBLE FOR LOCATING AND CONFIRMING DEPTHS OF ALL THE EXISTING UTILITY LINES WITHIN PROPOSED RETENTION BASIN AREAS. IF THE BASIN CANNOT BE CONSTRUCTED PER PLAN BECAUSE OF CONFLICTS, THE CONTRACTOR SHOULD DISCUSS MODIFICATION OF BASIN CONFIGURATION WITH THE CITY INSPECTOR TO DETERMINE IF A PLAN REVISON OR A FIELD CHANGE IS REQUIRED.

13. ALL DRAINAGE PROTECTIVE DEVICES SUCH AS SWALES, INTERCEPTOR DITCHES, PIPES, PROTECTIVE BERMS, BARRIER WALLS, CONCRETE CHANNELS, OR OTHER MEASURES DESIGNED TO PROTECT ADJACENT BUILDINGS OR PROPERTY FROM STORM RUNOFF MUST BE COMPLETED PRIOR TO BUILDING CONSTRUCTION.

14. RETENTION BASIN SIDE SLOPES SHALL BE A MAXIMUM OF 4:1 UNLESS APPROVAL IS RECEIVED FROM THE PLAN REVIEWER FOR A STEEPER SLOPE.

15. ALL KNOWN EXISTING UNDERGROUND UTILITIES WITHIN PROPOSED RETENTION AREAS HAVE BEEN DESIGNED TO MAINTAIN A MINIMUM 15" OF COVER OVER CITY OWNED UTILITY LINES AND THE MINIMUM SPECIFIED BY OTHER UTILITY OWNERS.

16. REQUIRED RETAINING WALLS SHOWN ON THE GRADING AND DRAINAGE PLANS ARE TO BE REVIEWED, PERMITTED, AND INSPECTED BY THE BUILDING SAFETY BRANCH OF THE DEVELOPMENT SERVICES DEPARTMENTS.

17. CERTIFICATE OF OCCUPANCY (C.OF O.) AND/OR FINAL ELECTRICAL CLEARANCE FOR ANY BUILDING IS DENIED UNTIL ALL GRADING AND DRAINAGE IMPROVEMENTS ARE COMPLETED.

18. DAMAGED AND/OR DISPLACED CONCRETE CURB, GUTTER, SIDEWALK, OR DRIVEWAY SLAB THAT IS WITHIN THE RIGHT-OF-WAY SHALL BE REPAIRED OR REPLACED, AS NOTED BY CITY INSPECTORS, BEFORE FINAL ACCEPTANCE OF THE WORK.

19. THE ENGINEERING DESIGN ON THESE PLANS ARE ONLY APPROVED BY THE CITY IN SCOPE AND NOT IN DETAIL. CONSTRUCTION QUANTITIES ON THESE PLANS ARE NOT VERIFIED BY THE CITY. APPROVAL OF THESE PLANS ARE FOR PERMIT PURPOSES ONLY AND SHALL NOT PREVENT THE CITY FROM REQUIRING CORRECTION OF ERRORS IN THE PLANS WHERE SUCH ERRORS ARE SUBSEQUENTLY FOUND TO BE IN VIOATION OF ANY LAW, ORDINANACE, HEALTH, SAFETY OR OTHER DESIGN ISSUES.

20. CONSTRUCTION WITHIN THE RIGHT-OF-WAY SHALL CONFORM TO THE LATEST APPLICABLE MARICOPA ASSOCIATION OF GOVERNMENTS (MAG) UNIFORM STANDARD SPECIFICATIONS AND DETAILS AND THE LATEST CITY OF PHOENIX SUPPLEMENTALS TO THE MAG UNIFORM STANDARD SPECIFICATIONS AND DETAILS.

21. PLAN APPROVAL IS VALID FOR TWELVE (12) MONTHS. IF APPROVAL EXPIRES, THE PLANS MUST BE RESUBMITTED FOR CITY UPDATE REVIEW AND APPROVAL.

22. COMPACTION SHALL COMPLY WITH M.A.G. SECTION 601.

23. OBSTRUCTIONS TO PROPOSED IMPROVEMENTS IN THE RIGHT-OF-WAY SHALL BE REMOVED OR RELOCATED BEFORE BEGINNING CONSTRUCTION OF THE PROPOSED IMPROVEMENTS.

24. THE ACTUAL POINT OF PAVEMENT MATCHING AND/OR TERMINATION SHALL BE DETERMINED IN THE FIELD BY THE CITY OF PHOENIX, DEVELOPMENT SERVICES DEPARTMENT FIELD INSPECTOR.

25. TREES AND SHRUBBERY IN THE RIGHT-OF-WAY THAT CONFLICT WITH PROPOSED IMPROVEMENTS SHALL NOT BE REMOVED WITHOUT APPROVAL OF THE CITY LANDSCAPE ARCHITECT OR HIS ASSIGNEES. THE PERMITTEE SHALL BE RESPONSIBLE FOR OBTAINING AUTHORIZATION TO REMOVE AND/OR RELOCATE SAID TREES OR SHUBBERY BY CALLING THE DEVELOPMENT SERVICES LANDSCAPE ARCHITECT AT (602) 256-4116.

UTILITY REVIEW

1. THESE PLANS HAVE BEEN SUBMITTED TO THE FOLLOWING UTILITY COMPANIES. WHERE THE WORK TO BE DONE CONFLICTS WITH ANY OF THESE UTILITIES, THE CONFLICTS SHALL BE RESOLVED AS SPECIFIED IN THE SPECIAL PROVISIONS AND/OR AS OTHERWISE NOTED ON THESE PLANS. CONFLICTS ARISING DURING THE COURSE OF CONSTRUCTION FROM UNFORESEEN CIRCUMSTANCES SHALL BE REPORTED TO THE INTERESTED UTILITY COMPANY AND BE RESOLVED BY THEM AND THE DESIGN ENGINEER.

2. THE CITY WILL NOT PARTICIPATE IN THE COST OF CONSTRUCTION OR UTILITY RELOCATION.

SRP (602) 236-0811	VINCE FEATHERLY COMPANY REPRESENTATIVE	DATE 05/25
U.S.WEST COMMUNICATIONS (602) 630-0496	ROBERT ARIETTA COMPANY REPRESENTATIVE	DATE 05/25
COX COMMUNICATIONS (623) 322-7220	CONFLICT REVIEW DEPT. COMPANY REPRESENTATIVE	DATE 05/25
SOUTHWEST GAS CORPORATION (623) 484-5308	GERALDO LOPEZ COMPANY REPRESENTATIVE	DATE 05/25
A. T. & T. (602) 261-2962		
SALT RIVER IRRIGATION (602) 236-2962		

CUT/FILL QUANTITIES

CUT:	187,023	CU. YD.
FILL:	142,352	CU. YD.
NET:	44,671	CU. YD.

NOTE: THESE QUANTITIES ARE ESTIMATES OF THE ENGINEER, THE CONTRACTOR IS RESPONSIBLE FOR THERE OWN QUANITY TAKE-OFFS. INCLUDES 20% SHRINKAGE & 0.2 COMPACTION

IMPROVEMENT QUANTITIES

* COORDINATE WITH PAVING PLANS *

24" RGRCP:	77	LF
36" HDPE:	44	LF
HEADWALL:	28	EA
DRY WELL:	1	EA

NOTE: THESE QUANTITIES ARE ESTIMATES OF THE ENGINEER, THE CONTRACTOR IS RESPONSIBLE FOR THERE OWN QUANITY TAKE-OFFS.

NET ACREAGE

2,630,183.25 FT = 60.38 AC.

AS-BUILT CERTIFICATION

I HEREBY CERTIFY THAT THE "RECORD DRAWING" MEASUREMENTS AS SHOWN HEREON WERE MADE UNDER MY SUPERVISION OR AS NOTED AND ARE CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

REGISTERED LAND SURVEYOR — DATE 2-20-02

29865
REGISTRATION NUMBER

NOTE: THE OWNER/DEVELOPER IS RESPONSIBLE FOR INSTALLING ADDITIONAL DRY WELLS SHOULD THE RETENTION BASINS FALL TO DRAIN WITHIN 36 HOURS.

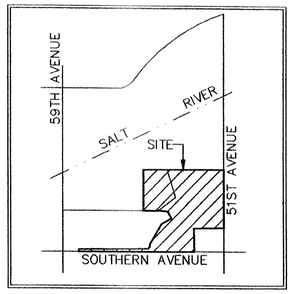
REVISIONS APPROVED BY:

CITY OF PHOENIX

THESE PLANS HAVE BEEN APPROVED BY THE DEVELOPMENT SERVICES DEPARTMENT FOR THE ISSUANCE OF THE FOLLOWING PERMITS:

GRADING	JT	PH 1	DATE 6/26/01
PAVING		PH 1	DATE
CONCRETE		PH 1	DATE
DRAIN FAC	JT	PH 1	DATE 6/26/01
WATER		PH 1	DATE
WASTEWATER		PH 1	DATE
OTHER		PH 1	DATE

KEY MAP
(NTS)



VICINITY MAP
(NTS)

ENGINEER

DAVID EVANS AND ASSOCIATES, INC.
7878 NORTH 16TH STREET, SUITE 250
PHOENIX, ARIZONA 85020
PHONE: (602) 678-5151
CONTACT: GARY TIMMERMAN

DEVELOPER

ELLIOT HOMES
1400 E. SOUTHERN AVENUE
BUILDING H, SUITE 725
TEMPE, ARIZONA 85281
PHONE: (602) 831-9200
CONTACT: JEFF KLEM

BASIS OF BEARING

BEARINGS ARE BASED ON THE EAST LINE OF THE SOUTHEAST QUARTER OF SECTION 29, TOWNSHIP 1 NORTH, RANGE 2 EAST. WHICH BEARS S 00°07'48" W PER ALTA/ACSM LAND TITLE SURVEY PREPARED BY STANTECH CONSULTING INC., JOB NO. 28800098, DATED JUNE 30, 1997

BENCHMARK

CITY OF PHOENIX NGS SS ROD IN HANDHOLE AT THE NORTHWEST CORNER OF THE SRP PUMP STATION LOCATED AT THE SOUTHWEST CORNER OF THE INTERSECTION OF 51ST AVENUE AND SOUTHERN AVENUE. ELEV. = 1012.33
(C.O.P. DATUM)

APPROVED BY:

CITY OF PHOENIX

THESE PLANS HAVE BEEN APPROVED BY THE DEVELOPMENT SERVICES DEPARTMENT FOR THE ISSUANCE OF THE FOLLOWING PERMITS:

GRADING	JT	OCC.	DATE 7/26/00
PAVING		OCC.	DATE
CONCRETE		OCC.	DATE
DRAIN FAC	JT	OCC.	DATE 7/26/00
WATER		OCC.	DATE
WASTEWATER		OCC.	DATE
OTHER		OCC.	DATE

LEGEND

G4	INDICATES SHEET NUMBER
—	INDICATES MATCH LINE
DWSE	DESIGN WATER SURFACE ELEVATION
◆	INDICATES A CHANGE IN GRADE
77.52	INDICATES TOP OF CURB ELEVATION
→	INDICATES DIRECTION OF FLOW
FF: 98.57 P: 97.9	INDICATES FINISH FLOOR ELEVATION INDICATES PAD ELEVATION
N.I.C	NOT IN CONTRACT
◄	SLOPE INDICATOR
	DRYWELL LOCATION
	RETAINING WALL
12.5	REAR YARD ELEVATION
T.O.B.	TOP OF BERM
	PROPOSED PAD LIMITS

RUSN 2000255-01
ABANDONMENT #V990116A
PROJECT # 98-11948
CCPR # 2000255
SDEV # 99000784
QS # 3-15 & 3-16

SHEET INDEX

1	COVER
2	DETAIL
3-11	GRADING SHEETS
12-13	DETAILS & SECTIONS

CALL TWO WORKING DAYS BEFORE YOU DIG
263-1100
BLUE STAKE CENTER

DATE	REVISION	BY
05/26/01	RELOCATION OF STORM DRAIN PIPE	CLZ
06/01/00	2ND SUBMITTAL TO CITY OF PHOENIX	CBS
02/13/00	1ST SUBMITTAL TO CITY OF PHOENIX	CBS

DAVID EVANS AND ASSOCIATES,
7878 N. 16TH STREET, STE #250
PHOENIX, AZ. 85020-4436 (602) 678-5151

7/26/00

ON-SITE GRADING AND DRAINAGE PLANS
RIVER WALK VILLAGES
PHOENIX, ARIZONA

SECTION: 29	TWNSHP: 1N	RANGE: 2E	
DESIGN BY: CBC/DMF	DATE: 06/00		
CHECKED BY: GJT	DRAWING NO.: DP02GD01		
JOB NO.: DPPD0002	SHEET 1 OF 13		

DIS 98-11948
QS# 3-15 & 3-16

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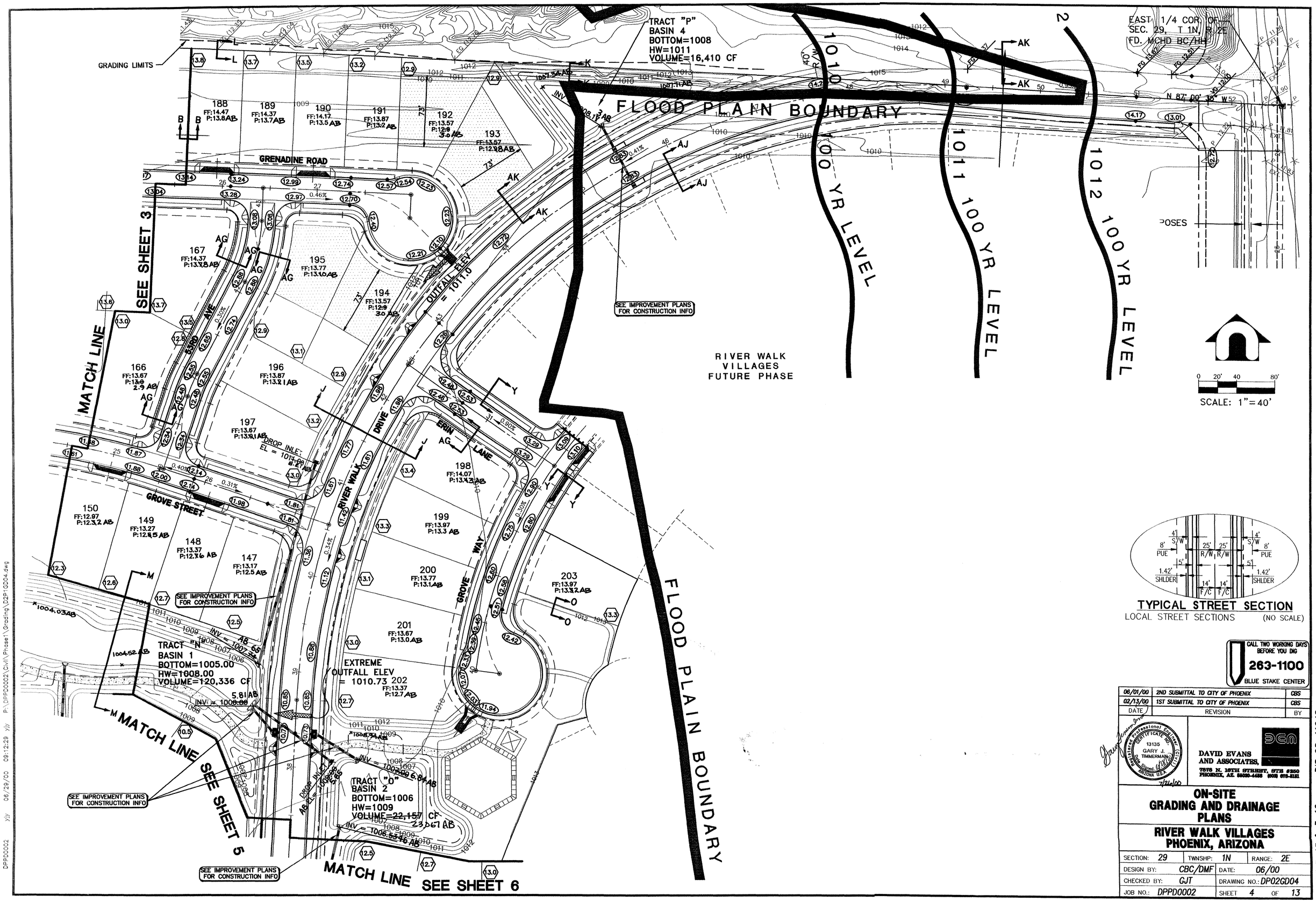

DATE	REVISION	BY
06/01/00	2ND SUBMITTAL TO CITY OF PHOENIX	CBS
02/13/00	1ST SUBMITTAL TO CITY OF PHOENIX	CBS

DAVID EVANS AND ASSOCIATES,
7878 N. 16TH STREET, STE #250
PHOENIX, AZ 85020-4488 (602) 978-8181

Registered Professional Engineer (Civil) CERTIFICATE NO. 13135 GARY J. TIMMERMAN ARIZONA U.S.A. 7/24/00

ON-SITE GRADING AND DRAINAGE PLANS

RIVER WALK VILLAGES PHOENIX, ARIZONA

SECTION: 29	TWNSHP: 1N	RANGE: 2E	
DESIGN BY: CBC/DMF	DATE: 06/00		
CHECKED BY: GJT	DRAWING NO.: DP02GD04		
JOB NO.: DPPD0002	SHEET 4 OF 13		

DIS 98-11948

QS# 3-15 & 3-16

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