# Bell Park Subdivision Drainage Investigation

PREPARED FOR
FLOOD CONTROL DISTRICT of Maricopa County

**PREPARED BY**
***STANTEC CONSULTING, INC.***

***7776 Pointe Parkway West Suite 290***
***Phoenix, Arizona 85044***
***(602) 438-2200***

***December 1999***

FLOOD CONTROL DISTRICT of MARICOPA COUNTY 1959

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Registered Professional Engineer (Civil)
CERTIFICATE NO.
31680
PATRICK J.
ELLISON
Date Signed 12/14/99
ARIZONA U.S.A.

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# 1.0 Background

## 1.1 GENERAL DESCRIPTION

The Bell Park Subdivision and the adjacent New River are located within the City of Peoria and lie within the Flood Control District of Maricopa County's (District) Middle New River Watercourse Master Plan project (FCD 97-04). As part of the Middle New River Watercourse Master Plan project, previous hydraulic models were reviewed and new models were prepared for New River. Results of the hydraulic models indicate that flow breakouts (overtopping) occur along the west bank of New River, adjacent to the Bell Park Subdivision downstream of Union Hills Drive. Flow breakouts appear to enter the Bell Park Subdivision via several drainage channels that discharge to New River.

The Flood Control District of Maricopa County contracted with Stantec Consulting Inc. to conduct a Drainage Investigation for the Bell Park Subdivision. The purpose of the Drainage Investigation is: 1) to review the report entitled "Bell Park New River Bank Protection Flood Analysis", prepared by DEI Processional Services, L.L.C. (analysis utilizes Federal Emergency Management Agency (FEMA) 100-year peak discharge), 2) conduct an assessment of potential flooding within the Bell Park Subdivision adjacent to the west bank of New River utilizing U.S. Army Corp of Engineers (COE) future condition 100-year peak discharges, and 3) compare previous hydraulic models, and topographic maps and to update hydraulic models and topographic maps to determine why changes in water surface elevations have occurred relative to those listed in the current Flood Insurance Study (FIS).

## 1.2 LOCATION PROJECT

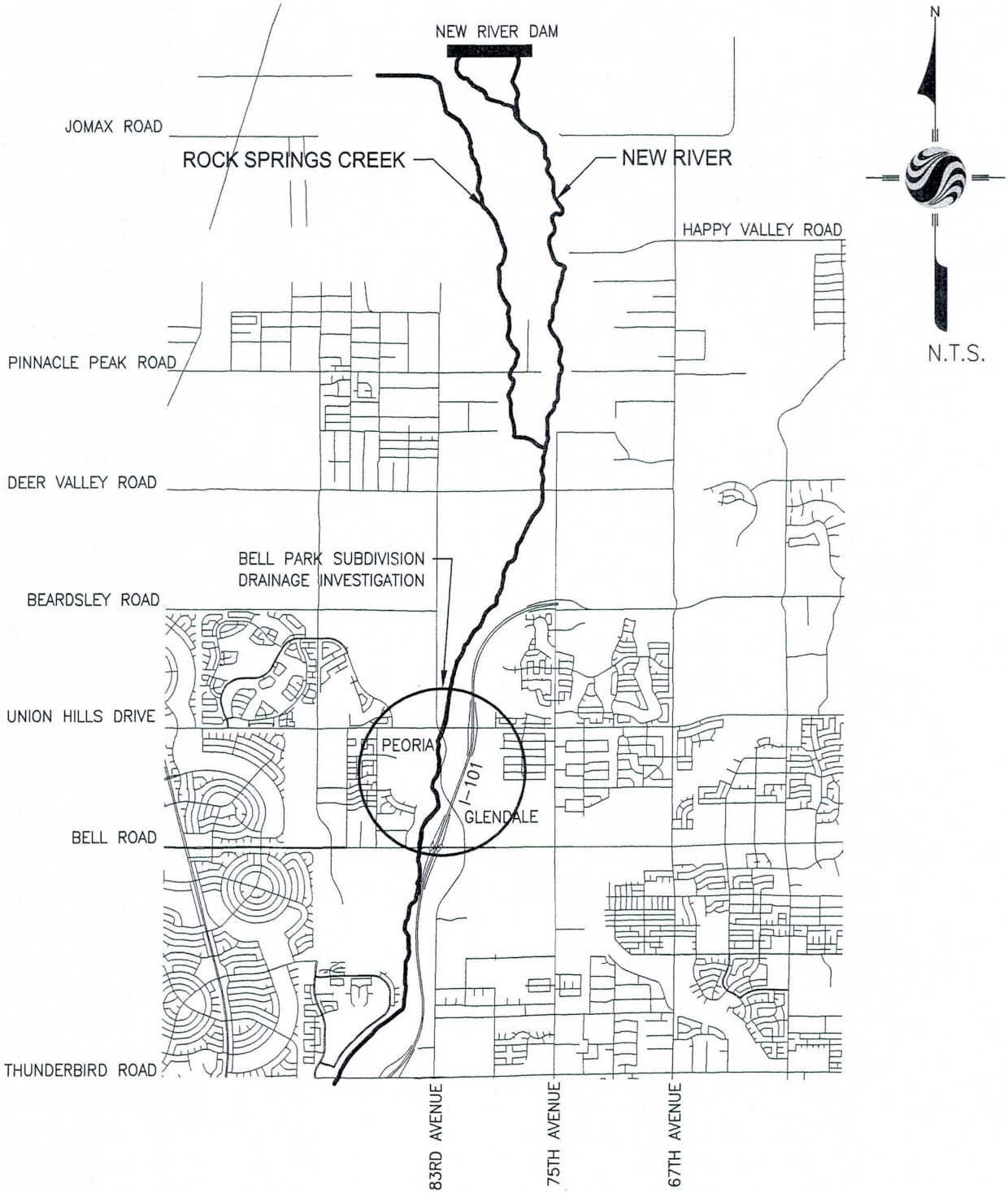
The location of the project is within the channel of New River. Specifically, the study boundaries are between Bell Road and Union Hills Drive and within the cities of Glendale and Peoria. Project location is displayed on Figure 1.

## 1.3 EXISTING CONDITIONS

The project reach extends from approximately River Mile (RM) 9.984 to RM 10.980 (Bell Road to Union Hills Drive). The existing channel is characterized by a trapezoidal shaped channel section with the majority of the west channel side slope being armored with wire-tied, rock filled mattresses. The east channel side slope is typically not armored. The trapezoidal section is a result of encroachment of the natural channel/floodplain by development. The channel bed material consists of

cobbles and sand. At approximately RM 10.862 (approximately 700 feet downstream of the Union Hills Road Bridge), 83rd Avenue crosses New River as an at-grade dip section. Eighty-third Avenue is a four lane undivided arterial road. The dip section is within the City of Glendale.

At four locations along the west bank, water surface elevations determined from Flood Insurance Study profiles are higher than bank elevations. At these locations, subdivision drainage channels outfall to New River. There is a potential for New River flood waters to back up into the drainage channels and impact the subdivision.




Client/Project

Flood Control District of Maricopa County
Bell Park Subdivision Drainage Investigation

Figure No.
**1.0**

Title
**LOCATION MAP**

Date: 12/1/99
Project Number 28900058

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P:\28900058\Bell Park\FIGURE- 1.0.dwg

# 2.0 Hydrologic/Hydraulic Analysis

## 2.1 GENERAL

The project area lies below New River Dam and within the New River channel corridor. Upstream of the dam, the New River watershed is comprised of 164 square miles of primarily undeveloped desert and desert mountains, whereas below the dam, the New River watersheds are highly urbanized. In urbanized portions of the watershed land use is predominately residential however some commercial does occur. Watersheds are characterized by both mountainous areas and flat valley areas, thus slopes can range from 0.1 percent to greater than 10 percent. Downstream of the dam, stormwater is conveyed as concentrated flow within defined and/or braided channels and as overland flow within overbank areas. The subject reach of New River is in a FEMA delineated floodway.

## 2.2 DESIGN DISCHARGES

Peak discharges developed for previous hydrologic studies conducted by FEMA and COE are used in the hydraulic evaluations for this investigation to determine water surface elevations for New River. One hundred year peak discharges cited in the FEMA's "Flood Insurance Study (FIS), Maricopa County, Arizona and Incorporated Areas" (1995), and one hundred year peak discharges listed in the FEMA, HEC-2 hydraulic computer model for the effective New River Floodplain/Floodway delineation's are utilized in existing condition evaluations for this study. A FEMA 100-year peak discharge of 10,900 cfs is used as the existing condition peak discharge for the subject reach. The COE, in their design process for the New River Dam, developed a hydrologic model to determine future condition 100-Year peak discharges at two specific concentration points downstream of the dam. The concentration points are located at the confluence of New River with Rocks Springs Creek and at the confluence of New River with Skunk Creek. Interpolations of the future condition 100-Year peak discharges cited in the Army Corps of Engineers (COE) document entitled, "Gila River Basin, Phoenix, Arizona and Vicinity (Including New River), New River Dam (Including New River to Skunk Creek) Design Memorandum No. 3", dated November 1982, are made to determine potential peak discharges at locations other than the locations cited in the COE's report. The methodology used for COE 100-year peak discharge interpolation is described in the Middle New River Watercourse Master Plan Technical Documentation Notebook (January 1999). The COE 100-year discharge (future condition 100-year peak discharge) of 15,500 cfs is used for the subject reach when evaluating future condition flow capacity.

## 2.3 HYDRAULIC EVALUATIONS

### 2.3.1 Review of DEI Bell Park New River Bank Protection Flood Analysis

DEI Professional Services, L.L.C., at the request of the City of Peoria was asked to determine the potential for flooding in the Bell Park Subdivision. DEI analysis was based on a FEMA existing condition 100-year peak discharge and updated hydraulic models.

DEI determined 4 locations in which backwater from New River could drain to or pond within the subdivision. Location 1 is located 300 feet southeast of the intersection of 83$^{RD}$ Drive and 84$^{TH}$ Avenue. Location 2 is located 250 feet northeast of the intersection of 83$^{RD}$ Drive and 84$^{TH}$ Avenue. Location 3 is located at the intersection of Fullam Street and 83$^{RD}$ Drive. Location 4 is located at the intersection of Bluefield and 83$^{RD}$ Drive. At location 4, backwater would pond within streets and adjacent front yards. At Location 3, backwater enters 83$^{RD}$ Drive ultimately flowing within the streets draining to Location 2. The limits of inundation along 83$^{RD}$ Drive is restricted to the street and front yards. At Location 2, additional backwater combines with flow from 83$^{RD}$ Drive. The combined flow ponding depth at Location 2 is such that flow enters 84$^{TH}$ Avenue and drains to Location 1. At Location 1, backwater combines with flow from Location 2 and ponds within 84$^{TH}$ Avenue and adjacent front yards.

DEI conducted field surveys to determine Finish Floor Elevations (FFEs) of structures around the locations of inflow from New River. The FFE's are then compared to New River water surface elevations, ponding elevations at the 4 locations of concern and flow depths within 83$^{RD}$ Drive to determine if structures are impacted by flow. DEI concluded that structures would not be impacted from New River backwater for a FEMA 100-year discharge event. Stantec reviewed DEI analysis and agree that their conclusions are reasonable with the qualification that the average vertical distance from FFE's to gutter grade along 83$^{RD}$ Drive of 1.67 feet used in DEI's study holds true for all structures located along 83$^{RD}$ Drive between Locations 2 and 3.

### 2.3.2 Stantec Flood Assessment Utilizing COE Future Condition Discharge

Assessment of potential flooding to the Bell Park Subdivision from New River backwater was conducted by Stantec utilizing the COE future condition discharge. The following data, assumptions and/or procedures were utilized in the assessment:

1) Survey data of finished floor elevations, side channel configurations and cross-section data of 83$^{rd}$ Drive was obtained from the "Bell Park New River Bank Protection Flood Analysis" (DEI Professional Services, L.L.C., 1999).

2) Additional elevation data was obtained for 84TH Avenue from a digital terrain model prepared for the Middle New River Water Course Master Plan (FCD 97-04).

3) The weir equation was used to estimate the flow rate of the water through the side channels for Location 1 and 2, and 3. A "C" coefficient of 3.0 is utilized. *L* equals weir length, *H* equals depth of flow and *Q* equals peak discharge.

$$Q = CLH^{\frac{3}{2}}$$

4) Manning's Equation is utilized to estimate flow depth within 83RD Drive (using FlowMaster, Haestad Methods, 1996).

5) Future condition water surface elevations for New River utilized to determine backwater entering the subdivision were obtained from the updated HEC-RAS hydraulic model developed for the Middle New River Watercourse Master Plan.

The areas around and between the four channels that drain the Bell Park Subdivision (Locations 1 through 4) to New River were evaluated for potential flooding. Potential flood prone areas and results of the analysis are presented on Plate 1. Calculations sheets are located in Appendix A. The following conclusions are made from the hydraulic analysis:

1) At Location 4, the ponding elevation of backwater from New River within 83RD Drive and Bluefield roadways is approximately 1221.80. Ponding limits are restricted to roadways and adjacent front yards. No structures are inundated at this location.

2) At Location 3, approximately 233 cfs will enter 83RD Drive with a backwater elevation of 1219.17. One structure adjacent to Location 3 and 83RD Drive will be impacted by backwater from New River. Based on roadway and adjacent lot geometry inferred from DEI's report, water surface elevations in 83RD Drive will be approximately 0.24 feet lower than the adjacent structures FFE's downstream of Location 3. Upstream of Location 3 (between Location 3 and Location 4), 7 structures have FFE's elevations lower (0.1' to 0.8') than New River water surface elevations A block wall exists between Locations 3 and 4 along the New River bank. The block wall will impede flow to the subdivision.

3) At Location 2, the ponding elevation of backwater from New River within 83RD Drive is approximately 1213.69. The hydraulic control point for flow draining to the subdivision is the intersection of 84TH Avenue and 83RD Drive, at this location approximately 100 cfs will drain to 84TH Avenue. This does not take into consideration flow from Location 3 being conveyed within 83RD Drive and combining with backwater from Location 2

The hydraulic control points for flow entering the subdivision and potentially draining back to New River change when one combines flow within 83RD Drive from Location 3 with backwater form Location 2. The hydraulic control points identified are 1) the crest in 84th Avenue just south of Location 1 with the roadway elevation becoming the effective weir crest elevation, 2) Location 1 with the New River backwater elevation at this location becoming the effective weir crest elevation, and 3) Location 2 with the New River backwater elevation at this location becoming the effective weir crest elevation. For given water surface elevations, discharge flow rates draining to the subdivision at 84TH Avenue and back to New River are calculated and summed until the summation equals the combination of flow from New River at Location 2 with flow in 83RD Drive for a total of 333 cfs.

The approximated maximum ponding elevation for New River backwater at Locations 1 and 2 is approximately 1214.30. Six structures are impacted at these locations.

4) As mentioned above, the approximate maximum ponding elevation for New River backwater at Location 1 is approximately 1214.30. At this ponding level, approximately 158 cfs will drain to the south within 84TH Avenue and approximately 138 cfs will drain back to New River. Field survey's for FFE's south of Location 1 was not conducted, therefore, no flooding analysis is conducted within the subdivision south of Location 1.

### 2.3.3 New River Hydraulic Evaluation

This section of the report discusses the comparison of previous hydraulic models, and topographic maps to updated hydraulic models and topographic maps to determine why changes in water surface elevations have occurred relative to those listed in the current Flood Insurance Study (FIS). It serves only as background documentation for hydraulic modeling used as a basis for this report.

The basis for hydraulic modeling for this project are hydraulic models developed for the Middle New River Watercourse Master Plan. Hydraulic computations performed for the Middle New River Watercourse Master Plan were completed following procedures and guidelines listed in the "Drainage Design Manual for Maricopa County, Volume II, Hydraulics"; the "ProHEC2, Program Documentation Manual" (Dodson and Associates, Inc.); and U.S. the Army Corps of Engineers, "HEC-RAS River Analysis System User Manual".

Water surface profiles determined from the hydraulic computations for existing conditions are compared to FEMA's effective water surface profiles to identify changes that may have occurred since FEMA's study was conducted.

The U.S. Army Corps of Engineers "HEC-RAS, River Analysis System", computer program (Version 2.2) and an enhanced version of the standard Corps of Engineers' "HEC-2 Flood Plain Analysis Computer Program" (Dodson and Associates, Inc. Version 4.6) are used to conduct floodplain delineation hydraulic analyses.

Hydraulic models commence at or below the confluence of New River with Skunk Creek and extend upstream to just below the New River Dam. Computer input files for hydraulic models are located in Appendix B. Diskettes with the computer input files for this study are located in Appendix C.

#### 2.3.3.1 Effective Existing Condition Hydraulic Models

Models referred to as Effective FEMA are models that best reflect the hydraulic conditions of New River depicted on Effective FEMA FIRM Panel for the subject reach (1190, effective date 1993 (revised 1996) and were obtained from the Flood Control District of Maricopa County (District). For the reach of New River from the confluence with Bell Road to New River Dam, the District recommended using the model NRIVER-2 that was recreated by District staff from FEMA HEC-2 hard copy printouts. For the reach of New River from the confluence with Skunk Creek to Bell Road, the results of the model REVSB by Coe and Van Loo, closely match's FEMA's original.

In addition to the NRIVER-2 model, models developed by HDR for the Union Hill Bridge and improvements immediately downstream were also obtained from the District. HDR revised NRIVER-2 to develop a model (UHILLs) for pre-bridge conditions and a model (UNIONBR8) for proposed improvements

For comparison purposes, Stantec revised the NRIVER-2 model to include cross section data derived from work maps that were used for the original FIS model at cross section locations that are consistent with the Updated Existing Condition Model. Stantec's revised model is named RNEWRIVER-2.

2.3.3.2 Updated Existing Condition Model

An Updated Existing Condition Model was developed by Stantec to reflect current hydraulic conditions. The model includes the following:

1. Cross section geometric data is updated to reflect recent topographic mapping (Fight Date, 3/9/98) developed for the Middle New River Watercourse Master Plan study. Cross section geometric data is determined at the locations of cross sections used in FEMA's original study for the reach.

2. Cross section orientation is updated so that cross-section alignment is perpendicular to the main flow path.

3. Bridges that have been constructed since FEMA's 1986 study are included in the updated model.

4. Additional cross sections are added so that the maximum distance between cross-sections is approximately 500 feet.

5. Bank stations are adjusted so that they are consistent with new topography.

6. At locations along the study reach, expansion and contraction head loss coefficients are adjusted to reflect new channel transitions.

7. The final Updated Existing Condition Model by Stantec commences further down stream than the Effective FEMA models and initial Updated Existing Condition Models. The reason for starting further downstream is to evaluate potential backwater effects of the Thunderbird Road Bridge and channel improvements (drop structure) downstream of the confluence of Skunk Creek.

The Updated Existing Condition Model was then revised so that the same number and location of cross sections define the subject reach as used in the FEMA's Effective Model. The new model is referred to as Revised Updated Existing Condition Model.

### 2.3.4 Existing Condition Hydraulic Analysis Results

A comparison of the results from FEMA's Effective Model, HDR's Proposed Condition model and FEMA's Revised Effective Model, Stantec's Revised Updated Existing Condition Model and Updated Existing Condition Model are made to determine if changes in water surface elevations relative FEMA's Effective Model are a result of modeling techniques or are due to changes in channel morphology. Differences in modeling techniques between Stantec's models, HDR's model and FEMA's Effective Model are primarily the number of cross sections used in the subject reach to define

the geometry of the channel. The expected changes in channel morphology since the formulation of FEMA's Effective Model are do to aggregation, degradation, lateral migration or improvements that include fill or channelization.

A comparison of Stantec's Revised Updated Existing Condition model to FEMA Effective Model is presented in Table 1. The cross section location and the nuumber of cross sections used in the subject reach are consistent with the FEMA Effective hydraulic model. This provides an "apples to apples" comparison. Stantec's Updated Existing Condition Model was revised so that the same number and location of cross sections define the subject reach as used in the FEMA's Effective Model. Review of the data in Table 1 indicates that water surface elevations determined in the Revised Updated Existing Condition Model relative to FEMA's Effective Model are lower at the downstream segment of the subject reach and higher at the upstream segment. Given that the main difference between the two models is different topographic base mapping (Updated Model and Revised Updated Model being recent mapping), a logical inference concerning the difference in water surface elevations listed in Table 1 are changes in channel morphology over time or changes due to development. In comparing 1985 topographic maps with 1998 topographic maps, it appears that in the area of Cross Section 10.612 the west bank may have been shifted 10 to 20 feet towards the channel. However, registration between the two map sources may contribute to some of the shift.

**TABLE 1**

**FEMA Effective Model Comparison with Stantec's Revised Updated Model**

| CROSS SECTION No. | Stantec's Revised Updated Model (REVNEWBR) | FEMA Effective Model (NEWRIVER-2) | Difference in Water Surface Elevation between Stantec and FEMA Models |
|---|---|---|---|
| 10.096 | 1200.06 | 1200.56 | -0.5 |
| 10.176 | NA | NA | |
| 10.271 | 1204.06 | 1205.05 | -0.99 |
| 10.348 | NA | NA | |
| 10.443 | 1209.58 | 1209.58 | 0 |
| 10.517 | NA | NA | |
| 10.612 | 1214.10 | 1213.73 | 0.37 |
| 10.699 | NA | NA | |
| 10.803 | 1219.49 | 1219.44 | 0.05 |
| 10.862 | NA | NA | |

A second model comparison between Stantec's Updated Existing Condition Model, FEMA's Revised Effective Model and HDR's Proposed Condition Model to FEMA's Effective Model is presented in Table 2. The second model comparison is based on hydraulic models that have a greater number of cross sections than FEMA's effective model. FEMA's Revised Effective Model includes additional cross sections at the same location as Stantec's Updated Existing Condition Model. HDR's Proposed Condition Model includes additional cross sections downstream of the Union Hills Bridge to model proposed improvements to 83rd Avenue, however the location of the additional cross sections are not the same as in the FEMA Effective or Stantec Updated Existing Condition Model.

A review of the data in Table 2 indicates that in the comparing results of the models to the FEMA Effective model, there is generally a decrease in water surface elevations at the lower segment of the subject reach and an increase at the upper segment of the reach.

The major difference between the data listed in Table 1 and those listed in Table 2 is that a greater number of cross-sections are used to define the channel for models listed in Table 2 than those listed in Table 1. The difference in water surface elevations between the FEMA Revised Effective Model and the FEMA Effective Model indicates that by increasing the number of cross sections in the model the channel geometry for the reach is defined such that an increase in water surface elevations is realized.

The water surface elevations are greater in FEMA's Revised Effective when compared with those in Stantec's Updated Existing Condition Model. A logical explanation for this increase is do to a combination of additional cross sections being used to define channel geometry and changes in channel morphology that has taken place overtime.

## TABLE 2
## Hydraulic Model Comparison

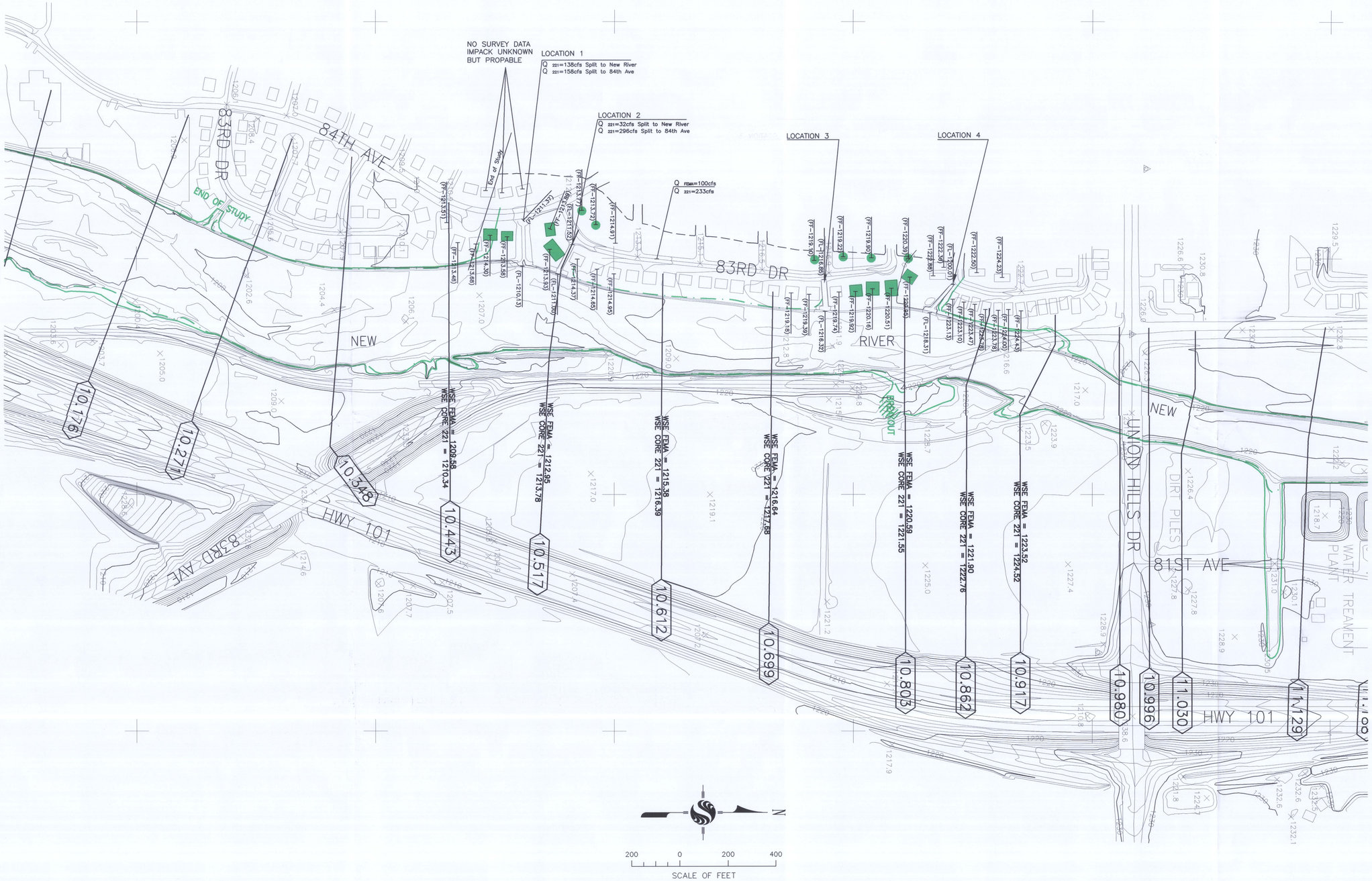
| CROSS SECTION No. | 1. Stantec's Updated Existing Condition Model (NEWBR) | 2. FEMA Revised Effective Model (RNEWRIVER-2) | 3. HDR's Proposed Condition Model (UNIONNBR8) | 4. FEMA Effective Model (NEWRIVER-2) | Difference Between 1 And 4 | Difference Between 2 And 4 | Difference Between 3 And 4 |
|---|---|---|---|---|---|---|---|
| | (ft) | (ft) | (ft) | (ft) | (ft) | (ft) | (ft) |
| 10.096 | 1200.06 | 1200.56 | 1200.56 | 1200.56 | -0.5 | 0 | 0 |
| 10.176 | 1202.11 | NA | NA | NA | | | |
| 10.271 | 1204.82 | 1205.05 | 1205.06 | 1205.05 | -0.23 | 0 | 0.01 |
| 10.348 | 1206.60 | NA | NA | NA | | | |
| 10.443 | 1209.15 | 1209.58 | 1209.58 | 1209.58 | -0.43 | 0 | 0 |
| 10.517 | 1212.59 | 1212.82 | NA | NA | | | |
| 10.612 | 1214.97 | 1214.15 | 1215.19 | 1213.73 | 1.24 | 0.42 | 1.46 |
| 10.699 | 1216.03 | 1217.33 | NA | NA | | | |
| 10.803 | 1220.40 | 1219.46 | 1219.38 | 1219.44 | 0.96 | 0.02 | -0.06 |
| 10.862 | 1221.49 | NA | 1221.57 | NA | | | |

# 3.0 Comparison of Topographic Maps

Topographic maps prepared for FEMA's 1985 FIS study are compared to topographic maps prepared for the middle New River Watercourse Master Plan. Two general comments can be made from the comparison.

1) Encroachment by development or infrastructure into the New River Channel since 1985 maybe in the order of 0 to 20 feet at few locations.

2) A comparison of bank elevations for the west bank of New River indicate that the current bank elevations are at or slightly lower than west bank elevations determined utilizing the 1985 topography. At existing drainage channel outlets from the Bell Park subdivision the cannel inverts are lower than bank elevations determined from the 1985 topography.





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Consultants

Legend

- STRUCTURE
- (FF–1214.37) STRUCTURE WITH FINISHED FLOOR ELEVATION
- (FF–1214.37) STRUCTURE WITH FINISHED FLOOR ELEVATION IMPACTED BY COE 221 FLOW
- APPROXIMATE FLOODING LIMITS USING COE 221 FLOW
- FEMA FLOODPLAIN LIMIT
- COE 221 FLOODPLAIN LIMIT

Notes

| 0 Revision | By | Appd. | Date |
|---|---|---|---|
| | | | |

| A Issued | By | Appd. | Date |
|---|---|---|---|
| | | | |

File Name:

| Dwn. | Dsgn. | Dsgn. | Date |
|---|---|---|---|
| | | | |

Permit/Seal

Client/Project

FLOOD CONTROL DISTRICT
OF MARICOPA COUNTY

F.C.D. CONTRACT NO. 97-04 MIDDLE NEW RIVER WATER COURSE MASTER PLAN
PHOENIX, ARIZONA

Title

APPROXIMATE FLOODING LIMITS
DOWNSTREAM OF UNION HILLS DR.
USING COE 221 FLOW

| Project No. | Scale |
|---|---|
| 82000058 | 1" = 200' |

| Drawing No. | Sheet | Revision |
|---|---|---|
| A101 | 1 of 1 | 1 |

P:\82000058\Acad13\rref\bell_park.dwg

# APPENDIX A

## CALCULATION SHEETS

Table A1

| Given: | Location | Water Surface Elevation[1] |
|---|---|---|
| | 1 | 1212.66 |
| | 2 | 1213.69 |
| | 3 | 1219.17 |
| | 4 | 1221.8 |

1) New River Backwater Elevation to Determine Inpact to Subdivision (Based on COE Future Condition Discharge)

Table A2

Flow Draining Over Breakpoint Between Location 1 and 2
Drains to 84TH Avenue

| Constant C (6) | Water Surface Elevation feet (7) | Height of Weir feet (8) | Length of Weir feet (9) | Discharge cfs (10) |
|---|---|---|---|---|
| 3 | 1212.66 | 0 | 32 | 0 |
| 3 | 1212.79 | 0.13 | 32 | 4 |
| 3 | 1212.89 | 0.23 | 32 | 11 |
| 3 | 1212.99 | 0.33 | 32 | 18 |
| 3 | 1213.09 | 0.43 | 32 | 27 |
| 3 | 1213.19 | 0.53 | 32 | 37 |
| 3 | 1213.29 | 0.63 | 32 | 48 |
| 3 | 1213.39 | 0.73 | 32 | 60 |
| 3 | 1213.49 | 0.83 | 32 | 73 |
| 3 | 1213.59 | 0.93 | 32 | 86 |
| 3 | 1213.69 | 1.03 | 32 | 100 |

Table A3

Rating curves for calculation of the Flow Rates

| Flow Draing Back to New River at Location 2 | | | | | Flow Draing Back to New River at Location 1 | | | | | Flow Over Breakpoint South of Location 1- Drains to 84th Ave | | | | | Sum of Discharge from (5), (10), & (15) cfs (16) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Constant C (1) | Water Surface Elevation feet (2) | Height of Weir feet (3) | Length of Weir feet (4) | Discharge cfs (5) | Constant C (6) | Water Surface Elevation feet (7) | Height of Weir feet (8) | Length of Weir feet (9) | Discharge cfs (10) | Constant C (11) | Water Surface Elevation feet (12) | Height of Weir feet (13) | Length of Weir feet (14) | Discharge cfs (15) | |
| | | | | | 3 | **1212.66** | 0 | 22 | 0 | | | | | | 0 |
| | | | | | 3 | 1212.79 | 0.13 | 22 | 3 | | | | | | 3 |
| | | | | | 3 | 1212.89 | 0.23 | 22 | 7 | | | | | | 7 |
| | | | | | 3 | 1212.99 | 0.33 | 22 | 13 | 3 | **1212.99** | 0.09 | 32 | 3 | 15 |
| | | | | | 3 | 1213.09 | 0.43 | 22 | 19 | 3 | 1213.09 | 0.19 | 32 | 8 | 27 |
| | | | | | 3 | 1213.19 | 0.53 | 22 | 25 | 3 | 1213.19 | 0.29 | 32 | 15 | 40 |
| | | | | | 3 | 1213.29 | 0.63 | 22 | 33 | 3 | 1213.29 | 0.39 | 32 | 23 | 56 |
| | | | | | 3 | 1213.39 | 0.73 | 22 | 41 | 3 | 1213.39 | 0.49 | 32 | 33 | 74 |
| | | | | | 3 | 1213.49 | 0.83 | 22 | 50 | 3 | 1213.49 | 0.59 | 32 | 44 | 93 |
| | | | | | 3 | 1213.59 | 0.93 | 22 | 59 | 3 | 1213.59 | 0.69 | 32 | 55 | 114 |
| 3 | **1,213.69** | 0.00 | 22.0 | 0 | 3 | 1213.69 | 1.03 | 22 | 69 | 3 | 1213.69 | 0.79 | 32 | 67 | 136 |
| 3 | 1,213.79 | 0.10 | 22.0 | 2 | 3 | 1213.79 | 1.13 | 22 | 79 | 3 | 1213.79 | 0.89 | 32 | 81 | 162 |
| 3 | 1,213.89 | 0.20 | 22.0 | 6 | 3 | 1213.89 | 1.23 | 22 | 90 | 3 | 1213.89 | 0.99 | 32 | 95 | 190 |
| 3 | 1,213.99 | 0.30 | 22.0 | 11 | 3 | 1213.99 | 1.33 | 22 | 101 | 3 | 1213.99 | 1.09 | 32 | 109 | 221 |
| 3 | 1,214.09 | 0.40 | 22.0 | 17 | 3 | 1214.09 | 1.43 | 22 | 113 | 3 | 1214.09 | 1.19 | 32 | 125 | 254 |
| 3 | 1,214.19 | 0.50 | 22.0 | 23 | 3 | 1214.19 | 1.53 | 22 | 125 | 3 | 1214.19 | 1.29 | 32 | 141 | 289 |
| 3 | 1,214.29 | 0.60 | 22.0 | 31 | 3 | 1214.29 | 1.63 | 22 | 137 | 3 | 1214.29 | 1.39 | 32 | 157 | 325 |
| 3 | 1,214.39 | 0.70 | 22.0 | 39 | 3 | 1214.39 | 1.73 | 22 | 150 | 3 | 1214.39 | 1.49 | 32 | 175 | 363 |
| 3 | 1,214.49 | 0.80 | 22.0 | 47 | 3 | 1214.49 | 1.83 | 22 | 163 | 3 | 1214.49 | 1.59 | 32 | 192 | 403 |

Bold Font for Watersurface Elevation Indicate Effective Weir Elevations

# Flow on 83rd Drive using CORE 221 Qs
## Worksheet for Irregular Channel

| Project Description | |
|---|---|
| Worksheet | Street Capacity - CL, 16' - 1 for 83rd Drive using CORE 221 Qs |
| Flow Element | Irregular Channel |
| Method | Manning's Formula |
| Solve For | Channel Depth |

| Input Data | | |
|---|---|---|
| Slope | 0.001416 | ft/ft |
| Discharge | 233.00 | cfs |

| Options | |
|---|---|
| Current Roughness Method | Improved Lotter's Method |
| Open Channel Weighting Metho | Improved Lotter's Method |
| Closed Channel Weighting Meth | Horton's Method |

| Results | | |
|---|---|---|
| Mannings Coefficient | 0.015 | |
| Water Surface Elevation | 11.12 | ft |
| Elevation Range | 9.69 to 11.36 | |
| Flow Area | 71.2 | ft² |
| Wetted Perimeter | 89.35 | ft |
| Top Width | 88.40 | ft |
| Actual Depth | 1.43 | ft |
| Critical Elevation | 10.87 | ft |
| Critical Slope | 0.003665 | ft/ft |
| Velocity | 3.27 | ft/s |
| Velocity Head | 0.17 | ft |
| Specific Energy | 11.29 | ft |
| Froude Number | 0.64 | |
| Flow Type | Subcritical | |

Roughness Segments

| Start Station | End Station | Mannings Coefficient |
|---|---|---|
| 0+00 | 0+34 | 0.035 |
| 0+34 | 0+66 | 0.013 |
| 0+66 | 1+00 | 0.035 |

Natural Channel Points

| Station (ft) | Elevation (ft) |
|---|---|
| 0+00 | 11.36 |
| 0+25 | 10.33 |
| 0+34 | 10.19 |
| 0+35 | 10.19 |
| 0+35 | 9.69 |
| 0+50 | 10.00 |
| 0+66 | 9.69 |
| 0+66 | 10.19 |
| 0+66 | 10.19 |
| 0+75 | 10.33 |
| 1+00 | 11.36 |

# APPENDIX B

## HEC-2 MODELS

FEMA'S EFFECTIVE MODEL

```
C
C     14
C  8.655 1985 TOPO - DIGITIZED DATA SEC.8.655 THRU SEC.9.129
C  8.655 DOWNSTREAM STUDY LIMIT
C  8.655 NEW RIVER-SKUNK CREEK CONFLUENCE
C  8.731 BEGIN DISCHARGE FOR NEW RIVER ONLY
C  8.936 OLD CORP STATION NO. 8.95=0.6
C  9.009 GREENWAY ROAD AREA
C  9.129 OLD CORP STATION NO. 9.15=9.8
C  9.129 END 1985 TOPO DIGITIZED SECTIONS, END C/L = 10000
C  9.318 BEGIN STATION C/L = 20000
C  9.953 BELL ROAD
C  9.967 SPECIAL BRIDGE
C 10.989 UNION HILLS DRIVE
C 11.129 NEW SECTION - LEFT BANK TAKEN FROM ARROWHEAD RANCH
C 11.129 WASTEWATER TREATMENT PLANT GRADING PLAN-DIBBLE & ASSOC.
T1       NEW RIVER ABOVE SKUNK CREEK, PHOENIX, ARIZ., SEPT 1985
T2       MARICOPA COUNTY FIS
T3       FLOOD BOUNDARY
J1             2                                                  1162.8
J2                    -1                                                    15
J3    38      43      53      21      55      26      56      22      54       4
J3     1      50     200
NC  .045    .045    .035    .200    .400
QT     2   21000   21000
X1 8.655      36  9581.4 10224.3     750     150     400
X3    10
GR1173.9  8649.5  1172.8  8725.6  1173.6  8761.4  1172.8  8805.7  1171.9  8882.4
GR1171.9  8973.3  1171.7  9029.3  1170.9  9157.1  1170.5    9250  1170.8    9322
GR1170.3  9369.5  1169.5  9443.6  1169.3  9488.5  1171.5  9503.3  1167.1  9548.1
GR1171.6  9581.4  1166.9  9605.5  1161.4    9624  1157.9    9660  1156.6  9716.3
GR1155.1  9744.7  1156.1  9761.1  1155.3  9864.2  1155.3  9905.7  1156.2  9954.8
GR1156.3   10000  1156.3   10071  1156.7 10091.4  1155.7 10121.5  1155.7 10154.7
GR1164.5 10193.7  1171.2 10224.3  1172.3 10244.2  1171.2   10247  1171.1 10299.3
GR1170.6 10403.3
NC                          .100    .300
QT     2   12000   12000
ET                    9.1                                          9762.5 10213.5
X1 8.731      45  9762.5 10213.5     400     400     400
X3    10
GR1174.8    8627  1174.1  8663.6  1172.6  8666.7  1174.4  8670.4  1172.1  8683.8
GR1170.8  8831.8  1170.4    9040    1170  9196.9  1168.3  9265.9    1167  9305.7
GR1166.8    9321  1173.5    9346  1167.4  9377.8  1160.3  9401.7  1156.9  9425.5
GR1157.6    9463  1156.3  9473.2  1158.8  9489.1    1166  9510.2  1169.2  9519.8
GR1168.9  9553.9  1169.2  9595.9  1168.6  9640.2  1168.3  9678.4  1173.6  9692.1
GR1171.9  9727.6  1171.4  9748.3  1172.8  9762.5  1172.6    9771  1167.8  9795.5
GR  1160  9831.2  1157.1    9844  1156.1  9894.9  1156.9   10000  1157.8 10055.6
GR1157.3 10089.1  1156.7 10123.2  1157.3   10151  1164.7 10183.1  1170.6 10206.7
GR1172.2 10213.5  1173.3 10246.5    1172 10250.5  1171.9 10342.2  1171.3   10403
*
*     REVISED THE ELEVATION OF STATION 9478.8 FROM 117039 TO 1170.9 (TMM 3-94)
*
ET                    9.1                                          9771.3 10219.2
X1 8.807      58  9771.3 10219.2     400     390     400
X3    10
GR1174.2    8591  1174.2  8613.7  1174.8  8626.5  1174.6  8637.8  1173.1  8640.4
GR1174.2  8644.4  1172.8  8658.6  1172.4  8867.9    1172  9015.9  1171.9  9044.3
```

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GR1172.4  9063.6  1170.8  9080.6  1170.8  9093.1  1174.4  9117.5    1175  9131.2
GR1172.2  9150.5  1164.2  9172.6  1160.1  9193.9  1158.6  9221.8  1157.7  9249.9
GR1159.2  9261.8  1157.9  9281.7  1159.2  9293.1  1164.6  9312.1  1171.3  9327.1
GR1170.8    9359  1170.5  9382.8  1171.1  9406.1  1170.6  9448.1  1170.9  9478.8
GR1171.6    9539  1171.9  9588.1  1172.4  9618.2  1172.2  9646.1  1172.1  9673.9
GR1178.4  9688.1  1187.7  9701.7  1193.4  9715.9  1194.1  9729.6  1186.6  9749.4
GR1174.7  9771.3  1169.2    9792  1162.1  9826.7  1159.7    9848  1158.4  9918.7
GR1158.3  9957.1  1158.8   10000  1158.6 10069.8  1158.4 10113.6  1158.5 10146.5
GR1163.7 10172.1  1170.8 10201.6  1173.9 10219.2  1174.4 10248.2  1173.2 10258.1
GR1173.9 10328.3  1173.6 10380.5    1173 10402.7
ET                   9.1                                          9824.7 10216.9
X1 8.883      55  9824.7 10216.9     280     400     400
X3    10
GR1176.2  8580.8  1175.3  8595.6  1173.7  8597.9  1174.9  8600.1  1173.5  8625.1
GR1174.4  8705.8  1174.1  8768.8  1175.2  8824.2  1179.5  8846.4  1180.4  8864.3
GR1177.5  8878.5  1167.9  8905.2  1162.9  8926.2  1159.6  8943.8  1159.9  8977.9
GR1158.5  8985.3  1161.3  9000.6  1158.4  9027.9  1158.8  9040.4  1162.1  9058.5
GR1169.4  9075.9  1173.3  9086.9    1174  9126.4    1173  9140.3    1173  9167.6
GR1172.7  9204.5  1174.4  9252.2  1173.6  9288.3  1173.9    9325  1173.7  9357.3
GR1174.3  9422.7  1174.7  9473.8  1173.9  9529.7  1173.9  9563.4  1175.1  9610.3
GR1174.9  9680.1  1175.9  9745.5  1174.9  9824.7  1169.4  9860.8  1166.1  9911.3
GR1163.8  9955.6  1163.1  9984.3  1163.1   10000  1160.2 10004.5  1160.9 10056.5
GR1160.1 10106.7  1160.4 10145.4  1163.8 10164.1  1171.6 10191.4  1176.3 10216.9
GR  1177 10247.6  1175.5 10249.9  1176.3 10292.2  1176.1 10347.6  1175.3 10404.7
ET                   9.1                                          9809.4 10213.2
X1 8.936      60  9809.4 10213.2     300     300     290
X3    10
GR  1180  8590.6  1174.5  8616.4  1165.7  8644.6  1162.8  8656.8  1162.9  8675.8
GR1163.3  8691.1    1163  8713.3  1162.3    8740  1166.9  8754.2  1173.7  8779.8
GR  1179  8797.9  1177.6  8810.7  1177.4  8832.3  1175.7  8843.9  1174.6  8913.5
GR1175.6  8920.6  1174.6  8947.9  1175.5  9022.3  1175.5    9091  1175.9  9152.4
GR1176.4  9222.8    1177  9261.2  1177.8    9274  1177.1    9322  1177.8  9335.9
GR1178.2  9360.6  1175.8  9370.5  1176.9  9389.9  1177.8  9408.3  1175.5  9452.4
GR  1177  9483.3  1176.2  9535.9  1175.6  9543.2  1176.6  9575.3    1176  9615.4
GR1177.8  9634.7  1176.7  9680.7  1177.8    9708  1176.9    9754    1176  9785.5
GR1176.1  9797.7  1177.3  9809.4    1176    9817  1167.6  9825.6  1166.8  9858.6
GR1166.7    9894  1165.7  9939.7  1165.3  9959.9  1165.7  9994.3  1162.2   10000
GR1162.3 10069.8  1161.8 10110.7  1162.1 10143.1  1167.9 10169.2    1174 10192.8
GR1178.2 10213.2  1178.2 10244.2  1177.7 10247.6  1177.1 10309.8  1176.6 10402.1
*
*     REVISED THE ELEVATION OF STATION 8934.8 FROM 1744.7 TO 1174.7 (TMM 3-94)
*        "     "      "     "     "    9747.2  "   117732 "  1177.2    "
*        "     "      "     "     "    9765.9  "   117835 "  1178.5    "
*        "     "      "     "     "    9792    "   117838 "  1178.8    "
*        "     "      "     "     "    9802.3  "   117936 "  1179.6    "
*        "     "      "     "     "   10000.0  "   116535 "  1165.5    "
*
ET                   9.1                                          9886.1 10212.7
X1 8.977      58  9886.1 10212.7     220     200     210
X3    10
GR1177.7  8605.6  1175.6  8628.1  1174.7  8658.4  1174.4  8712.7  1174.6  8744.5
GR1175.6  8767.2  1174.1  8802.4  1175.6  8841.6  1174.9  8864.9    1175  8878.6
GR1174.7  8934.8  1174.7  8953.5  1175.5  8991.6  1175.7  9030.5  1176.4    9064
GR1178.2  9075.1  1176.8  9084.2  1176.6  9130.2  1176.8  9179.1  1177.1  9252.3
GR  1176  9330.2  1176.4  9370.6  1177.8  9377.4  1176.8  9385.9  1176.8  9448.7
GR1177.3    9491  1176.4    9537  1176.4  9556.3  1176.9  9609.7  1176.8  9662.3
GR1176.3  9713.1  1177.2  9747.2  1178.5  9765.9  1178.8    9792  1179.6  9802.3
```

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GR1178.3    9821  1180.8  9828.4  1176.5  9836.1  1176.5  9867.6  1177.2  9886.1
GR1168.4    9900  1167.1  9909.3  1165.7    9938  1164.9  9976.1  1165.5   10000
GR1163.6 10007.3  1163.7 10066.4    1164 10103.3  1163.5 10128.9  1163.5 10137.4
GR1168.4 10163.5  1173.3   10188  1178.5   10209  1179.3 10212.7  1180.9 10243.9
GR1180.1 10248.2  1179.7 10281.7  1179.8 10401.6
ET                   9.1                                          9764.5   10207
X1 9.009      34  9764.5   10207     330     180     180
X3    10
GR  1177    8740  1176.9  8817.3    1177  8883.2  1177.1  8937.1  1177.2  9008.7
GR1177.5  9075.7  1177.5  9150.2  1177.5  9213.2  1177.7  9285.6  1177.7  9368.3
GR1177.9    9462  1178.2  9547.2  1178.2  9614.3  1178.3  9675.6  1178.3  9725.9
GR  1178  9764.5  1174.2  9786.1  1167.1  9821.6    1164  9852.3    1166  9886.3
GR1164.6    9921  1163.6  9960.8  1162.9   10000  1164.1 10055.9  1164.8 10109.6
GR1164.8 10149.3  1169.2 10162.4  1178.6 10177.2  1179.9   10207  1180.3 10253.3
GR1179.5 10304.1  1180.2 10353.8  1179.8 10424.8  1179.3 10475.4
ET                   9.1                                          9689.8 10113.8
X1 9.047      44  9689.8 10113.8     280     160     200
X3    10
GR1179.8  8601.2  1179.8    8619 1180.63    8633  1179.4  8721.9  1179.5  8798.8
GR1179.2  8858.5  1178.9  8933.2  1178.7  9004.2  1173.2  9070.4  1178.8  9154.1
GR1178.8  9233.1  1178.8  9306.9    1179  9377.9  1179.1  9475.6  1178.6  9532.5
GR1178.7  9570.5  1180.6  9579.9    1180  9593.2  1181.6  9616.5  1180.5    9660
GR1177.5  9689.8  1171.4  9715.9  1166.4  9742.1  1166.2  9751.1  1166.9  9756.8
GR1162.3  9762.5    1162    9781  1163.2  9794.9  1163.3  9845.4    1164  9880.4
GR1162.9  9904.5  1161.7  9907.9  1161.2  9937.7  1161.9  9971.5  1162.6   10000
GR  1165 10050.5  1165.7 10084.6    1171 10101.3  1177.6 10113.8  1178.2 10168.4
GR1178.2 10218.1  1178.1 10298.2  1178.7 10354.4  1178.2 10401.6
NC          .060
ET                   9.1                                          9641.2   10090
X1 9.129      51  9641.2   10090     290     460     420
X3    10
GR1182.2  8558.3  1182.2  8569.9    1183  8580.4  1183.8  8652.3  1181.8  8719.9
GR1182.2  8785.2  1181.7  8844.6  1181.3  8932.3  1180.6  8995.9  1180.5  9075.5
GR  1181    9134    1181  9205.5  1181.5  9271.4  1181.2  9370.8  1180.3  9477.1
GR1180.3  9499.5  1180.1  9524.8  1180.8  9562.3  1180.3  9599.2  1180.9  9629.9
GR1180.6  9641.2  1176.6  9662.3    1173  9666.8  1173.4    9673  1164.9  9688.4
GR1165.5  9712.2  1166.2  9768.2  1166.3  9795.2  1167.5  9799.7  1164.8  9814.5
GR1164.2  9836.1  1165.2  9889.5  1165.1  9919.9  1166.3  9971.3  1167.1  9982.6
GR1168.1  9987.7  1167.9   10000  1168.9 10061.6  1171.8 10079.8  1178.7   10090
GR  1179 10117.8    1179 10195.1  1178.6 10241.7  1178.5 10245.1  1179.7 10304.1
GR1179.2 10370.6  1179.6 10407.5  1179.9 10429.4  1178.7 10432.2  1180.1 10433.6
GR1179.5 10439.6
*
*     REVISED THE ELEVATION OF STATION 18380 FROM  185.2 TO 1185.2 (TMM 3-94)
*        "     "      "     "     "    20015  "   118135 "  1181.5     "
*
NC  .050    .060    .035    .100    .300
ET                   9.1                                          19660   20015
X1 9.318      39   19660   20015    1000    1000    1000
X3    10
GR  1192   16150    1170   16210    1170   16310  1194.6   16420    1186   16465
GR1186.8   16560    1184   16830  1185.2   16920    1184   17065    1184   17120
GR  1186   17130    1186   17150    1184   17160  1183.7   17360    1184   17470
GR  1185   17855  1185.2   18380  1185.3   18430    1185   18460  1185.1   19440
GR  1186   19660    1184   19685    1178   19710    1178   19865    1176   19945
GR  1174   19985  1173.2   20000    1174   20010  1181.5   20015  1181.3   20105
GR  1182   20360    1184   20370    1186   21110    1186   21150    1184   21595
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GR  1182   22220    1180   22940    1180   23725  1181.2   23740
QT     2   11450   11450
ET                   9.1                                     19770   20235
X1 9.492      40   19770   20235     910     890     920
X3    10
GR1197.2   16090    1178   16135    1178   16185  1193.2   16240    1192   16258
GR  1190   16470    1188   17185    1187   17360    1188   17710  1188.6   17900
GR1189.3   18260    1189   18870  1188.8   18885    1190   18900    1150   18920
GR1189.2   19030  1189.5   19300    1188   19610    1185   19635    1186   19650
GR  1188   19700    1188   19770    1186   19905    1184   19930    1184   19950
GR  1180   19970    1179   20000    1180   20055    1182   20160    1184   20195
GR1193.9   20235    1186   20255  1185.4   20310    1186   20785    1188   20800
GR1188.8   21100    1190   21450    1190   22860    1188   23130    1188   24248
NC  .040    .060    .035
ET                   9.1                                     19840   20060
X1 9.692      31   19840   20060    1050    1040    1056
X3    10
GR  1194    1593    1192   16660    1190   17050  1189.8   17130    1190   17448
GR  1192   18040    1194   18880    1195   19040  1194.4   19150    1194   19280
GR  1194   19680    1192   19790    1192   19830    1195   19840    1186   19880
GR1184.1   20000    1186   20015    1188   20020    1190   20040    1196   20060
GR  1194   20060  1193.2   20090    1194   20195    1194   21315    1196   21690
GR  1196   21725    1194   22305    1192   24380    1190   24790    1190   25100
GR  1192   25440
NC  .060    .060    .035    .300    .500
ET                   9.1                                     19840   20080
X1 9.889      31   19840   20080    1100    1050    1040
X3    10
GR  1200   14530    1198   15330    1196   17370    1198   17830    1200   18628
GR1201.6   19190    1200   19460    1198   19490    1196   19510    1196   19570
GR  1198   19590    1198   19810    1200   19820    1200   19840    1198   19850
GR  1196   19870    1190   19890    1188   19900    1190   19920    1190   19965
GR1188.2   20000    1190   20050    1200   20080    1200   20970  1198.6   21620
GR  1200   21710    1200   21730    1198   22710  1196.1   23410    1198   24490
GR  1198   26950
*
*     REVISED THE ELEVATION OF STATION 15520 FROM 120034 TO 1200.4 (TMM 3-94)
*
NC  .060    .060    .030    .300    .500
ET                   9.1                                     19790   20032
X1 9.953      27   19790   20032     225     225     225
X3    10
GR  1202   15050  1200.4   15520    1200   16550    1200   16890  1200.5   17285
GR  1200   17540    1200   17610    1202   18770    1202   18860  1202.4   19045
GR  1200   19515    1200   19790    1194   19805    1192   19840    1192   19910
GR  1190   19990  1188.6   20010    1200   20030    1202   20032    1202   20050
GR  1200   21475    1200   21785    1198   22680    1198   24780    1200   25390
GR  1200   26215  1200.6   26810
ET                 9.110                                     19825   20010
SB  .900   1.560     2.6             213      20    2800   1.880 1188.61  1188.6
X1 9.967      29   19825   20110      75      75      75
X2                     1  1200.9  1207.5
X3    10
BT    21   15025    1204           15450  1203.5           16410    1202
BT 16635  1201.4           16805    1202           17990    1204           18530
BT1205.6           19065    1204           19325    1204           19800    1205
BT         19825  1207.5  1200.9   20110  1207.5  1200.9   20110  1205.8
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BT 20635    1204            21810    1202            22850    1200            24300
BT  1198            24630    1198            25270    1200            26275    1202
BT          27010  1202.1
GR  1204   15025  1203.5   15450    1202   16410  1201.4   16635    1202   16805
GR  1204   17990  1205.6   18530    1204   19065    1204   19325    1205   19800
GR  1204   19825    1196   19845    1194   19860    1192   19890    1192   19980
GR  1190   20015  1188.6   20025    1190   20035    1194   20060    1204   20110
GR1205.8   20130    1204   20635    1202   21810    1200   22850    1198   24300
GR  1198   24630    1200   25270    1202   26275  1202.1   27010
*
*     REVISED THE ELEVATION OF STATION 23690 FROM 199.6 TO 1199.6 (TMM 3-94)
*
NC                          .100    .300
ET                    9.1                                          19635   20055
X110.096      38   19635   20055     610     650     645
X3    10
GR  1206   14890    1204   14935    1203   15070    1204   16230  1204.8   16600
GR1204.4   17760  1205.1   18700    1205   19025    1204   19260    1204   19275
GR  1206   19285    1208   19335    1208   19435    1206   19545    1202   19555
GR  1201   19635    1198   19665    1196   19970  1195.7   20000    1196   20010
GR  1198   20020    1200   20040    1206   20055    1206   20090    1206   20675
GR  1204   21060    1202   22510    1200   23200  1199.6   23690    1200   24210
GR  1202   24600    1202   24615    1200   24890    1199   25180    1200   25545
GR  1202   25900    1206   25910    1206   26020
QT     2   10900   10900
ET                    9.1                                          19820   20320
X110.271      40   19820   20320     920     925     925
X3    10
GR  1208   14700    1206   15620    1206   16020    1208   16520    1208   16790
GR1209.6   17725  1209.7   18290    1208   19090    1208   19750  1212.5   19820
GR  1204   19870    1202   19930    1200   19980  1198.2   20000    1200   20020
GR  1202   20230    1204   20295    1208   20320    1208   20365    1206   20375
GR  1206   20680    1208   20685  1208.4   21370    1208   22660    1206   22930
GR  1204   23700    1204   24115    1206   25190    1206   25220    1204   25230
GR  1204   26490    1206   26520    1206   26865    1207   26870    1207   26880
GR  1206   26895    1204   26930    1204   27050    1206   27210    1208   27230
ET                    9.1                                          19655   20110
X110.443      34   19655   20110     930     900     910
X3    10
GR1213.5   14830    1212   15205  1210.5   15830    1212   16220  1213.9   17660
GR  1212   19220    1211   19560    1212   19590    1216   19605    1216   19655
GR  1210   19670    1210   19740    1208   19750    1206   19950  1205.6   20000
GR  1206   20100    1210   20110    1212   20600    1212   22030    1210   22740
GR  1208   23440  1207.8   23780    1208   24260  1208.6   25120    1208   25140
GR  1206   25145    1206   26400    1208   26810    1208   27000    1206   27080
GR  1206   27180    1208   27190    1212   27205    1214   27415
*
*     REVISED THE ELEVATION OF STATION 16705 FROM 1318   TO 1218   (TMM 3-94)
*        "     "      "     "     "    18050  "   121935 "  1219.5    "
*
ET                    9.1                                          19955   20300
X110.612      34   19955   20300     880     900     890
GR  1217   15010    1216   16240    1216   16325    1218   16705  1219.5   18050
GR  1219   18420    1218   19580    1216   19885    1216   19895    1222   19910
GR  1222   19955    1210   19985  1209.6   20000    1210   20010    1212   20295
GR  1218   20300    1218   20325    1216   20330    1216   20740    1218   20760
GR  1218   21655    1216   22770    1214   23050  1212.4   23730    1214   24140
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GR  1214   24250    1214   25455    1212   25530    1210   26540    1212   26790
GR  1212   27110    1214   27420    1214   28550    1216   28650
ET                   9.1                                             19750   20015
X110.803      52   19750   20015    1020    1010    1010
X3    10
GR1225.5   14775    1225   15010    1225   15545    1224   15710    1223   16085
GR  1224   16185  1223.8   16830    1222   16900    1222   16920    1224   16955
GR  1224   17030  1223.2   17280    1224   17460    1224   19160    1224   19288
GR  1223   19435    1224   19450    1230   19465    1230   19530    1220   19565
GR  1220   19575    1220   19585    1220   19595    1220   19750    1216   19768
GR  1216   19888  1214.1   20000    1216   20010    1220   20015    1220   20190
GR  1222   20405    1224   20480    1224   20555    1222   21230    1220   22410
GR  1218   23155  1217.8   23290    1218   23405    1220   23875    1220   23910
GR  1218   25030    1218   25155    1220   25180    1220   25210    1220   25248
GR  1218   25935    1218   27130    1220   27370    1220   27690    1222   28035
GR  1222   28610    1223   28690
ET                   9.1                                             19905   20250
X110.989      37   19905   20250     920    1000     980
X3    10
GR  1232   15130    1231   15330    1231   15900    1230   16280  1228.3   16485
GR  1228   16700    1227   16970  1227.7   17355    1228   18930    1228   19575
GR  1226   19780    1226   19850    1226   19905    1220   19955  1218.2   20000
GR  1220   20080    1222   20175    1224   20200    1226   20250    1226   20251
GR  1226   20252    1228   20295  1228.2   20530  1228.6   20910    1228   21640
GR  1226   22470    1225   22630  1224.6   22820  1224.2   23230    1226   24300
GR  1226   24490    1224   24995    1222   25830  1221.2   26800    1222   27800
GR  1224   28070    1226   28380
ET                   9.1                                             19820   20115
NC  .045    .045
X111.129       7   19820   20115     710     710     710
X3    10
GR  1232   19820    1225   19840    1222   19850  1221.7   20000    1222   20090
GR  1225   20100    1230   20115
QT     2   10350   10350
ET                   9.1                                             19830   20055
X111.188      23   19830   20055     310     310     320
X3    10
GR  1232   19830    1225   19850    1222   19860    1222   19975    1222   20000
GR  1224   20020    1232   20055    1232   20080    1234   20420    1234   20770
GR1234.4   21080    1234   21335    1232   22210    1230   23060  1229.5   23110
GR  1230   23225    1232   24360    1232   24390    1230   25130    1228   25580
GR  1226   26990    1226   27460    1228   28315
ET                   9.1                                             19900   20120
X111.301      10   19900   20120     600     600     600
X3    10
GR  1232   19890    1235   19900    1235   19905    1232   19915    1226   19930
GR  1224   19938    1222   20000    1226   20070    1230   20100    1236   20120
NC  .045    .060    .035
ET                   9.1                                             19900   20175
X111.386      32   19900   20175     440     420     450
X3    10
GR  1240   16820    1238   17220    1238   18760    1240   18800    1244   18850
GR  1244   18915    1238   18950    1238   19040    1236   19280    1236   19420
GR  1233   19430    1233   19890    1233   19892    1233   19900    1228   19905
GR  1228   19912    1226   19975    1223   20000    1226   20030    1228   20085
GR  1230   20115    1232   20150    1238   20175  1239.5   20820    1238   22925
GR1238.8   23655    1240   24780    1240   24805    1238   25705  1236.8   26140
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GR  1238   26800    1240   27485
ET                   9.1                                          19780   20170
X111.481      15   19780   20170     480     540     520
X3    10
GR  1240   19130    1238   19305    1230   19320    1228   19380    1228   19550
GR  1230   19710    1236   19780    1230   19800    1232   19860    1230   19900
GR  1228   19950  1227.4   20000    1230   20060    1234   20140    1240   20170
ET                   9.1                                          19470   20310
X111.566      37   19470   20310     280     530     460
X3    10
GR  1241   17270    1240   18790    1242   18940    1242   19140    1240   19170
GR  1240   19470    1236   19480    1234   19550    1234   19760    1230   19775
GR  1230   19790    1232   19810    1234   19820    1234   19855    1232   19860
GR  1232   19940    1230   19980  1229.7   20000    1230   20010    1230   20180
GR  1232   20295    1240   20310    1240   20335    1242   20780    1244   21030
GR1244.2   21620  1244.2   21960    1244   22190  1243.6   23225    1244   23470
GR1244.9   24495    1246   25220    1245   25570    1244   26550    1244   26660
GR  1246   27240  1246.7   27420
ET                   9.1                                          19925   20510
X111.759      35   19925   20510    1050     980    1020
X3    10
GR  1246   17890    1245   18190    1246   18510    1246   18920  1246.5   18930
GR  1246   18950    1246   19120    1244   19230    1244   19255    1244   19880
GR  1244   19900    1244   19925    1236   19940    1235   20000    1236   20040
GR  1236   20455    1242   20465    1244   20495    1248   20510    1248   20525
GR  1246   20540    1246   20620    1246   20760    1246   20800    1246   20820
GR  1246   21070    1248   21460    1250   21630    1250   21870  1219.6   22350
GR  1249   22980  1249.2   23620    1250   25015    1250   25960  1250.4   27420
NC  .060    .060    .035
ET                   9.1                                          19865   20510
X111.949      35   19865   20510     990    1000    1000
X3    10
X4     1  1247.4   20700
GR1250.8   18670  1250.4   18895  1250.4   19275    1251   19500    1251   19535
GR  1250   19865    1248   19920    1246   19974    1244   19976    1243   20000
GR  1244   20045    1244   20215    1242   20280    1242   20470    1244   20480
GR  1246   20510    1246   20520    1246   20530    1246   20590    1246   20600
GR  1248   20925    1250   20940    1252   21660    1254   22180    1254   22280
GR1252.8   22630    1254   22985  1252.5   23380    1254   23685    1244   23750
GR1252.4   24515    1254   25865    1254   26540    1256   27550  1256.5   27760
ET                   9.1                                          19890   20680
X112.125      37   19890   20680     910    1000     930
X3    10
GR  1256   19305  1256.1   19430    1256   19805    1256   19860    1258   19875
GR  1258   19890    1256   19920    1254   19923    1250   19930  1248.2   19950
GR1248.5   20000    1250   20025    1250   20090    1248   20140    1248   20160
GR  1250   20230    1250   20320    1248   20330    1248   20440    1250   20565
GR  1252   20600    1254   20640    1258   20680    1258   20710    1254   20730
GR  1254   20800    1254   20810    1254   20860    1253   21155    1254   21455
GR  1256   22190    1258   22395    1258   22940    1259   24160    1260   26290
GR  1260   27215  1261.7   27800
QT     2    9800    9800
ET                   9.1                                          19830   20240
X112.313      28   19830   20240    1010     980     990
X3    10
GR  1261   18650    1260   19080    1260   19800    1262   19810    1262   19830
GR  1260   19835    1258   19840    1256   19935    1254   19950  1252.2   20000
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GR  1254   20220    1260   20240    1260   20260    1258   20300    1258   20320
GR  1258   20360    1258   20362    1258   20440    1258   20450    1258   20455
GR1258.6   21090    1259   21610    1260   22140  1261.5   22890  1261.9   23990
GR  1262   24500    1262   27100  1263.3   27570
ET                    9.1                                           19810   20280
X112.511      35   19810   20280    1000    1020    1056
X3    10
GR  1266   18920    1266   19115    1266   19240    1264   19385    1263   19600
GR  1262   19700    1262   19710    1262   19720  1263.6   19810    1260   19865
GR  1258   19905  1257.3   20000    1258   20070    1264   20110    1264   20140
GR  1262   20210    1260   20220    1260   20265    1264   20280    1264   20350
GR  1262   20365    1260   20400    1260   20440    1264   20460    1264   20610
GR1263.6   20830    1264   20995    1265   21585    1265   22640    1266   23100
GR  1266   24600  1265.7   24880    1266   26000  1265.7   26670    1266   27380
ET           4.1     9.1           20980                             19810   20330
X112.701      34   19810   20330    1030    1020    1000
X3    10
X4     1  1269.6   20500
GR1270.6   19190    1270   19700    1270   19810    1268   19820    1266   19985
GR1264.7   20000    1265   20070    1266   20290    1268   20330    1270   20600
GR  1269   20660    1270   20740    1270   20980    1266   20990    1266   21090
GR  1268   21100    1268   21150    1262   21190    1262   21200    1270   21230
GR  1270   21260  1269.6   21510    1270   21770  1271.4   23220  1270.6   23800
GR  1270   23910    1270   23920  1270.7   24130  1268.8   24900  1269.1   26070
GR1269.6   26710    1270   27000    1270   27650  1270.7   27740
ET           4.1     9.1           21135                             19845   20360
X112.896      40   19845   20360    1010    1010    1030
X3    10
X4     1    1274   20420
GR  1276   18670    1274   18750  1275.6   19330    1274   19845    1272   19850
GR  1270   19965  1268.8   20000    1270   20020    1270   20350    1273   20360
GR  1274   20585    1276   20620    1276   20670    1274   20675    1274   21135
GR  1270   21165    1270   21180    1274   21200    1274   21250    1270   21260
GR  1270   21350    1264   21365    1264   21390    1274   21410    1274   21495
GR  1276   21560  1277.2   21900    1276   22520  1275.6   22660    1276   23015
GR  1277   23610    1276   24190    1276   24280  1274.9   24440  1275.7   25428
GR1274.2   25910  1274.9   26740    1274   26945    1274   27000    1276   27660
QT     2    7900    7900
ET           4.1     9.1           21645                             19930   20350
X113.076      32   19930   20350     950     980     950
X3    10
GR  1280   19510    1278   19930    1274   19940  1272.6   20000    1274   20050
GR  1276   20090    1276   20210    1274   20260    1272   20270    1272   20315
GR  1274   20335    1278   20350    1279   20480    1278   21020    1278   21150
GR  1280   21645    1280   21660  1278.6   21740  1278.6   21760    1278   21780
GR  1278   21800    1280   21960    1280   22825  1279.6   23250    1280   23630
GR  1280   24220    1278   24835  1278.6   25040  1278.6   26370    1278   26740
GR  1278   26920    1280   27585
ET           4.1     9.1           21410                             19810   20120
X113.227      26   19810   20120     800     670     800
X3    10
GR  1284   18690    1282   19260    1282   19690  1281.5   19810    1276   19845
GR  1274   19970  1273.9   20000    1274   20030    1278   20090    1280   20100
GR  1282   20120    1282   21410    1276   21425    1276   21440    1282   21455
GR1282.2   21900    1284   22160  1282.6   22860    1284   23350  1284.7   23820
GR  1284   24080    1282   24510    1282   24580  1281.8   24730  1281.5   25780
GR  1282   27300
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ET          4.1     9.1          21425                          19870   20170
X113.420     33   19870   20170    970    1000    1020
X3    10
X4     2  1187.2   19750    1186   19700
GR  1290   18215    1288   19350    1288   19490    1286   19560  1287.5   19870
GR  1284   19880    1282   19975  1281.8   20000    1282   20040    1282   20080
GR  1286   20100    1288   20150    1290   20170    1290   20185    1288   20195
GR  1288   20315    1288   20490    1288   20780    1287   20840    1286   21425
GR  1284   21570    1282   21580    1282   21610    1286   21650    1286   21760
GR  1288   21875    1297   21900    1288   21940    1288   23570  1288.7   23780
GR1289.6   25395    1290   26450  1290.7   26525
NC  .050    .050    .035
ET          4.1     9.1          21380                          19870   20455
X113.619     39   19870   20455    1090    1020    1056
X3    10
GR  1296   18690    1294   19490    1294   19835    1294   19870    1294   19890
GR  1286   19910    1286   19995    1285   20000    1286   20005    1290   20105
GR  1290   20315    1292   20360    1292   20445    1290   20450    1292   20455
GR  1293   20456    1292   20457    1292   20470    1290   20480    1290   20520
GR  1294   20540    1294   20600    1294   21380    1292   21680    1290   21690
GR  1290   21710    1292   21755    1294   21780    1294   21850    1290   21880
GR  1290   21895    1292   21905    1294   22680  1295.4   23340  1295.7   24310
GR  1294   24400    1294   25040  1294.8   25580    1296   26565
ET          4.1     9.1          21430                          19890   20340
X113.818     33   19890   20340    1050    1050    1056
GR  1302   18660    1300   19320    1300   19890    1298   19895    1296   19970
GR1295.5   20000    1296   20015    1296   20130    1294   20250    1294   20325
GR  1298   20340    1298   20450    1296   20460    1296   20630    1298   20740
GR  1300   20750    1300   20870  1299.2   21160    1300   21305  1300.3   21430
GR  1300   21580    1298   21820    1294   21840    1294   21850    1296   21860
GR  1296   22050    1298   22060    1300   22865    1300   23030  1300.6   23470
GR1300.8   23985    1300   24550    1300   26150
*
*     REVISED THE ELEVATION OF STATION 22245 FROM 2300 TO 1300 (TMM 3-94)
*
QT     2    6100    6100
ET          4.1     9.1          22160                          19915   20270
X114.013     39   19915   20270    1020    1055    1030
X4     5    1304   20900  1302.3   20930    1304   20960    1304   21100    1302
X4 21170
GR  1306   19285    1304   19690    1304   19915    1302   19940    1302   19960
GR  1300   19962    1299   20000    1300   20010    1302   20035    1300   20120
GR  1302   20190    1302   20250    1303   20270    1302   20300    1302   20625
GR  1300   20645    1300   20660    1302   20720    1305   20725    1304   21145
GR  1306   21170    1306   22160    1304   22225    1300   22245    1298   22255
GR  1298   22270    1302   22285    1302   22350    1304   22390    1304   22460
GR  1302   22480    1304   22505    1306   22680    1306   23465  1307.7   24010
GR1306.2   24750    1306   25400    1306   25520  1306.3   26000
ET          4.1     9.1          21710                          19715   20015
X114.197     36   19715   20015     990     920     970
GR  1316   18385    1314   18590    1312   19130    1310   19550    1308   19565
GR1308.5   19715    1306   19730    1304   19732    1304   19755    1306   19800
GR  1307   19850    1306   20000    1310   20015    1310   20240    1308   20242
GR  1308   20310    1310   20330    1310   20460    1308   20465    1308   20745
GR  1310   20780    1310   20810    1308   20815    1308   20830    1310   20832
GR  1310   21710    1308   21930    1306   21970    1306   22035    1308   22060
GR  1310   22550    1310   22640  1310.6   22800    1310   22910    1310   25290
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GR  1311   25560
ET          4.1     9.1          21420                          19540   20250
X114.379     38   19540   20095    940    1000     960
X4     3   1316   21150    1315   21030  1315.3   20970
GR  1324   18115    1322   18320    1320   18550    1318   19100    1316   19540
GR  1314   19550    1314   19635    1312   19655    1310   19665    1310   19690
GR  1316   19705    1316   19950    1312   19960  1310.4   20000    1312   20020
GR  1314   20095    1314   20430    1316   20535    1316   20580    1314   20750
GR  1314   20820    1314   20860    1312   20900    1312   20945    1314   20950
GR  1316   21420    1316   22060    1314   22065    1312   22075    1312   22150
GR  1314   22180    1316   22385    1316   23115    1318   23325    1318   23600
GR  1316   24180    1316   24290    1318   25135
ET          4.1     9.1          20045                          19220   20045
X114.559     39   19220   20045    950     915     950
X4     2   1320   20035  1320.8   20045
GR  1326   18225    1324   18540    1322   18690    1322   19220    1318   19225
GR  1316   19230    1318   19300    1320   19360    1320   19415    1318   19425
GR  1318   19450    1320   19550    1320   19740    1318   19760    1318   19780
GR  1318   19940    1316   19960  1315.4   20000    1316   20020    1318   20025
GR  1320   20065    1320   20210  1320.6   20375    1320   20875  1319.9   21150
GR  1320   21220  1320.4   21370    1320   21515    1320   21790    1318   21792
GR  1318   21820    1320   21840    1320   22190    1322   22800    1322   23050
GR  1320   23620    1320   23650    1322   23970  1322.4   24200
ET          4.1     9.1          22000                          19670   20170
X114.752     36   19670   20170    1010    1010    1020
X3    10
GR  1336   17740    1334   18200    1332   18480    1330   18820    1328   19010
GR  1326   19300    1326   19670    1322   19680    1322   19910    1320   19988
GR1318.8   20000    1320   20010    1322   20015    1322   20080    1324   20090
GR  1324   20125    1326   20170    1326   20580    1324   21260    1324   21550
GR  1326   21780    1328   21820    1328   22005    1326   22060    1322   22070
GR  1322   22120    1324   22190    1326   22230    1328   22580    1328   23035
GR1236.4   23615    1328   24120    1330   24470    1332   24710    1334   24950
GR  1336   25220
QT     2    4200    4200
ET          4.1     9.1          20720                          19865   20050
X114.945     49   19865   20050    1005    1000    1020
GR  1350   17110    1348   17265    1346   17660    1344   18190    1342   18415
GR  1340   18830    1338   19040    1336   19350    1334   19650    1332   19770
GR  1330   19865    1328   19940    1326   19950    1324   19970  1322.5   20000
GR  1324   20020    1330   20050    1330   20245    1328   20370    1328   20400
GR  1330   20420    1332   20615  1332.8   20720    1332   21050    1332   21960
GR  1330   22110    1330   22200  1331.3   22400    1330   22550    1330   22750
GR  1324   22770    1324   22790    1328   22800    1330   22845    1332   22875
GR  1332   23060    1333   23245    1333   23450    1334   23850    1336   24040
GR  1338   24310    1338   24610    1340   24915    1342   25050    1344   25120
GR  1346   25270    1348   25480    1348   26190    1350   26250
ET          4.1     9.1          21800                          19955   20382
X115.144     55   19955   20382    900     890    1056      .9
X3    10
GR  1360   16750    1358   16880    1356   17180    1354   17540    1352   17750
GR  1350   17905    1350   18105    1348   18410    1346   18630    1344   18950
GR  1342   19115    1342   19250    1340   19555    1338   19660    1338   19720
GR  1334   19724    1334   19830    1334   19832    1332   19850    1336   19865
GR  1336   19900    1336   19955    1330   19975    1329   20000    1330   20070
GR  1332   20080    1334   20315    1334   20350    1332   20380    1336   20382
GR  1338   21510    1338   21800    1336   22035    1336   22315    1334   22350
```

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| GR | 1334 | 22370 | 1336 | 22390 | 1336 | 22470 | 1334 | 22515 | 1332 | 22530 |
| GR | 1332 | 22570 | 1334 | 22625 | 1336 | 22640 | 1336 | 22700 | 1334 | 22810 |
| GR | 1332 | 22820 | 1332 | 22840 | 1334 | 22880 | 1336 | 22960 | 1338 | 23815 |
| GR | 1340 | 23960 | 1342 | 24145 | 1344 | 24305 | 1350 | 24455 | 1360 | 24660 |
| ET | | 4.1 | 9.1 | | 21750 | | | | 19770 | 20100 |
| X115.333 | | 53 | 19770 | 20100 | 900 | 890 | 1000 | | | |
| X3 | 10 | | | | | | | | | |
| GR | 1358 | 17825 | 1356 | 18010 | 1354 | 18370 | 1352 | 18530 | 1350 | 18570 |
| GR | 1348 | 18605 | 1348 | 18620 | 1350 | 18630 | 1350 | 18725 | 1348 | 18900 |
| GR | 1346 | 18930 | 1346 | 19010 | 1348 | 19040 | 1348 | 19060 | 1344 | 19070 |
| GR | 1344 | 19080 | 1346 | 19090 | 1346 | 19305 | 1344 | 19335 | 1340 | 19350 |
| GR | 1340 | 19770 | 1338 | 19790 | 1336 | 19880 | 1336 | 19980 | 1335 | 20000 |
| GR | 1336 | 20010 | 1338 | 20090 | 1342 | 20100 | 1342 | 21750 | 1338 | 21765 |
| GR | 1338 | 21790 | 1340 | 21810 | 1340 | 22045 | 1340 | 22046 | 1338 | 22060 |
| GR | 1338 | 22080 | 1340 | 22120 | 1340 | 22150 | 1336 | 22170 | 1336 | 22180 |
| GR | 1340 | 22190 | 1342 | 22270 | 1342 | 22300 | 1340 | 22540 | 1340 | 22590 |
| GR | 1342 | 22760 | 1342 | 23065 | 1344 | 23360 | 1345 | 23420 | 1348 | 23530 |
| GR | 1348 | 23690 | 1350 | 23710 | 1360 | 23930 | | | | |
| ET | | 4.1 | 9.1 | | 20960 | | | | 19950 | 20320 |
| X115.519 | | 48 | 19950 | 20320 | 940 | 960 | 980 | | | |
| X3 | 10 | | | | | | | | | |
| X4 | 1 | 1345 | 20320 | | | | | | | |
| GR | 1360 | 18730 | 1358 | 18760 | 1358 | 18965 | 1356 | 19050 | 1354 | 19115 |
| GR | 1354 | 19390 | 1352 | 19460 | 1352 | 19515 | 1350 | 19540 | 1350 | 19680 |
| GR | 1348 | 19950 | 1342 | 19970 | 1340 | 19995 | 1340 | 20005 | 1342 | 20015 |
| GR | 1342 | 20130 | 1340 | 20215 | 1340 | 20225 | 1344 | 20250 | 1344.5 | 20338 |
| GR | 1346 | 20595 | 1350 | 20960 | 1350 | 21080 | 1348 | 21965 | 1344 | 21985 |
| GR | 1344 | 22005 | 1346 | 22020 | 1348 | 22080 | 1346 | 22110 | 1346 | 22135 |
| GR | 1348 | 22145 | 1346 | 22275 | 1346 | 22530 | 1342 | 22545 | 1344 | 22560 |
| GR | 1346 | 22630 | 1346 | 22855 | 1344 | 22860 | 1344 | 22875 | 1346 | 22895 |
| GR | 1346 | 22925 | 1342 | 22930 | 1346 | 22945 | 1348 | 23615 | 1348 | 23765 |
| GR | 1350 | 23950 | 1352 | 24140 | 1360 | 24300 | | | | |
| ET | | 4.1 | 9.1 | | 20900 | | | | 19870 | 20085 |
| X115.699 | | 37 | 19870 | 20085 | 935 | 920 | 950 | | | |
| GR | 1364 | 18850 | 1362 | 18960 | 1360 | 19070 | 1358 | 19220 | 1356 | 19230 |
| GR | 1356 | 19260 | 1358 | 19270 | 1358 | 19345 | 1356 | 19490 | 1354 | 19870 |
| GR | 1352 | 19880 | 1350 | 19885 | 1348 | 19950 | 1346 | 19980 | 1345 | 20000 |
| GR | 1346 | 20030 | 1346 | 20065 | 1348 | 20075 | 1350 | 20085 | 1350 | 20700 |
| GR | 1348 | 20760 | 1348 | 20885 | 1354 | 20900 | 1354 | 21715 | 1348 | 21790 |
| GR | 1348 | 21880 | 1352 | 21930 | 1352 | 23430 | 1350 | 23435 | 1350 | 23445 |
| GR | 1352 | 23450 | 1352 | 23550 | 1356 | 23920 | 1360 | 24120 | 1362 | 24170 |
| GR | 1362 | 24470 | 1364 | 24650 | | | | | | |
| QT | 2 | 2350 | 2350 | | | | | | | |
| ET | | 4.1 | 9.1 | | 2690 | | | | 1985 | 2430 |
| X115.966 | | 40 | 1985 | 2430 | 1450 | 1200 | 1410 | | | |
| X4 | 9 | 1359 | 1900 | 1352 | 2280 | 1354 | 2300 | 1356 | 2325 | 1356 |
| X4 | 2400 | 1357 | 2430 | 1357.3 | 2530 | 1352 | 2600 | 1354 | 2620 | |
| GR | 1364 | 1080 | 1362 | 1180 | 1360 | 1585 | 1360 | 1725 | 1358 | 1985 |
| GR | 1356 | 1990 | 1354 | 1995 | 1354 | 2005 | 1356 | 2010 | 1356 | 2040 |
| GR | 1355 | 2060 | 1354 | 2150 | 1354 | 2250 | 1356 | 2560 | 1356 | 2670 |
| GR | 1358 | 2675 | 1360 | 2690 | 1360 | 3205 | 1358 | 3505 | 1358 | 4225 |
| GR | 1356 | 4415 | 1356 | 5380 | 1354 | 5381 | 1354 | 5395 | 1356 | 5405 |
| GR | 1356 | 5495 | 1358 | 5610 | 1358 | 5745 | 1360 | 5850 | 1362 | 5925 |
| GR | 1362 | 6150 | 1364 | 6270 | 1366 | 6410 | 1368 | 6580 | 1370 | 6615 |
| GR | 1372 | 6755 | 1374 | 6795 | 1376 | 6835 | 1376 | 6965 | 1378 | 7010 |
| ET | | 4.1 | 9.1 | | 2865 | | | | 1970 | 2350 |
| X116.066 | | 48 | 1970 | 2350 | 565 | 480 | 570 | | | |

```
X4      3  1360.4    1970  1356.2    2560    1358    2580
GR   1368    1090    1368    1150    1366    1305    1364    1560    1362    1650
GR   1362    1780    1360    1820    1360    1980    1356    2000    1358    2060
GR   1360    2150    1360    2210    1358    2240    1358    2280    1360    2350
GR   1360    2435    1358    2465    1358    2690    1360    2710    1362    2760
GR   1364    2865    1364    2915    1362    3310    1360    3545    1358    3550
GR   1358    3730    1360    3745    1360    4670    1358    4920    1358    5145
GR   1356    5355    1354    5356    1354    5365    1356    5368    1358    5375
GR   1358    5570    1360    5720    1362    5800    1364    5915    1364    6005
GR   1366    6110    1368    6380    1368    6570    1370    6680    1372    6780
GR   1374    6830    1374    6870    1376    6920
ET            4.1     9.1            3030                            1950    2200
X116.167       22    1950    2130     530     530     530
X4      2  1359.7    2030    1362    2130
GR   1370    1020    1370    1095    1368    1245    1366    1255    1366    1270
GR   1368    1290    1368    1420    1366    1665  1364.8    1950    1360    1955
GR   1360    2040    1362    2110    1362    2170    1362    2250    1362    2370
GR   1360    2550    1360    2590    1358    2600    1360    2610    1362    2620
GR   1364    2630    1365    2650
ET            4.1     9.1            2645                            1925    2030
X116.248       40    1925    2030     450     340     430
GR   1372    1090    1370    1100    1370    1115    1370    1120    1370    1130
GR   1370    1365    1368    1590    1366    1660    1367    1925    1362    1940
GR   1362    1985    1361    2000    1362    2013    1364    2030    1364    2230
GR   1362    2240    1362    2250    1364    2300    1364    2630    1366    2645
GR   1366    2943    1364    2950    1364    3045    1366    3055    1366    3690
GR   1364    3755    1364    3770    1365    4105    1364    4218    1362    4765
GR   1360    5045    1358    5055  1356.1    5095    1358    5105    1360    5115
GR   1362    5328    1364    5485    1366    5755    1368    5810    1370    6160
ET            4.1     9.1            2665                            1915    2240
X116.328       45    1915    2240     440     250     410
X4      1  1367.4    2240
GR   1374     980    1372     990    1372    1010    1372    1015    1372    1020
GR   1372    1250    1370    1520    1368    1790    1367    1835    1366    1915
GR   1364    1940  1362.8    2000    1364    2050    1366    2150    1366    2335
GR   1364    2339    1364    2370    1366    2397    1366    2403    1368    2665
GR   1366    2680    1366    2715    1368    2735    1368    3345    1366    3530
GR   1366    3730    1367    3890    1366    4145    1366    4310    1364    4355
GR   1364    4505    1362    4760    1362    4885    1360    4910    1358    4920
GR1357.5     4925    1358    4937    1360    4947    1362    5050    1362    5278
GR   1364    5335    1366    5455    1368    5645    1370    5695    1370    5780
ET            4.1     9.1            2460                            1885    2055
X116.411       46    1885    2055     510     350     450
X3     10
X4      1  1369.2    1885
GR   1378     610    1376     760    1376     761    1376     762    1376     763
GR   1374    1090    1372    1370    1370    1500    1370    1650    1368    1665
GR   1368    1920    1366    1948  1364.3    2000    1366    2048    1370    2055
GR   1370    2210    1368    2223    1368    2240    1370    2260    1370    2390
GR   1368    2425    1368    2450    1370    2460    1370    2980    1368    3125
GR   1368    3390    1369    3520    1369    3580    1369    3645    1368    3830
GR   1366    4025    1366    4200    1364    4520    1362    4545    1360    4545
GR1359.5     4555    1360    4561    1362    4565    1362    4588    1360    4594
GR   1360    4600    1362    4601    1364    4758    1366    4885    1368    4995
GR   1370    5185
*
*     REVISED THE ELEVATION OF STATION 2000 FROM 1365 TO 1365.8 (TMM 3-94)
```

```
*          "     "     "     "     "     3560  "   1970 "  1370      "
*          "     "     "     "     "     3960  "   1398 "  1368      "
*
ET                    9.1                                                 1835    2035
X116.504      33    1835    2035     460     300     490
X3    10
GR  1380     680    1378     695    1378     712    1378     720    1378     743
GR  1376     980    1374    1180    1374    1315    1372    1625    1370    1630
GR  1370    1665    1372    1670    1372    1770    1370    1780    1370    1835
GR  1368    1915    1366    1980  1365.8    2000    1366    2018    1372    2035
GR  1372    2110    1370    2140    1370    2160    1372    2195    1372    2390
GR1370.7    2880  1371.8    3295    1370    3560    1368    3960    1366    4225
GR  1364    4310    1364    4340    1390    4340
ET                    9.1                                                 1910    2110
X116.608      30    1910    2110     485     450     530
X3    10
X4     2  1376.5    1910  1374.2    2110
GR  1382     920    1380    1000    1380    1050    1380    1150    1380    1151
GR  1378    1280    1376    1520    1376    1920    1374    1925    1372    1930
GR  1370    1935    1370    1980    1368    1995  1367.8    2000    1368    2015
GR  1370    2020    1370    2080    1372    2090    1372    2200    1370    2210
GR  1369    2220    1370    2235    1372    2270    1374    2310    1374    2375
GR  1372    2385    1372    2395    1374    2400    1376    2410    1376    2550
ET           4.1     9.1            2300                            1950    2110
X116.732      18    1950    2115     640     420     685
X3    10
X4     4    1375    2000    1380    1950    1376    2040    1379    2300
GR  1382    1650    1376    1960    1376    2110    1378    2115    1378    2370
GR  1376    2470    1376    2480    1378    2490    1378    2550    1376    2570
GR  1376    2620    1378    2630    1378    2850    1376    2880    1375    2885
GR  1376    2890    1378    2910    1380    2920
ET                    9.1                                                 1935    2045
X116.818      14    1935    2045     430     750     455
X4     1  1381.2    2240
GR  1390    1145    1388    1340    1386    1490    1384    1640    1382    1935
GR  1376    1980  1375.7    2000    1376    2030  1380.4    2045    1380    2097
GR  1378    2105    1378    2190    1380    2210    1382    2350
EJ
T1      NEW RIVER ABOVE SKUNK CREEK, PHOENIX, ARIZ., APRIL 1981
T2      100 YEAR FLOOD
T3      FLOODWAY
J1            3                                                     1162.8
J2    15                                                                      15


ER
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# STANTEC'S REVISED UPDATED EXISTING CONDITION MODEL

```
*       MODEL REFLECTS NEW TOPOGRAPHIC DATA ALONG ORIGINAL FEMA
*       CROSS SECTIONS ALIGMENTS.  Additional Cross Sections Added to Model
*       N-VALUE AND EXPANSION AND CONTRACTION
*       COEFFICIENTS REMAIN THE SAME AS ORIGINAL FEMA MODEL
*
*       BRIDGE DATA FOR BELL ROAD BRIDGE REVISED AND UPDATED OVER ORIGIN
*       FEMA MODEL
*       UNION HILLS ROAD BRIDGE MODELED
*       ADDITIONAL CROSS SECTIONS ADDED TO MODEL
*       MODEL THUNDERBIRD ROAD BRIDGE
*       START MODEL AT THUNDERBIRD ROAD BRIDGE
*
T1      NEW RIVER ABOVE THUNDERBIRD ROAD                        AUGUST 1998
T2      MIDDLE NEW RIVER WATERCOURSE MASTER PLAN        STANTEC #28900058
T3      FEMA/COE MODEL UPDATE                           FILE NEWBR.IH2
T3      START NEW RIVER Q OF 12000 AT X-SEC 8.807
*
J1             2                                                 1150.5
J2                    -1                                                        15
J3    38      43       1      21      55      26      56      22      54       4
J3     8
*
QT     1   41000
NC 0.045   0.045   0.035      .3      .5
*
X1 7.728      20    9900   10222
X3    10                                                  1157.5  1157.5
GR1160.0 9887.00 1159.68 9895.29 1157.98 9899.88    1154    9900 1146.00 9931.12
GR1136.5 9958.45  1135.4 9962.95 1135.9110073.21 1136.4910130.56 1136.5010159.07
GR1140.510176.73  1144.210189.17    1154   10222 1158.1410228.35 1159.0210276.12
GR1158.310320.83  1157.510337.19  1155.910406.88 1156.6310412.97 1155.9910448.47
*
SB  1.05     1.6    2.68       0     202       9 4805.23       2  1135.3  1135.4
*
X1 7.751      16 9919.3510239.55     115     110  121.70
X2                     1  1155.7 1159.26
X3    10                                                 1161.15 1159.26
BT   -15 9892.86 1161.15         9912.86 1163.35            9925 1163.421155.391
BT       9944.75 1163.52 1155.49 9981.55 1163.65 1155.6210021.55 1163.73  1155.7
BT      10061.55 1163.74 1155.7110101.55 1163.67 1155.6410141.55 1163.53 1155.50
BT      10181.55 1163.32 1155.2910221.551163.041 1155.01   10225 1163.01 1154.98
BT      10241.55 1162.87        10242.86 1162.86        10372.86 1159.26
GR1161.1 9892.86  1160.0 9895.00 1159.53 9915.55 1157.94 9919.35 1155.49 9944.75
GR1140.7 9965.55  1135.3 9978.33  1135.810034.63 1136.0310077.55 1136.9910176.70
GR1151.410220.40 1154.98   10225  1158.910239.55  1159.510278.43 1160.0010320.22
GR1159.210372.86
*
X1 7.800      22 9857.1210243.64     230     355  259.16
GR1153.5 9736.00 1153.41 9764.38 1157.33 9780.03 1156.96 9795.93 1155.45 9805.92
GR1158.1 9832.22 1158.52 9857.12 1150.65 9893.02 1147.75 9908.87 1142.94 9931.81
GR1142.1 9943.11 1138.01 9965.96 1135.77 9974.38 1135.65 9977.75 1136.1210030.71
GR1136.910090.50 1137.5710128.41 1142.8910160.65 1157.0710243.64 1156.7810269.64
GR1157.210311.28 1157.0910330.96
*
NC                            .1      .3
*
X1 7.920      23 9855.3710258.56     615     655  631.37
```

```
GR1160.4 9836.00 1160.45 9855.37 1156.67 9868.90 1155.58 9880.63 1148.19 9919.94
GR1141.6 9962.13 1139.05 9980.61 1135.74 9991.30 1136.1410011.40 1137.0410036.41
GR1136.710060.91 1139.3510072.06 1138.6610080.58 1136.5310088.54 1136.6310104.58
GR1140.410137.77 1141.4010148.13 1150.4810206.92 1158.7510253.04 1160.2910258.56
GR1159.610273.87 1160.4310308.49 1160.0210319.77
*
X1 8.006      22 9848.5210252.11     445     505  463.28
GR1158.0 9813.00 1158.06 9822.82 1159.57 9836.05 1159.66 9848.52 1157.00 9864.41
GR1156.8 9872.33 1151.07 9899.09 1140.44 9978.90 1136.11 9995.88 1136.6510014.86
GR1138.110043.49 1137.6810056.74 1139.3410072.31 1139.0810086.47 1137.1010091.99
GR1137.810110.36 1142.2310145.00 1158.4510236.11 1161.5110252.11 1160.3710268.56
GR1161.310301.55 1160.8410324.12
*
X1 8.052      22  9848.510251.73     225     255  236.58
GR1158.5 9812.00 1160.52 9848.50 1158.04 9858.22 1157.59 9871.97 1156.11 9879.48
GR1145.9 9941.09 1140.15 9975.40 1136.42 9990.32 1137.4410013.47 1139.2010041.37
GR1138.310061.51 1140.1710069.50 1139.8610082.68 1137.0210092.14 1138.0610113.77
GR1143.310148.19 1148.1610177.35 1157.3610230.27 1161.7210251.73 1161.2610264.08
GR1162.310301.26 1161.4010320.82
*
X1 8.120      24 9882.4910260.19     365     370  370.41
GR1162.2 9841.00 1162.60 9858.45 1159.87 9870.72 1159.32 9882.49 1157.08 9893.84
GR1149.6 9934.41 1140.42 9990.41 1138.00 9998.97 1138.2510012.37 1137.9710036.29
GR1141.010050.72 1139.8710069.18 1141.3710081.41 1141.3610100.66 1138.4710109.14
GR1138.910131.16 1141.9010138.76 1146.6810172.82 1150.5510195.97 1163.5010260.19
GR1162.910278.49 1162.9510317.31 1162.2610354.77 1162.0210372.33
*
X1 8.220      25 9863.7810241.56     485     565  512.82
GR1163.2 9844.00 1161.40 9853.02 1160.58 9863.78 1152.10 9903.79 1150.30 9912.99
GR1145.8 9942.26 1144.16 9957.57 1140.67 9978.73 1138.78 9982.77 1138.87 9997.52
GR1140.410022.85 1140.4110030.36 1141.6210059.20 1140.7310073.77 1141.1210098.68
GR1142.610111.36 1142.7010121.98 1154.4610195.80 1164.5510241.56 1164.0310257.47
GR1164.310293.89 1164.0210325.89 1165.3310356.69 1165.4010382.29 1164.2310492.32
*
X1 8.330      16 9800.4210176.69     555     545  565.26
GR1166.4 9780.00 1164.42 9787.92 1164.00 9800.42 1156.43 9829.07 1147.97 9874.97
GR1144.1 9898.66 1142.94 9954.30 1140.5910025.59 1142.5310060.91 1148.0510088.64
GR1166.410176.69 1165.8810193.23 1165.4210260.92 1165.4310341.08 1164.7310388.98
GR1164.610416.78
*
X1 8.390      30 9814.9410190.49     310     305  308.23
GR1168.0 9792.00 1165.60 9802.80 1165.05 9814.94 1161.22 9828.78 1156.70 9850.73
GR1147.2 9900.76 1142.10 9926.76 1142.01 9950.40 1141.32 9968.87 1140.92 9998.25
GR1141.610028.95 1141.4010035.16 1142.4510058.42 1152.0710114.24 1167.4110190.49
GR1166.610211.61 1166.6510240.54 1166.4510279.51 1166.8710290.31 1165.3210298.53
GR1163.610401.70 1163.4610431.35 1164.0310515.87 1164.6010577.34 1164.5110632.74
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GR1214.0 9419.00 1204.81 9458.13 1202.80 9469.16 1202.99 9509.07 1202.36 9533.71
GR1202.3 9535.44 1202.95 9613.28 1198.85 9638.57 1198.71 9645.54 1199.70 9693.66
GR1199.4 9699.65 1199.36 9717.94 1198.77 9721.18 1198.72 9737.04 1199.79 9749.36
GR1198.3 9789.16 1196.85 9824.32 1196.22 9831.87 1194.27 9839.16 1194.07 9850.44
GR1196.3 9869.71 1196.38 9882.40 1193.67 9900.20 1194.67 9907.13 1193.34 9915.24
GR1190.0 9927.43 1189.82 9932.44 1189.1310003.11 1189.4710079.45 1189.0510121.40
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X3    10
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GR1218.0 8912.00 1220.57 8926.34 1221.50 8934.06 1220.97 8945.19 1220.81 9012.40
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X3    10
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* CHANGED ELEVATION 1218.19 TO 1216.61 A T STA 10088.04
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BT       9591.57 1228.47         9691.57 1230.33         9800.44 1230.73
BT       9820.12 1233.04         9839.42 1233.24         9855.82 1233.39
BT       9872.00 1233.52 1227.82 9880.42 1233.59 1227.88 9905.02 1233.75  1228.0
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GR1230.810457.76 1233.5110494.01 1233.8810530.59 1233.0010560.22 1231.8210572.71
GR1234.910588.37 1233.3510672.97 1234.2110681.83 1232.8510688.27 1232.7210698.88
GR1232.110716.12 1232.4510726.76 1231.7010748.02 1233.4610770.25 1234.0010813.49
*
X111.243      46 9887.6210109.22     295     335  314.34
X3    10
GR1231.8 9045.00 1233.38 9054.46 1231.28 9149.54 1231.14 9247.85 1231.21 9286.87
GR1231.1 9356.70 1231.67 9443.04 1231.72 9460.96 1231.08 9487.11 1218.35 9529.07
GR1218.4 9677.97 1218.42 9816.78 1231.14 9861.96 1231.21 9873.99 1232.84 9882.80
GR1233.7 9887.62 1224.76 9917.39 1222.23 9925.15 1221.10 9966.73 1219.13 9985.42
GR1219.210011.89 1223.2310043.76 1222.8610075.46 1234.3010109.22 1233.4610121.84
GR1233.110165.28 1233.5110276.72 1234.4810371.05 1235.8710492.94 1234.1010502.21
GR1232.610509.53 1234.9910539.77 1234.8310547.78 1235.5610581.98 1234.9810612.73
GR1233.910625.25 1236.7410643.35 1236.4610667.70 1236.2910713.47 1236.0310734.03
GR1235.510744.01 1233.9110761.90 1234.3110780.34 1235.0210822.13 1234.8210909.68
GR1234.610940.42
*
X111.301      45 9883.5610107.77     300     275  289.90
X3    10
GR1234.0 9052.00 1235.11 9070.93 1234.97 9091.44 1233.70 9137.56 1232.26 9187.01
GR1231.8 9300.96 1231.82 9306.67 1233.33 9320.68 1231.94 9329.32 1232.14 9347.02
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GR1232.2 9379.69 1231.22 9454.18 1230.68 9483.89 1223.69 9510.19 1223.69 9828.80
GR1231.0 9857.44 1231.34 9872.47 1232.87 9883.56 1221.78 9921.65 1222.87 9928.94
GR1221.9 9951.10 1222.05 9961.37 1221.2710013.49 1223.8310037.02 1223.6810064.26
GR1232.510099.96 1234.8210107.77 1235.3310200.70 1235.4710255.01 1235.9010334.00
GR1236.410389.16 1236.2710402.35 1236.7210462.61 1237.0910521.61 1233.5310537.78
GR1236.010566.27 1236.3310579.08 1236.5110611.66 1236.1710643.13 1235.9910658.31
GR1238.010672.93 1237.7210709.94 1238.3010812.37 1238.3010841.78 1238.0210853.55
*
NC 0.045    0.06   0.035
*
X111.386      43 9863.6710133.31     445     415  436.60
X3    10
GR1238.0 9104.00 1238.00 9123.73 1226.67 9191.60 1225.61 9220.12 1225.95 9256.82
GR1231.0 9280.43 1228.94 9287.19 1229.46 9308.14 1229.76 9394.57 1229.82 9401.11
GR1228.9 9481.84 1229.01 9515.86 1230.04 9536.77 1230.05 9593.60 1229.96 9609.85
GR1230.2 9689.93 1230.22 9711.91 1230.37 9789.39 1229.50 9849.51 1233.46 9863.67
GR1226.3 9882.21 1223.19 9891.31 1226.78 9931.36 1223.57 9967.31 1223.55 9973.51
GR1223.110044.54 1229.3810065.65 1228.8910089.95 1230.9410109.70 1238.4010133.31
GR1238.110237.54 1238.2310272.91 1242.5410303.28 1241.6810313.95 1238.1110332.85
GR1238.010363.13 1239.2410432.47 1239.1510467.83 1239.3910532.44 1239.5810609.10
GR1234.810629.07 1238.1410669.31 1238.2010700.17
*
X111.481      49 9842.0710210.27     510     555  523.22
X3    10
GR1240.0 9213.00 1231.30 9259.07 1230.96 9289.22 1230.07 9294.24 1228.64 9312.12
GR1228.4 9351.41 1229.22 9380.55 1234.43 9396.73 1229.72 9405.88 1230.75 9441.10
GR1233.7 9450.35 1229.09 9459.92 1229.38 9484.46 1228.69 9512.58 1232.91 9527.94
GR1233.9 9533.33 1233.72 9537.96 1228.96 9551.67 1229.99 9565.36 1230.13 9626.91
GR1231.1 9699.79 1231.84 9769.56 1232.16 9826.52 1236.77 9842.07 1234.57 9849.46
GR1225.7 9874.37 1224.81 9910.11 1227.89 9942.30 1226.04 9982.82 1225.4510006.70
GR1226.510013.65 1227.8110060.55 1228.6610103.46 1234.1010123.39 1233.9710146.77
GR1234.010175.50 1237.2310194.78 1240.1910210.27 1240.7810240.77 1240.7010257.84
GR1241.510321.22 1242.0010371.31 1242.0410427.88 1242.1110499.82 1242.3610600.96
GR1241.810713.02 1241.9810765.73 1241.2810778.90 1241.6410811.84
*
* Left Overbank is affected by expansion(11.566)
*
X111.566      64 9523.1810058.35     565     545  468.92
GR1240.0 9217.00 1241.94 9243.61 1243.12 9263.08 1235.34 9307.74 1235.06 9328.39
GR1235.4 9341.54 1233.44 9355.88 1240.89 9368.38 1241.33 9379.99 1233.84 9408.25
GR1233.6 9428.19 1236.00 9441.21 1235.92 9455.53 1235.04 9467.11 1234.83 9495.42
GR1234.3 9509.06 1234.96 9523.18 1234.44 9543.01 1232.21 9556.13 1231.97 9565.05
GR1229.3 9590.35 1229.37 9612.35 1228.55 9673.74 1229.76 9727.08 1228.48 9769.86
GR1228.6 9787.53 1229.71 9842.83 1229.49 9858.42 1230.00 9883.62 1229.58 9913.00
GR1229.0 9932.09 1229.69 9962.18 1228.59 9987.62 1228.3210023.35 1234.1310037.42
GR1243.310058.35 1243.5610068.09 1243.5710096.08 1243.7510156.89 1243.2610195.96
GR1242.710215.88 1242.0410254.08 1243.2910265.37 1242.9810281.07 1242.8510286.74
GR1242.910380.23 1243.8510480.60 1244.3810567.95 1244.2510701.36 1244.4310785.01
GR1244.510879.83 1244.4110910.88 1245.2010926.94 1243.1410935.49 1243.0410944.13
GR1243.910964.63 1243.4511006.16 1243.4511021.48 1242.4311034.46 1244.5511055.81
GR1244.111100.69 1243.8111144.02 1241.9511171.29 1241.9111174.93
*
* LEFT OVERBANK WAS SET DUE TO EXPANSION(11.664)
*
X111.664      49 9730.4310052.37     535     515  513.83
GR1242.1 9320.00 1243.88 9340.74 1245.57 9371.82 1242.97 9388.89 1239.19 9409.19
GR1236.8 9488.20 1243.40 9510.42 1241.47 9516.13 1237.15 9531.47 1235.87 9573.54
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GR1236.2 9662.56 1232.61 9717.06 1232.30 9730.43 1231.61 9787.16 1231.67 9815.35
GR1232.0 9824.67 1230.40 9884.86 1230.85 9920.74 1231.01 9952.14 1228.99 9964.99
GR1228.810014.00 1244.8610052.37 1245.5210098.66 1245.3810205.55 1244.6310278.51
GR1244.710364.72 1245.0010404.73 1243.9810464.97 1244.3610536.07 1244.4710559.65
GR1245.810585.61 1245.2610594.36 1245.2310650.67 1246.1210723.36 1246.2410751.60
GR1246.110826.22 1246.8110911.07 1246.8510942.04 1246.2711022.64 1246.4011133.10
GR1246.611161.18 1246.9911173.53 1245.0811183.38 1246.2711206.23 1246.0211270.25
GR1244.611284.98 1246.4411298.78 1246.5611315.55 1246.0111344.37
*
X111.759      65 9858.3710130.39     485     470  501.24
GR1246.0 9380.00 1247.47 9411.85 1237.12 9448.72 1235.12 9505.51 1234.93 9552.05
GR1235.0 9596.10 1234.63 9635.78 1234.75 9656.13 1235.20 9677.71 1244.58 9698.81
GR1242.9 9710.55 1242.88 9727.37 1236.32 9748.99 1244.09 9771.52 1244.46 9791.44
GR1244.4 9807.81 1240.79 9819.26 1242.57 9823.36 1239.21 9829.85 1242.12 9839.37
GR1238.8 9849.88 1241.08 9858.37 1234.17 9869.84 1234.21 9928.41 1234.19 9943.92
GR1234.7 9960.27 1235.17 9990.31 1232.02 9997.43 1232.2510042.04 1234.2710059.13
GR1234.210095.05 1233.9710100.53 1246.5510130.39 1246.8510142.30 1247.0610225.77
GR1246.310304.48 1245.6610383.19 1245.6610475.98 1245.3910562.80 1245.4110575.61
GR1244.810625.75 1243.5710657.35 1243.5510662.34 1243.9010768.32 1244.3810868.46
GR1244.610915.38 1247.8010938.13 1248.0211050.27 1248.1411085.38 1248.0711275.36
GR1248.011369.50 1248.4511404.60 1249.2111412.55 1249.5211417.07 1247.8611430.62
GR1248.611447.94 1248.7411479.92 1247.9411515.93 1247.1211526.98 1247.4811541.06
GR1245.011546.12 1244.5611556.70 1244.7811576.66 1244.5411597.61 1246.5611620.05
*
X111.864      69 9832.9710118.56     605     665  615.28
GR1242.0 9457.00 1241.63 9513.08 1241.74 9602.35 1239.18 9617.01 1239.11 9623.30
GR1239.7 9660.06 1241.11 9692.74 1241.15 9749.87 1241.34 9791.41 1241.22 9832.97
GR1240.6 9856.60 1240.43 9887.29 1235.84 9896.12 1235.57 9921.44 1236.26 9925.06
GR1237.0 9951.56 1236.65 9960.02 1237.0510035.33 1236.9710064.50 1236.2610092.91
GR1240.010106.90 1240.4510118.56 1237.5110130.48 1248.0910155.03 1250.3910162.06
GR1250.810181.61 1250.6310186.50 1251.7910208.62 1253.3010218.70 1242.9810241.04
GR1247.110267.88 1246.3710306.91 1246.9110315.52 1246.2010361.53 1246.1810381.98
GR1246.910411.28 1247.5310492.53 1247.4510507.94 1247.4010526.95 1248.2510540.69
GR1248.010646.53 1248.1410746.82 1247.8710807.84 1247.8010845.75 1248.0910951.51
GR1248.210972.51 1248.3811053.19 1248.1711108.97 1248.2611132.09 1248.2711266.94
GR1247.811275.43 1251.0111292.83 1250.3011308.40 1250.1711399.39 1250.2211448.86
GR1250.611553.79 1250.3511642.08 1250.3611679.66 1250.7611783.75 1250.9011791.44
GR1251.511795.97 1249.7911809.30 1251.1911825.54 1251.7011859.76 1250.9711891.49
GR1249.911905.10 1250.6511917.77 1247.5411923.48 1247.1511941.26
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NC  0.06    0.06   0.035
*
X111.949      79 9673.7510428.00     565     380  452.25
X3    10
GR1252.0 9320.00 1252.72 9340.38 1252.27 9354.07 1251.06 9379.51 1251.34 9388.34
GR1250.0 9426.34 1249.50 9443.29 1244.15 9458.10 1243.17 9542.24 1243.06 9563.90
GR1244.3 9584.85 1247.72 9650.51 1248.70 9673.75 1247.84 9705.69 1247.26 9738.43
GR1245.3 9753.82 1246.42 9765.51 1245.82 9772.96 1241.28 9787.33 1242.45 9805.15
GR1242.0 9836.25 1244.24 9878.93 1245.13 9893.21 1239.71 9915.65 1239.00 9974.92
GR1239.110050.62 1239.1710079.84 1238.9010105.39 1241.7710120.23 1241.0410136.92
GR1239.510188.32 1242.6510231.21 1243.2010256.85 1244.3910323.37 1244.8110325.20
GR1244.710341.45 1242.0010362.64 1241.8110383.08 1247.1610403.18 1248.8810412.63
GR1248.810428.00 1247.9410442.64 1247.9310479.36 1248.7510497.97 1248.8110553.94
GR1247.910629.27 1249.1410677.54 1250.2310711.85 1249.7810759.77 1249.6410859.51
GR1249.510896.76 1249.6510958.52 1249.5911017.72 1249.8611090.31 1249.8411248.77
GR1250.011341.52 1249.9111373.85 1250.1711462.35 1250.1611480.12 1249.3711487.38
GR1252.311500.60 1252.5511507.16 1251.7111515.49 1251.9111611.62 1251.7311753.21
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GR1252.011833.41 1252.1211947.81 1252.1311997.03 1252.9112004.41 1251.7612006.99
GR1253.412010.55 1252.4112024.24 1252.8712041.68 1253.1112070.93 1252.1212110.93
GR1252.112115.68 1254.2312129.85 1251.7812148.74 1251.9512170.55
*
* CODED OUT TRENCH ADJACENT TO FLETCHER HEIGHTS
*
X112.034      72 9568.4110210.39     485     615  539.66
X3    10
GR1254.0 9213.00 1253.38 9220.00 1254.54 9235.21 1253.68 9286.76 1252.80 9376.99
GR1252.4 9501.88 1253.86 9557.44 1253.64 9568.41 1253.36 9608.98 1252.99 9631.85
GR1251.9 9683.23 1250.55 9719.47 1248.73 9732.10 1247.48 9744.74 1246.55 9778.46
GR1245.1 9814.00 1242.62 9844.50 1241.73 9952.09 1241.47 9997.91 1242.2710060.49
GR1242.610072.37 1246.2810086.14  1244.5 10172.6 1250.9010186.14 1250.9610210.39
GR1252.210222.61 1252.6610240.53 1255.5210269.53 1255.7010297.52 1255.5510345.02
GR1255.710414.46 1256.4110507.80 1254.8110543.63 1255.1010625.84 1255.0710669.22
GR1255.410717.05 1254.9910828.77 1254.6910929.62 1253.8010939.84 1253.3810970.08
GR1255.110999.45 1255.1811091.42 1254.6911104.05 1253.3011111.71 1252.5211126.93
GR1252.311153.59 1253.5211222.48 1249.4311237.43 1250.0011285.65 1250.2911292.32
GR1250.411359.58 1250.6111396.92 1250.6111497.53 1251.0011531.69 1256.3311572.18
GR1254.011589.75 1254.3411658.39 1254.3111710.68 1254.8011761.30 1254.2911791.91
GR1256.711802.96 1256.4211878.86 1256.4711919.14 1256.8011970.78 1256.7412042.08
GR1256.912129.06 1256.7912181.35 1257.2812296.42 1257.2012330.15 1256.9912357.20
GR1257.912385.72 1257.8212389.41
*
* CROSS SECTION ADJUSTED PER FLETCHER HEIGTHS GRADING PLAN
*
X112.125      81 9685.3410437.79     535     365  461.89
X3    10
GR1252.0 9049.00 1255.00 9068.23 1254.82 9096.82 1245.20 9127.01 1245.27 9143.84
GR1255.0 9178.29 1255.39 9201.81 1255.24 9247.47 1255.67 9370.00 1256.01 9401.46
GR1256.0 9511.87 1256.65 9575.08 1258.35 9587.02 1256.14 9608.23 1255.76 9625.14
GR1255.5 9653.92 1255.96 9685.34 1254.31 9743.99 1253.38 9748.10 1250.29 9767.48
GR1249.9 9807.09 1249.75 9822.20 1247.19 9862.49 1246.14 9874.00 1245.84 9893.23
GR1245.2 9905.00 1244.96 9963.33 1245.0510011.22 1244.6510087.24 1245.4810126.05
GR1245.610188.42 1245.0710217.08  1246.610300.00  1254.410337.64  1256.210437.79
GR1255.710453.41 1255.3010497.61  1255.310528.77  1257.210540.16  1256.910657.73
GR1256.810731.98 1257.1110829.79  1256.910913.73  1257.010983.60  1257.011046.81
GR1256.711134.07 1256.5011191.23  1256.611236.54  1255.811305.08  1255.911320.86
GR1255.211377.53 1254.1011405.52  1254.011455.47  1254.611505.70  1253.711586.69
GR1253.411602.34 1257.0011623.01  1257.911651.29  1258.311676.10  1255.011687.04
GR1253.611701.25 1253.1011718.54  1260.611732.36  1261.511739.55  1257.311763.57
GR1258.411774.93 1262.9011788.09  1259.811812.51  1253.911828.47  1254.511884.73
GR1255.911923.03 1256.3011970.87  1256.712015.67  1257.312040.30  1252.812071.27
GR1253.012117.23 1257.5012147.77  1256.912178.36  1259.012188.58  1258.712252.96
GR1259.012350.20
*
* CROSS SECTION ADJUSTED PER FLETCHER HEIGTHS GRADING PLAN
*
X112.194      71 9831.3710282.89     370     330  337.73
X3    10
GR1259.5 8672.00 1259.01 8712.33 1258.82 8737.02 1258.43 8837.03 1258.37 8898.06
GR1258.1 8937.03 1258.12 9037.00 1257.93 9137.01 1257.33 9273.14 1257.03 9374.95
GR1256.6 9433.06 1256.69 9462.14 1257.87 9471.89 1257.34 9522.08 1257.53 9564.57
GR1258.5 9579.29 1258.45 9627.53 1259.53 9755.43 1259.62 9831.37 1253.17 9850.32
GR1252.2 9877.34 1249.04 9889.54 1250.11 9930.45 1250.58 9934.41 1250.13 9961.21
GR1248.0 9968.74 1248.3910040.44 1249.9210059.15 1249.6510108.03 1248.4510126.99
GR1249.8 10268.0 1257.6010282.89  1258.010357.49  1257.910377.00  1256.410468.20
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GR1256.410548.46 1256.6610625.97  1256.310706.62  1256.310779.02  1255.910950.21
GR1256.010957.31 1256.0210996.42  1255.911051.10  1256.311135.52  1256.511207.14
GR1256.411266.14 1256.6911320.63  1256.611348.71  1257.311367.39  1256.111383.45
GR1256.311435.96 1257.2811493.32  1257.211521.15  1256.711557.11  1257.311620.37
GR1258.311654.50 1257.9911691.53  1257.711705.13  1257.911780.58  1258.411867.52
GR1259.112078.16 1259.6012191.99  1258.912211.69  1260.712219.00  1260.112238.25
GR1260.812248.25 1261.0112259.89  1255.512283.23  1255.012320.96  1261.412350.30
GR1259.912385.23
*
QT     1    9800
*
X112.313      79 9877.1410260.61     750     585  685.08
X3    10
GR1262.2 8911.00 1262.73 8923.98 1261.52 9012.36 1261.02 9114.22 1260.76 9215.07
GR1260.1 9317.71 1259.46 9418.58 1258.59 9521.44 1258.43 9656.01 1258.52 9698.04
GR1258.2 9773.36 1258.60 9818.33 1262.47 9843.21 1262.03 9863.96 1260.51 9877.14
GR1257.6 9914.61 1256.72 9926.12 1255.59 9959.40 1250.88 9979.52 1250.4710015.02
GR1252.710027.71 1253.8810085.83 1254.5810136.24 1254.3510145.32 1250.9110172.03
GR1250.710209.29 1258.6110237.98 1259.8410260.61 1259.4610325.64 1259.1210358.25
GR1258.410383.80 1258.2410407.94 1259.2810424.35 1258.9510555.79 1258.6410695.97
GR1258.710714.29 1257.3310732.29 1257.2310762.67 1259.2710789.42 1259.0910866.17
GR1259.210886.46 1253.0310920.68 1255.9010949.10 1256.4010979.09 1256.1511040.79
GR1256.311045.95 1256.4911097.10 1258.1711164.64 1258.2311221.00 1258.5011277.52
GR1258.611305.70 1259.4011348.84 1259.1311422.49 1259.9911500.27 1257.8711510.39
GR1257.311529.67 1257.3011550.15 1257.3011582.66 1257.7611627.75 1258.0911639.64
GR1258.311753.95 1259.5011771.62 1258.4911786.29 1258.4111816.42 1259.0611918.18
GR1259.311973.14 1259.3212019.77 1259.5812086.75 1259.6412121.34 1259.5212222.93
GR1260.012313.37 1259.6912346.84 1259.5012353.96 1260.7912361.90 1260.4912380.30
GR1261.312392.93 1261.0312403.57 1255.7012426.17 1255.5512455.15
*
X112.420      85 9768.6010079.26     600     665  578.07
X3    10
GR1262.8 8970.00 1262.84 8995.74 1263.05 9031.93 1262.68 9063.82 1262.62 9138.82
GR1262.3 9186.80 1261.52 9249.06 1262.21 9327.82 1262.01 9372.12 1261.12 9408.46
GR1259.2 9418.10 1261.28 9432.27 1261.31 9461.13 1259.29 9471.85 1261.27 9503.62
GR1260.7 9537.40 1261.31 9588.38 1261.24 9629.55 1260.94 9686.71 1261.80 9741.61
GR1262.3 9768.60 1260.52 9787.66 1259.54 9809.52 1259.44 9833.82 1259.91 9864.46
GR1259.6 9879.23 1256.26 9892.06 1255.77 9936.50 1255.38 9965.68 1254.66 9986.22
GR1254.510057.78 1263.5410079.26 1258.7910090.34 1258.2510116.23 1263.9210131.13
GR1255.810148.99 1256.0410176.35 1256.1510195.53 1255.3010247.56 1258.0210261.05
GR1258.810270.00 1264.0410294.39 1262.2810315.54 1261.7610330.07 1261.4210388.05
GR1261.410468.87 1259.9610507.52 1260.0510560.42 1260.3910630.82 1260.3710752.60
GR1260.510875.12 1260.7610965.90 1260.7511105.43 1261.2111179.53 1261.6511240.84
GR1261.711255.41 1262.7211276.88 1262.7311329.43 1262.5311367.68 1260.9711396.98
GR1261.011429.38 1262.3711459.64 1262.7311532.97 1262.5511582.61 1262.3311603.00
GR1259.911613.43 1259.1111633.66 1259.1411682.80 1260.0611714.44 1261.7311750.89
GR1261.911804.41 1262.3611853.81 1262.1211888.68 1262.7911910.74 1262.2011996.14
GR1262.312195.66 1262.4412281.63 1262.4312335.41 1262.5812388.49 1262.5712455.76
GR1262.612481.27 1263.4912489.77 1263.0112519.87 1258.2112542.11 1258.0512555.45
*
* CODED OUT LOW AREA BETWEEN STA'S 9170 TO 9196
*
X112.511      97 9871.1610111.39     455     435  467.59
X3    10
GR1265.3 8690.00 1265.72 8722.98 1265.05 8800.78 1266.47 8877.93 1266.49 8890.38
GR1266.0 8981.86 1265.46 9039.65 1265.57 9069.52 1266.11 9085.08 1268.85 9115.14
GR1264.3 9130.07 1266.04 9156.70 1265.36 9213.05  1265.1 9233.07  1265.0 9269.19
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GR1265.1 9306.39 1264.21 9384.01 1264.06 9435.15  1263.6 9495.38  1263.4 9500.47
GR1265.1 9523.53 1264.00 9531.83 1263.64 9577.67  1263.7 9644.25  1263.4 9672.29
GR1262.5 9730.13 1263.21 9797.63 1262.26 9871.16  1261.0 9883.90  1259.3 9894.61
GR1258.8 9930.98 1257.37 9939.14 1257.32 9949.45  1256.110006.29  1258.710014.97
GR1258.410030.43 1258.0510040.23 1255.2610046.60  1254.810065.40  1259.610081.47
GR1262.210098.86 1265.3910111.39 1262.9510128.79  1262.410163.12  1268.310179.88
GR1258.710197.80 1258.5210223.09 1261.2010235.25  1264.310263.05  1264.110285.63
GR1264.610296.97 1264.0310330.85 1263.4810343.82  1260.210356.41  1262.910377.48
GR1262.010380.84 1259.4210389.62 1258.9110422.92  1263.910445.29  1264.010496.80
GR1263.810540.37 1264.3210566.77 1263.6110579.76  1262.910630.51  1263.010681.68
GR1262.810712.46 1261.7910743.72 1261.6510774.49  1263.110794.84  1262.910853.81
GR1262.710983.83 1262.9811088.30 1262.9511205.62  1263.411282.68  1263.011394.61
GR1263.611437.19 1262.9411454.35 1263.1911473.97  1263.811515.22  1263.211550.92
GR1262.611567.64 1263.1311601.02 1262.2211632.58  1262.611658.99  1261.911682.22
GR1261.311690.38 1261.8711719.06 1261.6611747.07  1262.011777.83  1263.011801.49
GR1263.411979.14 1263.7512063.88 1263.4612080.25  1263.912124.63  1264.912138.43
GR1263.912163.30 1264.1012308.79
*
X112.606      83 9830.2110454.31     555     545  582.30
X3    10
GR1271.3 8672.00 1271.16 8718.88 1271.27 8847.88 1270.93 8952.99 1271.04 8973.43
GR1273.2 8993.98 1271.05 9003.15 1269.60 9028.62 1270.71 9035.21 1269.48 9039.08
GR1269.7 9102.66 1269.56 9154.40 1269.28 9201.43 1267.51 9275.63 1266.42 9296.46
GR1267.2 9340.88 1266.98 9427.50 1268.01 9462.39 1267.42 9495.37 1267.18 9517.89
GR1267.3 9533.36 1271.37 9543.58 1266.42 9556.36 1266.78 9620.55 1266.81 9680.55
GR1267.2 9725.43 1267.14 9830.21 1266.35 9892.62 1264.34 9947.62 1258.90 9982.32
GR1258.910018.64 1261.6710049.91 1262.0110071.58 1262.7010087.37 1261.8210107.56
GR1261.710129.45 1261.9810144.64 1262.9610168.55 1264.0310184.12 1264.4810204.94
GR1264.010279.52 1263.6510302.48 1265.8210329.34 1265.9310354.50 1266.9110391.91
GR1266.010408.71 1265.8110425.58 1267.9110454.31 1267.8510484.03 1267.0910546.29
GR1266.010585.93 1265.2810606.50 1265.4910660.51 1265.5710676.56 1264.8510695.53
GR1263.510715.39 1260.4310728.80 1260.1810748.11 1262.9110764.66 1264.7410771.78
GR1265.110790.79 1266.8510824.07 1266.7610845.22 1265.7510861.31 1265.3610881.60
GR1267.910886.82 1268.1710951.49 1267.8611032.15 1267.5111194.39 1267.3811343.08
GR1267.311434.76 1267.4311497.82 1266.0311600.22 1268.0311624.87 1267.3211703.86
GR1264.711721.38 1264.0011755.43 1263.7811870.61 1266.8112034.70 1268.1612173.40
GR1268.312249.99 1268.1812351.98 1267.8612359.19
*
* Additional point added in cross section for left overbank.
*
X112.701      82  9752.010320.98     495     525  505.60
X3    10
GR1270.6 8680.00 1270.78 8721.65 1270.39 8761.54 1269.91 8834.19 1270.27 8937.79
GR1270.4 9012.95 1270.30 9085.93 1270.35 9213.32 1269.98 9339.72 1268.84 9353.89
GR1268.8 9385.93 1270.11 9401.33 1269.69 9469.80 1268.52 9567.00 1268.60 9597.47
GR1270.6 9611.88 1271.47 9662.32 1271.92 9720.70 1271.92 9748.51 1270.00  9752.0
GR1266.7 9764.27 1265.60 9795.73 1265.27 9811.75 1264.93 9881.58 1266.19 9898.15
GR1266.6 9928.36 1260.10 9962.31 1260.6010022.85 1262.0910057.09 1267.5210088.04
GR1267.610120.25 1268.1010154.93 1269.7910320.98 1269.4910401.53 1270.4010441.01
GR1268.110464.67 1268.0010495.45 1268.7410531.98 1269.9010587.16 1270.3110635.89
GR1269.710648.51 1270.0010668.19 1270.5910704.23 1270.3810760.22 1269.9710796.48
GR1268.910831.26 1268.6010837.21 1268.9910865.60 1269.7510900.67 1268.8310939.27
GR1270.210954.64 1270.1010961.95 1268.2610970.14 1261.3711007.32 1270.1511042.66
GR1269.711062.80 1269.6011118.03 1269.6211156.57 1269.8511186.33 1268.1311211.37
GR1268.411240.08 1269.0011255.17 1268.3611353.40 1268.3511380.25 1268.1211465.73
GR1268.211520.29 1267.4011611.90 1267.1111616.72 1267.0611655.52 1267.7711695.16
GR1268.211751.92 1268.0011802.89 1268.3011831.52 1267.6611854.32 1268.2811863.24
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GR1267.011949.36 1267.0012049.56 1267.0812081.11 1267.4712149.73 1267.4412210.25
GR1267.612247.63 1268.0012274.40
*
X112.801      80 9884.4810602.96     565     535  524.61
X3    10
GR1270.9 8567.00 1272.13 8583.83 1272.02 8614.59 1272.02 8749.74 1272.26 8884.25
GR1272.3 8942.46 1272.53 9094.94 1272.62 9196.57 1272.47 9284.07 1272.72 9430.16
GR1272.6 9499.01 1272.24 9573.63 1269.64 9591.81 1271.67 9618.77 1269.88 9670.91
GR1269.0 9706.70 1269.10 9758.35 1269.69 9795.76 1274.94 9814.71 1275.01 9884.48
GR1266.0 9902.50 1265.26 9934.52 1261.09 9956.10 1260.2310017.58 1268.4010059.56
GR1267.110104.27 1268.1710131.07 1265.3910174.10 1265.9210193.94 1267.7510248.52
GR1268.510317.64 1268.1210351.80 1265.5110405.16 1268.4610445.30 1268.7210453.44
GR1268.310495.79 1266.8110544.02 1272.0710571.00 1272.5710602.96 1272.6010647.74
GR1272.010710.39 1271.8010766.01 1271.5710784.75 1272.1410820.84 1272.5910864.11
GR1272.410928.04 1272.4110937.12 1275.5810952.31 1270.9410963.24 1268.3010977.39
GR1269.211019.29 1272.2311032.48 1272.3711073.10 1272.7811094.16 1271.1811110.08
GR1268.011125.36 1263.7211140.13 1263.0911151.97 1263.0511177.43 1272.7411202.48
GR1273.111254.68 1273.0711286.14 1272.8311298.47 1271.5511315.03 1271.3411373.02
GR1271.411424.11 1271.1711461.44 1271.3711487.97 1271.4111544.60 1271.0511573.06
GR1271.511628.44 1273.3211637.25 1273.1211679.97 1273.2211762.70 1271.9411887.91
GR1271.911975.26 1273.2112022.13 1273.9112094.51 1272.3012123.08 1272.7812156.91
*
X112.896      86 9833.8410320.61     540     495  508.24
X3    10
GR1274.0 8717.00 1274.49 8749.83 1273.96 8793.27 1275.30 8802.24 1275.29 8836.46
GR1275.0 8904.06 1274.68 8974.91 1275.01 9098.69 1275.18 9207.26 1274.81 9315.82
GR1275.1 9424.38 1274.72 9576.84 1274.89 9659.07 1274.71 9701.03 1274.17 9716.95
GR1276.1 9743.96 1276.58 9773.87 1276.83 9803.97 1277.11 9814.81 1278.41 9833.84
GR1269.6 9869.72 1269.25 9888.88 1267.44 9898.12 1263.73 9911.88 1262.67 9944.67
GR1262.510044.90 1269.1510086.23 1264.4110098.15 1265.8810157.92 1265.2610183.04
GR1266.510194.89 1265.2610222.69 1264.8210272.81 1269.5610303.80 1273.0410320.61
GR1273.510382.30 1272.8510468.09 1270.9010496.52 1270.1210518.49 1273.4110536.31
GR1275.210549.69 1274.9310608.72 1274.9210654.62 1274.8810686.10 1273.8710715.69
GR1274.010765.77 1275.2210787.05 1274.3310834.25 1276.1710840.95 1274.0110845.95
GR1274.810865.73 1274.5310878.01 1274.3710925.58 1274.4410942.62 1273.6010963.76
GR1274.010991.33 1274.1311093.87 1274.2711154.56 1274.6211205.78 1269.6411225.48
GR1271.811254.61 1268.4211276.61 1270.6811290.98 1264.5211313.73 1264.4211321.39
GR1269.211341.82 1275.3011369.54 1275.0111385.26 1276.4011406.58 1273.0911420.81
GR1274.811491.04 1276.8211509.31 1276.7511523.80 1275.3911596.48 1275.4711719.14
GR1275.711796.68 1276.4011870.25 1274.7811884.03 1274.9711963.70 1273.3211983.85
GR1272.911998.17 1273.1712017.52 1272.9712029.09 1273.4712075.31 1273.6412209.08
GR1274.012274.40
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*
*
*
*
*
X112.991      91 9734.0810268.84     595     535  527.02
X3    10
GR1277.8 9109.00 1277.40 9125.68 1277.29 9230.38 1276.96 9285.05 1276.25 9292.43
GR1277.2 9314.01 1277.48 9346.40 1277.27 9363.64 1277.06 9433.70 1277.21 9508.50
GR1277.5 9532.83 1277.61 9600.49 1278.19 9620.61 1278.00 9631.17 1273.76 9650.22
GR1277.6 9675.18 1277.73 9718.08 1277.59 9734.08 1264.19 9760.85 1263.68 9804.76
GR1265.1 9866.56 1265.75 9922.72 1266.02 9928.62 1265.67 9943.89 1262.37 9957.87
GR1262.410166.57 1263.3210192.90 1266.3310211.52 1270.7510235.94 1264.8310250.37
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GR1268.610257.02 1274.4110268.84 1274.7310314.62 1275.2010322.13 1274.6510372.12
GR1275.010423.27 1275.8610458.40 1277.3410469.64 1277.6710475.62 1276.2610485.97
GR1276.010528.43 1275.9110590.90 1276.3210622.82 1275.9410665.92 1276.2910739.76
GR1276.510783.70 1275.8010803.83 1276.9110858.51 1277.5011022.81 1278.1911081.00
GR1276.711118.65 1276.5311166.51 1277.5211173.79 1275.9911179.58 1276.1311199.94
GR1276.111227.08 1276.5311303.67 1276.4911322.82 1276.7311369.44 1276.2211404.86
GR1276.211424.60 1276.5111439.49 1276.3911515.64 1276.1311527.22 1275.3711559.36
GR1266.911593.09 1266.9311597.27 1277.0311620.09 1277.2311633.86 1276.9111683.68
GR1277.511749.85 1277.4911771.21 1278.4011892.81 1279.2611915.63 1279.2411995.72
GR1279.312027.37 1279.2912063.73 1278.9412145.14 1279.0112161.49 1278.6912214.68
GR1278.412228.89 1278.6712239.87 1277.4012251.44 1277.9412282.64 1277.9412331.27
GR1276.012348.40 1276.4912375.66 1276.3712416.43 1276.4512478.51 1277.1512569.18
GR1278.012640.45
*
QT     1    7900
*
X113.076      94 9671.6010153.97     520     455  454.21
X3    10
GR1280.0 9262.00 1279.43 9284.29 1279.76 9305.95 1279.75 9353.03 1280.46 9383.30
GR1278.0 9395.75 1279.96 9421.73 1280.29 9461.38 1280.27 9493.93 1280.58 9557.24
GR1280.4 9607.76 1279.35 9671.60 1271.27 9691.22 1265.52 9704.51 1263.66 9732.62
GR1264.6 9760.43 1264.26 9804.98 1262.51 9828.51 1262.56 9834.95 1264.46 9853.67
GR1264.3 9869.40 1264.56 9887.26 1263.80 9907.57 1263.96 9922.62 1262.75 9937.25
GR1263.1 9949.84 1264.01 9971.55 1263.42 9983.97 1262.37 9999.25 1262.3710016.02
GR1264.110030.84 1266.1510041.79 1263.2310062.05 1263.9110073.48 1269.1810088.42
GR1271.810097.30 1272.7810130.78 1278.5310153.97 1278.6510196.43 1279.4810263.57
GR1279.910302.23 1289.0310351.20 1289.6610357.34 1288.7710363.55 1279.0610418.15
GR1278.810482.31 1278.8010511.62 1280.0110548.87 1279.0810574.50 1279.1710655.70
GR1278.110727.03 1277.9210780.10 1279.0210801.44 1278.3110890.52 1277.9810978.72
GR1277.810989.61 1278.8311090.55 1279.0911192.51 1278.1211294.05 1277.4011330.55
GR1279.211338.30 1278.8611343.15 1277.5111348.03 1278.1011368.97 1277.8911452.28
GR1277.011521.72 1277.3911595.07 1277.5711610.08 1277.7911623.16 1269.5011643.76
GR1270.111651.89 1277.7711676.25 1277.4511699.15 1278.6811721.59 1279.1311735.23
GR1278.611741.88 1278.5111808.21 1278.6611914.17 1278.6912002.75 1279.7212076.22
GR1279.912103.32 1280.0312165.57 1279.9212257.85 1279.8212276.59 1279.9812332.23
GR1279.612353.90 1280.1212381.78 1279.1712391.07 1280.1412469.46 1280.0912473.91
GR1277.912489.28 1278.7512517.38 1278.4312536.39 1280.0012543.98
*
X113.151      92 9746.0010187.38     520     370  393.13
GR1283.4 9058.00 1283.94 9159.76 1283.98 9240.17 1283.04 9289.92 1282.20 9302.23
GR1282.7 9337.98 1282.65 9380.65 1282.96 9394.79 1284.50 9403.86 1285.29 9412.45
GR1282.2 9421.65 1281.96 9458.29 1282.57 9499.64 1282.00 9569.32 1281.32 9594.33
GR1280.4 9619.08 1279.96 9652.65 1279.66 9676.17 1280.00 9696.02 1278.50 9723.06
GR1278.6 9740.99 1279.07 9746.00 1273.37 9760.92 1270.15 9773.47 1267.90 9799.83
GR1265.9 9808.73 1264.66 9829.94 1263.33 9848.13 1262.93 9857.53 1263.88 9866.92
GR1262.2 9882.66 1262.20 9958.44 1264.32 9979.64 1262.70 9988.47 1263.3410021.52
GR1265.210032.89 1266.8010069.78 1267.6210083.97 1267.9610111.44 1270.3210148.84
GR1272.810175.73 1277.2110187.38 1280.9710192.79 1278.9210199.57 1279.6410224.70
GR1280.310305.26 1280.2910361.06 1283.5110366.73 1280.5810374.07 1280.7210391.58
GR1282.910396.83 1280.4810403.87 1280.9010487.48 1280.7710531.61 1280.3310625.65
GR1280.710692.47 1281.4410717.98 1280.3410752.22 1279.9010801.20 1279.7310871.60
GR1279.910895.53 1280.6010996.09 1279.6611071.71 1279.7311075.74 1279.0511128.71
GR1279.111136.57 1278.8911232.60 1278.9211257.18 1278.8711285.51 1280.7411300.32
GR1280.511316.52 1279.2111324.52 1279.7411354.50 1279.7211383.93 1279.9411416.27
GR1279.711490.94 1279.6911530.92 1277.4711539.50 1273.6111550.90 1279.3211574.03
GR1279.811587.70 1279.9711609.34 1279.3111638.72 1279.7711664.46 1281.3011685.96
GR1281.011720.15 1280.8311762.38 1281.0811826.04 1280.9111880.75 1281.1711960.20
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GR1281.212105.17 1281.0712158.86
*
X113.161      50 9737.8710244.12      55      70   51.06
GR1284.7 8898.00 1284.22 8969.41 1283.76 9114.29 1283.93 9144.54 1283.52 9161.51
GR1283.3 9249.24 1283.19 9290.04 1283.17 9327.39 1282.51 9373.82 1283.04 9393.66
GR1283.1 9413.16 1281.11 9573.20 1280.87 9644.14 1280.81 9737.87 1279.90 9782.29
GR1276.4 9873.96 1275.44 9907.29 1275.20 9933.89 1274.65 9965.75 1274.7810043.50
GR1275.210080.57 1276.0810124.23 1277.0310151.97 1280.2510209.33 1281.5110244.12
GR1281.710266.74 1281.6010323.36 1281.3810368.03 1281.3810475.00 1281.4610532.18
GR1281.410620.05 1281.4510703.46 1281.5310751.25 1281.3110780.07 1281.2710829.33
GR1281.410885.47 1281.4710918.04 1281.1910988.58 1280.9711093.76 1281.0111246.85
GR1281.811387.32 1281.6511437.47 1280.5111505.24 1280.0011555.61 1280.4911596.67
GR1280.311663.43 1280.3111722.35 1280.6411839.85 1280.9611930.31 1281.3812128.02
*
X113.185      22 9742.2010245.97      35      32   33.56
GR1282.0 9531.00 1281.61 9580.66 1281.67 9631.21 1281.38 9661.38 1281.83 9719.60
GR1281.8 9742.20 1281.08 9773.40 1279.67 9812.09 1279.30 9817.12 1277.52 9857.31
GR1276.2 9890.49 1275.33 9931.33 1274.89 9959.09 1274.8910034.43 1274.9810078.37
GR1275.610124.98 1277.2710167.33 1278.3010192.55 1281.2810227.07 1281.9310245.97
GR1282.310259.87 1282.0010293.43
*
* Additional point added for left overbank
*
X113.227      55 9945.6510223.75     335     350  315.32
X3    10
GR1284.0 9299.00 1283.71 9303.82 1284.00 9325.43 1283.88 9360.31 1283.54 9393.86
GR1282.9 9408.68 1283.57 9430.29 1282.78 9451.58 1282.97 9494.70 1282.15 9670.83
GR1283.3 9692.69 1283.56 9751.23 1283.85 9777.54 1282.76 9884.39 1281.61 9936.51
GR1282.5 9945.65 1277.72 9957.55 1275.80 9961.08 1274.89 9985.19 1274.8910022.24
GR1275.610047.48 1276.3110060.47 1275.8410111.00 1275.4310135.64 1275.4010150.07
GR1278.710208.83 1283.0010223.75 1288.9010244.21 1284.6110260.70 1284.3910273.12
GR1283.310382.10 1283.3010418.01 1283.1610577.44 1283.2710651.09 1283.1610746.83
GR1283.410891.21 1283.3011019.74 1283.1711184.80 1282.9911250.25 1282.9211388.15
GR1282.911487.05 1283.4011521.31 1283.9211544.11 1274.8211566.13 1274.8911576.35
GR1283.011597.94 1282.7011611.67 1282.5311668.93 1282.3511688.14 1282.3911759.44
GR1282.411873.09 1282.6011895.89 1283.4112032.49 1283.8512237.81 1284.0312299.29
*
X113.325      57 9867.7710134.99     555     545  571.01
X3    10
GR1286.0 9272.00 1285.55 9320.30 1285.13 9372.63 1285.11 9408.38 1285.22 9416.58
GR1284.2 9457.31 1283.81 9486.84 1283.97 9527.30 1283.64 9544.73 1282.07 9560.67
GR1284.2 9579.99 1284.50 9604.04 1292.51 9618.16 1301.03 9633.92 1301.23 9655.29
GR1302.5 9722.72 1302.27 9757.72 1301.33 9807.64 1300.59 9838.03 1299.87 9853.17
GR1291.0 9867.77 1282.20 9882.41 1280.59 9896.14 1277.86 9926.63 1280.40 9955.50
GR1277.4 9977.65 1277.4010016.57 1278.2110045.01 1276.7010064.07 1277.9810082.82
GR1278.310111.69 1288.1010134.99 1287.0010142.65 1289.3310150.48 1289.9110164.78
GR1290.110170.47 1287.2010183.27 1287.1210195.74 1286.2410219.94 1285.6710474.24
GR1285.710562.34 1286.0010736.53 1286.0810829.36 1285.7010942.15 1285.6311229.36
GR1285.411329.35 1285.3011424.41 1285.8811473.91 1278.0211492.57 1277.8911506.86
GR1283.811520.53 1286.4011525.37 1285.1011541.38 1285.3211629.34 1285.4411739.52
GR1285.511826.82 1286.0011912.41
*
X113.420      99 9845.8610081.84     515     495  514.13
X3    10
GR1288.0 9395.00 1288.07 9423.96 1287.97 9477.21 1287.26 9513.90 1286.57 9532.21
GR1286.6 9556.16 1286.46 9582.05 1287.25 9613.21 1287.96 9631.08 1287.45 9655.50
GR1288.3 9699.72 1288.27 9722.92 1288.92 9791.30 1288.27 9813.82 1290.55 9827.24
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GR1288.5 9840.39 1288.33 9845.86 1283.51 9862.12 1282.43 9880.73 1281.07 9894.26
GR1280.6 9906.80 1280.99 9959.33 1278.03 9983.50 1277.4310001.06 1277.8010024.47
GR1280.310036.23 1281.5710063.88 1289.9810081.84 1286.4010089.78 1288.7310113.31
GR1287.310121.36 1287.7110128.19 1289.3310141.72 1293.3910168.52 1288.5810186.33
GR1288.410237.05 1289.2310252.26 1288.3210276.97 1287.0510308.19 1287.2810345.14
GR1287.310388.39 1286.9410429.90 1286.9310457.00 1286.6410480.94 1285.6810512.07
GR1286.110543.20 1285.7910563.93 1285.7510631.63 1286.5310651.86 1285.9110673.18
GR1284.510715.52 1285.1110726.52 1286.7410745.47 1287.0110797.71 1286.9610827.96
GR1287.810843.39 1288.1110915.91 1286.2710945.44 1286.3810983.68 1285.9510995.12
GR1286.211031.99 1286.0611056.81 1286.7111096.76 1287.3411131.85 1287.3311193.12
GR1287.811212.33 1286.8511276.48 1286.9211336.18 1285.8311397.94 1286.3311420.53
GR1284.411476.18 1284.0611503.97 1284.1811554.68 1283.6511563.74 1281.6911582.11
GR1282.411594.34 1284.6611609.37 1286.9711631.71 1287.1211647.43 1286.5511676.33
GR1285.911684.88 1286.4311698.97 1286.4411770.93 1284.9111801.36 1283.0311846.69
GR1287.111928.45 1287.1811948.35 1287.7812019.57 1287.6812043.31 1286.8212067.16
GR1287.212087.53 1287.0012136.62 1287.5512201.47 1287.6012271.53 1287.9912295.07
GR1285.512353.62 1284.3212397.71 1284.0712461.22 1286.0012488.90
*
X113.524      94 9858.0310221.34     605     500  522.56
X3    10
GR1291.3 9448.00 1290.03 9454.37 1289.55 9508.29 1291.53 9523.62 1290.64 9555.54
GR1292.0 9575.63 1291.36 9598.72 1291.56 9609.69 1291.28 9650.51 1291.26 9693.45
GR1292.1 9734.83 1291.90 9791.94 1291.20 9825.00 1291.61 9851.09 1292.81 9858.03
GR1283.4 9877.26 1282.60 9891.18 1282.60 9957.87 1283.21 9972.60 1283.7710018.98
GR1282.610028.68 1282.6710047.89 1283.8010059.95 1283.8210081.31 1281.9910117.75
GR1281.910137.15 1286.9710162.05 1288.1510165.76 1291.7110221.34 1288.5310236.72
GR1288.810264.54 1290.6710273.99 1290.6610287.01 1291.1610291.26 1290.2510351.78
GR1291.610376.49 1290.4510419.81 1291.7210446.96 1296.5610472.14 1290.8310478.74
GR1289.710494.98 1289.9510514.86 1290.9410526.43 1290.8210557.78 1290.3110573.55
GR1289.610581.04 1290.8110634.38 1301.1310651.91 1300.6110662.52 1298.3410667.92
GR1296.210675.41 1290.8710685.96 1290.5910716.77 1290.4110758.66 1290.7610840.28
GR1290.410886.63 1290.8610904.99 1291.6310921.81 1291.3210957.21 1290.0111016.88
GR1289.711102.37 1289.8411116.92 1290.1711216.95 1290.4911261.54 1290.4011316.98
GR1290.111325.20 1290.0711408.44 1289.4611445.30 1290.7311517.06 1291.4211566.71
GR1286.911600.63 1286.1211620.62 1292.7211642.39 1291.3411652.84 1290.0011697.54
GR1290.511737.67 1290.1311759.00 1290.3011827.51 1290.0411892.97 1289.0211918.09
GR1290.011977.44 1289.6412013.71 1289.8112086.33 1289.5612106.77 1289.9512129.98
GR1290.412144.25 1290.2612182.87 1290.1312243.57 1290.2212264.75 1289.0712285.59
GR1289.612301.57 1289.5112317.61 1289.9812380.13 1290.0212409.58
*
NC  0.05    0.05   0.035
*
X113.619      96 9739.4110391.00     565     495  505.64
GR1292.0 9562.00 1292.36 9629.30 1294.25 9639.88 1292.78 9661.38 1292.79 9674.83
GR1295.2 9693.47 1294.77 9739.41 1285.43 9788.42 1283.79 9799.13 1284.12 9865.32
GR1283.5 9935.28 1284.45 9954.22 1284.14 9967.18 1283.47 9976.42 1283.51 9995.82
GR1285.310006.46 1285.1310048.70 1284.7210076.70 1284.4310134.23 1285.0210190.74
GR1285.210219.99 1284.8010294.96 1291.1910312.09 1290.2510317.40 1291.1110324.25
GR1289.710336.10 1289.4610361.89 1293.8810391.00 1294.3810437.69 1294.7010478.35
GR1298.410487.80 1301.8010495.02 1294.4910511.79 1302.4010532.76 1303.9810551.60
GR1305.010578.70 1298.2710600.79 1299.3310623.06 1293.6810639.96 1293.7110652.46
GR1295.210655.91 1296.0210672.33 1297.6110682.32 1296.6310687.16 1293.7910693.85
GR1293.710719.15 1300.0210730.61 1295.9410738.98 1299.9310747.76 1296.2510755.10
GR1299.710762.57 1295.9710768.85 1298.8710777.37 1296.1910783.38 1298.7310790.11
GR1294.510798.42 1295.3710859.97 1294.7810889.08 1293.5810942.12 1293.0711003.19
GR1292.311057.05 1293.2011123.97 1293.0411169.90 1293.1011234.76 1292.9411240.22
GR1292.911273.64 1293.5311336.71 1293.8411354.86 1293.6411403.54 1292.9611443.98
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GR1294.111504.21 1293.5811528.18 1290.6011539.04 1289.6511544.35 1290.5211565.78
GR1290.211594.34 1293.6211621.42 1293.5111641.40 1293.9111665.37 1293.0511687.55
GR1293.011730.32 1292.8611738.32 1294.2211807.73 1293.4311833.85 1293.3311878.84
GR1293.311929.21 1293.6512009.04 1293.4812045.43 1292.8112123.83 1292.9412135.85
GR1292.512212.03 1293.2612253.55 1293.0212338.41 1293.0512364.23 1292.3012394.05
GR1292.712413.20
*
X113.680      80 9591.0310317.81     320     315  331.09
GR1296.8 9322.00 1297.07 9356.46 1295.43 9385.60 1296.98 9417.80 1297.29 9479.95
GR1297.5 9485.63 1296.86 9495.23 1293.73 9528.80 1293.03 9551.69 1289.41 9568.06
GR1292.5 9582.07 1292.88 9591.03 1290.80 9613.38 1289.19 9648.83 1288.62 9671.63
GR1288.2 9722.36 1287.28 9796.47 1287.06 9826.79 1286.91 9883.94 1286.40 9919.92
GR1285.8 9939.41 1285.50 9984.53 1285.5110023.54 1286.1910077.15 1286.2910123.24
GR1286.110152.41 1286.4410190.29 1287.2610222.53 1289.8810265.88 1291.2510283.02
GR1292.810317.81 1293.2210368.57 1292.5310398.99 1292.6110434.15 1292.2910477.35
GR1292.510529.74 1292.9010615.42 1292.9310647.52 1293.0710711.24 1293.3910820.69
GR1293.310865.19 1293.4110884.17 1292.9810938.51 1293.3610974.42 1293.7210989.05
GR1293.811017.31 1294.1611050.34 1294.2011107.98 1294.3711135.27 1294.0711160.10
GR1293.811248.44 1293.9611275.04 1294.7111314.65 1294.8011340.48 1294.5611345.46
GR1294.511413.21 1294.7511447.00 1294.2511476.07 1294.8711499.87 1294.8511540.28
GR1295.011627.90 1294.7511680.45 1295.1111724.22 1295.0411772.94 1295.2311815.45
GR1294.811852.94 1295.1211880.39 1295.0211903.62 1293.9711973.31 1293.9212041.77
GR1294.612088.13 1294.2912090.19 1294.6212119.52 1294.3412147.76 1294.1912185.46
GR1294.312223.78 1294.0512270.24 1294.2712373.64 1294.4112409.48 1294.7612454.94
*
* Additional point was added at invert to account for expansion at 13.918
* This point was used in the left bank.
* BOTTOM OF CHANNEL SET AT OVERTOPING ELEVATION OF 1288.  SEE DOWN STREAM X-SEC
*
X113.742      85 9760.0010379.63     430     400  353.72
X3    10
GR1296.8 9354.00 1296.55 9370.67 1297.62 9384.46 1297.63 9483.28 1299.44 9497.01
GR1293.9 9531.00 1294.10 9554.38 1289.54 9577.58 1288.87 9634.50 1287.86 9648.28
GR  1288 9680.80    1288 9700.02    1288 9760.00    128810197.76 1289.3810241.99
GR1290.510254.48 1290.3010268.29 1292.9610308.28 1294.4110321.65 1297.5010343.75
GR1299.510379.63 1299.9010399.95 1300.3110408.16 1300.1810436.03 1299.1010442.12
GR1296.810459.79 1295.5010475.06 1290.6910506.06 1288.5410532.73 1288.7110558.39
GR1289.510598.63 1290.7010669.55 1290.8810723.24 1306.2210748.29 1319.9610770.75
GR1309.310788.50 1294.4010816.13 1290.1710826.64 1290.0410886.49 1292.3310894.56
GR1298.410909.82 1300.8010922.28 1301.5110930.63 1298.4410944.77 1289.2510962.63
GR1288.811011.30 1288.6011043.43 1288.1711069.82 1289.4411101.46 1289.4811132.43
GR1295.611152.30 1296.0011197.31 1296.0511240.82 1296.5811285.44 1296.7311324.28
GR1297.111365.59 1296.8011409.29 1297.4911469.34 1296.9911529.55 1296.9711566.62
GR1296.811581.98 1297.2011645.17 1297.5211669.97 1296.9011698.77 1297.0411764.32
GR1296.711812.47 1292.7011878.03 1292.1011914.78 1291.6511924.59 1287.9311975.00
GR1286.511988.35 1285.6012038.04 1288.3612070.37 1289.6612076.59 1288.4612098.39
GR1288.712119.06 1289.0012153.65 1295.1412164.88 1296.6812205.17 1297.0812283.01
GR1297.012327.32 1297.1012339.26 1296.6712407.76 1296.7012420.60 1298.0112438.39
*
* BOTTOM OF CHANNEL SET AT OVERTOPING ELEVATION OF 1288.  SEE DOWN STREAM X-SEC
*
X113.818      80 9912.0010482.82     395     435  406.30
X3    10
GR1298.0 9462.00 1298.87 9477.76 1298.90 9504.05 1299.46 9584.30 1299.62 9588.83
GR1296.7 9617.74 1297.12 9659.36 1293.55 9672.91 1295.18 9696.39 1295.29 9703.75
GR1294.1 9721.63 1292.98 9755.56 1293.68 9770.96 1293.89 9787.10 1293.17 9788.30
GR1291.3 9805.83 1290.67 9814.79 1290.76 9825.73    1288 9839.58    1288 9912.00
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GR  128810335.40    128810469.10 1292.3210482.82 1289.2010492.06 1288.7110536.03
GR1288.810549.75 1289.9010559.35 1294.9410586.82 1299.1710611.56 1299.6310640.25
GR1289.110655.18 1287.8010702.75 1287.7810868.03 1288.2210913.91 1288.0210937.39
GR1288.210947.65 1288.1011003.07 1288.4911038.22 1289.4411066.97 1289.2911089.19
GR1289.611109.90 1289.0011192.24 1290.1211228.34 1288.4211272.67 1289.9711378.54
GR1290.411402.76 1291.8011423.75 1291.9611434.18 1290.6411448.66 1292.3411458.94
GR1290.611464.39 1290.7011487.76 1290.5411520.45 1290.4711569.55 1290.2311616.61
GR1290.411645.04 1300.2011670.09 1301.0711676.56 1296.8211689.63 1297.8711700.15
GR1298.411706.11 1296.1011712.53 1289.8811722.98 1290.5511747.42 1289.8611801.18
GR1300.411817.69 1286.9011848.75 1287.2111915.57 1286.9711946.27 1285.8311983.10
GR1286.412002.23 1286.9012078.57 1286.1812129.51 1286.1112189.27 1286.6112247.67
GR1299.112281.97 1299.2012312.95 1298.9312326.03 1299.3612411.99 1299.9812562.08
*
X113.918      74 9953.7010177.83     595     955  656.30
X3    10
GR1305.6 8690.00 1305.41 8756.38 1305.02 8823.10 1304.84 8885.68 1303.86 8948.25
GR1303.7 8999.95 1303.54 9020.77 1303.86 9044.04 1303.87 9068.28 1303.42 9096.57
GR1303.5 9116.11 1303.77 9127.28 1303.13 9160.88 1303.67 9214.63 1303.46 9287.48
GR1303.3 9318.62 1302.59 9346.45 1302.64 9411.57 1302.20 9493.34 1302.18 9532.93
GR1302.5 9610.44 1301.79 9645.68 1301.87 9654.69 1303.56 9662.27 1301.78 9670.94
GR1301.9 9690.31 1301.65 9740.18 1301.58 9838.42 1301.34 9849.35 1300.90 9910.10
GR1300.7 9953.70 1300.59 9960.57 1293.23 9971.16 1290.60 9986.59 1289.8310006.54
GR1296.210021.74 1297.6910053.13 1297.8110074.08 1295.9610092.92 1293.0310112.54
GR1293.310117.50 1298.5510147.50 1300.3310168.14 1302.2810177.83 1301.6110191.01
GR1300.610203.56 1301.1410225.34 1300.9710274.90 1301.1710292.57 1302.6510338.15
GR1301.910356.67 1299.8810375.47 1299.9610385.00 1299.3410417.63 1300.1810429.28
GR1300.210461.49 1299.0610503.98 1298.5610534.06 1297.9710541.44 1295.7410550.72
GR1294.110561.42 1292.2710589.82 1293.1510607.55 1292.9110623.66 1293.4010643.70
GR1295.910654.48 1302.2910674.21 1302.1710681.03 1302.0810738.74 1302.2610785.14
GR1302.910882.16 1302.2410980.53 1302.4111085.57 1302.3711252.08
*
QT     1    6100
*
X114.013      78 9743.5410041.42     620     485  514.07
GR1310.9 8525.00 1309.19 8541.70 1309.09 8570.76 1309.75 8582.50 1310.60 8606.66
GR1310.4 8621.35 1310.50 8648.37 1310.50 8692.44 1310.87 8720.08 1309.49 8733.42
GR1309.7 8777.54 1309.37 8820.32 1308.08 8863.07 1307.94 8902.86 1307.48 8937.44
GR1307.5 8965.25 1307.69 9009.34 1307.63 9098.15 1307.80 9141.73 1307.54 9238.48
GR1307.4 9289.98 1307.46 9347.91 1306.04 9364.47 1306.56 9382.02 1306.22 9411.06
GR1307.1 9433.96 1307.01 9480.97 1306.80 9500.90 1306.83 9579.11 1306.63 9597.26
GR1306.5 9651.60 1306.05 9743.54 1305.60 9780.56 1302.93 9784.17 1302.82 9802.62
GR1300.1 9828.14 1299.23 9889.76 1299.00 9921.27 1296.71 9930.76 1298.47 9947.01
GR1298.1 9975.11 1295.83 9987.00 1295.7510006.96 1303.6610041.42 1301.6510064.01
GR1302.610074.42 1303.9410106.66 1302.2910134.52 1303.7110177.15 1304.2310254.67
GR1304.610273.37 1301.5410286.06 1301.5110331.62 1303.3810385.94 1303.4110447.36
GR1301.810463.96 1301.4410479.72 1300.5910492.14 1302.4010510.26 1301.7710520.18
GR1301.010541.35 1305.3110553.40 1305.2710624.76 1304.0010635.71 1305.4610649.37
GR1302.610663.07 1305.6410681.11 1305.3710732.78 1301.4310752.10 1303.9310776.74
GR1304.510804.42 1304.4910864.83 1304.6710921.65 1302.7810959.24 1305.7110994.93
GR1306.011069.44 1306.0611173.31 1306.3111219.95
*
X114.103      83 9764.4310088.39     540     515  520.68
GR1314.0 8482.00 1313.81 8510.08 1314.17 8523.94 1313.52 8549.49 1313.03 8586.27
GR1311.6 8599.67 1311.80 8629.88 1312.89 8656.28 1312.92 8725.18 1313.32 8770.35
GR1310.9 8789.81 1311.00 8837.87 1310.88 8883.79 1310.60 8939.35 1310.39 8952.61
GR1310.7 9032.01 1310.50 9087.45 1310.14 9125.80 1310.44 9187.24 1310.15 9236.68
GR1310.1 9315.24 1308.89 9333.67 1308.70 9390.43 1310.12 9400.08 1309.73 9429.81
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GR1310.0 9489.07 1309.88 9532.52 1309.30 9581.48 1309.14 9622.09 1308.87 9668.19
GR1309.1 9707.83 1309.53 9720.37 1309.48 9755.08 1308.94 9764.43 1306.87 9770.45
GR1306.7 9786.95 1302.91 9806.67 1302.87 9818.91 1303.56 9902.96 1299.87 9930.06
GR1301.0 9960.73 1299.72 9997.55 1300.6810026.47 1301.4210067.94 1307.3810088.39
GR1307.910149.94 1308.3210209.06 1308.0710298.29 1307.1310310.73 1308.5310326.25
GR1307.710400.57 1307.3910410.45 1307.9210445.28 1307.9610457.93 1307.3810471.61
GR1307.510507.04 1303.2510530.20 1303.1610592.95 1305.6310627.85 1305.2710636.01
GR1306.210653.59 1305.7110661.82 1308.5010680.36 1308.2210688.06 1307.4710753.83
GR1307.310780.11 1304.9710795.67 1306.4310823.65 1305.4410846.31 1306.9010861.54
GR1304.310877.59 1305.6210905.63 1307.1610932.90 1306.5810964.23 1308.5610977.08
GR1308.310985.98 1307.4411049.41 1306.8911083.90 1307.9211097.61 1308.0811113.27
GR1306.911144.60 1308.1211160.37 1307.9911239.53
*
X114.197      66 9935.1510264.33     465     470  479.63
GR1313.6 8909.00 1314.34 8915.32 1313.27 9038.55 1312.59 9122.52 1312.09 9147.10
GR1312.6 9151.88 1311.98 9246.33 1311.85 9345.34 1311.29 9445.16 1311.53 9543.27
GR1311.2 9638.59 1311.04 9745.61 1311.25 9791.44 1307.75 9805.82 1309.41 9820.01
GR1309.3 9844.53 1308.78 9877.37 1310.09 9884.83 1309.84 9924.15 1309.62 9935.15
GR1301.910001.01 1305.9110028.16 1306.2410041.70 1307.5710147.14 1307.8810192.02
GR1306.710233.34 1306.6010242.45 1310.8010264.33 1310.5410340.43 1310.5810441.83
GR1311.310477.47 1307.3510490.71 1307.9510524.03 1306.7910553.36 1310.7910570.57
GR1310.410638.66 1311.0010700.76 1307.7110711.62 1309.4110731.07 1308.8610748.02
GR1308.710769.66 1308.7910825.53 1309.0410834.98 1307.8510852.16 1308.9710866.22
GR1308.210880.46 1308.3710886.69 1306.2810901.93 1306.7010942.54 1307.5710958.63
GR1306.510972.37 1306.2810984.49 1310.3310999.92 1308.9711011.88 1310.2611032.16
GR1310.411044.97 1309.9711056.74 1307.3811070.34 1310.8211084.16 1310.5411146.24
GR1309.311243.47 1309.5611283.64 1308.6311294.27 1309.9111331.37 1310.5111363.10
GR1310.911444.99
*
X114.284      77 9832.3710052.65     495     485  498.98
GR1316.0 8572.00 1314.69 8690.39 1313.76 8702.61 1314.96 8714.39 1314.56 8737.63
GR1313.7 8836.33 1313.52 8924.48 1312.85 8931.58 1313.46 8940.77 1313.10 9036.33
GR1312.9 9152.12 1312.76 9236.20 1312.63 9312.20 1312.12 9324.11 1312.72 9343.29
GR1312.7 9450.45 1312.30 9546.21 1312.37 9556.68 1312.53 9580.41 1308.45 9608.38
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GR1338.5 9757.56 1338.15 9796.97 1335.33 9883.09 1336.49 9899.49 1331.18 9929.77
GR1332.3 9953.39 1333.3910001.52 1333.2310028.97 1332.6510059.37 1339.3210074.95
GR1339.510100.82 1340.1210146.88 1340.3810170.67 1340.5510187.23 1340.0410212.73
GR1340.210280.35 1340.5410296.89 1339.9210361.08 1340.0810419.48 1340.5610461.22
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GR1339.511217.31 1339.6511317.31
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GR1335.1 9939.15 1333.64 9989.51 1333.6910026.60 1342.6810046.52 1343.1510227.71
GR1342.710341.69 1342.9510417.14 1342.7710466.38 1342.2510541.37 1342.1410616.62
GR1342.210666.92 1342.4910751.49 1343.2610816.38 1343.2710833.20 1342.3610915.84
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GR1350.0 8879.06 1351.09 8896.09 1351.35 8928.81 1350.19 9027.64 1348.75 9066.08
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GR1340.5 9638.26 1341.47 9722.76 1341.67 9764.78 1342.02 9780.18 1335.54 9799.96
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GR1344.510285.88 1345.3310338.16 1345.2410443.18 1344.7710481.74 1344.2110494.13
GR1345.510532.96 1346.4410573.06 1351.5810606.55 1345.8610641.82 1345.9110691.57
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GR1345.711222.68
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GR1347.7 9560.29 1347.34 9582.52 1347.12 9599.39 1342.21 9610.67 1341.34 9626.58
GR1341.6 9664.10 1341.32 9705.46 1338.84 9716.87 1336.67 9728.62 1337.25 9752.31
GR1337.3 9781.12 1338.08 9847.02 1337.44 9959.73 1335.06 9973.89 1335.9210020.83
GR1341.510056.25 1342.2110097.34 1343.3010121.69 1344.3610151.77 1344.0310180.94
GR1344.010260.23 1345.2410313.56 1346.5110413.86 1346.6810460.22 1346.7110506.32
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GR1348.4 9893.94 1348.64 9926.47 1346.05 9936.59 1344.28 9951.29 1340.53 9958.57
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GR1347.810789.91 1348.1710872.72 1346.1710895.37 1345.6210931.84 1352.2810953.24
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GR1350.410905.65 1350.6810942.53 1349.7310961.91 1349.2810980.87 1350.1911005.87
GR1348.511023.38 1346.3311039.77 1346.0011058.38 1346.4811085.01 1348.6311095.88
GR1351.711102.88 1350.9411115.35 1351.9311119.44 1351.7611131.49 1352.3811166.70
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GR1345.7 9788.07 1350.56 9797.17 1347.50 9804.33 1348.52 9816.60 1347.89 9831.05
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GR1350.510345.58 1349.4410422.21 1347.7010491.03 1348.8810505.89 1349.0010544.84
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GR1345.210002.05 1350.3310034.91 1350.2210060.20 1352.1110073.97 1352.6910127.71
GR1352.810160.12 1349.4610176.02 1349.9210190.22 1353.0410202.57 1350.8010242.67
GR1350.010254.44 1352.5110267.14 1352.8410283.39 1352.4210292.86 1349.5510303.63
GR1351.010316.45 1352.5710323.35 1352.3510385.32 1352.0910417.82 1352.0010421.64
GR1349.110435.06 1348.3410452.82 1351.7810470.05 1352.4010523.42 1351.2510539.06
GR1353.910553.37 1353.6510569.57 1353.8010593.97 1352.0910609.33 1354.7210630.81
GR1354.710662.46 1354.1710669.80 1354.9910683.15 1355.8110751.70 1355.2410811.74
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GR1354.810123.51 1353.5210141.21 1355.1110153.32 1354.8910233.75 1354.8210292.58
GR1354.810351.99 1354.3410383.48 1351.5510395.76 1351.3510435.00 1356.0310456.42
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GR1358.210707.49 1357.8910760.99 1358.4610924.53 1358.4310992.75
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GR1363.9 8884.00 1363.62 8899.06 1363.40 8931.55 1363.36 8982.64 1363.04 9078.40
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GR1356.010277.33 1354.7210283.48 1354.0610318.28 1357.7510333.71 1354.4010371.08
GR1360.110391.06 1360.5310401.94 1360.8910555.41 1360.9510627.42 1361.1310709.60
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X116.066      53 9577.0210067.61     610     505  584.23
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GR1363.1 9518.54 1362.18 9539.80 1361.42 9577.02 1358.27 9592.47 1359.33 9598.29
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GR1358.9 9908.20 1357.80 9920.79 1358.94 9933.97 1359.73 9976.20 1354.42 9993.66
GR1357.210011.06 1357.2210026.00 1359.3010051.57 1359.7410067.61 1359.5410107.14
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GR1361.310472.80 1361.8910514.13 1362.2710523.21 1362.7310569.30 1363.6010652.65
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X116.167      42 9897.2110144.90     540     535  590.83
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X116.248      43 9943.3710160.36     435     495  436.54
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GR1370.5 9643.66 1370.54 9658.59 1368.00 9669.77 1368.25 9678.81 1366.77 9684.21
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GR1362.6 9996.65 1364.9010031.10 1365.5610113.20 1367.7310144.93 1367.0810175.58
GR1366.110214.84 1367.0110241.49 1365.5610260.35 1366.0610273.85 1365.8110289.61
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X3    10
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GR1371.9 9370.95 1371.12 9417.94 1370.98 9460.54 1371.07 9512.40 1371.41 9560.04
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GR1374.8 9656.27 1374.97 9665.50 1369.67 9679.46 1370.53 9691.84 1373.39 9713.71
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GR1371.8 9860.80 1369.98 9873.94 1369.77 9895.68 1368.09 9972.28 1366.8210021.02
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GR1373.8 9933.34 1372.61 9962.46 1370.17 9997.45 1374.9910020.98 1376.2110075.83
GR1376.910091.69 1375.1810192.99 1377.2310207.79 1376.2810244.30 1376.4210259.44
GR1375.310266.52 1374.9810298.74 1373.5610307.01 1375.6910319.69 1376.5510340.77
GR1377.010352.47 1374.2810383.15 1373.3710400.42 1372.1510409.17 1372.5210430.44
GR1377.010440.96 1377.1510453.89 1377.7610480.52
*
X116.732      50 9872.8910091.14     535     460  475.63
X3    10
GR1387.1 9126.00 1385.91 9196.46 1384.39 9325.73 1384.23 9357.75 1382.66 9366.79
GR1384.3 9376.02 1383.83 9423.31 1382.90 9488.50 1381.83 9620.10 1380.94 9707.59
GR1380.4 9784.24 1380.10 9814.78 1380.07 9872.89 1379.83 9879.46 1378.19 9883.93
GR1373.1 9904.86 1373.81 9928.66 1376.38 9978.64 1372.9310001.36 1375.4210020.11
GR1374.010031.44 1378.1310053.85 1379.1110091.14 1378.2810123.79 1377.3110143.34
GR1378.410169.44 1379.0410194.24 1379.2710228.96 1379.1810243.81 1376.6510258.86
GR1377.210312.27 1377.1710316.43 1375.8710380.28 1375.6310401.27 1379.1310413.50
GR1378.810454.52 1378.2610472.41 1378.9810507.22 1377.0510521.90 1378.0310539.82
GR1377.610558.41 1375.0810568.68 1374.7310589.51 1379.3410611.09 1378.7010635.50
GR1379.410716.95 1378.6410801.92 1376.7110820.44 1376.6910844.30 1379.7510863.91
*
X116.829      47 9839.2810093.75     430     550  525.69
X3    10
GR1384.0 9597.00 1383.63 9624.11 1383.38 9671.43 1382.26 9793.51 1382.01 9808.18
GR1382.0 9839.28 1381.32 9857.43 1380.14 9878.20 1379.44 9897.06 1378.50 9940.12
GR1377.9 9950.38 1376.18 9966.48 1375.32 9983.91 1375.6110035.56 1375.5210040.25
GR1374.910062.80 1381.4810093.75 1380.7610124.12 1381.2410158.92 1379.8610173.60
GR1379.010224.80 1379.5210238.09 1380.5710256.30 1381.0310320.59 1380.8610343.63
GR1378.310360.06 1377.1110380.09 1378.1910400.25 1378.6210438.67 1377.6510454.22
GR1376.310488.15 1380.6210503.43 1380.3710535.22 1380.4410565.72 1378.6310579.72
GR1378.510603.94 1379.0610625.18 1381.2510639.95 1381.7710707.04 1381.2110733.80
GR1380.710747.09 1380.1010779.71 1381.5910826.95 1381.6310847.56 1378.4710858.61
GR1381.410875.40 1381.9510885.60
EJ


ER
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FEMA'S REVISED EFFECTIVE MODEL

```
C
C     14
C  8.655 1985 TOPO - DIGITIZED DATA SEC.8.655 THRU SEC.9.129
C  8.655 DOWNSTREAM STUDY LIMIT
C  8.655 NEW RIVER-SKUNK CREEK CONFLUENCE
C  8.731 BEGIN DISCHARGE FOR NEW RIVER ONLY
C  8.936 OLD CORP STATION NO. 8.95=0.6
C  9.009 GREENWAY ROAD AREA
C  9.129 OLD CORP STATION NO. 9.15=9.8
C  9.129 END 1985 TOPO DIGITIZED SECTIONS, END C/L = 10000
C  9.318 BEGIN STATION C/L = 20000
C  9.953 BELL ROAD
C  9.967 SPECIAL BRIDGE
C 10.989 UNION HILLS DRIVE
C 11.129 NEW SECTION - LEFT BANK TAKEN FROM ARROWHEAD RANCH
C 11.129 WASTEWATER TREATMENT PLANT GRADING PLAN-DIBBLE & ASSOC.
T1       NEW RIVER ABOVE SKUNK CREEK, PHOENIX, ARIZ., SEPT 1985
T2       MARICOPA COUNTY FIS
T3       FLOOD BOUNDARY
*        Model revised between Bell Road and Uninion Hills Drive by Stantec.
*        Additional x-sec based on 1985 topo are added, number of x-sec and
*        location are consistant with Stantec Updated Existing Condition Model.
*        Date of Revised model 1i 12/1/99.
J1             2                                                  1162.8
J2                    -1                                                      15
J3    38       43       53       21       55       26       56       22       54        4
J3     1       50      200
NC  .045     .045     .035     .200     .400
QT     2    21000    21000
X1 8.655       36   9581.4  10224.3      750      150      400
X3    10
GR1173.9   8649.5   1172.8   8725.6   1173.6   8761.4   1172.8   8805.7   1171.9   8882.4
GR1171.9   8973.3   1171.7   9029.3   1170.9   9157.1   1170.5     9250   1170.8     9322
GR1170.3   9369.5   1169.5   9443.6   1169.3   9488.5   1171.5   9503.3   1167.1   9548.1
GR1171.6   9581.4   1166.9   9605.5   1161.4     9624   1157.9     9660   1156.6   9716.3
GR1155.1   9744.7   1156.1   9761.1   1155.3   9864.2   1155.3   9905.7   1156.2   9954.8
GR1156.3    10000   1156.3    10071   1156.7  10091.4   1155.7  10121.5   1155.7  10154.7
GR1164.5  10193.7   1171.2  10224.3   1172.3  10244.2   1171.2    10247   1171.1  10299.3
GR1170.6  10403.3
NC                          .100     .300
QT     2    12000    12000
ET                        9.1                                          9762.5  10213.5
X1 8.731       45   9762.5  10213.5      400      400      400
X3    10
GR1174.8     8627   1174.1   8663.6   1172.6   8666.7   1174.4   8670.4   1172.1   8683.8
GR1170.8   8831.8   1170.4     9040     1170   9196.9   1168.3   9265.9     1167   9305.7
GR1166.8     9321   1173.5     9346   1167.4   9377.8   1160.3   9401.7   1156.9   9425.5
GR1157.6     9463   1156.3   9473.2   1158.8   9489.1     1166   9510.2   1169.2   9519.8
GR1168.9   9553.9   1169.2   9595.9   1168.6   9640.2   1168.3   9678.4   1173.6   9692.1
GR1171.9   9727.6   1171.4   9748.3   1172.8   9762.5   1172.6     9771   1167.8   9795.5
GR  1160   9831.2   1157.1     9844   1156.1   9894.9   1156.9    10000   1157.8  10055.6
GR1157.3  10089.1   1156.7  10123.2   1157.3    10151   1164.7  10183.1   1170.6  10206.7
GR1172.2  10213.5   1173.3  10246.5     1172  10250.5   1171.9  10342.2   1171.3    10403
*
*     REVISED THE ELEVATION OF STATION 9478.8 FROM 117039 TO 1170.9 (TMM 3-94)
*
ET                        9.1                                          9771.3  10219.2
```

```
X1 8.807      58  9771.3 10219.2     400     390     400
X3    10
GR1174.2    8591  1174.2  8613.7  1174.8  8626.5  1174.6  8637.8  1173.1  8640.4
GR1174.2  8644.4  1172.8  8658.6  1172.4  8867.9    1172  9015.9  1171.9  9044.3
GR1172.4  9063.6  1170.8  9080.6  1170.8  9093.1  1174.4  9117.5    1175  9131.2
GR1172.2  9150.5  1164.2  9172.6  1160.1  9193.9  1158.6  9221.8  1157.7  9249.9
GR1159.2  9261.8  1157.9  9281.7  1159.2  9293.1  1164.6  9312.1  1171.3  9327.1
GR1170.8    9359  1170.5  9382.8  1171.1  9406.1  1170.6  9448.1  1170.9  9478.8
GR1171.6    9539  1171.9  9588.1  1172.4  9618.2  1172.2  9646.1  1172.1  9673.9
GR1178.4  9688.1  1187.7  9701.7  1193.4  9715.9  1194.1  9729.6  1186.6  9749.4
GR1174.7  9771.3  1169.2    9792  1162.1  9826.7  1159.7    9848  1158.4  9918.7
GR1158.3  9957.1  1158.8   10000  1158.6 10069.8  1158.4 10113.6  1158.5 10146.5
GR1163.7 10172.1  1170.8 10201.6  1173.9 10219.2  1174.4 10248.2  1173.2 10258.1
GR1173.9 10328.3  1173.6 10380.5    1173 10402.7
ET                   9.1                                          9824.7 10216.9
X1 8.883      55  9824.7 10216.9     280     400     400
X3    10
GR1176.2  8580.8  1175.3  8595.6  1173.7  8597.9  1174.9  8600.1  1173.5  8625.1
GR1174.4  8705.8  1174.1  8768.8  1175.2  8824.2  1179.5  8846.4  1180.4  8864.3
GR1177.5  8878.5  1167.9  8905.2  1162.9  8926.2  1159.6  8943.8  1159.9  8977.9
GR1158.5  8985.3  1161.3  9000.6  1158.4  9027.9  1158.8  9040.4  1162.1  9058.5
GR1169.4  9075.9  1173.3  9086.9    1174  9126.4    1173  9140.3    1173  9167.6
GR1172.7  9204.5  1174.4  9252.2  1173.6  9288.3  1173.9    9325  1173.7  9357.3
GR1174.3  9422.7  1174.7  9473.8  1173.9  9529.7  1173.9  9563.4  1175.1  9610.3
GR1174.9  9680.1  1175.9  9745.5  1174.9  9824.7  1169.4  9860.8  1166.1  9911.3
GR1163.8  9955.6  1163.1  9984.3  1163.1   10000  1160.2 10004.5  1160.9 10056.5
GR1160.1 10106.7  1160.4 10145.4  1163.8 10164.1  1171.6 10191.4  1176.3 10216.9
GR  1177 10247.6  1175.5 10249.9  1176.3 10292.2  1176.1 10347.6  1175.3 10404.7
ET                   9.1                                          9809.4 10213.2
X1 8.936      60  9809.4 10213.2     300     300     290
X3    10
GR  1180  8590.6  1174.5  8616.4  1165.7  8644.6  1162.8  8656.8  1162.9  8675.8
GR1163.3  8691.1    1163  8713.3  1162.3    8740  1166.9  8754.2  1173.7  8779.8
GR  1179  8797.9  1177.6  8810.7  1177.4  8832.3  1175.7  8843.9  1174.6  8913.5
GR1175.6  8920.6  1174.6  8947.9  1175.5  9022.3  1175.5    9091  1175.9  9152.4
GR1176.4  9222.8    1177  9261.2  1177.8    9274  1177.1    9322  1177.8  9335.9
GR1178.2  9360.6  1175.8  9370.5  1176.9  9389.9  1177.8  9408.3  1175.5  9452.4
GR  1177  9483.3  1176.2  9535.9  1175.6  9543.2  1176.6  9575.3    1176  9615.4
GR1177.8  9634.7  1176.7  9680.7  1177.8    9708  1176.9    9754    1176  9785.5
GR1176.1  9797.7  1177.3  9809.4    1176    9817  1167.6  9825.6  1166.8  9858.6
GR1166.7    9894  1165.7  9939.7  1165.3  9959.9  1165.7  9994.3  1162.2   10000
GR1162.3 10069.8  1161.8 10110.7  1162.1 10143.1  1167.9 10169.2    1174 10192.8
GR1178.2 10213.2  1178.2 10244.2  1177.7 10247.6  1177.1 10309.8  1176.6 10402.1
*
*     REVISED THE ELEVATION OF STATION 8934.8 FROM 1744.7 TO 1174.7 (TMM 3-94)
*        "     "      "     "     "    9747.2  "   117732 "  1177.2    "
*        "     "      "     "     "    9765.9  "   117835 "  1178.5    "
*        "     "      "     "     "    9792    "   117838 "  1178.8    "
*        "     "      "     "     "    9802.3  "   117936 "  1179.6    "
*        "     "      "     "     "   10000.0  "   116535 "  1165.5    "
*
ET                   9.1                                          9886.1 10212.7
X1 8.977      58  9886.1 10212.7     220     200     210
X3    10
GR1177.7  8605.6  1175.6  8628.1  1174.7  8658.4  1174.4  8712.7  1174.6  8744.5
GR1175.6  8767.2  1174.1  8802.4  1175.6  8841.6  1174.9  8864.9    1175  8878.6
GR1174.7  8934.8  1174.7  8953.5  1175.5  8991.6  1175.7  9030.5  1176.4    9064
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GR1178.2  9075.1  1176.8  9084.2  1176.6  9130.2  1176.8  9179.1  1177.1  9252.3
GR  1176  9330.2  1176.4  9370.6  1177.8  9377.4  1176.8  9385.9  1176.8  9448.7
GR1177.3    9491  1176.4    9537  1176.4  9556.3  1176.9  9609.7  1176.8  9662.3
GR1176.3  9713.1  1177.2  9747.2  1178.5  9765.9  1178.8    9792  1179.6  9802.3
GR1178.3    9821  1180.8  9828.4  1176.5  9836.1  1176.5  9867.6  1177.2  9886.1
GR1168.4    9900  1167.1  9909.3  1165.7    9938  1164.9  9976.1  1165.5   10000
GR1163.6 10007.3  1163.7 10066.4    1164 10103.3  1163.5 10128.9  1163.5 10137.4
GR1168.4 10163.5  1173.3   10188  1178.5   10209  1179.3 10212.7  1180.9 10243.9
GR1180.1 10248.2  1179.7 10281.7  1179.8 10401.6
ET                   9.1                                          9764.5   10207
X1 9.009      34  9764.5   10207     330     180     180
X3    10
GR  1177    8740  1176.9  8817.3    1177  8883.2  1177.1  8937.1  1177.2  9008.7
GR1177.5  9075.7  1177.5  9150.2  1177.5  9213.2  1177.7  9285.6  1177.7  9368.3
GR1177.9    9462  1178.2  9547.2  1178.2  9614.3  1178.3  9675.6  1178.3  9725.9
GR  1178  9764.5  1174.2  9786.1  1167.1  9821.6    1164  9852.3    1166  9886.3
GR1164.6    9921  1163.6  9960.8  1162.9   10000  1164.1 10055.9  1164.8 10109.6
GR1164.8 10149.3  1169.2 10162.4  1178.6 10177.2  1179.9   10207  1180.3 10253.3
GR1179.5 10304.1  1180.2 10353.8  1179.8 10424.8  1179.3 10475.4
ET                   9.1                                          9689.8 10113.8
X1 9.047      44  9689.8 10113.8     280     160     200
X3    10
GR1179.8  8601.2  1179.8    8619 1180.63    8633  1179.4  8721.9  1179.5  8798.8
GR1179.2  8858.5  1178.9  8933.2  1178.7  9004.2  1173.2  9070.4  1178.8  9154.1
GR1178.8  9233.1  1178.8  9306.9    1179  9377.9  1179.1  9475.6  1178.6  9532.5
GR1178.7  9570.5  1180.6  9579.9    1180  9593.2  1181.6  9616.5  1180.5    9660
GR1177.5  9689.8  1171.4  9715.9  1166.4  9742.1  1166.2  9751.1  1166.9  9756.8
GR1162.3  9762.5    1162    9781  1163.2  9794.9  1163.3  9845.4    1164  9880.4
GR1162.9  9904.5  1161.7  9907.9  1161.2  9937.7  1161.9  9971.5  1162.6   10000
GR  1165 10050.5  1165.7 10084.6    1171 10101.3  1177.6 10113.8  1178.2 10168.4
GR1178.2 10218.1  1178.1 10298.2  1178.7 10354.4  1178.2 10401.6
NC          .060
ET                   9.1                                          9641.2   10090
X1 9.129      51  9641.2   10090     290     460     420
X3    10
GR1182.2  8558.3  1182.2  8569.9    1183  8580.4  1183.8  8652.3  1181.8  8719.9
GR1182.2  8785.2  1181.7  8844.6  1181.3  8932.3  1180.6  8995.9  1180.5  9075.5
GR  1181    9134    1181  9205.5  1181.5  9271.4  1181.2  9370.8  1180.3  9477.1
GR1180.3  9499.5  1180.1  9524.8  1180.8  9562.3  1180.3  9599.2  1180.9  9629.9
GR1180.6  9641.2  1176.6  9662.3    1173  9666.8  1173.4    9673  1164.9  9688.4
GR1165.5  9712.2  1166.2  9768.2  1166.3  9795.2  1167.5  9799.7  1164.8  9814.5
GR1164.2  9836.1  1165.2  9889.5  1165.1  9919.9  1166.3  9971.3  1167.1  9982.6
GR1168.1  9987.7  1167.9   10000  1168.9 10061.6  1171.8 10079.8  1178.7   10090
GR  1179 10117.8    1179 10195.1  1178.6 10241.7  1178.5 10245.1  1179.7 10304.1
GR1179.2 10370.6  1179.6 10407.5  1179.9 10429.4  1178.7 10432.2  1180.1 10433.6
GR1179.5 10439.6
*
*     REVISED THE ELEVATION OF STATION 18380 FROM  185.2 TO 1185.2 (TMM 3-94)
*        "     "      "     "     "    20015  "   118135 "  1181.5     "
*
NC  .050    .060    .035    .100    .300
ET                   9.1                                          19660   20015
X1 9.318      39   19660   20015    1000    1000    1000
X3    10
GR  1192   16150    1170   16210    1170   16310  1194.6   16420    1186   16465
GR1186.8   16560    1184   16830  1185.2   16920    1184   17065    1184   17120
GR  1186   17130    1186   17150    1184   17160  1183.7   17360    1184   17470
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GR  1185   17855  1185.2   18380  1185.3   18430    1185   18460  1185.1   19440
GR  1186   19660    1184   19685    1178   19710    1178   19865    1176   19945
GR  1174   19985  1173.2   20000    1174   20010  1181.5   20015  1181.3   20105
GR  1182   20360    1184   20370    1186   21110    1186   21150    1184   21595
GR  1182   22220    1180   22940    1180   23725  1181.2   23740
QT     2   11450   11450
ET                   9.1                                           19770   20235
X1 9.492      40   19770   20235     910     890     920
X3    10
GR1197.2   16090    1178   16135    1178   16185  1193.2   16240    1192   16258
GR  1190   16470    1188   17185    1187   17360    1188   17710  1188.6   17900
GR1189.3   18260    1189   18870  1188.8   18885    1190   18900    1150   18920
GR1189.2   19030  1189.5   19300    1188   19610    1185   19635    1186   19650
GR  1188   19700    1188   19770    1186   19905    1184   19930    1184   19950
GR  1180   19970    1179   20000    1180   20055    1182   20160    1184   20195
GR1193.9   20235    1186   20255  1185.4   20310    1186   20785    1188   20800
GR1188.8   21100    1190   21450    1190   22860    1188   23130    1188   24248
NC  .040    .060    .035
ET                   9.1                                           19840   20060
X1 9.692      31   19840   20060    1050    1040    1056
X3    10
GR  1194    1593    1192   16660    1190   17050  1189.8   17130    1190   17448
GR  1192   18040    1194   18880    1195   19040  1194.4   19150    1194   19280
GR  1194   19680    1192   19790    1192   19830    1195   19840    1186   19880
GR1184.1   20000    1186   20015    1188   20020    1190   20040    1196   20060
GR  1194   20060  1193.2   20090    1194   20195    1194   21315    1196   21690
GR  1196   21725    1194   22305    1192   24380    1190   24790    1190   25100
GR  1192   25440
NC  .060    .060    .035    .300    .500
ET                   9.1                                           19840   20080
X1 9.889      31   19840   20080    1100    1050    1040
X3    10
GR  1200   14530    1198   15330    1196   17370    1198   17830    1200   18628
GR1201.6   19190    1200   19460    1198   19490    1196   19510    1196   19570
GR  1198   19590    1198   19810    1200   19820    1200   19840    1198   19850
GR  1196   19870    1190   19890    1188   19900    1190   19920    1190   19965
GR1188.2   20000    1190   20050    1200   20080    1200   20970  1198.6   21620
GR  1200   21710    1200   21730    1198   22710  1196.1   23410    1198   24490
GR  1198   26950
*
*     REVISED THE ELEVATION OF STATION 15520 FROM 120034 TO 1200.4 (TMM 3-94)
*
NC  .060    .060    .030    .300    .500
ET                   9.1                                           19790   20032
X1 9.953      27   19790   20032     225     225     225
X3    10
GR  1202   15050  1200.4   15520    1200   16550    1200   16890  1200.5   17285
GR  1200   17540    1200   17610    1202   18770    1202   18860  1202.4   19045
GR  1200   19515    1200   19790    1194   19805    1192   19840    1192   19910
GR  1190   19990  1188.6   20010    1200   20030    1202   20032    1202   20050
GR  1200   21475    1200   21785    1198   22680    1198   24780    1200   25390
GR  1200   26215  1200.6   26810
ET                 9.110                                           19825   20010
SB  .900   1.560     2.6             213      20    2800   1.880 1188.61  1188.6
X1 9.967      29   19825   20110      75      75      75
X2                     1  1200.9  1207.5
X3    10
```

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BT    21   15025    1204           15450  1203.5           16410    1202
BT 16635  1201.4           16805    1202           17990    1204           18530
BT1205.6           19065    1204           19325    1204           19800    1205
BT         19825  1207.5  1200.9   20110  1207.5  1200.9   20110  1205.8
BT 20635    1204           21810    1202           22850    1200           24300
BT  1198           24630    1198           25270    1200           26275    1202
BT         27010  1202.1
GR  1204   15025  1203.5   15450    1202   16410  1201.4   16635    1202   16805
GR  1204   17990  1205.6   18530    1204   19065    1204   19325    1205   19800
GR  1204   19825    1196   19845    1194   19860    1192   19890    1192   19980
GR  1190   20015  1188.6   20025    1190   20035    1194   20060    1204   20110
GR1205.8   20130    1204   20635    1202   21810    1200   22850    1198   24300
GR  1198   24630    1200   25270    1202   26275  1202.1   27010
*
*     REVISED THE ELEVATION OF STATION 23690 FROM 199.6 TO 1199.6 (TMM 3-94)
*
NC                          .100    .300
ET                   9.1                                          19635   20055
X110.096      38   19635   20055     610     650     645
X3    10
GR  1206   14890    1204   14935    1203   15070    1204   16230  1204.8   16600
GR1204.4   17760  1205.1   18700    1205   19025    1204   19260    1204   19275
GR  1206   19285    1208   19335    1208   19435    1206   19545    1202   19555
GR  1201   19635    1198   19665    1196   19970  1195.7   20000    1196   20010
GR  1198   20020    1200   20040    1206   20055    1206   20090    1206   20675
GR  1204   21060    1202   22510    1200   23200  1199.6   23690    1200   24210
GR  1202   24600    1202   24615    1200   24890    1199   25180    1200   25545
GR  1202   25900    1206   25910    1206   26020
QT     2   10900   10900
ET                   9.1                                          19820   20320
X110.271      40   19820   20320     920     925     925
X3    10
GR  1208   14700    1206   15620    1206   16020    1208   16520    1208   16790
GR1209.6   17725  1209.7   18290    1208   19090    1208   19750  1212.5   19820
GR  1204   19870    1202   19930    1200   19980  1198.2   20000    1200   20020
GR  1202   20230    1204   20295    1208   20320    1208   20365    1206   20375
GR  1206   20680    1208   20685  1208.4   21370    1208   22660    1206   22930
GR  1204   23700    1204   24115    1206   25190    1206   25220    1204   25230
GR  1204   26490    1206   26520    1206   26865    1207   26870    1207   26880
GR  1206   26895    1204   26930    1204   27050    1206   27210    1208   27230
ET                   9.1                                          19655   20110
X110.443      34   19655   20110     930     900     910
X3    10
GR1213.5   14830    1212   15205  1210.5   15830    1212   16220  1213.9   17660
GR  1212   19220    1211   19560    1212   19590    1216   19605    1216   19655
GR  1210   19670    1210   19740    1208   19750    1206   19950  1205.6   20000
GR  1206   20100    1210   20110    1212   20600    1212   22030    1210   22740
GR  1208   23440  1207.8   23780    1208   24260  1208.6   25120    1208   25140
GR  1206   25145    1206   26400    1208   26810    1208   27000    1206   27080
GR  1206   27180    1208   27190    1212   27205    1214   27415
ET                   9.1                                           9578   10045
X110.517      14    9578   10045     415     440     480
X3    10
GR1219.5    9578    1214    9605    1212    9613    1210    9678    1214    9693
GR  1214    9700    1208    9720    1208    9737    1210    9780    1210    9840
GR  1208    9895    1206   10000    1206   10018  1213.8   10045
*
```

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*     REVISED THE ELEVATION OF STATION 16705 FROM 1318   TO 1218   (TMM 3-94)
*        "     "      "     "     "    18050  "   121935 "  1219.5    "
*
ET                    9.1                                          19955   20300
X110.612      34    19955   20300     480     460     440
GR  1217   15010     1216   16240    1216   16325    1218   16705  1219.5   18050
GR  1219   18420     1218   19580    1216   19885    1216   19895    1222   19910
GR  1222   19955     1210   19985  1209.6   20000    1210   20010    1212   20295
GR  1218   20300     1218   20325    1216   20330    1216   20740    1218   20760
GR  1218   21655     1216   22770    1214   23050  1212.4   23730    1214   24140
GR  1214   24250     1214   25455    1212   25530    1210   26540    1212   26790
GR  1212   27110     1214   27420    1214   28550    1216   28650
ET                    9.1                                           9925   10315
X110.651       7     9925   10315     225     230     235
X3    10
GR  1224    9925     1216    9940    1212    9975    1212   10070    1212   10255
GR  1212   10279     1220   10315
ET                    9.1                                           9942   10260
X110.699       7     9942   10260     240     240     245
X3    10
GR  1218    9942     1212    9970  1211.8   10000    1212   10020    1214   10095
GR  1214   10228     1220   10260
ET                    9.1                                           9838   10750
X110.750       5     9838   10750     275     270     270
X3    10
GR  1220    9838     1214    9860  1213.5   10000    1214   10550    1220   10750
ET                    9.1                                          19750   20015
X110.803      52    19750   20015     270     270     270
X3    10
GR1225.5   14775     1225   15010    1225   15545    1224   15710    1223   16085
GR  1224   16185   1223.8   16830    1222   16900    1222   16920    1224   16955
GR  1224   17030   1223.2   17280    1224   17460    1224   19160    1224   19288
GR  1223   19435     1224   19450    1230   19465    1230   19530    1220   19565
GR  1220   19575     1220   19585    1220   19595    1220   19750    1216   19768
GR  1216   19888   1214.1   20000    1216   20010    1220   20015    1220   20190
GR  1222   20405     1224   20480    1224   20555    1222   21230    1220   22410
GR  1218   23155   1217.8   23290    1218   23405    1220   23875    1220   23910
GR  1218   25030     1218   25155    1220   25180    1220   25210    1220   25248
GR  1218   25935     1218   27130    1220   27370    1220   27690    1222   28035
GR  1222   28610     1223   28690
ET                    9.1                                          19905   20250
X110.989      37    19905   20250     920    1000     980
X3    10
GR  1232   15130     1231   15330    1231   15900    1230   16280  1228.3   16485
GR  1228   16700     1227   16970  1227.7   17355    1228   18930    1228   19575
GR  1226   19780     1226   19850    1226   19905    1220   19955  1218.2   20000
GR  1220   20080     1222   20175    1224   20200    1226   20250    1226   20251
GR  1226   20252     1228   20295  1228.2   20530  1228.6   20910    1228   21640
GR  1226   22470     1225   22630  1224.6   22820  1224.2   23230    1226   24300
GR  1226   24490     1224   24995    1222   25830  1221.2   26800    1222   27800
GR  1224   28070     1226   28380
ET                    9.1                                          19820   20115
NC  .045    .045
X111.129       7    19820   20115     710     710     710
X3    10
GR  1232   19820     1225   19840    1222   19850  1221.7   20000    1222   20090
GR  1225   20100     1230   20115
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QT      2   10350   10350
ET                   9.1                                                19830   20055
X111.188       23   19830   20055     310     310     320
X3     10
GR   1232   19830    1225   19850    1222   19860    1222   19975    1222   20000
GR   1224   20020    1232   20055    1232   20080    1234   20420    1234   20770
GR1234.4    21080    1234   21335    1232   22210    1230   23060  1229.5   23110
GR   1230   23225    1232   24360    1232   24390    1230   25130    1228   25580
GR   1226   26990    1226   27460    1228   28315
ET                   9.1                                                19900   20120
X111.301       10   19900   20120     600     600     600
X3     10
GR   1232   19890    1235   19900    1235   19905    1232   19915    1226   19930
GR   1224   19938    1222   20000    1226   20070    1230   20100    1236   20120
NC   .045    .060    .035
ET                   9.1                                                19900   20175
X111.386       32   19900   20175     440     420     450
X3     10
GR   1240   16820    1238   17220    1238   18760    1240   18800    1244   18850
GR   1244   18915    1238   18950    1238   19040    1236   19280    1236   19420
GR   1233   19430    1233   19890    1233   19892    1233   19900    1228   19905
GR   1228   19912    1226   19975    1223   20000    1226   20030    1228   20085
GR   1230   20115    1232   20150    1238   20175  1239.5   20820    1238   22925
GR1238.8    23655    1240   24780    1240   24805    1238   25705  1236.8   26140
GR   1238   26800    1240   27485
ET                   9.1                                                19780   20170
X111.481       15   19780   20170     480     540     520
X3     10
GR   1240   19130    1238   19305    1230   19320    1228   19380    1228   19550
GR   1230   19710    1236   19780    1230   19800    1232   19860    1230   19900
GR   1228   19950  1227.4   20000    1230   20060    1234   20140    1240   20170
ET                   9.1                                                19470   20310
X111.566       37   19470   20310     280     530     460
X3     10
GR   1241   17270    1240   18790    1242   18940    1242   19140    1240   19170
GR   1240   19470    1236   19480    1234   19550    1234   19760    1230   19775
GR   1230   19790    1232   19810    1234   19820    1234   19855    1232   19860
GR   1232   19940    1230   19980  1229.7   20000    1230   20010    1230   20180
GR   1232   20295    1240   20310    1240   20335    1242   20780    1244   21030
GR1244.2    21620  1244.2   21960    1244   22190  1243.6   23225    1244   23470
GR1244.9    24495    1246   25220    1245   25570    1244   26550    1244   26660
GR   1246   27240  1246.7   27420
ET                   9.1                                                19925   20510
X111.759       35   19925   20510    1050     980    1020
X3     10
GR   1246   17890    1245   18190    1246   18510    1246   18920  1246.5   18930
GR   1246   18950    1246   19120    1244   19230    1244   19255    1244   19880
GR   1244   19900    1244   19925    1236   19940    1235   20000    1236   20040
GR   1236   20455    1242   20465    1244   20495    1248   20510    1248   20525
GR   1246   20540    1246   20620    1246   20760    1246   20800    1246   20820
GR   1246   21070    1248   21460    1250   21630    1250   21870  1219.6   22350
GR   1249   22980  1249.2   23620    1250   25015    1250   25960  1250.4   27420
NC   .060    .060    .035
ET                   9.1                                                19865   20510
X111.949       35   19865   20510     990    1000    1000
X3     10
X4      1  1247.4   20700
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GR1250.8   18670  1250.4   18895  1250.4   19275    1251   19500    1251   19535
GR  1250   19865    1248   19920    1246   19974    1244   19976    1243   20000
GR  1244   20045    1244   20215    1242   20280    1242   20470    1244   20480
GR  1246   20510    1246   20520    1246   20530    1246   20590    1246   20600
GR  1248   20925    1250   20940    1252   21660    1254   22180    1254   22280
GR1252.8   22630    1254   22985  1252.5   23380    1254   23685    1244   23750
GR1252.4   24515    1254   25865    1254   26540    1256   27550  1256.5   27760
ET                   9.1                                             19890   20680
X112.125      37   19890   20680     910    1000     930
X3    10
GR  1256   19305  1256.1   19430    1256   19805    1256   19860    1258   19875
GR  1258   19890    1256   19920    1254   19923    1250   19930  1248.2   19950
GR1248.5   20000    1250   20025    1250   20090    1248   20140    1248   20160
GR  1250   20230    1250   20320    1248   20330    1248   20440    1250   20565
GR  1252   20600    1254   20640    1258   20680    1258   20710    1254   20730
GR  1254   20800    1254   20810    1254   20860    1253   21155    1254   21455
GR  1256   22190    1258   22395    1258   22940    1259   24160    1260   26290
GR  1260   27215  1261.7   27800
QT     2    9800    9800
ET                   9.1                                             19830   20240
X112.313      28   19830   20240    1010     980     990
X3    10
GR  1261   18650    1260   19080    1260   19800    1262   19810    1262   19830
GR  1260   19835    1258   19840    1256   19935    1254   19950  1252.2   20000
GR  1254   20220    1260   20240    1260   20260    1258   20300    1258   20320
GR  1258   20360    1258   20362    1258   20440    1258   20450    1258   20455
GR1258.6   21090    1259   21610    1260   22140  1261.5   22890  1261.9   23990
GR  1262   24500    1262   27100  1263.3   27570
ET                   9.1                                             19810   20280
X112.511      35   19810   20280    1000    1020    1056
X3    10
GR  1266   18920    1266   19115    1266   19240    1264   19385    1263   19600
GR  1262   19700    1262   19710    1262   19720  1263.6   19810    1260   19865
GR  1258   19905  1257.3   20000    1258   20070    1264   20110    1264   20140
GR  1262   20210    1260   20220    1260   20265    1264   20280    1264   20350
GR  1262   20365    1260   20400    1260   20440    1264   20460    1264   20610
GR1263.6   20830    1264   20995    1265   21585    1265   22640    1266   23100
GR  1266   24600  1265.7   24880    1266   26000  1265.7   26670    1266   27380
ET           4.1     9.1           20980                            19810   20330
X112.701      34   19810   20330    1030    1020    1000
X3    10
X4     1  1269.6   20500
GR1270.6   19190    1270   19700    1270   19810    1268   19820    1266   19985
GR1264.7   20000    1265   20070    1266   20290    1268   20330    1270   20600
GR  1269   20660    1270   20740    1270   20980    1266   20990    1266   21090
GR  1268   21100    1268   21150    1262   21190    1262   21200    1270   21230
GR  1270   21260  1269.6   21510    1270   21770  1271.4   23220  1270.6   23800
GR  1270   23910    1270   23920  1270.7   24130  1268.8   24900  1269.1   26070
GR1269.6   26710    1270   27000    1270   27650  1270.7   27740
ET           4.1     9.1           21135                            19845   20360
X112.896      40   19845   20360    1010    1010    1030
X3    10
X4     1    1274   20420
GR  1276   18670    1274   18750  1275.6   19330    1274   19845    1272   19850
GR  1270   19965  1268.8   20000    1270   20020    1270   20350    1273   20360
GR  1274   20585    1276   20620    1276   20670    1274   20675    1274   21135
GR  1270   21165    1270   21180    1274   21200    1274   21250    1270   21260
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GR  1270   21350    1264   21365    1264   21390    1274   21410    1274   21495
GR  1276   21560  1277.2   21900    1276   22520  1275.6   22660    1276   23015
GR  1277   23610    1276   24190    1276   24280  1274.9   24440  1275.7   25428
GR1274.2   25910  1274.9   26740    1274   26945    1274   27000    1276   27660
QT     2    7900    7900
ET            4.1     9.1           21645                           19930   20350
X113.076       32   19930   20350     950     980     950
X3    10
GR  1280   19510    1278   19930    1274   19940  1272.6   20000    1274   20050
GR  1276   20090    1276   20210    1274   20260    1272   20270    1272   20315
GR  1274   20335    1278   20350    1279   20480    1278   21020    1278   21150
GR  1280   21645    1280   21660  1278.6   21740  1278.6   21760    1278   21780
GR  1278   21800    1280   21960    1280   22825  1279.6   23250    1280   23630
GR  1280   24220    1278   24835  1278.6   25040  1278.6   26370    1278   26740
GR  1278   26920    1280   27585
ET            4.1     9.1           21410                           19810   20120
X113.227       26   19810   20120     800     670     800
X3    10
GR  1284   18690    1282   19260    1282   19690  1281.5   19810    1276   19845
GR  1274   19970  1273.9   20000    1274   20030    1278   20090    1280   20100
GR  1282   20120    1282   21410    1276   21425    1276   21440    1282   21455
GR1282.2   21900    1284   22160  1282.6   22860    1284   23350  1284.7   23820
GR  1284   24080    1282   24510    1282   24580  1281.8   24730  1281.5   25780
GR  1282   27300
ET            4.1     9.1           21425                           19870   20170
X113.420       33   19870   20170     970    1000    1020
X3    10
X4     2  1187.2   19750    1186   19700
GR  1290   18215    1288   19350    1288   19490    1286   19560  1287.5   19870
GR  1284   19880    1282   19975  1281.8   20000    1282   20040    1282   20080
GR  1286   20100    1288   20150    1290   20170    1290   20185    1288   20195
GR  1288   20315    1288   20490    1288   20780    1287   20840    1286   21425
GR  1284   21570    1282   21580    1282   21610    1286   21650    1286   21760
GR  1288   21875    1297   21900    1288   21940    1288   23570  1288.7   23780
GR1289.6   25395    1290   26450  1290.7   26525
NC  .050    .050    .035
ET            4.1     9.1           21380                           19870   20455
X113.619       39   19870   20455    1090    1020    1056
X3    10
GR  1296   18690    1294   19490    1294   19835    1294   19870    1294   19890
GR  1286   19910    1286   19995    1285   20000    1286   20005    1290   20105
GR  1290   20315    1292   20360    1292   20445    1290   20450    1292   20455
GR  1293   20456    1292   20457    1292   20470    1290   20480    1290   20520
GR  1294   20540    1294   20600    1294   21380    1292   21680    1290   21690
GR  1290   21710    1292   21755    1294   21780    1294   21850    1290   21880
GR  1290   21895    1292   21905    1294   22680  1295.4   23340  1295.7   24310
GR  1294   24400    1294   25040  1294.8   25580    1296   26565
ET            4.1     9.1           21430                           19890   20340
X113.818       33   19890   20340    1050    1050    1056
GR  1302   18660    1300   19320    1300   19890    1298   19895    1296   19970
GR1295.5   20000    1296   20015    1296   20130    1294   20250    1294   20325
GR  1298   20340    1298   20450    1296   20460    1296   20630    1298   20740
GR  1300   20750    1300   20870  1299.2   21160    1300   21305  1300.3   21430
GR  1300   21580    1298   21820    1294   21840    1294   21850    1296   21860
GR  1296   22050    1298   22060    1300   22865    1300   23030  1300.6   23470
GR1300.8   23985    1300   24550    1300   26150
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*     REVISED THE ELEVATION OF STATION 22245 FROM 2300 TO 1300 (TMM 3-94)
*
QT     2    6100    6100
ET           4.1     9.1           22160                           19915   20270
X114.013      39   19915   20270    1020    1055    1030
X4     5    1304   20900  1302.3   20930    1304   20960    1304   21100    1302
X4 21170
GR  1306   19285    1304   19690    1304   19915    1302   19940    1302   19960
GR  1300   19962    1299   20000    1300   20010    1302   20035    1300   20120
GR  1302   20190    1302   20250    1303   20270    1302   20300    1302   20625
GR  1300   20645    1300   20660    1302   20720    1305   20725    1304   21145
GR  1306   21170    1306   22160    1304   22225    1300   22245    1298   22255
GR  1298   22270    1302   22285    1302   22350    1304   22390    1304   22460
GR  1302   22480    1304   22505    1306   22680    1306   23465  1307.7   24010
GR1306.2   24750    1306   25400    1306   25520  1306.3   26000
ET           4.1     9.1           21710                           19715   20015
X114.197      36   19715   20015     990     920     970
GR  1316   18385    1314   18590    1312   19130    1310   19550    1308   19565
GR1308.5   19715    1306   19730    1304   19732    1304   19755    1306   19800
GR  1307   19850    1306   20000    1310   20015    1310   20240    1308   20242
GR  1308   20310    1310   20330    1310   20460    1308   20465    1308   20745
GR  1310   20780    1310   20810    1308   20815    1308   20830    1310   20832
GR  1310   21710    1308   21930    1306   21970    1306   22035    1308   22060
GR  1310   22550    1310   22640  1310.6   22800    1310   22910    1310   25290
GR  1311   25560
ET           4.1     9.1           21420                           19540   20250
X114.379      38   19540   20095     940    1000     960
X4     3    1316   21150    1315   21030  1315.3   20970
GR  1324   18115    1322   18320    1320   18550    1318   19100    1316   19540
GR  1314   19550    1314   19635    1312   19655    1310   19665    1310   19690
GR  1316   19705    1316   19950    1312   19960  1310.4   20000    1312   20020
GR  1314   20095    1314   20430    1316   20535    1316   20580    1314   20750
GR  1314   20820    1314   20860    1312   20900    1312   20945    1314   20950
GR  1316   21420    1316   22060    1314   22065    1312   22075    1312   22150
GR  1314   22180    1316   22385    1316   23115    1318   23325    1318   23600
GR  1316   24180    1316   24290    1318   25135
ET           4.1     9.1           20045                           19220   20045
X114.559      39   19220   20045     950     915     950
X4     2    1320   20035  1320.8   20045
GR  1326   18225    1324   18540    1322   18690    1322   19220    1318   19225
GR  1316   19230    1318   19300    1320   19360    1320   19415    1318   19425
GR  1318   19450    1320   19550    1320   19740    1318   19760    1318   19780
GR  1318   19940    1316   19960  1315.4   20000    1316   20020    1318   20025
GR  1320   20065    1320   20210  1320.6   20375    1320   20875  1319.9   21150
GR  1320   21220  1320.4   21370    1320   21515    1320   21790    1318   21792
GR  1318   21820    1320   21840    1320   22190    1322   22800    1322   23050
GR  1320   23620    1320   23650    1322   23970  1322.4   24200
ET           4.1     9.1           22000                           19670   20170
X114.752      36   19670   20170    1010    1010    1020
X3    10
GR  1336   17740    1334   18200    1332   18480    1330   18820    1328   19010
GR  1326   19300    1326   19670    1322   19680    1322   19910    1320   19988
GR1318.8   20000    1320   20010    1322   20015    1322   20080    1324   20090
GR  1324   20125    1326   20170    1326   20580    1324   21260    1324   21550
GR  1326   21780    1328   21820    1328   22005    1326   22060    1322   22070
GR  1322   22120    1324   22190    1326   22230    1328   22580    1328   23035
GR1236.4   23615    1328   24120    1330   24470    1332   24710    1334   24950
```

```
GR  1336   25220
QT     2    4200    4200
ET           4.1     9.1            20720                           19865   20050
X114.945      49   19865   20050    1005    1000    1020
GR  1350   17110    1348   17265    1346   17660    1344   18190    1342   18415
GR  1340   18830    1338   19040    1336   19350    1334   19650    1332   19770
GR  1330   19865    1328   19940    1326   19950    1324   19970  1322.5   20000
GR  1324   20020    1330   20050    1330   20245    1328   20370    1328   20400
GR  1330   20420    1332   20615  1332.8   20720    1332   21050    1332   21960
GR  1330   22110    1330   22200  1331.3   22400    1330   22550    1330   22750
GR  1324   22770    1324   22790    1328   22800    1330   22845    1332   22875
GR  1332   23060    1333   23245    1333   23450    1334   23850    1336   24040
GR  1338   24310    1338   24610    1340   24915    1342   25050    1344   25120
GR  1346   25270    1348   25480    1348   26190    1350   26250
ET           4.1     9.1            21800                           19955   20382
X115.144      55   19955   20382     900     890    1056      .9
X3    10
GR  1360   16750    1358   16880    1356   17180    1354   17540    1352   17750
GR  1350   17905    1350   18105    1348   18410    1346   18630    1344   18950
GR  1342   19115    1342   19250    1340   19555    1338   19660    1338   19720
GR  1334   19724    1334   19830    1334   19832    1332   19850    1336   19865
GR  1336   19900    1336   19955    1330   19975    1329   20000    1330   20070
GR  1332   20080    1334   20315    1334   20350    1332   20380    1336   20382
GR  1338   21510    1338   21800    1336   22035    1336   22315    1334   22350
GR  1334   22370    1336   22390    1336   22470    1334   22515    1332   22530
GR  1332   22570    1334   22625    1336   22640    1336   22700    1334   22810
GR  1332   22820    1332   22840    1334   22880    1336   22960    1338   23815
GR  1340   23960    1342   24145    1344   24305    1350   24455    1360   24660
ET           4.1     9.1            21750                           19770   20100
X115.333      53   19770   20100     900     890    1000
X3    10
GR  1358   17825    1356   18010    1354   18370    1352   18530    1350   18570
GR  1348   18605    1348   18620    1350   18630    1350   18725    1348   18900
GR  1346   18930    1346   19010    1348   19040    1348   19060    1344   19070
GR  1344   19080    1346   19090    1346   19305    1344   19335    1340   19350
GR  1340   19770    1338   19790    1336   19880    1336   19980    1335   20000
GR  1336   20010    1338   20090    1342   20100    1342   21750    1338   21765
GR  1338   21790    1340   21810    1340   22045    1340   22046    1338   22060
GR  1338   22080    1340   22120    1340   22150    1336   22170    1336   22180
GR  1340   22190    1342   22270    1342   22300    1340   22540    1340   22590
GR  1342   22760    1342   23065    1344   23360    1345   23420    1348   23530
GR  1348   23690    1350   23710    1360   23930
ET           4.1     9.1            20960                           19950   20320
X115.519      48   19950   20320     940     960     980
X3    10
X4     1    1345   20320
GR  1360   18730    1358   18760    1358   18965    1356   19050    1354   19115
GR  1354   19390    1352   19460    1352   19515    1350   19540    1350   19680
GR  1348   19950    1342   19970    1340   19995    1340   20005    1342   20015
GR  1342   20130    1340   20215    1340   20225    1344   20250  1344.5   20338
GR  1346   20595    1350   20960    1350   21080    1348   21965    1344   21985
GR  1344   22005    1346   22020    1348   22080    1346   22110    1346   22135
GR  1348   22145    1346   22275    1346   22530    1342   22545    1344   22560
GR  1346   22630    1346   22855    1344   22860    1344   22875    1346   22895
GR  1346   22925    1342   22930    1346   22945    1348   23615    1348   23765
GR  1350   23950    1352   24140    1360   24300
ET           4.1     9.1            20900                           19870   20085
```

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| X115.699 | 37 | 19870 | 20085 | 935 | 920 | 950 | | | |
| GR 1364 | 18850 | 1362 | 18960 | 1360 | 19070 | 1358 | 19220 | 1356 | 19230 |
| GR 1356 | 19260 | 1358 | 19270 | 1358 | 19345 | 1356 | 19490 | 1354 | 19870 |
| GR 1352 | 19880 | 1350 | 19885 | 1348 | 19950 | 1346 | 19980 | 1345 | 20000 |
| GR 1346 | 20030 | 1346 | 20065 | 1348 | 20075 | 1350 | 20085 | 1350 | 20700 |
| GR 1348 | 20760 | 1348 | 20885 | 1354 | 20900 | 1354 | 21715 | 1348 | 21790 |
| GR 1348 | 21880 | 1352 | 21930 | 1352 | 23430 | 1350 | 23435 | 1350 | 23445 |
| GR 1352 | 23450 | 1352 | 23550 | 1356 | 23920 | 1360 | 24120 | 1362 | 24170 |
| GR 1362 | 24470 | 1364 | 24650 | | | | | | |
| QT 2 | 2350 | 2350 | | | | | | | |
| ET | 4.1 | 9.1 | | 2690 | | | | 1985 | 2430 |
| X115.966 | 40 | 1985 | 2430 | 1450 | 1200 | 1410 | | | |
| X4 9 | 1359 | 1900 | 1352 | 2280 | 1354 | 2300 | 1356 | 2325 | 1356 |
| X4 2400 | 1357 | 2430 | 1357.3 | 2530 | 1352 | 2600 | 1354 | 2620 | |
| GR 1364 | 1080 | 1362 | 1180 | 1360 | 1585 | 1360 | 1725 | 1358 | 1985 |
| GR 1356 | 1990 | 1354 | 1995 | 1354 | 2005 | 1356 | 2010 | 1356 | 2040 |
| GR 1355 | 2060 | 1354 | 2150 | 1354 | 2250 | 1356 | 2560 | 1356 | 2670 |
| GR 1358 | 2675 | 1360 | 2690 | 1360 | 3205 | 1358 | 3505 | 1358 | 4225 |
| GR 1356 | 4415 | 1356 | 5380 | 1354 | 5381 | 1354 | 5395 | 1356 | 5405 |
| GR 1356 | 5495 | 1358 | 5610 | 1358 | 5745 | 1360 | 5850 | 1362 | 5925 |
| GR 1362 | 6150 | 1364 | 6270 | 1366 | 6410 | 1368 | 6580 | 1370 | 6615 |
| GR 1372 | 6755 | 1374 | 6795 | 1376 | 6835 | 1376 | 6965 | 1378 | 7010 |
| ET | 4.1 | 9.1 | | 2865 | | | | 1970 | 2350 |
| X116.066 | 48 | 1970 | 2350 | 565 | 480 | 570 | | | |
| X4 3 | 1360.4 | 1970 | 1356.2 | 2560 | 1358 | 2580 | | | |
| GR 1368 | 1090 | 1368 | 1150 | 1366 | 1305 | 1364 | 1560 | 1362 | 1650 |
| GR 1362 | 1780 | 1360 | 1820 | 1360 | 1980 | 1356 | 2000 | 1358 | 2060 |
| GR 1360 | 2150 | 1360 | 2210 | 1358 | 2240 | 1358 | 2280 | 1360 | 2350 |
| GR 1360 | 2435 | 1358 | 2465 | 1358 | 2690 | 1360 | 2710 | 1362 | 2760 |
| GR 1364 | 2865 | 1364 | 2915 | 1362 | 3310 | 1360 | 3545 | 1358 | 3550 |
| GR 1358 | 3730 | 1360 | 3745 | 1360 | 4670 | 1358 | 4920 | 1358 | 5145 |
| GR 1356 | 5355 | 1354 | 5356 | 1354 | 5365 | 1356 | 5368 | 1358 | 5375 |
| GR 1358 | 5570 | 1360 | 5720 | 1362 | 5800 | 1364 | 5915 | 1364 | 6005 |
| GR 1366 | 6110 | 1368 | 6380 | 1368 | 6570 | 1370 | 6680 | 1372 | 6780 |
| GR 1374 | 6830 | 1374 | 6870 | 1376 | 6920 | | | | |
| ET | 4.1 | 9.1 | | 3030 | | | | 1950 | 2200 |
| X116.167 | 22 | 1950 | 2130 | 530 | 530 | 530 | | | |
| X4 2 | 1359.7 | 2030 | 1362 | 2130 | | | | | |
| GR 1370 | 1020 | 1370 | 1095 | 1368 | 1245 | 1366 | 1255 | 1366 | 1270 |
| GR 1368 | 1290 | 1368 | 1420 | 1366 | 1665 | 1364.8 | 1950 | 1360 | 1955 |
| GR 1360 | 2040 | 1362 | 2110 | 1362 | 2170 | 1362 | 2250 | 1362 | 2370 |
| GR 1360 | 2550 | 1360 | 2590 | 1358 | 2600 | 1360 | 2610 | 1362 | 2620 |
| GR 1364 | 2630 | 1365 | 2650 | | | | | | |
| ET | 4.1 | 9.1 | | 2645 | | | | 1925 | 2030 |
| X116.248 | 40 | 1925 | 2030 | 450 | 340 | 430 | | | |
| GR 1372 | 1090 | 1370 | 1100 | 1370 | 1115 | 1370 | 1120 | 1370 | 1130 |
| GR 1370 | 1365 | 1368 | 1590 | 1366 | 1660 | 1367 | 1925 | 1362 | 1940 |
| GR 1362 | 1985 | 1361 | 2000 | 1362 | 2013 | 1364 | 2030 | 1364 | 2230 |
| GR 1362 | 2240 | 1362 | 2250 | 1364 | 2300 | 1364 | 2630 | 1366 | 2645 |
| GR 1366 | 2943 | 1364 | 2950 | 1364 | 3045 | 1366 | 3055 | 1366 | 3690 |
| GR 1364 | 3755 | 1364 | 3770 | 1365 | 4105 | 1364 | 4218 | 1362 | 4765 |
| GR 1360 | 5045 | 1358 | 5055 | 1356.1 | 5095 | 1358 | 5105 | 1360 | 5115 |
| GR 1362 | 5328 | 1364 | 5485 | 1366 | 5755 | 1368 | 5810 | 1370 | 6160 |
| ET | 4.1 | 9.1 | | 2665 | | | | 1915 | 2240 |
| X116.328 | 45 | 1915 | 2240 | 440 | 250 | 410 | | | |
| X4 1 | 1367.4 | 2240 | | | | | | | |
| GR 1374 | 980 | 1372 | 990 | 1372 | 1010 | 1372 | 1015 | 1372 | 1020 |

```
GR  1372    1250    1370    1520    1368    1790    1367    1835    1366    1915
GR  1364    1940  1362.8    2000    1364    2050    1366    2150    1366    2335
GR  1364    2339    1364    2370    1366    2397    1366    2403    1368    2665
GR  1366    2680    1366    2715    1368    2735    1368    3345    1366    3530
GR  1366    3730    1367    3890    1366    4145    1366    4310    1364    4355
GR  1364    4505    1362    4760    1362    4885    1360    4910    1358    4920
GR1357.5    4925    1358    4937    1360    4947    1362    5050    1362    5278
GR  1364    5335    1366    5455    1368    5645    1370    5695    1370    5780
ET           4.1     9.1            2460                            1885    2055
X116.411      46    1885    2055     510     350     450
X3    10
X4     1  1369.2    1885
GR  1378     610    1376     760    1376     761    1376     762    1376     763
GR  1374    1090    1372    1370    1370    1500    1370    1650    1368    1665
GR  1368    1920    1366    1948  1364.3    2000    1366    2048    1370    2055
GR  1370    2210    1368    2223    1368    2240    1370    2260    1370    2390
GR  1368    2425    1368    2450    1370    2460    1370    2980    1368    3125
GR  1368    3390    1369    3520    1369    3580    1369    3645    1368    3830
GR  1366    4025    1366    4200    1364    4520    1362    4545    1360    4545
GR1359.5    4555    1360    4561    1362    4565    1362    4588    1360    4594
GR  1360    4600    1362    4601    1364    4758    1366    4885    1368    4995
GR  1370    5185
*
*     REVISED THE ELEVATION OF STATION 2000 FROM 1365 TO 1365.8 (TMM 3-94)
*        "     "     "     "    "     3560  "   1970 "  1370      "
*        "     "     "     "    "     3960  "   1398 "  1368      "
*
ET                  9.1                                             1835    2035
X116.504      33    1835    2035     460     300     490
X3    10
GR  1380     680    1378     695    1378     712    1378     720    1378     743
GR  1376     980    1374    1180    1374    1315    1372    1625    1370    1630
GR  1370    1665    1372    1670    1372    1770    1370    1780    1370    1835
GR  1368    1915    1366    1980  1365.8    2000    1366    2018    1372    2035
GR  1372    2110    1370    2140    1370    2160    1372    2195    1372    2390
GR1370.7    2880  1371.8    3295    1370    3560    1368    3960    1366    4225
GR  1364    4310    1364    4340    1390    4340
ET                  9.1                                             1910    2110
X116.608      30    1910    2110     485     450     530
X3    10
X4     2  1376.5    1910  1374.2    2110
GR  1382     920    1380    1000    1380    1050    1380    1150    1380    1151
GR  1378    1280    1376    1520    1376    1920    1374    1925    1372    1930
GR  1370    1935    1370    1980    1368    1995  1367.8    2000    1368    2015
GR  1370    2020    1370    2080    1372    2090    1372    2200    1370    2210
GR  1369    2220    1370    2235    1372    2270    1374    2310    1374    2375
GR  1372    2385    1372    2395    1374    2400    1376    2410    1376    2550
ET           4.1     9.1            2300                            1950    2110
X116.732      18    1950    2115     640     420     685
X3    10
X4     4    1375    2000    1380    1950    1376    2040    1379    2300
GR  1382    1650    1376    1960    1376    2110    1378    2115    1378    2370
GR  1376    2470    1376    2480    1378    2490    1378    2550    1376    2570
GR  1376    2620    1378    2630    1378    2850    1376    2880    1375    2885
GR  1376    2890    1378    2910    1380    2920
ET                  9.1                                             1935    2045
X116.818      14    1935    2045     430     750     455
```

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X4      1  1381.2     2240
GR   1390     1145     1388     1340     1386     1490     1384     1640     1382     1935
GR   1376     1980   1375.7     2000     1376     2030   1380.4     2045     1380     2097
GR   1378     2105     1378     2190     1380     2210     1382     2350
EJ
T1       NEW RIVER ABOVE SKUNK CREEK, PHOENIX, ARIZ., APRIL 1981
T2       100 YEAR FLOOD
T3       FLOODWAY
J1              3                                                        1162.8
J2     15                                                                          15


ER
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# STANTEC'S UPDATED EXISTING CONDITION MODEL

```
*       MODEL REFLECTS NEW TOPOGRAPHIC DATA ALONG ORIGINAL FEMA
*       CROSS SECTIONS ALIGMENTS.
*       Number of Cross Sections Between Bell Road and Union Hills are
*       consistant with Original FEMA Model
*       N-VALUE AND EXPANSION AND CONTRACTION
*       COEFFICIENTS REMAIN THE SAME AS ORIGINAL FEMA MODEL
*
*       BRIDGE DATA FOR BELL ROAD BRIDGE REVISED AND UPDATED OVER ORIGINAL
*       FEMA MODEL
*       UNION HILLS ROAD BRIDGE MODELED
*       ADDITIONAL CROSS SECTIONS ADDED TO MODEL
*       MODEL THUNDERBIRD ROAD BRIDGE
*       START MODEL AT THUNDERBIRD ROAD BRIDGE
*
T1      NEW RIVER ABOVE THUNDERBIRD ROAD                        December 1999
T2      MIDDLE NEW RIVER WATERCOURSE MASTER PLAN        STANTEC #28900058
T3      FEMA/COE MODEL UPDATE                           FILE RevNEWBR.IH2
T3      START NEW RIVER Q OF 12000 AT X-SEC 8.807
*
J1            2                                                  1150.5
J2                   -1                                                        15
J3    38      43       1      21      55      26      56      22      54       4
J3     8
*
QT     1   41000
NC 0.045   0.045   0.035      .3      .5
*
X1 7.728      20    9900   10222
X3    10                                                  1157.5  1157.5
GR1160.0 9887.00 1159.68 9895.29 1157.98 9899.88    1154    9900 1146.00 9931.12
GR1136.5 9958.45  1135.4 9962.95 1135.9110073.21 1136.4910130.56 1136.5010159.07
GR1140.510176.73  1144.210189.17    1154   10222 1158.1410228.35 1159.0210276.12
GR1158.310320.83  1157.510337.19  1155.910406.88 1156.6310412.97 1155.9910448.47
*
SB  1.05     1.6    2.68       0     202       9 4805.23       2  1135.3  1135.4
*
X1 7.751      16 9919.3510239.55     115     110  121.70
X2                    1  1155.7 1159.26
X3    10                                                 1161.15 1159.26
BT   -15 9892.86 1161.15         9912.86 1163.35            9925 1163.421155.391
BT       9944.75 1163.52 1155.49 9981.55 1163.65 1155.6210021.55 1163.73  1155.7
BT      10061.55 1163.74 1155.7110101.55 1163.67 1155.6410141.55 1163.53 1155.50
BT      10181.55 1163.32 1155.2910221.551163.041 1155.01   10225 1163.01 1154.98
BT      10241.55 1162.87        10242.86 1162.86        10372.86 1159.26
GR1161.1 9892.86  1160.0 9895.00 1159.53 9915.55 1157.94 9919.35 1155.49 9944.75
GR1140.7 9965.55  1135.3 9978.33  1135.810034.63 1136.0310077.55 1136.9910176.70
GR1151.410220.40 1154.98   10225  1158.910239.55  1159.510278.43 1160.0010320.22
GR1159.210372.86
*
X1 7.800      22 9857.1210243.64     230     355  259.16
GR1153.5 9736.00 1153.41 9764.38 1157.33 9780.03 1156.96 9795.93 1155.45 9805.92
GR1158.1 9832.22 1158.52 9857.12 1150.65 9893.02 1147.75 9908.87 1142.94 9931.81
GR1142.1 9943.11 1138.01 9965.96 1135.77 9974.38 1135.65 9977.75 1136.1210030.71
GR1136.910090.50 1137.5710128.41 1142.8910160.65 1157.0710243.64 1156.7810269.64
GR1157.210311.28 1157.0910330.96
*
NC                            .1      .3
```

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*
X1 7.920      23 9855.3710258.56     615     655  631.37
GR1160.4 9836.00 1160.45 9855.37 1156.67 9868.90 1155.58 9880.63 1148.19 9919.94
GR1141.6 9962.13 1139.05 9980.61 1135.74 9991.30 1136.1410011.40 1137.0410036.41
GR1136.710060.91 1139.3510072.06 1138.6610080.58 1136.5310088.54 1136.6310104.58
GR1140.410137.77 1141.4010148.13 1150.4810206.92 1158.7510253.04 1160.2910258.56
GR1159.610273.87 1160.4310308.49 1160.0210319.77
*
X1 8.006      22 9848.5210252.11     445     505  463.28
GR1158.0 9813.00 1158.06 9822.82 1159.57 9836.05 1159.66 9848.52 1157.00 9864.41
GR1156.8 9872.33 1151.07 9899.09 1140.44 9978.90 1136.11 9995.88 1136.6510014.86
GR1138.110043.49 1137.6810056.74 1139.3410072.31 1139.0810086.47 1137.1010091.99
GR1137.810110.36 1142.2310145.00 1158.4510236.11 1161.5110252.11 1160.3710268.56
GR1161.310301.55 1160.8410324.12
*
X1 8.052      22  9848.510251.73     225     255  236.58
GR1158.5 9812.00 1160.52 9848.50 1158.04 9858.22 1157.59 9871.97 1156.11 9879.48
GR1145.9 9941.09 1140.15 9975.40 1136.42 9990.32 1137.4410013.47 1139.2010041.37
GR1138.310061.51 1140.1710069.50 1139.8610082.68 1137.0210092.14 1138.0610113.77
GR1143.310148.19 1148.1610177.35 1157.3610230.27 1161.7210251.73 1161.2610264.08
GR1162.310301.26 1161.4010320.82
*
X1 8.120      24 9882.4910260.19     365     370  370.41
GR1162.2 9841.00 1162.60 9858.45 1159.87 9870.72 1159.32 9882.49 1157.08 9893.84
GR1149.6 9934.41 1140.42 9990.41 1138.00 9998.97 1138.2510012.37 1137.9710036.29
GR1141.010050.72 1139.8710069.18 1141.3710081.41 1141.3610100.66 1138.4710109.14
GR1138.910131.16 1141.9010138.76 1146.6810172.82 1150.5510195.97 1163.5010260.19
GR1162.910278.49 1162.9510317.31 1162.2610354.77 1162.0210372.33
*
X1 8.220      25 9863.7810241.56     485     565  512.82
GR1163.2 9844.00 1161.40 9853.02 1160.58 9863.78 1152.10 9903.79 1150.30 9912.99
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GR1234.810629.07 1238.1410669.31 1238.2010700.17
*
X111.481      49 9842.0710210.27     510     555  523.22
X3    10
GR1240.0 9213.00 1231.30 9259.07 1230.96 9289.22 1230.07 9294.24 1228.64 9312.12
GR1228.4 9351.41 1229.22 9380.55 1234.43 9396.73 1229.72 9405.88 1230.75 9441.10
GR1233.7 9450.35 1229.09 9459.92 1229.38 9484.46 1228.69 9512.58 1232.91 9527.94
GR1233.9 9533.33 1233.72 9537.96 1228.96 9551.67 1229.99 9565.36 1230.13 9626.91
GR1231.1 9699.79 1231.84 9769.56 1232.16 9826.52 1236.77 9842.07 1234.57 9849.46
GR1225.7 9874.37 1224.81 9910.11 1227.89 9942.30 1226.04 9982.82 1225.4510006.70
GR1226.510013.65 1227.8110060.55 1228.6610103.46 1234.1010123.39 1233.9710146.77
GR1234.010175.50 1237.2310194.78 1240.1910210.27 1240.7810240.77 1240.7010257.84
GR1241.510321.22 1242.0010371.31 1242.0410427.88 1242.1110499.82 1242.3610600.96
GR1241.810713.02 1241.9810765.73 1241.2810778.90 1241.6410811.84
*
* Left Overbank is affected by expansion(11.566)
*
X111.566      64 9523.1810058.35     565     545  468.92
GR1240.0 9217.00 1241.94 9243.61 1243.12 9263.08 1235.34 9307.74 1235.06 9328.39
GR1235.4 9341.54 1233.44 9355.88 1240.89 9368.38 1241.33 9379.99 1233.84 9408.25
GR1233.6 9428.19 1236.00 9441.21 1235.92 9455.53 1235.04 9467.11 1234.83 9495.42
GR1234.3 9509.06 1234.96 9523.18 1234.44 9543.01 1232.21 9556.13 1231.97 9565.05
GR1229.3 9590.35 1229.37 9612.35 1228.55 9673.74 1229.76 9727.08 1228.48 9769.86
GR1228.6 9787.53 1229.71 9842.83 1229.49 9858.42 1230.00 9883.62 1229.58 9913.00
GR1229.0 9932.09 1229.69 9962.18 1228.59 9987.62 1228.3210023.35 1234.1310037.42
GR1243.310058.35 1243.5610068.09 1243.5710096.08 1243.7510156.89 1243.2610195.96
GR1242.710215.88 1242.0410254.08 1243.2910265.37 1242.9810281.07 1242.8510286.74
GR1242.910380.23 1243.8510480.60 1244.3810567.95 1244.2510701.36 1244.4310785.01
GR1244.510879.83 1244.4110910.88 1245.2010926.94 1243.1410935.49 1243.0410944.13
GR1243.910964.63 1243.4511006.16 1243.4511021.48 1242.4311034.46 1244.5511055.81
GR1244.111100.69 1243.8111144.02 1241.9511171.29 1241.9111174.93
*
* LEFT OVERBANK WAS SET DUE TO EXPANSION(11.664)
*
X111.664      49 9730.4310052.37     535     515  513.83
GR1242.1 9320.00 1243.88 9340.74 1245.57 9371.82 1242.97 9388.89 1239.19 9409.19
GR1236.8 9488.20 1243.40 9510.42 1241.47 9516.13 1237.15 9531.47 1235.87 9573.54
GR1236.2 9662.56 1232.61 9717.06 1232.30 9730.43 1231.61 9787.16 1231.67 9815.35
GR1232.0 9824.67 1230.40 9884.86 1230.85 9920.74 1231.01 9952.14 1228.99 9964.99
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GR1228.810014.00 1244.8610052.37 1245.5210098.66 1245.3810205.55 1244.6310278.51
GR1244.710364.72 1245.0010404.73 1243.9810464.97 1244.3610536.07 1244.4710559.65
GR1245.810585.61 1245.2610594.36 1245.2310650.67 1246.1210723.36 1246.2410751.60
GR1246.110826.22 1246.8110911.07 1246.8510942.04 1246.2711022.64 1246.4011133.10
GR1246.611161.18 1246.9911173.53 1245.0811183.38 1246.2711206.23 1246.0211270.25
GR1244.611284.98 1246.4411298.78 1246.5611315.55 1246.0111344.37
*
X111.759      65 9858.3710130.39     485     470  501.24
GR1246.0 9380.00 1247.47 9411.85 1237.12 9448.72 1235.12 9505.51 1234.93 9552.05
GR1235.0 9596.10 1234.63 9635.78 1234.75 9656.13 1235.20 9677.71 1244.58 9698.81
GR1242.9 9710.55 1242.88 9727.37 1236.32 9748.99 1244.09 9771.52 1244.46 9791.44
GR1244.4 9807.81 1240.79 9819.26 1242.57 9823.36 1239.21 9829.85 1242.12 9839.37
GR1238.8 9849.88 1241.08 9858.37 1234.17 9869.84 1234.21 9928.41 1234.19 9943.92
GR1234.7 9960.27 1235.17 9990.31 1232.02 9997.43 1232.2510042.04 1234.2710059.13
GR1234.210095.05 1233.9710100.53 1246.5510130.39 1246.8510142.30 1247.0610225.77
GR1246.310304.48 1245.6610383.19 1245.6610475.98 1245.3910562.80 1245.4110575.61
GR1244.810625.75 1243.5710657.35 1243.5510662.34 1243.9010768.32 1244.3810868.46
GR1244.610915.38 1247.8010938.13 1248.0211050.27 1248.1411085.38 1248.0711275.36
GR1248.011369.50 1248.4511404.60 1249.2111412.55 1249.5211417.07 1247.8611430.62
GR1248.611447.94 1248.7411479.92 1247.9411515.93 1247.1211526.98 1247.4811541.06
GR1245.011546.12 1244.5611556.70 1244.7811576.66 1244.5411597.61 1246.5611620.05
*
X111.864      69 9832.9710118.56     605     665  615.28
GR1242.0 9457.00 1241.63 9513.08 1241.74 9602.35 1239.18 9617.01 1239.11 9623.30
GR1239.7 9660.06 1241.11 9692.74 1241.15 9749.87 1241.34 9791.41 1241.22 9832.97
GR1240.6 9856.60 1240.43 9887.29 1235.84 9896.12 1235.57 9921.44 1236.26 9925.06
GR1237.0 9951.56 1236.65 9960.02 1237.0510035.33 1236.9710064.50 1236.2610092.91
GR1240.010106.90 1240.4510118.56 1237.5110130.48 1248.0910155.03 1250.3910162.06
GR1250.810181.61 1250.6310186.50 1251.7910208.62 1253.3010218.70 1242.9810241.04
GR1247.110267.88 1246.3710306.91 1246.9110315.52 1246.2010361.53 1246.1810381.98
GR1246.910411.28 1247.5310492.53 1247.4510507.94 1247.4010526.95 1248.2510540.69
GR1248.010646.53 1248.1410746.82 1247.8710807.84 1247.8010845.75 1248.0910951.51
GR1248.210972.51 1248.3811053.19 1248.1711108.97 1248.2611132.09 1248.2711266.94
GR1247.811275.43 1251.0111292.83 1250.3011308.40 1250.1711399.39 1250.2211448.86
GR1250.611553.79 1250.3511642.08 1250.3611679.66 1250.7611783.75 1250.9011791.44
GR1251.511795.97 1249.7911809.30 1251.1911825.54 1251.7011859.76 1250.9711891.49
GR1249.911905.10 1250.6511917.77 1247.5411923.48 1247.1511941.26
*
NC  0.06    0.06   0.035
*
X111.949      79 9673.7510428.00     565     380  452.25
X3    10
GR1252.0 9320.00 1252.72 9340.38 1252.27 9354.07 1251.06 9379.51 1251.34 9388.34
GR1250.0 9426.34 1249.50 9443.29 1244.15 9458.10 1243.17 9542.24 1243.06 9563.90
GR1244.3 9584.85 1247.72 9650.51 1248.70 9673.75 1247.84 9705.69 1247.26 9738.43
GR1245.3 9753.82 1246.42 9765.51 1245.82 9772.96 1241.28 9787.33 1242.45 9805.15
GR1242.0 9836.25 1244.24 9878.93 1245.13 9893.21 1239.71 9915.65 1239.00 9974.92
GR1239.110050.62 1239.1710079.84 1238.9010105.39 1241.7710120.23 1241.0410136.92
GR1239.510188.32 1242.6510231.21 1243.2010256.85 1244.3910323.37 1244.8110325.20
GR1244.710341.45 1242.0010362.64 1241.8110383.08 1247.1610403.18 1248.8810412.63
GR1248.810428.00 1247.9410442.64 1247.9310479.36 1248.7510497.97 1248.8110553.94
GR1247.910629.27 1249.1410677.54 1250.2310711.85 1249.7810759.77 1249.6410859.51
GR1249.510896.76 1249.6510958.52 1249.5911017.72 1249.8611090.31 1249.8411248.77
GR1250.011341.52 1249.9111373.85 1250.1711462.35 1250.1611480.12 1249.3711487.38
GR1252.311500.60 1252.5511507.16 1251.7111515.49 1251.9111611.62 1251.7311753.21
GR1252.011833.41 1252.1211947.81 1252.1311997.03 1252.9112004.41 1251.7612006.99
GR1253.412010.55 1252.4112024.24 1252.8712041.68 1253.1112070.93 1252.1212110.93
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GR1252.112115.68 1254.2312129.85 1251.7812148.74 1251.9512170.55
*
* CODED OUT TRENCH ADJACENT TO FLETCHER HEIGHTS
*
X112.034      72 9568.4110210.39     485     615  539.66
X3    10
GR1254.0 9213.00 1253.38 9220.00 1254.54 9235.21 1253.68 9286.76 1252.80 9376.99
GR1252.4 9501.88 1253.86 9557.44 1253.64 9568.41 1253.36 9608.98 1252.99 9631.85
GR1251.9 9683.23 1250.55 9719.47 1248.73 9732.10 1247.48 9744.74 1246.55 9778.46
GR1245.1 9814.00 1242.62 9844.50 1241.73 9952.09 1241.47 9997.91 1242.2710060.49
GR1242.610072.37 1246.2810086.14  1244.5 10172.6 1250.9010186.14 1250.9610210.39
GR1252.210222.61 1252.6610240.53 1255.5210269.53 1255.7010297.52 1255.5510345.02
GR1255.710414.46 1256.4110507.80 1254.8110543.63 1255.1010625.84 1255.0710669.22
GR1255.410717.05 1254.9910828.77 1254.6910929.62 1253.8010939.84 1253.3810970.08
GR1255.110999.45 1255.1811091.42 1254.6911104.05 1253.3011111.71 1252.5211126.93
GR1252.311153.59 1253.5211222.48 1249.4311237.43 1250.0011285.65 1250.2911292.32
GR1250.411359.58 1250.6111396.92 1250.6111497.53 1251.0011531.69 1256.3311572.18
GR1254.011589.75 1254.3411658.39 1254.3111710.68 1254.8011761.30 1254.2911791.91
GR1256.711802.96 1256.4211878.86 1256.4711919.14 1256.8011970.78 1256.7412042.08
GR1256.912129.06 1256.7912181.35 1257.2812296.42 1257.2012330.15 1256.9912357.20
GR1257.912385.72 1257.8212389.41
*
* CROSS SECTION ADJUSTED PER FLETCHER HEIGTHS GRADING PLAN
*
X112.125      81 9685.3410437.79     535     365  461.89
X3    10
GR1252.0 9049.00 1255.00 9068.23 1254.82 9096.82 1245.20 9127.01 1245.27 9143.84
GR1255.0 9178.29 1255.39 9201.81 1255.24 9247.47 1255.67 9370.00 1256.01 9401.46
GR1256.0 9511.87 1256.65 9575.08 1258.35 9587.02 1256.14 9608.23 1255.76 9625.14
GR1255.5 9653.92 1255.96 9685.34 1254.31 9743.99 1253.38 9748.10 1250.29 9767.48
GR1249.9 9807.09 1249.75 9822.20 1247.19 9862.49 1246.14 9874.00 1245.84 9893.23
GR1245.2 9905.00 1244.96 9963.33 1245.0510011.22 1244.6510087.24 1245.4810126.05
GR1245.610188.42 1245.0710217.08  1246.610300.00  1254.410337.64  1256.210437.79
GR1255.710453.41 1255.3010497.61  1255.310528.77  1257.210540.16  1256.910657.73
GR1256.810731.98 1257.1110829.79  1256.910913.73  1257.010983.60  1257.011046.81
GR1256.711134.07 1256.5011191.23  1256.611236.54  1255.811305.08  1255.911320.86
GR1255.211377.53 1254.1011405.52  1254.011455.47  1254.611505.70  1253.711586.69
GR1253.411602.34 1257.0011623.01  1257.911651.29  1258.311676.10  1255.011687.04
GR1253.611701.25 1253.1011718.54  1260.611732.36  1261.511739.55  1257.311763.57
GR1258.411774.93 1262.9011788.09  1259.811812.51  1253.911828.47  1254.511884.73
GR1255.911923.03 1256.3011970.87  1256.712015.67  1257.312040.30  1252.812071.27
GR1253.012117.23 1257.5012147.77  1256.912178.36  1259.012188.58  1258.712252.96
GR1259.012350.20
*
* CROSS SECTION ADJUSTED PER FLETCHER HEIGTHS GRADING PLAN
*
X112.194      71 9831.3710282.89     370     330  337.73
X3    10
GR1259.5 8672.00 1259.01 8712.33 1258.82 8737.02 1258.43 8837.03 1258.37 8898.06
GR1258.1 8937.03 1258.12 9037.00 1257.93 9137.01 1257.33 9273.14 1257.03 9374.95
GR1256.6 9433.06 1256.69 9462.14 1257.87 9471.89 1257.34 9522.08 1257.53 9564.57
GR1258.5 9579.29 1258.45 9627.53 1259.53 9755.43 1259.62 9831.37 1253.17 9850.32
GR1252.2 9877.34 1249.04 9889.54 1250.11 9930.45 1250.58 9934.41 1250.13 9961.21
GR1248.0 9968.74 1248.3910040.44 1249.9210059.15 1249.6510108.03 1248.4510126.99
GR1249.8 10268.0 1257.6010282.89  1258.010357.49  1257.910377.00  1256.410468.20
GR1256.410548.46 1256.6610625.97  1256.310706.62  1256.310779.02  1255.910950.21
GR1256.010957.31 1256.0210996.42  1255.911051.10  1256.311135.52  1256.511207.14
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GR1256.411266.14 1256.6911320.63  1256.611348.71  1257.311367.39  1256.111383.45
GR1256.311435.96 1257.2811493.32  1257.211521.15  1256.711557.11  1257.311620.37
GR1258.311654.50 1257.9911691.53  1257.711705.13  1257.911780.58  1258.411867.52
GR1259.112078.16 1259.6012191.99  1258.912211.69  1260.712219.00  1260.112238.25
GR1260.812248.25 1261.0112259.89  1255.512283.23  1255.012320.96  1261.412350.30
GR1259.912385.23
*
QT     1    9800
*
X112.313      79 9877.1410260.61     750     585  685.08
X3    10
GR1262.2 8911.00 1262.73 8923.98 1261.52 9012.36 1261.02 9114.22 1260.76 9215.07
GR1260.1 9317.71 1259.46 9418.58 1258.59 9521.44 1258.43 9656.01 1258.52 9698.04
GR1258.2 9773.36 1258.60 9818.33 1262.47 9843.21 1262.03 9863.96 1260.51 9877.14
GR1257.6 9914.61 1256.72 9926.12 1255.59 9959.40 1250.88 9979.52 1250.4710015.02
GR1252.710027.71 1253.8810085.83 1254.5810136.24 1254.3510145.32 1250.9110172.03
GR1250.710209.29 1258.6110237.98 1259.8410260.61 1259.4610325.64 1259.1210358.25
GR1258.410383.80 1258.2410407.94 1259.2810424.35 1258.9510555.79 1258.6410695.97
GR1258.710714.29 1257.3310732.29 1257.2310762.67 1259.2710789.42 1259.0910866.17
GR1259.210886.46 1253.0310920.68 1255.9010949.10 1256.4010979.09 1256.1511040.79
GR1256.311045.95 1256.4911097.10 1258.1711164.64 1258.2311221.00 1258.5011277.52
GR1258.611305.70 1259.4011348.84 1259.1311422.49 1259.9911500.27 1257.8711510.39
GR1257.311529.67 1257.3011550.15 1257.3011582.66 1257.7611627.75 1258.0911639.64
GR1258.311753.95 1259.5011771.62 1258.4911786.29 1258.4111816.42 1259.0611918.18
GR1259.311973.14 1259.3212019.77 1259.5812086.75 1259.6412121.34 1259.5212222.93
GR1260.012313.37 1259.6912346.84 1259.5012353.96 1260.7912361.90 1260.4912380.30
GR1261.312392.93 1261.0312403.57 1255.7012426.17 1255.5512455.15
*
X112.420      85 9768.6010079.26     600     665  578.07
X3    10
GR1262.8 8970.00 1262.84 8995.74 1263.05 9031.93 1262.68 9063.82 1262.62 9138.82
GR1262.3 9186.80 1261.52 9249.06 1262.21 9327.82 1262.01 9372.12 1261.12 9408.46
GR1259.2 9418.10 1261.28 9432.27 1261.31 9461.13 1259.29 9471.85 1261.27 9503.62
GR1260.7 9537.40 1261.31 9588.38 1261.24 9629.55 1260.94 9686.71 1261.80 9741.61
GR1262.3 9768.60 1260.52 9787.66 1259.54 9809.52 1259.44 9833.82 1259.91 9864.46
GR1259.6 9879.23 1256.26 9892.06 1255.77 9936.50 1255.38 9965.68 1254.66 9986.22
GR1254.510057.78 1263.5410079.26 1258.7910090.34 1258.2510116.23 1263.9210131.13
GR1255.810148.99 1256.0410176.35 1256.1510195.53 1255.3010247.56 1258.0210261.05
GR1258.810270.00 1264.0410294.39 1262.2810315.54 1261.7610330.07 1261.4210388.05
GR1261.410468.87 1259.9610507.52 1260.0510560.42 1260.3910630.82 1260.3710752.60
GR1260.510875.12 1260.7610965.90 1260.7511105.43 1261.2111179.53 1261.6511240.84
GR1261.711255.41 1262.7211276.88 1262.7311329.43 1262.5311367.68 1260.9711396.98
GR1261.011429.38 1262.3711459.64 1262.7311532.97 1262.5511582.61 1262.3311603.00
GR1259.911613.43 1259.1111633.66 1259.1411682.80 1260.0611714.44 1261.7311750.89
GR1261.911804.41 1262.3611853.81 1262.1211888.68 1262.7911910.74 1262.2011996.14
GR1262.312195.66 1262.4412281.63 1262.4312335.41 1262.5812388.49 1262.5712455.76
GR1262.612481.27 1263.4912489.77 1263.0112519.87 1258.2112542.11 1258.0512555.45
*
* CODED OUT LOW AREA BETWEEN STA'S 9170 TO 9196
*
X112.511      97 9871.1610111.39     455     435  467.59
X3    10
GR1265.3 8690.00 1265.72 8722.98 1265.05 8800.78 1266.47 8877.93 1266.49 8890.38
GR1266.0 8981.86 1265.46 9039.65 1265.57 9069.52 1266.11 9085.08 1268.85 9115.14
GR1264.3 9130.07 1266.04 9156.70 1265.36 9213.05  1265.1 9233.07  1265.0 9269.19
GR1265.1 9306.39 1264.21 9384.01 1264.06 9435.15  1263.6 9495.38  1263.4 9500.47
GR1265.1 9523.53 1264.00 9531.83 1263.64 9577.67  1263.7 9644.25  1263.4 9672.29
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GR1262.5 9730.13 1263.21 9797.63 1262.26 9871.16  1261.0 9883.90  1259.3 9894.61
GR1258.8 9930.98 1257.37 9939.14 1257.32 9949.45  1256.110006.29  1258.710014.97
GR1258.410030.43 1258.0510040.23 1255.2610046.60  1254.810065.40  1259.610081.47
GR1262.210098.86 1265.3910111.39 1262.9510128.79  1262.410163.12  1268.310179.88
GR1258.710197.80 1258.5210223.09 1261.2010235.25  1264.310263.05  1264.110285.63
GR1264.610296.97 1264.0310330.85 1263.4810343.82  1260.210356.41  1262.910377.48
GR1262.010380.84 1259.4210389.62 1258.9110422.92  1263.910445.29  1264.010496.80
GR1263.810540.37 1264.3210566.77 1263.6110579.76  1262.910630.51  1263.010681.68
GR1262.810712.46 1261.7910743.72 1261.6510774.49  1263.110794.84  1262.910853.81
GR1262.710983.83 1262.9811088.30 1262.9511205.62  1263.411282.68  1263.011394.61
GR1263.611437.19 1262.9411454.35 1263.1911473.97  1263.811515.22  1263.211550.92
GR1262.611567.64 1263.1311601.02 1262.2211632.58  1262.611658.99  1261.911682.22
GR1261.311690.38 1261.8711719.06 1261.6611747.07  1262.011777.83  1263.011801.49
GR1263.411979.14 1263.7512063.88 1263.4612080.25  1263.912124.63  1264.912138.43
GR1263.912163.30 1264.1012308.79
*
X112.606      83 9830.2110454.31     555     545  582.30
X3    10
GR1271.3 8672.00 1271.16 8718.88 1271.27 8847.88 1270.93 8952.99 1271.04 8973.43
GR1273.2 8993.98 1271.05 9003.15 1269.60 9028.62 1270.71 9035.21 1269.48 9039.08
GR1269.7 9102.66 1269.56 9154.40 1269.28 9201.43 1267.51 9275.63 1266.42 9296.46
GR1267.2 9340.88 1266.98 9427.50 1268.01 9462.39 1267.42 9495.37 1267.18 9517.89
GR1267.3 9533.36 1271.37 9543.58 1266.42 9556.36 1266.78 9620.55 1266.81 9680.55
GR1267.2 9725.43 1267.14 9830.21 1266.35 9892.62 1264.34 9947.62 1258.90 9982.32
GR1258.910018.64 1261.6710049.91 1262.0110071.58 1262.7010087.37 1261.8210107.56
GR1261.710129.45 1261.9810144.64 1262.9610168.55 1264.0310184.12 1264.4810204.94
GR1264.010279.52 1263.6510302.48 1265.8210329.34 1265.9310354.50 1266.9110391.91
GR1266.010408.71 1265.8110425.58 1267.9110454.31 1267.8510484.03 1267.0910546.29
GR1266.010585.93 1265.2810606.50 1265.4910660.51 1265.5710676.56 1264.8510695.53
GR1263.510715.39 1260.4310728.80 1260.1810748.11 1262.9110764.66 1264.7410771.78
GR1265.110790.79 1266.8510824.07 1266.7610845.22 1265.7510861.31 1265.3610881.60
GR1267.910886.82 1268.1710951.49 1267.8611032.15 1267.5111194.39 1267.3811343.08
GR1267.311434.76 1267.4311497.82 1266.0311600.22 1268.0311624.87 1267.3211703.86
GR1264.711721.38 1264.0011755.43 1263.7811870.61 1266.8112034.70 1268.1612173.40
GR1268.312249.99 1268.1812351.98 1267.8612359.19
*
* Additional point added in cross section for left overbank.
*
X112.701      82  9752.010320.98     495     525  505.60
X3    10
GR1270.6 8680.00 1270.78 8721.65 1270.39 8761.54 1269.91 8834.19 1270.27 8937.79
GR1270.4 9012.95 1270.30 9085.93 1270.35 9213.32 1269.98 9339.72 1268.84 9353.89
GR1268.8 9385.93 1270.11 9401.33 1269.69 9469.80 1268.52 9567.00 1268.60 9597.47
GR1270.6 9611.88 1271.47 9662.32 1271.92 9720.70 1271.92 9748.51 1270.00  9752.0
GR1266.7 9764.27 1265.60 9795.73 1265.27 9811.75 1264.93 9881.58 1266.19 9898.15
GR1266.6 9928.36 1260.10 9962.31 1260.6010022.85 1262.0910057.09 1267.5210088.04
GR1267.610120.25 1268.1010154.93 1269.7910320.98 1269.4910401.53 1270.4010441.01
GR1268.110464.67 1268.0010495.45 1268.7410531.98 1269.9010587.16 1270.3110635.89
GR1269.710648.51 1270.0010668.19 1270.5910704.23 1270.3810760.22 1269.9710796.48
GR1268.910831.26 1268.6010837.21 1268.9910865.60 1269.7510900.67 1268.8310939.27
GR1270.210954.64 1270.1010961.95 1268.2610970.14 1261.3711007.32 1270.1511042.66
GR1269.711062.80 1269.6011118.03 1269.6211156.57 1269.8511186.33 1268.1311211.37
GR1268.411240.08 1269.0011255.17 1268.3611353.40 1268.3511380.25 1268.1211465.73
GR1268.211520.29 1267.4011611.90 1267.1111616.72 1267.0611655.52 1267.7711695.16
GR1268.211751.92 1268.0011802.89 1268.3011831.52 1267.6611854.32 1268.2811863.24
GR1267.011949.36 1267.0012049.56 1267.0812081.11 1267.4712149.73 1267.4412210.25
GR1267.612247.63 1268.0012274.40
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X112.801      80 9884.4810602.96     565     535  524.61
X3    10
GR1270.9 8567.00 1272.13 8583.83 1272.02 8614.59 1272.02 8749.74 1272.26 8884.25
GR1272.3 8942.46 1272.53 9094.94 1272.62 9196.57 1272.47 9284.07 1272.72 9430.16
GR1272.6 9499.01 1272.24 9573.63 1269.64 9591.81 1271.67 9618.77 1269.88 9670.91
GR1269.0 9706.70 1269.10 9758.35 1269.69 9795.76 1274.94 9814.71 1275.01 9884.48
GR1266.0 9902.50 1265.26 9934.52 1261.09 9956.10 1260.2310017.58 1268.4010059.56
GR1267.110104.27 1268.1710131.07 1265.3910174.10 1265.9210193.94 1267.7510248.52
GR1268.510317.64 1268.1210351.80 1265.5110405.16 1268.4610445.30 1268.7210453.44
GR1268.310495.79 1266.8110544.02 1272.0710571.00 1272.5710602.96 1272.6010647.74
GR1272.010710.39 1271.8010766.01 1271.5710784.75 1272.1410820.84 1272.5910864.11
GR1272.410928.04 1272.4110937.12 1275.5810952.31 1270.9410963.24 1268.3010977.39
GR1269.211019.29 1272.2311032.48 1272.3711073.10 1272.7811094.16 1271.1811110.08
GR1268.011125.36 1263.7211140.13 1263.0911151.97 1263.0511177.43 1272.7411202.48
GR1273.111254.68 1273.0711286.14 1272.8311298.47 1271.5511315.03 1271.3411373.02
GR1271.411424.11 1271.1711461.44 1271.3711487.97 1271.4111544.60 1271.0511573.06
GR1271.511628.44 1273.3211637.25 1273.1211679.97 1273.2211762.70 1271.9411887.91
GR1271.911975.26 1273.2112022.13 1273.9112094.51 1272.3012123.08 1272.7812156.91
*
X112.896      86 9833.8410320.61     540     495  508.24
X3    10
GR1274.0 8717.00 1274.49 8749.83 1273.96 8793.27 1275.30 8802.24 1275.29 8836.46
GR1275.0 8904.06 1274.68 8974.91 1275.01 9098.69 1275.18 9207.26 1274.81 9315.82
GR1275.1 9424.38 1274.72 9576.84 1274.89 9659.07 1274.71 9701.03 1274.17 9716.95
GR1276.1 9743.96 1276.58 9773.87 1276.83 9803.97 1277.11 9814.81 1278.41 9833.84
GR1269.6 9869.72 1269.25 9888.88 1267.44 9898.12 1263.73 9911.88 1262.67 9944.67
GR1262.510044.90 1269.1510086.23 1264.4110098.15 1265.8810157.92 1265.2610183.04
GR1266.510194.89 1265.2610222.69 1264.8210272.81 1269.5610303.80 1273.0410320.61
GR1273.510382.30 1272.8510468.09 1270.9010496.52 1270.1210518.49 1273.4110536.31
GR1275.210549.69 1274.9310608.72 1274.9210654.62 1274.8810686.10 1273.8710715.69
GR1274.010765.77 1275.2210787.05 1274.3310834.25 1276.1710840.95 1274.0110845.95
GR1274.810865.73 1274.5310878.01 1274.3710925.58 1274.4410942.62 1273.6010963.76
GR1274.010991.33 1274.1311093.87 1274.2711154.56 1274.6211205.78 1269.6411225.48
GR1271.811254.61 1268.4211276.61 1270.6811290.98 1264.5211313.73 1264.4211321.39
GR1269.211341.82 1275.3011369.54 1275.0111385.26 1276.4011406.58 1273.0911420.81
GR1274.811491.04 1276.8211509.31 1276.7511523.80 1275.3911596.48 1275.4711719.14
GR1275.711796.68 1276.4011870.25 1274.7811884.03 1274.9711963.70 1273.3211983.85
GR1272.911998.17 1273.1712017.52 1272.9712029.09 1273.4712075.31 1273.6412209.08
GR1274.012274.40
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*
X112.991      91 9734.0810268.84     595     535  527.02
X3    10
GR1277.8 9109.00 1277.40 9125.68 1277.29 9230.38 1276.96 9285.05 1276.25 9292.43
GR1277.2 9314.01 1277.48 9346.40 1277.27 9363.64 1277.06 9433.70 1277.21 9508.50
GR1277.5 9532.83 1277.61 9600.49 1278.19 9620.61 1278.00 9631.17 1273.76 9650.22
GR1277.6 9675.18 1277.73 9718.08 1277.59 9734.08 1264.19 9760.85 1263.68 9804.76
GR1265.1 9866.56 1265.75 9922.72 1266.02 9928.62 1265.67 9943.89 1262.37 9957.87
GR1262.410166.57 1263.3210192.90 1266.3310211.52 1270.7510235.94 1264.8310250.37
GR1268.610257.02 1274.4110268.84 1274.7310314.62 1275.2010322.13 1274.6510372.12
GR1275.010423.27 1275.8610458.40 1277.3410469.64 1277.6710475.62 1276.2610485.97
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GR1276.010528.43 1275.9110590.90 1276.3210622.82 1275.9410665.92 1276.2910739.76
GR1276.510783.70 1275.8010803.83 1276.9110858.51 1277.5011022.81 1278.1911081.00
GR1276.711118.65 1276.5311166.51 1277.5211173.79 1275.9911179.58 1276.1311199.94
GR1276.111227.08 1276.5311303.67 1276.4911322.82 1276.7311369.44 1276.2211404.86
GR1276.211424.60 1276.5111439.49 1276.3911515.64 1276.1311527.22 1275.3711559.36
GR1266.911593.09 1266.9311597.27 1277.0311620.09 1277.2311633.86 1276.9111683.68
GR1277.511749.85 1277.4911771.21 1278.4011892.81 1279.2611915.63 1279.2411995.72
GR1279.312027.37 1279.2912063.73 1278.9412145.14 1279.0112161.49 1278.6912214.68
GR1278.412228.89 1278.6712239.87 1277.4012251.44 1277.9412282.64 1277.9412331.27
GR1276.012348.40 1276.4912375.66 1276.3712416.43 1276.4512478.51 1277.1512569.18
GR1278.012640.45
*
QT     1    7900
*
X113.076      94 9671.6010153.97     520     455  454.21
X3    10
GR1280.0 9262.00 1279.43 9284.29 1279.76 9305.95 1279.75 9353.03 1280.46 9383.30
GR1278.0 9395.75 1279.96 9421.73 1280.29 9461.38 1280.27 9493.93 1280.58 9557.24
GR1280.4 9607.76 1279.35 9671.60 1271.27 9691.22 1265.52 9704.51 1263.66 9732.62
GR1264.6 9760.43 1264.26 9804.98 1262.51 9828.51 1262.56 9834.95 1264.46 9853.67
GR1264.3 9869.40 1264.56 9887.26 1263.80 9907.57 1263.96 9922.62 1262.75 9937.25
GR1263.1 9949.84 1264.01 9971.55 1263.42 9983.97 1262.37 9999.25 1262.3710016.02
GR1264.110030.84 1266.1510041.79 1263.2310062.05 1263.9110073.48 1269.1810088.42
GR1271.810097.30 1272.7810130.78 1278.5310153.97 1278.6510196.43 1279.4810263.57
GR1279.910302.23 1289.0310351.20 1289.6610357.34 1288.7710363.55 1279.0610418.15
GR1278.810482.31 1278.8010511.62 1280.0110548.87 1279.0810574.50 1279.1710655.70
GR1278.110727.03 1277.9210780.10 1279.0210801.44 1278.3110890.52 1277.9810978.72
GR1277.810989.61 1278.8311090.55 1279.0911192.51 1278.1211294.05 1277.4011330.55
GR1279.211338.30 1278.8611343.15 1277.5111348.03 1278.1011368.97 1277.8911452.28
GR1277.011521.72 1277.3911595.07 1277.5711610.08 1277.7911623.16 1269.5011643.76
GR1270.111651.89 1277.7711676.25 1277.4511699.15 1278.6811721.59 1279.1311735.23
GR1278.611741.88 1278.5111808.21 1278.6611914.17 1278.6912002.75 1279.7212076.22
GR1279.912103.32 1280.0312165.57 1279.9212257.85 1279.8212276.59 1279.9812332.23
GR1279.612353.90 1280.1212381.78 1279.1712391.07 1280.1412469.46 1280.0912473.91
GR1277.912489.28 1278.7512517.38 1278.4312536.39 1280.0012543.98
*
X113.151      92 9746.0010187.38     520     370  393.13
GR1283.4 9058.00 1283.94 9159.76 1283.98 9240.17 1283.04 9289.92 1282.20 9302.23
GR1282.7 9337.98 1282.65 9380.65 1282.96 9394.79 1284.50 9403.86 1285.29 9412.45
GR1282.2 9421.65 1281.96 9458.29 1282.57 9499.64 1282.00 9569.32 1281.32 9594.33
GR1280.4 9619.08 1279.96 9652.65 1279.66 9676.17 1280.00 9696.02 1278.50 9723.06
GR1278.6 9740.99 1279.07 9746.00 1273.37 9760.92 1270.15 9773.47 1267.90 9799.83
GR1265.9 9808.73 1264.66 9829.94 1263.33 9848.13 1262.93 9857.53 1263.88 9866.92
GR1262.2 9882.66 1262.20 9958.44 1264.32 9979.64 1262.70 9988.47 1263.3410021.52
GR1265.210032.89 1266.8010069.78 1267.6210083.97 1267.9610111.44 1270.3210148.84
GR1272.810175.73 1277.2110187.38 1280.9710192.79 1278.9210199.57 1279.6410224.70
GR1280.310305.26 1280.2910361.06 1283.5110366.73 1280.5810374.07 1280.7210391.58
GR1282.910396.83 1280.4810403.87 1280.9010487.48 1280.7710531.61 1280.3310625.65
GR1280.710692.47 1281.4410717.98 1280.3410752.22 1279.9010801.20 1279.7310871.60
GR1279.910895.53 1280.6010996.09 1279.6611071.71 1279.7311075.74 1279.0511128.71
GR1279.111136.57 1278.8911232.60 1278.9211257.18 1278.8711285.51 1280.7411300.32
GR1280.511316.52 1279.2111324.52 1279.7411354.50 1279.7211383.93 1279.9411416.27
GR1279.711490.94 1279.6911530.92 1277.4711539.50 1273.6111550.90 1279.3211574.03
GR1279.811587.70 1279.9711609.34 1279.3111638.72 1279.7711664.46 1281.3011685.96
GR1281.011720.15 1280.8311762.38 1281.0811826.04 1280.9111880.75 1281.1711960.20
GR1281.212105.17 1281.0712158.86
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X113.161      50 9737.8710244.12      55      70   51.06
GR1284.7 8898.00 1284.22 8969.41 1283.76 9114.29 1283.93 9144.54 1283.52 9161.51
GR1283.3 9249.24 1283.19 9290.04 1283.17 9327.39 1282.51 9373.82 1283.04 9393.66
GR1283.1 9413.16 1281.11 9573.20 1280.87 9644.14 1280.81 9737.87 1279.90 9782.29
GR1276.4 9873.96 1275.44 9907.29 1275.20 9933.89 1274.65 9965.75 1274.7810043.50
GR1275.210080.57 1276.0810124.23 1277.0310151.97 1280.2510209.33 1281.5110244.12
GR1281.710266.74 1281.6010323.36 1281.3810368.03 1281.3810475.00 1281.4610532.18
GR1281.410620.05 1281.4510703.46 1281.5310751.25 1281.3110780.07 1281.2710829.33
GR1281.410885.47 1281.4710918.04 1281.1910988.58 1280.9711093.76 1281.0111246.85
GR1281.811387.32 1281.6511437.47 1280.5111505.24 1280.0011555.61 1280.4911596.67
GR1280.311663.43 1280.3111722.35 1280.6411839.85 1280.9611930.31 1281.3812128.02
*
X113.185      22 9742.2010245.97      35      32   33.56
GR1282.0 9531.00 1281.61 9580.66 1281.67 9631.21 1281.38 9661.38 1281.83 9719.60
GR1281.8 9742.20 1281.08 9773.40 1279.67 9812.09 1279.30 9817.12 1277.52 9857.31
GR1276.2 9890.49 1275.33 9931.33 1274.89 9959.09 1274.8910034.43 1274.9810078.37
GR1275.610124.98 1277.2710167.33 1278.3010192.55 1281.2810227.07 1281.9310245.97
GR1282.310259.87 1282.0010293.43
*
* Additional point added for left overbank
*
X113.227      55 9945.6510223.75     335     350  315.32
X3    10
GR1284.0 9299.00 1283.71 9303.82 1284.00 9325.43 1283.88 9360.31 1283.54 9393.86
GR1282.9 9408.68 1283.57 9430.29 1282.78 9451.58 1282.97 9494.70 1282.15 9670.83
GR1283.3 9692.69 1283.56 9751.23 1283.85 9777.54 1282.76 9884.39 1281.61 9936.51
GR1282.5 9945.65 1277.72 9957.55 1275.80 9961.08 1274.89 9985.19 1274.8910022.24
GR1275.610047.48 1276.3110060.47 1275.8410111.00 1275.4310135.64 1275.4010150.07
GR1278.710208.83 1283.0010223.75 1288.9010244.21 1284.6110260.70 1284.3910273.12
GR1283.310382.10 1283.3010418.01 1283.1610577.44 1283.2710651.09 1283.1610746.83
GR1283.410891.21 1283.3011019.74 1283.1711184.80 1282.9911250.25 1282.9211388.15
GR1282.911487.05 1283.4011521.31 1283.9211544.11 1274.8211566.13 1274.8911576.35
GR1283.011597.94 1282.7011611.67 1282.5311668.93 1282.3511688.14 1282.3911759.44
GR1282.411873.09 1282.6011895.89 1283.4112032.49 1283.8512237.81 1284.0312299.29
*
X113.325      57 9867.7710134.99     555     545  571.01
X3    10
GR1286.0 9272.00 1285.55 9320.30 1285.13 9372.63 1285.11 9408.38 1285.22 9416.58
GR1284.2 9457.31 1283.81 9486.84 1283.97 9527.30 1283.64 9544.73 1282.07 9560.67
GR1284.2 9579.99 1284.50 9604.04 1292.51 9618.16 1301.03 9633.92 1301.23 9655.29
GR1302.5 9722.72 1302.27 9757.72 1301.33 9807.64 1300.59 9838.03 1299.87 9853.17
GR1291.0 9867.77 1282.20 9882.41 1280.59 9896.14 1277.86 9926.63 1280.40 9955.50
GR1277.4 9977.65 1277.4010016.57 1278.2110045.01 1276.7010064.07 1277.9810082.82
GR1278.310111.69 1288.1010134.99 1287.0010142.65 1289.3310150.48 1289.9110164.78
GR1290.110170.47 1287.2010183.27 1287.1210195.74 1286.2410219.94 1285.6710474.24
GR1285.710562.34 1286.0010736.53 1286.0810829.36 1285.7010942.15 1285.6311229.36
GR1285.411329.35 1285.3011424.41 1285.8811473.91 1278.0211492.57 1277.8911506.86
GR1283.811520.53 1286.4011525.37 1285.1011541.38 1285.3211629.34 1285.4411739.52
GR1285.511826.82 1286.0011912.41
*
X113.420      99 9845.8610081.84     515     495  514.13
X3    10
GR1288.0 9395.00 1288.07 9423.96 1287.97 9477.21 1287.26 9513.90 1286.57 9532.21
GR1286.6 9556.16 1286.46 9582.05 1287.25 9613.21 1287.96 9631.08 1287.45 9655.50
GR1288.3 9699.72 1288.27 9722.92 1288.92 9791.30 1288.27 9813.82 1290.55 9827.24
GR1288.5 9840.39 1288.33 9845.86 1283.51 9862.12 1282.43 9880.73 1281.07 9894.26
GR1280.6 9906.80 1280.99 9959.33 1278.03 9983.50 1277.4310001.06 1277.8010024.47
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GR1287.310121.36 1287.7110128.19 1289.3310141.72 1293.3910168.52 1288.5810186.33
GR1288.410237.05 1289.2310252.26 1288.3210276.97 1287.0510308.19 1287.2810345.14
GR1287.310388.39 1286.9410429.90 1286.9310457.00 1286.6410480.94 1285.6810512.07
GR1286.110543.20 1285.7910563.93 1285.7510631.63 1286.5310651.86 1285.9110673.18
GR1284.510715.52 1285.1110726.52 1286.7410745.47 1287.0110797.71 1286.9610827.96
GR1287.810843.39 1288.1110915.91 1286.2710945.44 1286.3810983.68 1285.9510995.12
GR1286.211031.99 1286.0611056.81 1286.7111096.76 1287.3411131.85 1287.3311193.12
GR1287.811212.33 1286.8511276.48 1286.9211336.18 1285.8311397.94 1286.3311420.53
GR1284.411476.18 1284.0611503.97 1284.1811554.68 1283.6511563.74 1281.6911582.11
GR1282.411594.34 1284.6611609.37 1286.9711631.71 1287.1211647.43 1286.5511676.33
GR1285.911684.88 1286.4311698.97 1286.4411770.93 1284.9111801.36 1283.0311846.69
GR1287.111928.45 1287.1811948.35 1287.7812019.57 1287.6812043.31 1286.8212067.16
GR1287.212087.53 1287.0012136.62 1287.5512201.47 1287.6012271.53 1287.9912295.07
GR1285.512353.62 1284.3212397.71 1284.0712461.22 1286.0012488.90
*
X113.524      94 9858.0310221.34     605     500  522.56
X3    10
GR1291.3 9448.00 1290.03 9454.37 1289.55 9508.29 1291.53 9523.62 1290.64 9555.54
GR1292.0 9575.63 1291.36 9598.72 1291.56 9609.69 1291.28 9650.51 1291.26 9693.45
GR1292.1 9734.83 1291.90 9791.94 1291.20 9825.00 1291.61 9851.09 1292.81 9858.03
GR1283.4 9877.26 1282.60 9891.18 1282.60 9957.87 1283.21 9972.60 1283.7710018.98
GR1282.610028.68 1282.6710047.89 1283.8010059.95 1283.8210081.31 1281.9910117.75
GR1281.910137.15 1286.9710162.05 1288.1510165.76 1291.7110221.34 1288.5310236.72
GR1288.810264.54 1290.6710273.99 1290.6610287.01 1291.1610291.26 1290.2510351.78
GR1291.610376.49 1290.4510419.81 1291.7210446.96 1296.5610472.14 1290.8310478.74
GR1289.710494.98 1289.9510514.86 1290.9410526.43 1290.8210557.78 1290.3110573.55
GR1289.610581.04 1290.8110634.38 1301.1310651.91 1300.6110662.52 1298.3410667.92
GR1296.210675.41 1290.8710685.96 1290.5910716.77 1290.4110758.66 1290.7610840.28
GR1290.410886.63 1290.8610904.99 1291.6310921.81 1291.3210957.21 1290.0111016.88
GR1289.711102.37 1289.8411116.92 1290.1711216.95 1290.4911261.54 1290.4011316.98
GR1290.111325.20 1290.0711408.44 1289.4611445.30 1290.7311517.06 1291.4211566.71
GR1286.911600.63 1286.1211620.62 1292.7211642.39 1291.3411652.84 1290.0011697.54
GR1290.511737.67 1290.1311759.00 1290.3011827.51 1290.0411892.97 1289.0211918.09
GR1290.011977.44 1289.6412013.71 1289.8112086.33 1289.5612106.77 1289.9512129.98
GR1290.412144.25 1290.2612182.87 1290.1312243.57 1290.2212264.75 1289.0712285.59
GR1289.612301.57 1289.5112317.61 1289.9812380.13 1290.0212409.58
*
NC  0.05    0.05   0.035
*
X113.619      96 9739.4110391.00     565     495  505.64
GR1292.0 9562.00 1292.36 9629.30 1294.25 9639.88 1292.78 9661.38 1292.79 9674.83
GR1295.2 9693.47 1294.77 9739.41 1285.43 9788.42 1283.79 9799.13 1284.12 9865.32
GR1283.5 9935.28 1284.45 9954.22 1284.14 9967.18 1283.47 9976.42 1283.51 9995.82
GR1285.310006.46 1285.1310048.70 1284.7210076.70 1284.4310134.23 1285.0210190.74
GR1285.210219.99 1284.8010294.96 1291.1910312.09 1290.2510317.40 1291.1110324.25
GR1289.710336.10 1289.4610361.89 1293.8810391.00 1294.3810437.69 1294.7010478.35
GR1298.410487.80 1301.8010495.02 1294.4910511.79 1302.4010532.76 1303.9810551.60
GR1305.010578.70 1298.2710600.79 1299.3310623.06 1293.6810639.96 1293.7110652.46
GR1295.210655.91 1296.0210672.33 1297.6110682.32 1296.6310687.16 1293.7910693.85
GR1293.710719.15 1300.0210730.61 1295.9410738.98 1299.9310747.76 1296.2510755.10
GR1299.710762.57 1295.9710768.85 1298.8710777.37 1296.1910783.38 1298.7310790.11
GR1294.510798.42 1295.3710859.97 1294.7810889.08 1293.5810942.12 1293.0711003.19
GR1292.311057.05 1293.2011123.97 1293.0411169.90 1293.1011234.76 1292.9411240.22
GR1292.911273.64 1293.5311336.71 1293.8411354.86 1293.6411403.54 1292.9611443.98
GR1294.111504.21 1293.5811528.18 1290.6011539.04 1289.6511544.35 1290.5211565.78
GR1290.211594.34 1293.6211621.42 1293.5111641.40 1293.9111665.37 1293.0511687.55
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GR1293.011730.32 1292.8611738.32 1294.2211807.73 1293.4311833.85 1293.3311878.84
GR1293.311929.21 1293.6512009.04 1293.4812045.43 1292.8112123.83 1292.9412135.85
GR1292.512212.03 1293.2612253.55 1293.0212338.41 1293.0512364.23 1292.3012394.05
GR1292.712413.20
*
X113.680      80 9591.0310317.81     320     315  331.09
GR1296.8 9322.00 1297.07 9356.46 1295.43 9385.60 1296.98 9417.80 1297.29 9479.95
GR1297.5 9485.63 1296.86 9495.23 1293.73 9528.80 1293.03 9551.69 1289.41 9568.06
GR1292.5 9582.07 1292.88 9591.03 1290.80 9613.38 1289.19 9648.83 1288.62 9671.63
GR1288.2 9722.36 1287.28 9796.47 1287.06 9826.79 1286.91 9883.94 1286.40 9919.92
GR1285.8 9939.41 1285.50 9984.53 1285.5110023.54 1286.1910077.15 1286.2910123.24
GR1286.110152.41 1286.4410190.29 1287.2610222.53 1289.8810265.88 1291.2510283.02
GR1292.810317.81 1293.2210368.57 1292.5310398.99 1292.6110434.15 1292.2910477.35
GR1292.510529.74 1292.9010615.42 1292.9310647.52 1293.0710711.24 1293.3910820.69
GR1293.310865.19 1293.4110884.17 1292.9810938.51 1293.3610974.42 1293.7210989.05
GR1293.811017.31 1294.1611050.34 1294.2011107.98 1294.3711135.27 1294.0711160.10
GR1293.811248.44 1293.9611275.04 1294.7111314.65 1294.8011340.48 1294.5611345.46
GR1294.511413.21 1294.7511447.00 1294.2511476.07 1294.8711499.87 1294.8511540.28
GR1295.011627.90 1294.7511680.45 1295.1111724.22 1295.0411772.94 1295.2311815.45
GR1294.811852.94 1295.1211880.39 1295.0211903.62 1293.9711973.31 1293.9212041.77
GR1294.612088.13 1294.2912090.19 1294.6212119.52 1294.3412147.76 1294.1912185.46
GR1294.312223.78 1294.0512270.24 1294.2712373.64 1294.4112409.48 1294.7612454.94
*
* Additional point was added at invert to account for expansion at 13.918
* This point was used in the left bank.
* BOTTOM OF CHANNEL SET AT OVERTOPING ELEVATION OF 1288.  SEE DOWN STREAM X-SEC
*
X113.742      85 9760.0010379.63     430     400  353.72
X3    10
GR1296.8 9354.00 1296.55 9370.67 1297.62 9384.46 1297.63 9483.28 1299.44 9497.01
GR1293.9 9531.00 1294.10 9554.38 1289.54 9577.58 1288.87 9634.50 1287.86 9648.28
GR  1288 9680.80    1288 9700.02    1288 9760.00    128810197.76 1289.3810241.99
GR1290.510254.48 1290.3010268.29 1292.9610308.28 1294.4110321.65 1297.5010343.75
GR1299.510379.63 1299.9010399.95 1300.3110408.16 1300.1810436.03 1299.1010442.12
GR1296.810459.79 1295.5010475.06 1290.6910506.06 1288.5410532.73 1288.7110558.39
GR1289.510598.63 1290.7010669.55 1290.8810723.24 1306.2210748.29 1319.9610770.75
GR1309.310788.50 1294.4010816.13 1290.1710826.64 1290.0410886.49 1292.3310894.56
GR1298.410909.82 1300.8010922.28 1301.5110930.63 1298.4410944.77 1289.2510962.63
GR1288.811011.30 1288.6011043.43 1288.1711069.82 1289.4411101.46 1289.4811132.43
GR1295.611152.30 1296.0011197.31 1296.0511240.82 1296.5811285.44 1296.7311324.28
GR1297.111365.59 1296.8011409.29 1297.4911469.34 1296.9911529.55 1296.9711566.62
GR1296.811581.98 1297.2011645.17 1297.5211669.97 1296.9011698.77 1297.0411764.32
GR1296.711812.47 1292.7011878.03 1292.1011914.78 1291.6511924.59 1287.9311975.00
GR1286.511988.35 1285.6012038.04 1288.3612070.37 1289.6612076.59 1288.4612098.39
GR1288.712119.06 1289.0012153.65 1295.1412164.88 1296.6812205.17 1297.0812283.01
GR1297.012327.32 1297.1012339.26 1296.6712407.76 1296.7012420.60 1298.0112438.39
*
* BOTTOM OF CHANNEL SET AT OVERTOPING ELEVATION OF 1288.  SEE DOWN STREAM X-SEC
*
X113.818      80 9912.0010482.82     395     435  406.30
X3    10
GR1298.0 9462.00 1298.87 9477.76 1298.90 9504.05 1299.46 9584.30 1299.62 9588.83
GR1296.7 9617.74 1297.12 9659.36 1293.55 9672.91 1295.18 9696.39 1295.29 9703.75
GR1294.1 9721.63 1292.98 9755.56 1293.68 9770.96 1293.89 9787.10 1293.17 9788.30
GR1291.3 9805.83 1290.67 9814.79 1290.76 9825.73    1288 9839.58    1288 9912.00
GR  128810335.40    128810469.10 1292.3210482.82 1289.2010492.06 1288.7110536.03
GR1288.810549.75 1289.9010559.35 1294.9410586.82 1299.1710611.56 1299.6310640.25
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GR1289.110655.18 1287.8010702.75 1287.7810868.03 1288.2210913.91 1288.0210937.39
GR1288.210947.65 1288.1011003.07 1288.4911038.22 1289.4411066.97 1289.2911089.19
GR1289.611109.90 1289.0011192.24 1290.1211228.34 1288.4211272.67 1289.9711378.54
GR1290.411402.76 1291.8011423.75 1291.9611434.18 1290.6411448.66 1292.3411458.94
GR1290.611464.39 1290.7011487.76 1290.5411520.45 1290.4711569.55 1290.2311616.61
GR1290.411645.04 1300.2011670.09 1301.0711676.56 1296.8211689.63 1297.8711700.15
GR1298.411706.11 1296.1011712.53 1289.8811722.98 1290.5511747.42 1289.8611801.18
GR1300.411817.69 1286.9011848.75 1287.2111915.57 1286.9711946.27 1285.8311983.10
GR1286.412002.23 1286.9012078.57 1286.1812129.51 1286.1112189.27 1286.6112247.67
GR1299.112281.97 1299.2012312.95 1298.9312326.03 1299.3612411.99 1299.9812562.08
*
X113.918      74 9953.7010177.83     595     955  656.30
X3    10
GR1305.6 8690.00 1305.41 8756.38 1305.02 8823.10 1304.84 8885.68 1303.86 8948.25
GR1303.7 8999.95 1303.54 9020.77 1303.86 9044.04 1303.87 9068.28 1303.42 9096.57
GR1303.5 9116.11 1303.77 9127.28 1303.13 9160.88 1303.67 9214.63 1303.46 9287.48
GR1303.3 9318.62 1302.59 9346.45 1302.64 9411.57 1302.20 9493.34 1302.18 9532.93
GR1302.5 9610.44 1301.79 9645.68 1301.87 9654.69 1303.56 9662.27 1301.78 9670.94
GR1301.9 9690.31 1301.65 9740.18 1301.58 9838.42 1301.34 9849.35 1300.90 9910.10
GR1300.7 9953.70 1300.59 9960.57 1293.23 9971.16 1290.60 9986.59 1289.8310006.54
GR1296.210021.74 1297.6910053.13 1297.8110074.08 1295.9610092.92 1293.0310112.54
GR1293.310117.50 1298.5510147.50 1300.3310168.14 1302.2810177.83 1301.6110191.01
GR1300.610203.56 1301.1410225.34 1300.9710274.90 1301.1710292.57 1302.6510338.15
GR1301.910356.67 1299.8810375.47 1299.9610385.00 1299.3410417.63 1300.1810429.28
GR1300.210461.49 1299.0610503.98 1298.5610534.06 1297.9710541.44 1295.7410550.72
GR1294.110561.42 1292.2710589.82 1293.1510607.55 1292.9110623.66 1293.4010643.70
GR1295.910654.48 1302.2910674.21 1302.1710681.03 1302.0810738.74 1302.2610785.14
GR1302.910882.16 1302.2410980.53 1302.4111085.57 1302.3711252.08
*
QT     1    6100
*
X114.013      78 9743.5410041.42     620     485  514.07
GR1310.9 8525.00 1309.19 8541.70 1309.09 8570.76 1309.75 8582.50 1310.60 8606.66
GR1310.4 8621.35 1310.50 8648.37 1310.50 8692.44 1310.87 8720.08 1309.49 8733.42
GR1309.7 8777.54 1309.37 8820.32 1308.08 8863.07 1307.94 8902.86 1307.48 8937.44
GR1307.5 8965.25 1307.69 9009.34 1307.63 9098.15 1307.80 9141.73 1307.54 9238.48
GR1307.4 9289.98 1307.46 9347.91 1306.04 9364.47 1306.56 9382.02 1306.22 9411.06
GR1307.1 9433.96 1307.01 9480.97 1306.80 9500.90 1306.83 9579.11 1306.63 9597.26
GR1306.5 9651.60 1306.05 9743.54 1305.60 9780.56 1302.93 9784.17 1302.82 9802.62
GR1300.1 9828.14 1299.23 9889.76 1299.00 9921.27 1296.71 9930.76 1298.47 9947.01
GR1298.1 9975.11 1295.83 9987.00 1295.7510006.96 1303.6610041.42 1301.6510064.01
GR1302.610074.42 1303.9410106.66 1302.2910134.52 1303.7110177.15 1304.2310254.67
GR1304.610273.37 1301.5410286.06 1301.5110331.62 1303.3810385.94 1303.4110447.36
GR1301.810463.96 1301.4410479.72 1300.5910492.14 1302.4010510.26 1301.7710520.18
GR1301.010541.35 1305.3110553.40 1305.2710624.76 1304.0010635.71 1305.4610649.37
GR1302.610663.07 1305.6410681.11 1305.3710732.78 1301.4310752.10 1303.9310776.74
GR1304.510804.42 1304.4910864.83 1304.6710921.65 1302.7810959.24 1305.7110994.93
GR1306.011069.44 1306.0611173.31 1306.3111219.95
*
X114.103      83 9764.4310088.39     540     515  520.68
GR1314.0 8482.00 1313.81 8510.08 1314.17 8523.94 1313.52 8549.49 1313.03 8586.27
GR1311.6 8599.67 1311.80 8629.88 1312.89 8656.28 1312.92 8725.18 1313.32 8770.35
GR1310.9 8789.81 1311.00 8837.87 1310.88 8883.79 1310.60 8939.35 1310.39 8952.61
GR1310.7 9032.01 1310.50 9087.45 1310.14 9125.80 1310.44 9187.24 1310.15 9236.68
GR1310.1 9315.24 1308.89 9333.67 1308.70 9390.43 1310.12 9400.08 1309.73 9429.81
GR1310.0 9489.07 1309.88 9532.52 1309.30 9581.48 1309.14 9622.09 1308.87 9668.19
GR1309.1 9707.83 1309.53 9720.37 1309.48 9755.08 1308.94 9764.43 1306.87 9770.45
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GR1306.7 9786.95 1302.91 9806.67 1302.87 9818.91 1303.56 9902.96 1299.87 9930.06
GR1301.0 9960.73 1299.72 9997.55 1300.6810026.47 1301.4210067.94 1307.3810088.39
GR1307.910149.94 1308.3210209.06 1308.0710298.29 1307.1310310.73 1308.5310326.25
GR1307.710400.57 1307.3910410.45 1307.9210445.28 1307.9610457.93 1307.3810471.61
GR1307.510507.04 1303.2510530.20 1303.1610592.95 1305.6310627.85 1305.2710636.01
GR1306.210653.59 1305.7110661.82 1308.5010680.36 1308.2210688.06 1307.4710753.83
GR1307.310780.11 1304.9710795.67 1306.4310823.65 1305.4410846.31 1306.9010861.54
GR1304.310877.59 1305.6210905.63 1307.1610932.90 1306.5810964.23 1308.5610977.08
GR1308.310985.98 1307.4411049.41 1306.8911083.90 1307.9211097.61 1308.0811113.27
GR1306.911144.60 1308.1211160.37 1307.9911239.53
*
X114.197      66 9935.1510264.33     465     470  479.63
GR1313.6 8909.00 1314.34 8915.32 1313.27 9038.55 1312.59 9122.52 1312.09 9147.10
GR1312.6 9151.88 1311.98 9246.33 1311.85 9345.34 1311.29 9445.16 1311.53 9543.27
GR1311.2 9638.59 1311.04 9745.61 1311.25 9791.44 1307.75 9805.82 1309.41 9820.01
GR1309.3 9844.53 1308.78 9877.37 1310.09 9884.83 1309.84 9924.15 1309.62 9935.15
GR1301.910001.01 1305.9110028.16 1306.2410041.70 1307.5710147.14 1307.8810192.02
GR1306.710233.34 1306.6010242.45 1310.8010264.33 1310.5410340.43 1310.5810441.83
GR1311.310477.47 1307.3510490.71 1307.9510524.03 1306.7910553.36 1310.7910570.57
GR1310.410638.66 1311.0010700.76 1307.7110711.62 1309.4110731.07 1308.8610748.02
GR1308.710769.66 1308.7910825.53 1309.0410834.98 1307.8510852.16 1308.9710866.22
GR1308.210880.46 1308.3710886.69 1306.2810901.93 1306.7010942.54 1307.5710958.63
GR1306.510972.37 1306.2810984.49 1310.3310999.92 1308.9711011.88 1310.2611032.16
GR1310.411044.97 1309.9711056.74 1307.3811070.34 1310.8211084.16 1310.5411146.24
GR1309.311243.47 1309.5611283.64 1308.6311294.27 1309.9111331.37 1310.5111363.10
GR1310.911444.99
*
X114.284      77 9832.3710052.65     495     485  498.98
GR1316.0 8572.00 1314.69 8690.39 1313.76 8702.61 1314.96 8714.39 1314.56 8737.63
GR1313.7 8836.33 1313.52 8924.48 1312.85 8931.58 1313.46 8940.77 1313.10 9036.33
GR1312.9 9152.12 1312.76 9236.20 1312.63 9312.20 1312.12 9324.11 1312.72 9343.29
GR1312.7 9450.45 1312.30 9546.21 1312.37 9556.68 1312.53 9580.41 1308.45 9608.38
GR1307.5 9637.64 1308.89 9659.03 1309.20 9677.62 1307.90 9689.94 1309.50 9703.98
GR1310.8 9714.36 1311.87 9786.70 1312.13 9832.37 1309.36 9847.97 1308.37 9877.34
GR1306.6 9907.28 1312.79 9923.81 1312.97 9945.19 1312.92 9960.84 1308.60 9975.83
GR1307.010005.31 1305.7910016.02 1305.4010030.96 1309.9610046.66 1311.3010052.65
GR1311.310078.67 1311.3710106.77 1310.9810125.87 1308.9910168.70 1309.0410190.02
GR1311.510230.88 1310.7710246.59 1310.8810272.31 1312.9010303.30 1313.0710352.16
GR1311.910375.49 1310.9210390.23 1310.5310412.97 1311.0810422.51 1309.9410472.27
GR1309.510480.46 1309.6910502.30 1312.5810526.77 1311.1310626.65 1311.0710681.51
GR1309.010742.33 1309.1310764.17 1311.8110784.83 1311.6910802.10 1310.9410827.12
GR1310.010882.64 1310.3510916.41 1309.2110925.93 1308.8010941.61 1312.5910957.60
GR1312.311052.02 1311.9211066.30 1310.2411073.88 1311.6511087.96 1311.3811094.07
GR1311.911163.22 1312.6211215.66
*
X114.379      70 9565.2810321.28     515     490  505.75
GR1317.9 8862.00 1317.02 8877.86 1318.32 8889.61 1318.08 8913.38 1318.04 8962.56
GR1317.6 9056.52 1316.78 9062.14 1317.66 9072.18 1317.45 9107.40 1317.54 9155.18
GR1317.3 9245.43 1316.99 9284.44 1316.46 9407.47 1316.35 9507.48 1316.50 9565.28
GR1311.7 9578.59 1312.54 9595.64 1313.79 9614.48 1313.33 9669.20 1310.93 9682.72
GR1308.7 9690.38 1307.97 9710.37 1313.21 9718.80 1316.83 9729.29 1316.29 9807.52
GR1316.2 9842.38 1316.27 9907.34 1316.58 9970.44 1309.18 9985.59 1312.7710107.59
GR1313.310175.50 1313.2810202.48 1313.7810214.19 1313.6110242.77 1313.0010266.63
GR1314.010293.86 1314.4910321.28 1313.3410375.86 1312.3810404.88 1312.2710442.62
GR1315.010496.85 1315.2410508.25 1315.6910567.01 1316.1010605.13 1313.8910616.59
GR1315.010642.59 1313.6410658.44 1313.7410708.14 1314.3310748.70 1312.7210788.08
GR1312.110820.11 1312.7210840.28 1314.9710853.23 1313.2010890.66 1312.4610918.74
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GR1310.910930.89 1310.6610963.11 1315.1310981.31 1315.0511004.24 1314.8211010.56
GR1314.211107.74 1313.9511226.69 1313.9911307.79 1314.1311385.61 1314.4311407.83
GR1315.211426.71 1315.8511483.58 1314.6111495.37 1314.4011501.57 1315.4311525.15
*
X114.495      74 9287.0910222.87     605     455  561.68
GR1322.1 8746.00 1321.22 8814.24 1320.81 8914.44 1320.56 9014.65 1319.83 9122.94
GR1319.0 9226.20 1319.46 9262.39 1315.24 9271.03 1317.51 9287.09 1314.75 9295.53
GR1313.9 9328.02 1315.46 9371.50 1317.44 9402.37 1316.78 9476.40 1317.94 9507.27
GR1318.0 9554.76 1317.02 9581.47 1317.85 9595.83 1317.85 9658.33 1316.62 9668.11
GR1317.7 9678.15 1316.24 9686.69 1317.89 9703.20 1318.48 9750.29 1317.61 9812.03
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GR1338.510092.66 1342.3410115.94 1342.4910120.14 1343.6310172.80 1343.8110220.26
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GR1345.510532.96 1346.4410573.06 1351.5810606.55 1345.8610641.82 1345.9110691.57
GR1344.910715.69 1344.8810742.49 1344.5810785.92 1344.6610827.51 1344.5210885.92
GR1344.710982.89 1345.2511014.79 1346.2411051.36 1344.9711089.03 1344.9911113.45
GR1345.711222.68
*
X115.475      55 9705.4610056.25     510     260  319.63
GR1350.0 9157.00 1349.44 9198.07 1350.54 9209.08 1350.67 9229.38 1347.08 9245.82
GR1347.3 9250.90 1349.17 9259.75 1350.84 9275.83 1350.14 9307.72 1350.43 9314.50
GR1349.5 9332.25 1349.40 9341.89 1349.84 9365.79 1349.61 9370.52 1349.38 9401.44
GR1349.7 9416.67 1348.86 9455.68 1348.12 9477.73 1347.86 9503.99 1346.09 9540.74
GR1347.7 9560.29 1347.34 9582.52 1347.12 9599.39 1342.21 9610.67 1341.34 9626.58
GR1341.6 9664.10 1341.32 9705.46 1338.84 9716.87 1336.67 9728.62 1337.25 9752.31
GR1337.3 9781.12 1338.08 9847.02 1337.44 9959.73 1335.06 9973.89 1335.9210020.83
GR1341.510056.25 1342.2110097.34 1343.3010121.69 1344.3610151.77 1344.0310180.94
GR1344.010260.23 1345.2410313.56 1346.5110413.86 1346.6810460.22 1346.7110506.32
GR1346.510560.22 1347.1210660.22 1346.9210714.74 1346.5510760.25 1346.8710815.03
GR1346.710860.23 1346.0410915.32 1346.0410960.23 1346.4411098.29 1347.0911134.47
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X115.596      58 9926.4710212.94     460     775  677.66
GR1352.1 9227.00 1351.49 9286.29 1351.40 9339.59 1349.90 9362.26 1349.19 9391.52
GR1348.9 9411.74 1349.54 9424.70 1349.34 9446.73 1349.35 9470.51 1345.94 9479.00
GR1349.2 9489.28 1348.08 9518.40 1345.62 9525.76 1348.75 9542.40 1348.00 9566.90
GR1347.4 9622.54 1347.44 9642.37 1348.25 9657.79 1348.35 9689.11 1348.27 9713.32
GR1348.0 9734.14 1348.44 9776.97 1348.24 9796.93 1348.20 9840.22 1347.97 9867.96
GR1348.4 9893.94 1348.64 9926.47 1346.05 9936.59 1344.28 9951.29 1340.53 9958.57
GR1340.0 9974.55 1338.38 9990.68 1340.4610040.87 1341.3710070.78 1341.4810085.86
GR1340.710104.64 1345.8610125.69 1345.1110136.01 1344.1010161.47 1344.9010178.16
GR1345.610193.67 1347.7810212.94 1348.7710274.80 1348.7110331.79 1346.7110354.38
GR1346.610371.49 1346.5510470.92 1347.1010570.91 1347.4810670.92 1348.1410770.92
GR1347.810789.91 1348.1710872.72 1346.1710895.37 1345.6210931.84 1352.2810953.24
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X115.623      79 9949.1610136.16     475     205  505.65
GR1356.6 9318.00 1356.12 9323.95 1352.99 9331.78 1351.18 9386.87 1352.92 9398.18
GR1352.4 9440.31 1352.07 9494.82 1351.33 9498.50 1352.10 9508.04 1349.97 9517.30
GR1352.6 9525.37 1352.97 9554.41 1353.00 9642.50 1352.56 9690.19 1352.10 9801.75
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GR1340.0 9962.84 1341.13 9982.30 1341.1110011.88 1343.1210043.47 1343.8310049.19
GR1344.110086.79 1345.1210097.68 1344.5410103.38 1346.8610115.75 1346.9210125.97
GR1348.710136.16 1345.7310154.16 1346.8010166.78 1347.8310199.38 1347.4410212.27
GR1347.010247.85 1345.8410269.85 1349.1010283.93 1349.6810296.67 1348.9910313.36
GR1349.410315.84 1348.8210345.62 1347.7410363.48 1348.5510414.67 1347.2910427.12
GR1348.910447.66 1349.0010497.95 1349.0810545.69 1346.2310560.13 1345.7810582.80
GR1347.910599.59 1346.9710633.17 1346.8610675.59 1348.1710704.51 1347.8710725.87
GR1346.210741.04 1348.7810788.78 1348.9110818.10 1351.0510850.88 1349.2310868.19
GR1350.410905.65 1350.6810942.53 1349.7310961.91 1349.2810980.87 1350.1911005.87
GR1348.511023.38 1346.3311039.77 1346.0011058.38 1346.4811085.01 1348.6311095.88
GR1351.711102.88 1350.9411115.35 1351.9311119.44 1351.7611131.49 1352.3811166.70
GR1353.311227.40 1353.4311251.11 1352.8411320.83 1352.8711337.20
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X115.699      63 9874.7110044.10     485     240  413.60
GR1358.1 9256.00 1357.15 9266.09 1358.11 9282.59 1356.26 9326.59 1356.49 9335.31
GR1356.1 9340.59 1357.54 9350.90 1357.07 9406.43 1356.61 9463.66 1355.47 9563.65
GR1355.3 9671.99 1354.18 9710.26 1354.38 9735.10 1353.56 9757.70 1351.26 9770.34
GR1345.7 9788.07 1350.56 9797.17 1347.50 9804.33 1348.52 9816.60 1347.89 9831.05
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GR1349.0 9855.63 1349.99 9874.71 1349.08 9903.39 1345.89 9921.35 1344.71 9982.14
GR1345.410027.02 1349.7610044.10 1348.5510069.22 1350.4210099.66 1350.4410129.06
GR1352.510139.36 1353.4310149.46 1351.4010156.88 1348.9110172.37 1350.7110204.12
GR1350.510210.28 1351.1010264.93 1348.7010281.24 1349.0110309.55 1349.0710319.29
GR1350.510345.58 1349.4410422.21 1347.7010491.03 1348.8810505.89 1349.0010544.84
GR1350.210566.95 1347.0710578.72 1346.5010599.47 1348.8410621.48 1349.2410656.83
GR1348.810679.76 1348.4010706.38 1347.8710721.41 1346.2510813.35 1346.2510832.99
GR1351.710850.80 1351.7010858.87 1352.8910884.29 1352.9610911.30 1353.5910981.91
GR1353.711012.23 1354.4011112.68 1354.3111130.18
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X115.792      70 9922.8510073.97     430     560  472.66
GR1357.9 9168.00 1357.39 9203.65 1357.00 9214.01 1357.11 9268.42 1356.51 9312.99
GR1356.0 9337.76 1356.21 9368.60 1355.53 9387.84 1355.56 9405.54 1354.36 9447.91
GR1351.5 9469.29 1354.10 9480.60 1355.02 9495.88 1356.34 9508.29 1355.96 9530.07
GR1353.8 9566.08 1350.44 9620.50 1352.07 9634.25 1352.32 9648.55 1352.19 9683.78
GR1352.3 9725.88 1352.05 9791.07 1352.29 9825.91 1353.17 9850.91 1351.96 9860.93
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GR1345.210002.05 1350.3310034.91 1350.2210060.20 1352.1110073.97 1352.6910127.71
GR1352.810160.12 1349.4610176.02 1349.9210190.22 1353.0410202.57 1350.8010242.67
GR1350.010254.44 1352.5110267.14 1352.8410283.39 1352.4210292.86 1349.5510303.63
GR1351.010316.45 1352.5710323.35 1352.3510385.32 1352.0910417.82 1352.0010421.64
GR1349.110435.06 1348.3410452.82 1351.7810470.05 1352.4010523.42 1351.2510539.06
GR1353.910553.37 1353.6510569.57 1353.8010593.97 1352.0910609.33 1354.7210630.81
GR1354.710662.46 1354.1710669.80 1354.9910683.15 1355.8110751.70 1355.2410811.74
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X115.885      39 9960.5910153.32     525     475  509.42
X3    10
GR1360.0 9393.00 1359.75 9456.26 1358.69 9533.52 1358.51 9586.21 1358.05 9653.18
GR1356.2 9670.80 1357.52 9688.72 1357.26 9742.60 1356.87 9773.97 1357.00 9780.43
GR1355.3 9787.42 1357.29 9797.88 1356.29 9841.90 1355.99 9875.75 1356.36 9960.59
GR1348.4 9993.59 1350.3510022.82 1352.3210043.13 1352.7910080.48 1351.1110097.44
GR1354.810123.51 1353.5210141.21 1355.1110153.32 1354.8910233.75 1354.8210292.58
GR1354.810351.99 1354.3410383.48 1351.5510395.76 1351.3510435.00 1356.0310456.42
GR1355.710467.88 1357.2410493.20 1357.9510526.90 1358.0810531.97 1358.3310630.47
GR1358.210707.49 1357.8910760.99 1358.4610924.53 1358.4310992.75
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QT     1    2350
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GR1363.9 8884.00 1363.62 8899.06 1363.40 8931.55 1363.36 8982.64 1363.04 9078.40
GR1362.6 9108.81 1362.11 9167.73 1361.39 9213.77 1360.33 9318.74 1360.44 9396.68
GR1359.5 9476.26 1358.94 9601.17 1358.93 9616.36 1357.42 9619.86 1358.95 9625.72
GR1358.6 9663.48 1359.10 9699.11 1353.46 9716.17 1358.90 9732.42 1358.21 9751.30
GR1355.4 9769.62 1355.12 9801.73 1355.85 9810.49 1356.22 9834.25 1353.69 9864.01
GR1355.6 9935.39 1354.00 9950.33 1351.8410001.29 1356.1010023.45 1356.7010078.54
GR1355.710103.98 1356.6210120.58 1356.7210155.14 1357.7410168.96 1357.7710180.45
GR1356.010277.33 1354.7210283.48 1354.0610318.28 1357.7510333.71 1354.4010371.08
GR1360.110391.06 1360.5310401.94 1360.8910555.41 1360.9510627.42 1361.1310709.60
GR1361.510788.34 1361.2810863.73 1361.1510882.38
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X116.066      53 9577.0210067.61     610     505  584.23
GR1364.0 9330.00 1363.30 9395.88 1361.39 9412.63 1363.18 9425.48 1363.50 9457.05
GR1363.1 9518.54 1362.18 9539.80 1361.42 9577.02 1358.27 9592.47 1359.33 9598.29
GR1359.3 9607.20 1358.86 9627.82 1358.05 9642.76 1360.07 9658.05 1361.08 9672.67
GR1361.1 9680.42 1359.84 9703.18 1360.88 9729.76 1360.66 9739.23 1356.71 9753.63
GR1355.9 9777.73 1356.38 9784.76 1358.19 9826.64 1359.68 9844.48 1357.90 9900.29
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GR1358.9 9908.20 1357.80 9920.79 1358.94 9933.97 1359.73 9976.20 1354.42 9993.66
GR1357.210011.06 1357.2210026.00 1359.3010051.57 1359.7410067.61 1359.5410107.14
GR1360.110150.01 1360.9110169.03 1359.5810197.50 1358.4910211.89 1357.7510226.70
GR1357.610257.82 1354.6310282.25 1358.5010358.80 1356.4510424.28 1360.4810448.99
GR1361.310472.80 1361.8910514.13 1362.2710523.21 1362.7310569.30 1363.6010652.65
GR1363.810685.24 1363.9210771.86 1364.0810883.43
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X116.167      42 9897.2110144.90     540     535  590.83
GR1368.0 9428.00 1366.39 9629.69 1366.07 9715.53 1365.21 9792.86 1365.02 9856.46
GR1364.3 9897.21 1360.34 9915.84 1359.96 9955.56 1360.72 9980.69 1358.9810002.86
GR1363.510030.58 1362.3510074.98 1361.9110104.37 1361.0810122.99 1363.4010144.90
GR1363.410174.60 1363.8010191.10 1362.8010199.04 1363.1010225.53 1363.0610252.32
GR1362.510275.89 1361.2910342.34 1360.3710382.68 1359.6410402.57 1360.9910428.98
GR1358.510453.37 1358.8110472.28 1358.3210512.09 1358.2210540.84 1363.6910561.93
GR1364.010608.91 1362.6610625.17 1362.3710651.98 1363.9710674.62 1363.1410721.87
GR1362.610741.72 1361.3110754.11 1366.2810771.51 1366.4310793.58 1366.1610805.79
GR1366.610813.45 1366.5710899.23
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X116.248      43 9943.3710160.36     435     495  436.54
GR1370.0 9465.00 1369.86 9474.66 1369.57 9535.36 1369.31 9559.46 1367.71 9626.12
GR1367.9 9666.85 1365.93 9683.27 1368.11 9697.73 1367.95 9734.77 1366.50 9743.57
GR1367.4 9760.62 1366.79 9874.83 1366.86 9943.37 1361.19 9953.78 1360.22 9988.35
GR1363.110031.27 1364.0210054.21 1364.2910067.38 1365.4010160.36 1363.5210189.00
GR1365.110225.06 1365.3110249.87 1361.3310270.28 1363.8810292.69 1362.6910311.21
GR1365.810325.37 1365.6810359.41 1364.4210402.36 1365.6010423.55 1364.3410442.35
GR1363.710462.82 1365.1010472.30 1365.3310480.52 1364.1110490.42 1365.5310501.75
GR1364.810541.04 1365.2510579.72 1363.2610601.19 1362.5410621.04 1361.4910634.85
GR1367.510660.98 1366.9910737.15 1367.3610801.23
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X116.348      37 9841.0310144.93     595     310  497.94
GR1374.0 9141.00 1372.84 9232.51 1371.70 9453.27 1370.65 9551.83 1370.89 9579.59
GR1370.5 9643.66 1370.54 9658.59 1368.00 9669.77 1368.25 9678.81 1366.77 9684.21
GR1366.7 9700.54 1368.28 9728.13 1368.33 9798.00 1368.31 9841.03 1366.74 9911.88
GR1366.9 9924.93 1364.63 9944.09 1365.07 9956.73 1363.99 9965.77 1363.10 9990.28
GR1362.6 9996.65 1364.9010031.10 1365.5610113.20 1367.7310144.93 1367.0810175.58
GR1366.110214.84 1367.0110241.49 1365.5610260.35 1366.0610273.85 1365.8110289.61
GR1363.010355.80 1367.8810392.74 1367.1710445.21 1366.8410458.55 1367.5510515.81
GR1368.510622.19 1368.8510660.66
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X116.411      28 9686.2210049.69     395     535  481.78
X3    10
GR1375.9 8995.00 1375.05 9120.20 1374.58 9159.97 1373.44 9270.57 1372.46 9345.53
GR1371.9 9370.95 1371.12 9417.94 1370.98 9460.54 1371.07 9512.40 1371.41 9560.04
GR1371.7 9640.55 1372.29 9686.22 1368.45 9702.90 1367.29 9721.58 1369.72 9758.22
GR1369.9 9775.40 1369.50 9894.49 1366.28 9956.88 1365.08 9987.15 1364.4110035.01
GR1371.310049.69 1370.9510130.70 1370.5210196.76 1367.0410215.73 1369.8510234.00
GR1369.510249.38 1370.1910309.65 1370.2210371.55
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X116.504      30 9811.6810070.55     500     475  481.43
X3    10
GR1377.9 8925.00 1376.71 9025.45 1375.98 9108.49 1375.17 9222.68 1375.15 9288.95
GR1375.0 9331.82 1374.45 9394.72 1374.09 9464.83 1374.40 9565.32 1374.29 9582.92
GR1374.8 9656.27 1374.97 9665.50 1369.67 9679.46 1370.53 9691.84 1373.39 9713.71
GR1372.0 9731.63 1372.92 9749.68 1373.02 9808.13 1373.13 9811.68 1370.78 9833.45
GR1371.8 9860.80 1369.98 9873.94 1369.77 9895.68 1368.09 9972.28 1366.8210021.02
GR1367.810053.11 1373.9110070.55 1373.1610097.93 1374.4510112.12 1374.2910124.71
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X116.608      32 9854.8810075.05     385     555  500.72
X3    10
GR1380.0 9007.00 1379.51 9048.38 1379.03 9104.16 1378.52 9199.80 1378.06 9275.58
GR1378.0 9323.12 1376.40 9542.06 1376.43 9660.33 1376.65 9760.99 1376.69 9833.01
GR1376.9 9854.88 1375.11 9860.37 1369.14 9874.28 1371.43 9901.31 1368.87 9913.86
GR1371.0 9943.45 1371.58 9967.37 1368.69 9995.55 1371.9710018.19 1371.9810032.53
GR1370.510054.12 1372.9710066.45 1375.3710075.05 1375.0210099.35 1374.6210112.94
GR1373.110130.85 1374.5410142.98 1374.2510150.42 1370.4110181.47 1372.6110194.23
GR1373.310239.89 1375.2910262.60
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X116.637      38 9796.3710091.69     240     235  231.78
X3    10
GR1380.0 9215.00 1380.08 9287.91 1378.64 9456.47 1378.02 9539.78 1377.61 9650.70
GR1377.5 9755.49 1377.95 9796.37 1375.23 9800.03 1372.29 9803.59 1374.36 9822.14
GR1374.1 9845.09 1373.64 9868.07 1371.87 9891.63 1371.96 9902.54 1373.76 9912.51
GR1373.8 9933.34 1372.61 9962.46 1370.17 9997.45 1374.9910020.98 1376.2110075.83
GR1376.910091.69 1375.1810192.99 1377.2310207.79 1376.2810244.30 1376.4210259.44
GR1375.310266.52 1374.9810298.74 1373.5610307.01 1375.6910319.69 1376.5510340.77
GR1377.010352.47 1374.2810383.15 1373.3710400.42 1372.1510409.17 1372.5210430.44
GR1377.010440.96 1377.1510453.89 1377.7610480.52
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X116.732      50 9872.8910091.14     535     460  475.63
X3    10
GR1387.1 9126.00 1385.91 9196.46 1384.39 9325.73 1384.23 9357.75 1382.66 9366.79
GR1384.3 9376.02 1383.83 9423.31 1382.90 9488.50 1381.83 9620.10 1380.94 9707.59
GR1380.4 9784.24 1380.10 9814.78 1380.07 9872.89 1379.83 9879.46 1378.19 9883.93
GR1373.1 9904.86 1373.81 9928.66 1376.38 9978.64 1372.9310001.36 1375.4210020.11
GR1374.010031.44 1378.1310053.85 1379.1110091.14 1378.2810123.79 1377.3110143.34
GR1378.410169.44 1379.0410194.24 1379.2710228.96 1379.1810243.81 1376.6510258.86
GR1377.210312.27 1377.1710316.43 1375.8710380.28 1375.6310401.27 1379.1310413.50
GR1378.810454.52 1378.2610472.41 1378.9810507.22 1377.0510521.90 1378.0310539.82
GR1377.610558.41 1375.0810568.68 1374.7310589.51 1379.3410611.09 1378.7010635.50
GR1379.410716.95 1378.6410801.92 1376.7110820.44 1376.6910844.30 1379.7510863.91
*
X116.829      47 9839.2810093.75     430     550  525.69
X3    10
GR1384.0 9597.00 1383.63 9624.11 1383.38 9671.43 1382.26 9793.51 1382.01 9808.18
GR1382.0 9839.28 1381.32 9857.43 1380.14 9878.20 1379.44 9897.06 1378.50 9940.12
GR1377.9 9950.38 1376.18 9966.48 1375.32 9983.91 1375.6110035.56 1375.5210040.25
GR1374.910062.80 1381.4810093.75 1380.7610124.12 1381.2410158.92 1379.8610173.60
GR1379.010224.80 1379.5210238.09 1380.5710256.30 1381.0310320.59 1380.8610343.63
GR1378.310360.06 1377.1110380.09 1378.1910400.25 1378.6210438.67 1377.6510454.22
GR1376.310488.15 1380.6210503.43 1380.3710535.22 1380.4410565.72 1378.6310579.72
GR1378.510603.94 1379.0610625.18 1381.2510639.95 1381.7710707.04 1381.2110733.80
GR1380.710747.09 1380.1010779.71 1381.5910826.95 1381.6310847.56 1378.4710858.61
GR1381.410875.40 1381.9510885.60
EJ


ER
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# HDR'S PROPOSED CONDITION MODEL

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C
C     14
C  8.655 1985 TOPO - DIGITIZED DATA SEC.8.655 THRU SEC.9.129
C  8.655 DOWNSTREAM STUDY LIMIT
C  8.655 NEW RIVER-SKUNK CREEK CONFLUENCE
C  8.731 BEGIN DISCHARGE FOR NEW RIVER ONLY
C  8.936 OLD CORP STATION NO. 8.95=0.6
C  9.009 GREENWAY ROAD AREA
C  9.129 OLD CORP STATION NO. 9.15=9.8
C  9.129 END 1985 TOPO DIGITIZED SECTIONS, END C/L = 10000
C  9.318 BEGIN STATION C/L = 20000
C  9.953 BELL ROAD
C  9.967 SPECIAL BRIDGE
C 10.989 UNION HILLS DRIVE
C 11.129 NEW SECTION - LEFT BANK TAKEN FROM ARROWHEAD RANCH
C 11.129 WASTEWATER TREATMENT PLANT GRADING PLAN-DIBBLE & ASSOC.
T1       NEW RIVER ABOVE SKUNK CREEK, PHOENIX, ARIZ., SEPT 1985
T2       MARICOPA COUNTY FIS
T3       FLOOD BOUNDARY
*        Model revised between Bell Road and Uninion Hills Drive by Stantec.
*        Additional x-sec based on 1985 topo are added, number of x-sec and
*        location are consistant with Stantec Updated Existing Condition Model.
*        Date of Revised model 1i 12/1/99.
J1             2                                                  1162.8
J2                    -1                                                        15
J3    38       43       53       21       55       26       56       22       54        4
J3     1       50      200
NC  .045     .045     .035     .200     .400
QT     2    21000    21000
X1 8.655       36   9581.4 10224.3      750      150      400
X3    10
GR1173.9   8649.5   1172.8   8725.6   1173.6   8761.4   1172.8   8805.7   1171.9   8882.4
GR1171.9   8973.3   1171.7   9029.3   1170.9   9157.1   1170.5     9250   1170.8     9322
GR1170.3   9369.5   1169.5   9443.6   1169.3   9488.5   1171.5   9503.3   1167.1   9548.1
GR1171.6   9581.4   1166.9   9605.5   1161.4     9624   1157.9     9660   1156.6   9716.3
GR1155.1   9744.7   1156.1   9761.1   1155.3   9864.2   1155.3   9905.7   1156.2   9954.8
GR1156.3    10000   1156.3    10071   1156.7  10091.4   1155.7  10121.5   1155.7  10154.7
GR1164.5  10193.7   1171.2  10224.3   1172.3  10244.2   1171.2    10247   1171.1  10299.3
GR1170.6  10403.3
NC                          .100     .300
QT     2    12000    12000
ET                        9.1                                          9762.5  10213.5
X1 8.731       45   9762.5 10213.5      400      400      400
X3    10
GR1174.8     8627   1174.1   8663.6   1172.6   8666.7   1174.4   8670.4   1172.1   8683.8
GR1170.8   8831.8   1170.4     9040     1170   9196.9   1168.3   9265.9     1167   9305.7
GR1166.8     9321   1173.5     9346   1167.4   9377.8   1160.3   9401.7   1156.9   9425.5
GR1157.6     9463   1156.3   9473.2   1158.8   9489.1     1166   9510.2   1169.2   9519.8
GR1168.9   9553.9   1169.2   9595.9   1168.6   9640.2   1168.3   9678.4   1173.6   9692.1
GR1171.9   9727.6   1171.4   9748.3   1172.8   9762.5   1172.6     9771   1167.8   9795.5
GR  1160   9831.2   1157.1     9844   1156.1   9894.9   1156.9    10000   1157.8  10055.6
GR1157.3  10089.1   1156.7  10123.2   1157.3    10151   1164.7  10183.1   1170.6  10206.7
GR1172.2  10213.5   1173.3  10246.5     1172  10250.5   1171.9  10342.2   1171.3    10403
*
*     REVISED THE ELEVATION OF STATION 9478.8 FROM 117039 TO 1170.9 (TMM 3-94)
*
ET                        9.1                                          9771.3  10219.2
```

```
X1 8.807      58  9771.3 10219.2     400     390     400
X3    10
GR1174.2    8591  1174.2  8613.7  1174.8  8626.5  1174.6  8637.8  1173.1  8640.4
GR1174.2  8644.4  1172.8  8658.6  1172.4  8867.9    1172  9015.9  1171.9  9044.3
GR1172.4  9063.6  1170.8  9080.6  1170.8  9093.1  1174.4  9117.5    1175  9131.2
GR1172.2  9150.5  1164.2  9172.6  1160.1  9193.9  1158.6  9221.8  1157.7  9249.9
GR1159.2  9261.8  1157.9  9281.7  1159.2  9293.1  1164.6  9312.1  1171.3  9327.1
GR1170.8    9359  1170.5  9382.8  1171.1  9406.1  1170.6  9448.1  1170.9  9478.8
GR1171.6    9539  1171.9  9588.1  1172.4  9618.2  1172.2  9646.1  1172.1  9673.9
GR1178.4  9688.1  1187.7  9701.7  1193.4  9715.9  1194.1  9729.6  1186.6  9749.4
GR1174.7  9771.3  1169.2    9792  1162.1  9826.7  1159.7    9848  1158.4  9918.7
GR1158.3  9957.1  1158.8   10000  1158.6 10069.8  1158.4 10113.6  1158.5 10146.5
GR1163.7 10172.1  1170.8 10201.6  1173.9 10219.2  1174.4 10248.2  1173.2 10258.1
GR1173.9 10328.3  1173.6 10380.5    1173 10402.7
ET                   9.1                                          9824.7 10216.9
X1 8.883      55  9824.7 10216.9     280     400     400
X3    10
GR1176.2  8580.8  1175.3  8595.6  1173.7  8597.9  1174.9  8600.1  1173.5  8625.1
GR1174.4  8705.8  1174.1  8768.8  1175.2  8824.2  1179.5  8846.4  1180.4  8864.3
GR1177.5  8878.5  1167.9  8905.2  1162.9  8926.2  1159.6  8943.8  1159.9  8977.9
GR1158.5  8985.3  1161.3  9000.6  1158.4  9027.9  1158.8  9040.4  1162.1  9058.5
GR1169.4  9075.9  1173.3  9086.9    1174  9126.4    1173  9140.3    1173  9167.6
GR1172.7  9204.5  1174.4  9252.2  1173.6  9288.3  1173.9    9325  1173.7  9357.3
GR1174.3  9422.7  1174.7  9473.8  1173.9  9529.7  1173.9  9563.4  1175.1  9610.3
GR1174.9  9680.1  1175.9  9745.5  1174.9  9824.7  1169.4  9860.8  1166.1  9911.3
GR1163.8  9955.6  1163.1  9984.3  1163.1   10000  1160.2 10004.5  1160.9 10056.5
GR1160.1 10106.7  1160.4 10145.4  1163.8 10164.1  1171.6 10191.4  1176.3 10216.9
GR  1177 10247.6  1175.5 10249.9  1176.3 10292.2  1176.1 10347.6  1175.3 10404.7
ET                   9.1                                          9809.4 10213.2
X1 8.936      60  9809.4 10213.2     300     300     290
X3    10
GR  1180  8590.6  1174.5  8616.4  1165.7  8644.6  1162.8  8656.8  1162.9  8675.8
GR1163.3  8691.1    1163  8713.3  1162.3    8740  1166.9  8754.2  1173.7  8779.8
GR  1179  8797.9  1177.6  8810.7  1177.4  8832.3  1175.7  8843.9  1174.6  8913.5
GR1175.6  8920.6  1174.6  8947.9  1175.5  9022.3  1175.5    9091  1175.9  9152.4
GR1176.4  9222.8    1177  9261.2  1177.8    9274  1177.1    9322  1177.8  9335.9
GR1178.2  9360.6  1175.8  9370.5  1176.9  9389.9  1177.8  9408.3  1175.5  9452.4
GR  1177  9483.3  1176.2  9535.9  1175.6  9543.2  1176.6  9575.3    1176  9615.4
GR1177.8  9634.7  1176.7  9680.7  1177.8    9708  1176.9    9754    1176  9785.5
GR1176.1  9797.7  1177.3  9809.4    1176    9817  1167.6  9825.6  1166.8  9858.6
GR1166.7    9894  1165.7  9939.7  1165.3  9959.9  1165.7  9994.3  1162.2   10000
GR1162.3 10069.8  1161.8 10110.7  1162.1 10143.1  1167.9 10169.2    1174 10192.8
GR1178.2 10213.2  1178.2 10244.2  1177.7 10247.6  1177.1 10309.8  1176.6 10402.1
*
*     REVISED THE ELEVATION OF STATION 8934.8 FROM 1744.7 TO 1174.7 (TMM 3-94)
*        "     "      "     "     "    9747.2  "   117732 "  1177.2    "
*        "     "      "     "     "    9765.9  "   117835 "  1178.5    "
*        "     "      "     "     "    9792    "   117838 "  1178.8    "
*        "     "      "     "     "    9802.3  "   117936 "  1179.6    "
*        "     "      "     "     "   10000.0  "   116535 "  1165.5    "
*
ET                   9.1                                          9886.1 10212.7
X1 8.977      58  9886.1 10212.7     220     200     210
X3    10
GR1177.7  8605.6  1175.6  8628.1  1174.7  8658.4  1174.4  8712.7  1174.6  8744.5
GR1175.6  8767.2  1174.1  8802.4  1175.6  8841.6  1174.9  8864.9    1175  8878.6
GR1174.7  8934.8  1174.7  8953.5  1175.5  8991.6  1175.7  9030.5  1176.4    9064
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GR1178.2  9075.1  1176.8  9084.2  1176.6  9130.2  1176.8  9179.1  1177.1  9252.3
GR  1176  9330.2  1176.4  9370.6  1177.8  9377.4  1176.8  9385.9  1176.8  9448.7
GR1177.3    9491  1176.4    9537  1176.4  9556.3  1176.9  9609.7  1176.8  9662.3
GR1176.3  9713.1  1177.2  9747.2  1178.5  9765.9  1178.8    9792  1179.6  9802.3
GR1178.3    9821  1180.8  9828.4  1176.5  9836.1  1176.5  9867.6  1177.2  9886.1
GR1168.4    9900  1167.1  9909.3  1165.7    9938  1164.9  9976.1  1165.5   10000
GR1163.6 10007.3  1163.7 10066.4    1164 10103.3  1163.5 10128.9  1163.5 10137.4
GR1168.4 10163.5  1173.3   10188  1178.5   10209  1179.3 10212.7  1180.9 10243.9
GR1180.1 10248.2  1179.7 10281.7  1179.8 10401.6
ET                   9.1                                          9764.5   10207
X1 9.009      34  9764.5   10207     330     180     180
X3    10
GR  1177    8740  1176.9  8817.3    1177  8883.2  1177.1  8937.1  1177.2  9008.7
GR1177.5  9075.7  1177.5  9150.2  1177.5  9213.2  1177.7  9285.6  1177.7  9368.3
GR1177.9    9462  1178.2  9547.2  1178.2  9614.3  1178.3  9675.6  1178.3  9725.9
GR  1178  9764.5  1174.2  9786.1  1167.1  9821.6    1164  9852.3    1166  9886.3
GR1164.6    9921  1163.6  9960.8  1162.9   10000  1164.1 10055.9  1164.8 10109.6
GR1164.8 10149.3  1169.2 10162.4  1178.6 10177.2  1179.9   10207  1180.3 10253.3
GR1179.5 10304.1  1180.2 10353.8  1179.8 10424.8  1179.3 10475.4
ET                   9.1                                          9689.8 10113.8
X1 9.047      44  9689.8 10113.8     280     160     200
X3    10
GR1179.8  8601.2  1179.8    8619 1180.63    8633  1179.4  8721.9  1179.5  8798.8
GR1179.2  8858.5  1178.9  8933.2  1178.7  9004.2  1173.2  9070.4  1178.8  9154.1
GR1178.8  9233.1  1178.8  9306.9    1179  9377.9  1179.1  9475.6  1178.6  9532.5
GR1178.7  9570.5  1180.6  9579.9    1180  9593.2  1181.6  9616.5  1180.5    9660
GR1177.5  9689.8  1171.4  9715.9  1166.4  9742.1  1166.2  9751.1  1166.9  9756.8
GR1162.3  9762.5    1162    9781  1163.2  9794.9  1163.3  9845.4    1164  9880.4
GR1162.9  9904.5  1161.7  9907.9  1161.2  9937.7  1161.9  9971.5  1162.6   10000
GR  1165 10050.5  1165.7 10084.6    1171 10101.3  1177.6 10113.8  1178.2 10168.4
GR1178.2 10218.1  1178.1 10298.2  1178.7 10354.4  1178.2 10401.6
NC          .060
ET                   9.1                                          9641.2   10090
X1 9.129      51  9641.2   10090     290     460     420
X3    10
GR1182.2  8558.3  1182.2  8569.9    1183  8580.4  1183.8  8652.3  1181.8  8719.9
GR1182.2  8785.2  1181.7  8844.6  1181.3  8932.3  1180.6  8995.9  1180.5  9075.5
GR  1181    9134    1181  9205.5  1181.5  9271.4  1181.2  9370.8  1180.3  9477.1
GR1180.3  9499.5  1180.1  9524.8  1180.8  9562.3  1180.3  9599.2  1180.9  9629.9
GR1180.6  9641.2  1176.6  9662.3    1173  9666.8  1173.4    9673  1164.9  9688.4
GR1165.5  9712.2  1166.2  9768.2  1166.3  9795.2  1167.5  9799.7  1164.8  9814.5
GR1164.2  9836.1  1165.2  9889.5  1165.1  9919.9  1166.3  9971.3  1167.1  9982.6
GR1168.1  9987.7  1167.9   10000  1168.9 10061.6  1171.8 10079.8  1178.7   10090
GR  1179 10117.8    1179 10195.1  1178.6 10241.7  1178.5 10245.1  1179.7 10304.1
GR1179.2 10370.6  1179.6 10407.5  1179.9 10429.4  1178.7 10432.2  1180.1 10433.6
GR1179.5 10439.6
*
*     REVISED THE ELEVATION OF STATION 18380 FROM  185.2 TO 1185.2 (TMM 3-94)
*        "     "      "     "     "    20015  "   118135 "  1181.5     "
*
NC  .050    .060    .035    .100    .300
ET                   9.1                                          19660   20015
X1 9.318      39   19660   20015    1000    1000    1000
X3    10
GR  1192   16150    1170   16210    1170   16310  1194.6   16420    1186   16465
GR1186.8   16560    1184   16830  1185.2   16920    1184   17065    1184   17120
GR  1186   17130    1186   17150    1184   17160  1183.7   17360    1184   17470
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GR  1185   17855  1185.2   18380  1185.3   18430    1185   18460  1185.1   19440
GR  1186   19660    1184   19685    1178   19710    1178   19865    1176   19945
GR  1174   19985  1173.2   20000    1174   20010  1181.5   20015  1181.3   20105
GR  1182   20360    1184   20370    1186   21110    1186   21150    1184   21595
GR  1182   22220    1180   22940    1180   23725  1181.2   23740
QT     2   11450   11450
ET                   9.1                                             19770   20235
X1 9.492      40   19770   20235     910     890     920
X3    10
GR1197.2   16090    1178   16135    1178   16185  1193.2   16240    1192   16258
GR  1190   16470    1188   17185    1187   17360    1188   17710  1188.6   17900
GR1189.3   18260    1189   18870  1188.8   18885    1190   18900    1150   18920
GR1189.2   19030  1189.5   19300    1188   19610    1185   19635    1186   19650
GR  1188   19700    1188   19770    1186   19905    1184   19930    1184   19950
GR  1180   19970    1179   20000    1180   20055    1182   20160    1184   20195
GR1193.9   20235    1186   20255  1185.4   20310    1186   20785    1188   20800
GR1188.8   21100    1190   21450    1190   22860    1188   23130    1188   24248
NC  .040    .060    .035
ET                   9.1                                             19840   20060
X1 9.692      31   19840   20060    1050    1040    1056
X3    10
GR  1194    1593    1192   16660    1190   17050  1189.8   17130    1190   17448
GR  1192   18040    1194   18880    1195   19040  1194.4   19150    1194   19280
GR  1194   19680    1192   19790    1192   19830    1195   19840    1186   19880
GR1184.1   20000    1186   20015    1188   20020    1190   20040    1196   20060
GR  1194   20060  1193.2   20090    1194   20195    1194   21315    1196   21690
GR  1196   21725    1194   22305    1192   24380    1190   24790    1190   25100
GR  1192   25440
NC  .060    .060    .035    .300    .500
ET                   9.1                                             19840   20080
X1 9.889      31   19840   20080    1100    1050    1040
X3    10
GR  1200   14530    1198   15330    1196   17370    1198   17830    1200   18628
GR1201.6   19190    1200   19460    1198   19490    1196   19510    1196   19570
GR  1198   19590    1198   19810    1200   19820    1200   19840    1198   19850
GR  1196   19870    1190   19890    1188   19900    1190   19920    1190   19965
GR1188.2   20000    1190   20050    1200   20080    1200   20970  1198.6   21620
GR  1200   21710    1200   21730    1198   22710  1196.1   23410    1198   24490
GR  1198   26950
*
*     REVISED THE ELEVATION OF STATION 15520 FROM 120034 TO 1200.4 (TMM 3-94)
*
NC  .060    .060    .030    .300    .500
ET                   9.1                                             19790   20032
X1 9.953      27   19790   20032     225     225     225
X3    10
GR  1202   15050  1200.4   15520    1200   16550    1200   16890  1200.5   17285
GR  1200   17540    1200   17610    1202   18770    1202   18860  1202.4   19045
GR  1200   19515    1200   19790    1194   19805    1192   19840    1192   19910
GR  1190   19990  1188.6   20010    1200   20030    1202   20032    1202   20050
GR  1200   21475    1200   21785    1198   22680    1198   24780    1200   25390
GR  1200   26215  1200.6   26810
ET                 9.110                                             19825   20010
SB  .900   1.560    2.6             213      20    2800   1.880 1188.61  1188.6
X1 9.967      29   19825   20110      75      75      75
X2                     1  1200.9  1207.5
X3    10
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BT    21   15025    1204           15450  1203.5           16410    1202
BT 16635  1201.4           16805    1202           17990    1204           18530
BT1205.6           19065    1204           19325    1204           19800    1205
BT         19825  1207.5  1200.9   20110  1207.5  1200.9   20110  1205.8
BT 20635    1204           21810    1202           22850    1200           24300
BT  1198           24630    1198           25270    1200           26275    1202
BT         27010  1202.1
GR  1204   15025  1203.5   15450    1202   16410  1201.4   16635    1202   16805
GR  1204   17990  1205.6   18530    1204   19065    1204   19325    1205   19800
GR  1204   19825    1196   19845    1194   19860    1192   19890    1192   19980
GR  1190   20015  1188.6   20025    1190   20035    1194   20060    1204   20110
GR1205.8   20130    1204   20635    1202   21810    1200   22850    1198   24300
GR  1198   24630    1200   25270    1202   26275  1202.1   27010
*
*     REVISED THE ELEVATION OF STATION 23690 FROM 199.6 TO 1199.6 (TMM 3-94)
*
NC                          .100    .300
ET                   9.1                                    19635   20055
X110.096      38   19635   20055     610     650     645
X3    10
GR  1206   14890    1204   14935    1203   15070    1204   16230  1204.8   16600
GR1204.4   17760  1205.1   18700    1205   19025    1204   19260    1204   19275
GR  1206   19285    1208   19335    1208   19435    1206   19545    1202   19555
GR  1201   19635    1198   19665    1196   19970  1195.7   20000    1196   20010
GR  1198   20020    1200   20040    1206   20055    1206   20090    1206   20675
GR  1204   21060    1202   22510    1200   23200  1199.6   23690    1200   24210
GR  1202   24600    1202   24615    1200   24890    1199   25180    1200   25545
GR  1202   25900    1206   25910    1206   26020
QT     2   10900   10900
ET                   9.1                                    19820   20320
X110.271      40   19820   20320     920     925     925
X3    10
GR  1208   14700    1206   15620    1206   16020    1208   16520    1208   16790
GR1209.6   17725  1209.7   18290    1208   19090    1208   19750  1212.5   19820
GR  1204   19870    1202   19930    1200   19980  1198.2   20000    1200   20020
GR  1202   20230    1204   20295    1208   20320    1208   20365    1206   20375
GR  1206   20680    1208   20685  1208.4   21370    1208   22660    1206   22930
GR  1204   23700    1204   24115    1206   25190    1206   25220    1204   25230
GR  1204   26490    1206   26520    1206   26865    1207   26870    1207   26880
GR  1206   26895    1204   26930    1204   27050    1206   27210    1208   27230
ET                   9.1                                    19655   20110
X110.443      34   19655   20110     930     900     910
X3    10
GR1213.5   14830    1212   15205  1210.5   15830    1212   16220  1213.9   17660
GR  1212   19220    1211   19560    1212   19590    1216   19605    1216   19655
GR  1210   19670    1210   19740    1208   19750    1206   19950  1205.6   20000
GR  1206   20100    1210   20110    1212   20600    1212   22030    1210   22740
GR  1208   23440  1207.8   23780    1208   24260  1208.6   25120    1208   25140
GR  1206   25145    1206   26400    1208   26810    1208   27000    1206   27080
GR  1206   27180    1208   27190    1212   27205    1214   27415
ET                   9.1                                     9578   10045
X110.517      14    9578   10045     415     440     480
X3    10
GR1219.5    9578    1214    9605    1212    9613    1210    9678    1214    9693
GR  1214    9700    1208    9720    1208    9737    1210    9780    1210    9840
GR  1208    9895    1206   10000    1206   10018  1213.8   10045
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*     REVISED THE ELEVATION OF STATION 16705 FROM 1318   TO 1218   (TMM 3-94)
*        "     "      "     "     "    18050  "   121935 "  1219.5    "
*
ET                    9.1                                                19955   20300
X110.612      34    19955   20300     480     460     440
GR  1217   15010     1216   16240    1216   16325    1218   16705  1219.5   18050
GR  1219   18420     1218   19580    1216   19885    1216   19895    1222   19910
GR  1222   19955     1210   19985  1209.6   20000    1210   20010    1212   20295
GR  1218   20300     1218   20325    1216   20330    1216   20740    1218   20760
GR  1218   21655     1216   22770    1214   23050  1212.4   23730    1214   24140
GR  1214   24250     1214   25455    1212   25530    1210   26540    1212   26790
GR  1212   27110     1214   27420    1214   28550    1216   28650
ET                    9.1                                                 9925   10315
X110.651       7     9925   10315     225     230     235
X3    10
GR  1224    9925     1216    9940    1212    9975    1212   10070    1212   10255
GR  1212   10279     1220   10315
ET                    9.1                                                 9942   10260
X110.699       7     9942   10260     240     240     245
X3    10
GR  1218    9942     1212    9970  1211.8   10000    1212   10020    1214   10095
GR  1214   10228     1220   10260
ET                    9.1                                                 9838   10750
X110.750       5     9838   10750     275     270     270
X3    10
GR  1220    9838     1214    9860  1213.5   10000    1214   10550    1220   10750
ET                    9.1                                               19750   20015
X110.803      52    19750   20015     270     270     270
X3    10
GR1225.5   14775     1225   15010    1225   15545    1224   15710    1223   16085
GR  1224   16185   1223.8   16830    1222   16900    1222   16920    1224   16955
GR  1224   17030   1223.2   17280    1224   17460    1224   19160    1224   19288
GR  1223   19435     1224   19450    1230   19465    1230   19530    1220   19565
GR  1220   19575     1220   19585    1220   19595    1220   19750    1216   19768
GR  1216   19888   1214.1   20000    1216   20010    1220   20015    1220   20190
GR  1222   20405     1224   20480    1224   20555    1222   21230    1220   22410
GR  1218   23155   1217.8   23290    1218   23405    1220   23875    1220   23910
GR  1218   25030     1218   25155    1220   25180    1220   25210    1220   25248
GR  1218   25935     1218   27130    1220   27370    1220   27690    1222   28035
GR  1222   28610     1223   28690
ET                    9.1                                               19905   20250
X110.989      37    19905   20250     920    1000     980
X3    10
GR  1232   15130     1231   15330    1231   15900    1230   16280  1228.3   16485
GR  1228   16700     1227   16970  1227.7   17355    1228   18930    1228   19575
GR  1226   19780     1226   19850    1226   19905    1220   19955  1218.2   20000
GR  1220   20080     1222   20175    1224   20200    1226   20250    1226   20251
GR  1226   20252     1228   20295  1228.2   20530  1228.6   20910    1228   21640
GR  1226   22470     1225   22630  1224.6   22820  1224.2   23230    1226   24300
GR  1226   24490     1224   24995    1222   25830  1221.2   26800    1222   27800
GR  1224   28070     1226   28380
ET                    9.1                                               19820   20115
NC  .045    .045
X111.129       7    19820   20115     710     710     710
X3    10
GR  1232   19820     1225   19840    1222   19850  1221.7   20000    1222   20090
GR  1225   20100     1230   20115
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QT      2   10350   10350
ET                   9.1                                          19830   20055
X111.188       23   19830   20055     310     310     320
X3     10
GR   1232   19830    1225   19850    1222   19860    1222   19975    1222   20000
GR   1224   20020    1232   20055    1232   20080    1234   20420    1234   20770
GR1234.4    21080    1234   21335    1232   22210    1230   23060  1229.5   23110
GR   1230   23225    1232   24360    1232   24390    1230   25130    1228   25580
GR   1226   26990    1226   27460    1228   28315
ET                   9.1                                          19900   20120
X111.301       10   19900   20120     600     600     600
X3     10
GR   1232   19890    1235   19900    1235   19905    1232   19915    1226   19930
GR   1224   19938    1222   20000    1226   20070    1230   20100    1236   20120
NC   .045    .060    .035
ET                   9.1                                          19900   20175
X111.386       32   19900   20175     440     420     450
X3     10
GR   1240   16820    1238   17220    1238   18760    1240   18800    1244   18850
GR   1244   18915    1238   18950    1238   19040    1236   19280    1236   19420
GR   1233   19430    1233   19890    1233   19892    1233   19900    1228   19905
GR   1228   19912    1226   19975    1223   20000    1226   20030    1228   20085
GR   1230   20115    1232   20150    1238   20175  1239.5   20820    1238   22925
GR1238.8    23655    1240   24780    1240   24805    1238   25705  1236.8   26140
GR   1238   26800    1240   27485
ET                   9.1                                          19780   20170
X111.481       15   19780   20170     480     540     520
X3     10
GR   1240   19130    1238   19305    1230   19320    1228   19380    1228   19550
GR   1230   19710    1236   19780    1230   19800    1232   19860    1230   19900
GR   1228   19950  1227.4   20000    1230   20060    1234   20140    1240   20170
ET                   9.1                                          19470   20310
X111.566       37   19470   20310     280     530     460
X3     10
GR   1241   17270    1240   18790    1242   18940    1242   19140    1240   19170
GR   1240   19470    1236   19480    1234   19550    1234   19760    1230   19775
GR   1230   19790    1232   19810    1234   19820    1234   19855    1232   19860
GR   1232   19940    1230   19980  1229.7   20000    1230   20010    1230   20180
GR   1232   20295    1240   20310    1240   20335    1242   20780    1244   21030
GR1244.2    21620  1244.2   21960    1244   22190  1243.6   23225    1244   23470
GR1244.9    24495    1246   25220    1245   25570    1244   26550    1244   26660
GR   1246   27240  1246.7   27420
ET                   9.1                                          19925   20510
X111.759       35   19925   20510    1050     980    1020
X3     10
GR   1246   17890    1245   18190    1246   18510    1246   18920  1246.5   18930
GR   1246   18950    1246   19120    1244   19230    1244   19255    1244   19880
GR   1244   19900    1244   19925    1236   19940    1235   20000    1236   20040
GR   1236   20455    1242   20465    1244   20495    1248   20510    1248   20525
GR   1246   20540    1246   20620    1246   20760    1246   20800    1246   20820
GR   1246   21070    1248   21460    1250   21630    1250   21870  1219.6   22350
GR   1249   22980  1249.2   23620    1250   25015    1250   25960  1250.4   27420
NC   .060    .060    .035
ET                   9.1                                          19865   20510
X111.949       35   19865   20510     990    1000    1000
X3     10
X4      1  1247.4   20700
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GR1250.8   18670  1250.4   18895  1250.4   19275    1251   19500    1251   19535
GR  1250   19865    1248   19920    1246   19974    1244   19976    1243   20000
GR  1244   20045    1244   20215    1242   20280    1242   20470    1244   20480
GR  1246   20510    1246   20520    1246   20530    1246   20590    1246   20600
GR  1248   20925    1250   20940    1252   21660    1254   22180    1254   22280
GR1252.8   22630    1254   22985  1252.5   23380    1254   23685    1244   23750
GR1252.4   24515    1254   25865    1254   26540    1256   27550  1256.5   27760
ET                   9.1                                             19890   20680
X112.125      37   19890   20680     910    1000     930
X3    10
GR  1256   19305  1256.1   19430    1256   19805    1256   19860    1258   19875
GR  1258   19890    1256   19920    1254   19923    1250   19930  1248.2   19950
GR1248.5   20000    1250   20025    1250   20090    1248   20140    1248   20160
GR  1250   20230    1250   20320    1248   20330    1248   20440    1250   20565
GR  1252   20600    1254   20640    1258   20680    1258   20710    1254   20730
GR  1254   20800    1254   20810    1254   20860    1253   21155    1254   21455
GR  1256   22190    1258   22395    1258   22940    1259   24160    1260   26290
GR  1260   27215  1261.7   27800
QT     2    9800    9800
ET                   9.1                                             19830   20240
X112.313      28   19830   20240    1010     980     990
X3    10
GR  1261   18650    1260   19080    1260   19800    1262   19810    1262   19830
GR  1260   19835    1258   19840    1256   19935    1254   19950  1252.2   20000
GR  1254   20220    1260   20240    1260   20260    1258   20300    1258   20320
GR  1258   20360    1258   20362    1258   20440    1258   20450    1258   20455
GR1258.6   21090    1259   21610    1260   22140  1261.5   22890  1261.9   23990
GR  1262   24500    1262   27100  1263.3   27570
ET                   9.1                                             19810   20280
X112.511      35   19810   20280    1000    1020    1056
X3    10
GR  1266   18920    1266   19115    1266   19240    1264   19385    1263   19600
GR  1262   19700    1262   19710    1262   19720  1263.6   19810    1260   19865
GR  1258   19905  1257.3   20000    1258   20070    1264   20110    1264   20140
GR  1262   20210    1260   20220    1260   20265    1264   20280    1264   20350
GR  1262   20365    1260   20400    1260   20440    1264   20460    1264   20610
GR1263.6   20830    1264   20995    1265   21585    1265   22640    1266   23100
GR  1266   24600  1265.7   24880    1266   26000  1265.7   26670    1266   27380
ET           4.1     9.1          20980                             19810   20330
X112.701      34   19810   20330    1030    1020    1000
X3    10
X4     1  1269.6   20500
GR1270.6   19190    1270   19700    1270   19810    1268   19820    1266   19985
GR1264.7   20000    1265   20070    1266   20290    1268   20330    1270   20600
GR  1269   20660    1270   20740    1270   20980    1266   20990    1266   21090
GR  1268   21100    1268   21150    1262   21190    1262   21200    1270   21230
GR  1270   21260  1269.6   21510    1270   21770  1271.4   23220  1270.6   23800
GR  1270   23910    1270   23920  1270.7   24130  1268.8   24900  1269.1   26070
GR1269.6   26710    1270   27000    1270   27650  1270.7   27740
ET           4.1     9.1          21135                             19845   20360
X112.896      40   19845   20360    1010    1010    1030
X3    10
X4     1    1274   20420
GR  1276   18670    1274   18750  1275.6   19330    1274   19845    1272   19850
GR  1270   19965  1268.8   20000    1270   20020    1270   20350    1273   20360
GR  1274   20585    1276   20620    1276   20670    1274   20675    1274   21135
GR  1270   21165    1270   21180    1274   21200    1274   21250    1270   21260
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GR  1270   21350    1264   21365    1264   21390    1274   21410    1274   21495
GR  1276   21560  1277.2   21900    1276   22520  1275.6   22660    1276   23015
GR  1277   23610    1276   24190    1276   24280  1274.9   24440  1275.7   25428
GR1274.2   25910  1274.9   26740    1274   26945    1274   27000    1276   27660
QT     2    7900    7900
ET           4.1     9.1           21645                            19930   20350
X113.076      32   19930   20350     950     980     950
X3    10
GR  1280   19510    1278   19930    1274   19940  1272.6   20000    1274   20050
GR  1276   20090    1276   20210    1274   20260    1272   20270    1272   20315
GR  1274   20335    1278   20350    1279   20480    1278   21020    1278   21150
GR  1280   21645    1280   21660  1278.6   21740  1278.6   21760    1278   21780
GR  1278   21800    1280   21960    1280   22825  1279.6   23250    1280   23630
GR  1280   24220    1278   24835  1278.6   25040  1278.6   26370    1278   26740
GR  1278   26920    1280   27585
ET           4.1     9.1           21410                            19810   20120
X113.227      26   19810   20120     800     670     800
X3    10
GR  1284   18690    1282   19260    1282   19690  1281.5   19810    1276   19845
GR  1274   19970  1273.9   20000    1274   20030    1278   20090    1280   20100
GR  1282   20120    1282   21410    1276   21425    1276   21440    1282   21455
GR1282.2   21900    1284   22160  1282.6   22860    1284   23350  1284.7   23820
GR  1284   24080    1282   24510    1282   24580  1281.8   24730  1281.5   25780
GR  1282   27300
ET           4.1     9.1           21425                            19870   20170
X113.420      33   19870   20170     970    1000    1020
X3    10
X4     2  1187.2   19750    1186   19700
GR  1290   18215    1288   19350    1288   19490    1286   19560  1287.5   19870
GR  1284   19880    1282   19975  1281.8   20000    1282   20040    1282   20080
GR  1286   20100    1288   20150    1290   20170    1290   20185    1288   20195
GR  1288   20315    1288   20490    1288   20780    1287   20840    1286   21425
GR  1284   21570    1282   21580    1282   21610    1286   21650    1286   21760
GR  1288   21875    1297   21900    1288   21940    1288   23570  1288.7   23780
GR1289.6   25395    1290   26450  1290.7   26525
NC  .050    .050    .035
ET           4.1     9.1           21380                            19870   20455
X113.619      39   19870   20455    1090    1020    1056
X3    10
GR  1296   18690    1294   19490    1294   19835    1294   19870    1294   19890
GR  1286   19910    1286   19995    1285   20000    1286   20005    1290   20105
GR  1290   20315    1292   20360    1292   20445    1290   20450    1292   20455
GR  1293   20456    1292   20457    1292   20470    1290   20480    1290   20520
GR  1294   20540    1294   20600    1294   21380    1292   21680    1290   21690
GR  1290   21710    1292   21755    1294   21780    1294   21850    1290   21880
GR  1290   21895    1292   21905    1294   22680  1295.4   23340  1295.7   24310
GR  1294   24400    1294   25040  1294.8   25580    1296   26565
ET           4.1     9.1           21430                            19890   20340
X113.818      33   19890   20340    1050    1050    1056
GR  1302   18660    1300   19320    1300   19890    1298   19895    1296   19970
GR1295.5   20000    1296   20015    1296   20130    1294   20250    1294   20325
GR  1298   20340    1298   20450    1296   20460    1296   20630    1298   20740
GR  1300   20750    1300   20870  1299.2   21160    1300   21305  1300.3   21430
GR  1300   21580    1298   21820    1294   21840    1294   21850    1296   21860
GR  1296   22050    1298   22060    1300   22865    1300   23030  1300.6   23470
GR1300.8   23985    1300   24550    1300   26150
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*     REVISED THE ELEVATION OF STATION 22245 FROM 2300 TO 1300 (TMM 3-94)
*
QT      2    6100    6100
ET            4.1     9.1           22160                           19915   20270
X114.013       39   19915   20270    1020    1055    1030
X4      5    1304   20900  1302.3   20930    1304   20960    1304   21100    1302
X4  21170
GR   1306   19285    1304   19690    1304   19915    1302   19940    1302   19960
GR   1300   19962    1299   20000    1300   20010    1302   20035    1300   20120
GR   1302   20190    1302   20250    1303   20270    1302   20300    1302   20625
GR   1300   20645    1300   20660    1302   20720    1305   20725    1304   21145
GR   1306   21170    1306   22160    1304   22225    1300   22245    1298   22255
GR   1298   22270    1302   22285    1302   22350    1304   22390    1304   22460
GR   1302   22480    1304   22505    1306   22680    1306   23465  1307.7   24010
GR1306.2    24750    1306   25400    1306   25520  1306.3   26000
ET            4.1     9.1           21710                           19715   20015
X114.197       36   19715   20015     990     920     970
GR   1316   18385    1314   18590    1312   19130    1310   19550    1308   19565
GR1308.5    19715    1306   19730    1304   19732    1304   19755    1306   19800
GR   1307   19850    1306   20000    1310   20015    1310   20240    1308   20242
GR   1308   20310    1310   20330    1310   20460    1308   20465    1308   20745
GR   1310   20780    1310   20810    1308   20815    1308   20830    1310   20832
GR   1310   21710    1308   21930    1306   21970    1306   22035    1308   22060
GR   1310   22550    1310   22640  1310.6   22800    1310   22910    1310   25290
GR   1311   25560
ET            4.1     9.1           21420                           19540   20250
X114.379       38   19540   20095     940    1000     960
X4      3    1316   21150    1315   21030  1315.3   20970
GR   1324   18115    1322   18320    1320   18550    1318   19100    1316   19540
GR   1314   19550    1314   19635    1312   19655    1310   19665    1310   19690
GR   1316   19705    1316   19950    1312   19960  1310.4   20000    1312   20020
GR   1314   20095    1314   20430    1316   20535    1316   20580    1314   20750
GR   1314   20820    1314   20860    1312   20900    1312   20945    1314   20950
GR   1316   21420    1316   22060    1314   22065    1312   22075    1312   22150
GR   1314   22180    1316   22385    1316   23115    1318   23325    1318   23600
GR   1316   24180    1316   24290    1318   25135
ET            4.1     9.1           20045                           19220   20045
X114.559       39   19220   20045     950     915     950
X4      2    1320   20035  1320.8   20045
GR   1326   18225    1324   18540    1322   18690    1322   19220    1318   19225
GR   1316   19230    1318   19300    1320   19360    1320   19415    1318   19425
GR   1318   19450    1320   19550    1320   19740    1318   19760    1318   19780
GR   1318   19940    1316   19960  1315.4   20000    1316   20020    1318   20025
GR   1320   20065    1320   20210  1320.6   20375    1320   20875  1319.9   21150
GR   1320   21220  1320.4   21370    1320   21515    1320   21790    1318   21792
GR   1318   21820    1320   21840    1320   22190    1322   22800    1322   23050
GR   1320   23620    1320   23650    1322   23970  1322.4   24200
ET            4.1     9.1           22000                           19670   20170
X114.752       36   19670   20170    1010    1010    1020
X3     10
GR   1336   17740    1334   18200    1332   18480    1330   18820    1328   19010
GR   1326   19300    1326   19670    1322   19680    1322   19910    1320   19988
GR1318.8    20000    1320   20010    1322   20015    1322   20080    1324   20090
GR   1324   20125    1326   20170    1326   20580    1324   21260    1324   21550
GR   1326   21780    1328   21820    1328   22005    1326   22060    1322   22070
GR   1322   22120    1324   22190    1326   22230    1328   22580    1328   23035
GR1236.4    23615    1328   24120    1330   24470    1332   24710    1334   24950
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GR  1336   25220
QT     2    4200    4200
ET           4.1     9.1            20720                                19865   20050
X114.945      49   19865   20050    1005    1000    1020
GR  1350   17110    1348   17265    1346   17660    1344   18190    1342   18415
GR  1340   18830    1338   19040    1336   19350    1334   19650    1332   19770
GR  1330   19865    1328   19940    1326   19950    1324   19970  1322.5   20000
GR  1324   20020    1330   20050    1330   20245    1328   20370    1328   20400
GR  1330   20420    1332   20615  1332.8   20720    1332   21050    1332   21960
GR  1330   22110    1330   22200  1331.3   22400    1330   22550    1330   22750
GR  1324   22770    1324   22790    1328   22800    1330   22845    1332   22875
GR  1332   23060    1333   23245    1333   23450    1334   23850    1336   24040
GR  1338   24310    1338   24610    1340   24915    1342   25050    1344   25120
GR  1346   25270    1348   25480    1348   26190    1350   26250
ET           4.1     9.1            21800                                19955   20382
X115.144      55   19955   20382     900     890    1056      .9
X3    10
GR  1360   16750    1358   16880    1356   17180    1354   17540    1352   17750
GR  1350   17905    1350   18105    1348   18410    1346   18630    1344   18950
GR  1342   19115    1342   19250    1340   19555    1338   19660    1338   19720
GR  1334   19724    1334   19830    1334   19832    1332   19850    1336   19865
GR  1336   19900    1336   19955    1330   19975    1329   20000    1330   20070
GR  1332   20080    1334   20315    1334   20350    1332   20380    1336   20382
GR  1338   21510    1338   21800    1336   22035    1336   22315    1334   22350
GR  1334   22370    1336   22390    1336   22470    1334   22515    1332   22530
GR  1332   22570    1334   22625    1336   22640    1336   22700    1334   22810
GR  1332   22820    1332   22840    1334   22880    1336   22960    1338   23815
GR  1340   23960    1342   24145    1344   24305    1350   24455    1360   24660
ET           4.1     9.1            21750                                19770   20100
X115.333      53   19770   20100     900     890    1000
X3    10
GR  1358   17825    1356   18010    1354   18370    1352   18530    1350   18570
GR  1348   18605    1348   18620    1350   18630    1350   18725    1348   18900
GR  1346   18930    1346   19010    1348   19040    1348   19060    1344   19070
GR  1344   19080    1346   19090    1346   19305    1344   19335    1340   19350
GR  1340   19770    1338   19790    1336   19880    1336   19980    1335   20000
GR  1336   20010    1338   20090    1342   20100    1342   21750    1338   21765
GR  1338   21790    1340   21810    1340   22045    1340   22046    1338   22060
GR  1338   22080    1340   22120    1340   22150    1336   22170    1336   22180
GR  1340   22190    1342   22270    1342   22300    1340   22540    1340   22590
GR  1342   22760    1342   23065    1344   23360    1345   23420    1348   23530
GR  1348   23690    1350   23710    1360   23930
ET           4.1     9.1            20960                                19950   20320
X115.519      48   19950   20320     940     960     980
X3    10
X4     1    1345   20320
GR  1360   18730    1358   18760    1358   18965    1356   19050    1354   19115
GR  1354   19390    1352   19460    1352   19515    1350   19540    1350   19680
GR  1348   19950    1342   19970    1340   19995    1340   20005    1342   20015
GR  1342   20130    1340   20215    1340   20225    1344   20250  1344.5   20338
GR  1346   20595    1350   20960    1350   21080    1348   21965    1344   21985
GR  1344   22005    1346   22020    1348   22080    1346   22110    1346   22135
GR  1348   22145    1346   22275    1346   22530    1342   22545    1344   22560
GR  1346   22630    1346   22855    1344   22860    1344   22875    1346   22895
GR  1346   22925    1342   22930    1346   22945    1348   23615    1348   23765
GR  1350   23950    1352   24140    1360   24300
ET           4.1     9.1            20900                                19870   20085
```

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| X115.699 | 37 | 19870 | 20085 | 935 | 920 | 950 | | | |
| GR 1364 | 18850 | 1362 | 18960 | 1360 | 19070 | 1358 | 19220 | 1356 | 19230 |
| GR 1356 | 19260 | 1358 | 19270 | 1358 | 19345 | 1356 | 19490 | 1354 | 19870 |
| GR 1352 | 19880 | 1350 | 19885 | 1348 | 19950 | 1346 | 19980 | 1345 | 20000 |
| GR 1346 | 20030 | 1346 | 20065 | 1348 | 20075 | 1350 | 20085 | 1350 | 20700 |
| GR 1348 | 20760 | 1348 | 20885 | 1354 | 20900 | 1354 | 21715 | 1348 | 21790 |
| GR 1348 | 21880 | 1352 | 21930 | 1352 | 23430 | 1350 | 23435 | 1350 | 23445 |
| GR 1352 | 23450 | 1352 | 23550 | 1356 | 23920 | 1360 | 24120 | 1362 | 24170 |
| GR 1362 | 24470 | 1364 | 24650 | | | | | | |
| QT 2 | 2350 | 2350 | | | | | | | |
| ET | 4.1 | 9.1 | | 2690 | | | | 1985 | 2430 |
| X115.966 | 40 | 1985 | 2430 | 1450 | 1200 | 1410 | | | |
| X4 9 | 1359 | 1900 | 1352 | 2280 | 1354 | 2300 | 1356 | 2325 | 1356 |
| X4 2400 | 1357 | 2430 | 1357.3 | 2530 | 1352 | 2600 | 1354 | 2620 | |
| GR 1364 | 1080 | 1362 | 1180 | 1360 | 1585 | 1360 | 1725 | 1358 | 1985 |
| GR 1356 | 1990 | 1354 | 1995 | 1354 | 2005 | 1356 | 2010 | 1356 | 2040 |
| GR 1355 | 2060 | 1354 | 2150 | 1354 | 2250 | 1356 | 2560 | 1356 | 2670 |
| GR 1358 | 2675 | 1360 | 2690 | 1360 | 3205 | 1358 | 3505 | 1358 | 4225 |
| GR 1356 | 4415 | 1356 | 5380 | 1354 | 5381 | 1354 | 5395 | 1356 | 5405 |
| GR 1356 | 5495 | 1358 | 5610 | 1358 | 5745 | 1360 | 5850 | 1362 | 5925 |
| GR 1362 | 6150 | 1364 | 6270 | 1366 | 6410 | 1368 | 6580 | 1370 | 6615 |
| GR 1372 | 6755 | 1374 | 6795 | 1376 | 6835 | 1376 | 6965 | 1378 | 7010 |
| ET | 4.1 | 9.1 | | 2865 | | | | 1970 | 2350 |
| X116.066 | 48 | 1970 | 2350 | 565 | 480 | 570 | | | |
| X4 3 | 1360.4 | 1970 | 1356.2 | 2560 | 1358 | 2580 | | | |
| GR 1368 | 1090 | 1368 | 1150 | 1366 | 1305 | 1364 | 1560 | 1362 | 1650 |
| GR 1362 | 1780 | 1360 | 1820 | 1360 | 1980 | 1356 | 2000 | 1358 | 2060 |
| GR 1360 | 2150 | 1360 | 2210 | 1358 | 2240 | 1358 | 2280 | 1360 | 2350 |
| GR 1360 | 2435 | 1358 | 2465 | 1358 | 2690 | 1360 | 2710 | 1362 | 2760 |
| GR 1364 | 2865 | 1364 | 2915 | 1362 | 3310 | 1360 | 3545 | 1358 | 3550 |
| GR 1358 | 3730 | 1360 | 3745 | 1360 | 4670 | 1358 | 4920 | 1358 | 5145 |
| GR 1356 | 5355 | 1354 | 5356 | 1354 | 5365 | 1356 | 5368 | 1358 | 5375 |
| GR 1358 | 5570 | 1360 | 5720 | 1362 | 5800 | 1364 | 5915 | 1364 | 6005 |
| GR 1366 | 6110 | 1368 | 6380 | 1368 | 6570 | 1370 | 6680 | 1372 | 6780 |
| GR 1374 | 6830 | 1374 | 6870 | 1376 | 6920 | | | | |
| ET | 4.1 | 9.1 | | 3030 | | | | 1950 | 2200 |
| X116.167 | 22 | 1950 | 2130 | 530 | 530 | 530 | | | |
| X4 2 | 1359.7 | 2030 | 1362 | 2130 | | | | | |
| GR 1370 | 1020 | 1370 | 1095 | 1368 | 1245 | 1366 | 1255 | 1366 | 1270 |
| GR 1368 | 1290 | 1368 | 1420 | 1366 | 1665 | 1364.8 | 1950 | 1360 | 1955 |
| GR 1360 | 2040 | 1362 | 2110 | 1362 | 2170 | 1362 | 2250 | 1362 | 2370 |
| GR 1360 | 2550 | 1360 | 2590 | 1358 | 2600 | 1360 | 2610 | 1362 | 2620 |
| GR 1364 | 2630 | 1365 | 2650 | | | | | | |
| ET | 4.1 | 9.1 | | 2645 | | | | 1925 | 2030 |
| X116.248 | 40 | 1925 | 2030 | 450 | 340 | 430 | | | |
| GR 1372 | 1090 | 1370 | 1100 | 1370 | 1115 | 1370 | 1120 | 1370 | 1130 |
| GR 1370 | 1365 | 1368 | 1590 | 1366 | 1660 | 1367 | 1925 | 1362 | 1940 |
| GR 1362 | 1985 | 1361 | 2000 | 1362 | 2013 | 1364 | 2030 | 1364 | 2230 |
| GR 1362 | 2240 | 1362 | 2250 | 1364 | 2300 | 1364 | 2630 | 1366 | 2645 |
| GR 1366 | 2943 | 1364 | 2950 | 1364 | 3045 | 1366 | 3055 | 1366 | 3690 |
| GR 1364 | 3755 | 1364 | 3770 | 1365 | 4105 | 1364 | 4218 | 1362 | 4765 |
| GR 1360 | 5045 | 1358 | 5055 | 1356.1 | 5095 | 1358 | 5105 | 1360 | 5115 |
| GR 1362 | 5328 | 1364 | 5485 | 1366 | 5755 | 1368 | 5810 | 1370 | 6160 |
| ET | 4.1 | 9.1 | | 2665 | | | | 1915 | 2240 |
| X116.328 | 45 | 1915 | 2240 | 440 | 250 | 410 | | | |
| X4 1 | 1367.4 | 2240 | | | | | | | |
| GR 1374 | 980 | 1372 | 990 | 1372 | 1010 | 1372 | 1015 | 1372 | 1020 |

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GR  1372    1250    1370    1520    1368    1790    1367    1835    1366    1915
GR  1364    1940  1362.8    2000    1364    2050    1366    2150    1366    2335
GR  1364    2339    1364    2370    1366    2397    1366    2403    1368    2665
GR  1366    2680    1366    2715    1368    2735    1368    3345    1366    3530
GR  1366    3730    1367    3890    1366    4145    1366    4310    1364    4355
GR  1364    4505    1362    4760    1362    4885    1360    4910    1358    4920
GR1357.5    4925    1358    4937    1360    4947    1362    5050    1362    5278
GR  1364    5335    1366    5455    1368    5645    1370    5695    1370    5780
ET           4.1     9.1            2460                            1885    2055
X116.411      46    1885    2055     510     350     450
X3    10
X4     1  1369.2    1885
GR  1378     610    1376     760    1376     761    1376     762    1376     763
GR  1374    1090    1372    1370    1370    1500    1370    1650    1368    1665
GR  1368    1920    1366    1948  1364.3    2000    1366    2048    1370    2055
GR  1370    2210    1368    2223    1368    2240    1370    2260    1370    2390
GR  1368    2425    1368    2450    1370    2460    1370    2980    1368    3125
GR  1368    3390    1369    3520    1369    3580    1369    3645    1368    3830
GR  1366    4025    1366    4200    1364    4520    1362    4545    1360    4545
GR1359.5    4555    1360    4561    1362    4565    1362    4588    1360    4594
GR  1360    4600    1362    4601    1364    4758    1366    4885    1368    4995
GR  1370    5185
*
*     REVISED THE ELEVATION OF STATION 2000 FROM 1365 TO 1365.8 (TMM 3-94)
*        "     "     "     "    "     3560  "   1970 "  1370      "
*        "     "     "     "    "     3960  "   1398 "  1368      "
*
ET                   9.1                                            1835    2035
X116.504      33    1835    2035     460     300     490
X3    10
GR  1380     680    1378     695    1378     712    1378     720    1378     743
GR  1376     980    1374    1180    1374    1315    1372    1625    1370    1630
GR  1370    1665    1372    1670    1372    1770    1370    1780    1370    1835
GR  1368    1915    1366    1980  1365.8    2000    1366    2018    1372    2035
GR  1372    2110    1370    2140    1370    2160    1372    2195    1372    2390
GR1370.7    2880  1371.8    3295    1370    3560    1368    3960    1366    4225
GR  1364    4310    1364    4340    1390    4340
ET                   9.1                                            1910    2110
X116.608      30    1910    2110     485     450     530
X3    10
X4     2  1376.5    1910  1374.2    2110
GR  1382     920    1380    1000    1380    1050    1380    1150    1380    1151
GR  1378    1280    1376    1520    1376    1920    1374    1925    1372    1930
GR  1370    1935    1370    1980    1368    1995  1367.8    2000    1368    2015
GR  1370    2020    1370    2080    1372    2090    1372    2200    1370    2210
GR  1369    2220    1370    2235    1372    2270    1374    2310    1374    2375
GR  1372    2385    1372    2395    1374    2400    1376    2410    1376    2550
ET           4.1     9.1            2300                            1950    2110
X116.732      18    1950    2115     640     420     685
X3    10
X4     4    1375    2000    1380    1950    1376    2040    1379    2300
GR  1382    1650    1376    1960    1376    2110    1378    2115    1378    2370
GR  1376    2470    1376    2480    1378    2490    1378    2550    1376    2570
GR  1376    2620    1378    2630    1378    2850    1376    2880    1375    2885
GR  1376    2890    1378    2910    1380    2920
ET                   9.1                                            1935    2045
X116.818      14    1935    2045     430     750     455
```

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X4      1  1381.2     2240
GR   1390     1145     1388     1340     1386     1490     1384     1640     1382     1935
GR   1376     1980   1375.7     2000     1376     2030   1380.4     2045     1380     2097
GR   1378     2105     1378     2190     1380     2210     1382     2350
EJ
T1       NEW RIVER ABOVE SKUNK CREEK, PHOENIX, ARIZ., APRIL 1981
T2       100 YEAR FLOOD
T3       FLOODWAY
J1              3                                                        1162.8
J2     15                                                                                15


ER
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*
*   REVISED HEC-2 FILE NRIVER.DAT TO HAVE INPUT DATA MATCH WITH THE HARDCOPY
*   PRINTOUT OF THE HEC-2 FILE IN THE FLOOD CONTROL DISTRICT LIBRARY THAT
*   CORRESPONDS WITH PUBLISHED FEMA DATA.
*   THE HEC-2 MODEL ON THE PRINTOUT WAS WAS RUN ON 9 OCTOBER 1985 USING THE
*   MAY 1984 UPDATED VERSION OF HEC-2.
*   THIS HEC-2 MODEL APPEARS TO BE THE BEST MATCH WITH PUBLISHED FEMA DATA
*   FOR NEW RIVER FROM BELL ROAD UPSTREAM TO THE NEW RIVER DAM.
*   THE RESULTS GENERATED BY THIS HEC-2 MODEL DOWNSTREAM OF BELL ROAD SHOUDN'T
*   BE USED.
*   THE PUBLISHED FEMA DATA FOR THE REACH BELOW BELL ROAD MATCHES CLOSELY WITH
*   HEC-2 MODEL REVSB., WHICH WAS DEVELOPED BY COE & VAN LOO.
*   THE CROSS SECTIONS BELOW BELL ROAD WHERE RETAINED FOR HISTORICAL REASONS.
*   THIS HEC-2 MODEL HASN'T BEEN UPDATED FOR ANY CHANGES THAT MIGHT OCCURED
*   SINCE THE MODEL WAS ORIGINALLY CREATED.
*
C
C     14
C  8.655 1985 TOPO - DIGITIZED DATA SEC.8.655 THRU SEC.9.129
C  8.655 DOWNSTREAM STUDY LIMIT
C  8.655 NEW RIVER-SKUNK CREEK CONFLUENCE
C  8.731 BEGIN DISCHARGE FOR NEW RIVER ONLY
C  8.936 OLD CORP STATION NO. 8.95=0.6
C  9.009 GREENWAY ROAD AREA
C  9.129 OLD CORP STATION NO. 9.15=9.8
C  9.129 END 1985 TOPO DIGITIZED SECTIONS, END C/L = 10000
C  9.318 BEGIN STATION C/L = 20000
C  9.953 BELL ROAD
C  9.967 SPECIAL BRIDGE
C 10.989 UNION HILLS DRIVE
C 11.129 NEW SECTION - LEFT BANK TAKEN FROM ARROWHEAD RANCH
C 11.129 WASTEWATER TREATMENT PLANT GRADING PLAN-DIBBLE & ASSOC.
T1       NEW RIVER ABOVE SKUNK CREEK, PHOENIX, ARIZ., SEPT 1985   (UNIONBR6.DAT)
T2       Edited by HDR (5-95) for Union Hills Drive Bridge Analysis
T3       Union Hills Bridge      5-Span Structure (Includes 83rd Ave. Crossing)
*        Existing Condition Flood Plain Model FIS, COE 100-yr & 500-yr Q's
*        Estimated starting WSEL from FIS Profiles for 100-yr 500-yr.
J1             2                                                  1170.5
J2     1              -1                                                      15
J3    38      43      53      21      55      26      56      22      54       4
J3     1      50
NC  .045    .045    .035    .200    .400
QT     3   41000   41000   69700
X1 8.655      36  9581.4 10224.3     750     150     400
X3    10
GR1173.9  8649.5  1172.8  8725.6  1173.6  8761.4  1172.8  8805.7  1171.9  8882.4
GR1171.9  8973.3  1171.7  9029.3  1170.9  9157.1  1170.5    9250  1170.8    9322
GR1170.3  9369.5  1169.5  9443.6  1169.3  9488.5  1171.5  9503.3  1167.1  9548.1
GR1171.6  9581.4  1166.9  9605.5  1161.4    9624  1157.9    9660  1156.6  9716.3
GR1155.1  9744.7  1156.1  9761.1  1155.3  9864.2  1155.3  9905.7  1156.2  9954.8
GR1156.3   10000  1156.3   10071  1156.7 10091.4  1155.7 10121.5  1155.7 10154.7
GR1164.5 10193.7  1171.2 10224.3  1172.3 10244.2  1171.2   10247  1171.1 10299.3
GR1170.6 10403.3
NC                          .100    .300
QT     3   12000   19000   20400
ET                    9.1                                          9762.5 10213.5
X1 8.731      45  9762.5 10213.5     400     400     400
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X3    10
GR1174.8    8627  1174.1  8663.6  1172.6  8666.7  1174.4  8670.4  1172.1  8683.8
GR1170.8  8831.8  1170.4    9040    1170  9196.9  1168.3  9265.9    1167  9305.7
GR1166.8    9321  1173.5    9346  1167.4  9377.8  1160.3  9401.7  1156.9  9425.5
GR1157.6    9463  1156.3  9473.2  1158.8  9489.1    1166  9510.2  1169.2  9519.8
GR1168.9  9553.9  1169.2  9595.9  1168.6  9640.2  1168.3  9678.4  1173.6  9692.1
GR1171.9  9727.6  1171.4  9748.3  1172.8  9762.5  1172.6    9771  1167.8  9795.5
GR  1160  9831.2  1157.1    9844  1156.1  9894.9  1156.9   10000  1157.8 10055.6
GR1157.3 10089.1  1156.7 10123.2  1157.3   10151  1164.7 10183.1  1170.6 10206.7
GR1172.2 10213.5  1173.3 10246.5    1172 10250.5  1171.9 10342.2  1171.3   10403
*
*     REVISED THE ELEVATION OF STATION 9478.8 FROM 117039 TO 1170.9 (TMM 3-94)
*
ET                    9.1                                          9771.3 10219.2
X1 8.807       58  9771.3 10219.2     400     390     400
X3    10
GR1174.2    8591  1174.2  8613.7  1174.8  8626.5  1174.6  8637.8  1173.1  8640.4
GR1174.2  8644.4  1172.8  8658.6  1172.4  8867.9    1172  9015.9  1171.9  9044.3
GR1172.4  9063.6  1170.8  9080.6  1170.8  9093.1  1174.4  9117.5    1175  9131.2
GR1172.2  9150.5  1164.2  9172.6  1160.1  9193.9  1158.6  9221.8  1157.7  9249.9
GR1159.2  9261.8  1157.9  9281.7  1159.2  9293.1  1164.6  9312.1  1171.3  9327.1
GR1170.8    9359  1170.5  9382.8  1171.1  9406.1  1170.6  9448.1  1170.9  9478.8
GR1171.6    9539  1171.9  9588.1  1172.4  9618.2  1172.2  9646.1  1172.1  9673.9
GR1178.4  9688.1  1187.7  9701.7  1193.4  9715.9  1194.1  9729.6  1186.6  9749.4
GR1174.7  9771.3  1169.2    9792  1162.1  9826.7  1158.7    9848  1158.4  9918.7
GR1158.3  9957.1  1158.8   10000  1158.6 10069.8  1158.4 10113.6  1158.5 10146.5
GR1163.7 10172.1  1170.8 10201.6  1173.9 10219.2  1174.4 10248.2  1173.2 10258.1
GR1173.9 10328.3  1173.6 10380.5    1173 10402.7
ET                    9.1                                          9824.7 10216.9
X1 8.883       55  9824.7 10216.9     280     400     400
X3    10
GR1176.2  8580.8  1175.3  8595.6  1173.7  8597.9  1174.9  8600.1  1173.5  8625.1
GR1174.4  8705.8  1174.1  8768.8  1175.2  8824.2  1179.5  8846.4  1180.4  8864.3
GR1177.5  8878.5  1167.9  8905.2  1162.9  8926.2  1159.6  8943.8  1159.9  8977.9
GR1158.5  8985.3  1161.3  9000.6  1158.4  9027.9  1158.8  9040.4  1162.1  9058.5
GR1169.4  9075.9  1173.3  9086.9    1174  9126.4    1173  9140.3    1173  9167.6
GR1172.7  9204.5  1174.4  9252.2  1173.6  9288.3  1173.9    9325  1173.7  9357.3
GR1174.3  9422.7  1174.7  9473.8  1173.9  9529.7  1173.9  9563.4  1175.1  9610.3
GR1174.9  9680.1  1175.9  9745.5  1174.9  9824.7  1169.4  9860.8  1166.1  9911.3
GR1163.8  9955.6  1163.1  9984.3  1163.1   10000  1160.2 10004.5  1160.9 10056.5
GR1160.1 10106.7  1160.4 10145.4  1163.8 10164.1  1171.6 10191.4  1176.3 10216.9
GR  1177 10247.6  1175.5 10249.9  1176.3 10292.2  1176.1 10347.6  1175.3 10404.7
ET                    9.1                                          9809.4 10213.2
X1 8.936       60  9809.4 10213.2     300     300     290
X3    10
GR  1180  8590.6  1174.5  8616.4  1165.7  8644.6  1162.8  8656.8  1162.9  8675.8
GR1163.3  8691.1    1163  8713.3  1162.3    8740  1166.9  8754.2  1173.7  8779.8
GR  1179  8797.9  1177.6  8810.7  1177.4  8832.3  1175.7  8843.9  1174.6  8913.5
GR1175.6  8920.6  1174.6  8947.9  1175.5  9022.3  1175.5    9091  1175.9  9152.4
GR1176.4  9222.8    1177  9261.2  1177.8    9274  1177.1    9322  1177.8  9335.9
GR1178.2  9360.6  1175.8  9370.5  1176.9  9389.9  1177.8  9408.3  1175.5  9452.4
GR  1177  9483.3  1176.2  9535.9  1175.6  9543.2  1176.6  9575.3    1176  9615.4
GR1177.8  9634.7  1176.7  9680.7  1177.8    9708  1176.9    9754    1176  9785.5
GR1176.1  9797.7  1177.3  9809.4    1176    9817  1167.6  9825.6  1166.8  9859.6
GR1166.7    9894  1165.7  9939.7  1165.3  9959.9  1165.7  9994.3  1162.2   10000
GR1162.3 10069.8  1161.8 10110.7  1162.1 10143.1  1167.9 10169.2    1174 10192.8
GR1178.2 10213.2  1178.2 10244.2  1177.7 10247.6  1177.1 10309.8  1176.6 10402.1
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*
*     REVISED THE ELEVATION OF STATION 8934.8 FROM 1744.7 TO 1174.7 (TMM 3-94)
*        "     "      "     "     "    9747.2  "   117732 "  1177.2    "
*        "     "      "     "     "    9765.9  "   117835 "  1178.5    "
*        "     "      "     "     "    9792    "   117838 "  1178.8    "
*        "     "      "     "     "    9802.3  "   117936 "  1179.6    "
*        "     "      "     "     "   10000.0  "   116535 "  1165.5    "
*
ET                   9.1                                          9886.1 10212.7
X1 8.977      58  9886.1 10212.7     220     200     210
X3    10
GR1177.7  8605.6  1175.6  8628.1  1174.7  8658.4  1174.4  8712.7  1174.6  8744.5
GR1175.6  8767.2  1174.1  8802.4  1175.6  8841.6  1174.9  8864.9    1175  8878.6
GR1174.7  8934.8  1174.7  8953.5  1175.5  8991.6  1175.7  9030.5  1176.4    9064
GR1178.2  9075.1  1176.8  9084.2  1176.6  9130.2  1176.8  9179.1  1177.1  9252.3
GR  1176  9330.2  1176.4  9370.6  1177.8  9377.4  1176.8  9385.9  1176.8  9448.7
GR1177.3    9491  1176.4    9537  1176.4  9556.3  1176.9  9609.7  1176.8  9662.3
GR1176.3  9713.1  1177.2  9747.2  1178.5  9765.9  1178.8    9792  1179.6  9802.3
GR1178.3    9821  1180.8  9828.4  1176.5  9836.1  1176.5  9867.6  1177.2  9886.1
GR1168.4    9900  1167.1  9909.3  1165.7    9938  1164.9  9976.1  1165.5   10000
GR1163.6 10007.3  1163.7 10066.4    1164 10103.3  1163.5 10128.9  1163.5 10137.4
GR1168.4 10163.5  1173.3   10188  1178.5   10209  1179.3 10212.7  1180.9 10243.9
GR1180.1 10248.2  1179.7 10281.7  1179.8 10401.6
ET                   9.1                                          9764.5   10207
X1 9.009      34  9764.5   10207     330     180     180
X3    10
GR  1177    8740  1176.9  8817.3    1177  8883.2  1177.1  8937.1  1177.2  9008.7
GR1177.5  9075.7  1177.5  9150.2  1177.5  9213.2  1177.7  9285.6  1177.7  9368.3
GR1177.9    9462  1178.2  9547.2  1178.2  9614.3  1178.3  9675.6  1178.3  9725.9
GR  1178  9764.5  1174.2  9786.1  1167.1  9821.6  1164.9  9852.3    1166  9886.3
GR1164.6    9921  1163.6  9960.8  1162.9   10000  1164.1 10055.9  1164.8 10109.6
GR1164.8 10149.3  1169.2 10162.4  1178.6 10177.2  1179.9   10207  1180.3 10253.3
GR1179.5 10304.1  1180.2 10353.8  1179.8 10424.8  1179.3 10475.4
ET                   9.1                                          9689.8 10113.8
X1 9.047      44  9689.8 10113.8     280     160     200
X3    10
GR1179.8  8601.2  1179.8    8619  1180.6    8633  1179.4  8721.9  1179.5  8798.8
GR1179.2  8858.5  1178.9  8933.2  1178.7  9004.2  1173.2  9070.4  1178.8  9154.1
GR1178.8  9233.1  1178.8  9306.9    1179  9377.9  1179.1  9475.6  1178.6  9532.5
GR1178.7  9570.5  1180.6  9579.9    1180  9593.2  1181.6  9616.5  1180.5    9660
GR1177.5  9689.8  1171.4  9715.9  1166.4  9742.1  1166.2  9751.1  1166.9  9756.8
GR1162.3  9762.5    1162    9781  1163.2  9794.9  1163.3  9845.4    1164  9880.4
GR1162.9  9904.5  1161.7  9907.9  1161.2  9937.7  1161.9  9971.5  1162.6   10000
GR  1165 10050.5  1165.7 10084.6    1171 10101.3  1177.6 10113.8  1178.2 10168.4
GR1178.2 10218.1  1178.1 10298.2  1178.7 10354.4  1178.2 10401.6
NC          .060
ET                   9.1                                          9641.2   10090
X1 9.129      51  9641.2   10090     290     460     420
X3    10
GR1182.2  8558.3  1182.2  8569.9    1183  8580.4  1181.8  8652.3  1181.8  8719.9
GR1182.2  8785.2  1181.7  8844.6  1181.3  8932.3  1180.6  8995.9  1180.5  9075.5
GR  1181    9134    1181  9205.5  1181.5  9271.4  1181.2  9370.8  1180.3  9477.1
GR1180.3  9499.5  1180.1  9524.8  1180.8  9562.3  1180.3  9599.2  1180.9  9629.9
GR1180.6  9641.2  1176.6  9662.3    1173  9666.8  1173.4    9673  1164.9  9688.4
GR1165.5  9712.2  1166.2  9768.2  1166.3  9795.2  1167.5  9799.7  1164.8  9814.5
GR1164.2  9836.1  1165.2  9889.5  1165.1  9919.9  1166.3  9971.3  1167.1  9982.6
GR1168.1  9987.7  1167.9   10000  1168.9 10061.6  1171.8 10079.8  1178.7   10090
```

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GR  1179 10117.8    1179 10195.1  1178.6 10241.7  1178.5 10245.1  1179.7 10304.1
GR1179.2 10370.6  1179.6 10407.5  1179.9 10429.4  1178.7 10432.2  1180.1 10433.6
GR1179.5 10439.6
*
*     REVISED THE ELEVATION OF STATION 18380 FROM  185.2 TO 1185.2 (TMM 3-94)
*        "     "      "     "     "    20015  "   118135 "  1181.5     "
*
NC  .050    .060    .035    .100    .300
ET                   9.1                                          19660   20015
X1 9.318      39   19660   20015    1000    1000    1000
X3    10
GR  1192   16150    1170   16210    1170   16310  1194.6   16420    1186   16465
GR1186.8   16560    1184   16830  1185.2   16920    1184   17065    1184   17120
GR  1186   17130    1186   17150    1184   17160  1183.7   17360    1184   17470
GR  1185   17855  1185.2   18380  1185.3   18430    1185   18460  1185.1   19440
GR  1186   19660    1184   19685    1178   19710    1178   19865    1176   19945
GR  1174   19985  1173.2   20000    1174   20010  1181.5   20015  1181.3   20105
GR  1182   20360    1184   20370    1186   21110    1186   21150    1184   21595
GR  1182   22220    1180   22940    1180   23725  1181.2   23740
QT     3   11450   17250   19465
ET                   9.1                                          19770   20235
X1 9.492      40   19770   20235     910     890     920
X3    10
GR1197.2   16090    1178   16135    1178   16185  1193.2   16240    1192   16250
GR  1190   16470    1188   17185    1187   17360    1188   17710  1188.6   17900
GR1189.3   18260    1189   18870  1188.8   18885    1190   18900    1190   18920
GR1189.2   19030  1189.5   19300    1188   19610    1185   19635    1186   19650
GR  1188   19700    1188   19770    1186   19905    1184   19930    1184   19950
GR  1180   19970    1179   20000    1180   20055    1182   20160    1184   20195
GR1193.9   20235    1186   20255  1185.4   20310    1186   20785    1188   20800
GR1188.8   21100    1190   21450    1190   22860    1188   23130    1188   24240
NC  .040    .060    .035
ET                   9.1                                          19840   20060
X1 9.692      31   19840   20060    1050    1040    1056
X3    10
GR  1194   15930    1192   16660    1190   17050  1189.8   17130    1190   17440
GR  1192   18040    1194   18880    1195   19040  1194.4   19150    1194   19280
GR  1194   19680    1192   19790    1192   19830    1195   19840    1186   19880
GR1184.1   20000    1186   20015    1188   20020    1190   20040  1196.1   20060
GR  1194   20060  1193.2   20090    1194   20195    1194   21315    1196   21690
GR  1196   21725    1194   22305    1192   24380    1190   24790    1190   25100
GR  1192   25440
NC  .060    .060    .035    .300    .500
ET                   9.1                                          19840   20080
X1 9.889      31   19840   20080    1100    1050    1040
X3    10
GR  1200   14530    1198   15330    1196   17370    1198   17830    1200   18620
GR1201.6   19190    1200   19460    1198   19490    1196   19510    1196   19570
GR  1198   19590    1198   19810    1200   19820    1200   19840    1198   19850
GR  1196   19870    1190   19890    1188   19900    1190   19920    1190   19965
GR1188.2   20000    1190   20050    1200   20080    1200   20970  1198.6   21620
GR  1200   21710    1200   21730    1198   22710  1196.1   23410    1198   24490
GR  1198   26950
*
*     REVISED THE ELEVATION OF STATION 15520 FROM 120034 TO 1200.4 (TMM 3-94)
*
NC  .060    .060    .030    .300    .500
```

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ET                    9.1                                                19790   20032
X1 9.953      27   19790   20032     335     335     335
X3    10
GR  1202   15050  1200.4   15520    1200   16550    1200   16890  1200.5   17285
GR  1200   17540    1200   17610    1202   18770    1202   18860  1202.4   19045
GR  1200   19515    1200   19790    1194   19805    1192   19840    1192   19910
GR  1190   19990  1188.6   20010    1200   20030    1202   20032    1202   20050
GR  1200   21475    1200   21785    1198   22680    1198   24780    1200   25390
GR  1200   26215  1200.6   26810
ET                  9.110                                               19825   20110
SB  .900   1.560     2.6             213      20    2800   1.880 1188.61  1188.6
X1 9.967      29   19825   20110      75      75      75
X2                    1  1200.9  1207.5
X3    10
BT    21   15025    1204           15450  1203.5           16410    1202
BT 16635  1201.4           16805    1202           17990    1204           18530
BT1205.6           19065    1204           19325    1204           19800    1205
BT         19825  1207.5  1200.9   20110  1207.5  1200.9   20110  1205.8
BT 20635    1204           21810    1202           22850    1200           24300
BT  1198           24630    1198           25270    1200           26275    1202
BT         27010  1202.1
GR  1204   15025  1203.5   15450    1202   16410  1201.4   16635    1202   16805
GR  1204   17990  1205.6   18530    1204   19065    1204   19325    1205   19800
GR  1204   19825    1196   19845    1194   19860    1192   19890    1192   19980
GR  1190   20015  1188.6   20025    1190   20035    1194   20060    1204   20110
GR1205.8   20130    1204   20635    1202   21810    1200   22850    1198   24300
GR  1198   24630    1200   25270    1202   26275  1202.1   27010
*
*     REVISED THE ELEVATION OF STATION 23690 FROM 199.6 TO 1199.6 (TMM 3-94)
*
NC                          .100    .300
ET                    9.1                                                19635   20055
X110.096      38   19635   20055     610     650     645
X3    10
GR  1206   14890    1204   14935    1203   15070    1204   16230  1204.8   16600
GR1204.4   17760  1205.1   18700    1205   19025    1204   19260    1204   19275
GR  1206   19285    1208   19335    1208   19435    1206   19545    1202   19555
GR  1201   19635    1198   19665    1196   19970  1195.7   20000    1196   20010
GR  1198   20020    1200   20040    1206   20055    1206   20090    1206   20675
GR  1204   21060    1202   22510    1200   23200  1199.6   23690    1200   24210
GR  1202   24600    1202   24615    1200   24890    1199   25180    1200   25545
GR  1202   25900    1206   25910    1206   26020
QT     3   10900   15500   18530
ET                    9.1                                                19820   20320
X110.271      40   19820   20320     920     925     925
X3    10
GR  1208   14700    1206   15620    1206   16020    1208   16520    1208   16790
GR1209.6   17735  1209.7   18290    1208   19090    1208   19750  1212.5   19820
GR  1204   19870    1202   19930    1200   19980  1198.2   20000    1200   20020
GR  1202   20230    1204   20295    1208   20320    1208   20365    1206   20375
GR  1206   20680    1208   20685  1208.4   21370    1208   22660    1206   22930
GR  1204   23700    1204   24115    1206   25190    1206   25220    1204   25230
GR  1204   26490    1206   26520    1206   26865    1207   26870    1207   26880
GR  1206   26895    1204   26930    1204   27050    1206   27210    1208   27230
ET                    9.1                                                19655   20110
X110.443      34   19655   20110     930     900     910
X3    10
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GR1213.5   14830    1212   15205  1210.5   15830    1212   16220  1213.9   17660
GR  1212   19220    1211   19560    1212   19590    1216   19605    1216   19655
GR  1210   19670    1210   19740    1208   19750    1206   19950  1205.6   20000
GR  1206   20100    1210   20110    1212   20600    1212   22030    1210   22740
GR  1208   23440  1207.8   23780    1208   24260  1208.6   25120    1208   25140
GR  1206   25145    1206   26400    1208   26810    1208   27000    1206   27080
GR  1206   27180    1208   27190    1212   27205    1214   27415
*
*     REVISED THE ELEVATION OF STATION 16705 FROM 1318   TO 1218   (TMM 3-94)
*        "     "      "     "     "    18050  "   121935 "  1219.5    "
*
ET                   9.1                                              19955   20300
X110.612       6   19955   20300     880     900     890
X3    10
*   1217   15010    1216   16240    1216   16325    1218   16705  1219.5   18050
*   1219   18420    1218   19580    1216   19885    1216   19895    1222   19910
GR  1222   19955    1210   19985  1209.6   20000    1210   20010    1212   20295
GR  1218   20300
*   1218   20300    1218   20325    1216   20330    1216   20740    1218   20760
*   1218   21655    1216   22770    1214   23050  1212.4   23730    1214   24140
*   1214   24250    1214   25455    1212   25530    1210   26540    1212   26790
*   1212   27110    1214   27420    1214   28550    1216   28650
*
* Added cross sections to determine impact of fill from 83rd Ave. location
X110.659       8    29.9  314.98     259     255     247
X3    10
GR1222.2    29.9 1213.97   45.90 1209.05   52.50 1209.05   68.90 1209.05   75.46
GR1209.1  216.55 1211.14  305.13 1215.61  314.98
*
*
* Added cross sections to determine impact of fill from 83rd Ave. location
X110.691      11   37.73  324.82     174     161     170
X3    10
GR1223.2       0 1223.16   26.25 1223.16   37.73 1223.16      40 1223.16   46.68
GR1209.1   77.00 1209.05   82.03 1209.05  109.91 1211.14  292.01 1212.33  314.98
GR1217.3  324.82
*
*
* Added cross sections to determine impact of fill from 83rd Ave. location
X110.723      11  113.19  352.71     167     164     170
X3    10
GR1223.8       0 1223.81   22.97 1217.25   44.29 1215.61  113.19 1211.14  119.76
GR1209.1  141.08 1209.05  167.33 1211.14  228.03 1212.03  305.13 1213.97  344.51
GR1217.3  352.71
*
* Existing FIS Cross-Section
*
ET                   9.1                                              19750   20015
X110.803      12   19750   20015     420     430     423
X3    10
GR  1220   19575    1220   19585    1220   19595    1220   19750    1216   19760
GR  1216   19888  1214.1   20000    1216   20010    1220   20015    1220   20190
GR  1222   20405    1224   20480
*
* ******************************************************************************
* May 1995 - HDR Engineering Inc. under contract to the Maricopa County Highway
* Department to bridge the Union Hills corssing of the New River.
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* HDR modified this model to determine the impact the new bridge would have on
* the existing floodplain. This reach originally contained only 3 cross
* sections in the model. Sections were added to better define the water surface
* thru this reach. Normal bridge method is used to model the new 5 span bridge.
* The bridge spans bank to bank (e.g. no abutments extend into the channel). The
* section data is taken from new survey done in February 1995.
* ******************************************************************************
*
*
* Cross Sections 10.933 thru 10.936 represent the channel geometry at the
* proposed crossing of 83rd Ave.
*
X110.933       8     0.0  406.84     164     241     244
X3    10
GR1222.2     0.0 1217.25    19.7 1217.25   68.90 1215.61   85.31 1213.97  104.99
GR1214.0  134.52 1215.61  387.16 1220.53  406.84
*
X110.934       8     0.0  390.44      82      92      85
X3    10
GR1225.5     0.0 1217.25   32.81 1216.43   88.59 1216.93   98.43 1216.93  141.08
GR1216.4  150.93 1215.61  370.75 1220.53  390.44
*
X110.935      11     0.0  383.88     131     154     144
X3    10
GR1227.1     0.0 1226.11   26.25 1215.61   59.06 1215.61  206.70 1217.91  213.27
GR1217.9  265.76 1215.61  272.32 1215.61  334.66 1217.25  351.07 1220.53  360.93
GR1222.2  383.88
*
X110.936       9     0.0  324.82     131     154     137
X3    10
GR1225.5     0.0  1227.1   22.97 1222.17   32.81 1218.89   75.46 1215.61  111.55
GR1217.3  275.60 1218.89  285.45 1222.17  292.01 1223.81  324.82
*
* ******************************************************************************
* Cross Section on the down stream face of the Union Hills Crossing
* Modified To Include A Proposed 5-Span Proposed Bridge Structure
* The Bridge Spans the New River Bank to Bank. The Channel is not
* restricted and expansion and contraction is not critical to the model.
* ******************************************************************************
NC                              .3      .5
X110.989      35    60.1   309.0     370     370     370   0.956
X2                          1228    1230                                      15
X3    10
GR1225.5     0.0  1229.7    60.1 1227.98    68.0 1227.98    70.0  1227.0    74.2
GR1219.2   104.4  1218.1   116.8 1227.98   116.8 1227.98   118.8 1217.85   118.8
GR1217.0   137.4 1216.75   164.6 1227.98   164.6 1227.98   166.6 1216.70   166.6
GR1216.4   210.8 1216.45   212.4 1227.98   212.4 1227.98   214.4 1216.55   214.4
GR1217.4   233.9 1218.05   260.2 1227.98   260.2 1227.98   262.2  1218.1   262.2
GR1218.4   271.4  1219.1   277.0 1227.98   309.0 1227.98   311.0  1222.8   335.9
GR1223.5   374.5  1228.1   482.0  1228.5   524.3  1228.4   580.9  1228.7   633.5
*
* Upstream Face of the Union Hills Bridge
*
X111.004      35    60.1   309.0      85      85      85   0.956
X2                          1228    1230                                      15
X3    10
GR1225.5     0.0  1229.7    60.1 1227.98    68.0 1227.98    70.0  1227.0    74.2
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GR1219.2   104.4  1218.1   116.8 1227.98   116.8 1227.98   118.8 1217.85   118.8
GR1217.0   137.4 1216.75   164.6 1227.98   164.6 1227.98   166.6 1216.70   166.6
GR1216.4   210.8 1216.45   212.4 1227.98   212.4 1227.98   214.4 1216.55   214.4
GR1217.4   233.9 1218.05   260.2 1227.98   260.2 1227.98   262.2  1218.1   262.2
GR1218.4   271.4  1219.1   277.0 1227.98   309.0 1227.98   311.0  1222.8   335.9
GR1223.5   374.5  1228.1   482.0  1228.5   524.3  1228.4   580.9  1228.7   633.5
*
X111.005      15    60.1   309.0       5       5       5   0.956
X2                                                                          15
X3    10                                  309.0  1230.0
GR1225.5     0.0  1229.7    60.1  1228.0    68.0  1228.0    70.0  1227.0    74.2
GR1219.2   104.4  1217.0   137.4  1216.4   210.8  1217.4   233.9  1218.4   271.4
GR1222.1   297.8 1222.15   309.0  1222.8   335.9  1223.5   374.5  1228.7   633.5
*
NC                          0.1     0.3
X111.020      31   362.3   603.7      60      60      60
X2
X3    10                                  603.7  1230.3
GR1227.2     0.0  1227.2    45.4  1226.9    98.5  1227.2   150.7  1226.4   196.4
GR1227.0   243.5  1227.5   348.4  1229.5   362.3  1220.8   388.8  1219.4   395.2
GR1216.8   404.7  1216.0   431.7  1217.7   487.6  1218.5   493.3  1218.2   507.3
GR1218.1   529.4  1217.9   531.9  1220.8   546.5  1221.6   595.0  1225.6   603.7
GR1224.5   649.8  1225.1   761.8  1226.7   765.0  1226.7   770.6  1226.0   773.2
GR1225.3   774.6  1225.4   784.3  1227.8   797.2  1229.2   825.7  1229.3   853.2
GR1228.3  894.14
*
*  Cross Section 300' upstream of the Union Hills alignment
X111.045      16    89.6   307.6     170     170     170
X2                                                                          15
X3    10
GR1226.6     0.0  1228.4    82.2  1229.8    89.6  1218.6   108.3  1217.8   184.5
GR1218.6   225.8  1221.0   230.8  1220.7   241.1  1219.5   248.6  1219.3   251.4
GR1219.3   271.5  1219.1   278.8  1223.5   291.5  1223.8   297.0  1226.9   307.6
GR1227.3   360.3
*
ET                   9.1                                                0.0   381.6
NC  .045    .045
*
* This section was re-surveyed and updated by HDR using data taken during
* the Union Hills project
*
X111.129      15     5.6   330.9     395     395     395
X2                                                                          15
X3    10
GR1230.9     0.0  1230.0     5.6  1220.2    34.7  1221.2    77.8  1221.0   106.8
GR1217.8   131.6  1217.9   207.9  1218.3   220.8  1221.0   244.8  1221.0   248.8
GR1221.5   273.8  1221.2   276.4  1231.3   297.6  1230.1   330.9  1229.8   381.6
*
*
QT     3   10350   13750   17595
ET                   9.1                                              758.7  1228.
*
* This section was re-surveyed and updated by HDR using data taken during
* the Union Hills project
*
X111.188      18   761.6  1020.9     320     320     320
X2                                                                          15
```

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X3     10
GR1232.3   758.7  1232.8   761.6  1220.5   800.6  1221.9   814.1  1221.7   860.6
GR1218.4   873.4  1217.5   888.0  1219.1   943.9  1221.8   958.7  1221.5   962.5
GR1221.6   986.5  1221.3   988.7  1227.2  1005.5  1227.4  1009.6  1232.7  1020.9
GR1231.5  1045.5  1231.6  1088.8  1231.9  1228.7
*
*
ET                   9.1                                                   0.0   361.8
*
* This section was re-surveyed and updated by HDR using data taken during
* the Union Hills project
*
X111.301      21    72.7   297.9     600     600     600
X3     10
GR1218.2     0.0  1231.3    44.9  1231.5    63.8  1233.3    72.7  1232.9    80.2
GR1221.4   116.6  1222.9   128.2  1221.9   132.7  1222.2   161.9  1220.4   177.2
GR1219.7   194.3  1221.0   219.5  1223.4   230.0  1223.5   233.5  1224.1   255.5
GR1223.8   266.8  1227.8   276.7  1227.2   281.2  1233.9   297.9  1234.3   320.5
GR1235.1   361.8
*
*  Cross Section at the beginning of the Treatment Plant protection dike
X111.328      18     5.6   214.4     180     180     180
X3     10
GR1233.9     0.0  1233.6     5.6  1222.3    45.2  1224.0    61.9  1222.3    74.2
GR1222.5    88.8  1221.2    99.7  1220.9   109.8  1222.3   150.6  1225.5   163.3
GR1225.3   164.6  1225.8   190.8  1225.7   200.0  1233.4   214.4  1231.4   222.6
GR1236.7   240.0  1236.4   266.1  1236.5   296.1
*
*
*  End of HDR Engineering Inc. Modifications
* ******************************************************************************
*
*
NC  .045    .060    .035
ET                   9.1                                                 19900   20175
X111.386      32   19900   20175     315     240     270
X3     10
GR  1240   16820    1238   17220    1238   18760    1240   18800    1244   18850
GR  1244   18915    1238   18950    1238   19040    1236   19280    1236   19420
GR  1233   19430    1233   19890    1233   19892    1233   19900    1228   19905
GR  1228   19912    1226   19975    1223   20000    1226   20030    1228   20085
GR  1230   20115    1232   20150    1238   20175  1239.5   20820    1238   22925
GR1238.8   23655    1240   24780    1240   24805    1238   25705  1236.8   26140
GR  1238   26800    1240   27485
*
*
ET                   9.1                                                 19780   20170
X111.481      15   19780   20170     480     540     520
X3     10
GR  1240   19130    1238   19305    1230   19320    1228   19380    1228   19550
GR  1230   19710    1236   19780    1230   19800    1232   19860    1230   19900
GR  1228   19950  1227.4   20000    1230   20060    1234   20140    1240   20170
ET                   9.1                                                 19470   20310
X111.566      37   19470   20310     280     530     460
X3     10
GR  1241   17270    1240   18790    1242   18940    1242   19140    1240   19170
GR  1240   19470    1236   19480    1234   19550    1234   19760    1230   19775
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GR  1230   19790    1232   19810    1234   19820    1234   19855    1232   19860
GR  1232   19940    1230   19980  1229.7   20000    1230   20010    1230   20180
GR  1232   20295    1240   20310    1240   20335    1242   20780    1244   21030
GR1244.2   21620  1244.2   21960    1244   22190  1243.6   23225    1244   23470
GR1244.9   24495    1246   25220    1245   25570    1244   26550    1244   26660
GR  1246   27240  1246.7   27420
ET                  9.1                                             19925   20510
X111.759      35   19925   20510     1050     980    1020
X3    10
GR  1246   17890    1245   18190    1246   18510    1246   18920  1246.5   18930
GR  1246   18950    1246   19120    1244   19230    1244   19255    1244   19880
GR  1244   19900    1244   19925    1236   19940    1235   20000    1236   20040
GR  1236   20455    1242   20465    1244   20495    1248   20510    1248   20525
GR  1246   20540    1246   20620    1246   20760    1246   20800    1246   20820
GR  1246   21070    1248   21460    1250   21630    1250   21870  1219.6   22350
GR  1249   22980  1249.2   23620    1250   25015    1250   25960  1250.4   27420
NC  .060    .060    .035
ET                  9.1                                             19865   20510
X111.949      35   19865   20510     990    1000    1000
X3    10
X4     1  1247.4   20700
GR1250.8   18670  1250.4   18895  1250.4   19275    1251   19500    1251   19535
GR  1250   19865    1248   19920    1246   19974    1244   19976    1243   20000
GR  1244   20045    1244   20215    1242   20280    1242   20470    1244   20480
GR  1246   20510    1246   20520    1246   20530    1246   20590    1246   20600
GR  1248   20925    1250   20940    1252   21660    1254   22180    1254   22280
GR1252.8   22630    1254   22985  1252.5   23380    1254   23685    1244   23750
GR1252.4   24515    1254   25865    1254   26540    1256   27550  1256.5   27760
ET                  9.1                                             19890   20680
X112.125      37   19890   20680     910    1000     930
X3    10
GR  1256   19305  1256.1   19430    1256   19805    1256   19860    1258   19875
GR  1258   19890    1256   19920    1254   19923    1250   19930  1248.2   19950
GR1248.5   20000    1250   20025    1250   20090    1248   20140    1248   20160
GR  1250   20230    1250   20320    1248   20330    1248   20440    1250   20565
GR  1252   20600    1254   20640    1258   20680    1258   20710    1254   20730
GR  1254   20800    1254   20810    1254   20860    1253   21155    1254   21455
GR  1256   22190    1258   22395    1258   22940    1259   24160    1260   26290
GR  1260   27215  1261.7   27800
QT     3    9800   12000   16660
ET                  9.1                                             19830   20240
X112.313      28   19830   20240    1010     980     990
X3    10
GR  1261   18650    1260   19080    1260   19800    1262   19810    1262   19830
GR  1260   19835    1258   19840    1256   19935    1254   19950  1252.2   20000
GR  1254   20220    1260   20240    1260   20260    1258   20300    1258   20320
GR  1258   20360    1258   20362    1258   20440    1258   20450    1258   20455
GR1258.6   21090    1259   21610    1260   22140  1261.5   22890  1261.9   23990
GR  1262   24500    1262   27100  1263.3   27570
ET                  9.1                                             19810   20280
X112.511      35   19810   20280    1000    1020    1056
X3    10
GR  1266   18920    1266   19115    1266   19240    1264   19385    1263   19600
GR  1262   19700    1262   19710    1262   19720  1263.6   19810    1260   19865
GR  1258   19905  1257.3   20000    1258   20070    1264   20110    1264   20140
GR  1262   20210    1260   20220    1260   20265    1264   20280    1264   20350
GR  1262   20365    1260   20400    1260   20440    1264   20460    1264   20610
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GR1263.6   20830    1264   20995    1265   21585    1265   22640    1266   23100
GR  1266   24600  1265.7   24880    1266   26000  1265.7   26670    1266   27380
ET           4.1     9.1           20980                           19810   20330
X112.701      34   19810   20330    1030    1020    1000
X3    10
X4     1  1269.6   20500
GR1270.6   19190    1270   19700    1270   19810    1268   19820    1266   19985
GR1264.7   20000    1265   20070    1266   20290    1268   20330    1270   20600
GR  1269   20660    1270   20740    1270   20980    1266   20990    1266   21090
GR  1268   21100    1268   21150    1262   21190    1262   21200    1270   21230
GR  1270   21260  1269.6   21510    1270   21770  1271.4   23220  1270.6   23800
GR  1270   23910    1270   23920  1270.7   24130  1268.8   24900  1269.1   26070
GR1269.6   26710    1270   27000    1270   27650  1270.7   27740
ET           4.1     9.1           21135                           19845   20360
X112.896      40   19845   20360    1010    1010    1030
X3    10
X4     1    1274   20420
GR  1276   18670    1274   18750  1275.6   19330    1274   19845    1272   19850
GR  1270   19965  1268.8   20000    1270   20020    1270   20350    1273   20360
GR  1274   20585    1276   20620    1276   20670    1274   20675    1274   21135
GR  1270   21165    1270   21180    1274   21200    1274   21250    1270   21260
GR  1270   21350    1264   21365    1264   21390    1274   21410    1274   21495
GR  1276   21560  1277.2   21900    1276   22520  1275.6   22660    1276   23015
GR  1277   23610    1276   24190    1276   24280  1274.9   24440  1275.7   25428
GR1274.2   25910  1274.9   26740    1274   26945    1274   27000    1276   27660
QT     3    7900    7900   13430
ET           4.1     9.1           21645                           19930   20350
X113.076      32   19930   20350     950     980     950
X3    10
GR  1280   19510    1278   19930    1274   19940  1272.6   20000    1274   20050
GR  1276   20090    1276   20210    1274   20260    1272   20270    1272   20315
GR  1274   20335    1278   20350    1279   20480    1278   21020    1278   21150
GR  1280   21645    1280   21660  1278.6   21740  1278.6   21760    1278   21780
GR  1278   21800    1280   21960    1280   22825  1279.6   23250    1280   23630
GR  1280   24220    1278   24835  1278.6   25040  1278.6   26370    1278   26740
GR  1278   26920    1280   27585
ET           4.1     9.1           21410                           19810   20120
X113.227      26   19810   20120     800     670     800
X3    10
GR  1284   18690    1282   19260    1282   19690  1281.5   19810    1276   19845
GR  1274   19970  1273.9   20000    1274   20030    1278   20090    1280   20100
GR  1282   20120    1282   21410    1276   21425    1276   21440    1282   21455
GR1282.2   21900    1284   22160  1282.6   22860    1284   23350  1284.7   23820
GR  1284   24080    1282   24510    1282   24580  1281.8   24730  1281.5   25780
GR  1282   27300
ET           4.1     9.1           21425                           19870   20170
X113.420      33   19870   20170     970    1000    1020
X3    10
X4     2  1187.2   19750    1186   19700
GR  1290   18215    1288   19350    1288   19490    1286   19560  1287.5   19870
GR  1284   19880    1282   19975  1281.8   20000    1282   20040    1282   20080
GR  1286   20100    1288   20150    1290   20170    1290   20185    1288   20195
GR  1288   20315    1288   20490    1288   20780    1287   20840    1286   21425
GR  1284   21570    1282   21580    1282   21610    1286   21650    1286   21760
GR  1288   21875    1297   21900    1288   21940    1288   23570  1288.7   23780
GR1289.6   25395    1290   26450  1290.7   26525
NC  .050    .050    .035
```

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ET          4.1     9.1          21380                          19870   20455
X113.619     39   19870   20455   1090    1020    1056
X3    10
GR  1296  18690    1294   19490    1294   19835    1294   19870    1294   19890
GR  1286  19910    1286   19995    1285   20000    1286   20005    1290   20105
GR  1290  20315    1292   20360    1292   20445    1290   20450    1292   20455
GR  1293  20456    1292   20457    1292   20470    1290   20480    1290   20520
GR  1294  20540    1294   20600    1294   21380    1292   21680    1290   21690
GR  1290  21710    1292   21755    1294   21780    1294   21850    1290   21880
GR  1290  21895    1292   21905    1294   22680  1295.4   23340  1295.7   24310
GR  1294  24400    1294   25040  1294.8   25580    1296   26565
ET          4.1     9.1          21430                          19890   20340
X113.818     33   19890   20340   1050    1050    1056
GR  1302  18660    1300   19320    1300   19890    1298   19895    1296   19970
GR1295.5  20000    1296   20015    1296   20130    1294   20250    1294   20325
GR  1298  20340    1298   20450    1296   20460    1296   20630    1298   20740
GR  1300  20750    1300   20870  1299.2   21160    1300   21305  1300.3   21430
GR  1300  21580    1298   21820    1294   21840    1294   21850    1296   21860
GR  1296  22050    1298   22060    1300   22865    1300   23030  1300.6   23470
GR1300.8  23985    1300   24550    1300   26150
*
*     REVISED THE ELEVATION OF STATION 22245 FROM 2300 TO 1300 (TMM 3-94)
*
QT     3   6100    9539   10370
ET          4.1     9.1          22160                          19915   20270
X114.013     39   19915   20270   1020    1055    1030
X4     5   1304   20900  1302.3   20930    1304   20960    1304   21100    1302
X4 21170
GR  1306  19285    1304   19690    1304   19915    1302   19940    1302   19960
GR  1300  19962    1299   20000    1300   20010    1302   20035    1300   20120
GR  1302  20190    1302   20250    1303   20270    1302   20300    1302   20625
GR  1300  20645    1300   20660    1302   20720    1305   20725    1304   21145
GR  1306  21170    1306   22160    1304   22225    1300   22245    1298   22255
GR  1298  22270    1302   22285    1302   22350    1304   22390    1304   22460
GR  1302  22480    1304   22505    1306   22680    1306   23465  1307.7   24010
GR1306.2  24750    1306   25400    1306   25520  1306.3   26000
ET          4.1     9.1          21710                          19715   20015
X114.197     36   19715   20015    990     920     970
GR  1316  18385    1314   18590    1312   19130    1310   19550    1308   19565
GR1308.5  19715    1306   19730    1304   19732    1304   19755    1306   19800
GR  1307  19850    1306   20000    1310   20015    1310   20240    1308   20242
GR  1308  20310    1310   20330    1310   20460    1308   20465    1308   20745
GR  1310  20780    1310   20810    1308   20815    1308   20830    1310   20832
GR  1310  21710    1308   21930    1306   21970    1306   22035    1308   22060
GR  1310  22550    1310   22640  1310.6   22800    1310   22910    1310   25290
GR  1311  25560
ET          4.1     9.1          21420                          19540   20250
X114.379     38   19540   20095    940    1000     960
X4     3   1316   21150    1315   21030  1315.3   20970
GR  1324  18115    1322   18320    1320   18550    1318   19100    1316   19540
GR  1314  19550    1314   19635    1312   19655    1310   19665    1310   19690
GR  1316  19705    1316   19950    1312   19960  1310.4   20000    1312   20020
GR  1314  20095    1314   20430    1316   20535    1316   20580    1314   20750
GR  1314  20820    1314   20860    1312   20900    1312   20945    1314   20950
GR  1316  21420    1316   22060    1314   22065    1312   22075    1312   22150
GR  1314  22180    1316   22385    1316   23115    1318   23325    1318   23600
GR  1316  24180    1316   24290    1318   25135
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ET          4.1     9.1          20045                          19220   20045
X114.559     39   19220   20045    950     915     950
X4     2   1320   20035  1320.8   20045
GR  1326  18225    1324   18540    1322   18690    1322   19220    1318   19225
GR  1316  19230    1318   19300    1320   19360    1320   19415    1318   19425
GR  1318  19450    1320   19550    1320   19740    1318   19760    1318   19780
GR  1318  19940    1316   19960  1315.4   20000    1316   20020    1318   20025
GR  1320  20065    1320   20210  1320.6   20375    1320   20875  1319.9   21150
GR  1320  21220  1320.4   21370    1320   21515    1320   21790    1318   21792
GR  1318  21820    1320   21840    1320   22190    1322   22800    1322   23050
GR  1320  23620    1320   23650    1322   23970  1322.4   24200
ET          4.1     9.1          22000                          19670   20170
X114.752     36   19670   20170    1010    1010    1020
X3    10
GR  1336  17740    1334   18200    1332   18480    1330   18820    1328   19010
GR  1326  19300    1326   19670    1322   19680    1322   19910    1320   19988
GR1318.8  20000    1320   20010    1322   20015    1322   20080    1324   20090
GR  1324  20125    1326   20170    1326   20580    1324   21260    1324   21550
GR  1326  21780    1328   21820    1328   22005    1326   22060    1322   22070
GR  1322  22120    1324   22190    1326   22230    1328   22580    1328   23035
GR1236.4  23615    1328   24120    1330   24470    1332   24710    1334   24950
GR  1336  25220
QT     3   4200    4746    7140
ET          4.1     9.1          20720                          19865   20050
X114.945     49   19865   20050    1005    1000    1020
GR  1350  17110    1348   17265    1346   17660    1344   18190    1342   18415
GR  1340  18830    1338   19040    1336   19350    1334   19650    1332   19770
GR  1330  19865    1328   19940    1326   19950    1324   19970  1322.5   20000
GR  1324  20020    1330   20050    1330   20245    1328   20370    1328   20400
GR  1330  20420    1332   20615  1332.8   20720    1332   21050    1332   21960
GR  1330  22110    1330   22200  1331.3   22400    1330   22550    1330   22750
GR  1324  22770    1324   22790    1328   22800    1330   22845    1332   22875
GR  1332  23060    1333   23245    1333   23450    1334   23850    1336   24040
GR  1338  24310    1338   24610    1340   24915    1342   25050    1344   25120
GR  1346  25270    1348   25480    1348   26190    1350   26250
ET          4.1     9.1          21800                          19955   20382
X115.144     55   19955   20382     900     890    1056     .89
X3    10
GR  1360  16750    1358   16880    1356   17180    1354   17540    1352   17750
GR  1350  17905    1350   18105    1348   18410    1346   18630    1344   18950
GR  1342  19115    1342   19250    1340   19555    1338   19660    1338   19720
GR  1334  19724    1334   19830    1334   19832    1332   19850    1336   19865
GR  1336  19900    1336   19955    1330   19975    1329   20000    1330   20070
GR  1332  20080    1334   20315    1334   20350    1332   20380    1336   20382
GR  1338  21510    1338   21800    1336   22035    1336   22315    1334   22350
GR  1334  22370    1336   22390    1336   22470    1334   22515    1332   22530
GR  1332  22570    1334   22625    1336   22640    1336   22700    1334   22810
GR  1332  22820    1332   22840    1334   22880    1336   22960    1338   23815
GR  1340  23960    1342   24145    1344   24305    1350   24455    1360   24660
ET          4.1     9.1          21750                          19770   20100
X115.333     53   19770   20100     900     890    1000
X3    10
GR  1358  17825    1356   18010    1354   18370    1352   18530    1350   18570
GR  1348  18605    1348   18620    1350   18630    1350   18725    1348   18900
GR  1346  18930    1346   19010    1348   19040    1348   19060    1344   19070
GR  1344  19080    1346   19090    1346   19305    1344   19335    1340   19350
GR  1340  19770    1338   19790    1336   19880    1336   19980    1335   20000
```

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| GR | 1336 | 20010 | 1338 | 20090 | 1342 | 20100 | 1342 | 21750 | 1338 | 21765 |
| GR | 1338 | 21790 | 1340 | 21810 | 1340 | 22045 | 1340 | 22046 | 1338 | 22060 |
| GR | 1338 | 22080 | 1340 | 22120 | 1340 | 22150 | 1336 | 22170 | 1336 | 22180 |
| GR | 1340 | 22190 | 1342 | 22270 | 1342 | 22300 | 1340 | 22540 | 1340 | 22590 |
| GR | 1342 | 22760 | 1342 | 23065 | 1344 | 23360 | 1345 | 23420 | 1348 | 23530 |
| GR | 1348 | 23690 | 1350 | 23710 | 1360 | 23930 | | | | |
| ET | | 4.1 | 9.1 | | 20960 | | | | 19950 | 20320 |
| X115.519 | | 48 | 19950 | 20320 | 940 | 960 | 980 | | | |
| X3 | 10 | | | | | | | | | |
| X4 | 1 | 1345 | 20320 | | | | | | | |
| GR | 1360 | 18730 | 1358 | 18760 | 1358 | 18965 | 1356 | 19050 | 1354 | 19115 |
| GR | 1354 | 19390 | 1352 | 19460 | 1352 | 19515 | 1350 | 19540 | 1350 | 19680 |
| GR | 1348 | 19950 | 1342 | 19970 | 1340 | 19995 | 1340 | 20005 | 1342 | 20015 |
| GR | 1342 | 20130 | 1340 | 20215 | 1340 | 20225 | 1344 | 20250 | 1344.5 | 20338 |
| GR | 1346 | 20595 | 1350 | 20960 | 1350 | 21080 | 1348 | 21965 | 1344 | 21985 |
| GR | 1344 | 22005 | 1346 | 22020 | 1348 | 22080 | 1346 | 22110 | 1346 | 22135 |
| GR | 1348 | 22145 | 1346 | 22275 | 1346 | 22530 | 1342 | 22545 | 1344 | 22560 |
| GR | 1346 | 22630 | 1346 | 22855 | 1344 | 22860 | 1344 | 22875 | 1346 | 22895 |
| GR | 1346 | 22925 | 1342 | 22930 | 1346 | 22945 | 1348 | 23615 | 1348 | 23765 |
| GR | 1350 | 23950 | 1352 | 24140 | 1360 | 24300 | | | | |
| ET | | 4.1 | 9.1 | | 20900 | | | | 19870 | 20085 |
| X115.699 | | 37 | 19870 | 20085 | 935 | 920 | 950 | | | |
| GR | 1364 | 18850 | 1362 | 18960 | 1360 | 19070 | 1358 | 19220 | 1356 | 19230 |
| GR | 1356 | 19260 | 1358 | 19270 | 1358 | 19345 | 1356 | 19490 | 1354 | 19870 |
| GR | 1352 | 19880 | 1350 | 19885 | 1348 | 19950 | 1346 | 19980 | 1345 | 20000 |
| GR | 1346 | 20030 | 1346 | 20065 | 1348 | 20075 | 1350 | 20085 | 1350 | 20700 |
| GR | 1348 | 20760 | 1348 | 20885 | 1354 | 20900 | 1354 | 21715 | 1348 | 21790 |
| GR | 1348 | 21880 | 1352 | 21930 | 1352 | 23430 | 1350 | 23435 | 1350 | 23445 |
| GR | 1352 | 23450 | 1352 | 23550 | 1356 | 23920 | 1360 | 24120 | 1362 | 24170 |
| GR | 1362 | 24470 | 1364 | 24650 | | | | | | |
| QT | 3 | 2350 | 2350 | 3995 | | | | | | |
| ET | | 4.1 | 9.1 | | 2690 | | | | 1985 | 2430 |
| X115.966 | | 40 | 1985 | 2430 | 1450 | 1200 | 1410 | | | |
| X4 | 9 | 1359 | 1900 | 1352 | 2280 | 1354 | 2300 | 1356 | 2325 | 1356 |
| X4 | 2400 | 1357 | 2430 | 1357.3 | 2530 | 1352 | 2600 | 1354 | 2620 | |
| GR | 1364 | 1080 | 1362 | 1180 | 1360 | 1585 | 1360 | 1725 | 1358 | 1985 |
| GR | 1356 | 1990 | 1354 | 1995 | 1354 | 2005 | 1356 | 2010 | 1356 | 2040 |
| GR | 1355 | 2060 | 1354 | 2150 | 1354 | 2250 | 1356 | 2560 | 1356 | 2670 |
| GR | 1358 | 2675 | 1360 | 2690 | 1360 | 3205 | 1358 | 3505 | 1358 | 4225 |
| GR | 1356 | 4415 | 1356 | 5380 | 1354 | 5381 | 1354 | 5395 | 1356 | 5405 |
| GR | 1356 | 5495 | 1358 | 5610 | 1358 | 5745 | 1360 | 5850 | 1362 | 5925 |
| GR | 1362 | 6150 | 1364 | 6270 | 1366 | 6410 | 1368 | 6580 | 1370 | 6615 |
| GR | 1372 | 6755 | 1374 | 6795 | 1376 | 6835 | 1376 | 6965 | 1378 | 7010 |
| ET | | 4.1 | 9.1 | | 2865 | | | | 1970 | 2350 |
| X116.066 | | 48 | 1970 | 2350 | 565 | 480 | 570 | | | |
| X4 | 3 | 1360.4 | 1970 | 1356.2 | 2560 | 1358 | 2580 | | | |
| GR | 1368 | 1090 | 1368 | 1150 | 1366 | 1305 | 1364 | 1560 | 1362 | 1650 |
| GR | 1362 | 1780 | 1360 | 1820 | 1360 | 1980 | 1356 | 2000 | 1358 | 2060 |
| GR | 1360 | 2150 | 1360 | 2210 | 1358 | 2240 | 1358 | 2280 | 1360 | 2350 |
| GR | 1360 | 2435 | 1358 | 2465 | 1358 | 2690 | 1360 | 2710 | 1362 | 2760 |
| GR | 1364 | 2865 | 1364 | 2915 | 1362 | 3310 | 1360 | 3545 | 1358 | 3550 |
| GR | 1358 | 3730 | 1360 | 3745 | 1360 | 4670 | 1358 | 4920 | 1358 | 5145 |
| GR | 1356 | 5355 | 1354 | 5356 | 1354 | 5365 | 1356 | 5368 | 1358 | 5375 |
| GR | 1358 | 5570 | 1360 | 5720 | 1362 | 5800 | 1364 | 5915 | 1364 | 6005 |
| GR | 1366 | 6110 | 1368 | 6380 | 1368 | 6570 | 1370 | 6680 | 1372 | 6780 |
| GR | 1374 | 6830 | 1374 | 6870 | 1376 | 6920 | | | | |
| ET | | 4.1 | 9.1 | | 3030 | | | | 1950 | 2200 |

```
X116.167      22    1950    2130     530     530     530
X4     2  1359.7    2030    1362    2130
GR  1370    1020    1370    1095    1368    1245    1366    1255    1366    1270
GR  1368    1290    1368    1420    1366    1665  1364.8    1950    1360    1955
GR  1360    2040    1362    2110    1362    2170    1362    2250    1362    2370
GR  1360    2550    1360    2590    1358    2600    1360    2610    1362    2620
GR  1364    2630    1365    2650
ET           4.1     9.1            2645                            1925    2030
X116.248      40    1925    2030     450     340     430
GR  1372    1090    1370    1100    1370    1115    1370    1120    1370    1130
GR  1370    1365    1368    1590    1366    1660    1367    1925    1362    1940
GR  1362    1985    1361    2000    1362    2013    1364    2030    1364    2230
GR  1362    2240    1362    2250    1364    2300    1364    2630    1366    2645
GR  1366    2943    1364    2950    1364    3045    1366    3055    1366    3690
GR  1364    3755    1364    3770    1365    4105    1364    4218    1362    4765
GR  1360    5045    1358    5055  1356.1    5095    1358    5105    1360    5115
GR  1362    5328    1364    5485    1366    5755    1368    5810    1370    6160
ET           4.1     9.1            2665                            1915    2240
X116.328      45    1915    2240     440     250     410
X4     1  1367.4    2240
GR  1374     980    1372     990    1372    1010    1372    1015    1372    1020
GR  1372    1250    1370    1520    1368    1790    1367    1835    1366    1915
GR  1364    1940  1362.8    2000    1364    2050    1366    2150    1366    2335
GR  1364    2339    1364    2370    1366    2397    1366    2403    1368    2665
GR  1366    2680    1366    2715    1368    2735    1368    3345    1366    3530
GR  1366    3730    1367    3890    1366    4145    1366    4310    1364    4355
GR  1364    4505    1362    4760    1362    4885    1360    4910    1358    4920
GR1357.5    4925    1358    4937    1360    4947    1362    5050    1362    5278
GR  1364    5335    1366    5455    1368    5645    1370    5695    1370    5780
ET           4.1     9.1            2460                            1885    2055
X116.411      46    1885    2055     510     350     450
X3    10
X4     1  1369.2    1885
GR  1378     610    1376     760    1376     761    1376     762    1376     763
GR  1374    1090    1372    1370    1370    1500    1370    1650    1368    1665
GR  1368    1920    1366    1948  1364.3    2000    1366    2048    1370    2055
GR  1370    2210    1368    2223    1368    2240    1370    2260    1370    2390
GR  1368    2425    1368    2450    1370    2460    1370    2980    1368    3125
GR  1368    3390    1369    3520    1369    3580    1369    3645    1368    3830
GR  1366    4025    1366    4200    1364    4520    1362    4545    1360    4545
GR1359.5    4555    1360    4561    1362    4565    1362    4588    1360    4594
GR  1360    4600    1362    4601    1364    4758    1366    4885    1368    4995
GR  1370    5185
*
*     REVISED THE ELEVATION OF STATION 2000 FROM 1365 TO 1365.8 (TMM 3-94)
*        "     "     "     "    "     3560  "   1970 "  1370      "
*        "     "     "     "    "     3960  "   1398 "  1368      "
*
ET                  9.1                                            1835    2035
X116.504      33    1835    2035     460     300     490
X3    10
GR  1380     680    1378     695    1378     712    1378     720    1378     743
GR  1376     980    1374    1180    1374    1315    1372    1625    1370    1630
GR  1370    1665    1372    1670    1372    1770    1370    1780    1370    1835
GR  1368    1915    1366    1980  1365.8    2000    1366    2018    1372    2035
GR  1372    2110    1370    2140    1370    2160    1372    2195    1372    2390
GR1370.7    2880  1371.8    3295    1370    3560    1368    3960    1366    4225
```

```
GR  1364    4310    1364    4340    1390    4340
ET                   9.1                                         1910    2110
X116.608      30    1910    2110     485     450     530
X3    10
X4     2  1376.5    1910  1374.2    2110
GR  1382     920    1380    1000    1380    1050    1380    1150    1380    1151
GR  1378    1280    1376    1520    1376    1920    1374    1925    1372    1930
GR  1370    1935    1370    1980    1368    1995  1367.8    2000    1368    2015
GR  1370    2020    1370    2080    1372    2090    1372    2200    1370    2210
GR  1369    2220    1370    2235    1372    2270    1374    2310    1374    2375
GR  1372    2385    1372    2395    1374    2400    1376    2410    1376    2550
ET           4.1     9.1            2300                            1950    2110
X116.732      18    1950    2115     640     420     685
X3    10
X4     4    1375    2000    1380    1950    1376    2040    1379    2300
GR  1382    1650    1376    1960    1376    2110    1378    2115    1378    2370
GR  1376    2470    1376    2480    1378    2490    1378    2550    1376    2570
GR  1376    2620    1378    2630    1378    2850    1376    2880    1375    2885
GR  1376    2890    1378    2910    1380    2920
ET                   9.1                                         1935    2045
X116.818      14    1935    2045     430     750     455
X4     1  1381.2    2240
GR  1390    1145    1388    1340    1386    1490    1384    1640    1382    1935
GR  1376    1980  1375.7    2000    1376    2030  1380.4    2045    1380    2097
GR  1378    2105    1378    2190    1380    2210    1382    2350
EJ
*
T1      NEW RIVER ABOVE SKUNK CREEK, PHOENIX, ARIZ., APRIL 1981
T2      Corps of Engineers Future Condition 100 YEAR Q
T3      Comparison with FIS Q  WSEL estimated from FIS Profile
J1            3                                                   1170.5
J2     2             -1                                                     15
*
T1      NEW RIVER ABOVE SKUNK CREEK, PHOENIX, ARIZ., APRIL 1981
T2      Corps of Engineers Condition 500 YEAR Q  (i.e. 1.7XQ100)
T3      Comparison with FIS Q  WSEL estimated from FIS Profile
J1            4                                                   1170.5
J2    15             -1                                                     15


ER
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# APPENDIX C

## HYDRAULIC MODEL INPUT FILES ON DISK