ASSOCIATED ATTACHMENTS/ENCLOSURES:

Attachment 02.04.03-09B: Guntersville Calculation

Calculation **CDQ000020080011, Rev. 1**

Title **Dam Rating Curve - Guntersville**

EDMS Number: **L58 090908 002**

(266 Pages including Cover Sheet)

NPG CALCULATION COVERSHEET/CCRIS UPDATE

REV 0 EDMS/RIMS NO.	EDMS TYPE:	EDMS ACCESSION NO (N/A for REV. 0)
L 58 090224 004	Calculations (nuclear)	L58 090908 002

Calc Title: Initial Dam Rating Curve, Guntersville

CALC ID	TYPE	ORG	PLANT	BRANCH	NUMBER	CUR REV	NEW REV	REVISION APPLICABILITY
CURRENT	CN	NUC	GEN	CEB	CDQ000020080011	0	1	Entire calc ☒ Selected pages ☐
NEW	CN	NUC	GEN	CEB				

ACTION						No CCRIS Changes ☐ (For calc revision, CCRIS been reviewed and no CCRIS changes required)
	NEW ☐ REVISION ☒	DELETE ☐ RENAME ☐	SUPERSEDE ☐ DUPLICATE ☐	CCRIS UPDATE ONLY ☐ (Verifier Approval Signatures Not Required)		

UNITS	SYSTEMS	UNIDS
N/A	N/A	N/A

DCN,EDC,N/A	APPLICABLE DESIGN DOCUMENT(S)	CLASSIFICATION
See Below	N/A	E

QUALITY RELATED?	SAFETY RELATED? (If yes, QR = yes)	UNVERIFIED ASSUMPTION	SPECIAL REQUIREMENTS AND/OR LIMITING CONDITIONS?	DESIGN OUTPUT ATTACHMENT?	SAR/TS and/or ISFSI SAR/CoC AFFECTED
Yes ☒ No ☐	Yes ☒ No ☐	Yes ☐ No ☒	Yes ☒ No ☐	Yes ☐ No ☒	Yes ☐ No ☒

PREPARER ID	PREPARER PHONE NO	PREPARING ORG (BRANCH)	VERIFICATION METHOD	NEW METHOD OF ANALYSIS
A.C. Murr	205-298-6074	BWSC (CEB)	Design Review	☐ Yes ☒ No

PREPARER SIGNATURE	DATE	CHECKER SIGNATURE	DATE
Andrew Murr	08/27/2009	Bryant Bondurant	8/28/09
VERIFIER SIGNATURE	DATE	APPROVAL SIGNATURE	DATE
L.Y. Lin	8/28/09	K.E. Yates (for)	9-4-09

STATEMENT OF PROBLEM/ABSTRACT

Initial dam rating (headwater rating) curves are required as inputs to TVA's SOCH and TRBROUTE models, used in performing flood-routing calculations for the Tennessee River. The initial dam rating curves provide total dam discharge as a function of headwater elevation and are used to define the beginning conditions for the hydraulic analysis. The final dam rating curve is confirmed and documented in the SOCH Probable Maximum Flood model calculation by validating the headwater-tailwater relationship across the modeled dam configuration.
Note: This dam rating curve determined in this calculation must only be used for determining the effects of a Probable Maximum Flood (PMF) upstream of Guntersville Dam (see Section 5.0).

EDCN – 22404 (SQN)
EDCN – 54018 (WBN)
EDCN – later (BFN)

This calculation contains electronic attachments and must be stored in EDMS as an Adobe .pdf file to maintain the ability to retrieve the electronic attachments.

MICROFICHE/EFICHE Yes ☐ No ☒ FICHE NUMBER(S)

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NPG CALCULATION COVERSHEET/CCRIS UPDATE

REV 0 EDMS/RIMS NO.	EDMS TYPE:	EDMS ACCESSION NO (N/A for REV 0)
L58 090224 004	Calculations (nuclear)	N/A

Calc Title: Dam Rating Curves, Guntersville

CALC ID	TYPE	ORG	PLANT	BRANCH	NUMBER	CUR REV	NEW REV	REVISION APPLICABILITY
CURRENT	CN	NUC						Entire calc ☐ Selected pages ☐
NEW	CN	NUC	GEN	CEB	CDQ000020080011	N/A	0	

ACTION				
ACTION	NEW ☒ REVISION ☐	DELETE ☐ RENAME ☐	SUPERSEDE ☐ DUPLICATE ☐	CCRIS UPDATE ONLY ☐ (Verifier Approval Signatures Not Required)	No CCRIS Changes ☐ (For calc revision, CCRIS been reviewed and no CCRIS changes required)

UNITS	SYSTEMS	UNIDS
N/A	N/A	N/A

DCN,EDC,N/A	APPLICABLE DESIGN DOCUMENT(S)	CLASSIFICATION
N/A	N/A	E

QUALITY RELATED?	SAFETY RELATED? (If yes, QR = yes)	UNVERIFIED ASSUMPTION	SPECIAL REQUIREMENTS AND/OR LIMITING CONDITIONS?	DESIGN OUTPUT ATTACHMENT?	SAR/TS and/or ISFSI SAR/CoC AFFECTED
Yes ☒ No ☐	Yes ☒ No ☐	Yes ☒ No ☐	Yes ☒ No ☐	Yes ☐ No ☒	Yes ☐ No ☒

PREPARER ID	PREPARER PHONE NO	PREPARING ORG (BRANCH)	VERIFICATION METHOD	NEW METHOD OF ANALYSIS
gaschohl	865-632-3968	CEB	Design Review	☐ Yes ☒ No

PREPARER SIGNATURE	DATE	CHECKER SIGNATURE	DATE
G.A. Schohl *Gerald A. Schohl*	02/6/2009	*[signature]* JANIE B. MAUTER	2/9/09
VERIFIER SIGNATURE	**DATE**	**APPROVAL SIGNATURE**	**DATE**
[signature] David Hunt Jr. Andrew C. Muer Scott Zinkhan	2/9/09	K.B. Spates *[signature]*	2/24/09

STATEMENT OF PROBLEM/ABSTRACT

Dam rating (headwater rating) curves for 20 dams are required as inputs to TVA's SOCH and TRBROUTE models, which perform flood-routing calculations for the Tennessee River and tributaries. The dam rating curves provide total dam discharge as a function of headwater elevation. This calculation presents the dam curve for Guntersville Dam.

Assumption 3.1.1 limits this dam rating curve to use in determination of PMF levels for plants above Guntersville reservoir. This rating curve is not acceptable for use in determination of the PMF levels at Browns Ferry. See Section 5.1.

This calculation contains electronic attachments and must be stored in EDMS as an Adobe .pdf file to maintain the ability to retrieve the electronic attachments.

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NPG CALCULATION COVERSHEET/CCRIS UPDATE

CALC ID	TYPE	ORG	PLANT	BRANCH	NUMBER	REV
	CN	NUC	GEN	CEB	CDQ000020080011	1

ALTERNATE CALCULATION IDENTIFICATION

BLDG	ROOM	ELEV	COORD/AZIM	FIRM BWSC	Print Report Yes. ☐

CATEGORIES NA

KEY NOUNS (A-add, D-delete)

ACTION (A/D)	KEY NOUN	A/D	KEY NOUN

CROSS-REFERENCES (A-add, C-change, D-delete)

ACTION (A/C/D)	XREF CODE	XREF TYPE	XREF PLANT	XREF BRANCH	XREF NUMBER	XREF REV
A	S	CN	GEN	CEB	CDQ000020080041	
A	S	CN	GEN	CEB	CDQ000020080046	
A	S	CN	GEN	CEB	CDQ000020080053	
A	S	CN	GEN	CEB	CDQ000020080054	

CCRIS ONLY UPDATES:
Following are required only when making keyword/cross reference CCRIS updates and page 1 of form NEDP-2-1 is not included:

PREPARER SIGNATURE	DATE	CHECKER SIGNATURE	DATE
PREPARER PHONE NO.	EDMS ACCESSION NO.		

NPG CALCULATION RECORD OF REVISION

CALCULATION IDENTIFIER CDQ000020080011

Title Initial Dam Rating Curve, Guntersville

Revision No.	DESCRIPTION OF REVISION
0	Initial issue Total Pages: 75
1	This calculation was revised to remove the conservative tailwater assumption. Significant changes to text are marked with a right-hand margin revision bar. Pages deleted: 3 Pages revised: 1, 2, 3, 4, 6, 8, 9, 14, 17 New pages added: 1a Calculation header was revised (Title and Revision) on all pages from page 5, inclusive. UVA 3.2.1 – Removed based on Reference 31. UVA 3.2.2 – Removed based on Reference 32. UVA 3.2.3 – Removed based on conservative estimate. UVA 3.2.4 – Removed based on conservative estimate and validation at a later date. UVA 3.2.5 – Removed based on Reference 33. Revised electronic attachment 19 and 21. Total pages for Revision 1: 74

NPG CALCULATION TABLE OF CONTENTS

Calculation Identifier: CDQ000020080011 | Revision: 1

TABLE OF CONTENTS

NPG COMPUTER INPUT FILE
STORAGE INFORMATION SHEET

Document CDQ000020080011	Rev. 0	Plant: GEN	

Subject:
Initial Dam Rating Curve, Guntersville

☐ Electronic storage of the input files for this calculation is not required. Comments:

☒ Input files for this calculation have been stored electronically and sufficient identifying information is provided below for each input file. (Any retrieved file requires re-verification of its contents before use.)

These files are electronically attached to the parent ADOBE.pdf calculation file. All files are therefore stored in an unalterable medium and are retrievable through the EDMS number for this calculation.

Attachment 21: Guntersville Rating Curves.xls
Spreadsheet for dam rating curve calculations
Attachment 22: Complete PDF copy of Reference 2
Attachment 23: Complete PDF copy of Reference 3
Attachment 24: Complete PDF copy of Reference 5
Attachments 25 through 49: Large resolution PDF files of References 1 and 7-30

☐ Microfiche/eFiche

1. Purpose

Initial dam rating (headwater rating) curves are required as inputs to TVA's SOCH and TRBROUTE models, used in performing flood-routing calculations for the Tennessee River. The initial dam rating curves provide total dam discharge as a function of headwater elevation and are used to define the beginning conditions for hydraulic analysis. The final dam rating curve is confirmed and documented in the SOCH Probable Maximum Flood model calculation (Reference 31) by validating the headwater-tailwater relationship across the modeled dam configuration.

TVA developed methods of analysis, procedures, and computer programs for determining design basis flood levels for nuclear plant sites in the 1970's. Determination of maximum flood levels included consideration of the most severe flood conditions that may be reasonably predicted to occur at a site as a result of both severe hydrometerological conditions and seismic activity. This process was followed to meet Nuclear Regulatory Guide 1.59. At that time, there were no computer programs available that would handle unsteady flow and dam failure analysis. As a result of this early work and method development TVA developed a runoff and stream course modeling process for the TVA reservoir system. This process provided a basis for currently licensed plants (Sequoyah Nuclear Plant, Watts Bar Nuclear Plant, and Browns Ferry Nuclear Plant). The Bellefonte Nuclear Plant (BLN) Units 1 & 2 Final Safety Analysis Report (FSAR) was also based on this process.

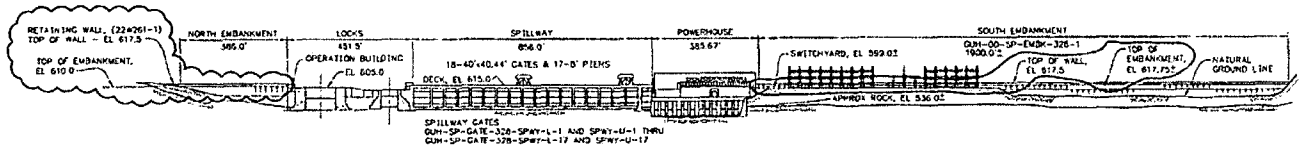
BLN Unit 3 & 4 Combined Operating License Application (COLA) was submitted using data and analysis that was determined for the original BLN FSAR (Unit 1 and Unit 2) and was documented in a 1998 reassessment. In 1998, the analysis process and documentation was brought under the nuclear quality assurance process for the first time. A quality assurance audit conducted by NRC staff in early 2007 raised several questions related to past work regarding design basis flood level determinations. This calculation supports a portion of the effort to improve the design basis documentation.

Preparation of all calculations supporting nuclear development and licensing are subject to TVA Standard Department Procedure NEDP-2. This standard dictates the process in which calculation are prepared, checked, verified, stored, and cross referenced in a goal to provide the highest quality nuclear design input and output possible.

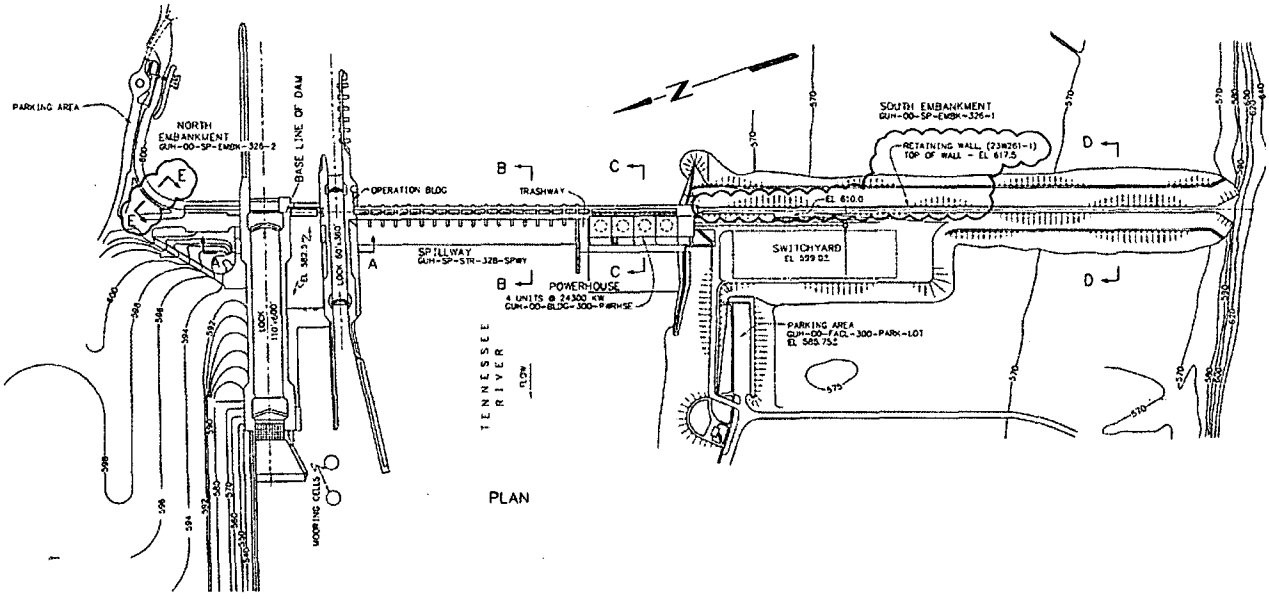
Figure 1 is a plan and elevation view of Guntersville Dam (a portion of Reference 1, which is included as Attachment 1). A photograph is included as Attachment 2. For headwaters in the normal operating range, discharge is passed through the turbines or the spillway. The spillway consists of eighteen spillway bays, each with leaf gates to control discharge. If, as during a probable maximum flood (PMF) event, headwater rises above the normal operating range, discharge may pass also over the navigation locks, the tops of the spillway piers, the south embankment, and the north embankment. Discharge is not expected to pass over the north and south embankments, however, because their top elevations were raised in 1996 as part of the dam safety modification program. The modifications were designed to ensure that the embankments would not be overtopped during a PMF event (Reference 2). Nevertheless, the rating curve developed in this calculation includes headwater elevations above the tops of the modified embankments because overflow may occur in some flood-routing simulations. Potential breaching of overtopped embankments is conservatively ignored for plant sites upstream of the Guntersville dam. Flood-routing simulations downstream of Guntersville must consider the potential impact of breached embankments on the dam rating curve.

The initial dam rating curve is based on the current configuration of Guntersville Dam as defined on the current design drawings. The purpose of this calculation does not evaluate the design loading conditions for the dam or embankments.

Revision 0 discussed the dam rating curve results with a conservative assumption for tailwater, as tailored to the Bellefonte Nuclear Plant. However, in this Revision 1, the conservative tailwater assumption is taken out.



DOWNSTREAM ELEVATION



PLAN

Figure 1 – Guntersville Dam, General Plan and Elevation (Ref. 1).

2. References

1. TVA drawing no: 10W200, R11 (Attachments 1 and 25)
2. TVA Water Control Project Manual (Blue Book) for Guntersville Dam, TVA River Operations, April, 2000 (Attachment 22).
3. "Guntersville Dam Spillway Discharge Tables," River Operations, Tennessee Valley Authority, 2004, RIMS No. L58 081211 804 (Attachment 23).
4. "Hydraulic Design Criteria," USACE (U. S. Army Engineer Waterways Experiment Station), Eighteenth issue, Vicksburg, MS, 1988.
5. "Discharge Coefficients for Spillways at TVA Dams," Kenneth W. Kirkpatrick, Paper No. 2855, Transactions of the American Society of Civil Engineers, vol. 22, pp. 190-210, 1957 (relevant pages included as Attachment 9, complete paper included as Attachment 24).
6. Hydraulic Design Chart 711 (HDC 711) from Reference 4 (Attachment 10 in this calculation).
7. TVA drawing no. 47K2900, R0 (Attachments 4-1 and 26)
8. TVA drawing no: 51N241, R8 (Attachments 12 and 27)
9. TVA drawing no: 22W263-1, R1 (Attachments 15-9 and 28)
10. TVA drawing no: 22W263-5, R1 (Attachments 15-10 and 29)
11. TVA drawing no: 51N222, R8 (Attachments 15-6 and 30)
12. TVA drawing no: 51N226, R5 (Attachments 15-7 and 31)
13. TVA drawing no: 61N250, R3 (Attachments 15-8 and 32)
14. TVA drawing no: 61N430, R3 (Attachments 15-11 and 33)
15. TVA drawing no: 61W256, R4 (Attachments 15-12 and 34)
16. TVA drawing no. 02-L349-3/1.3 (Attachments 15-13 and 35)
17. TVA drawing no: 23W261-1, R2 (Attachments 16-2 and 36)
18. TVA drawing no: 46W300, R6 (Attachments 16-3 and 37)
19. TVA drawing no: 64W204, R4 (Attachments 3-1 and 38)
20. TVA drawing no: 64W504-1, R1 (Attachments 3-2 and 39)
21. TVA drawing no: 02-L349-20/1.12, R12 (Attachments 15-14 and 40)
22. TVA drawing no: 02-L349-20/56, R6 (Attachments 15-15 and 41)
23. TVA drawing no: 22W260-1, R1 (Attachments 17-2 and 42)
24. TVA drawing no: 22W261-1, R1 (Attachments 17-3 and 43)
25. TVA drawing no: 22W261-6, R1 (Attachments 17-4 and 44)
26. TVA drawing no: 23W260-1, R2 (Attachments 18-2 and 45)
27. TVA drawing no: 23W262-1, R1 (Attachments 18-3 and 46)
28. TVA drawing no. 14W301, R5 (Attachments 20-2 and 47)
29. TVA drawing no. 14N310, R3 (Attachments 20-3 and 48)
30. TVA drawing no. 51W217, R5 (Attachments 20-4 and 49)
31. "SOCH Probable Maximum Flood Model Validation," CDQ000020080053
32. "Dam Spillway Gate/Outlet Open Configuration for Flood Analyses," Tennessee Valley Authority, May 29, 2009 (EDMS No. L58 090529 80Q)
33. "Dam Lock Gate Technical Evaluation for the PMF," Tennessee Valley Authority, (EDMS No. L58090908001)

3. Assumptions & Methodology

The initial dam rating curve developed in this calculation, which are applicable for any conditions in which all spillway gates are fully open, will be used in simulations of probable maximum flood events. Consequently, the rating curve has been calculated well above the normal operating range and several feet above the top of the dam.

3.1 Assumptions

3.1.1 Assumption: The tailwater rating curve provided in Attachment 5 by the TVA River Operations Risk Section, is acceptable for use in development of the initial dam rating curve.
Technical Justification: The final tailwater curve is validated in the unsteady SOCH PMF calculation (Reference 31) by ensuring consistency with the headwater-tailwater relationship across the modeled dam configuration. This calculation provides the initial dam rating curve for the SOCH PMF calculation.

3.1.2 Assumption: All spillway gates will be set to the maximum openings specified in the spillway discharge tables.
Technical Justification: TVA maintains that all discharge outlets (spillways gates, sluice gates, and valves) for projects in the reservoir system can be placed in the fully open position for the passage of water when and as needed. See "Dam Spillway Gate/Outlet Open Configuration for Flood Analysis" (Reference 32) for further explanation.

3.1.3 Assumption: The upper gates of the main and auxiliary navigation locks will not fail when overflowed.
Technical Justification: See "Dam Lock Gate Technical Evaluation for the PMF" (Reference 33).

3.1.4 Assumption: The fully raised spillway gate leaves are assumed to remain in their design stored open position for the evaluation of Probable Maximum Flood (PMF) conditions upstream of Guntersville Dam. For the evaluation of PMF conditions downstream of Guntersville, Dam, the fully raised spillway gate leaves are assumed to retain position but deform under hydrostatic loads during the PMF and, as a result, not provide flow resistance above the gate rail slots.
Technical Justification: In the fully raised position, the spillway gate leaves do not have lateral support for the portion of the gates extending above the gate rail slots. As a result, the gates will potentially deform plastically under the hydrostatic flexural loads during the PMF, resulting in decreased flow resistance for headwater elevations above the gate rail slots. Assuming the gates maintain the design stored open condition under PMF conditions will conservatively result in higher headwater at the Guntersville Dam and higher flood elevations at upstream locations. Consequently, the design stored open position will be used for evaluation of flood impacts upstream of Guntersville Dam. For evaluations of PMF impacts downstream of the Guntersville Dam, the spillway gates will conservatively be assumed to maintain the design stored open position but fail plastically in flexure under hydrostatic load and provide no flow resistance above the gate rail slots. This assumption will result in conservatively higher flood elevations at downstream locations and will be used for evaluation of flood impacts downstream of Guntersville dam.

3.1.5 Assumption: The maximum headwater elevation at the Guntersville Dam will not exceed 624 feet.
Technical Justification: The maximum headwater is based on very conservative estimations of the maximum PMF elevation at the dam. This assumption is validated in the SOCH PMF analysis in development of the final dam rating curve in the SOCH PMF calculation.

3.2 Unverified Assumptions (UVA)

None.

3.3 Methodology

Discharges past the dam are computed as "free" discharge or "orifice" discharge. Free discharge refers to free surface overflow and is computed using a weir-type equation as follows (Reference 4 shows weir flow equations for overflow discharges):

$$Q_f = C_f L H_c^{1.5} \quad (1)$$

in which Q_f = free discharge (cfs), C_f = free discharge coefficient ($ft^{0.5}/s$ -- may vary with HW), L = length of overflowing section (ft), H_c = head on crest (ft) = HW - Z_c, HW = headwater elevation (ft), and Z_c = top, or crest, elevation of overflowing section (ft). This equation is modified to account for tailwater submergence as follows:

$$Q_{fs} = Q_f S_f \quad (2)$$

in which Q_{fs} = "corrected" free discharge (cfs) and S_f = tailwater submergence factor (dimensionless -- varies between 0 and 1). S_f varies with d/H_c where d = TW - Z_c (ft) and TW = tailwater elevation (ft).

With all gate leaves fully raised, flow through the Guntersville spillway is free discharge for all headwater elevations below Z_o, the elevation of the bottom of the upstream crane girder (see Attachments 12 and 20-1). The discharge coefficient, C_f, for free discharge over a spillway crest varies with head, H_c and the submergence factor, S_f, varies with submergence ratio, d/H_c (Reference 4 provides these kinds of data). For the Guntersville spillway crest, the relationships $C_f(H_c)$ and $S_f(d/H_c)$ were determined from a physical model study (Reference 5; relevant pages included as Attachment 9). The crest length, L, and crest elevation, Z_c, are shown on TVA drawings (e.g., Reference 1).

The physical model used to measure spillway discharge included several bays and the piers between them. Consequently, pier contraction effects are implicitly included in the discharge coefficients derived from the model test data.

Under the assumption that all spillway gates are fully open, the two end bays (first and last) are the only spillway bays subject to end contraction effects. These effects, which may reduce discharge through these two bays by a few percent, are neglected in this calculation. Neglecting this minor effect has negligible impact on the dam rating curve.

For headwater elevations above Z_o (608.8 feet [4.1.5]), flow through the spillway bays is treated as orifice discharge. Data indicating the headwater elevation at which the overflowing nappe would first touch the bottom of the girder are not available. Also, data indicating the relationship between headwater elevation, tailwater elevation, and discharge for this condition are not available. Because the discharge is very much affected by submergence at headwaters this high, which means that it is more controlled by the difference in elevation between the headwater and tailwater than by the difference in elevation between the headwater and the spillway crest, the following approach for predicting spillway discharge is adequate for headwaters above Z_o:

$$Q_o = C_o (Z_o - Z_c) L \sqrt{2g(HW - TW)} \quad (3)$$

in which C_o = discharge coefficient determined by imposing the condition that the orifice discharge (Equation 3) is equal to the free discharge affected by submergence (Equation 2) when the headwater elevation is equal to Z_o. Since C_o depends on TW when HW=Z_o, it is determined as part of the overall calculation and cannot be computed ahead of time.

Flows over the the navigation locks, the tops of the spillway piers, the south embankment, and the north embankment are computed as free discharge. Values of the discharge coefficient, C_f, and the submergence factor, S_f, are estimated using Hydraulic Design Chart 711 (Reference 6) which is included as Attachment 10. Length, L, and crest elevation, Z_c, in each case is determined from TVA drawings (all relevant drawings are defined as References).

The upper plot of HDC 711 (Reference 6) shows that C_f is about 2.65 for very broad crests ($H_1/B < 0.4$ where $H_1 = H_c$ and B = streamwise length of the crest) and gradually increases to 3.1, the maximum value for a "broad-crested" weir, as H_1/B increases to about 1.2. As H_1/B increases above 1.2, C_f continues to increase as the weir transitions from broad-crested to sharp-crested at about $H_1/B = 2.0$. Since the estimation of discharge over the top of various sections of a dam and its embankments is an approximation, small variations in C_f with H_c are not modeled and the effects of end contractions are neglected. A single representative value for C_f within the range of its variation is used for all headwater elevations included in the rating. Neglecting minor variations in C_f values and end contractions has negligible impact on the dam rating curve.

The lower plot of HDC 711 shows several curves of C_s/C_f (equivalent to S_f) versus H_2/H_1 (equivalent to d/H_c). As illustrated in Attachment 11, the curve labeled "suggested for design (broad crests)" is well-represented by the following polynomial:

$$S_f = 1.0 + 0.023\sigma - 5.0259\sigma^2 + 18.266\sigma^3 - 44.658\sigma^4 \quad \text{for} \quad 0 \le \sigma \le 0.37 \quad \text{broad crest} \qquad (4)$$

in which $\sigma = d/H_c - 0.6$. According to this relationship, submergence affects discharge over a broad-crested weir for $d/H_c > 0.6$.

4. Design Input

Sect.	Input Parameter	Source	Symbol	Value
4.1	**Spillway crest parameters**			
4.1.1	Crest length	18 40-foot wide bays; Ref. 1 or Ref. 8	L	720 feet
4.1.2	Crest elevation	Ref. 1 or Ref. 8	Z_c	555 feet
4.1.3	Free discharge coefficient	Ref. 5 presents discharge parameters for several TVA spillways determined from model test data, and C_f vs. H_c for Guntersville is plotted in Fig. 3c. Points scaled from Fig. 3c plus four points added by visual extrapolation are fit by a polynomial. C_f is needed to H_c=69 feet (headwater limit for rating tables, 624 feet [4.7], minus crest elevation, 555 feet [4.1.2]) for the rating curve. The extrapolation is arbitrary but the extrapolated values of C_f are expected to be within plus or minus 0.05, or 1.5 percent, of the true values.	$C_f(H_c)$	Polynomial Equation given in Att. 13
4.1.4	Submergence factor for free discharge	Ref. 5 presents discharge parameters for several TVA spillways determined from model test data, and S_f vs. d/H_c for Guntersville is plotted in Fig. 7b. Points scaled from Fig. 7b are fit by the equation given in Att. 14.	$S_f(d/H_c)$	Equation given in Att. 14
4.1.5	Headwater elevation above which orifice discharge is computed.	Paragraph 4.15	Z_o	608.8 feet
4.2	**Main and Auxiliary Lock Gate Overflow**			
4.2.1	Discharge coefficient	Justification in Att. 15	C_f	3.2
4.2.2	Overflow elevation	Justification in Att. 15	Z_c	598.3 feet
4.2.3	Overflow length	Determined in Att. 15	L	170 feet
4.3	**Auxiliary Lock Walls Overflow**			
4.3.1	Discharge coefficient	Justification in Att. 15	C_f	2.9
4.3.2	Overflow elevation	Ref. 1	Z_c	600 feet
4.3.3	Overflow length	Determined in Att. 15	L	75.5 feet
4.4	**Main Lock Walls Overflow**			
4.4.1	Discharge coefficient	Justification in Att. 15	C_f	2.8
4.4.2	Overflow elevation	Ref. 1	Z_c	605 feet
4.4.3	Overflow length	Determined in Att. 15	L	159 feet
4.5	**Sloped Section of Dam Between Locks Overflow**			
4.5.1	Discharge coefficient	Justification in Att. 15	C_f	2.9
4.5.2	Overflow elevation	Ref. 8	Z_c	602.5 feet
4.5.3	Overflow length	Determined in Att. 15	L	60 feet
4.6	**Spillway piers Overflow**			
4.6.1	Discharge coefficient	Justification in Att. 16	C_f	2.65
4.6.2	Overflow elevation	Ref. 1 and Ref. 8	Z_c	615 feet
4.6.3	Overflow length	Determined in Att. 16	L	162.5 feet
4.7	**Upper limit on headwater elevation for rating**	Three feet above the maximum elevation predicted by a preliminary SOCH simulation for the 100 percent runoff assumption [3.2.4].	HW_{max}	624 feet
4.8	**Tailwater Rating Curve**			
4.8.1	TW vs. total discharge, Q	Paragraph 4.14	TW(Q)	Equation 5

Sect.	Input Parameter	Source	Symbol	Value
4.9	**North Embankment Flood Wall Overflow**			
4.9.1	Discharge coefficient	Justification in Att. 17	C_f	3.12
4.9.2	Overflow elevation	Determined in Att. 17	Z_c	617.5 feet
4.9.3	Overflow length	Determined in Att. 17	L	500 feet
4.10	**North Embankment Sloped Section Overflow**			
4.10.1	Discharge coefficient	Justification in Att. 17	C_f	2.65
4.10.2	Overflow elevation	Determined in Att. 17	Z_c	621 feet
4.10.3	Overflow length	Determined in Att. 17	L	30 feet
4.11	**South Embankment Overflow**			
4.11.1	Discharge coefficient	Justification in Att. 18	C_f	2.94
4.11.2	Overflow elevation	Determined in Att. 18	Z_c	617.5 feet
4.11.3	Overflow length	Determined in Att. 18	L	1890 feet

4.12 Upper Lock Gates

Both upper gates include a walkway on top supported by a steel frame attached to the gate. The areas between the walkways and the tops of the gates are essentially open and will allow flow to pass if the gates are overtopped (somewhat visible in Attachment 2). Since flow will pass over the miter gates when the headwater rises above them, and the walkways may not survive PMF overflow, the overflow elevation for each gate is established as the top of the miter gate rather than the elevation of the walkway.

The overflow elevation for the upper gate of the main lock is 599.4 (Attachment 3-1). The overflow elevation for the upper gate of the auxiliary lock is 597.1 feet (Attachment 3-2). For calculation convenience, the average of these two elevations, 598.3 feet, is used for both gates. Use of the average elevation for both gates has no significant impact on the rating curve.

4.13 Turbine Discharge

Guntersville Dam has four turbines (see Attachment 1). The turbines will be operated during a PMF until the tailwater or headwater reaches a level at which electrical components will get wet, excessive vibration occurs, or the gross head (headwater elevation minus tailwater elevation) becomes too small for power generation.

The turbines are expected to be operated for maximum capacity, with the wicket gates open as far as possible. Attachment 4-1 provides discharge curves for Unit 4 (all four units are similar; see Attachment 4-2). Linear extrapolation of the "maximum power" curve indicates that generator output (power) is less than or equal to zero for gross heads smaller than about 10 feet. The rating curve calculation results (Figure 2) indicate that gross heads during the PMF without the turbines running are less than 9 feet throughout the entire headwater elevation range. Therefore, the turbines at Guntersville will not be operated under conditions in which the dam rating curve is applicable, and turbine discharge is not included in the rating curve.

The turbines at Guntersville were rehabilitated and upgraded a few years ago (see Attachment 4-3). Attachment 4-1 includes points taken from preliminary operating characteristics (see Attachment 4-4) for the upgraded Unit 4. The upgraded unit delivers slightly more power at all gross heads than the previous unit. Extrapolation of the maximum power curve for the upgraded unit, using the previous maximum power curve as a guide, indicates that generator output is less than zero for gross heads smaller than about 9 feet, verifying that turbine discharge is zero for the dam rating curve.

4.14 Tailwater rating curve

The tailwater rating curve used in this calculation was developed from the curves shown in Attachment 5-1. The blue curve on the plot was computed for steady-state conditions with no backwater effects from downstream water levels (data listed in Attachment 5-2). The pink curve on the plot was computed for steady-state conditions with the water level at Decatur Alabama (end of the tailwater, start of the main reservoir) at 557 feet, the highest downstream water level considered for the plot in Attachment 5-3 which illustrates backwater effects (data listed in Attachment 5-4). Since higher tailwater means less discharge from Guntersville Dam, which is conservative for computing flood levels at the Bellefonte site, the rating curve for this calculation follows the pink curve for discharges less than 350,000 cfs (rather than a curve corresponding to lower downstream water levels) and the blue curve for larger discharges. As noted previously, the dam rating curve developed in this calculation is the initial curve used in developing the initial SOCH PMF model. The final dam rating curve, including the validated headwater-tailwater relationship, is confirmed and documented in Reference 31.

Attachment 19 lists data points taken from Attachments 5-2 and 5-4 and shows a polynomial fit to the result. Attachment 19 also lists tailwater values (column 3) computed from discharge values (column 1) using the polynomial. The polynomial used for the rating curve calculations is as follows:

$$TW = 554.89 + 0.11085Q_a - 1.157\times10^{-4}Q_a^2 + 7.335\times10^{-8}Q_a^3 - 1.788\times10^{-11}Q_a^4 \quad (5)$$

in which $Q_a = Q/0.9$ and Q = total discharge past the dam in cfs divided by 1000 ("1000 cfs").

4.15 Spillway orifice discharge

Discharge through a spillway bay for headwater elevation 608.8 feet, the elevation of the bottom of the upstream crane girder (see Attachment 20-4), is depicted in Attachment 20-1. For this and lower headwaters, the flow is free discharge affected by tailwater submergence. The tailwater elevation indicated in Attachment 20-1 is from the rating curve results in section 6 for headwater elevation 608.8 feet.

For headwater elevations above 608.8 feet, the discharge is orifice discharge controlled by the opening between the bottom of the crane girder and the spillway crest, and by the difference between the headwater and tailwater elevations. As shown in Attachment 20-1, the bottom of the crane girder is the control elevation because the bottoms of the stored spillway gate leaves are both higher. As also shown in Attachment 20-1, the tops of the stored spillway gate leaves are above the maximum headwater elevation considered for the rating curve. Consequently, flow will not pass over the tops of the stored spillway gates for any headwater elevations considered for the rating curve. The stored gate leaves are expected to remain in place under flow [3.1.4].

5. Special Requirements/Limiting Conditions

The assumptions limit this dam rating curve to SOCH PMF analyses for nuclear facilities upstream of Guntersville Dam. These assumptions are conservative for determining PMF levels at the Watts Bar, Sequoyah, and Bellefonte sites. However, for determining PMF levels at the Browns Ferry site, these assumptions are not conservative and should be reevaluated.

6. Calculations

The calculations consist of computing spillway and overflow discharges (from Equations 1 and 2) for a list of headwater elevations ranging from 555 feet, the spillway crest elevation, to 624 feet [4.7], which is 6.5 feet above the top elevations of the north and south embankments. The dam rating curve is a plot of headwater elevation versus total dam discharge.

Discharge passes through the spillway section first and then the various overflow sections as headwater rises above their crest elevations. Total discharge, given in "1000 cfs" is the sum of all discharges in cfs past the dam divided by 1000.

6.1 Dam Rating Curve

Figure 2 shows the spreadsheet calculations for the dam rating curve (spreadsheet included as Attachment 21). The final result, the rating curve, is defined by the first two columns, HW vs. Total Discharge. The third column (TW) gives the tailwater associated with the "Total Discharge" from the tailwater rating curve polynomial fit [4.8.1].

Spillway discharge is computed in the next five columns, H_c, C_f, d/H_c, S_f, and Q_{fs}. Free discharge occurs for headwater elevations below 608.8 feet [4.1.5] and orifice discharge occurs for headwater elevations above 608.8 feet. The transition point is indicated by a double horizontal line. Above the line, the listed discharge coefficient is C_f [4.1.3] and below the line the listed discharge coefficient is C_o, computed as described in section [3.3]. Column $Q_{fs}|Q_o$ is the spillway discharge computed from Equation 2 for free discharge and from Equation 3 for orifice discharge. Tailwater affects the spillway discharge for headwater elevations above 557 feet ($S_f < 1.0$, $d/H_c > 0.3$) as indicated by the single horizontal line. Discharges above the horizontal line are not affected by tailwater submergence. Discharges below the horizontal line and above the double horizontal line are reduced (multiplied by S_f) by tailwater submergence. The effect of tailwater submergence on discharges below the double horizontal line is included implicitly in Equation 3. The effects of tailwater submergence make it necessary to iterate through different tailwater elevations until the total computed discharge fits the tailwater rating curve [4.8.1]. Figure 2 shows the final results of this process but does not show the iteration steps. The results are readily checked by computing the individual discharges, adding them up to compute total discharge, and then making sure the listed tailwater and total discharge agree with the tailwater rating curve.

The column following the spillway discharge column shows "C_f=", "Z_c=", and "L=" in three rows to indicate the meaning of the values included in those rows in the "Overflow Discharge" columns.

The next six columns compute discharge over the upper miter gates and the auxiliary lock walls. Columns for d/H_c and S_f are included because these discharges are affected by tailwater ($d/Hc > 0.6$) for some headwater elevations. Submergence factor, S_f, is computed from Equation 4. The overflow discharges are computed using Equation 2. The overflow discharge coefficients C_f ([4.2.1], [4.3.1]), elevations Z_c ([4.2.2], [4.3.2]), and lengths L ([4.2.3], [4.3.3]) are indicated in the three rows above the computed discharges.

The next six columns compute discharge over the sloped section of the dam between the locks, the main lock walls, the spillway piers, the north embankment, the north embankment sloped section, and the south embankment. The overflow discharge coefficient C_f ([4.5.1], [4.4.1], [4.6.1], [4.9.1], [4.10.1], [4.11.1]), elevation Z_c ([4.5.2], [4.4.2], [4.6.2], [4.9.2], [4.10.2], [4.11.2]), and length L ([4.5.3], [4.4.3], [4.6.3], [4.9.3], [4.10.3], [4.11.3]) in each case is indicated in the three rows above the computed discharge. These discharges, all computed using Equation 1, are not affected by tailwater submergence. This is verified in the last column, which shows d/H_c remaining less than 0.6 [3.3] for the sloped section of the dam between the locks, which has the lowest overflow elevation of this group.

TVA

Calculation No. CDQ000020080011	Rev: 0	Plant: GEN	Page: 16
Subject: Initial Dam Rating Curve, Guntersville		Prepped	G. Schohl
		Checked	JBM

Spillway Parameters
L = 720 feet
Z_c = 555 feet

	Q Total Discharge	TW	Spillway feet				cfs	Overflow Discharge, Q_f in cfs								
								Upper Lock Gates	Aux. Lock Walls	Mid-Sect.	Main Lock Walls	Spill Piers	North Emb.	North Emb. Slope	South Emb.	Upper Lock Gates
								C_f= 3.2	2.90	2.9	2.8	2.65	3.12	2.65	2.94	
								Z_c = 598.3	600	602.5	605	615	617.5	621	617.5	
HW	1000 cfs	feet	H_c	C_f | C_o	d/H_c	S_f	Q_{fs} | Q_o	L = 170	75.5	60	159	162.5	500	30	1890	d/Hc
555	0.00	554.89	0	2.834		1	0	0	0	0	0	0	0	0	0	
557	5.89	555.54	2	2.893	0.27	1	5892	0	0	0	0	0	0	0	0	
559	16.92	556.73	4	2.949	0.43	0.996	16919	0	0	0	0	0	0	0	0	
561	31.32	558.25	6	3.002	0.54	0.986	31324	0	0	0	0	0	0	0	0	
563	48.22	559.97	8	3.051	0.62	0.970	48222	0	0	0	0	0	0	0	0	
565	66.97	561.82	10	3.098	0.68	0.950	66971	0	0	0	0	0	0	0	0	
567	87.15	563.72	12	3.141	0.73	0.927	87150	0	0	0	0	0	0	0	0	
569	108.54	565.65	14	3.182	0.76	0.904	108536	0	0	0	0	0	0	0	0	
571	131.03	567.59	16	3.220	0.79	0.883	131028	0	0	0	0	0	0	0	0	
573	154.59	569.52	18	3.256	0.81	0.864	154590	0	0	0	0	0	0	0	0	
575	179.26	571.45	20	3.289	0.82	0.846	179261	0	0	0	0	0	0	0	0	
577	205.09	573.36	22	3.320	0.83	0.831	205086	0	0	0	0	0	0	0	0	
579	232.16	575.25	24	3.349	0.84	0.819	232159	0	0	0	0	0	0	0	0	
581	260.53	577.13	26	3.376	0.85	0.808	260533	0	0	0	0	0	0	0	0	
583	290.34	578.99	28	3.401	0.86	0.800	290338	0	0	0	0	0	0	0	0	
585	321.66	580.82	30	3.425	0.86	0.794	321662	0	0	0	0	0	0	0	0	
587	354.59	582.64	32	3.447	0.86	0.789	354592	0	0	0	0	0	0	0	0	
589	389.23	584.42	34	3.467	0.87	0.786	389231	0	0	0	0	0	0	0	0	
591	425.68	586.18	36	3.486	0.87	0.785	425680	0	0	0	0	0	0	0	0	
592	444.62	587.05	37	3.495	0.87	0.785	444619	0	0	0	0	0	0	0	0	
593	464.03	587.91	38	3.504	0.87	0.785	464034	0	0	0	0	0	0	0	0	
594	483.90	588.77	39	3.513	0.87	0.786	483901	0	0	0	0	0	0	0	0	
595	504.30	589.62	40	3.521	0.87	0.786	504301	0	0	0	0	0	0	0	0	
596	525.16	590.46	41	3.529	0.86	0.787	525159	0	0	0	0	0	0	0	0	
597	546.50	591.29	42	3.536	0.86	0.789	546502	0	0	0	0	0	0	0	0	
598	568.36	592.12	43	3.544	0.86	0.790	568356	0	0	0	0	0	0	0	0	
599	590.83	592.94	44	3.551	0.86	0.791	590507	319	0	0	0	0	0	0	0	
600	614.07	593.77	45	3.558	0.86	0.793	612867	1206	0	0	0	0	0	0	0	
602.5	675.30	595.86	48	3.574	0.86	0.795	669757	4682	865	0	0	0	0	0	0	
605	740.71	597.95	50	3.590	0.86	0.797	728136	9434	2448	688	0	0	0	0	0	
607	796.30	599.64	52	3.601	0.86	0.797	775362	13960	4055	1661	1259	0	0	0	0	
608.8	848.51	601.19	54	3.611	0.86	0.797	818238	18509	5716	2751	3298	0	0	0	0	
611	899.58	602.67	56	0.954			856113	24621	7988	4312	6543	0	0	0	0	
613	946.49	604.00	58	0.954			889568	30660	10263	5920	10074	0	0	0	0	
615	993.71	605.33	60	0.954			922096	37126	12720	7690	14078	0	0	0	0	0.421
617.5	1053.87	607.01	63	0.954			960592	45767	16029	10108	19675	1702	0	0	0	0.454
619	1096.41	608.18	64	0.954			975538	51234	18133	11662	23321	3445	2866	0	10208	0.477
620	1127.91	609.04	65	0.954			981784	54991	19583	12738	25864	4815	6166	0	21964	0.495
622	1196.46	610.88	67	0.954			988925	62766	22593	14983	31205	7975	14892	80	53043	0.531
624	1271.74	612.84	69	0.954			990924	70876	25743	17346	36871	11627	25852	413	92083	0.566

Figure 2 – Calculations for Dam Rating Curve

7. Results/Conclusions

For convenience, the dam rating results, separate from the calculation details provided above, are tabulated as total discharge in 1000 cfs vs. headwater elevation in feet in Figure 3. The dam rating curve (along with the tailwater rating curve) is plotted in Figure 4.

The initial dam rating curve developed in this calculation provides Guntersville total dam discharge vs. headwater elevation for use in TVA's SOCH and TRBROUTE models for simulation conditions satisfying the assumptions in [3.1 and 3.2]. In particular, all gate leaves must be removed from the spillway bays and placed in their stored positions.

The assumptions limit this dam rating curve to SOCH PMF analyses for nuclear facilities upstream of Guntersville Dam. These assumptions are conservative for determining PMF levels at the Watts Bar, Sequoyah, and Bellefonte sites. However, for determining PMF levels at the Browns Ferry site, these assumptions are not conservative and should be reevaluated.

Results Using Given TW Rating	
	Total Discharge
HW	1000 cfs
555	0.00
557	5.89
559	16.92
561	31.32
563	48.22
565	66.97
567	87.15
569	108.54
571	131.03
573	154.59
575	179.26
577	205.09
579	232.16
581	260.53
583	290.34
585	321.66
587	354.59
589	389.23
591	425.68
592	444.62
593	464.03
594	483.90
595	504.30
596	525.16
597	546.50
598	568.36
599	590.83
600	614.07
602.5	675.30
605	740.71
607	796.30
608.8	848.51
611	899.58
613	946.49
615	993.71
617.5	1053.87
619	1096.41
620	1127.91
622	1196.46
624	1271.74

Figure 3 – Dam Rating Results

Attachment 2

Source: Reference 2

Calculation No: CDQ000020080011

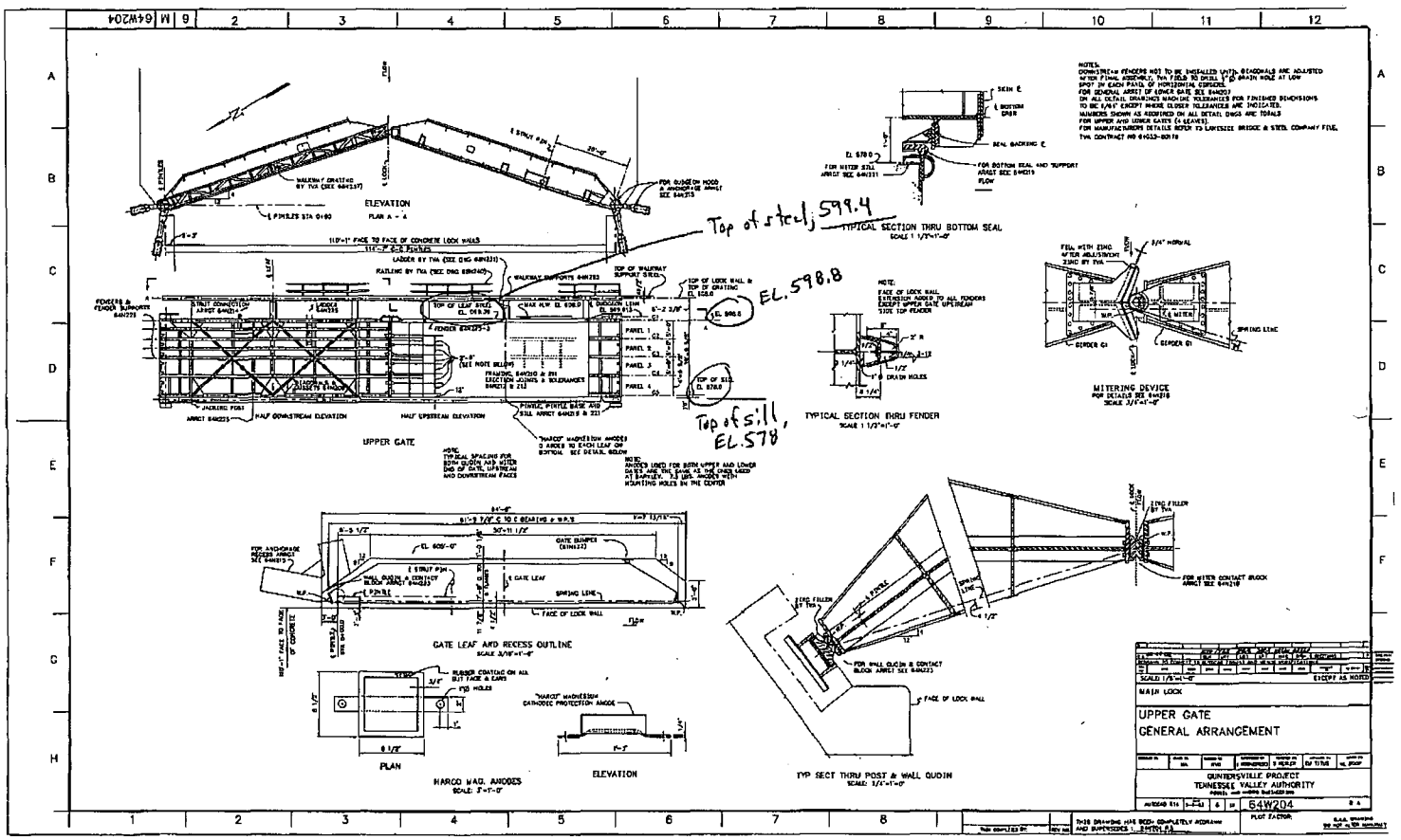
GUNTERSVILLE DAM

September 1999

Attachment 3-1

Source: Reference 19

Calculation No: CDQ000020080011



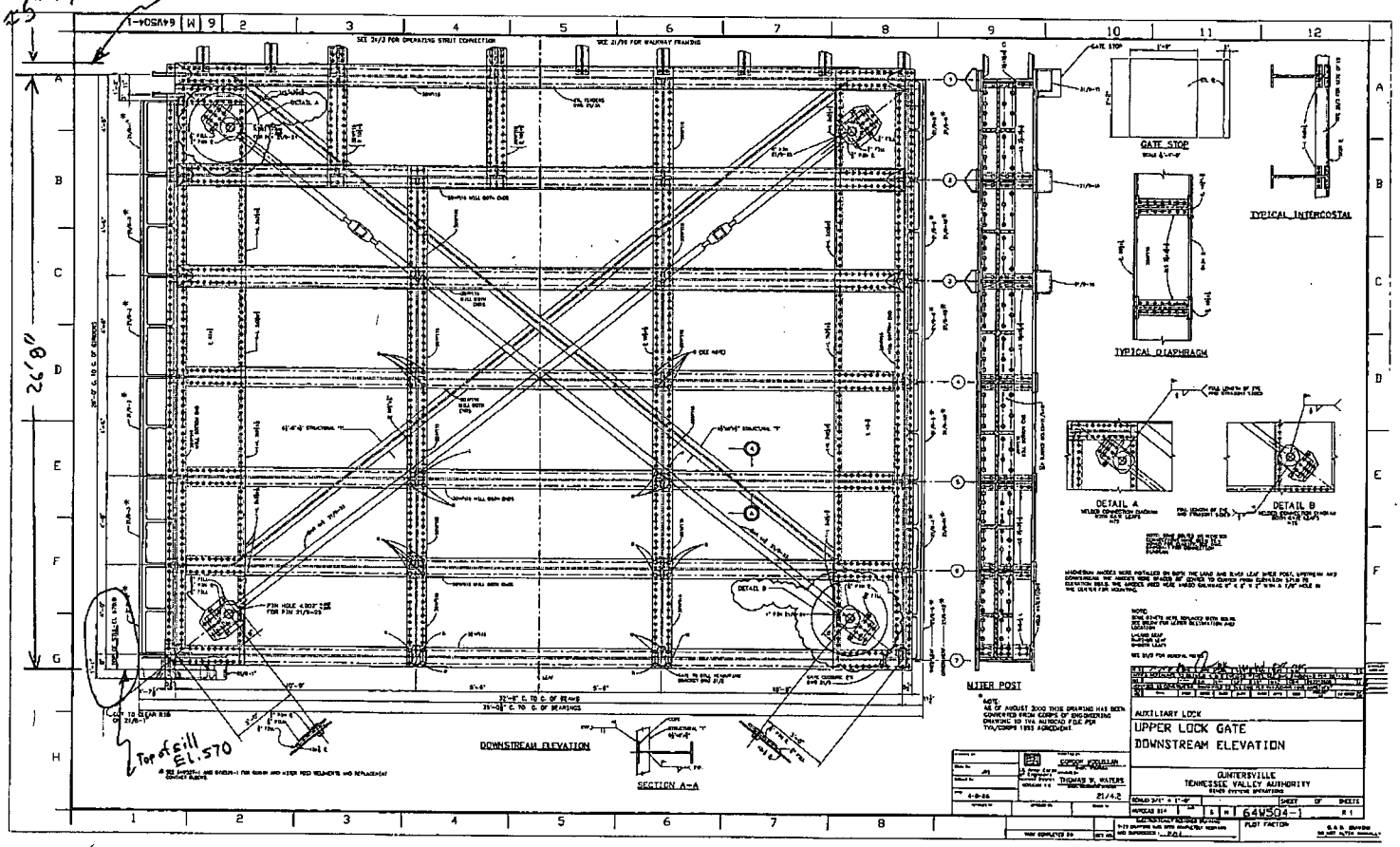
Attachment 3-2

Source: Reference 20

Calculation No: CDQ000020080011

570 + 26.67' + 0.42' ⇒ EL. 597.1'

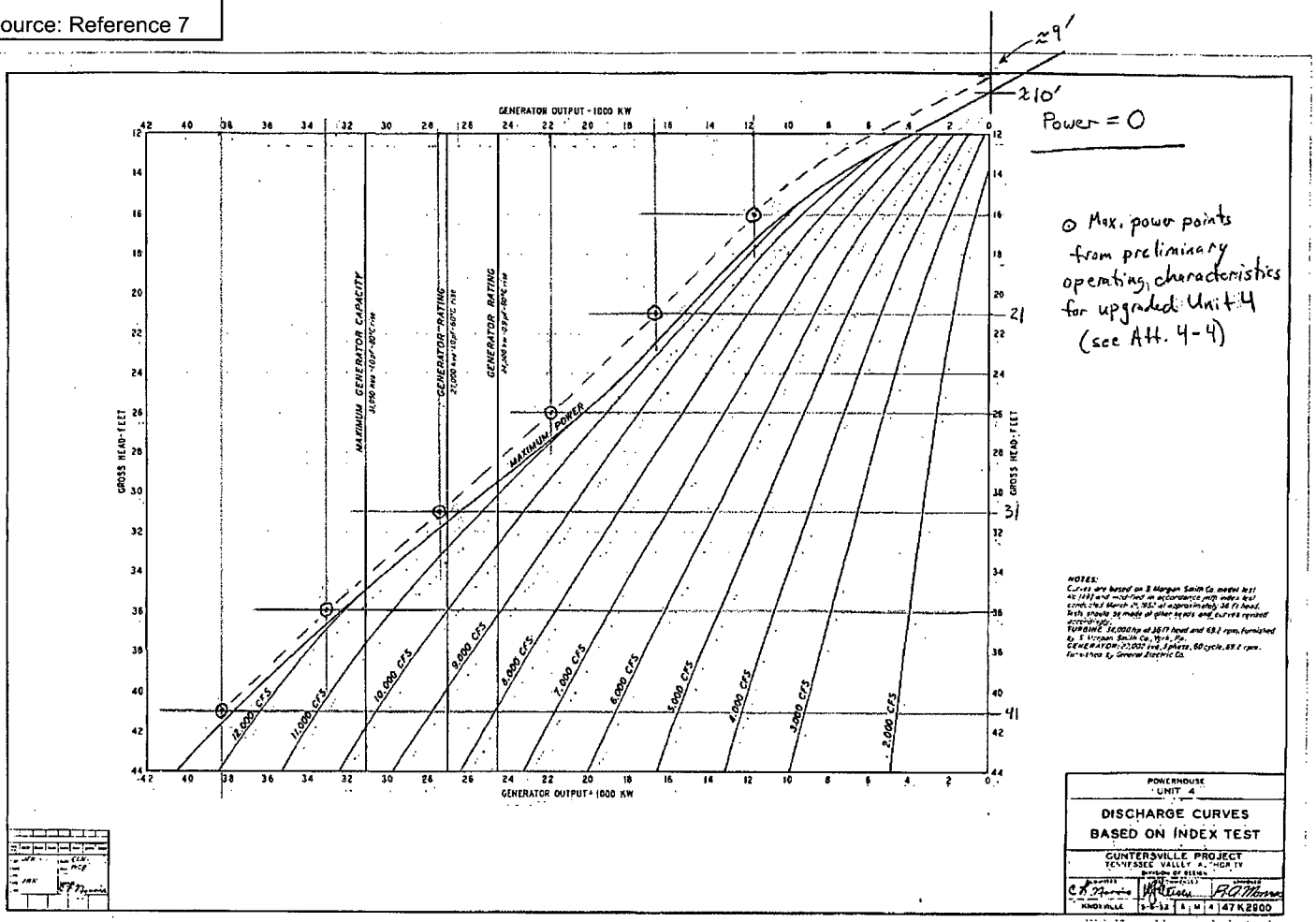
11" by scaling



Attachment 4-1

Source: Reference 7

Calculation No: CDQ000020080011



POWER FACILITIES (CONT.)

HYDRAULIC TURBINES

Number 4
Manufacturer ..... S. Morgan Smith Co. (now Allis-Chalmers Manufacturing Co.)
Type ..... Kaplan adjustable-blade propeller
Rated capacity (each) ..... 34,000 hp at 36-ft net head
Rated speed ..... 69.2 r/min
Maximum runaway speed ..... 189 r/min
Specific speed at rating 145
Value of sigma at rating 1.05
Diameter of runner ..... 265 in.
Diameter of guide vane circle ..... 318.375 in.
Diameter of lower pit ..... 30.0 ft
Spacing of turbines, center to center of units ..... 78 ft
Draft tubes (see Powerhouse) ..... Elbow type
Governors ..... Woodward, cabinet actuator type
Heaviest assembly to be lifted by crane ..... 446,000 lb

GENERATORS

Number 4
Manufacturer ..... Generator Electric Co.
Type ..... Enclosed , water-cooled , vertical-shaft
Rating: Units 1, 2, 3, 4; original rating ..... 27,000 kVA, 24,300 kW, 1129 A, 60 degrees C rise, 0.9 pf, 13.8 kV, 3 phase, 60 Hz
Capacity: Units 1, 2, 3, 4; original capacity ..... 31,050 kVA, 27,945 kW, 1298 A, 80 degrees C rise
Units 1-4 rewound and rerated:
Rating units 1-4:
Unit 1 - Jan 1979 ..... 32,000 Kva , 28,800 kW
Unit 2 - July 1979 1339 A,60 degrees C
Unit 3 - Dec 1974 rise, 0.9 pf, 13.8 kV
Unit 4 - 1978 3 phase, 60 Hz
Efficiency (original values):
Unit 1 (tested):
At rated kVA, 1.0 pf ..... 96.50 percent
At 75% kVA, 0.9 pf ..... 97.05 percent
Units 2-4 (guaranteed):
At rated kVA, 1.0 pf ..... 96.50 percent
At 75% kVA, 0.9 pf ..... 97.05 percent

POWER FACILITIES (CONT.)

GENERATORS (CONT.)

Flywheel effect (tested):
- Units 1-3 ..... 85,920,000 lb-ft^2
- Unit 4 ..... 92,770,000 lb-ft^2

Thrust bearing:
- Units 1-3 ..... Kingsbury, dia. 87 in., max. load 1000 tons
- Unit 4 ..... GE, dia. 100 in., max. load 1000 tons

Neutral reactor ..... 1.0 ohm, 6000 A, 1 min

Exciters:
- Main ..... 250 kW, 250 V
- Pilot ..... 15 kW, 250 V

Weight of heaviest crane lift, rotor:
- Units 1-3 ..... 230 tons
- Unit 4 ..... 232.5 tons

Diameter over air housing, less trim ..... 556 in.

Diameter of stator bore ..... 396 in.

Top of pilot exciter:
- Above stator soleplates ..... 146.75 in.
- Above generator floor ..... 104 in.

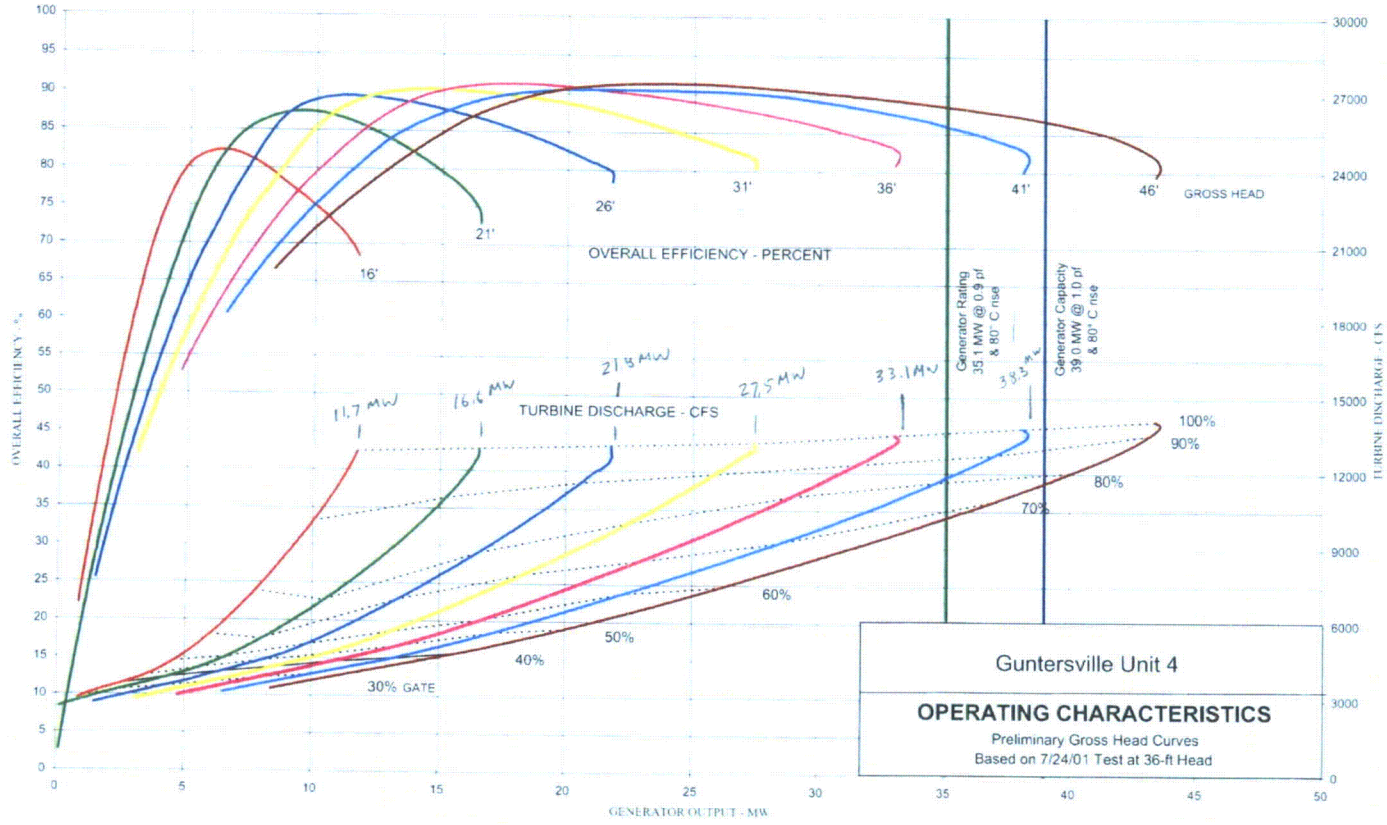
GENERATOR AND TURBINE MODERNIZATION

Guntersville Units 1 through 4 will be rehabilitated and upgraded. Work on Unit 4 was started in March 2000 and is expected to be completed in late summer 2000. Work on Units 1, 2, and 3 is scheduled to start in March and complete in July of 2001, 2002 and 2003 respectively. Major items include installation of new stainless steel runners; new main and pilot exciters; new transformers on 3 of 4 banks; new stainless steel throat ring; rewedged stators; reinsulated rotor poles; new turbine guide bearings; rehabilitated wicket gates with new greaseless bushings throughout; rehabilitated shift ring; new or rehabilitated cooling water piping, valves, and strainers; rehabilitated generator brake system; and upgrade or rehabilitation of various other unit components.

Attachment 4-4

Source: TVA River Operations

Calculation No: CDQ000020080011



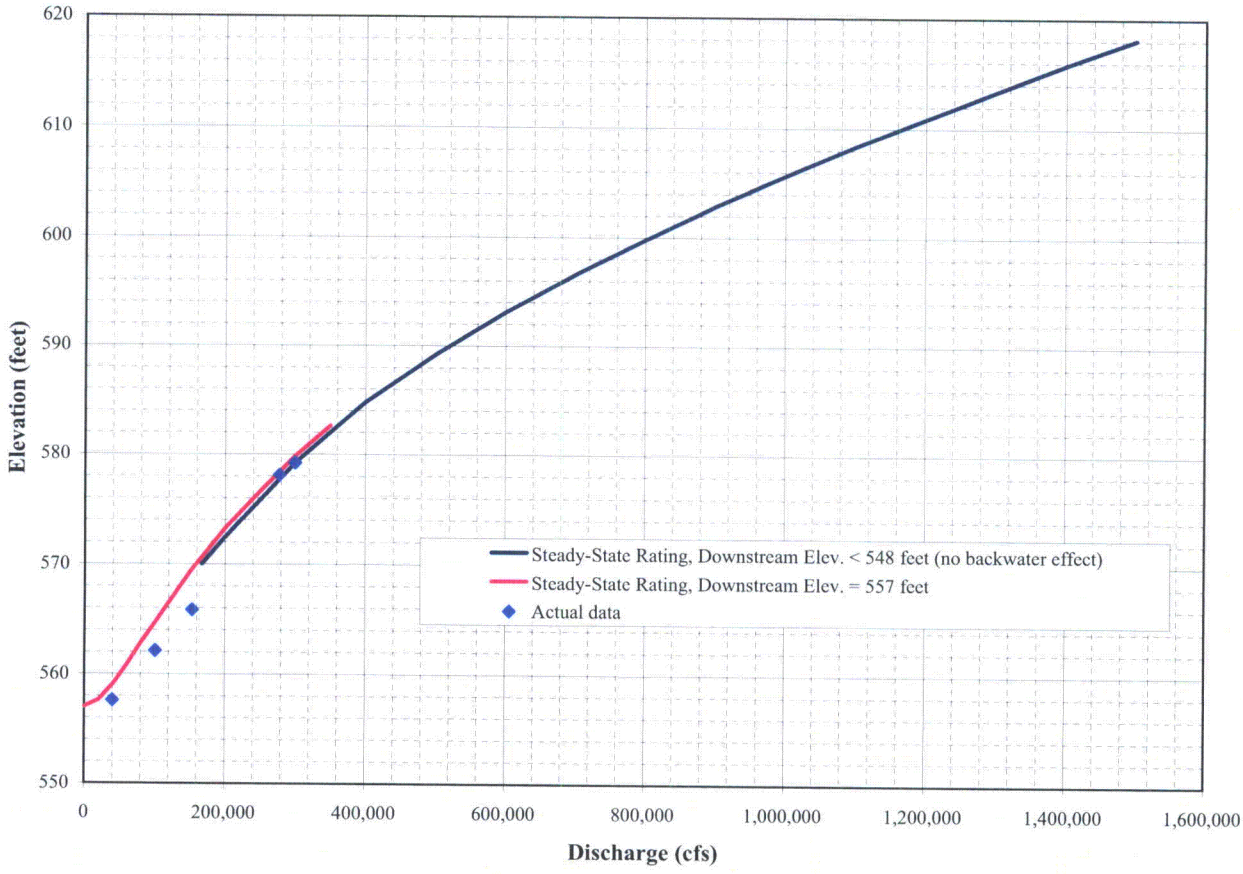
Issued

HYPAS_GUH_4_Prelim_072401.xls

Attachment 5-1

Calculation No: CDQ000020080011

Guntersville Steady-State Tailwater Rating



Source: TVA River Operations
Flood Risk Section

Guntersville TW Rating.xls

Book # 106-96.01

Attachment 5-2

Calculation No: CDQ000020080011

Guntersville Steady-State Tailwater Rating
(no downstream elevation effects)

Elevation	Discharge	
570.0	167,000	
572.4	200,000	
579.2	300,000	
584.8	400,000	
589.2	500,000	
593.1	600,000	
596.6	700,000	
599.8	800,000	
602.9	900,000	
605.7	1,000,000	PMF
608.4	1,100,000	
610.9	1,200,000	
615.8	1,400,000	
618.1	1,500,000	

Based on 1978 plot Book # 106-96.01

Elevation	Discharge
557	0
557.6	20000
559	40000
560.8	60000
562.8	80000
564.6	100000
569.3	150000
573.2	200000
576.6	250000
579.8	300000
582.6	350000

TW at Max. Q During Floods

Elevation	Discharge	Frequency
577.9	260,000	10
580.0	287,000	50
581.1	305,000	100
583.9	362,000	500
587.0	595,400	MPF
610.9	1,000,000	PMF

Headwater Elev. 556
Flood Control Section 1951

Discharge	Elevation
0	556.0
50,000	559.5
100,000	564.9
200,000	573.9
300,000	580.7
400,000	586.8
500,000	592.1
600,000	597.1

Actual data

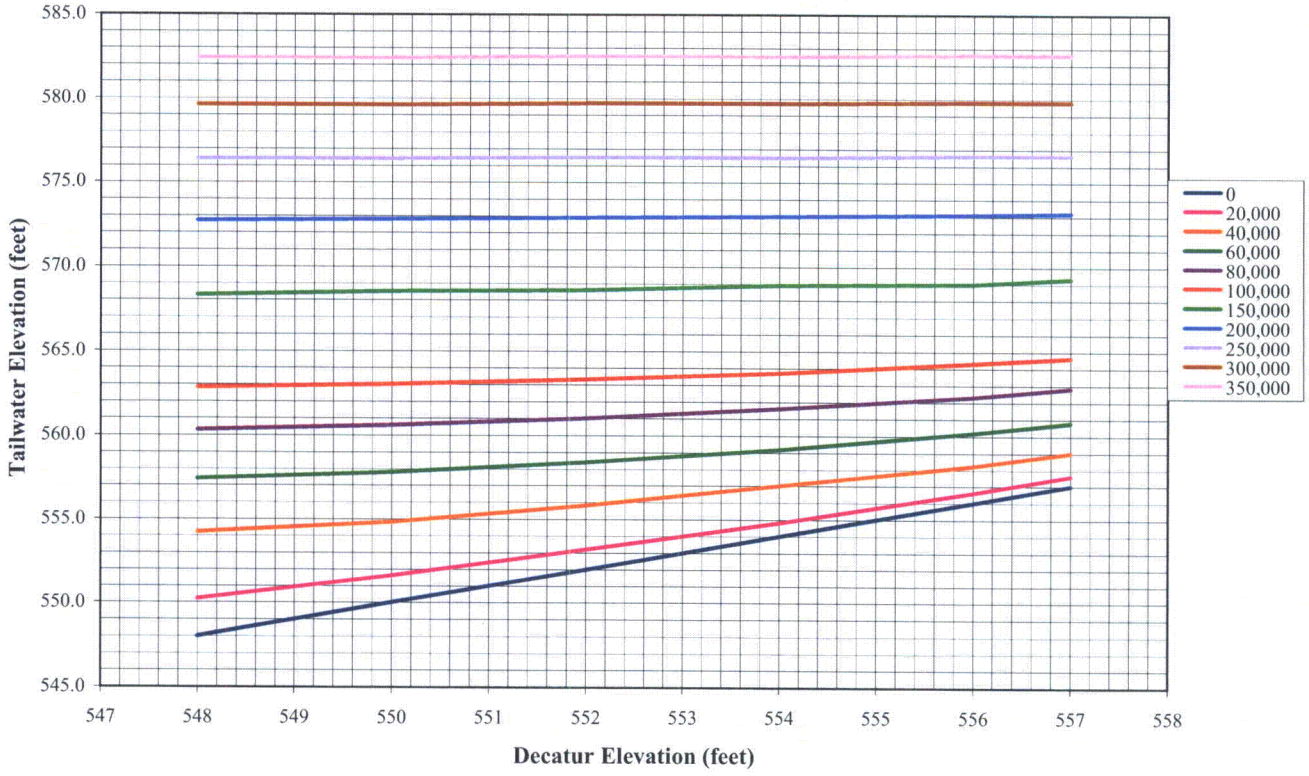
Elevation	Discharge
557.6	39900
562.1	101000
565.8	153400
578.1	278000
579.2	300000

Source: TVA River Operations
Flood Risk Section

Attachment 5-3

Calculation No: CDQ000020080011

Guntersville Tailwater Rating



Source: TVA River Operations
Flood Risk Section

Guntersville TW Rating.xls

11/21/2008

Attachment 5-4

Calculation No: CDQ000020080011

Guntersville Tailwater Rating -- Effects of Reservoir Elevation Downstream (at Decatur, AL)

Q*1000	Q	Decatur Elev.	TW	Q*1000	Q	Decatur Elev.	TW	Q*1000	Q	Decatur Elev.	TW
0	0	548	548.0	80	80,000	548	560.3	250	250,000	548	576.4
0	0	550	550.0	80	80,000	550	560.6	250	250,000	550	576.4
0	0	552	552.0	80	80,000	552	561.0	250	250,000	552	576.5
0	0	554	554.0	80	80,000	554	561.6	250	250,000	554	576.5
0	0	556	556.0	80	80,000	556	562.3	250	250,000	556	576.6
0	0	557	557.0	80	80,000	557	562.8	250	250,000	557	576.6
20	20,000	548	550.2	100	100,000	548	562.8	300	300,000	548	579.6
20	20,000	550	551.6	100	100,000	550	563.0	300	300,000	550	579.6
20	20,000	552	553.2	100	100,000	552	563.3	300	300,000	552	579.7
20	20,000	554	554.8	100	100,000	554	563.7	300	300,000	554	579.7
20	20,000	556	556.6	100	100,000	556	564.3	300	300,000	556	579.8
20	20,000	557	557.6	100	100,000	557	564.6	300	300,000	557	579.8
40	40,000	548	554.2	150	150,000	548	568.3	350	350,000	548	582.4
40	40,000	550	554.8	150	150,000	550	568.5	350	350,000	550	582.4
40	40,000	552	555.8	150	150,000	552	568.6	350	350,000	552	582.5
40	40,000	554	557.0	150	150,000	554	568.9	350	350,000	554	582.5
40	40,000	556	558.2	150	150,000	556	569.0	350	350,000	556	582.6
40	40,000	557	559.0	150	150,000	557	569.3	350	350,000	557	582.6
60	60,000	548	557.4	200	200,000	548	572.7				
60	60,000	550	557.8	200	200,000	550	572.8				
60	60,000	552	558.4	200	200,000	552	572.9				
60	60,000	554	559.2	200	200,000	554	573.0				
60	60,000	556	560.2	200	200,000	556	573.1				
60	60,000	557	560.8	200	200,000	557	573.2				

Source: TVA River Operations
Flood Risk Section

Attachment 6

Source: Reference 4

Calculation No: CDQ000020080011

GUNTERSVILLE DAM

SPILLWAY GATE ARRANGEMENTS

Arrangement Number	Gate Number																	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
61	5	5	9	9	9	U	U	9	U	U	9	9	9	9	9	9	-	-
62	5	5	9	9	9	U	U	9	U	U	9	U	9	9	9	9	-	-
63	5	5	9	9	9	U	U	9	U	U	9	U	U	9	9	9	-	-
64	5	5	9	9	9	U	U	9	U	U	9	U	U	9	U	9	-	-
65	5	5	9	9	9	U	U	9	U	U	9	U	U	9	U	U	-	-
66	5	5	9	9	9	U	U	9	U	U	9	U	U	9	U	U	5	-
67	5	5	9	9	9	U	U	9	U	U	9	U	U	9	U	U	9	-
68	5	5	9	9	9	U	U	9	U	U	9	U	U	U	U	U	9	-
69	5	5	9	9	9	U	U	9	U	U	U	U	U	U	U	U	9	-
70	5	5	9	9	9	U	U	U	U	U	U	U	U	U	U	U	9	-
71	5	5	9	9	U	U	U	U	U	U	U	U	U	U	U	U	9	-
72	5	5	U	9	U	U	U	U	U	U	U	U	U	U	U	U	9	-
73	5	U	U	9	U	U	U	U	U	U	U	U	U	U	U	U	9	-
74	U	U	U	9	U	U	U	U	U	U	U	U	U	U	U	U	9	-
75	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	9	-
76	U	U	U	U	-	U	U	-	U	U	U	L	U	U	U	U	9	-
77	U	U	U	U	-	U	U	9	U	U	U	L	U	U	U	U	9	-
78	U	U	U	U	-	U	U	U	U	U	U	L	U	U	U	U	9	-
79	U	U	U	U	9	U	U	U	U	U	U	L	U	U	U	U	9	-
80	U	U	U	U	U	U	U	U	U	U	U	L	U	U	U	U	9	-
81	U	U	U	U	-	U	U	-	U	L	U	L	U	U	U	U	9	-
82	U	U	U	U	-	U	U	9	U	L	U	L	U	U	U	U	9	-
83	U	U	U	U	-	U	U	U	U	L	U	L	U	U	U	U	9	-
84	U	U	U	U	U	U	U	U	U	L	U	L	U	U	U	U	9	-
85	U	U	-	U	U	U	U	L	U	L	U	L	U	-	U	U	9	-
86	U	U	-	U	U	U	U	L	U	L	U	L	U	U	U	U	9	-
87	U	U	U	U	U	U	U	L	U	L	U	L	U	U	U	U	9	-
88	U	U	U	-	U	L	L	L	U	L	U	L	U	-	U	U	9	-
89	U	U	U	-	U	L	U	L	U	L	U	L	U	U	U	U	9	-
90	U	U	U	U	U	L	U	L	U	L	U	L	U	U	U	U	9	-

Arrangement Number	Gate Number																	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
91	U	U	U	L	U	L	U	L	U	L	U	L	U	-	U	-	9	-
92	U	U	U	L	U	L	U	L	U	L	U	L	U	-	U	U	9	-
93	U	U	U	L	U	L	U	L	U	L	U	L	U	U	U	U	9	-
94	U	U	U	L	U	L	U	L	U	L	L	L	U	-	U	-	9	-
95	U	U	U	L	U	L	U	L	U	L	L	L	U	-	U	U	9	-
96	U	U	U	L	U	L	U	L	U	L	L	L	U	U	U	U	9	-
97	U	U	U	L	L	L	U	L	U	L	L	L	U	-	U	-	9	-
98	U	U	U	L	L	L	U	L	U	L	L	L	U	-	U	U	9	-
99	U	U	U	L	L	L	U	L	U	L	L	L	U	U	-	U	9	-
100	U	U	U	L	L	L	U	L	L	L	L	L	U	-	U	-	9	-
101	U	U	U	L	L	L	U	L	L	L	L	L	U	-	U	U	9	-
102	U	U	U	L	L	L	U	L	L	L	L	L	U	U	U	U	9	-
103	U	U	U	L	L	L	L	L	L	L	L	L	U	-	U	-	9	-
104	U	U	U	L	L	L	L	L	L	L	L	L	U	-	U	U	9	-
105	U	U	U	L	L	L	L	L	L	L	L	L	U	U	U	U	9	-
106	U	U	U	L	L	L	L	L	L	L	L	L	U	-	-	U	-	-
107	U	U	U	L	L	L	L	L	L	L	L	L	U	U	U	U	-	-
108	U	U	U	L	L	L	L	L	L	L	L	L	L	L	U	-	-	-
109	U	U	U	L	L	L	L	L	L	L	L	L	L	U	U	U	-	-
110	U	U	U	L	L	L	L	L	L	L	L	L	L	L	L	U	-	-
111	U	U	U	L	L	L	L	L	L	L	L	L	L	L	L	U	U	-
112	U	U	U	L	L	L	L	L	L	L	L	L	L	L	L	L	-	-
113	U	U	U	L	L	L	L	L	L	L	L	L	L	L	L	L	U	U
114	-	U	L	L	L	L	L	L	L	L	L	L	L	L	L	L	U	U
115	U	U	L	L	L	L	L	L	L	L	L	L	L	L	L	L	U	U
116	-	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	U	U
117	U	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	U
118	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	U
119	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	U
120	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L

GATE OPENING LEGEND

Gate openings are shown in the vertical columns under each Gate Number as follows:

1 - Upper leaf open 1 foot

3 - Upper leaf open 3 feet

5 - Upper leaf open 5 feet

9 - Upper leaf open 9 feet

U - Upper leaf out

L - Lower leaf out

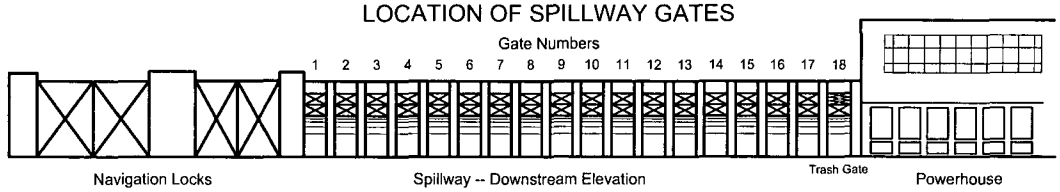
Attachment 7

Source: Reference 3

Calculation No: CDQ000020080011

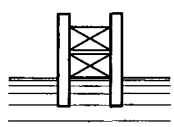
GUNTERSVILLE DAM

LOCATION OF SPILLWAY GATES

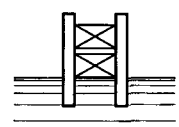


KEY TO GATE ARRANGEMENT TABLES

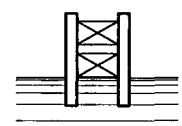
Symbols Refer To Gate Openings As Used In The Gate Arrangement Tables, Pages 5 and 6



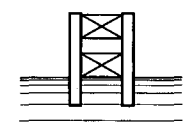
1
Upper Leaf Open One Foot



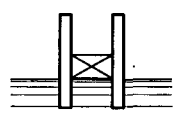
3
Upper Leaf Open Three Feet



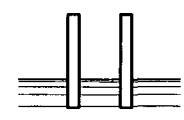
5
Upper Leaf Open Five Feet



9
Upper Leaf Open Nine Feet



U
Upper Leaf Removed



L
Both Leaves Removed

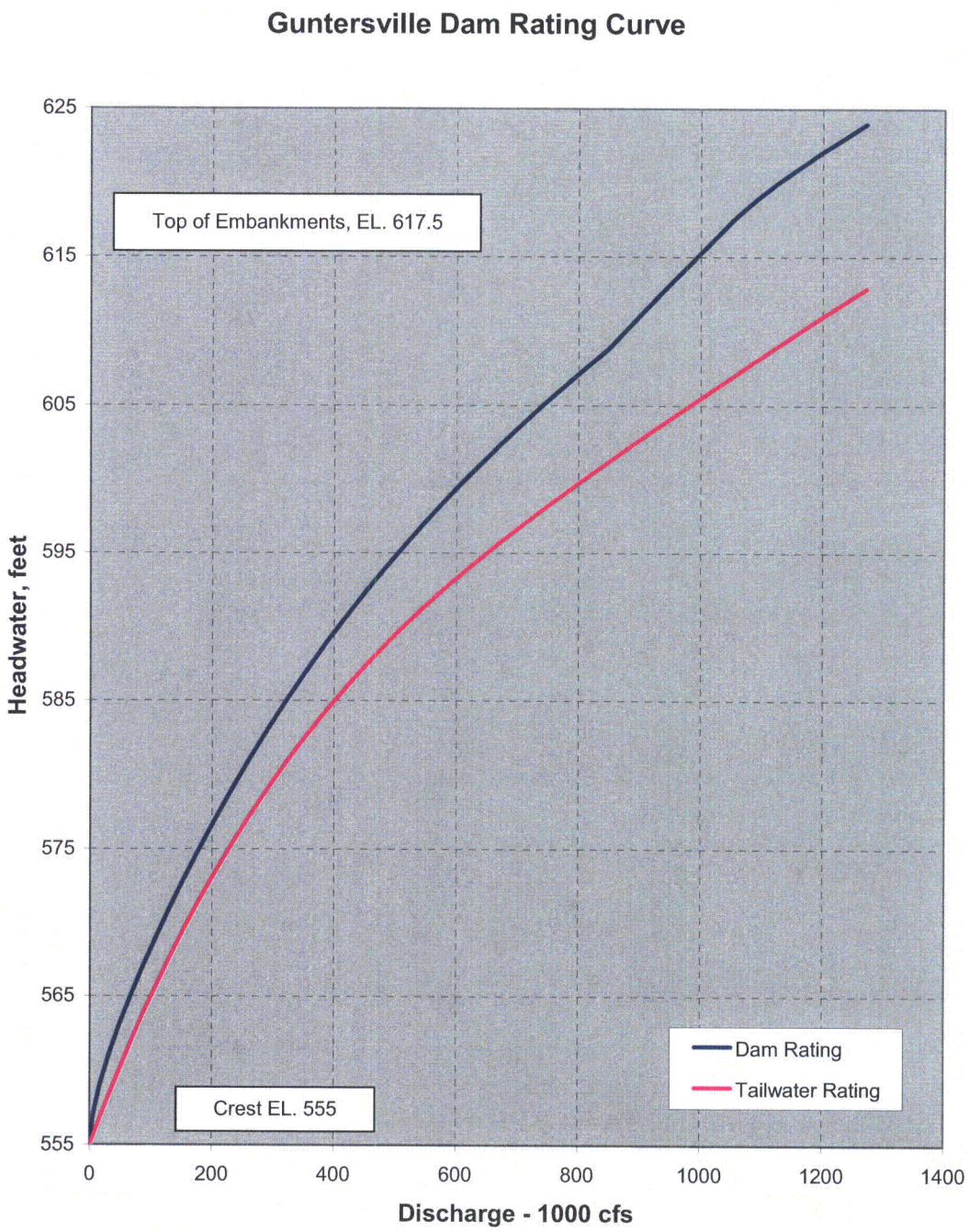
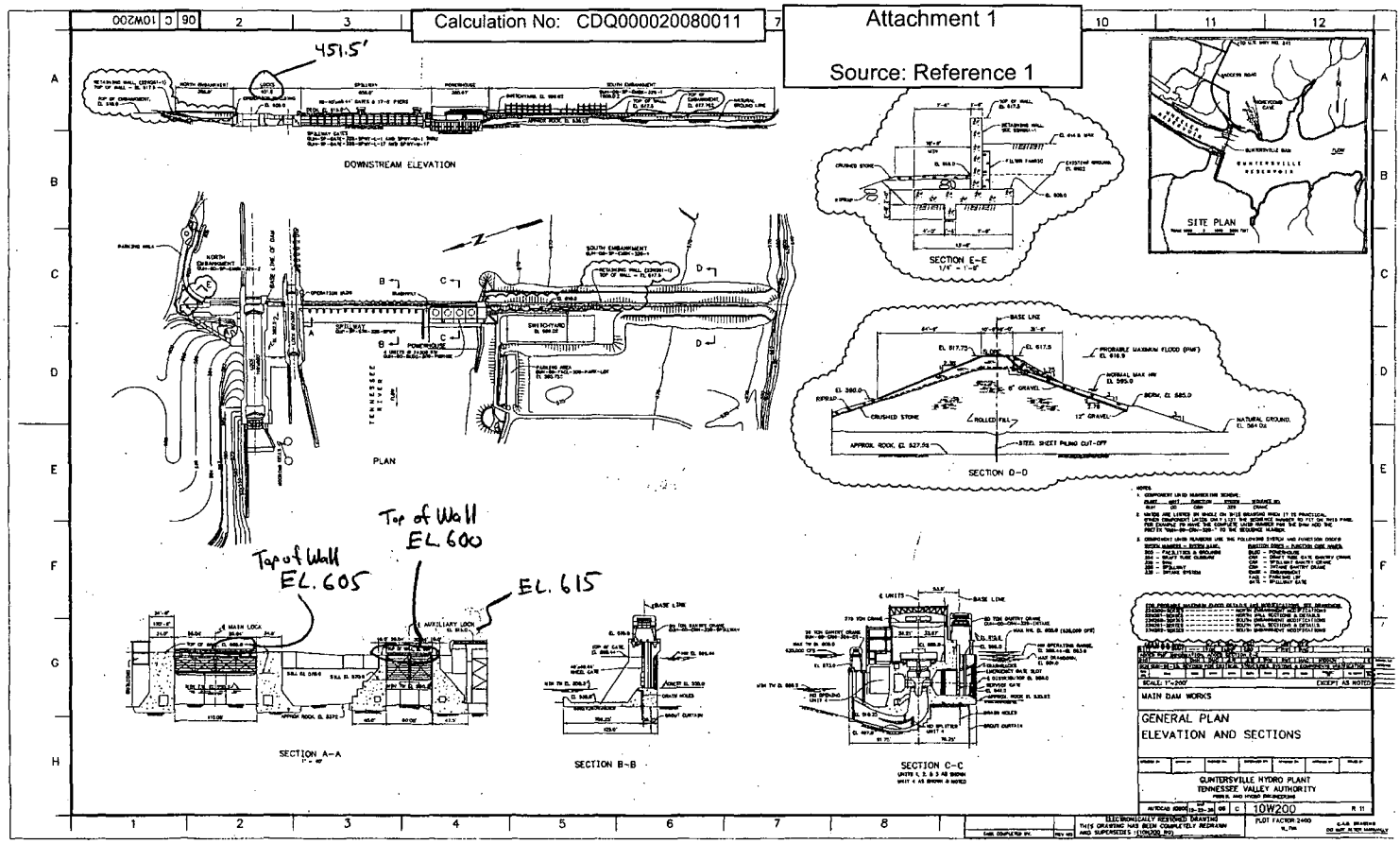


Figure 4 – Dam Rating Curve

Calculation No: CDQ000020080011

Attachment 1

Source: Reference 1



1

1

GUNTERSVILLE DAM

September 1999

Guntersville WCP Manual
Attachment 22

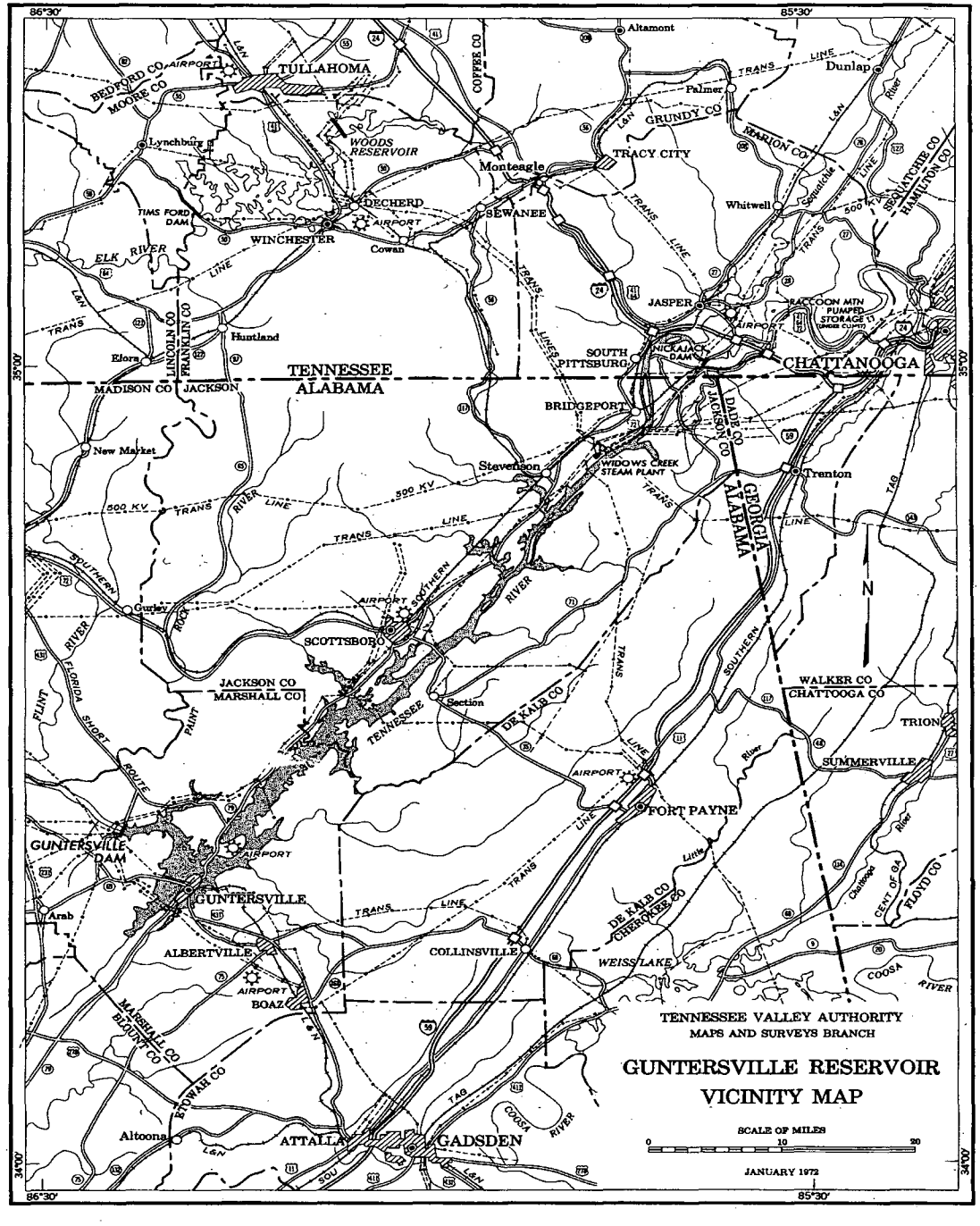
RESERVOIR OPERATION OVERVIEW

Guntersville is a multipurpose main river project, one of 9 such projects located on the Tennessee River which provides a navigable waterway from the mouth of the river at Paducah, Kentucky, to the source of the river at Knoxville, Tennessee, some 652 river miles apart. Construction started in 1935, the dam was closed in 1939, the original lock went into operations at that time, and three hydroelectric units went into production later that year. A fourth hydroelectric unit was later authorized and went into production in 1952. A larger, modern lock was completed in 1965.

In addition to serving as a vital navigation link on the Tennessee River, Guntersville provides limited flood reduction benefits for downstream locations, and also contributes hydroelectric generation. Under normal conditions, the annual pool elevation only varies by about 2 feet at Guntersville, due to original design considerations. Guntersville Reservoir is fed by releases from TVA's Nickajack Dam in addition to unregulated inflows from the 2,580 square mile local drainage area.

Table of Contents

Table of Contents (Cont.)


86°30'
85°30'
35°00'
34°00'
TULLAHOMA
AIRPORT
BEDFORD CO
MOORE CO
COFFEE CO
Altamont
Dunlap
Palmer
GRUNDY CO
MARION CO
Lynchburg
WOODS RESERVOIR
TRACY CITY
Monteagle
SEWANEE
DECHERD
AIRPORT
TIMS FORD DAM
WINCHESTER
Cowan
Whitwell
SEQUATCHIE CO
HAMILTON CO
ELK RIVER
Huntland
Elora
LINCOLN CO
FRANKLIN CO
JASPER
RACCOON MTN PUMPED STORAGE
SOUTH PITTSBURG
NICKAJACK DAM
CHATTANOOGA
TENNESSEE
ALABAMA
MADISON CO
JACKSON
BRIDGEPORT
DADE CO
JACKSON CO
New Market
Stevenson
WIDOWS CREEK STEAM PLANT
Trenton
GEORGIA
ALABAMA
500 KV TRANS LINE
SOUTHERN RAILWAY
Gurley
SCOTTSBORO
TENNESSEE RIVER
FLINT RIVER
FLORIDA SHORT ROUTE
PAINT ROCK
JACKSON CO
MARSHALL CO
Section
DE KALB CO
WALKER CO
CHATTOOGA CO
TRION
SUMMERVILLE
FORT PAYNE
GUNTERSVILLE DAM
GUNTERSVILLE
Arab
ALBERTVILLE
COLLINSVILLE
WEISS LAKE
CHEROKEE CO
CENT OF GA
FLOYD CO
COOSA RIVER
BOAZ
MARSHALL CO
BLOUNT CO
WALKER CO
Altoona
ATTALLA
GADSDEN
TAG
L&N
SOU
TENNESSEE VALLEY AUTHORITY
MAPS AND SURVEYS BRANCH
GUNTERSVILLE RESERVOIR
VICINITY MAP
SCALE OF MILES
0 10 20
JANUARY 1972
N

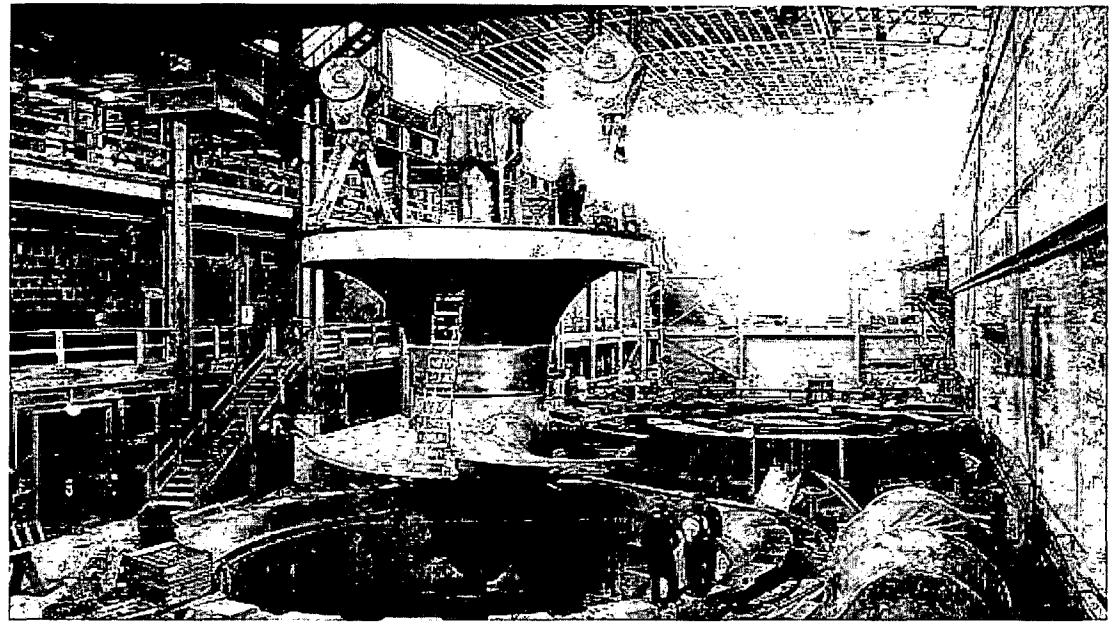


FIGURE 1 - Installation of Kaplan turbine, 1938

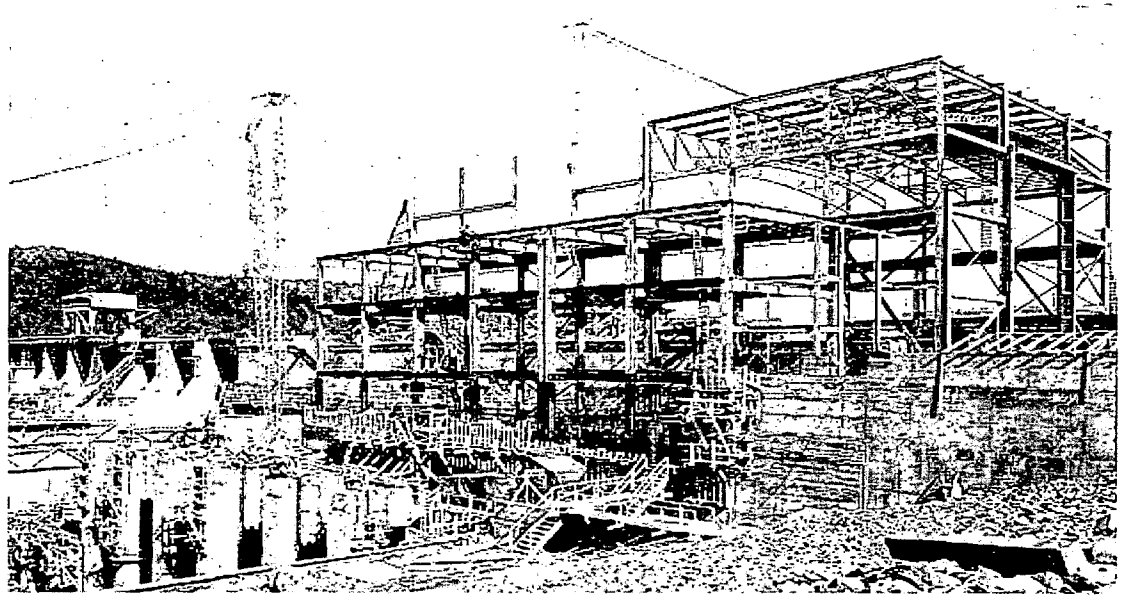


FIGURE 2 - Dam and Powerhouse Construction, 1938

FIGURE 3 - General plan and downstream elevation

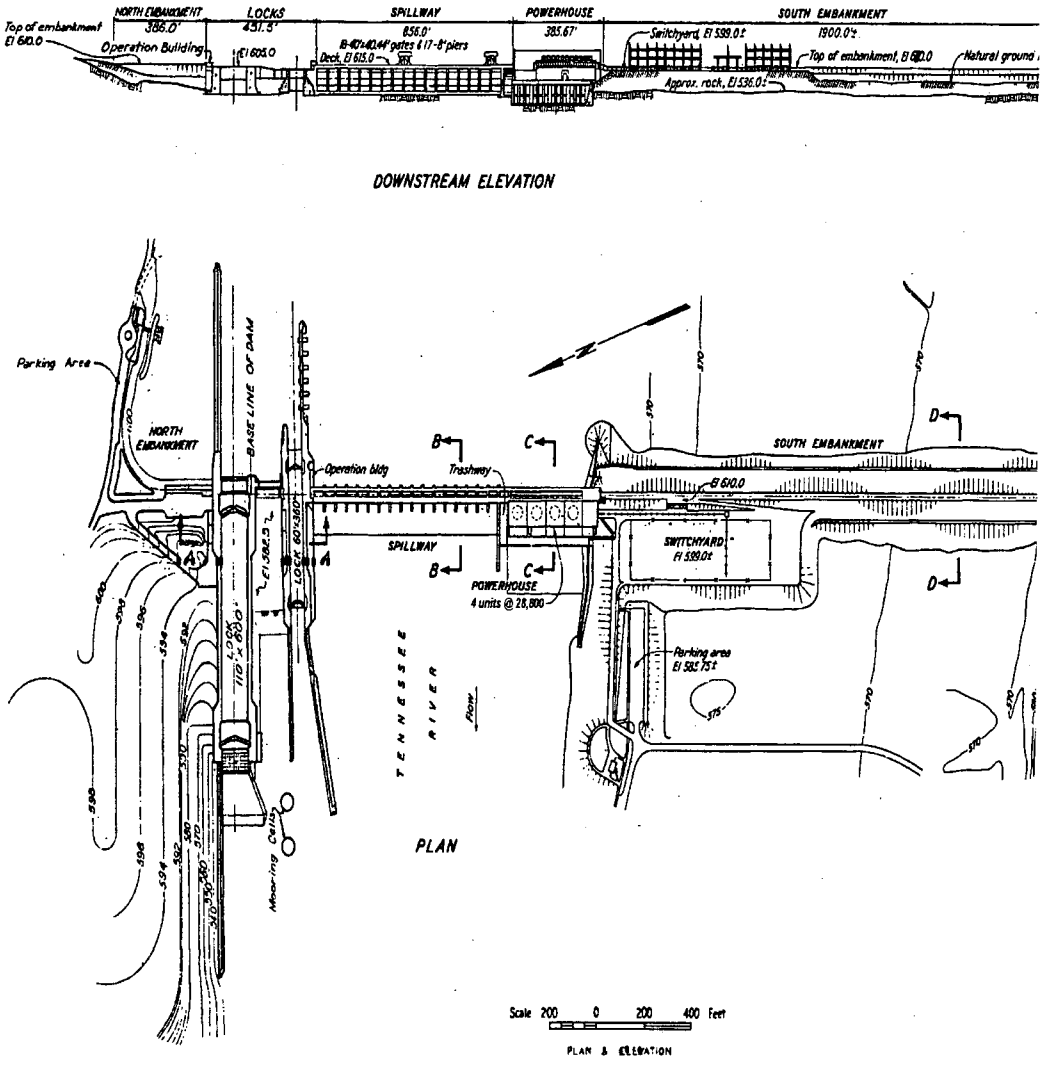
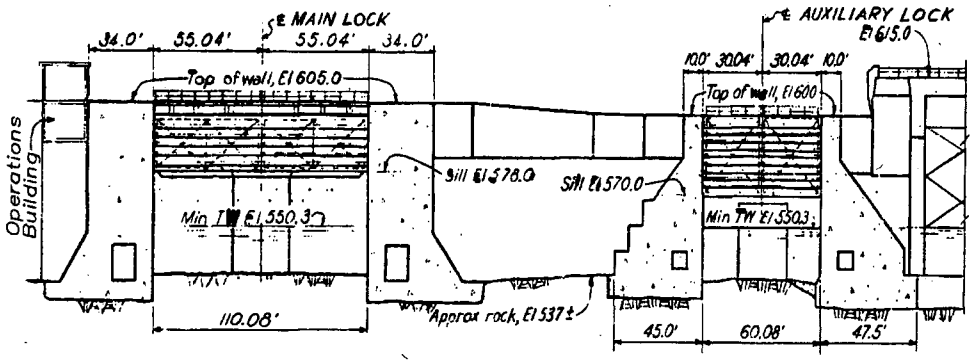
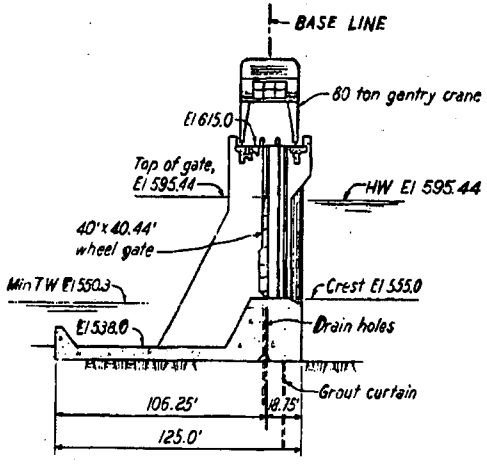


FIGURE 4 - Sections A-A and B-B



SECTION A-A

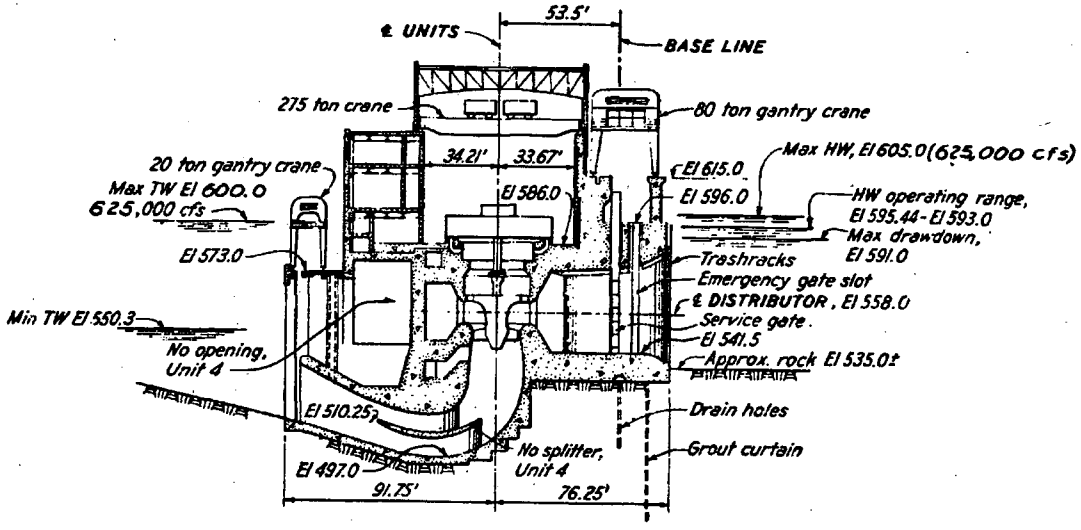


SECTION B-B

Scale 40 0 40 80 Feet

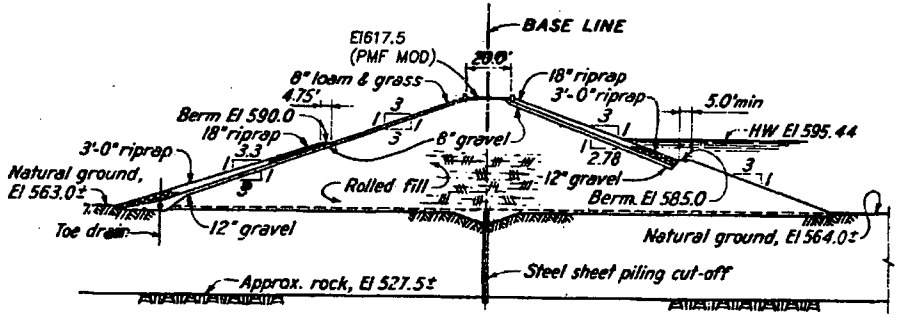
SECTIONS

FIGURE 5 - Sections C-C and D-D



SECTION C-C

UNITS 1, 2, & 3 AS SHOWN
UNIT 4 AS SHOWN & NOTED



SECTION D-D

Scale 40 0 40 80 Feet

SECTIONS

FIGURE 6 - Main Lock General Plan

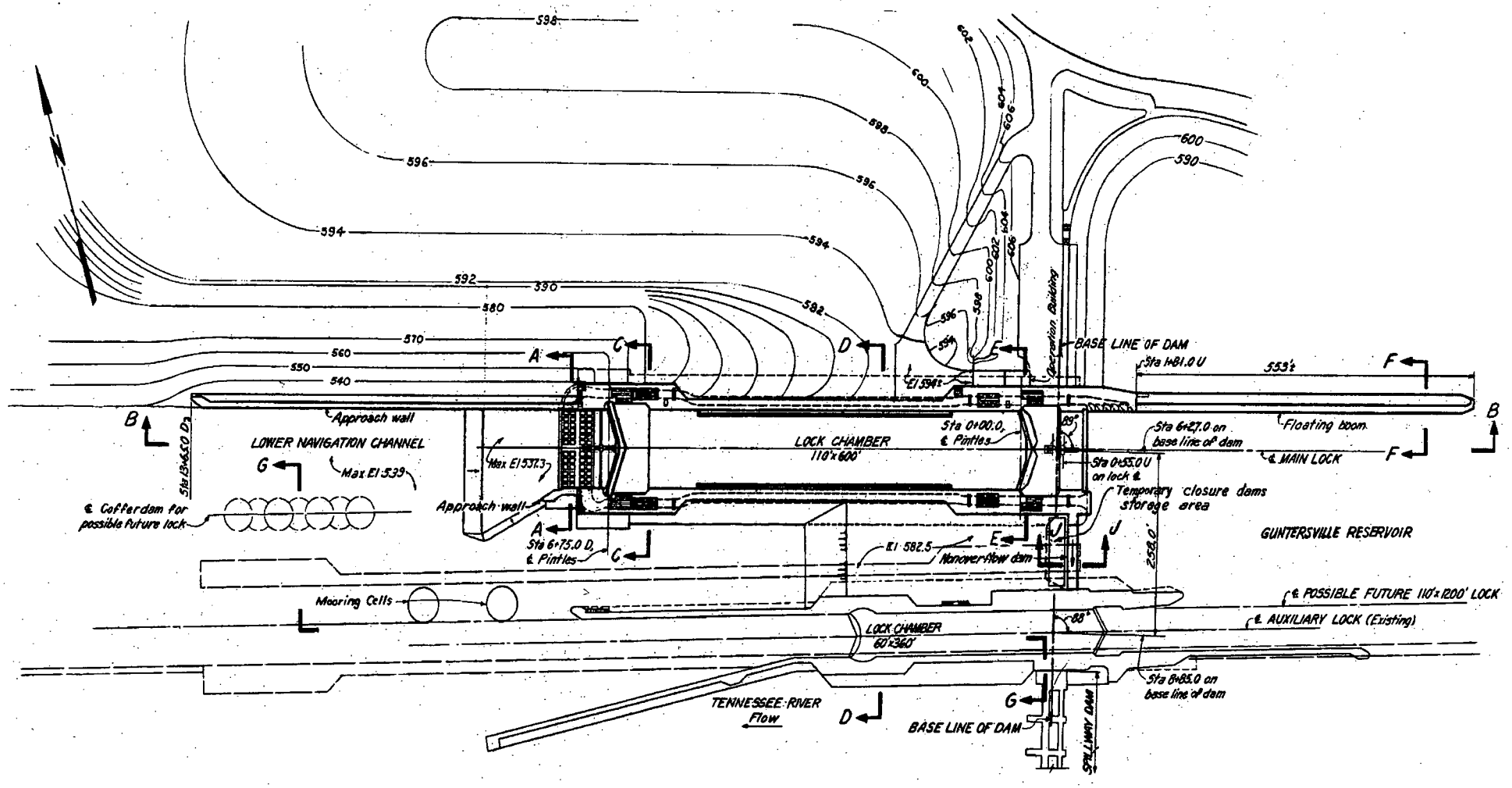
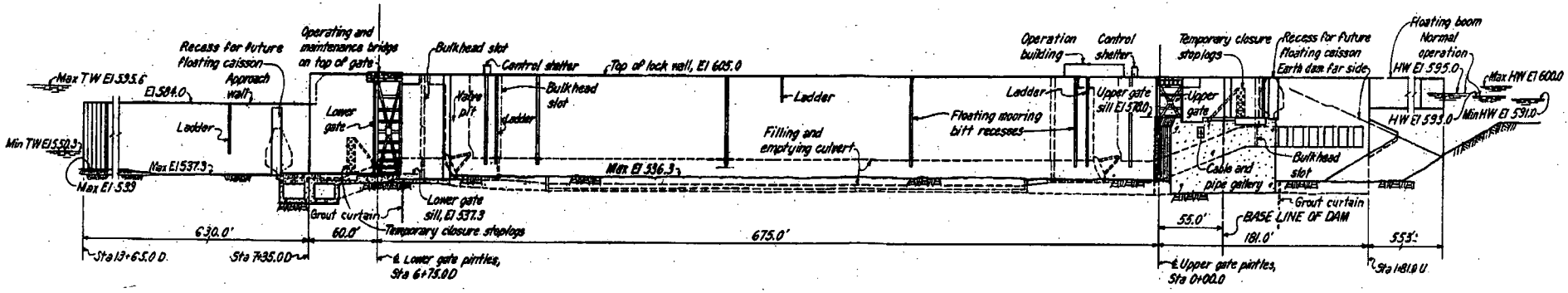
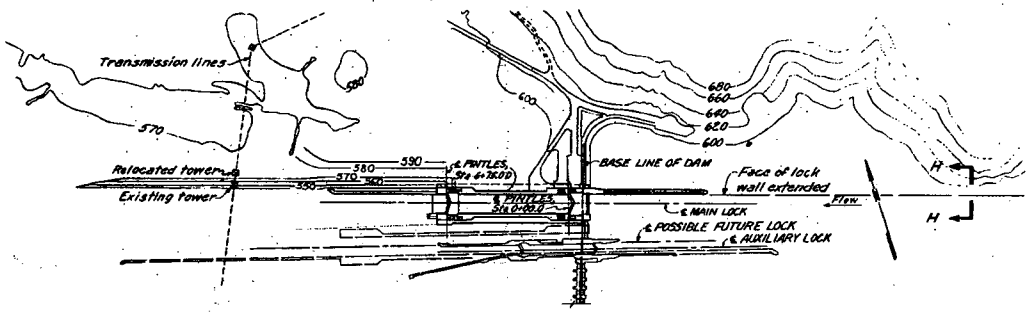


FIGURE 7 - Main Lock Elevation B-B

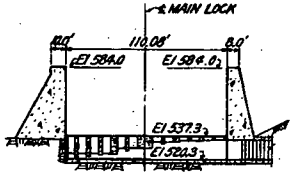


ELEVATION B-B

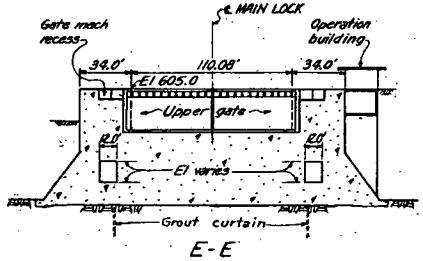
FIGURE 8 - Main Lock Key Plan and Sections A-A, E-E, H-H, J-J, and F-F



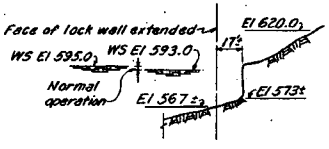
KEY PLAN



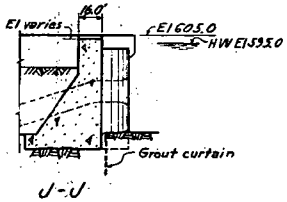
SECTION A-A



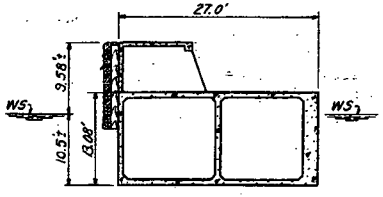
E-E



H-H

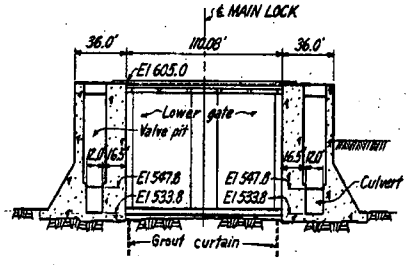


J-J

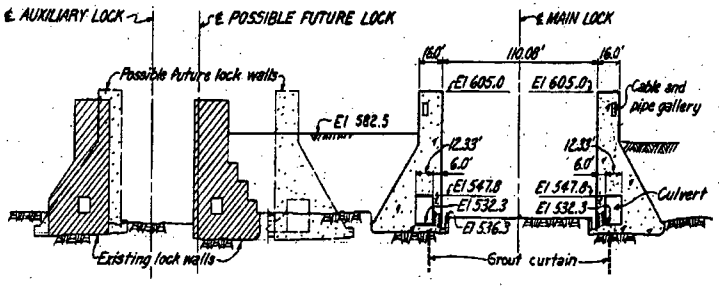


F-F

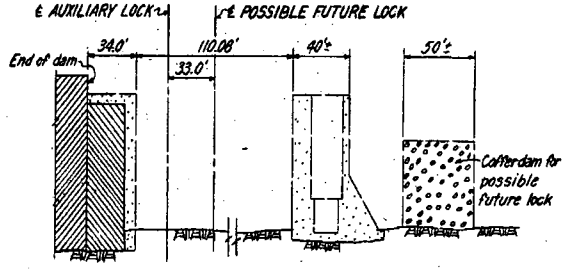
FIGURE 9 - Main Lock Sections C-C, D-D, and G-G



C-C



D-D



G-G

GUNTERSVILLE PROJECT

SUMMARY OF PRINCIPAL FEATURES

NOTE:
Elevations are based on the U.S.C. & G.S. 1929 General Adjustment.

LOCATION

On Tennessee River at river mile 349.0; in Marshall County, Alabama; 75.7 miles downstream from Nickajack Dam; 74.1 miles upstream from Wheeler Dam; 11 miles northwest of Guntersville, Alabama; 65 air miles north of Birmingham, Alabama; 75 air miles southwest of Chattanooga, Tennessee; 10.5 miles from railroad siding at Guntersville on Louisville & Nashville Railroad.

CHRONOLOGY

Exploration of site started	July 1935
Initial appropriation by Congress	August 12, 1935
Authorized by TVA Board of Directors	November 27, 1935
Construction started	December 4, 1935
First excavation	March 26, 1936
Started driving cofferdam No. 1	April 23, 1936
Cofferdam No. 1 unwatered	July 14, 1936
First concrete(in lock)	September 21,1936
Cofferdam No. 2 construction started	March 20, 1937
Lock placed in temporary operation	May 24, 1937
Cofferdam No. 2 unwatered	July 16,1937
Cofferdam No. 3 unwatered	February 2, 1938
Dam closure	January 16,1939
Lock placed in permanent operation.	January 24,1939
Reservoir filled to el. 593.75 and discharge of normal flow began	January 27,1939
Unit 1 in commercial operation	August 1,1939
Unit 2 in commercial operation	October 13,1939
Unit 3 in commercial operation	December 26,1939
Unit 4 authorized by TVA Board of Directors	June 28,1949
Unit 4 in commercial operation	March 24,1952
Main lock:	
Authorized by TVA Board of Directors	January 12, 1961
Initial appropriation by Congress	October 24, 1962
Construction started	March 4,1963
First concrete placed	October 31,1963
Initial public lock passage	June 30,1965
Safety Modifications for Probable Maximum Flood construction completed	June 30, 1995

PROJECT COST

Initial project, including lock and 3 units	$ 33,188,040
Addition of unit 4	4,678,704
Addition of main lock	16,415,876
Safety Modification for Probable Maximum Flood	37,329,070
Total, including switchyard	$ 91,611,690

STREAMFLOW

Drainage area at dam:	24,450 sq. miles
Uncontrolled (below Nickajack Dam)	2,580 sq. miles
Maximum known flood at dam site:	
Natural (1867)	419,000 cfs
Regulated (March 1973)	314,200 cfs
Average unregulated flow at dam site, (1903-1999)	41,100 cfs
Minimum daily natural flow at dam site (1925), approx	3,600 cfs

RESERVOIR

Counties affected: State of Alabama	Marshall
State of Tennessee	Marion
Reservoir land at May 1996:	
Fee simple	91,070 ac.
Easements	1,068 ac.
Total	92,138 ac.
Transferred	4,329 ac.
Operating levels at dam:	
Probable maximum flood elevation	el. 614.0
500 Year flood elevation	el. 595.9
100 Year flood elevation	el. 595.8
TVA Flood Risk Profile	el. 597.0*
Maximum used for design (625,000 cfs)	el. 605.0
Top of gates (area 70,200 ac.)	el. 595.44
Winter Flood Guide Level	el. 593.0
Summer Flood Level	el. 595.0
Backwater, length to Nickajack Dam	75.7 miles
Shoreline, length at normal maximum pool level:	
Main shore	786 miles
Islands	163 miles
Total	949 miles
Original river area (to Nickajack Dam)	12,065 ac.
Storage (flat pool assumption):	
Total volume:	
At top of gates (el. 595.44)	1,052,000 ac.-ft
At normal maximum pool (el. 595.0)	1,018,000 ac.-ft
At normal minimum pool (el. 593.0)	879,700 ac.-ft
Controlled flood storage, January 1 to April 1 (el. 595.44-593)	172,300 ac.-ft

* TVA Flood Risk Profile Elevation is the elevation of the 500 Year flood that has been adjusted for surcharge at the dam. Surcharge is the ability to raise the water level behind the dam above the top-of-gates elevation (when in the closed position) without causing damage to the project.

TAILWATER

Maximum used for design (625,000 cfs)	el. 600.0
Maximum known flood (1867)	el. 590.1
Full plant operation (4 units)	el. 554.5
One unit operating at best efficiency	el. 551.1
Minimum level	el. 550.3

HEAD (Gross)

Maximum static (el. 595.44-550.3)	45.14 ft
Normal operating range	16 to 43 ft
Average operating	37 ft

RESERVOIR ADJUSTMENTS

(Initial Project)

Clearing (below el. 595)	24,426 ac.
Drainage of isolated pools	229,114 cu.yd
Preparation of sailing line	472 ac.
Highways:	
Access (dam to Alabama. Highway 1, also south access; bituminous surface on crushed stone base)	7.4 miles
State	15.8 miles
County	44.7 miles
Tertiary	20.3 miles
Total	88.2 miles
Railroads	5.7 miles
Bridge adjustments (highway 6,317 ft; railroad 417 ft)	44 bridges
Concrete box culverts	84
Families relocated	1,182
Graves	193 agreements;68 removals
Utilities adjusted or constructed	42.9 miles

NAVIGATION FACILITIES

NAVIGATION CHANNEL

Length of channel for 9-ft navigable depth (to Nickajack Dam)	73.4 sailing miles
Minimum flat pool to maintain 9-ft navigable depth	el. 593.0
Length of dredged navigable channel:	
Below lock	8.0 miles
Upper end of pool	9.0 miles

NAVIGATION FACILITIES (CONT.)

NAVIGATION LOCKS (See Figure 10)

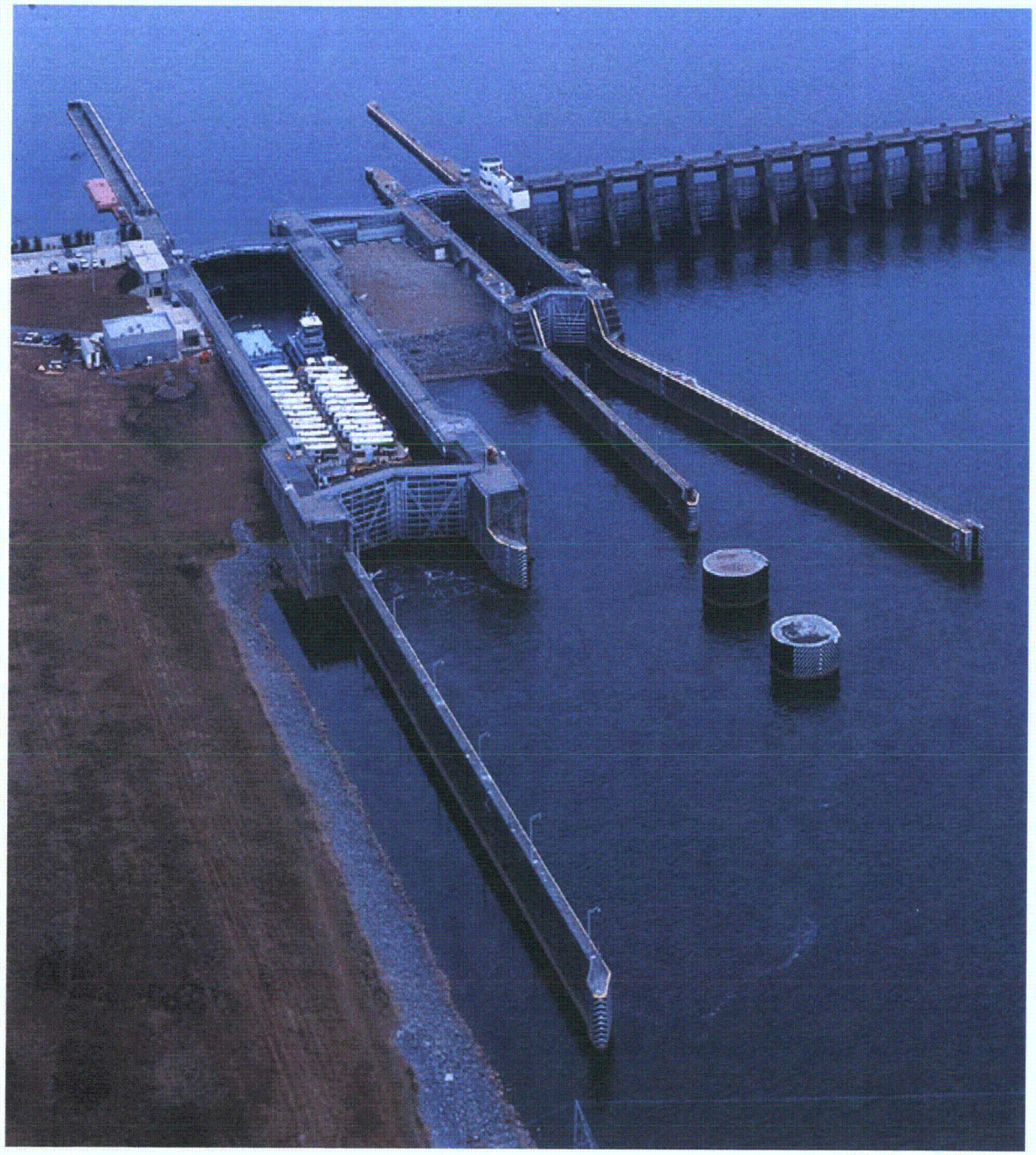
MAIN LOCK

Location	Right (north) bank
Lock chamber, clear	110 by 600 ft
Lift (maximum), el. 550.3 to el. 595.4	Approx. 45 ft
Gate sills	Upper, el. 578.0; lower, el. 537.3
Minimum depth over sills	13.0 ft
Upstream river approach wall	Floating boom 553 ft long with approx. 9.5 ft freeboard
Top of chamber walls	el. 605
Top of downstream approach walls	el. 584.0
Filling and emptying system	Multiple-port type, 416 8-in. dia. ports in each wall
Estimated lockage time (checking to regaining speed)	40 min
Provision for future lock	Planned so that a 110-ft-wide lock can be constructed in place of present 60-ft-wide auxiliary lock
Lock gate top	Upper , el.599.38; lower, el.599.38
Lock gate height	Upper , 21.89 ft; lower, 62.59 ft

AUXILIARY LOCK (See Figure 10)

Location	At right (north)end of spillway
Lock chamber, clear	60 by 360 ft
Lift: Maximum (el. 550-595)	45 ft
Normal (el. 556-595)	39 ft
Guard (gate) sills	Upper, el.578.0; lower, el.538.2
Minimum depth over sills	Upper, el.13.0 ft; lower, 12.1 ft
Top of upper guide and guard walls	el.600.0
Top of chamber walls	el.600.0
Top of lower guide and guard walls	el.578.0
Estimated lockage time (checking to regaining speed)	35 min
Lock gate top	Upper, el. 597.11; lower, el. 597.64
Lock gate height	Upper, 27.94 ft; lower, 60.64 ft

FIGURE 10 - Navigation and Auxillary Locks, September 1999



DAM

Material and type	Concrete gravity spillway; concrete powerhouse intake; navigation locks; impervious rolled earthfill embankments
Lengths:	
Spillway (See Figure 11)	856 ft
Powerhouse intake and service bay	386 ft
Navigation locks	451 ft
Earth embankments:	
Left (south) bank	1,900 ft
Right (north) bank	386 ft
Total	3,979 ft
Maximum height, foundation to deck level	94 ft
Maximum width at base:	
Spillway section only, pier	72 ft
Including apron	125 ft
Deck level	el. 615.0
Top of earth embankments	el. 610.0
Outlet facilities (Figure 11):	
Spillway clear opening (18 openings at 40 ft)	720 ft
Spillway crest level	el. 555.0
Crest gates	18 fixed-wheel lift gates, 40 ft wide, 40.44 ft high; separated by 8-ft-thick piers
Trash gate	Top half of one crest gate consists of 3 sections for operation as trash gate
Traveling cranes	Two 80-ton gantries, one with auxiliary 10-ton trash boom hoist
Spillway capacity:	
HW el. 605.0 (design level)	650,000 cfs
HW el. 595.44 (top of gates)	478,000 cfs
Foundation	Bangor limestone

FIGURE 11 - View of Spillway Gates (looking upstream), September 1999

POWER FACILITIES

INTAKES

Number	4 (each with 3 bays)
Dimensions of one rack opening	22 ft 11 in. wide by 46 ft high
Gross area at racks	3,160 sq.ft per unit
Gates	2 sets of 1 wheel and 2 slide gates, 17 ft 8 in. clear opening by 38 ft 2-1/2 in. high
Crane	Same 80-ton gantry as used for spillway

POWERHOUSE (See Figure 12)

Generating capacity, 4-unit total	115,200 kW
Type of construction	Enclosed, reinforced concrete, structural steel and brick
Principal outside dimensions including service bay	386 ft long by 168 ft wide by 166 ft high
Service bay	70 by 144 ft
Draft tubes:	
Type	Elbow, 3 openings, with horizontal splitter; splitter omitted in unit 4
Horizontal length (center line of turbine to downstream face)	85.0 ft
Vertical distance from distributor centerline to draft tube floor	61.0 ft
Net area at outlet opening	1,350 sq. ft
Gates	1 set of 3 sliding type, 25 ft 6 in. high by 18 ft clear opening in 2 sections
Crane	One 20-ton gantry and lifting beam
Erecting crane	275-ton capacity; two 137-1/2-ton main hooks and two 25-ton auxiliary hooks

FIGURE 12 - View of Powerhouse, September 1999

POWER FACILITIES (CONT.)

HYDRAULIC TURBINES

Number 4
Manufacturer ..... S. Morgan Smith Co. (now Allis-Chalmers Manufacturing Co.)
Type ..... Kaplan adjustable-blade propeller
Rated capacity (each) ..... 34,000 hp at 36-ft net head
Rated speed ..... 69.2 r/min
Maximum runaway speed ..... 189 r/min
Specific speed at rating 145
Value of sigma at rating 1.05
Diameter of runner ..... 265 in.
Diameter of guide vane circle ..... 318.375 in.
Diameter of lower pit ..... 30.0 ft
Spacing of turbines, center to center of units ..... 78 ft
Draft tubes (see Powerhouse) ..... Elbow type
Governors ..... Woodward, cabinet actuator type
Heaviest assembly to be lifted by crane ..... 446,000 lb

GENERATORS

Number 4
Manufacturer ..... Generator Electric Co.
Type ..... Enclosed , water-cooled , vertical-shaft
Rating: Units 1, 2, 3, 4; original rating ..... 27,000 kVA, 24,300 kW, 1129 A, 60 degrees C rise, 0.9 pf, 13.8 kV, 3 phase, 60 Hz
Capacity: Units 1, 2, 3, 4; original capacity ..... 31,050 kVA, 27,945 kW, 1298 A, 80 degrees C rise
Units 1-4 rewound and rerated:
Rating units 1-4:
Unit 1 - Jan 1979 ..... 32,000 Kva , 28,800 kW
Unit 2 - July 1979 1339 A,60 degrees C
Unit 3 - Dec 1974 rise, 0.9 pf, 13.8 kV
Unit 4 - 1978 3 phase, 60 Hz
Efficiency (original values):
Unit 1 (tested):
At rated kVA, 1.0 pf ..... 96.50 percent
At 75% kVA, 0.9 pf ..... 97.05 percent
Units 2-4 (guaranteed):
At rated kVA, 1.0 pf ..... 96.50 percent
At 75% kVA, 0.9 pf ..... 97.05 percent

POWER FACILITIES (CONT.)

GENERATORS (CONT.)

Flywheel effect (tested):
- Units 1-3 ..... 85,920,000 lb-ft^2
- Unit 4 ..... 92,770,000 lb-ft^2

Thrust bearing:
- Units 1-3 ..... Kingsbury, dia. 87 in., max. load 1000 tons
- Unit 4 ..... GE, dia. 100 in., max. load 1000 tons

Neutral reactor ..... 1.0 ohm, 6000 A, 1 min

Exciters:
- Main ..... 250 kW, 250 V
- Pilot ..... 15 kW, 250 V

Weight of heaviest crane lift, rotor:
- Units 1-3 ..... 230 tons
- Unit 4 ..... 232.5 tons

Diameter over air housing, less trim ..... 556 in.

Diameter of stator bore ..... 396 in.

Top of pilot exciter:
- Above stator soleplates ..... 146.75 in.
- Above generator floor ..... 104 in.

GENERATOR AND TURBINE MODERNIZATION

Guntersville Units 1 through 4 will be rehabilitated and upgraded. Work on Unit 4 was started in March 2000 and is expected to be completed in late summer 2000. Work on Units 1, 2, and 3 is scheduled to start in March and complete in July of 2001, 2002 and 2003 respectively. Major items include installation of new stainless steel runners; new main and pilot exciters; new transformers on 3 of 4 banks; new stainless steel throat ring; rewedged stators; reinsulated rotor poles; new turbine guide bearings; rehabilitated wicket gates with new greaseless bushings throughout; rehabilitated shift ring; new or rehabilitated cooling water piping, valves, and strainers; rehabilitated generator brake system; and upgrade or rehabilitation of various other unit components.

POWER FACILITIES (CONT.)

TRANSMISSION PLANT

Step-up transformers (7/2000):
- 4 1-3 phase, 2-winding transformers, banks 1 to 4; each rated 13.8-161 kV, 40,000 kVA self-cooled, 53,000 kVA forced-air cooled; ABB

Intersystem transformers:
- 2 banks of 3 single-phase, 2-winding autotransformers, banks 11 and 12; each bank rated 154/11.5 kV, 22,500 kVA self-cooled, 30,000 kVA forced-aircooled on 154/11.5-kV windings; 5000 kVA selfcooled, 6667 kVA forced-air-cooled on 11.5-kV windings; 154-kV load ratio control; General Electric
- 1 bank of 3 (plus 1 spare) single-phase, 3-winding transformers, bank 13, rated 110-46 kV, 20,000 kVA self-cooled, 26,667 kVA forced-air-cooled, 12.45 kV, full-capacity tertiary; Moloney

161-kV circuit breakers:
- 3 1200-A, 5,000,000-kVA, 5/60-Hz, sol, Westinghouse
- 6 1200-A, 5,000,000-kVA, 5/20-Hz, pneu, Westinghouse
- 1 1200-A, 5,000,000-kVA, 3/20-Hz, pneu, Westinghouse

115-kV circuit breakers:
- 4 600-A, 1,000,000-kVA, 8-Hz, sol, Allis-Chalmers

46-kV circuit breakers:
- 1 600-A, 500,000-kVA, 8/30-Hz, sol, Allis-Chalmers
- 1 600-A, 500,000-kVA, 8/20-Hz, pneu, Allis-Chalmers

12.5-kV circuit breakers:
- 1 600-A, 250,000-kVA, 8-Hz, sol, General Electric

Structures (See Figure 14):
- 8 161-kV switchyard bays, 38 ft wide
- 4 11 5-kV switchyard bays, 38 ft wide
- 6 46-kV switchyard bays; 5 at 21 ft wide, 1 at 19 ft wide
- 4 12-kV switchyard bays
- 8 transformer structures

FIGURE 13 - SINGLE LINE DIAGRAM OF MAIN CONNECTIONS

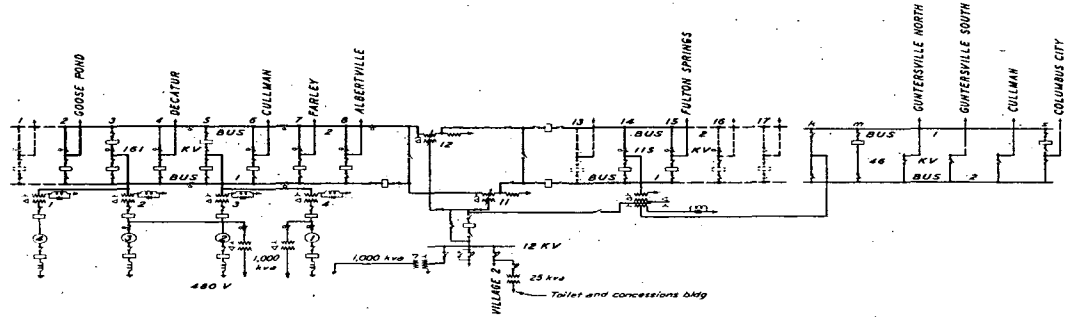
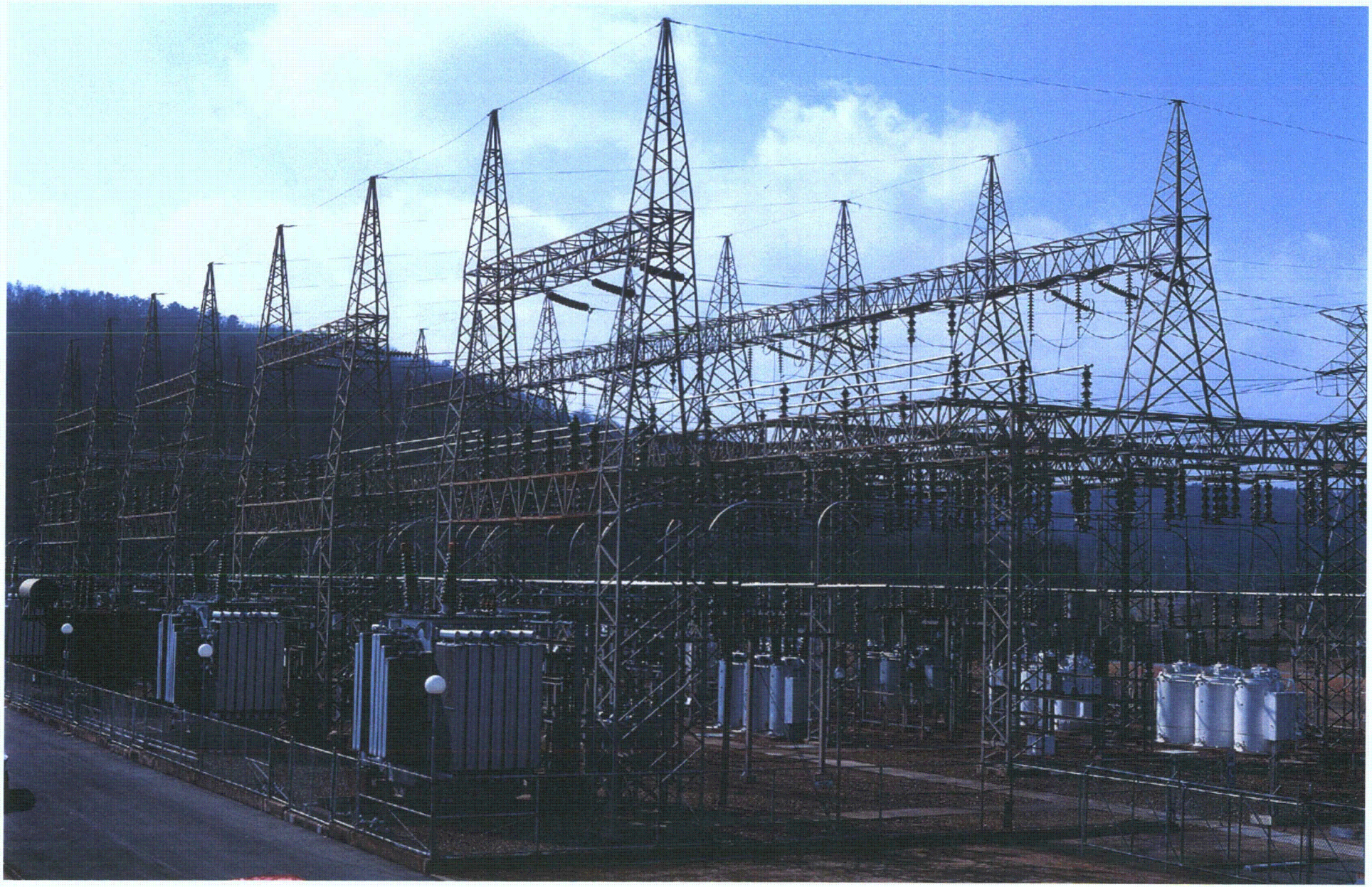


FIGURE 14 - View of Switchyard



TRANSMISSION PLANT DATA

Location	Phase	Serial Number	MVA Rating		Voltage kV	Cooling	Tap Changer	Oil Preservation System	Oil Volume Gal.	Configuration	Impedance %			Contract Number	Manufacturer	Yr of Manuf
			55 deg	65 deg							H-X	H-Y	X-Y			
Bank 1	3	2351354	24/32	N/A	161/13.2	OA/FA	DETC	Gas-Blanketed	8425	Wye/Delta	10.59	N/A	N/A	TV-25055	Westinghouse	1939
Bank 2	3	3641714	39/52/65	72.8	161/13.8/6.9	OA/FA/FA	DETC	Conservator	8052	Wye/Wye/Wye	6.83	7.00	5.52	80K6-823678-1	Ferranti-Packard	1982
Bank 3	3	2480856	24/32	N/A	161/13.2	OA/FA	DETC	Gas-Blanketed	8425	Wye/Delta	10.38	N/A	N/A	TV-58211	Westinghouse	1939
Bank 4		Removed														
Bank 11A	1	5694180	7.5/10	N/A	154/115/11.5	OA/FA	DETC	Gas-Blanketed	9730	Wye/Wye/Delta	5.49	49.70	42.20	TV-18681	General Electric	1938
Bank 11B	1	5694181	7.5/10	N/A	154/115/11.5	OA/FA	DETC	Gas-Blanketed	9730	Wye/Wye/Delta	5.46	49.80	42.40	TV-18681	General Electric	1938
Bank 11C	1	5694182	7.5/10	N/A	154/115/11.5	OA/FA	DETC	Gas-Blanketed	9730	Wye/Wye/Delta	5.51	51.20	43.70	TV-18681	General Electric	1938
Bank 12A	1	5694183	7.5/10	N/A	154/115/11.5	OA/FA	DETC	Gas-Blanketed	9730	Wye/Wye/Delta	5.49	49.70	42.10	TV-19681	General Electric	1938
Bank 12B	1	6908127	7.5/10	N/A	154/115/11.5	OA/FA	DETC	Gas-Blanketed	9730	Wye/Wye/Delta	5.52	10.93	9.27	TV-65516	General Electric	1942
Bank 12C	1	6908128	7.5/10	N/A	154/115/11.5	OA/FA	DETC	Gas-Blanketed	9730	Wye/Wye/Delta	5.57	10.93	9.30	TV-65516	General Electric	1942
Bank 13A	1	568446	6.67/8.9	N/A	110/46/12.45	OA/FA	DETC	Gas-Blanketed	4940	Wye/Wye/Delta	9.58	14.57	3.60	TV-25022	Moloney	1938
Bank 13B	1	568445	6.67/8.9	N/A	110/46/12.45	OA/FA	DETC	Gas-Blanketed	4940	Wye/Wye/Delta	9.52	14.45	3.59	TV-25022	Moloney	1938
Bank 13C	1	568444	6.67/8.9	N/A	110/46/12.45	OA/FA	DETC	Gas-Blanketed	4940	Wye/Wye/Delta	9.67	14.60	3.56	TV-25022	Moloney	1938
Bank 13S	1	837499	6.67/8.9	N/A	110/46/12.45	OA/FA	DETC	Gas-Blanketed	4800	Wye/Wye/Delta	9.81	14.56	3.66	TV-90870	Moloney	1947

Note: H=High voltage winding
Y=Tertiary winding
X=Low voltage winding

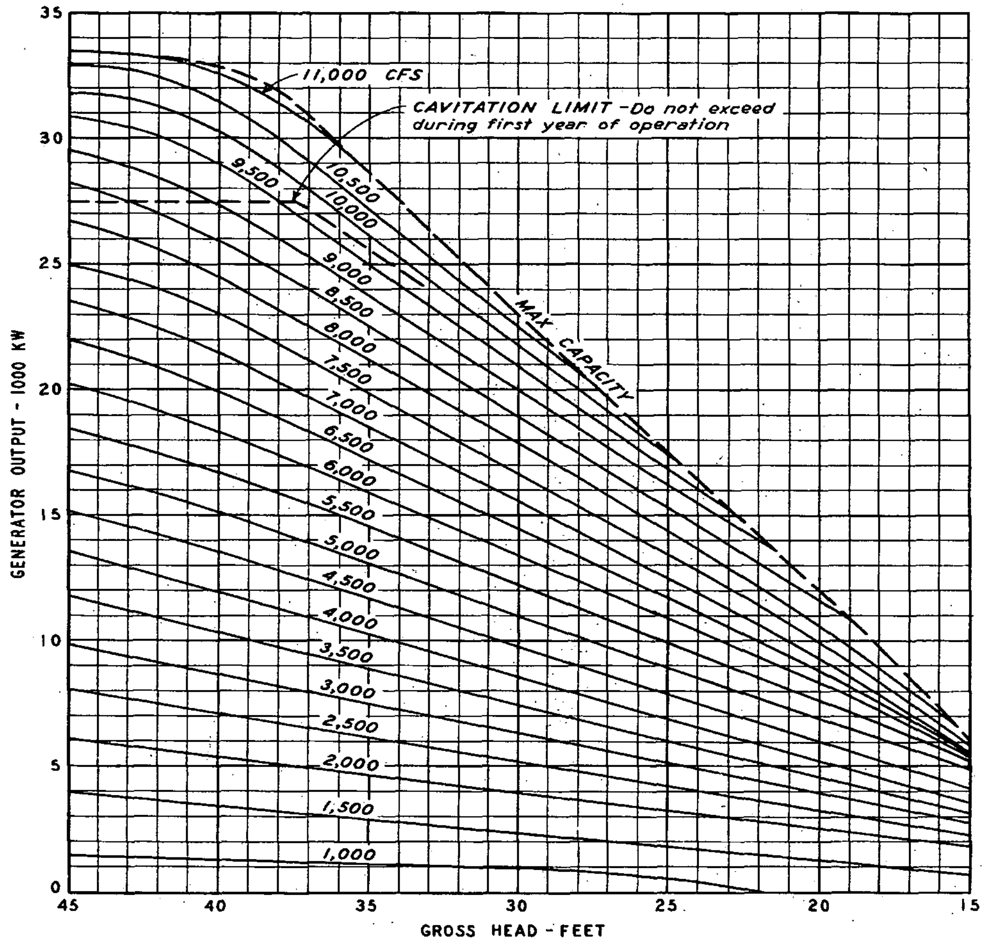
POWER FACILITIES (CONT.)

ELECTRIC CONTROLS

From control room in powerhouse:
Guntersville generators, transformers, switchyard, sources of auxiliary power, unit auxiliaries, and starting of turbines by direct control
Cullman substation by supervisory control.

RESERVOIR AND POWER DATA

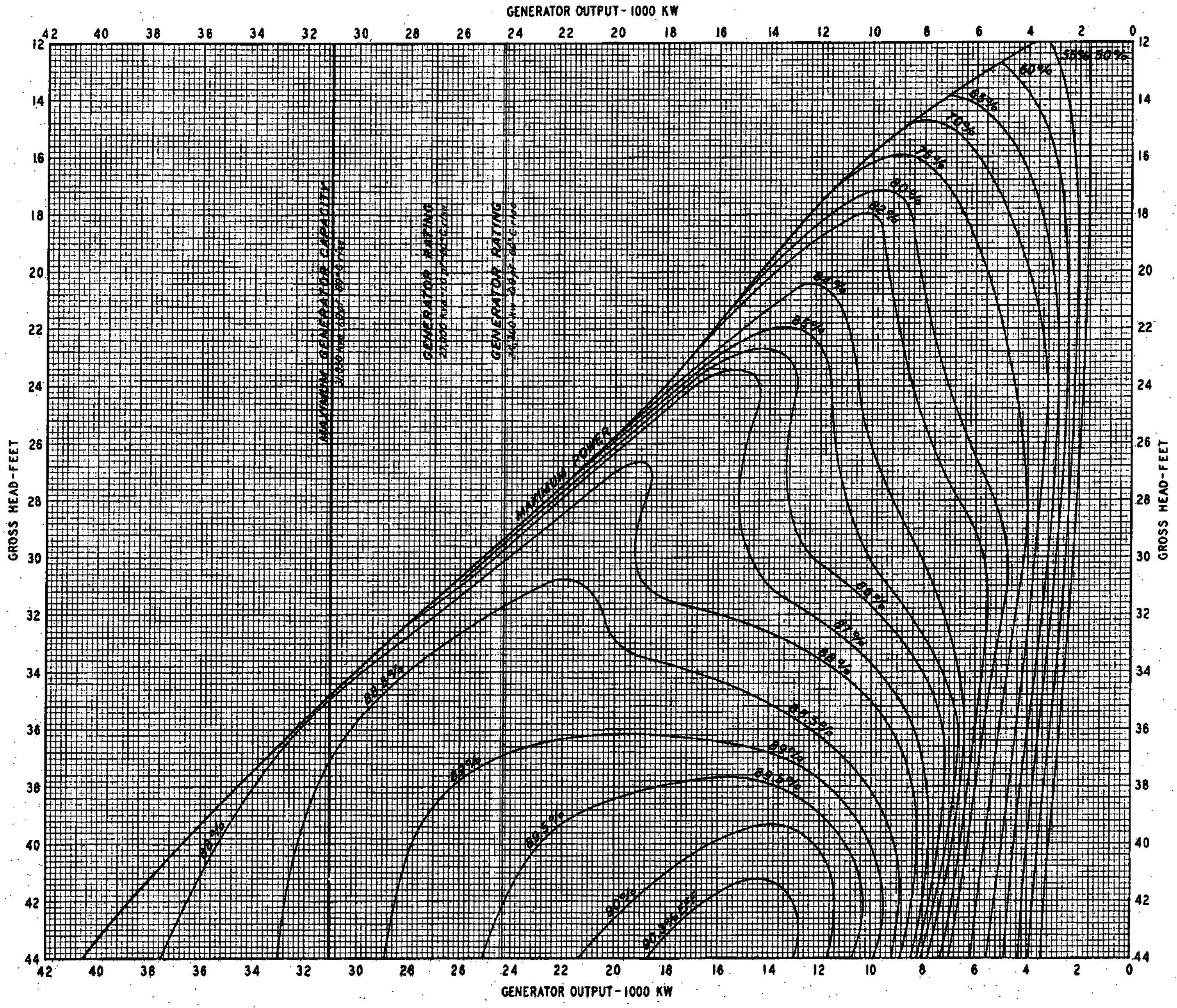
Elevation (feet)	Area (acre*1000)	Volume (ac-ft*1000)	Potential Eis (gWh)	Gross Head (feet)	TW Elevation (feet)	Best Efficiency Plant Output (mW)	Best Efficiency Turbine Discharge (cfs)	Best Efficiency kW/CFS	Maximum Sustainable Plant Output (mW)	Maximum Sustainable Turbine Discharge (cfs)	Maximum Sustainable kW/CFS
596	72.38	1088.7	239.9	40.0	556	130.0	48,000	2.71	130.0	48,000	2.71
595	68.98	1018.0	223.4	39.0	556	127.8	48,600	2.63	127.8	48,600	2.63
594	65.68	950.7	207.7	38.0	556	125.6	49,200	2.56	125.6	49,200	2.56
593	62.54	886.6	192.9	37.0	556	123.4	49,800	2.48	123.4	49,800	2.48
592	59.56	825.5	178.9	36.0	556	121.2	50,400	2.41	121.2	50,400	2.41
596	72.38	1088.7	236.9	37.0	559	123.4	49,800	2.48	123.4	49,800	2.48
595	68.98	1018.0	220.6	36.0	559	121.2	50,400	2.41	121.2	50,400	2.41
594	65.68	950.7	205.1	35.0	559	119.0	51,000	2.33	119.0	51,000	2.33
593	62.54	886.6	190.4	34.0	559	114.0	50,600	2.25	114.0	50,600	2.25
592	59.56	825.5	176.5	33.0	559	109.0	50,200	2.17	109.0	50,200	2.17



NOTES:

These curves supersedes preliminary curves shown on dwg 6-M-4-10A64. These curves show turbine discharge at different heads and kw outputs and are based on Field Index tests made on unit No. 1 Aug 3, 1939 - head 38 ft, unit No. 2 Oct 14, 1939 - head 42 ft and are based on an overall efficiency of 90 % at best point. These are final curves prepared for recording plant discharge.

TESTS		
TURBINE DISCHARGE		
GUNTERSVILLE PROJECT TENNESSEE VALLEY AUTHORITY ENGINEERING DESIGN DEPARTMENT		
SUBMITTED: J. F. Roberts	RECOMMENDED: George R. Rich	APPROVED: [illegible]
KNOXVILLE, TENN.	11-1-39	6 M 4 10A64 R1



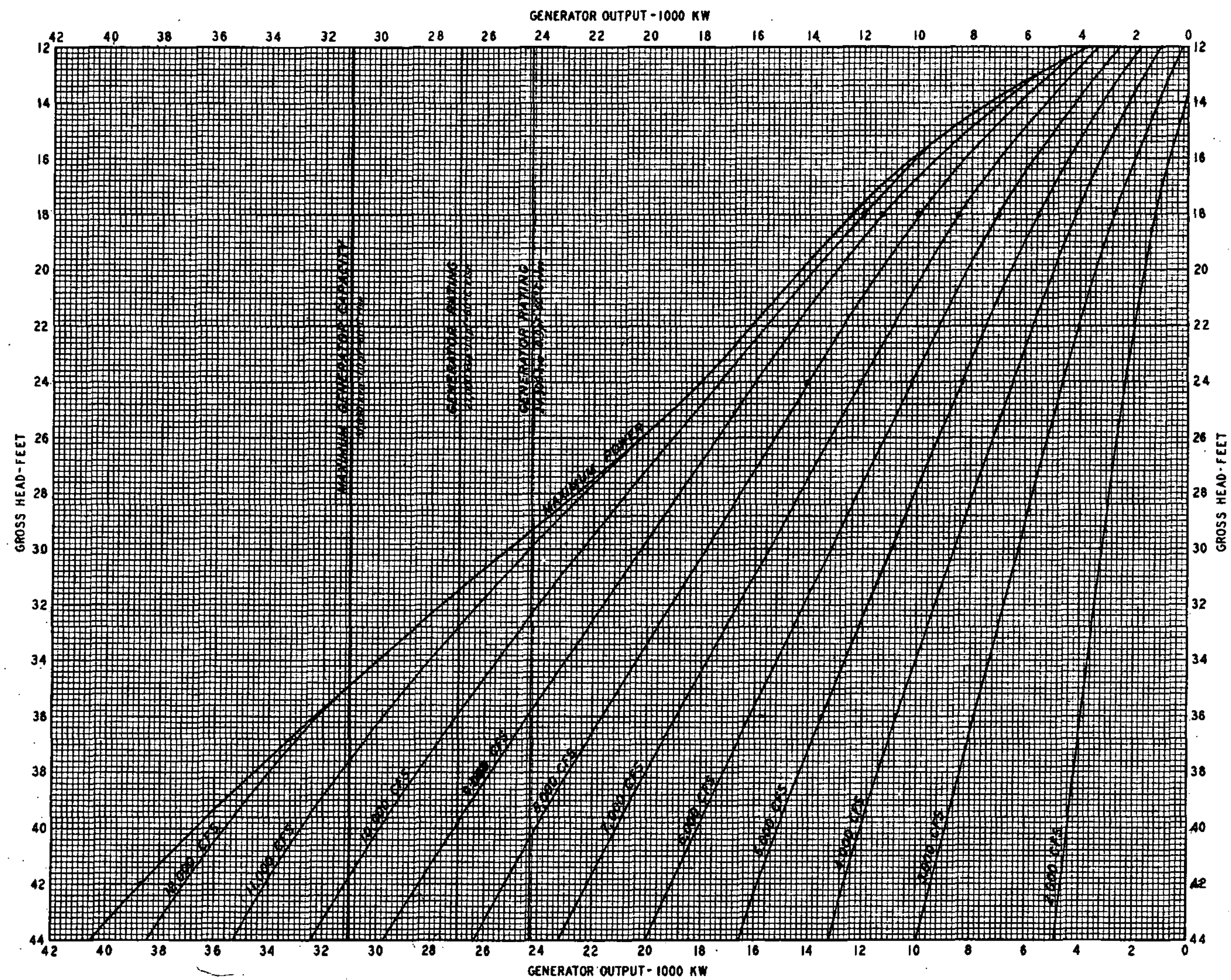
Curves are based on S. Morgan Smith Co. model test No. 1497 and modified in accordance with index test conducted March 21, 1952 at approximately 36 ft head.

POWERHOUSE
UNIT 4

OPERATING CHARACTERISTICS OF 27,000 KVA GENERATING UNIT

GUNTERSVILLE PROJECT
TENNESSEE VALLEY AUTHORITY
DIVISION OF DESIGN

SUBMITTED	RECOMMENDED	APPROVED			
C. L. Norris	[signature]	B. A. Monroe			
KNOXVILLE	5-6-52	6	M	4	47K2901



Curves are based on S. Morgan Smith Co. model test No. 1497 and modified in accordance with index test conducted March 21, 1952 at approximately 36 ft head.

POWERHOUSE UNIT 4
DISCHARGE CURVES BASED ON INDEX TEST
GUNTERSVILLE PROJECT TENNESSEE VALLEY AUTHORITY DIVISION OF DESIGN
SUBMITTED / RECOMMENDED / APPROVED
KNOXVILLE 5-6-52 6 M 4 47K2900

Guntersville Spill Compilation

Volumes are average daily in day-second-feet, except as shown
Maximum spill, date of maximum, and number of days of spill in each spill period, in this order. "Total Days" is for calendar year
and does not always equal the sum of the days in periods because of extension of periods into adjacent years.
All spill is through the spillway. Maximum hourly average discharge to date was 314,200 cfs at 5 p.m. on 3/18/73.
*Instantaneous value from monthly report graphs (approximate).

Year	Maximum Average Daily Discharge Turbine + Spill	Date	Number of Periods	Total Days	
1939	*210000	2/17	4	251	210000---2/17---190; 36000---8/9---2; 15000---8/16---4; 27000---8/22---54
1940	*77000	2/20	8	94	50000---2/20---29; 50000---3/15---12; 2000---3/25---2; 35000---3/31---9; 18000---4/15---6; 48000---4/21---17; 39625---8/15---10; 38600---9/1---9
1941	58008	4/7	6	41	18150---1/4-7---7; 17600---3/16---4; 5938---3/21---3; 263---3/24---2; 29258---4/7---9; 25000---7/10---16
1942	219466	12/31	7	78	15850---2/19---3; 71700---3/22---18; 12100---3/29---3; 6500---7/14&15---4; 15958---8/10---4; 41700---8/25-27---14; 11297---10/19---2
1943	223808	1/1	7	105	200500---1/1---79; 85354---3/22---18; 41350---4/23---20; 12000---5/13---10; 4813---7/29---2; 8179---8/3---4; 4542---9/3---2
1944	198975	3/31	8	108	6800---1/4---4; 88200---2/29---37; 63525---3/21---7; 165975---3/31---48; 4850---5/23---3; 7604---9/30---1; 13375---12/19---4; 52500---12/31---38
1945	130000	2/20	14	165	3400---2/6---3; 97000---2/20---37; 18462---3/24---8; 14200---4/3---5; 42150---4/29---26; 6500---6/20---4; 8075---8/2---3; 9350---8/9---4; 3250---8/17---2; 8116---8/24---2; 5850---8/30---3; 1625---9/7---2; 1050---9/12---2; 3366---11/24---2
1946	258728	1/9	25	221	232662---1/9---112; 7162---3/30---2; 1375---4/1---1; 3925---4/11---2; 6219---4/28---2; 14350---5/5---4; 68781---5/18---8; 21158---6/6---4; 1960---6/12---4; 10829---6/19---4; 8500---6/27---3; 6300---7/4&5---3; 12819---7/10---3; 4962---7/18---3; 10700---7/23-25---5; 8400---7/31---3; 10600---8/7---4; 9500---8/14---4; 12000---8/20---3; 4900---8/28---3; 7850---9/19---3; 4000---10/1---5; 2200---10/12---6; 8200---10/31---9; 19300---11/12---33
1947	212316	1/22	3	103	176431---1/22---108; 4898---4/14---1; 7582---12/23---10
1948	242265	2/15	5	133	6733---1/7---2; 8622---1/16---8; 3187---1/29---3; 206702---2/15---64; 42331---4/10---13
1949	233363	1/7	13	237	197800---1/7---109; 9006---3/19---7; 55890---4/1---10; 31245---5/2---5; 89279---7/19---15; 9060---8/3---4; 6333---8/11---4; 9659---8/18---3; 7871---8/24---4; 9185---9/1---5; 11705---10/11---42; 22995---10/20---6; 5298---10/27---3
1950	190850	2/11	5	213	155287---2/11---153; 3747---6/5---2; 9242---7/30---5; 50560---9/11---16; 6283---10/9---65
1951	206700	3/30	5	145	180258---3/30---134; 3800---4/15---3; 26600---4/22---12; 8100---11/20---5; 127000---2/23---78
1952	155300	3/12	2	83	5300---2/24---5; 121000---3/12---26
1953	135400	2/23	5	43	33000---1/10---6; 4500---1/24&25---2; 89500---2/23---29; 9500---5/5---4; 3500---5/20---2

Guntersville Spill Compilation

Volumes are average daily in day-second-feet, except as shown
Maximum spill, date of maximum, and number of days of spill in each spill period, in this order. "Total Days" is for calendar year and does not always equal the sum of the days in periods because of extension of periods into adjacent years.
All spill is through the spillway. Maximum hourly average discharge to date was 314,200 cfs at 5 p.m. on 3/18/73.
*Instantaneous value from monthly report graphs (approximate).

Year	Maximum Average Daily Discharge Turbine + Spill	Date	Number of Periods	Total Days	
1954	223400	1/24	3	23	181600---1/24---16; 4500---3/2&3---2; 7700---3/5---2
1955	149200	3/24	5	30	52800---1/1---7; 34000---2/9---7; 28100---2/24---4; 104700---3/24---13; 9700---4/7---2
1956	193200	2/5	9	58	150300---2/5---10; 7200---2/14&15---2; 70800---2/21---17; 7900---3/9---4; 68600---3/18---10; 7600---4/6---2; 29500---4/17---5; 64900---12/15---6; 9400---12/23&24---2
1957	252700	2/2	4	92	211700---2/2---37; 5300---3/10---3; 14900---4/7---5; 188900---11/20---54
1958	144900	4/30	5	44	8600---1/4---2; 8000---1/27---5; 36900---2/7---12; 99100---4/30---5; 37200---5/11---13
1959	120400	12/21	3	36	69900---1/24---5; 10500---2/17---2; 74400---12/21---29
1960	106100	3/4	3	38	13300---1/8---16; 42300---2/21---11; 60000---3/4---11
1961	219300	12/20	2	50	161800---2/25---29; 177400---12/20---23
1962	225900	2/26	6	83	34600---1/8---9; 3300---1/16---2; 7100---1/20---3; 176600---1/29---23; 183600---2/26---34; 70100---4/12---10
1963	254000	3/16	4	34	15700---2/5---4; 3400---2/11---2; 213800---3/16---22; 80100---4/30---6
1964	156600	3/16	10	98	28200---1/11---5; 36300---1/27---7; 27100---2/18---5; 45600---3/8---4; 112900---3/16---18; 97200---4/9---14; 54200---5/3---10; 8500---12/1---3; 7900---12/7---6; 23600---12/14---21
1965	218700	3/29	6	43	3600---1/4---4; 51400---1/13---12; 49800---2/13---9; 6700---3/2---1; 7100---3/7---2; 177200---3/29---15
1966	141300	2/16	4	33	97900---2/16---8; 25500---3/7---7; 10300---5/4---3; 19600---12/13---13
1967	167000	12/22	8	96	21100---1/1---6; 39200---2/22---12; 63200---3/10---11; 3500---6/5---1; 95700---7/9---10; 9000---8/4---3; 18900---11/4---16; 123900---12/22---65
1968	164900	1/12	2	30	12000---3/15---2; 4700---5/18---2
1969	181500	12/31	3	33	49400---1/21---6; 134900---2/3---19; 28300---5/20---6
1970	207600	1/1	6	34	163800---1/1---14; 14500---2/4---5; 7200---2/19---1; 38800---4/4---5; 84100---4/29---7; 9000---12/25---4
1971	121700	2/7	5	64	55800---1/25---6; 74600---2/7---14; 63500---3/1---18; 30600---5/14---5; 63900---12/8---21
1972	162500	12/13	7	118	89100---1/13---39; 11000---2/22---7; 69300---3/4&5---15; 18900---3/30---6; 22300---4/23---3; 34400---5/16---8; 116200---12/13---53
1973	304400	3/19	5	155	53400---2/15---33; 262300---3/19---24; 57300---4/28---19; 147300---5/31---24; 22100---6/18---7

Guntersville Spill Compilation

Volumes are average daily in day-second-feet, except as shown
Maximum spill, date of maximum, and number of days of spill in each spill period, in this order. "Total Days" is for calendar year and does not always equal the sum of the days in periods because of extension of periods into adjacent years.
All spill is through the spillway. Maximum hourly average discharge to date was 314,200 cfs at 5 p.m. on 3/18/73.
*Instantaneous value from monthly report graphs (approximate).

Year	Maximum Average Daily Discharge Turbine + Spill	Date	Number of Periods	Total Days	
1974	189600	1/15	7	104	144700---1/15---99; 3600---3/11---2; 63800---3/23---8; 53100---4/6---14; 16700---5/25---6; 17400---6/1---3; 5800---9/7---2
1975	205300	3/15	5	117	72800---2/19---68; 161500---3/15---34; 17700---5/20---5; 26200---9/24---3; 13800---11/15-16---8
1976	89000	1/3	6	53	39300---1/3---16; 11700---1/16&17---7; 25500---1/29---12; 10600---2/21---5; 26500---7/5---5; 12000---12/15---12
1977	204700	4/6	7	104	8200---1/2---1; 28800---1/11-12---11; 66900---3/14---7; 158800---4/6---17; 28600---10/11---4; 19400---10/27---7
1978	130700	1/29	5	63	81300---1/29---96; 32700---3/15---11; 22000---5/8---3; 15600---5/12---3; 18400---12/10---5
1979	195500	3/5	13	188	53200---1/3---19; 80000---1/24---16; 151000---3/5---23; 21400---3/29---10; 89400---4/14---14; 4100---4/26---2; 20200---5/4---3; 37600---5/25---5; 80300---6/2---13; 8000---7/12---2; 57700---7/27---18; 45800---9/29---22; 51800---11/12---43
1980	218300	3/22	6	70	49900---1/27---25; 41600---3/9---8; 174700---3/22---20; 51200---4/14---6; 11900---5/17---2; 13900---5/26---9
1981	49000	2/13	0	0	
1982	170100	1/4	6	117	125300---1/4---17; 75300---2/18---44; 43400---3/16&18---19; 12000---8/18---3; 5500---9/15---2; 106400---12/2---38
1983	153500	5/21	12	92	9600---1/12---3; 7700---1/19---2; 34700---2/6---17; 100100---4/7---10; 8200---4/20---3; 12000---4/23-26---5; 108900---5/21---14; 14600---6/7---6; 70100---11/29---4; 85500---12/4---7; 22200---12/14---5; 41800---12/30-31---14
1984	243900	5/9	9	72	31400---2/16---5; 28000---2/29---9; 19600---3/23-24---5; 16400---3/30-31---5; 5700---4/6---2; 212000---5/9---31; 11900---6/5-6---4; 9200---8/1-3---5; 5545---11/29---2
1985	106016	2/2	2	14	58935---2/2---10; 18538---2/13---4
1986	96185	11/28	3	43	21975---2/20---7; 49830---11/28---10; 23070---12/12---26
1987	140558	2/28	2	42	54444---1/20---24; 95442---2/28---18
1988	112335	1/21	1	6	64687---1/21---6
1989	187040	10/1	10	169	94485---1/14---15; 16162---2/8---3; 10657---2/14---4; 74114---3/7---23; 12313---4/11---4; 16947---5/11---2; 155671---6/23---35; 141533---10/1---25; 5649---10/25---9; 44702---11/18---49
1990	250905	12/24	7	111	197045---2/17---85; 6019---5/4---2; 25623---5/11---5; 11898---5/16---3; 6177---5/22---2; 3784---6/9---4; 208154---12/24---34

Guntersville Spill Compilation

Volumes are average daily in day-second-feet, except as shown
Maximum spill, date of maximum, and number of days of spill in each spill period, in this order. "Total Days" is for calendar year and does not always equal the sum of the days in periods because of extension of periods into adjacent years.
All spill is through the spillway. Maximum hourly average discharge to date was 314,200 cfs at 5 p.m. on 3/18/73.
*Instantaneous value from monthly report graphs (approximate).

Year	Maximum Average Daily Discharge Turbine + Spill	Date	Number of Periods	Total Days	
1991	214599	2/21	7	105	83360---1/3---34; 169838---2/21---30; 57817---4/2---11; 2006---5/2---2; 18883---5/6---3; 13666---6/25---4; 146283---12/4---42
1992	125584	12/29	6	66	75946---1/7---42; 11632---1/15---3; 29388---2/28---9; 8216---11/7---5; 34022---11/26---5; 77240---12/27&29---37
1993	160242	3/25	6	70	65185---1/1---37; 40996---1/26---9; 6109---2/26---2; 33293---3/9---14; 114502---3/25---14; 30918---12/8---9
1994	251768	3/28	8	129	165731---2/12--68; 205954---3/28---34; 17511---6/30---4; 5803---7/12---2; 11035---7/31---6; 16660---11/30---4; 21790---12/5&6---6; 21870---12/13---5
1995	149003	10/6	6	70	76886---1/18---21; 91933---2/17---16; 81985---3/9---13; 1235---10/3---1; 103628---10/6---4; 32500---11/9---15;
1996	176475	1/30	7	17	130317---1/30---51; 79815---3/7---14; 5510---3/23---4; 22080---4/22---3; 27640---6/13---7; 5510---9/8---6; 78219---12/5---32
1997	170493	3/5	11	119	70777---1/30---42; 123295---3/5---31; 94317---5/4---10; 50756---6/2---5; 5569---6/7---6; 98379---6/18---6; 17568---6/23---4; 11767---7/3---2; 22208---10/28---4; 13347---11/5---4; 13509---11/11---5
1998	210552	4/21	5	113	84198---1/9---55; 46410---3/11---9; 25387---3/22---8; 165713---4/22---29; 34775---6/12---12
1999	122818	5/7	5	46	65524---1/25---25; 24262---3/9---8; 31337---3/14---3; 73424---5/7---5; 29300---7/15---5

ANNUAL MAXIMUM AND MINIMUM ELEVATIONS, IN ORDER OF MAGNITUDE

RIVER SCHEDULING
TVA OPERATED RESERVOIR SYSTEM
ANNUAL MAXIMUM AND MINIMUM ELEVATIONS, IN ORDER OF MAGNITUDE
FROM DATE OF RESERVOIR CLOSURE THROUGH 1999

GUNTERSVILLE

MAXIMUM					MINIMUM				
ORDER	ELEVATION	YEAR	MONTH	DAY	ORDER	ELEVATION	YEAR	MONTH	DAY
1	596.29	1944	MAR.	2	1	567.20 *	1939	JAN.	16
2	595.86	1942	DEC.	28	2	590.65	1968	NOV.	12
3	595.77	1997	MAY	3	3	590.85	1964	NOV.	19
4	595.72	1973	MAR.	18	4	591.65	1953	SEP.	8
5	595.69	1963	APR.	29	5	591.90	1975	OCT.	4
6	595.68	1995	OCT.	5	6	591.90	1976	SEP.	27
7	595.65	1946	APR.	10	7	591.90	1978	SEP.	17
8	595.60	1949	MAY	1	8	591.95	1974	OCT.	5
9	595.57	1945	APR.	28	9	591.98	1977	SEP.	25
10	595.56	1950	JUNE	5	10	592.00	1940	DEC.	10
11	595.55	1941	JULY	11	11	592.00	1983	JULY	23
12	595.53	1984	APR.	25	12	592.00	1987	JUNE	25
13	595.49	1948	APR.	10	13	592.02	1982	NOV.	12
14	595.49	1951	APR.	23	14	592.06	1944	FEB.	7
15	595.49	1953	MAY	2	15	592.22	1980	OCT.	6
16	595.49	1958	APR.	29	16	592.32	1989	JUNE	2
17	595.48	1990	FEB.	16	17	592.33	1965	JAN.	1
18	595.46	1966	MAY	4	18	592.35	1970	NOV.	9
19	595.45	1960	MAY	13	19	592.37	1981	OCT.	18
20	595.45	1968	MAY	4	20	592.39	1948	OCT.	12
21	595.45	1976	JULY	5	21	592.39	1950	JAN.	31
22	595.45	1982	JAN.	3	22	592.39	1956	FEB.	25
23	595.45	1991	JUNE	15	23	592.40	1979	SEP.	13
24	595.44	1957	MAY	13	24	592.41	1949	JAN.	18
25	595.44	1961	APR.	15	25	592.43	1971	OCT.	26
26	595.43	1971	APR.	25	26	592.45	1945	FEB.	28
27	595.42	1969	MAY	20	27	592.55	1952	MAR.	4
28	595.42	1989	SEP.	30	28	592.55	1955	SEP.	16
29	595.41	1943	MAY	15	29	592.56	1951	JAN.	3
30	595.41	1947	APR.	14	30	592.57	1946	JAN.	15
31	595.41	1954	APR.	18	31	592.60 %	1941	MAR.	3
32	595.41	1993	MAY	7	32	592.60	1961	DEC.	23
33	595.40	1959	MAY	26	33	592.60	1962	MAR.	20
34	595.40	1972	APR.	23	34	592.62	1973	DEC.	13
35	595.40	1983	MAY	23	35	592.62	1990	DEC.	30
36	595.39	1956	APR.	17	36	592.63	1954	FEB.	1
37	595.39	1999	JUNE	26	37	592.65	1947	FEB.	1
38	595.38	1955	JULY	11	38	592.65	1969	APR.	22
39	595.38	1964	APR.	9	39	592.70	1958	DEC.	7
40	595.38	1965	APR.	19	40	592.70	1960	FEB.	5
41	595.37	1988	APR.	19	41	592.70	1963	FEB.	26
42	595.37	1994	JUNE	20	42	592.70	1967	DEC.	10
43	595.35	1962	APR.	14	43	592.73	1957	AUG.	23
44	595.35	1967	APR.	28	44	592.75	1943	FEB.	5
45	595.34	1996	JAN.	7	45	592.76	1966	FEB.	10
46	595.33	1987	MAY	24	46	592.76	1972	FEB.	24
47	595.31	1974	JAN.	13	47	592.77	1984	FEB.	12
48	595.30	1970	APR.	22	48	592.78	1959	AUG.	14
49	595.30	1979	APR.	13	49	592.85	1985	JAN.	1
50	595.30	1980	MAR.	21	50	592.85	1991	JAN.	16
51	595.30	1985	APR.	18	51	592.87	1995	JAN.	4
52	595.29	1952	JUNE	15	52	592.88	1998	NOV.	10
53	595.28	1940	APR.	4	53	592.89	1986	AUG.	10
54	595.23	1992	NOV.	24	54	592.90	1988	MAR.	1
55	595.21	1939	JULY	3	55	592.92	1999	DEC.	4

ANNUAL MAXIMUM AND MINIMUM ELEVATIONS, IN ORDER OF MAGNITUDE (CONT.)

RIVER SCHEDULING
TVA OPERATED RESERVOIR SYSTEM
ANNUAL MAXIMUM AND MINIMUM ELEVATIONS, IN ORDER OF MAGNITUDE
FROM DATE OF RESERVOIR CLOSURE THROUGH 1999

GUNTERSVILLE

MAXIMUM					MINIMUM				
ORDER	ELEVATION	YEAR	MONTH	DAY	ORDER	ELEVATION	YEAR	MONTH	DAY
56	595.20	1998	JULY	19	56	592.95	1992	FEB.	13
57	595.18	1975	OCT.	20	57	592.96	1994	DEC.	23
58	595.16	1986	MAY	31	58	592.96	1996	DEC.	17
59	595.15	1977	MAR.	14	59	592.98 %	1942	NOV.	12
60	595.15	1978	JULY	3	60	592.98	1993	DEC.	25
61	595.10	1981	APR.	30	61	593.01	1997	DEC.	17

* CLOSURE
% MIDNIGHT ELEVATION
TOP-OF-GATES ELEVATION 595.44

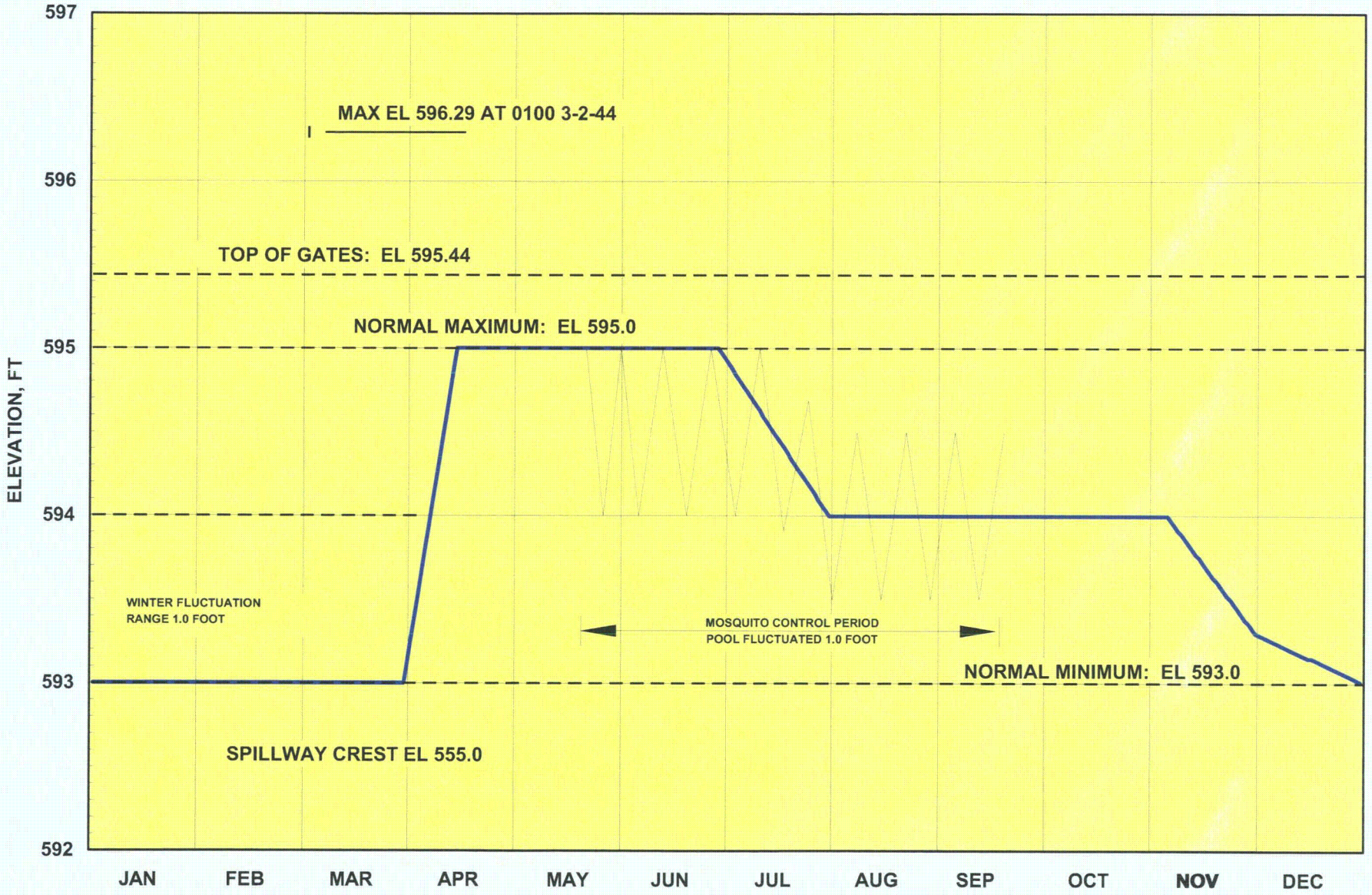
AVERAGE WEEKLY CFS

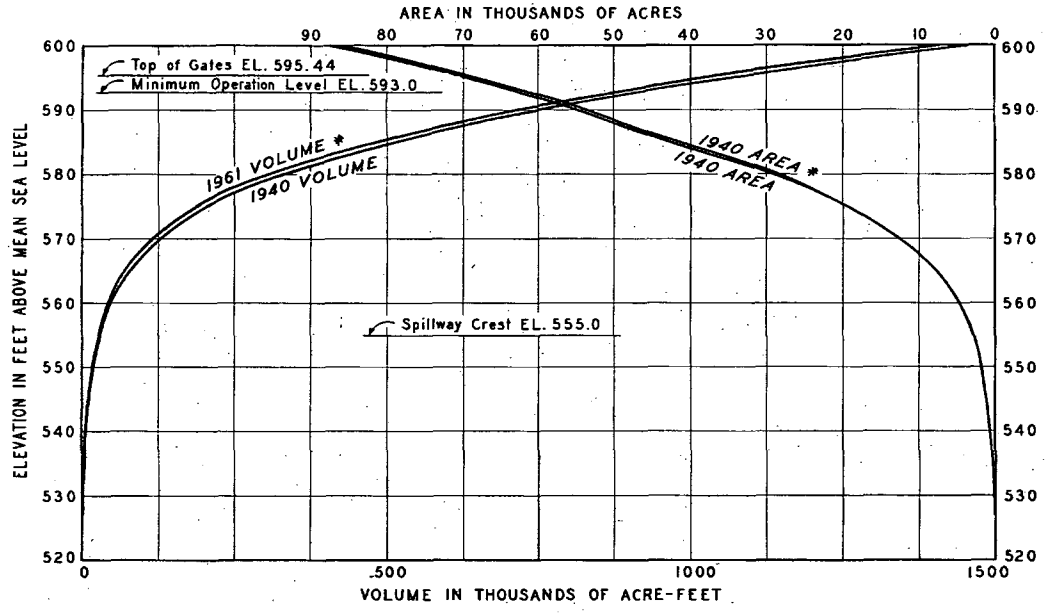
MAXIMUM, MINIMIUM, MEDIAN, AND MEAN
Adjusted Flow by Weeks
Guntersville
Years = 1903-1999

WEEK ENDING	WEEK NO.	MAXIMUM	YR	MINIMUM	YR	MEDIAN	MEAN
JAN 7	1	232,000	1949	7,920	1940	51,000	64,800
JAN 14	2	268,000	1946	8,130	1981	52,500	62,100
JAN 21	3	339,000	1947	10,900	1981	51,700	60,700
JAN 28	4	215,000	1962	7,700	1940	58,300	69,800
FEB 4	5	429,000	1957	7,810	1940	56,300	70,600
FEB 11	6	208,000	1957	12,900	1934	58,000	71,500
FEB 18	7	294,000	1948	12,000	1934	60,300	75,500
FEB 25	8	247,000	1961	10,800	1934	65,400	76,000
MAR 4	9	215,000	1997	13,200	1941	64,100	73,200
MAR 11	10	255,000	1917	22,900	1986	69,800	79,400
MAR 18	11	361,000	1973	20,600	1931	65,800	83,700
MAR 25	12	287,000	1980	17,600	1988	64,800	75,200
APR 1	13	377,000	1994	17,200	1988	62,800	81,900
APR 8	14	343,000	1977	17,800	1910	60,900	74,000
APR 15	15	199,000	1936	15,200	1986	53,100	64,600
APR 22	16	292,000	1998	14,100	1986	48,600	56,000
APR 29	17	139,000	1958	11,200	1986	47,900	50,600
MAY 6	18	150,000	1984	9,130	1986	40,500	49,700
MAY 13	19	304,000	1984	9,570	1986	38,700	46,300
MAY 20	20	96,100	1946	11,300	1941	35,800	39,700
MAY 27	21	141,000	1983	7,620	1941	30,700	36,200
JUN 3	22	147,000	1973	7,980	1988	26,300	34,500
JUN 10	23	133,000	1909	4,230	1988	25,900	32,800
JUN 17	24	130,000	1989	4,000	1988	24,600	29,500
JUN 24	25	139,000	1989	3,900	1986	23,300	26,400
JUL 1	26	70,800	1928	3,160	1988	20,900	24,100
JUL 8	27	110,000	1989	4,360	1988	20,200	25,000
JUL 15	28	150,000	1916	6,190	1970	19,600	26,300
JUL 22	29	120,000	1916	4,080	1986	18,700	25,200
JUL 29	30	104,000	1938	4,320	1986	18,900	23,600
AUG 5	31	72,100	1971	1,580	1986	17,900	21,400
AUG 12	32	57,900	1942	4,020	1957	18,200	20,000
AUG 19	33	151,000	1920	3,930	1954	16,700	21,200
AUG 26	34	97,700	1920	4,250	1987	15,600	19,100
SEP 2	35	55,400	1950	4,020	1953	13,600	17,500
SEP 9	36	103,000	1928	1,720	1998	13,200	16,400
SEP 16	37	58,300	1928	2,470	1954	13,200	15,200
SEP 23	38	47,200	1920	3,120	1999	11,800	14,400
SEP 30	39	102,000	1989	4,200	1954	11,700	16,300
OCT 7	40	134,000	1989	3,770	1986	11,200	18,400
OCT 14	41	80,800	1906	2,320	1987	11,600	15,000
OCT 21	42	71,200	1975	3,160	1954	12,000	15,700
OCT 28	43	62,700	1977	3,300	1998	12,900	16,500
NOV 4	44	109,000	1918	3,290	1954	13,500	18,300
NOV 11	45	153,000	1977	2,710	1953	14,100	20,200
NOV 18	46	160,000	1957	4,480	1953	14,600	22,600
NOV 25	47	157,000	1957	6,050	1954	20,200	28,900
DEC 2	48	202,000	1948	6,630	1956	21,700	34,000
DEC 9	49	142,000	1991	5,900	1987	30,100	35,700
DEC 16	50	222,000	1972	6,960	1939	30,800	41,600
DEC 23	51	231,000	1961	6,450	1958	29,700	44,800
DEC 31	52	210,000	1926	8,000	1965	45,000	53,200

AVERAGE FLOW: 1903 - 1999 = 41100 CFS **RIVER SYSTEM OPERATIONS**

ANNUAL OPERATING CYCLE





ELEV FT	1940 AREA AC	VOLUME 1940 AC-FT	VOLUME 1947 AC-FT	VOLUME 1956 AC-FT	VOLUME 1961 AC-FT	1940 AREA* AC	VOLUME* 1940 AC-FT	VOLUME* 1961 AC-FT
600	87,700	1,456,000	1,440,000	1,432,000	1,423,000	86,800	1,438,000	1,406,000
595.44	71,200	1,097,000	1,081,000	1,073,000	1,064,000	70,200	1,085,000	1,052,000
595	69,100	1,063,000	1,046,000	1,039,000	1,030,000	67,900	1,050,000	1,018,000
590	54,500	752,000	735,000	728,000	719,000	53,600	745,000	712,000
585	42,600	510,000	492,000	487,000	477,000	41,800	508,000	474,000
580	29,100	330,000	316,000	311,000	301,000	28,700	330,000	301,000
570	12,400	127,000	121,000	117,000	113,000	12,400	127,000	113,000
560	4,480	46,800	44,000	40,800	39,100	4,480	46,800	39,100
550	1,800	17,650	16,600	14,500	14,800	1,800	17,650	14,800
540	880	4,470	4,220	3,210	3,910	880	4,470	3,910
530	15	25	14	2	0	15	25	0
526.6	0	0	0	0	0	0	0	0

NOTES:

Reservoir areas at elevation 580 and above were measured on navigation maps, scale 1"=2,000' showing field located contours at elevations 580, 585, 590, 595 and 600. Supplementary measurements were made on TVA land maps, scale 1"=500' with field located contours at elevations 595 and 600. Contours were drawn at 10' intervals and made to conform to elevations on TVA sediment range cross sections located at five to ten mile intervals. The 1940 volume was computed by the contour method. Volumes of sediment on succeeding dates were computed by the constant factor method.

Elevations are referred to the USC & GS 1929 General Adjustment.

Area of original river within reservoir = 12,065 acres.

Drainage area at dam = 24,450 square miles.

Dam closure January 16, 1939.

*Adjusted due to closure of Nickajack Dam Dec. 14, 1967, reducing length of Guntersville Reservoir by 6.4 miles.

THIS DRAWING SUPERSEDES 6-DA-1-321A2Inz

SAFETY MODIFICATIONS FOR PROBABLE MAXIMUM FLOOD

Chronology

Safety analysis studies for Guntersville Dam for the Probable Maximum Flood(PMF) were started in August 1984 and completed in February 1993. Final design started in April 1993. Onsite construction began in 1994 and was completed on June 30, 1995.

Cost of Modification

Design costs for the capital safety modifications to Guntersville Dam were approximately $5,460,000. Construction costs were approximately $31,869,070. The total project cost was approximately $37.3 million. This did not include costs for dam safety evaluation studies which resulted in the modifications.

Controlling Features

The embankments at Guntersville Dam were modified in order to safely pass the probable maximum flood. The embankments were raised to an elevation of 617.5 from the lowest embankment elevation of 610.0. The modifications to the south embankment consisted of a cantilever concrete wall, impervious earthfill embankment, and a stoplog system at the powerhouse. The modifications to the north embankment consisted of a cantilever concrete wall, sheet pile cells/wall cutoff, and a structural slab. These PMF modifications will prevent overtopping and erosion of the embankments and thus prevent breach and failure of the dam.

CONSTRUCTION DATA

HOUSING FACILITIES
(Initial Project)

Permanent houses built ..... None
Semipermanent houses built 36
Domitories built:
- Staff (52 capacity) 1
- Men (360 total capacity) 6
- Women (25 capacity) 1

Public buildings constructed included a cafeteria (192 seats), hospital (18 beds), two community and recreation buildings, and gas station.

PERSONNEL
Initial Project

	Total	Dam Construction Only	Unit 4	Main Lock
Peak employed	3,500	1,800	180	560*
Total man-hours	13,824,356	7,468,771	556,985	2,002,320
Number of injuries	524	204	8	25
Days lost	41,578	27,548	279	7,757
Fatalities	3	3	0	0
Accident frequency	37.9	27.3	14.4	12.49
Accident severity	3,008	3,688	501	3,874

*Approximate.

QUANTITIES

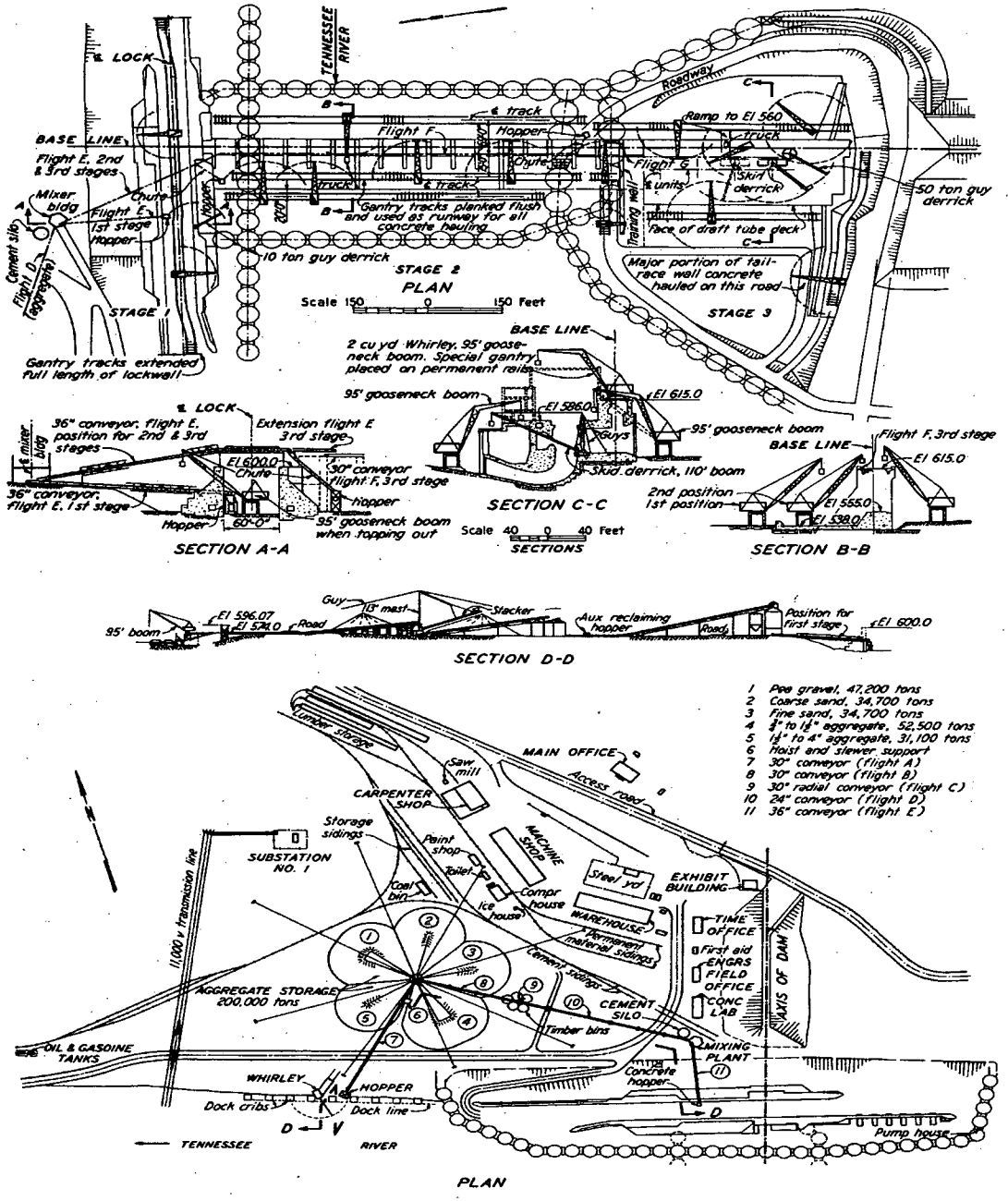
	Initial Project	Unit 4
Dam, lock, and power facilities:		
Earth excavation	409,000 cu. yd	
Rock excavation	129,000 cu. yd	
Earthfill	836,500 cu. yd	
Riprap	38,400 cu. yd	
Concrete	295,700 cu. yd	12,940 cu. yd
Reinforcing steel	4,600 tons	430 tons
Structural steel, powerhouse	1,206 tons	
Formwork	1,500,000 sq. ft	83,680 sq. ft
Highway and railroad:		
Excavation	2,150,000 cu. yd	

CONSTRUCTION DATA (CONT.)

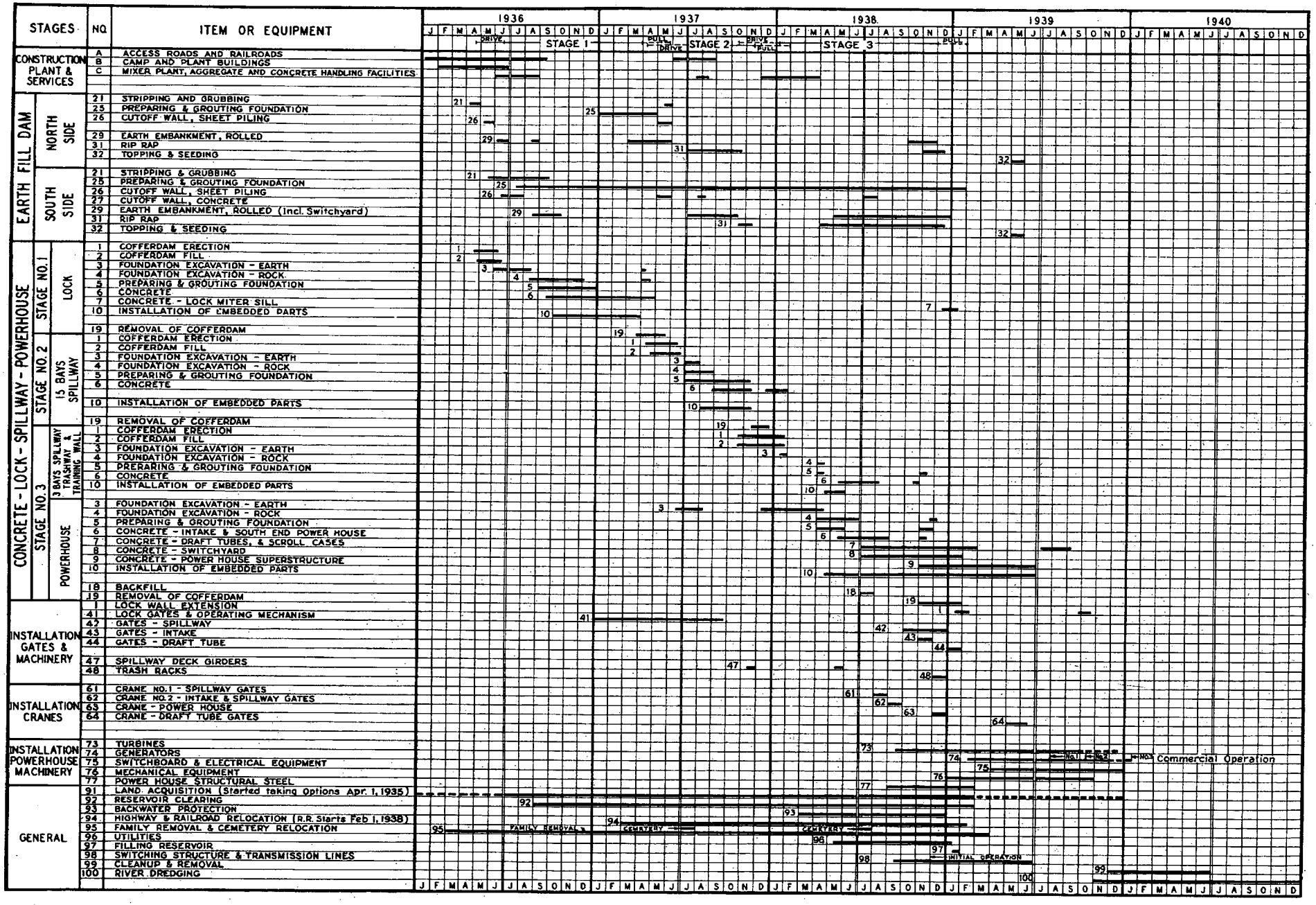
QUANTITIES (CONT.)

Main lock:

Earth excavation	981,000 cu. yd
Rock excavation	55,600 cu. yd
Dredging	177,000 cu. yd
Rolled fill	104,000 cu. yd
Backfill	83,000 cu. yd
Concrete	205,500 cu. yd
Reinforcing steel	1,600 tons
Formwork	783,000 sq. ft

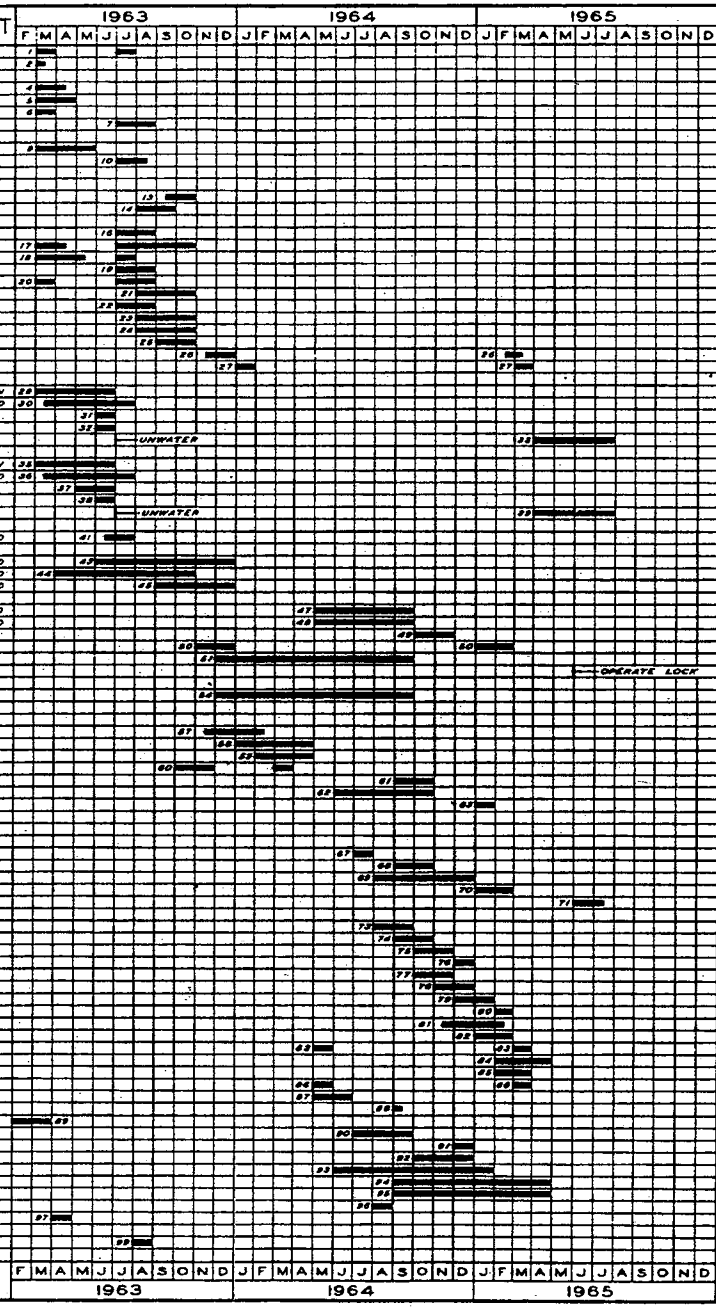


CONSTRUCTION PLANT LAYOUT



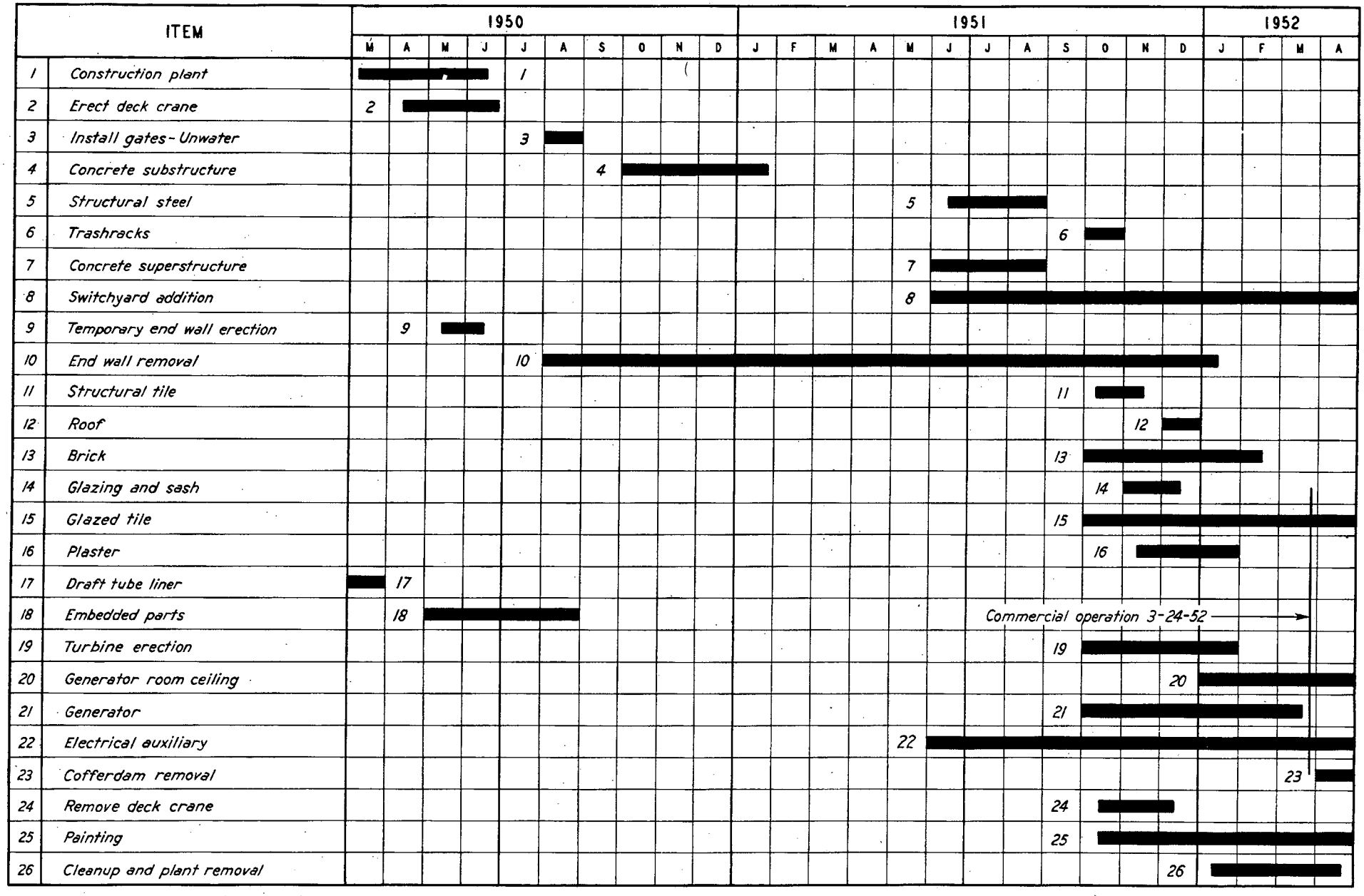
CONSTRUCTION SCHEDULE

		NO.	ITEM	QUAN	UNIT
CONSTRUCTION PLANT	ACCESS	1	ROADS & PARKING		
		2	DOCK FACILITY		
		3			
	GENERAL	4	TIME & PERSONNEL		
		5	ACCOUNTING & ADMINISTRATION		
		6	WAREHOUSE		
		7	HOSPITAL		
		8			
	SHOPS	9	EQUIPMENT - MACHINE & GD		
		10	CARPENTER		
		11			
		12			
		13	REINFORCING		
		14	PIPE, IRON, METAL & ELECTRICAL		
		15			
	UTILITIES	16	COMPRESSED AIR		
		17	POWER		
		18	TELEPHONE		
		19	RAW WATER & FIRE PROTECTION		
		20	TREATED WATER & SEWERAGE		
	CONCRETE PLANT	21	MIXING PLANT		
		22	AGGREGATE STORAGE		
		23	AGGREGATE RINSING & SCREENING		
		24	FLY ASH FACILITIES		
		25	CONCRETE LAB		
	OTHER	26	ERECT GANTRY CRANE & REMOVE		
		27	BUILD BRIDGE OVER DISCHARGE OUTLET & REMOVE		
		28			
COFFERDAMS	DOWNSTREAM	29	SET 21 CELLS - 80 FT DIAM	2,700	TON
		30	FILL CELLS	90,000	CU YD
		31	CONNECTION TO LOCK WALL		
		32	SHEET PILE CUT-OFF & DIKE		
		33	REMOVE		
		34			
	UPSTREAM	35	SET 5 CELLS 70 FT DIAM & 8 CELLS 24 FT DIAM	1,800	TON
		36	FILL CELLS	60,000	CU YD
		37	CONNECTION TO LOCK WALL		
		38	SHEET PILE CUT-OFF		
		39	REMOVE		
		40			
EXCAVATION & FILL	EXCAVATION	41	EXCAVATE NORTH EMBANKMENT	56,000	CU YD
		42			
		43	EXCAVATE EARTH (CHANNEL)	887,000	CU YD
		44	EXCAVATE EARTH	425,000	CU YD
		45	EXCAVATE ROCK	42,000	CU YD
	FILL	46			
		47	RECONSTRUCT NORTH EMBANKMENT	85,000	CU YD
		48	BACKFILL - LAND WALL	100,000	CU YD
		49	- BETWEEN LOCKS		
		50	RIPRAP - NORTH SHORE		
CONCRETE	MAIN LOCK	51	LAND WALL		
		52			
		53			
		54	RIVER WALL		
		55			
		56			
		57	DISCHARGE STRUCTURE & LOWER SILL		
		58	UPPER SILL - M1-M3		
		59	DAM - BETWEEN LOCKS		
		60	LOWER APPROACH WALLS - L19 - L32 & R19		
		61	FILL - EMPTY TRENCHES		
		62	OPERATION BUILDING & CONTROL SHELTERS		
		63	MAINTENANCE BRIDGE		
		64			
		65			
		66			
	FLOATING BOOM	67	SITE PREPARATION		
		68	UPSTREAM ANCHORAGES		
		69	PONTOONS		
		70	OUTFITTING		
		71	SETTING		
		72			
EQUIPMENT	UPPER GATE	73	ERECT		
		74	WELD		
		75	PAINT		
		76	OPERATING MACHINERY		
	LOWER GATE	77	ERECT		
		78	WELD		
		79	PAINT		
		80	OPERATING MACHINERY		
	VALVES	81	ERECT		
		82	OPERATING MACHINERY		
	OTHER	83	BULKHEADS		
		84	MOORING BITTS		
		85	TOWING EQUIPMENT		
		86	TEMPORARY DAMS		
		87	TRASHRACKS		
		88	MOBILE CRANE		
OTHER		89	DRY-PACK CONTR JTS - EXISTING LOCK - HOLD DOWN CONC		
		90	CABLE TRAYS & SUPPORTS		
		91	MAINTENANCE BRIDGE STEEL		
		92	HANDRAILS & GRATING		
		93	ARCHITECTURAL INSTALLATIONS		
		94	ELECTRICAL INSTALLATIONS		
		95	MECHANICAL INSTALLATIONS		
		96	FLOATING CAISSON RECESS FILLERS		
		97	RELOCATE PIPE LINES IN EXCAVATION AREA		
		98			
		99	RELOCATE TRANSMISSION TOWER		
		100			



LEGEND:
Under construction
Complete

GENERAL
MAIN LOCK
DETAILED
CONSTRUCTION SCHEDULE
GUNTERSVILLE PROJECT
TENNESSEE VALLEY AUTHORITY
60K12000H



CONSTRUCTION SCHEDULE - UNIT 4

TENNESSEE VALLEY AUTHORITY
RIVER SYSTEM OPERATIONS & ENVIRONMENT
RIVER OPERATIONS

GUNTERSVILLE DAM

SPILLWAY DISCHARGE TABLES

MARCH 2004

Guntersville Spillway Discharge Tables
Attachment 23

CONTENTS

INSTRUCTIONS FOR USE OF TABLES

1. Tables Update

These tables supersede the tables issued in February 1948 and revised in July 1974. The tables were revised to increase the maximum headwater elevation covered in the tables from 597 feet to 600 feet. They were revised also to reflect the discharge values obtained from SPILLQ, which is a computer code used in TVA software for monitoring spill discharges and determining gate arrangements.

2. Purpose of Tables

These tables provide a means for setting required spillway discharges and for determining the discharge when a specific arrangement of gates is in use. Discharge through a gate depends on the headwater and tailwater elevations and is affected by the discharge of the adjacent gates, particularly when the lower leaf is removed. The tabulated discharges are based on test results from scale models.

The specific gate arrangements in the tables were determined by considering the best conditions for navigation below the dam and erosion below the spillway apron. In addition, the specified arrangements minimize travel of the gantry crane used for manipulating the gates, under the assumption that only one crane is available for spillway gate operation.

3. Range of Tables

The tables cover the complete range of operating conditions. Discharges range from 0 to 610,000 cubic feet per second. Headwater elevations range from 590 feet to 600 feet. Tailwater elevations range from the minimum possible elevation to elevation 595.5 feet. The range of discharges for each tailwater elevation is ample to cover all operations. The tables do not include discharges for tailwater elevations at which such discharges could never occur (500,000 cubic feet per second with tailwater elevation below 572.5 feet, for example).

4. Arrangement of Tables

The tables show spillway discharges in cubic feet per second for each 0.2 foot of headwater elevation and for various ranges of tailwater elevation.

Headwater elevations in 0.2-foot increments are shown at the top of each column. The headwater and tailwater range is shown at the bottom of each page. The first tailwater range covers all tailwater elevations up to and including elevation 572.5 feet. Discharges in this tailwater range are given for headwater elevations between 590 feet and 600 feet, which requires 6 pages in the tables. The next tailwater range is from elevation 572.51 feet to 573.50 feet, requiring another 6 pages. Other tables cover tailwater ranges up to elevation 595.50 feet.

The discharge is tabulated under the headwater elevations for specific arrangements of gate openings, which are indicated by number in the left and right columns of each page. The numbered arrangements are defined in the table of Spillway Gate Arrangements on pages 5 and 6. Reference to this table and to the drawing showing the location of the gates on page 4 will determine the gate opening to which each gate is to be set for any particular discharge given in the tables.

5. Discharge Intervals

The tables have been prepared so that the incremental discharge between tabulated values for consecutive gate arrangements is generally less than 5 percent of the tabulated discharge. The differences between tabulated discharges caused by a change of one increment in headwater elevation are generally 1 percent or less. The differences in discharges caused by a change in tailwater elevation are also generally 1 percent or less. These limits are exceeded in some cases near the extreme ends of the tables where operation is relatively infrequent. In general it is possible to set any required discharge within about 2-1/2 percent and to know the actual discharge for any given set of conditions within 1 percent. These tolerances are considered acceptable and therefore it will not be necessary to interpolate between values given in these tables.

When the exact headwater elevation does not appear in the tables, the discharge for the headwater elevation closest to it is used. For example, the column headed 594.2 is used for actual headwater elevations between 594.10 feet and 594.29 feet inclusive. When the actual headwater elevation is exactly halfway between tabular values, the larger value is used.

6. Use of Tables

The tables can be used in two ways: (1) to determine the arrangement of gates needed to pass a required discharge at a given headwater and tailwater elevation, and (2) to determine the discharge for a given arrangement of gates and headwater and tailwater elevation.

In setting up any required gate arrangement from the condition of all gates closed, or in passing from one gate arrangement to another, the desired gate openings may be set in any convenient order without setting up all intervening gate arrangements. Temporary undesirable conditions that may result while the change is being made should cause no permanent harm since the entire change will usually take no more than a few hours.

Example 1 -- What gate arrangement is necessary to pass a discharge of 110,000 cubic feet per second with the headwater at elevation 594.43 feet and the tailwater at elevation 567.18 feet?

The first step is to determine which pages of the tables include this tailwater within their tailwater range. Referring to the contents page, we find that tailwater range "Up to 572.5" is found on pages 7 to 12. Within those pages, pages 9 and 10 cover headwater elevations between 594 feet and 598 feet. The headwater elevation closest to 594.43 feet is 594.4 feet. In the column with this heading on page 10, the discharge closest to 110,000 cubic feet per second is 109,600 cubic feet per second and the corresponding gate arrangement is number 57. Reference to the table of gate arrangements on page 5 shows that the gates should be opened as follows: gates 1 and 2 opened to 5 feet, gates 3 through 16 opened to 9 feet, and gates 17 and 18 closed.

After the gates are opened, changes in the headwater elevation or tailwater elevation may require changes in the gate arrangement to maintain the desired discharge. For example, if the headwater should fall to 594.29 feet, the discharge will be found in the column headed 594.2. In this column the discharge closest to 110,000 cubic feet per second is 108,800 cubic feet per second for gate arrangement 57. Accordingly, no change in gate arrangement would be necessary. It may be seen further that the gate arrangement would not be changed until the headwater elevation fell to 593.89 feet or below. For headwater elevation 593.8 feet, gate arrangement 58 will give the discharge closest to 110,000 cubic feet per second. To change to gate arrangement 58 from gate arrangement 57, it is necessary to remove the upper leaf of gate 6.

Example 2 – The effect of a change in tailwater elevation is shown by this example. Suppose it is required to discharge 250,000 cubic feet per second with the headwater elevation at 593.64 feet and the tailwater elevation at 579.32 feet. The pages to be used are those marked "Tailwater 578.51 to 579.50." The headwater elevation closest to 593.64 feet is 593.6 feet. In the column headed 593.6 on page 49 the discharge closest to 250,000 cubic feet per second is 252,200 cubic feet per second at gate arrangement 89. Referring to the table of gate arrangements, page 6, it is found that gates 4 and 18 are closed, gate 17 is opened to 9 feet, gates 1, 2, 3, 5, 7, 9, 11, 13, 14, 15, and 16 have their upper leaves removed, and gates 6, 8, 10, and 12 have both the upper and lower leaves removed. If operation under these conditions causes the tailwater to fall to elevation 577.8 feet, the set of pages marked "Tailwater 577.51 to 578.50" are used. At the same headwater elevation the discharge closest to 250,000 cubic feet per second is 245,600 cubic feet per second for gate arrangement 87. To change to gate arrangement 87 from gate arrangement 89, it is necessary to remove the upper leaf of gate 4 and replace the lower leaf of gate 6.

Example 3 -- Suppose the operating records show that the headwater is at elevation 594.30 feet, the tailwater is at elevation 562.2 feet, and gate arrangement 52 is in use. The first part of the table marked "Tailwater Up to 572.5" is applicable. The headwater is found on page 9, which is marked "Headwater 594 to 598." The elevation given is exactly halfway between elevations 594.2 feet and 594.4 feet. The larger value, 594.4 feet, should be used. In the column headed 594.4, opposite gate arrangement 52, the discharge is found to be 94,750 cubic feet per second.

7. Trash Gate

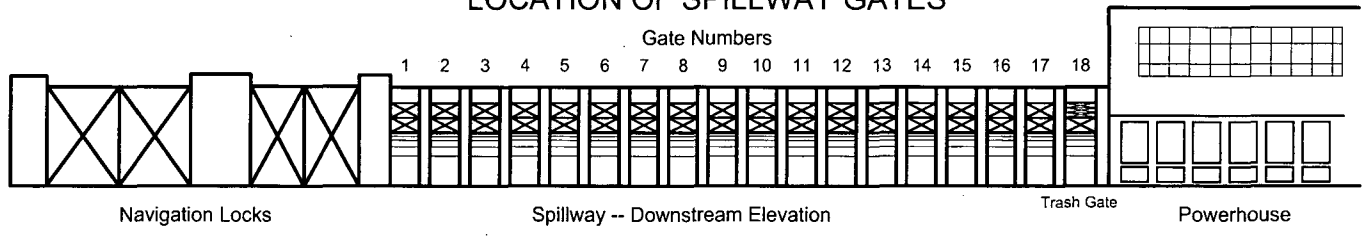
Gate 18 differs from the other spillway gates in that the upper half is divided into three separate sections that can be removed as necessary to pass trash. Because operation of Gate 18 for trash removal is independent of normal spilling operations, the discharge through Gate 18 that occurs during trash removal is not included in the spillway discharge tables. The trash removal discharge, which is given in the tables on page 104, must always be added to the discharge obtained from the spillway discharge tables to obtain the total spillway discharge.

When Gate 18 is opened as part of normal spilling operations (gate arrangements 113 through 120), its discharge is included in the spillway discharge tables. The discharge that occurs when Gate 18 is closed but overflowing (headwater elevation greater than 595.44 feet) is also included in the spillway discharge tables. In these cases, no additional discharge should be added to the discharge obtained from the spillway discharge tables.

Because the discharge over Gate 18 when it is closed and the headwater elevation is greater than 595.44 feet is already included in the spillway tables, the trash gate discharges on page 104 reflect only the added discharge due to removing gate sections.

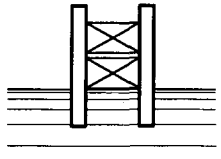
GUNTERSVILLE DAM

LOCATION OF SPILLWAY GATES

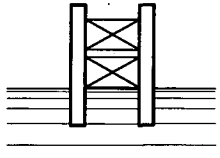


KEY TO GATE ARRANGEMENT TABLES

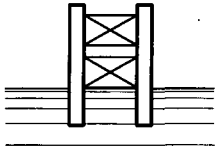
Symbols Refer To Gate Openings As Used In The Gate Arrangement Tables, Pages 5 and 6



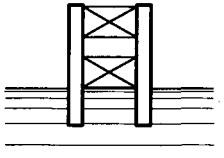
1
Upper Leaf Open One Foot



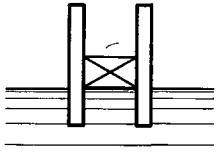
3
Upper Leaf Open Three Feet



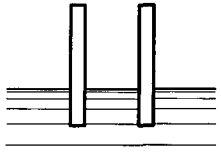
5
Upper Leaf Open Five Feet



9
Upper Leaf Open Nine Feet



U
Upper Leaf Removed



L
Both Leaves Removed

GUNTERSVILLE DAM

SPILLWAY GATE ARRANGEMENTS

Arrangement Number	Gate Number																	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-
2	-	-	-	-	-	3	-	-	-	-	-	-	-	-	-	-	-	-
3	-	-	-	-	-	3	1	-	-	-	-	-	-	-	-	-	-	-
4	-	-	-	-	-	3	3	-	-	-	-	-	-	-	-	-	-	-
5	-	-	-	-	-	3	3	-	-	-	-	1	-	-	-	-	-	-
6	-	-	-	-	-	3	3	-	-	-	-	3	-	-	-	-	-	-
7	-	-	-	-	-	3	3	-	-	-	-	3	1	-	-	-	-	-
8	-	-	-	-	-	3	3	-	-	-	-	3	3	-	-	-	-	-
9	-	-	-	-	-	3	3	-	-	-	-	3	3	-	-	1	-	-
10	-	-	-	-	-	3	3	-	-	-	-	3	3	-	-	3	-	-
11	-	-	-	-	-	3	3	-	-	-	-	3	3	-	1	3	-	-
12	-	-	-	-	-	3	3	-	-	-	-	3	3	-	3	3	-	-
13	-	-	-	-	-	3	3	-	-	1	-	3	3	-	3	3	-	-
14	-	-	-	-	-	3	3	-	-	3	-	3	3	-	3	3	-	-
15	-	-	-	-	-	3	3	-	1	3	-	3	3	-	3	3	-	-
16	-	-	-	-	-	3	3	-	3	3	-	3	3	-	3	3	-	-
17	-	-	-	1	-	3	3	-	3	3	-	3	3	-	3	3	-	-
18	-	-	-	3	-	3	3	-	3	3	-	3	3	-	3	3	-	-
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21	-	3	-	5	-	3	3	-	3	3	-	3	3	-	3	3	-	-
22	-	3	-	5	-	5	3	-	3	3	-	3	3	-	3	3	-	-
23	-	3	-	5	-	5	5	-	3	3	-	3	3	-	3	3	-	-
24	-	3	-	5	-	5	5	-	5	3	-	3	3	-	3	3	-	-
25	-	3	-	5	-	5	5	-	5	5	-	3	3	-	3	3	-	-
26	-	3	-	5	-	5	5	-	5	5	-	5	3	-	3	3	-	-
27	-	3	-	5	-	5	5	-	5	5	-	5	5	-	3	3	-	-
28	-	3	-	5	-	5	5	-	5	5	-	5	5	-	5	3	-	-
29	-	3	-	5	-	5	5	-	5	5	-	5	5	-	5	5	-	-
30	-	3	-	5	-	5	5	-	5	5	1	5	5	-	5	5	-	-

Arrangement Number	Gate Number																	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
31	-	3	-	5	-	5	5	-	5	5	3	5	5	-	5	5	-	-
32	-	3	-	5	-	5	5	-	5	5	5	5	5	-	5	5	-	-
33	-	3	-	5	-	5	5	1	5	5	5	5	5	-	5	5	-	-
34	-	3	-	5	-	5	5	3	5	5	5	5	5	-	5	5	-	-
35	-	3	-	5	-	5	5	5	5	5	5	5	5	-	5	5	-	-
36	-	3	-	5	1	5	5	5	5	5	5	5	5	-	5	5	-	-
37	-	3	-	5	3	5	5	5	5	5	5	5	5	-	5	5	-	-
38	-	3	-	5	5	5	5	5	5	5	5	5	5	-	5	5	-	-
39	3	3	-	5	5	5	5	5	5	5	5	5	5	-	5	5	-	-
40	3	3	3	5	5	5	5	5	5	5	5	5	5	-	5	5	-	-
41	3	3	5	5	5	5	5	5	5	5	5	5	5	-	5	5	-	-
42	3	3	5	9	5	5	5	5	5	5	5	5	5	-	5	5	-	-
43	3	3	5	9	5	9	5	5	5	5	5	5	5	-	5	5	-	-
44	3	3	5	9	5	9	9	5	5	5	5	5	5	-	5	5	-	-
45	3	3	5	9	5	9	9	5	5	9	5	5	5	-	5	5	-	-
46	3	3	5	9	5	9	9	5	5	9	5	9	5	-	5	5	-	-
47	3	3	5	9	5	9	9	5	5	9	5	9	9	-	5	5	-	-
48	3	3	5	9	5	9	9	5	5	9	5	9	9	-	9	5	-	-
49	3	3	5	9	5	9	9	5	5	9	5	9	9	-	9	9	-	-
50	3	3	5	9	5	9	9	5	5	9	5	9	9	5	9	9	-	-
51	3	3	5	9	5	9	9	5	5	9	5	9	9	9	9	9	-	-
52	3	3	5	9	5	9	9	5	5	9	9	9	9	9	9	9	-	-
53	3	3	5	9	5	9	9	5	9	9	9	9	9	9	9	9	-	-
54	3	3	5	9	5	9	9	9	9	9	9	9	9	9	9	9	-	-
55	3	3	5	9	9	9	9	9	9	9	9	9	9	9	9	9	-	-
56	5	5	5	9	9	9	9	9	9	9	9	9	9	9	9	9	-	-
57	5	5	9	9	9	9	9	9	9	9	9	9	9	9	9	9	-	-
58	5	5	9	9	9	U	9	9	9	9	9	9	9	9	9	9	-	-
59	5	5	9	9	9	U	U	9	9	9	9	9	9	9	9	9	-	-
60	5	5	9	9	9	U	U	9	U	9	9	9	9	9	9	9	-	-

GATE OPENING LEGEND

Gate openings are shown in the vertical columns under each Gate Number as follows:

1 - Upper leaf open 1 foot

3 - Upper leaf open 3 feet

5 - Upper leaf open 5 feet

9 - Upper leaf open 9 feet

U - Upper leaf out

L - Lower leaf out

GUNTERSVILLE DAM

SPILLWAY GATE ARRANGEMENTS

Arrangement Number	Gate Number																	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
61	5	5	9	9	9	U	U	9	U	U	9	9	9	9	9	9	-	-
62	5	5	9	9	9	U	U	9	U	U	9	U	9	9	9	9	-	-
63	5	5	9	9	9	U	U	9	U	U	9	U	U	9	9	9	-	-
64	5	5	9	9	9	U	U	9	U	U	9	U	U	9	U	9	-	-
65	5	5	9	9	9	U	U	9	U	U	9	U	U	9	U	U	-	-
66	5	5	9	9	9	U	U	9	U	U	9	U	U	9	U	U	5	-
67	5	5	9	9	9	U	U	9	U	U	9	U	U	9	U	U	9	-
68	5	5	9	9	9	U	U	9	U	U	9	U	U	U	U	U	9	-
69	5	5	9	9	9	U	U	9	U	U	U	U	U	U	U	U	9	-
70	5	5	9	9	9	U	U	U	U	U	U	U	U	U	U	U	9	-
71	5	5	9	9	U	U	U	U	U	U	U	U	U	U	U	U	9	-
72	5	5	U	9	U	U	U	U	U	U	U	U	U	U	U	U	9	-
73	5	U	U	9	U	U	U	U	U	U	U	U	U	U	U	U	9	-
74	U	U	U	9	U	U	U	U	U	U	U	U	U	U	U	U	9	-
75	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	9	-
76	U	U	U	U	-	U	U	-	U	U	U	L	U	U	U	U	9	-
77	U	U	U	U	-	U	U	9	U	U	U	L	U	U	U	U	9	-
78	U	U	U	U	-	U	U	U	U	U	U	L	U	U	U	U	9	-
79	U	U	U	U	9	U	U	U	U	U	U	L	U	U	U	U	9	-
80	U	U	U	U	U	U	U	U	U	U	U	L	U	U	U	U	9	-
81	U	U	U	U	-	U	U	-	U	L	U	L	U	U	U	U	9	-
82	U	U	U	U	-	U	U	9	U	L	U	L	U	U	U	U	9	-
83	U	U	U	U	-	U	U	U	U	L	U	L	U	U	U	U	9	-
84	U	U	U	U	U	U	U	U	U	L	U	L	U	U	U	U	9	-
85	U	U	-	U	U	U	U	L	U	L	U	L	U	-	U	U	9	-
86	U	U	-	U	U	U	U	L	U	L	U	L	U	U	U	U	9	-
87	U	U	U	U	U	U	U	L	U	L	U	L	U	U	U	U	9	-
88	U	U	U	-	U	L	U	L	U	L	U	L	U	-	U	U	9	-
89	U	U	U	-	U	L	U	L	U	L	U	L	U	U	U	U	9	-
90	U	U	U	U	U	L	U	L	U	L	U	L	U	U	U	U	9	-

Arrangement Number	Gate Number																	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
91	U	U	U	L	U	L	U	L	U	L	U	L	U	-	U	-	9	-
92	U	U	U	L	U	L	U	L	U	L	U	L	U	-	U	U	9	-
93	U	U	U	L	U	L	U	L	U	L	U	L	U	U	U	U	9	-
94	U	U	U	L	U	L	U	L	U	L	L	L	U	-	U	-	9	-
95	U	U	U	L	U	L	U	L	U	L	L	L	U	-	U	U	9	-
96	U	U	U	L	U	L	U	L	U	L	L	L	U	U	U	U	9	-
97	U	U	U	L	L	L	U	L	U	L	L	L	U	-	U	-	9	-
98	U	U	U	L	L	L	U	L	U	L	L	L	U	-	U	U	9	-
99	U	U	U	L	L	L	U	L	U	L	L	L	U	U	U	U	9	-
100	U	U	U	L	L	L	U	L	L	L	L	L	U	-	U	-	9	-
101	U	U	U	L	L	L	U	L	L	L	L	L	U	-	U	U	9	-
102	U	U	U	L	L	L	U	L	L	L	L	L	U	U	U	U	9	-
103	U	U	U	L	L	L	L	L	L	L	L	L	U	-	U	-	9	-
104	U	U	U	L	L	L	L	L	L	L	L	L	U	-	U	U	9	-
105	U	U	U	L	L	L	L	L	L	L	L	L	U	U	U	U	9	-
106	U	U	U	L	L	L	L	L	L	L	L	L	L	U	-	-	U	-
107	U	U	U	L	L	L	L	L	L	L	L	L	L	U	U	U	U	-
108	U	U	U	L	L	L	L	L	L	L	L	L	L	L	U	U	-	-
109	U	U	U	L	L	L	L	L	L	L	L	L	L	L	U	U	U	-
110	U	U	U	L	L	L	L	L	L	L	L	L	L	L	L	U	-	-
111	U	U	U	L	L	L	L	L	L	L	L	L	L	L	L	L	U	-
112	U	U	U	L	L	L	L	L	L	L	L	L	L	L	L	L	-	-
113	U	U	U	L	L	L	L	L	L	L	L	L	L	L	L	L	U	U
114	-	U	L	L	L	L	L	L	L	L	L	L	L	L	L	L	U	U
115	U	U	L	L	L	L	L	L	L	L	L	L	L	L	L	L	U	U
116	-	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	U	U
117	U	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	U	U
118	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	U	U
119	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	U
120	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L

GATE OPENING LEGEND

Gate openings are shown in the vertical columns under each Gate Number as follows:

1 - Upper leaf open 1 foot

3 - Upper leaf open 3 feet

5 - Upper leaf open 5 feet

9 - Upper leaf open 9 feet

U - Upper leaf out

L - Lower leaf out

GUNTERSVILLE DAM
SPILLWAY DISCHARGE
IN CUBIC FEET PER SECOND

GATE ARRANGEMENT	HEADWATER ELEVATION																				GATE ARRANGEMENT
	590.0	590.2	590.4	590.6	590.8	591.0	591.2	591.4	591.6	591.8	592.0	592.2	592.4	592.6	592.8	593.0	593.2	593.4	593.6	593.8	594.0	
1	900	910	920	920	930	930	940	940	950	950	960	970	970	980	980	990	990	1,000	1,000	1,010	1,010	1
2	2,380	2,400	2,420	2,430	2,450	2,470	2,480	2,500	2,510	2,530	2,550	2,560	2,580	2,590	2,610	2,620	2,640	2,650	2,670	2,680	2,700	2
3	3,290	3,310	3,330	3,360	3,380	3,400	3,420	3,440	3,460	3,490	3,510	3,530	3,550	3,570	3,590	3,610	3,630	3,650	3,670	3,690	3,710	3
4	4,770	4,800	4,840	4,870	4,900	4,930	4,970	5,000	5,030	5,060	5,090	5,120	5,150	5,180	5,210	5,240	5,270	5,300	5,330	5,360	5,390	4
5	5,670	5,710	5,750	5,790	5,830	5,870	5,900	5,940	5,980	6,020	6,050	6,090	6,120	6,160	6,200	6,230	6,270	6,300	6,340	6,370	6,400	5
6	7,150	7,200	7,250	7,300	7,350	7,400	7,450	7,500	7,540	7,590	7,640	7,680	7,730	7,780	7,820	7,870	7,910	7,960	8,000	8,040	8,090	6
7	8,060	8,110	8,170	8,220	8,280	8,330	8,390	8,440	8,490	8,550	8,600	8,650	8,700	8,750	8,800	8,850	8,900	8,950	9,000	9,050	9,100	7
8	9,540	9,610	9,670	9,740	9,800	9,870	9,930	10,000	10,060	10,120	10,180	10,250	10,310	10,370	10,430	10,490	10,550	10,610	10,670	10,730	10,780	8
9	10,440	10,510	10,590	10,660	10,730	10,800	10,870	10,940	11,010	11,080	11,140	11,210	11,280	11,350	11,410	11,480	11,540	11,610	11,670	11,730	11,800	9
10	11,920	12,010	12,090	12,170	12,250	12,330	12,420	12,500	12,570	12,650	12,730	12,810	12,880	12,960	13,040	13,110	13,190	13,260	13,330	13,410	13,480	10
11	12,830	12,920	13,000	13,090	13,180	13,270	13,350	13,440	13,520	13,610	13,690	13,770	13,860	13,940	14,020	14,100	14,180	14,260	14,340	14,410	14,490	11
12	14,310	14,410	14,510	14,610	14,700	14,800	14,900	14,990	15,090	15,180	15,280	15,370	15,460	15,550	15,640	15,730	15,820	15,910	16,000	16,090	16,180	12
13	15,210	15,320	15,420	15,530	15,630	15,730	15,840	15,940	16,040	16,140	16,240	16,340	16,430	16,530	16,630	16,720	16,820	16,910	17,000	17,100	17,190	13
14	16,690	16,810	16,930	17,040	17,160	17,270	17,380	17,490	17,600	17,710	17,820	17,930	18,040	18,150	18,250	18,360	18,460	18,560	18,670	18,770	18,870	14
15	17,600	17,720	17,840	17,960	18,080	18,200	18,320	18,440	18,550	18,670	18,780	18,900	19,010	19,120	19,230	19,340	19,450	19,560	19,670	19,780	19,880	15
16	19,080	19,210	19,340	19,480	19,610	19,740	19,860	19,990	20,120	20,240	20,370	20,490	20,620	20,740	20,860	20,980	21,100	21,220	21,330	21,450	21,570	16
17	19,980	20,120	20,260	20,400	20,530	20,670	20,800	20,940	21,070	21,200	21,330	21,460	21,590	21,710	21,840	21,970	22,090	22,210	22,340	22,460	22,580	17
18	21,460	21,610	21,760	21,910	22,060	22,200	22,350	22,490	22,630	22,770	22,920	23,050	23,190	23,330	23,470	23,600	23,740	23,870	24,000	24,130	24,260	18
19	22,360	22,520	22,680	22,830	22,980	23,140	23,290	23,430	23,580	23,730	23,880	24,020	24,160	24,310	24,450	24,590	24,730	24,870	25,000	25,140	25,280	19
20	23,850	24,010	24,180	24,340	24,510	24,670	24,830	24,990	25,150	25,310	25,460	25,620	25,770	25,920	26,070	26,220	26,370	26,520	26,670	26,810	26,960	20
21	25,170	25,350	25,530	25,700	25,880	26,050	26,220	26,390	26,560	26,730	26,900	27,060	27,230	27,390	27,550	27,710	27,870	28,030	28,190	28,350	28,500	21
22	26,490	26,680	26,870	27,060	27,250	27,430	27,620	27,800	27,980	28,160	28,340	28,510	28,690	28,860	29,030	29,210	29,380	29,540	29,710	29,880	30,040	22
23	27,820	28,020	28,220	28,420	28,620	28,810	29,010	29,200	29,390	29,580	29,770	29,960	30,150	30,330	30,510	30,700	30,880	31,060	31,230	31,410	31,590	23
24	29,140	29,350	29,560	29,780	29,990	30,190	30,400	30,600	30,810	31,010	31,210	31,410	31,600	31,800	31,990	32,190	32,380	32,570	32,760	32,940	33,130	24
25	30,460	30,690	30,910	31,130	31,350	31,570	31,790	32,010	32,220	32,430	32,650	32,860	33,060	33,270	33,470	33,680	33,880	34,080	34,280	34,480	34,670	25
26	31,790	32,020	32,260	32,490	32,720	32,960	33,180	33,410	33,640	33,860	34,080	34,300	34,520	34,740	34,950	35,170	35,380	35,590	35,800	36,010	36,220	26
27	33,110	33,360	33,600	33,850	34,090	34,340	34,580	34,820	35,050	35,290	35,520	35,750	35,980	36,210	36,430	36,660	36,880	37,100	37,320	37,540	37,760	27
28	34,440	34,690	34,950	35,210	35,460	35,720	35,970	36,220	36,470	36,710	36,960	37,200	37,440	37,680	37,910	38,150	38,380	38,620	38,850	39,070	39,300	28
29	35,760	36,030	36,300	36,560	36,830	37,100	37,360	37,620	37,880	38,140	38,390	38,650	38,900	39,150	39,390	39,640	39,880	40,130	40,370	40,610	40,840	29
30	36,660	36,940	37,210	37,490	37,760	38,030	38,300	38,570	38,830	39,090	39,350	39,610	39,870	40,120	40,380	40,630	40,880	41,120	41,370	41,610	41,860	30
31	38,140	38,430	38,710	39,000	39,280	39,560	39,840	40,120	40,400	40,670	40,940	41,210	41,470	41,740	42,000	42,260	42,520	42,780	43,030	43,290	43,540	31
32	39,470	39,770	40,060	40,360	40,650	40,950	41,240	41,520	41,810	42,090	42,380	42,660	42,930	43,210	43,480	43,750	44,020	44,290	44,560	44,820	45,080	32
33	40,370	40,680	40,980	41,280	41,580	41,880	42,170	42,470	42,760	43,050	43,340	43,620	43,900	44,190	44,460	44,740	45,020	45,290	45,560	45,830	46,090	33
34	41,850	42,170	42,480	42,790	43,100	43,410	43,720	44,020	44,330	44,630	44,920	45,220	45,510	45,800	46,090	46,380	46,660	46,940	47,220	47,500	47,780	34
35	43,180	43,500	43,820	44,150	44,470	44,790	45,110	45,430	45,740	46,050	46,360	46,670	46,970	47,270	47,570	47,870	48,160	48,450	48,750	49,030	49,320	35
36	44,080	44,410	44,740	45,070	45,400	45,730	46,050	46,370	46,690	47,010	47,320	47,630	47,940	48,250	48,550	48,850	49,150	49,450	49,750	50,040	50,330	36
37	45,560	45,900	46,240	46,580	46,920	47,260	47,590	47,930	48,260	48,580	48,910	49,230	49,550	49,860	50,180	50,490	50,800	51,110	51,410	51,720	52,020	37
38	46,890	47,240	47,590	47,940	48,290	48,640	48,990	49,330	49,670	50,010	50,340	50,680	51,000	51,330	51,660	51,980	52,300	52,620	52,930	53,250	53,560	38
39	49,270	49,640	50,010	50,380	50,740	51,110	51,470	51,830	52,180	52,540	52,890	53,240	53,580	53,920	54,260	54,600	54,940	55,270	55,600	55,930	56,260	39
40	51,650	52,040	52,420	52,810	53,190	53,580	53,950	54,330	54,700	55,070	55,430	55,800	56,160	56,520	56,870	57,220	57,570	57,920	58,270	58,610	58,950	40
41	52,980	53,380	53,770	54,170	54,560	54,960	55,350	55,730	56,110	56,490	56,870	57,250	57,620	57,990	58,350	58,720	59,080	59,430	59,790	60,140	60,490	41
42	55,330	55,750	56,170	56,590	57,010	57,420	57,830	58,240	58,650	59,060	59,470	59,870	60,270	60,670	61,060	61,450	61,840	62,230	62,610	62,990	63,370	42
43	57,670	58,120	58,560	59,010	59,450	59,880	60,320	60,750	61,190	61,630	62,070	62,500	62,930	63,350	63,770	64,190	64,610	65,020	65,430	65,840	66,240	43
44	60,020	60,490	60,960	61,430	61,890	62,350	62,800	63,260	63,730	64,200	64,660	65,120	65,580	66,030	66,480	66,930	67,370	67,810	68,250	68,680	69,120	44
45	62,370	62,860	63,350	63,840	64,330	64,810	65,290	65,780	66,270	66,770	67,260	67,750	68,230	68,710	69,190	69,670	70,140	70,600	71,070	71,530	71,990	45
46	64,720	65,240	65,750	66,260	66,770	67,280	67,770	68,290	68,810	69,340	69,860	70,370	70,890	71,400	71,900	72,400	72,900	73,400	73,890	74,380	74,860	46
47	67,060	67,610	68,150	68,680	69,210	69,740	70,260	70,800	71,350	71,910	72,460	73,000	73,540	74,080	74,610	75,140	75,670	76,190	76,710	77,220	77,740	47
48	69,410	69,980	70,540	71,100	71,650	72,200	72,750	73,310	73,890	74,480	75,050	75,630	76,200	76,760	77,320	77,880	78,430	78,980	79,530	80,070	80,610	48
49	71,760	72,350	72,940	73,520	74,100	74,670	75,230	75,820	76,430	77,040	77,650	78,250	78,850	79,440	80,030	80,620	81,200	81,770	82,350	82,920	83,490	49
50	75,470	76,090	76,700	77,310	77,920	78,510	79,110	79,720	80,360	81,000	81,630	82,260	82,880	83,500	84,120	84,730	85,340	85,940	86,540	87,130	87,720	50
51	77,820	78,460	79,100	79,730	80,360	80,980	81,590	82,230	82,900	83,570	84,230	84,890	85,540	86,190	86,830	87,470	88,100	88,730	89,360	89,980	90,600	51
52	80,160	80,830	81,490	82,150	82,800	83,440	84,080	84,740	85,440	86,140	86,830	87,510	88,190	88,870	89,540	90,200	90,870	91,520	92,180	92,830	93,470	52
53	82,510	83,200	83,890	84,570	85,240	85,910	86,560	87,260	87,980	88,710	89,430	90,140	90,850	91,550	92,250	92,940	93,630	94,320	95,000	95,670	96,350	53
54	84,860	85,580	86,290	86,990	87,680	88,370	89,050	89,770	90,520	91,280	92,020	92,760	93,500	94,230	94,960	95,680	96,400	97,110	97,820	98,520	99,220	54
55	87,210	87,950	88,680	89,410	90,120	90,830	91,530	92,280	93,060	93,850	94,620	95,390	96,150	96,910	97,670	98,420	99,160	99,900	100,600	101,400	102,100	55

MARCH 2004

HEADWATER 590 to 594
TAILWATER Up to 572.5

GUNTERSVILLE DAM
SPILLWAY DISCHARGE
IN CUBIC FEET PER SECOND

GATE ARRANGEMENT	HEADWATER ELEVATION																					GATE ARRANGEMENT
	590.0	590.2	590.4	590.6	590.8	591.0	591.2	591.4	591.6	591.8	592.0	592.2	592.4	592.6	592.8	593.0	593.2	593.4	593.6	593.8	594.0	
56	89,850	90,620	91,370	92,120	92,860	93,600	94,320	95,090	95,890	96,700	97,490	98,290	99,070	99,850	100,600	101,400	102,200	102,900	103,700	104,400	105,200	56
57	92,200	92,990	93,770	94,540	95,300	96,060	96,810	97,600	98,430	99,270	100,100	100,900	101,700	102,500	103,300	104,100	104,900	105,700	106,500	107,300	108,100	57
58	94,120	95,020	95,910	96,790	97,670	98,540	99,400	100,300	101,300	102,200	103,100	104,100	105,000	105,900	106,900	107,800	108,700	109,600	110,500	111,400	112,300	58
59	96,040	97,040	98,040	99,040	100,000	101,000	102,000	103,000	104,100	105,100	106,200	107,200	108,300	109,300	110,400	111,400	112,500	113,500	114,500	115,500	116,600	59
60	97,950	99,070	100,200	101,300	102,400	103,500	104,600	105,700	106,900	108,100	109,200	110,400	111,600	112,800	113,900	115,100	116,200	117,400	118,500	119,700	120,800	60
61	99,870	101,100	102,300	103,500	104,800	106,000	107,200	108,400	109,700	111,000	112,300	113,600	114,900	116,200	117,400	118,700	120,000	121,200	122,500	123,800	125,100	61
62	101,800	103,100	104,400	105,800	107,100	108,400	109,800	111,100	112,500	113,900	115,300	116,800	118,200	119,600	121,000	122,400	123,700	125,100	126,500	127,900	129,300	62
63	103,700	105,100	106,600	108,000	109,500	110,900	112,400	113,900	115,400	116,900	118,400	119,900	121,400	123,000	124,500	126,000	127,500	129,000	130,500	132,000	133,600	63
64	105,600	107,200	108,700	110,300	111,800	113,400	115,000	116,600	118,200	119,800	121,500	123,100	124,700	126,400	128,000	129,600	131,300	132,900	134,500	136,200	137,800	64
65	107,500	109,200	110,900	112,500	114,200	115,900	117,600	119,300	121,000	122,800	124,500	126,300	128,000	129,800	131,500	133,300	135,000	136,800	138,500	140,300	142,100	65
66	111,200	112,900	114,600	116,300	118,000	119,700	121,400	123,200	124,900	126,700	128,500	130,300	132,100	133,900	135,600	137,400	139,200	140,900	142,700	144,500	146,300	66
67	113,600	115,300	117,000	118,700	120,500	122,200	123,900	125,700	127,500	129,300	131,100	132,900	134,700	136,500	138,300	140,100	141,900	143,700	145,500	147,400	149,200	67
68	115,500	117,300	119,200	121,000	122,800	124,700	126,500	128,400	130,300	132,200	134,100	136,100	138,000	139,900	141,900	143,800	145,700	147,600	149,500	151,500	153,400	68
69	117,400	119,400	121,300	123,200	125,200	127,100	129,100	131,100	133,100	135,200	137,200	139,200	141,300	143,300	145,400	147,400	149,500	151,500	153,600	155,600	157,700	69
70	119,300	121,400	123,400	125,500	127,500	129,600	131,700	133,800	135,900	138,100	140,200	142,400	144,600	146,800	148,900	151,100	153,200	155,400	157,600	159,700	161,900	70
71	121,300	123,400	125,600	127,700	129,900	132,100	134,300	136,500	138,800	141,000	143,300	145,600	147,900	150,200	152,400	154,700	157,000	159,300	161,600	163,900	166,200	71
72	123,200	125,400	127,700	130,000	132,300	134,600	136,900	139,200	141,600	144,000	146,300	148,700	151,100	153,600	156,000	158,300	160,700	163,200	165,600	168,000	170,400	72
73	127,400	129,800	132,200	134,600	137,100	139,500	142,000	144,500	147,000	149,500	152,000	154,500	157,100	159,700	162,200	164,700	167,300	169,800	172,400	175,000	177,600	73
74	131,700	134,200	136,800	139,300	141,900	144,500	147,100	149,700	152,300	155,000	157,600	160,300	163,000	165,700	168,400	171,100	173,800	176,500	179,200	181,900	184,700	74
75	133,600	136,200	138,900	141,600	144,200	146,900	149,600	152,400	155,100	157,900	160,700	163,500	166,300	169,200	172,000	174,800	177,600	180,400	183,200	186,100	188,900	75
76	136,700	139,100	141,500	144,000	146,400	148,900	151,400	153,900	156,400	159,000												76
77	142,800	145,200	147,700	150,200	152,700	155,200	157,800	160,300	162,900	165,500	168,100	170,700	173,400	176,000	178,600	181,200	183,900	186,500	189,200	191,800	194,500	77
78	144,700	147,200	149,800	152,400	155,100	157,700	160,400	163,000	165,700	168,400	171,200	173,900	176,600	179,400	182,200	184,900	187,600	190,400	193,200	196,000	198,800	78
79	150,700	153,400	156,000	158,700	161,300	164,000	166,700	169,400	172,200	175,000	177,700	180,500	183,300	186,200	189,000	191,700	194,500	197,400	200,200	203,000	205,900	79
80	152,600	155,400	158,100	160,900	163,700	166,500	169,300	172,200	175,000	177,900	180,800	183,700	186,600	189,600	192,500	195,400	198,300	201,200	204,200	207,100	210,100	80
81	155,700	158,200	160,800	163,300	165,900	168,500	171,100	173,700	176,300	178,900												81
82	161,800	164,300	166,900	169,500	172,200	174,800	177,400	180,100	182,800	185,500	188,200	190,900	193,700	196,400	199,200	201,900	204,600	207,400	210,100	212,900	215,700	82
83	163,700	166,400	169,100	171,800	174,500	177,300	180,000	182,800	185,600	188,400	191,200	194,100	196,900	199,800	202,700	205,500	208,400	211,200	214,100	217,000	219,900	83
84	171,700	174,500	177,400	180,200	183,100	186,000	189,000	191,900	194,900	197,900	200,900	203,900	206,900	210,000	213,000	216,000	219,000	222,100	225,100	228,200	231,300	84
85	174,700	177,400	180,000	182,700	185,300	188,000	190,700	193,400	196,200	198,900												85
86	182,700	185,500	188,300	191,100	194,000	196,800	199,700	202,600	205,500	208,400	211,300	214,300	217,300	220,200	223,200	226,200	229,100	232,100	235,100	238,100	241,100	86
87	190,700	193,600	196,600	199,600	202,600	205,600	208,600	211,700	214,800	217,900	221,000	224,100	227,200	230,400	233,500	236,600	239,800	242,900	246,100	249,300	252,500	87
88	193,800	196,500	199,200	202,000	204,800	207,600	210,400	213,200	216,100	218,900												88
89	201,700	204,600	207,500	210,500	213,400	216,400	219,300	222,300	225,300	228,400	231,400	234,500	237,600	240,600	243,700	246,800	249,900	253,000	256,100	259,200	262,300	89
90	209,700	212,800	215,800	218,900	222,000	225,200	228,300	231,500	234,600	237,800	241,100	244,300	247,500	250,800	254,000	257,300	260,500	263,800	267,100	270,400	273,700	90
92	220,800	223,800	226,800	229,800	232,900	235,900	239,000	242,100	245,200	248,400	251,500	254,700	257,900	261,100	264,200	267,400	270,600	273,800	277,000	280,200	283,500	92
93	228,700	231,900	235,100	238,300	241,500	244,700	248,000	251,200	254,500	257,800	261,100	264,500	267,800	271,200	274,600	277,900	281,300	284,600	288,000	291,400	294,900	93
95	242,400	245,500	248,600	251,700	254,900	258,000	261,200	264,400	267,600	270,800	274,100	277,300	280,600	283,900	287,200	290,400	293,700	297,000	300,300	303,600	307,000	95
96	250,300	253,600	256,900	260,200	263,500	266,800	270,100	273,500	276,900	280,300	283,700	287,100	290,600	294,000	297,500	300,900	304,400	307,900	311,300	314,800	318,300	96
98	264,000	267,200	270,400	273,600	276,900	280,100	283,400	286,700	290,000	293,300	296,600	300,000	303,400	306,700	310,100	313,500	316,800	320,200	323,600	327,000	330,500	98
99	271,900	275,300	278,700	282,100	285,500	288,900	292,300	295,800	299,300	302,800	306,300	309,800	313,300	316,900	320,400	324,000	327,500	331,100	334,600	338,200	341,800	99
101	285,600	288,900	292,200	295,500	298,900	302,200	305,600	309,000	312,400	315,800	319,200	322,600	326,100	329,600	333,000	336,500	340,000	343,400	346,900	350,400	354,000	101
102	293,600	297,000	300,500	304,000	307,500	311,000	314,500	318,100	321,700	325,200	328,800	332,400	336,100	339,700	343,300	347,000	350,600	354,300	358,000	361,600	365,300	102
104	307,200	310,600	314,000	317,400	320,900	324,300	327,800	331,200	334,700	338,200	341,800	345,300	348,800	352,400	356,000	359,500	363,100	366,700	370,200	373,800		104
105	315,200	318,700	322,300	325,900	329,500	333,100	336,700	340,400	344,000	347,700	351,400	355,100	358,800	362,600	366,300	370,000	373,700					105
106	321,500	324,900	328,400	331,800	335,300	338,800	342,300	345,900	349,400	352,900	356,500	360,100	363,700	367,300	370,900	374,500						106
107	337,400	341,200	345,000	348,800	352,600	356,400	360,200	364,100	368,000	371,900												107
108	349,700	353,500	357,200	360,900	364,700	368,400	372,200															108
109	357,700	361,600	365,500	369,400	373,300																	109
110	370,100	373,900																				110

HEADWATER 590 to 594
TAILWATER Up to 572.5

MARCH 2004

GUNTERSVILLE DAM
SPILLWAY DISCHARGE
IN CUBIC FEET PER SECOND

GATE ARRANGEMENT	HEADWATER ELEVATION																					GATE ARRANGEMENT
	594.0	594.2	594.4	594.6	594.8	595.0	595.2	595.4	595.6	595.8	596.0	596.2	596.4	596.6	596.8	597.0	597.2	597.4	597.6	597.8	598.0	
0*	0	0	0	0	0	0	0	0	160	530	1,030	1,640	2,320	3,080	3,910	4,810	5,760	6,770	7,840	8,950	10,110	0*
1	1,010	1,020	1,020	1,030	1,030	1,040	1,040	1,050	1,200	1,560	2,040	2,610	3,260	4,000	4,810	5,680	6,620	7,620	8,670	9,770	10,920	1
2	2,700	2,710	2,720	2,740	2,750	2,770	2,780	2,790	2,960	3,330	3,810	4,390	5,060	5,790	6,590	7,440	8,360	9,320	10,340	11,410	12,520	2
3	3,710	3,730	3,750	3,770	3,790	3,800	3,820	3,840	4,000	4,350	4,820	5,370	6,000	6,700	7,480	8,320	9,220	10,170	11,180	12,230		3
4	5,390	5,420	5,450	5,480	5,510	5,530	5,560	5,590	5,760	6,120	6,590	7,150	7,790	8,490	9,260	10,080	10,950	11,880	12,850	13,860	14,920	4
5	6,400	6,440	6,470	6,510	6,540	6,570	6,600	6,640	6,800	7,150	7,590	8,130	8,730	9,410	10,150	10,950	11,810	12,720	13,680	14,690		5
6	8,090	8,130	8,170	8,220	8,260	8,300	8,340	8,380	8,560	8,910	9,370	9,910	10,520	11,200	11,930	12,710	13,550	14,430	15,350	16,320	17,330	6
7	9,100	9,150	9,200	9,240	9,290	9,340	9,380	9,430	9,600	9,940	10,370	10,890	11,460	12,110	12,820	13,590	14,410	15,280	16,190	17,140		7
8	10,780	10,840	10,900	10,960	11,010	11,070	11,120	11,180	11,360	11,700	12,150	12,670	13,260	13,900	14,600	15,350	16,140	16,980	17,860	18,780	19,730	8
9	11,800	11,860	11,920	11,980	12,040	12,110	12,170	12,230	12,400	12,730	13,150	13,640	14,200	14,820	15,490	16,230	17,000	17,830	18,690	19,600		9
10	13,480	13,550	13,620	13,690	13,760	13,830	13,900	13,970	14,160	14,500	14,930	15,430	15,990	16,610	17,270	17,990	18,740	19,530	20,370	21,230	22,140	10
11	14,490	14,570	14,650	14,720	14,800	14,870	14,950	15,020	15,200	15,520	15,930	16,400	16,930	17,520	18,170	18,860	19,600	20,380	21,200	22,060		11
12	16,180	16,260	16,350	16,430	16,520	16,600	16,690	16,770	16,960	17,290	17,700	18,190	18,720	19,310	19,950	20,620	21,330	22,090	22,870	23,690	24,540	12
13	17,190	17,280	17,370	17,460	17,550	17,640	17,730	17,820	18,000	18,320												13
14	18,870	18,970	19,070	19,170	19,270	19,370	19,470	19,560	19,760	20,080	20,480	20,940	21,460	22,020	22,620	23,260	23,930	24,640	25,380	26,150	26,950	14
15	19,880	19,990	20,090	20,200	20,300	20,410	20,510	20,610	20,800	21,110												15
16	21,570	21,680	21,800	21,910	22,020	22,140	22,250	22,360	22,560	22,870	23,260	23,700	24,190	24,720	25,290	25,890	26,530	27,190	27,880	28,610	29,350	16
17	22,580	22,700	22,820	22,940	23,060	23,170	23,290	23,410	23,600	23,900												17
18	24,260	24,390	24,520	24,650	24,780	24,900	25,030	25,150	25,360	25,670	26,040	26,460	26,920	27,430	27,960	28,530	29,120	29,740	30,390	31,060	31,760	18
19	25,280	25,410	25,540	25,680	25,810	25,940	26,070	26,200	26,400	26,690												19
20	26,960	27,100	27,250	27,390	27,530	27,670	27,810	27,950	28,160	28,460	28,820	29,220	29,660	30,130	30,630	31,160	31,720	32,300	32,900	33,520	34,160	20
21	28,500	28,660	28,810	28,960	29,110	29,260	29,410	29,560	29,780	30,090	30,460	30,870	31,320	31,800	32,310	32,850	33,410	34,000	34,610	35,250	35,900	21
22	30,040	30,210	30,370	30,530	30,700	30,860	31,010	31,170	31,400	31,720	32,100	32,520	32,980	33,470	33,990	34,540	35,110	35,710	36,330	36,970	37,630	22
23	31,590	31,760	31,940	32,110	32,280	32,450	32,620	32,790	33,020	33,350	33,740	34,170	34,640	35,140	35,670	36,230	36,810	37,420	38,050	38,700	39,370	23
24	33,130	33,310	33,500	33,680	33,860	34,040	34,220	34,400	34,640	34,990	35,380	35,820	36,300	36,810	37,350	37,920	38,510	39,120	39,760	40,420	41,100	24
25	34,670	34,870	35,060	35,250	35,440	35,630	35,820	36,010	36,270	36,620	37,030	37,470	37,960	38,480	39,030	39,610	40,210	40,830	41,480	42,150	42,840	25
26	36,220	36,420	36,620	36,830	37,030	37,230	37,430	37,620	37,890	38,250	38,670	39,130	39,620	40,150	40,710	41,290	41,900	42,540	43,200	43,870	44,570	26
27	37,760	37,970	38,190	38,400	38,610	38,820	39,030	39,240	39,510	39,880	40,310	40,780	41,280	41,820	42,390	42,980	43,600	44,250	44,910	45,600	46,310	27
28	39,300	39,530	39,750	39,970	40,190	40,410	40,630	40,850	41,130	41,510	41,950	42,430	42,940	43,490	44,070	44,670	45,300	45,950	46,630	47,320	48,040	28
29	40,840	41,080	41,310	41,550	41,780	42,010	42,230	42,460	42,760	43,150	43,590	44,080	44,600	45,160	45,750	46,360	47,000	47,660	48,340	49,050	49,780	29
30	41,860	42,100	42,340	42,570	42,810	43,040	43,280	43,510	43,800	44,170												30
31	43,540	43,790	44,040	44,280	44,530	44,770	45,020	45,260	45,560	45,940	46,370	46,840	47,340	47,870	48,420	49,000	49,590	50,210	50,850	51,510	52,180	31
32	45,080	45,340	45,600	45,860	46,110	46,370	46,620	46,870	47,180	47,570	48,010	48,490	49,000	49,540	50,100	50,680	51,290	51,920	52,570	53,230	53,920	32
33	46,090	46,360	46,620	46,890	47,150	47,400	47,660	47,920	48,220	48,600												33
34	47,780	48,050	48,330	48,600	48,870	49,130	49,400	49,660	49,980	50,360	50,790	51,250	51,730	52,240	52,770	53,320	53,890	54,470	55,070	55,690	56,320	34
35	49,320	49,610	49,890	50,170	50,450	50,730	51,000	51,280	51,600	52,000	52,430	52,900	53,390	53,910	54,450	55,010	55,590	56,180	56,790	57,420	58,060	35
36	50,330	50,620	50,910	51,200	51,480	51,760	52,040	52,320	52,640	53,020												36
37	52,020	52,320	52,610	52,910	53,200	53,490	53,780	54,070	54,400	54,790	55,210	55,660	56,130	56,620	57,120	57,640	58,180	58,730	59,300	59,870	60,460	37
38	53,560	53,870	54,180	54,480	54,780	55,090	55,390	55,680	56,020	56,420	56,850	57,310	57,790	58,290	58,800	59,330	59,880	60,440	61,010	61,600	62,200	38
39	56,260	56,580	56,900	57,220	57,540	57,850	58,170	58,480	58,820	59,210	59,630	60,070	60,520	60,990	61,470	61,970	62,470	62,990	63,520	64,060	64,600	39
40	58,950	59,290	59,630	59,960	60,290	60,620	60,950	61,270	61,620	62,010	62,410	62,820	63,250	63,690	64,140	64,600	65,070	65,540	66,030	66,510	67,010	40
41	60,490	60,840	61,190	61,530	61,870	62,210	62,550	62,880	63,240	63,640	64,050	64,480	64,920	65,360	65,820	66,290	66,770	67,250	67,740	68,240	68,740	41
42	63,370	63,740	64,120	64,490	64,850	65,220	65,580	65,940	66,330	66,750	67,190	67,640	68,100	68,580	69,060	69,560	70,060	70,570	71,080	71,600	72,130	42
43	66,240	66,640	67,040	67,440	67,830	68,230	68,620	69,000	69,410	69,860	70,320	70,800	71,290	71,790	72,300	72,820	73,350	73,880	74,420	74,970	75,520	43
44	69,120	69,540	69,970	70,390	70,820	71,230	71,650	72,060	72,500	72,970	73,460	73,960	74,480	75,010	75,540	76,080	76,640	77,190	77,760	78,330	78,910	44
45	71,990	72,450	72,900	73,350	73,800	74,240	74,680	75,120	75,580	76,080	76,600	77,130	77,670	78,220	78,780	79,350	79,930	80,510	81,100	81,700	82,300	45
46	74,860	75,350	75,830	76,300	76,780	77,250	77,720	78,180	78,670	79,190	79,730	80,290	80,860	81,430	82,020	82,610	83,210	83,820	84,440	85,060	85,690	46
47	77,740	78,250	78,750	79,260	79,760	80,250	80,750	81,240	81,760	82,300	82,870	83,450	84,040	84,650	85,260	85,880	86,500	87,140	87,780	88,420	89,080	47
48	80,610	81,150	81,680	82,210	82,740	83,260	83,780	84,300	84,840	85,410	86,010	86,610	87,230	87,860	88,500	89,140	89,790	90,450	91,120	91,790	92,470	48
49	83,490	84,050	84,610	85,160	85,720	86,270	86,810	87,360	87,930	88,530	89,140	89,780	90,420	91,070	91,740	92,410	93,080	93,770	94,460	95,150	95,860	49
50	87,720	88,310	88,900	89,480	90,050	90,630	91,200	91,770	92,350	92,950	93,560	94,190	94,810	95,450	96,090	96,730	97,380	98,030	98,680	99,340	100,000	50
51	90,600	91,210	91,820	92,430	93,030	93,630	94,230	94,820	95,430	96,060	96,700	97,350	98,000	98,660	99,330	99,990	100,700	101,300	102,000	102,700	103,400	51
52	93,470	94,110	94,750	95,380	96,010	96,640	97,260	97,880	98,520	99,170	99,840	100,500	101,200	101,900	102,600	103,300	104,000	104,700	105,400	106,100	106,800	52
53	96,350	97,010	97,680	98,340	99,000	99,650	100,300	100,900	101,600	102,300	103,000	103,700	104,400	105,100	105,800	106,500	107,200	108,000	108,700	109,400	110,200	53
54	99,220	99,910	100,600	101,300	102,000	102,700	103,300	104,000	104,700	105,400	106,100	106,800	107,600	108,300	109,000	109,800	110,500	111,300	112,000	112,800	113,600	54

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** Arrangement "0" indicates that all spillway gates are closed. Discharge is spillway gate and trash gate overflow.*

HEADWATER 594 to 598
TAILWATER Up to 572.5

GUNTERSVILLE DAM
SPILLWAY DISCHARGE
IN CUBIC FEET PER SECOND

GATE ARRANGEMENT	HEADWATER ELEVATION																					GATE ARRANGEMENT
	594.0	594.2	594.4	594.6	594.8	595.0	595.2	595.4	595.6	595.8	596.0	596.2	596.4	596.6	596.8	597.0	597.2	597.4	597.6	597.8	598.0	
55	102,100	102,800	103,500	104,200	105,000	105,700	106,400	107,100	107,800	108,500	109,200	110,000	110,800	111,500	112,300	113,100	113,800	114,600	115,400	116,200	116,900	55
56	105,200	105,900	106,700	107,400	108,100	108,800	109,600	110,300	111,000	111,800	112,500	113,300	114,100	114,900	115,600	116,400	117,200	118,000	118,800	119,600	120,400	56
57	108,100	108,800	109,600	110,300	111,100	111,900	112,600	113,300	114,100	114,900	115,700	116,500	117,300	118,100	118,900	119,700	120,500	121,300	122,100	123,000	123,800	57
58	112,300	113,200	114,100	115,000	115,900	116,700	117,600	118,500	119,400	120,300	121,200	122,100	123,100	124,000	125,000	125,900	126,900	127,800	128,800	129,800	130,700	58
59	116,600	117,600	118,600	119,600	120,600	121,600	122,600	123,600	124,700	125,700	126,800	127,800	128,900	130,000	131,100	132,200	133,300	134,400	135,500	136,600	137,700	59
60	120,800	122,000	123,100	124,200	125,400	126,500	127,700	128,800	130,000	131,100	132,300	133,500	134,700	135,900	137,200	138,400	139,600	140,900	142,100	143,400	144,600	60
61	125,100	126,300	127,600	128,900	130,100	131,400	132,700	133,900	135,200	136,500	137,900	139,200	140,500	141,900	143,300	144,600	146,000	147,400	148,800	150,200	151,600	61
62	129,300	130,700	132,100	133,500	134,900	136,300	137,700	139,100	140,500	142,000	143,400	144,900	146,400	147,900	149,400	150,900	152,400	153,900	155,400	157,000	158,500	62
63	133,600	135,100	136,600	138,100	139,700	141,200	142,700	144,200	145,800	147,400	149,000	150,600	152,200	153,800	155,500	157,100	158,800	160,400	162,100	163,800	165,500	63
64	137,800	139,500	141,100	142,800	144,400	146,100	147,700	149,400	151,100	152,800	154,500	156,300	158,000	159,800	161,600	163,300	165,100	167,000	168,800	170,600	172,400	64
65	142,100	143,800	145,600	147,400	149,200	151,000	152,700	154,500	156,400	158,200	160,100	161,900	163,800	165,700	167,700	169,600	171,500	173,500	175,400	177,400	179,400	65
66	146,300	148,100	149,900	151,700	153,500	155,300	157,100	159,000	160,800	162,600	164,500	166,400	168,200	170,100	172,000	173,900	175,800	177,700	179,600	181,600	183,500	66
67	149,200	151,000	152,800	154,600	156,500	158,300	160,200	162,000	163,900	165,700	167,600	169,500	171,400	173,300	175,200	177,200	179,100	181,000	183,000	184,900	186,900	67
68	153,400	155,400	157,300	159,300	161,200	163,200	165,200	167,200	169,200	171,200	173,200	175,200	177,200	179,300	181,300	183,400	185,500	187,600	189,600	191,700	193,800	68
69	157,700	159,700	161,800	163,900	166,000	168,100	170,200	172,300	174,400	176,600	178,700	180,900	183,100	185,200	187,400	189,600	191,900	194,100	196,300	198,500	200,800	69
70	161,900	164,100	166,300	168,500	170,800	173,000	175,200	177,500	179,700	182,000	184,300	186,600	188,900	191,200	193,500	195,900	198,200	200,600	203,000	205,400	207,700	70
71	166,200	168,500	170,800	173,200	175,500	177,900	180,200	182,600	185,000	187,400	189,800	192,300	194,700	197,200	199,600	202,100	204,600	207,100	209,600	212,200	214,700	71
72	170,400	172,900	175,300	177,800	180,300	182,800	185,300	187,800	190,300	192,800	195,400	197,900	200,500	203,100	205,700	208,400	211,000	213,600	216,300	219,000	221,600	72
73	177,600	180,200	182,800	185,400	188,000	190,700	193,300	196,000	198,600	201,300	204,100	206,800	209,500	212,300	215,100	217,900	220,700	223,500	226,300	229,100	232,000	73
74	184,700	187,400	190,200	193,000	195,700	198,500	201,400	204,200	207,000	209,900	212,700	215,600	218,500	221,500	224,400	227,400	230,300	233,300	236,300	239,300	242,300	74
75	188,900	191,800	194,700	197,600	200,500	203,400	206,400	209,300	212,300	215,300	218,300	221,300	224,400	227,400	230,500	233,600	236,700	239,800	242,900	246,100	249,300	75
77	194,500	197,200	199,900	202,600	205,300	208,000	210,800	213,500	216,300	219,100	221,900	224,800	227,700	230,600	233,500	236,400	239,300	242,300	245,300	248,300	251,300	77
78	198,800	201,600	204,400	207,200	210,100	212,900	215,800	218,700	221,600	224,500	227,500	230,500	233,500	236,500	239,600	242,600	245,700	248,800	251,900	255,100	258,200	78
79	205,900	208,700	211,600	214,500	217,400	220,300	223,200	226,100	229,100	232,100	235,100	238,100	241,100	244,100	247,200	250,200	253,300	256,400	259,500	262,600	265,800	79
80	210,100	213,100	216,100	219,100	222,100	225,200	228,200	231,300	234,400	237,500	240,600	243,700	246,900	250,100	253,300	256,500	259,700	262,900	266,200	269,400	272,700	80
82	215,700	218,500	221,300	224,100	226,900	229,800	232,600	235,500	238,400	241,300	244,300	247,200	250,200	253,200	256,200	259,300	262,300	265,400	268,500	271,600	274,700	82
83	219,900	222,900	225,800	228,700	231,700	234,700	237,600	240,600	243,700	246,700	249,800	252,900	256,000	259,200	262,300	265,500	268,700	271,900	275,200	278,400	281,700	83
84	231,300	234,400	237,500	240,600	243,800	246,900	250,100	253,300	256,500	259,700	262,900	266,200	269,400	272,700	276,000	279,300	282,700	286,000	289,400	292,800	296,200	84
86	241,100	244,200	247,200	250,300	253,300	256,400	259,500	262,600	265,700	268,900	272,100	275,300	278,600	281,800	285,100	288,400	291,700	295,000	298,400	301,700	305,100	86
87	252,500	255,700	258,900	262,200	265,400	268,700	271,900	275,200	278,500	281,900	285,200	288,600	292,000	295,400	298,800	302,200	305,700	309,100	312,600	316,100	319,600	87
89	262,300	265,500	268,600	271,800	275,000	278,200	281,400	284,600	287,800	291,100	294,400	297,700	301,100	304,500	307,900	311,300	314,700	318,100	321,600	325,100	328,600	89
90	273,700	277,000	280,300	283,700	287,000	290,400	293,800	297,200	300,600	304,100	307,500	311,000	314,500	318,000	321,500	325,100	328,700	332,200	335,800	339,400	343,100	90
92	283,500	286,700	290,000	293,300	296,600	299,900	303,200	306,500	309,900	313,300	316,700	320,200	323,600	327,100	330,600	334,100	337,700	341,200	344,800	348,400	352,000	92
93	294,900	298,300	301,700	305,200	308,700	312,200	315,700	319,200	322,700	326,300	329,800	333,400	337,000	340,700	344,300	348,000	351,600	355,300	359,000	362,800	366,500	93
95	307,000	310,300	313,700	317,100	320,400	323,800	327,300	330,700	334,100	337,600	341,100	344,600	348,200	351,800	355,400	359,000	362,600	366,200	369,900	373,600		95
96	318,300	321,900	325,400	329,000	332,500	336,100	339,700	343,300	346,900	350,600	354,200	357,900	361,600	365,300	369,000	372,800						96
98	330,500	333,900	337,400	340,800	344,300	347,800	351,300	354,800	358,300	361,900	365,500	369,100	372,800									98
99	341,800	345,500	349,100	352,700	356,400	360,000	363,700	367,400	371,100	374,900												99
101	354,000	357,500	361,000	364,600	368,200	371,700																101
102	365,300	369,000	372,800																			102

HEADWATER 594 to 598
TAILWATER Up to 572.5

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GUNTERSVILLE DAM
SPILLWAY DISCHARGE
IN CUBIC FEET PER SECOND

GATE ARRANGEMENT	HEADWATER ELEVATION																				GATE ARRANGEMENT
	598.0	598.2	598.4	598.6	598.8	599.0	599.2	599.4	599.6	599.8	600.0	600.2	600.4	600.6	600.8	601.0	601.2	601.4	601.6	601.8	602.0	
0*	10,110	11,320	12,570	13,860	15,200	16,580	18,000	19,450	20,940	22,470	24,030											0*
1	10,920	12,120	13,360	14,650	15,980	17,350	18,760	20,210	21,690	23,210	24,770											1
2	12,520	13,670	14,860	16,110	17,400	18,740	20,130	21,550	23,020	24,520	26,060											2
4	14,920	16,020	17,160	18,350	19,610	20,910	22,260	23,660	25,090	26,570	28,080											4
6	17,330	18,370	19,450	20,600	21,810	23,080	24,400	25,760	27,170	28,610	30,100											6
8	19,730	20,720	21,750	22,840	24,010	25,240	26,530	27,860	29,240	30,660	32,130											8
10	22,140	23,070	24,040	25,080	26,210	27,410	28,660	29,960	31,310	32,710	34,150											10
12	24,540	25,420	26,330	27,330	28,420	29,580	30,800	32,070	33,390	34,760	36,170											12
14	26,950	27,770	28,630	29,570	30,620	31,740	32,930	34,170	35,460	36,810	38,190											14
16	29,350	30,130	30,920	31,810	32,820	33,910	35,060	36,270	37,540	38,850	40,220											16
18	31,760	32,480	33,220	34,060	35,020	36,080	37,200	38,380	39,610	40,900	42,240											18
20	34,160	34,830	35,510	36,300	37,230	38,240	39,330	40,480	41,690	42,950	44,260											20
21	35,900	36,570	37,260	38,050	38,970	39,960	41,030	42,150	43,320	44,550	45,820											21
22	37,630	38,320	39,020	39,810	40,710	41,690	42,720	43,820	44,960	46,140	47,370											22
23	39,370	40,060	40,770	41,560	42,450	43,410	44,420	45,480	46,590	47,740	48,930											23
24	41,100	41,800	42,520	43,310	44,190	45,130	46,120	47,150	48,230	49,340	50,490											24
25	42,840	43,550	44,270	45,060	45,930	46,850	47,820	48,820	49,860	50,930	52,040											25
26	44,570	45,290	46,030	46,820	47,670	48,570	49,510	50,490	51,490	52,530	53,600											26
27	46,310	47,030	47,780	48,570	49,410	50,290	51,210	52,150	53,130	54,130	55,150											27
28	48,040	48,780	49,530	50,320	51,150	52,020	52,910	53,820	54,760	55,720	56,710											28
29	49,780	50,520	51,280	52,080	52,890	53,740	54,600	55,490	56,400	57,320	58,260											29
31	52,180	52,870	53,580	54,320	55,100	55,900	56,740	57,590	58,470	59,370	60,290											31
32	53,920	54,620	55,330	56,070	56,840	57,630	58,430	59,260	60,110	60,970	61,840											32
34	56,320	56,970	57,630	58,310	59,040	59,790	60,570	61,360	62,180	63,010	63,870											34
35	58,060	58,710	59,380	60,070	60,780	61,510	62,270	63,030	63,810	64,610	65,420											35
37	60,460	61,060	61,670	62,310	62,980	63,680	64,400	65,140	65,890	66,660	67,440											37
38	62,200	62,810	63,420	64,060	64,730	65,400	66,100	66,800	67,520	68,260	69,000											38
39	64,600	65,160	65,720	66,310	66,930	67,570	68,230	68,910	69,600	70,300	71,020											39
40	67,010	67,510	68,010	68,550	69,130	69,740	70,360	71,010	71,670	72,350	73,050											40
41	68,740	69,250	69,770	70,300	70,870	71,460	72,060	72,680	73,310	73,950	74,600											41
42	72,130	72,660	73,200	73,770	74,360	74,970	75,600	76,240	76,890	77,560	78,230											42
43	75,520	76,080	76,640	77,230	77,850	78,480	79,130	79,800	80,480	81,170	81,870											43
44	78,910	79,490	80,080	80,690	81,330	81,990	82,670	83,360	84,060	84,780	85,500											44
45	82,300	82,910	83,520	84,160	84,820	85,510	86,210	86,920	87,650	88,390	89,130											45
46	85,690	86,320	86,960	87,620	88,310	89,020	89,740	90,480	91,230	91,990	92,770											46
47	89,080	89,730	90,400	91,080	91,800	92,530	93,280	94,040	94,820	95,600	96,400											47
48	92,470	93,150	93,840	94,550	95,290	96,040	96,820	97,600	98,400	99,210	100,000											48
49	95,860	96,560	97,280	98,010	98,770	99,560	100,400	101,200	102,000	102,800	103,700											49
50	100,000	100,700	101,300	102,000	102,700	103,400	104,200	104,900	105,700	106,500	107,200											50
51	103,400	104,100	104,800	105,500	106,200	107,000	107,700	108,500	109,300	110,100	110,900											51
52	106,800	107,500	108,200	108,900	109,700	110,500	111,300	112,100	112,900	113,700	114,500											52
53	110,200	110,900	111,600	112,400	113,200	114,000	114,800	115,600	116,500	117,300	118,100											53
54	113,600	114,300	115,100	115,900	116,700	117,500	118,300	119,200	120,000	120,900	121,800											54
55	116,900	117,700	118,500	119,300	120,200	121,000	121,900	122,700	123,600	124,500	125,400											55
56	120,400	121,200	122,000	122,800	123,600	124,400	125,300	126,100	126,900	127,700	128,500											56
57	123,800	124,600	125,500	126,300	127,100	128,000	128,800	129,600	130,500	131,300	132,200											57
58	130,700	131,700	132,700	133,700	134,700	135,600	136,600	137,600	138,600	139,600	140,600											58
59	137,700	138,800	139,900	141,100	142,200	143,300	144,500	145,600	146,800	147,900	149,100											59
60	144,600	145,900	147,200	148,400	149,700	151,000	152,300	153,600	154,900	156,200	157,500											60
61	151,600	153,000	154,400	155,800	157,300	158,700	160,100	161,600	163,100	164,500	166,000											61
62	158,500	160,100	161,600	163,200	164,800	166,400	168,000	169,600	171,200	172,800	174,400											62
63	165,500	167,200	168,900	170,600	172,300	174,100	175,800	177,600	179,300	181,100	182,900											63
64	172,400	174,300	176,100	178,000	179,900	181,800	183,700	185,600	187,500	189,400	191,400											64
65	179,400	181,400	183,400	185,400	187,400	189,400	191,500	193,600	195,600	197,700	199,800											65
66	183,500	185,500	187,400	189,400	191,300	193,300	195,300	197,300	199,400	201,400	203,400											66

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** Arrangement "0" indicates that all spillway gates are closed. Discharge is spillway gate and trash gate overflow.*

HEADWATER 598 to 602
TAILWATER Up to 572.5

GUNTERSVILLE DAM
SPILLWAY DISCHARGE
IN CUBIC FEET PER SECOND

GATE ARRANGEMENT	HEADWATER ELEVATION																				GATE ARRANGEMENT
	598.0	598.2	598.4	598.6	598.8	599.0	599.2	599.4	599.6	599.8	600.0	600.2	600.4	600.6	600.8	601.0	601.2	601.4	601.6	601.8	602.0	
67	186,900	188,900	190,800	192,800	194,800	196,800	198,900	200,900	202,900	205,000	207,000											67
68	193,800	196,000	198,100	200,200	202,400	204,500	206,700	208,900	211,100	213,300	215,500											68
69	200,800	203,100	205,300	207,600	209,900	212,200	214,500	216,900	219,200	221,600	223,900											69
70	207,700	210,100	212,600	215,000	217,400	219,900	222,400	224,900	227,400	229,900	232,400											70
71	214,700	217,200	219,800	222,400	225,000	227,600	230,200	232,900	235,500	238,200	240,900											71
72	221,600	224,300	227,000	229,700	232,500	235,300	238,100	240,900	243,700	246,500	249,300											72
73	232,000	234,800	237,700	240,600	243,500	246,500	249,400	252,400	255,400	258,400	261,400											73
74	242,300	245,300	248,400	251,400	254,500	257,700	260,800	264,000	267,100	270,300	273,500											74
75	249,300	252,400	255,600	258,800	262,100	265,300	268,600	271,900	275,300	278,600	282,000											75
77	251,300	254,300	257,300	260,400	263,500	266,600	269,700	272,900	276,100	279,200	282,400											77
78	258,200	261,400	264,600	267,800	271,000	274,300	277,600	280,900	284,200	287,500	290,900											78
79	265,800	268,900	272,100	275,200	278,400	281,700	284,900	288,200	291,500	294,800	298,100											79
80	272,700	276,000	279,300	282,600	286,000	289,400	292,800	296,200	299,600	303,100	306,600											80
82	274,700	277,900	281,000	284,200	287,400	290,600	293,900	297,200	300,400	303,700	307,100											82
83	281,700	285,000	288,300	291,600	294,900	298,300	301,700	305,100	308,600	312,000	315,500											83
84	296,200	299,600	303,000	306,400	309,900	313,400	316,900	320,500	324,000	327,600	331,200											84
86	305,100	308,500	311,900	315,400	318,800	322,300	325,900	329,400	333,000	336,500	340,100											86
87	319,600	323,100	326,700	330,200	333,800	337,400	341,100	344,700	348,400	352,100	355,800											87
89	328,600	332,100	335,600	339,200	342,800	346,400	350,000	353,700	357,300	361,000	364,700											89
90	343,100	346,700	350,400	354,000	357,700	361,500	365,200	369,000	372,800													90
92	352,000	355,700	359,300	363,000	366,700	370,400	374,200															92
93	366,500	370,300	374,000																			93

HEADWATER 598 to 602
TAILWATER Up to 572.5

MARCH 2004

GUNTERSVILLE DAM
SPILLWAY DISCHARGE
IN CUBIC FEET PER SECOND

GATE ARRANGEMENT	HEADWATER ELEVATION																				GATE ARRANGEMENT
	590.0	590.2	590.4	590.6	590.8	591.0	591.2	591.4	591.6	591.8	592.0	592.2	592.4	592.6	592.8	593.0	593.2	593.4	593.6	593.8	594.0	
1	900	910	920	920	930	930	940	940	950	950	960	970	970	980	980	990	990	1,000	1,000	1,010	1,010	1
2	2,380	2,400	2,420	2,430	2,450	2,470	2,480	2,500	2,510	2,530	2,550	2,560	2,580	2,590	2,610	2,620	2,640	2,650	2,670	2,680	2,700	2
3	3,290	3,310	3,330	3,360	3,380	3,400	3,420	3,440	3,460	3,490	3,510	3,530	3,550	3,570	3,590	3,610	3,630	3,650	3,670	3,690	3,710	3
4	4,770	4,800	4,840	4,870	4,900	4,930	4,970	5,000	5,030	5,060	5,090	5,120	5,150	5,180	5,210	5,240	5,270	5,300	5,330	5,360	5,390	4
5	5,670	5,710	5,750	5,790	5,830	5,870	5,900	5,940	5,980	6,020	6,050	6,090	6,120	6,160	6,200	6,230	6,270	6,300	6,340	6,370	6,400	5
6	7,150	7,200	7,250	7,300	7,350	7,400	7,450	7,500	7,540	7,590	7,640	7,680	7,730	7,780	7,820	7,870	7,910	7,960	8,000	8,040	8,090	6
7	8,060	8,110	8,170	8,220	8,280	8,330	8,390	8,440	8,490	8,550	8,600	8,650	8,700	8,750	8,800	8,850	8,900	8,950	9,000	9,050	9,100	7
8	9,540	9,610	9,670	9,740	9,800	9,870	9,930	10,000	10,060	10,120	10,180	10,250	10,310	10,370	10,430	10,490	10,550	10,610	10,670	10,730	10,780	8
9	10,440	10,510	10,590	10,660	10,730	10,800	10,870	10,940	11,010	11,080	11,140	11,210	11,280	11,350	11,410	11,480	11,540	11,610	11,670	11,730	11,800	9
10	11,920	12,010	12,090	12,170	12,250	12,330	12,420	12,500	12,570	12,650	12,730	12,810	12,880	12,960	13,040	13,110	13,190	13,260	13,330	13,410	13,480	10
11	12,830	12,920	13,000	13,090	13,180	13,270	13,350	13,440	13,520	13,610	13,690	13,770	13,860	13,940	14,020	14,100	14,180	14,260	14,340	14,410	14,490	11
12	14,310	14,410	14,510	14,610	14,700	14,800	14,900	14,990	15,090	15,180	15,280	15,370	15,460	15,550	15,640	15,730	15,820	15,910	16,000	16,090	16,180	12
13	15,210	15,320	15,420	15,530	15,630	15,730	15,840	15,940	16,040	16,140	16,240	16,340	16,430	16,530	16,630	16,720	16,820	16,910	17,000	17,100	17,190	13
14	16,690	16,810	16,930	17,040	17,160	17,270	17,380	17,490	17,600	17,710	17,820	17,930	18,040	18,150	18,250	18,360	18,460	18,560	18,670	18,770	18,870	14
15	17,600	17,720	17,840	17,960	18,080	18,200	18,320	18,440	18,550	18,670	18,780	18,900	19,010	19,120	19,230	19,340	19,450	19,560	19,670	19,780	19,880	15
16	19,080	19,210	19,340	19,480	19,610	19,740	19,860	19,990	20,120	20,240	20,370	20,490	20,620	20,740	20,860	20,980	21,100	21,220	21,330	21,450	21,570	16
17	19,980	20,120	20,260	20,400	20,530	20,670	20,800	20,940	21,070	21,200	21,330	21,460	21,590	21,710	21,840	21,970	22,090	22,210	22,340	22,460	22,580	17
18	21,460	21,610	21,760	21,910	22,060	22,200	22,350	22,490	22,630	22,770	22,920	23,050	23,190	23,330	23,470	23,600	23,740	23,870	24,000	24,130	24,260	18
19	22,360	22,520	22,680	22,830	22,980	23,140	23,290	23,430	23,580	23,730	23,880	24,020	24,160	24,310	24,450	24,590	24,730	24,870	25,000	25,140	25,280	19
20	23,850	24,010	24,180	24,340	24,510	24,670	24,830	24,990	25,150	25,310	25,460	25,620	25,770	25,920	26,070	26,220	26,370	26,520	26,670	26,810	26,960	20
21	25,170	25,350	25,530	25,700	25,880	26,050	26,220	26,390	26,560	26,730	26,900	27,060	27,230	27,390	27,550	27,710	27,870	28,030	28,190	28,350	28,500	21
22	26,490	26,680	26,870	27,060	27,250	27,430	27,620	27,800	27,980	28,160	28,340	28,510	28,690	28,860	29,030	29,210	29,380	29,540	29,710	29,880	30,040	22
23	27,820	28,020	28,220	28,420	28,620	28,810	29,010	29,200	29,390	29,580	29,770	29,960	30,150	30,330	30,510	30,700	30,880	31,060	31,230	31,410	31,590	23
24	29,140	29,350	29,560	29,780	29,990	30,190	30,400	30,600	30,810	31,010	31,210	31,410	31,600	31,800	31,990	32,190	32,380	32,570	32,760	32,940	33,130	24
25	30,460	30,690	30,910	31,130	31,350	31,570	31,790	32,010	32,220	32,430	32,650	32,860	33,060	33,270	33,470	33,680	33,880	34,080	34,280	34,480	34,670	25
26	31,790	32,020	32,260	32,490	32,720	32,960	33,180	33,410	33,640	33,860	34,080	34,300	34,520	34,740	34,950	35,170	35,380	35,590	35,800	36,010	36,220	26
27	33,110	33,360	33,600	33,850	34,090	34,340	34,580	34,820	35,050	35,290	35,520	35,750	35,980	36,210	36,430	36,660	36,880	37,100	37,320	37,540	37,760	27
28	34,440	34,690	34,950	35,210	35,460	35,720	35,970	36,220	36,470	36,710	36,960	37,200	37,440	37,680	37,910	38,150	38,380	38,620	38,850	39,070	39,300	28
29	35,760	36,030	36,300	36,560	36,830	37,100	37,360	37,620	37,880	38,140	38,390	38,650	38,900	39,150	39,390	39,640	39,880	40,130	40,370	40,610	40,840	29
30	36,660	36,940	37,210	37,490	37,760	38,030	38,300	38,570	38,830	39,090	39,350	39,610	39,870	40,120	40,380	40,630	40,880	41,120	41,370	41,610	41,860	30
31	38,140	38,430	38,710	39,000	39,280	39,560	39,840	40,120	40,400	40,670	40,940	41,210	41,470	41,740	42,000	42,260	42,520	42,780	43,030	43,290	43,540	31
32	39,470	39,770	40,060	40,360	40,650	40,950	41,240	41,520	41,810	42,090	42,380	42,660	42,930	43,210	43,480	43,750	44,020	44,290	44,560	44,820	45,080	32
33	40,370	40,680	40,980	41,280	41,580	41,880	42,170	42,470	42,760	43,050	43,340	43,620	43,900	44,190	44,460	44,740	45,020	45,290	45,560	45,830	46,090	33
34	41,850	42,170	42,480	42,790	43,100	43,410	43,720	44,020	44,330	44,630	44,920	45,220	45,510	45,800	46,090	46,380	46,660	46,940	47,220	47,500	47,780	34
35	43,180	43,500	43,820	44,150	44,470	44,790	45,110	45,430	45,740	46,050	46,360	46,670	46,970	47,270	47,570	47,870	48,160	48,450	48,750	49,030	49,320	35
36	44,080	44,410	44,740	45,070	45,400	45,730	46,050	46,370	46,690	47,010	47,320	47,630	47,940	48,250	48,550	48,850	49,150	49,450	49,750	50,040	50,330	36
37	45,560	45,900	46,240	46,580	46,920	47,260	47,590	47,930	48,260	48,580	48,910	49,230	49,550	49,860	50,180	50,490	50,800	51,110	51,410	51,720	52,020	37
38	46,890	47,240	47,590	47,940	48,290	48,640	48,990	49,330	49,670	50,010	50,340	50,680	51,000	51,330	51,660	51,980	52,300	52,620	52,930	53,250	53,560	38
39	49,270	49,640	50,010	50,380	50,740	51,110	51,470	51,830	52,180	52,540	52,890	53,240	53,580	53,920	54,260	54,600	54,940	55,270	55,600	55,930	56,260	39
40	51,650	52,040	52,420	52,810	53,190	53,580	53,950	54,330	54,700	55,070	55,430	55,800	56,160	56,520	56,870	57,220	57,570	57,920	58,270	58,610	58,950	40
41	52,980	53,380	53,770	54,170	54,560	54,960	55,350	55,730	56,110	56,490	56,870	57,250	57,620	57,990	58,350	58,720	59,080	59,430	59,790	60,140	60,490	41
42	55,330	55,750	56,170	56,590	57,010	57,420	57,830	58,240	58,650	59,060	59,470	59,870	60,270	60,670	61,060	61,450	61,840	62,230	62,610	62,990	63,370	42
43	57,670	58,120	58,560	59,010	59,450	59,880	60,320	60,750	61,190	61,630	62,070	62,500	62,930	63,350	63,770	64,190	64,610	65,020	65,430	65,840	66,240	43
44	60,020	60,490	60,960	61,430	61,890	62,350	62,800	63,260	63,730	64,200	64,660	65,120	65,580	66,030	66,480	66,930	67,370	67,810	68,250	68,680	69,120	44
45	62,370	62,860	63,350	63,840	64,330	64,810	65,290	65,780	66,270	66,770	67,260	67,750	68,230	68,710	69,190	69,670	70,140	70,600	71,070	71,530	71,990	45
46	64,720	65,240	65,750	66,260	66,770	67,280	67,770	68,290	68,810	69,340	69,860	70,370	70,890	71,400	71,900	72,400	72,900	73,400	73,890	74,380	74,860	46
47	67,060	67,610	68,150	68,680	69,210	69,740	70,260	70,800	71,350	71,910	72,460	73,000	73,540	74,080	74,610	75,140	75,670	76,190	76,710	77,220	77,740	47
48	69,410	69,980	70,540	71,100	71,650	72,200	72,750	73,310	73,890	74,480	75,050	75,630	76,200	76,760	77,320	77,880	78,430	78,980	79,530	80,070	80,610	48
49	71,760	72,350	72,940	73,520	74,100	74,670	75,230	75,820	76,430	77,040	77,650	78,250	78,850	79,440	80,030	80,620	81,200	81,770	82,350	82,920	83,490	49
50	75,470	76,090	76,700	77,310	77,920	78,510	79,110	79,720	80,360	81,000	81,630	82,260	82,880	83,500	84,120	84,730	85,340	85,940	86,540	87,130	87,720	50
51	77,820	78,460	79,100	79,730	80,360	80,980	81,590	82,230	82,900	83,570	84,230	84,890	85,540	86,190	86,830	87,470	88,100	88,730	89,360	89,980	90,600	51
52	80,160	80,830	81,490	82,150	82,800	83,440	84,080	84,740	85,440	86,140	86,830	87,510	88,190	88,870	89,540	90,200	90,870	91,520	92,180	92,830	93,470	52
53	82,510	83,200	83,890	84,570	85,240	85,910	86,560	87,260	87,980	88,710	89,430	90,140	90,850	91,550	92,250	92,940	93,630	94,320	95,000	95,670	96,350	53
54	84,860	85,580	86,290	86,990	87,680	88,370	89,050	89,770	90,520	91,280	92,020	92,760	93,500	94,230	94,960	95,680	96,400	97,110	97,820	98,520	99,220	54
55	87,210	87,950	88,680	89,410	90,120	90,830	91,530	92,280	93,060	93,850	94,620	95,390	96,150	96,910	97,670	98,420	99,160	99,900	100,600	101,400	102,100	55

MARCH 2004

HEADWATER 590 to 594
TAILWATER 572.51 to 573.50

GUNTERSVILLE DAM

SPILLWAY DISCHARGE

IN CUBIC FEET PER SECOND

GATE ARRANGEMENT	HEADWATER ELEVATION																					GATE ARRANGEMENT
	590.0	590.2	590.4	590.6	590.8	591.0	591.2	591.4	591.6	591.8	592.0	592.2	592.4	592.6	592.8	593.0	593.2	593.4	593.6	593.8	594.0	
56	89,850	90,620	91,370	92,120	92,860	93,600	94,320	95,090	95,890	96,700	97,490	98,290	99,070	99,850	100,600	101,400	102,200	102,900	103,700	104,400	105,200	56
57	92,200	92,990	93,770	94,540	95,300	96,060	96,810	97,600	98,430	99,270	100,100	100,900	101,700	102,500	103,300	104,100	104,900	105,700	106,500	107,300	108,100	57
58	94,120	95,020	95,910	96,790	97,670	98,540	99,400	100,300	101,300	102,200	103,100	104,100	105,000	105,900	106,900	107,800	108,700	109,600	110,500	111,400	112,300	58
59	96,040	97,040	98,040	99,040	100,000	101,000	102,000	103,000	104,100	105,100	106,200	107,200	108,300	109,300	110,400	111,400	112,500	113,500	114,500	115,500	116,600	59
60	97,950	99,070	100,200	101,300	102,400	103,500	104,600	105,700	106,900	108,100	109,200	110,400	111,600	112,800	113,900	115,100	116,200	117,400	118,500	119,700	120,800	60
61	99,870	101,100	102,300	103,500	104,800	106,000	107,200	108,400	109,700	111,000	112,300	113,600	114,900	116,200	117,400	118,700	120,000	121,200	122,500	123,800	125,100	61
62	101,800	103,100	104,400	105,800	107,100	108,400	109,800	111,100	112,500	113,900	115,300	116,800	118,200	119,600	121,000	122,400	123,700	125,100	126,500	127,900	129,300	62
63	103,700	105,100	106,600	108,000	109,500	110,900	112,400	113,900	115,400	116,900	118,400	119,900	121,400	123,000	124,500	126,000	127,500	129,000	130,500	132,000	133,600	63
64	105,600	107,200	108,700	110,300	111,800	113,400	115,000	116,600	118,200	119,800	121,500	123,100	124,700	126,400	128,000	129,600	131,300	132,900	134,500	136,200	137,800	64
65	107,500	109,200	110,900	112,500	114,200	115,900	117,600	119,300	121,000	122,800	124,500	126,300	128,000	129,800	131,500	133,300	135,000	136,800	138,500	140,300	142,100	65
66	111,200	112,900	114,600	116,300	118,000	119,700	121,400	123,200	124,900	126,700	128,500	130,300	132,100	133,900	135,600	137,400	139,200	140,900	142,700	144,500	146,300	66
67	113,600	115,300	117,000	118,700	120,500	122,200	123,900	125,700	127,500	129,300	131,100	132,900	134,700	136,500	138,300	140,100	141,900	143,700	145,500	147,400	149,200	67
68	115,500	117,300	119,200	121,000	122,800	124,700	126,500	128,400	130,300	132,200	134,100	136,100	138,000	139,900	141,900	143,800	145,700	147,600	149,500	151,500	153,400	68
69	117,400	119,400	121,300	123,200	125,200	127,100	129,100	131,100	133,100	135,200	137,200	139,200	141,300	143,300	145,400	147,400	149,500	151,500	153,600	155,600	157,700	69
70	119,300	121,400	123,400	125,500	127,500	129,600	131,700	133,800	135,900	138,100	140,200	142,400	144,600	146,800	148,900	151,100	153,200	155,400	157,600	159,700	161,900	70
71	121,300	123,400	125,600	127,700	129,900	132,100	134,300	136,500	138,800	141,000	143,300	145,600	147,900	150,200	152,400	154,700	157,000	159,300	161,600	163,900	166,200	71
72	123,200	125,400	127,700	130,000	132,300	134,600	136,900	139,200	141,600	144,000	146,300	148,700	151,100	153,600	156,000	158,300	160,700	163,200	165,600	168,000	170,400	72
73	127,400	129,800	132,200	134,600	137,100	139,500	142,000	144,500	147,000	149,500	152,000	154,500	157,100	159,700	162,200	164,700	167,300	169,800	172,400	175,000	177,600	73
74	131,700	134,200	136,800	139,300	141,900	144,500	147,100	149,700	152,300	155,000	157,600	160,300	163,000	165,700	168,400	171,100	173,800	176,500	179,200	181,900	184,700	74
75	133,600	136,200	138,900	141,600	144,200	146,900	149,600	152,400	155,100	157,900	160,700	163,500	166,300	169,200	172,000	174,800	177,600	180,400	183,200	186,100	188,900	75
76	136,700	139,100	141,500	144,000	146,400	148,900	151,400	153,900	156,400	158,900												76
77	142,700	145,200	147,700	150,200	152,700	155,200	157,700	160,300	162,900	165,500	168,100	170,700	173,300	176,000	178,600	181,200	183,900	186,500	189,200	191,800	194,500	77
78	144,600	147,200	149,800	152,400	155,000	157,700	160,300	163,000	165,700	168,400	171,100	173,900	176,600	179,400	182,100	184,900	187,600	190,400	193,200	195,900	198,700	78
79	150,700	153,300	156,000	158,600	161,300	164,000	166,700	169,400	172,200	174,900	177,700	180,500	183,300	186,100	188,900	191,700	194,500	197,300	200,200	203,000	205,900	79
80	152,600	155,400	158,100	160,900	163,700	166,500	169,300	172,100	175,000	177,900	180,800	183,700	186,600	189,500	192,500	195,400	198,300	201,200	204,200	207,100	210,100	80
81	155,700	158,200	160,700	163,300	165,800	168,400	171,000	173,600	176,300	178,900												81
82	161,700	164,300	166,900	169,500	172,100	174,700	177,400	180,000	182,700	185,400	188,200	190,900	193,600	196,400	199,100	201,800	204,600	207,300	210,100	212,900	215,700	82
83	163,600	166,300	169,000	171,700	174,500	177,200	180,000	182,800	185,600	188,400	191,200	194,100	196,900	199,800	202,600	205,500	208,400	211,200	214,100	217,000	219,900	83
84	171,600	174,500	177,300	180,200	183,100	186,000	188,900	191,900	194,900	197,800	200,800	203,900	206,900	209,900	213,000	216,000	219,000	222,100	225,100	228,200	231,300	84
85	174,700	177,300	179,900	182,600	185,300	188,000	190,700	193,400	196,100	198,900												85
86	182,600	185,400	188,200	191,100	193,900	196,800	199,600	202,500	205,400	208,300	211,300	214,200	217,200	220,200	223,200	226,100	229,100	232,100	235,100	238,100	241,100	86
87	190,600	193,600	196,500	199,500	202,500	205,500	208,600	211,600	214,700	217,800	220,900	224,000	227,200	230,300	233,500	236,600	239,700	242,900	246,100	249,300	252,500	87
88	193,700	196,400	199,200	201,900	204,700	207,500	210,300	213,100	216,000	218,800												88
89	201,600	204,500	207,400	210,400	213,300	216,300	219,300	222,300	225,300	228,300	231,400	234,400	237,500	240,600	243,700	246,700	249,800	252,900	256,000	259,100	262,300	89
90	209,600	212,700	215,700	218,800	221,900	225,100	228,200	231,400	234,600	237,800	241,000	244,200	247,500	250,700	254,000	257,200	260,500	263,700	267,000	270,300	273,600	90
92	220,600	223,600	226,700	229,700	232,700	235,800	238,900	242,000	245,100	248,300	251,400	254,600	257,800	261,000	264,200	267,300	270,500	273,700	277,000	280,200	283,400	92
93	228,600	231,800	235,000	238,200	241,400	244,600	247,900	251,100	254,400	257,700	261,100	264,400	267,800	271,100	274,500	277,800	281,200	284,600	288,000	291,400	294,800	93
95	242,200	245,300	248,400	251,600	254,700	257,900	261,100	264,300	267,500	270,700	274,000	277,200	280,500	283,800	287,100	290,400	293,600	296,900	300,300	303,600	306,900	95
96	250,200	253,400	256,700	260,000	263,300	266,700	270,000	273,400	276,800	280,200	283,600	287,000	290,500	294,000	297,400	300,800	304,300	307,800	311,300	314,800	318,300	96
98	263,800	267,000	270,200	273,400	276,700	280,000	283,200	286,500	289,800	293,200	296,500	299,900	303,200	306,600	310,000	313,400	316,700	320,100	323,500	327,000	330,400	98
99	271,800	275,100	278,500	281,900	285,300	288,700	292,200	295,700	299,100	302,600	306,100	309,700	313,200	316,800	320,300	323,900	327,400	331,000	334,600	338,100	341,800	99
101	285,400	288,700	292,000	295,300	298,700	302,000	305,400	308,800	312,200	315,600	319,100	322,500	326,000	329,400	332,900	336,400	339,800	343,300	346,800	350,300	353,900	101
102	293,300	296,800	300,300	303,800	307,300	310,800	314,400	317,900	321,500	325,100	328,700	332,300	335,900	339,600	343,200	346,900	350,500	354,200	357,800	361,500	365,200	102
104	306,900	310,300	313,800	317,200	320,600	324,100	327,600	331,100	334,600	338,100	341,600	345,100	348,700	352,300	355,800	359,400	362,900	366,500	370,100	373,700	377,300	104
105	314,900	318,500	322,100	325,700	329,300	332,900	336,500	340,200	343,800	347,500	351,200	354,900	358,700	362,400	366,100	369,900	373,600	377,400	381,100			105
106	321,200	324,600	328,100	331,600	335,100	338,600	342,100	345,600	349,200	352,800	356,300	359,900	363,500	367,100	370,700	374,300	378,000	381,600				106
107	337,100	340,900	344,700	348,500	352,300	356,200	360,000	363,900	367,800	371,700	375,600	379,500										107
108	349,400	353,200	356,900	360,600	364,400	368,200	372,000	375,800	379,600													108
109	357,400	361,300	365,200	369,100	373,000	377,000	380,900															109
110	369,700	373,500	377,400	381,200																		110
111	377,700	381,700																				111

HEADWATER 590 to 594
TAILWATER 572.51 to 573.50

MARCH 2004

GUNTERSVILLE DAM
SPILLWAY DISCHARGE
IN CUBIC FEET PER SECOND

GATE ARRANGEMENT	HEADWATER ELEVATION																				GATE ARRANGEMENT
	594.0	594.2	594.4	594.6	594.8	595.0	595.2	595.4	595.6	595.8	596.0	596.2	596.4	596.6	596.8	597.0	597.2	597.4	597.6	597.8	598.0	
0*	0	0	0	0	0	0	0	0	160	530	1,030	1,640	2,320	3,080	3,910	4,810	5,760	6,770	7,840	8,950	10,110	0*
1	1,010	1,020	1,020	1,030	1,030	1,040	1,050	1,060	1,230	1,590	2,080	2,660	3,320	4,060	4,880	5,760	6,710	7,710	8,760	9,860	11,010	1
2	2,700	2,710	2,720	2,740	2,750	2,770	2,800	2,830	3,010	3,400	3,910	4,510	5,190	5,940	6,750	7,630	8,560	9,530	10,550	11,610	12,720	2
3	3,710	3,730	3,750	3,770	3,790	3,800	3,850	3,900	4,080	4,460	4,950	5,530	6,180	6,910	7,720	8,580	9,510	10,460	11,470	12,520		3
4	5,390	5,420	5,450	5,480	5,510	5,530	5,600	5,670	5,870	6,270	6,780	7,380	8,050	8,790	9,590	10,450	11,360	12,290	13,260	14,270	15,330	4
5	6,400	6,440	6,470	6,510	6,540	6,570	6,650	6,730	6,940	7,330	7,820	8,400	9,050	9,770	10,560	11,400	12,300	13,220	14,180	15,180		5
6	8,090	8,130	8,170	8,220	8,260	8,300	8,400	8,500	8,730	9,140	9,650	10,250	10,920	11,650	12,430	13,270	14,160	15,040	15,970	16,940	17,940	6
7	9,100	9,150	9,200	9,240	9,290	9,340	9,450	9,560	9,800	10,200	10,700	11,270	11,910	12,620	13,390	14,220	15,100	15,980	16,890	17,850		7
8	10,780	10,840	10,900	10,960	11,010	11,070	11,200	11,330	11,590	12,010	12,530	13,120	13,780	14,500	15,270	16,090	16,950	17,800	18,680	19,600	20,550	8
9	11,800	11,860	11,920	11,980	12,040	12,110	12,250	12,400	12,650	13,070	13,570	14,140	14,780	15,480	16,230	17,040	17,900	18,730	19,600	20,510		9
10	13,480	13,550	13,620	13,690	13,760	13,830	14,000	14,170	14,440	14,860	15,400	15,990	16,650	17,350	18,110	18,910	19,750	20,560	21,390	22,260	23,160	10
11	14,490	14,570	14,650	14,720	14,800	14,870	15,050	15,230	15,510	15,940	16,440	17,020	17,640	18,330	19,070	19,860	20,700	21,490	22,310	23,170		11
12	16,180	16,260	16,350	16,430	16,520	16,600	16,800	17,000	17,300	17,740	18,270	18,860	19,510	20,210	20,950	21,730	22,550	23,310	24,100	24,920	25,780	12
13	17,190	17,280	17,370	17,460	17,550	17,640	17,850	18,060	18,370	18,800												13
14	18,870	18,970	19,070	19,170	19,270	19,370	19,600	19,830	20,160	20,610	21,140	21,730	22,370	23,060	23,790	24,550	25,350	26,070	26,810	27,580	28,390	14
15	19,880	19,990	20,090	20,200	20,300	20,410	20,650	20,900	21,220	21,670												15
16	21,570	21,680	21,800	21,910	22,020	22,140	22,400	22,660	23,010	23,480	24,020	24,610	25,240	25,910	26,620	27,370	28,140	28,830	29,520	30,250	31,000	16
17	22,580	22,700	22,820	22,940	23,060	23,170	23,450	23,730	24,080	24,540												17
18	24,260	24,390	24,520	24,650	24,780	24,900	25,200	25,500	25,870	26,350	26,890	27,480	28,100	28,770	29,460	30,190	30,940	31,580	32,230	32,910	33,610	18
19	25,280	25,410	25,540	25,680	25,810	25,940	26,250	26,560	26,940	27,410												19
20	26,960	27,100	27,250	27,390	27,530	27,670	28,000	28,330	28,730	29,220	29,760	30,350	30,970	31,620	32,300	33,010	33,740	34,340	34,940	35,570	36,220	20
21	28,500	28,660	28,810	28,960	29,110	29,260	29,610	29,960	30,370	30,880	31,440	32,040	32,680	33,340	34,040	34,760	35,510	36,120	36,730	37,370	38,030	21
22	30,040	30,210	30,370	30,530	30,700	30,860	31,220	31,580	32,010	32,540	33,110	33,730	34,380	35,070	35,780	36,520	37,280	37,900	38,520	39,170	39,840	22
23	31,590	31,760	31,940	32,110	32,280	32,450	32,830	33,210	33,660	34,190	34,790	35,420	36,090	36,790	37,520	38,270	39,050	39,680	40,310	40,970	41,650	23
24	33,130	33,310	33,500	33,680	33,860	34,040	34,440	34,840	35,300	35,850	36,460	37,110	37,800	38,510	39,260	40,030	40,820	41,460	42,100	42,770	43,450	24
25	34,670	34,870	35,060	35,250	35,440	35,630	36,050	36,460	36,940	37,510	38,140	38,800	39,500	40,240	41,000	41,780	42,590	43,240	43,890	44,570	45,260	25
26	36,220	36,420	36,620	36,830	37,030	37,230	37,660	38,090	38,580	39,170	39,810	40,490	41,210	41,960	42,730	43,540	44,360	45,020	45,680	46,370	47,070	26
27	37,760	37,970	38,190	38,400	38,610	38,820	39,270	39,710	40,230	40,830	41,490	42,190	42,920	43,680	44,470	45,290	46,130	46,800	47,470	48,170	48,880	27
28	39,300	39,530	39,750	39,970	40,190	40,410	40,880	41,340	41,870	42,490	43,160	43,880	44,630	45,410	46,210	47,040	47,900	48,580	49,260	49,970	50,690	28
29	40,840	41,080	41,310	41,550	41,780	42,010	42,490	42,970	43,510	44,150	44,840	45,570	46,330	47,130	47,950	48,800	49,670	50,360	51,050	51,770	52,500	29
30	41,860	42,100	42,340	42,570	42,810	43,040	43,540	44,030	44,580	45,210												30
31	43,540	43,790	44,040	44,280	44,530	44,770	45,290	45,800	46,370	47,020	47,710	48,440	49,200	49,980	50,790	51,620	52,470	53,120	53,770	54,430	55,110	31
32	45,080	45,340	45,600	45,860	46,110	46,370	46,900	47,420	48,010	48,670	49,390	50,130	50,910	51,710	52,530	53,370	54,240	54,900	55,560	56,230	56,920	32
33	46,090	46,360	46,620	46,890	47,150	47,400	47,950	48,490	49,080	49,730												33
34	47,780	48,050	48,330	48,600	48,870	49,130	49,700	50,260	50,870	51,540	52,260	53,000	53,770	54,560	55,370	56,190	57,040	57,660	58,270	58,890	59,530	34
35	49,320	49,610	49,890	50,170	50,450	50,730	51,310	51,880	52,510	53,200	53,930	54,690	55,480	56,280	57,110	57,950	58,810	59,440	60,060	60,690	61,340	35
36	50,330	50,620	50,910	51,200	51,480	51,760	52,360	52,950	53,580	54,260												36
37	52,020	52,320	52,610	52,910	53,200	53,490	54,110	54,720	55,370	56,070	56,810	57,560	58,340	59,140	59,950	60,770	61,600	62,190	62,770	63,350	63,950	37
38	53,560	53,870	54,180	54,480	54,780	55,090	55,720	56,340	57,010	57,730	58,480	59,260	60,050	60,860	61,680	62,520	63,370	63,980	64,560	65,150	65,760	38
39	56,260	56,580	56,900	57,220	57,540	57,850	58,520	59,180	59,870	60,600	61,350	62,130	62,910	63,710	64,520	65,340	66,170	66,730	67,270	67,810	68,370	39
40	58,950	59,290	59,630	59,960	60,290	60,620	61,320	62,010	62,720	63,470	64,230	65,000	65,780	66,570	67,360	68,160	68,970	69,490	69,980	70,480	70,980	40
41	60,490	60,840	61,190	61,530	61,870	62,210	62,930	63,640	64,370	65,130	65,900	66,690	67,490	68,290	69,100	69,920	70,740	71,270	71,770	72,280	72,790	41
42	63,370	63,740	64,120	64,490	64,850	65,220	65,990	66,750	67,530	68,340	69,160	70,000	70,850	71,700	72,560	73,430	74,300	74,860	75,390	75,920	76,460	42
43	66,240	66,640	67,040	67,440	67,830	68,230	69,040	69,860	70,690	71,550	72,430	73,320	74,210	75,120	76,030	76,940	77,870	78,450	79,010	79,560	80,130	43
44	69,120	69,540	69,970	70,390	70,820	71,230	72,100	72,970	73,850	74,760	75,690	76,630	77,580	78,530	79,490	80,460	81,430	82,050	82,620	83,210	83,800	44
45	71,990	72,450	72,900	73,350	73,800	74,240	75,160	76,070	77,010	77,970	78,950	79,940	80,940	81,950	82,960	83,970	84,990	85,640	86,240	86,850	87,470	45
46	74,860	75,350	75,830	76,300	76,780	77,250	78,220	79,180	80,170	81,190	82,210	83,260	84,300	85,360	86,420	87,490	88,550	89,230	89,860	90,500	91,140	46
47	77,740	78,250	78,750	79,260	79,760	80,250	81,280	82,290	83,330	84,400	85,480	86,570	87,670	88,770	89,880	91,000	92,120	92,820	93,480	94,140	94,810	47
48	80,610	81,150	81,680	82,210	82,740	83,260	84,340	85,400	86,490	87,610	88,740	89,880	91,030	92,190	93,350	94,510	95,680	96,410	97,100	97,790	98,480	48
49	83,490	84,050	84,610	85,160	85,720	86,270	87,390	88,510	89,650	90,820	92,000	93,200	94,390	95,600	96,810	98,030	99,240	100,000	100,700	101,400	102,200	49
50	87,720	88,310	88,900	89,480	90,050	90,630	91,800	92,970	94,150	95,350	96,550	97,760	98,970	100,200	101,400	102,600	103,800	104,500	105,200	105,900	106,600	50
51	90,600	91,210	91,820	92,430	93,030	93,630	94,860	96,080	97,310	98,560	99,810	101,100	102,300	103,600	104,900	106,100	107,400	108,100	108,800	109,500	110,200	51
52	93,470	94,110	94,750	95,380	96,010	96,640	97,920	99,190	100,500	101,800	103,100	104,400	105,700	107,000	108,300	109,600	110,900	111,700	112,500	113,200	113,900	52
53	96,350	97,010	97,680	98,340	99,000	99,650	101,000	102,300	103,600	105,000	106,300	107,700	109,100	110,400	111,800	113,100	114,500	115,300	116,100	116,800	117,600	53
54	99,220	99,910	100,600	101,300	102,000	102,700	104,000	105,400	106,800	108,200	109,600	111,000	112,400	113,800	115,200	116,700	118,100	118,900	119,700	120,500	121,300	54

MARCH 2004

** Arrangement "0" indicates that all spillway gates are closed. Discharge is spillway gate and trash gate overflow.*

HEADWATER 594 to 598
TAILWATER 572.51 to 573.50

GUNTERSVILLE DAM
SPILLWAY DISCHARGE
IN CUBIC FEET PER SECOND

GATE ARRANGEMENT	HEADWATER ELEVATION																					GATE ARRANGEMENT
	594.0	594.2	594.4	594.6	594.8	595.0	595.2	595.4	595.6	595.8	596.0	596.2	596.4	596.6	596.8	597.0	597.2	597.4	597.6	597.8	598.0	
55	102,100	102,800	103,500	104,200	105,000	105,700	107,100	108,500	110,000	111,400	112,900	114,300	115,800	117,200	118,700	120,200	121,600	122,500	123,300	124,100	124,900	55
56	105,200	105,900	106,700	107,400	108,100	108,800	110,300	111,800	113,200	114,700	116,200	117,700	119,200	120,700	122,200	123,700	125,200	126,100	126,900	127,700	128,500	56
57	108,100	108,800	109,600	110,300	111,100	111,900	113,400	114,900	116,400	117,900	119,500	121,000	122,600	124,100	125,600	127,200	128,700	129,700	130,500	131,400	132,200	57
58	112,300	113,200	114,100	115,000	115,900	116,700	118,300	119,900	121,500	123,200	124,800	126,400	128,100	129,700	131,300	133,000	134,600	135,700	136,700	137,700	138,700	58
59	116,600	117,600	118,600	119,600	120,600	121,600	123,300	125,000	126,700	128,400	130,100	131,800	133,600	135,300	137,000	138,800	140,500	141,700	142,900	144,000	145,200	59
60	120,800	122,000	123,100	124,200	125,400	126,500	128,300	130,100	131,800	133,600	135,400	137,300	139,100	140,900	142,700	144,600	146,400	147,700	149,000	150,300	151,600	60
61	125,100	126,300	127,600	128,900	130,100	131,400	133,300	135,100	137,000	138,900	140,800	142,700	144,600	146,500	148,400	150,400	152,300	153,800	155,200	156,600	158,100	61
62	129,300	130,700	132,100	133,500	134,900	136,300	138,200	140,200	142,100	144,100	146,100	148,100	150,100	152,100	154,100	156,100	158,200	159,800	161,400	163,000	164,600	62
63	133,600	135,100	136,600	138,100	139,700	141,200	143,200	145,200	147,300	149,300	151,400	153,500	155,600	157,700	159,800	161,900	164,100	165,800	167,600	169,300	171,000	63
64	137,800	139,500	141,100	142,800	144,400	146,100	148,200	150,300	152,400	154,600	156,700	158,900	161,100	163,300	165,500	167,700	170,000	171,900	173,700	175,600	177,500	64
65	142,100	143,800	145,600	147,400	149,200	151,000	153,100	155,300	157,600	159,800	162,100	164,300	166,600	168,900	171,200	173,500	175,800	177,900	179,900	181,900	184,000	65
66	146,300	148,100	149,900	151,700	153,500	155,300	157,600	159,800	162,100	164,300	166,600	168,900	171,200	173,500	175,800	178,100	180,400	182,400	184,400	186,400	188,400	66
67	149,200	151,000	152,800	154,600	156,500	158,300	160,600	162,900	165,200	167,500	169,900	172,200	174,500	176,900	179,300	181,600	184,000	186,000	188,000	190,000	192,100	67
68	153,400	155,400	157,300	159,300	161,200	163,200	165,600	168,000	170,400	172,800	175,200	177,600	180,100	182,500	184,900	187,400	189,900	192,000	194,200	196,400	198,500	68
69	157,700	159,700	161,800	163,900	166,000	168,100	170,600	173,000	175,500	178,000	180,500	183,000	185,600	188,100	190,600	193,200	195,800	198,100	200,400	202,700	205,000	69
70	161,900	164,100	166,300	168,500	170,800	173,000	175,500	178,100	180,700	183,200	185,800	188,400	191,100	193,700	196,300	199,000	201,600	204,100	206,500	209,000	211,500	70
71	166,200	168,500	170,800	173,200	175,500	177,900	180,500	183,100	185,800	188,500	191,200	193,900	196,600	199,300	202,000	204,800	207,500	210,100	212,700	215,300	217,900	71
72	170,400	172,900	175,300	177,800	180,300	182,800	185,500	188,200	191,000	193,700	196,500	199,300	202,100	204,900	207,700	210,600	213,400	216,200	218,900	221,600	224,400	72
73	177,600	180,200	182,800	185,400	188,000	190,700	193,500	196,400	199,300	202,200	205,100	208,000	211,000	213,900	216,900	219,900	222,900	225,800	228,700	231,600	234,600	73
74	184,700	187,400	190,200	193,000	195,700	198,500	201,500	204,500	207,600	210,600	213,700	216,700	219,800	222,900	226,000	229,200	232,300	235,400	238,500	241,600	244,700	74
75	188,900	191,800	194,700	197,600	200,500	203,400	206,500	209,600	212,700	215,800	219,000	222,100	225,300	228,500	231,700	235,000	238,200	241,400	244,700	247,900	251,200	75
77	194,500	197,200	199,900	202,600	205,300	208,000	210,900	213,900	216,800	219,800	222,800	225,800	228,900	231,900	235,000	238,100	241,200	244,300	247,400	250,400	253,500	77
78	198,700	201,600	204,400	207,200	210,100	212,900	215,900	218,900	222,000	225,000	228,100	231,200	234,400	237,500	240,700	243,900	247,100	250,300	253,500	256,800	260,000	78
79	205,900	208,700	211,600	214,500	217,400	220,300	223,400	226,500	229,600	232,800	235,900	239,100	242,300	245,500	248,800	252,000	255,300	258,500	261,700	264,900	268,100	79
80	210,100	213,100	216,100	219,100	222,100	225,200	228,400	231,600	234,800	238,000	241,300	244,500	247,800	251,100	254,500	257,800	261,200	264,500	267,800	271,200	274,600	80
82	215,700	218,500	221,300	224,100	226,900	229,800	232,800	235,800	238,900	242,000	245,100	248,200	251,400	254,600	257,800	261,000	264,200	267,400	270,500	273,700	276,900	82
83	219,900	222,800	225,800	228,700	231,700	234,600	237,800	240,900	244,000	247,200	250,400	253,600	256,900	260,200	263,400	266,800	270,100	273,400	276,700	280,000	283,400	83
84	231,300	234,400	237,500	240,600	243,800	246,900	250,200	253,500	256,800	260,200	263,500	266,900	270,300	273,700	277,200	280,600	284,100	287,500	291,000	294,500	297,900	84
86	241,100	244,100	247,200	250,200	253,300	256,400	259,600	262,800	266,100	269,400	272,700	276,000	279,400	282,800	286,200	289,600	293,000	296,400	299,900	303,300	306,800	86
87	252,500	255,700	258,900	262,100	265,400	268,600	272,000	275,500	278,900	282,300	285,800	289,300	292,800	296,400	299,900	303,500	307,000	310,600	314,200	317,700	321,300	87
89	262,300	265,400	268,600	271,700	274,900	278,100	281,400	284,800	288,100	291,500	295,000	298,400	301,900	305,400	308,900	312,400	316,000	319,500	323,000	326,600	330,200	89
90	273,600	276,900	280,300	283,600	287,000	290,400	293,900	297,400	301,000	304,500	308,100	311,700	315,300	319,000	322,600	326,300	330,000	333,600	337,300	341,000	344,700	90
92	283,400	286,700	290,000	293,200	296,500	299,900	303,300	306,700	310,200	313,700	317,300	320,800	324,400	328,000	331,600	335,300	338,900	342,500	346,200	349,900	353,500	92
93	294,800	298,200	301,700	305,100	308,600	312,100	315,700	319,400	323,000	326,700	330,400	334,100	337,800	341,600	345,300	349,100	352,900	356,700	360,500	364,300	368,100	93
95	306,900	310,300	313,600	317,000	320,400	323,800	327,300	330,800	334,400	338,000	341,600	345,200	348,900	352,600	356,300	360,000	363,700	367,400	371,200	374,900	378,700	95
96	318,300	321,800	325,300	328,900	332,500	336,000	339,700	343,500	347,200	351,000	354,700	358,500	362,300	366,200	370,000	373,900	377,800	381,600				96
98	330,400	333,800	337,300	340,800	344,200	347,700	351,300	354,900	358,600	362,200	365,900	369,700	373,400	377,200	380,900							98
99	341,800	345,400	349,000	352,700	356,300	360,000	363,800	367,600	371,400	375,200	379,100											99
101	353,900	357,400	361,000	364,500	368,100	371,700	375,300	379,000	382,800													101
102	365,200	368,900	372,700	376,400	380,200																	102
104	377,300	381,000																				104

HEADWATER 594 to 598
TAILWATER 572.51 to 573.50

MARCH 2004

GUNTERSVILLE DAM
SPILLWAY DISCHARGE
IN CUBIC FEET PER SECOND

GATE ARRANGEMENT	HEADWATER ELEVATION																				GATE ARRANGEMENT
	598.0	598.2	598.4	598.6	598.8	599.0	599.2	599.4	599.6	599.8	600.0	600.2	600.4	600.6	600.8	601.0	601.2	601.4	601.6	601.8	602.0	
0*	10,110	11,320	12,570	13,860	15,200	16,580	18,000	19,450	20,940	22,470	24,030											0*
1	11,010	12,210	13,450	14,740	16,070	17,440	18,850	20,290	21,780	23,300	24,860											1
2	12,720	13,870	15,070	16,310	17,610	18,950	20,340	21,760	23,220	24,730	26,270											2
4	15,330	16,430	17,570	18,760	20,020	21,330	22,680	24,070	25,510	26,980	28,500											4
6	17,940	18,990	20,070	21,210	22,430	23,700	25,020	26,380	27,790	29,240	30,730											6
8	20,550	21,540	22,570	23,660	24,840	26,070	27,360	28,690	30,070	31,500	32,960											8
10	23,160	24,100	25,070	26,110	27,250	28,450	29,700	31,000	32,360	33,750	35,190											10
12	25,780	26,660	27,570	28,560	29,660	30,820	32,040	33,310	34,640	36,010	37,420											12
14	28,390	29,220	30,070	31,010	32,070	33,190	34,380	35,630	36,920	38,270	39,660											14
16	31,000	31,770	32,570	33,460	34,480	35,570	36,720	37,940	39,200	40,520	41,890											16
18	33,610	34,330	35,070	35,910	36,890	37,940	39,060	40,250	41,490	42,780	44,120											18
20	36,220	36,890	37,570	38,360	39,300	40,310	41,400	42,560	43,770	45,040	46,350											20
21	38,030	38,700	39,400	40,190	41,110	42,110	43,180	44,300	45,480	46,710	47,980											21
22	39,840	40,520	41,230	42,020	42,930	43,910	44,950	46,050	47,190	48,380	49,620											22
23	41,650	42,340	43,060	43,850	44,750	45,710	46,720	47,790	48,900	50,060	51,250											23
24	43,450	44,160	44,880	45,680	46,560	47,510	48,500	49,540	50,620	51,730	52,890											24
25	45,260	45,980	46,710	47,510	48,380	49,300	50,270	51,280	52,330	53,410	54,520											25
26	47,070	47,800	48,540	49,330	50,190	51,100	52,050	53,030	54,040	55,080	56,150											26
27	48,880	49,610	50,370	51,160	52,010	52,900	53,820	54,770	55,750	56,750	57,790											27
28	50,690	51,430	52,190	52,990	53,830	54,700	55,590	56,510	57,460	58,430	59,420											28
29	52,500	53,250	54,020	54,820	55,640	56,490	57,370	58,260	59,170	60,100	61,050											29
31	55,110	55,810	56,520	57,270	58,050	58,870	59,710	60,570	61,450	62,360	63,280											31
32	56,920	57,630	58,350	59,100	59,870	60,670	61,480	62,310	63,170	64,030	64,920											32
34	59,530	60,180	60,850	61,550	62,280	63,040	63,820	64,630	65,450	66,290	67,150											34
35	61,340	62,000	62,680	63,370	64,100	64,840	65,600	66,370	67,160	67,960	68,780											35
37	63,950	64,560	65,180	65,820	66,510	67,210	67,940	68,680	69,440	70,220	71,010											37
38	65,760	66,380	67,000	67,650	68,320	69,010	69,710	70,430	71,150	71,900	72,650											38
39	68,370	68,930	69,500	70,100	70,730	71,380	72,050	72,740	73,440	74,150	74,880											39
40	70,980	71,490	72,010	72,550	73,140	73,760	74,390	75,050	75,720	76,410	77,110											40
41	72,790	73,310	73,830	74,380	74,960	75,550	76,170	76,790	77,430	78,080	78,750											41
42	76,460	77,000	77,550	78,130	78,730	79,350	79,990	80,640	81,310	81,980	82,670											42
43	80,130	80,700	81,280	81,880	82,500	83,150	83,820	84,490	85,180	85,880	86,600											43
44	83,800	84,400	85,000	85,620	86,280	86,950	87,640	88,340	89,060	89,790	90,520											44
45	87,470	88,090	88,720	89,370	90,050	90,750	91,460	92,190	92,930	93,690	94,450											45
46	91,140	91,790	92,440	93,120	93,830	94,550	95,290	96,040	96,810	97,590	98,380											46
47	94,810	95,490	96,170	96,870	97,600	98,350	99,110	99,890	100,700	101,500	102,300											47
48	98,480	99,180	99,890	100,600	101,400	102,100	102,900	103,700	104,600	105,400	106,200											48
49	102,200	102,900	103,600	104,400	105,100	105,900	106,800	107,600	108,400	109,300	110,200											49
50	106,600	107,300	107,900	108,600	109,400	110,100	110,900	111,600	112,400	113,200	114,000											50
51	110,200	111,000	111,700	112,400	113,100	113,900	114,700	115,500	116,300	117,100	117,900											51
52	113,900	114,600	115,400	116,100	116,900	117,700	118,500	119,300	120,200	121,000	121,900											52
53	117,600	118,300	119,100	119,900	120,700	121,500	122,400	123,200	124,100	124,900	125,800											53
54	121,300	122,000	122,800	123,600	124,500	125,300	126,200	127,000	127,900	128,800	129,700											54
55	124,900	125,700	126,500	127,400	128,200	129,100	130,000	130,900	131,800	132,700	133,600											55
56	128,500	129,400	130,200	131,000	131,900	132,700	133,500	134,400	135,200	136,100	136,900											56
57	132,200	133,100	133,900	134,800	135,600	136,500	137,400	138,200	139,100	140,000	140,800											57
58	138,700	139,700	140,700	141,700	142,700	143,700	144,800	145,800	146,800	147,800	148,900											58
59	145,200	146,300	147,500	148,600	149,800	151,000	152,100	153,300	154,500	155,700	156,900											59
60	151,600	152,900	154,200	155,500	156,900	158,200	159,500	160,900	162,200	163,600	164,900											60
61	158,100	159,500	161,000	162,500	163,900	165,400	166,900	168,400	169,900	171,400	172,900											61
62	164,600	166,200	167,800	169,400	171,000	172,700	174,300	176,000	177,600	179,300	181,000											62
63	171,000	172,800	174,500	176,300	178,100	179,900	181,700	183,500	185,300	187,100	189,000											63
64	177,500	179,400	181,300	183,200	185,200	187,100	189,100	191,000	193,000	195,000	197,000											64
65	184,000	186,000	188,100	190,100	192,200	194,300	196,500	198,600	200,700	202,900	205,000											65
66	188,400	190,400	192,400	194,400	196,500	198,500	200,600	202,600	204,700	206,800	208,900											66

MARCH 2004

** Arrangement "0" indicates that all spillway gates are closed. Discharge is spillway gate and trash gate overflow.*

HEADWATER 598 to 602
TAILWATER 572.51 to 573.50

GUNTERSVILLE DAM
SPILLWAY DISCHARGE
IN CUBIC FEET PER SECOND

GATE ARRANGEMENT	HEADWATER ELEVATION																					GATE ARRANGEMENT
	598.0	598.2	598.4	598.6	598.8	599.0	599.2	599.4	599.6	599.8	600.0	600.2	600.4	600.6	600.8	601.0	601.2	601.4	601.6	601.8	602.0	
67	192, 100	194, 100	196, 100	198, 200	200, 200	202, 300	204, 400	206, 500	208, 600	210, 700	212, 800											67
68	198, 500	200, 700	202, 900	205, 100	207, 300	209, 500	211, 800	214, 000	216, 300	218, 600	220, 800											68
69	205, 000	207, 300	209, 700	212, 000	214, 400	216, 800	219, 200	221, 600	224, 000	226, 400	228, 900											69
70	211, 500	213, 900	216, 400	218, 900	221, 400	224, 000	226, 600	229, 100	231, 700	234, 300	236, 900											70
71	217, 900	220, 600	223, 200	225, 800	228, 500	231, 200	233, 900	236, 700	239, 400	242, 200	244, 900											71
72	224, 400	227, 200	230, 000	232, 800	235, 600	238, 500	241, 300	244, 200	247, 100	250, 000	252, 900											72
73	234, 600	237, 500	240, 500	243, 400	246, 400	249, 500	252, 500	255, 600	258, 700	261, 800	264, 900											73
74	244, 700	247, 800	251, 000	254, 100	257, 300	260, 500	263, 700	267, 000	270, 300	273, 500	276, 800											74
75	251, 200	254, 400	257, 700	261, 000	264, 400	267, 700	271, 100	274, 500	278, 000	281, 400	284, 900											75
77	253, 500	256, 600	259, 700	262, 900	266, 000	269, 300	272, 500	275, 700	279, 000	282, 200	285, 500											77
78	260, 000	263, 200	266, 500	269, 800	273, 100	276, 500	279, 900	283, 300	286, 700	290, 100	293, 600											78
79	268, 100	271, 300	274, 600	277, 800	281, 100	284, 500	287, 800	291, 200	294, 600	297, 900	301, 300											79
80	274, 600	277, 900	281, 300	284, 700	288, 200	291, 700	295, 200	298, 700	302, 300	305, 800	309, 400											80
82	276, 900	280, 100	283, 400	286, 600	289, 900	293, 200	296, 500	299, 900	303, 300	306, 600	310, 000											82
83	283, 400	286, 700	290, 100	293, 500	297, 000	300, 400	303, 900	307, 400	311, 000	314, 500	318, 100											83
84	297, 900	301, 400	304, 900	308, 500	312, 000	315, 600	319, 300	322, 900	326, 500	330, 200	333, 900											84
86	306, 800	310, 200	313, 700	317, 300	320, 800	324, 400	328, 000	331, 600	335, 300	338, 900	342, 600											86
87	321, 300	324, 900	328, 600	332, 200	335, 900	339, 600	343, 300	347, 100	350, 800	354, 600	358, 400											87
89	330, 200	333, 800	337, 400	341, 000	344, 600	348, 300	352, 100	355, 800	359, 500	363, 300	367, 100											89
90	344, 700	348, 400	352, 200	355, 900	359, 700	363, 500	367, 400	371, 200	375, 100	379, 000												90
92	353, 500	357, 300	361, 000	364, 700	368, 500	372, 300	376, 100	380, 000														92
93	368, 100	371, 900	375, 800	379, 700																		93
95	378, 700	382, 500																				95

HEADWATER 598 to 602
TAILWATER 572.51 to 573.50

MARCH 2004

GUNTERSVILLE DAM
SPILLWAY DISCHARGE
IN CUBIC FEET PER SECOND

GATE ARRANGE-MENT	HEADWATER ELEVATION																				GATE ARRANGE-MENT
	590.0	590.2	590.4	590.6	590.8	591.0	591.2	591.4	591.6	591.8	592.0	592.2	592.4	592.6	592.8	593.0	593.2	593.4	593.6	593.8	594.0	
1	970	980	980	990	990	1,000	1,010	1,010	1,020	1,020	1,030	1,030	1,040	1,050	1,050	1,060	1,060	1,070	1,070	1,080	1,080	1
2	2,540	2,560	2,570	2,590	2,610	2,620	2,640	2,660	2,670	2,690	2,700	2,720	2,740	2,750	2,770	2,780	2,800	2,810	2,830	2,840	2,860	2
3	3,510	3,530	3,550	3,580	3,600	3,620	3,650	3,670	3,690	3,710	3,730	3,760	3,780	3,800	3,820	3,840	3,860	3,880	3,900	3,920	3,940	3
4	5,080	5,110	5,140	5,180	5,210	5,250	5,280	5,310	5,350	5,380	5,410	5,440	5,470	5,510	5,540	5,570	5,600	5,630	5,660	5,690	5,720	4
5	6,050	6,090	6,130	6,170	6,210	6,250	6,290	6,320	6,360	6,400	6,440	6,480	6,510	6,550	6,590	6,620	6,660	6,700	6,730	6,770	6,800	5
6	7,610	7,670	7,720	7,770	7,820	7,870	7,920	7,970	8,020	8,070	8,110	8,160	8,210	8,260	8,300	8,350	8,400	8,440	8,490	8,530	8,580	6
7	8,580	8,640	8,700	8,760	8,810	8,870	8,920	8,980	9,040	9,090	9,140	9,200	9,250	9,300	9,360	9,410	9,460	9,510	9,560	9,610	9,660	7
8	10,150	10,220	10,290	10,360	10,430	10,490	10,560	10,620	10,690	10,760	10,820	10,880	10,950	11,010	11,070	11,140	11,200	11,260	11,320	11,380	11,440	8
9	11,120	11,200	11,270	11,350	11,420	11,490	11,560	11,640	11,710	11,780	11,850	11,920	11,990	12,060	12,120	12,190	12,260	12,330	12,390	12,460	12,520	9
10	12,690	12,780	12,860	12,950	13,030	13,120	13,200	13,280	13,360	13,440	13,520	13,600	13,680	13,760	13,840	13,920	14,000	14,070	14,150	14,220	14,300	10
11	13,660	13,750	13,840	13,940	14,030	14,120	14,200	14,290	14,380	14,470	14,550	14,640	14,720	14,810	14,890	14,980	15,060	15,140	15,220	15,300	15,380	11
12	15,230	15,330	15,430	15,540	15,640	15,740	15,840	15,940	16,040	16,130	16,230	16,330	16,420	16,520	16,610	16,700	16,800	16,890	16,980	17,070	17,160	12
13	16,200	16,310	16,420	16,520	16,630	16,740	16,840	16,950	17,050	17,160	17,260	17,360	17,460	17,560	17,660	17,760	17,860	17,950	18,050	18,150	18,240	13
14	17,770	17,890	18,010	18,130	18,240	18,360	18,480	18,590	18,710	18,820	18,930	19,050	19,160	19,270	19,380	19,490	19,600	19,700	19,810	19,910	20,020	14
15	18,740	18,860	18,990	19,110	19,240	19,360	19,480	19,600	19,730	19,840	19,960	20,080	20,200	20,310	20,430	20,540	20,660	20,770	20,880	20,990	21,100	15
16	20,300	20,440	20,580	20,720	20,850	20,980	21,120	21,250	21,380	21,510	21,640	21,770	21,890	22,020	22,150	22,270	22,390	22,520	22,640	22,760	22,880	16
17	21,270	21,420	21,560	21,700	21,840	21,980	22,120	22,260	22,400	22,530	22,670	22,800	22,930	23,070	23,200	23,330	23,460	23,580	23,710	23,840	23,960	17
18	22,840	23,000	23,150	23,300	23,460	23,610	23,760	23,910	24,050	24,200	24,340	24,490	24,630	24,770	24,910	25,050	25,190	25,330	25,470	25,600	25,740	18
19	23,810	23,970	24,130	24,290	24,450	24,610	24,760	24,920	25,070	25,220	25,370	25,520	25,670	25,820	25,970	26,110	26,260	26,400	26,540	26,680	26,820	19
20	25,380	25,550	25,720	25,890	26,060	26,230	26,400	26,560	26,730	26,890	27,050	27,210	27,370	27,530	27,680	27,840	27,990	28,150	28,300	28,450	28,600	20
21	26,760	26,940	27,130	27,310	27,490	27,670	27,850	28,020	28,200	28,370	28,550	28,720	28,890	29,060	29,220	29,390	29,560	29,720	29,880	30,050	30,210	21
22	28,140	28,330	28,530	28,720	28,920	29,110	29,300	29,490	29,670	29,860	30,040	30,230	30,410	30,590	30,770	30,940	31,120	31,290	31,470	31,640	31,810	22
23	29,510	29,720	29,930	30,140	30,340	30,540	30,750	30,950	31,150	31,340	31,540	31,730	31,930	32,120	32,310	32,500	32,680	32,870	33,050	33,240	33,420	23
24	30,890	31,110	31,330	31,550	31,770	31,980	32,200	32,410	32,620	32,830	33,040	33,240	33,440	33,650	33,850	34,050	34,250	34,440	34,640	34,830	35,030	24
25	32,270	32,500	32,730	32,960	33,190	33,420	33,650	33,870	34,090	34,310	34,530	34,750	34,960	35,180	35,390	35,600	35,810	36,020	36,220	36,430	36,630	25
26	33,650	33,890	34,140	34,380	34,620	34,860	35,100	35,330	35,570	35,800	36,030	36,260	36,480	36,710	36,930	37,150	37,370	37,590	37,810	38,030	38,240	26
27	35,030	35,280	35,540	35,790	36,050	36,300	36,550	36,790	37,040	37,280	37,520	37,760	38,000	38,240	38,470	38,710	38,940	39,170	39,390	39,620	39,850	27
28	36,410	36,670	36,940	37,210	37,470	37,730	38,000	38,260	38,510	38,770	39,020	39,270	39,520	39,770	40,010	40,260	40,500	40,740	40,980	41,220	41,450	28
29	37,790	38,070	38,340	38,620	38,900	39,170	39,450	39,720	39,990	40,250	40,520	40,780	41,040	41,300	41,560	41,810	42,060	42,320	42,560	42,810	43,060	29
30	38,760	39,040	39,320	39,610	39,890	40,170	40,450	40,730	41,000	41,280	41,550	41,810	42,080	42,340	42,610	42,870	43,130	43,380	43,640	43,890	44,140	30
31	40,320	40,620	40,910	41,210	41,500	41,800	42,090	42,370	42,660	42,940	43,220	43,500	43,780	44,050	44,320	44,590	44,860	45,130	45,390	45,660	45,920	31
32	41,700	42,010	42,320	42,620	42,930	43,230	43,540	43,830	44,130	44,430	44,720	45,010	45,300	45,580	45,870	46,150	46,430	46,700	46,980	47,250	47,530	32
33	42,670	42,990	43,300	43,610	43,920	44,230	44,540	44,850	45,150	45,450	45,750	46,040	46,340	46,630	46,920	47,200	47,490	47,770	48,050	48,330	48,610	33
34	44,240	44,570	44,890	45,210	45,540	45,860	46,180	46,490	46,800	47,110	47,420	47,730	48,030	48,330	48,630	48,930	49,230	49,520	49,810	50,100	50,390	34
35	45,620	45,960	46,290	46,630	46,960	47,300	47,630	47,950	48,280	48,600	48,920	49,240	49,550	49,860	50,180	50,480	50,790	51,090	51,390	51,690	51,990	35
36	46,590	46,930	47,270	47,620	47,960	48,300	48,630	48,960	49,290	49,620	49,950	50,270	50,590	50,910	51,230	51,540	51,850	52,160	52,470	52,770	53,080	36
37	48,160	48,510	48,860	49,220	49,570	49,920	50,260	50,610	50,950	51,290	51,620	51,960	52,290	52,620	52,940	53,270	53,590	53,910	54,220	54,540	54,850	37
38	49,540	49,900	50,260	50,630	50,990	51,360	51,710	52,070	52,420	52,770	53,120	53,470	53,810	54,150	54,480	54,820	55,150	55,480	55,810	56,140	56,460	38
39	52,070	52,460	52,840	53,220	53,600	53,980	54,350	54,730	55,100	55,460	55,830	56,190	56,540	56,900	57,250	57,600	57,950	58,300	58,640	58,980	59,320	39
40	54,610	55,010	55,410	55,810	56,210	56,600	56,990	57,380	57,770	58,150	58,530	58,910	59,280	59,650	60,020	60,390	60,750	61,110	61,470	61,830	62,180	40
41	55,990	56,400	56,810	57,220	57,630	58,040	58,440	58,840	59,240	59,640	60,030	60,420	60,800	61,180	61,560	61,940	62,310	62,690	63,050	63,420	63,790	41
42	58,520	58,960	59,390	59,830	60,260	60,690	61,120	61,550	61,980	62,400	62,820	63,240	63,650	64,070	64,480	64,880	65,280	65,680	66,080	66,480	66,870	42
43	61,050	61,520	61,980	62,440	62,890	63,350	63,800	64,250	64,710	65,160	65,620	66,060	66,510	66,950	67,390	67,820	68,260	68,680	69,110	69,530	69,950	43
44	63,590	64,080	64,560	65,040	65,530	66,000	66,470	66,950	67,440	67,930	68,410	68,890	69,360	69,830	70,300	70,760	71,230	71,680	72,140	72,590	73,040	44
45	66,120	66,630	67,140	67,650	68,160	68,660	69,150	69,660	70,180	70,690	71,200	71,710	72,220	72,720	73,210	73,710	74,200	74,680	75,170	75,650	76,120	45
46	68,650	69,190	69,720	70,260	70,790	71,310	71,830	72,360	72,910	73,460	74,000	74,540	75,070	75,600	76,120	76,650	77,170	77,680	78,190	78,700	79,210	46
47	71,180	71,750	72,310	72,860	73,420	73,960	74,500	75,060	75,640	76,220	76,790	77,360	77,920	78,480	79,040	79,590	80,140	80,680	81,220	81,760	82,290	47
48	73,710	74,310	74,890	75,470	76,050	76,620	77,180	77,770	78,380	78,980	79,590	80,180	80,780	81,360	81,950	82,530	83,110	83,680	84,250	84,820	85,380	48
49	76,250	76,860	77,470	78,080	78,680	79,270	79,860	80,470	81,110	81,750	82,380	83,010	83,630	84,250	84,860	85,470	86,080	86,680	87,280	87,870	88,460	49
50	80,160	80,810	81,450	82,080	82,710	83,330	83,950	84,590	85,260	85,920	86,580	87,240	87,890	88,530	89,170	89,810	90,440	91,070	91,690	92,310	92,930	50
51	82,700	83,370	84,030	84,690	85,340	85,990	86,620	87,290	87,990	88,690	89,380	90,060	90,740	91,410	92,080	92,750	93,410	94,070	94,720	95,370	96,020	51
52	85,230	85,920	86,610	87,300	87,970	88,640	89,300	90,000	90,730	91,450	92,170	92,880	93,590	94,300	95,000	95,690	96,380	97,070	97,750	98,430	99,100	52
53	87,760	88,480	89,200	89,900	90,600	91,290	91,980	92,700	93,460	94,210	94,960	95,710	96,450	97,180	97,910	98,630	99,350	100,100	100,800	101,500	102,200	53
54	90,290	91,040	91,780	92,510	93,230	93,950	94,650	95,400	96,190	96,980	97,760	98,530	99,300	100,100	100,800	101,600	102,300	103,100	103,800	104,500	105,300	54
55	92,820	93,600	94,360	95,120	95,860	96,600	97,330	98,110	98,930	99,740	100,600	101,400	102,200	102,900	103,700	104,500	105,300	106,100	106,800	107,600	108,400	55

MARCH 2004

HEADWATER 590 to 594
TAILWATER 573.51 to 574.50

GUNTERSVILLE DAM
SPILLWAY DISCHARGE
IN CUBIC FEET PER SECOND

GATE ARRANGEMENT	HEADWATER ELEVATION																					GATE ARRANGEMENT
	590.0	590.2	590.4	590.6	590.8	591.0	591.2	591.4	591.6	591.8	592.0	592.2	592.4	592.6	592.8	593.0	593.2	593.4	593.6	593.8	594.0	
56	95,580	96,380	97,160	97,940	98,710	99,480	100,200	101,000	101,900	102,700	103,500	104,400	105,200	106,000	106,800	107,600	108,400	109,200	110,000	110,800	111,600	56
57	98,110	98,940	99,750	100,600	101,300	102,100	102,900	103,700	104,600	105,500	106,300	107,200	108,000	108,900	109,700	110,600	111,400	112,200	113,000	113,800	114,700	57
58	99,750	100,700	101,600	102,500	103,400	104,300	105,200	106,200	107,200	108,200	109,100	110,100	111,100	112,100	113,000	114,000	114,900	115,900	116,800	117,700	118,700	58
59	101,400	102,400	103,500	104,500	105,500	106,600	107,600	108,600	109,700	110,800	111,900	113,000	114,100	115,200	116,300	117,400	118,400	119,500	120,600	121,700	122,700	59
60	103,000	104,200	105,300	106,500	107,600	108,800	109,900	111,100	112,300	113,500	114,700	116,000	117,200	118,400	119,600	120,800	122,000	123,200	124,400	125,600	126,700	60
61	104,700	105,900	107,200	108,500	109,700	111,000	112,200	113,500	114,900	116,200	117,500	118,900	120,200	121,500	122,900	124,200	125,500	126,800	128,100	129,500	130,800	61
62	106,300	107,700	109,000	110,400	111,800	113,200	114,600	116,000	117,400	118,900	120,300	121,800	123,300	124,700	126,200	127,600	129,000	130,500	131,900	133,400	134,800	62
63	107,900	109,400	110,900	112,400	113,900	115,400	116,900	118,400	120,000	121,600	123,100	124,700	126,300	127,900	129,400	131,000	132,600	134,100	135,700	137,300	138,800	63
64	109,600	111,200	112,800	114,400	116,000	117,600	119,200	120,900	122,600	124,200	125,900	127,600	129,300	131,000	132,700	134,400	136,100	137,800	139,500	141,200	142,900	64
65	111,200	112,900	114,600	116,400	118,100	119,800	121,600	123,300	125,100	126,900	128,700	130,600	132,400	134,200	136,000	137,800	139,600	141,400	143,300	145,100	146,900	65
66	115,100	116,900	118,600	120,400	122,100	123,900	125,600	127,400	129,300	131,100	132,900	134,800	136,600	138,500	140,300	142,200	144,000	145,800	147,700	149,500	151,400	66
67	117,600	119,400	121,200	123,000	124,700	126,500	128,300	130,100	132,000	133,900	135,700	137,600	139,500	141,400	143,200	145,100	147,000	148,800	150,700	152,600	154,400	67
68	119,300	121,200	123,000	124,900	126,800	128,700	130,700	132,600	134,600	136,500	138,500	140,500	142,500	144,500	146,500	148,500	150,500	152,500	154,500	156,500	158,500	68
69	120,900	122,900	124,900	126,900	128,900	131,000	133,000	135,000	137,100	139,200	141,300	143,400	145,600	147,700	149,800	151,900	154,000	156,100	158,200	160,400	162,500	69
70	122,600	124,700	126,800	128,900	131,000	133,200	135,300	137,500	139,700	141,900	144,100	146,400	148,600	150,900	153,100	155,300	157,500	159,800	162,000	164,300	166,500	70
71	124,200	126,400	128,600	130,900	133,100	135,400	137,600	139,900	142,300	144,600	146,900	149,300	151,700	154,000	156,400	158,700	161,100	163,400	165,800	168,200	170,600	71
72	125,800	128,100	130,500	132,800	135,200	137,600	140,000	142,400	144,800	147,300	149,700	152,200	154,700	157,200	159,700	162,100	164,600	167,100	169,600	172,100	174,600	72
73	130,000	132,500	134,900	137,400	139,900	142,500	145,000	147,500	150,100	152,700	155,300	158,000	160,600	163,200	165,900	168,500	171,100	173,700	176,400	179,000	181,700	73
74	134,200	136,800	139,400	142,000	144,700	147,300	150,000	152,700	155,400	158,200	160,900	163,700	166,500	169,300	172,100	174,800	177,600	180,400	183,200	186,000	188,800	74
75	135,800	138,500	141,200	144,000	146,700	149,500	152,300	155,100	158,000	160,800	163,700	166,600	169,500	172,400	175,300	178,200	181,100	184,000	187,000	189,900	192,900	75
76	138,500	141,000	143,500	146,000	148,500	151,100	153,600	156,200	158,800	161,400												76
77	144,900	147,500	150,000	152,600	155,200	157,800	160,400	163,000	165,700	168,300	171,000	173,700	176,500	179,200	181,900	184,600	187,300	190,000	192,700	195,500	198,200	77
78	146,500	149,200	151,900	154,600	157,300	160,000	162,700	165,500	168,200	171,000	173,800	176,700	179,500	182,300	185,200	188,000	190,800	193,700	196,500	199,400	202,300	78
79	153,000	155,700	158,400	161,200	163,900	166,700	169,500	172,300	175,100	178,000	180,800	183,700	186,600	189,500	192,400	195,300	198,200	201,100	204,000	206,900	209,800	79
80	154,600	157,500	160,300	163,100	166,000	168,900	171,800	174,700	177,700	180,700	183,600	186,600	189,600	192,700	195,700	198,700	201,700	204,700	207,700	210,800	213,900	80
81	157,300	159,900	162,500	165,100	167,800	170,400	173,100	175,800	178,500	181,200												81
82	163,800	166,400	169,100	171,700	174,400	177,100	179,900	182,600	185,400	188,200	190,900	193,800	196,600	199,400	202,200	205,000	207,800	210,700	213,500	216,400	219,200	82
83	165,400	168,200	170,900	173,700	176,500	179,400	182,200	185,100	187,900	190,800	193,700	196,700	199,600	202,600	205,500	208,400	211,400	214,300	217,300	220,300	223,300	83
84	173,500	176,400	179,300	182,300	185,300	188,300	191,300	194,300	197,400	200,500	203,500	206,600	209,800	212,900	216,000	219,100	222,200	225,400	228,500	231,700	234,800	84
85	176,100	178,800	181,600	184,300	187,000	189,800	192,600	195,400	198,200	201,000												85
86	184,200	187,100	190,000	192,900	195,800	198,700	201,700	204,700	207,600	210,600	213,700	216,700	219,700	222,800	225,800	228,900	231,900	235,000	238,100	241,200	244,300	86
87	192,300	195,300	198,400	201,500	204,600	207,700	210,800	213,900	217,100	220,300	223,500	226,700	229,900	233,100	236,400	239,600	242,800	246,000	249,300	252,600	255,800	87
88	195,000	197,800	200,600	203,500	206,300	209,200	212,100	215,000	217,900	220,800												88
89	203,100	206,000	209,000	212,100	215,100	218,100	221,200	224,200	227,300	230,400	233,600	236,700	239,900	243,000	246,200	249,300	252,500	255,700	258,800	262,000	265,200	89
90	211,200	214,300	217,500	220,600	223,800	227,000	230,300	233,500	236,800	240,100	243,400	246,700	250,000	253,400	256,700	260,000	263,300	266,700	270,100	273,400	276,800	90
92	221,900	225,000	228,100	231,200	234,300	237,500	240,700	243,800	247,000	250,200	253,500	256,700	260,000	263,300	266,500	269,800	273,000	276,300	279,600	282,900	286,200	92
93	230,000	233,200	236,500	239,800	243,100	246,400	249,800	253,100	256,500	259,900	263,300	266,700	270,100	273,600	277,000	280,500	283,900	287,400	290,800	294,300	297,800	93
95	243,300	246,400	249,600	252,800	256,100	259,300	262,600	265,800	269,100	272,400	275,700	279,100	282,400	285,800	289,100	292,500	295,800	299,200	302,600	306,000	309,400	95
96	251,300	254,700	258,100	261,400	264,800	268,200	271,700	275,100	278,600	282,000	285,500	289,100	292,600	296,100	299,600	303,200	306,700	310,200	313,800	317,400	321,000	96
98	264,600	267,900	271,200	274,500	277,800	281,100	284,500	287,800	291,200	294,600	298,000	301,400	304,900	308,300	311,800	315,200	318,600	322,100	325,600	329,000	332,500	98
99	272,700	276,100	279,600	283,100	286,600	290,100	293,600	297,100	300,700	304,200	307,800	311,400	315,000	318,700	322,300	325,900	329,500	333,100	336,800	340,400	344,100	99
101	285,900	289,300	292,700	296,100	299,500	303,000	306,400	309,800	313,300	316,800	320,300	323,800	327,300	330,900	334,400	337,900	341,400	345,000	348,500	352,100	355,700	101
102	294,000	297,600	301,100	304,700	308,300	311,900	315,500	319,100	322,800	326,400	330,100	333,800	337,500	341,200	344,900	348,600	352,300	356,000	359,800	363,500	367,300	102
104	307,300	310,800	314,200	317,700	321,300	324,800	328,300	331,800	335,400	339,000	342,600	346,200	349,800	353,400	357,000	360,600	364,200	367,900	371,500	375,200	378,800	104
105	315,400	319,000	322,700	326,300	330,000	333,700	337,400	341,100	344,900	348,600	352,400	356,100	359,900	363,700	367,500	371,300	375,100	378,900	382,700	386,600	390,400	105
106	320,900	324,400	328,000	331,500	335,100	338,700	342,200	345,800	349,400	353,000	356,700	360,300	363,900	367,600	371,300	374,900	378,600	382,300	385,900	389,600	393,400	106
107	337,100	340,900	344,800	348,700	352,600	356,500	360,400	364,400	368,300	372,300	376,300	380,200	384,200	388,300	392,300	396,300						107
108	349,100	352,900	356,700	360,500	364,300	368,200	372,000	375,900	379,800	383,600	387,500	391,500	395,400									108
109	357,200	361,100	365,100	369,100	373,100	377,100	381,100	385,200	389,200	393,300	397,300											109
110	369,200	373,100	377,000	380,900	384,800	388,800	392,700	396,700														110
111	377,300	381,300	385,400	389,500	393,600	397,700																111
112	388,200	392,100	396,100																			112

HEADWATER 590 to 594
TAILWATER 573.51 to 574.50

MARCH 2004

GUNTERSVILLE DAM
SPILLWAY DISCHARGE
IN CUBIC FEET PER SECOND

GATE ARRANGEMENT	HEADWATER ELEVATION																					GATE ARRANGEMENT
	594.0	594.2	594.4	594.6	594.8	595.0	595.2	595.4	595.6	595.8	596.0	596.2	596.4	596.6	596.8	597.0	597.2	597.4	597.6	597.8	598.0	
0*	0	0	0	0	0	0	0	0	160	530	1,030	1,640	2,320	3,080	3,910	4,810	5,760	6,770	7,840	8,950	10,110	0*
1	1,080	1,090	1,090	1,100	1,100	1,110	1,110	1,120	1,270	1,630	2,110	2,680	3,340	4,070	4,880	5,760	6,700	7,690	8,740	9,850	11,000	1
2	2,860	2,870	2,890	2,900	2,920	2,930	2,950	2,960	3,130	3,490	3,980	4,560	5,230	5,960	6,760	7,620	8,530	9,500	10,510	11,580	12,690	2
3	3,940	3,960	3,980	4,000	4,020	4,040	4,060	4,080	4,240	4,590	5,060	5,610	6,240	6,940	7,720	8,560	9,460	10,420	11,420	12,480		3
4	5,720	5,750	5,780	5,810	5,840	5,870	5,900	5,920	6,090	6,460	6,930	7,490	8,130	8,830	9,600	10,420	11,300	12,220	13,190	14,210	15,270	4
5	6,800	6,840	6,870	6,910	6,940	6,980	7,010	7,040	7,210	7,550	8,010	8,540	9,140	9,820	10,570	11,370	12,230	13,140	14,100	15,110		5
6	8,580	8,620	8,670	8,710	8,760	8,800	8,840	8,890	9,060	9,420	9,880	10,420	11,030	11,710	12,440	13,230	14,070	14,950	15,870	16,840	17,850	6
7	9,660	9,710	9,760	9,810	9,860	9,910	9,960	10,010	10,180	10,520	10,950	11,470	12,050	12,700	13,410	14,180	15,000	15,870	16,780	17,740		7
8	11,440	11,500	11,560	11,620	11,680	11,730	11,790	11,850	12,030	12,380	12,820	13,350	13,940	14,580	15,290	16,040	16,830	17,670	18,550	19,470	20,430	8
9	12,520	12,590	12,650	12,720	12,780	12,840	12,910	12,970	13,140	13,480	13,900	14,400	14,950	15,570	16,250	16,980	17,770	18,590	19,460	20,370		9
10	14,300	14,370	14,450	14,520	14,600	14,670	14,740	14,810	15,000	15,340	15,770	16,280	16,840	17,460	18,130	18,840	19,600	20,400	21,230	22,100	23,010	10
11	15,380	15,460	15,540	15,620	15,700	15,780	15,850	15,930	16,110	16,440	16,850	17,320	17,860	18,450	19,090	19,790	20,530	21,320	22,140	23,000		11
12	17,160	17,250	17,340	17,430	17,510	17,600	17,690	17,770	17,970	18,300	18,720	19,200	19,740	20,340	20,970	21,650	22,370	23,120	23,910	24,730	25,590	12
13	18,240	18,340	18,430	18,530	18,620	18,710	18,800	18,890	19,080	19,400												13
14	20,020	20,120	20,230	20,330	20,430	20,540	20,640	20,740	20,930	21,260	21,670	22,130	22,650	23,210	23,810	24,460	25,130	25,850	26,590	27,360	28,170	14
15	21,100	21,210	21,320	21,430	21,540	21,640	21,750	21,860	22,050	22,360												15
16	22,880	23,000	23,120	23,240	23,350	23,470	23,580	23,700	23,900	24,220	24,610	25,060	25,550	26,090	26,660	27,260	27,900	28,570	29,270	29,990	30,740	16
17	23,960	24,090	24,210	24,330	24,460	24,580	24,700	24,820	25,020	25,320												17
18	25,740	25,870	26,010	26,140	26,270	26,400	26,530	26,660	26,870	27,180	27,560	27,990	28,460	28,960	29,500	30,070	30,670	31,300	31,950	32,620	33,320	18
19	26,820	26,960	27,100	27,240	27,380	27,510	27,650	27,780	27,980	28,280												19
20	28,600	28,750	28,900	29,040	29,190	29,340	29,480	29,620	29,840	30,140	30,510	30,920	31,360	31,840	32,340	32,880	33,440	34,020	34,630	35,250	35,900	20
21	30,210	30,370	30,520	30,680	30,840	30,990	31,150	31,300	31,530	31,840	32,220	32,630	33,090	33,580	34,090	34,640	35,200	35,800	36,410	37,050	37,710	21
22	31,810	31,980	32,150	32,320	32,490	32,650	32,820	32,980	33,220	33,540	33,930	34,350	34,820	35,310	35,840	36,390	36,970	37,580	38,200	38,850	39,520	22
23	33,420	33,600	33,780	33,960	34,140	34,310	34,490	34,660	34,900	35,240	35,640	36,070	36,550	37,050	37,590	38,150	38,740	39,350	39,990	40,650	41,320	23
24	35,030	35,220	35,410	35,600	35,780	35,970	36,160	36,340	36,590	36,940	37,350	37,790	38,280	38,790	39,340	39,910	40,510	41,130	41,780	42,440	43,130	24
25	36,630	36,830	37,040	37,240	37,430	37,630	37,830	38,020	38,280	38,640	39,060	39,510	40,010	40,530	41,090	41,670	42,280	42,910	43,560	44,240	44,940	25
26	38,240	38,450	38,660	38,870	39,080	39,290	39,490	39,700	39,970	40,340	40,770	41,230	41,740	42,270	42,840	43,430	44,050	44,690	45,350	46,040	46,740	26
27	39,850	40,070	40,290	40,510	40,730	40,950	41,160	41,380	41,660	42,040	42,470	42,950	43,460	44,010	44,590	45,190	45,810	46,470	47,140	47,830	48,550	27
28	41,450	41,690	41,920	42,150	42,380	42,610	42,830	43,060	43,350	43,740	44,180	44,670	45,190	45,750	46,330	46,950	47,580	48,240	48,930	49,630	50,350	28
29	43,060	43,300	43,550	43,790	44,030	44,270	44,500	44,740	45,040	45,440	45,890	46,390	46,920	47,490	48,080	48,700	49,350	50,020	50,710	51,430	52,160	29
30	44,140	44,390	44,640	44,890	45,130	45,370	45,620	45,860	46,160	46,540												30
31	45,920	46,180	46,440	46,690	46,950	47,200	47,450	47,700	48,010	48,400	48,840	49,320	49,830	50,360	50,930	51,510	52,120	52,750	53,390	54,060	54,740	31
32	47,530	47,800	48,060	48,330	48,600	48,860	49,120	49,380	49,700	50,100	50,550	51,040	51,560	52,100	52,670	53,270	53,890	54,520	55,180	55,850	56,550	32
33	48,610	48,880	49,160	49,430	49,700	49,970	50,230	50,500	50,810	51,200												33
34	50,390	50,670	50,950	51,230	51,510	51,790	52,070	52,340	52,670	53,060	53,500	53,970	54,460	54,980	55,520	56,080	56,650	57,250	57,860	58,490	59,130	34
35	51,990	52,290	52,580	52,870	53,160	53,450	53,740	54,020	54,360	54,760	55,210	55,690	56,190	56,720	57,270	57,840	58,420	59,030	59,650	60,280	60,930	35
36	53,080	53,380	53,670	53,970	54,270	54,560	54,850	55,140	55,470	55,860												36
37	54,850	55,160	55,470	55,780	56,080	56,380	56,680	56,980	57,320	57,720	58,150	58,610	59,090	59,590	60,110	60,640	61,190	61,750	62,330	62,910	63,510	37
38	56,460	56,780	57,100	57,420	57,730	58,040	58,350	58,660	59,010	59,420	59,860	60,330	60,820	61,330	61,860	62,400	62,960	63,530	64,110	64,710	65,320	38
39	59,320	59,650	59,990	60,320	60,650	60,980	61,300	61,620	61,980	62,380	62,810	63,260	63,730	64,210	64,700	65,210	65,730	66,250	66,790	67,340	67,900	39
40	62,180	62,530	62,880	63,220	63,570	63,910	64,250	64,590	64,950	65,340	65,760	66,190	66,630	67,080	67,540	68,010	68,490	68,980	69,470	69,970	70,480	40
41	63,790	64,150	64,510	64,860	65,220	65,570	65,920	66,270	66,640	67,040	67,470	67,910	68,360	68,820	69,290	69,770	70,260	70,760	71,260	71,770	72,280	41
42	66,870	67,260	67,650	68,030	68,410	68,790	69,170	69,550	69,950	70,380	70,830	71,300	71,770	72,260	72,760	73,270	73,780	74,300	74,830	75,370	75,910	42
43	69,950	70,370	70,790	71,200	71,610	72,020	72,420	72,830	73,250	73,710	74,190	74,680	75,190	75,700	76,230	76,760	77,300	77,850	78,410	78,970	79,540	43
44	73,040	73,490	73,930	74,370	74,810	75,240	75,680	76,110	76,560	77,050	77,550	78,070	78,600	79,150	79,700	80,260	80,830	81,400	81,980	82,570	83,160	44
45	76,120	76,600	77,070	77,540	78,000	78,470	78,930	79,380	79,870	80,380	80,910	81,460	82,020	82,590	83,170	83,750	84,350	84,950	85,560	86,170	86,790	45
46	79,210	79,710	80,210	80,710	81,200	81,690	82,180	82,660	83,170	83,710	84,270	84,850	85,430	86,030	86,630	87,250	87,870	88,500	89,130	89,770	90,410	46
47	82,290	82,820	83,350	83,880	84,400	84,920	85,430	85,940	86,480	87,050	87,640	88,240	88,850	89,470	90,100	90,740	91,390	92,040	92,700	93,370	94,040	47
48	85,380	85,940	86,490	87,050	87,590	88,140	88,680	89,220	89,790	90,380	91,000	91,620	92,260	92,910	93,570	94,240	94,910	95,590	96,280	96,970	97,670	48
49	88,460	89,050	89,630	90,210	90,790	91,370	91,940	92,500	93,090	93,720	94,360	95,010	95,680	96,360	97,040	97,730	98,430	99,140	99,850	100,600	101,300	49
50	92,930	93,540	94,150	94,760	95,360	95,960	96,550	97,140	97,750	98,380	99,010	99,660	100,300	101,000	101,600	102,300	103,000	103,600	104,300	105,000	105,700	50
51	96,020	96,660	97,290	97,930	98,560	99,180	99,800	100,400	101,100	101,700	102,400	103,000	103,700	104,400	105,100	105,800	106,500	107,200	107,900	108,600	109,300	51
52	99,100	99,770	100,400	101,100	101,800	102,400	103,100	103,700	104,400	105,000	105,700	106,400	107,100	107,900	108,600	109,300	110,000	110,700	111,500	112,200	112,900	52
53	102,200	102,900	103,600	104,300	104,900	105,600	106,300	107,000	107,700	108,400	109,100	109,800	110,600	111,300	112,000	112,800	113,500	114,300	115,000	115,800	116,600	53
54	105,300	106,000	106,700	107,400	108,100	108,900	109,600	110,300	111,000	111,700	112,500	113,200	114,000	114,700	115,500	116,300	117,100	117,800	118,600	119,400	120,200	54

MARCH 2004

** Arrangement "0" indicates that all spillway gates are closed. Discharge is spillway gate and trash gate overflow.*

HEADWATER 594 to 598
TAILWATER 573.51 to 574.50

GUNTERSVILLE DAM
SPILLWAY DISCHARGE
IN CUBIC FEET PER SECOND

GATE ARRANGEMENT	HEADWATER ELEVATION																					GATE ARRANGEMENT
	594.0	594.2	594.4	594.6	594.8	595.0	595.2	595.4	595.6	595.8	596.0	596.2	596.4	596.6	596.8	597.0	597.2	597.4	597.6	597.8	598.0	
55	108,400	109,100	109,900	110,600	111,300	112,100	112,800	113,500	114,300	115,000	115,800	116,600	117,400	118,200	119,000	119,800	120,600	121,400	122,200	123,000	123,800	55
56	111,600	112,300	113,100	113,900	114,600	115,400	116,200	116,900	117,700	118,400	119,200	120,000	120,800	121,700	122,500	123,300	124,100	124,900	125,800	126,600	127,400	56
57	114,700	115,500	116,300	117,000	117,800	118,600	119,400	120,200	121,000	121,800	122,600	123,400	124,300	125,100	125,900	126,800	127,600	128,500	129,300	130,200	131,100	57
58	118,700	119,600	120,500	121,500	122,400	123,300	124,200	125,100	126,100	127,000	128,000	128,900	129,900	130,900	131,900	132,900	133,800	134,800	135,800	136,800	137,800	58
59	122,700	123,800	124,800	125,900	126,900	128,000	129,000	130,100	131,100	132,200	133,300	134,400	135,500	136,700	137,800	138,900	140,100	141,200	142,300	143,500	144,600	59
60	126,700	127,900	129,100	130,300	131,500	132,700	133,900	135,000	136,200	137,500	138,700	139,900	141,200	142,500	143,700	145,000	146,300	147,600	148,900	150,100	151,400	60
61	130,800	132,100	133,400	134,700	136,000	137,400	138,700	140,000	141,300	142,700	144,100	145,400	146,800	148,200	149,600	151,100	152,500	153,900	155,400	156,800	158,200	61
62	134,800	136,300	137,700	139,100	140,600	142,000	143,500	144,900	146,400	147,900	149,400	150,900	152,500	154,000	155,600	157,100	158,700	160,300	161,900	163,500	165,000	62
63	138,800	140,400	142,000	143,600	145,100	146,700	148,300	149,900	151,500	153,100	154,800	156,400	158,100	159,800	161,500	163,200	164,900	166,600	168,400	170,100	171,800	63
64	142,900	144,600	146,300	148,000	149,700	151,400	153,100	154,900	156,600	158,400	160,200	162,000	163,800	165,600	167,400	169,300	171,100	173,000	174,900	176,800	178,600	64
65	146,900	148,700	150,600	152,400	154,200	156,100	157,900	159,800	161,700	163,600	165,500	167,500	169,400	171,400	173,400	175,300	177,300	179,400	181,400	183,400	185,400	65
66	151,400	153,200	155,100	156,900	158,800	160,700	162,600	164,400	166,300	168,300	170,200	172,100	174,000	176,000	177,900	179,900	181,900	183,900	185,800	187,800	189,800	66
67	154,400	156,300	158,200	160,100	162,000	163,900	165,800	167,700	169,700	171,600	173,500	175,500	177,500	179,400	181,400	183,400	185,400	187,400	189,400	191,400	193,500	67
68	158,500	160,500	162,500	164,500	166,600	168,600	170,600	172,700	174,700	176,800	178,900	181,000	183,100	185,200	187,300	189,500	191,600	193,800	195,900	198,100	200,300	68
69	162,500	164,700	166,800	169,000	171,100	173,300	175,500	177,600	179,800	182,000	184,300	186,500	188,700	191,000	193,300	195,500	197,800	200,100	202,400	204,700	207,100	69
70	166,500	168,800	171,100	173,400	175,700	178,000	180,300	182,600	184,900	187,300	189,600	192,000	194,400	196,800	199,200	201,600	204,000	206,500	208,900	211,400	213,900	70
71	170,600	173,000	175,400	177,800	180,200	182,600	185,100	187,500	190,000	192,500	195,000	197,500	200,000	202,600	205,100	207,700	210,300	212,800	215,400	218,000	220,700	71
72	174,600	177,100	179,700	182,200	184,800	187,300	189,900	192,500	195,100	197,700	200,400	203,000	205,700	208,400	211,000	213,800	216,500	219,200	221,900	224,700	227,500	72
73	181,700	184,400	187,100	189,800	192,500	195,200	198,000	200,700	203,500	206,300	209,100	211,900	214,700	217,600	220,400	223,300	226,200	229,100	232,000	234,900	237,900	73
74	188,800	191,700	194,500	197,400	200,300	203,200	206,100	209,000	211,900	214,800	217,800	220,800	223,800	226,800	229,800	232,900	235,900	239,000	242,100	245,200	248,300	74
75	192,900	195,800	198,800	201,800	204,800	207,800	210,900	213,900	217,000	220,100	223,200	226,300	229,400	232,600	235,800	239,000	242,200	245,400	248,600	251,900	255,100	75
77	198,200	201,000	203,800	206,600	209,400	212,200	215,000	217,800	220,700	223,600	226,500	229,500	232,400	235,400	238,400	241,400	244,400	247,500	250,500	253,600	256,700	77
78	202,300	205,200	208,100	211,000	213,900	216,900	219,800	222,800	225,800	228,800	231,900	235,000	238,100	241,200	244,300	247,500	250,600	253,800	257,000	260,300	263,500	78
79	209,800	212,800	215,700	218,700	221,700	224,700	227,700	230,700	233,800	236,800	239,900	243,000	246,100	249,200	252,400	255,500	258,700	261,900	265,100	268,300	271,500	79
80	213,900	216,900	220,000	223,100	226,200	229,400	232,500	235,700	238,900	242,000	245,300	248,500	251,700	255,000	258,300	261,600	264,900	268,200	271,600	274,900	278,300	80
82	219,200	222,100	225,000	227,900	230,800	233,700	236,700	239,600	242,600	245,600	248,600	251,700	254,700	257,800	260,900	264,000	267,200	270,300	273,500	276,700	279,900	82
83	223,300	226,300	229,300	232,300	235,400	238,400	241,500	244,600	247,700	250,800	254,000	257,200	260,400	263,600	266,800	270,100	273,400	276,700	280,000	283,400	286,700	83
84	234,800	238,000	241,200	244,400	247,700	250,900	254,200	257,400	260,700	264,000	267,400	270,700	274,100	277,400	280,800	284,200	287,700	291,100	294,600	298,000	301,500	84
86	244,300	247,400	250,500	253,600	256,800	260,000	263,100	266,300	269,500	272,800	276,100	279,400	282,700	286,000	289,400	292,800	296,200	299,600	303,000	306,500	309,900	86
87	255,800	259,100	262,400	265,800	269,100	272,500	275,800	279,200	282,600	286,000	289,400	292,900	296,400	299,900	303,400	306,900	310,400	314,000	317,600	321,100	324,700	87
89	265,200	268,500	271,700	275,000	278,200	281,500	284,800	288,100	291,400	294,800	298,200	301,600	305,000	308,400	311,900	315,400	318,900	322,400	326,000	329,600	333,100	89
90	276,800	280,200	283,700	287,100	290,500	294,000	297,500	301,000	304,500	308,000	311,500	315,100	318,700	322,300	325,900	329,500	333,200	336,900	340,500	344,200	347,900	90
92	286,200	289,600	292,900	296,300	299,600	303,000	306,400	309,800	313,300	316,700	320,200	323,800	327,300	330,900	334,500	338,100	341,700	345,300	349,000	352,600	356,300	92
93	297,800	301,300	304,900	308,400	312,000	315,500	319,100	322,700	326,300	330,000	333,600	337,300	341,000	344,700	348,400	352,200	355,900	359,700	363,500	367,300	371,200	93
95	309,400	312,800	316,200	319,700	323,100	326,600	330,100	333,600	337,100	340,700	344,200	347,800	351,500	355,100	358,800	362,400	366,100	369,900	373,600	377,300	381,100	95
96	321,000	324,600	328,200	331,800	335,500	339,100	342,800	346,500	350,200	353,900	357,600	361,400	365,100	368,900	372,700	376,600	380,400	384,300	388,100	392,000	395,900	96
98	332,500	336,000	339,600	343,100	346,600	350,200	353,700	357,300	360,900	364,600	368,200	371,900	375,600	379,300	383,100	386,800	390,600	394,400	398,200			98
99	344,100	347,800	351,500	355,200	358,900	362,700	366,400	370,200	374,000	377,800	381,600	385,400	389,300	393,200	397,100							99
101	355,700	359,300	362,900	366,500	370,100	373,800	377,400	381,100	384,700	388,500	392,200	396,000										101
102	367,300	371,000	374,800	378,600	382,400	386,300	390,100	393,900	397,800													102
104	378,800	382,500	386,200	389,900	393,600	397,300																104
105	390,400	394,300	398,200																			105
106	393,400	397,100																				106

HEADWATER 594 to 598
TAILWATER 573.51 to 574.50

MARCH 2004

GUNTERSVILLE DAM
SPILLWAY DISCHARGE
IN CUBIC FEET PER SECOND

GATE ARRANGEMENT	HEADWATER ELEVATION																					GATE ARRANGEMENT
	598.0	598.2	598.4	598.6	598.8	599.0	599.2	599.4	599.6	599.8	600.0	600.2	600.4	600.6	600.8	601.0	601.2	601.4	601.6	601.8	602.0	
0*	10,110	11,320	12,570	13,860	15,200	16,580	18,000	19,450	20,940	22,470	24,030											0*
1	11,000	12,200	13,440	14,730	16,050	17,420	18,830	20,280	21,770	23,290	24,850											1
2	12,690	13,840	15,040	16,280	17,580	18,920	20,310	21,730	23,190	24,700	26,240											2
4	15,270	16,370	17,510	18,700	19,960	21,260	22,620	24,010	25,450	26,920	28,440											4
6	17,850	18,890	19,980	21,120	22,340	23,610	24,930	26,290	27,700	29,150	30,640											6
8	20,430	21,420	22,450	23,540	24,710	25,950	27,240	28,570	29,950	31,370	32,840											8
10	23,010	23,940	24,910	25,960	27,090	28,290	29,550	30,850	32,200	33,600	35,040											10
12	25,590	26,470	27,380	28,380	29,470	30,630	31,860	33,130	34,460	35,830	37,240											12
14	28,170	29,000	29,850	30,800	31,850	32,980	34,170	35,410	36,710	38,050	39,440											14
16	30,740	31,520	32,320	33,220	34,230	35,320	36,480	37,690	38,960	40,280	41,650											16
18	33,320	34,050	34,790	35,630	36,610	37,660	38,790	39,970	41,210	42,510	43,850											18
20	35,900	36,570	37,260	38,050	38,990	40,000	41,100	42,250	43,460	44,730	46,050											20
21	37,710	38,390	39,080	39,880	40,800	41,800	42,870	43,990	45,170	46,400	47,680											21
22	39,520	40,200	40,910	41,700	42,610	43,600	44,640	45,740	46,880	48,080	49,310											22
23	41,320	42,020	42,730	43,530	44,430	45,390	46,410	47,480	48,590	49,750	50,940											23
24	43,130	43,830	44,560	45,360	46,240	47,190	48,180	49,220	50,300	51,420	52,570											24
25	44,940	45,650	46,390	47,180	48,060	48,980	49,950	50,960	52,010	53,090	54,200											25
26	46,740	47,470	48,210	49,010	49,870	50,780	51,720	52,700	53,720	54,760	55,830											26
27	48,550	49,280	50,040	50,830	51,680	52,570	53,490	54,450	55,430	56,430	57,470											27
28	50,350	51,100	51,860	52,660	53,500	54,370	55,270	56,190	57,140	58,110	59,100											28
29	52,160	52,910	53,690	54,480	55,310	56,160	57,040	57,930	58,840	59,780	60,730											29
31	54,740	55,440	56,150	56,900	57,690	58,510	59,350	60,210	61,100	62,000	62,930											31
32	56,550	57,260	57,980	58,730	59,500	60,300	61,120	61,950	62,810	63,670	64,560											32
34	59,130	59,780	60,450	61,150	61,880	62,640	63,430	64,230	65,060	65,900	66,760											34
35	60,930	61,600	62,270	62,970	63,700	64,440	65,200	65,980	66,770	67,570	68,390											35
37	63,510	64,120	64,740	65,390	66,070	66,780	67,510	68,260	69,020	69,800	70,590											37
38	65,320	65,940	66,570	67,220	67,890	68,580	69,280	70,000	70,730	71,470	72,230											38
39	67,900	68,460	69,040	69,640	70,270	70,920	71,590	72,280	72,980	73,700	74,430											39
40	70,480	70,990	71,510	72,060	72,650	73,260	73,900	74,560	75,230	75,920	76,630											40
41	72,280	72,800	73,330	73,880	74,460	75,060	75,670	76,300	76,940	77,590	78,260											41
42	75,910	76,460	77,010	77,580	78,190	78,810	79,450	80,110	80,770	81,450	82,140											42
43	79,540	80,110	80,690	81,290	81,920	82,570	83,230	83,910	84,610	85,310	86,020											43
44	83,160	83,760	84,370	84,990	85,650	86,320	87,020	87,720	88,440	89,170	89,910											44
45	86,790	87,410	88,040	88,700	89,380	90,080	90,800	91,530	92,270	93,020	93,790											45
46	90,410	91,070	91,720	92,400	93,110	93,840	94,580	95,330	96,100	96,880	97,670											46
47	94,040	94,720	95,400	96,110	96,840	97,590	98,360	99,140	99,930	100,700	101,600											47
48	97,670	98,370	99,080	99,810	100,600	101,300	102,100	102,900	103,800	104,600	105,400											48
49	101,300	102,000	102,800	103,500	104,300	105,100	105,900	106,800	107,600	108,500	109,300											49
50	105,700	106,400	107,100	107,800	108,500	109,200	110,000	110,800	111,600	112,400	113,200											50
51	109,300	110,000	110,700	111,500	112,200	113,000	113,800	114,600	115,400	116,200	117,000											51
52	112,900	113,700	114,400	115,200	116,000	116,800	117,600	118,400	119,200	120,100	120,900											52
53	116,600	117,300	118,100	118,900	119,700	120,500	121,300	122,200	123,100	123,900	124,800											53
54	120,200	121,000	121,800	122,600	123,400	124,300	125,100	126,000	126,900	127,800	128,700											54
55	123,800	124,600	125,400	126,300	127,100	128,000	128,900	129,800	130,700	131,600	132,600											55
56	127,400	128,300	129,100	129,900	130,800	131,600	132,500	133,300	134,100	135,000	135,800											56
57	131,100	131,900	132,800	133,600	134,500	135,400	136,200	137,100	138,000	138,800	139,700											57
58	137,800	138,900	139,900	140,900	141,900	142,900	143,900	145,000	146,000	147,000	148,100											58
59	144,600	145,800	147,000	148,100	149,300	150,500	151,700	152,800	154,000	155,200	156,400											59
60	151,400	152,800	154,100	155,400	156,700	158,000	159,400	160,700	162,100	163,400	164,800											60
61	158,200	159,700	161,200	162,600	164,100	165,600	167,100	168,600	170,100	171,600	173,100											61
62	165,000	166,700	168,300	169,900	171,500	173,200	174,800	176,500	178,100	179,800	181,500											62
63	171,800	173,600	175,400	177,100	178,900	180,700	182,500	184,300	186,200	188,000	189,800											63
64	178,600	180,600	182,500	184,400	186,300	188,300	190,200	192,200	194,200	196,200	198,200											64
65	185,400	187,500	189,600	191,600	193,700	195,800	198,000	200,100	202,200	204,400	206,500											65
66	189,800	191,800	193,900	195,900	197,900	200,000	202,000	204,100	206,200	208,300	210,400											66

MARCH 2004

** Arrangement "0" indicates that all spillway gates are closed. Discharge is spillway gate and trash gate overflow.*

HEADWATER 598 to 602
TAILWATER 573.51 to 574.50

GUNTERSVILLE DAM
SPILLWAY DISCHARGE
IN CUBIC FEET PER SECOND

GATE ARRANGE-MENT	HEADWATER ELEVATION																					GATE ARRANGE-MENT
	598.0	598.2	598.4	598.6	598.8	599.0	599.2	599.4	599.6	599.8	600.0	600.2	600.4	600.6	600.8	601.0	601.2	601.4	601.6	601.8	602.0	
67	193, 500	195, 500	197, 500	199, 600	201, 600	203, 700	205, 800	207, 900	210, 000	212, 100	214, 300											67
68	200, 300	202, 400	204, 600	206, 800	209, 000	211, 300	213, 500	215, 800	218, 100	220, 300	222, 600											68
69	207, 100	209, 400	211, 700	214, 100	216, 400	218, 800	221, 200	223, 700	226, 100	228, 500	231, 000											69
70	213, 900	216, 300	218, 800	221, 300	223, 800	226, 400	229, 000	231, 500	234, 100	236, 700	239, 300											70
71	220, 700	223, 300	225, 900	228, 600	231, 200	234, 000	236, 700	239, 400	242, 200	244, 900	247, 700											71
72	227, 500	230, 200	233, 000	235, 800	238, 700	241, 500	244, 400	247, 300	250, 200	253, 100	256, 000											72
73	237, 900	240, 800	243, 800	246, 800	249, 800	252, 800	255, 900	259, 000	262, 000	265, 100	268, 300											73
74	248, 300	251, 400	254, 600	257, 700	260, 900	264, 100	267, 400	270, 600	273, 900	277, 200	280, 500											74
75	255, 100	258, 400	261, 700	265, 000	268, 300	271, 700	275, 100	278, 500	281, 900	285, 400	288, 800											75
77	256, 700	259, 800	262, 900	266, 100	269, 300	272, 500	275, 700	278, 900	282, 200	285, 500	288, 800											77
78	263, 500	266, 800	270, 000	273, 300	276, 700	280, 000	283, 400	286, 800	290, 200	293, 700	297, 100											78
79	271, 500	274, 800	278, 000	281, 300	284, 600	287, 900	291, 300	294, 600	298, 000	301, 400	304, 800											79
80	278, 300	281, 700	285, 100	288, 500	292, 000	295, 500	299, 000	302, 500	306, 100	309, 600	313, 200											80
82	279, 900	283, 100	286, 400	289, 600	292, 900	296, 200	299, 600	302, 900	306, 300	309, 700												82
83	286, 700	290, 100	293, 500	296, 900	300, 300	303, 800	307, 300	310, 800	314, 300	317, 900	321, 500											83
84	301, 500	305, 000	308, 500	312, 100	315, 600	319, 200	322, 900	326, 500	330, 200	333, 800	337, 500											84
86	309, 900	313, 400	316, 900	320, 400	324, 000	327, 600	331, 200	334, 800	338, 400	342, 100	345, 800											86
87	324, 700	328, 400	332, 000	335, 600	339, 300	343, 000	346, 800	350, 500	354, 300	358, 100	361, 900											87
89	333, 100	336, 700	340, 300	344, 000	347, 600	351, 300	355, 100	358, 800	362, 600	366, 300	370, 100											89
90	347, 900	351, 700	355, 400	359, 200	363, 000	366, 800	370, 600	374, 500	378, 400	382, 300	386, 200											90
92	356, 300	360, 000	363, 800	367, 500	371, 300	375, 100	378, 900	382, 800	386, 700	390, 600	394, 500											92
93	371, 200	375, 000	378, 800	382, 700	386, 600	390, 600	394, 500	398, 500														93
95	381, 100	384, 900	388, 700	392, 500	396, 400																	95
96	395, 900																					96

HEADWATER 598 to 602
TAILWATER 573.51 to 574.50

MARCH 2004

GUNTERSVILLE DAM
SPILLWAY DISCHARGE
IN CUBIC FEET PER SECOND

GATE ARRANGEMENT	HEADWATER ELEVATION																					GATE ARRANGEMENT
	590.0	590.2	590.4	590.6	590.8	591.0	591.2	591.4	591.6	591.8	592.0	592.2	592.4	592.6	592.8	593.0	593.2	593.4	593.6	593.8	594.0	
1	950	960	970	970	980	980	990	1,000	1,000	1,010	1,010	1,020	1,020	1,030	1,040	1,040	1,050	1,050	1,060	1,060	1,070	1
2	2,500	2,520	2,530	2,550	2,570	2,590	2,600	2,620	2,640	2,650	2,670	2,680	2,700	2,720	2,730	2,750	2,760	2,780	2,790	2,810	2,830	2
3	3,450	3,480	3,500	3,520	3,550	3,570	3,590	3,610	3,640	3,660	3,680	3,700	3,720	3,750	3,770	3,790	3,810	3,830	3,850	3,870	3,890	3
4	5,000	5,030	5,070	5,100	5,140	5,170	5,200	5,240	5,270	5,300	5,340	5,370	5,400	5,430	5,460	5,500	5,530	5,560	5,590	5,620	5,650	4
5	5,950	5,990	6,030	6,070	6,110	6,150	6,190	6,230	6,270	6,310	6,350	6,390	6,430	6,460	6,500	6,540	6,570	6,610	6,650	6,680	6,720	5
6	7,500	7,550	7,600	7,650	7,710	7,760	7,810	7,860	7,910	7,960	8,010	8,050	8,100	8,150	8,200	8,240	8,290	8,340	8,380	8,430	8,480	6
7	8,450	8,510	8,570	8,630	8,680	8,740	8,800	8,850	8,910	8,960	9,020	9,070	9,130	9,180	9,230	9,290	9,340	9,390	9,440	9,490	9,540	7
8	10,000	10,070	10,140	10,210	10,270	10,340	10,410	10,480	10,540	10,610	10,670	10,740	10,800	10,870	10,930	10,990	11,060	11,120	11,180	11,240	11,300	8
9	10,950	11,030	11,100	11,180	11,250	11,330	11,400	11,470	11,540	11,620	11,690	11,760	11,830	11,900	11,970	12,030	12,100	12,170	12,240	12,300	12,370	9
10	12,500	12,580	12,670	12,760	12,840	12,930	13,010	13,090	13,180	13,260	13,340	13,420	13,500	13,580	13,660	13,740	13,820	13,900	13,970	14,050	14,130	10
11	13,450	13,540	13,640	13,730	13,820	13,910	14,000	14,090	14,180	14,270	14,350	14,440	14,530	14,610	14,700	14,780	14,870	14,950	15,030	15,110	15,190	11
12	14,990	15,100	15,200	15,310	15,410	15,510	15,610	15,710	15,810	15,910	16,010	16,110	16,200	16,300	16,390	16,490	16,580	16,680	16,770	16,860	16,950	12
13	15,950	16,060	16,170	16,280	16,390	16,500	16,600	16,710	16,810	16,920	17,020	17,130	17,230	17,330	17,430	17,530	17,630	17,730	17,830	17,920	18,020	13
14	17,490	17,620	17,740	17,860	17,980	18,100	18,220	18,330	18,450	18,560	18,680	18,790	18,900	19,020	19,130	19,240	19,350	19,460	19,560	19,670	19,780	14
15	18,450	18,580	18,700	18,830	18,960	19,080	19,210	19,330	19,450	19,570	19,690	19,810	19,930	20,050	20,160	20,280	20,390	20,510	20,620	20,730	20,850	15
16	19,990	20,130	20,270	20,410	20,550	20,680	20,820	20,950	21,080	21,220	21,350	21,480	21,610	21,730	21,860	21,990	22,110	22,240	22,360	22,480	22,600	16
17	20,950	21,090	21,240	21,380	21,520	21,670	21,810	21,950	22,090	22,220	22,360	22,500	22,630	22,760	22,900	23,030	23,160	23,290	23,420	23,540	23,670	17
18	22,490	22,650	22,810	22,960	23,120	23,270	23,420	23,570	23,720	23,870	24,020	24,160	24,310	24,450	24,590	24,730	24,870	25,010	25,150	25,290	25,430	18
19	23,440	23,610	23,770	23,930	24,090	24,250	24,410	24,570	24,720	24,880	25,030	25,180	25,330	25,480	25,630	25,780	25,920	26,070	26,210	26,350	26,500	19
20	24,990	25,170	25,340	25,510	25,680	25,850	26,020	26,190	26,360	26,520	26,680	26,850	27,010	27,170	27,320	27,480	27,640	27,790	27,950	28,100	28,250	20
21	26,370	26,550	26,740	26,920	27,110	27,290	27,470	27,650	27,830	28,000	28,180	28,350	28,520	28,690	28,860	29,030	29,200	29,370	29,530	29,690	29,860	21
22	27,740	27,940	28,140	28,340	28,530	28,730	28,920	29,110	29,300	29,490	29,670	29,860	30,040	30,220	30,400	30,580	30,760	30,940	31,110	31,290	31,460	22
23	29,120	29,330	29,540	29,750	29,950	30,160	30,360	30,570	30,770	30,970	31,170	31,360	31,560	31,750	31,940	32,130	32,320	32,510	32,700	32,880	33,070	23
24	30,500	30,720	30,940	31,160	31,380	31,600	31,810	32,030	32,240	32,450	32,660	32,870	33,070	33,280	33,480	33,680	33,880	34,080	34,280	34,470	34,670	24
25	31,870	32,110	32,340	32,570	32,800	33,030	33,260	33,490	33,710	33,930	34,150	34,370	34,590	34,810	35,020	35,230	35,440	35,650	35,860	36,070	36,270	25
26	33,250	33,490	33,740	33,980	34,230	34,470	34,710	34,940	35,180	35,410	35,650	35,880	36,110	36,330	36,560	36,780	37,000	37,230	37,440	37,660	37,880	26
27	34,620	34,880	35,140	35,390	35,650	35,900	36,150	36,400	36,650	36,900	37,140	37,380	37,620	37,860	38,100	38,330	38,570	38,800	39,030	39,250	39,480	27
28	36,000	36,270	36,540	36,810	37,070	37,340	37,600	37,860	38,120	38,380	38,630	38,890	39,140	39,390	39,640	39,880	40,130	40,370	40,610	40,850	41,090	28
29	37,380	37,660	37,940	38,220	38,500	38,770	39,050	39,320	39,590	39,860	40,130	40,390	40,660	40,920	41,180	41,430	41,690	41,940	42,190	42,440	42,690	29
30	38,330	38,620	38,900	39,190	39,470	39,760	40,040	40,320	40,590	40,870	41,140	41,410	41,680	41,950	42,210	42,470	42,730	42,990	43,250	43,500	43,760	30
31	39,880	40,170	40,470	40,770	41,070	41,360	41,650	41,940	42,230	42,510	42,800	43,080	43,360	43,630	43,910	44,180	44,450	44,720	44,990	45,250	45,510	31
32	41,250	41,560	41,870	42,180	42,490	42,800	43,100	43,400	43,700	44,000	44,290	44,580	44,870	45,160	45,450	45,730	46,010	46,290	46,570	46,850	47,120	32
33	42,210	42,520	42,840	43,150	43,470	43,780	44,090	44,400	44,700	45,000	45,300	45,600	45,900	46,190	46,480	46,770	47,060	47,340	47,630	47,910	48,190	33
34	43,750	44,080	44,400	44,730	45,060	45,380	45,700	46,020	46,340	46,650	46,960	47,270	47,570	47,880	48,180	48,480	48,780	49,070	49,360	49,660	49,940	34
35	45,130	45,470	45,800	46,140	46,480	46,820	47,150	47,480	47,810	48,130	48,450	48,770	49,090	49,410	49,720	50,030	50,340	50,640	50,950	51,250	51,550	35
36	46,080	46,430	46,770	47,120	47,460	47,800	48,140	48,470	48,810	49,140	49,470	49,790	50,110	50,440	50,750	51,070	51,380	51,700	52,000	52,310	52,620	36
37	47,630	47,980	48,340	48,690	49,050	49,400	49,750	50,100	50,440	50,780	51,120	51,460	51,790	52,120	52,450	52,780	53,100	53,420	53,740	54,060	54,370	37
38	49,000	49,370	49,740	50,110	50,470	50,840	51,200	51,560	51,910	52,270	52,620	52,960	53,310	53,650	53,990	54,330	54,660	54,990	55,320	55,650	55,980	38
39	51,500	51,890	52,270	52,660	53,040	53,420	53,800	54,180	54,550	54,920	55,280	55,650	56,010	56,370	56,720	57,080	57,430	57,770	58,120	58,460	58,800	39
40	54,000	54,400	54,810	55,210	55,610	56,010	56,400	56,800	57,180	57,570	57,950	58,330	58,710	59,080	59,450	59,820	60,190	60,550	60,910	61,270	61,630	40
41	55,380	55,790	56,210	56,620	57,030	57,440	57,850	58,250	58,650	59,050	59,450	59,840	60,230	60,610	60,990	61,370	61,750	62,120	62,500	62,870	63,230	41
42	57,860	58,300	58,740	59,180	59,620	60,050	60,480	60,910	61,340	61,770	62,190	62,610	63,030	63,450	63,860	64,270	64,670	65,080	65,480	65,880	66,270	42
43	60,340	60,810	61,270	61,740	62,200	62,660	63,110	63,570	64,030	64,490	64,940	65,390	65,840	66,280	66,730	67,160	67,600	68,030	68,460	68,890	69,310	43
44	62,830	63,320	63,810	64,300	64,780	65,260	65,740	66,220	66,710	67,200	67,690	68,170	68,650	69,120	69,590	70,060	70,520	70,980	71,440	71,900	72,350	44
45	65,310	65,830	66,340	66,860	67,360	67,870	68,370	68,880	69,400	69,920	70,430	70,950	71,450	71,960	72,460	72,950	73,450	73,940	74,420	74,910	75,390	45
46	67,790	68,340	68,880	69,410	69,950	70,480	71,000	71,540	72,090	72,640	73,180	73,720	74,260	74,790	75,320	75,850	76,370	76,890	77,410	77,920	78,430	46
47	70,280	70,850	71,410	71,970	72,530	73,080	73,630	74,190	74,770	75,350	75,930	76,500	77,070	77,630	78,190	78,740	79,300	79,840	80,390	80,930	81,470	47
48	72,760	73,360	73,950	74,530	75,110	75,690	76,260	76,850	77,460	78,070	78,680	79,280	79,870	80,470	81,050	81,640	82,220	82,800	83,370	83,940	84,500	48
49	75,250	75,870	76,480	77,090	77,700	78,290	78,890	79,500	80,150	80,790	81,420	82,050	82,680	83,300	83,920	84,530	85,140	85,750	86,350	86,950	87,540	49
50	79,120	79,770	80,420	81,050	81,690	82,310	82,940	83,580	84,250	84,920	85,590	86,240	86,900	87,550	88,190	88,830	89,470	90,100	90,730	91,350	91,970	50
51	81,600	82,280	82,950	83,610	84,270	84,920	85,560	86,240	86,940	87,640	88,330	89,020	89,700	90,380	91,060	91,730	92,390	93,050	93,710	94,360	95,010	51
52	84,090	84,790	85,480	86,170	86,850	87,530	88,190	88,890	89,630	90,360	91,080	91,800	92,510	93,220	93,920	94,620	95,320	96,010	96,690	97,370	98,050	52
53	86,570	87,300	88,020	88,730	89,440	90,130	90,820	91,550	92,310	93,070	93,830	94,580	95,320	96,060	96,790	97,520	98,240	98,960	99,670	100,400	101,100	53
54	89,060	89,810	90,550	91,290	92,020	92,740	93,450	94,210	95,000	95,790	96,570	97,350	98,120	98,890	99,650	100,400	101,200	101,900	102,700	103,400	104,100	54
55	91,540	92,320	93,090	93,850	94,600	95,350	96,080	96,860	97,690	98,510	99,320	100,100	100,900	101,700	102,500	103,300	104,100	104,900	105,600	106,400	107,200	55

MARCH 2004

HEADWATER 590 to 594
TAILWATER 574.51 to 575.50

GUNTERSVILLE DAM

SPILLWAY DISCHARGE

IN CUBIC FEET PER SECOND

GATE ARRANGEMENT	HEADWATER ELEVATION																					GATE ARRANGEMENT
	590.0	590.2	590.4	590.6	590.8	591.0	591.2	591.4	591.6	591.8	592.0	592.2	592.4	592.6	592.8	593.0	593.2	593.4	593.6	593.8	594.0	
56	94,290	95,090	95,890	96,670	97,450	98,220	98,980	99,780	100,600	101,500	102,300	103,100	104,000	104,800	105,600	106,400	107,200	108,000	108,800	109,600	110,400	56
57	96,770	97,600	98,420	99,230	100,000	100,800	101,600	102,400	103,300	104,200	105,100	105,900	106,800	107,600	108,500	109,300	110,100	111,000	111,800	112,600	113,400	57
58	98,640	99,580	100,500	101,400	102,400	103,300	104,200	105,100	106,100	107,100	108,100	109,100	110,000	111,000	112,000	112,900	113,900	114,800	115,800	116,700	117,700	58
59	100,500	101,600	102,600	103,600	104,700	105,700	106,700	107,800	108,900	110,000	111,100	112,200	113,300	114,400	115,500	116,600	117,700	118,700	119,800	120,900	121,900	59
60	102,400	103,500	104,700	105,900	107,000	108,200	109,300	110,500	111,700	112,900	114,100	115,400	116,600	117,800	119,000	120,200	121,400	122,600	123,800	125,000	126,200	60
61	104,300	105,500	106,800	108,100	109,300	110,600	111,900	113,200	114,500	115,800	117,200	118,500	119,900	121,200	122,500	123,800	125,200	126,500	127,800	129,100	130,400	61
62	106,100	107,500	108,900	110,300	111,700	113,000	114,400	115,800	117,300	118,800	120,200	121,700	123,100	124,600	126,000	127,500	128,900	130,400	131,800	133,300	134,700	62
63	108,000	109,500	111,000	112,500	114,000	115,500	117,000	118,500	120,100	121,700	123,200	124,800	126,400	128,000	129,600	131,100	132,700	134,300	135,800	137,400	139,000	63
64	109,900	111,500	113,100	114,700	116,300	117,900	119,500	121,200	122,900	124,600	126,300	128,000	129,700	131,400	133,100	134,800	136,400	138,100	139,800	141,500	143,200	64
65	111,700	113,400	115,200	116,900	118,600	120,400	122,100	123,900	125,700	127,500	129,300	131,100	132,900	134,800	136,600	138,400	140,200	142,000	143,800	145,700	147,500	65
66	115,600	117,300	119,100	120,900	122,600	124,400	126,200	128,000	129,800	131,600	133,500	135,300	137,200	139,000	140,900	142,700	144,500	146,400	148,200	150,100	151,900	66
67	118,100	119,900	121,600	123,400	125,200	127,000	128,800	130,600	132,500	134,300	136,200	138,100	140,000	141,900	143,700	145,600	147,500	149,300	151,200	153,100	155,000	67
68	120,000	121,800	123,700	125,600	127,500	129,400	131,400	133,300	135,300	137,300	139,200	141,200	143,200	145,300	147,200	149,200	151,200	153,200	155,200	157,200	159,200	68
69	121,800	123,800	125,800	127,800	129,900	131,900	133,900	136,000	138,100	140,200	142,300	144,400	146,500	148,600	150,800	152,900	155,000	157,100	159,200	161,300	163,500	69
70	123,700	125,800	127,900	130,000	132,200	134,300	136,500	138,700	140,900	143,100	145,300	147,500	149,800	152,000	154,300	156,500	158,700	161,000	163,200	165,500	167,700	70
71	125,600	127,800	130,000	132,300	134,500	136,800	139,000	141,300	143,700	146,000	148,300	150,700	153,100	155,400	157,800	160,100	162,500	164,800	167,200	169,600	172,000	71
72	127,400	129,800	132,100	134,500	136,800	139,200	141,600	144,000	146,500	148,900	151,400	153,800	156,300	158,800	161,300	163,800	166,200	168,700	171,200	173,700	176,200	72
73	131,800	134,200	136,700	139,200	141,700	144,300	146,800	149,400	151,900	154,500	157,100	159,800	162,400	165,100	167,700	170,300	172,900	175,600	178,200	180,900	183,500	73
74	136,100	138,700	141,400	144,000	146,600	149,300	152,000	154,700	157,400	160,200	162,900	165,700	168,500	171,300	174,100	176,800	179,600	182,400	185,200	188,000	190,800	74
75	138,000	140,700	143,500	146,200	149,000	151,800	154,600	157,400	160,200	163,100	166,000	168,800	171,800	174,700	177,600	180,500	183,400	186,300	189,200	192,100	195,100	75
76	140,200	142,700	145,200	147,700	150,200	152,800	155,400	157,900	160,600	163,200												76
77	146,500	149,100	151,600	154,200	156,800	159,400	162,000	164,700	167,300	170,000	172,700	175,400	178,100	180,900	183,600	186,300	189,000	191,700	194,500	197,200	200,000	77
78	148,400	151,100	153,700	156,400	159,100	161,900	164,600	167,400	170,100	172,900	175,700	178,600	181,400	184,300	187,100	189,900	192,800	195,600	198,500	201,300	204,200	78
79	154,700	157,500	160,200	162,900	165,700	168,500	171,300	174,100	176,900	179,800	182,700	185,500	188,400	191,400	194,200	197,100	200,000	202,900	205,800	208,700	211,700	79
80	156,600	159,400	162,300	165,200	168,000	170,900	173,800	176,800	179,700	182,700	185,700	188,700	191,700	194,700	197,800	200,800	203,800	206,800	209,800	212,900	215,900	80
81	158,800	161,400	164,000	166,600	169,300	172,000	174,600	177,300	180,100	182,800												81
82	165,100	167,800	170,500	173,200	175,900	178,600	181,300	184,100	186,900	189,600	192,400	195,300	198,100	200,900	203,800	206,600	209,400	212,200	215,100	217,900	220,800	82
83	167,000	169,800	172,600	175,400	178,200	181,000	183,900	186,800	189,700	192,600	195,500	198,400	201,400	204,300	207,300	210,200	213,200	216,100	219,100	222,100	225,100	83
84	175,200	178,200	181,100	184,100	187,100	190,100	193,100	196,200	199,200	202,300	205,400	208,500	211,700	214,800	217,900	221,000	224,200	227,300	230,400	233,600	236,800	84
85	177,400	180,100	182,900	185,600	188,400	191,100	193,900	196,700	199,600	202,400												85
86	185,600	188,500	191,400	194,300	197,300	200,200	203,200	206,200	209,200	212,200	215,200	218,300	221,300	224,400	227,400	230,500	233,500	236,600	239,700	242,800	245,900	86
87	193,800	196,900	200,000	203,100	206,200	209,300	212,400	215,600	218,800	221,900	225,200	228,400	231,600	234,900	238,100	241,300	244,600	247,800	251,100	254,300	257,600	87
88	196,000	198,800	201,700	204,600	207,400	210,300	213,200	216,100	219,100	222,000												88
89	204,200	207,200	210,300	213,300	216,300	219,400	222,500	225,600	228,700	231,800	234,900	238,100	241,300	244,500	247,600	250,800	253,900	257,100	260,300	263,500	266,700	89
90	212,500	215,600	218,800	222,000	225,200	228,500	231,700	235,000	238,300	241,600	244,900	248,200	251,600	254,900	258,300	261,600	264,900	268,300	271,700	275,100	278,500	90
92	222,800	226,000	229,100	232,200	235,400	238,600	241,800	245,000	248,200	251,400	254,700	257,900	261,200	264,500	267,800	271,100	274,300	277,600	280,900	284,300	287,600	92
93	231,100	234,400	237,700	241,000	244,300	247,600	251,000	254,400	257,800	261,200	264,600	268,100	271,500	275,000	278,400	281,900	285,300	288,800	292,300	295,800	299,300	93
95	243,800	247,100	250,300	253,600	256,800	260,100	263,400	266,700	270,000	273,300	276,700	280,000	283,400	286,800	290,100	293,500	296,900	300,300	303,700	307,100	310,500	95
96	252,100	255,500	258,900	262,300	265,700	269,200	272,600	276,100	279,600	283,100	286,600	290,100	293,700	297,300	300,800	304,300	307,900	311,400	315,000	318,600	322,200	96
98	264,800	268,200	271,500	274,900	278,200	281,600	285,000	288,400	291,800	295,200	298,700	302,100	305,600	309,000	312,500	315,900	319,400	322,900	326,400	329,900	333,400	98
99	273,100	276,600	280,100	283,600	287,100	290,700	294,200	297,800	301,400	305,000	308,600	312,200	315,900	319,500	323,100	326,800	330,400	334,100	337,700	341,400	345,100	99
101	285,900	289,300	292,700	296,200	299,600	303,100	306,600	310,100	313,600	317,100	320,600	324,200	327,700	331,300	334,800	338,400	342,000	345,500	349,100	352,700	356,300	101
102	294,100	297,700	301,300	304,900	308,500	312,200	315,800	319,500	323,200	326,900	330,600	334,300	338,000	341,800	345,500	349,200	353,000	356,700	360,500	364,200	368,000	102
104	306,900	310,400	313,900	317,500	321,000	324,600	328,200	331,800	335,400	339,000	342,600	346,300	349,900	353,600	357,200	360,800	364,500	368,200	371,800	375,500	379,200	104
105	315,100	318,800	322,500	326,200	329,900	333,700	337,400	341,200	345,000	348,800	352,600	356,400	360,200	364,000	367,900	371,700	375,500	379,300	383,200	387,000	390,900	105
106	320,300	323,900	327,500	331,100	334,700	338,300	342,000	345,600	349,300	352,900	356,600	360,300	363,900	367,600	371,300	375,000	378,700	382,400	386,100	389,900	393,600	106
107	336,800	340,700	344,600	348,600	352,500	356,500	360,500	364,400	368,400	372,400	376,500	380,500	384,500	388,600	392,600	396,700	400,700	404,800	408,900	412,900		107
108	348,300	352,200	356,100	360,000	363,900	367,800	371,700	375,600	379,500	383,400	387,400	391,300	395,300	399,300	403,200	407,200	411,200					108
109	356,600	360,600	364,600	368,700	372,800	376,800	380,900	385,000	389,100	393,200	397,300	401,500	405,600	409,700	413,900							109
110	368,100	372,100	376,100	380,100	384,100	388,100	392,100	396,100	400,200	404,200	408,200	412,300										110
111	376,400	380,500	384,700	388,800	393,000	397,200	401,400	405,500	409,800	414,000												111
112	386,800	390,900	395,000	399,000	403,100	407,200	411,300															112
113	404,400	408,800	413,300																			113

HEADWATER 590 to 594
TAILWATER 574.51 to 575.50

MARCH 2004

GUNTERSVILLE DAM
SPILLWAY DISCHARGE
IN CUBIC FEET PER SECOND

GATE ARRANGEMENT	HEADWATER ELEVATION																					GATE ARRANGEMENT
	594.0	594.2	594.4	594.6	594.8	595.0	595.2	595.4	595.6	595.8	596.0	596.2	596.4	596.6	596.8	597.0	597.2	597.4	597.6	597.8	598.0	
0*	0	0	0	0	0	0	0	0	160	530	1,030	1,640	2,320	3,080	3,910	4,810	5,760	6,770	7,840	8,950	10,110	0*
1	1,070	1,070	1,080	1,080	1,090	1,090	1,100	1,100	1,260	1,620	2,100	2,670	3,320	4,060	4,870	5,740	6,680	7,680	8,730	9,830	10,980	1
2	2,830	2,840	2,860	2,870	2,890	2,900	2,910	2,930	3,090	3,460	3,950	4,530	5,190	5,930	6,720	7,580	8,500	9,470	10,480	11,550	12,660	2
3	3,890	3,910	3,930	3,950	3,970	3,990	4,010	4,030	4,190	4,550	5,010	5,560	6,190	6,900	7,680	8,520	9,420	10,370	11,380	12,430		3
4	5,650	5,680	5,710	5,740	5,770	5,800	5,830	5,860	6,030	6,390	6,860	7,430	8,060	8,770	9,540	10,360	11,230	12,160	13,130	14,150	15,210	4
5	6,720	6,750	6,790	6,820	6,860	6,890	6,930	6,960	7,130	7,470	7,930	8,460	9,060	9,740	10,490	11,290	12,150	13,070	14,020	15,030		5
6	8,480	8,520	8,570	8,610	8,660	8,700	8,740	8,790	8,960	9,320	9,780	10,320	10,930	11,610	12,350	13,130	13,970	14,850	15,780	16,750	17,750	6
7	9,540	9,590	9,650	9,690	9,740	9,790	9,840	9,890	10,060	10,400	10,840	11,350	11,940	12,580	13,300	14,070	14,890	15,760	16,670	17,630		7
8	11,300	11,360	11,420	11,480	11,540	11,600	11,660	11,720	11,900	12,250	12,690	13,220	13,810	14,450	15,160	15,910	16,700	17,540	18,420	19,340	20,300	8
9	12,370	12,440	12,500	12,570	12,630	12,690	12,760	12,820	13,000	13,330	13,750	14,250	14,810	15,430	16,110	16,840	17,620	18,450	19,320	20,230		9
10	14,130	14,200	14,280	14,350	14,430	14,500	14,570	14,640	14,830	15,170	15,610	16,110	16,680	17,300	17,970	18,680	19,440	20,240	21,070	21,940	22,850	10
11	15,190	15,280	15,360	15,440	15,510	15,590	15,670	15,750	15,930	16,260	16,670	17,150	17,680	18,270	18,920	19,620	20,360	21,140	21,970	22,830		11
12	16,950	17,040	17,130	17,220	17,310	17,400	17,490	17,570	17,770	18,100	18,520	19,010	19,550	20,140	20,780	21,460	22,170	22,930	23,720	24,540	25,400	12
13	18,020	18,120	18,210	18,310	18,400	18,490	18,590	18,680	18,870	19,190												13
14	19,780	19,880	19,990	20,090	20,200	20,300	20,400	20,500	20,700	21,030	21,440	21,900	22,420	22,980	23,590	24,230	24,910	25,620	26,370	27,140	27,940	14
15	20,850	20,960	21,070	21,180	21,280	21,390	21,500	21,610	21,800	22,110												15
16	22,600	22,720	22,840	22,960	23,080	23,200	23,320	23,430	23,630	23,960	24,350	24,800	25,290	25,830	26,400	27,010	27,650	28,320	29,010	29,740	30,490	16
17	23,670	23,800	23,920	24,050	24,170	24,290	24,410	24,540	24,740	25,040												17
18	25,430	25,560	25,700	25,830	25,970	26,100	26,230	26,360	26,570	26,890	27,260	27,690	28,160	28,670	29,210	29,780	30,380	31,010	31,660	32,340	33,040	18
19	26,500	26,640	26,780	26,920	27,060	27,190	27,330	27,460	27,670	27,970												19
20	28,250	28,400	28,550	28,700	28,850	29,000	29,140	29,290	29,500	29,810	30,180	30,590	31,030	31,510	32,020	32,550	33,120	33,700	34,310	34,940	35,590	20
21	29,860	30,020	30,180	30,340	30,500	30,650	30,810	30,970	31,190	31,510	31,890	32,300	32,760	33,250	33,770	34,310	34,880	35,480	36,090	36,730	37,390	21
22	31,460	31,630	31,800	31,970	32,140	32,310	32,480	32,640	32,880	33,210	33,590	34,020	34,490	34,980	35,510	36,070	36,650	37,250	37,880	38,530	39,200	22
23	33,070	33,250	33,430	33,610	33,790	33,970	34,140	34,320	34,560	34,900	35,300	35,740	36,210	36,720	37,260	37,820	38,410	39,030	39,660	40,320	41,000	23
24	34,670	34,860	35,050	35,250	35,430	35,620	35,810	36,000	36,250	36,600	37,010	37,450	37,940	38,460	39,000	39,580	40,180	40,800	41,450	42,120	42,800	24
25	36,270	36,480	36,680	36,880	37,080	37,280	37,480	37,670	37,940	38,300	38,710	39,170	39,670	40,190	40,750	41,330	41,940	42,580	43,230	43,910	44,610	25
26	37,880	38,090	38,310	38,520	38,730	38,940	39,140	39,350	39,620	39,990	40,420	40,890	41,390	41,930	42,500	43,090	43,710	44,350	45,020	45,700	46,410	26
27	39,480	39,710	39,930	40,150	40,370	40,590	40,810	41,030	41,310	41,690	42,130	42,610	43,120	43,670	44,240	44,850	45,480	46,130	46,800	47,500	48,210	27
28	41,090	41,320	41,560	41,790	42,020	42,250	42,480	42,700	43,000	43,390	43,830	44,320	44,850	45,400	45,990	46,600	47,240	47,900	48,590	49,290	50,020	28
29	42,690	42,940	43,180	43,420	43,660	43,900	44,140	44,380	44,690	45,090	45,540	46,040	46,570	47,140	47,740	48,360	49,010	49,680	50,370	51,090	51,820	29
30	43,760	44,010	44,260	44,510	44,750	45,000	45,240	45,480	45,790	46,170												30
31	45,510	45,780	46,040	46,290	46,550	46,800	47,060	47,310	47,620	48,010	48,460	48,930	49,440	49,980	50,550	51,130	51,740	52,370	53,020	53,690	54,370	31
32	47,120	47,390	47,660	47,930	48,200	48,460	48,720	48,990	49,310	49,710	50,160	50,650	51,170	51,720	52,290	52,890	53,510	54,150	54,800	55,480	56,170	32
33	48,190	48,460	48,740	49,010	49,290	49,560	49,820	50,090	50,410	50,800												33
34	49,940	50,230	50,520	50,800	51,080	51,360	51,640	51,910	52,240	52,640	53,080	53,550	54,040	54,560	55,100	55,660	56,240	56,840	57,450	58,080	58,720	34
35	51,550	51,850	52,140	52,440	52,730	53,020	53,310	53,590	53,930	54,340	54,780	55,260	55,770	56,300	56,850	57,420	58,010	58,620	59,240	59,870	60,530	35
36	52,620	52,920	53,220	53,520	53,820	54,110	54,400	54,700	55,030	55,420												36
37	54,370	54,690	55,000	55,310	55,610	55,920	56,220	56,520	56,860	57,260	57,700	58,160	58,640	59,140	59,660	60,200	60,740	61,310	61,880	62,470	63,070	37
38	55,980	56,300	56,620	56,940	57,260	57,570	57,890	58,200	58,550	58,960	59,410	59,880	60,370	60,880	61,410	61,950	62,510	63,080	63,670	64,270	64,880	38
39	58,800	59,140	59,480	59,810	60,140	60,470	60,800	61,130	61,480	61,890	62,320	62,770	63,240	63,720	64,220	64,730	65,250	65,780	66,320	66,870	67,430	39
40	61,630	61,980	62,330	62,680	63,030	63,370	63,710	64,050	64,420	64,820	65,230	65,670	66,110	66,560	67,030	67,500	67,980	68,470	68,960	69,470	69,970	40
41	63,230	63,600	63,960	64,320	64,670	65,030	65,380	65,730	66,110	66,510	66,940	67,380	67,840	68,300	68,770	69,260	69,750	70,240	70,750	71,260	71,780	41
42	66,270	66,660	67,050	67,440	67,830	68,210	68,590	68,970	69,370	69,800	70,260	70,730	71,210	71,700	72,200	72,710	73,220	73,750	74,280	74,820	75,360	42
43	69,310	69,730	70,150	70,560	70,980	71,390	71,790	72,200	72,630	73,090	73,570	74,070	74,580	75,090	75,620	76,160	76,700	77,250	77,810	78,370	78,940	43
44	72,350	72,800	73,240	73,690	74,130	74,570	75,000	75,430	75,890	76,380	76,890	77,410	77,950	78,490	79,050	79,610	80,180	80,750	81,340	81,930	82,520	44
45	75,390	75,870	76,340	76,810	77,280	77,750	78,210	78,670	79,150	79,670	80,210	80,750	81,320	81,890	82,470	83,060	83,650	84,260	84,870	85,480	86,110	45
46	78,430	78,930	79,430	79,930	80,430	80,920	81,410	81,900	82,410	82,960	83,520	84,100	84,690	85,290	85,890	86,510	87,130	87,760	88,400	89,040	89,690	46
47	81,470	82,000	82,530	83,060	83,580	84,100	84,620	85,140	85,680	86,250	86,840	87,440	88,060	88,680	89,320	89,960	90,610	91,260	91,930	92,600	93,270	47
48	84,500	85,070	85,630	86,180	86,730	87,280	87,830	88,370	88,940	89,540	90,150	90,780	91,430	92,080	92,740	93,410	94,090	94,770	95,460	96,150	96,850	48
49	87,540	88,130	88,720	89,300	89,880	90,460	91,030	91,600	92,200	92,820	93,470	94,130	94,800	95,480	96,160	96,860	97,560	98,270	98,990	99,710	100,400	49
50	91,970	92,590	93,200	93,810	94,420	95,020	95,620	96,210	96,820	97,450	98,090	98,740	99,390	100,100	100,700	101,400	102,100	102,700	103,400	104,100	104,800	50
51	95,010	95,660	96,300	96,930	97,570	98,200	98,820	99,440	100,100	100,700	101,400	102,100	102,800	103,500	104,100	104,800	105,500	106,200	106,900	107,700	108,400	51
52	98,050	98,720	99,390	100,100	100,700	101,400	102,000	102,700	103,300	104,000	104,700	105,400	106,100	106,800	107,600	108,300	109,000	109,700	110,500	111,200	112,000	52
53	101,100	101,800	102,500	103,200	103,900	104,600	105,200	105,900	106,600	107,300	108,000	108,800	109,500	110,200	111,000	111,700	112,500	113,200	114,000	114,800	115,500	53
54	104,100	104,900	105,600	106,300	107,000	107,700	108,400	109,100	109,900	110,600	111,400	112,100	112,900	113,600	114,400	115,200	116,000	116,800	117,500	118,300	119,100	54

MARCH 2004

** Arrangement "0" indicates that all spillway gates are closed. Discharge is spillway gate and trash gate overflow.*

HEADWATER 594 to 598
TAILWATER 574.51 to 575.50

GUNTERSVILLE DAM
SPILLWAY DISCHARGE
IN CUBIC FEET PER SECOND

GATE ARRANGEMENT	HEADWATER ELEVATION																					GATE ARRANGEMENT
	594.0	594.2	594.4	594.6	594.8	595.0	595.2	595.4	595.6	595.8	596.0	596.2	596.4	596.6	596.8	597.0	597.2	597.4	597.6	597.8	598.0	
55	107,200	107,900	108,700	109,400	110,200	110,900	111,600	112,400	113,100	113,900	114,700	115,500	116,200	117,000	117,800	118,600	119,400	120,300	121,100	121,900	122,700	55
56	110,400	111,200	111,900	112,700	113,500	114,200	115,000	115,700	116,500	117,300	118,100	118,900	119,700	120,500	121,300	122,200	123,000	123,800	124,600	125,500	126,300	56
57	113,400	114,200	115,000	115,800	116,600	117,400	118,200	119,000	119,800	120,600	121,400	122,200	123,100	123,900	124,800	125,600	126,500	127,300	128,200	129,000	129,900	57
58	117,700	118,600	119,500	120,500	121,400	122,300	123,200	124,100	125,100	126,000	127,000	128,000	128,900	129,900	130,900	131,900	132,900	133,900	134,900	135,900	136,900	58
59	121,900	123,000	124,100	125,100	126,200	127,200	128,300	129,300	130,400	131,500	132,600	133,700	134,800	135,900	137,100	138,200	139,300	140,500	141,600	142,800	143,900	59
60	126,200	127,400	128,600	129,800	131,000	132,100	133,300	134,500	135,700	136,900	138,200	139,400	140,700	141,900	143,200	144,500	145,800	147,100	148,400	149,700	151,000	60
61	130,400	131,800	133,100	134,400	135,700	137,000	138,400	139,700	141,000	142,400	143,800	145,100	146,500	147,900	149,400	150,800	152,200	153,600	155,100	156,500	158,000	61
62	134,700	136,200	137,600	139,100	140,500	142,000	143,400	144,900	146,300	147,800	149,400	150,900	152,400	154,000	155,500	157,100	158,600	160,200	161,800	163,400	165,000	62
63	139,000	140,500	142,100	143,700	145,300	146,900	148,500	150,000	151,700	153,300	154,900	156,600	158,300	160,000	161,700	163,400	165,100	166,800	168,500	170,300	172,000	63
64	143,200	144,900	146,600	148,300	150,100	151,800	153,500	155,200	157,000	158,700	160,500	162,300	164,200	166,000	167,800	169,700	171,500	173,400	175,300	177,200	179,100	64
65	147,500	149,300	151,200	153,000	154,800	156,700	158,500	160,400	162,300	164,200	166,100	168,100	170,000	172,000	174,000	176,000	178,000	180,000	182,000	184,000	186,100	65
66	151,900	153,800	155,600	157,500	159,400	161,200	163,100	165,000	166,900	168,800	170,700	172,700	174,600	176,600	178,500	180,500	182,500	184,400	186,400	188,400	190,400	66
67	155,000	156,800	158,700	160,600	162,500	164,400	166,300	168,200	170,200	172,100	174,100	176,000	178,000	180,000	181,900	183,900	185,900	187,900	190,000	192,000	194,000	67
68	159,200	161,200	163,200	165,300	167,300	169,300	171,400	173,400	175,500	177,600	179,700	181,700	183,900	186,000	188,100	190,200	192,400	194,500	196,700	198,900	201,000	68
69	163,500	165,600	167,800	169,900	172,100	174,300	176,400	178,600	180,800	183,000	185,200	187,500	189,700	192,000	194,300	196,500	198,800	201,100	203,400	205,700	208,100	69
70	167,700	170,000	172,300	174,600	176,900	179,200	181,500	183,800	186,100	188,500	190,800	193,200	195,600	198,000	200,400	202,800	205,300	207,700	210,100	212,600	215,100	70
71	172,000	174,400	176,800	179,200	181,600	184,100	186,500	189,000	191,400	193,900	196,400	198,900	201,500	204,000	206,600	209,100	211,700	214,300	216,900	219,500	222,100	71
72	176,200	178,800	181,300	183,900	186,400	189,000	191,600	194,100	196,800	199,400	202,000	204,700	207,300	210,000	212,700	215,400	218,100	220,900	223,600	226,400	229,100	72
73	183,500	186,200	188,900	191,600	194,300	197,100	199,800	202,600	205,300	208,100	210,900	213,700	216,600	219,400	222,300	225,200	228,000	230,900	233,900	236,800	239,700	73
74	190,800	193,700	196,500	199,400	202,300	205,200	208,100	211,000	213,900	216,900	219,800	222,800	225,800	228,800	231,900	234,900	238,000	241,000	244,100	247,200	250,300	74
75	195,100	198,100	201,100	204,000	207,100	210,100	213,100	216,200	219,200	222,300	225,400	228,500	231,700	234,800	238,000	241,200	244,400	247,600	250,800	254,100	257,400	75
77	200,000	202,700	205,500	208,300	211,100	213,900	216,700	219,600	222,400	225,300	228,300	231,200	234,200	237,100	240,100	243,100	246,200	249,200	252,300	255,400	258,500	77
78	204,200	207,100	210,000	212,900	215,900	218,800	221,800	224,800	227,800	230,800	233,800	236,900	240,000	243,100	246,300	249,400	252,600	255,800	259,000	262,200	265,500	78
79	211,700	214,600	217,600	220,600	223,600	226,600	229,600	232,600	235,600	238,700	241,800	244,900	248,000	251,100	254,300	257,400	260,600	263,800	267,000	270,200	273,400	79
80	215,900	219,000	222,100	225,200	228,300	231,500	234,600	237,800	241,000	244,200	247,400	250,600	253,900	257,100	260,400	263,700	267,000	270,400	273,700	277,100	280,400	80
82	220,800	223,700	226,600	229,500	232,400	235,300	238,300	241,200	244,200	247,200	250,200	253,300	256,300	259,400	262,500	265,700	268,800	272,000	275,200	278,300	281,600	82
83	225,100	228,100	231,100	234,100	237,200	240,200	243,300	246,400	249,500	252,600	255,800	259,000	262,200	265,400	268,700	272,000	275,300	278,600	281,900	285,200	288,600	83
84	236,800	240,000	243,200	246,400	249,600	252,900	256,100	259,400	262,700	266,000	269,300	272,700	276,000	279,400	282,800	286,200	289,700	293,100	296,600	300,000	303,500	84
86	245,900	249,000	252,200	255,300	258,500	261,600	264,800	268,000	271,200	274,500	277,800	281,100	284,400	287,700	291,100	294,500	297,900	301,300	304,700	308,200	311,700	86
87	257,600	260,900	264,200	267,600	270,900	274,300	277,600	281,000	284,400	287,900	291,300	294,800	298,200	301,700	305,200	308,800	312,300	315,900	319,400	323,000	326,600	87
89	266,700	270,000	273,200	276,500	279,700	283,000	286,300	289,600	293,000	296,300	299,700	303,100	306,600	310,000	313,500	317,000	320,500	324,100	327,600	331,200	334,800	89
90	278,500	281,900	285,300	288,800	292,200	295,700	299,200	302,600	306,200	309,700	313,300	316,800	320,400	324,000	327,600	331,300	334,900	338,600	342,300	346,000	349,700	90
92	287,600	290,900	294,300	297,700	301,000	304,400	307,800	311,300	314,700	318,200	321,700	325,200	328,800	332,300	335,900	339,500	343,200	346,800	350,500	354,100	357,800	92
93	299,300	302,800	306,400	309,900	313,500	317,100	320,700	324,300	327,900	331,500	335,200	338,900	342,600	346,300	350,100	353,800	357,600	361,400	365,200	369,000	372,800	93
95	310,500	313,900	317,400	320,800	324,300	327,800	331,300	334,800	338,300	341,800	345,400	349,000	352,700	356,300	360,000	363,700	367,400	371,100	374,900	378,600	382,400	95
96	322,200	325,800	329,500	333,100	336,700	340,400	344,100	347,800	351,500	355,200	359,000	362,700	366,500	370,300	374,100	378,000	381,800	385,700	389,500	393,400	397,400	96
98	333,400	336,900	340,400	344,000	347,500	351,100	354,700	358,300	361,900	365,500	369,200	372,900	376,600	380,300	384,100	387,800	391,600	395,400	399,300	403,100	406,900	98
99	345,100	348,800	352,500	356,300	360,000	363,700	367,500	371,300	375,100	378,900	382,700	386,600	390,400	394,300	398,200	402,100	406,000	410,000	413,900			99
101	356,300	359,900	363,500	367,100	370,800	374,400	378,100	381,800	385,500	389,200	392,900	396,700	400,500	404,300	408,200	412,000						101
102	368,000	371,800	375,600	379,400	383,200	387,100	390,900	394,800	398,700	402,600	406,500	410,400										102
104	379,200	382,900	386,600	390,300	394,000	397,800	401,500	405,300	409,000	412,900												104
105	390,900	394,800	398,700	402,600	406,500	410,400																105
106	393,600	397,300	401,100	404,800	408,600	412,400																106

HEADWATER 594 to 598
TAILWATER 574.51 to 575.50

MARCH 2004

GUNTERSVILLE DAM
SPILLWAY DISCHARGE
IN CUBIC FEET PER SECOND

GATE ARRANGEMENT	HEADWATER ELEVATION																					GATE ARRANGEMENT
	598.0	598.2	598.4	598.6	598.8	599.0	599.2	599.4	599.6	599.8	600.0	600.2	600.4	600.6	600.8	601.0	601.2	601.4	601.6	601.8	602.0	
0*	10,110	11,320	12,570	13,860	15,200	16,580	18,000	19,450	20,940	22,470	24,030											0*
1	10,980	12,180	13,430	14,710	16,040	17,410	18,820	20,270	21,750	23,280	24,830											1
2	12,660	13,810	15,010	16,250	17,550	18,890	20,270	21,700	23,160	24,670	26,210											2
4	15,210	16,310	17,440	18,640	19,900	21,200	22,550	23,950	25,390	26,860	28,380											4
6	17,750	18,800	19,880	21,030	22,240	23,510	24,830	26,200	27,610	29,060	30,550											6
8	20,300	21,290	22,320	23,420	24,590	25,830	27,110	28,450	29,830	31,250	32,720											8
10	22,850	23,790	24,760	25,800	26,940	28,140	29,390	30,700	32,050	33,450	34,890											10
12	25,400	26,280	27,200	28,190	29,290	30,450	31,670	32,950	34,270	35,640	37,060											12
14	27,940	28,780	29,630	30,580	31,630	32,760	33,950	35,200	36,490	37,840	39,230											14
16	30,490	31,270	32,070	32,970	33,980	35,070	36,230	37,450	38,720	40,040	41,400											16
18	33,040	33,760	34,510	35,350	36,330	37,380	38,510	39,700	40,940	42,230	43,580											18
20	35,590	36,260	36,950	37,740	38,680	39,700	40,790	41,950	43,160	44,430	45,750											20
21	37,390	38,070	38,770	39,570	40,490	41,490	42,560	43,690	44,870	46,100	47,380											21
22	39,200	39,880	40,590	41,390	42,300	43,280	44,330	45,420	46,570	47,770	49,000											22
23	41,000	41,700	42,410	43,210	44,110	45,070	46,090	47,160	48,280	49,440	50,630											23
24	42,800	43,510	44,240	45,030	45,920	46,870	47,860	48,900	49,990	51,100	52,260											24
25	44,610	45,320	46,060	46,860	47,730	48,660	49,630	50,640	51,690	52,770	53,890											25
26	46,410	47,140	47,880	48,680	49,540	50,450	51,400	52,380	53,400	54,440	55,520											26
27	48,210	48,950	49,700	50,500	51,360	52,250	53,170	54,120	55,100	56,110	57,150											27
28	50,020	50,760	51,530	52,330	53,170	54,040	54,940	55,860	56,810	57,780	58,770											28
29	51,820	52,580	53,350	54,150	54,980	55,830	56,710	57,600	58,520	59,450	60,400											29
31	54,370	55,070	55,790	56,540	57,330	58,140	58,990	59,850	60,740	61,650	62,570											31
32	56,170	56,880	57,610	58,360	59,140	59,940	60,750	61,590	62,440	63,320	64,200											32
34	58,720	59,380	60,050	60,750	61,490	62,250	63,030	63,840	64,670	65,510	66,370											34
35	60,530	61,190	61,870	62,570	63,300	64,040	64,800	65,580	66,370	67,180	68,000											35
37	63,070	63,690	64,310	64,960	65,640	66,350	67,080	67,830	68,590	69,380	70,170											37
38	64,880	65,500	66,130	66,780	67,460	68,150	68,850	69,570	70,300	71,050	71,800											38
39	67,430	67,990	68,570	69,170	69,800	70,460	71,130	71,820	72,520	73,240	73,970											39
40	69,970	70,490	71,010	71,560	72,150	72,770	73,410	74,070	74,740	75,440	76,140											40
41	71,780	72,300	72,830	73,380	73,960	74,560	75,180	75,810	76,450	77,110	77,770											41
42	75,360	75,910	76,460	77,040	77,650	78,270	78,920	79,570	80,240	80,920	81,610											42
43	78,940	79,520	80,100	80,700	81,330	81,990	82,650	83,330	84,030	84,730	85,450											43
44	82,520	83,130	83,730	84,360	85,020	85,700	86,390	87,100	87,820	88,550	89,290											44
45	86,110	86,730	87,370	88,020	88,710	89,410	90,130	90,860	91,610	92,360	93,130											45
46	89,690	90,340	91,000	91,680	92,390	93,120	93,870	94,620	95,390	96,180	96,970											46
47	93,270	93,950	94,640	95,340	96,080	96,830	97,600	98,390	99,180	99,990	100,800											47
48	96,850	97,560	98,270	99,000	99,760	100,500	101,300	102,200	103,000	103,800	104,600											48
49	100,400	101,200	101,900	102,700	103,500	104,300	105,100	105,900	106,800	107,600	108,500											49
50	104,800	105,500	106,200	106,900	107,600	108,400	109,100	109,900	110,700	111,500	112,300											50
51	108,400	109,100	109,800	110,500	111,300	112,100	112,900	113,700	114,500	115,300	116,100											51
52	112,000	112,700	113,400	114,200	115,000	115,800	116,600	117,400	118,300	119,100	120,000											52
53	115,500	116,300	117,100	117,900	118,700	119,500	120,300	121,200	122,100	122,900	123,800											53
54	119,100	119,900	120,700	121,500	122,400	123,200	124,100	125,000	125,800	126,700	127,600											54
55	122,700	123,500	124,300	125,200	126,000	126,900	127,800	128,700	129,600	130,600	131,500											55
56	126,300	127,100	128,000	128,800	129,700	130,500	131,400	132,200	133,000	133,900	134,700											56
57	129,900	130,800	131,600	132,500	133,300	134,200	135,100	136,000	136,800	137,700	138,600											57
58	136,900	137,900	138,900	140,000	141,000	142,000	143,000	144,100	145,100	146,100	147,200											58
59	143,900	145,100	146,300	147,400	148,600	149,800	151,000	152,200	153,300	154,500	155,700											59
60	151,000	152,300	153,600	154,900	156,200	157,600	158,900	160,200	161,600	163,000	164,300											60
61	158,000	159,400	160,900	162,400	163,800	165,300	166,800	168,300	169,900	171,400	172,900											61
62	165,000	166,600	168,200	169,800	171,500	173,100	174,800	176,400	178,100	179,800	181,500											62
63	172,000	173,800	175,500	177,300	179,100	180,900	182,700	184,500	186,400	188,200	190,000											63
64	179,100	181,000	182,900	184,800	186,700	188,700	190,700	192,600	194,600	196,600	198,600											64
65	186,100	188,100	190,200	192,300	194,300	196,500	198,600	200,700	202,900	205,000	207,200											65
66	190,400	192,400	194,400	196,500	198,500	200,600	202,600	204,700	206,800	208,900	211,000											66

MARCH 2004

** Arrangement "0" indicates that all spillway gates are closed. Discharge is spillway gate and trash gate overflow.*

HEADWATER 598 to 602
TAILWATER 574.51 to 575.50

GUNTERSVILLE DAM
SPILLWAY DISCHARGE
IN CUBIC FEET PER SECOND

GATE ARRANGEMENT	HEADWATER ELEVATION																					GATE ARRANGEMENT
	598.0	598.2	598.4	598.6	598.8	599.0	599.2	599.4	599.6	599.8	600.0	600.2	600.4	600.6	600.8	601.0	601.2	601.4	601.6	601.8	602.0	
67	194,000	196,000	198,100	200,100	202,200	204,300	206,400	208,500	210,600	212,700	214,800											67
68	201,000	203,200	205,400	207,600	209,800	212,100	214,300	216,600	218,800	221,100	223,400											68
69	208,100	210,400	212,700	215,100	217,400	219,800	222,300	224,700	227,100	229,500	232,000											69
70	215,100	217,600	220,000	222,500	225,100	227,600	230,200	232,800	235,300	237,900	240,500											70
71	222,100	224,700	227,400	230,000	232,700	235,400	238,100	240,900	243,600	246,400	249,100											71
72	229,100	231,900	234,700	237,500	240,300	243,200	246,100	249,000	251,900	254,800	257,700											72
73	239,700	242,700	245,600	248,600	251,600	254,700	257,700	260,800	263,900	267,000	270,100											73
74	250,300	253,500	256,600	259,800	262,900	266,200	269,400	272,700	275,900	279,200	282,500											74
75	257,400	260,600	263,900	267,200	270,600	274,000	277,400	280,800	284,200	287,600	291,100											75
77	258,500	261,600	264,700	267,800	271,000	274,200	277,500															77
78	265,500	268,800	272,000	275,300	278,600	282,000	285,400	288,800	292,200	295,700	299,100											78
79	273,400	276,700	279,900	283,200	286,500	289,800	293,200	296,600	299,900	303,300	306,700											79
80	280,400	283,800	287,200	290,700	294,100	297,600	301,100	304,700	308,200	311,800	315,300											80
82	281,600	284,800	288,000	291,300	294,600	297,900	301,200															82
83	288,600	292,000	295,300	298,700	302,200	305,700	309,200	312,700	316,200	319,800	323,300											83
84	303,500	307,000	310,600	314,100	317,700	321,300	324,900	328,500	332,200	335,900	339,600											84
86	311,700	315,200	318,700	322,200	325,700	329,300	332,900	336,600	340,200	343,900	347,600											86
87	326,600	330,200	333,900	337,500	341,200	344,900	348,700	352,400	356,200	360,000	363,800											87
89	334,800	338,400	342,000	345,600	349,300	353,000	356,700	360,500	364,200	368,000	371,800											89
90	349,700	353,400	357,200	361,000	364,700	368,600	372,400	376,300	380,200	384,100	388,000											90
92	357,800	361,600	365,300	369,000	372,800	376,600	380,500	384,300	388,200	392,100	396,000											92
93	372,800	376,600	380,500	384,400	388,300	392,200	396,200	400,200	404,200	408,200	412,200											93
95	382,400	386,200	390,000	393,800	397,700	401,600	405,500	409,400	413,300													95
96	397,400	401,300	405,200	409,200	413,100																	96
98	406,900	410,800																				98

HEADWATER 598 to 602
TAILWATER 574.51 to 575.50

MARCH 2004

GUNTERSVILLE DAM

SPILLWAY DISCHARGE

IN CUBIC FEET PER SECOND

GATE ARRANGE-MENT	HEADWATER ELEVATION																					GATE ARRANGE-MENT
	590.0	590.2	590.4	590.6	590.8	591.0	591.2	591.4	591.6	591.8	592.0	592.2	592.4	592.6	592.8	593.0	593.2	593.4	593.6	593.8	594.0	
6	7,330	7,380	7,430	7,490	7,540	7,590	7,640	7,690	7,740	7,790	7,840	7,890	7,940	7,990	8,040	8,090	8,140	8,180	8,230	8,280	8,320	6
7	8,260	8,320	8,380	8,430	8,490	8,550	8,610	8,670	8,720	8,780	8,830	8,890	8,940	9,000	9,050	9,110	9,160	9,210	9,270	9,320	9,370	7
8	9,770	9,840	9,910	9,980	10,050	10,120	10,190	10,260	10,320	10,390	10,460	10,520	10,590	10,660	10,720	10,780	10,850	10,910	10,970	11,040	11,100	8
9	10,700	10,780	10,850	10,930	11,010	11,080	11,160	11,230	11,300	11,380	11,450	11,520	11,590	11,660	11,730	11,800	11,870	11,940	12,010	12,080	12,140	9
10	12,210	12,300	12,390	12,480	12,560	12,650	12,740	12,820	12,910	12,990	13,070	13,160	13,240	13,320	13,400	13,480	13,560	13,640	13,720	13,790	13,870	10
11	13,140	13,240	13,330	13,420	13,520	13,610	13,700	13,790	13,880	13,970	14,060	14,150	14,240	14,330	14,410	14,500	14,580	14,670	14,750	14,840	14,920	11
12	14,650	14,760	14,870	14,970	15,080	15,180	15,280	15,390	15,490	15,590	15,690	15,790	15,890	15,980	16,080	16,180	16,270	16,370	16,460	16,550	16,650	12
13	15,580	15,700	15,810	15,920	16,030	16,140	16,250	16,360	16,470	16,570	16,680	16,780	16,890	16,990	17,090	17,200	17,300	17,400	17,500	17,600	17,690	13
14	17,090	17,220	17,340	17,470	17,590	17,710	17,830	17,950	18,070	18,190	18,300	18,420	18,530	18,650	18,760	18,870	18,980	19,090	19,200	19,310	19,420	14
15	18,020	18,160	18,290	18,420	18,540	18,670	18,800	18,920	19,050	19,170	19,290	19,410	19,530	19,650	19,770	19,890	20,010	20,120	20,240	20,350	20,470	15
16	19,540	19,680	19,820	19,960	20,100	20,240	20,380	20,510	20,650	20,780	20,920	21,050	21,180	21,310	21,440	21,570	21,700	21,820	21,950	22,070	22,200	16
17	20,470	20,620	20,760	20,910	21,060	21,200	21,340	21,490	21,630	21,770	21,910	22,050	22,180	22,320	22,450	22,590	22,720	22,850	22,980	23,110	23,240	17
18	21,980	22,140	22,300	22,460	22,620	22,770	22,930	23,080	23,230	23,380	23,530	23,680	23,830	23,970	24,120	24,260	24,410	24,550	24,690	24,830	24,970	18
19	22,910	23,080	23,240	23,410	23,570	23,730	23,890	24,050	24,210	24,370	24,520	24,680	24,830	24,980	25,130	25,280	25,430	25,580	25,730	25,870	26,020	19
20	24,420	24,600	24,780	24,950	25,130	25,300	25,470	25,640	25,810	25,980	26,150	26,310	26,480	26,640	26,800	26,960	27,120	27,280	27,430	27,590	27,740	20
21	25,770	25,960	26,150	26,340	26,530	26,710	26,890	27,080	27,260	27,440	27,620	27,790	27,970	28,140	28,310	28,490	28,660	28,820	28,990	29,160	29,320	21
22	27,120	27,320	27,520	27,720	27,920	28,120	28,320	28,510	28,700	28,890	29,080	29,270	29,460	29,640	29,830	30,010	30,190	30,370	30,550	30,730	30,900	22
23	28,470	28,690	28,900	29,110	29,320	29,530	29,740	29,940	30,150	30,350	30,550	30,750	30,950	31,150	31,340	31,540	31,730	31,920	32,110	32,300	32,480	23
24	29,820	30,050	30,270	30,500	30,720	30,940	31,160	31,380	31,590	31,810	32,020	32,230	32,440	32,650	32,860	33,060	33,260	33,470	33,670	33,870	34,060	24
25	31,170	31,410	31,650	31,880	32,120	32,350	32,580	32,810	33,040	33,270	33,490	33,710	33,930	34,150	34,370	34,590	34,800	35,010	35,230	35,440	35,640	25
26	32,520	32,770	33,020	33,270	33,520	33,760	34,000	34,250	34,490	34,720	34,960	35,190	35,430	35,660	35,890	36,110	36,340	36,560	36,780	37,000	37,220	26
27	33,870	34,130	34,390	34,650	34,910	35,170	35,430	35,680	35,930	36,180	36,430	36,670	36,920	37,160	37,400	37,640	37,870	38,110	38,340	38,570	38,800	27
28	35,220	35,500	35,770	36,040	36,310	36,580	36,850	37,110	37,380	37,640	37,900	38,150	38,410	38,660	38,910	39,160	39,410	39,660	39,900	40,140	40,380	28
29	36,570	36,860	37,140	37,430	37,710	37,990	38,270	38,550	38,820	39,100	39,370	39,630	39,900	40,170	40,430	40,690	40,950	41,200	41,460	41,710	41,960	29
30	37,500	37,790	38,080	38,370	38,660	38,950	39,240	39,520	39,800	40,080	40,360	40,630	40,900	41,170	41,440	41,710	41,970	42,230	42,490	42,750	43,010	30
31	39,010	39,320	39,620	39,920	40,220	40,520	40,820	41,110	41,400	41,690	41,980	42,270	42,550	42,830	43,110	43,380	43,660	43,930	44,200	44,470	44,740	31
32	40,360	40,680	40,990	41,310	41,620	41,930	42,240	42,550	42,850	43,150	43,450	43,750	44,040	44,330	44,620	44,910	45,200	45,480	45,760	46,040	46,320	32
33	41,290	41,610	41,930	42,250	42,570	42,890	43,210	43,520	43,830	44,140	44,440	44,740	45,040	45,340	45,640	45,930	46,220	46,510	46,800	47,080	47,360	33
34	42,810	43,140	43,470	43,800	44,130	44,460	44,790	45,110	45,430	45,750	46,060	46,380	46,690	47,000	47,300	47,610	47,910	48,210	48,500	48,800	49,090	34
35	44,160	44,500	44,840	45,190	45,530	45,870	46,210	46,540	46,880	47,210	47,530	47,860	48,180	48,500	48,820	49,130	49,440	49,750	50,060	50,370	50,670	35
36	45,080	45,440	45,790	46,140	46,490	46,830	47,180	47,520	47,850	48,190	48,520	48,850	49,180	49,510	49,830	50,150	50,470	50,780	51,100	51,410	51,720	36
37	46,600	46,960	47,320	47,680	48,040	48,400	48,760	49,110	49,460	49,800	50,150	50,490	50,830	51,160	51,500	51,830	52,160	52,480	52,810	53,130	53,450	37
38	47,950	48,320	48,690	49,070	49,440	49,810	50,180	50,540	50,900	51,260	51,620	51,970	52,320	52,670	53,010	53,350	53,690	54,030	54,360	54,700	55,030	38
39	50,390	50,780	51,170	51,560	51,950	52,340	52,730	53,110	53,480	53,860	54,230	54,600	54,970	55,330	55,690	56,050	56,400	56,760	57,110	57,460	57,800	39
40	52,830	53,240	53,650	54,060	54,470	54,870	55,270	55,670	56,070	56,460	56,850	57,230	57,610	57,990	58,370	58,740	59,120	59,480	59,850	60,210	60,580	40
41	54,180	54,600	55,020	55,450	55,870	56,280	56,690	57,100	57,510	57,910	58,310	58,710	59,110	59,500	59,880	60,270	60,650	61,030	61,410	61,780	62,160	41
42	56,630	57,080	57,530	57,970	58,420	58,860	59,290	59,730	60,170	60,600	61,030	61,460	61,880	62,300	62,720	63,130	63,540	63,950	64,360	64,760	65,160	42
43	59,080	59,560	60,030	60,500	60,970	61,430	61,890	62,350	62,820	63,280	63,740	64,200	64,650	65,100	65,550	65,990	66,430	66,870	67,310	67,740	68,170	43
44	61,530	62,030	62,530	63,020	63,520	64,000	64,490	64,980	65,470	65,970	66,460	66,940	67,430	67,910	68,380	68,860	69,330	69,790	70,260	70,720	71,170	44
45	63,980	64,510	65,030	65,550	66,070	66,580	67,080	67,600	68,130	68,650	69,170	69,690	70,200	70,710	71,220	71,720	72,220	72,710	73,200	73,690	74,180	45
46	66,430	66,990	67,530	68,080	68,620	69,150	69,680	70,220	70,780	71,340	71,890	72,430	72,980	73,510	74,050	74,580	75,110	75,630	76,150	76,670	77,190	46
47	68,880	69,460	70,030	70,600	71,170	71,720	72,280	72,850	73,440	74,020	74,600	75,180	75,750	76,320	76,880	77,440	78,000	78,550	79,100	79,650	80,190	47
48	71,330	71,940	72,530	73,130	73,710	74,300	74,870	75,470	76,090	76,700	77,320	77,920	78,520	79,120	79,720	80,310	80,890	81,470	82,050	82,630	83,200	48
49	73,790	74,410	75,040	75,650	76,260	76,870	77,470	78,090	78,740	79,390	80,030	80,670	81,300	81,930	82,550	83,170	83,780	84,390	85,000	85,600	86,200	49
50	77,580	78,240	78,890	79,530	80,180	80,810	81,440	82,090	82,770	83,440	84,110	84,780	85,440	86,090	86,740	87,390	88,030	88,670	89,300	89,930	90,560	50
51	80,030	80,710	81,390	82,060	82,730	83,380	84,030	84,710	85,420	86,130	86,830	87,520	88,210	88,900	89,580	90,250	90,920	91,590	92,250	92,910	93,560	51
52	82,480	83,190	83,890	84,590	85,280	85,960	86,630	87,340	88,080	88,810	89,540	90,270	90,990	91,700	92,410	93,110	93,810	94,510	95,200	95,890	96,570	52
53	84,930	85,660	86,390	87,110	87,830	88,530	89,230	89,960	90,730	91,500	92,260	93,010	93,760	94,500	95,240	95,980	96,710	97,430	98,150	98,860	99,580	53
54	87,380	88,140	88,890	89,640	90,380	91,100	91,820	92,590	93,390	94,180	94,970	95,760	96,530	97,310	98,080	98,840	99,600	100,300	101,100	101,800	102,600	54
55	89,830	90,620	91,400	92,160	92,930	93,680	94,420	95,210	96,040	96,870	97,690	98,500	99,310	100,100	100,900	101,700	102,500	103,300	104,000	104,800	105,600	55
56	92,530	93,340	94,140	94,940	95,720	96,500	97,270	98,080	98,930	99,780	100,600	101,500	102,300	103,100	103,900	104,800	105,600	106,400	107,200	108,000	108,700	56
57	94,980	95,820	96,640	97,460	98,270	99,070	99,860	100,700	101,600	102,500	103,300	104,200	105,100	105,900	106,800	107,600	108,500	109,300	110,100	110,900	111,800	57
58	96,930	97,880	98,820	99,750	100,700	101,600	102,500	103,500	104,500	105,500	106,400	107,400	108,400	109,400	110,400	111,300	112,300	113,200	114,200	115,100	116,100	58
59	98,870	99,930	101,000	102,000	103,100	104,100	105,100	106,200	107,300	108,400	109,600	110,700	111,800	112,900	114,000	115,000	116,100	117,200	118,300	119,400	120,400	59
60	100,800	102,000	103,200	104,300	105,500	106,600	107,800	109,000	110,200	111,400	112,700	113,900	115,100	116,300	117,600	118,800	120,000	121,200	122,400	123,600	124,800	60

MARCH 2004

HEADWATER 590 to 594
TAILWATER 575.51 to 576.50

GUNTERSVILLE DAM
SPILLWAY DISCHARGE
IN CUBIC FEET PER SECOND

GATE ARRANGEMENT	HEADWATER ELEVATION																					GATE ARRANGEMENT
	590.0	590.2	590.4	590.6	590.8	591.0	591.2	591.4	591.6	591.8	592.0	592.2	592.4	592.6	592.8	593.0	593.2	593.4	593.6	593.8	594.0	
61	102,800	104,100	105,300	106,600	107,900	109,200	110,400	111,700	113,100	114,400	115,800	117,100	118,500	119,800	121,200	122,500	123,800	125,100	126,500	127,800	129,100	61
62	104,700	106,100	107,500	108,900	110,300	111,700	113,100	114,500	116,000	117,400	118,900	120,400	121,800	123,300	124,700	126,200	127,600	129,100	130,500	132,000	133,500	62
63	106,700	108,200	109,700	111,200	112,700	114,200	115,700	117,300	118,800	120,400	122,000	123,600	125,200	126,800	128,300	129,900	131,500	133,100	134,600	136,200	137,800	63
64	108,600	110,200	111,800	113,500	115,100	116,700	118,400	120,000	121,700	123,400	125,100	126,800	128,500	130,200	131,900	133,600	135,300	137,000	138,700	140,400	142,100	64
65	110,600	112,300	114,000	115,800	117,500	119,200	121,000	122,800	124,600	126,400	128,200	130,000	131,900	133,700	135,500	137,300	139,200	141,000	142,800	144,600	146,500	65
66	114,300	116,100	117,900	119,600	121,400	123,200	125,000	126,800	128,600	130,500	132,300	134,200	136,000	137,900	139,700	141,600	143,400	145,300	147,100	149,000	150,800	66
67	116,800	118,600	120,400	122,200	124,000	125,800	127,600	129,400	131,300	133,100	135,000	136,900	138,800	140,700	142,600	144,400	146,300	148,200	150,100	151,900	153,800	67
68	118,700	120,600	122,500	124,400	126,400	128,300	130,200	132,200	134,100	136,100	138,100	140,100	142,100	144,200	146,200	148,100	150,100	152,100	154,100	156,200	158,200	68
69	120,700	122,700	124,700	126,700	128,800	130,800	132,800	134,900	137,000	139,100	141,200	143,400	145,500	147,600	149,800	151,900	154,000	156,100	158,200	160,400	162,500	69
70	122,600	124,800	126,900	129,000	131,200	133,300	135,500	137,700	139,900	142,100	144,300	146,600	148,800	151,100	153,300	155,600	157,800	160,100	162,300	164,600	166,900	70
71	124,600	126,800	129,100	131,300	133,600	135,800	138,100	140,400	142,800	145,100	147,500	149,800	152,200	154,600	156,900	159,300	161,700	164,000	166,400	168,800	171,200	71
72	126,500	128,900	131,200	133,600	136,000	138,400	140,800	143,200	145,600	148,100	150,600	153,000	155,500	158,100	160,500	163,000	165,500	168,000	170,500	173,000	175,500	72
73	130,900	133,400	135,900	138,400	140,900	143,500	146,000	148,600	151,200	153,800	156,400	159,000	161,700	164,300	167,000	169,600	172,200	174,900	177,500	180,200	182,900	73
74	135,300	137,900	140,600	143,200	145,900	148,600	151,200	154,000	156,700	159,400	162,200	165,000	167,800	170,600	173,400	176,200	179,000	181,800	184,600	187,400	190,200	74
75	137,300	140,000	142,700	145,500	148,300	151,100	153,900	156,700	159,600	162,400	165,300	168,200	171,100	174,100	177,000	179,900	182,800	185,700	188,700	191,600	194,600	75
76	139,400	141,900	144,400	146,900	149,500	152,100	154,600	157,200	159,900	162,500												76
77	145,600	148,200	150,700	153,300	155,900	158,600	161,200	163,900	166,500	169,200	171,900	174,700	177,400	180,100	182,900	185,600	188,300	191,000	193,800	196,500	199,300	77
78	147,500	150,200	152,900	155,600	158,400	161,100	163,800	166,600	169,400	172,200	175,100	177,900	180,700	183,600	186,500	189,300	192,100	195,000	197,900	200,800	203,700	78
79	153,800	156,500	159,300	162,000	164,800	167,600	170,400	173,200	176,100	179,000	181,800	184,700	187,700	190,600	193,500	196,400	199,300	202,200	205,100	208,100	211,000	79
80	155,700	158,600	161,400	164,300	167,200	170,100	173,100	176,000	179,000	182,000	185,000	188,000	191,000	194,100	197,100	200,100	203,100	206,200	209,200	212,300	215,400	80
81	157,800	160,500	163,100	165,800	168,400	171,100	173,800	176,500	179,300	182,000												81
82	164,100	166,700	169,400	172,200	174,900	177,600	180,400	183,200	185,900	188,800	191,600	194,400	197,300	200,100	203,000	205,800	208,600	211,500	214,300	217,200	220,100	82
83	166,000	168,800	171,600	174,400	177,300	180,100	183,000	185,900	188,800	191,700	194,700	197,600	200,600	203,600	206,600	209,500	212,500	215,400	218,400	221,400	224,400	83
84	174,200	177,200	180,100	183,100	186,200	189,200	192,200	195,300	198,400	201,500	204,600	207,700	210,900	214,000	217,200	220,300	223,400	226,600	229,800	232,900	236,100	84
85	176,300	179,000	181,800	184,600	187,400	190,200	193,000	195,800	198,700	201,500												85
86	184,500	187,400	190,300	193,300	196,200	199,200	202,200	205,200	208,200	211,300	214,300	217,400	220,500	223,600	226,700	229,700	232,800	235,900	239,000	242,100	245,200	86
87	192,700	195,700	198,800	202,000	205,100	208,200	211,400	214,600	217,800	221,000	224,200	227,500	230,700	234,000	237,300	240,500	243,800	247,000	250,300	253,600	256,900	87
88	194,700	197,600	200,500	203,400	206,300	209,200	212,200	215,100	218,100	221,100												88
89	202,900	206,000	209,000	212,100	215,200	218,300	221,400	224,500	227,600	230,800	234,000	237,100	240,300	243,600	246,700	249,900	253,100	256,300	259,500	262,800	266,000	89
90	211,100	214,300	217,500	220,800	224,000	227,300	230,600	233,900	237,200	240,500	243,900	247,200	250,600	254,000	257,400	260,700	264,100	267,500	270,900	274,300	277,700	90
92	221,400	224,600	227,700	230,900	234,100	237,300	240,500	243,800	247,000	250,300	253,600	256,900	260,200	263,500	266,800	270,100	273,400	276,800	280,100	283,400	286,800	92
93	229,600	232,900	236,200	239,600	243,000	246,400	249,700	253,200	256,600	260,000	263,500	267,000	270,500	274,000	277,500	280,900	284,400	287,900	291,400	295,000	298,500	93
95	242,200	245,500	248,800	252,100	255,400	258,700	262,000	265,400	268,700	272,100	275,500	278,900	282,300	285,700	289,100	292,500	295,900	299,300	302,800	306,200	309,600	95
96	250,400	253,800	257,300	260,800	264,200	267,700	271,200	274,700	278,300	281,800	285,400	289,000	292,500	296,100	299,700	303,300	306,900	310,500	314,100	317,700	321,300	96
98	263,000	266,400	269,800	273,200	276,600	280,000	283,500	286,900	290,400	293,900	297,300	300,800	304,300	307,900	311,400	314,900	318,400	321,900	325,400	328,900	332,500	98
99	271,200	274,800	278,300	281,900	285,500	289,100	292,700	296,300	299,900	303,600	307,300	310,900	314,600	318,300	322,000	325,700	329,300	333,000	336,700	340,500	344,200	99
101	283,900	287,400	290,900	294,400	297,900	301,400	305,000	308,500	312,100	315,600	319,200	322,800	326,400	330,000	333,600	337,200	340,800	344,400	348,100	351,700	355,300	101
102	292,100	295,700	299,400	303,100	306,700	310,400	314,200	317,900	321,600	325,400	329,100	332,900	336,700	340,500	344,200	348,000	351,800	355,600	359,400	363,200	367,000	102
104	304,700	308,300	311,900	315,500	319,100	322,800	326,400	330,100	333,700	337,400	341,100	344,800	348,500	352,200	355,900	359,600	363,300	367,000	370,700	374,400	378,100	104
105	312,900	316,600	320,400	324,200	328,000	331,800	335,600	339,500	343,300	347,100	351,000	354,900	358,800	362,600	366,500	370,400	374,300	378,100	382,000	385,900	389,800	105
106	318,100	321,700	325,400	329,100	332,800	336,500	340,200	343,900	347,600	351,300	355,100	358,800	362,500	366,300	370,000	373,800	377,500	381,300	385,100	388,800	392,600	106
107	334,500	338,500	342,500	346,500	350,500	354,500	358,600	362,600	366,700	370,800	374,900	379,000	383,100	387,200	391,300	395,400	399,500	403,600	407,700	411,900	416,000	107
108	345,900	349,900	353,800	357,800	361,700	365,700	369,700	373,700	377,700	381,700	385,700	389,700	393,800	397,800	401,800	405,900	409,900	413,900	418,000	422,000	426,100	108
109	354,100	358,200	362,300	366,500	370,600	374,800	378,900	383,100	387,300	391,400	395,600	399,800	404,000	408,300	412,500	416,700	420,900	425,100	429,300			109
110	365,600	369,600	373,700	377,800	381,800	385,900	390,000	394,100	398,200	402,400	406,500	410,600	414,700	418,900	423,000	427,200						110
111	373,700	378,000	382,200	386,500	390,700	395,000	399,200	403,500	407,800	412,100	416,400	420,700	425,000	429,300								111
112	384,100	388,200	392,400	396,500	400,700	404,900	409,100	413,200	417,400	421,600	425,800											112
113	401,600	406,100	410,600	415,100	419,700	424,200	428,800															113
114	413,000	417,500	422,000	426,400																		114
115	421,200	425,800																				115

HEADWATER 590 to 594
TAILWATER 575.51 to 576.50

MARCH 2004

GUNTERSVILLE DAM
SPILLWAY DISCHARGE
IN CUBIC FEET PER SECOND

GATE ARRANGEMENT	HEADWATER ELEVATION																					GATE ARRANGEMENT
	594.0	594.2	594.4	594.6	594.8	595.0	595.2	595.4	595.6	595.8	596.0	596.2	596.4	596.6	596.8	597.0	597.2	597.4	597.6	597.8	598.0	
0*																			7,840	8,950	10,110	0*
1																		7,660	8,710	9,810	10,960	1
2																7,540	8,450	9,420	10,440	11,500	12,610	2
3															7,610	8,450	9,350	10,310	11,310	12,370		3
4												7,330	7,970	8,670	9,440	10,260	11,140	12,060	13,040	14,050	15,110	4
5										7,360	7,810	8,340	8,950	9,630	10,370	11,180	12,040	12,950	13,910	14,920		5
6	8,320	8,370	8,420	8,460	8,510	8,550	8,600	8,640	8,810	9,170	9,630	10,180	10,790	11,470	12,200	12,990	13,830	14,710	15,640	16,610	17,610	6
7	9,370	9,420	9,470	9,520	9,570	9,620	9,670	9,720	9,900	10,240	10,670	11,190	11,770	12,420	13,140	13,910	14,730	15,600	16,510	17,470		7
8	11,100	11,160	11,220	11,280	11,340	11,400	11,460	11,520	11,700	12,050	12,500	13,020	13,610	14,260	14,970	15,720	16,520	17,360	18,240	19,160	20,120	8
9	12,140	12,210	12,280	12,340	12,410	12,470	12,540	12,600	12,780	13,120	13,540	14,040	14,590	15,220	15,900	16,630	17,420	18,240	19,110	20,020		9
10	13,870	13,950	14,030	14,100	14,180	14,250	14,330	14,400	14,590	14,930	15,360	15,870	16,440	17,060	17,730	18,450	19,200	20,000	20,840	21,710	22,620	10
11	14,920	15,000	15,080	15,160	15,240	15,320	15,400	15,480	15,670	15,990	16,410	16,880	17,420	18,010	18,660	19,360	20,100	20,890	21,710	22,580		11
12	16,650	16,740	16,830	16,920	17,010	17,100	17,190	17,280	17,470	17,810	18,230	18,720	19,260	19,850	20,490	21,170	21,890	22,650	23,440	24,260	25,120	12
13	17,690	17,790	17,890	17,980	18,080	18,170	18,270	18,360	18,550	18,870												13
14	19,420	19,530	19,640	19,740	19,850	19,950	20,060	20,160	20,360	20,690	21,100	21,560	22,080	22,650	23,260	23,900	24,580	25,290	26,040	26,820	27,620	14
15	20,470	20,580	20,690	20,800	20,920	21,030	21,130	21,240	21,440	21,750												15
16	22,200	22,320	22,440	22,560	22,680	22,800	22,920	23,040	23,240	23,570	23,960	24,410	24,910	25,440	26,020	26,630	27,270	27,940	28,640	29,370	30,120	16
17	23,240	23,370	23,500	23,620	23,750	23,880	24,000	24,120	24,320	24,630												17
18	24,970	25,110	25,250	25,380	25,520	25,650	25,790	25,920	26,130	26,450	26,830	27,260	27,730	28,240	28,780	29,350	29,960	30,590	31,240	31,920	32,620	18
19	26,020	26,160	26,300	26,440	26,590	26,730	26,860	27,000	27,210	27,510												19
20	27,740	27,900	28,050	28,200	28,350	28,500	28,650	28,800	29,010	29,330	29,690	30,110	30,550	31,030	31,540	32,080	32,640	33,230	33,840	34,470	35,130	20
21	29,320	29,490	29,650	29,810	29,970	30,130	30,290	30,450	30,680	31,000	31,380	31,800	32,260	32,750	33,270	33,810	34,390	34,980	35,600	36,250	36,910	21
22	30,900	31,080	31,250	31,430	31,600	31,770	31,940	32,100	32,340	32,670	33,060	33,490	33,960	34,460	34,990	35,550	36,130	36,740	37,370	38,020	38,690	22
23	32,480	32,670	32,850	33,040	33,220	33,400	33,580	33,760	34,000	34,350	34,750	35,190	35,660	36,170	36,710	37,280	37,870	38,490	39,130	39,790	40,470	23
24	34,060	34,260	34,460	34,650	34,840	35,030	35,220	35,410	35,670	36,020	36,430	36,880	37,370	37,890	38,440	39,010	39,620	40,240	40,890	41,560	42,250	24
25	35,640	35,850	36,060	36,260	36,460	36,660	36,870	37,060	37,330	37,690	38,110	38,570	39,070	39,600	40,160	40,750	41,360	42,000	42,650	43,330	44,030	25
26	37,220	37,440	37,660	37,870	38,090	38,300	38,510	38,720	39,000	39,370	39,800	40,270	40,770	41,310	41,880	42,480	43,100	43,750	44,420	45,100	45,810	26
27	38,800	39,030	39,260	39,480	39,710	39,930	40,150	40,370	40,660	41,040	41,480	41,960	42,480	43,030	43,610	44,210	44,850	45,500	46,180	46,880	47,590	27
28	40,380	40,620	40,860	41,100	41,330	41,560	41,790	42,020	42,320	42,720	43,160	43,650	44,180	44,740	45,330	45,950	46,590	47,250	47,940	48,650	49,380	28
29	41,960	42,210	42,460	42,710	42,950	43,200	43,440	43,680	43,990	44,390	44,850	45,350	45,890	46,460	47,050	47,680	48,330	49,010	49,700	50,420	51,160	29
30	43,010	43,270	43,520	43,770	44,020	44,270	44,520	44,760	45,070	45,450												30
31	44,740	45,000	45,270	45,530	45,790	46,050	46,300	46,560	46,870	47,270	47,710	48,200	48,710	49,250	49,820	50,410	51,020	51,650	52,300	52,970	53,660	31
32	46,320	46,590	46,870	47,140	47,410	47,680	47,940	48,210	48,530	48,940	49,400	49,890	50,410	50,960	51,540	52,140	52,760	53,400	54,060	54,740	55,440	32
33	47,360	47,650	47,930	48,200	48,480	48,750	49,020	49,290	49,620	50,010												33
34	49,090	49,380	49,670	49,960	50,240	50,530	50,810	51,090	51,420	51,820	52,260	52,740	53,240	53,760	54,300	54,870	55,450	56,050	56,670	57,300	57,940	34
35	50,670	50,970	51,270	51,570	51,870	52,160	52,450	52,740	53,080	53,490	53,950	54,430	54,940	55,470	56,030	56,600	57,190	57,800	58,430	59,070	59,720	35
36	51,720	52,030	52,330	52,630	52,940	53,230	53,530	53,830	54,160	54,560												36
37	53,450	53,760	54,080	54,390	54,700	55,010	55,320	55,620	55,970	56,370	56,810	57,280	57,760	58,270	58,790	59,330	59,880	60,450	61,030	61,620	62,220	37
38	55,030	55,350	55,680	56,000	56,320	56,640	56,960	57,280	57,630	58,050	58,500	58,970	59,470	59,980	60,510	61,060	61,620	62,200	62,790	63,390	64,010	38
39	57,800	58,140	58,480	58,820	59,160	59,490	59,830	60,160	60,520	60,930	61,360	61,820	62,290	62,780	63,280	63,790	64,310	64,850	65,390	65,950	66,510	39
40	60,580	60,930	61,290	61,640	62,000	62,340	62,690	63,040	63,400	63,810	64,230	64,660	65,110	65,570	66,040	66,520	67,000	67,490	67,990	68,500	69,010	40
41	62,160	62,520	62,890	63,260	63,620	63,980	64,330	64,690	65,070	65,480	65,910	66,360	66,820	67,280	67,760	68,250	68,740	69,250	69,750	70,270	70,790	41
42	65,160	65,560	65,950	66,350	66,740	67,120	67,510	67,890	68,300	68,740	69,200	69,670	70,150	70,650	71,150	71,670	72,190	72,720	73,250	73,790	74,340	42
43	68,170	68,590	69,020	69,440	69,850	70,270	70,680	71,090	71,530	71,990	72,480	72,980	73,490	74,010	74,540	75,080	75,630	76,190	76,750	77,320	77,890	43
44	71,170	71,630	72,080	72,530	72,970	73,420	73,860	74,290	74,750	75,250	75,760	76,290	76,830	77,380	77,940	78,500	79,080	79,660	80,250	80,840	81,440	44
45	74,180	74,660	75,140	75,620	76,090	76,560	77,030	77,490	77,980	78,500	79,050	79,600	80,170	80,740	81,330	81,920	82,520	83,130	83,740	84,360	84,990	45
46	77,190	77,700	78,200	78,710	79,210	79,710	80,200	80,700	81,210	81,760	82,330	82,910	83,500	84,110	84,720	85,340	85,970	86,600	87,240	87,890	88,540	46
47	80,190	80,730	81,270	81,800	82,330	82,850	83,380	83,900	84,440	85,020	85,610	86,220	86,840	87,470	88,110	88,760	89,410	90,070	90,740	91,410	92,090	47
48	83,200	83,760	84,330	84,890	85,450	86,000	86,550	87,100	87,670	88,270	88,900	89,530	90,180	90,830	91,500	92,170	92,850	93,540	94,230	94,930	95,640	48
49	86,200	86,800	87,390	87,980	88,560	89,150	89,720	90,300	90,900	91,530	92,180	92,840	93,520	94,200	94,890	95,590	96,300	97,010	97,730	98,460	99,190	49
50	90,560	91,180	91,800	92,410	93,020	93,630	94,230	94,830	95,450	96,080	96,730	97,380	98,040	98,710	99,380	100,100	100,700	101,400	102,100	102,800	103,500	50
51	93,560	94,210	94,860	95,500	96,140	96,780	97,410	98,030	98,680	99,340	100,000	100,700	101,400	102,100	102,800	103,500	104,200	104,900	105,600	106,300	107,000	51
52	96,570	97,250	97,920	98,590	99,260	99,920	100,600	101,200	101,900	102,600	103,300	104,000	104,700	105,400	106,200	106,900	107,600	108,400	109,100	109,800	110,600	52
53	99,580	100,300	101,000	101,700	102,400	103,100	103,800	104,400	105,100	105,900	106,600	107,300	108,100	108,800	109,600	110,300	111,100	111,800	112,600	113,400	114,100	53
54	102,600	103,300	104,000	104,800	105,500	106,200	106,900	107,600	108,400	109,100	109,900	110,600	111,400	112,200	112,900	113,700	114,500	115,300	116,100	116,900	117,700	54

MARCH 2004

** Arrangement "0" indicates that all spillway gates are closed. Discharge is spillway gate and trash gate overflow.*

HEADWATER 594 to 598
TAILWATER 575.51 to 576.50

GUNTERSVILLE DAM
SPILLWAY DISCHARGE
IN CUBIC FEET PER SECOND

GATE ARRANGEMENT	HEADWATER ELEVATION																					GATE ARRANGEMENT
	594.0	594.2	594.4	594.6	594.8	595.0	595.2	595.4	595.6	595.8	596.0	596.2	596.4	596.6	596.8	597.0	597.2	597.4	597.6	597.8	598.0	
55	105,600	106,400	107,100	107,900	108,600	109,400	110,100	110,800	111,600	112,400	113,100	113,900	114,700	115,500	116,300	117,100	118,000	118,800	119,600	120,400	121,200	55
56	108,700	109,500	110,300	111,100	111,900	112,600	113,400	114,100	114,900	115,700	116,500	117,300	118,100	119,000	119,800	120,600	121,400	122,300	123,100	123,900	124,800	56
57	111,800	112,600	113,400	114,200	115,000	115,800	116,600	117,300	118,100	119,000	119,800	120,600	121,500	122,300	123,200	124,000	124,900	125,700	126,600	127,500	128,300	57
58	116,100	117,000	118,000	118,900	119,800	120,800	121,700	122,600	123,500	124,500	125,500	126,400	127,400	128,400	129,400	130,400	131,400	132,400	133,400	134,400	135,400	58
59	120,400	121,500	122,600	123,600	124,700	125,800	126,800	127,900	128,900	130,000	131,100	132,300	133,400	134,500	135,600	136,800	137,900	139,100	140,200	141,400	142,500	59
60	124,800	126,000	127,200	128,400	129,600	130,800	131,900	133,100	134,300	135,600	136,800	138,100	139,300	140,600	141,900	143,200	144,400	145,700	147,000	148,300	149,700	60
61	129,100	130,400	131,800	133,100	134,400	135,700	137,100	138,400	139,700	141,100	142,500	143,900	145,300	146,700	148,100	149,500	151,000	152,400	153,900	155,300	156,800	61
62	133,500	134,900	136,400	137,800	139,300	140,700	142,200	143,700	145,100	146,600	148,200	149,700	151,200	152,800	154,300	155,900	157,500	159,100	160,700	162,300	163,900	62
63	137,800	139,400	141,000	142,600	144,100	145,700	147,300	148,900	150,500	152,200	153,800	155,500	157,200	158,900	160,600	162,300	164,000	165,700	167,500	169,200	171,000	63
64	142,100	143,800	145,600	147,300	149,000	150,700	152,500	154,200	155,900	157,700	159,500	161,300	163,100	165,000	166,800	168,700	170,500	172,400	174,300	176,200	178,100	64
65	146,500	148,300	150,200	152,000	153,900	155,700	157,600	159,500	161,300	163,300	165,200	167,100	169,100	171,100	173,100	175,100	177,100	179,100	181,100	183,200	185,200	65
66	150,800	152,700	154,600	156,400	158,300	160,200	162,100	164,000	165,900	167,800	169,700	171,700	173,600	175,600	177,500	179,500	181,500	183,500	185,500	187,500	189,500	66
67	153,800	155,700	157,600	159,500	161,400	163,300	165,300	167,200	169,100	171,100	173,000	175,000	177,000	178,900	180,900	182,900	184,900	187,000	189,000	191,000	193,000	67
68	158,200	160,200	162,200	164,300	166,300	168,300	170,400	172,400	174,500	176,600	178,700	180,800	182,900	185,000	187,200	189,300	191,500	193,600	195,800	198,000	200,100	68
69	162,500	164,700	166,800	169,000	171,200	173,300	175,500	177,700	179,900	182,100	184,400	186,600	188,900	191,100	193,400	195,700	198,000	200,300	202,600	204,900	207,300	69
70	166,900	169,100	171,400	173,700	176,000	178,300	180,600	183,000	185,300	187,700	190,000	192,400	194,800	197,200	199,600	202,100	204,500	207,000	209,400	211,900	214,400	70
71	171,200	173,600	176,000	178,400	180,900	183,300	185,800	188,200	190,700	193,200	195,700	198,200	200,800	203,300	205,900	208,400	211,000	213,600	216,200	218,800	221,500	71
72	175,500	178,100	180,600	183,200	185,700	188,300	190,900	193,500	196,100	198,700	201,400	204,000	206,700	209,400	212,100	214,800	217,600	220,300	223,000	225,800	228,600	72
73	182,900	185,600	188,300	191,000	193,700	196,500	199,200	202,000	204,700	207,500	210,300	213,200	216,000	218,900	221,700	224,600	227,500	230,400	233,400	236,300	239,200	73
74	190,200	193,100	195,900	198,800	201,700	204,600	207,500	210,400	213,400	216,300	219,300	222,300	225,300	228,300	231,400	234,400	237,500	240,600	243,700	246,800	249,900	74
75	194,600	197,500	200,500	203,500	206,600	209,600	212,600	215,700	218,800	221,900	225,000	228,100	231,300	234,400	237,600	240,800	244,000	247,200	250,500	253,700	257,000	75
77	199,300	202,100	204,900	207,700	210,500	213,300	216,200	219,000	221,900	224,800	227,700	230,700	233,600	236,600	239,600	242,700	245,700	248,800	251,800	254,900	258,000	77
78	203,700	206,600	209,500	212,400	215,400	218,300	221,300	224,300	227,300	230,300	233,400	236,500	239,600	242,700	245,900	249,000	252,200	255,400	258,600	261,900	265,100	78
79	211,000	214,000	217,000	219,900	222,900	226,000	229,000	232,000	235,100	238,100	241,200	244,300	247,500	250,600	253,700	256,900	260,100	263,300	266,500	269,700	273,000	79
80	215,400	218,400	221,600	224,700	227,800	230,900	234,100	237,300	240,500	243,700	246,900	250,100	253,400	256,700	260,000	263,300	266,600	270,000	273,300	276,700	280,100	80
82	220,100	223,000	225,900	228,800	231,700	234,700	237,600	240,600	243,600	246,600	249,600	252,700	255,800	258,900	262,000	265,100	268,300	271,500	274,700	277,900	281,100	82
83	224,400	227,500	230,500	233,500	236,600	239,700	242,800	245,900	249,000	252,100	255,300	258,500	261,700	265,000	268,200	271,500	274,800	278,100	281,500	284,800	288,200	83
84	236,100	239,300	242,600	245,800	249,000	252,300	255,600	258,900	262,200	265,500	268,800	272,200	275,600	279,000	282,400	285,800	289,200	292,700	296,200	299,600	303,100	84
86	245,200	248,400	251,500	254,700	257,900	261,000	264,200	267,400	270,700	273,900	277,200	280,600	283,900	287,300	290,600	294,000	297,400	300,900	304,300	307,800	311,300	86
87	256,900	260,200	263,600	266,900	270,300	273,700	277,000	280,400	283,900	287,300	290,700	294,200	297,700	301,200	304,700	308,300	311,800	315,400	319,000	322,600	326,200	87
89	266,000	269,300	272,500	275,800	279,100	282,400	285,700	289,000	292,400	295,800	299,200	302,600	306,000	309,500	313,000	316,500	320,000	323,600	327,100	330,700	334,300	89
90	277,700	281,200	284,600	288,100	291,500	295,000	298,500	302,000	305,600	309,100	312,700	316,300	319,900	323,500	327,100	330,800	334,400	338,100	341,800	345,500	349,300	90
92	286,800	290,200	293,500	296,900	300,300	303,800	307,200	310,600	314,100	317,600	321,100	324,600	328,200	331,800	335,400	339,000	342,600	346,300	350,000	353,700	357,400	92
93	298,500	302,100	305,600	309,200	312,800	316,400	320,000	323,600	327,300	330,900	334,600	338,300	342,000	345,700	349,500	353,300	357,000	360,800	364,700	368,500	372,300	93
95	309,600	313,100	316,600	320,000	323,500	327,000	330,500	334,100	337,600	341,200	344,800	348,400	352,100	355,700	359,400	363,100	366,900	370,600	374,400	378,100	381,900	95
96	321,300	325,000	328,600	332,300	336,000	339,700	343,400	347,100	350,800	354,500	358,300	362,100	365,900	369,700	373,500	377,400	381,300	385,100	389,000	392,900	396,900	96
98	332,500	336,000	339,600	343,200	346,700	350,300	353,900	357,500	361,200	364,800	368,500	372,200	376,000	379,700	383,500	387,300	391,100	394,900	398,700	402,600	406,400	98
99	344,200	347,900	351,700	355,400	359,200	362,900	366,700	370,500	374,300	378,200	382,000	385,900	389,800	393,700	397,600	401,500	405,500	409,400	413,400	417,400	421,400	99
101	355,300	359,000	362,600	366,300	369,900	373,600	377,300	381,000	384,700	388,500	392,200	396,000	399,800	403,700	407,500	411,400	415,300	419,200	423,100	427,000		101
102	367,000	370,800	374,700	378,500	382,400	386,200	390,100	394,000	397,900	401,800	405,700	409,700	413,700	417,600	421,600	425,600	429,700					102
104	378,100	381,900	385,600	389,400	393,100	396,900	400,700	404,500	408,300	412,100	416,000	419,800	423,700	427,600								104
105	389,800	393,800	397,700	401,600	405,600	409,500	413,500	417,500	421,400	425,400	429,500											105
106	392,600	396,400	400,200	404,000	407,800	411,600	415,400	419,200	423,100	427,000												106
107	416,000	420,200	424,300	428,500																		107
108	426,100																					108

HEADWATER 594 to 598
TAILWATER 575.51 to 576.50

MARCH 2004

GUNTERSVILLE DAM
SPILLWAY DISCHARGE
IN CUBIC FEET PER SECOND

GATE ARRANGEMENT	HEADWATER ELEVATION																				GATE ARRANGEMENT
	598.0	598.2	598.4	598.6	598.8	599.0	599.2	599.4	599.6	599.8	600.0	600.2	600.4	600.6	600.8	601.0	601.2	601.4	601.6	601.8	602.0	
0*	10,110	11,320	12,570	13,860	15,200	16,580	18,000	19,450	20,940	22,470	24,030											0*
1	10,960	12,160	13,410	14,690	16,020	17,390	18,800	20,250	21,740	23,260	24,820											1
2	12,610	13,770	14,960	16,210	17,500	18,850	20,230	21,650	23,120	24,620	26,160											2
4	15,110	16,210	17,350	18,550	19,810	21,110	22,460	23,860	25,300	26,770	28,290											4
6	17,610	18,660	19,750	20,890	22,110	23,380	24,700	26,060	27,470	28,920	30,410											6
8	20,120	21,110	22,140	23,230	24,410	25,640	26,930	28,270	29,650	31,080	32,540											8
10	22,620	23,560	24,530	25,580	26,710	27,910	29,170	30,470	31,830	33,230	34,670											10
12	25,120	26,010	26,920	27,920	29,010	30,180	31,400	32,680	34,000	35,380	36,800											12
14	27,620	28,450	29,310	30,260	31,320	32,440	33,640	34,880	36,180	37,530	38,920											14
16	30,120	30,900	31,700	32,600	33,620	34,710	35,870	37,090	38,360	39,680	41,050											16
18	32,620	33,350	34,100	34,940	35,920	36,980	38,100	39,290	40,540	41,830	43,180											18
20	35,130	35,800	36,490	37,290	38,220	39,240	40,340	41,500	42,710	43,980	45,300											20
21	36,910	37,590	38,290	39,090	40,010	41,010	42,080	43,210	44,400	45,630	46,910											21
22	38,690	39,380	40,090	40,890	41,800	42,790	43,830	44,930	46,080	47,280	48,520											22
23	40,470	41,170	41,890	42,690	43,590	44,560	45,580	46,650	47,770	48,930	50,120											23
24	42,250	42,960	43,690	44,490	45,380	46,330	47,320	48,370	49,450	50,570	51,730											24
25	44,030	44,750	45,490	46,290	47,170	48,100	49,070	50,080	51,140	52,220	53,340											25
26	45,810	46,540	47,290	48,090	48,960	49,870	50,820	51,800	52,820	53,870	54,940											26
27	47,590	48,330	49,090	49,890	50,750	51,640	52,560	53,520	54,500	55,510	56,550											27
28	49,380	50,120	50,890	51,690	52,540	53,410	54,310	55,240	56,190	57,160	58,160											28
29	51,160	51,910	52,690	53,490	54,320	55,180	56,060	56,960	57,870	58,810	59,760											29
31	53,660	54,360	55,080	55,830	56,630	57,450	58,290	59,160	60,050	60,960	61,890											31
32	55,440	56,150	56,880	57,640	58,420	59,220	60,040	60,880	61,730	62,610	63,500											32
34	57,940	58,600	59,270	59,980	60,720	61,480	62,270	63,080	63,910	64,760	65,620											34
35	59,720	60,390	61,070	61,780	62,510	63,250	64,020	64,800	65,600	66,410	67,230											35
37	62,220	62,840	63,470	64,120	64,810	65,520	66,250	67,000	67,770	68,560	69,360											37
38	64,010	64,630	65,270	65,920	66,600	67,290	68,000	68,720	69,460	70,200	70,960											38
39	66,510	67,080	67,660	68,260	68,900	69,560	70,230	70,930	71,630	72,360	73,090											39
40	69,010	69,530	70,050	70,610	71,200	71,820	72,470	73,130	73,810	74,510	75,220											40
41	70,790	71,320	71,850	72,410	72,990	73,600	74,210	74,850	75,500	76,150	76,820											41
42	74,340	74,890	75,450	76,030	76,640	77,270	77,920	78,580	79,250	79,940	80,630											42
43	77,890	78,470	79,050	79,660	80,300	80,950	81,630	82,310	83,010	83,720	84,440											43
44	81,440	82,050	82,660	83,290	83,950	84,630	85,330	86,040	86,760	87,500	88,250											44
45	84,990	85,620	86,260	86,920	87,610	88,310	89,040	89,770	90,520	91,280	92,050											45
46	88,540	89,200	89,860	90,550	91,260	91,990	92,740	93,500	94,280	95,060	95,860											46
47	92,090	92,770	93,460	94,170	94,910	95,670	96,450	97,230	98,030	98,850	99,670											47
48	95,640	96,350	97,060	97,800	98,570	99,350	100,200	101,000	101,800	102,600	103,500											48
49	99,190	99,920	100,700	101,400	102,200	103,000	103,900	104,700	105,500	106,400	107,300											49
50	103,500	104,200	104,900	105,600	106,300	107,100	107,800	108,600	109,400	110,200	111,000											50
51	107,000	107,700	108,500	109,200	110,000	110,700	111,500	112,300	113,200	114,000	114,800											51
52	110,600	111,300	112,100	112,800	113,600	114,400	115,200	116,100	116,900	117,800	118,600											52
53	114,100	114,900	115,700	116,500	117,300	118,100	119,000	119,800	120,700	121,600	122,400											53
54	117,700	118,500	119,300	120,100	120,900	121,800	122,700	123,500	124,400	125,300	126,200											54
55	121,200	122,000	122,900	123,700	124,600	125,500	126,400	127,300	128,200	129,100	130,100											55
56	124,800	125,600	126,500	127,300	128,200	129,000	129,900	130,700	131,600	132,400	133,300											56
57	128,300	129,200	130,100	130,900	131,800	132,700	133,600	134,400	135,300	136,200	137,100											57
58	135,400	136,500	137,500	138,500	139,500	140,600	141,600	142,600	143,700	144,700	145,700											58
59	142,500	143,700	144,900	146,100	147,200	148,400	149,600	150,800	152,000	153,200	154,400											59
60	149,700	151,000	152,300	153,600	154,900	156,300	157,600	159,000	160,300	161,700	163,100											60
61	156,800	158,200	159,700	161,200	162,700	164,200	165,700	167,200	168,700	170,200	171,700											61
62	163,900	165,500	167,100	168,700	170,400	172,000	173,700	175,300	177,000	178,700	180,400											62
63	171,000	172,700	174,500	176,300	178,100	179,900	181,700	183,500	185,400	187,200	189,000											63
64	178,100	180,000	181,900	183,800	185,800	187,800	189,700	191,700	193,700	195,700	197,700											64
65	185,200	187,300	189,300	191,400	193,500	195,600	197,800	199,900	202,000	204,200	206,400											65
66	189,500	191,500	193,500	195,600	197,600	199,700	201,700	203,800	205,900	208,000	210,100											66

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* *Arrangement "0" indicates that all spillway gates are closed. Discharge is spillway gate and trash gate overflow.*

HEADWATER 598 to 602
TAILWATER 575.51 to 576.50

GUNTERSVILLE DAM
SPILLWAY DISCHARGE
IN CUBIC FEET PER SECOND

GATE ARRANGEMENT	HEADWATER ELEVATION																					GATE ARRANGEMENT
	598.0	598.2	598.4	598.6	598.8	599.0	599.2	599.4	599.6	599.8	600.0	600.2	600.4	600.6	600.8	601.0	601.2	601.4	601.6	601.8	602.0	
67	193, 000	195, 100	197, 100	199, 200	201, 200	203, 300	205, 400	207, 500	209, 700	211, 800	213, 900											67
68	200, 100	202, 300	204, 500	206, 700	209, 000	211, 200	213, 500	215, 700	218, 000	220, 300	222, 600											68
69	207, 300	209, 600	211, 900	214, 300	216, 700	219, 100	221, 500	223, 900	226, 300	228, 800	231, 200											69
70	214, 400	216, 800	219, 300	221, 900	224, 400	226, 900	229, 500	232, 100	234, 700	237, 300	239, 900											70
71	221, 500	224, 100	226, 800	229, 400	232, 100	234, 800	237, 500	240, 300	243, 000	245, 800	248, 600											71
72	228, 600	231, 400	234, 200	237, 000	239, 800	242, 700	245, 600	248, 500	251, 400	254, 300	257, 200											72
73	239, 200	242, 200	245, 200	248, 200	251, 200	254, 200	257, 300	260, 400	263, 500	266, 600	269, 700											73
74	249, 900	253, 000	256, 200	259, 300	262, 500	265, 800	269, 000	272, 300	275, 600	278, 900	282, 200											74
75	257, 000	260, 300	263, 600	266, 900	270, 200	273, 600	277, 000	280, 500	283, 900	287, 400	290, 800											75
77	258, 000	261, 100	264, 300	267, 400	270, 600	273, 800	277, 100															77
78	265, 100	268, 400	271, 700	275, 000	278, 300	281, 700	285, 100	288, 500	291, 900	295, 400	298, 800											78
79	273, 000	276, 200	279, 500	282, 800	286, 100	289, 400	292, 800	296, 200	299, 500	303, 000	306, 400											79
80	280, 100	283, 500	286, 900	290, 300	293, 800	297, 300	300, 800	304, 300	307, 900	311, 500	315, 000											80
82	281, 100	284, 300	287, 600	290, 800	294, 100	297, 500	300, 800															82
83	288, 200	291, 600	295, 000	298, 400	301, 800	305, 300	308, 800	312, 400	315, 900	319, 500	323, 000											83
84	303, 100	306, 700	310, 200	313, 700	317, 300	320, 900	324, 600	328, 200	331, 900	335, 600	339, 200											84
86	311, 300	314, 800	318, 300	321, 800	325, 400	329, 000	332, 600	336, 200	339, 900	343, 600	347, 300											86
87	326, 200	329, 800	333, 500	337, 100	340, 800	344, 600	348, 300	352, 100	355, 900	359, 600	363, 500											87
89	334, 300	337, 900	341, 600	345, 200	348, 900	352, 600	356, 300	360, 100	363, 900	367, 700	371, 500											89
90	349, 300	353, 000	356, 800	360, 500	364, 300	368, 200	372, 100	375, 900	379, 800	383, 700	387, 700											90
92	357, 400	361, 100	364, 900	368, 600	372, 400	376, 200	380, 100	384, 000	387, 900	391, 800	395, 700											92
93	372, 300	376, 200	380, 100	384, 000	387, 900	391, 800	395, 800	399, 800	403, 800	407, 800	411, 900											93
95	381, 900	385, 700	389, 500	393, 400	397, 200	401, 100	405, 100	409, 000	413, 000	416, 900	420, 900											95
96	396, 900	400, 800	404, 700	408, 700	412, 700	416, 700	420, 800	424, 800	428, 900													96
98	406, 400	410, 300	414, 200	418, 100	422, 100	426, 100																98
99	421, 400	425, 400	429, 400																			99

HEADWATER 598 to 602
TAILWATER 575.51 to 576.50

MARCH 2004

GUNTERSVILLE DAM
SPILLWAY DISCHARGE
IN CUBIC FEET PER SECOND

GATE ARRANGEMENT	HEADWATER ELEVATION																				GATE ARRANGEMENT
	590.0	590.2	590.4	590.6	590.8	591.0	591.2	591.4	591.6	591.8	592.0	592.2	592.4	592.6	592.8	593.0	593.2	593.4	593.6	593.8	594.0	
16																			21,540	21,660	21,790	16
17												21,590	21,730	21,870	22,010	22,150	22,280	22,420	22,550	22,680	22,810	17
18		21,620	21,790	21,950	22,110	22,270	22,430	22,580	22,740	22,890	23,040	23,200	23,350	23,500	23,650	23,790	23,940	24,080	24,230	24,370	24,510	18
19	22,360	22,530	22,700	22,870	23,040	23,200	23,370	23,530	23,690	23,850	24,010	24,170	24,330	24,480	24,640	24,790	24,940	25,090	25,240	25,390	25,540	19
20	23,840	24,020	24,210	24,390	24,560	24,740	24,920	25,090	25,260	25,440	25,610	25,770	25,940	26,110	26,270	26,440	26,600	26,760	26,920	27,080	27,240	20
21	25,160	25,360	25,550	25,740	25,940	26,130	26,310	26,500	26,680	26,870	27,050	27,230	27,410	27,590	27,760	27,940	28,110	28,280	28,450	28,620	28,790	21
22	26,490	26,690	26,900	27,100	27,310	27,510	27,710	27,910	28,100	28,300	28,490	28,680	28,870	29,060	29,250	29,440	29,620	29,810	29,990	30,170	30,350	22
23	27,810	28,030	28,250	28,460	28,680	28,890	29,100	29,310	29,520	29,730	29,940	30,140	30,340	30,540	30,740	30,940	31,130	31,330	31,520	31,710	31,900	23
24	29,130	29,360	29,590	29,820	30,050	30,280	30,500	30,720	30,940	31,160	31,380	31,590	31,810	32,020	32,230	32,440	32,650	32,850	33,060	33,260	33,460	24
25	30,450	30,700	30,940	31,180	31,420	31,660	31,890	32,130	32,360	32,590	32,820	33,050	33,270	33,500	33,720	33,940	34,160	34,370	34,590	34,800	35,010	25
26	31,770	32,030	32,280	32,540	32,790	33,040	33,290	33,540	33,780	34,020	34,260	34,500	34,740	34,980	35,210	35,440	35,670	35,900	36,120	36,350	36,570	26
27	33,100	33,360	33,630	33,900	34,160	34,420	34,690	34,940	35,200	35,460	35,710	35,960	36,210	36,450	36,700	36,940	37,180	37,420	37,660	37,890	38,130	27
28	34,420	34,700	34,980	35,260	35,530	35,810	36,080	36,350	36,620	36,890	37,150	37,410	37,670	37,930	38,190	38,440	38,690	38,940	39,190	39,440	39,680	28
29	35,740	36,030	36,320	36,610	36,900	37,190	37,480	37,760	38,040	38,320	38,590	38,870	39,140	39,410	39,680	39,940	40,210	40,470	40,730	40,980	41,240	29
30	36,650	36,940	37,240	37,540	37,830	38,130	38,420	38,710	39,000	39,280	39,560	39,840	40,120	40,390	40,670	40,940	41,210	41,480	41,740	42,000	42,260	30
31	38,130	38,440	38,740	39,050	39,360	39,670	39,970	40,270	40,570	40,860	41,150	41,450	41,730	42,020	42,300	42,590	42,870	43,140	43,420	43,690	43,960	31
32	39,450	39,770	40,090	40,410	40,730	41,050	41,360	41,680	41,990	42,290	42,600	42,900	43,200	43,500	43,790	44,090	44,380	44,670	44,950	45,240	45,520	32
33	40,350	40,680	41,010	41,340	41,660	41,990	42,310	42,630	42,940	43,250	43,570	43,870	44,180	44,480	44,790	45,080	45,380	45,670	45,970	46,250	46,540	33
34	41,830	42,170	42,510	42,850	43,190	43,520	43,860	44,190	44,510	44,840	45,160	45,480	45,790	46,110	46,420	46,730	47,040	47,340	47,640	47,940	48,240	34
35	43,150	43,510	43,860	44,210	44,560	44,910	45,250	45,590	45,930	46,270	46,600	46,930	47,260	47,590	47,910	48,230	48,550	48,860	49,180	49,490	49,800	35
36	44,060	44,420	44,770	45,130	45,490	45,840	46,190	46,540	46,890	47,230	47,570	47,910	48,240	48,570	48,900	49,230	49,550	49,870	50,190	50,510	50,820	36
37	45,540	45,910	46,280	46,650	47,020	47,380	47,740	48,100	48,460	48,810	49,160	49,510	49,860	50,200	50,540	50,880	51,210	51,540	51,870	52,200	52,520	37
38	46,860	47,240	47,620	48,010	48,390	48,760	49,140	49,510	49,880	50,240	50,610	50,960	51,320	51,680	52,030	52,380	52,720	53,060	53,400	53,740	54,080	38
39	49,240	49,650	50,040	50,440	50,840	51,240	51,630	52,020	52,400	52,790	53,170	53,540	53,920	54,290	54,650	55,020	55,380	55,740	56,100	56,450	56,800	39
40	51,630	52,050	52,470	52,880	53,300	53,710	54,120	54,530	54,930	55,330	55,730	56,120	56,510	56,900	57,280	57,660	58,040	58,420	58,790	59,160	59,520	40
41	52,950	53,380	53,810	54,240	54,670	55,100	55,520	55,940	56,350	56,760	57,170	57,570	57,980	58,380	58,770	59,160	59,550	59,940	60,320	60,700	61,080	41
42	55,370	55,830	56,280	56,740	57,190	57,640	58,080	58,530	58,970	59,410	59,850	60,290	60,720	61,150	61,570	61,990	62,410	62,830	63,240	63,650	64,050	42
43	57,790	58,280	58,760	59,230	59,710	60,180	60,650	61,120	61,600	62,070	62,540	63,000	63,460	63,920	64,370	64,820	65,270	65,710	66,150	66,590	67,020	43
44	60,220	60,720	61,230	61,730	62,230	62,720	63,210	63,710	64,220	64,720	65,220	65,710	66,200	66,690	67,170	67,650	68,130	68,600	69,070	69,540	70,000	44
45	62,640	63,170	63,700	64,230	64,750	65,270	65,780	66,300	66,840	67,370	67,900	68,420	68,940	69,460	69,970	70,480	70,990	71,490	71,990	72,480	72,970	45
46	65,060	65,620	66,170	66,720	67,270	67,810	68,350	68,900	69,460	70,030	70,580	71,140	71,690	72,230	72,770	73,310	73,850	74,380	74,900	75,430	75,940	46
47	67,480	68,060	68,640	69,220	69,790	70,350	70,910	71,490	72,090	72,680	73,270	73,850	74,430	75,000	75,570	76,140	76,710	77,260	77,820	78,370	78,920	47
48	69,900	70,510	71,110	71,710	72,310	72,890	73,480	74,080	74,710	75,330	75,950	76,560	77,170	77,780	78,380	78,970	79,560	80,150	80,730	81,310	81,890	48
49	72,320	72,960	73,590	74,210	74,830	75,440	76,040	76,670	77,330	77,980	78,630	79,270	79,910	80,550	81,180	81,800	82,420	83,040	83,650	84,260	84,860	49
50	76,030	76,700	77,350	78,010	78,650	79,290	79,930	80,590	81,280	81,960	82,640	83,310	83,970	84,640	85,290	85,950	86,590	87,240	87,880	88,510	89,140	50
51	78,450	79,140	79,820	80,500	81,170	81,840	82,500	83,180	83,900	84,610	85,320	86,020	86,720	87,410	88,090	88,780	89,450	90,130	90,790	91,460	92,120	51
52	80,870	81,590	82,300	83,000	83,690	84,380	85,060	85,780	86,520	87,260	88,000	88,730	89,460	90,180	90,890	91,600	92,310	93,010	93,710	94,400	95,090	52
53	83,300	84,040	84,770	85,490	86,210	86,920	87,630	88,370	89,150	89,920	90,680	91,440	92,200	92,950	93,690	94,430	95,170	95,900	96,630	97,350	98,060	53
54	85,720	86,480	87,240	87,990	88,730	89,460	90,190	90,960	91,770	92,570	93,370	94,160	94,940	95,720	96,500	97,260	98,030	98,790	99,540	100,300	101,000	54
55	88,140	88,930	89,710	90,490	91,250	92,010	92,760	93,550	94,390	95,220	96,050	96,870	97,680	98,490	99,300	100,100	100,900	101,700	102,500	103,200	104,000	55
56	90,780	91,600	92,410	93,200	93,990	94,770	95,550	96,370	97,230	98,090	98,930	99,780	100,600	101,400	102,300	103,100	103,900	104,700	105,500	106,300	107,100	56
57	93,210	94,050	94,880	95,700	96,510	97,320	98,120	98,960	99,850	100,700	101,600	102,500	103,400	104,200	105,100	105,900	106,800	107,600	108,400	109,300	110,100	57
58	95,150	96,100	97,040	97,980	98,910	99,830	100,700	101,700	102,700	103,700	104,700	105,700	106,700	107,700	108,700	109,600	110,600	111,600	112,500	113,500	114,400	58
59	97,090	98,160	99,210	100,300	101,300	102,300	103,400	104,500	105,600	106,700	107,800	108,900	110,000	111,100	112,200	113,300	114,400	115,500	116,600	117,700	118,700	59
60	99,040	100,200	101,400	102,500	103,700	104,900	106,000	107,200	108,500	109,700	110,900	112,100	113,400	114,600	115,800	117,000	118,200	119,500	120,700	121,900	123,100	60
61	101,000	102,300	103,500	104,800	106,100	107,400	108,700	110,000	111,300	112,700	114,000	115,400	116,700	118,100	119,400	120,700	122,100	123,400	124,700	126,100	127,400	61
62	102,900	104,300	105,700	107,100	108,500	109,900	111,300	112,700	114,200	115,600	117,100	118,600	120,100	121,500	123,000	124,400	125,900	127,300	128,800	130,300	131,700	62
63	104,900	106,400	107,900	109,400	110,900	112,400	113,900	115,500	117,000	118,600	120,200	121,800	123,400	125,000	126,600	128,100	129,700	131,300	132,900	134,500	136,000	63
64	106,800	108,400	110,000	111,700	113,300	114,900	116,600	118,200	119,900	121,600	123,300	125,000	126,700	128,500	130,200	131,800	133,500	135,200	137,000	138,700	140,400	64
65	108,800	110,500	112,200	114,000	115,700	117,400	119,200	121,000	122,800	124,600	126,400	128,200	130,100	131,900	133,700	135,600	137,400	139,200	141,000	142,900	144,700	65
66	112,500	114,200	116,000	117,700	119,500	121,300	123,100	124,900	126,700	128,600	130,400	132,300	134,100	136,000	137,900	139,700	141,500	143,400	145,200	147,100	149,000	66
67	114,900	116,700	118,500	120,200	122,000	123,800	125,600	127,500	129,400	131,200	133,100	135,000	136,900	138,800	140,700	142,500	144,400	146,300	148,200	150,100	151,900	67
68	116,800	118,700	120,600	122,500	124,400	126,400	128,300	130,200	132,200	134,200	136,200	138,200	140,200	142,200	144,200	146,200	148,200	150,200	152,200	154,300	156,300	68
69	118,800	120,800	122,800	124,800	126,800	128,900	130,900	133,000	135,100	137,200	139,300	141,400	143,600	145,700	147,800	149,900	152,100	154,200	156,300	158,400	160,600	69
70	120,700	122,800	125,000	127,100	129,200	131,400	133,500	135,700	137,900	140,200	142,400	144,600	146,900	149,200	151,400	153,600	155,900	158,100	160,400	162,600	164,900	70

MARCH 2004

HEADWATER 590 to 594
TAILWATER 576.51 to 577.50

GUNTERSVILLE DAM
SPILLWAY DISCHARGE
IN CUBIC FEET PER SECOND

GATE ARRANGEMENT	HEADWATER ELEVATION																					GATE ARRANGEMENT
	590.0	590.2	590.4	590.6	590.8	591.0	591.2	591.4	591.6	591.8	592.0	592.2	592.4	592.6	592.8	593.0	593.2	593.4	593.6	593.8	594.0	
71	122,700	124,900	127,100	129,400	131,600	133,900	136,200	138,500	140,800	143,200	145,500	147,900	150,200	152,600	155,000	157,300	159,700	162,100	164,500	166,800	169,200	71
72	124,600	126,900	129,300	131,700	134,000	136,400	138,800	141,200	143,700	146,100	148,600	151,100	153,600	156,100	158,600	161,000	163,500	166,000	168,500	171,000	173,600	72
73	129,000	131,400	133,900	136,400	138,900	141,500	144,000	146,600	149,200	151,800	154,400	157,000	159,700	162,300	165,000	167,600	170,200	172,900	175,500	178,200	180,900	73
74	133,300	135,900	138,600	141,200	143,900	146,500	149,200	151,900	154,700	157,400	160,200	163,000	165,700	168,600	171,300	174,100	176,900	179,700	182,500	185,300	188,200	74
75	135,300	138,000	140,700	143,500	146,300	149,000	151,900	154,700	157,500	160,400	163,300	166,200	169,100	172,000	174,900	177,800	180,700	183,600	186,600	189,500	192,500	75
76	137,500	140,000	142,500	145,000	147,600	150,200	152,700	155,300	158,000	160,600												76
77	143,600	146,100	148,700	151,300	153,900	156,600	159,200	161,800	164,500	167,200	169,900	172,700	175,400	178,100	180,900	183,600	186,300	189,100	191,800	194,600	197,300	77
78	145,500	148,200	150,900	153,600	156,300	159,100	161,800	164,600	167,400	170,200	173,000	175,900	178,700	181,600	184,500	187,300	190,100	193,000	195,900	198,800	201,700	78
79	151,700	154,400	157,100	159,900	162,700	165,500	168,300	171,100	174,000	176,800	179,700	182,600	185,500	188,500	191,400	194,300	197,200	200,100	203,000	206,000	208,900	79
80	153,600	156,400	159,300	162,200	165,100	168,000	170,900	173,900	176,800	179,800	182,800	185,800	188,900	191,900	195,000	198,000	201,000	204,000	207,100	210,200	213,200	80
81	155,800	158,400	161,100	163,700	166,400	169,100	171,800	174,500	177,300	180,000												81
82	161,900	164,600	167,300	170,000	172,700	175,500	178,200	181,000	183,800	186,700	189,500	192,300	195,200	198,100	200,900	203,700	206,600	209,400	212,300	215,200	218,100	82
83	163,800	166,600	169,500	172,300	175,100	178,000	180,900	183,800	186,700	189,600	192,600	195,500	198,500	201,500	204,500	207,400	210,400	213,400	216,400	219,400	222,400	83
84	171,900	174,900	177,900	180,900	183,900	186,900	190,000	193,000	196,100	199,200	202,400	205,500	208,700	211,800	215,000	218,100	221,300	224,400	227,600	230,800	234,000	84
85	174,100	176,800	179,600	182,400	185,200	188,000	190,900	193,700	196,600	199,500												85
86	182,200	185,100	188,000	191,000	194,000	196,900	199,900	203,000	206,000	209,100	212,100	215,200	218,300	221,400	224,500	227,600	230,700	233,800	236,900	240,000	243,200	86
87	190,200	193,300	196,400	199,600	202,700	205,900	209,000	212,200	215,400	218,700	221,900	225,200	228,500	231,700	235,000	238,300	241,500	244,800	248,100	251,400	254,800	87
88	192,400	195,300	198,200	201,100	204,000	207,000	209,900	212,900	215,900	218,900												88
89	200,500	203,500	206,600	209,700	212,800	215,900	219,000	222,100	225,300	228,500	231,700	234,900	238,100	241,300	244,500	247,700	251,000	254,200	257,400	260,700	263,900	89
90	208,500	211,800	215,000	218,200	221,500	224,800	228,100	231,400	234,700	238,100	241,500	244,800	248,200	251,700	255,000	258,400	261,800	265,200	268,600	272,100	275,500	90
92	218,800	222,000	225,200	228,400	231,600	234,800	238,100	241,300	244,600	247,900	251,200	254,600	257,900	261,200	264,600	267,900	271,200	274,600	277,900	281,300	284,700	92
93	226,900	230,200	233,600	236,900	240,300	243,700	247,200	250,600	254,100	257,500	261,000	264,500	268,000	271,600	275,100	278,600	282,100	285,600	289,200	292,700	296,300	93
95	239,500	242,800	246,100	249,400	252,700	256,100	259,400	262,800	266,200	269,600	273,000	276,500	279,900	283,400	286,800	290,200	293,700	297,100	300,600	304,100	307,500	95
96	247,500	251,000	254,500	258,000	261,500	265,000	268,500	272,100	275,600	279,200	282,800	286,400	290,100	293,700	297,300	300,900	304,500	308,200	311,800	315,400	319,100	96
98	260,100	263,500	267,000	270,400	273,900	277,300	280,800	284,300	287,800	291,300	294,800	298,400	301,900	305,500	309,000	312,600	316,100	319,700	323,200	326,800	330,400	98
99	268,200	271,800	275,400	279,000	282,600	286,200	289,900	293,600	297,200	300,900	304,600	308,300	312,100	315,800	319,500	323,200	327,000	330,700	334,400	338,200	342,000	99
101	280,800	284,300	287,900	291,400	295,000	298,600	302,200	305,800	309,400	313,000	316,600	320,300	323,900	327,600	331,300	334,900	338,500	342,200	345,900	349,500	353,200	101
102	288,900	292,600	296,300	300,000	303,700	307,500	311,300	315,000	318,800	322,600	326,400	330,300	334,100	337,900	341,800	345,600	349,400	353,200	357,100	360,900	364,800	102
104	301,500	305,100	308,800	312,500	316,100	319,800	323,500	327,200	331,000	334,700	338,500	342,200	346,000	349,700	353,500	357,200	361,000	364,700	368,500	372,300	376,100	104
105	309,500	313,400	317,200	321,000	324,900	328,700	332,600	336,500	340,400	344,300	348,200	352,200	356,100	360,000	364,000	367,900	371,800	375,800	379,700	383,700	387,600	105
106	314,800	318,600	322,300	326,000	329,800	333,500	337,300	341,100	344,900	348,600	352,400	356,200	360,100	363,900	367,700	371,500	375,300	379,100	382,900	386,800	390,600	106
107	331,000	335,000	339,100	343,200	347,300	351,400	355,500	359,600	363,700	367,900	372,000	376,200	380,300	384,500	388,700	392,800	397,000	401,200	405,400	409,600	413,800	107
108	342,400	346,400	350,400	354,500	358,500	362,500	366,600	370,700	374,700	378,800	382,900	387,000	391,100	395,200	399,300	403,400	407,500	411,600	415,700	419,900	424,000	108
109	350,500	354,600	358,800	363,000	367,200	371,500	375,700	379,900	384,200	388,400	392,700	397,000	401,200	405,500	409,800	414,100	418,400	422,700	427,000	431,300	435,600	109
110	361,900	366,000	370,200	374,300	378,500	382,600	386,800	391,000	395,200	399,400	403,600	407,800	412,000	416,200	420,400	424,700	428,900	433,100	437,300	441,600		110
111	370,000	374,300	378,600	382,900	387,200	391,500	395,900	400,300	404,600	409,000	413,400	417,800	422,200	426,600	430,900	435,300	439,700	444,100				111
112	380,300	384,500	388,700	393,000	397,200	401,500	405,700	410,000	414,300	418,600	422,900	427,100	431,400	435,700	440,000	444,300						112
113	397,500	402,100	406,700	411,300	415,900	420,600	425,200	429,800	434,500	439,200	443,800											113
114	409,000	413,500	418,000	422,600	427,200	431,700	436,300	440,900	445,500													114
115	417,000	421,700	426,400	431,200	435,900	440,700	445,400															115
116	427,400	432,000	436,600	441,300																		116
117	436,500	441,300																				117

HEADWATER 590 to 594
TAILWATER 576.51 to 577.50

MARCH 2004

GUNTERSVILLE DAM

SPILLWAY DISCHARGE

IN CUBIC FEET PER SECOND

GATE ARRANGEMENT	HEADWATER ELEVATION																				GATE ARRANGEMENT
	594.0	594.2	594.4	594.6	594.8	595.0	595.2	595.4	595.6	595.8	596.0	596.2	596.4	596.6	596.8	597.0	597.2	597.4	597.6	597.8	598.0	
10																					22, 390	10
12																	21, 610	22, 370	23, 160	23, 980	24, 840	12
14													21, 750	22, 310	22, 920	23, 570	24, 250	24, 970	25, 710	26, 490	27, 300	14
16	21, 790	21, 910	22, 040	22, 160	22, 280	22, 400	22, 530	22, 650	22, 850	23, 180	23, 570	24, 030	24, 520	25, 060	25, 640	26, 250	26, 890	27, 570	28, 270	29, 000	29, 750	16
17	22, 810	22, 940	23, 070	23, 200	23, 330	23, 460	23, 580	23, 710	23, 910	24, 220												17
18	24, 510	24, 650	24, 790	24, 930	25, 070	25, 210	25, 340	25, 480	25, 690	26, 010	26, 390	26, 820	27, 300	27, 810	28, 350	28, 930	29, 530	30, 160	30, 820	31, 500	32, 210	18
19	25, 540	25, 680	25, 830	25, 970	26, 120	26, 260	26, 400	26, 540	26, 750	27, 050												19
20	27, 240	27, 390	27, 550	27, 700	27, 850	28, 010	28, 160	28, 310	28, 530	28, 840	29, 210	29, 620	30, 070	30, 560	31, 070	31, 610	32, 170	32, 760	33, 380	34, 010	34, 660	20
21	28, 790	28, 960	29, 120	29, 290	29, 450	29, 610	29, 780	29, 940	30, 170	30, 490	30, 870	31, 290	31, 750	32, 250	32, 770	33, 320	33, 890	34, 490	35, 110	35, 760	36, 420	21
22	30, 350	30, 520	30, 700	30, 880	31, 050	31, 220	31, 400	31, 570	31, 810	32, 140	32, 530	32, 960	33, 430	33, 940	34, 470	35, 030	35, 610	36, 220	36, 850	37, 510	38, 180	22
23	31, 900	32, 090	32, 280	32, 460	32, 650	32, 830	33, 010	33, 200	33, 450	33, 790	34, 190	34, 630	35, 110	35, 630	36, 170	36, 740	37, 330	37, 950	38, 590	39, 260	39, 940	23
24	33, 460	33, 660	33, 860	34, 050	34, 250	34, 440	34, 630	34, 830	35, 090	35, 440	35, 850	36, 310	36, 800	37, 320	37, 870	38, 450	39, 050	39, 680	40, 330	41, 010	41, 700	24
25	35, 010	35, 220	35, 430	35, 640	35, 850	36, 050	36, 250	36, 450	36, 730	37, 090	37, 510	37, 980	38, 480	39, 010	39, 570	40, 160	40, 770	41, 410	42, 070	42, 760	43, 460	25
26	36, 570	36, 790	37, 010	37, 230	37, 440	37, 660	37, 870	38, 080	38, 370	38, 740	39, 170	39, 650	40, 160	40, 700	41, 270	41, 870	42, 490	43, 140	43, 810	44, 500	45, 220	26
27	38, 130	38, 360	38, 590	38, 820	39, 040	39, 270	39, 490	39, 710	40, 010	40, 390	40, 830	41, 320	41, 840	42, 390	42, 970	43, 580	44, 210	44, 870	45, 550	46, 250	46, 970	27
28	39, 680	39, 920	40, 160	40, 400	40, 640	40, 880	41, 110	41, 340	41, 650	42, 040	42, 490	42, 990	43, 520	44, 080	44, 670	45, 290	45, 930	46, 600	47, 290	48, 000	48, 730	28
29	41, 240	41, 490	41, 740	41, 990	42, 240	42, 490	42, 730	42, 970	43, 290	43, 690	44, 150	44, 660	45, 200	45, 770	46, 370	47, 000	47, 650	48, 330	49, 030	49, 750	50, 490	29
30	42, 260	42, 520	42, 780	43, 030	43, 290	43, 540	43, 790	44, 040	44, 350	44, 740												30
31	43, 960	44, 230	44, 500	44, 760	45, 020	45, 290	45, 550	45, 800	46, 120	46, 520	46, 970	47, 460	47, 970	48, 520	49, 090	49, 680	50, 300	50, 930	51, 590	52, 260	52, 950	31
32	45, 520	45, 800	46, 070	46, 350	46, 620	46, 900	47, 170	47, 430	47, 760	48, 170	48, 630	49, 130	49, 650	50, 210	50, 790	51, 390	52, 020	52, 660	53, 320	54, 010	54, 710	32
33	46, 540	46, 830	47, 110	47, 390	47, 670	47, 950	48, 220	48, 500	48, 820	49, 220												33
34	48, 240	48, 540	48, 830	49, 120	49, 410	49, 700	49, 980	50, 260	50, 600	51, 000	51, 450	51, 930	52, 430	52, 960	53, 500	54, 070	54, 660	55, 260	55, 880	56, 510	57, 160	34
35	49, 800	50, 100	50, 410	50, 710	51, 010	51, 300	51, 600	51, 890	52, 240	52, 650	53, 110	53, 600	54, 110	54, 650	55, 200	55, 780	56, 380	56, 990	57, 620	58, 260	58, 920	35
36	50, 820	51, 130	51, 440	51, 750	52, 050	52, 360	52, 660	52, 960	53, 300	53, 700												36
37	52, 520	52, 840	53, 160	53, 480	53, 790	54, 110	54, 420	54, 720	55, 080	55, 480	55, 930	56, 390	56, 880	57, 390	57, 920	58, 460	59, 020	59, 590	60, 170	60, 770	61, 380	37
38	54, 080	54, 410	54, 740	55, 070	55, 390	55, 710	56, 040	56, 350	56, 720	57, 130	57, 590	58, 070	58, 560	59, 080	59, 620	60, 170	60, 740	61, 320	61, 910	62, 520	63, 130	38
39	56, 800	57, 150	57, 490	57, 840	58, 180	58, 510	58, 850	59, 190	59, 550	59, 970	60, 400	60, 860	61, 340	61, 830	62, 340	62, 850	63, 380	63, 920	64, 470	65, 020	65, 590	39
40	59, 520	59, 890	60, 250	60, 610	60, 960	61, 320	61, 670	62, 020	62, 390	62, 800	63, 220	63, 660	64, 120	64, 580	65, 050	65, 530	66, 020	66, 520	67, 020	67, 530	68, 050	40
41	61, 080	61, 450	61, 820	62, 190	62, 560	62, 920	63, 290	63, 650	64, 030	64, 450	64, 880	65, 330	65, 800	66, 270	66, 750	67, 240	67, 740	68, 250	68, 760	69, 280	69, 800	41
42	64, 050	64, 450	64, 850	65, 250	65, 650	66, 040	66, 430	66, 810	67, 230	67, 670	68, 130	68, 610	69, 100	69, 600	70, 110	70, 630	71, 150	71, 690	72, 220	72, 770	73, 320	42
43	67, 020	67, 460	67, 880	68, 310	68, 730	69, 150	69, 570	69, 980	70, 420	70, 890	71, 380	71, 890	72, 410	72, 930	73, 470	74, 010	74, 560	75, 120	75, 690	76, 260	76, 840	43
44	70, 000	70, 460	70, 910	71, 370	71, 820	72, 260	72, 710	73, 150	73, 620	74, 120	74, 630	75, 170	75, 710	76, 260	76, 830	77, 400	77, 980	78, 560	79, 150	79, 750	80, 360	44
45	72, 970	73, 460	73, 940	74, 420	74, 900	75, 380	75, 850	76, 320	76, 810	77, 340	77, 890	78, 440	79, 010	79, 600	80, 180	80, 780	81, 390	82, 000	82, 620	83, 240	83, 870	45
46	75, 940	76, 460	76, 970	77, 480	77, 990	78, 490	78, 990	79, 490	80, 010	80, 560	81, 140	81, 720	82, 320	82, 930	83, 540	84, 170	84, 800	85, 440	86, 080	86, 730	87, 390	46
47	78, 920	79, 460	80, 000	80, 540	81, 070	81, 610	82, 130	82, 660	83, 210	83, 790	84, 390	85, 000	85, 620	86, 260	86, 900	87, 550	88, 210	88, 880	89, 550	90, 220	90, 910	47
48	81, 890	82, 460	83, 030	83, 600	84, 160	84, 720	85, 270	85, 830	86, 400	87, 010	87, 640	88, 280	88, 930	89, 590	90, 260	90, 940	91, 620	92, 310	93, 010	93, 720	94, 420	48
49	84, 860	85, 460	86, 060	86, 660	87, 250	87, 830	88, 420	89, 000	89, 600	90, 230	90, 890	91, 560	92, 230	92, 920	93, 620	94, 320	95, 030	95, 750	96, 480	97, 210	97, 940	49
50	89, 140	89, 770	90, 390	91, 010	91, 630	92, 240	92, 850	93, 460	94, 070	94, 710	95, 370	96, 020	96, 690	97, 360	98, 030	98, 710	99, 400	100, 100	100, 800	101, 500	102, 200	50
51	92, 120	92, 770	93, 420	94, 070	94, 720	95, 360	95, 990	96, 620	97, 270	97, 940	98, 620	99, 300	99, 990	100, 700	101, 400	102, 100	102, 800	103, 500	104, 200	105, 000	105, 700	51
52	95, 090	95, 770	96, 450	97, 130	97, 800	98, 470	99, 130	99, 790	100, 500	101, 200	101, 900	102, 600	103, 300	104, 000	104, 800	105, 500	106, 200	107, 000	107, 700	108, 400	109, 200	52
53	98, 060	98, 780	99, 480	100, 200	100, 900	101, 600	102, 300	103, 000	103, 700	104, 400	105, 100	105, 900	106, 600	107, 400	108, 100	108, 900	109, 600	110, 400	111, 200	111, 900	112, 700	53
54	101, 000	101, 800	102, 500	103, 200	104, 000	104, 700	105, 400	106, 100	106, 900	107, 600	108, 400	109, 100	109, 900	110, 700	111, 500	112, 300	113, 000	113, 800	114, 600	115, 400	116, 200	54
55	104, 000	104, 800	105, 500	106, 300	107, 100	107, 800	108, 600	109, 300	110, 100	110, 800	111, 600	112, 400	113, 200	114, 000	114, 800	115, 600	116, 500	117, 300	118, 100	118, 900	119, 700	55
56	107, 100	107, 900	108, 700	109, 500	110, 300	111, 000	111, 800	112, 600	113, 300	114, 100	114, 900	115, 800	116, 600	117, 400	118, 200	119, 100	119, 900	120, 700	121, 600	122, 400	123, 300	56
57	110, 100	110, 900	111, 700	112, 500	113, 300	114, 100	114, 900	115, 700	116, 500	117, 400	118, 200	119, 000	119, 900	120, 700	121, 600	122, 400	123, 300	124, 200	125, 000	125, 900	126, 800	57
58	114, 400	115, 400	116, 300	117, 200	118, 200	119, 100	120, 000	121, 000	121, 900	122, 900	123, 800	124, 800	125, 800	126, 800	127, 800	128, 800	129, 800	130, 800	131, 800	132, 800	133, 900	58
59	118, 700	119, 800	120, 900	122, 000	123, 000	124, 100	125, 200	126, 200	127, 300	128, 400	129, 500	130, 600	131, 700	132, 900	134, 000	135, 200	136, 300	137, 500	138, 600	139, 800	141, 000	59
60	123, 100	124, 300	125, 500	126, 700	127, 900	129, 100	130, 300	131, 500	132, 700	133, 900	135, 200	136, 400	137, 700	139, 000	140, 200	141, 500	142, 800	144, 100	145, 400	146, 700	148, 000	60
61	127, 400	128, 700	130, 100	131, 400	132, 700	134, 000	135, 400	136, 700	138, 100	139, 400	140, 800	142, 200	143, 600	145, 000	146, 500	147, 900	149, 300	150, 800	152, 200	153, 700	155, 100	61
62	131, 700	133, 200	134, 600	136, 100	137, 600	139, 000	140, 500	142, 000	143, 400	144, 900	146, 500	148, 000	149, 500	151, 100	152, 700	154, 200	155, 800	157, 400	159, 000	160, 600	162, 200	62
63	136, 000	137, 600	139, 200	140, 800	142, 400	144, 000	145, 600	147, 200	148, 800	150, 500	152, 100	153, 800	155, 500	157, 200	158, 900	160, 600	162, 300	164, 100	165, 800	167, 600	169, 300	63
64	140, 400	142, 100	143, 800	145, 500	147, 200	149, 000	150, 700	152, 400	154, 200	156, 000	157, 800	159, 600	161, 400	163, 300	165, 100	167, 000	168, 800	170, 700	172, 600	174, 500	176, 400	64
65	144, 700	146, 500	148, 400	150, 200	152, 100	154, 000	155, 800	157, 700	159, 600	161, 500	163, 400	165, 400	167, 400	169, 300	171, 300	173, 300	175, 300	177, 400	179, 400	181, 400	183, 500	65
66	149, 000	150, 800	152, 700	154, 600	156, 500	158, 400	160, 300	162, 100	164, 100	166, 000	167, 900	169, 900	171, 800	173, 800	175, 700	177, 700	179, 700	181, 700	183, 700	185, 700	187, 700	66
67	151, 900	153, 800	155, 700	157, 600	159, 600	161, 500	163, 400	165, 300	167, 300	169, 200	171, 200	173, 100	175, 100	177, 100	179, 100	181, 100	183, 100	185, 100	187, 200	189, 200	191, 200	67

MARCH 2004

HEADWATER 594 to 598
TAILWATER 576.51 to 577.50

GUNTERSVILLE DAM
SPILLWAY DISCHARGE
IN CUBIC FEET PER SECOND

GATE ARRANGEMENT	HEADWATER ELEVATION																					GATE ARRANGEMENT
	594.0	594.2	594.4	594.6	594.8	595.0	595.2	595.4	595.6	595.8	596.0	596.2	596.4	596.6	596.8	597.0	597.2	597.4	597.6	597.8	598.0	
68	156,300	158,300	160,300	162,400	164,400	166,500	168,500	170,600	172,600	174,700	176,800	178,900	181,000	183,200	185,300	187,500	189,600	191,800	193,900	196,100	198,300	68
69	160,600	162,700	164,900	167,100	169,200	171,400	173,600	175,800	178,000	180,200	182,500	184,700	187,000	189,200	191,500	193,800	196,100	198,400	200,700	203,100	205,400	69
70	164,900	167,200	169,500	171,800	174,100	176,400	178,700	181,100	183,400	185,800	188,100	190,500	192,900	195,300	197,700	200,200	202,600	205,100	207,500	210,000	212,500	70
71	169,200	171,700	174,100	176,500	178,900	181,400	183,800	186,300	188,800	191,300	193,800	196,300	198,800	201,400	204,000	206,500	209,100	211,700	214,300	217,000	219,600	71
72	173,600	176,100	178,700	181,200	183,800	186,400	188,900	191,500	194,200	196,800	199,400	202,100	204,800	207,500	210,200	212,900	215,600	218,400	221,100	223,900	226,700	72
73	180,900	183,600	186,300	189,000	191,700	194,400	197,200	200,000	202,700	205,500	208,300	211,200	214,000	216,900	219,800	222,600	225,500	228,500	231,400	234,300	237,300	73
74	188,200	191,000	193,900	196,800	199,600	202,500	205,400	208,400	211,300	214,300	217,300	220,200	223,300	226,300	229,300	232,400	235,500	238,500	241,600	244,800	247,900	74
75	192,500	195,500	198,500	201,500	204,500	207,500	210,600	213,600	216,700	219,800	222,900	226,000	229,200	232,400	235,500	238,700	242,000	245,200	248,400	251,700	255,000	75
77	197,300	200,100	202,900	205,700	208,600	211,400	214,200	217,100	220,000	222,900	225,800	228,800	231,700	234,700	237,700	240,800	243,800	246,900	250,000	253,000	256,200	77
78	201,700	204,600	207,500	210,400	213,400	216,400	219,300	222,300	225,300	228,400	231,500	234,600	237,700	240,800	244,000	247,100	250,300	253,500	256,700	260,000	263,200	78
79	208,900	211,900	214,900	217,900	220,900	223,900	226,900	230,000	233,000	236,100	239,200	242,300	245,400	248,600	251,700	254,900	258,100	261,300	264,500	267,700	271,000	79
80	213,200	216,300	219,500	222,600	225,700	228,900	232,000	235,200	238,400	241,600	244,800	248,100	251,400	254,600	257,900	261,300	264,600	267,900	271,300	274,700	278,100	80
82	218,100	221,000	223,900	226,800	229,800	232,700	235,700	238,700	241,700	244,700	247,700	250,800	253,900	257,000	260,100	263,300	266,400	269,600	272,800	276,000	279,300	82
83	222,400	225,500	228,500	231,600	234,600	237,700	240,800	243,900	247,000	250,200	253,400	256,600	259,800	263,100	266,400	269,600	272,900	276,300	279,600	283,000	286,300	83
84	234,000	237,200	240,400	243,700	246,900	250,200	253,500	256,800	260,100	263,400	266,800	270,100	273,500	276,900	280,300	283,800	287,200	290,700	294,200	297,700	301,200	84
86	243,200	246,300	249,500	252,700	255,900	259,100	262,300	265,500	268,700	272,000	275,300	278,700	282,000	285,400	288,800	292,200	295,600	299,000	302,500	306,000	309,400	86
87	254,800	258,100	261,400	264,800	268,200	271,600	275,000	278,400	281,800	285,200	288,700	292,200	295,700	299,200	302,700	306,300	309,900	313,400	317,000	320,600	324,300	87
89	263,900	267,200	270,500	273,800	277,100	280,400	283,700	287,100	290,400	293,800	297,300	300,700	304,200	307,700	311,200	314,700	318,200	321,800	325,300	328,900	332,500	89
90	275,500	279,000	282,400	285,900	289,400	292,900	296,400	299,900	303,500	307,100	310,600	314,200	317,900	321,500	325,100	328,800	332,500	336,200	339,900	343,600	347,400	90
92	284,700	288,100	291,500	294,900	298,300	301,800	305,200	308,700	312,100	315,700	319,200	322,800	326,300	329,900	333,600	337,200	340,800	344,500	348,200	351,900	355,600	92
93	296,300	299,800	303,400	307,000	310,600	314,300	317,900	321,500	325,200	328,900	332,600	336,300	340,000	343,800	347,500	351,300	355,100	358,900	362,800	366,600	370,500	93
95	307,500	311,000	314,500	318,000	321,600	325,100	328,600	332,200	335,700	339,300	343,000	346,600	350,300	354,000	357,700	361,400	365,100	368,900	372,700	376,400	380,300	95
96	319,100	322,800	326,500	330,200	333,900	337,600	341,300	345,000	348,800	352,600	356,400	360,200	364,000	367,800	371,700	375,500	379,400	383,300	387,200	391,100	395,100	96
98	330,400	334,000	337,600	341,200	344,800	348,400	352,000	355,700	359,300	363,000	366,800	370,500	374,200	378,000	381,800	385,600	389,400	393,300	397,100	401,000	404,900	98
99	342,000	345,700	349,500	353,300	357,100	360,900	364,700	368,600	372,400	376,300	380,100	384,000	387,900	391,900	395,800	399,700	403,700	407,700	411,700	415,700	419,700	99
101	353,200	356,900	360,600	364,300	368,000	371,700	375,500	379,200	382,900	386,700	390,500	394,400	398,200	402,100	405,900	409,800	413,700	417,600	421,600	425,500	429,500	101
102	364,800	368,700	372,500	376,400	380,300	384,200	388,100	392,100	396,000	399,900	403,900	407,900	411,900	415,900	419,900	424,000	428,000	432,100	436,100	440,200	444,300	102
104	376,100	379,900	383,600	387,400	391,200	395,100	398,900	402,700	406,500	410,400	414,300	418,200	422,100	426,100	430,100	434,000	438,000	442,000				104
105	387,600	391,600	395,600	399,600	403,600	407,600	411,600	415,600	419,600	423,600	427,700	431,800	435,800	439,900	444,000							105
106	390,600	394,500	398,300	402,200	406,000	409,900	413,700	417,600	421,500	425,500	429,400	433,400	437,400	441,500	445,500							106
107	413,800	418,000	422,200	426,400	430,600	434,900	439,100	443,400														107
108	424,000	428,100	432,300	436,400	440,600	444,700																108
109	435,600	439,900	444,200																			109

HEADWATER 594 to 598
TAILWATER 576.51 to 577.50

MARCH 2004

GUNTERSVILLE DAM
SPILLWAY DISCHARGE
IN CUBIC FEET PER SECOND

GATE ARRANGEMENT	HEADWATER ELEVATION																				GATE ARRANGEMENT
	598.0	598.2	598.4	598.6	598.8	599.0	599.2	599.4	599.6	599.8	600.0	600.2	600.4	600.6	600.8	601.0	601.2	601.4	601.6	601.8	602.0	
0*										22,470	24,030											0*
2								21,610	23,070	24,580	26,120											2
4							22,370	23,770	25,210	26,680	28,200											4
6					21,970	23,240	24,560	25,930	27,340	28,790	30,280											6
8			21,950	23,050	24,230	25,460	26,750	28,090	29,470	30,900	32,360											8
10	22,390	23,330	24,300	25,350	26,480	27,680	28,940	30,250	31,600	33,000	34,450											10
12	24,840	25,730	26,650	27,640	28,740	29,910	31,130	32,410	33,740	35,110	36,530											12
14	27,300	28,130	28,990	29,940	31,000	32,130	33,320	34,570	35,870	37,220	38,610											14
16	29,750	30,530	31,340	32,240	33,250	34,350	35,510	36,730	38,000	39,320	40,700											16
18	32,210	32,940	33,680	34,530	35,510	36,570	37,700	38,890	40,130	41,430	42,780											18
20	34,660	35,340	36,030	36,830	37,770	38,790	39,890	41,050	42,270	43,540	44,860											20
21	36,420	37,110	37,810	38,610	39,530	40,540	41,610	42,740	43,930	45,160	46,450											21
22	38,180	38,870	39,590	40,390	41,300	42,290	43,340	44,440	45,590	46,790	48,030											22
23	39,940	40,640	41,360	42,160	43,070	44,040	45,060	46,130	47,250	48,410	49,610											23
24	41,700	42,410	43,140	43,940	44,830	45,790	46,790	47,830	48,920	50,040	51,200											24
25	43,460	44,180	44,920	45,720	46,600	47,530	48,510	49,530	50,580	51,670	52,780											25
26	45,220	45,950	46,700	47,500	48,370	49,280	50,230	51,220	52,240	53,290	54,370											26
27	46,970	47,720	48,470	49,280	50,140	51,030	51,960	52,920	53,900	54,920	55,950											27
28	48,730	49,480	50,250	51,060	51,900	52,780	53,680	54,610	55,570	56,540	57,540											28
29	50,490	51,250	52,030	52,840	53,670	54,530	55,410	56,310	57,230	58,170	59,120											29
31	52,950	53,650	54,380	55,130	55,930	56,750	57,600	58,470	59,360	60,270	61,210											31
32	54,710	55,420	56,150	56,910	57,690	58,500	59,320	60,160	61,020	61,900	62,790											32
34	57,160	57,820	58,500	59,210	59,950	60,720	61,510	62,320	63,160	64,010	64,870											34
35	58,920	59,590	60,280	60,990	61,720	62,470	63,240	64,020	64,820	65,630	66,460											35
37	61,380	61,990	62,620	63,280	63,970	64,690	65,420	66,180	66,950	67,740	68,540											37
38	63,130	63,760	64,400	65,060	65,740	66,440	67,150	67,870	68,610	69,360	70,130											38
39	65,590	66,170	66,750	67,360	68,000	68,660	69,340	70,030	70,750	71,470	72,210											39
40	68,050	68,570	69,090	69,650	70,250	70,880	71,530	72,190	72,880	73,580	74,290											40
41	69,800	70,340	70,870	71,430	72,020	72,630	73,250	73,890	74,540	75,200	75,880											41
42	73,320	73,880	74,440	75,030	75,640	76,280	76,920	77,590	78,260	78,950	79,650											42
43	76,840	77,420	78,010	78,620	79,260	79,920	80,600	81,290	81,990	82,700	83,430											43
44	80,360	80,970	81,580	82,220	82,880	83,570	84,270	84,980	85,710	86,450	87,200											44
45	83,870	84,510	85,150	85,810	86,510	87,220	87,940	88,680	89,440	90,200	90,980											45
46	87,390	88,050	88,720	89,410	90,130	90,860	91,620	92,380	93,160	93,950	94,750											46
47	90,910	91,600	92,290	93,000	93,750	94,510	95,290	96,080	96,880	97,700	98,530											47
48	94,420	95,140	95,860	96,600	97,370	98,160	98,960	99,780	100,600	101,400	102,300											48
49	97,940	98,680	99,430	100,200	101,000	101,800	102,600	103,500	104,300	105,200	106,100											49
50	102,200	102,900	103,600	104,300	105,000	105,800	106,500	107,300	108,100	108,900	109,700											50
51	105,700	106,400	107,100	107,900	108,600	109,400	110,200	111,000	111,900	112,700	113,500											51
52	109,200	109,900	110,700	111,500	112,300	113,100	113,900	114,700	115,600	116,400	117,300											52
53	112,700	113,500	114,300	115,100	115,900	116,700	117,600	118,400	119,300	120,200	121,100											53
54	116,200	117,000	117,800	118,700	119,500	120,400	121,200	122,100	123,000	123,900	124,800											54
55	119,700	120,600	121,400	122,200	123,100	124,000	124,900	125,800	126,700	127,700	128,600											55
56	123,300	124,100	125,000	125,800	126,700	127,500	128,400	129,200	130,100	130,900	131,800											56
57	126,800	127,600	128,500	129,400	130,300	131,200	132,000	132,900	133,800	134,700	135,600											57
58	133,900	134,900	135,900	136,900	138,000	139,000	140,000	141,100	142,100	143,200	144,200											58
59	141,000	142,100	143,300	144,500	145,700	146,800	148,000	149,200	150,400	151,600	152,800											59
60	148,000	149,400	150,700	152,000	153,400	154,700	156,000	157,400	158,800	160,100	161,500											60
61	155,100	156,600	158,100	159,600	161,000	162,500	164,100	165,600	167,100	168,600	170,100											61
62	162,200	163,800	165,500	167,100	168,700	170,400	172,100	173,700	175,400	177,100	178,800											62
63	169,300	171,100	172,900	174,600	176,400	178,200	180,100	181,900	183,700	185,600	187,400											63
64	176,400	178,300	180,200	182,200	184,100	186,100	188,100	190,100	192,100	194,100	196,100											64
65	183,500	185,600	187,600	189,700	191,800	193,900	196,100	198,200	200,400	202,500	204,700											65
66	187,700	189,700	191,800	193,800	195,800	197,900	200,000	202,100	204,200	206,300	208,400											66
67	191,200	193,300	195,300	197,400	199,500	201,600	203,700	205,800	207,900	210,000	212,200											67

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* *Arrangement "0" indicates that all spillway gates are closed. Discharge is spillway gate and trash gate overflow.*

HEADWATER 598 to 602
TAILWATER 576.51 to 577.50

GUNTERSVILLE DAM
SPILLWAY DISCHARGE
IN CUBIC FEET PER SECOND

GATE ARRANGEMENT	HEADWATER ELEVATION																					GATE ARRANGEMENT
	598.0	598.2	598.4	598.6	598.8	599.0	599.2	599.4	599.6	599.8	600.0	600.2	600.4	600.6	600.8	601.0	601.2	601.4	601.6	601.8	602.0	
68	198,300	200,500	202,700	204,900	207,100	209,400	211,700	213,900	216,200	218,500	220,800											68
69	205,400	207,700	210,100	212,500	214,800	217,300	219,700	222,100	224,500	227,000	229,400											69
70	212,500	215,000	217,500	220,000	222,500	225,100	227,700	230,300	232,900	235,500	238,100											70
71	219,600	222,200	224,900	227,500	230,200	232,900	235,700	238,400	241,200	243,900	246,700											71
72	226,700	229,500	232,300	235,100	237,900	240,800	243,700	246,600	249,500	252,400	255,400											72
73	237,300	240,200	243,200	246,200	249,200	252,300	255,400	258,500	261,500	264,700	267,800											73
74	247,900	251,000	254,200	257,300	260,500	263,800	267,000	270,300	273,600	276,900	280,200											74
75	255,000	258,300	261,600	264,900	268,200	271,600	275,000	278,500	281,900	285,400	288,800											75
77	256,200	259,300	262,400	265,600	268,800	272,000	275,200	278,500														77
78	263,200	266,500	269,800	273,100	276,500	279,800	283,200	286,700	290,100	293,500	297,000											78
79	271,000	274,200	277,500	280,800	284,100	287,500	290,800	294,200	297,600	301,000	304,500											79
80	278,100	281,500	284,900	288,300	291,800	295,300	298,800	302,400	305,900	309,500	313,100											80
82	279,300	282,500	285,800	289,000	292,300	295,700	299,000	302,400														82
83	286,300	289,700	293,100	296,600	300,000	303,500	307,000	310,600	314,100	317,700	321,300											83
84	301,200	304,700	308,200	311,800	315,400	319,000	322,600	326,300	330,000	333,600	337,300											84
86	309,400	312,900	316,500	320,000	323,600	327,200	330,800	334,500	338,100	341,800	345,500											86
87	324,300	327,900	331,600	335,200	338,900	342,700	346,400	350,200	354,000	357,800	361,600											87
89	332,500	336,200	339,800	343,500	347,100	350,900	354,600	358,400	362,200	366,000	369,800											89
90	347,400	351,100	354,900	358,700	362,500	366,300	370,200	374,100	378,000	381,900	385,900											90
92	355,600	359,400	363,100	366,900	370,700	374,500	378,400	382,300	386,200	390,100	394,000											92
93	370,500	374,300	378,200	382,100	386,000	390,000	394,000	398,000	402,000	406,100	410,100											93
95	380,300	384,100	387,900	391,800	395,600	399,500	403,500	407,400	411,400	415,400	419,400											95
96	395,100	399,000	403,000	407,000	411,000	415,000	419,100	423,100	427,200	431,300	435,500											96
98	404,900	408,800	412,700	416,600	420,600	424,600	428,600	432,600	436,600	440,700	444,700											98
99	419,700	423,700	427,800	431,800	435,900	440,000	444,100															99
101	429,500	433,500	437,500	441,500	445,500																	101
102	444,300																					102

HEADWATER 598 to 602
TAILWATER 576.51 to 577.50

MARCH 2004

GUNTERSVILLE DAM
SPILLWAY DISCHARGE
IN CUBIC FEET PER SECOND

GATE ARRANGEMENT	HEADWATER ELEVATION																				GATE ARRANGEMENT
	590.0	590.2	590.4	590.6	590.8	591.0	591.2	591.4	591.6	591.8	592.0	592.2	592.4	592.6	592.8	593.0	593.2	593.4	593.6	593.8	594.0	
27															35,950	36,190	36,440	36,680	36,920	37,160	37,400	27
28										36,080	36,350	36,620	36,880	37,140	37,410	37,660	37,920	38,170	38,430	38,680	38,930	28
29					36,050	36,340	36,630	36,920	37,200	37,480	37,770	38,040	38,320	38,590	38,860	39,130	39,400	39,670	39,930	40,190	40,450	29
30		36,040	36,340	36,640	36,940	37,240	37,540	37,830	38,120	38,410	38,700	38,990	39,270	39,550	39,830	40,100	40,380	40,650	40,920	41,190	41,450	30
31	37,190	37,510	37,820	38,130	38,450	38,760	39,060	39,370	39,670	39,970	40,270	40,570	40,860	41,150	41,440	41,720	42,010	42,290	42,570	42,850	43,120	31
32	38,480	38,810	39,140	39,460	39,790	40,110	40,430	40,750	41,060	41,370	41,680	41,990	42,290	42,600	42,900	43,200	43,490	43,780	44,080	44,360	44,650	32
33	39,350	39,680	40,020	40,350	40,680	41,010	41,340	41,660	41,980	42,300	42,620	42,930	43,240	43,550	43,860	44,160	44,470	44,770	45,060	45,360	45,650	33
34	40,810	41,150	41,500	41,840	42,190	42,530	42,860	43,200	43,530	43,860	44,190	44,510	44,830	45,150	45,470	45,780	46,100	46,410	46,710	47,020	47,320	34
35	42,100	42,460	42,810	43,170	43,530	43,880	44,230	44,580	44,920	45,260	45,600	45,940	46,270	46,600	46,930	47,260	47,580	47,900	48,220	48,540	48,850	35
36	42,960	43,330	43,690	44,060	44,420	44,780	45,140	45,490	45,840	46,190	46,540	46,880	47,220	47,560	47,890	48,220	48,550	48,880	49,210	49,530	49,850	36
37	44,420	44,800	45,170	45,550	45,920	46,300	46,660	47,030	47,390	47,750	48,110	48,460	48,810	49,160	49,500	49,850	50,190	50,520	50,860	51,190	51,520	37
38	45,710	46,100	46,490	46,880	47,270	47,650	48,030	48,410	48,780	49,150	49,520	49,880	50,250	50,610	50,960	51,320	51,670	52,020	52,360	52,710	53,050	38
39	48,040	48,450	48,850	49,260	49,660	50,070	50,460	50,860	51,250	51,640	52,020	52,410	52,790	53,160	53,540	53,910	54,270	54,640	55,000	55,360	55,720	39
40	50,360	50,790	51,210	51,640	52,060	52,480	52,900	53,310	53,720	54,130	54,530	54,930	55,320	55,720	56,110	56,500	56,880	57,260	57,640	58,020	58,390	40
41	51,650	52,090	52,530	52,970	53,400	53,830	54,260	54,690	55,110	55,530	55,940	56,350	56,760	57,170	57,570	57,970	58,360	58,760	59,150	59,530	59,920	41
42	54,060	54,530	54,990	55,450	55,910	56,370	56,820	57,270	57,720	58,170	58,610	59,050	59,490	59,920	60,350	60,780	61,200	61,630	62,040	62,460	62,870	42
43	56,470	56,960	57,450	57,940	58,420	58,900	59,370	59,850	60,330	60,810	61,280	61,750	62,220	62,680	63,140	63,590	64,050	64,500	64,940	65,390	65,830	43
44	58,880	59,400	59,910	60,420	60,930	61,430	61,920	62,430	62,940	63,440	63,950	64,450	64,940	65,430	65,920	66,410	66,890	67,370	67,840	68,310	68,780	44
45	61,290	61,830	62,370	62,900	63,430	63,960	64,480	65,010	65,550	66,080	66,620	67,150	67,670	68,190	68,710	69,220	69,730	70,240	70,740	71,240	71,740	45
46	63,700	64,270	64,830	65,390	65,940	66,490	67,030	67,590	68,160	68,720	69,290	69,840	70,400	70,950	71,490	72,030	72,570	73,110	73,640	74,170	74,690	46
47	66,110	66,710	67,290	67,870	68,450	69,020	69,580	70,170	70,770	71,360	71,950	72,540	73,120	73,700	74,280	74,850	75,420	75,980	76,540	77,090	77,650	47
48	68,520	69,140	69,750	70,360	70,960	71,550	72,140	72,750	73,380	74,000	74,620	75,240	75,850	76,460	77,060	77,660	78,260	78,850	79,440	80,020	80,600	48
49	70,930	71,580	72,210	72,840	73,460	74,080	74,690	75,330	75,990	76,640	77,290	77,940	78,580	79,220	79,850	80,480	81,100	81,720	82,340	82,950	83,550	49
50	74,550	75,220	75,890	76,550	77,200	77,850	78,490	79,160	79,850	80,530	81,210	81,880	82,550	83,220	83,880	84,540	85,190	85,840	86,480	87,120	87,750	50
51	76,960	77,660	78,350	79,030	79,710	80,380	81,040	81,740	82,460	83,170	83,880	84,580	85,280	85,980	86,670	87,350	88,030	88,710	89,380	90,040	90,710	51
52	79,370	80,090	80,810	81,520	82,220	82,910	83,600	84,320	85,070	85,810	86,550	87,280	88,010	88,730	89,450	90,160	90,870	91,580	92,280	92,970	93,660	52
53	81,780	82,530	83,270	84,000	84,730	85,440	86,150	86,900	87,670	88,450	89,220	89,980	90,740	91,490	92,240	92,980	93,720	94,450	95,180	95,900	96,620	53
54	84,190	84,960	85,730	86,480	87,230	87,970	88,710	89,480	90,280	91,090	91,890	92,680	93,460	94,250	95,020	95,790	96,560	97,320	98,070	98,830	99,570	54
55	86,600	87,400	88,190	88,970	89,740	90,500	91,260	92,060	92,890	93,730	94,550	95,380	96,190	97,000	97,810	98,610	99,400	100,200	101,000	101,800	102,500	55
56	89,180	90,010	90,820	91,620	92,420	93,210	93,990	94,810	95,670	96,530	97,380	98,230	99,060	99,900	100,700	101,500	102,400	103,200	104,000	104,800	105,600	56
57	91,590	92,440	93,280	94,110	94,930	95,740	96,540	97,390	98,280	99,170	100,000	100,900	101,800	102,700	103,500	104,400	105,200	106,000	106,900	107,700	108,500	57
58	93,520	94,470	95,420	96,370	97,300	98,230	99,150	100,100	101,100	102,100	103,100	104,100	105,100	106,100	107,100	108,000	109,000	110,000	110,900	111,900	112,800	58
59	95,440	96,510	97,570	98,620	99,670	100,700	101,800	102,800	104,000	105,100	106,200	107,300	108,400	109,500	110,600	111,700	112,800	113,900	115,000	116,000	117,100	59
60	97,360	98,540	99,710	100,900	102,000	103,200	104,400	105,600	106,800	108,000	109,300	110,500	111,700	112,900	114,200	115,400	116,600	117,800	119,000	120,200	121,400	60
61	99,280	100,600	101,900	103,100	104,400	105,700	107,000	108,300	109,600	111,000	112,300	113,700	115,000	116,400	117,700	119,000	120,400	121,700	123,000	124,400	125,700	61
62	101,200	102,600	104,000	105,400	106,800	108,200	109,600	111,000	112,500	113,900	115,400	116,900	118,300	119,800	121,300	122,700	124,200	125,600	127,100	128,500	130,000	62
63	103,100	104,600	106,100	107,700	109,200	110,700	112,200	113,700	115,300	116,900	118,500	120,100	121,600	123,200	124,800	126,400	128,000	129,500	131,100	132,700	134,300	63
64	105,100	106,700	108,300	109,900	111,500	113,200	114,800	116,500	118,100	119,800	121,500	123,300	125,000	126,700	128,400	130,100	131,800	133,500	135,200	136,900	138,600	64
65	107,000	108,700	110,400	112,200	113,900	115,700	117,400	119,200	121,000	122,800	124,600	126,400	128,300	130,100	131,900	133,700	135,500	137,400	139,200	141,000	142,900	65
66	110,600	112,300	114,100	115,900	117,600	119,400	121,200	123,000	124,800	126,700	128,500	130,400	132,200	134,100	136,000	137,800	139,600	141,500	143,300	145,200	147,100	66
67	113,000	114,800	116,600	118,400	120,200	122,000	123,800	125,600	127,500	129,300	131,200	133,100	135,000	136,900	138,700	140,600	142,500	144,400	146,200	148,100	150,000	67
68	114,900	116,800	118,700	120,600	122,500	124,400	126,400	128,300	130,300	132,300	134,300	136,300	138,300	140,300	142,300	144,300	146,300	148,300	150,300	152,300	154,300	68
69	116,800	118,800	120,900	122,900	124,900	126,900	129,000	131,000	133,100	135,200	137,300	139,500	141,600	143,700	145,800	147,900	150,100	152,200	154,300	156,400	158,600	69
70	118,800	120,900	123,000	125,100	127,300	129,400	131,600	133,800	136,000	138,200	140,400	142,700	144,900	147,200	149,400	151,600	153,900	156,100	158,300	160,600	162,900	70
71	120,700	122,900	125,100	127,400	129,600	131,900	134,200	136,500	138,800	141,100	143,500	145,800	148,200	150,600	152,900	155,300	157,600	160,000	162,400	164,800	167,200	71
72	122,600	124,900	127,300	129,600	132,000	134,400	136,800	139,200	141,600	144,100	146,600	149,000	151,500	154,000	156,500	159,000	161,400	163,900	166,400	168,900	171,500	72
73	127,000	129,400	131,900	134,400	136,900	139,400	142,000	144,500	147,100	149,700	152,300	154,900	157,600	160,200	162,800	165,400	168,100	170,700	173,400	176,000	178,700	73
74	131,300	133,900	136,500	139,100	141,800	144,400	147,100	149,800	152,500	155,300	158,000	160,800	163,600	166,400	169,200	171,900	174,700	177,500	180,300	183,100	185,900	74
75	133,200	135,900	138,600	141,400	144,100	146,900	149,700	152,500	155,400	158,200	161,100	164,000	166,900	169,800	172,700	175,600	178,500	181,400	184,300	187,300	190,200	75
76	135,500	138,000	140,500	143,000	145,600	148,100	150,700	153,300	155,900	158,600												76
77	141,500	144,000	146,600	149,200	151,800	154,400	157,100	159,700	162,400	165,100	167,800	170,500	173,200	176,000	178,700	181,400	184,200	186,900	189,600	192,400	195,200	77
78	143,400	146,100	148,800	151,500	154,200	156,900	159,700	162,400	165,200	168,000	170,900	173,700	176,600	179,400	182,300	185,100	188,000	190,800	193,700	196,600	199,500	78
79	149,400	152,200	154,900	157,700	160,400	163,200	166,000	168,800	171,700	174,600	177,400	180,300	183,300	186,200	189,100	192,000	194,900	197,800	200,700	203,700	206,600	79
80	151,400	154,200	157,000	159,900	162,800	165,700	168,600	171,600	174,500	177,500	180,500	183,500	186,600	189,600	192,600	195,700	198,700	201,700	204,800	207,800	210,900	80
81	153,600	156,200	158,900	161,500	164,200	166,900	169,600	172,300	175,100	177,800												81

MARCH 2004

HEADWATER 590 to 594
TAILWATER 577.51 to 578.50

GUNTERSVILLE DAM
SPILLWAY DISCHARGE
IN CUBIC FEET PER SECOND

GATE ARRANGEMENT	HEADWATER ELEVATION																					GATE ARRANGEMENT
	590.0	590.2	590.4	590.6	590.8	591.0	591.2	591.4	591.6	591.8	592.0	592.2	592.4	592.6	592.8	593.0	593.2	593.4	593.6	593.8	594.0	
82	159,600	162,300	165,000	167,700	170,500	173,200	176,000	178,700	181,600	184,400	187,200	190,000	192,900	195,800	198,600	201,500	204,300	207,200	210,100	213,000	215,900	82
83	161,600	164,300	167,200	170,000	172,800	175,700	178,600	181,500	184,400	187,300	190,300	193,200	196,200	199,200	202,200	205,200	208,100	211,100	214,100	217,100	220,200	83
84	169,500	172,500	175,400	178,400	181,500	184,500	187,500	190,600	193,700	196,800	199,900	203,100	206,200	209,400	212,600	215,700	218,800	222,000	225,200	228,400	231,600	84
85	171,700	174,500	177,300	180,100	182,900	185,700	188,500	191,400	194,200	197,100												85
86	179,700	182,600	185,600	188,500	191,500	194,500	197,500	200,500	203,500	206,600	209,700	212,800	215,900	219,000	222,100	225,200	228,300	231,400	234,500	237,700	240,800	86
87	187,600	190,700	193,800	197,000	200,100	203,300	206,400	209,600	212,900	216,100	219,300	222,600	225,900	229,200	232,500	235,700	239,000	242,300	245,600	248,900	252,300	87
88	189,900	192,800	195,700	198,600	201,500	204,500	207,400	210,400	213,400	216,400												88
89	197,800	200,900	204,000	207,000	210,100	213,200	216,400	219,500	222,700	225,900	229,100	232,300	235,500	238,800	242,000	245,200	248,500	251,700	255,000	258,200	261,500	89
90	205,800	209,000	212,200	215,500	218,800	222,000	225,300	228,700	232,000	235,400	238,800	242,100	245,600	249,000	252,400	255,800	259,200	262,600	266,100	269,500	273,000	90
92	216,000	219,200	222,400	225,600	228,800	232,000	235,300	238,600	241,900	245,200	248,500	251,900	255,200	258,600	261,900	265,300	268,600	272,000	275,400	278,800	282,200	92
93	223,900	227,300	230,600	234,000	237,400	240,800	244,200	247,700	251,200	254,700	258,200	261,700	265,200	268,800	272,300	275,800	279,400	282,900	286,500	290,100	293,600	93
95	236,500	239,800	243,100	246,400	249,800	253,100	256,500	259,900	263,300	266,700	270,200	273,600	277,100	280,600	284,100	287,500	291,000	294,500	298,000	301,500	305,000	95
96	244,400	247,900	251,400	254,900	258,400	261,900	265,500	269,000	272,600	276,200	279,800	283,500	287,100	290,800	294,400	298,100	301,700	305,400	309,100	312,700	316,400	96
98	257,000	260,400	263,800	267,300	270,700	274,200	277,700	281,200	284,800	288,300	291,900	295,400	299,000	302,600	306,200	309,800	313,400	317,000	320,600	324,200	327,800	98
99	264,900	268,500	272,100	275,700	279,400	283,000	286,700	290,400	294,100	297,800	301,500	305,300	309,000	312,800	316,600	320,300	324,100	327,900	331,600	335,400	339,200	99
101	277,500	281,000	284,600	288,100	291,700	295,300	298,900	302,500	306,200	309,900	313,500	317,200	320,900	324,600	328,300	332,000	335,700	339,400	343,100	346,900	350,600	101
102	285,400	289,100	292,800	296,600	300,300	304,100	307,900	311,700	315,500	319,300	323,200	327,100	330,900	334,800	338,700	342,600	346,400	350,300	354,200	358,100	362,000	102
104	298,000	301,600	305,300	309,000	312,700	316,400	320,100	323,900	327,600	331,400	335,200	339,000	342,800	346,600	350,400	354,300	358,100	361,900	365,700	369,500	373,400	104
105	305,900	309,800	313,600	317,400	321,300	325,200	329,100	333,000	336,900	340,900	344,900	348,800	352,800	356,800	360,800	364,800	368,800	372,800	376,800	380,800	384,800	105
106	311,300	315,000	318,700	322,500	326,300	330,000	333,800	337,600	341,500	345,300	349,200	353,000	356,900	360,800	364,700	368,500	372,400	376,300	380,200	384,100	388,000	106
107	327,200	331,200	335,300	339,400	343,500	347,600	351,800	355,900	360,100	364,300	368,500	372,700	376,900	381,200	385,400	389,600	393,800	398,100	402,300	406,600	410,900	107
108	338,600	342,600	346,600	350,600	354,700	358,800	362,900	367,000	371,100	375,200	379,400	383,500	387,700	391,900	396,000	400,200	404,400	408,600	412,800	417,000	421,100	108
109	346,500	350,700	354,900	359,100	363,300	367,500	371,800	376,100	380,400	384,700	389,000	393,400	397,700	402,100	406,400	410,800	415,100	419,500	423,800	428,200	432,600	109
110	357,900	362,000	366,200	370,300	374,500	378,700	382,900	387,100	391,400	395,600	399,900	404,200	408,500	412,800	417,100	421,400	425,700	430,000	434,300	438,600	442,900	110
111	365,800	370,100	374,400	378,800	383,100	387,500	391,900	396,300	400,700	405,100	409,600	414,000	418,500	423,000	427,400	431,900	436,400	440,900	445,300	449,800	454,300	111
112	376,100	380,300	384,600	388,800	393,100	397,400	401,700	406,000	410,400	414,700	419,100	423,400	427,800	432,200	436,600	440,900	445,300	449,700	454,100	458,500		112
113	393,100	397,700	402,300	406,900	411,500	416,200	420,900	425,600	430,300	435,000	439,800	444,500	449,300	454,100	458,800							113
114	404,500	409,000	413,600	418,100	422,700	427,400	432,000	436,600	441,300	446,000	450,700	455,300	460,100									114
115	412,400	417,100	421,900	426,600	431,400	436,100	440,900	445,800	450,600	455,400	460,300											115
116	422,700	427,400	432,000	436,700	441,400	446,100	450,800	455,500	460,300													116
117	431,800	436,600	441,400	446,300	451,200	456,100	461,000															117
118	450,000	454,900	459,800																			118

HEADWATER 590 to 594
TAILWATER 577.51 to 578.50

MARCH 2004

GUNTERSVILLE DAM
SPILLWAY DISCHARGE
IN CUBIC FEET PER SECOND

GATE ARRANGEMENT	HEADWATER ELEVATION																					GATE ARRANGEMENT
	594.0	594.2	594.4	594.6	594.8	595.0	595.2	595.4	595.6	595.8	596.0	596.2	596.4	596.6	596.8	597.0	597.2	597.4	597.6	597.8	598.0	
21																					35,930	21
22																			36,330	36,980	37,660	22
23																36,180	36,780	37,400	38,040	38,710	39,390	23
24													36,200	36,720	37,280	37,860	38,470	39,100	39,760	40,430	41,130	24
25									36,090	36,460	36,880	37,350	37,850	38,390	38,960	39,550	40,170	40,810	41,470	42,160	42,860	25
26		36,100	36,320	36,540	36,760	36,980	37,200	37,420	37,700	38,080	38,520	38,990	39,510	40,050	40,630	41,230	41,860	42,510	43,190	43,880	44,600	26
27	37,400	37,640	37,870	38,100	38,330	38,560	38,790	39,020	39,310	39,700	40,150	40,640	41,160	41,720	42,310	42,920	43,560	44,220	44,900	45,610	46,330	27
28	38,930	39,170	39,420	39,660	39,900	40,150	40,380	40,620	40,930	41,330	41,780	42,280	42,820	43,380	43,980	44,600	45,250	45,920	46,620	47,330	48,070	28
29	40,450	40,710	40,970	41,220	41,480	41,730	41,980	42,220	42,540	42,950	43,420	43,930	44,470	45,050	45,650	46,290	46,950	47,630	48,330	49,060	49,800	29
30	41,450	41,720	41,980	42,240	42,500	42,760	43,010	43,270	43,580	43,980												30
31	43,120	43,400	43,670	43,940	44,210	44,480	44,740	45,000	45,330	45,730	46,190	46,680	47,200	47,750	48,320	48,920	49,540	50,180	50,840	51,510	52,210	31
32	44,650	44,940	45,220	45,500	45,780	46,060	46,330	46,610	46,940	47,360	47,820	48,320	48,850	49,410	50,000	50,600	51,230	51,880	52,550	53,240	53,940	32
33	45,650	45,940	46,230	46,520	46,810	47,090	47,370	47,650	47,980	48,380												33
34	47,320	47,620	47,920	48,220	48,510	48,810	49,100	49,390	49,730	50,140	50,590	51,070	51,580	52,110	52,660	53,240	53,830	54,430	55,060	55,700	56,350	34
35	48,850	49,160	49,470	49,780	50,090	50,390	50,690	50,990	51,340	51,760	52,220	52,710	53,230	53,770	54,340	54,920	55,520	56,140	56,770	57,420	58,090	35
36	49,850	50,170	50,480	50,800	51,110	51,420	51,730	52,030	52,380	52,780												36
37	51,520	51,850	52,170	52,500	52,820	53,140	53,450	53,770	54,130	54,540	54,990	55,460	55,960	56,470	57,000	57,550	58,110	58,690	59,280	59,880	60,490	37
38	53,050	53,390	53,720	54,060	54,390	54,720	55,050	55,370	55,740	56,160	56,620	57,110	57,610	58,140	58,680	59,240	59,810	60,400	60,990	61,600	62,230	38
39	55,720	56,070	56,430	56,780	57,120	57,470	57,810	58,150	58,530	58,950	59,390	59,860	60,340	60,840	61,350	61,870	62,400	62,950	63,500	64,060	64,640	39
40	58,390	58,760	59,130	59,490	59,860	60,220	60,580	60,930	61,310	61,730	62,160	62,610	63,060	63,530	64,010	64,500	64,990	65,500	66,010	66,520	67,040	40
41	59,920	60,300	60,680	61,050	61,430	61,800	62,170	62,540	62,930	63,350	63,790	64,250	64,720	65,200	65,690	66,180	66,690	67,200	67,720	68,250	68,780	41
42	62,870	63,280	63,690	64,090	64,490	64,890	65,290	65,680	66,100	66,550	67,020	67,500	68,000	68,510	69,020	69,540	70,080	70,610	71,160	71,710	72,270	42
43	65,830	66,260	66,700	67,130	67,560	67,980	68,410	68,830	69,270	69,750	70,250	70,760	71,280	71,810	72,350	72,900	73,460	74,020	74,600	75,170	75,760	43
44	68,780	69,250	69,710	70,170	70,620	71,080	71,530	71,970	72,450	72,950	73,470	74,010	74,560	75,120	75,690	76,260	76,850	77,440	78,030	78,640	79,250	44
45	71,740	72,230	72,720	73,210	73,690	74,170	74,650	75,120	75,620	76,150	76,700	77,260	77,840	78,430	79,020	79,620	80,230	80,850	81,470	82,100	82,730	45
46	74,690	75,210	75,730	76,240	76,750	77,260	77,770	78,270	78,790	79,350	79,930	80,520	81,120	81,730	82,350	82,980	83,620	84,260	84,910	85,560	86,220	46
47	77,650	78,190	78,740	79,280	79,820	80,350	80,890	81,410	81,970	82,550	83,160	83,770	84,400	85,040	85,690	86,340	87,000	87,670	88,350	89,030	89,710	47
48	80,600	81,180	81,750	82,320	82,880	83,450	84,010	84,560	85,140	85,750	86,380	87,030	87,680	88,350	89,020	89,700	90,390	91,080	91,780	92,490	93,200	48
49	83,550	84,160	84,760	85,360	85,950	86,540	87,130	87,710	88,310	88,950	89,610	90,280	90,960	91,650	92,350	93,060	93,770	94,490	95,220	95,950	96,690	49
50	87,750	88,380	89,010	89,630	90,250	90,870	91,480	92,090	92,710	93,360	94,010	94,670	95,340	96,010	96,690	97,370	98,060	98,750	99,440	100,100	100,800	50
51	90,710	91,370	92,020	92,670	93,320	93,960	94,600	95,240	95,890	96,560	97,240	97,930	98,620	99,320	100,000	100,700	101,400	102,200	102,900	103,600	104,300	51
52	93,660	94,350	95,030	95,710	96,380	97,050	97,720	98,380	99,060	99,760	100,500	101,200	101,900	102,600	103,400	104,100	104,800	105,600	106,300	107,100	107,800	52
53	96,620	97,330	98,040	98,750	99,450	100,100	100,800	101,500	102,200	103,000	103,700	104,400	105,200	105,900	106,700	107,500	108,200	109,000	109,800	110,500	111,300	53
54	99,570	100,300	101,100	101,800	102,500	103,200	104,000	104,700	105,400	106,200	106,900	107,700	108,500	109,200	110,000	110,800	111,600	112,400	113,200	114,000	114,800	54
55	102,500	103,300	104,100	104,800	105,600	106,300	107,100	107,800	108,600	109,400	110,100	110,900	111,700	112,500	113,400	114,200	115,000	115,800	116,600	117,500	118,300	55
56	105,600	106,400	107,200	107,900	108,700	109,500	110,300	111,000	111,800	112,600	113,400	114,200	115,100	115,900	116,700	117,500	118,400	119,200	120,100	120,900	121,700	56
57	108,500	109,400	110,200	111,000	111,800	112,600	113,400	114,200	115,000	115,800	116,600	117,500	118,300	119,200	120,000	120,900	121,800	122,600	123,500	124,400	125,200	57
58	112,800	113,800	114,700	115,700	116,600	117,500	118,500	119,400	120,300	121,300	122,300	123,200	124,200	125,200	126,200	127,200	128,200	129,200	130,200	131,300	132,300	58
59	117,100	118,200	119,300	120,300	121,400	122,500	123,500	124,600	125,700	126,800	127,900	129,000	130,100	131,200	132,400	133,500	134,700	135,800	137,000	138,200	139,300	59
60	121,400	122,600	123,800	125,000	126,200	127,400	128,600	129,800	131,000	132,200	133,500	134,700	136,000	137,300	138,600	139,800	141,100	142,400	143,700	145,000	146,400	60
61	125,700	127,000	128,400	129,700	131,000	132,300	133,700	135,000	136,300	137,700	139,100	140,500	141,900	143,300	144,700	146,200	147,600	149,000	150,500	151,900	153,400	61
62	130,000	131,400	132,900	134,400	135,800	137,300	138,700	140,200	141,700	143,200	144,700	146,200	147,800	149,300	150,900	152,500	154,100	155,600	157,200	158,800	160,400	62
63	134,300	135,900	137,400	139,000	140,600	142,200	143,800	145,400	147,000	148,700	150,300	152,000	153,700	155,400	157,100	158,800	160,500	162,200	164,000	165,700	167,500	63
64	138,600	140,300	142,000	143,700	145,400	147,200	148,900	150,600	152,400	154,100	155,900	157,800	159,600	161,400	163,300	165,100	167,000	168,900	170,700	172,600	174,500	64
65	142,900	144,700	146,500	148,400	150,200	152,100	154,000	155,800	157,700	159,600	161,600	163,500	165,500	167,400	169,400	171,400	173,400	175,500	177,500	179,500	181,600	65
66	147,100	148,900	150,800	152,700	154,500	156,400	158,300	160,200	162,100	164,000	166,000	167,900	169,800	171,800	173,800	175,700	177,700	179,700	181,700	183,700	185,700	66
67	150,000	151,900	153,800	155,700	157,600	159,500	161,400	163,400	165,300	167,200	169,200	171,200	173,100	175,100	177,100	179,100	181,100	183,100	185,100	187,200	189,200	67
68	154,300	156,300	158,300	160,400	162,400	164,500	166,500	168,600	170,600	172,700	174,800	176,900	179,000	181,100	183,300	185,400	187,600	189,700	191,900	194,100	196,200	68
69	158,600	160,700	162,900	165,000	167,200	169,400	171,600	173,800	176,000	178,200	180,400	182,700	184,900	187,200	189,400	191,700	194,000	196,300	198,600	201,000	203,300	69
70	162,900	165,200	167,400	169,700	172,000	174,300	176,600	179,000	181,300	183,700	186,000	188,400	190,800	193,200	195,600	198,000	200,500	202,900	205,400	207,900	210,300	70
71	167,200	169,600	172,000	174,400	176,800	179,300	181,700	184,200	186,600	189,100	191,600	194,200	196,700	199,200	201,800	204,400	206,900	209,500	212,100	214,800	217,400	71
72	171,500	174,000	176,500	179,100	181,600	184,200	186,800	189,400	192,000	194,600	197,300	199,900	202,600	205,300	208,000	210,700	213,400	216,100	218,900	221,600	224,400	72
73	178,700	181,400	184,100	186,800	189,500	192,200	195,000	197,700	200,500	203,300	206,100	208,900	211,800	214,600	217,500	220,400	223,200	226,200	229,100	232,000	235,000	73
74	185,900	188,800	191,600	194,500	197,400	200,300	203,200	206,100	209,000	212,000	214,900	217,900	220,900	223,900	227,000	230,000	233,100	236,200	239,300	242,400	245,500	74
75	190,200	193,200	196,200	199,200	202,200	205,200	208,200	211,300	214,400	217,400	220,600	223,700	226,800	230,000	233,200	236,300	239,500	242,800	246,000	249,300	252,500	75

MARCH 2004

HEADWATER 594 to 598
TAILWATER 577.51 to 578.50

GUNTERSVILLE DAM
SPILLWAY DISCHARGE
IN CUBIC FEET PER SECOND

GATE ARRANGEMENT	HEADWATER ELEVATION																					GATE ARRANGEMENT
	594.0	594.2	594.4	594.6	594.8	595.0	595.2	595.4	595.6	595.8	596.0	596.2	596.4	596.6	596.8	597.0	597.2	597.4	597.6	597.8	598.0	
77	195,200	198,000	200,800	203,600	206,400	209,200	212,000	214,900	217,800	220,700	223,600	226,600	229,500	232,500	235,500	238,600	241,600	244,700	247,700	250,800	253,900	77
78	199,500	202,400	205,300	208,200	211,200	214,100	217,100	220,100	223,100	226,200	229,200	232,300	235,400	238,600	241,700	244,900	248,100	251,300	254,500	257,700	261,000	78
79	206,600	209,600	212,600	215,600	218,600	221,600	224,600	227,600	230,700	233,800	236,900	240,000	243,100	246,200	249,400	252,500	255,700	258,900	262,100	265,400	268,600	79
80	210,900	214,000	217,100	220,200	223,400	226,500	229,700	232,800	236,000	239,200	242,500	245,700	249,000	252,300	255,600	258,900	262,200	265,500	268,900	272,300	275,600	80
82	215,900	218,800	221,700	224,600	227,600	230,500	233,500	236,400	239,400	242,500	245,500	248,600	251,700	254,800	257,900	261,100	264,200	267,400	270,600	273,800	277,000	82
83	220,200	223,200	226,200	229,300	232,400	235,500	238,500	241,700	244,800	248,000	251,100	254,400	257,600	260,800	264,100	267,400	270,700	274,000	277,400	280,700	284,100	83
84	231,600	234,800	238,000	241,300	244,500	247,800	251,100	254,400	257,700	261,000	264,400	267,800	271,100	274,500	278,000	281,400	284,800	288,300	291,800	295,300	298,800	84
86	240,800	244,000	247,200	250,400	253,500	256,800	260,000	263,200	266,500	269,700	273,100	276,400	279,700	283,100	286,500	289,900	293,300	296,800	300,200	303,700	307,200	86
87	252,300	255,600	259,000	262,300	265,700	269,100	272,500	275,900	279,400	282,800	286,300	289,800	293,300	296,800	300,400	303,900	307,500	311,100	314,600	318,300	321,900	87
89	261,500	264,800	268,100	271,400	274,700	278,100	281,400	284,700	288,100	291,500	295,000	298,400	301,900	305,400	308,900	312,400	316,000	319,500	323,100	326,700	330,300	89
90	273,000	276,400	279,900	283,400	286,900	290,400	293,900	297,500	301,000	304,600	308,200	311,800	315,500	319,100	322,800	326,400	330,100	333,800	337,500	341,300	345,000	90
92	282,200	285,600	289,000	292,500	295,900	299,400	302,800	306,300	309,800	313,300	316,900	320,500	324,100	327,700	331,300	335,000	338,600	342,300	346,000	349,700	353,500	92
93	293,600	297,200	300,800	304,500	308,100	311,700	315,400	319,000	322,700	326,400	330,100	333,900	337,600	341,400	345,200	348,900	352,800	356,600	360,400	364,300	368,100	93
95	305,000	308,500	312,000	315,600	319,100	322,700	326,200	329,800	333,400	337,000	340,700	344,400	348,100	351,800	355,500	359,200	363,000	366,800	370,500	374,300	378,200	95
96	316,400	320,100	323,800	327,600	331,300	335,000	338,800	342,600	346,300	350,100	353,900	357,800	361,600	365,500	369,300	373,200	377,100	381,000	385,000	388,900	392,800	96
98	327,800	331,400	335,000	338,700	342,300	346,000	349,700	353,300	357,000	360,800	364,500	368,300	372,100	375,900	379,700	383,500	387,400	391,200	395,100	399,000	402,900	98
99	339,200	343,000	346,900	350,700	354,500	358,400	362,200	366,100	370,000	373,800	377,800	381,700	385,600	389,600	393,500	397,500	401,500	405,500	409,500	413,500	417,600	99
101	350,600	354,300	358,100	361,800	365,600	369,300	373,100	376,900	380,700	384,500	388,300	392,200	396,100	400,000	403,900	407,800	411,700	415,700	419,600	423,600	427,600	101
102	362,000	365,900	369,900	373,800	377,700	381,700	385,600	389,600	393,600	397,600	401,600	405,600	409,600	413,700	417,700	421,800	425,900	429,900	434,000	438,100	442,300	102
104	373,400	377,200	381,100	384,900	388,800	392,600	396,500	400,400	404,300	408,200	412,100	416,100	420,100	424,100	428,100	432,100	436,100	440,100	444,200	448,200	452,300	104
105	384,800	388,800	392,900	396,900	401,000	405,000	409,100	413,100	417,200	421,300	425,400	429,500	433,600	437,800	441,900	446,100	450,200	454,400	458,600			105
106	388,000	391,900	395,800	399,700	403,600	407,500	411,500	415,400	419,300	423,300	427,400	431,400	435,500	439,600	443,700	447,800	451,900	456,100	460,200			106
107	410,900	415,100	419,400	423,700	428,000	432,300	436,500	440,900	445,200	449,500	453,900	458,200										107
108	421,100	425,300	429,600	433,800	438,000	442,200	446,400	450,700	454,900	459,200												108
109	432,600	437,000	441,400	445,800	450,200	454,600	459,000															109
110	442,900	447,200	451,500	455,900	460,200																	110
111	454,300	458,800																				111

HEADWATER 594 to 598
TAILWATER 577.51 to 578.50

MARCH 2004

GUNTERSVILLE DAM
SPILLWAY DISCHARGE
IN CUBIC FEET PER SECOND

GATE ARRANGEMENT	HEADWATER ELEVATION																				GATE ARRANGEMENT
	598.0	598.2	598.4	598.6	598.8	599.0	599.2	599.4	599.6	599.8	600.0	600.2	600.4	600.6	600.8	601.0	601.2	601.4	601.6	601.8	602.0	
12											36, 260											12
14										36, 900	38, 300											14
16								36, 360	37, 640	38, 960	40, 340											16
18						36, 160	37, 290	38, 480	39, 730	41, 030	42, 370											18
20				36, 360	37, 300	38, 330	39, 430	40, 590	41, 810	43, 090	44, 410											20
21	35, 930	36, 610	37, 320	38, 120	39, 050	40, 060	41, 130	42, 260	43, 450	44, 690	45, 970											21
22	37, 660	38, 360	39, 070	39, 870	40, 790	41, 780	42, 830	43, 940	45, 090	46, 290	47, 540											22
23	39, 390	40, 100	40, 820	41, 630	42, 530	43, 510	44, 530	45, 610	46, 730	47, 890	49, 100											23
24	41, 130	41, 840	42, 580	43, 380	44, 280	45, 230	46, 230	47, 280	48, 370	49, 500	50, 660											24
25	42, 860	43, 590	44, 330	45, 140	46, 020	46, 960	47, 940	48, 950	50, 010	51, 100	52, 220											25
26	44, 600	45, 330	46, 090	46, 890	47, 760	48, 680	49, 640	50, 630	51, 650	52, 700	53, 780											26
27	46, 330	47, 080	47, 840	48, 650	49, 510	50, 410	51, 340	52, 300	53, 290	54, 300	55, 350											27
28	48, 070	48, 820	49, 590	50, 400	51, 250	52, 130	53, 040	53, 970	54, 930	55, 910	56, 910											28
29	49, 800	50, 560	51, 350	52, 160	52, 990	53, 860	54, 740	55, 640	56, 570	57, 510	58, 470											29
31	52, 210	52, 920	53, 650	54, 410	55, 200	56, 030	56, 880	57, 760	58, 650	59, 570	60, 510											31
32	53, 940	54, 660	55, 400	56, 160	56, 950	57, 760	58, 580	59, 430	60, 290	61, 170	62, 070											32
34	56, 350	57, 020	57, 700	58, 410	59, 160	59, 930	60, 730	61, 540	62, 380	63, 240	64, 110											34
35	58, 090	58, 760	59, 450	60, 160	60, 900	61, 660	62, 430	63, 220	64, 020	64, 840	65, 670											35
37	60, 490	61, 120	61, 750	62, 410	63, 110	63, 830	64, 570	65, 330	66, 110	66, 900	67, 710											37
38	62, 230	62, 860	63, 510	64, 170	64, 850	65, 560	66, 270	67, 000	67, 750	68, 500	69, 270											38
39	64, 640	65, 220	65, 800	66, 420	67, 060	67, 730	68, 420	69, 120	69, 830	70, 560	71, 310											39
40	67, 040	67, 570	68, 100	68, 670	69, 270	69, 910	70, 560	71, 230	71, 920	72, 630	73, 350											40
41	68, 780	69, 320	69, 860	70, 420	71, 020	71, 630	72, 260	72, 900	73, 560	74, 230	74, 910											41
42	72, 270	72, 830	73, 400	73, 990	74, 610	75, 250	75, 900	76, 570	77, 250	77, 950	78, 650											42
43	75, 760	76, 340	76, 940	77, 560	78, 200	78, 870	79, 550	80, 240	80, 950	81, 670	82, 400											43
44	79, 250	79, 860	80, 480	81, 120	81, 790	82, 480	83, 190	83, 910	84, 640	85, 380	86, 140											44
45	82, 730	83, 370	84, 020	84, 690	85, 380	86, 100	86, 830	87, 580	88, 330	89, 100	89, 880											45
46	86, 220	86, 890	87, 560	88, 250	88, 970	89, 720	90, 470	91, 240	92, 030	92, 820	93, 630											46
47	89, 710	90, 400	91, 100	91, 820	92, 570	93, 330	94, 110	94, 910	95, 720	96, 540	97, 370											47
48	93, 200	93, 920	94, 640	95, 380	96, 160	96, 950	97, 760	98, 580	99, 410	100, 300	101, 100											48
49	96, 690	97, 430	98, 180	98, 950	99, 750	100, 600	101, 400	102, 200	103, 100	104, 000	104, 900											49
50	100, 800	101, 500	102, 200	103, 000	103, 700	104, 500	105, 200	106, 000	106, 800	107, 600	108, 500											50
51	104, 300	105, 000	105, 800	106, 500	107, 300	108, 100	108, 900	109, 700	110, 500	111, 400	112, 200											51
52	107, 800	108, 600	109, 300	110, 100	110, 900	111, 700	112, 500	113, 400	114, 200	115, 100	115, 900											52
53	111, 300	112, 100	112, 900	113, 700	114, 500	115, 300	116, 200	117, 000	117, 900	118, 800	119, 700											53
54	114, 800	115, 600	116, 400	117, 200	118, 100	118, 900	119, 800	120, 700	121, 600	122, 500	123, 400											54
55	118, 300	119, 100	119, 900	120, 800	121, 700	122, 500	123, 500	124, 400	125, 300	126, 200	127, 200											55
56	121, 700	122, 600	123, 400	124, 300	125, 100	126, 000	126, 900	127, 700	128, 600	129, 400	130, 300											56
57	125, 200	126, 100	127, 000	127, 900	128, 700	129, 600	130, 500	131, 400	132, 300	133, 200	134, 000											57
58	132, 300	133, 300	134, 300	135, 300	136, 400	137, 400	138, 500	139, 500	140, 500	141, 600	142, 600											58
59	139, 300	140, 500	141, 700	142, 800	144, 000	145, 200	146, 400	147, 600	148, 800	150, 000	151, 200											59
60	146, 400	147, 700	149, 000	150, 300	151, 700	153, 000	154, 400	155, 700	157, 100	158, 400	159, 800											60
61	153, 400	154, 900	156, 300	157, 800	159, 300	160, 800	162, 300	163, 800	165, 400	166, 900	168, 400											61
62	160, 400	162, 100	163, 700	165, 300	167, 000	168, 600	170, 300	171, 900	173, 600	175, 300	177, 000											62
63	167, 500	169, 300	171, 000	172, 800	174, 600	176, 400	178, 200	180, 100	181, 900	183, 700	185, 600											63
64	174, 500	176, 400	178, 400	180, 300	182, 200	184, 200	186, 200	188, 200	190, 200	192, 200	194, 200											64
65	181, 600	183, 600	185, 700	187, 800	189, 900	192, 000	194, 100	196, 300	198, 400	200, 600	202, 800											65
66	185, 700	187, 700	189, 800	191, 800	193, 800	195, 900	198, 000	200, 100	202, 200	204, 300	206, 400											66
67	189, 200	191, 200	193, 300	195, 400	197, 400	199, 500	201, 600	203, 700	205, 900	208, 000	210, 100											67
68	196, 200	198, 400	200, 600	202, 800	205, 100	207, 300	209, 600	211, 800	214, 100	216, 400	218, 700											68
69	203, 300	205, 600	208, 000	210, 300	212, 700	215, 100	217, 500	220, 000	222, 400	224, 800	227, 300											69
70	210, 300	212, 800	215, 300	217, 800	220, 400	222, 900	225, 500	228, 100	230, 700	233, 300	235, 900											70
71	217, 400	220, 000	222, 700	225, 300	228, 000	230, 700	233, 400	236, 200	238, 900	241, 700	244, 500											71
72	224, 400	227, 200	230, 000	232, 800	235, 600	238, 500	241, 400	244, 300	247, 200	250, 100	253, 100											72
73	235, 000	237, 900	240, 900	243, 900	246, 900	249, 900	253, 000	256, 100	259, 200	262, 300	265, 400											73

MARCH 2004

HEADWATER 598 to 602
TAILWATER 577.51 to 578.50

GUNTERSVILLE DAM
SPILLWAY DISCHARGE
IN CUBIC FEET PER SECOND

GATE ARRANGEMENT	HEADWATER ELEVATION																				GATE ARRANGEMENT
	598.0	598.2	598.4	598.6	598.8	599.0	599.2	599.4	599.6	599.8	600.0	600.2	600.4	600.6	600.8	601.0	601.2	601.4	601.6	601.8	602.0	
74	245, 500	248, 600	251, 800	254, 900	258, 100	261, 300	264, 600	267, 900	271, 100	274, 400	277, 700											74
75	252, 500	255, 800	259, 100	262, 400	265, 800	269, 100	272, 500	276, 000	279, 400	282, 800	286, 300											75
77	253, 900	257, 000	260, 200	263, 300	266, 500	269, 700	273, 000	276, 200	279, 500	282, 800												77
78	261, 000	264, 200	267, 500	270, 800	274, 200	277, 500	280, 900	284, 300	287, 800	291, 200	294, 700											78
79	268, 600	271, 900	275, 100	278, 400	281, 700	285, 100	288, 400	291, 800	295, 200	298, 600	302, 000											79
80	275, 600	279, 000	282, 500	285, 900	289, 300	292, 900	296, 400	299, 900	303, 500	307, 000	310, 600											80
82	277, 000	280, 300	283, 500	286, 800	290, 100	293, 500	296, 800	300, 200	303, 600	307, 000												82
83	284, 100	287, 500	290, 900	294, 300	297, 800	301, 300	304, 800	308, 300	311, 800	315, 400	319, 000											83
84	298, 800	302, 300	305, 800	309, 400	312, 900	316, 600	320, 200	323, 900	327, 500	331, 200	334, 900											84
86	307, 200	310, 700	314, 200	317, 800	321, 400	325, 000	328, 600	332, 200	335, 900	339, 600	343, 300											86
87	321, 900	325, 500	329, 200	332, 800	336, 500	340, 300	344, 000	347, 800	351, 600	355, 400	359, 200											87
89	330, 300	334, 000	337, 600	341, 300	344, 900	348, 700	352, 400	356, 200	360, 000	363, 800	367, 600											89
90	345, 000	348, 800	352, 500	356, 300	360, 100	364, 000	367, 900	371, 800	375, 700	379, 600	383, 500											90
92	353, 500	357, 200	361, 000	364, 700	368, 500	372, 400	376, 300	380, 100	384, 000	387, 900	391, 900											92
93	368, 100	372, 000	375, 900	379, 800	383, 700	387, 700	391, 700	395, 700	399, 700	403, 800	407, 800											93
95	378, 200	382, 000	385, 800	389, 700	393, 600	397, 500	401, 500	405, 400	409, 400	413, 400	417, 400											95
96	392, 800	396, 800	400, 800	404, 800	408, 800	412, 800	416, 900	421, 000	425, 100	429, 200	433, 300											96
98	402, 900	406, 800	410, 700	414, 700	418, 600	422, 600	426, 700	430, 700	434, 700	438, 800	442, 900											98
99	417, 600	421, 600	425, 700	429, 700	433, 800	438, 000	442, 100	446, 300	450, 400	454, 600	458, 800											99
101	427, 600	431, 600	435, 600	439, 600	443, 700	447, 800	451, 900	456, 000	460, 100													101
102	442, 300	446, 400	450, 500	454, 700	458, 900																	102
104	452, 300	456, 400	460, 500																			104

HEADWATER 598 to 602
TAILWATER 577.51 to 578.50

MARCH 2004

GUNTERSVILLE DAM
SPILLWAY DISCHARGE
IN CUBIC FEET PER SECOND

GATE ARRANGEMENT	HEADWATER ELEVATION																				GATE ARRANGEMENT
	590.0	590.2	590.4	590.6	590.8	591.0	591.2	591.4	591.6	591.8	592.0	592.2	592.4	592.6	592.8	593.0	593.2	593.4	593.6	593.8	594.0	
37																					50, 490	37
38																	50, 570	50, 930	51, 290	51, 640	51, 990	38
39										50, 410	50, 810	51, 200	51, 590	51, 980	52, 360	52, 740	53, 120	53, 500	53, 870	54, 240	54, 610	39
40				50, 270	50, 700	51, 130	51, 560	51, 990	52, 410	52, 830	53, 240	53, 660	54, 070	54, 470	54, 870	55, 270	55, 670	56, 060	56, 450	56, 840	57, 220	40
41		50, 670	51, 120	51, 570	52, 020	52, 460	52, 900	53, 340	53, 780	54, 210	54, 630	55, 060	55, 480	55, 890	56, 310	56, 720	57, 120	57, 530	57, 930	58, 330	58, 720	41
42	52, 600	53, 080	53, 560	54, 030	54, 510	54, 970	55, 440	55, 900	56, 370	56, 830	57, 280	57, 740	58, 190	58, 630	59, 070	59, 510	59, 950	60, 380	60, 810	61, 240	61, 660	42
43	54, 990	55, 500	56, 000	56, 500	56, 990	57, 480	57, 970	58, 460	58, 960	59, 450	59, 930	60, 420	60, 900	61, 370	61, 840	62, 310	62, 780	63, 240	63, 700	64, 150	64, 600	43
44	57, 380	57, 910	58, 440	58, 960	59, 480	60, 000	60, 510	61, 020	61, 550	62, 070	62, 580	63, 100	63, 600	64, 110	64, 610	65, 110	65, 600	66, 090	66, 580	67, 060	67, 540	44
45	59, 770	60, 320	60, 870	61, 420	61, 970	62, 510	63, 040	63, 580	64, 140	64, 690	65, 240	65, 780	66, 310	66, 850	67, 380	67, 900	68, 430	68, 950	69, 460	69, 970	70, 480	45
46	62, 160	62, 740	63, 310	63, 890	64, 450	65, 020	65, 570	66, 150	66, 730	67, 310	67, 890	68, 460	69, 020	69, 590	70, 150	70, 700	71, 250	71, 800	72, 340	72, 880	73, 420	46
47	64, 540	65, 150	65, 750	66, 350	66, 940	67, 530	68, 110	68, 710	69, 320	69, 930	70, 540	71, 140	71, 730	72, 330	72, 910	73, 500	74, 080	74, 650	75, 230	75, 800	76, 360	47
48	66, 930	67, 560	68, 190	68, 810	69, 430	70, 040	70, 640	71, 270	71, 910	72, 550	73, 190	73, 820	74, 440	75, 070	75, 680	76, 300	76, 900	77, 510	78, 110	78, 710	79, 300	48
49	69, 320	69, 980	70, 630	71, 280	71, 920	72, 550	73, 180	73, 830	74, 500	75, 170	75, 840	76, 500	77, 150	77, 800	78, 450	79, 090	79, 730	80, 360	80, 990	81, 620	82, 240	49
50	72, 840	73, 530	74, 210	74, 890	75, 560	76, 220	76, 880	77, 560	78, 270	78, 970	79, 660	80, 350	81, 040	81, 720	82, 400	83, 070	83, 730	84, 390	85, 050	85, 710	86, 350	50
51	75, 220	75, 940	76, 650	77, 350	78, 050	78, 730	79, 420	80, 120	80, 860	81, 590	82, 320	83, 030	83, 750	84, 460	85, 160	85, 860	86, 560	87, 250	87, 940	88, 620	89, 290	51
52	77, 610	78, 350	79, 090	79, 810	80, 530	81, 250	81, 950	82, 680	83, 450	84, 210	84, 970	85, 710	86, 460	87, 200	87, 930	88, 660	89, 380	90, 100	90, 820	91, 530	92, 230	52
53	80, 000	80, 770	81, 530	82, 280	83, 020	83, 760	84, 480	85, 250	86, 040	86, 830	87, 620	88, 400	89, 170	89, 940	90, 700	91, 460	92, 210	92, 960	93, 700	94, 440	95, 170	53
54	82, 390	83, 180	83, 960	84, 740	85, 510	86, 270	87, 020	87, 810	88, 630	89, 450	90, 270	91, 080	91, 880	92, 680	93, 470	94, 250	95, 040	95, 810	96, 580	97, 350	98, 110	54
55	84, 780	85, 590	86, 400	87, 200	87, 990	88, 780	89, 550	90, 370	91, 220	92, 070	92, 920	93, 760	94, 590	95, 410	96, 240	97, 050	97, 860	98, 670	99, 470	100, 300	101, 100	55
56	87, 310	88, 150	88, 990	89, 810	90, 630	91, 430	92, 230	93, 070	93, 950	94, 830	95, 690	96, 550	97, 410	98, 260	99, 100	99, 940	100, 800	101, 600	102, 400	103, 200	104, 100	56
57	89, 700	90, 570	91, 430	92, 270	93, 110	93, 950	94, 770	95, 630	96, 540	97, 450	98, 340	99, 230	100, 100	101, 000	101, 900	102, 700	103, 600	104, 500	105, 300	106, 200	107, 000	57
58	91, 600	92, 580	93, 550	94, 510	95, 460	96, 410	97, 350	98, 330	99, 350	100, 400	101, 400	102, 400	103, 400	104, 400	105, 400	106, 400	107, 400	108, 300	109, 300	110, 300	111, 200	58
59	93, 510	94, 590	95, 670	96, 740	97, 810	98, 870	99, 930	101, 000	102, 200	103, 300	104, 400	105, 500	106, 700	107, 800	108, 900	110, 000	111, 100	112, 200	113, 300	114, 400	115, 500	59
60	95, 410	96, 610	97, 790	98, 980	100, 200	101, 300	102, 500	103, 700	105, 000	106, 200	107, 500	108, 700	109, 900	111, 200	112, 400	113, 600	114, 900	116, 100	117, 300	118, 500	119, 700	60
61	97, 320	98, 620	99, 920	101, 200	102, 500	103, 800	105, 100	106, 400	107, 800	109, 100	110, 500	111, 900	113, 200	114, 600	115, 900	117, 300	118, 600	120, 000	121, 300	122, 600	124, 000	61
62	99, 220	100, 600	102, 000	103, 400	104, 900	106, 300	107, 700	109, 100	110, 600	112, 100	113, 500	115, 000	116, 500	118, 000	119, 400	120, 900	122, 400	123, 800	125, 300	126, 800	128, 200	62
63	101, 100	102, 600	104, 200	105, 700	107, 200	108, 700	110, 300	111, 800	113, 400	115, 000	116, 600	118, 200	119, 800	121, 400	123, 000	124, 500	126, 100	127, 700	129, 300	130, 900	132, 500	63
64	103, 000	104, 700	106, 300	107, 900	109, 600	111, 200	112, 800	114, 500	116, 200	117, 900	119, 600	121, 300	123, 000	124, 800	126, 500	128, 200	129, 900	131, 600	133, 300	135, 000	136, 700	64
65	104, 900	106, 700	108, 400	110, 200	111, 900	113, 700	115, 400	117, 200	119, 000	120, 800	122, 700	124, 500	126, 300	128, 200	130, 000	131, 800	133, 600	135, 400	137, 300	139, 100	141, 000	65
66	108, 500	110, 200	112, 000	113, 800	115, 500	117, 300	119, 100	120, 900	122, 800	124, 600	126, 500	128, 300	130, 200	132, 100	133, 900	135, 800	137, 600	139, 500	141, 300	143, 200	145, 100	66
67	110, 800	112, 600	114, 400	116, 200	118, 000	119, 800	121, 700	123, 500	125, 400	127, 200	129, 100	131, 000	132, 900	134, 800	136, 700	138, 600	140, 500	142, 300	144, 200	146, 100	148, 000	67
68	112, 700	114, 600	116, 600	118, 500	120, 400	122, 300	124, 200	126, 200	128, 200	130, 200	132, 200	134, 200	136, 200	138, 200	140, 200	142, 200	144, 200	146, 200	148, 200	150, 200	152, 300	68
69	114, 600	116, 700	118, 700	120, 700	122, 700	124, 800	126, 800	128, 900	131, 000	133, 100	135, 200	137, 300	139, 500	141, 600	143, 700	145, 800	148, 000	150, 100	152, 200	154, 400	156, 500	69
70	116, 600	118, 700	120, 800	122, 900	125, 100	127, 200	129, 400	131, 600	133, 800	136, 000	138, 200	140, 500	142, 700	145, 000	147, 200	149, 500	151, 700	154, 000	156, 200	158, 500	160, 700	70
71	118, 500	120, 700	122, 900	125, 200	127, 400	129, 700	132, 000	134, 300	136, 600	138, 900	141, 300	143, 600	146, 000	148, 400	150, 800	153, 100	155, 500	157, 800	160, 200	162, 600	165, 000	71
72	120, 400	122, 700	125, 000	127, 400	129, 800	132, 200	134, 600	137, 000	139, 400	141, 900	144, 300	146, 800	149, 300	151, 800	154, 300	156, 700	159, 200	161, 700	164, 200	166, 700	169, 200	72
73	124, 700	127, 100	129, 600	132, 100	134, 600	137, 100	139, 700	142, 200	144, 800	147, 400	150, 000	152, 600	155, 300	157, 900	160, 600	163, 200	165, 800	168, 400	171, 100	173, 700	176, 400	73
74	128, 900	131, 500	134, 200	136, 800	139, 400	142, 100	144, 800	147, 500	150, 200	152, 900	155, 700	158, 500	161, 300	164, 100	166, 800	169, 600	172, 400	175, 200	178, 000	180, 800	183, 600	74
75	130, 900	133, 600	136, 300	139, 000	141, 800	144, 600	147, 400	150, 200	153, 000	155, 900	158, 700	161, 600	164, 500	167, 500	170, 300	173, 200	176, 100	179, 000	182, 000	184, 900	187, 900	75
76	133, 200	135, 700	138, 200	140, 800	143, 300	145, 900	148, 500	151, 100	153, 700	156, 300												76
77	139, 100	141, 700	144, 300	146, 800	149, 500	152, 100	154, 700	157, 400	160, 000	162, 700	165, 400	168, 200	170, 900	173, 600	176, 400	179, 100	181, 800	184, 600	187, 300	190, 100	192, 900	77
78	141, 000	143, 700	146, 400	149, 100	151, 800	154, 500	157, 300	160, 100	162, 800	165, 700	168, 500	171, 300	174, 200	177, 000	179, 900	182, 700	185, 600	188, 400	191, 300	194, 200	197, 100	78
79	146, 900	149, 700	152, 400	155, 200	157, 900	160, 700	163, 500	166, 400	169, 200	172, 100	175, 000	177, 900	180, 800	183, 700	186, 600	189, 500	192, 400	195, 300	198, 300	201, 200	204, 200	79
80	148, 800	151, 700	154, 500	157, 400	160, 300	163, 200	166, 100	169, 000	172, 000	175, 000	178, 000	181, 000	184, 000	187, 100	190, 100	193, 100	196, 200	199, 200	202, 300	205, 300	208, 400	80
81	151, 200	153, 800	156, 500	159, 100	161, 800	164, 500	167, 200	169, 900	172, 700	175, 400												81
82	157, 100	159, 800	162, 500	165, 200	167, 900	170, 700	173, 400	176, 200	179, 000	181, 900	184, 700	187, 500	190, 400	193, 300	196, 100	199, 000	201, 900	204, 700	207, 600	210, 500	213, 400	82
83	159, 000	161, 800	164, 600	167, 400	170, 300	173, 100	176, 000	178, 900	181, 800	184, 800	187, 700	190, 700	193, 700	196, 700	199, 700	202, 600	205, 600	208, 600	211, 600	214, 600	217, 700	83
84	166, 800	169, 800	172, 700	175, 700	178, 800	181, 800	184, 800	187, 900	191, 000	194, 100	197, 200	200, 400	203, 500	206, 700	209, 900	213, 000	216, 200	219, 400	222, 500	225, 700	229, 000	84
85	169, 200	171, 900	174, 700	177, 500	180, 300	183, 100	185, 900	188, 800	191, 700	194, 600												85
86	177, 000	179, 900	182, 800	185, 800	188, 800	191, 800	194, 800	197, 800	200, 800	203, 900	207, 000	210, 100	213, 200	216, 300	219, 400	222, 500	225, 600	228, 800	231, 900	235, 100	238, 200	86
87	184, 800	187, 900	191, 000	194, 100	197, 300	200, 400	203, 600	206, 800	210, 000	213, 200	216, 500	219, 800	223, 100	226, 400	229, 600	232, 900	236, 200	239, 500	242, 800	246, 200	249, 500	87
88	187, 100	190, 000	192, 900	195, 800	198, 800	201, 700	204, 700	207, 700	210, 700	213, 700												88
89	194, 900	198, 000	201, 100	204, 200	207, 300	210, 400	213, 500	216, 700	219, 800	223, 000	226, 200	229, 500	232, 700	235, 900	239, 200	242, 400	245, 700	248, 900	252, 200	255, 500	258, 800	89
90	202, 700	206, 000	209, 200	212, 500	215, 700	219, 000	222, 300	225, 700	229, 000	232, 400	235, 700	239, 100	242, 600	246, 000	249, 400	252, 800	256, 200	259, 700	263, 100	266, 600	270, 100	90
92	212, 900	216, 100	219, 300	222, 500	225, 700	229, 000	232, 300	235, 500	238, 800	242, 100	245, 500	248, 800	252, 200	255, 600	258, 900	262, 300	265, 700	269, 100	272, 500	275, 900	279, 300	92

MARCH 2004

HEADWATER 590 to 594
TAILWATER 578.51 to 579.50

GUNTERSVILLE DAM
SPILLWAY DISCHARGE
IN CUBIC FEET PER SECOND

GATE ARRANGEMENT	HEADWATER ELEVATION																					GATE ARRANGEMENT
	590.0	590.2	590.4	590.6	590.8	591.0	591.2	591.4	591.6	591.8	592.0	592.2	592.4	592.6	592.8	593.0	593.2	593.4	593.6	593.8	594.0	
93	220, 700	224, 100	227, 400	230, 800	234, 200	237, 600	241, 100	244, 500	248, 000	251, 500	255, 000	258, 500	262, 100	265, 600	269, 200	272, 700	276, 300	279, 800	283, 400	287, 000	290, 600	93
95	233, 200	236, 500	239, 900	243, 200	246, 600	249, 900	253, 300	256, 700	260, 100	263, 500	267, 000	270, 500	273, 900	277, 400	280, 900	284, 400	287, 900	291, 400	294, 900	298, 500	302, 000	95
96	241, 000	244, 500	248, 000	251, 500	255, 000	258, 600	262, 100	265, 700	269, 300	272, 900	276, 500	280, 200	283, 800	287, 500	291, 200	294, 800	298, 500	302, 200	305, 900	309, 600	313, 300	96
98	253, 600	257, 000	260, 400	263, 900	267, 400	270, 900	274, 400	277, 900	281, 400	284, 900	288, 500	292, 100	295, 700	299, 300	302, 900	306, 500	310, 100	313, 800	317, 400	321, 000	324, 700	98
99	261, 400	265, 000	268, 600	272, 200	275, 900	279, 500	283, 200	286, 900	290, 600	294, 300	298, 000	301, 800	305, 600	309, 400	313, 100	316, 900	320, 700	324, 500	328, 300	332, 200	336, 000	99
101	273, 900	277, 400	281, 000	284, 600	288, 200	291, 800	295, 400	299, 000	302, 700	306, 400	310, 000	313, 700	317, 400	321, 200	324, 900	328, 600	332, 300	336, 100	339, 900	343, 600	347, 400	101
102	281, 700	285, 400	289, 200	292, 900	296, 700	300, 400	304, 200	308, 000	311, 900	315, 700	319, 500	323, 400	327, 300	331, 200	335, 100	339, 000	342, 900	346, 900	350, 800	354, 700	358, 700	102
104	294, 200	297, 900	301, 600	305, 300	309, 000	312, 700	316, 500	320, 200	324, 000	327, 800	331, 500	335, 400	339, 200	343, 000	346, 900	350, 700	354, 600	358, 400	362, 300	366, 200	370, 100	104
105	302, 000	305, 900	309, 700	313, 600	317, 500	321, 400	325, 300	329, 200	333, 100	337, 100	341, 100	345, 100	349, 100	353, 100	357, 100	361, 100	365, 200	369, 200	373, 200	377, 300	381, 400	105
106	307, 400	311, 200	315, 000	318, 700	322, 500	326, 300	330, 100	333, 900	337, 800	341, 600	345, 500	349, 300	353, 200	357, 100	361, 000	364, 900	368, 900	372, 800	376, 700	380, 700	384, 600	106
107	323, 100	327, 200	331, 300	335, 400	339, 500	343, 600	347, 800	351, 900	356, 100	360, 300	364, 500	368, 700	373, 000	377, 200	381, 500	385, 800	390, 000	394, 300	398, 600	402, 900	407, 200	107
108	334, 400	338, 500	342, 500	346, 600	350, 700	354, 700	358, 800	362, 900	367, 100	371, 200	375, 400	379, 500	383, 700	387, 900	392, 100	396, 300	400, 600	404, 800	409, 100	413, 300	417, 600	108
109	342, 200	346, 400	350, 700	354, 900	359, 100	363, 400	367, 700	371, 900	376, 200	380, 500	384, 900	389, 200	393, 600	398, 000	402, 400	406, 800	411, 200	415, 600	420, 000	424, 400	428, 900	109
110	353, 600	357, 700	361, 900	366, 100	370, 300	374, 500	378, 700	383, 000	387, 200	391, 500	395, 700	400, 000	404, 300	408, 700	413, 000	417, 300	421, 700	426, 100	430, 400	434, 800	439, 200	110
111	361, 400	365, 700	370, 100	374, 400	378, 800	383, 200	387, 500	392, 000	396, 400	400, 800	405, 300	409, 700	414, 200	418, 700	423, 200	427, 700	432, 300	436, 800	441, 400	445, 900	450, 500	111
112	371, 600	375, 900	380, 200	384, 500	388, 800	393, 100	397, 400	401, 700	406, 000	410, 400	414, 800	419, 100	423, 500	428, 000	432, 400	436, 800	441, 200	445, 700	450, 200	454, 600	459, 100	112
113	388, 300	393, 000	397, 600	402, 300	406, 900	411, 600	416, 300	421, 000	425, 700	430, 400	435, 200	439, 900	444, 700	449, 500	454, 300	459, 200	464, 000	468, 800	473, 700			113
114	399, 700	404, 300	408, 900	413, 500	418, 100	422, 700	427, 300	432, 000	436, 600	441, 300	446, 000	450, 700	455, 500	460, 200	465, 000	469, 700	474, 500					114
115	407, 500	412, 200	417, 000	421, 800	426, 600	431, 400	436, 200	441, 000	445, 800	450, 700	455, 500	460, 400	465, 300	470, 300	475, 200							115
116	417, 700	422, 400	427, 100	431, 800	436, 600	441, 300	446, 000	450, 700	455, 500	460, 300	465, 000	469, 800	474, 700									116
117	426, 600	431, 500	436, 400	441, 300	446, 200	451, 100	456, 100	461, 000	466, 000	470, 900	475, 900											117
118	444, 700	449, 700	454, 700	459, 700	464, 700	469, 700	474, 700															118
119	463, 900	469, 000	474, 100																			119

HEADWATER 590 to 594
TAILWATER 578.51 to 579.50

MARCH 2004

GUNTERSVILLE DAM
SPILLWAY DISCHARGE
IN CUBIC FEET PER SECOND

GATE ARRANGEMENT	HEADWATER ELEVATION																					GATE ARRANGEMENT
	594.0	594.2	594.4	594.6	594.8	595.0	595.2	595.4	595.6	595.8	596.0	596.2	596.4	596.6	596.8	597.0	597.2	597.4	597.6	597.8	598.0	
31																				50,740	51,440	31
32																	50,420	51,080	51,750	52,440	53,140	32
34													50,700	51,240	51,800	52,370	52,970	53,580	54,210	54,850	55,510	34
35									50,420	50,850	51,310	51,810	52,330	52,880	53,440	54,030	54,630	55,260	55,890	56,550	57,210	35
36						50,460	50,770	51,080	51,430	51,840												36
37	50,490	50,830	51,160	51,500	51,830	52,160	52,480	52,800	53,160	53,580	54,030	54,510	55,010	55,520	56,060	56,610	57,180	57,760	58,350	58,960	59,570	37
38	51,990	52,340	52,690	53,030	53,370	53,710	54,040	54,370	54,740	55,170	55,630	56,120	56,630	57,160	57,710	58,270	58,850	59,440	60,040	60,650	61,280	38
39	54,610	54,970	55,330	55,690	56,050	56,410	56,750	57,100	57,480	57,900	58,350	58,820	59,310	59,810	60,330	60,850	61,390	61,940	62,500	63,060	63,640	39
40	57,220	57,600	57,980	58,360	58,730	59,100	59,470	59,830	60,210	60,630	61,070	61,520	61,980	62,460	62,940	63,430	63,930	64,440	64,950	65,470	66,000	40
41	58,720	59,110	59,500	59,890	60,280	60,660	61,030	61,400	61,800	62,230	62,680	63,140	63,610	64,100	64,590	65,090	65,600	66,120	66,640	67,170	67,710	41
42	61,660	62,080	62,500	62,920	63,330	63,740	64,140	64,540	64,960	65,410	65,890	66,380	66,880	67,390	67,910	68,440	68,970	69,520	70,070	70,620	71,180	42
43	64,600	65,050	65,500	65,940	66,380	66,820	67,240	67,670	68,120	68,600	69,100	69,620	70,140	70,680	71,230	71,780	72,340	72,910	73,490	74,070	74,660	43
44	67,540	68,020	68,490	68,960	69,430	69,890	70,350	70,800	71,280	71,790	72,320	72,860	73,410	73,970	74,550	75,130	75,720	76,310	76,910	77,520	78,130	44
45	70,480	70,990	71,490	71,990	72,480	72,970	73,460	73,940	74,440	74,980	75,530	76,100	76,680	77,270	77,870	78,470	79,090	79,710	80,330	80,970	81,610	45
46	73,420	73,950	74,480	75,010	75,530	76,050	76,560	77,070	77,600	78,160	78,740	79,340	79,940	80,560	81,190	81,820	82,460	83,110	83,760	84,420	85,080	46
47	76,360	76,920	77,480	78,030	78,580	79,130	79,670	80,200	80,760	81,350	81,960	82,580	83,210	83,850	84,500	85,160	85,830	86,500	87,180	87,870	88,560	47
48	79,300	79,890	80,480	81,060	81,640	82,210	82,770	83,340	83,920	84,540	85,170	85,820	86,480	87,150	87,820	88,510	89,200	89,900	90,600	91,320	92,030	48
49	82,240	82,860	83,470	84,080	84,690	85,290	85,880	86,470	87,080	87,720	88,380	89,060	89,740	90,440	91,140	91,850	92,570	93,300	94,030	94,760	95,510	49
50	86,350	87,000	87,640	88,280	88,910	89,540	90,160	90,770	91,400	92,050	92,710	93,370	94,050	94,720	95,410	96,090	96,780	97,480	98,170	98,870	99,570	50
51	89,290	89,970	90,640	91,300	91,960	92,620	93,260	93,900	94,560	95,230	95,920	96,610	97,310	98,020	98,730	99,440	100,200	100,900	101,600	102,300	103,000	51
52	92,230	92,940	93,630	94,330	95,010	95,700	96,370	97,040	97,720	98,420	99,130	99,850	100,600	101,300	102,000	102,800	103,500	104,300	105,000	105,800	106,500	52
53	95,170	95,900	96,630	97,350	98,070	98,780	99,480	100,200	100,900	101,600	102,300	103,100	103,800	104,600	105,400	106,100	106,900	107,700	108,400	109,200	110,000	53
54	98,110	98,870	99,620	100,400	101,100	101,900	102,600	103,300	104,000	104,800	105,600	106,300	107,100	107,900	108,700	109,500	110,300	111,100	111,900	112,700	113,500	54
55	101,100	101,800	102,600	103,400	104,200	104,900	105,700	106,400	107,200	108,000	108,800	109,600	110,400	111,200	112,000	112,800	113,600	114,500	115,300	116,100	116,900	55
56	104,100	104,900	105,700	106,500	107,300	108,000	108,800	109,600	110,400	111,200	112,000	112,800	113,600	114,500	115,300	116,100	117,000	117,800	118,700	119,500	120,400	56
57	107,000	107,800	108,700	109,500	110,300	111,100	111,900	112,700	113,500	114,400	115,200	116,000	116,900	117,800	118,600	119,500	120,300	121,200	122,100	123,000	123,800	57
58	111,200	112,200	113,200	114,100	115,100	116,000	116,900	117,900	118,800	119,800	120,800	121,700	122,700	123,700	124,700	125,700	126,700	127,800	128,800	129,800	130,800	58
59	115,500	116,600	117,700	118,700	119,800	120,900	122,000	123,000	124,100	125,200	126,300	127,400	128,600	129,700	130,900	132,000	133,200	134,300	135,500	136,600	137,800	59
60	119,700	120,900	122,200	123,400	124,600	125,800	127,000	128,200	129,400	130,600	131,900	133,100	134,400	135,700	137,000	138,300	139,600	140,900	142,200	143,500	144,800	60
61	124,000	125,300	126,700	128,000	129,300	130,700	132,000	133,300	134,700	136,100	137,400	138,800	140,200	141,700	143,100	144,500	146,000	147,400	148,800	150,300	151,800	61
62	128,200	129,700	131,200	132,600	134,100	135,600	137,000	138,500	140,000	141,500	143,000	144,500	146,100	147,600	149,200	150,800	152,400	153,900	155,500	157,100	158,700	62
63	132,500	134,100	135,700	137,200	138,800	140,400	142,000	143,600	145,300	146,900	148,600	150,200	151,900	153,600	155,300	157,000	158,800	160,500	162,200	164,000	165,700	63
64	136,700	138,400	140,100	141,900	143,600	145,300	147,100	148,800	150,600	152,300	154,100	155,900	157,800	159,600	161,400	163,300	165,200	167,000	168,900	170,800	172,700	64
65	141,000	142,800	144,600	146,500	148,400	150,200	152,100	153,900	155,800	157,800	159,700	161,600	163,600	165,600	167,600	169,600	171,600	173,600	175,600	177,600	179,700	65
66	145,100	146,900	148,800	150,700	152,600	154,500	156,400	158,300	160,200	162,100	164,000	165,900	167,900	169,900	171,800	173,800	175,800	177,800	179,800	181,800	183,800	66
67	148,000	149,900	151,800	153,700	155,600	157,600	159,500	161,400	163,300	165,300	167,200	169,200	171,200	173,100	175,100	177,100	179,100	181,200	183,200	185,200	187,200	67
68	152,300	154,300	156,300	158,300	160,400	162,400	164,500	166,500	168,600	170,700	172,800	174,900	177,000	179,100	181,300	183,400	185,500	187,700	189,900	192,000	194,200	68
69	156,500	158,700	160,800	163,000	165,100	167,300	169,500	171,700	173,900	176,100	178,300	180,600	182,800	185,100	187,400	189,700	191,900	194,200	196,600	198,900	201,200	69
70	160,700	163,000	165,300	167,600	169,900	172,200	174,500	176,800	179,200	181,500	183,900	186,300	188,700	191,100	193,500	195,900	198,300	200,800	203,200	205,700	208,200	70
71	165,000	167,400	169,800	172,200	174,700	177,100	179,500	182,000	184,500	187,000	189,500	192,000	194,500	197,100	199,600	202,200	204,700	207,300	209,900	212,500	215,200	71
72	169,200	171,800	174,300	176,900	179,400	182,000	184,600	187,200	189,800	192,400	195,000	197,700	200,300	203,000	205,700	208,400	211,100	213,900	216,600	219,400	222,200	72
73	176,400	179,100	181,800	184,500	187,200	190,000	192,700	195,400	198,200	201,000	203,800	206,600	209,400	212,300	215,200	218,000	220,900	223,800	226,700	229,700	232,600	73
74	183,600	186,400	189,300	192,200	195,000	197,900	200,800	203,700	206,700	209,600	212,600	215,600	218,600	221,600	224,600	227,600	230,700	233,800	236,900	240,000	243,100	74
75	187,900	190,800	193,800	196,800	199,800	202,800	205,800	208,900	211,900	215,000	218,100	221,300	224,400	227,500	230,700	233,900	237,100	240,300	243,500	246,800	250,000	75
77	192,900	195,600	198,400	201,300	204,100	206,900	209,800	212,600	215,500	218,400	221,300	224,300	227,300	230,200	233,300	236,300	239,300	242,400	245,500	248,500	251,600	77
78	197,100	200,000	202,900	205,900	208,800	211,800	214,800	217,800	220,800	223,800	226,900	230,000	233,100	236,200	239,400	242,500	245,700	248,900	252,100	255,400	258,600	78
79	204,200	207,100	210,100	213,100	216,100	219,100	222,200	225,200	228,300	231,300	234,400	237,500	240,700	243,800	247,000	250,100	253,300	256,500	259,700	262,900	266,200	79
80	208,400	211,500	214,600	217,700	220,900	224,000	227,200	230,300	233,500	236,800	240,000	243,200	246,500	249,800	253,100	256,400	259,700	263,000	266,400	269,800	273,200	80
82	213,400	216,300	219,300	222,200	225,200	228,100	231,100	234,100	237,100	240,100	243,200	246,300	249,400	252,500	255,600	258,800	261,900	265,100	268,300	271,500	274,800	82
83	217,700	220,700	223,800	226,800	229,900	233,000	236,100	239,200	242,400	245,500	248,700	252,000	255,200	258,400	261,700	265,000	268,300	271,700	275,000	278,400	281,700	83
84	229,000	232,200	235,400	238,700	241,900	245,200	248,500	251,800	255,100	258,500	261,800	265,200	268,600	272,000	275,400	278,900	282,300	285,800	289,300	292,800	296,300	84
86	238,200	241,400	244,600	247,800	251,000	254,200	257,400	260,700	264,000	267,300	270,600	273,900	277,300	280,700	284,100	287,500	290,900	294,400	297,900	301,300	304,800	86
87	249,500	252,900	256,200	259,600	263,000	266,400	269,900	273,300	276,700	280,200	283,700	287,200	290,700	294,200	297,800	301,300	304,900	308,500	312,100	315,700	319,400	87
89	258,800	262,100	265,400	268,700	272,100	275,400	278,800	282,200	285,600	289,000	292,400	295,900	299,400	302,900	306,400	310,000	313,500	317,100	320,700	324,300	328,000	89
90	270,100	273,600	277,100	280,600	284,100	287,600	291,200	294,700	298,300	301,900	305,500	309,200	312,800	316,500	320,100	323,800	327,500	331,200	335,000	338,700	342,500	90

MARCH 2004

HEADWATER 594 to 598
TAILWATER 578.51 to 579.50

GUNTERSVILLE DAM
SPILLWAY DISCHARGE
IN CUBIC FEET PER SECOND

GATE ARRANGEMENT	HEADWATER ELEVATION																					GATE ARRANGEMENT
	594.0	594.2	594.4	594.6	594.8	595.0	595.2	595.4	595.6	595.8	596.0	596.2	596.4	596.6	596.8	597.0	597.2	597.4	597.6	597.8	598.0	
92	279, 300	282, 800	286, 200	289, 700	293, 200	296, 600	300, 100	303, 600	307, 200	310, 700	314, 300	317, 900	321, 500	325, 100	328, 800	332, 500	336, 200	339, 900	343, 600	347, 300	351, 100	92
93	290, 600	294, 300	297, 900	301, 500	305, 200	308, 900	312, 500	316, 200	319, 900	323, 600	327, 400	331, 100	334, 900	338, 700	342, 500	346, 300	350, 100	354, 000	357, 800	361, 700	365, 600	93
95	302, 000	305, 600	309, 100	312, 700	316, 300	319, 900	323, 500	327, 100	330, 700	334, 400	338, 100	341, 800	345, 500	349, 200	353, 000	356, 800	360, 500	364, 300	368, 200	372, 000	375, 800	95
96	313, 300	317, 100	320, 800	324, 600	328, 300	332, 100	335, 900	339, 700	343, 500	347, 300	351, 200	355, 000	358, 900	362, 800	366, 700	370, 600	374, 500	378, 500	382, 400	386, 400	390, 300	96
98	324, 700	328, 400	332, 100	335, 700	339, 400	343, 100	346, 800	350, 600	354, 300	358, 100	361, 900	365, 700	369, 500	373, 300	377, 200	381, 000	384, 900	388, 800	392, 700	396, 600	400, 600	98
99	336, 000	339, 900	343, 700	347, 600	351, 500	355, 400	359, 200	363, 200	367, 100	371, 000	375, 000	378, 900	382, 900	386, 900	390, 900	394, 900	398, 900	402, 900	407, 000	411, 000	415, 100	99
101	347, 400	351, 200	355, 000	358, 800	362, 600	366, 400	370, 200	374, 000	377, 900	381, 700	385, 600	389, 500	393, 500	397, 400	401, 400	405, 300	409, 300	413, 300	417, 300	421, 300	425, 300	101
102	358, 700	362, 700	366, 600	370, 600	374, 600	378, 600	382, 600	386, 600	390, 600	394, 700	398, 700	402, 800	406, 900	411, 000	415, 100	419, 200	423, 300	427, 400	431, 600	435, 700	439, 900	102
104	370, 100	374, 000	377, 900	381, 800	385, 700	389, 600	393, 600	397, 500	401, 400	405, 400	409, 400	413, 400	417, 500	421, 500	425, 600	429, 600	433, 700	437, 800	441, 900	446, 000	450, 100	104
105	381, 400	385, 500	389, 600	393, 600	397, 700	401, 900	406, 000	410, 100	414, 200	418, 400	422, 500	426, 700	430, 900	435, 100	439, 300	443, 500	447, 700	451, 900	456, 100	460, 400	464, 600	105
106	384, 600	388, 600	392, 600	396, 600	400, 600	404, 500	408, 500	412, 500	416, 600	420, 600	424, 700	428, 800	432, 900	437, 100	441, 200	445, 400	449, 600	453, 800	458, 000	462, 300	466, 500	106
107	407, 200	411, 600	415, 900	420, 300	424, 600	429, 000	433, 300	437, 700	442, 100	446, 500	450, 900	455, 300	459, 800	464, 200	468, 600	473, 100						107
108	417, 600	421, 800	426, 100	430, 400	434, 700	439, 000	443, 300	447, 600	451, 900	456, 300	460, 600	465, 000	469, 400	473, 800								108
109	428, 900	433, 300	437, 800	442, 300	446, 700	451, 200	455, 700	460, 200	464, 700	469, 200	473, 700											109
110	439, 200	443, 600	448, 000	452, 400	456, 800	461, 200	465, 600	470, 100	474, 500													110
111	450, 500	455, 100	459, 700	464, 200	468, 800	473, 400																111
112	459, 100	463, 600	468, 100	472, 600																		112

HEADWATER 594 to 598
TAILWATER 578.51 to 579.50

MARCH 2004

GUNTERSVILLE DAM

SPILLWAY DISCHARGE

IN CUBIC FEET PER SECOND

GATE ARRANGEMENT	HEADWATER ELEVATION																				GATE ARRANGEMENT
	598.0	598.2	598.4	598.6	598.8	599.0	599.2	599.4	599.6	599.8	600.0	600.2	600.4	600.6	600.8	601.0	601.2	601.4	601.6	601.8	602.0	
25										50,510	51,630											25
26									51,030	52,080	53,170											26
27							50,680	51,650	52,640	53,660	54,700											27
28					50,570	51,450	52,360	53,290	54,250	55,240	56,240											28
29			50,630	51,440	52,280	53,150	54,030	54,940	55,870	56,810	57,780											29
31	51,440	52,150	52,880	53,640	54,450	55,280	56,130	57,010	57,910	58,830	59,770											31
32	53,140	53,870	54,610	55,370	56,160	56,970	57,810	58,650	59,520	60,400	61,300											32
34	55,510	56,180	56,860	57,570	58,330	59,100	59,900	60,720	61,560	62,420	63,300											34
35	57,210	57,890	58,590	59,300	60,040	60,800	61,580	62,370	63,180	64,000	64,830											35
37	59,570	60,200	60,840	61,500	62,210	62,930	63,670	64,440	65,220	66,010	66,820											37
38	61,280	61,920	62,570	63,230	63,920	64,630	65,350	66,080	66,830	67,590	68,360											38
39	63,640	64,220	64,820	65,440	66,080	66,760	67,440	68,150	68,870	69,600	70,350											39
40	66,000	66,530	67,070	67,640	68,250	68,880	69,540	70,220	70,910	71,620	72,340											40
41	67,710	68,250	68,800	69,370	69,960	70,580	71,220	71,860	72,520	73,200	73,880											41
42	71,180	71,750	72,320	72,920	73,540	74,180	74,840	75,520	76,200	76,900	77,610											42
43	74,660	75,250	75,850	76,470	77,120	77,790	78,470	79,170	79,880	80,600	81,330											43
44	78,130	78,750	79,370	80,020	80,700	81,390	82,100	82,820	83,560	84,300	85,060											44
45	81,610	82,250	82,900	83,570	84,270	84,990	85,730	86,470	87,240	88,010	88,790											45
46	85,080	85,750	86,430	87,120	87,850	88,590	89,350	90,130	90,910	91,710	92,520											46
47	88,560	89,250	89,950	90,680	91,430	92,200	92,980	93,780	94,590	95,410	96,250											47
48	92,030	92,750	93,480	94,230	95,000	95,800	96,610	97,430	98,270	99,120	99,970											48
49	95,510	96,250	97,000	97,780	98,580	99,400	100,200	101,100	101,900	102,800	103,700											49
50	99,570	100,300	101,000	101,700	102,500	103,200	104,000	104,800	105,600	106,400	107,200											50
51	103,000	103,800	104,500	105,300	106,000	106,800	107,600	108,500	109,300	110,100	111,000											51
52	106,500	107,300	108,000	108,800	109,600	110,400	111,300	112,100	113,000	113,800	114,700											52
53	110,000	110,800	111,600	112,400	113,200	114,000	114,900	115,800	116,600	117,500	118,400											53
54	113,500	114,300	115,100	115,900	116,800	117,600	118,500	119,400	120,300	121,200	122,100											54
55	116,900	117,800	118,600	119,500	120,300	121,200	122,100	123,100	124,000	124,900	125,900											55
56	120,400	121,200	122,100	122,900	123,800	124,600	125,500	126,400	127,200	128,100	128,900											56
57	123,800	124,700	125,600	126,500	127,400	128,200	129,100	130,000	130,900	131,800	132,700											57
58	130,800	131,800	132,900	133,900	134,900	136,000	137,000	138,100	139,100	140,100	141,200											58
59	137,800	139,000	140,200	141,300	142,500	143,700	144,900	146,100	147,300	148,500	149,700											59
60	144,800	146,100	147,400	148,800	150,100	151,400	152,800	154,200	155,500	156,900	158,200											60
61	151,800	153,200	154,700	156,200	157,700	159,200	160,700	162,200	163,700	165,200	166,800											61
62	158,700	160,400	162,000	163,600	165,300	166,900	168,600	170,200	171,900	173,600	175,300											62
63	165,700	167,500	169,300	171,000	172,800	174,600	176,500	178,300	180,100	182,000	183,800											63
64	172,700	174,600	176,500	178,500	180,400	182,400	184,400	186,300	188,300	190,300	192,300											64
65	179,700	181,800	183,800	185,900	188,000	190,100	192,200	194,400	196,500	198,700	200,900											65
66	183,800	185,800	187,800	189,800	191,900	193,900	196,000	198,100	200,200	202,300	204,400											66
67	187,200	189,300	191,300	193,400	195,500	197,500	199,600	201,800	203,900	206,000	208,100											67
68	194,200	196,400	198,600	200,800	203,000	205,300	207,500	209,800	212,100	214,400	216,600											68
69	201,200	203,500	205,900	208,200	210,600	213,000	215,400	217,900	220,300	222,700	225,200											69
70	208,200	210,700	213,200	215,700	218,200	220,800	223,300	225,900	228,500	231,100	233,700											70
71	215,200	217,800	220,400	223,100	225,800	228,500	231,200	233,900	236,700	239,400	242,200											71
72	222,200	224,900	227,700	230,500	233,400	236,200	239,100	242,000	244,900	247,800	250,700											72
73	232,600	235,600	238,500	241,500	244,500	247,600	250,600	253,700	256,800	259,900	263,000											73
74	243,100	246,200	249,300	252,500	255,700	258,900	262,100	265,400	268,700	271,900	275,200											74
75	250,000	253,300	256,600	259,900	263,200	266,600	270,000	273,400	276,900	280,300	283,800											75
77	251,600	254,800	257,900	261,100	264,200	267,500	270,700	273,900	277,200	280,500	283,800											77
78	258,600	261,900	265,200	268,500	271,800	275,200	278,600	282,000	285,400	288,900	292,300											78
79	266,200	269,400	272,700	276,000	279,300	282,600	286,000	289,400	292,700	296,200	299,600											79
80	273,200	276,600	280,000	283,400	286,900	290,400	293,900	297,400	301,000	304,500	308,100											80
82	274,800	278,000	281,300	284,500	287,800	291,200	294,500	297,900	301,300	304,700	308,100											82
83	281,700	285,100	288,500	292,000	295,400	298,900	302,400	306,000	309,500	313,100	316,600											83
84	296,300	299,800	303,300	306,900	310,500	314,100	317,700	321,400	325,000	328,700	332,400											84

MARCH 2004

HEADWATER 598 to 602
TAILWATER 578.51 to 579.50

GUNTERSVILLE DAM
SPILLWAY DISCHARGE
IN CUBIC FEET PER SECOND

GATE ARRANGEMENT	HEADWATER ELEVATION																				GATE ARRANGEMENT
	598.0	598.2	598.4	598.6	598.8	599.0	599.2	599.4	599.6	599.8	600.0	600.2	600.4	600.6	600.8	601.0	601.2	601.4	601.6	601.8	602.0	
86	304, 800	308, 400	311, 900	315, 400	319, 000	322, 600	326, 300	329, 900	333, 600	337, 300	341, 000											86
87	319, 400	323, 000	326, 700	330, 300	334, 100	337, 800	341, 600	345, 300	349, 100	352, 900	356, 700											87
89	328, 000	331, 600	335, 200	338, 900	342, 600	346, 400	350, 100	353, 900	357, 700	361, 500	365, 300											89
90	342, 500	346, 200	350, 000	353, 800	357, 700	361, 500	365, 400	369, 300	373, 200	377, 100	381, 100											90
92	351, 100	354, 800	358, 600	362, 400	366, 200	370, 100	374, 000	377, 800	381, 800	385, 700	389, 600											92
93	365, 600	369, 500	373, 400	377, 300	381, 300	385, 200	389, 200	393, 300	397, 300	401, 300	405, 400											93
95	375, 800	379, 700	383, 500	387, 400	391, 300	395, 300	399, 200	403, 200	407, 200	411, 200	415, 200											95
96	390, 300	394, 300	398, 300	402, 300	406, 400	410, 400	414, 500	418, 600	422, 700	426, 900	431, 000											96
98	400, 600	404, 500	408, 500	412, 500	416, 500	420, 500	424, 500	428, 600	432, 600	436, 700	440, 800											98
99	415, 100	419, 200	423, 300	427, 400	431, 500	435, 600	439, 800	444, 000	448, 200	452, 400	456, 600											99
101	425, 300	429, 400	433, 400	437, 500	441, 600	445, 700	449, 800	453, 900	458, 100	462, 200	466, 400											101
102	439, 900	444, 000	448, 200	452, 400	456, 600	460, 800	465, 100	469, 400	473, 600													102
104	450, 100	454, 200	458, 400	462, 500	466, 700	470, 900	475, 100															104
105	464, 600	468, 900	473, 200																			105
106	466, 500	470, 700	475, 000																			106

HEADWATER 598 to 602
TAILWATER 578.51 to 579.50

MARCH 2004

GUNTERSVILLE DAM
SPILLWAY DISCHARGE
IN CUBIC FEET PER SECOND

GATE ARRANGEMENT	HEADWATER ELEVATION																				GATE ARRANGEMENT
	590.0	590.2	590.4	590.6	590.8	591.0	591.2	591.4	591.6	591.8	592.0	592.2	592.4	592.6	592.8	593.0	593.2	593.4	593.6	593.8	594.0	
44																		64,710	65,200	65,690	66,180	44
45													64,880	65,420	65,950	66,490	67,010	67,540	68,060	68,580	69,090	45
46								64,660	65,250	65,830	66,410	66,990	67,560	68,130	68,700	69,260	69,820	70,370	70,920	71,470	72,010	46
47				64,790	65,390	65,990	66,590	67,190	67,820	68,430	69,040	69,650	70,250	70,850	71,440	72,030	72,620	73,200	73,780	74,360	74,930	47
48	65,290	65,940	66,580	67,220	67,850	68,470	69,090	69,730	70,390	71,030	71,670	72,300	72,940	73,570	74,190	74,810	75,420	76,030	76,640	77,240	77,840	48
49	67,640	68,320	68,990	69,650	70,310	70,960	71,600	72,270	72,960	73,620	74,300	74,960	75,620	76,280	76,930	77,580	78,230	78,870	79,500	80,130	80,760	49
50	71,070	71,780	72,470	73,170	73,860	74,540	75,210	75,910	76,630	77,330	78,030	78,730	79,420	80,110	80,790	81,460	82,140	82,810	83,470	84,130	84,780	50
51	73,420	74,150	74,880	75,600	76,310	77,020	77,720	78,440	79,200	79,930	80,660	81,380	82,110	82,820	83,530	84,240	84,940	85,640	86,330	87,020	87,700	51
52	75,770	76,530	77,280	78,030	78,770	79,500	80,230	80,980	81,760	82,520	83,290	84,040	84,790	85,540	86,280	87,010	87,740	88,470	89,190	89,910	90,620	52
53	78,120	78,910	79,690	80,460	81,230	81,980	82,730	83,520	84,330	85,120	85,910	86,700	87,480	88,250	89,020	89,790	90,550	91,300	92,050	92,790	93,530	53
54	80,470	81,280	82,090	82,890	83,680	84,470	85,240	86,050	86,900	87,720	88,540	89,360	90,170	90,970	91,770	92,560	93,350	94,130	94,910	95,680	96,450	54
55	82,810	83,660	84,500	85,320	86,140	86,950	87,750	88,590	89,470	90,320	91,170	92,010	92,850	93,690	94,510	95,340	96,150	96,960	97,770	98,570	99,370	55
56	85,330	86,190	87,050	87,900	88,730	89,560	90,380	91,240	92,140	93,030	93,900	94,770	95,630	96,490	97,340	98,180	99,020	99,860	100,700	101,500	102,300	56
57	87,680	88,570	89,450	90,330	91,190	92,050	92,890	93,780	94,710	95,630	96,530	97,430	98,320	99,200	100,100	101,000	101,800	102,700	103,500	104,400	105,200	57
58	89,560	90,560	91,550	92,530	93,510	94,480	95,440	96,440	97,480	98,510	99,530	100,500	101,600	102,600	103,600	104,500	105,500	106,500	107,500	108,500	109,400	58
59	91,440	92,540	93,640	94,740	95,820	96,910	97,980	99,100	100,200	101,400	102,500	103,700	104,800	105,900	107,000	108,100	109,200	110,300	111,400	112,500	113,600	59
60	93,320	94,530	95,740	96,940	98,140	99,340	100,500	101,800	103,000	104,300	105,500	106,800	108,000	109,300	110,500	111,700	113,000	114,200	115,400	116,600	117,800	60
61	95,200	96,520	97,830	99,150	100,500	101,800	103,100	104,400	105,800	107,200	108,500	109,900	111,300	112,600	114,000	115,300	116,700	118,000	119,400	120,700	122,000	61
62	97,080	98,500	99,930	101,400	102,800	104,200	105,600	107,100	108,600	110,000	111,500	113,000	114,500	116,000	117,400	118,900	120,400	121,800	123,300	124,800	126,200	62
63	98,960	100,500	102,000	103,600	105,100	106,600	108,200	109,700	111,300	112,900	114,500	116,100	117,700	119,300	120,900	122,500	124,100	125,700	127,300	128,800	130,400	63
64	100,800	102,500	104,100	105,800	107,400	109,100	110,700	112,400	114,100	115,800	117,500	119,200	121,000	122,700	124,400	126,100	127,800	129,500	131,200	132,900	134,600	64
65	102,700	104,500	106,200	108,000	109,700	111,500	113,300	115,000	116,900	118,700	120,500	122,300	124,200	126,000	127,900	129,700	131,500	133,300	135,200	137,000	138,800	65
66	106,100	107,900	109,700	111,500	113,300	115,100	116,900	118,700	120,500	122,400	124,200	126,100	128,000	129,900	131,700	133,600	135,400	137,300	139,100	141,000	142,900	66
67	108,500	110,300	112,100	113,900	115,700	117,500	119,400	121,200	123,100	125,000	126,900	128,800	130,700	132,600	134,500	136,300	138,200	140,100	142,000	143,900	145,800	67
68	110,400	112,300	114,200	116,100	118,000	120,000	121,900	123,900	125,900	127,900	129,900	131,900	133,900	135,900	137,900	139,900	141,900	143,900	145,900	148,000	150,000	68
69	112,300	114,300	116,300	118,300	120,400	122,400	124,500	126,500	128,600	130,800	132,900	135,000	137,100	139,300	141,400	143,500	145,600	147,800	149,900	152,000	154,200	69
70	114,100	116,300	118,400	120,500	122,700	124,800	127,000	129,200	131,400	133,600	135,900	138,100	140,400	142,600	144,900	147,100	149,300	151,600	153,800	156,100	158,400	70
71	116,000	118,200	120,500	122,700	125,000	127,300	129,600	131,900	134,200	136,500	138,900	141,200	143,600	146,000	148,300	150,700	153,000	155,400	157,800	160,200	162,600	71
72	117,900	120,200	122,600	124,900	127,300	129,700	132,100	134,500	137,000	139,400	141,900	144,300	146,800	149,300	151,800	154,300	156,800	159,200	161,700	164,300	166,800	72
73	122,100	124,600	127,100	129,600	132,100	134,600	137,100	139,700	142,300	144,900	147,500	150,100	152,700	155,400	158,000	160,600	163,300	165,900	168,600	171,200	173,900	73
74	126,400	129,000	131,600	134,200	136,900	139,500	142,200	144,900	147,600	150,400	153,100	155,900	158,700	161,500	164,200	167,000	169,800	172,600	175,400	178,200	181,000	74
75	128,200	130,900	133,700	136,400	139,200	142,000	144,700	147,600	150,400	153,200	156,100	159,000	161,900	164,800	167,700	170,600	173,500	176,400	179,300	182,300	185,200	75
76	130,700	133,200	135,700	138,300	140,800	143,400	146,000	148,600	151,200	153,800												76
77	136,400	139,000	141,600	144,200	146,800	149,500	152,100	154,800	157,400	160,100	162,800	165,600	168,300	171,100	173,800	176,500	179,200	182,000	184,700	187,500	190,300	77
78	138,300	141,000	143,700	146,400	149,100	151,900	154,600	157,400	160,200	163,000	165,800	168,700	171,500	174,400	177,300	180,100	182,900	185,800	188,700	191,600	194,500	78
79	144,100	146,800	149,600	152,400	155,200	158,000	160,800	163,600	166,500	169,300	172,200	175,100	178,000	180,900	183,800	186,700	189,700	192,600	195,500	198,500	201,400	79
80	146,000	148,800	151,700	154,600	157,500	160,400	163,300	166,300	169,200	172,200	175,200	178,200	181,300	184,300	187,300	190,300	193,400	196,400	199,500	202,500	205,600	80
81	148,400	151,100	153,700	156,400	159,100	161,800	164,500	167,300	170,000	172,800												81
82	154,200	156,900	159,600	162,400	165,100	167,900	170,700	173,500	176,300	179,100	181,900	184,800	187,700	190,500	193,400	196,200	199,100	202,000	204,900	207,800	210,700	82
83	156,100	158,900	161,700	164,600	167,400	170,300	173,200	176,100	179,000	182,000	184,900	187,900	190,900	193,900	196,900	199,800	202,800	205,800	208,800	211,800	214,900	83
84	163,700	166,700	169,700	172,700	175,800	178,800	181,900	185,000	188,100	191,200	194,300	197,400	200,600	203,800	206,900	210,100	213,200	216,400	219,600	222,800	226,000	84
85	166,100	168,900	171,800	174,600	177,400	180,300	183,100	186,000	188,900	191,800												85
86	173,800	176,800	179,700	182,700	185,700	188,800	191,800	194,800	197,900	200,900	204,000	207,100	210,200	213,400	216,500	219,600	222,700	225,800	229,000	232,100	235,300	86
87	181,500	184,600	187,700	190,900	194,100	197,200	200,400	203,700	206,900	210,100	213,400	216,700	219,900	223,300	226,500	229,800	233,100	236,400	239,700	243,100	246,400	87
88	183,900	186,800	189,800	192,700	195,700	198,700	201,700	204,700	207,700	210,700												88
89	191,500	194,700	197,800	200,900	204,000	207,200	210,300	213,500	216,700	219,900	223,100	226,300	229,600	232,800	236,100	239,300	242,600	245,800	249,100	252,400	255,700	89
90	199,200	202,500	205,800	209,100	212,400	215,700	219,000	222,400	225,700	229,100	232,500	235,900	239,300	242,700	246,100	249,600	253,000	256,400	259,900	263,300	266,800	90
92	209,300	212,500	215,800	219,100	222,300	225,600	228,900	232,200	235,500	238,900	242,200	245,600	248,900	252,300	255,700	259,000	262,400	265,800	269,200	272,600	276,100	92
93	216,900	220,400	223,800	227,200	230,700	234,100	237,600	241,000	244,500	248,000	251,600	255,100	258,600	262,200	265,800	269,300	272,800	276,400	280,000	283,600	287,200	93
95	229,400	232,800	236,100	239,500	243,000	246,400	249,800	253,200	256,700	260,100	263,600	267,000	270,500	274,000	277,500	281,000	284,500	288,000	291,500	295,100	298,600	95
96	237,000	240,600	244,100	247,700	251,300	254,900	258,400	262,100	265,700	269,300	272,900	276,600	280,200	283,900	287,600	291,200	294,900	298,600	302,300	306,000	309,800	96
98	249,400	253,000	256,500	260,000	263,600	267,100	270,700	274,200	277,800	281,400	284,900	288,500	292,100	295,800	299,400	303,000	306,600	310,200	313,800	317,500	321,200	98
99	257,100	260,800	264,500	268,200	271,900	275,600	279,300	283,100	286,800	290,500	294,300	298,100	301,900	305,600	309,400	313,200	317,000	320,800	324,600	328,500	332,300	99
101	269,500	273,200	276,900	280,500	284,200	287,900	291,500	295,200	298,900	302,600	306,300	310,000	313,700	317,500	321,200	324,900	328,600	332,400	336,200	339,900	343,700	101
102	277,200	281,000	284,800	288,700	292,500	296,400	300,200	304,100	307,900	311,800	315,700	319,600	323,500	327,400	331,300	335,200	339,100	343,000	346,900	350,900	354,900	102

MARCH 2004

HEADWATER 590 to 594
TAILWATER 579.51 to 580.50

GUNTERSVILLE DAM
SPILLWAY DISCHARGE
IN CUBIC FEET PER SECOND

GATE ARRANGEMENT	HEADWATER ELEVATION																				GATE ARRANGEMENT
	590.0	590.2	590.4	590.6	590.8	591.0	591.2	591.4	591.6	591.8	592.0	592.2	592.4	592.6	592.8	593.0	593.2	593.4	593.6	593.8	594.0	
104	289,600	293,400	297,200	301,000	304,800	308,600	312,400	316,200	320,000	323,900	327,700	331,500	335,300	339,200	343,000	346,900	350,700	354,600	358,500	362,400	366,300	104
105	297,300	301,200	305,200	309,200	313,100	317,100	321,100	325,100	329,000	333,000	337,000	341,000	345,100	349,100	353,100	357,100	361,100	365,200	369,300	373,300	377,400	105
106	302,700	306,600	310,500	314,400	318,300	322,200	326,000	329,900	333,800	337,700	341,500	345,400	349,300	353,200	357,100	361,100	365,000	368,900	372,900	376,800	380,800	106
107	318,100	322,300	326,500	330,700	334,900	339,100	343,400	347,600	351,800	356,000	360,300	364,500	368,800	373,000	377,300	381,600	385,800	390,100	394,400	398,800	403,100	107
108	329,300	333,500	337,700	341,900	346,100	350,200	354,400	358,600	362,800	366,900	371,100	375,300	379,500	383,700	387,900	392,200	396,400	400,600	404,900	409,100	413,400	108
109	337,000	341,300	345,700	350,000	354,400	358,700	363,100	367,400	371,800	376,100	380,500	384,900	389,200	393,600	398,000	402,400	406,800	411,200	415,700	420,100	424,600	109
110	348,200	352,600	356,900	361,200	365,500	369,800	374,100	378,400	382,700	387,000	391,400	395,700	400,000	404,300	408,700	413,000	417,300	421,700	426,100	430,500	434,900	110
111	355,900	360,400	364,900	369,400	373,800	378,300	382,800	387,300	391,800	396,200	400,700	405,200	409,700	414,200	418,700	423,200	427,800	432,300	436,900	441,500	446,000	111
112	366,100	370,500	375,000	379,400	383,800	388,200	392,600	397,000	401,400	405,800	410,200	414,600	419,100	423,500	427,900	432,300	436,800	441,200	445,700	450,200	454,700	112
113	382,400	387,200	392,000	396,800	401,600	406,400	411,200	416,000	420,700	425,500	430,300	435,100	439,900	444,700	449,500	454,300	459,200	464,000	468,900	473,800	478,700	113
114	393,700	398,500	403,200	408,000	412,800	417,500	422,200	427,000	431,700	436,400	441,200	445,900	450,700	455,400	460,200	464,900	469,700	474,500	479,300	484,200	489,000	114
115	401,400	406,300	411,200	416,200	421,100	426,000	430,900	435,800	440,700	445,600	450,500	455,500	460,400	465,300	470,200	475,200	480,100	485,100	490,100			115
116	411,600	416,500	421,300	426,200	431,100	435,900	440,700	445,600	450,400	455,200	460,100	464,900	469,700	474,600	479,400	484,300	489,100					116
117	420,300	425,300	430,400	435,500	440,500	445,600	450,600	455,700	460,700	465,700	470,800	475,800	480,900	485,900	491,000							117
118	438,100	443,300	448,500	453,700	458,800	464,000	469,100	474,300	479,400	484,500	489,600											118
119	457,000	462,400	467,700	473,000	478,300	483,600	488,900															119
120	474,900	480,400	485,800	491,200																		120

HEADWATER 590 to 594
TAILWATER 579.51 to 580.50

MARCH 2004

GUNTERSVILLE DAM
SPILLWAY DISCHARGE
IN CUBIC FEET PER SECOND

GATE ARRANGEMENT	HEADWATER ELEVATION																				GATE ARRANGEMENT
	594.0	594.2	594.4	594.6	594.8	595.0	595.2	595.4	595.6	595.8	596.0	596.2	596.4	596.6	596.8	597.0	597.2	597.4	597.6	597.8	598.0	
40																					64,910	40
41																		64,970	65,510	66,050	66,590	41
42											64,650	65,150	65,660	66,180	66,710	67,250	67,800	68,350	68,910	69,480	70,050	42
43					65,060	65,500	65,940	66,380	66,840	67,330	67,850	68,370	68,910	69,460	70,010	70,580	71,150	71,730	72,320	72,910	73,500	43
44	66,180	66,660	67,140	67,610	68,090	68,560	69,030	69,490	69,980	70,500	71,040	71,590	72,160	72,730	73,310	73,900	74,500	75,110	75,720	76,340	76,960	44
45	69,090	69,600	70,110	70,620	71,120	71,610	72,110	72,600	73,120	73,660	74,230	74,810	75,400	76,000	76,610	77,230	77,850	78,490	79,120	79,770	80,420	45
46	72,010	72,550	73,080	73,620	74,140	74,670	75,190	75,710	76,250	76,830	77,420	78,030	78,650	79,270	79,910	80,560	81,210	81,860	82,530	83,200	83,870	46
47	74,930	75,490	76,060	76,620	77,170	77,730	78,280	78,820	79,390	79,990	80,610	81,250	81,890	82,550	83,210	83,880	84,560	85,240	85,930	86,630	87,330	47
48	77,840	78,440	79,030	79,620	80,200	80,780	81,360	81,930	82,530	83,160	83,810	84,470	85,140	85,820	86,510	87,210	87,910	88,620	89,340	90,060	90,790	48
49	80,760	81,380	82,000	82,620	83,230	83,840	84,440	85,040	85,670	86,320	87,000	87,680	88,380	89,090	89,810	90,530	91,260	92,000	92,740	93,490	94,250	49
50	84,780	85,440	86,080	86,730	87,370	88,000	88,630	89,260	89,900	90,560	91,240	91,920	92,600	93,300	93,990	94,690	95,390	96,100	96,810	97,520	98,240	50
51	87,700	88,380	89,060	89,730	90,390	91,060	91,720	92,370	93,040	93,730	94,430	95,140	95,850	96,570	97,290	98,020	98,750	99,480	100,200	101,000	101,700	51
52	90,620	91,330	92,030	92,730	93,420	94,110	94,800	95,480	96,180	96,890	97,620	98,350	99,090	99,840	100,600	101,300	102,100	102,900	103,600	104,400	105,100	52
53	93,530	94,270	95,000	95,730	96,450	97,170	97,880	98,590	99,320	100,100	100,800	101,600	102,300	103,100	103,900	104,700	105,400	106,200	107,000	107,800	108,600	53
54	96,450	97,210	97,970	98,730	99,480	100,200	101,000	101,700	102,500	103,200	104,000	104,800	105,600	106,400	107,200	108,000	108,800	109,600	110,400	111,200	112,100	54
55	99,370	100,200	100,900	101,700	102,500	103,300	104,000	104,800	105,600	106,400	107,200	108,000	108,800	109,700	110,500	111,300	112,200	113,000	113,800	114,700	115,500	55
56	102,300	103,100	103,900	104,800	105,500	106,300	107,100	107,900	108,700	109,500	110,400	111,200	112,000	112,900	113,700	114,600	115,400	116,300	117,200	118,000	118,900	56
57	105,200	106,100	106,900	107,800	108,600	109,400	110,200	111,000	111,900	112,700	113,600	114,400	115,300	116,200	117,000	117,900	118,800	119,700	120,600	121,500	122,300	57
58	109,400	110,400	111,400	112,300	113,300	114,200	115,200	116,100	117,100	118,100	119,100	120,100	121,100	122,100	123,100	124,100	125,100	126,200	127,200	128,200	129,300	58
59	113,600	114,700	115,800	116,900	118,000	119,100	120,200	121,200	122,300	123,400	124,600	125,700	126,800	128,000	129,200	130,300	131,500	132,600	133,800	135,000	136,200	59
60	117,800	119,100	120,300	121,500	122,700	123,900	125,100	126,300	127,600	128,800	130,100	131,400	132,600	133,900	135,200	136,500	137,800	139,100	140,400	141,800	143,100	60
61	122,000	123,400	124,700	126,100	127,400	128,800	130,100	131,400	132,800	134,200	135,600	137,000	138,400	139,800	141,300	142,700	144,200	145,600	147,100	148,500	150,000	61
62	126,200	127,700	129,200	130,700	132,100	133,600	135,100	136,500	138,000	139,600	141,100	142,600	144,200	145,800	147,300	148,900	150,500	152,100	153,700	155,300	156,900	62
63	130,400	132,000	133,600	135,200	136,800	138,400	140,000	141,700	143,300	144,900	146,600	148,300	150,000	151,700	153,400	155,100	156,800	158,600	160,300	162,100	163,900	63
64	134,600	136,400	138,100	139,800	141,500	143,300	145,000	146,800	148,500	150,300	152,100	153,900	155,800	157,600	159,500	161,300	163,200	165,100	167,000	168,900	170,800	64
65	138,800	140,700	142,500	144,400	146,300	148,100	150,000	151,900	153,800	155,700	157,600	159,600	161,500	163,500	165,500	167,500	169,500	171,600	173,600	175,600	177,700	65
66	142,900	144,700	146,600	148,500	150,400	152,300	154,200	156,100	158,000	159,900	161,900	163,800	165,800	167,700	169,700	171,700	173,700	175,700	177,700	179,700	181,700	66
67	145,800	147,700	149,600	151,500	153,400	155,300	157,300	159,200	161,100	163,100	165,000	167,000	169,000	171,000	173,000	175,000	177,000	179,000	181,100	183,100	185,100	67
68	150,000	152,000	154,000	156,100	158,100	160,200	162,200	164,300	166,400	168,500	170,600	172,700	174,800	176,900	179,100	181,200	183,400	185,500	187,700	189,900	192,100	68
69	154,200	156,300	158,500	160,700	162,800	165,000	167,200	169,400	171,600	173,800	176,100	178,300	180,600	182,800	185,100	187,400	189,700	192,000	194,300	196,600	199,000	69
70	158,400	160,700	162,900	165,200	167,500	169,900	172,200	174,500	176,800	179,200	181,600	184,000	186,300	188,800	191,200	193,600	196,000	198,500	200,900	203,400	205,900	70
71	162,600	165,000	167,400	169,800	172,300	174,700	177,100	179,600	182,100	184,600	187,100	189,600	192,100	194,700	197,200	199,800	202,400	205,000	207,600	210,200	212,800	71
72	166,800	169,300	171,800	174,400	177,000	179,500	182,100	184,700	187,300	189,900	192,600	195,200	197,900	200,600	203,300	206,000	208,700	211,500	214,200	217,000	219,700	72
73	173,900	176,600	179,300	182,000	184,700	187,400	190,200	192,900	195,700	198,500	201,300	204,100	206,900	209,800	212,600	215,500	218,400	221,300	224,200	227,200	230,100	73
74	181,000	183,800	186,700	189,600	192,400	195,300	198,200	201,100	204,100	207,000	210,000	213,000	216,000	219,000	222,000	225,100	228,100	231,200	234,300	237,400	240,500	74
75	185,200	188,200	191,200	194,100	197,100	200,200	203,200	206,200	209,300	212,400	215,500	218,600	221,700	224,900	228,100	231,300	234,500	237,700	240,900	244,100	247,400	75
77	190,300	193,100	195,900	198,700	201,500	204,300	207,200	210,000	212,900	215,800	218,800	221,700	224,700	227,700	230,700	233,800	236,800	239,900	243,000	246,100	249,200	77
78	194,500	197,400	200,300	203,300	206,200	209,200	212,200	215,100	218,200	221,200	224,300	227,400	230,500	233,600	236,800	240,000	243,200	246,400	249,600	252,800	256,100	78
79	201,400	204,400	207,400	210,400	213,400	216,400	219,400	222,500	225,500	228,600	231,700	234,800	238,000	241,100	244,300	247,500	250,600	253,800	257,100	260,300	263,500	79
80	205,600	208,700	211,800	214,900	218,100	221,200	224,400	227,600	230,800	234,000	237,200	240,500	243,800	247,000	250,300	253,700	257,000	260,300	263,700	267,100	270,500	80
82	210,700	213,600	216,500	219,500	222,400	225,400	228,400	231,400	234,400	237,500	240,500	243,600	246,700	249,900	253,000	256,200	259,300	262,500	265,800	269,000	272,200	82
83	214,900	217,900	221,000	224,100	227,100	230,200	233,400	236,500	239,600	242,800	246,000	249,300	252,500	255,800	259,100	262,400	265,700	269,000	272,400	275,800	279,100	83
84	226,000	229,200	232,500	235,800	239,000	242,300	245,600	248,900	252,200	255,600	259,000	262,400	265,800	269,200	272,600	276,100	279,500	283,000	286,500	290,000	293,500	84
86	235,300	238,500	241,700	244,900	248,100	251,300	254,600	257,800	261,100	264,400	267,800	271,100	274,500	277,900	281,300	284,800	288,200	291,700	295,200	298,700	302,200	86
87	246,400	249,800	253,200	256,600	260,000	263,400	266,800	270,300	273,700	277,200	280,700	284,200	287,800	291,300	294,900	298,500	302,000	305,700	309,300	312,900	316,600	87
89	255,700	259,000	262,300	265,700	269,000	272,400	275,800	279,200	282,600	286,000	289,500	293,000	296,500	300,100	303,600	307,200	310,800	314,400	318,000	321,600	325,200	89
90	266,800	270,300	273,800	277,400	280,900	284,500	288,000	291,600	295,200	298,800	302,400	306,100	309,800	313,400	317,100	320,900	324,600	328,300	332,100	335,800	339,600	90
92	276,100	279,500	283,000	286,500	290,000	293,500	297,000	300,500	304,100	307,600	311,200	314,900	318,500	322,200	325,900	329,600	333,300	337,000	340,800	344,500	348,300	92
93	287,200	290,900	294,500	298,200	301,800	305,500	309,200	312,900	316,700	320,400	324,200	328,000	331,800	335,600	339,400	343,300	347,100	351,000	354,900	358,800	362,700	93
95	298,600	302,200	305,800	309,400	313,000	316,600	320,200	323,900	327,500	331,200	335,000	338,700	342,400	346,200	350,000	353,800	357,600	361,500	365,300	369,200	373,100	95
96	309,800	313,500	317,300	321,100	324,900	328,700	332,500	336,300	340,100	344,000	347,900	351,800	355,700	359,600	363,600	367,500	371,500	375,400	379,400	383,400	387,400	96
98	321,200	324,900	328,600	332,300	336,000	339,700	343,500	347,200	351,000	354,800	358,700	362,500	366,400	370,300	374,200	378,100	382,000	385,900	389,900	393,800	397,800	98
99	332,300	336,200	340,100	344,000	347,900	351,800	355,700	359,700	363,600	367,600	371,600	375,600	379,600	383,600	387,700	391,700	395,800	399,900	404,000	408,100	412,200	99
101	343,700	347,500	351,400	355,200	359,000	362,900	366,700	370,600	374,500	378,400	382,400	386,300	390,300	394,300	398,300	402,300	406,300	410,400	414,400	418,500	422,600	101
102	354,900	358,900	362,900	366,900	370,900	374,900	379,000	383,000	387,100	391,200	395,300	399,400	403,500	407,700	411,800	416,000	420,200	424,300	428,500	432,700	436,900	102

MARCH 2004

HEADWATER 594 to 598
TAILWATER 579.51 to 580.50

GUNTERSVILLE DAM
SPILLWAY DISCHARGE
IN CUBIC FEET PER SECOND

GATE ARRANGEMENT	HEADWATER ELEVATION																					GATE ARRANGEMENT
	594.0	594.2	594.4	594.6	594.8	595.0	595.2	595.4	595.6	595.8	596.0	596.2	596.4	596.6	596.8	597.0	597.2	597.4	597.6	597.8	598.0	
104	366, 300	370, 200	374, 100	378, 100	382, 000	386, 000	390, 000	394, 000	398, 000	402, 000	406, 100	410, 100	414, 200	418, 300	422, 400	426, 600	430, 700	434, 800	439, 000	443, 200	447, 300	104
105	377, 400	381, 500	385, 600	389, 800	393, 900	398, 100	402, 200	406, 400	410, 600	414, 800	419, 000	423, 200	427, 500	431, 700	436, 000	440, 200	444, 500	448, 800	453, 100	457, 400	461, 700	105
106	380, 800	384, 800	388, 800	392, 800	396, 900	400, 900	404, 900	409, 000	413, 100	417, 200	421, 300	425, 500	429, 700	433, 900	438, 200	442, 400	446, 600	450, 900	455, 200	459, 500	463, 800	106
107	403, 100	407, 500	411, 800	416, 200	420, 600	425, 000	429, 400	433, 800	438, 300	442, 700	447, 200	451, 700	456, 200	460, 700	465, 200	469, 800	474, 300	478, 800	483, 400	487, 900	492, 500	107
108	413, 400	417, 700	422, 000	426, 400	430, 700	435, 000	439, 400	443, 800	448, 200	452, 600	457, 000	461, 500	465, 900	470, 400	474, 900	479, 400	483, 900	488, 400				108
109	424, 600	429, 100	433, 500	438, 100	442, 600	447, 100	451, 600	456, 200	460, 800	465, 300	469, 900	474, 600	479, 200	483, 800	488, 400							109
110	434, 900	439, 300	443, 800	448, 200	452, 700	457, 200	461, 600	466, 100	470, 600	475, 200	479, 700	484, 300	488, 900									110
111	446, 000	450, 700	455, 300	459, 900	464, 600	469, 200	473, 900	478, 500	483, 200	487, 900												111
112	454, 700	459, 200	463, 700	468, 300	472, 800	477, 400	481, 900	486, 500	491, 100													112
113	478, 700	483, 600	488, 500																			113
114	489, 000																					114

HEADWATER 594 to 598
TAILWATER 579.51 to 580.50

MARCH 2004

GUNTERSVILLE DAM

SPILLWAY DISCHARGE

IN CUBIC FEET PER SECOND

GATE ARRANGEMENT	HEADWATER ELEVATION																					GATE ARRANGEMENT
	598.0	598.2	598.4	598.6	598.8	599.0	599.2	599.4	599.6	599.8	600.0	600.2	600.4	600.6	600.8	601.0	601.2	601.4	601.6	601.8	602.0	
37										65, 120	65, 940											37
38								65, 150	65, 900	66, 670	67, 450											38
39					65, 080	65, 760	66, 460	67, 170	67, 900	68, 640	69, 390											39
40	64, 910	65, 450	65, 990	66, 570	67, 190	67, 840	68, 500	69, 190	69, 890	70, 610	71, 340											40
41	66, 590	67, 140	67, 700	68, 280	68, 880	69, 510	70, 150	70, 810	71, 480	72, 160	72, 850											41
42	70, 050	70, 620	71, 210	71, 810	72, 440	73, 100	73, 760	74, 450	75, 140	75, 850	76, 560											42
43	73, 500	74, 110	74, 710	75, 350	76, 000	76, 680	77, 380	78, 080	78, 800	79, 530	80, 280											43
44	76, 960	77, 590	78, 220	78, 880	79, 570	80, 270	80, 990	81, 720	82, 470	83, 220	83, 990											44
45	80, 420	81, 070	81, 730	82, 410	83, 130	83, 850	84, 600	85, 360	86, 130	86, 910	87, 700											45
46	83, 870	84, 560	85, 240	85, 950	86, 690	87, 440	88, 210	89, 000	89, 790	90, 600	91, 420											46
47	87, 330	88, 040	88, 750	89, 480	90, 250	91, 030	91, 820	92, 630	93, 450	94, 290	95, 130											47
48	90, 790	91, 520	92, 260	93, 020	93, 810	94, 610	95, 430	96, 270	97, 120	97, 980	98, 840											48
49	94, 250	95, 000	95, 770	96, 550	97, 370	98, 200	99, 050	99, 910	100, 800	101, 700	102, 600											49
50	98, 240	98, 950	99, 670	100, 400	101, 200	102, 000	102, 700	103, 500	104, 400	105, 200	106, 000											50
51	101, 700	102, 400	103, 200	103, 900	104, 700	105, 500	106, 400	107, 200	108, 000	108, 900	109, 700											51
52	105, 100	105, 900	106, 700	107, 500	108, 300	109, 100	110, 000	110, 800	111, 700	112, 600	113, 400											52
53	108, 600	109, 400	110, 200	111, 000	111, 900	112, 700	113, 600	114, 500	115, 300	116, 200	117, 200											53
54	112, 100	112, 900	113, 700	114, 500	115, 400	116, 300	117, 200	118, 100	119, 000	119, 900	120, 900											54
55	115, 500	116, 400	117, 200	118, 100	119, 000	119, 900	120, 800	121, 700	122, 700	123, 600	124, 600											55
56	118, 900	119, 800	120, 600	121, 500	122, 400	123, 200	124, 100	125, 000	125, 800	126, 700	127, 600											56
57	122, 300	123, 200	124, 100	125, 000	125, 900	126, 800	127, 700	128, 600	129, 500	130, 400	131, 300											57
58	129, 300	130, 300	131, 300	132, 400	133, 400	134, 500	135, 500	136, 600	137, 600	138, 700	139, 800											58
59	136, 200	137, 400	138, 600	139, 700	140, 900	142, 100	143, 400	144, 600	145, 800	147, 000	148, 200											59
60	143, 100	144, 400	145, 800	147, 100	148, 500	149, 800	151, 200	152, 500	153, 900	155, 300	156, 700											60
61	150, 000	151, 500	153, 000	154, 500	156, 000	157, 500	159, 000	160, 500	162, 000	163, 600	165, 100											61
62	156, 900	158, 600	160, 200	161, 800	163, 500	165, 100	166, 800	168, 500	170, 200	171, 900	173, 600											62
63	163, 900	165, 600	167, 400	169, 200	171, 000	172, 800	174, 600	176, 500	178, 300	180, 200	182, 000											63
64	170, 800	172, 700	174, 600	176, 600	178, 500	180, 500	182, 500	184, 400	186, 400	188, 400	190, 500											64
65	177, 700	179, 800	181, 800	183, 900	186, 000	188, 100	190, 300	192, 400	194, 600	196, 700	198, 900											65
66	181, 700	183, 700	185, 700	187, 800	189, 800	191, 900	194, 000	196, 100	198, 200	200, 300	202, 400											66
67	185, 100	187, 200	189, 200	191, 300	193, 400	195, 500	197, 600	199, 700	201, 800	203, 900	206, 100											67
68	192, 100	194, 300	196, 500	198, 700	200, 900	203, 100	205, 400	207, 700	210, 000	212, 200	214, 500											68
69	199, 000	201, 300	203, 700	206, 000	208, 400	210, 800	213, 200	215, 700	218, 100	220, 500	223, 000											69
70	205, 900	208, 400	210, 900	213, 400	215, 900	218, 500	221, 000	223, 600	226, 200	228, 800	231, 400											70
71	212, 800	215, 400	218, 100	220, 800	223, 400	226, 100	228, 900	231, 600	234, 400	237, 100	239, 900											71
72	219, 700	222, 500	225, 300	228, 100	230, 900	233, 800	236, 700	239, 600	242, 500	245, 400	248, 300											72
73	230, 100	233, 100	236, 000	239, 000	242, 000	245, 100	248, 100	251, 200	254, 300	257, 400	260, 500											73
74	240, 500	243, 600	246, 800	249, 900	253, 100	256, 300	259, 600	262, 800	266, 100	269, 400	272, 700											74
75	247, 400	250, 700	254, 000	257, 300	260, 600	264, 000	267, 400	270, 800	274, 200	277, 700	281, 100											75
77	249, 200	252, 300	255, 400	258, 600	261, 800	265, 000	268, 200	271, 500	274, 800	278, 100	281, 400											77
78	256, 100	259, 400	262, 700	266, 000	269, 300	272, 700	276, 100	279, 500	282, 900	286, 300	289, 800											78
79	263, 500	266, 800	270, 100	273, 300	276, 700	280, 000	283, 400	286, 800	290, 100	293, 600	297, 000											79
80	270, 500	273, 900	277, 300	280, 700	284, 200	287, 700	291, 200	294, 700	298, 300	301, 800	305, 400											80
82	272, 200	275, 500	278, 700	282, 000	285, 300	288, 700	292, 100	295, 400	298, 800	302, 300	305, 700											82
83	279, 100	282, 500	286, 000	289, 400	292, 900	296, 400	299, 900	303, 400	307, 000	310, 500	314, 100											83
84	293, 500	297, 000	300, 600	304, 100	307, 700	311, 400	315, 000	318, 700	322, 400	326, 000	329, 700											84
86	302, 200	305, 700	309, 300	312, 800	316, 400	320, 100	323, 700	327, 400	331, 000	334, 700	338, 400											86
87	316, 600	320, 200	323, 900	327, 600	331, 300	335, 100	338, 800	342, 600	346, 400	350, 200	354, 100											87
89	325, 200	328, 900	332, 600	336, 300	340, 000	343, 700	347, 500	351, 300	355, 100	358, 900	362, 800											89
90	339, 600	343, 400	347, 200	351, 000	354, 900	358, 800	362, 700	366, 600	370, 500	374, 400	378, 400											90
92	348, 300	352, 100	355, 900	359, 700	363, 600	367, 400	371, 300	375, 300	379, 200	383, 100	387, 100											92
93	362, 700	366, 600	370, 500	374, 500	378, 400	382, 400	386, 500	390, 500	394, 600	398, 600	402, 700											93
95	373, 100	376, 900	380, 800	384, 800	388, 700	392, 700	396, 700	400, 700	404, 700	408, 700	412, 800											95
96	387, 400	391, 400	395, 500	399, 500	403, 600	407, 700	411, 800	415, 900	420, 100	424, 200	428, 400											96
98	397, 800	401, 800	405, 800	409, 800	413, 800	417, 900	422, 000	426, 100	430, 200	434, 300	438, 400											98

MARCH 2004

HEADWATER 598 to 602
TAILWATER 579.51 to 580.50

GUNTERSVILLE DAM
SPILLWAY DISCHARGE
IN CUBIC FEET PER SECOND

GATE ARRANGEMENT	HEADWATER ELEVATION																				GATE ARRANGEMENT
	598.0	598.2	598.4	598.6	598.8	599.0	599.2	599.4	599.6	599.8	600.0	600.2	600.4	600.6	600.8	601.0	601.2	601.4	601.6	601.8	602.0	
99	412, 200	416, 300	420, 400	424, 600	428, 700	432, 900	437, 100	441, 300	445, 600	449, 800	454, 000											99
101	422, 600	426, 700	430, 800	434, 900	439, 000	443, 100	447, 300	451, 500	455, 700	459, 900	464, 100											101
102	436, 900	441, 200	445, 400	449, 600	453, 900	458, 100	462, 400	466, 700	471, 100	475, 400	479, 700											102
104	447, 300	451, 500	455, 700	459, 900	464, 100	468, 400	472, 600	476, 900	481, 200	485, 500	489, 700											104
105	461, 700	466, 000	470, 300	474, 700	479, 000	483, 400	487, 800	492, 100														105
106	463, 800	468, 100	472, 400	476, 800	481, 100	485, 500	489, 900															106
107	492, 500																					107

HEADWATER 598 to 602
TAILWATER 579.51 to 580.50

MARCH 2004

GUNTERSVILLE DAM
SPILLWAY DISCHARGE
IN CUBIC FEET PER SECOND

GATE ARRANGEMENT	HEADWATER ELEVATION																				GATE ARRANGEMENT
	590.0	590.2	590.4	590.6	590.8	591.0	591.2	591.4	591.6	591.8	592.0	592.2	592.4	592.6	592.8	593.0	593.2	593.4	593.6	593.8	594.0	
49																					79, 240	49
50															79, 090	79, 780	80, 470	81, 150	81, 830	82, 510	83, 180	50
51												79, 600	80, 330	81, 070	81, 790	82, 520	83, 240	83, 950	84, 660	85, 360	86, 060	51
52								79, 070	79, 860	80, 650	81, 430	82, 200	82, 970	83, 740	84, 500	85, 250	86, 000	86, 740	87, 480	88, 220	88, 950	52
53					79, 230	80, 000	80, 760	81, 550	82, 380	83, 200	84, 010	84, 810	85, 610	86, 410	87, 200	87, 980	88, 760	89, 540	90, 310	91, 070	91, 830	53
54		79, 200	80, 020	80, 830	81, 640	82, 430	83, 220	84, 040	84, 890	85, 740	86, 590	87, 420	88, 260	89, 080	89, 900	90, 720	91, 530	92, 330	93, 130	93, 930	94, 710	54
55	80, 670	81, 530	82, 370	83, 210	84, 040	84, 860	85, 670	86, 520	87, 410	88, 290	89, 160	90, 030	90, 900	91, 750	92, 600	93, 450	94, 290	95, 130	95, 960	96, 780	97, 600	55
56	83, 230	84, 110	84, 970	85, 830	86, 680	87, 520	88, 350	89, 210	90, 120	91, 020	91, 920	92, 800	93, 690	94, 560	95, 430	96, 300	97, 160	98, 010	98, 860	99, 700	100, 500	56
57	85, 530	86, 430	87, 320	88, 210	89, 080	89, 940	90, 800	91, 700	92, 640	93, 570	94, 490	95, 410	96, 330	97, 230	98, 130	99, 030	99, 920	100, 800	101, 700	102, 600	103, 400	57
58	87, 360	88, 370	89, 380	90, 370	91, 360	92, 340	93, 310	94, 320	95, 370	96, 410	97, 450	98, 490	99, 520	100, 500	101, 600	102, 600	103, 600	104, 600	105, 600	106, 600	107, 600	58
59	89, 200	90, 320	91, 430	92, 540	93, 640	94, 730	95, 810	96, 940	98, 100	99, 260	100, 400	101, 600	102, 700	103, 900	105, 000	106, 100	107, 200	108, 400	109, 500	110, 600	111, 700	59
60	91, 040	92, 270	93, 490	94, 700	95, 910	97, 120	98, 320	99, 560	100, 800	102, 100	103, 400	104, 600	105, 900	107, 200	108, 400	109, 700	110, 900	112, 100	113, 400	114, 600	115, 900	60
61	92, 880	94, 210	95, 540	96, 870	98, 190	99, 510	100, 800	102, 200	103, 600	104, 900	106, 300	107, 700	109, 100	110, 500	111, 800	113, 200	114, 600	115, 900	117, 300	118, 600	120, 000	61
62	94, 720	96, 160	97, 600	99, 030	100, 500	101, 900	103, 300	104, 800	106, 300	107, 800	109, 300	110, 800	112, 300	113, 800	115, 300	116, 700	118, 200	119, 700	121, 200	122, 700	124, 100	62
63	96, 560	98, 100	99, 650	101, 200	102, 700	104, 300	105, 800	107, 400	109, 000	110, 600	112, 200	113, 900	115, 500	117, 100	118, 700	120, 300	121, 900	123, 500	125, 100	126, 700	128, 300	63
64	98, 390	100, 000	101, 700	103, 400	105, 000	106, 700	108, 300	110, 000	111, 800	113, 500	115, 200	116, 900	118, 700	120, 400	122, 100	123, 800	125, 500	127, 300	129, 000	130, 700	132, 400	64
65	100, 200	102, 000	103, 800	105, 500	107, 300	109, 100	110, 900	112, 700	114, 500	116, 300	118, 200	120, 000	121, 900	123, 700	125, 500	127, 400	129, 200	131, 000	132, 900	134, 700	136, 600	65
66	103, 600	105, 400	107, 200	109, 000	110, 800	112, 600	114, 400	116, 200	118, 100	119, 900	121, 800	123, 700	125, 600	127, 400	129, 300	131, 200	133, 000	134, 900	136, 800	138, 600	140, 500	66
67	105, 900	107, 700	109, 500	111, 300	113, 200	115, 000	116, 800	118, 700	120, 600	122, 500	124, 400	126, 300	128, 200	130, 100	132, 000	133, 900	135, 800	137, 700	139, 600	141, 500	143, 400	67
68	107, 700	109, 600	111, 600	113, 500	115, 400	117, 400	119, 300	121, 300	123, 300	125, 300	127, 300	129, 400	131, 400	133, 400	135, 400	137, 400	139, 500	141, 500	143, 500	145, 500	147, 600	68
69	109, 500	111, 600	113, 600	115, 700	117, 700	119, 800	121, 900	123, 900	126, 100	128, 200	130, 300	132, 400	134, 600	136, 700	138, 900	141, 000	143, 100	145, 300	147, 400	149, 500	151, 700	69
70	111, 400	113, 500	115, 700	117, 800	120, 000	122, 200	124, 400	126, 600	128, 800	131, 000	133, 300	135, 500	137, 800	140, 000	142, 300	144, 500	146, 800	149, 000	151, 300	153, 600	155, 800	70
71	113, 200	115, 500	117, 700	120, 000	122, 300	124, 600	126, 900	129, 200	131, 500	133, 900	136, 200	138, 600	141, 000	143, 400	145, 700	148, 100	150, 400	152, 800	155, 200	157, 600	160, 000	71
72	115, 100	117, 400	119, 800	122, 200	124, 600	127, 000	129, 400	131, 800	134, 300	136, 700	139, 200	141, 700	144, 200	146, 700	149, 100	151, 600	154, 100	156, 600	159, 100	161, 600	164, 100	72
73	119, 200	121, 700	124, 200	126, 700	129, 200	131, 800	134, 300	136, 900	139, 500	142, 100	144, 700	147, 300	150, 000	152, 600	155, 300	157, 900	160, 500	163, 200	165, 800	168, 500	171, 200	73
74	123, 300	126, 000	128, 600	131, 300	133, 900	136, 600	139, 300	142, 000	144, 700	147, 500	150, 300	153, 000	155, 800	158, 600	161, 400	164, 200	167, 000	169, 700	172, 600	175, 400	178, 200	74
75	125, 200	127, 900	130, 600	133, 400	136, 200	139, 000	141, 800	144, 600	147, 500	150, 300	153, 200	156, 100	159, 000	161, 900	164, 800	167, 700	170, 600	173, 500	176, 500	179, 400	182, 300	75
76	127, 700	130, 200	132, 800	135, 400	137, 900	140, 500	143, 200	145, 800	148, 400	151, 100												76
77	133, 300	135, 900	138, 500	141, 200	143, 800	146, 500	149, 100	151, 800	154, 500	157, 200	160, 000	162, 700	165, 500	168, 200	170, 900	173, 700	176, 400	179, 200	181, 900	184, 700	187, 500	77
78	135, 200	137, 900	140, 600	143, 300	146, 100	148, 900	151, 600	154, 400	157, 300	160, 100	162, 900	165, 800	168, 600	171, 500	174, 400	177, 200	180, 100	182, 900	185, 800	188, 700	191, 600	78
79	140, 800	143, 600	146, 300	149, 100	152, 000	154, 800	157, 600	160, 500	163, 400	166, 200	169, 100	172, 100	175, 000	177, 900	180, 800	183, 800	186, 700	189, 600	192, 500	195, 500	198, 400	79
80	142, 600	145, 500	148, 400	151, 300	154, 200	157, 200	160, 100	163, 100	166, 100	169, 100	172, 100	175, 100	178, 200	181, 200	184, 300	187, 300	190, 300	193, 400	196, 400	199, 500	202, 600	80
81	145, 100	147, 800	150, 500	153, 300	156, 000	158, 700	161, 500	164, 200	167, 000	169, 800												81
82	150, 800	153, 500	156, 300	159, 100	161, 900	164, 700	167, 500	170, 300	173, 100	176, 000	178, 900	181, 700	184, 600	187, 500	190, 400	193, 300	196, 100	199, 000	201, 900	204, 800	207, 700	82
83	152, 600	155, 500	158, 300	161, 200	164, 100	167, 000	170, 000	172, 900	175, 900	178, 800	181, 800	184, 800	187, 800	190, 800	193, 800	196, 800	199, 800	202, 800	205, 800	208, 800	211, 900	83
84	160, 100	163, 100	166, 200	169, 200	172, 300	175, 400	178, 500	181, 600	184, 700	187, 800	191, 000	194, 200	197, 400	200, 500	203, 700	206, 900	210, 000	213, 200	216, 400	219, 600	222, 800	84
85	162, 600	165, 400	168, 300	171, 200	174, 000	176, 900	179, 800	182, 700	185, 600	188, 600												85
86	170, 100	173, 100	176, 100	179, 100	182, 200	185, 200	188, 300	191, 400	194, 500	197, 600	200, 700	203, 800	207, 000	210, 100	213, 300	216, 400	219, 500	222, 600	225, 800	228, 900	232, 100	86
87	177, 500	180, 700	183, 900	187, 100	190, 300	193, 500	196, 800	200, 000	203, 300	206, 600	209, 900	213, 200	216, 500	219, 800	223, 200	226, 400	229, 800	233, 100	236, 400	239, 700	243, 100	87
88	180, 100	183, 000	186, 000	189, 000	192, 100	195, 100	198, 100	201, 200	204, 300	207, 300												88
89	187, 500	190, 700	193, 800	197, 000	200, 200	203, 400	206, 600	209, 800	213, 100	216, 300	219, 600	222, 900	226, 100	229, 400	232, 700	235, 900	239, 200	242, 500	245, 800	249, 100	252, 400	89
90	195, 000	198, 300	201, 700	205, 000	208, 400	211, 700	215, 100	218, 500	221, 900	225, 300	228, 800	232, 200	235, 700	239, 200	242, 600	246, 000	249, 500	252, 900	256, 400	259, 900	263, 300	90
92	205, 000	208, 300	211, 600	214, 900	218, 200	221, 600	224, 900	228, 300	231, 700	235, 100	238, 500	241, 900	245, 300	248, 700	252, 100	255, 500	258, 900	262, 300	265, 700	269, 200	272, 600	92
93	212, 500	215, 900	219, 400	222, 900	226, 400	229, 900	233, 400	237, 000	240, 500	244, 100	247, 700	251, 300	254, 900	258, 500	262, 000	265, 600	269, 200	272, 800	276, 400	280, 000	283, 600	93
95	224, 800	228, 200	231, 700	235, 100	238, 600	242, 100	245, 600	249, 100	252, 600	256, 100	259, 700	263, 200	266, 700	270, 300	273, 800	277, 300	280, 900	284, 400	287, 900	291, 500	295, 000	95
96	232, 300	235, 900	239, 500	243, 100	246, 800	250, 400	254, 100	257, 800	261, 400	265, 100	268, 900	272, 600	276, 300	280, 000	283, 700	287, 400	291, 100	294, 800	298, 500	302, 300	306, 000	96
98	244, 600	248, 200	251, 700	255, 300	259, 000	262, 600	266, 200	269, 900	273, 500	277, 200	280, 800	284, 500	288, 200	291, 800	295, 500	299, 100	302, 800	306, 400	310, 100	313, 800	317, 400	98
99	252, 000	255, 800	259, 500	263, 300	267, 100	270, 900	274, 700	278, 500	282, 400	286, 200	290, 000	293, 900	297, 700	301, 600	305, 400	309, 200	313, 000	316, 900	320, 700	324, 600	328, 400	99
101	264, 400	268, 100	271, 800	275, 600	279, 300	283, 100	286, 900	290, 600	294, 400	298, 200	302, 000	305, 800	309, 600	313, 400	317, 200	320, 900	324, 700	328, 500	332, 300	336, 100	339, 900	101
102	271, 800	275, 700	279, 600	283, 500	287, 500	291, 400	295, 300	299, 300	303, 300	307, 200	311, 200	315, 200	319, 100	323, 100	327, 100	331, 000	335, 000	338, 900	342, 900	346, 800	350, 800	102
104	284, 200	288, 000	291, 900	295, 800	299, 700	303, 600	307, 500	311, 400	315, 300	319, 300	323, 200	327, 100	331, 000	334, 900	338, 800	342, 700	346, 600	350, 500	354, 400	358, 400	362, 300	104
105	291, 600	295, 700	299, 700	303, 800	307, 800	311, 900	316, 000	320, 100	324, 200	328, 300	332, 400	336, 500	340, 600	344, 700	348, 700	352, 800	356, 900	361, 000	365, 100	369, 100	373, 200	105
106	297, 100	301, 100	305, 000	309, 000	313, 000	317, 000	321, 000	325, 000	329, 000	333, 000	337, 000	341, 000	345, 000	349, 000	352, 900	356, 900	360, 900	364, 800	368, 800	372, 800	376, 800	106
107	312, 100	316, 400	320, 700	325, 000	329, 300	333, 600	338, 000	342, 300	346, 700	351, 000	355, 400	359, 700	364, 100	368, 400	372, 700	377, 100	381, 400	385, 700	390, 000	394, 400	398, 700	107
108	323, 200	327, 500	331, 800	336, 100	340, 300	344, 600	349, 000	353, 300	357, 600	361, 900	366, 200	370, 500	374, 800	379, 100	383, 400	387, 700	391, 900	396, 200	400, 500	404, 800	409, 100	108

MARCH 2004

HEADWATER 590 to 594
TAILWATER 580.51 to 581.50

GUNTERSVILLE DAM
SPILLWAY DISCHARGE
IN CUBIC FEET PER SECOND

GATE ARRANGEMENT	HEADWATER ELEVATION																					GATE ARRANGEMENT
	590.0	590.2	590.4	590.6	590.8	591.0	591.2	591.4	591.6	591.8	592.0	592.2	592.4	592.6	592.8	593.0	593.2	593.4	593.6	593.8	594.0	
109	330, 700	335, 100	339, 600	344, 000	348, 500	353, 000	357, 400	361, 900	366, 400	370, 900	375, 400	379, 900	384, 400	388, 800	393, 300	397, 700	402, 200	406, 600	411, 100	415, 600	420, 000	109
110	341, 900	346, 300	350, 700	355, 100	359, 500	364, 000	368, 400	372, 900	377, 300	381, 800	386, 200	390, 700	395, 100	399, 500	404, 000	408, 400	412, 800	417, 200	421, 600	426, 000	430, 400	110
111	349, 300	353, 900	358, 500	363, 100	367, 700	372, 300	376, 900	381, 600	386, 200	390, 800	395, 400	400, 000	404, 700	409, 300	413, 900	418, 400	423, 000	427, 600	432, 200	436, 800	441, 400	111
112	359, 500	364, 000	368, 500	373, 100	377, 600	382, 200	386, 700	391, 300	395, 800	400, 400	405, 000	409, 500	414, 000	418, 500	423, 100	427, 600	432, 100	436, 600	441, 100	445, 600	450, 100	112
113	375, 400	380, 300	385, 200	390, 100	395, 000	400, 000	404, 900	409, 800	414, 800	419, 700	424, 600	429, 600	434, 500	439, 400	444, 300	449, 200	454, 100	459, 000	463, 900	468, 800	473, 700	113
114	386, 600	391, 400	396, 300	401, 200	406, 100	411, 000	415, 900	420, 800	425, 700	430, 600	435, 500	440, 400	445, 300	450, 100	455, 000	459, 800	464, 700	469, 500	474, 300	479, 200	484, 000	114
115	394, 100	399, 100	404, 100	409, 200	414, 200	419, 300	424, 400	429, 500	434, 500	439, 600	444, 700	449, 700	454, 800	459, 800	464, 900	469, 900	474, 900	479, 900	484, 900	490, 000	495, 000	115
116	404, 200	409, 200	414, 100	419, 100	424, 100	429, 200	434, 200	439, 200	444, 200	449, 200	454, 200	459, 200	464, 200	469, 100	474, 100	479, 000	484, 000	488, 900	493, 800	498, 800	503, 700	116
117	412, 700	417, 800	423, 000	428, 200	433, 400	438, 600	443, 900	449, 100	454, 300	459, 500	464, 700	469, 900	475, 100	480, 300	485, 400	490, 600	495, 700	500, 900	506, 000			117
118	430, 300	435, 600	440, 900	446, 200	451, 500	456, 800	462, 100	467, 500	472, 800	478, 100	483, 400	488, 700	494, 000	499, 300	504, 500							118
119	448, 900	454, 300	459, 800	465, 200	470, 700	476, 200	481, 600	487, 100	492, 600	498, 000	503, 500											119
120	466, 500	472, 100	477, 600	483, 200	488, 800	494, 300	499, 900	505, 500														120

HEADWATER 590 to 594
TAILWATER 580.51 to 581.50

MARCH 2004

GUNTERSVILLE DAM
SPILLWAY DISCHARGE
IN CUBIC FEET PER SECOND

GATE ARRANGEMENT	HEADWATER ELEVATION																					GATE ARRANGEMENT
	594.0	594.2	594.4	594.6	594.8	595.0	595.2	595.4	595.6	595.8	596.0	596.2	596.4	596.6	596.8	597.0	597.2	597.4	597.6	597.8	598.0	
45																					79, 140	45
46																79, 230	79, 880	80, 540	81, 210	81, 890	82, 570	46
47											79, 230	79, 870	80, 520	81, 180	81, 850	82, 530	83, 210	83, 900	84, 590	85, 300	86, 000	47
48						79, 350	79, 930	80, 510	81, 120	81, 750	82, 400	83, 070	83, 750	84, 430	85, 130	85, 830	86, 540	87, 250	87, 980	88, 700	89, 440	48
49	79, 240	79, 870	80, 510	81, 140	81, 760	82, 380	82, 990	83, 600	84, 230	84, 890	85, 570	86, 260	86, 970	87, 680	88, 400	89, 130	89, 870	90, 610	91, 360	92, 110	92, 870	49
50	83, 180	83, 840	84, 500	85, 160	85, 810	86, 460	87, 100	87, 730	88, 380	89, 050	89, 730	90, 410	91, 100	91, 800	92, 500	93, 210	93, 910	94, 630	95, 340	96, 060	96, 780	50
51	86, 060	86, 760	87, 450	88, 130	88, 820	89, 490	90, 160	90, 820	91, 490	92, 190	92, 890	93, 610	94, 330	95, 050	95, 780	96, 510	97, 240	97, 980	98, 720	99, 460	100, 200	51
52	88, 950	89, 670	90, 390	91, 110	91, 820	92, 530	93, 220	93, 910	94, 610	95, 330	96, 060	96, 800	97, 550	98, 300	99, 050	99, 810	100, 600	101, 300	102, 100	102, 900	103, 600	52
53	91, 830	92, 580	93, 330	94, 080	94, 820	95, 560	96, 280	96, 990	97, 720	98, 470	99, 230	100, 000	100, 800	101, 500	102, 300	103, 100	103, 900	104, 700	105, 500	106, 300	107, 100	53
54	94, 710	95, 500	96, 280	97, 050	97, 820	98, 590	99, 340	100, 100	100, 800	101, 600	102, 400	103, 200	104, 000	104, 800	105, 600	106, 400	107, 200	108, 000	108, 900	109, 700	110, 500	54
55	97, 600	98, 410	99, 220	100, 000	100, 800	101, 600	102, 400	103, 200	104, 000	104, 800	105, 600	106, 400	107, 200	108, 000	108, 900	109, 700	110, 600	111, 400	112, 200	113, 100	113, 900	55
56	100, 500	101, 400	102, 200	103, 000	103, 800	104, 600	105, 400	106, 200	107, 000	107, 900	108, 700	109, 500	110, 400	111, 200	112, 100	112, 900	113, 800	114, 700	115, 500	116, 400	117, 300	56
57	103, 400	104, 300	105, 100	106, 000	106, 800	107, 700	108, 500	109, 300	110, 200	111, 000	111, 900	112, 700	113, 600	114, 500	115, 400	116, 200	117, 100	118, 000	118, 900	119, 800	120, 700	57
58	107, 600	108, 600	109, 500	110, 500	111, 500	112, 500	113, 400	114, 400	115, 300	116, 300	117, 300	118, 300	119, 300	120, 300	121, 400	122, 400	123, 400	124, 400	125, 500	126, 500	127, 600	58
59	111, 700	112, 800	113, 900	115, 000	116, 100	117, 200	118, 300	119, 400	120, 500	121, 600	122, 700	123, 900	125, 000	126, 200	127, 300	128, 500	129, 700	130, 900	132, 000	133, 200	134, 400	59
60	115, 900	117, 100	118, 300	119, 600	120, 800	122, 000	123, 200	124, 400	125, 700	126, 900	128, 200	129, 500	130, 800	132, 000	133, 300	134, 600	136, 000	137, 300	138, 600	139, 900	141, 300	60
61	120, 000	121, 400	122, 700	124, 100	125, 400	126, 800	128, 100	129, 500	130, 800	132, 200	133, 600	135, 000	136, 500	137, 900	139, 300	140, 800	142, 200	143, 700	145, 200	146, 600	148, 100	61
62	124, 100	125, 600	127, 100	128, 600	130, 100	131, 600	133, 000	134, 500	136, 000	137, 500	139, 100	140, 600	142, 200	143, 800	145, 300	146, 900	148, 500	150, 100	151, 700	153, 300	155, 000	62
63	128, 300	129, 900	131, 500	133, 100	134, 700	136, 300	138, 000	139, 600	141, 200	142, 900	144, 500	146, 200	147, 900	149, 600	151, 300	153, 100	154, 800	156, 500	158, 300	160, 000	161, 800	63
64	132, 400	134, 200	135, 900	137, 600	139, 400	141, 100	142, 900	144, 600	146, 400	148, 200	150, 000	151, 800	153, 600	155, 500	157, 300	159, 200	161, 100	162, 900	164, 800	166, 700	168, 700	64
65	136, 600	138, 400	140, 300	142, 200	144, 000	145, 900	147, 800	149, 600	151, 500	153, 500	155, 400	157, 400	159, 300	161, 300	163, 300	165, 300	167, 300	169, 400	171, 400	173, 400	175, 500	65
66	140, 500	142, 400	144, 300	146, 200	148, 100	150, 000	151, 900	153, 800	155, 700	157, 600	159, 600	161, 500	163, 500	165, 400	167, 400	169, 400	171, 400	173, 400	175, 400	177, 400	179, 400	66
67	143, 400	145, 300	147, 200	149, 200	151, 100	153, 000	154, 900	156, 900	158, 800	160, 800	162, 700	164, 700	166, 700	168, 700	170, 700	172, 700	174, 700	176, 700	178, 800	180, 800	182, 800	67
68	147, 600	149, 600	151, 600	153, 700	155, 700	157, 800	159, 800	161, 900	164, 000	166, 100	168, 200	170, 300	172, 400	174, 500	176, 700	178, 800	181, 000	183, 200	185, 300	187, 500	189, 700	68
69	151, 700	153, 900	156, 000	158, 200	160, 400	162, 600	164, 800	166, 900	169, 200	171, 400	173, 600	175, 900	178, 100	180, 400	182, 700	185, 000	187, 300	189, 600	191, 900	194, 200	196, 500	69
70	155, 800	158, 100	160, 400	162, 700	165, 000	167, 300	169, 700	172, 000	174, 300	176, 700	179, 100	181, 400	183, 800	186, 200	188, 700	191, 100	193, 500	196, 000	198, 400	200, 900	203, 400	70
71	160, 000	162, 400	164, 800	167, 200	169, 700	172, 100	174, 600	177, 000	179, 500	182, 000	184, 500	187, 000	189, 600	192, 100	194, 700	197, 200	199, 800	202, 400	205, 000	207, 600	210, 300	71
72	164, 100	166, 700	169, 200	171, 800	174, 300	176, 900	179, 500	182, 100	184, 700	187, 300	189, 900	192, 600	195, 300	198, 000	200, 700	203, 400	206, 100	208, 800	211, 600	214, 300	217, 100	72
73	171, 200	173, 900	176, 500	179, 300	182, 000	184, 700	187, 400	190, 200	193, 000	195, 800	198, 600	201, 400	204, 200	207, 100	209, 900	212, 800	215, 700	218, 600	221, 500	224, 400	227, 400	73
74	178, 200	181, 000	183, 900	186, 800	189, 600	192, 500	195, 400	198, 300	201, 300	204, 200	207, 200	210, 200	213, 200	216, 200	219, 200	222, 200	225, 300	228, 400	231, 500	234, 600	237, 700	74
75	182, 300	185, 300	188, 300	191, 300	194, 300	197, 300	200, 300	203, 400	206, 400	209, 500	212, 600	215, 700	218, 900	222, 000	225, 200	228, 400	231, 600	234, 800	238, 000	241, 300	244, 500	75
77	187, 500	190, 300	193, 100	195, 900	198, 700	201, 500	204, 400	207, 300	210, 100	213, 100	216, 000	219, 000	221, 900	224, 900	228, 000	231, 000	234, 100	237, 100	240, 200	243, 300	246, 400	77
78	191, 600	194, 500	197, 500	200, 400	203, 400	206, 300	209, 300	212, 300	215, 300	218, 400	221, 400	224, 500	227, 700	230, 800	234, 000	237, 100	240, 300	243, 500	246, 800	250, 000	253, 300	78
79	198, 400	201, 400	204, 400	207, 400	210, 400	213, 400	216, 500	219, 500	222, 600	225, 700	228, 800	231, 900	235, 000	238, 200	241, 300	244, 500	247, 700	250, 900	254, 100	257, 400	260, 600	79
80	202, 600	205, 700	208, 800	211, 900	215, 100	218, 200	221, 400	224, 600	227, 800	231, 000	234, 200	237, 500	240, 700	244, 000	247, 300	250, 600	254, 000	257, 300	260, 700	264, 100	267, 500	80
82	207, 700	210, 700	213, 600	216, 500	219, 500	222, 500	225, 400	228, 400	231, 500	234, 500	237, 600	240, 700	243, 800	247, 000	250, 100	253, 300	256, 500	259, 700	262, 900	266, 100	269, 400	82
83	211, 900	214, 900	218, 000	221, 100	224, 100	227, 200	230, 400	233, 500	236, 600	239, 800	243, 000	246, 300	249, 500	252, 800	256, 100	259, 400	262, 700	266, 100	269, 500	272, 800	276, 200	83
84	222, 800	226, 100	229, 300	232, 600	235, 800	239, 100	242, 400	245, 700	249, 100	252, 400	255, 800	259, 200	262, 600	266, 000	269, 500	272, 900	276, 400	279, 900	283, 400	286, 900	290, 400	84
86	232, 100	235, 300	238, 500	241, 700	244, 900	248, 200	251, 400	254, 700	258, 000	261, 300	264, 600	268, 000	271, 400	274, 800	278, 200	281, 700	285, 200	288, 600	292, 100	295, 700	299, 200	86
87	243, 100	246, 500	249, 800	253, 200	256, 600	260, 100	263, 500	266, 900	270, 400	273, 900	277, 400	280, 900	284, 500	288, 000	291, 600	295, 200	298, 800	302, 400	306, 100	309, 700	313, 400	87
89	252, 400	255, 700	259, 000	262, 400	265, 700	269, 100	272, 500	275, 900	279, 300	282, 700	286, 200	289, 700	293, 300	296, 800	300, 400	304, 000	307, 600	311, 200	314, 800	318, 500	322, 200	89
90	263, 300	266, 800	270, 400	273, 900	277, 400	281, 000	284, 500	288, 100	291, 700	295, 400	299, 000	302, 700	306, 300	310, 000	313, 800	317, 500	321, 200	325, 000	328, 800	332, 500	336, 300	90
92	272, 600	276, 100	279, 500	283, 000	286, 500	290, 000	293, 500	297, 100	300, 600	304, 200	307, 800	311, 500	315, 100	318, 800	322, 500	326, 200	330, 000	333, 700	337, 500	341, 300	345, 100	92
93	283, 600	287, 200	290, 900	294, 500	298, 200	301, 900	305, 600	309, 300	313, 100	316, 800	320, 600	324, 400	328, 200	332, 000	335, 900	339, 800	343, 600	347, 500	351, 400	355, 400	359, 300	93
95	295, 000	298, 600	302, 200	305, 800	309, 400	313, 000	316, 600	320, 300	324, 000	327, 700	331, 400	335, 200	338, 900	342, 700	346, 600	350, 400	354, 200	358, 100	362, 000	365, 900	369, 800	95
96	306, 000	309, 800	313, 500	317, 300	321, 100	324, 900	328, 700	332, 500	336, 400	340, 300	344, 200	348, 100	352, 000	356, 000	359, 900	363, 900	367, 900	371, 900	375, 900	380, 000	384, 000	96
98	317, 400	321, 100	324, 800	328, 500	332, 300	336, 000	339, 800	343, 500	347, 300	351, 100	355, 000	358, 900	362, 800	366, 700	370, 600	374, 500	378, 500	382, 500	386, 500	390, 500	394, 500	98
99	328, 400	332, 300	336, 200	340, 100	344, 000	347, 900	351, 800	355, 800	359, 700	363, 700	367, 800	371, 800	375, 800	379, 900	384, 000	388, 100	392, 200	396, 300	400, 400	404, 500	408, 700	99
101	339, 900	343, 700	347, 500	351, 300	355, 100	359, 000	362, 900	366, 700	370, 700	374, 600	378, 600	382, 600	386, 600	390, 600	394, 600	398, 700	402, 800	406, 900	411, 000	415, 100	419, 200	101
102	350, 800	354, 800	358, 800	362, 800	366, 900	370, 900	374, 900	379, 000	383, 100	387, 200	391, 300	395, 500	399, 600	403, 800	408, 000	412, 200	416, 400	420, 700	424, 900	429, 100	433, 400	102
104	362, 300	366, 200	370, 100	374, 100	378, 000	382, 000	386, 000	390, 000	394, 000	398, 100	402, 100	406, 300	410, 400	414, 500	418, 700	422, 900	427, 000	431, 200	435, 400	439, 700	443, 900	104
105	373, 200	377, 300	381, 500	385, 600	389, 700	393, 900	398, 100	402, 200	406, 400	410, 700	414, 900	419, 200	423, 500	427, 700	432, 000	436, 400	440, 700	445, 000	449, 400	453, 700	458, 100	105
107	398, 700	403, 100	407, 400	411, 800	416, 200	420, 600	425, 100	429, 500	434, 000	438, 400	442, 900	447, 500	452, 000	456, 600	461, 100	465, 700	470, 300	474, 900	479, 500	484, 100	488, 800	107
108	409, 100	413, 400	417, 700	422, 000	426, 300	430, 700	435, 100	439, 400	443, 900	448, 300	452, 800	457, 300	461, 800	466, 300	470, 900	475, 400	480, 000	484, 600	489, 200	493, 800	498, 400	108
109	420, 000	424, 500	429, 000	433, 500	438, 100	442, 600	447, 100	451, 700	456, 300	460, 900	465, 500	470, 200	474, 800	479, 500	484, 200	488, 900	493, 600	498, 400	503, 100	507, 900		109

MARCH 2004

HEADWATER 594 to 598
TAILWATER 580.51 to 581.50

GUNTERSVILLE DAM
SPILLWAY DISCHARGE
IN CUBIC FEET PER SECOND

GATE ARRANGEMENT	HEADWATER ELEVATION																				GATE ARRANGEMENT
	594.0	594.2	594.4	594.6	594.8	595.0	595.2	595.4	595.6	595.8	596.0	596.2	596.4	596.6	596.8	597.0	597.2	597.4	597.6	597.8	598.0	
110	430, 400	434, 800	439, 300	443, 700	448, 200	452, 700	457, 200	461, 700	466, 200	470, 800	475, 400	480, 000	484, 600	489, 300	493, 900	498, 600	503, 300	508, 000				110
111	441, 400	446, 000	450, 600	455, 200	459, 900	464, 500	469, 200	473, 900	478, 600	483, 400	488, 100	492, 900	497, 700	502, 500	507, 300							111
112	450, 100	454, 600	459, 100	463, 700	468, 200	472, 800	477, 300	481, 900	486, 600	491, 200	495, 900	500, 600	505, 300									112
113	473, 700	478, 600	483, 500	488, 500	493, 400	498, 400	503, 400															113
114	484, 000	488, 900	493, 800	498, 700	503, 600																	114
115	495, 000	500, 100	505, 100																			115
116	503, 700																					116

HEADWATER 594 to 598
TAILWATER 580.51 to 581.50

MARCH 2004

GUNTERSVILLE DAM
SPILLWAY DISCHARGE
IN CUBIC FEET PER SECOND

GATE ARRANGEMENT	HEADWATER ELEVATION																				GATE ARRANGEMENT
	598.0	598.2	598.4	598.6	598.8	599.0	599.2	599.4	599.6	599.8	600.0	600.2	600.4	600.6	600.8	601.0	601.2	601.4	601.6	601.8	602.0	
43											79,090											43
44						79,030	79,760	80,490	81,240	82,010	82,780											44
45	79,140	79,800	80,460	81,150	81,860	82,600	83,350	84,110	84,880	85,670	86,470											45
46	82,570	83,250	83,950	84,660	85,400	86,160	86,930	87,720	88,520	89,330	90,160											46
47	86,000	86,710	87,430	88,170	88,940	89,720	90,520	91,330	92,160	93,000	93,850											47
48	89,440	90,170	90,910	91,680	92,470	93,280	94,110	94,950	95,800	96,660	97,540											48
49	92,870	93,630	94,400	95,190	96,010	96,850	97,700	98,560	99,440	100,300	101,200											49
50	96,780	97,500	98,220	98,960	99,730	100,500	101,300	102,100	102,900	103,800	104,600											50
51	100,200	101,000	101,700	102,500	103,300	104,100	104,900	105,700	106,600	107,400	108,300											51
52	103,600	104,400	105,200	106,000	106,800	107,600	108,500	109,300	110,200	111,100	112,000											52
53	107,100	107,900	108,700	109,500	110,300	111,200	112,100	113,000	113,900	114,800	115,700											53
54	110,500	111,300	112,200	113,000	113,900	114,800	115,700	116,600	117,500	118,400	119,400											54
55	113,900	114,800	115,600	116,500	117,400	118,300	119,300	120,200	121,100	122,100	123,100											55
56	117,300	118,100	119,000	119,900	120,800	121,600	122,500	123,400	124,300	125,200	126,000											56
57	120,700	121,600	122,500	123,400	124,300	125,200	126,100	127,000	127,900	128,800	129,700											57
58	127,600	128,600	129,600	130,700	131,700	132,800	133,900	134,900	136,000	137,000	138,100											58
59	134,400	135,600	136,800	138,000	139,200	140,400	141,600	142,800	144,000	145,300	146,500											59
60	141,300	142,600	143,900	145,300	146,600	148,000	149,400	150,700	152,100	153,500	154,900											60
61	148,100	149,600	151,100	152,600	154,100	155,600	157,100	158,600	160,200	161,700	163,200											61
62	155,000	156,600	158,200	159,900	161,500	163,200	164,900	166,500	168,200	169,900	171,600											62
63	161,800	163,600	165,400	167,200	169,000	170,800	172,600	174,400	176,300	178,100	180,000											63
64	168,700	170,600	172,500	174,400	176,400	178,400	180,400	182,300	184,300	186,400	188,400											64
65	175,500	177,600	179,700	181,700	183,800	186,000	188,100	190,300	192,400	194,600	196,700											65
66	179,400	181,400	183,500	185,500	187,600	189,600	191,700	193,800	195,900	198,000	200,100											66
67	182,800	184,900	187,000	189,000	191,100	193,200	195,300	197,400	199,500	201,700	203,800											67
68	189,700	191,900	194,100	196,300	198,500	200,800	203,100	205,300	207,600	209,900	212,200											68
69	196,500	198,900	201,200	203,600	206,000	208,400	210,800	213,200	215,700	218,100	220,600											69
70	203,400	205,900	208,400	210,900	213,400	216,000	218,600	221,100	223,700	226,300	228,900											70
71	210,300	212,900	215,500	218,200	220,900	223,600	226,300	229,000	231,800	234,600	237,300											71
72	217,100	219,900	222,700	225,500	228,300	231,200	234,100	237,000	239,900	242,800	245,700											72
73	227,400	230,300	233,300	236,300	239,300	242,300	245,400	248,500	251,600	254,700	257,800											73
74	237,700	240,800	243,900	247,100	250,300	253,500	256,700	260,000	263,300	266,500	269,800											74
75	244,500	247,800	251,100	254,400	257,700	261,100	264,500	267,900	271,300	274,800	278,200											75
78	253,300	256,600	259,900	263,200	266,500	269,900	273,300	276,700	280,100	283,600	287,000											78
79	260,600	263,900	267,200	270,400	273,800	277,100	280,500	283,900	287,300	290,700	294,100											79
80	267,500	270,900	274,300	277,700	281,200	284,700	288,200	291,800	295,300	298,900	302,500											80
83	276,200	279,700	283,100	286,500	290,000	293,500	297,000	300,600	304,200	307,700	311,300											83
84	290,400	294,000	297,500	301,100	304,700	308,300	312,000	315,700	319,400	323,100	326,800											84
86	299,200	302,700	306,300	309,900	313,500	317,100	320,800	324,500	328,200	331,900	335,600											86
87	313,400	317,100	320,800	324,500	328,200	332,000	335,800	339,600	343,400	347,200	351,000											87
89	322,200	325,800	329,500	333,200	337,000	340,800	344,600	348,400	352,200	356,000	359,900											89
90	336,300	340,200	344,000	347,800	351,700	355,600	359,500	363,400	367,400	371,300	375,300											90
92	345,100	348,900	352,800	356,600	360,500	364,400	368,300	372,200	376,200	380,200	384,200											92
93	359,300	363,200	367,200	371,200	375,200	379,200	383,300	387,300	391,400	395,500	399,600											93
95	369,800	373,700	377,700	381,600	385,600	389,600	393,600	397,700	401,700	405,800	409,800											95
96	384,000	388,100	392,100	396,200	400,300	404,400	408,600	412,700	416,900	421,100	425,300											96
98	394,500	398,500	402,600	406,600	410,700	414,800	418,900	423,100	427,200	431,400	435,500											98
99	408,700	412,900	417,000	421,200	425,400	429,600	433,900	438,100	442,400	446,700	451,000											99
101	419,200	423,300	427,500	431,700	435,800	440,000	444,200	448,500	452,700	457,000	461,200											101
102	433,400	437,700	441,900	446,200	450,500	454,900	459,200	463,600	467,900	472,300	476,700											102
104	443,900	448,200	452,400	456,700	460,900	465,200	469,600	473,900	478,200	482,500	486,900											104
105	458,100	462,500	466,900	471,200	475,700	480,100	484,500	489,000	493,400	497,900	502,300											105
107	488,800	493,400	498,100	502,700	507,400																	107
108	498,400	503,000	507,700																			108

MARCH 2004

HEADWATER 598 to 602
TAILWATER 580.51 to 581.50

GUNTERSVILLE DAM
SPILLWAY DISCHARGE
IN CUBIC FEET PER SECOND

GATE ARRANGEMENT	HEADWATER ELEVATION																				GATE ARRANGEMENT
	590.0	590.2	590.4	590.6	590.8	591.0	591.2	591.4	591.6	591.8	592.0	592.2	592.4	592.6	592.8	593.0	593.2	593.4	593.6	593.8	594.0	
55																			93,960	94,800	95,620	55
56															93,450	94,320	95,190	96,050	96,900	97,750	98,600	56
57													94,260	95,190	96,100	97,000	97,900	98,790	99,680	100,600	101,400	57
58										94,130	95,220	96,310	97,380	98,440	99,460	100,500	101,500	102,500	103,500	104,500	105,500	58
59								94,500	95,710	96,910	98,120	99,310	100,500	101,700	102,800	104,000	105,100	106,200	107,400	108,500	109,600	59
60						94,530	95,770	97,060	98,380	99,690	101,000	102,300	103,600	104,900	106,200	107,400	108,700	109,900	111,200	112,400	113,700	60
61				94,130	95,490	96,860	98,220	99,620	101,000	102,500	103,900	105,300	106,800	108,200	109,500	110,900	112,300	113,700	115,000	116,400	117,800	61
62			94,760	96,240	97,720	99,190	100,700	102,200	103,700	105,300	106,800	108,300	109,900	111,400	112,900	114,400	115,900	117,400	118,900	120,400	121,900	62
63	93,610	95,190	96,770	98,350	99,940	101,500	103,100	104,700	106,400	108,000	109,700	111,300	113,000	114,700	116,300	117,900	119,500	121,100	122,700	124,300	125,900	63
64	95,410	97,090	98,770	100,500	102,200	103,900	105,600	107,300	109,100	110,800	112,600	114,400	116,100	117,900	119,600	121,400	123,100	124,800	126,600	128,300	130,000	64
65	97,200	98,980	100,800	102,600	104,400	106,200	108,000	109,900	111,700	113,600	115,500	117,400	119,300	121,100	123,000	124,800	126,700	128,500	130,400	132,300	134,100	65
66	100,400	102,200	104,100	105,900	107,700	109,600	111,400	113,300	115,200	117,100	119,000	121,000	122,900	124,800	126,700	128,600	130,400	132,300	134,200	136,100	138,000	66
67	102,700	104,500	106,400	108,200	110,100	112,000	113,800	115,700	117,700	119,600	121,600	123,500	125,500	127,400	129,300	131,200	133,100	135,100	137,000	138,900	140,800	67
68	104,500	106,400	108,400	110,300	112,300	114,300	116,300	118,300	120,300	122,400	124,500	126,500	128,600	130,700	132,700	134,700	136,700	138,800	140,800	142,900	144,900	68
69	106,200	108,300	110,400	112,400	114,500	116,600	118,700	120,900	123,000	125,200	127,400	129,500	131,700	133,900	136,100	138,200	140,300	142,500	144,700	146,800	149,000	69
70	108,000	110,200	112,400	114,500	116,700	119,000	121,200	123,400	125,700	128,000	130,200	132,500	134,800	137,100	139,400	141,700	143,900	146,200	148,500	150,800	153,100	70
71	109,800	112,100	114,400	116,700	119,000	121,300	123,600	126,000	128,400	130,700	133,100	135,500	138,000	140,400	142,800	145,200	147,500	149,900	152,300	154,700	157,200	71
72	111,600	114,000	116,400	118,800	121,200	123,600	126,100	128,500	131,000	133,500	136,000	138,600	141,100	143,600	146,100	148,600	151,100	153,600	156,200	158,700	161,200	72
73	115,700	118,200	120,700	123,200	125,800	128,300	130,900	133,500	136,200	138,800	141,500	144,100	146,800	149,500	152,100	154,800	157,400	160,100	162,800	165,500	168,200	73
74	119,700	122,300	125,000	127,600	130,300	133,000	135,800	138,500	141,300	144,100	146,900	149,700	152,500	155,400	158,200	161,000	163,800	166,600	169,400	172,200	175,100	74
75	121,500	124,200	127,000	129,800	132,600	135,400	138,200	141,100	144,000	146,900	149,800	152,700	155,600	158,600	161,500	164,400	167,400	170,300	173,200	176,200	179,200	75
76	124,200	126,700	129,300	131,900	134,500	137,100	139,700	142,400	145,100	147,700												76
77	129,600	132,200	134,900	137,500	140,200	142,900	145,600	148,300	151,000	153,800	156,500	159,300	162,100	164,900	167,700	170,400	173,200	176,000	178,800	181,600	184,400	77
78	131,400	134,100	136,900	139,600	142,400	145,200	148,000	150,800	153,700	156,500	159,400	162,300	165,200	168,200	171,000	173,900	176,800	179,700	182,600	185,500	188,500	78
79	136,900	139,700	142,500	145,300	148,100	151,000	153,800	156,700	159,600	162,600	165,500	168,500	171,400	174,400	177,400	180,300	183,300	186,200	189,200	192,200	195,100	79
80	138,700	141,600	144,500	147,400	150,300	153,300	156,300	159,300	162,300	165,400	168,400	171,500	174,600	177,700	180,700	183,800	186,900	189,900	193,000	196,100	199,200	80
81	141,400	144,100	146,800	149,500	152,200	155,000	157,800	160,600	163,400	166,200												81
82	146,800	149,600	152,300	155,100	157,900	160,800	163,600	166,500	169,400	172,300	175,200	178,100	181,000	184,000	186,900	189,800	192,700	195,600	198,600	201,500	204,400	82
83	148,600	151,500	154,400	157,300	160,200	163,100	166,100	169,000	172,000	175,000	178,100	181,100	184,200	187,200	190,300	193,300	196,300	199,400	202,400	205,500	208,500	83
84	155,900	158,900	161,900	165,000	168,100	171,200	174,300	177,500	180,700	183,800	187,100	190,300	193,500	196,700	200,000	203,200	206,400	209,600	212,800	216,100	219,300	84
85	158,500	161,400	164,200	167,100	170,000	172,900	175,800	178,800	181,800	184,700												85
86	165,800	168,800	171,800	174,900	177,900	181,000	184,100	187,200	190,400	193,500	196,700	199,900	203,100	206,300	209,500	212,700	215,800	219,000	222,200	225,400	228,600	86
87	173,000	176,200	179,400	182,600	185,900	189,100	192,400	195,700	199,000	202,300	205,700	209,100	212,400	215,800	219,200	222,500	225,900	229,300	232,600	236,000	239,400	87
88	175,700	178,700	181,700	184,700	187,800	190,800	193,900	197,000	200,100	203,200												88
89	183,000	186,100	189,300	192,500	195,700	198,900	202,200	205,400	208,700	212,000	215,300	218,700	222,000	225,400	228,700	232,000	235,300	238,700	242,000	245,300	248,700	89
90	190,200	193,600	196,900	200,300	203,600	207,000	210,500	213,900	217,400	220,800	224,300	227,800	231,400	234,900	238,400	241,900	245,400	248,900	252,400	255,900	259,500	90
92	200,200	203,500	206,800	210,100	213,500	216,800	220,200	223,600	227,100	230,500	234,000	237,500	241,000	244,400	247,900	251,400	254,900	258,300	261,800	265,300	268,800	92
93	207,400	210,900	214,400	217,900	221,400	224,900	228,500	232,100	235,700	239,300	243,000	246,600	250,300	254,000	257,600	261,300	264,900	268,600	272,200	275,900	279,500	93
95	219,700	223,100	226,600	230,100	233,600	237,100	240,600	244,200	247,700	251,300	254,900	258,500	262,100	265,800	269,400	273,000	276,600	280,200	283,800	287,400	291,000	95
96	226,900	230,500	234,200	237,800	241,500	245,200	248,900	252,600	256,300	260,100	263,900	267,700	271,500	275,300	279,100	282,900	286,600	290,400	294,200	298,000	301,800	96
98	239,200	242,800	246,400	250,000	253,600	257,300	261,000	264,700	268,400	272,100	275,800	279,600	283,300	287,100	290,900	294,600	298,300	302,100	305,800	309,600	313,300	98
99	246,400	250,200	254,000	257,800	261,600	265,400	269,200	273,100	277,000	280,900	284,800	288,700	292,700	296,600	300,500	304,500	308,400	312,300	316,200	320,100	324,100	99
101	258,700	262,400	266,200	270,000	273,700	277,500	281,300	285,200	289,000	292,900	296,800	300,600	304,500	308,400	312,300	316,200	320,100	323,900	327,800	331,700	335,600	101
102	265,900	269,900	273,800	277,700	281,700	285,600	289,600	293,600	297,600	301,700	305,700	309,800	313,900	318,000	322,000	326,100	330,100	334,200	338,200	342,300	346,300	102
104	278,200	282,100	286,000	289,900	293,800	297,700	301,700	305,700	309,700	313,700	317,700	321,700	325,700	329,800	333,800	337,800	341,800	345,800	349,800	353,800	357,800	104
105	285,400	289,500	293,600	297,700	301,700	305,800	310,000	314,100	318,300	322,500	326,700	330,900	335,100	339,300	343,500	347,700	351,900	356,100	360,200	364,400	368,600	105
106	291,100	295,100	299,100	303,000	307,000	311,000	315,100	319,100	323,200	327,300	331,400	335,500	339,600	343,700	347,800	351,900	356,000	360,100	364,100	368,200	372,300	106
107	305,600	309,900	314,200	318,600	322,900	327,200	331,600	336,000	340,400	344,900	349,300	353,800	358,300	362,700	367,200	371,600	376,100	380,500	385,000	389,400	393,900	107
108	316,700	321,000	325,300	329,600	333,900	338,200	342,600	346,900	351,300	355,700	360,100	364,500	369,000	373,400	377,800	382,200	386,700	391,100	395,500	399,900	404,200	108
109	323,900	328,400	332,900	337,300	341,800	346,300	350,800	355,400	359,900	364,500	369,100	373,700	378,300	382,900	387,500	392,100	396,700	401,300	405,900	410,500	415,000	109
110	335,000	339,500	343,900	348,400	352,800	357,300	361,800	366,300	370,800	375,400	379,900	384,500	389,000	393,600	398,200	402,700	407,300	411,800	416,400	420,900	425,400	110
111	342,300	346,900	351,500	356,100	360,700	365,400	370,000	374,700	379,400	384,200	388,900	393,600	398,400	403,100	407,900	412,600	417,300	422,100	426,800	431,500	436,200	111
112	352,400	357,000	361,500	366,100	370,600	375,200	379,800	384,400	389,100	393,700	398,400	403,100	407,700	412,400	417,100	421,800	426,400	431,100	435,700	440,300	444,900	112
113	367,900	372,800	377,700	382,700	387,600	392,600	397,500	402,500	407,600	412,600	417,600	422,700	427,800	432,900	437,900	443,000	448,000	453,100	458,100	463,100	468,100	113
114	378,900	383,900	388,800	393,700	398,600	403,500	408,500	413,400	418,400	423,400	428,400	433,500	438,500	443,500	448,600	453,600	458,600	463,600	468,600	473,600	478,500	114

HEADWATER 590 to 594
TAILWATER 581.51 to 582.50

MARCH 2004

GUNTERSVILLE DAM
SPILLWAY DISCHARGE
IN CUBIC FEET PER SECOND

GATE ARRANGEMENT	HEADWATER ELEVATION																				GATE ARRANGEMENT
	590.0	590.2	590.4	590.6	590.8	591.0	591.2	591.4	591.6	591.8	592.0	592.2	592.4	592.6	592.8	593.0	593.2	593.4	593.6	593.8	594.0	
115	386, 200	391, 300	396, 400	401, 500	406, 500	411, 600	416, 700	421, 900	427, 100	432, 200	437, 400	442, 600	447, 800	453, 100	458, 300	463, 500	468, 600	473, 800	479, 000	484, 200	489, 300	115
116	396, 300	401, 400	406, 400	411, 400	416, 400	421, 500	426, 500	431, 600	436, 700	441, 800	446, 900	452, 100	457, 200	462, 300	467, 500	472, 600	477, 700	482, 800	487, 900	493, 000	498, 100	116
117	404, 500	409, 800	415, 000	420, 200	425, 500	430, 700	436, 000	441, 200	446, 500	451, 900	457, 200	462, 500	467, 900	473, 300	478, 600	483, 900	489, 300	494, 600	499, 900	505, 200	510, 500	117
118	421, 900	427, 300	432, 600	438, 000	443, 300	448, 600	454, 000	459, 400	464, 800	470, 200	475, 700	481, 100	486, 600	492, 100	497, 500	503, 000	508, 400	513, 800	519, 200			118
119	440, 200	445, 800	451, 300	456, 700	462, 200	467, 700	473, 200	478, 800	484, 300	489, 900	495, 500	501, 100	506, 700	512, 300	517, 900	523, 400						119
120	457, 600	463, 200	468, 900	474, 400	480, 000	485, 600	491, 300	496, 900	502, 600	508, 300	514, 000	519, 700										120

MARCH 2004

HEADWATER 590 to 594
TAILWATER 581.51 to 582.50

GUNTERSVILLE DAM

SPILLWAY DISCHARGE

IN CUBIC FEET PER SECOND

GATE ARRANGEMENT	HEADWATER ELEVATION																					GATE ARRANGEMENT
	594.0	594.2	594.4	594.6	594.8	595.0	595.2	595.4	595.6	595.8	596.0	596.2	596.4	596.6	596.8	597.0	597.2	597.4	597.6	597.8	598.0	
50																			93,840	94,570	95,310	50
51														93,450	94,190	94,940	95,690	96,440	97,190	97,950	98,710	51
52										93,620	94,370	95,130	95,890	96,660	97,430	98,200	98,980	99,760	100,500	101,300	102,100	52
53						93,720	94,460	95,200	95,950	96,720	97,490	98,280	99,070	99,870	100,700	101,500	102,300	103,100	103,900	104,700	105,500	53
54		93,580	94,370	95,150	95,930	96,700	97,470	98,240	99,010	99,810	100,600	101,400	102,300	103,100	103,900	104,700	105,600	106,400	107,200	108,100	108,900	54
55	95,620	96,450	97,260	98,070	98,880	99,680	100,500	101,300	102,100	102,900	103,700	104,600	105,400	106,300	107,100	108,000	108,900	109,700	110,600	111,500	112,300	55
56	98,600	99,440	100,300	101,100	101,900	102,700	103,600	104,400	105,200	106,000	106,900	107,700	108,600	109,500	110,300	111,200	112,100	113,000	113,900	114,700	115,600	56
57	101,400	102,300	103,200	104,000	104,900	105,700	106,600	107,400	108,300	109,100	110,000	110,900	111,800	112,700	113,600	114,500	115,400	116,300	117,200	118,100	119,000	57
58	105,500	106,500	107,500	108,500	109,500	110,400	111,400	112,400	113,400	114,400	115,400	116,400	117,400	118,500	119,500	120,600	121,600	122,600	123,700	124,800	125,800	58
59	109,600	110,700	111,800	112,900	114,100	115,200	116,300	117,400	118,500	119,600	120,800	121,900	123,100	124,300	125,400	126,600	127,800	129,000	130,200	131,400	132,600	59
60	113,700	114,900	116,200	117,400	118,600	119,900	121,100	122,300	123,600	124,900	126,100	127,400	128,700	130,000	131,400	132,700	134,000	135,300	136,700	138,000	139,400	60
61	117,800	119,100	120,500	121,900	123,200	124,600	126,000	127,300	128,700	130,100	131,500	132,900	134,400	135,800	137,300	138,700	140,200	141,700	143,200	144,600	146,100	61
62	121,900	123,300	124,800	126,300	127,800	129,300	130,800	132,300	133,800	135,400	136,900	138,500	140,000	141,600	143,200	144,800	146,400	148,000	149,600	151,300	152,900	62
63	125,900	127,600	129,200	130,800	132,400	134,000	135,700	137,300	138,900	140,600	142,300	144,000	145,700	147,400	149,100	150,900	152,600	154,400	156,100	157,900	159,700	63
64	130,000	131,800	133,500	135,300	137,000	138,800	140,500	142,300	144,000	145,800	147,700	149,500	151,300	153,200	155,100	156,900	158,800	160,700	162,600	164,500	166,400	64
65	134,100	136,000	137,800	139,700	141,600	143,500	145,400	147,200	149,200	151,100	153,000	155,000	157,000	159,000	161,000	163,000	165,000	167,000	169,100	171,100	173,200	65
66	138,000	139,900	141,800	143,700	145,600	147,500	149,400	151,300	153,200	155,200	157,100	159,100	161,000	163,000	165,000	167,000	169,000	171,000	173,000	175,000	177,000	66
67	140,800	142,700	144,700	146,600	148,500	150,500	152,400	154,300	156,300	158,300	160,200	162,200	164,200	166,200	168,200	170,300	172,300	174,300	176,300	178,400	180,400	67
68	144,900	146,900	149,000	151,000	153,100	155,200	157,200	159,300	161,400	163,500	165,600	167,700	169,900	172,000	174,200	176,300	178,500	180,700	182,800	185,000	187,200	68
69	149,000	151,200	153,300	155,500	157,700	159,900	162,100	164,300	166,500	168,800	171,000	173,300	175,500	177,800	180,100	182,400	184,700	187,000	189,300	191,700	194,000	69
70	153,100	155,400	157,700	160,000	162,300	164,600	166,900	169,300	171,600	174,000	176,400	178,800	181,200	183,600	186,000	188,400	190,900	193,300	195,800	198,300	200,800	70
71	157,200	159,600	162,000	164,400	166,900	169,300	171,800	174,300	176,700	179,200	181,800	184,300	186,800	189,400	191,900	194,500	197,100	199,700	202,300	204,900	207,500	71
72	161,200	163,800	166,300	168,900	171,500	174,100	176,600	179,200	181,900	184,500	187,100	189,800	192,500	195,200	197,900	200,600	203,300	206,000	208,800	211,500	214,300	72
73	168,200	170,900	173,600	176,300	179,000	181,800	184,500	187,300	190,000	192,800	195,600	198,500	201,300	204,200	207,000	209,900	212,800	215,700	218,600	221,500	224,500	73
74	175,100	177,900	180,800	183,700	186,600	189,400	192,400	195,300	198,200	201,200	204,100	207,100	210,100	213,100	216,200	219,200	222,300	225,400	228,400	231,500	234,700	74
75	179,200	182,100	185,100	188,100	191,100	194,200	197,200	200,300	203,300	206,400	209,500	212,600	215,800	218,900	222,100	225,300	228,500	231,700	234,900	238,200	241,400	75
77	184,400	187,200	190,000	192,800	195,700	198,500	201,400	204,200	207,100	210,100	213,000	216,000	219,000	222,000	225,000	228,000	231,100	234,200	237,300	240,400	243,500	77
78	188,500	191,400	194,300	197,300	200,300	203,200	206,200	209,200	212,200	215,300	218,400	221,500	224,600	227,700	230,900	234,100	237,300	240,500	243,700	247,000	250,300	78
79	195,100	198,100	201,100	204,200	207,200	210,200	213,300	216,300	219,400	222,500	225,600	228,700	231,800	235,000	238,200	241,400	244,600	247,800	251,000	254,200	257,500	79
80	199,200	202,400	205,500	208,600	211,800	214,900	218,100	221,300	224,500	227,700	231,000	234,200	237,500	240,800	244,100	247,400	250,800	254,100	257,500	260,900	264,300	80
82	204,400	207,400	210,400	213,300	216,300	219,300	222,300	225,300	228,300	231,400	234,400	237,600	240,700	243,800	247,000	250,200	253,400	256,600	259,800	263,000	266,300	82
83	208,500	211,600	214,700	217,800	220,900	224,000	227,100	230,300	233,400	236,600	239,800	243,100	246,300	249,600	252,900	256,200	259,600	262,900	266,300	269,700	273,100	83
84	219,300	222,600	225,800	229,100	232,400	235,700	239,000	242,300	245,700	249,000	252,400	255,800	259,200	262,600	266,100	269,500	273,000	276,500	280,000	283,500	287,100	84
86	228,600	231,800	235,000	238,300	241,500	244,800	248,000	251,300	254,600	257,900	261,300	264,600	268,000	271,500	274,900	278,300	281,800	285,300	288,800	292,300	295,900	86
87	239,400	242,800	246,200	249,600	253,000	256,500	259,900	263,400	266,800	270,300	273,900	277,400	280,900	284,500	288,100	291,700	295,300	298,900	302,600	306,200	309,900	87
89	248,700	252,000	255,400	258,800	262,200	265,500	268,900	272,300	275,800	279,200	282,700	286,200	289,800	293,300	296,900	300,500	304,100	307,700	311,400	315,000	318,700	89
90	259,500	263,000	266,600	270,100	273,700	277,200	280,800	284,400	288,000	291,700	295,300	299,000	302,600	306,300	310,100	313,800	317,600	321,300	325,100	328,900	332,700	90
92	268,800	272,300	275,800	279,300	282,800	286,300	289,800	293,400	296,900	300,500	304,200	307,800	311,500	315,200	318,900	322,600	326,400	330,100	333,900	337,700	341,500	92
93	279,500	283,200	286,900	290,600	294,300	298,000	301,700	305,400	309,200	313,000	316,700	320,500	324,400	328,200	332,100	335,900	339,800	343,700	347,600	351,600	355,500	93
95	291,000	294,700	298,300	301,900	305,500	309,200	312,800	316,500	320,200	323,900	327,600	331,400	335,200	339,000	342,800	346,600	350,500	354,400	358,300	362,200	366,100	95
96	301,800	305,600	309,400	313,200	317,000	320,900	324,700	328,600	332,400	336,300	340,200	344,100	348,100	352,000	356,000	360,000	364,000	368,000	372,000	376,100	380,100	96
98	313,300	317,000	320,800	324,500	328,300	332,000	335,800	339,600	343,400	347,200	351,100	354,900	358,800	362,800	366,700	370,700	374,600	378,600	382,700	386,700	390,700	98
99	324,100	328,000	331,900	335,900	339,800	343,700	347,700	351,700	355,600	359,600	363,700	367,700	371,700	375,800	379,900	384,000	388,100	392,200	396,400	400,600	404,700	99
101	335,600	339,400	343,300	347,200	351,000	354,900	358,800	362,700	366,600	370,600	374,500	378,500	382,500	386,600	390,600	394,700	398,800	402,900	407,000	411,200	415,300	101
102	346,300	350,400	354,400	358,500	362,600	366,600	370,700	374,800	378,900	383,000	387,100	391,300	395,400	399,600	403,800	408,000	412,300	416,500	420,800	425,000	429,300	102
104	357,800	361,800	365,800	369,800	373,800	377,800	381,800	385,800	389,800	393,900	398,000	402,100	406,200	410,400	414,500	418,700	422,900	427,200	431,400	435,700	439,900	104
105	368,600	372,800	376,900	381,100	385,300	389,500	393,700	397,900	402,100	406,300	410,600	414,800	419,100	423,400	427,700	432,000	436,400	440,800	445,100	449,500	453,900	105
106	372,300	376,400	380,400	384,500	388,600	392,600	396,700	400,800	404,900	409,100	413,200	417,400	421,700	425,900	430,200	434,500	438,900	443,200	447,600	452,000	456,400	106
107	393,900	398,300	402,700	407,200	411,600	416,000	420,500	424,900	429,400	433,900	438,400	442,900	447,500	452,000	456,600	461,200	465,800	470,400	475,100	479,700	484,400	107
108	404,200	408,600	413,000	417,400	421,800	426,200	430,500	434,900	439,300	443,800	448,300	452,800	457,300	461,800	466,400	470,900	475,500	480,200	484,800	489,400	494,100	108
109	415,000	419,600	424,200	428,700	433,300	437,900	442,400	447,000	451,600	456,200	460,800	465,500	470,200	474,800	479,500	484,300	489,000	493,800	498,500	503,300	508,100	109
110	425,400	429,900	434,400	439,000	443,500	448,000	452,500	457,000	461,500	466,100	470,700	475,300	480,000	484,600	489,300	494,000	498,700	503,500	508,300	513,000	517,800	110
111	436,200	440,900	445,600	450,300	455,000	459,700	464,400	469,100	473,800	478,500	483,300	488,100	492,900	497,700	502,500	507,300	512,200	517,100	522,000			111
112	444,900	449,600	454,200	458,800	463,400	468,000	472,600	477,200	481,800	486,500	491,200	495,900	500,600	505,400	510,100	514,900	519,700					112
113	468,100	473,200	478,200	483,200	488,200	493,200	498,200	503,200	508,200	513,300	518,300	523,400										113

HEADWATER 594 to 598
TAILWATER 581.51 to 582.50

MARCH 2004

GUNTERSVILLE DAM

SPILLWAY DISCHARGE

IN CUBIC FEET PER SECOND

GATE ARRANGEMENT	HEADWATER ELEVATION																				GATE ARRANGEMENT
	594.0	594.2	594.4	594.6	594.8	595.0	595.2	595.4	595.6	595.8	596.0	596.2	596.4	596.6	596.8	597.0	597.2	597.4	597.6	597.8	598.0	
114	478, 500	483, 500	488, 500	493, 400	498, 400	503, 300	508, 300	513, 200	518, 200	523, 200												114
115	489, 300	494, 500	499, 600	504, 700	509, 900	515, 000	520, 100															115
116	498, 100	503, 100	508, 200	513, 200	518, 300	523, 300																116
117	510, 500	515, 800	521, 000																			117

MARCH 2004

HEADWATER 594 to 598
TAILWATER 581.51 to 582.50

GUNTERSVILLE DAM
SPILLWAY DISCHARGE
IN CUBIC FEET PER SECOND

GATE ARRANGEMENT	HEADWATER ELEVATION																					GATE ARRANGEMENT
	598.0	598.2	598.4	598.6	598.8	599.0	599.2	599.4	599.6	599.8	600.0	600.2	600.4	600.6	600.8	601.0	601.2	601.4	601.6	601.8	602.0	
48								93, 630	94, 480	95, 350	96, 230											48
49				93, 830	94, 650	95, 490	96, 350	97, 220	98, 100	98, 990	99, 890											49
50	95, 310	96, 040	96, 770	97, 520	98, 290	99, 080	99, 880	100, 700	101, 500	102, 400	103, 200											50
51	98, 710	99, 470	100, 200	101, 000	101, 800	102, 600	103, 400	104, 300	105, 100	106, 000	106, 900											51
52	102, 100	102, 900	103, 700	104, 500	105, 300	106, 200	107, 000	107, 900	108, 700	109, 600	110, 500											52
53	105, 500	106, 300	107, 200	108, 000	108, 800	109, 700	110, 600	111, 500	112, 400	113, 300	114, 200											53
54	108, 900	109, 800	110, 600	111, 500	112, 300	113, 200	114, 100	115, 100	116, 000	116, 900	117, 900											54
55	112, 300	113, 200	114, 100	115, 000	115, 900	116, 800	117, 700	118, 600	119, 600	120, 600	121, 500											55
56	115, 600	116, 500	117, 400	118, 300	119, 200	120, 000	120, 900	121, 800	122, 700	123, 600	124, 500											56
57	119, 000	120, 000	120, 900	121, 800	122, 700	123, 600	124, 500	125, 400	126, 300	127, 200	128, 100											57
58	125, 800	126, 900	127, 900	129, 000	130, 000	131, 100	132, 200	133, 200	134, 300	135, 400	136, 400											58
59	132, 600	133, 800	135, 000	136, 200	137, 400	138, 600	139, 800	141, 000	142, 300	143, 500	144, 700											59
60	139, 400	140, 700	142, 100	143, 400	144, 800	146, 100	147, 500	148, 900	150, 200	151, 600	153, 000											60
61	146, 100	147, 600	149, 100	150, 600	152, 100	153, 600	155, 200	156, 700	158, 200	159, 800	161, 300											61
62	152, 900	154, 500	156, 200	157, 800	159, 500	161, 100	162, 800	164, 500	166, 200	167, 900	169, 600											62
63	159, 700	161, 500	163, 200	165, 000	166, 800	168, 700	170, 500	172, 300	174, 200	176, 000	177, 900											63
64	166, 400	168, 400	170, 300	172, 200	174, 200	176, 200	178, 200	180, 200	182, 200	184, 200	186, 200											64
65	173, 200	175, 300	177, 400	179, 500	181, 600	183, 700	185, 800	188, 000	190, 100	192, 300	194, 500											65
66	177, 000	179, 100	181, 100	183, 100	185, 200	187, 300	189, 400	191, 500	193, 600	195, 700	197, 800											66
67	180, 400	182, 500	184, 600	186, 600	188, 700	190, 800	192, 900	195, 000	197, 200	199, 300	201, 400											67
68	187, 200	189, 400	191, 600	193, 800	196, 100	198, 300	200, 600	202, 900	205, 100	207, 400	209, 700											68
69	194, 000	196, 300	198, 700	201, 100	203, 400	205, 800	208, 300	210, 700	213, 100	215, 600	218, 000											69
70	200, 800	203, 300	205, 800	208, 300	210, 800	213, 400	215, 900	218, 500	221, 100	223, 700	226, 300											70
71	207, 500	210, 200	212, 800	215, 500	218, 200	220, 900	223, 600	226, 300	229, 100	231, 800	234, 600											71
72	214, 300	217, 100	219, 900	222, 700	225, 500	228, 400	231, 300	234, 200	237, 100	240, 000	242, 900											72
73	224, 500	227, 400	230, 400	233, 400	236, 400	239, 400	242, 500	245, 600	248, 700	251, 800	254, 900											73
74	234, 700	237, 800	240, 900	244, 100	247, 300	250, 500	253, 700	257, 000	260, 300	263, 500	266, 800											74
75	241, 400	244, 700	248, 000	251, 300	254, 600	258, 000	261, 400	264, 800	268, 200	271, 700	275, 100											75
78	250, 300	253, 500	256, 800	260, 100	263, 500	266, 900	270, 300	273, 700	277, 100	280, 600	284, 100											78
79	257, 500	260, 800	264, 000	267, 300	270, 600	274, 000	277, 400	280, 800	284, 200	287, 600	291, 000											79
80	264, 300	267, 700	271, 100	274, 500	278, 000	281, 500	285, 000	288, 600	292, 100	295, 700	299, 300											80
83	273, 100	276, 500	279, 900	283, 400	286, 900	290, 400	293, 900	297, 500	301, 100	304, 600	308, 200											83
84	287, 100	290, 600	294, 200	297, 800	301, 400	305, 000	308, 700	312, 400	316, 100	319, 800	323, 500											84
86	295, 900	299, 500	303, 000	306, 600	310, 200	313, 900	317, 600	321, 300	325, 000	328, 700	332, 400											86
87	309, 900	313, 600	317, 300	321, 000	324, 800	328, 500	332, 300	336, 200	340, 000	343, 800	347, 700											87
89	318, 700	322, 400	326, 100	329, 900	333, 600	337, 400	341, 200	345, 100	348, 900	352, 800	356, 600											89
90	332, 700	336, 500	340, 400	344, 200	348, 100	352, 100	356, 000	359, 900	363, 900	367, 900	371, 900											90
92	341, 500	345, 400	349, 200	353, 100	357, 000	360, 900	364, 900	368, 800	372, 800	376, 800	380, 800											92
93	355, 500	359, 500	363, 500	367, 500	371, 500	375, 600	379, 600	383, 700	387, 800	391, 900	396, 100											93
95	366, 100	370, 100	374, 000	378, 000	382, 000	386, 100	390, 100	394, 200	398, 300	402, 400	406, 500											95
96	380, 100	384, 200	388, 300	392, 400	396, 500	400, 700	404, 900	409, 100	413, 300	417, 500	421, 700											96
98	390, 700	394, 800	398, 900	403, 000	407, 100	411, 200	415, 400	419, 500	423, 700	427, 900	432, 100											98
99	404, 700	408, 900	413, 100	417, 300	421, 600	425, 900	430, 100	434, 400	438, 700	443, 100	447, 400											99
101	415, 300	419, 500	423, 700	427, 900	432, 100	436, 400	440, 600	444, 900	449, 200	453, 500	457, 800											101
102	429, 300	433, 600	437, 900	442, 300	446, 600	451, 000	455, 400	459, 800	464, 200	468, 600	473, 000											102
104	439, 900	444, 200	448, 500	452, 800	457, 100	461, 500	465, 900	470, 200	474, 600	479, 000	483, 400											104
105	453, 900	458, 300	462, 800	467, 200	471, 700	476, 100	480, 600	485, 100	489, 600	494, 200	498, 700											105
107	484, 400	489, 100	493, 800	498, 500	503, 200	508, 000	512, 800	517, 500	522, 300													107
108	494, 100	498, 800	503, 500	508, 200	512, 900	517, 700	522, 400															108
109	508, 100	512, 900	517, 800	522, 600																		109
110	517, 800	522, 600																				110

HEADWATER 598 to 602
TAILWATER 581.51 to 582.50

MARCH 2004

GUNTERSVILLE DAM
SPILLWAY DISCHARGE
IN CUBIC FEET PER SECOND

GATE ARRANGEMENT	HEADWATER ELEVATION																					GATE ARRANGEMENT
	590.0	590.2	590.4	590.6	590.8	591.0	591.2	591.4	591.6	591.8	592.0	592.2	592.4	592.6	592.8	593.0	593.2	593.4	593.6	593.8	594.0	
61																108, 200	109, 600	111, 000	112, 400	113, 800	115, 200	61
62														108, 500	110, 000	111, 600	113, 100	114, 600	116, 200	117, 700	119, 200	62
63												108, 300	110, 000	111, 700	113, 300	115, 000	116, 600	118, 300	119, 900	121, 600	123, 200	63
64										107, 700	109, 500	111, 300	113, 100	114, 800	116, 600	118, 400	120, 100	121, 900	123, 700	125, 400	127, 200	64
65									108, 600	110, 400	112, 300	114, 200	116, 100	118, 000	119, 900	121, 800	123, 600	125, 500	127, 400	129, 300	131, 200	65
66							108, 200	110, 000	111, 900	113, 800	115, 700	117, 700	119, 600	121, 500	123, 400	125, 400	127, 300	129, 200	131, 100	133, 100	135, 000	66
67						108, 700	110, 600	112, 400	114, 400	116, 300	118, 200	120, 200	122, 200	124, 100	126, 100	128, 000	129, 900	131, 900	133, 900	135, 800	137, 800	67
68					109, 000	111, 000	112, 900	114, 900	117, 000	119, 000	121, 100	123, 100	125, 200	127, 300	129, 300	131, 400	133, 500	135, 500	137, 600	139, 700	141, 800	68
69				109, 100	111, 200	113, 300	115, 300	117, 400	119, 600	121, 700	123, 900	126, 100	128, 300	130, 500	132, 600	134, 800	137, 000	139, 200	141, 400	143, 600	145, 800	69
70			109, 000	111, 200	113, 400	115, 600	117, 700	119, 900	122, 200	124, 400	126, 700	129, 000	131, 300	133, 600	135, 900	138, 200	140, 500	142, 800	145, 100	147, 500	149, 800	70
71		108, 800	111, 000	113, 300	115, 500	117, 800	120, 100	122, 400	124, 800	127, 200	129, 500	132, 000	134, 400	136, 800	139, 200	141, 600	144, 000	146, 400	148, 900	151, 300	153, 800	71
72	108, 400	110, 700	113, 000	115, 400	117, 700	120, 100	122, 500	124, 900	127, 400	129, 900	132, 400	134, 900	137, 400	140, 000	142, 500	145, 000	147, 500	150, 100	152, 600	155, 200	157, 800	72
73	112, 400	114, 900	117, 300	119, 800	122, 300	124, 800	127, 300	129, 900	132, 500	135, 100	137, 700	140, 400	143, 000	145, 700	148, 400	151, 100	153, 700	156, 400	159, 100	161, 900	164, 600	73
74	116, 500	119, 000	121, 600	124, 200	126, 800	129, 500	132, 100	134, 800	137, 500	140, 300	143, 000	145, 800	148, 600	151, 500	154, 300	157, 100	159, 900	162, 800	165, 600	168, 500	171, 400	74
75	118, 300	121, 000	123, 600	126, 300	129, 000	131, 700	134, 500	137, 300	140, 100	143, 000	145, 900	148, 800	151, 700	154, 600	157, 600	160, 500	163, 400	166, 400	169, 400	172, 400	175, 400	75
76	120, 900	123, 400	125, 900	128, 500	131, 000	133, 600	136, 200	138, 800	141, 400	144, 100												76
77	126, 100	128, 700	131, 300	133, 900	136, 500	139, 200	141, 800	144, 500	147, 200	149, 900	152, 700	155, 400	158, 200	161, 000	163, 800	166, 600	169, 400	172, 200	175, 000	177, 800	180, 700	77
78	128, 000	130, 600	133, 300	136, 000	138, 700	141, 500	144, 200	147, 000	149, 800	152, 600	155, 500	158, 400	161, 300	164, 200	167, 100	170, 000	172, 900	175, 800	178, 800	181, 700	184, 700	78
79	133, 200	136, 000	138, 700	141, 500	144, 300	147, 100	149, 900	152, 700	155, 600	158, 500	161, 400	164, 300	167, 300	170, 300	173, 300	176, 200	179, 200	182, 200	185, 200	188, 200	191, 200	79
80	135, 000	137, 900	140, 700	143, 600	146, 400	149, 300	152, 300	155, 200	158, 200	161, 200	164, 200	167, 300	170, 400	173, 500	176, 500	179, 600	182, 700	185, 800	188, 900	192, 100	195, 200	80
81	137, 600	140, 300	143, 000	145, 700	148, 500	151, 200	153, 900	156, 700	159, 500	162, 300												81
82	142, 900	145, 600	148, 400	151, 200	154, 000	156, 800	159, 600	162, 400	165, 300	168, 100	171, 000	173, 900	176, 900	179, 800	182, 700	185, 700	188, 600	191, 600	194, 600	197, 500	200, 500	82
83	144, 700	147, 600	150, 400	153, 300	156, 200	159, 100	162, 000	164, 900	167, 900	170, 900	173, 900	176, 900	179, 900	183, 000	186, 000	189, 100	192, 100	195, 200	198, 300	201, 400	204, 500	83
84	151, 800	154, 800	157, 800	160, 800	163, 900	167, 000	170, 000	173, 100	176, 300	179, 400	182, 600	185, 800	189, 000	192, 300	195, 500	198, 700	202, 000	205, 200	208, 500	211, 800	215, 100	84
85	154, 300	157, 200	160, 100	163, 000	165, 900	168, 800	171, 700	174, 600	177, 600	180, 500												85
86	161, 400	164, 500	167, 500	170, 600	173, 600	176, 700	179, 800	182, 800	186, 000	189, 100	192, 200	195, 400	198, 600	201, 800	205, 000	208, 200	211, 400	214, 600	217, 900	221, 100	224, 400	86
87	168, 500	171, 700	174, 900	178, 100	181, 300	184, 600	187, 800	191, 100	194, 300	197, 600	201, 000	204, 300	207, 700	211, 100	214, 500	217, 800	221, 200	224, 600	228, 100	231, 500	234, 900	87
88	171, 100	174, 200	177, 200	180, 300	183, 300	186, 400	189, 500	192, 500	195, 600	198, 700												88
89	178, 100	181, 400	184, 600	187, 800	191, 100	194, 300	197, 500	200, 800	204, 000	207, 300	210, 600	213, 900	217, 300	220, 600	224, 000	227, 300	230, 700	234, 000	237, 400	240, 800	244, 300	89
90	185, 200	188, 600	192, 000	195, 400	198, 800	202, 200	205, 600	209, 000	212, 400	215, 900	219, 300	222, 800	226, 400	229, 900	233, 400	236, 900	240, 500	244, 100	247, 600	251, 200	254, 800	90
92	194, 900	198, 300	201, 700	205, 100	208, 500	211, 900	215, 300	218, 700	222, 100	225, 500	229, 000	232, 400	235, 900	239, 400	242, 900	246, 400	249, 900	253, 500	257, 000	260, 600	264, 100	92
93	201, 900	205, 500	209, 100	212, 700	216, 200	219, 800	223, 300	226, 900	230, 500	234, 100	237, 700	241, 400	245, 000	248, 700	252, 400	256, 100	259, 800	263, 500	267, 200	270, 900	274, 700	93
95	213, 800	217, 500	221, 100	224, 700	228, 200	231, 800	235, 400	238, 900	242, 500	246, 000	249, 600	253, 200	256, 900	260, 500	264, 100	267, 800	271, 400	275, 100	278, 800	282, 500	286, 200	95
96	220, 900	224, 700	228, 500	232, 200	236, 000	239, 700	243, 400	247, 100	250, 900	254, 600	258, 400	262, 200	266, 000	269, 800	273, 600	277, 400	281, 300	285, 100	289, 000	292, 800	296, 700	96
98	232, 800	236, 700	240, 500	244, 200	248, 000	251, 700	255, 400	259, 100	262, 800	266, 600	270, 300	274, 000	277, 800	281, 600	285, 400	289, 100	292, 900	296, 700	300, 600	304, 400	308, 200	98
99	239, 900	243, 900	247, 900	251, 800	255, 700	259, 600	263, 500	267, 400	271, 200	275, 100	279, 000	283, 000	286, 900	290, 900	294, 800	298, 800	302, 800	306, 700	310, 800	314, 800	318, 800	99
101	251, 800	255, 800	259, 900	263, 800	267, 700	271, 600	275, 500	279, 400	283, 200	287, 100	290, 900	294, 800	298, 700	302, 600	306, 600	310, 500	314, 400	318, 400	322, 400	326, 300	330, 300	101
102	258, 900	263, 100	267, 200	271, 400	275, 400	279, 500	283, 500	287, 600	291, 600	295, 600	299, 700	303, 700	307, 800	311, 900	316, 000	320, 100	324, 300	328, 400	332, 500	336, 700	340, 800	102
104	270, 800	275, 000	279, 200	283, 400	287, 500	291, 500	295, 600	299, 600	303, 600	307, 600	311, 600	315, 600	319, 700	323, 700	327, 800	331, 900	335, 900	340, 000	344, 100	348, 200	352, 400	104
105	277, 800	282, 300	286, 600	290, 900	295, 200	299, 400	303, 600	307, 800	312, 000	316, 200	320, 300	324, 500	328, 800	333, 000	337, 200	341, 500	345, 800	350, 000	354, 300	358, 600	362, 900	105
106	283, 400	287, 800	292, 100	296, 300	300, 500	304, 700	308, 800	312, 900	317, 000	321, 100	325, 200	329, 300	333, 400	337, 600	341, 700	345, 900	350, 000	354, 200	358, 400	362, 600	366, 800	106
107	297, 500	302, 200	306, 900	311, 400	316, 000	320, 500	324, 900	329, 400	333, 800	338, 200	342, 700	347, 100	351, 600	356, 100	360, 600	365, 100	369, 700	374, 200	378, 700	383, 300	387, 900	107
108	308, 300	313, 000	317, 700	322, 300	326, 800	331, 300	335, 800	340, 200	344, 600	349, 000	353, 500	357, 900	362, 300	366, 800	371, 200	375, 700	380, 200	384, 700	389, 200	393, 800	398, 300	108
109	315, 400	320, 300	325, 100	329, 900	334, 600	339, 200	343, 800	348, 400	353, 000	357, 600	362, 200	366, 800	371, 400	376, 100	380, 700	385, 400	390, 000	394, 700	399, 400	404, 100	408, 800	109
110	326, 100	331, 100	336, 000	340, 700	345, 400	350, 100	354, 700	359, 300	363, 900	368, 400	373, 000	377, 500	382, 100	386, 700	391, 300	396, 000	400, 600	405, 300	409, 900	414, 600	419, 200	110
111	333, 200	338, 300	343, 300	348, 300	353, 200	358, 000	362, 800	367, 500	372, 300	377, 000	381, 700	386, 500	391, 200	396, 000	400, 800	405, 600	410, 400	415, 300	420, 100	424, 900	429, 800	111
112	343, 000	348, 200	353, 200	358, 100	363, 000	367, 800	372, 500	377, 200	381, 900	386, 600	391, 200	395, 900	400, 600	405, 300	410, 000	414, 800	419, 500	424, 300	429, 100	433, 800	438, 600	112
113	358, 100	363, 600	369, 000	374, 300	379, 500	384, 600	389, 700	394, 800	399, 900	404, 900	410, 000	415, 000	420, 100	425, 200	430, 400	435, 500	440, 600	445, 800	450, 900	456, 100	461, 300	113
114	368, 900	374, 400	379, 800	385, 100	390, 300	395, 500	400, 600	405, 700	410, 700	415, 700	420, 700	425, 800	430, 800	435, 900	441, 000	446, 100	451, 200	456, 300	461, 400	466, 600	471, 700	114
115	376, 000	381, 600	387, 200	392, 700	398, 100	403, 400	408, 700	413, 900	419, 100	424, 300	429, 500	434, 700	439, 900	445, 200	450, 400	455, 700	461, 000	466, 300	471, 600	476, 900	482, 300	115
116	385, 800	391, 500	397, 000	402, 500	407, 900	413, 200	418, 400	423, 600	428, 700	433, 900	439, 000	444, 100	449, 300	454, 500	459, 700	464, 900	470, 100	475, 300	480, 600	485, 800	491, 100	116
117	393, 800	399, 700	405, 400	411, 100	416, 700	422, 100	427, 600	433, 000	438, 300	443, 700	449, 000	454, 400	459, 700	465, 100	470, 500	476, 000	481, 400	486, 800	492, 300	497, 800	503, 200	117
118	410, 700	416, 800	422, 700	428, 500	434, 200	439, 800	445, 400	450, 900	456, 400	461, 800	467, 300	472, 700	478, 200	483, 700	489, 200	494, 800	500, 300	505, 900	511, 400	517, 000	522, 600	118
119	428, 600	434, 800	440, 900	446, 900	452, 800	458, 600	464, 300	469, 900	475, 600	481, 200	486, 800	492, 400	498, 000	503, 700	509, 300	515, 000	520, 700	526, 400	532, 100	537, 800		119
120	445, 500	451, 900	458, 100	464, 300	470, 300	476, 200	482, 100	487, 900	493, 600	499, 300	505, 000	510, 800	516, 500	522, 200	528, 000	533, 800						120

MARCH 2004

HEADWATER 590 to 594
TAILWATER 582.51 to 583.50

GUNTERSVILLE DAM
SPILLWAY DISCHARGE
IN CUBIC FEET PER SECOND

GATE ARRANGEMENT	HEADWATER ELEVATION																					GATE ARRANGEMENT
	594.0	594.2	594.4	594.6	594.8	595.0	595.2	595.4	595.6	595.8	596.0	596.2	596.4	596.6	596.8	597.0	597.2	597.4	597.6	597.8	598.0	
55																		107, 900	108, 700	109, 600	110, 500	55
56															108, 500	109, 400	110, 300	111, 100	112, 000	112, 900	113, 800	56
57											108, 100	109, 000	109, 900	110, 800	111, 700	112, 600	113, 500	114, 400	115, 300	116, 300	117, 200	57
58						108, 400	109, 400	110, 400	111, 300	112, 400	113, 400	114, 400	115, 400	116, 500	117, 500	118, 600	119, 600	120, 700	121, 700	122, 800	123, 900	58
59		108, 400	109, 600	110, 700	111, 900	113, 000	114, 100	115, 200	116, 400	117, 500	118, 700	119, 800	121, 000	122, 200	123, 400	124, 600	125, 800	126, 900	128, 100	129, 400	130, 600	59
60	111, 200	112, 500	113, 800	115, 100	116, 400	117, 700	118, 900	120, 100	121, 400	122, 700	124, 000	125, 300	126, 600	127, 900	129, 200	130, 500	131, 900	133, 200	134, 600	135, 900	137, 300	60
61	115, 200	116, 600	118, 100	119, 500	120, 900	122, 300	123, 700	125, 000	126, 400	127, 800	129, 300	130, 700	132, 100	133, 600	135, 100	136, 500	138, 000	139, 500	141, 000	142, 500	144, 000	61
62	119, 200	120, 800	122, 300	123, 800	125, 400	126, 900	128, 400	129, 900	131, 500	133, 000	134, 600	136, 100	137, 700	139, 300	140, 900	142, 500	144, 100	145, 700	147, 400	149, 000	150, 600	62
63	123, 200	124, 900	126, 600	128, 200	129, 900	131, 500	133, 200	134, 800	136, 500	138, 200	139, 900	141, 600	143, 300	145, 000	146, 800	148, 500	150, 300	152, 000	153, 800	155, 600	157, 300	63
64	127, 200	129, 000	130, 800	132, 600	134, 400	136, 200	138, 000	139, 700	141, 500	143, 300	145, 200	147, 000	148, 900	150, 700	152, 600	154, 500	156, 400	158, 300	160, 200	162, 100	164, 000	64
65	131, 200	133, 100	135, 100	137, 000	138, 900	140, 800	142, 700	144, 600	146, 500	148, 500	150, 500	152, 400	154, 400	156, 400	158, 400	160, 500	162, 500	164, 500	166, 600	168, 700	170, 700	65
66	135, 000	136, 900	138, 900	140, 800	142, 800	144, 700	146, 700	148, 600	150, 500	152, 500	154, 500	156, 400	158, 400	160, 400	162, 400	164, 400	166, 400	168, 400	170, 400	172, 500	174, 500	66
67	137, 800	139, 800	141, 700	143, 700	145, 700	147, 700	149, 600	151, 600	153, 600	155, 500	157, 500	159, 500	161, 500	163, 600	165, 600	167, 600	169, 600	171, 700	173, 700	175, 800	177, 800	67
68	141, 800	143, 900	146, 000	148, 100	150, 200	152, 300	154, 400	156, 500	158, 600	160, 700	162, 800	165, 000	167, 100	169, 300	171, 400	173, 600	175, 800	177, 900	180, 100	182, 300	184, 500	68
69	145, 800	148, 000	150, 200	152, 500	154, 700	156, 900	159, 100	161, 400	163, 600	165, 900	168, 100	170, 400	172, 700	175, 000	177, 300	179, 600	181, 900	184, 200	186, 500	188, 900	191, 200	69
70	149, 800	152, 100	154, 500	156, 800	159, 200	161, 600	163, 900	166, 300	168, 600	171, 000	173, 400	175, 800	178, 200	180, 700	183, 100	185, 600	188, 000	190, 500	193, 000	195, 400	197, 900	70
71	153, 800	156, 300	158, 700	161, 200	163, 700	166, 200	168, 700	171, 200	173, 700	176, 200	178, 700	181, 300	183, 800	186, 400	189, 000	191, 500	194, 100	196, 700	199, 400	202, 000	204, 600	71
72	157, 800	160, 400	163, 000	165, 600	168, 200	170, 800	173, 400	176, 100	178, 700	181, 300	184, 000	186, 700	189, 400	192, 100	194, 800	197, 500	200, 300	203, 000	205, 800	208, 500	211, 300	72
73	164, 600	167, 300	170, 100	172, 800	175, 600	178, 400	181, 200	183, 900	186, 700	189, 600	192, 400	195, 200	198, 100	200, 900	203, 800	206, 700	209, 600	212, 500	215, 500	218, 400	221, 400	73
74	171, 400	174, 300	177, 200	180, 100	183, 000	185, 900	188, 900	191, 800	194, 800	197, 800	200, 800	203, 800	206, 800	209, 800	212, 900	215, 900	219, 000	222, 100	225, 200	228, 300	231, 400	74
75	175, 400	178, 400	181, 400	184, 500	187, 500	190, 600	193, 600	196, 700	199, 800	202, 900	206, 000	209, 200	212, 300	215, 500	218, 700	221, 900	225, 100	228, 300	231, 600	234, 800	238, 100	75
77	180, 700	183, 500	186, 400	189, 300	192, 200	195, 000	197, 900	200, 800	203, 800	206, 700	209, 700	212, 700	215, 700	218, 700	221, 700	224, 800	227, 900	230, 900	234, 000	237, 200	240, 300	77
78	184, 700	187, 700	190, 600	193, 600	196, 700	199, 700	202, 700	205, 700	208, 800	211, 900	215, 000	218, 100	221, 200	224, 400	227, 600	230, 800	234, 000	237, 200	240, 400	243, 700	247, 000	78
79	191, 200	194, 300	197, 300	200, 400	203, 400	206, 500	209, 600	212, 700	215, 800	218, 900	222, 000	225, 200	228, 300	231, 500	234, 700	237, 900	241, 100	244, 300	247, 600	250, 800	254, 100	79
80	195, 200	198, 400	201, 600	204, 800	208, 000	211, 200	214, 400	217, 600	220, 800	224, 100	227, 300	230, 600	233, 900	237, 200	240, 600	243, 900	247, 200	250, 600	254, 000	257, 400	260, 800	80
82	200, 500	203, 500	206, 600	209, 600	212, 600	215, 600	218, 700	221, 700	224, 800	227, 900	231, 000	234, 100	237, 200	240, 400	243, 600	246, 800	250, 000	253, 200	256, 400	259, 700	263, 000	82
83	204, 500	207, 700	210, 800	213, 900	217, 100	220, 300	223, 400	226, 600	229, 800	233, 000	236, 300	239, 500	242, 800	246, 100	249, 400	252, 800	256, 100	259, 500	262, 800	266, 200	269, 600	83
84	215, 100	218, 400	221, 700	225, 100	228, 400	231, 700	235, 100	238, 500	241, 800	245, 200	248, 600	252, 100	255, 500	258, 900	262, 400	265, 900	269, 400	272, 900	276, 400	279, 900	283, 500	84
86	224, 400	227, 700	231, 000	234, 200	237, 500	240, 900	244, 200	247, 500	250, 800	254, 200	257, 600	261, 000	264, 400	267, 800	271, 300	274, 700	278, 200	281, 700	285, 200	288, 800	292, 300	86
87	234, 900	238, 400	241, 900	245, 400	248, 800	252, 300	255, 800	259, 300	262, 900	266, 400	269, 900	273, 500	277, 100	280, 600	284, 200	287, 900	291, 500	295, 100	298, 800	302, 400	306, 100	87
89	244, 300	247, 700	251, 100	254, 500	258, 000	261, 400	264, 900	268, 300	271, 800	275, 300	278, 900	282, 400	285, 900	289, 500	293, 100	296, 700	300, 300	304, 000	307, 600	311, 300	315, 000	89
90	254, 800	258, 400	262, 000	265, 700	269, 300	272, 900	276, 600	280, 200	283, 900	287, 500	291, 200	294, 900	298, 600	302, 400	306, 100	309, 800	313, 600	317, 400	321, 200	325, 000	328, 800	90
92	264, 100	267, 700	271, 300	274, 800	278, 400	282, 000	285, 600	289, 200	292, 800	296, 500	300, 100	303, 800	307, 500	311, 200	315, 000	318, 700	322, 500	326, 200	330, 000	333, 800	337, 700	92
93	274, 700	278, 400	282, 200	286, 000	289, 700	293, 500	297, 300	301, 100	304, 900	308, 700	312, 500	316, 400	320, 200	324, 100	327, 900	331, 800	335, 700	339, 600	343, 600	347, 500	351, 500	93
95	286, 200	289, 900	293, 600	297, 300	301, 000	304, 800	308, 500	312, 200	315, 900	319, 700	323, 500	327, 300	331, 100	334, 900	338, 800	342, 600	346, 500	350, 400	354, 300	358, 200	362, 200	95
96	296, 700	300, 600	304, 500	308, 400	312, 300	316, 200	320, 100	324, 100	328, 000	331, 900	335, 900	339, 800	343, 800	347, 800	351, 700	355, 700	359, 800	363, 800	367, 800	371, 900	376, 000	96
98	308, 200	312, 100	315, 900	319, 800	323, 600	327, 500	331, 300	335, 200	339, 000	342, 900	346, 800	350, 700	354, 700	358, 600	362, 600	366, 500	370, 500	374, 500	378, 500	382, 600	386, 600	98
99	318, 800	322, 800	326, 800	330, 900	334, 900	339, 000	343, 000	347, 000	351, 100	355, 100	359, 200	363, 300	367, 300	371, 400	375, 500	379, 700	383, 800	387, 900	392, 100	396, 300	400, 400	99
101	330, 300	334, 300	338, 300	342, 200	346, 200	350, 200	354, 200	358, 100	362, 100	366, 100	370, 200	374, 200	378, 200	382, 300	386, 400	390, 500	394, 600	398, 700	402, 800	407, 000	411, 100	101
102	340, 800	345, 000	349, 200	353, 300	357, 500	361, 700	365, 800	370, 000	374, 200	378, 300	382, 500	386, 700	390, 900	395, 100	399, 400	403, 600	407, 800	412, 100	416, 300	420, 600	424, 900	102
104	352, 400	356, 500	360, 600	364, 700	368, 800	372, 900	377, 000	381, 100	385, 200	389, 400	393, 500	397, 700	401, 800	406, 000	410, 200	414, 400	418, 600	422, 800	427, 100	431, 300	435, 600	104
105	362, 900	367, 200	371, 500	375, 800	380, 100	384, 400	388, 700	393, 000	397, 300	401, 600	405, 900	410, 200	414, 500	418, 800	423, 200	427, 500	431, 900	436, 200	440, 600	445, 000	449, 400	105
106	366, 800	371, 000	375, 200	379, 400	383, 500	387, 700	391, 900	396, 100	400, 300	404, 500	408, 700	413, 000	417, 300	421, 600	425, 900	430, 200	434, 500	438, 900	443, 300	447, 700	452, 100	106
107	387, 900	392, 400	397, 000	401, 600	406, 100	410, 700	415, 200	419, 800	424, 400	428, 900	433, 500	438, 100	442, 600	447, 200	451, 800	456, 400	461, 100	465, 700	470, 300	475, 000	479, 700	107
108	398, 300	402, 800	407, 300	411, 800	416, 400	420, 900	425, 400	429, 900	434, 400	438, 900	443, 400	448, 000	452, 500	457, 100	461, 700	466, 300	470, 900	475, 500	480, 100	484, 800	489, 500	108
109	408, 800	413, 500	418, 200	423, 000	427, 700	432, 400	437, 000	441, 700	446, 400	451, 100	455, 800	460, 500	465, 200	469, 900	474, 700	479, 400	484, 100	488, 900	493, 700	498, 500	503, 300	109
110	419, 200	423, 900	428, 600	433, 200	437, 900	442, 500	447, 200	451, 800	456, 400	461, 100	465, 700	470, 400	475, 100	479, 800	484, 500	489, 200	493, 900	498, 700	503, 500	508, 200	513, 000	110
111	429, 800	434, 600	439, 500	444, 300	449, 200	454, 000	458, 800	463, 600	468, 500	473, 300	478, 100	482, 900	487, 800	492, 600	497, 500	502, 300	507, 200	512, 100	517, 000	521, 900	526, 800	111
112	438, 600	443, 400	448, 100	452, 900	457, 700	462, 400	467, 100	471, 800	476, 600	481, 300	486, 100	490, 900	495, 600	500, 400	505, 200	510, 000	514, 800	519, 700	524, 500	529, 400	534, 300	112
113	461, 300	466, 500	471, 700	476, 800	482, 000	487, 100	492, 300	497, 400	502, 600	507, 700	512, 800	517, 900	523, 000	528, 200	533, 300	538, 400						113
114	471, 700	476, 800	482, 000	487, 100	492, 200	497, 300	502, 400	507, 500	512, 600	517, 700	522, 700	527, 800	532, 900	538, 000								114
115	482, 300	487, 600	492, 900	498, 200	503, 500	508, 800	514, 100	519, 400	524, 600	529, 900	535, 100											115
116	491, 100	496, 300	501, 500	506, 800	512, 000	517, 200	522, 400	527, 600	532, 700	537, 900												116
117	503, 200	508, 700	514, 100	519, 600	525, 000	530, 500	535, 900															117
118	522, 600	528, 100	533, 700	539, 300																		118

HEADWATER 594 to 598
TAILWATER 582.51 to 583.50

MARCH 2004

GUNTERSVILLE DAM
SPILLWAY DISCHARGE
IN CUBIC FEET PER SECOND

GATE ARRANGEMENT	HEADWATER ELEVATION																					GATE ARRANGEMENT
	598.0	598.2	598.4	598.6	598.8	599.0	599.2	599.4	599.6	599.8	600.0	600.2	600.4	600.6	600.8	601.0	601.2	601.4	601.6	601.8	602.0	
52										108, 100	109, 000											52
53						108, 000	108, 900	109, 800	110, 700	111, 700	112, 600											53
54		108, 000	108, 800	109, 700	110, 600	111, 500	112, 400	113, 400	114, 300	115, 300	116, 200											54
55	110, 500	111, 400	112, 300	113, 100	114, 100	115, 000	116, 000	116, 900	117, 900	118, 900	119, 900											55
56	113, 800	114, 700	115, 600	116, 500	117, 400	118, 300	119, 200	120, 100	121, 000	121, 900	122, 800											56
57	117, 200	118, 100	119, 000	119, 900	120, 900	121, 800	122, 700	123, 600	124, 600	125, 500	126, 400											57
58	123, 900	124, 900	126, 000	127, 100	128, 100	129, 200	130, 300	131, 400	132, 500	133, 500	134, 600											58
59	130, 600	131, 800	133, 000	134, 200	135, 400	136, 700	137, 900	139, 100	140, 400	141, 600	142, 800											59
60	137, 300	138, 600	140, 000	141, 300	142, 700	144, 100	145, 500	146, 900	148, 200	149, 600	151, 000											60
61	144, 000	145, 500	147, 000	148, 500	150, 000	151, 500	153, 100	154, 600	156, 100	157, 700	159, 200											61
62	150, 600	152, 300	153, 900	155, 600	157, 300	159, 000	160, 600	162, 300	164, 000	165, 700	167, 500											62
63	157, 300	159, 100	160, 900	162, 700	164, 500	166, 400	168, 200	170, 100	171, 900	173, 800	175, 700											63
64	164, 000	166, 000	167, 900	169, 900	171, 800	173, 800	175, 800	177, 800	179, 800	181, 800	183, 900											64
65	170, 700	172, 800	174, 900	177, 000	179, 100	181, 200	183, 400	185, 600	187, 700	189, 900	192, 100											65
66	174, 500	176, 500	178, 600	180, 600	182, 700	184, 800	186, 900	189, 000	191, 100	193, 200	195, 300											66
67	177, 800	179, 900	182, 000	184, 100	186, 100	188, 300	190, 400	192, 500	194, 600	196, 800	198, 900											67
68	184, 500	186, 700	189, 000	191, 200	193, 400	195, 700	198, 000	200, 200	202, 500	204, 800	207, 100											68
69	191, 200	193, 600	195, 900	198, 300	200, 700	203, 100	205, 600	208, 000	210, 400	212, 900	215, 300											69
70	197, 900	200, 400	202, 900	205, 500	208, 000	210, 600	213, 100	215, 700	218, 300	220, 900	223, 500											70
71	204, 600	207, 300	209, 900	212, 600	215, 300	218, 000	220, 700	223, 500	226, 200	229, 000	231, 800											71
72	211, 300	214, 100	216, 900	219, 700	222, 600	225, 400	228, 300	231, 200	234, 100	237, 000	240, 000											72
73	221, 400	224, 300	227, 300	230, 300	233, 300	236, 400	239, 400	242, 500	245, 600	248, 700	251, 800											73
74	231, 400	234, 600	237, 700	240, 900	244, 000	247, 300	250, 500	253, 800	257, 000	260, 300	263, 600											74
75	238, 100	241, 400	244, 700	248, 000	251, 300	254, 700	258, 100	261, 500	264, 900	268, 400	271, 800											75
78	247, 000	250, 300	253, 600	256, 900	260, 200	263, 600	267, 000	270, 500	273, 900	277, 400	280, 800											78
79	254, 100	257, 400	260, 600	263, 900	267, 300	270, 600	274, 000	277, 400	280, 800	284, 300	287, 700											79
80	260, 800	264, 200	267, 600	271, 100	274, 600	278, 100	281, 600	285, 200	288, 700	292, 300	295, 900											80
83	269, 600	273, 100	276, 500	280, 000	283, 500	287, 000	290, 600	294, 100	297, 700	301, 300	304, 900											83
84	283, 500	287, 000	290, 600	294, 200	297, 800	301, 400	305, 100	308, 800	312, 500	316, 200	320, 000											84
86	292, 300	295, 900	299, 500	303, 100	306, 700	310, 400	314, 100	317, 800	321, 500	325, 200	329, 000											86
87	306, 100	309, 800	313, 500	317, 300	321, 000	324, 800	328, 600	332, 500	336, 300	340, 200	344, 000											87
89	315, 000	318, 700	322, 400	326, 200	329, 900	333, 700	337, 600	341, 400	345, 300	349, 100	353, 000											89
90	328, 800	332, 600	336, 500	340, 400	344, 200	348, 200	352, 100	356, 100	360, 100	364, 100	368, 100											90
92	337, 700	341, 500	345, 400	349, 300	353, 200	357, 100	361, 100	365, 100	369, 100	373, 100	377, 100											92
93	351, 500	355, 400	359, 400	363, 400	367, 500	371, 600	375, 600	379, 800	383, 900	388, 000	392, 200											93
95	362, 200	366, 100	370, 100	374, 100	378, 100	382, 200	386, 200	390, 300	394, 400	398, 500	402, 700											95
96	376, 000	380, 000	384, 100	388, 300	392, 400	396, 600	400, 800	405, 000	409, 200	413, 500	417, 700											96
98	386, 600	390, 700	394, 800	398, 900	403, 000	407, 200	411, 400	415, 600	419, 800	424, 000	428, 200											98
99	400, 400	404, 600	408, 900	413, 100	417, 300	421, 600	425, 900	430, 300	434, 600	438, 900	443, 300											99
101	411, 100	415, 300	419, 500	423, 700	428, 000	432, 200	436, 500	440, 800	445, 100	449, 500	453, 800											101
102	424, 900	429, 200	433, 600	437, 900	442, 300	446, 700	451, 100	455, 500	460, 000	464, 400	468, 900											102
104	435, 600	439, 900	444, 200	448, 500	452, 900	457, 300	461, 700	466, 100	470, 500	474, 900	479, 400											104
105	449, 400	453, 800	458, 300	462, 700	467, 200	471, 700	476, 200	480, 800	485, 300	489, 900	494, 400											105
107	479, 700	484, 400	489, 100	493, 800	498, 600	503, 400	508, 100	513, 000	517, 800	522, 600	527, 500											107
108	489, 500	494, 100	498, 900	503, 600	508, 300	513, 100	517, 900	522, 700	527, 500	532, 400	537, 200											108
109	503, 300	508, 100	512, 900	517, 800	522, 700	527, 600	532, 500	537, 400														109
110	513, 000	517, 800	522, 700	527, 500	532, 400	537, 300																110
111	526, 800	531, 800	536, 700																			111
112	534, 300	539, 200																				112

MARCH 2004

HEADWATER 598 to 602
TAILWATER 582.51 to 583.50

GUNTERSVILLE DAM
SPILLWAY DISCHARGE
IN CUBIC FEET PER SECOND

GATE ARRANGEMENT	HEADWATER ELEVATION																				GATE ARRANGEMENT
	590.0	590.2	590.4	590.6	590.8	591.0	591.2	591.4	591.6	591.8	592.0	592.2	592.4	592.6	592.8	593.0	593.2	593.4	593.6	593.8	594.0	
64																				122,300	124,100	64
65																		122,300	124,200	126,100	128,000	65
66																	123,900	125,800	127,700	129,600	131,600	66
67															122,700	124,700	126,600	128,500	130,500	132,400	134,400	67
68														123,900	125,900	128,000	130,000	132,100	134,100	136,200	138,300	68
69												122,700	124,800	127,000	129,200	131,300	133,500	135,600	137,800	140,000	142,200	69
70											123,300	125,600	127,900	130,100	132,400	134,700	136,900	139,200	141,500	143,800	146,100	70
71										123,800	126,200	128,500	130,900	133,300	135,600	138,000	140,400	142,800	145,200	147,600	150,000	71
72									124,100	126,600	129,000	131,500	133,900	136,400	138,900	141,400	143,800	146,300	148,800	151,400	153,900	72
73							124,100	126,700	129,200	131,800	134,300	136,900	139,500	142,100	144,700	147,400	150,000	152,600	155,300	157,900	160,600	73
74					123,600	126,300	128,900	131,600	134,300	137,000	139,700	142,400	145,100	147,900	150,600	153,300	156,100	158,900	161,700	164,500	167,300	74
75				123,100	125,900	128,600	131,400	134,200	136,900	139,700	142,500	145,300	148,100	151,000	153,800	156,700	159,500	162,400	165,400	168,300	171,300	75
76			122,400	125,000	127,700	130,300	132,900	135,500	138,200	140,800												76
77		124,700	127,500	130,200	132,900	135,600	138,300	141,000	143,700	146,400	149,100	151,800	154,600	157,300	160,000	162,800	165,500	168,200	171,000	173,800	176,600	77
78	123,800	126,700	129,500	132,400	135,200	138,000	140,800	143,600	146,400	149,200	152,000	154,800	157,600	160,400	163,300	166,100	168,900	171,800	174,700	177,600	180,500	78
79	128,800	131,800	134,700	137,600	140,500	143,300	146,200	149,100	151,900	154,800	157,700	160,600	163,500	166,400	169,300	172,200	175,100	178,000	181,000	183,900	186,900	79
80	130,700	133,700	136,700	139,700	142,700	145,700	148,700	151,600	154,600	157,500	160,500	163,500	166,500	169,500	172,500	175,500	178,500	181,600	184,600	187,700	190,900	80
81	133,000	135,900	138,800	141,700	144,500	147,400	150,200	153,000	155,800	158,600												81
82	138,000	140,900	143,900	146,900	149,800	152,700	155,600	158,500	161,400	164,300	167,200	170,000	172,900	175,800	178,700	181,600	184,500	187,400	190,300	193,300	196,200	82
83	139,800	142,900	146,000	149,000	152,100	155,100	158,100	161,100	164,000	167,000	170,000	173,000	176,000	179,000	181,900	184,900	187,900	190,900	194,000	197,100	200,100	83
84	146,700	149,900	153,200	156,400	159,600	162,800	165,900	169,100	172,200	175,400	178,500	181,700	184,800	188,000	191,200	194,300	197,500	200,700	203,900	207,200	210,400	84
85	149,000	152,100	155,200	158,300	161,400	164,400	167,500	170,500	173,500	176,500												85
86	155,800	159,100	162,400	165,700	168,900	172,100	175,300	178,500	181,700	184,900	188,000	191,200	194,300	197,500	200,600	203,800	206,900	210,100	213,300	216,500	219,700	86
87	162,700	166,200	169,600	173,000	176,500	179,800	183,200	186,600	189,900	193,200	196,600	199,900	203,200	206,500	209,900	213,200	216,500	219,800	223,200	226,600	230,000	87
88	165,000	168,300	171,600	175,000	178,200	181,500	184,700	188,000	191,100	194,300												88
89	171,800	175,300	178,800	182,300	185,800	189,200	192,600	196,000	199,400	202,700	206,000	209,300	212,700	216,000	219,300	222,600	225,900	229,200	232,600	235,900	239,300	89
90	178,700	182,400	186,000	189,700	193,300	196,900	200,500	204,000	207,600	211,100	214,600	218,100	221,600	225,100	228,500	232,000	235,500	239,000	242,500	246,100	249,600	90
92	187,800	191,600	195,300	199,000	202,600	206,300	209,900	213,500	217,000	220,500	224,000	227,500	231,000	234,500	238,000	241,400	244,900	248,400	251,900	255,400	258,900	92
93	194,700	198,600	202,500	206,300	210,200	214,000	217,800	221,500	225,200	228,900	232,600	236,200	239,900	243,600	247,200	250,800	254,500	258,100	261,800	265,500	269,200	93
95	205,900	209,900	213,900	217,800	221,700	225,600	229,400	233,200	236,900	240,600	244,300	248,000	251,600	255,300	258,900	262,500	266,100	269,700	273,400	277,000	280,700	95
96	212,800	216,900	221,100	225,200	229,200	233,300	237,300	241,200	245,100	249,000	252,900	256,700	260,500	264,300	268,100	271,900	275,700	279,500	283,300	287,200	291,000	96
98	224,100	228,300	232,500	236,600	240,800	244,900	248,900	252,900	256,800	260,700	264,600	268,400	272,200	276,000	279,800	283,600	287,300	291,100	294,900	298,700	302,500	98
99	230,900	235,300	239,700	244,000	248,300	252,600	256,800	260,900	265,000	269,100	273,100	277,100	281,100	285,100	289,000	293,000	296,900	300,900	304,800	308,800	312,900	99
101	242,200	246,600	251,100	255,500	259,800	264,100	268,400	272,600	276,700	280,800	284,800	288,900	292,800	296,800	300,700	304,600	308,600	312,500	316,400	320,400	324,400	101
102	249,100	253,700	258,300	262,800	267,400	271,800	276,300	280,600	284,900	289,200	293,400	297,600	301,700	305,900	310,000	314,100	318,100	322,200	326,400	330,500	334,700	102
104	260,300	265,000	269,600	274,300	278,900	283,400	287,900	292,300	296,600	300,900	305,100	309,300	313,400	317,600	321,600	325,700	329,800	333,900	337,900	342,000	346,200	104
105	267,200	272,000	276,800	281,600	286,400	291,100	295,800	300,300	304,800	309,300	313,700	318,000	322,300	326,600	330,900	335,100	339,400	343,600	347,900	352,200	356,500	105
106	272,400	277,200	282,000	286,800	291,600	296,200	300,900	305,400	309,800	314,200	318,500	322,800	327,100	331,300	335,400	339,600	343,700	347,900	352,100	356,300	360,500	106
107	286,100	291,300	296,400	301,500	306,600	311,700	316,600	321,500	326,300	331,000	335,600	340,300	344,800	349,400	353,900	358,400	362,900	367,400	372,000	376,500	381,100	107
108	296,300	301,500	306,700	311,900	317,100	322,100	327,100	332,000	336,800	341,600	346,200	350,900	355,400	360,000	364,500	369,000	373,400	377,900	382,400	386,900	391,500	108
109	303,200	308,600	313,900	319,300	324,600	329,800	335,000	340,100	345,000	350,000	354,800	359,600	364,300	369,000	373,700	378,400	383,000	387,700	392,400	397,100	401,800	109
110	313,400	318,800	324,200	329,700	335,000	340,300	345,500	350,600	355,600	360,500	365,400	370,200	374,900	379,600	384,300	388,900	393,500	398,200	402,800	407,500	412,200	110
111	320,200	325,800	331,400	337,000	342,500	348,000	353,400	358,700	363,800	368,900	373,900	378,900	383,800	388,700	393,500	398,300	403,100	407,900	412,800	417,600	422,500	111
112	329,500	335,100	340,800	346,400	351,900	357,400	362,800	368,100	373,200	378,300	383,300	388,200	393,100	397,900	402,700	407,500	412,200	417,000	421,700	426,500	431,300	112
113	344,100	350,200	356,200	362,100	368,000	373,900	379,600	385,300	390,800	396,300	401,600	406,900	412,200	417,400	422,500	427,700	432,800	438,000	443,100	448,300	453,500	113
114	354,400	360,400	366,500	372,500	378,500	384,400	390,200	395,800	401,400	406,900	412,200	417,500	422,800	428,000	433,100	438,200	443,300	448,500	453,600	458,700	463,900	114
115	361,200	367,400	373,700	379,900	386,000	392,100	398,000	403,900	409,600	415,200	420,800	426,200	431,700	437,000	442,300	447,600	452,900	458,200	463,500	468,800	474,200	115
116	370,500	376,700	383,000	389,200	395,400	401,500	407,400	413,300	419,000	424,600	430,100	435,600	440,900	446,300	451,500	456,800	462,000	467,200	472,500	477,700	483,000	116
117	378,300	384,700	391,200	397,600	404,000	410,200	416,400	422,500	428,400	434,200	439,900	445,600	451,100	456,700	462,100	467,600	473,000	478,500	483,900	489,400	494,900	117
118	394,400	401,100	407,700	414,300	420,900	427,300	433,700	439,900	446,000	452,000	457,800	463,600	469,300	475,000	480,600	486,100	491,700	497,300	502,800	508,400	514,000	118
119	411,500	418,300	425,200	432,100	438,800	445,500	452,100	458,500	464,800	470,900	477,000	482,900	488,800	494,600	500,400	506,100	511,800	517,500	523,200	529,000	534,700	119
120	427,600	434,700	441,700	448,800	455,700	462,600	469,400	476,000	482,400	488,700	494,900	501,000	507,000	512,900	518,800	524,700	530,500	536,300	542,200	548,000	553,900	120

HEADWATER 590 to 594
TAILWATER 583.51 to 584.50

MARCH 2004

GUNTERSVILLE DAM
SPILLWAY DISCHARGE
IN CUBIC FEET PER SECOND

GATE ARRANGEMENT	HEADWATER ELEVATION																					GATE ARRANGEMENT
	594.0	594.2	594.4	594.6	594.8	595.0	595.2	595.4	595.6	595.8	596.0	596.2	596.4	596.6	596.8	597.0	597.2	597.4	597.6	597.8	598.0	
59																122, 300	123, 600	124, 800	126, 100	127, 300	128, 500	59
60												122, 800	124, 100	125, 500	126, 800	128, 200	129, 600	131, 000	132, 400	133, 700	135, 100	60
61								122, 200	123, 700	125, 100	126, 600	128, 100	129, 600	131, 100	132, 600	134, 100	135, 600	137, 100	138, 700	140, 200	141, 700	61
62					122, 400	124, 000	125, 500	127, 000	128, 600	130, 200	131, 800	133, 400	135, 000	136, 700	138, 300	140, 000	141, 600	143, 300	145, 000	146, 600	148, 300	62
63			123, 500	125, 200	126, 800	128, 500	130, 200	131, 800	133, 500	135, 300	137, 000	138, 700	140, 500	142, 300	144, 100	145, 900	147, 700	149, 500	151, 300	153, 100	154, 900	63
64	124, 100	125, 900	127, 700	129, 400	131, 200	133, 000	134, 800	136, 600	138, 500	140, 300	142, 200	144, 100	146, 000	147, 900	149, 800	151, 700	153, 700	155, 600	157, 600	159, 500	161, 400	64
65	128, 000	129, 900	131, 800	133, 700	135, 600	137, 600	139, 500	141, 400	143, 400	145, 400	147, 400	149, 400	151, 400	153, 500	155, 500	157, 600	159, 700	161, 800	163, 900	165, 900	168, 000	65
66	131, 600	133, 600	135, 500	137, 400	139, 400	141, 300	143, 300	145, 300	147, 300	149, 300	151, 300	153, 300	155, 300	157, 400	159, 400	161, 400	163, 500	165, 600	167, 600	169, 700	171, 700	66
67	134, 400	136, 400	138, 300	140, 300	142, 300	144, 300	146, 200	148, 200	150, 300	152, 300	154, 300	156, 400	158, 400	160, 500	162, 500	164, 600	166, 700	168, 800	170, 900	172, 900	175, 000	67
68	138, 300	140, 400	142, 500	144, 600	146, 700	148, 800	150, 900	153, 000	155, 200	157, 300	159, 500	161, 700	163, 900	166, 100	168, 300	170, 500	172, 700	175, 000	177, 200	179, 400	181, 600	68
69	142, 200	144, 400	146, 600	148, 900	151, 100	153, 300	155, 600	157, 800	160, 100	162, 400	164, 700	167, 000	169, 300	171, 700	174, 000	176, 400	178, 700	181, 100	183, 500	185, 800	188, 200	69
70	146, 100	148, 500	150, 800	153, 100	155, 500	157, 900	160, 200	162, 600	165, 000	167, 500	169, 900	172, 300	174, 800	177, 300	179, 800	182, 300	184, 800	187, 300	189, 800	192, 300	194, 800	70
71	150, 000	152, 500	155, 000	157, 400	159, 900	162, 400	164, 900	167, 400	170, 000	172, 500	175, 100	177, 700	180, 300	182, 900	185, 500	188, 100	190, 800	193, 400	196, 100	198, 700	201, 400	71
72	153, 900	156, 500	159, 100	161, 700	164, 300	166, 900	169, 600	172, 200	174, 900	177, 600	180, 300	183, 000	185, 700	188, 500	191, 200	194, 000	196, 800	199, 600	202, 400	205, 200	208, 000	72
73	160, 600	163, 400	166, 100	168, 900	171, 600	174, 400	177, 200	180, 000	182, 800	185, 700	188, 500	191, 400	194, 300	197, 200	200, 100	203, 100	206, 000	209, 000	211, 900	214, 900	217, 900	73
74	167, 300	170, 200	173, 100	176, 000	178, 900	181, 800	184, 800	187, 800	190, 700	193, 700	196, 800	199, 800	202, 900	205, 900	209, 000	212, 100	215, 200	218, 300	221, 500	224, 600	227, 800	74
75	171, 300	174, 200	177, 200	180, 300	183, 300	186, 400	189, 500	192, 500	195, 700	198, 800	202, 000	205, 100	208, 300	211, 500	214, 800	218, 000	221, 200	224, 500	227, 800	231, 100	234, 400	75
77	176, 600	179, 500	182, 300	185, 200	188, 100	191, 000	193, 900	196, 800	199, 800	202, 700	205, 700	208, 800	211, 800	214, 900	218, 000	221, 100	224, 200	227, 300	230, 400	233, 600	236, 700	77
78	180, 500	183, 500	186, 500	189, 500	192, 500	195, 500	198, 500	201, 600	204, 700	207, 800	210, 900	214, 100	217, 300	220, 500	223, 700	226, 900	230, 200	233, 400	236, 700	240, 000	243, 300	78
79	186, 900	190, 000	193, 000	196, 000	199, 100	202, 200	205, 300	208, 400	211, 500	214, 700	217, 900	221, 100	224, 300	227, 500	230, 700	233, 900	237, 200	240, 500	243, 700	247, 000	250, 300	79
80	190, 900	194, 000	197, 100	200, 300	203, 500	206, 700	210, 000	213, 200	216, 500	219, 800	223, 100	226, 400	229, 700	233, 100	236, 400	239, 800	243, 200	246, 600	250, 000	253, 500	256, 900	80
82	196, 200	199, 200	202, 200	205, 200	208, 300	211, 300	214, 400	217, 500	220, 600	223, 700	226, 900	230, 000	233, 200	236, 400	239, 700	242, 900	246, 100	249, 400	252, 700	256, 000	259, 300	82
83	200, 100	203, 300	206, 400	209, 500	212, 700	215, 900	219, 100	222, 300	225, 500	228, 800	232, 000	235, 400	238, 700	242, 000	245, 400	248, 800	252, 200	255, 600	259, 000	262, 400	265, 800	83
84	210, 400	213, 700	217, 000	220, 400	223, 700	227, 100	230, 500	233, 900	237, 300	240, 700	244, 200	247, 600	251, 100	254, 600	258, 100	261, 700	265, 200	268, 700	272, 300	275, 800	279, 400	84
86	219, 700	223, 000	226, 300	229, 600	232, 900	236, 200	239, 600	242, 900	246, 300	249, 700	253, 200	256, 600	260, 100	263, 600	267, 100	270, 600	274, 100	277, 700	281, 200	284, 800	288, 400	86
87	230, 000	233, 500	237, 000	240, 400	243, 900	247, 500	251, 000	254, 500	258, 100	261, 700	265, 300	268, 900	272, 500	276, 200	279, 800	283, 500	287, 200	290, 800	294, 500	298, 200	302, 000	87
89	239, 300	242, 700	246, 200	249, 600	253, 100	256, 600	260, 100	263, 600	267, 100	270, 700	274, 300	277, 900	281, 500	285, 100	288, 800	292, 400	296, 100	299, 800	303, 500	307, 200	310, 900	89
90	249, 600	253, 200	256, 900	260, 500	264, 100	267, 800	271, 500	275, 200	278, 900	282, 600	286, 400	290, 200	293, 900	297, 700	301, 500	305, 300	309, 100	313, 000	316, 800	320, 600	324, 500	90
92	258, 900	262, 500	266, 100	269, 700	273, 300	276, 900	280, 600	284, 200	287, 900	291, 600	295, 400	299, 100	302, 900	306, 700	310, 500	314, 300	318, 100	321, 900	325, 700	329, 600	333, 400	92
93	269, 200	273, 000	276, 800	280, 500	284, 300	288, 200	292, 000	295, 800	299, 700	303, 600	307, 500	311, 400	315, 300	319, 300	323, 200	327, 100	331, 100	335, 100	339, 000	343, 000	347, 000	93
95	280, 700	284, 400	288, 200	291, 900	295, 700	299, 500	303, 200	307, 000	310, 900	314, 700	318, 600	322, 400	326, 300	330, 200	334, 200	338, 100	342, 000	346, 000	349, 900	353, 900	357, 800	95
96	291, 000	294, 900	298, 800	302, 800	306, 700	310, 700	314, 700	318, 600	322, 600	326, 700	330, 700	334, 700	338, 800	342, 800	346, 900	351, 000	355, 000	359, 100	363, 200	367, 300	371, 400	96
98	302, 500	306, 400	310, 300	314, 200	318, 100	322, 000	325, 900	329, 800	333, 800	337, 800	341, 800	345, 800	349, 800	353, 800	357, 800	361, 900	365, 900	370, 000	374, 100	378, 100	382, 200	98
99	312, 900	316, 900	320, 900	325, 000	329, 100	333, 200	337, 300	341, 400	345, 600	349, 700	353, 900	358, 000	362, 200	366, 400	370, 600	374, 800	379, 000	383, 200	387, 400	391, 600	395, 800	99
101	324, 400	328, 400	332, 400	336, 400	340, 400	344, 500	348, 600	352, 600	356, 700	360, 800	364, 900	369, 100	373, 200	377, 400	381, 500	385, 700	389, 900	394, 100	398, 200	402, 400	406, 600	101
102	334, 700	338, 800	343, 000	347, 300	351, 500	355, 700	360, 000	364, 200	368, 500	372, 800	377, 100	381, 400	385, 700	390, 000	394, 300	398, 600	402, 900	407, 200	411, 500	415, 900	420, 200	102
104	346, 200	350, 300	354, 500	358, 600	362, 800	367, 000	371, 200	375, 400	379, 600	383, 900	388, 100	392, 400	396, 700	401, 000	405, 200	409, 500	413, 800	418, 100	422, 400	426, 700	431, 000	104
105	356, 500	360, 800	365, 100	369, 500	373, 900	378, 200	382, 600	387, 000	391, 400	395, 800	400, 300	404, 700	409, 100	413, 500	418, 000	422, 400	426, 800	431, 300	435, 700	440, 200	444, 600	105
106	360, 500	364, 700	369, 000	373, 200	377, 500	381, 800	386, 000	390, 300	394, 600	399, 000	403, 400	407, 700	412, 100	416, 500	420, 900	425, 300	429, 800	434, 200	438, 600	443, 000	447, 500	106
107	381, 100	385, 700	390, 300	394, 900	399, 600	404, 200	408, 900	413, 500	418, 200	422, 900	427, 600	432, 300	437, 000	441, 700	446, 400	451, 100	455, 800	460, 500	465, 200	469, 900	474, 700	107
108	391, 500	396, 000	400, 600	405, 200	409, 800	414, 400	419, 000	423, 700	428, 300	433, 000	437, 600	442, 300	447, 000	451, 700	456, 400	461, 000	465, 700	470, 400	475, 100	479, 800	484, 500	108
109	401, 800	406, 500	411, 300	416, 100	420, 900	425, 700	430, 500	435, 300	440, 100	444, 900	449, 800	454, 600	459, 400	464, 300	469, 100	473, 900	478, 800	483, 600	488, 400	493, 300	498, 100	109
110	412, 200	416, 900	421, 600	426, 400	431, 100	435, 900	440, 600	445, 400	450, 200	455, 000	459, 800	464, 600	469, 400	474, 200	479, 100	483, 900	488, 700	493, 500	498, 300	503, 200	508, 000	110
111	422, 500	427, 400	432, 300	437, 200	442, 100	447, 100	452, 000	457, 000	462, 000	466, 900	471, 900	476, 900	481, 900	486, 800	491, 800	496, 800	501, 700	506, 700	511, 600	516, 600	521, 600	111
112	431, 300	436, 100	441, 000	445, 800	450, 700	455, 600	460, 400	465, 300	470, 200	475, 100	480, 000	484, 900	489, 800	494, 800	499, 700	504, 600	509, 500	514, 400	519, 300	524, 300	529, 200	112
113	453, 500	458, 700	464, 000	469, 200	474, 500	479, 800	485, 000	490, 300	495, 600	500, 900	506, 200	511, 500	516, 700	522, 000	527, 200	532, 500	537, 700	542, 900	548, 200	553, 400		113
114	463, 900	469, 100	474, 300	479, 500	484, 700	490, 000	495, 200	500, 400	505, 700	510, 900	516, 200	521, 500	526, 700	531, 900	537, 200	542, 400	547, 600	552, 800				114
115	474, 200	479, 600	485, 000	490, 400	495, 800	501, 200	506, 600	512, 100	517, 500	522, 900	528, 300	533, 700	539, 100	544, 500	549, 900							115
116	483, 000	488, 300	493, 700	499, 000	504, 300	509, 700	515, 000	520, 300	525, 700	531, 100	536, 400	541, 800	547, 100	552, 500								116
117	494, 900	500, 400	506, 000	511, 500	517, 100	522, 600	528, 200	533, 800	539, 400	544, 900	550, 500											117
118	514, 000	519, 700	525, 300	531, 000	536, 700	542, 300	548, 000	553, 700														118
119	534, 700	540, 500	546, 300	552, 100																		119
120	553, 900																					120

MARCH 2004

HEADWATER 594 to 598
TAILWATER 583.51 to 584.50

GUNTERSVILLE DAM
SPILLWAY DISCHARGE
IN CUBIC FEET PER SECOND

GATE ARRANGEMENT	HEADWATER ELEVATION																					GATE ARRANGEMENT
	598.0	598.2	598.4	598.6	598.8	599.0	599.2	599.4	599.6	599.8	600.0	600.2	600.4	600.6	600.8	601.0	601.2	601.4	601.6	601.8	602.0	
57									122,700	123,700	124,600											57
58		123,000	124,000	125,100	126,200	127,300	128,400	129,500	130,500	131,600	132,700											58
59	128,500	129,700	130,900	132,200	133,400	134,600	135,900	137,100	138,300	139,600	140,800											59
60	135,100	136,400	137,800	139,200	140,600	141,900	143,300	144,700	146,100	147,500	148,900											60
61	141,700	143,200	144,700	146,200	147,700	149,300	150,800	152,400	153,900	155,500	157,100											61
62	148,300	149,900	151,600	153,200	154,900	156,600	158,300	160,000	161,700	163,400	165,200											62
63	154,900	156,700	158,500	160,300	162,100	164,000	165,800	167,700	169,500	171,400	173,300											63
64	161,400	163,400	165,300	167,300	169,300	171,300	173,300	175,300	177,300	179,400	181,400											64
65	168,000	170,100	172,200	174,300	176,500	178,600	180,800	182,900	185,100	187,300	189,500											65
66	171,700	173,800	175,800	177,900	180,000	182,100	184,200	186,300	188,400	190,500	192,700											66
67	175,000	177,100	179,200	181,300	183,400	185,500	187,600	189,800	191,900	194,100	196,200											67
68	181,600	183,800	186,100	188,300	190,600	192,800	195,100	197,400	199,700	202,000	204,300											68
69	188,200	190,600	193,000	195,300	197,700	200,200	202,600	205,100	207,500	210,000	212,400											69
70	194,800	197,300	199,800	202,400	204,900	207,500	210,100	212,700	215,300	217,900	220,600											70
71	201,400	204,000	206,700	209,400	212,100	214,800	217,600	220,300	223,100	225,900	228,700											71
72	208,000	210,800	213,600	216,400	219,300	222,200	225,100	228,000	230,900	233,800	236,800											72
73	217,900	220,900	223,900	226,900	229,900	233,000	236,000	239,100	242,200	245,300	248,500											73
74	227,800	230,900	234,100	237,300	240,500	243,700	247,000	250,300	253,600	256,800	260,200											74
75	234,400	237,700	241,000	244,300	247,700	251,100	254,500	257,900	261,300	264,800	268,300											75
78	243,300	246,600	250,000	253,300	256,700	260,100	263,500	266,900	270,400	273,900	277,300											78
79	250,300	253,600	256,900	260,200	263,600	267,000	270,400	273,800	277,200	280,600	284,100											79
80	256,900	260,300	263,800	267,300	270,800	274,300	277,800	281,400	285,000	288,600	292,200											80
83	265,800	269,300	272,800	276,200	279,700	283,300	286,900	290,400	294,000	297,600	301,300											83
84	279,400	283,000	286,600	290,200	293,800	297,500	301,200	304,900	308,600	312,400	316,100											84
86	288,400	292,000	295,600	299,200	302,800	306,500	310,200	313,900	317,700	321,400	325,200											86
87	302,000	305,700	309,400	313,200	316,900	320,800	324,600	328,400	332,300	336,100	340,000											87
89	310,900	314,600	318,400	322,100	325,900	329,800	333,600	337,400	341,300	345,200	349,100											89
90	324,500	328,400	332,200	336,100	340,000	344,000	347,900	351,900	355,900	359,900	364,000											90
92	333,400	337,300	341,200	345,100	349,000	353,000	357,000	361,000	365,000	369,000	373,000											92
93	347,000	351,000	355,000	359,100	363,100	367,200	371,300	375,400	379,600	383,700	387,900											93
95	357,800	361,800	365,800	369,800	373,900	377,900	382,000	386,100	390,200	394,400	398,500											95
96	371,400	375,500	379,700	383,800	388,000	392,200	396,400	400,600	404,800	409,100	413,400											96
98	382,200	386,300	390,400	394,600	398,700	402,900	407,100	411,300	415,500	419,700	424,000											98
99	395,800	400,000	404,300	408,500	412,800	417,100	421,400	425,700	430,100	434,400	438,800											99
101	406,600	410,800	415,100	419,300	423,500	427,800	432,100	436,400	440,700	445,100	449,500											101
102	420,200	424,500	428,900	433,300	437,600	442,000	446,500	450,900	455,300	459,800	464,300											102
104	431,000	435,300	439,700	444,000	448,400	452,800	457,200	461,600	466,000	470,500	474,900											104
105	444,600	449,100	453,500	458,000	462,500	467,000	471,500	476,100	480,600	485,200	489,800											105
107	474,700	479,400	484,100	488,900	493,600	498,400	503,200	508,000	512,900	517,700	522,600											107
108	484,500	489,300	494,000	498,700	503,500	508,300	513,100	517,900	522,700	527,600	532,400											108
109	498,100	503,000	507,800	512,700	517,600	522,500	527,400	532,400	537,300	542,300	547,300											109
110	508,000	512,800	517,700	522,600	527,500	532,400	537,300	542,200	547,200	552,100												110
111	521,600	526,600	531,500	536,500	541,500	546,600	551,600															111
112	529,200	534,100	539,100	544,000	549,000	554,000																112

HEADWATER 598 to 602
TAILWATER 583.51 to 584.50

MARCH 2004

GUNTERSVILLE DAM
SPILLWAY DISCHARGE
IN CUBIC FEET PER SECOND

GATE ARRANGEMENT	HEADWATER ELEVATION																					GATE ARRANGEMENT
	590.0	590.2	590.4	590.6	590.8	591.0	591.2	591.4	591.6	591.8	592.0	592.2	592.4	592.6	592.8	593.0	593.2	593.4	593.6	593.8	594.0	
69																				136, 600	138, 700	69
70																			138, 100	140, 400	142, 700	70
71																	137, 000	139, 400	141, 800	144, 200	146, 600	71
72																138, 000	140, 500	143, 000	145, 500	148, 000	150, 500	72
73														138, 800	141, 400	144, 000	146, 700	149, 300	151, 900	154, 500	157, 200	73
74												138, 900	141, 700	144, 500	147, 300	150, 100	152, 800	155, 500	158, 300	161, 100	163, 800	74
75											138, 900	141, 900	144, 800	147, 700	150, 600	153, 400	156, 300	159, 100	162, 000	164, 900	167, 700	75
77									139, 300	142, 200	145, 100	148, 000	150, 900	153, 700	156, 500	159, 200	162, 000	164, 800	167, 500	170, 300	173, 000	77
78								138, 900	142, 000	145, 000	148, 000	151, 000	153, 900	156, 900	159, 800	162, 600	165, 500	168, 300	171, 200	174, 100	176, 900	78
79						137, 900	141, 100	144, 200	147, 300	150, 400	153, 500	156, 500	159, 600	162, 600	165, 500	168, 500	171, 400	174, 300	177, 200	180, 200	183, 100	79
80					137, 000	140, 200	143, 500	146, 700	150, 000	153, 200	156, 400	159, 500	162, 600	165, 800	168, 800	171, 900	174, 900	177, 900	180, 900	184, 000	187, 000	80
81					138, 600	141, 700	144, 800	147, 900	151, 000	154, 100												81
82			137, 400	140, 500	143, 700	146, 900	150, 000	153, 200	156, 300	159, 500	162, 600	165, 700	168, 700	171, 700	174, 700	177, 700	180, 600	183, 500	186, 500	189, 400	192, 300	82
83			139, 300	142, 600	145, 900	149, 200	152, 500	155, 700	159, 000	162, 200	165, 400	168, 600	171, 800	174, 900	178, 000	181, 100	184, 100	187, 100	190, 200	193, 200	196, 200	83
84	139, 300	142, 700	146, 200	149, 600	153, 100	156, 600	160, 100	163, 500	167, 000	170, 400	173, 800	177, 200	180, 500	183, 800	187, 100	190, 300	193, 500	196, 700	199, 900	203, 100	206, 300	84
85	141, 700	144, 900	148, 200	151, 500	154, 800	158, 100	161, 400	164, 700	168, 000	171, 300												85
86	148, 200	151, 600	155, 100	158, 500	162, 000	165, 500	169, 000	172, 500	176, 000	179, 500	182, 900	186, 300	189, 600	193, 000	196, 300	199, 500	202, 700	205, 900	209, 100	212, 300	215, 500	86
87	154, 700	158, 300	161, 900	165, 600	169, 300	172, 900	176, 600	180, 300	184, 000	187, 600	191, 200	194, 800	198, 300	201, 900	205, 300	208, 700	212, 100	215, 500	218, 900	222, 200	225, 600	87
88	157, 100	160, 500	164, 000	167, 400	170, 900	174, 500	178, 000	181, 500	185, 000	188, 500												88
89	163, 600	167, 200	170, 800	174, 500	178, 200	181, 900	185, 600	189, 300	193, 000	196, 700	200, 300	203, 900	207, 500	211, 000	214, 500	217, 900	221, 300	224, 700	228, 100	231, 400	234, 800	89
90	170, 000	173, 800	177, 700	181, 500	185, 400	189, 300	193, 200	197, 100	201, 000	204, 800	208, 600	212, 400	216, 200	219, 900	223, 500	227, 100	230, 700	234, 300	237, 800	241, 300	244, 900	90
92	179, 000	182, 700	186, 600	190, 400	194, 300	198, 200	202, 200	206, 100	210, 000	213, 900	217, 700	221, 600	225, 300	229, 100	232, 700	236, 300	239, 900	243, 500	247, 000	250, 500	254, 100	92
93	185, 400	189, 400	193, 400	197, 500	201, 600	205, 700	209, 800	213, 900	218, 000	222, 000	226, 100	230, 100	234, 000	237, 900	241, 800	245, 600	249, 300	253, 000	256, 800	260, 500	264, 200	93
95	196, 400	200, 400	204, 400	208, 500	212, 600	216, 700	220, 800	225, 000	229, 100	233, 200	237, 300	241, 400	245, 300	249, 300	253, 100	256, 900	260, 700	264, 400	268, 200	271, 900	275, 500	95
96	202, 900	207, 100	211, 300	215, 500	219, 800	224, 100	228, 500	232, 800	237, 100	241, 400	245, 700	249, 900	254, 000	258, 200	262, 200	266, 200	270, 100	274, 000	277, 900	281, 800	285, 600	96
98	213, 900	218, 100	222, 300	226, 500	230, 800	235, 200	239, 500	243, 900	248, 300	252, 600	256, 900	261, 200	265, 400	269, 500	273, 600	277, 600	281, 500	285, 400	289, 300	293, 200	297, 000	98
99	220, 400	224, 700	229, 100	233, 600	238, 100	242, 600	247, 100	251, 700	256, 200	260, 800	265, 200	269, 700	274, 100	278, 400	282, 600	286, 800	290, 900	295, 000	299, 100	303, 100	307, 100	99
101	231, 400	235, 700	240, 100	244, 500	249, 100	253, 600	258, 200	262, 800	267, 400	272, 000	276, 500	281, 000	285, 400	289, 700	294, 000	298, 200	302, 300	306, 400	310, 500	314, 500	318, 500	101
102	237, 900	242, 400	247, 000	251, 600	256, 300	261, 000	265, 800	270, 600	275, 400	280, 100	284, 800	289, 500	294, 100	298, 600	303, 000	307, 400	311, 700	316, 000	320, 200	324, 400	328, 600	102
104	248, 900	253, 400	257, 900	262, 600	267, 300	272, 100	276, 900	281, 700	286, 500	291, 300	296, 100	300, 800	305, 400	310, 000	314, 400	318, 800	323, 100	327, 400	331, 600	335, 800	340, 000	104
105	255, 300	260, 000	264, 800	269, 600	274, 500	279, 500	284, 500	289, 500	294, 500	299, 500	304, 400	309, 300	314, 100	318, 800	323, 500	328, 000	332, 500	337, 000	341, 400	345, 700	350, 100	105
106	260, 500	265, 100	269, 800	274, 600	279, 500	284, 400	289, 300	294, 300	299, 300	304, 200	309, 100	313, 900	318, 700	323, 400	328, 000	332, 500	336, 900	341, 300	345, 600	349, 900	354, 200	106
107	273, 400	278, 500	283, 500	288, 700	293, 900	299, 200	304, 600	309, 900	315, 200	320, 500	325, 800	331, 000	336, 100	341, 200	346, 100	350, 900	355, 700	360, 400	365, 100	369, 700	374, 400	107
108	283, 400	288, 400	293, 500	298, 600	303, 900	309, 200	314, 600	319, 900	325, 300	330, 700	336, 000	341, 200	346, 300	351, 400	356, 400	361, 200	366, 000	370, 700	375, 400	380, 000	384, 600	108
109	289, 900	295, 100	300, 300	305, 700	311, 100	316, 600	322, 200	327, 700	333, 300	338, 800	344, 300	349, 700	355, 000	360, 300	365, 400	370, 400	375, 400	380, 300	385, 200	390, 000	394, 700	109
110	299, 800	305, 000	310, 300	315, 600	321, 100	326, 600	332, 200	337, 800	343, 400	348, 900	354, 500	359, 900	365, 300	370, 500	375, 700	380, 700	385, 700	390, 600	395, 500	400, 300	405, 000	110
111	306, 300	311, 700	317, 100	322, 700	328, 300	334, 000	339, 800	345, 600	351, 400	357, 100	362, 800	368, 400	374, 000	379, 400	384, 700	390, 000	395, 100	400, 200	405, 200	410, 200	415, 100	111
112	315, 400	320, 700	326, 100	331, 700	337, 300	343, 000	348, 800	354, 500	360, 300	366, 100	371, 800	377, 400	382, 900	388, 400	393, 700	398, 900	404, 000	409, 100	414, 000	419, 000	423, 900	112
113	329, 200	335, 000	340, 800	346, 700	352, 800	358, 900	365, 000	371, 200	377, 400	383, 600	389, 700	395, 700	401, 600	407, 400	413, 100	418, 700	424, 200	429, 600	435, 000	440, 300	445, 600	113
114	339, 200	344, 900	350, 700	356, 700	362, 700	368, 900	375, 100	381, 300	387, 500	393, 700	399, 800	405, 900	411, 800	417, 700	423, 400	429, 000	434, 500	439, 900	445, 300	450, 600	455, 900	114
115	345, 700	351, 600	357, 600	363, 700	370, 000	376, 300	382, 700	389, 100	395, 500	401, 800	408, 200	414, 400	420, 500	426, 600	432, 500	438, 200	443, 900	449, 500	455, 100	460, 500	466, 000	115
116	354, 700	360, 600	366, 600	372, 700	378, 900	385, 200	391, 600	398, 000	404, 400	410, 800	417, 100	423, 400	429, 500	435, 500	441, 400	447, 200	452, 800	458, 400	463, 900	469, 300	474, 700	116
117	362, 100	368, 200	374, 400	380, 700	387, 200	393, 700	400, 300	406, 900	413, 500	420, 100	426, 700	433, 100	439, 500	445, 700	451, 800	457, 700	463, 600	469, 400	475, 100	480, 800	486, 400	117
118	377, 600	383, 900	390, 200	396, 700	403, 400	410, 100	416, 900	423, 700	430, 500	437, 200	444, 000	450, 600	457, 100	463, 500	469, 800	475, 900	481, 900	487, 800	493, 700	499, 500	505, 200	118
119	394, 100	400, 500	407, 000	413, 700	420, 600	427, 500	434, 500	441, 500	448, 500	455, 500	462, 500	469, 300	476, 100	482, 700	489, 100	495, 400	501, 600	507, 700	513, 700	519, 700	525, 600	119
120	409, 600	416, 200	422, 900	429, 700	436, 700	443, 900	451, 000	458, 200	465, 500	472, 700	479, 800	486, 800	493, 700	500, 500	507, 100	513, 600	519, 900	526, 200	532, 300	538, 400	544, 400	120

MARCH 2004

HEADWATER 590 to 594
TAILWATER 584.51 to 585.50

GUNTERSVILLE DAM
SPILLWAY DISCHARGE
IN CUBIC FEET PER SECOND

GATE ARRANGEMENT	HEADWATER ELEVATION																					GATE ARRANGEMENT
	594.0	594.2	594.4	594.6	594.8	595.0	595.2	595.4	595.6	595.8	596.0	596.2	596.4	596.6	596.8	597.0	597.2	597.4	597.6	597.8	598.0	
61																				137, 300	138, 900	61
62																137, 000	138, 600	140, 300	142, 000	143, 700	145, 400	62
63													137, 400	139, 200	140, 900	142, 700	144, 500	146, 300	148, 200	150, 000	151, 800	63
64										137, 100	139, 000	140, 800	142, 800	144, 700	146, 600	148, 500	150, 400	152, 400	154, 400	156, 300	158, 300	64
65								138, 200	140, 100	142, 100	144, 000	146, 100	148, 100	150, 200	152, 200	154, 300	156, 300	158, 400	160, 500	162, 700	164, 800	65
66						137, 900	139, 900	141, 800	143, 800	145, 800	147, 800	149, 800	151, 800	153, 900	155, 900	158, 000	160, 000	162, 100	164, 200	166, 200	168, 300	66
67				136, 900	138, 900	140, 900	142, 800	144, 800	146, 800	148, 800	150, 800	152, 900	154, 900	157, 000	159, 000	161, 100	163, 200	165, 300	167, 400	169, 500	171, 600	67
68		136, 900	139, 000	141, 100	143, 200	145, 300	147, 400	149, 500	151, 600	153, 800	155, 900	158, 100	160, 300	162, 500	164, 700	166, 900	169, 100	171, 300	173, 600	175, 800	178, 100	68
69	138, 700	140, 900	143, 100	145, 300	147, 600	149, 800	152, 000	154, 200	156, 500	158, 700	161, 000	163, 300	165, 600	168, 000	170, 300	172, 700	175, 000	177, 400	179, 800	182, 200	184, 600	69
70	142, 700	145, 000	147, 300	149, 600	151, 900	154, 300	156, 600	158, 900	161, 300	163, 700	166, 100	168, 500	171, 000	173, 500	175, 900	178, 400	180, 900	183, 400	186, 000	188, 500	191, 000	70
71	146, 600	149, 000	151, 400	153, 800	156, 200	158, 700	161, 200	163, 600	166, 100	168, 700	171, 200	173, 800	176, 400	179, 000	181, 600	184, 200	186, 800	189, 500	192, 100	194, 800	197, 500	71
72	150, 500	153, 000	155, 500	158, 000	160, 600	163, 200	165, 700	168, 300	171, 000	173, 600	176, 300	179, 000	181, 700	184, 400	187, 200	190, 000	192, 700	195, 500	198, 300	201, 200	204, 000	72
73	157, 200	159, 800	162, 500	165, 100	167, 800	170, 600	173, 300	176, 000	178, 800	181, 600	184, 400	187, 300	190, 200	193, 100	196, 000	198, 900	201, 800	204, 800	207, 800	210, 800	213, 800	73
74	163, 800	166, 600	169, 400	172, 200	175, 100	177, 900	180, 800	183, 700	186, 600	189, 600	192, 600	195, 600	198, 600	201, 700	204, 700	207, 800	210, 900	214, 100	217, 200	220, 400	223, 500	74
75	167, 700	170, 600	173, 500	176, 500	179, 400	182, 400	185, 400	188, 400	191, 500	194, 600	197, 700	200, 800	204, 000	207, 200	210, 400	213, 600	216, 800	220, 100	223, 400	226, 700	230, 000	75
77	173, 000	175, 800	178, 600	181, 400	184, 200	187, 000	189, 900	192, 700	195, 700	198, 600	201, 600	204, 600	207, 600	210, 700	213, 700	216, 800	219, 900	223, 100	226, 200	229, 400	232, 600	77
78	176, 900	179, 800	182, 700	185, 600	188, 500	191, 500	194, 500	197, 500	200, 500	203, 600	206, 700	209, 800	213, 000	216, 100	219, 400	222, 600	225, 900	229, 100	232, 400	235, 700	239, 100	78
79	183, 100	186, 100	189, 000	192, 000	195, 000	198, 000	201, 100	204, 100	207, 200	210, 300	213, 400	216, 600	219, 800	223, 000	226, 200	229, 400	232, 700	236, 000	239, 300	242, 600	245, 900	79
80	187, 000	190, 100	193, 100	196, 200	199, 300	202, 500	205, 600	208, 800	212, 000	215, 300	218, 500	221, 800	225, 100	228, 500	231, 800	235, 200	238, 600	242, 000	245, 500	248, 900	252, 400	80
82	192, 300	195, 200	198, 200	201, 100	204, 100	207, 100	210, 100	213, 100	216, 200	219, 300	222, 400	225, 600	228, 800	232, 000	235, 200	238, 500	241, 700	245, 000	248, 300	251, 600	255, 000	82
83	196, 200	199, 200	202, 300	205, 400	208, 500	211, 600	214, 700	217, 800	221, 000	224, 300	227, 500	230, 800	234, 100	237, 500	240, 800	244, 200	247, 600	251, 100	254, 500	258, 000	261, 400	83
84	206, 300	209, 500	212, 800	216, 000	219, 300	222, 600	225, 900	229, 200	232, 600	236, 000	239, 400	242, 800	246, 300	249, 800	253, 300	256, 800	260, 400	264, 000	267, 500	271, 100	274, 700	84
86	215, 500	218, 700	221, 900	225, 100	228, 400	231, 600	234, 900	238, 200	241, 600	245, 000	248, 400	251, 800	255, 300	258, 800	262, 300	265, 900	269, 400	273, 000	276, 600	280, 200	283, 800	86
87	225, 600	229, 000	232, 400	235, 800	239, 200	242, 600	246, 100	249, 600	253, 100	256, 700	260, 200	263, 800	267, 500	271, 100	274, 800	278, 500	282, 200	285, 900	289, 600	293, 400	297, 100	87
89	234, 800	238, 100	241, 500	244, 900	248, 300	251, 700	255, 200	258, 600	262, 100	265, 700	269, 200	272, 800	276, 500	280, 100	283, 800	287, 500	291, 200	294, 900	298, 700	302, 400	306, 200	89
90	244, 900	248, 400	252, 000	255, 500	259, 100	262, 700	266, 300	270, 000	273, 700	277, 400	281, 100	284, 900	288, 600	292, 400	296, 300	300, 100	304, 000	307, 800	311, 700	315, 600	319, 500	90
92	254, 100	257, 600	261, 100	264, 700	268, 200	271, 800	275, 400	279, 000	282, 700	286, 400	290, 100	293, 800	297, 600	301, 400	305, 300	309, 100	313, 000	316, 900	320, 700	324, 600	328, 600	92
93	264, 200	267, 900	271, 600	275, 300	279, 000	282, 800	286, 600	290, 400	294, 200	298, 100	302, 000	305, 900	309, 800	313, 800	317, 700	321, 700	325, 700	329, 800	333, 800	337, 800	341, 900	93
95	275, 500	279, 200	282, 900	286, 600	290, 300	294, 000	297, 800	301, 500	305, 300	309, 200	313, 100	317, 000	320, 900	324, 800	328, 800	332, 800	336, 800	340, 800	344, 800	348, 800	352, 900	95
96	285, 600	289, 500	293, 400	297, 200	301, 100	305, 000	308, 900	312, 900	316, 900	320, 900	324, 900	329, 000	333, 100	337, 100	341, 300	345, 400	349, 500	353, 700	357, 800	362, 000	366, 200	96
98	297, 000	300, 900	304, 700	308, 500	312, 400	316, 300	320, 200	324, 100	328, 000	332, 000	336, 000	340, 100	344, 100	348, 200	352, 300	356, 400	360, 500	364, 700	368, 800	373, 000	377, 200	98
99	307, 100	311, 100	315, 100	319, 200	323, 200	327, 300	331, 300	335, 400	339, 600	343, 700	347, 900	352, 100	356, 300	360, 500	364, 800	369, 000	373, 300	377, 600	381, 900	386, 200	390, 500	99
101	318, 500	322, 500	326, 500	330, 500	334, 500	338, 500	342, 500	346, 600	350, 700	354, 800	359, 000	363, 200	367, 400	371, 600	375, 800	380, 100	384, 300	388, 600	392, 900	397, 200	401, 400	101
102	328, 600	332, 800	336, 900	341, 100	345, 300	349, 500	353, 700	358, 000	362, 200	366, 500	370, 800	375, 200	379, 500	383, 900	388, 300	392, 700	397, 100	401, 500	405, 900	410, 300	414, 800	102
104	340, 000	344, 100	348, 300	352, 400	356, 600	360, 700	364, 900	369, 100	373, 400	377, 600	381, 900	386, 300	390, 600	395, 000	399, 300	403, 700	408, 100	412, 500	416, 900	421, 300	425, 700	104
105	350, 100	354, 400	358, 700	363, 000	367, 400	371, 700	376, 100	380, 500	384, 900	389, 300	393, 800	398, 300	402, 800	407, 300	411, 800	416, 300	420, 900	425, 400	430, 000	434, 500	439, 100	105
106	354, 200	358, 400	362, 600	366, 900	371, 100	375, 400	379, 600	383, 900	388, 300	392, 700	397, 100	401, 500	406, 000	410, 500	415, 000	419, 500	424, 000	428, 600	433, 100	437, 700	442, 200	106
107	374, 400	379, 000	383, 500	388, 100	392, 700	397, 300	402, 000	406, 700	411, 300	416, 100	420, 800	425, 600	430, 400	435, 100	439, 900	444, 800	449, 600	454, 400	459, 200	464, 000	468, 900	107
108	384, 600	389, 200	393, 800	398, 400	402, 900	407, 500	412, 100	416, 800	421, 400	426, 100	430, 900	435, 600	440, 400	445, 200	450, 000	454, 800	459, 600	464, 400	469, 200	474, 100	478, 900	108
109	394, 700	399, 500	404, 200	409, 000	413, 700	418, 500	423, 300	428, 100	433, 000	437, 800	442, 700	447, 600	452, 600	457, 500	462, 400	467, 400	472, 400	477, 300	482, 300	487, 200	492, 200	109
110	405, 000	409, 800	414, 500	419, 200	423, 900	428, 700	433, 400	438, 200	443, 000	447, 900	452, 800	457, 700	462, 600	467, 500	472, 500	477, 400	482, 400	487, 300	492, 300	497, 300	502, 200	110
111	415, 100	420, 000	424, 900	429, 800	434, 700	439, 700	444, 600	449, 600	454, 600	459, 600	464, 600	469, 700	474, 800	479, 800	484, 900	490, 000	495, 100	500, 200	505, 300	510, 400	515, 500	111
112	423, 900	428, 700	433, 600	438, 400	443, 300	448, 100	453, 000	457, 900	462, 800	467, 800	472, 800	477, 800	482, 800	487, 900	492, 900	498, 000	503, 100	508, 100	513, 200	518, 300	523, 300	112
113	445, 600	450, 800	456, 100	461, 300	466, 600	471, 800	477, 100	482, 400	487, 700	493, 100	498, 400	503, 800	509, 100	514, 500	519, 900	525, 300	530, 700	536, 100	541, 500	546, 800	552, 200	113
114	455, 900	461, 100	466, 300	471, 500	476, 700	482, 000	487, 200	492, 500	497, 800	503, 100	508, 500	513, 800	519, 200	524, 600	529, 900	535, 300	540, 700	546, 100	551, 500	556, 800	562, 200	114
115	466, 000	471, 400	476, 800	482, 200	487, 600	493, 000	498, 400	503, 900	509, 300	514, 800	520, 300	525, 800	531, 400	536, 900	542, 400	547, 900	553, 500	559, 000	564, 500	570, 000		115
116	474, 700	480, 100	485, 400	490, 800	496, 100	501, 400	506, 800	512, 200	517, 600	523, 000	528, 500	533, 900	539, 400	544, 900	550, 400	555, 900	561, 400	566, 900				116
117	486, 400	491, 900	497, 500	503, 000	508, 600	514, 100	519, 700	525, 300	530, 900	536, 600	542, 200	547, 900	553, 600	559, 200	564, 900	570, 600						117
118	505, 200	510, 900	516, 600	522, 200	527, 900	533, 600	539, 300	545, 000	550, 700	556, 500	562, 200	568, 000										118
119	525, 600	531, 400	537, 300	543, 100	548, 900	554, 700	560, 600	566, 400														119
120	544, 400	550, 400	556, 400	562, 300	568, 200																	120

HEADWATER 594 to 598
TAILWATER 584.51 to 585.50

MARCH 2004

GUNTERSVILLE DAM
SPILLWAY DISCHARGE
IN CUBIC FEET PER SECOND

GATE ARRANGEMENT	HEADWATER ELEVATION																				GATE ARRANGEMENT
	598.0	598.2	598.4	598.6	598.8	599.0	599.2	599.4	599.6	599.8	600.0	600.2	600.4	600.6	600.8	601.0	601.2	601.4	601.6	601.8	602.0	
59										137, 500	138, 800											59
60				136, 700	138, 100	139, 500	141, 000	142, 400	143, 800	145, 300	146, 800											60
61	138, 900	140, 400	142, 000	143, 600	145, 100	146, 700	148, 300	149, 900	151, 500	153, 100	154, 700											61
62	145, 400	147, 100	148, 800	150, 500	152, 200	153, 900	155, 700	157, 400	159, 200	161, 000	162, 700											62
63	151, 800	153, 700	155, 500	157, 400	159, 300	161, 200	163, 100	165, 000	166, 900	168, 800	170, 700											63
64	158, 300	160, 300	162, 300	164, 300	166, 300	168, 400	170, 400	172, 500	174, 500	176, 600	178, 700											64
65	164, 800	166, 900	169, 100	171, 200	173, 400	175, 600	177, 800	180, 000	182, 200	184, 400	186, 700											65
66	168, 300	170, 400	172, 500	174, 600	176, 800	178, 900	181, 100	183, 200	185, 400	187, 600	189, 800											66
67	171, 600	173, 700	175, 900	178, 000	180, 200	182, 300	184, 500	186, 700	188, 900	191, 100	193, 300											67
68	178, 100	180, 400	182, 600	184, 900	187, 200	189, 500	191, 900	194, 200	196, 600	198, 900	201, 300											68
69	184, 600	187, 000	189, 400	191, 800	194, 300	196, 800	199, 200	201, 700	204, 200	206, 700	209, 300											69
70	191, 000	193, 600	196, 200	198, 700	201, 300	204, 000	206, 600	209, 300	211, 900	214, 600	217, 200											70
71	197, 500	200, 200	202, 900	205, 700	208, 400	211, 200	214, 000	216, 800	219, 600	222, 400	225, 200											71
72	204, 000	206, 800	209, 700	212, 600	215, 500	218, 400	221, 300	224, 300	227, 300	230, 200	233, 200											72
73	213, 800	216, 800	219, 800	222, 800	225, 900	229, 000	232, 100	235, 300	238, 400	241, 600	244, 700											73
74	223, 500	226, 700	229, 900	233, 100	236, 400	239, 600	242, 900	246, 200	249, 600	252, 900	256, 200											74
75	230, 000	233, 300	236, 700	240, 000	243, 400	246, 900	250, 300	253, 800	257, 200	260, 700	264, 200											75
77	232, 600	235, 800	239, 000	242, 200	245, 500	248, 800	252, 100	255, 400	258, 700	262, 100	265, 400											77
78	239, 100	242, 400	245, 800	249, 100	252, 500	256, 000	259, 400	262, 900	266, 400	269, 900	273, 400											78
79	245, 900	249, 200	252, 600	255, 900	259, 300	262, 700	266, 200	269, 600	273, 100	276, 500	280, 000											79
80	252, 400	255, 800	259, 300	262, 800	266, 400	270, 000	273, 500	277, 100	280, 800	284, 400	288, 000											80
82	255, 000	258, 300	261, 700	265, 000	268, 400	271, 900	275, 300	278, 800	282, 200	285, 700	289, 200											82
83	261, 400	264, 900	268, 400	271, 900	275, 500	279, 100	282, 700	286, 300	289, 900	293, 600	297, 200											83
84	274, 700	278, 400	282, 000	285, 700	289, 300	293, 000	296, 800	300, 500	304, 300	308, 000	311, 800											84
86	283, 800	287, 400	291, 100	294, 800	298, 400	302, 200	305, 900	309, 700	313, 400	317, 200	321, 000											86
87	297, 100	300, 900	304, 700	308, 500	312, 300	316, 100	320, 000	323, 900	327, 800	331, 700	335, 600											87
89	306, 200	310, 000	313, 800	317, 600	321, 400	325, 300	329, 100	333, 000	336, 900	340, 900	344, 800											89
90	319, 500	323, 400	327, 300	331, 300	335, 200	339, 200	343, 200	347, 300	351, 300	355, 300	359, 400											90
92	328, 600	332, 500	336, 400	340, 400	344, 300	348, 400	352, 400	356, 400	360, 500	364, 500	368, 600											92
93	341, 900	345, 900	350, 000	354, 100	358, 200	362, 300	366, 500	370, 600	374, 800	379, 000	383, 200											93
95	352, 900	356, 900	361, 000	365, 000	369, 100	373, 200	377, 400	381, 500	385, 600	389, 800	394, 000											95
96	366, 200	370, 400	374, 500	378, 700	383, 000	387, 200	391, 500	395, 700	400, 000	404, 300	408, 600											96
98	377, 200	381, 300	385, 500	389, 700	393, 900	398, 100	402, 300	406, 600	410, 800	415, 100	419, 400											98
99	390, 500	394, 800	399, 100	403, 400	407, 700	412, 100	416, 400	420, 800	425, 200	429, 600	434, 000											99
101	401, 400	405, 700	410, 000	414, 300	418, 600	423, 000	427, 300	431, 700	436, 000	440, 400	444, 800											101
102	414, 800	419, 200	423, 600	428, 000	432, 500	437, 000	441, 400	445, 900	450, 400	454, 900	459, 400											102
104	425, 700	430, 200	434, 600	439, 000	443, 400	447, 900	452, 300	456, 800	461, 200	465, 700	470, 200											104
105	439, 100	443, 600	448, 100	452, 700	457, 300	461, 800	466, 400	471, 000	475, 600	480, 200	484, 800											105
107	468, 900	473, 700	478, 500	483, 300	488, 200	493, 000	497, 900	502, 700	507, 600	512, 500	517, 400											107
108	478, 900	483, 700	488, 500	493, 400	498, 200	503, 000	507, 900	512, 800	517, 600	522, 500	527, 400											108
109	492, 200	497, 200	502, 100	507, 100	512, 000	517, 000	522, 000	527, 000	532, 000	537, 000	542, 000											109
110	502, 200	507, 200	512, 100	517, 100	522, 000	527, 000	532, 000	537, 000	542, 000	547, 000	552, 000											110
111	515, 500	520, 600	525, 700	530, 800	535, 900	541, 000	546, 100	551, 200	556, 300	561, 400	566, 600											111
112	523, 300	528, 400	533, 400	538, 500	543, 600	548, 600	553, 700	558, 800	563, 800	568, 900												112
113	552, 200	557, 500	562, 900	568, 200																		113
114	562, 200	567, 600																				114

MARCH 2004

HEADWATER 598 to 602
TAILWATER 584.51 to 585.50

GUNTERSVILLE DAM
SPILLWAY DISCHARGE
IN CUBIC FEET PER SECOND

GATE ARRANGEMENT	HEADWATER ELEVATION																				GATE ARRANGEMENT
	590.0	590.2	590.4	590.6	590.8	591.0	591.2	591.4	591.6	591.8	592.0	592.2	592.4	592.6	592.8	593.0	593.2	593.4	593.6	593.8	594.0	
73																				150, 800	153, 600	73
74																		151, 500	154, 400	157, 300	160, 200	74
75																	152, 000	155, 100	158, 100	161, 200	164, 200	75
77															151, 300	154, 400	157, 400	160, 400	163, 300	166, 300	169, 200	77
78														151, 400	154, 600	157, 700	160, 900	164, 000	167, 100	170, 100	173, 100	78
79													153, 500	156, 800	160, 100	163, 300	166, 500	169, 700	172, 900	176, 000	179, 100	79
80												153, 100	156, 500	160, 000	163, 400	166, 700	170, 000	173, 300	176, 600	179, 800	183, 000	80
82										152, 300	155, 600	159, 000	162, 300	165, 600	168, 900	172, 200	175, 400	178, 600	181, 800	184, 900	188, 000	82
83									151, 500	154, 900	158, 400	161, 900	165, 300	168, 800	172, 200	175, 600	178, 900	182, 200	185, 500	188, 700	192, 000	83
84							151, 900	155, 500	159, 100	162, 700	166, 400	170, 000	173, 700	177, 300	180, 900	184, 500	188, 000	191, 600	195, 000	198, 400	201, 800	84
85							153, 500	156, 900	160, 300	163, 700												85
86					153, 600	157, 200	160, 700	164, 300	167, 900	171, 500	175, 100	178, 800	182, 500	186, 100	189, 800	193, 400	196, 900	200, 500	203, 900	207, 400	210, 800	86
87			152, 600	156, 600	160, 400	164, 100	167, 900	171, 600	175, 400	179, 300	183, 100	187, 000	190, 800	194, 700	198, 500	202, 300	206, 100	209, 800	213, 500	217, 100	220, 700	87
88		151, 000	154, 900	158, 700	162, 400	166, 000	169, 500	173, 000	176, 600	180, 200												88
89	153, 000	157, 200	161, 300	165, 300	169, 200	172, 900	176, 700	180, 400	184, 200	188, 000	191, 900	195, 800	199, 600	203, 500	207, 400	211, 200	214, 900	218, 700	222, 400	226, 000	229, 600	89
90	159, 000	163, 400	167, 800	171, 900	176, 000	179, 900	183, 900	187, 800	191, 800	195, 800	199, 900	203, 900	208, 000	212, 100	216, 100	220, 100	224, 100	228, 000	231, 900	235, 700	239, 500	90
92	167, 500	172, 100	176, 500	180, 700	184, 800	188, 700	192, 700	196, 600	200, 500	204, 600	208, 600	212, 700	216, 800	220, 900	225, 000	229, 000	233, 000	236, 900	240, 800	244, 700	248, 500	92
93	173, 600	178, 300	182, 900	187, 300	191, 600	195, 700	199, 800	204, 000	208, 100	212, 300	216, 600	220, 900	225, 200	229, 500	233, 700	237, 900	242, 100	246, 300	250, 300	254, 400	258, 400	93
95	184, 000	188, 900	193, 700	198, 200	202, 500	206, 600	210, 700	214, 800	219, 000	223, 200	227, 400	231, 700	236, 000	240, 400	244, 600	248, 900	253, 100	257, 300	261, 400	265, 400	269, 400	95
96	190, 100	195, 200	200, 100	204, 800	209, 300	213, 600	217, 900	222, 200	226, 600	231, 000	235, 400	239, 900	244, 400	248, 900	253, 400	257, 800	262, 200	266, 600	270, 900	275, 200	279, 300	96
98	200, 600	205, 800	210, 800	215, 600	220, 200	224, 500	228, 800	233, 100	237, 400	241, 800	246, 300	250, 800	255, 300	259, 800	264, 300	268, 800	273, 200	277, 600	282, 000	286, 200	290, 400	98
99	206, 600	212, 000	217, 300	222, 200	227, 000	231, 500	236, 000	240, 400	245, 000	249, 600	254, 200	258, 900	263, 700	268, 400	273, 100	277, 800	282, 400	287, 000	291, 500	295, 900	300, 300	99
101	217, 100	222, 700	228, 000	233, 100	237, 800	242, 400	246, 900	251, 300	255, 800	260, 400	265, 100	269, 800	274, 500	279, 300	284, 000	288, 700	293, 400	298, 000	302, 500	307, 000	311, 400	101
102	223, 100	228, 900	234, 400	239, 700	244, 600	249, 400	254, 000	258, 700	263, 400	268, 200	273, 100	278, 000	282, 900	287, 900	292, 800	297, 700	302, 500	307, 300	312, 000	316, 700	321, 300	102
104	233, 600	239, 500	245, 200	250, 500	255, 500	260, 300	264, 900	269, 500	274, 300	279, 000	283, 900	288, 800	293, 800	298, 800	303, 700	308, 600	313, 500	318, 300	323, 100	327, 800	332, 400	104
105	239, 600	245, 800	251, 600	257, 100	262, 300	267, 300	272, 100	276, 900	281, 800	286, 800	291, 900	297, 000	302, 200	307, 300	312, 500	317, 600	322, 700	327, 700	332, 600	337, 500	342, 300	105
106	244, 800	250, 900	256, 800	262, 200	267, 300	272, 200	277, 000	281, 700	286, 500	291, 500	296, 500	301, 500	306, 600	311, 700	316, 800	321, 900	326, 900	331, 900	336, 800	341, 600	346, 300	106
107	256, 800	263, 400	269, 600	275, 400	280, 900	286, 200	291, 300	296, 500	301, 700	307, 000	312, 400	317, 900	323, 400	328, 900	334, 400	339, 800	345, 200	350, 600	355, 800	361, 000	366, 100	107
108	266, 300	273, 000	279, 300	285, 200	290, 800	296, 000	301, 200	306, 300	311, 500	316, 800	322, 200	327, 700	333, 200	338, 700	344, 200	349, 700	355, 100	360, 500	365, 800	371, 000	376, 100	108
109	272, 400	279, 200	285, 700	291, 800	297, 600	303, 000	308, 400	313, 700	319, 100	324, 600	330, 200	335, 900	341, 600	347, 300	353, 000	358, 700	364, 300	369, 900	375, 300	380, 700	386, 000	109
110	281, 800	288, 800	295, 500	301, 600	307, 400	312, 900	318, 200	323, 500	328, 900	334, 400	340, 000	345, 700	351, 400	357, 100	362, 900	368, 600	374, 200	379, 800	385, 300	390, 700	396, 000	110
111	287, 900	295, 100	301, 900	308, 200	314, 200	319, 900	325, 400	330, 900	336, 500	342, 200	348, 000	353, 900	359, 800	365, 700	371, 600	377, 500	383, 400	389, 100	394, 800	400, 400	405, 900	111
112	296, 500	303, 800	310, 800	317, 100	323, 100	328, 700	334, 200	339, 700	345, 200	350, 900	356, 700	362, 500	368, 400	374, 300	380, 200	386, 100	391, 900	397, 700	403, 400	409, 000	414, 400	112
113	309, 400	317, 100	324, 500	331, 300	337, 600	343, 700	349, 600	355, 500	361, 500	367, 600	373, 800	380, 000	386, 400	392, 700	399, 000	405, 300	411, 600	417, 800	423, 900	429, 800	435, 700	113
114	318, 900	326, 800	334, 200	341, 100	347, 500	353, 500	359, 400	365, 300	371, 300	377, 400	383, 600	389, 800	396, 200	402, 600	408, 900	415, 200	421, 500	427, 700	433, 800	439, 800	445, 700	114
115	325, 000	333, 000	340, 600	347, 700	354, 300	360, 500	366, 600	372, 700	378, 800	385, 100	391, 500	398, 000	404, 600	411, 100	417, 700	424, 200	430, 700	437, 100	443, 400	449, 600	455, 600	115
116	333, 600	341, 800	349, 500	356, 600	363, 200	369, 400	375, 400	381, 500	387, 600	393, 800	400, 200	406, 700	413, 200	419, 700	426, 300	432, 800	439, 200	445, 600	451, 900	458, 100	464, 100	116
117	340, 500	348, 900	356, 800	364, 100	370, 900	377, 400	383, 600	389, 900	396, 200	402, 700	409, 300	416, 000	422, 800	429, 500	436, 300	443, 100	449, 800	456, 400	462, 900	469, 300	475, 500	117
118	355, 200	363, 900	372, 100	379, 600	386, 600	393, 200	399, 700	406, 000	412, 500	419, 200	426, 000	432, 800	439, 800	446, 700	453, 700	460, 600	467, 500	474, 300	480, 900	487, 500	493, 900	118
119	370, 700	379, 700	388, 200	396, 000	403, 200	410, 100	416, 700	423, 200	429, 900	436, 800	443, 700	450, 800	458, 000	465, 100	472, 300	479, 500	486, 500	493, 600	500, 500	507, 200	513, 800	119
120	385, 400	394, 700	403, 500	411, 500	418, 900	425, 900	432, 700	439, 400	446, 200	453, 200	460, 400	467, 600	474, 900	482, 300	489, 700	497, 000	504, 300	511, 500	518, 500	525, 500	532, 200	120

HEADWATER 590 to 594
TAILWATER 585.51 to 586.50

MARCH 2004

GUNTERSVILLE DAM
SPILLWAY DISCHARGE
IN CUBIC FEET PER SECOND

GATE ARRANGEMENT	HEADWATER ELEVATION																					GATE ARRANGEMENT
	594.0	594.2	594.4	594.6	594.8	595.0	595.2	595.4	595.6	595.8	596.0	596.2	596.4	596.6	596.8	597.0	597.2	597.4	597.6	597.8	598.0	
64																			151, 100	153, 100	155, 000	64
65																151, 000	153, 100	155, 100	157, 200	159, 300	161, 400	65
66															152, 500	154, 500	156, 600	158, 600	160, 600	162, 700	164, 800	66
67													151, 500	153, 500	155, 600	157, 700	159, 800	161, 800	163, 900	166, 000	168, 100	67
68											152, 400	154, 600	156, 800	159, 000	161, 200	163, 400	165, 600	167, 800	170, 000	172, 200	174, 400	68
69								150, 800	153, 000	155, 200	157, 500	159, 800	162, 100	164, 400	166, 700	169, 100	171, 400	173, 700	176, 100	178, 400	180, 800	69
70						150, 800	153, 100	155, 500	157, 800	160, 200	162, 600	165, 000	167, 400	169, 800	172, 300	174, 700	177, 200	179, 700	182, 100	184, 600	187, 200	70
71					152, 800	155, 300	157, 700	160, 200	162, 700	165, 200	167, 700	170, 200	172, 700	175, 300	177, 800	180, 400	183, 000	185, 600	188, 200	190, 900	193, 500	71
72			152, 100	154, 600	157, 200	159, 800	162, 400	164, 900	167, 500	170, 100	172, 700	175, 400	178, 000	180, 700	183, 400	186, 100	188, 800	191, 500	194, 300	197, 100	199, 900	72
73	153, 600	156, 300	159, 000	161, 700	164, 500	167, 200	169, 900	172, 600	175, 300	178, 100	180, 800	183, 600	186, 400	189, 200	192, 100	194, 900	197, 800	200, 700	203, 600	206, 600	209, 500	73
74	160, 200	163, 100	166, 000	168, 800	171, 700	174, 500	177, 400	180, 300	183, 100	186, 000	188, 900	191, 900	194, 800	197, 800	200, 800	203, 800	206, 800	209, 900	213, 000	216, 100	219, 200	74
75	164, 200	167, 200	170, 100	173, 100	176, 100	179, 000	182, 000	185, 000	188, 000	191, 000	194, 000	197, 100	200, 100	203, 200	206, 300	209, 500	212, 600	215, 800	219, 000	222, 300	225, 600	75
77	169, 200	172, 100	174, 900	177, 800	180, 600	183, 500	186, 300	189, 200	192, 000	194, 900	197, 800	200, 800	203, 700	206, 700	209, 700	212, 800	215, 800	218, 900	222, 000	225, 100	228, 300	77
78	173, 100	176, 100	179, 100	182, 100	185, 000	188, 000	190, 900	193, 900	196, 900	199, 900	202, 900	206, 000	209, 000	212, 200	215, 300	218, 500	221, 600	224, 900	228, 100	231, 400	234, 700	78
79	179, 100	182, 100	185, 200	188, 200	191, 300	194, 300	197, 300	200, 300	203, 400	206, 400	209, 500	212, 600	215, 700	218, 800	222, 000	225, 200	228, 300	231, 600	234, 800	238, 100	241, 300	79
80	183, 000	186, 200	189, 300	192, 500	195, 600	198, 800	201, 900	205, 000	208, 200	211, 400	214, 600	217, 800	221, 000	224, 200	227, 500	230, 800	234, 200	237, 500	240, 900	244, 300	247, 700	80
82	188, 000	191, 100	194, 100	197, 200	200, 200	203, 200	206, 200	209, 200	212, 300	215, 300	218, 400	221, 500	224, 600	227, 800	230, 900	234, 100	237, 300	240, 600	243, 900	247, 100	250, 400	82
83	192, 000	195, 100	198, 300	201, 500	204, 600	207, 700	210, 800	214, 000	217, 100	220, 300	223, 500	226, 700	229, 900	233, 200	236, 500	239, 800	243, 200	246, 500	249, 900	253, 400	256, 800	83
84	201, 800	205, 200	208, 600	211, 900	215, 200	218, 500	221, 800	225, 100	228, 400	231, 800	235, 100	238, 500	241, 900	245, 300	248, 700	252, 200	255, 700	259, 200	262, 700	266, 300	269, 900	84
86	210, 800	214, 200	217, 500	220, 800	224, 100	227, 400	230, 700	234, 000	237, 300	240, 700	244, 000	247, 400	250, 800	254, 200	257, 700	261, 200	264, 700	268, 200	271, 800	275, 300	278, 900	86
87	220, 700	224, 200	227, 800	231, 300	234, 800	238, 200	241, 700	245, 200	248, 700	252, 100	255, 700	259, 200	262, 700	266, 300	269, 900	273, 500	277, 200	280, 800	284, 500	288, 300	292, 000	87
89	229, 600	233, 200	236, 700	240, 200	243, 700	247, 200	250, 600	254, 100	257, 600	261, 000	264, 600	268, 100	271, 700	275, 200	278, 900	282, 500	286, 200	289, 900	293, 600	297, 300	301, 100	89
90	239, 500	243, 300	247, 000	250, 700	254, 300	258, 000	261, 600	265, 200	268, 900	272, 500	276, 200	279, 900	283, 600	287, 300	291, 100	294, 900	298, 700	302, 500	306, 400	310, 200	314, 100	90
92	248, 500	252, 200	255, 900	259, 600	263, 300	266, 900	270, 500	274, 200	277, 800	281, 400	285, 100	288, 800	292, 500	296, 300	300, 100	303, 900	307, 700	311, 500	315, 400	319, 300	323, 200	92
93	258, 400	262, 300	266, 200	270, 100	273, 900	277, 700	281, 500	285, 300	289, 100	292, 900	296, 800	300, 600	304, 500	308, 400	312, 300	316, 200	320, 200	324, 200	328, 200	332, 200	336, 300	93
95	269, 400	273, 400	277, 300	281, 100	285, 000	288, 800	292, 600	296, 300	300, 100	303, 900	307, 700	311, 600	315, 500	319, 400	323, 300	327, 200	331, 200	335, 200	339, 200	343, 300	347, 300	95
96	279, 300	283, 500	287, 500	291, 600	295, 600	299, 600	303, 500	307, 500	311, 500	315, 400	319, 400	323, 400	327, 400	331, 500	335, 500	339, 600	343, 700	347, 900	352, 000	356, 200	360, 400	96
98	290, 400	294, 600	298, 600	302, 700	306, 700	310, 600	314, 600	318, 500	322, 500	326, 400	330, 400	334, 400	338, 400	342, 500	346, 500	350, 600	354, 800	358, 900	363, 100	367, 200	371, 400	98
99	300, 300	304, 600	308, 900	313, 100	317, 300	321, 400	325, 600	329, 700	333, 800	337, 900	342, 000	346, 200	350, 400	354, 500	358, 800	363, 000	367, 300	371, 500	375, 800	380, 200	384, 500	99
101	311, 400	315, 700	320, 000	324, 200	328, 400	332, 500	336, 600	340, 700	344, 800	348, 900	353, 000	357, 200	361, 300	365, 500	369, 800	374, 000	378, 300	382, 600	386, 900	391, 200	395, 500	101
102	321, 300	325, 800	330, 200	334, 600	339, 000	343, 300	347, 600	351, 900	356, 100	360, 400	364, 700	369, 000	373, 300	377, 600	382, 000	386, 400	390, 800	395, 200	399, 700	404, 100	408, 600	102
104	332, 400	336, 900	341, 300	345, 700	350, 100	354, 400	358, 600	362, 900	367, 100	371, 400	375, 700	380, 000	384, 300	388, 600	393, 000	397, 400	401, 800	406, 300	410, 700	415, 200	419, 600	104
105	342, 300	346, 900	351, 600	356, 200	360, 700	365, 200	369, 600	374, 000	378, 500	382, 900	387, 300	391, 800	396, 200	400, 700	405, 200	409, 800	414, 300	418, 900	423, 500	428, 100	432, 700	105
106	346, 300	351, 000	355, 500	360, 000	364, 500	368, 900	373, 200	377, 600	381, 900	386, 300	390, 700	395, 100	399, 600	404, 000	408, 500	413, 100	417, 600	422, 200	426, 800	431, 400	436, 100	106
107	366, 100	371, 100	376, 000	380, 900	385, 700	390, 500	395, 200	399, 900	404, 600	409, 300	414, 000	418, 700	423, 400	428, 200	433, 000	437, 800	442, 700	447, 500	452, 400	457, 300	462, 200	107
108	376, 100	381, 100	386, 000	390, 900	395, 700	400, 500	405, 200	409, 900	414, 500	419, 200	423, 900	428, 700	433, 400	438, 200	443, 000	447, 800	452, 700	457, 500	462, 400	467, 300	472, 200	108
109	386, 000	391, 200	396, 300	401, 300	406, 300	411, 300	416, 100	421, 000	425, 900	430, 700	435, 600	440, 500	445, 400	450, 300	455, 200	460, 200	465, 200	470, 200	475, 200	480, 200	485, 300	109
110	396, 000	401, 200	406, 300	411, 400	416, 300	421, 300	426, 100	431, 000	435, 800	440, 700	445, 500	450, 400	455, 300	460, 200	465, 200	470, 200	475, 200	480, 200	485, 300	490, 300	495, 400	110
111	405, 900	411, 300	416, 600	421, 800	427, 000	432, 100	437, 100	442, 100	447, 200	452, 200	457, 200	462, 200	467, 300	472, 300	477, 400	482, 600	487, 700	492, 900	498, 000	503, 200	508, 400	111
112	414, 400	419, 800	425, 000	430, 200	435, 300	440, 400	445, 400	450, 300	455, 300	460, 300	465, 300	470, 300	475, 300	480, 300	485, 400	490, 500	495, 700	500, 800	506, 000	511, 100	516, 300	112
113	435, 700	441, 500	447, 100	452, 700	458, 200	463, 600	469, 100	474, 400	479, 800	485, 100	490, 400	495, 800	501, 100	506, 500	511, 900	517, 300	522, 700	528, 200	533, 600	539, 100	544, 600	113
114	445, 700	451, 500	457, 100	462, 700	468, 200	473, 600	479, 000	484, 400	489, 700	495, 000	500, 400	505, 700	511, 100	516, 500	521, 900	527, 300	532, 700	538, 200	543, 700	549, 200	554, 700	114
115	455, 600	461, 600	467, 400	473, 100	478, 800	484, 400	490, 000	495, 500	501, 000	506, 500	512, 000	517, 500	523, 000	528, 500	534, 100	539, 700	545, 300	550, 900	556, 500	562, 100	567, 700	115
116	464, 100	470, 000	475, 800	481, 600	487, 200	492, 800	498, 300	503, 800	509, 200	514, 700	520, 100	525, 600	531, 100	536, 600	542, 100	547, 600	553, 200	558, 800	564, 400	570, 000	575, 600	116
117	475, 500	481, 600	487, 700	493, 600	499, 500	505, 200	511, 000	516, 700	522, 300	528, 000	533, 600	539, 300	544, 900	550, 600	556, 300	562, 000	567, 800	573, 500	579, 300	585, 100		117
118	493, 900	500, 200	506, 400	512, 500	518, 400	524, 400	530, 200	536, 000	541, 800	547, 600	553, 300	559, 100	564, 900	570, 700	576, 500	582, 300						118
119	513, 800	520, 300	526, 700	532, 900	539, 100	545, 200	551, 200	557, 200	563, 100	569, 000	574, 900	580, 900										119
120	532, 200	538, 900	545, 400	551, 800	558, 100	564, 300	570, 400	576, 500	582, 600													120

MARCH 2004

HEADWATER 594 to 598
TAILWATER 585.51 to 586.50

GUNTERSVILLE DAM
SPILLWAY DISCHARGE
IN CUBIC FEET PER SECOND

GATE ARRANGEMENT	HEADWATER ELEVATION																				GATE ARRANGEMENT
	598.0	598.2	598.4	598.6	598.8	599.0	599.2	599.4	599.6	599.8	600.0	600.2	600.4	600.6	600.8	601.0	601.2	601.4	601.6	601.8	602.0	
61											151, 800											61
62						150, 900	152, 600	154, 400	156, 200	157, 900	159, 700											62
63			152, 400	154, 200	156, 100	158, 000	159, 900	161, 800	163, 700	165, 600	167, 500											63
64	155, 000	157, 000	159, 000	161, 000	163, 000	165, 100	167, 100	169, 200	171, 200	173, 300	175, 400											64
65	161, 400	163, 500	165, 600	167, 800	170, 000	172, 200	174, 300	176, 600	178, 800	181, 000	183, 300											65
66	164, 800	166, 900	169, 000	171, 100	173, 200	175, 300	177, 500	179, 700	181, 800	184, 000	186, 200											66
67	168, 100	170, 200	172, 300	174, 500	176, 600	178, 800	180, 900	183, 100	185, 300	187, 500	189, 700											67
68	174, 400	176, 700	179, 000	181, 200	183, 500	185, 800	188, 200	190, 500	192, 900	195, 200	197, 600											68
69	180, 800	183, 200	185, 600	188, 000	190, 500	192, 900	195, 400	197, 900	200, 400	202, 900	205, 400											69
70	187, 200	189, 700	192, 200	194, 800	197, 400	200, 000	202, 600	205, 300	207, 900	210, 600	213, 300											70
71	193, 500	196, 200	198, 900	201, 600	204, 300	207, 100	209, 900	212, 700	215, 500	218, 300	221, 100											71
72	199, 900	202, 700	205, 500	208, 400	211, 300	214, 200	217, 100	220, 100	223, 000	226, 000	229, 000											72
73	209, 500	212, 500	215, 500	218, 500	221, 600	224, 700	227, 800	230, 900	234, 100	237, 200	240, 400											73
74	219, 200	222, 300	225, 500	228, 700	231, 900	235, 200	238, 500	241, 800	245, 100	248, 400	251, 800											74
75	225, 600	228, 800	232, 200	235, 500	238, 800	242, 300	245, 700	249, 200	252, 600	256, 100	259, 600											75
77	228, 300	231, 500	234, 700	237, 900	241, 100	244, 400	247, 700	251, 000	254, 400	257, 700	261, 100											77
78	234, 700	238, 000	241, 300	244, 700	248, 100	251, 500	254, 900	258, 400	261, 900	265, 400	269, 000											78
79	241, 300	244, 600	248, 000	251, 300	254, 700	258, 100	261, 500	265, 000	268, 400	271, 900	275, 400											79
80	247, 700	251, 100	254, 600	258, 100	261, 600	265, 200	268, 800	272, 400	276, 000	279, 600	283, 300											80
82	250, 400	253, 800	257, 100	260, 500	263, 900	267, 300	270, 800	274, 300	277, 700	281, 200	284, 800											82
83	256, 800	260, 300	263, 800	267, 300	270, 800	274, 400	278, 000	281, 600	285, 300	288, 900	292, 600											83
84	269, 900	273, 500	277, 100	280, 700	284, 400	288, 100	291, 800	295, 600	299, 400	303, 100	306, 900											84
86	278, 900	282, 600	286, 200	289, 900	293, 600	297, 300	301, 100	304, 900	308, 600	312, 400	316, 300											86
87	292, 000	295, 800	299, 500	303, 300	307, 200	311, 000	314, 900	318, 800	322, 700	326, 600	330, 600											87
89	301, 100	304, 900	308, 700	312, 500	316, 400	320, 200	324, 200	328, 100	332, 000	336, 000	339, 900											89
90	314, 100	318, 100	322, 000	325, 900	329, 900	333, 900	338, 000	342, 000	346, 100	350, 200	354, 200											90
92	323, 200	327, 200	331, 100	335, 100	339, 100	343, 200	347, 200	351, 300	355, 400	359, 500	363, 600											92
93	336, 300	340, 400	344, 500	348, 600	352, 700	356, 900	361, 000	365, 200	369, 400	373, 700	377, 900											93
95	347, 300	351, 400	355, 500	359, 600	363, 800	367, 900	372, 100	376, 300	380, 500	384, 700	388, 900											95
96	360, 400	364, 600	368, 800	373, 100	377, 300	381, 600	385, 900	390, 200	394, 600	398, 900	403, 200											96
98	371, 400	375, 700	379, 900	384, 100	388, 400	392, 700	397, 000	401, 300	405, 600	409, 900	414, 300											98
99	384, 500	388, 800	393, 200	397, 600	402, 000	406, 400	410, 800	415, 200	419, 700	424, 100	428, 600											99
101	395, 500	399, 900	404, 300	408, 600	413, 000	417, 400	421, 900	426, 300	430, 700	435, 200	439, 600											101
102	408, 600	413, 100	417, 600	422, 100	426, 600	431, 100	435, 700	440, 200	444, 800	449, 400	453, 900											102
104	419, 600	424, 100	428, 600	433, 100	437, 700	442, 200	446, 800	451, 300	455, 800	460, 400	464, 900											104
105	432, 700	437, 300	441, 900	446, 600	451, 200	455, 900	460, 600	465, 200	469, 900	474, 600	479, 300											105
107	462, 200	467, 100	472, 000	476, 900	481, 900	486, 800	491, 800	496, 700	501, 700	506, 700	511, 600											107
108	472, 200	477, 200	482, 100	487, 100	492, 000	497, 000	501, 900	506, 900	511, 900	516, 800	521, 800											108
109	485, 300	490, 400	495, 400	500, 500	505, 600	510, 700	515, 800	520, 800	525, 900	531, 000	536, 100											109
110	495, 400	500, 400	505, 500	510, 600	515, 700	520, 800	525, 900	531, 000	536, 100	541, 200	546, 300											110
111	508, 400	513, 600	518, 800	524, 100	529, 300	534, 500	539, 700	545, 000	550, 200	555, 400	560, 600											111
112	516, 300	521, 500	526, 700	531, 900	537, 100	542, 300	547, 500	552, 700	557, 900	563, 100	568, 300											112
113	544, 600	550, 100	555, 600	561, 000	566, 500	572, 000	577, 500	583, 000														113
114	554, 700	560, 200	565, 700	571, 200	576, 700	582, 200																114
115	567, 700	573, 300	579, 000	584, 600																		115
116	575, 600	581, 200																				116

HEADWATER 598 to 602
TAILWATER 585.51 to 586.50

MARCH 2004

GUNTERSVILLE DAM

SPILLWAY DISCHARGE

IN CUBIC FEET PER SECOND

GATE ARRANGEMENT	HEADWATER ELEVATION																				GATE ARRANGEMENT
	590.0	590.2	590.4	590.6	590.8	591.0	591.2	591.4	591.6	591.8	592.0	592.2	592.4	592.6	592.8	593.0	593.2	593.4	593.6	593.8	594.0	
78																					167,000	78
79																			165,900	169,300	172,700	79
80																		166,000	169,500	173,100	176,600	80
82																	167,700	171,100	174,600	178,000	181,400	82
83																167,500	171,100	174,600	178,200	181,700	185,300	83
84														168,700	172,400	176,100	179,800	183,600	187,300	191,100	194,800	84
86											166,200	169,900	173,600	177,300	181,000	184,700	188,400	192,200	195,900	199,700	203,500	86
87									165,800	169,800	173,800	177,700	181,500	185,400	189,300	193,200	197,200	201,100	205,100	209,100	213,000	87
89							165,800	170,200	174,400	178,500	182,400	186,300	190,200	194,000	197,900	201,800	205,800	209,700	213,700	217,700	221,700	89
90						168,000	172,600	177,100	181,500	185,800	189,900	194,000	198,100	202,200	206,300	210,400	214,500	218,700	222,900	227,000	231,200	90
92				166,600	171,400	176,200	181,000	185,600	190,100	194,400	198,600	202,700	206,800	210,800	214,900	219,000	223,100	227,300	231,500	235,700	239,900	92
93			167,800	172,800	177,800	182,800	187,700	192,500	197,200	201,700	206,100	210,400	214,700	218,900	223,200	227,500	231,900	236,200	240,600	245,000	249,400	93
95	167,300	172,400	177,500	182,700	187,900	193,000	198,100	203,100	207,900	212,500	216,900	221,200	225,400	229,600	233,900	238,200	242,500	246,900	251,300	255,800	260,200	95
96	172,800	178,100	183,500	188,800	194,200	199,600	204,900	210,000	215,000	219,800	224,400	228,900	233,300	237,800	242,200	246,700	251,300	255,900	260,500	265,100	269,700	96
98	182,300	187,800	193,200	198,700	204,300	209,800	215,300	220,600	225,700	230,500	235,200	239,700	244,100	248,500	252,900	257,400	262,000	266,600	271,200	275,800	280,500	98
99	187,800	193,500	199,200	204,800	210,600	216,300	222,000	227,500	232,800	237,900	242,700	247,400	252,000	256,600	261,200	265,900	270,700	275,500	280,300	285,200	290,000	99
101	197,300	203,100	208,900	214,800	220,700	226,600	232,400	238,100	243,500	248,600	253,500	258,100	262,700	267,300	271,900	276,600	281,400	286,200	291,000	295,900	300,700	101
102	202,800	208,900	214,800	220,900	227,000	233,100	239,200	245,000	250,600	255,900	261,000	265,900	270,600	275,400	280,200	285,100	290,100	295,100	300,200	305,200	310,300	102
104	212,400	218,500	224,600	230,800	237,100	243,400	249,600	255,600	261,300	266,700	271,700	276,600	281,400	286,100	290,900	295,800	300,800	305,800	310,900	315,900	321,000	104
105	217,900	224,200	230,500	236,900	243,400	249,900	256,300	262,500	268,400	274,000	279,300	284,300	289,300	294,200	299,300	304,400	309,500	314,700	320,000	325,300	330,600	105
106	222,900	229,200	235,500	241,900	248,400	254,900	261,300	267,500	273,400	278,900	284,000	289,000	293,900	298,700	303,700	308,700	313,800	318,900	324,100	329,400	334,600	106
107	233,900	240,600	247,300	254,100	261,000	267,900	274,800	281,400	287,600	293,500	299,100	304,400	309,700	315,000	320,300	325,700	331,300	336,800	342,400	348,000	353,700	107
108	242,500	249,400	256,200	263,100	270,100	277,200	284,200	290,900	297,300	303,200	308,800	314,100	319,400	324,600	330,000	335,400	340,900	346,500	352,100	357,700	363,400	108
109	248,000	255,100	262,100	269,200	276,500	283,700	290,900	297,800	304,400	310,500	316,300	321,900	327,300	332,800	338,300	343,900	349,600	355,400	361,200	367,100	372,900	109
110	256,700	263,800	270,900	278,200	285,600	293,000	300,300	307,400	314,000	320,200	326,000	331,600	337,000	342,400	347,900	353,600	359,300	365,100	370,900	376,800	382,600	110
111	262,200	269,500	276,900	284,300	291,900	299,500	307,100	314,300	321,200	327,500	333,500	339,300	344,900	350,500	356,300	362,100	368,000	374,000	380,000	386,100	392,200	111
112	270,000	277,500	284,900	292,400	300,100	307,900	315,500	322,900	329,800	336,200	342,200	347,900	353,500	359,000	364,700	370,500	376,400	382,300	388,300	394,400	400,400	112
113	281,800	289,700	297,500	305,500	313,700	321,900	329,900	337,700	345,000	351,900	358,300	364,400	370,400	376,500	382,600	388,800	395,100	401,500	408,000	414,500	420,900	113
114	290,400	298,400	306,400	314,500	322,800	331,100	339,400	347,300	354,700	361,600	368,000	374,100	380,100	386,100	392,200	398,500	404,800	411,200	417,700	424,200	430,600	114
115	295,900	304,100	312,300	320,600	329,100	337,700	346,100	354,200	361,800	368,900	375,500	381,900	388,100	394,300	400,600	407,000	413,500	420,100	426,800	433,500	440,200	115
116	303,800	312,100	320,300	328,700	337,400	346,000	354,600	362,800	370,400	377,500	384,200	390,500	396,600	402,700	409,000	415,400	421,900	428,500	435,100	441,800	448,400	116
117	310,000	318,600	327,100	335,700	344,600	353,500	362,200	370,700	378,600	385,900	392,700	399,300	405,700	412,000	418,500	425,200	431,900	438,700	445,600	452,500	459,400	117
118	323,400	332,200	341,000	350,000	359,100	368,400	377,400	386,200	394,300	401,900	408,900	415,600	422,100	428,700	435,300	442,100	449,000	456,000	463,100	470,100	477,200	118
119	337,500	346,700	355,800	365,000	374,600	384,200	393,600	402,600	411,100	418,900	426,100	433,000	439,700	446,400	453,300	460,300	467,400	474,600	481,900	489,200	496,500	119
120	350,900	360,300	369,700	379,300	389,100	399,000	408,800	418,100	426,900	434,900	442,300	449,300	456,200	463,000	470,000	477,200	484,500	491,800	499,300	506,800	514,300	120

MARCH 2004

HEADWATER 590 to 594
TAILWATER 586.51 to 587.50

GUNTERSVILLE DAM

SPILLWAY DISCHARGE

IN CUBIC FEET PER SECOND

GATE ARRANGEMENT	HEADWATER ELEVATION																					GATE ARRANGEMENT
	594.0	594.2	594.4	594.6	594.8	595.0	595.2	595.4	595.6	595.8	596.0	596.2	596.4	596.6	596.8	597.0	597.2	597.4	597.6	597.8	598.0	
68																			166,500	168,700	170,900	68
69																165,500	167,900	170,200	172,500	174,900	177,300	69
70														166,300	168,800	171,200	173,700	176,100	178,600	181,100	183,600	70
71												166,600	169,200	171,800	174,300	176,900	179,500	182,100	184,700	187,300	189,900	71
72										166,500	169,100	171,800	174,500	177,200	179,900	182,600	185,300	188,000	190,700	193,500	196,200	72
73							165,800	168,700	171,500	174,400	177,200	180,100	182,900	185,800	188,600	191,500	194,300	197,200	200,000	202,900	205,800	73
74					167,100	170,200	173,300	176,300	179,300	182,300	185,300	188,300	191,300	194,300	197,300	200,300	203,300	206,300	209,300	212,400	215,400	74
75				168,200	171,500	174,700	177,900	181,000	184,200	187,300	190,400	193,500	196,600	199,700	202,900	206,000	209,100	212,300	215,400	218,600	221,800	75
77		166,400	169,500	172,700	175,800	178,900	182,000	185,000	188,000	191,000	194,100	197,100	200,100	203,100	206,100	209,100	212,200	215,200	218,300	221,400	224,500	77
78	167,000	170,400	173,700	176,900	180,200	183,400	186,600	189,700	192,900	196,000	199,200	202,300	205,400	208,600	211,700	214,800	218,000	221,200	224,400	227,600	230,800	78
79	172,700	176,100	179,500	182,800	186,200	189,500	192,700	195,900	199,100	202,300	205,500	208,700	211,800	215,000	218,200	221,300	224,500	227,700	230,900	234,100	237,300	79
80	176,600	180,100	183,600	187,100	190,500	193,900	197,300	200,700	204,000	207,300	210,600	213,900	217,200	220,400	223,700	227,000	230,300	233,600	236,900	240,200	243,600	80
82	181,400	184,800	188,200	191,500	194,900	198,200	201,400	204,700	207,900	211,100	214,200	217,400	220,600	223,800	227,000	230,200	233,400	236,600	239,800	243,000	246,300	82
83	185,300	188,800	192,300	195,800	199,200	202,700	206,000	209,400	212,700	216,000	219,300	222,600	225,900	229,300	232,600	235,900	239,200	242,500	245,900	249,200	252,600	83
84	194,800	198,500	202,200	205,900	209,600	213,200	216,800	220,300	223,800	227,300	230,800	234,200	237,700	241,100	244,600	248,000	251,500	255,000	258,400	261,900	265,400	84
86	203,500	207,200	210,900	214,600	218,300	221,900	225,500	229,000	232,500	236,000	239,500	243,000	246,500	249,900	253,400	256,900	260,400	263,900	267,400	270,900	274,500	86
87	213,000	217,000	220,900	224,800	228,600	232,500	236,200	240,000	243,600	247,300	251,000	254,600	258,200	261,800	265,500	269,100	272,700	276,300	279,900	283,600	287,300	87
89	221,700	225,600	229,600	233,500	237,400	241,200	245,000	248,700	252,400	256,100	259,700	263,400	267,000	270,600	274,300	277,900	281,600	285,200	288,900	292,600	296,300	89
90	231,200	235,400	239,500	243,600	247,700	251,700	255,700	259,600	263,500	267,300	271,200	275,000	278,800	282,500	286,300	290,100	293,900	297,700	301,500	305,300	309,100	90
92	239,900	244,100	248,200	252,300	256,400	260,500	264,400	268,300	272,200	276,100	279,900	283,700	287,500	291,300	295,100	298,900	302,800	306,600	310,400	314,300	318,100	92
93	249,400	253,800	258,200	262,500	266,800	271,000	275,100	279,300	283,300	287,300	291,300	295,300	299,300	303,200	307,200	311,100	315,100	319,000	323,000	327,000	331,000	93
95	260,200	264,600	268,900	273,300	277,600	281,800	286,000	290,000	294,100	298,100	302,200	306,100	310,100	314,100	318,000	322,000	325,900	329,900	333,900	337,900	341,900	95
96	269,700	274,300	278,900	283,400	287,900	292,300	296,700	301,000	305,200	309,400	313,600	317,700	321,900	326,000	330,100	334,200	338,200	342,300	346,500	350,600	354,700	96
98	280,500	285,100	289,700	294,200	298,700	303,100	307,500	311,800	316,000	320,200	324,400	328,500	332,700	336,800	340,900	345,000	349,100	353,200	357,400	361,500	365,700	98
99	290,000	294,800	299,600	304,400	309,000	313,700	318,200	322,700	327,100	331,500	335,800	340,100	344,400	348,700	352,900	357,200	361,400	365,700	369,900	374,200	378,500	99
101	300,700	305,600	310,400	315,100	319,800	324,500	329,000	333,500	337,900	342,300	346,600	351,000	355,300	359,500	363,800	368,100	372,300	376,600	380,900	385,200	389,500	101
102	310,300	315,300	320,300	325,300	330,200	335,000	339,800	344,400	349,000	353,600	358,100	362,600	367,000	371,400	375,800	380,200	384,600	389,000	393,400	397,900	402,300	102
104	321,000	326,100	331,100	336,100	341,000	345,800	350,600	355,200	359,800	364,400	368,900	373,400	377,800	382,300	386,700	391,100	395,500	399,900	404,300	408,800	413,300	104
105	330,600	335,800	341,000	346,200	351,300	356,400	361,300	366,100	370,900	375,600	380,300	385,000	389,600	394,100	398,700	403,300	407,800	412,400	416,900	421,500	426,100	105
106	334,600	339,800	344,900	350,100	355,100	360,100	364,900	369,700	374,400	379,100	383,800	388,400	393,000	397,500	402,100	406,600	411,200	415,800	420,300	424,900	429,600	106
107	353,700	359,300	364,800	370,300	375,800	381,100	386,400	391,500	396,600	401,700	406,600	411,600	416,400	421,300	426,200	431,000	435,800	440,600	445,500	450,300	455,200	107
108	363,400	369,000	374,600	380,100	385,500	390,900	396,100	401,300	406,400	411,400	416,400	421,400	426,300	431,100	436,000	440,800	445,700	450,500	455,400	460,300	465,200	108
109	372,900	378,700	384,500	390,200	395,900	401,400	406,900	412,200	417,500	422,700	427,800	432,900	438,000	443,000	448,000	453,000	458,000	463,000	468,000	473,000	478,000	109
110	382,600	388,400	394,200	400,000	405,600	411,200	416,600	422,000	427,300	432,500	437,600	442,700	447,800	452,800	457,900	462,900	467,900	472,900	477,900	483,000	488,000	110
111	392,200	398,200	404,200	410,100	416,000	421,700	427,400	432,900	438,400	443,700	449,100	454,300	459,600	464,700	469,900	475,000	480,200	485,300	490,500	495,700	500,800	111
112	400,400	406,400	412,400	418,300	424,100	429,900	435,500	441,000	446,400	451,700	457,000	462,300	467,500	472,600	477,800	482,900	488,000	493,200	498,300	503,500	508,700	112
113	420,900	427,400	433,800	440,200	446,400	452,600	458,600	464,500	470,300	476,100	481,700	487,300	492,800	498,300	503,800	509,200	514,700	520,100	525,500	531,000	536,500	113
114	430,600	437,100	443,500	449,900	456,200	462,300	468,400	474,300	480,100	485,800	491,500	497,100	502,700	508,200	513,600	519,100	524,600	530,000	535,500	541,000	546,500	114
115	440,200	446,900	453,500	460,100	466,500	472,900	479,100	485,200	491,200	497,100	502,900	508,700	514,400	520,100	525,700	531,300	536,900	542,400	548,000	553,700	559,300	115
116	448,400	455,100	461,700	468,200	474,700	481,000	487,200	493,300	499,200	505,100	510,900	516,600	522,300	528,000	533,600	539,100	544,700	550,300	555,900	561,500	567,100	116
117	459,400	466,300	473,200	479,900	486,600	493,200	499,600	505,900	512,100	518,200	524,200	530,100	535,900	541,800	547,500	553,300	559,000	564,800	570,500	576,300	582,100	117
118	477,200	484,300	491,300	498,300	505,100	511,800	518,400	524,900	531,200	537,400	543,500	549,600	555,600	561,500	567,400	573,300	579,200	585,000	590,900	596,800		118
119	496,500	503,800	511,000	518,200	525,200	532,100	538,900	545,500	552,100	558,500	564,800	571,000	577,100	583,200	589,300	595,300	601,300					119
120	514,300	521,700	529,200	536,500	543,700	550,800	557,700	564,500	571,200	577,700	584,100	590,500	596,800									120

HEADWATER 594 to 598
TAILWATER 586.51 to 587.50

MARCH 2004

GUNTERSVILLE DAM
SPILLWAY DISCHARGE
IN CUBIC FEET PER SECOND

GATE ARRANGEMENT	HEADWATER ELEVATION																					GATE ARRANGEMENT
	598.0	598.2	598.4	598.6	598.8	599.0	599.2	599.4	599.6	599.8	600.0	600.2	600.4	600.6	600.8	601.0	601.2	601.4	601.6	601.8	602.0	
64								165, 900	168, 000	170, 000	172, 100											64
65					166, 700	168, 900	171, 000	173, 200	175, 400	177, 600	179, 800											65
66			165, 500	167, 600	169, 800	171, 900	174, 000	176, 100	178, 300	180, 400	182, 600											66
67		166, 700	168, 900	171, 000	173, 200	175, 300	177, 500	179, 600	181, 800	184, 000	186, 200											67
68	170, 900	173, 200	175, 400	177, 700	180, 000	182, 300	184, 600	186, 900	189, 200	191, 500	193, 900											68
69	177, 300	179, 600	182, 000	184, 400	186, 800	189, 300	191, 700	194, 200	196, 600	199, 100	201, 600											69
70	183, 600	186, 100	188, 600	191, 100	193, 700	196, 300	198, 800	201, 400	204, 100	206, 700	209, 300											70
71	189, 900	192, 500	195, 200	197, 800	200, 500	203, 200	206, 000	208, 700	211, 500	214, 200	217, 000											71
72	196, 200	199, 000	201, 700	204, 500	207, 400	210, 200	213, 100	216, 000	218, 900	221, 800	224, 800											72
73	205, 800	208, 700	211, 700	214, 600	217, 600	220, 600	223, 700	226, 700	229, 800	232, 900	236, 000											73
74	215, 400	218, 500	221, 600	224, 700	227, 800	231, 000	234, 300	237, 500	240, 700	244, 000	247, 300											74
75	221, 800	225, 000	228, 200	231, 400	234, 700	238, 000	241, 400	244, 800	248, 200	251, 600	255, 000											75
77	224, 500	227, 600	230, 700	233, 800	237, 000	240, 300	243, 500	246, 800	250, 100	253, 400	256, 700											77
78	230, 800	234, 000	237, 300	240, 600	243, 900	247, 200	250, 600	254, 000	257, 500	261, 000	264, 400											78
79	237, 300	240, 500	243, 800	247, 000	250, 300	253, 700	257, 100	260, 500	263, 900	267, 300	270, 800											79
80	243, 600	247, 000	250, 300	253, 700	257, 200	260, 700	264, 200	267, 700	271, 300	274, 900	278, 500											80
82	246, 300	249, 600	252, 900	256, 200	259, 500	262, 900	266, 300	269, 800	273, 200	276, 700	280, 200											82
83	252, 600	256, 000	259, 400	262, 900	266, 400	269, 900	273, 500	277, 000	280, 600	284, 300	287, 900											83
84	265, 400	269, 000	272, 500	276, 100	279, 700	283, 300	287, 000	290, 700	294, 400	298, 200	301, 900											84
86	274, 500	278, 000	281, 600	285, 200	288, 900	292, 600	296, 300	300, 000	303, 800	307, 500	311, 300											86
87	287, 300	291, 000	294, 700	298, 400	302, 200	306, 000	309, 800	313, 700	317, 600	321, 500	325, 400											87
89	296, 300	300, 000	303, 800	307, 500	311, 400	315, 200	319, 100	323, 000	326, 900	330, 800	334, 800											89
90	309, 100	313, 000	316, 800	320, 700	324, 700	328, 600	332, 600	336, 700	340, 700	344, 800	348, 800											90
92	318, 100	322, 000	325, 900	329, 900	333, 900	337, 900	341, 900	346, 000	350, 000	354, 100	358, 200											92
93	331, 000	335, 000	339, 000	343, 100	347, 200	351, 300	355, 500	359, 600	363, 800	368, 100	372, 300											93
95	341, 900	346, 000	350, 000	354, 100	358, 200	362, 400	366, 600	370, 800	375, 000	379, 200	383, 400											95
96	354, 700	358, 900	363, 100	367, 300	371, 500	375, 800	380, 100	384, 400	388, 800	393, 100	397, 500											96
98	365, 700	369, 900	374, 100	378, 300	382, 600	386, 900	391, 200	395, 500	399, 900	404, 300	408, 600											98
99	378, 500	382, 800	387, 200	391, 500	395, 900	400, 300	404, 800	409, 200	413, 700	418, 200	422, 700											99
101	389, 500	393, 800	398, 200	402, 600	407, 000	411, 400	415, 900	420, 300	424, 800	429, 300	433, 800											101
102	402, 300	406, 800	411, 300	415, 800	420, 300	424, 900	429, 400	434, 000	438, 600	443, 200	447, 900											102
104	413, 300	417, 800	422, 300	426, 800	431, 400	435, 900	440, 500	445, 100	449, 700	454, 400	459, 000											104
105	426, 100	430, 700	435, 300	440, 000	444, 700	449, 400	454, 100	458, 800	463, 500	468, 300	473, 100											105
107	455, 200	460, 100	465, 000	470, 000	474, 900	479, 900	484, 900	490, 000	495, 000	500, 000	505, 100											107
108	465, 200	470, 100	475, 100	480, 100	485, 100	490, 100	495, 100	500, 200	505, 200	510, 300	515, 400											108
109	478, 000	483, 100	488, 200	493, 300	498, 400	503, 500	508, 700	513, 900	519, 000	524, 200	529, 400											109
110	488, 000	493, 100	498, 200	503, 400	508, 500	513, 700	518, 900	524, 100	529, 300	534, 500	539, 700											110
111	500, 800	506, 100	511, 300	516, 500	521, 800	527, 100	532, 400	537, 700	543, 100	548, 400	553, 700											111
112	508, 700	513, 900	519, 100	524, 400	529, 700	535, 000	540, 300	545, 600	550, 900	556, 200	561, 600											112
113	536, 500	542, 000	547, 500	553, 000	558, 600	564, 100	569, 700	575, 300	580, 900	586, 500	592, 100											113
114	546, 500	552, 000	557, 500	563, 100	568, 700	574, 300	579, 900	585, 500	591, 100	596, 800												114
115	559, 300	564, 900	570, 600	576, 300	582, 000	587, 700	593, 500	599, 200														115
116	567, 100	572, 800	578, 500	584, 200	589, 900	595, 600	601, 300															116
117	582, 100	587, 900	593, 700	599, 600																		117

MARCH 2004

HEADWATER 598 to 602
TAILWATER 586.51 to 587.50

GUNTERSVILLE DAM
SPILLWAY DISCHARGE
IN CUBIC FEET PER SECOND

GATE ARRANGEMENT	HEADWATER ELEVATION																				GATE ARRANGEMENT
	590.0	590.2	590.4	590.6	590.8	591.0	591.2	591.4	591.6	591.8	592.0	592.2	592.4	592.6	592.8	593.0	593.2	593.4	593.6	593.8	594.0	
84																				181, 900	185, 600	84
86																		182, 900	186, 600	190, 400	194, 200	86
87																183, 400	187, 400	191, 300	195, 300	199, 200	203, 200	87
89														183, 500	187, 800	191, 900	195, 900	199, 900	203, 800	207, 800	211, 700	89
90												181, 800	186, 500	191, 200	195, 600	200, 000	204, 200	208, 300	212, 500	216, 600	220, 800	90
92										180, 100	185, 100	190, 000	194, 900	199, 600	204, 100	208, 500	212, 700	216, 900	221, 000	225, 100	229, 300	92
93									181, 700	186, 900	192, 100	197, 200	202, 300	207, 200	212, 000	216, 500	221, 000	225, 300	229, 700	234, 000	238, 400	93
95							180, 800	186, 200	191, 400	196, 800	202, 100	207, 400	212, 700	217, 700	222, 600	227, 200	231, 600	236, 000	240, 300	244, 600	248, 900	95
96						181, 400	187, 000	192, 500	198, 000	203, 600	209, 100	214, 700	220, 100	225, 400	230, 400	235, 200	239, 900	244, 400	248, 900	253, 400	258, 000	96
98					185, 000	190, 800	196, 500	202, 100	207, 800	213, 500	219, 200	224, 900	230, 400	235, 800	241, 000	245, 800	250, 500	255, 000	259, 500	264, 000	268, 500	98
99				184, 400	190, 700	196, 700	202, 600	208, 500	214, 400	220, 300	226, 200	232, 100	237, 900	243, 500	248, 800	253, 900	258, 700	263, 500	268, 200	272, 900	277, 600	99
101		180, 100	186, 900	193, 600	200, 000	206, 100	212, 200	218, 100	224, 100	230, 100	236, 200	242, 300	248, 200	254, 000	259, 400	264, 500	269, 400	274, 100	278, 800	283, 400	288, 200	101
102		185, 100	192, 200	199, 100	205, 700	212, 100	218, 300	224, 500	230, 700	236, 900	243, 300	249, 500	255, 700	261, 600	267, 200	272, 500	277, 600	282, 600	287, 400	292, 300	297, 200	102
104	186, 100	193, 800	201, 100	208, 200	215, 000	221, 500	227, 800	234, 100	240, 400	246, 800	253, 300	259, 700	266, 000	272, 100	277, 800	283, 100	288, 200	293, 200	298, 000	302, 900	307, 800	104
105	190, 900	198, 800	206, 400	213, 700	220, 700	227, 400	234, 000	240, 500	247, 000	253, 600	260, 300	266, 900	273, 400	279, 700	285, 600	291, 200	296, 500	301, 600	306, 700	311, 700	316, 900	105
106	195, 600	203, 600	211, 300	218, 600	225, 600	232, 400	238, 900	245, 300	251, 800	258, 400	265, 100	271, 800	278, 300	284, 500	290, 400	295, 900	301, 100	306, 100	311, 000	316, 000	321, 000	106
107	205, 200	213, 700	221, 800	229, 600	237, 000	244, 200	251, 200	258, 100	265, 000	272, 000	279, 100	286, 200	293, 100	299, 800	306, 100	312, 000	317, 600	323, 000	328, 300	333, 700	339, 200	107
108	212, 800	221, 500	229, 900	237, 900	245, 400	252, 700	259, 800	266, 800	273, 800	280, 900	288, 200	295, 400	302, 500	309, 300	315, 600	321, 500	327, 200	332, 600	337, 900	343, 200	348, 700	108
109	217, 600	226, 600	235, 100	243, 300	251, 100	258, 600	265, 900	273, 100	280, 400	287, 800	295, 200	302, 600	309, 900	316, 900	323, 400	329, 600	335, 400	341, 000	346, 600	352, 100	357, 800	109
110	225, 200	234, 400	243, 200	251, 600	259, 500	267, 200	274, 500	281, 800	289, 200	296, 700	304, 300	311, 900	319, 300	326, 300	333, 000	339, 200	345, 000	350, 600	356, 100	361, 600	367, 300	110
111	230, 000	239, 500	248, 500	257, 100	265, 200	273, 100	280, 700	288, 200	295, 800	303, 500	311, 300	319, 100	326, 700	334, 000	340, 800	347, 200	353, 200	359, 100	364, 800	370, 500	376, 400	111
112	236, 900	246, 700	255, 900	264, 600	272, 900	280, 800	288, 400	296, 000	303, 600	311, 400	319, 300	327, 200	335, 000	342, 300	349, 200	355, 600	361, 600	367, 400	373, 000	378, 700	384, 500	112
113	247, 200	257, 400	267, 100	276, 300	285, 000	293, 400	301, 600	309, 700	317, 700	326, 000	334, 400	342, 700	350, 900	358, 700	366, 000	372, 900	379, 300	385, 500	391, 700	397, 800	404, 000	113
114	254, 800	265, 300	275, 200	284, 600	293, 500	302, 000	310, 200	318, 300	326, 500	334, 900	343, 500	351, 900	360, 200	368, 200	375, 600	382, 500	388, 900	395, 100	401, 200	407, 300	413, 600	114
115	259, 600	270, 300	280, 400	290, 000	299, 200	307, 900	316, 400	324, 700	333, 100	341, 700	350, 500	359, 200	367, 700	375, 800	383, 400	390, 500	397, 200	403, 600	409, 900	416, 200	422, 600	115
116	266, 600	277, 500	287, 800	297, 600	306, 800	315, 600	324, 100	332, 500	341, 000	349, 700	358, 500	367, 300	375, 900	384, 200	391, 800	398, 900	405, 500	411, 900	418, 100	424, 400	430, 800	116
117	272, 000	283, 200	293, 800	303, 800	313, 300	322, 300	331, 100	339, 800	348, 500	357, 500	366, 600	375, 600	384, 500	392, 900	400, 800	408, 100	415, 000	421, 600	428, 100	434, 600	441, 200	117
118	283, 800	295, 400	306, 400	316, 800	326, 600	335, 900	345, 000	353, 900	363, 000	372, 200	381, 600	391, 000	400, 200	408, 900	417, 000	424, 600	431, 600	438, 400	445, 000	451, 700	458, 400	118
119	296, 200	308, 300	319, 700	330, 500	340, 700	350, 400	359, 700	369, 000	378, 300	387, 900	397, 700	407, 400	416, 900	426, 000	434, 400	442, 200	449, 500	456, 400	463, 200	470, 100	477, 000	119
120	307, 900	320, 500	332, 400	343, 500	354, 000	364, 000	373, 600	383, 200	392, 800	402, 700	412, 800	422, 800	432, 600	442, 000	450, 600	458, 600	466, 100	473, 200	480, 200	487, 100	494, 300	120

HEADWATER 590 to 594
TAILWATER 587.51 to 588.50

MARCH 2004

GUNTERSVILLE DAM
SPILLWAY DISCHARGE
IN CUBIC FEET PER SECOND

GATE ARRANGEMENT	HEADWATER ELEVATION																					GATE ARRANGEMENT
	594.0	594.2	594.4	594.6	594.8	595.0	595.2	595.4	595.6	595.8	596.0	596.2	596.4	596.6	596.8	597.0	597.2	597.4	597.6	597.8	598.0	
70																					180,000	70
71																			180,900	183,600	186,300	71
72																	181,400	184,200	187,000	189,800	192,600	72
73														181,200	184,300	187,300	190,300	193,300	196,300	199,200	202,200	73
74											179,900	183,100	186,400	189,700	192,900	196,100	199,200	202,400	205,500	208,600	211,800	74
75										181,500	184,900	188,300	191,700	195,100	198,400	201,700	205,000	208,300	211,600	214,800	218,100	75
77									181,800	185,100	188,400	191,800	195,100	198,300	201,600	204,800	208,000	211,200	214,300	217,500	220,700	77
78							179,700	183,100	186,600	190,000	193,500	196,900	200,400	203,800	207,100	210,500	213,800	217,100	220,400	223,700	227,000	78
79						181,900	185,500	189,000	192,500	196,000	199,600	203,000	206,500	210,000	213,400	216,700	220,100	223,400	226,700	230,000	233,300	79
80					182,700	186,300	190,000	193,700	197,300	201,000	204,600	208,200	211,800	215,400	218,900	222,400	225,900	229,300	232,800	236,200	239,600	80
82			179,900	183,400	186,900	190,400	194,000	197,500	201,100	204,600	208,100	211,700	215,200	218,600	222,100	225,500	228,800	232,200	235,500	238,900	242,200	82
83		180,200	183,800	187,500	191,200	194,800	198,500	202,200	205,800	209,500	213,200	216,800	220,400	224,000	227,600	231,100	234,600	238,100	241,600	245,100	248,500	83
84	185,600	189,500	193,300	197,200	201,100	205,000	208,800	212,700	216,600	220,400	224,300	228,100	231,900	235,700	239,400	243,000	246,700	250,300	253,900	257,500	261,100	84
86	194,200	198,000	201,800	205,700	209,600	213,500	217,400	221,200	225,100	229,000	232,900	236,700	240,500	244,300	248,100	251,800	255,500	259,100	262,800	266,400	270,000	86
87	203,200	207,200	211,300	215,400	219,500	223,600	227,700	231,800	235,900	239,900	244,000	248,000	252,000	255,900	259,800	263,700	267,500	271,300	275,100	278,900	282,600	87
89	211,700	215,700	219,800	223,900	228,000	232,100	236,200	240,300	244,400	248,500	252,600	256,600	260,600	264,600	268,500	272,400	276,300	280,100	283,900	287,700	291,500	89
90	220,800	225,000	229,300	233,600	237,900	242,200	246,500	250,800	255,100	259,400	263,700	267,900	272,100	276,200	280,300	284,400	288,400	292,300	296,300	300,200	304,100	90
92	229,300	233,500	237,800	242,100	246,400	250,700	255,000	259,400	263,700	268,000	272,300	276,500	280,700	284,900	289,000	293,100	297,100	301,100	305,100	309,100	313,000	92
93	238,400	242,800	247,300	251,800	256,300	260,800	265,400	269,900	274,400	278,900	283,400	287,800	292,200	296,500	300,800	305,000	309,200	313,300	317,500	321,600	325,600	93
95	248,900	253,300	257,800	262,300	266,800	271,400	275,900	280,500	285,000	289,500	294,000	298,400	302,800	307,200	311,500	315,700	319,900	324,100	328,200	332,400	336,500	95
96	258,000	262,600	267,300	272,000	276,800	281,500	286,300	291,000	295,700	300,400	305,100	309,700	314,300	318,800	323,300	327,600	332,000	336,300	340,600	344,800	349,100	96
98	268,500	273,200	277,800	282,500	287,300	292,000	296,800	301,600	306,300	311,000	315,700	320,400	325,000	329,500	334,000	338,400	342,700	347,100	351,400	355,600	359,900	98
99	277,600	282,400	287,300	292,200	297,200	302,200	307,100	312,100	317,000	322,000	326,800	331,600	336,400	341,100	345,700	350,300	354,800	359,300	363,700	368,100	372,500	99
101	288,200	293,000	297,900	302,800	307,700	312,700	317,700	322,600	327,600	332,500	337,400	342,300	347,100	351,800	356,400	361,000	365,500	370,000	374,500	378,900	383,300	101
102	297,200	302,300	307,300	312,500	317,600	322,800	328,000	333,200	338,300	343,500	348,600	353,600	358,500	363,400	368,200	372,900	377,600	382,200	386,800	391,400	395,900	102
104	307,800	312,800	317,900	323,000	328,200	333,400	338,600	343,700	348,900	354,100	359,200	364,200	369,200	374,100	378,900	383,600	388,300	393,000	397,600	402,200	406,700	104
105	316,900	322,100	327,400	332,700	338,100	343,500	348,900	354,300	359,700	365,000	370,300	375,500	380,600	385,700	390,700	395,600	400,400	405,200	409,900	414,700	419,400	105
106	321,000	326,200	331,400	336,600	342,000	347,300	352,600	357,900	363,200	368,500	373,800	379,000	384,100	389,200	394,100	399,000	403,900	408,700	413,500	418,200	422,900	106
107	339,200	344,700	350,300	356,000	361,800	367,500	373,300	379,000	384,700	390,400	396,000	401,600	407,000	412,400	417,700	422,900	428,000	433,100	438,200	443,200	448,200	107
108	348,700	354,200	359,900	365,600	371,300	377,000	382,800	388,600	394,300	400,000	405,600	411,200	416,700	422,100	427,400	432,600	437,800	442,900	448,000	453,000	458,000	108
109	357,800	363,500	369,400	375,300	381,200	387,200	393,100	399,100	405,000	410,900	416,700	422,500	428,100	433,700	439,100	444,500	449,800	455,100	460,300	465,500	470,600	109
110	367,300	373,000	378,900	384,800	390,700	396,700	402,700	408,600	414,600	420,500	426,300	432,100	437,800	443,400	448,800	454,300	459,600	464,900	470,100	475,300	480,500	110
111	376,400	382,300	388,400	394,500	400,600	406,800	413,000	419,200	425,300	431,400	437,400	443,400	449,200	455,000	460,600	466,200	471,700	477,100	482,500	487,800	493,100	111
112	384,500	390,400	396,400	402,500	408,600	414,800	420,900	427,100	433,200	439,300	445,300	451,200	457,000	462,800	468,400	474,000	479,400	484,900	490,200	495,500	500,800	112
113	404,000	410,400	416,900	423,400	430,000	436,600	443,200	449,800	456,400	462,900	469,300	475,600	481,800	487,900	493,800	499,700	505,500	511,300	517,000	522,600	528,200	113
114	413,600	419,900	426,400	432,900	439,500	446,100	452,700	459,300	465,900	472,400	478,900	485,200	491,400	497,500	503,600	509,500	515,300	521,100	526,800	532,400	538,000	114
115	422,600	429,200	435,900	442,600	449,400	456,200	463,100	469,900	476,700	483,400	490,000	496,500	502,900	509,200	515,300	521,400	527,400	533,300	539,100	544,900	550,600	115
116	430,800	437,300	443,900	450,600	457,400	464,200	471,000	477,800	484,500	491,200	497,800	504,300	510,700	517,000	523,100	529,200	535,100	541,000	546,900	552,600	558,400	116
117	441,200	448,000	454,900	461,800	468,800	475,900	482,900	490,000	496,900	503,900	510,700	517,400	524,000	530,400	536,800	543,000	549,200	555,200	561,200	567,200	573,100	117
118	458,400	465,400	472,400	479,500	486,700	493,900	501,200	508,400	515,500	522,600	529,600	536,500	543,200	549,800	556,300	562,700	569,000	575,200	581,300	587,300	593,400	118
119	477,000	484,200	491,400	498,800	506,200	513,600	521,000	528,500	535,800	543,100	550,300	557,400	564,300	571,100	577,800	584,300	590,800	597,100	603,400	609,700		119
120	494,300	501,600	509,000	516,500	524,100	531,700	539,300	546,900	554,400	561,900	569,300	576,500	583,600	590,500	597,300	604,000						120

MARCH 2004

HEADWATER 594 to 598
TAILWATER 587.51 to 588.50

GUNTERSVILLE DAM
SPILLWAY DISCHARGE
IN CUBIC FEET PER SECOND

GATE ARRANGEMENT	HEADWATER ELEVATION																					GATE ARRANGEMENT
	598.0	598.2	598.4	598.6	598.8	599.0	599.2	599.4	599.6	599.8	600.0	600.2	600.4	600.6	600.8	601.0	601.2	601.4	601.6	601.8	602.0	
67										180, 500	182, 700											67
68							181, 000	183, 400	185, 700	188, 000	190, 300											68
69				180, 900	183, 300	185, 700	188, 200	190, 600	193, 100	195, 500	198, 000											69
70	180, 000	182, 500	185, 000	187, 600	190, 100	192, 700	195, 300	197, 900	200, 500	203, 100	205, 700											70
71	186, 300	189, 000	191, 600	194, 300	197, 000	199, 700	202, 400	205, 100	207, 900	210, 600	213, 400											71
72	192, 600	195, 400	198, 200	201, 000	203, 800	206, 700	209, 500	212, 400	215, 300	218, 100	221, 000											72
73	202, 200	205, 200	208, 100	211, 100	214, 000	217, 000	220, 100	223, 100	226, 100	229, 200	232, 200											73
74	211, 800	214, 900	218, 000	221, 100	224, 200	227, 400	230, 600	233, 800	237, 000	240, 200	243, 400											74
75	218, 100	221, 300	224, 600	227, 800	231, 100	234, 400	237, 700	241, 000	244, 400	247, 700	251, 100											75
77	220, 700	223, 800	227, 000	230, 100	233, 300	236, 500	239, 700	243, 000	246, 200	249, 500	252, 800											77
78	227, 000	230, 300	233, 600	236, 900	240, 200	243, 500	246, 900	250, 200	253, 600	257, 000	260, 400											78
79	233, 300	236, 600	239, 800	243, 100	246, 400	249, 700	253, 100	256, 400	259, 800	263, 200	266, 600											79
80	239, 600	243, 000	246, 400	249, 800	253, 300	256, 700	260, 200	263, 700	267, 200	270, 700	274, 200											80
82	242, 200	245, 500	248, 800	252, 100	255, 500	258, 900	262, 200	265, 600	269, 100	272, 500	275, 900											82
83	248, 500	252, 000	255, 400	258, 900	262, 300	265, 800	269, 400	272, 900	276, 400	280, 000	283, 600											83
84	261, 100	264, 700	268, 300	271, 800	275, 400	279, 100	282, 700	286, 400	290, 000	293, 700	297, 400											84
86	270, 000	273, 600	277, 200	280, 900	284, 500	288, 200	291, 900	295, 600	299, 300	303, 000	306, 800											86
87	282, 600	286, 400	290, 100	293, 800	297, 600	301, 400	305, 200	309, 000	312, 800	316, 700	320, 600											87
89	291, 500	295, 300	299, 100	302, 900	306, 700	310, 500	314, 300	318, 200	322, 100	326, 000	329, 900											89
90	304, 100	308, 000	311, 900	315, 800	319, 800	323, 700	327, 700	331, 700	335, 700	339, 700	343, 700											90
92	313, 000	317, 000	320, 900	324, 900	328, 800	332, 800	336, 800	340, 900	344, 900	349, 000	353, 100											92
93	325, 600	329, 700	333, 800	337, 900	341, 900	346, 100	350, 200	354, 300	358, 500	362, 700	366, 900											93
95	336, 500	340, 600	344, 700	348, 700	352, 900	357, 000	361, 200	365, 300	369, 500	373, 700	378, 000											95
96	349, 100	353, 300	357, 500	361, 700	366, 000	370, 200	374, 500	378, 800	383, 100	387, 400	391, 800											96
98	359, 900	364, 100	368, 400	372, 600	376, 900	381, 200	385, 500	389, 800	394, 100	398, 500	402, 800											98
99	372, 500	376, 900	381, 200	385, 600	390, 000	394, 400	398, 800	403, 200	407, 700	412, 200	416, 600											99
101	383, 300	387, 700	392, 100	396, 500	400, 900	405, 300	409, 800	414, 200	418, 700	423, 200	427, 700											101
102	395, 900	400, 500	405, 000	409, 500	414, 000	418, 600	423, 100	427, 700	432, 300	436, 900	441, 500											102
104	406, 700	411, 300	415, 800	420, 400	424, 900	429, 500	434, 100	438, 700	443, 300	448, 000	452, 600											104
105	419, 400	424, 000	428, 700	433, 400	438, 000	442, 700	447, 400	452, 200	456, 900	461, 700	466, 400											105
107	448, 200	453, 100	458, 100	463, 000	468, 000	473, 000	478, 000	483, 000	488, 000	493, 100	498, 100											107
108	458, 000	463, 000	468, 000	473, 000	478, 000	483, 000	488, 000	493, 100	498, 100	503, 200	508, 300											108
109	470, 600	475, 700	480, 900	486, 000	491, 100	496, 200	501, 400	506, 500	511, 700	516, 900	522, 100											109
110	480, 500	485, 600	490, 800	495, 900	501, 100	506, 200	511, 400	516, 600	521, 900	527, 100	532, 400											110
111	493, 100	498, 400	503, 600	508, 900	514, 200	519, 400	524, 800	530, 100	535, 400	540, 800	546, 200											111
112	500, 800	506, 100	511, 400	516, 600	521, 900	527, 200	532, 500	537, 900	543, 200	548, 600	554, 000											112
113	528, 200	533, 700	539, 300	544, 800	550, 400	555, 900	561, 500	567, 100	572, 700	578, 400	584, 000											113
114	538, 000	543, 600	549, 200	554, 800	560, 300	565, 900	571, 600	577, 200	582, 900	588, 500	594, 200											114
115	550, 600	556, 400	562, 100	567, 800	573, 500	579, 200	584, 900	590, 700	596, 400	602, 200	608, 000											115
116	558, 400	564, 100	569, 800	575, 500	581, 200	586, 900	592, 700	598, 400	604, 200	610, 000												116
117	573, 100	579, 000	584, 800	590, 700	596, 500	602, 400	608, 300															117
118	593, 400	599, 400	605, 300																			118

HEADWATER 598 to 602
TAILWATER 587.51 to 588.50

MARCH 2004

GUNTERSVILLE DAM
SPILLWAY DISCHARGE
IN CUBIC FEET PER SECOND

GATE ARRANGEMENT	HEADWATER ELEVATION																				GATE ARRANGEMENT
	590.0	590.2	590.4	590.6	590.8	591.0	591.2	591.4	591.6	591.8	592.0	592.2	592.4	592.6	592.8	593.0	593.2	593.4	593.6	593.8	594.0	
89																				197,000	201,300	89
90																		195,900	200,700	205,400	209,900	90
92																193,900	199,000	204,000	209,000	213,700	218,300	92
93															196,100	201,400	206,700	212,000	217,100	222,100	226,900	93
95													194,800	200,300	205,800	211,200	216,700	222,100	227,400	232,500	237,400	95
96												195,900	201,600	207,400	213,100	218,800	224,400	230,000	235,500	240,800	245,900	96
98											199,400	205,300	211,100	216,900	222,700	228,600	234,400	240,200	245,800	251,200	256,400	98
99										199,500	205,800	211,900	217,900	224,000	230,000	236,100	242,100	248,100	254,000	259,600	265,000	99
101								195,200	202,100	208,700	215,100	221,300	227,400	233,600	239,700	245,900	252,100	258,300	264,300	270,000	275,400	101
102								200,900	207,900	214,800	221,400	227,900	234,200	240,600	247,000	253,400	259,800	266,200	272,400	278,400	284,000	102
104						194,000	202,100	209,700	217,000	224,000	230,700	237,300	243,700	250,200	256,700	263,200	269,800	276,300	282,700	288,800	294,500	104
105						199,300	207,500	215,300	222,800	230,100	237,100	243,900	250,500	257,200	263,900	270,700	277,500	284,300	290,800	297,100	303,000	105
106					194,800	203,700	212,100	220,100	227,700	234,900	241,900	248,600	255,300	261,900	268,600	275,400	282,200	288,900	295,500	301,700	307,600	106
107				194,700	204,800	214,200	223,000	231,400	239,400	247,200	254,600	261,800	268,900	276,000	283,100	290,400	297,600	304,800	311,800	318,500	324,800	107
108				201,500	211,900	221,600	230,700	239,300	247,600	255,400	263,000	270,300	277,500	284,600	291,900	299,200	306,600	314,000	321,100	327,800	334,200	108
109			194,200	206,200	216,900	226,800	236,100	245,000	253,400	261,600	269,300	276,900	284,300	291,700	299,200	306,700	314,400	321,900	329,200	336,200	342,800	109
110			200,700	213,000	224,000	234,200	243,800	252,900	261,600	269,900	277,700	285,400	292,900	300,300	307,900	315,600	323,400	331,000	338,500	345,600	352,200	110
111			205,100	217,700	229,000	239,400	249,300	258,600	267,500	276,000	284,100	292,000	299,700	307,400	315,200	323,100	331,100	339,000	346,600	353,900	360,800	111
112		196,100	211,000	223,900	235,400	246,100	256,200	265,700	274,800	283,400	291,600	299,500	307,200	315,000	322,800	330,900	338,900	346,900	354,700	362,100	368,900	112
113		204,700	220,400	234,000	246,000	257,300	267,800	277,800	287,400	296,500	305,200	313,600	321,900	330,100	338,500	347,000	355,500	364,000	372,200	380,000	387,400	113
114		210,900	227,000	240,800	253,100	264,600	275,500	285,800	295,500	304,800	313,600	322,100	330,400	338,800	347,200	355,800	364,500	373,100	381,500	389,400	396,800	114
115	195,700	214,900	231,400	245,500	258,100	269,900	280,900	291,400	301,400	310,900	319,900	328,700	337,300	345,800	354,500	363,400	372,300	381,100	389,600	397,800	405,400	115
116	200,800	220,500	237,300	251,700	264,500	276,500	287,900	298,600	308,700	318,300	327,400	336,200	344,800	353,400	362,200	371,100	380,100	389,000	397,700	405,900	413,500	116
117	205,000	225,100	242,300	257,100	270,200	282,500	294,100	305,000	315,400	325,300	334,700	343,800	352,700	361,500	370,500	379,700	389,000	398,200	407,100	415,500	423,400	117
118	213,800	234,800	252,600	268,000	281,600	294,400	306,400	317,800	328,600	338,800	348,500	357,900	367,000	376,200	385,500	395,000	404,600	414,100	423,300	432,000	440,100	118
119	223,000	245,000	263,600	279,500	293,700	307,000	319,600	331,400	342,700	353,300	363,300	373,000	382,400	391,900	401,500	411,400	421,300	431,200	440,700	449,700	458,100	119
120	231,800	254,700	273,900	290,400	305,100	318,900	331,900	344,200	355,800	366,800	377,100	387,100	396,800	406,500	416,400	426,600	436,900	447,100	456,900	466,200	474,800	120

MARCH 2004

HEADWATER 590 to 594
TAILWATER 588.51 to 589.50

GUNTERSVILLE DAM
SPILLWAY DISCHARGE
IN CUBIC FEET PER SECOND

GATE ARRANGEMENT	HEADWATER ELEVATION																					GATE ARRANGEMENT
	594.0	594.2	594.4	594.6	594.8	595.0	595.2	595.4	595.6	595.8	596.0	596.2	596.4	596.6	596.8	597.0	597.2	597.4	597.6	597.8	598.0	
73																				193, 900	197, 100	73
74																		196, 300	199, 700	203, 200	206, 600	74
75																195, 000	198, 600	202, 200	205, 800	209, 300	212, 900	75
77															194, 500	198, 000	201, 500	205, 000	208, 500	212, 000	215, 400	77
78														196, 300	200, 000	203, 600	207, 300	210, 900	214, 500	218, 100	221, 700	78
79												194, 800	198, 500	202, 200	205, 800	209, 500	213, 200	216, 900	220, 500	224, 100	227, 700	79
80											196, 100	199, 900	203, 700	207, 500	211, 300	215, 200	219, 000	222, 700	226, 500	230, 300	234, 000	80
82										195, 900	199, 600	203, 300	207, 000	210, 700	214, 400	218, 100	221, 900	225, 600	229, 200	232, 900	236, 500	82
83									196, 900	200, 700	204, 500	208, 300	212, 200	216, 000	219, 900	223, 800	227, 600	231, 500	235, 300	239, 100	242, 800	83
84						195, 300	199, 200	203, 200	207, 100	211, 100	215, 100	219, 100	223, 200	227, 200	231, 300	235, 300	239, 300	243, 300	247, 300	251, 200	255, 100	84
86				196, 000	199, 900	203, 700	207, 600	211, 500	215, 500	219, 500	223, 500	227, 600	231, 700	235, 800	239, 800	243, 900	248, 000	252, 000	256, 000	260, 000	264, 000	86
87		197, 100	201, 200	205, 200	209, 300	213, 400	217, 400	221, 600	225, 700	229, 900	234, 200	238, 400	242, 700	246, 900	251, 200	255, 400	259, 700	263, 900	268, 000	272, 100	276, 200	87
89	201, 300	205, 500	209, 600	213, 700	217, 700	221, 700	225, 800	229, 900	234, 100	238, 300	242, 600	246, 900	251, 200	255, 500	259, 800	264, 100	268, 300	272, 600	276, 800	280, 900	285, 100	89
90	209, 900	214, 300	218, 600	222, 900	227, 100	231, 400	235, 600	240, 000	244, 400	248, 800	253, 200	257, 700	262, 200	266, 600	271, 100	275, 600	280, 000	284, 400	288, 800	293, 100	297, 400	90
92	218, 300	222, 700	227, 000	231, 300	235, 500	239, 800	244, 000	248, 300	252, 700	257, 200	261, 600	266, 100	270, 700	275, 200	279, 700	284, 200	288, 700	293, 100	297, 500	301, 900	306, 200	92
93	226, 900	231, 500	236, 000	240, 500	244, 900	249, 400	253, 900	258, 400	263, 000	267, 600	272, 300	277, 000	281, 700	286, 400	291, 000	295, 700	300, 400	305, 000	309, 500	314, 000	318, 500	93
95	237, 400	242, 000	246, 500	251, 000	255, 400	259, 800	264, 300	268, 800	273, 400	278, 000	282, 700	287, 400	292, 100	296, 900	301, 600	306, 300	311, 000	315, 600	320, 200	324, 800	329, 300	95
96	245, 900	250, 800	255, 500	260, 200	264, 800	269, 400	274, 100	278, 800	283, 600	288, 500	293, 300	298, 200	303, 200	308, 100	313, 000	317, 800	322, 700	327, 500	332, 200	336, 900	341, 600	96
98	256, 400	261, 300	266, 000	270, 700	275, 200	279, 800	284, 500	289, 200	294, 000	298, 900	303, 800	308, 700	313, 600	318, 600	323, 500	328, 400	333, 300	338, 100	342, 900	347, 600	352, 300	98
99	265, 000	270, 100	275, 000	279, 900	284, 600	289, 500	294, 300	299, 300	304, 300	309, 300	314, 400	319, 500	324, 600	329, 800	334, 900	339, 900	345, 000	350, 000	354, 900	359, 800	364, 600	99
101	275, 400	280, 600	285, 500	290, 300	295, 100	299, 900	304, 700	309, 600	314, 600	319, 700	324, 800	330, 000	335, 100	340, 300	345, 400	350, 500	355, 600	360, 700	365, 600	370, 500	375, 400	101
102	284, 000	289, 400	294, 500	299, 500	304, 500	309, 500	314, 600	319, 700	324, 900	330, 200	335, 500	340, 800	346, 100	351, 500	356, 800	362, 100	367, 300	372, 500	377, 600	382, 700	387, 700	102
104	294, 500	299, 900	305, 000	310, 000	315, 000	319, 900	325, 000	330, 100	335, 300	340, 500	345, 900	351, 200	356, 600	362, 000	367, 300	372, 700	377, 900	383, 200	388, 300	393, 400	398, 400	104
105	303, 000	308, 600	314, 000	319, 200	324, 400	329, 600	334, 800	340, 100	345, 500	351, 000	356, 500	362, 100	367, 600	373, 200	378, 700	384, 200	389, 600	395, 000	400, 300	405, 500	410, 700	105
106	307, 600	313, 100	318, 400	323, 500	328, 500	333, 600	338, 700	343, 900	349, 300	354, 700	360, 200	365, 700	371, 300	376, 900	382, 400	387, 900	393, 400	398, 800	404, 100	409, 300	414, 500	106
107	324, 800	330, 700	336, 400	341, 900	347, 300	352, 800	358, 400	364, 000	369, 800	375, 600	381, 500	387, 400	393, 300	399, 200	405, 100	410, 900	416, 700	422, 400	428, 100	433, 600	439, 100	107
108	334, 200	340, 200	345, 800	351, 300	356, 800	362, 200	367, 800	373, 400	379, 200	385, 000	390, 900	396, 800	402, 800	408, 700	414, 700	420, 500	426, 400	432, 100	437, 800	443, 400	448, 900	108
109	342, 800	348, 900	354, 800	360, 500	366, 200	371, 800	377, 600	383, 500	389, 400	395, 500	401, 600	407, 700	413, 800	419, 900	426, 000	432, 100	438, 100	444, 000	449, 800	455, 500	461, 200	109
110	352, 200	358, 400	364, 300	370, 000	375, 600	381, 200	387, 000	392, 800	398, 800	404, 900	411, 000	417, 100	423, 300	429, 400	435, 600	441, 700	447, 700	453, 700	459, 500	465, 300	471, 000	110
111	360, 800	367, 200	373, 300	379, 200	385, 000	390, 800	396, 800	402, 900	409, 100	415, 300	421, 600	427, 900	434, 300	440, 600	446, 900	453, 200	459, 400	465, 500	471, 500	477, 400	483, 200	111
112	368, 900	375, 300	381, 400	387, 200	393, 000	398, 800	404, 700	410, 700	416, 800	423, 000	429, 300	435, 700	442, 000	448, 300	454, 700	460, 900	467, 100	473, 200	479, 300	485, 200	491, 000	112
113	387, 400	394, 200	400, 700	407, 000	413, 200	419, 500	425, 900	432, 400	438, 900	445, 600	452, 300	459, 000	465, 800	472, 500	479, 200	485, 800	492, 400	498, 900	505, 200	511, 500	517, 600	113
114	396, 800	403, 700	410, 200	416, 500	422, 700	428, 900	435, 300	441, 700	448, 300	455, 000	461, 700	468, 500	475, 300	482, 000	488, 800	495, 500	502, 100	508, 600	515, 000	521, 300	527, 400	114
115	405, 400	412, 500	419, 200	425, 700	432, 100	438, 500	445, 100	451, 800	458, 600	465, 400	472, 400	479, 300	486, 300	493, 200	500, 100	507, 000	513, 700	520, 400	527, 000	533, 400	539, 700	115
116	413, 500	420, 600	427, 300	433, 700	440, 100	446, 400	452, 900	459, 600	466, 300	473, 200	480, 100	487, 000	494, 000	500, 900	507, 800	514, 700	521, 500	528, 200	534, 700	541, 100	547, 500	116
117	423, 400	430, 700	437, 600	444, 300	450, 900	457, 500	464, 300	471, 200	478, 200	485, 300	492, 400	499, 600	506, 800	513, 900	521, 000	528, 100	535, 100	541, 900	548, 700	555, 300	561, 800	117
118	440, 100	447, 600	454, 700	461, 600	468, 300	475, 100	482, 000	489, 000	496, 200	503, 500	510, 800	518, 100	525, 500	532, 800	540, 100	547, 300	554, 400	561, 500	568, 400	575, 100	581, 800	118
119	458, 100	465, 900	473, 200	480, 200	487, 200	494, 100	501, 200	508, 500	515, 800	523, 300	530, 800	538, 400	545, 900	553, 500	561, 000	568, 400	575, 800	583, 000	590, 100	597, 000	603, 800	119
120	474, 800	482, 800	490, 300	497, 500	504, 500	511, 600	518, 900	526, 300	533, 800	541, 500	549, 200	556, 900	564, 600	572, 400	580, 000	587, 600	595, 100	602, 500	609, 800			120

HEADWATER 594 to 598
TAILWATER 588.51 to 589.50

MARCH 2004

GUNTERSVILLE DAM
SPILLWAY DISCHARGE
IN CUBIC FEET PER SECOND

GATE ARRANGEMENT	HEADWATER ELEVATION																				GATE ARRANGEMENT
	598.0	598.2	598.4	598.6	598.8	599.0	599.2	599.4	599.6	599.8	600.0	600.2	600.4	600.6	600.8	601.0	601.2	601.4	601.6	601.8	602.0	
69											194, 400											69
70								194, 100	196, 700	199, 400	202, 100											70
71						195, 700	198, 500	201, 300	204, 100	206, 900	209, 700											71
72				196, 700	199, 700	202, 700	205, 600	208, 600	211, 500	214, 500	217, 400											72
73	197, 100	200, 400	203, 500	206, 700	209, 800	213, 000	216, 100	219, 200	222, 300	225, 400	228, 500											73
74	206, 600	210, 000	213, 300	216, 600	219, 900	223, 300	226, 600	229, 900	233, 100	236, 400	239, 700											74
75	212, 900	216, 400	219, 900	223, 300	226, 800	230, 200	233, 700	237, 100	240, 500	243, 900	247, 400											75
77	215, 400	218, 800	222, 200	225, 600	228, 900	232, 300	235, 600	239, 000	242, 300	245, 600	248, 900											77
78	221, 700	225, 200	228, 800	232, 300	235, 800	239, 200	242, 700	246, 200	249, 700	253, 100	256, 600											78
79	227, 700	231, 300	234, 800	238, 300	241, 800	245, 300	248, 700	252, 200	255, 600	259, 100	262, 500											79
80	234, 000	237, 700	241, 400	245, 000	248, 600	252, 200	255, 800	259, 400	263, 000	266, 600	270, 200											80
82	236, 500	240, 200	243, 700	247, 300	250, 800	254, 300	257, 800	261, 300	264, 800	268, 300	271, 800											82
83	242, 800	246, 600	250, 300	253, 900	257, 600	261, 200	264, 900	268, 500	272, 200	275, 800	279, 400											83
84	255, 100	259, 000	262, 800	266, 600	270, 400	274, 200	278, 000	281, 800	285, 500	289, 300	293, 000											84
86	264, 000	267, 900	271, 800	275, 600	279, 400	283, 300	287, 100	290, 900	294, 700	298, 500	302, 200											86
87	276, 200	280, 300	284, 300	288, 300	292, 300	296, 200	300, 200	304, 100	308, 000	311, 900	315, 800											87
89	285, 100	289, 200	293, 200	297, 300	301, 300	305, 300	309, 200	313, 200	317, 200	321, 100	325, 100											89
90	297, 400	301, 600	305, 800	310, 000	314, 100	318, 200	322, 300	326, 400	330, 500	334, 600	338, 700											90
92	306, 200	310, 500	314, 700	318, 900	323, 100	327, 300	331, 400	335, 500	339, 700	343, 800	347, 900											92
93	318, 500	322, 900	327, 300	331, 600	335, 900	340, 200	344, 500	348, 800	353, 000	357, 200	361, 500											93
95	329, 300	333, 700	338, 100	342, 500	346, 800	351, 100	355, 400	359, 700	363, 900	368, 200	372, 400											95
96	341, 600	346, 100	350, 700	355, 200	359, 600	364, 100	368, 500	372, 900	377, 300	381, 600	386, 000											96
98	352, 300	356, 900	361, 500	366, 000	370, 500	374, 900	379, 300	383, 800	388, 200	392, 600	397, 000											98
99	364, 600	369, 400	374, 100	378, 700	383, 300	387, 900	392, 500	397, 000	401, 500	406, 000	410, 600											99
101	375, 400	380, 100	384, 900	389, 500	394, 100	398, 700	403, 300	407, 900	412, 400	417, 000	421, 500											101
102	387, 700	392, 600	397, 400	402, 200	407, 000	411, 700	416, 400	421, 100	425, 800	430, 400	435, 100											102
104	398, 400	403, 400	408, 200	413, 000	417, 800	422, 600	427, 300	432, 000	436, 700	441, 400	446, 000											104
105	410, 700	415, 800	420, 800	425, 800	430, 700	435, 500	440, 400	445, 200	450, 000	454, 800	459, 600											105
107	439, 100	444, 500	449, 800	455, 000	460, 200	465, 400	470, 600	475, 700	480, 800	485, 900	491, 000											107
108	448, 900	454, 300	459, 600	464, 900	470, 200	475, 400	480, 500	485, 700	490, 800	496, 000	501, 100											108
109	461, 200	466, 700	472, 200	477, 600	483, 000	488, 300	493, 600	498, 900	504, 200	509, 400	514, 700											109
110	471, 000	476, 500	482, 100	487, 500	492, 900	498, 300	503, 600	508, 900	514, 200	519, 500	524, 800											110
111	483, 200	489, 000	494, 600	500, 200	505, 800	511, 300	516, 700	522, 100	527, 600	533, 000	538, 400											111
112	491, 000	496, 700	502, 400	508, 000	513, 500	519, 000	524, 400	529, 900	535, 300	540, 700	546, 100											112
113	517, 600	523, 700	529, 600	535, 500	541, 400	547, 100	552, 900	558, 600	564, 300	570, 000	575, 600											113
114	527, 400	533, 500	539, 500	545, 400	551, 300	557, 100	562, 900	568, 600	574, 300	580, 000	585, 700											114
115	539, 700	545, 900	552, 100	558, 100	564, 100	570, 100	576, 000	581, 800	587, 700	593, 500	599, 300											115
116	547, 500	553, 700	559, 800	565, 900	571, 800	577, 800	583, 700	589, 500	595, 400	601, 200	607, 000											116
117	561, 800	568, 200	574, 500	580, 700	586, 900	593, 000	599, 000	605, 000														117
118	581, 800	588, 300	594, 700	601, 000	607, 300																	118
119	603, 800																					119

MARCH 2004

HEADWATER 598 to 602
TAILWATER 588.51 to 589.50

GUNTERSVILLE DAM
SPILLWAY DISCHARGE
IN CUBIC FEET PER SECOND

GATE ARRANGEMENT	HEADWATER ELEVATION																				GATE ARRANGEMENT
	590.0	590.2	590.4	590.6	590.8	591.0	591.2	591.4	591.6	591.8	592.0	592.2	592.4	592.6	592.8	593.0	593.2	593.4	593.6	593.8	594.0	
93																					210, 700	93
95																			209, 000	214, 700	220, 300	95
96																		210, 700	216, 500	222, 400	228, 300	96
98																	214, 100	220, 100	226, 000	232, 000	237, 900	98
99															208, 400	214, 900	221, 100	227, 300	233, 500	239, 700	245, 900	99
101														210, 700	217, 500	224, 000	230, 400	236, 700	242, 900	249, 200	255, 600	101
102													209, 700	217, 000	224, 000	230, 800	237, 500	244, 000	250, 400	257, 000	263, 500	102
104												210, 400	218, 300	225, 800	233, 100	240, 000	246, 700	253, 300	259, 900	266, 500	273, 200	104
105												216, 200	224, 400	232, 100	239, 600	246, 800	253, 800	260, 600	267, 400	274, 300	281, 200	105
106											211, 900	220, 700	228, 900	236, 800	244, 300	251, 500	258, 400	265, 200	272, 000	278, 700	285, 600	106
107										213, 300	223, 200	232, 400	241, 100	249, 400	257, 400	265, 100	272, 500	279, 800	287, 000	294, 200	301, 600	107
108									209, 300	220, 300	230, 400	239, 900	248, 900	257, 400	265, 500	273, 300	280, 900	288, 200	295, 500	302, 800	310, 300	108
109									214, 400	225, 600	236, 000	245, 800	255, 000	263, 700	272, 100	280, 100	287, 900	295, 500	303, 000	310, 600	318, 300	109
110									221, 100	232, 600	243, 200	253, 200	262, 700	271, 700	280, 200	288, 400	296, 300	303, 900	311, 500	319, 200	327, 000	110
111								212, 800	226, 100	238, 000	248, 900	259, 100	268, 800	278, 000	286, 800	295, 200	303, 300	311, 200	319, 100	326, 900	335, 000	111
112								218, 600	232, 200	244, 200	255, 300	265, 700	275, 700	285, 000	294, 000	302, 500	310, 600	318, 600	326, 400	334, 400	342, 400	112
113							212, 100	228, 600	242, 900	255, 600	267, 300	278, 300	288, 700	298, 600	308, 000	317, 000	325, 700	334, 200	342, 600	351, 000	359, 600	113
114							218, 200	235, 100	249, 700	262, 600	274, 500	285, 800	296, 500	306, 600	316, 200	325, 300	334, 100	342, 600	351, 100	359, 600	368, 300	114
115							222, 500	239, 800	254, 700	267, 900	280, 200	291, 700	302, 600	312, 900	322, 700	332, 100	341, 100	349, 900	358, 600	367, 400	376, 300	115
116							228, 000	245, 600	260, 700	274, 100	286, 600	298, 300	309, 400	319, 900	329, 900	339, 400	348, 400	357, 300	366, 000	374, 800	383, 800	116
117						211, 900	232, 900	250, 900	266, 500	280, 200	293, 000	305, 000	316, 400	327, 200	337, 400	347, 200	356, 500	365, 600	374, 600	383, 700	393, 000	117
118						220, 700	242, 700	261, 400	277, 500	291, 800	305, 000	317, 500	329, 400	340, 600	351, 200	361, 200	370, 900	380, 200	389, 500	398, 900	408, 500	118
119						230, 100	253, 100	272, 600	289, 300	304, 100	317, 900	330, 900	343, 200	354, 800	365, 900	376, 300	386, 300	396, 000	405, 600	415, 200	425, 100	119
120					211, 100	239, 000	262, 900	283, 100	300, 300	315, 600	329, 900	343, 400	356, 100	368, 200	379, 600	390, 400	400, 600	410, 600	420, 500	430, 400	440, 600	120

HEADWATER 590 to 594
TAILWATER 589.51 to 590.50

MARCH 2004

GUNTERSVILLE DAM
SPILLWAY DISCHARGE
IN CUBIC FEET PER SECOND

GATE ARRANGEMENT	HEADWATER ELEVATION																				GATE ARRANGEMENT
	594.0	594.2	594.4	594.6	594.8	595.0	595.2	595.4	595.6	595.8	596.0	596.2	596.4	596.6	596.8	597.0	597.2	597.4	597.6	597.8	598.0	
78																				210,000	213,800	78
79																			211,800	215,600	219,400	79
80																	209,900	213,800	217,800	221,700	225,700	80
82																208,900	212,800	216,600	220,500	224,300	228,200	82
83															210,500	214,400	218,400	222,400	226,400	230,400	234,400	83
84												209,200	213,200	217,200	221,300	225,400	229,600	233,700	237,900	242,100	246,300	84
86										209,500	213,500	217,500	221,600	225,600	229,800	233,900	238,100	242,300	246,500	250,800	255,000	86
87								211,100	215,300	219,500	223,600	227,800	232,000	236,300	240,600	244,900	249,300	253,700	258,100	262,500	266,800	87
89						210,800	215,200	219,400	223,600	227,800	232,000	236,200	240,400	244,700	249,000	253,400	257,800	262,300	266,700	271,200	275,600	89
90				210,200	215,100	219,900	224,500	229,000	233,400	237,700	242,100	246,500	250,900	255,400	259,900	264,400	269,000	273,600	278,200	282,800	287,400	90
92			213,100	218,300	223,300	228,100	232,800	237,300	241,700	246,100	250,400	254,800	259,300	263,800	268,300	272,900	277,500	282,200	286,900	291,500	296,200	92
93	210,700	216,100	221,600	226,900	232,200	237,200	242,100	246,800	251,400	256,000	260,500	265,100	269,800	274,400	279,100	283,900	288,700	293,500	298,400	303,200	308,000	93
95	220,300	225,900	231,500	237,000	242,400	247,500	252,500	257,200	261,800	266,400	270,900	275,500	280,100	284,800	289,600	294,400	299,200	304,100	308,900	313,800	318,700	95
96	228,300	234,100	240,000	245,700	251,300	256,600	261,800	266,700	271,500	276,300	281,000	285,800	290,600	295,500	300,400	305,400	310,400	315,400	320,500	325,500	330,500	96
98	237,900	243,900	249,900	255,800	261,500	266,900	272,100	277,100	281,900	286,600	291,400	296,100	301,000	305,900	310,800	315,800	320,900	326,000	331,000	336,100	341,200	98
99	245,900	252,100	258,300	264,400	270,300	276,000	281,400	286,600	291,600	296,600	301,500	306,400	311,400	316,500	321,600	326,800	332,100	337,300	342,600	347,800	353,100	99
101	255,600	261,900	268,300	274,500	280,500	286,300	291,800	297,000	302,000	306,900	311,800	316,800	321,800	326,900	332,100	337,300	342,500	347,800	353,100	358,500	363,700	101
102	263,500	270,100	276,700	283,200	289,400	295,400	301,100	306,500	311,700	316,900	322,000	327,100	332,300	337,600	342,900	348,300	353,700	359,200	364,700	370,100	375,600	102
104	273,200	279,900	286,600	293,200	299,600	305,700	311,400	316,900	322,100	327,200	332,300	337,400	342,600	347,900	353,300	358,700	364,200	369,700	375,200	380,800	386,300	104
105	281,200	288,100	295,100	301,900	308,500	314,800	320,800	326,400	331,800	337,200	342,400	347,700	353,100	358,600	364,100	369,700	375,400	381,100	386,800	392,400	398,100	105
106	285,600	292,600	299,600	306,400	313,000	319,300	325,200	330,700	336,000	341,300	346,500	351,700	357,100	362,500	368,100	373,700	379,400	385,100	390,800	396,500	402,200	106
107	301,600	309,000	316,400	323,700	330,800	337,500	343,800	349,800	355,500	361,100	366,700	372,300	378,000	383,900	389,800	395,700	401,700	407,800	413,800	419,900	425,900	107
108	310,300	317,800	325,400	332,800	340,000	346,800	353,100	359,100	364,900	370,500	376,000	381,700	387,400	393,200	399,200	405,200	411,200	417,300	423,400	429,500	435,600	108
109	318,300	326,100	333,800	341,500	348,800	355,900	362,400	368,600	374,600	380,400	386,200	392,000	397,900	403,900	410,000	416,200	422,400	428,700	434,900	441,200	447,400	109
110	327,000	334,900	342,800	350,500	358,000	365,100	371,800	378,000	383,900	389,800	395,500	401,300	407,200	413,300	419,400	425,700	431,900	438,200	444,500	450,900	457,200	110
111	335,000	343,100	351,200	359,200	366,900	374,200	381,100	387,500	393,700	399,700	405,600	411,600	417,700	424,000	430,300	436,700	443,100	449,600	456,100	462,500	469,000	111
112	342,400	350,700	358,900	367,000	374,700	382,100	389,000	395,400	401,500	407,500	413,400	419,300	425,400	431,600	437,900	444,300	450,800	457,300	463,800	470,300	476,700	112
113	359,600	368,300	377,100	385,600	393,900	401,700	409,000	415,900	422,500	428,900	435,200	441,600	448,100	454,700	461,400	468,100	475,000	481,800	488,700	495,600	502,400	113
114	368,300	377,200	386,000	394,700	403,100	411,000	418,400	425,300	431,800	438,200	444,600	450,900	457,400	464,100	470,800	477,600	484,500	491,400	498,300	505,200	512,100	114
115	376,300	385,400	394,500	403,400	412,000	420,100	427,700	434,800	441,600	448,200	454,700	461,200	467,900	474,700	481,600	488,600	495,700	502,700	509,800	516,900	523,900	115
116	383,800	393,000	402,100	411,100	419,800	428,000	435,600	442,600	449,400	455,900	462,400	468,900	475,600	482,400	489,300	496,300	503,300	510,400	517,500	524,600	531,700	116
117	393,000	402,400	411,900	421,100	430,000	438,500	446,300	453,700	460,700	467,400	474,100	480,900	487,800	494,800	501,900	509,100	516,400	523,600	530,900	538,200	545,500	117
118	408,500	418,200	428,000	437,500	446,700	455,400	463,500	471,100	478,200	485,100	492,000	498,900	505,900	513,100	520,400	527,700	535,200	542,600	550,100	557,500	565,000	118
119	425,100	435,200	445,400	455,300	464,800	473,800	482,200	489,900	497,300	504,400	511,400	518,500	525,700	533,100	540,600	548,200	555,800	563,500	571,200	578,900	586,500	119
120	440,600	451,000	461,500	471,700	481,500	490,800	499,300	507,300	514,800	522,100	529,300	536,500	543,900	551,400	559,100	566,800	574,600	582,500	590,400	598,200	606,000	120

MARCH 2004

HEADWATER 594 to 598
TAILWATER 589.51 to 590.50

GUNTERSVILLE DAM
SPILLWAY DISCHARGE
IN CUBIC FEET PER SECOND

GATE ARRANGEMENT	HEADWATER ELEVATION																					GATE ARRANGEMENT
	598.0	598.2	598.4	598.6	598.8	599.0	599.2	599.4	599.6	599.8	600.0	600.2	600.4	600.6	600.8	601.0	601.2	601.4	601.6	601.8	602.0	
72										209, 500	212, 700											72
73							210, 200	213, 600	217, 000	220, 400	223, 700											73
74				209, 600	213, 200	216, 900	220, 500	224, 100	227, 600	231, 200	234, 800											74
75		208, 800	212, 600	216, 300	220, 000	223, 800	227, 500	231, 300	235, 000	238, 700	242, 400											75
77		211, 300	214, 900	218, 600	222, 200	225, 900	229, 500	233, 200	236, 800	240, 400	244, 000											77
78	213, 800	217, 600	221, 400	225, 200	229, 000	232, 800	236, 600	240, 400	244, 100	247, 900	251, 600											78
79	219, 400	223, 300	227, 100	230, 900	234, 700	238, 500	242, 300	246, 000	249, 800	253, 600	257, 300											79
80	225, 700	229, 600	233, 600	237, 500	241, 400	245, 400	249, 300	253, 200	257, 100	261, 000	264, 900											80
82	228, 200	232, 100	235, 900	239, 800	243, 600	247, 500	251, 300	255, 100	258, 900	262, 700	266, 500											82
83	234, 400	238, 400	242, 400	246, 400	250, 400	254, 400	258, 400	262, 300	266, 300	270, 200	274, 100											83
84	246, 300	250, 400	254, 600	258, 700	262, 900	267, 000	271, 100	275, 200	279, 300	283, 300	287, 400											84
86	255, 000	259, 200	263, 500	267, 700	271, 800	276, 000	280, 200	284, 300	288, 400	292, 500	296, 600											86
87	266, 800	271, 200	275, 600	280, 000	284, 300	288, 600	292, 900	297, 200	301, 500	305, 700	309, 900											87
89	275, 600	280, 000	284, 500	288, 900	293, 300	297, 600	302, 000	306, 300	310, 600	314, 900	319, 100											89
90	287, 400	292, 000	296, 600	301, 200	305, 700	310, 200	314, 700	319, 200	323, 600	328, 000	332, 400											90
92	296, 200	300, 900	305, 500	310, 100	314, 700	319, 300	323, 800	328, 300	332, 800	337, 200	341, 600											92
93	308, 000	312, 800	317, 600	322, 400	327, 100	331, 900	336, 500	341, 200	345, 800	350, 300	354, 900											93
95	318, 700	323, 600	328, 400	333, 200	338, 000	342, 700	347, 400	352, 100	356, 700	361, 300	365, 800											95
96	330, 500	335, 600	340, 600	345, 500	350, 400	355, 300	360, 200	365, 000	369, 700	374, 400	379, 100											96
98	341, 200	346, 300	351, 300	356, 300	361, 300	366, 200	371, 100	375, 900	380, 600	385, 400	390, 100											98
99	353, 100	358, 300	363, 500	368, 600	373, 700	378, 800	383, 800	388, 800	393, 700	398, 500	403, 300											99
101	363, 700	369, 000	374, 300	379, 400	384, 600	389, 700	394, 700	399, 700	404, 600	409, 500	414, 300											101
102	375, 600	381, 000	386, 400	391, 700	397, 000	402, 300	407, 400	412, 500	417, 600	422, 600	427, 600											102
104	386, 300	391, 700	397, 200	402, 600	407, 900	413, 100	418, 300	423, 500	428, 500	433, 500	438, 500											104
105	398, 100	403, 700	409, 300	414, 900	420, 300	425, 700	431, 100	436, 300	441, 600	446, 700	451, 800											105
106	402, 200	407, 900	413, 500	419, 100	424, 600	430, 000	435, 400	440, 700	445, 900	451, 100	456, 200											106
107	425, 900	431, 900	437, 800	443, 700	449, 500	455, 200	460, 900	466, 400	471, 900	477, 400	482, 800											107
108	435, 600	441, 600	447, 600	453, 500	459, 400	465, 200	470, 800	476, 400	482, 000	487, 400	492, 900											108
109	447, 400	453, 600	459, 800	465, 800	471, 800	477, 700	483, 600	489, 300	495, 000	500, 600	506, 100											109
110	457, 200	463, 400	469, 600	475, 700	481, 800	487, 700	493, 500	499, 300	505, 000	510, 600	516, 200											110
111	469, 000	475, 400	481, 700	488, 000	494, 200	500, 300	506, 300	512, 200	518, 000	523, 800	529, 500											111
112	476, 700	483, 200	489, 500	495, 800	502, 000	508, 100	514, 100	520, 000	525, 800	531, 600	537, 300											112
113	502, 400	509, 200	515, 900	522, 500	529, 000	535, 400	541, 700	548, 000	554, 100	560, 200	566, 200											113
114	512, 100	518, 900	525, 700	532, 400	538, 900	545, 400	551, 700	558, 000	564, 100	570, 200	576, 200											114
115	523, 900	530, 900	537, 800	544, 700	551, 400	558, 000	564, 500	570, 900	577, 200	583, 400	589, 500											115
116	531, 700	538, 700	545, 600	552, 400	559, 200	565, 800	572, 300	578, 600	584, 900	591, 100	597, 300											116
117	545, 500	552, 700	559, 800	566, 800	573, 700	580, 500	587, 200	593, 700	600, 200	606, 600												117
118	565, 000	572, 300	579, 600	586, 800	593, 800	600, 700	607, 500															118
119	586, 500	594, 100	601, 600	608, 900																		119
120	606, 000																					120

HEADWATER 598 to 602
TAILWATER 589.51 to 590.50

MARCH 2004

GUNTERSVILLE DAM

SPILLWAY DISCHARGE

IN CUBIC FEET PER SECOND

GATE ARRANGEMENT	HEADWATER ELEVATION																				GATE ARRANGEMENT
	592.0	592.2	592.4	592.6	592.8	593.0	593.2	593.4	593.6	593.8	594.0	594.2	594.4	594.6	594.8	595.0	595.2	595.4	595.6	595.8	596.0	
90																				224, 800	229, 900	90
92																			227, 600	232, 900	238, 000	92
93																	225, 600	231, 200	236, 800	242, 200	247, 600	93
95															223, 500	229, 400	235, 200	240, 900	246, 700	252, 300	257, 800	95
96														225, 800	231, 800	237, 800	243, 900	249, 900	255, 800	261, 700	267, 300	96
98												223, 000	229, 100	235, 100	241, 200	247, 300	253, 500	259, 600	265, 700	271, 700	277, 500	98
99											224, 000	230, 400	236, 800	243, 100	249, 400	255, 800	262, 200	268, 500	274, 900	281, 100	287, 100	99
101										226, 300	233, 000	239, 600	246, 000	252, 400	258, 800	265, 300	271, 800	278, 300	284, 700	291, 100	297, 200	101
102									226, 100	233, 300	240, 300	247, 100	253, 800	260, 400	267, 000	273, 700	280, 500	287, 200	293, 900	300, 500	306, 800	102
104								226, 900	234, 700	242, 200	249, 300	256, 200	263, 000	269, 700	276, 400	283, 200	290, 100	296, 900	303, 800	310, 500	317, 000	104
105							225, 000	233, 400	241, 500	249, 100	256, 500	263, 700	270, 700	277, 700	284, 600	291, 700	298, 800	305, 900	312, 900	319, 900	326, 500	105
106							229, 200	237, 800	245, 900	253, 700	261, 100	268, 300	275, 300	282, 200	289, 000	296, 000	303, 100	310, 200	317, 300	324, 200	331, 000	106
107						232, 100	241, 800	250, 800	259, 400	267, 600	275, 500	283, 200	290, 700	298, 100	305, 400	312, 900	320, 500	328, 100	335, 600	343, 000	350, 100	107
108					228, 700	239, 200	249, 100	258, 400	267, 200	275, 700	283, 700	291, 500	299, 000	306, 500	313, 900	321, 400	329, 100	336, 800	344, 500	352, 000	359, 300	108
109					234, 400	245, 200	255, 400	264, 900	274, 000	282, 600	290, 900	298, 900	306, 700	314, 400	322, 100	329, 900	337, 800	345, 800	353, 700	361, 400	368, 800	109
110				229, 100	241, 200	252, 300	262, 700	272, 500	281, 800	290, 600	299, 100	307, 200	315, 100	322, 900	330, 600	338, 500	346, 500	354, 500	362, 600	370, 400	378, 000	110
111				234, 500	246, 900	258, 300	269, 000	279, 000	288, 500	297, 600	306, 300	314, 700	322, 800	330, 800	338, 800	346, 900	355, 200	363, 500	371, 700	379, 800	387, 600	111
112			226, 100	240, 400	252, 900	264, 500	275, 300	285, 600	295, 300	304, 600	313, 400	321, 800	330, 000	338, 000	346, 000	354, 200	362, 500	370, 900	379, 200	387, 400	395, 200	112
113			236, 800	251, 900	265, 200	277, 400	288, 800	299, 600	309, 900	319, 600	328, 900	337, 900	346, 600	355, 100	363, 700	372, 400	381, 200	390, 100	399, 000	407, 600	415, 900	113
114		225, 500	243, 200	258, 500	272, 000	284, 400	296, 100	307, 200	317, 700	327, 600	337, 100	346, 100	354, 900	363, 500	372, 200	380, 900	389, 900	398, 900	407, 900	416, 600	425, 100	114
115		230, 100	248, 200	263, 900	277, 700	290, 400	302, 400	313, 700	324, 400	334, 600	344, 300	353, 600	362, 600	371, 500	380, 400	389, 400	398, 600	407, 800	417, 000	426, 000	434, 600	115
116		235, 400	253, 800	269, 700	283, 700	296, 600	308, 800	320, 300	331, 200	341, 500	351, 400	360, 700	369, 800	378, 700	387, 600	396, 600	405, 900	415, 200	424, 500	433, 600	442, 300	116
117		240, 700	259, 600	275, 900	290, 300	303, 500	316, 000	327, 800	339, 000	349, 600	359, 700	369, 300	378, 700	387, 900	397, 100	406, 400	415, 900	425, 600	435, 100	444, 400	453, 400	117
118	227, 700	250, 600	270, 200	287, 100	302, 000	315, 700	328, 600	340, 900	352, 500	363, 500	373, 900	383, 900	393, 500	403, 000	412, 500	422, 100	431, 900	441, 900	451, 700	461, 400	470, 600	118
119	237, 200	261, 200	281, 600	299, 100	314, 500	328, 800	342, 200	355, 000	367, 100	378, 500	389, 300	399, 600	409, 600	419, 400	429, 200	439, 100	449, 300	459, 600	469, 800	479, 800	489, 300	119
120	246, 200	271, 000	292, 200	310, 300	326, 300	341, 000	354, 900	368, 100	380, 600	392, 400	403, 600	414, 200	424, 500	434, 500	444, 600	454, 800	465, 300	475, 900	486, 400	496, 700	506, 500	120

MARCH 2004

HEADWATER 592 to 596
TAILWATER 590.51 to 591.50

GUNTERSVILLE DAM
SPILLWAY DISCHARGE
IN CUBIC FEET PER SECOND

GATE ARRANGEMENT	HEADWATER ELEVATION																				GATE ARRANGEMENT
	596.0	596.2	596.4	596.6	596.8	597.0	597.2	597.4	597.6	597.8	598.0	598.2	598.4	598.6	598.8	599.0	599.2	599.4	599.6	599.8	600.0	
74																				223, 400	227, 200	74
75																		223, 000	226, 900	230, 800	234, 800	75
78																224, 200	228, 100	232, 100	236, 100	240, 000	244, 000	78
79															225, 500	229, 400	233, 400	237, 300	241, 300	245, 300	249, 300	79
80													224, 000	228, 100	232, 100	236, 300	240, 400	244, 500	248, 600	252, 700	256, 900	80
82													226, 400	230, 400	234, 300	238, 400	242, 400	246, 400	250, 500	254, 500	258, 500	82
83											224, 600	228, 700	232, 800	236, 900	241, 000	245, 200	249, 400	253, 600	257, 800	261, 900	266, 100	83
84								223, 500	227, 600	231, 800	235, 900	240, 200	244, 400	248, 700	253, 000	257, 300	261, 600	266, 000	270, 300	274, 600	278, 900	84
86						223, 700	227, 800	231, 900	236, 100	240, 300	244, 600	248, 900	253, 200	257, 500	261, 900	266, 300	270, 700	275, 100	279, 500	283, 800	288, 200	86
87				225, 600	229, 900	234, 200	238, 500	242, 800	247, 100	251, 500	255, 900	260, 300	264, 800	269, 300	273, 800	278, 300	282, 900	287, 500	292, 000	296, 500	301, 000	87
89		225, 000	229, 500	233, 900	238, 300	242, 600	246, 900	251, 200	255, 600	260, 100	264, 500	269, 000	273, 500	278, 100	282, 700	287, 300	291, 900	296, 500	301, 100	305, 700	310, 300	89
90	229, 900	234, 700	239, 500	244, 100	248, 600	253, 100	257, 600	262, 100	266, 600	271, 200	275, 800	280, 500	285, 200	289, 900	294, 600	299, 400	304, 200	308, 900	313, 700	318, 400	323, 100	90
92	238, 000	243, 000	247, 800	252, 400	257, 000	261, 500	266, 000	270, 500	275, 100	279, 800	284, 400	289, 200	293, 900	298, 700	303, 500	308, 300	313, 200	318, 000	322, 800	327, 600	332, 400	92
93	247, 600	252, 800	257, 700	262, 600	267, 300	272, 000	276, 700	281, 400	286, 100	290, 900	295, 700	300, 600	305, 500	310, 500	315, 400	320, 400	325, 400	330, 400	335, 400	340, 300	345, 200	93
95	257, 800	263, 000	268, 100	273, 000	277, 700	282, 400	287, 100	291, 800	296, 600	301, 400	306, 300	311, 200	316, 200	321, 200	326, 200	331, 300	336, 300	341, 300	346, 400	351, 300	356, 300	95
96	267, 300	272, 800	278, 000	283, 100	288, 000	292, 900	297, 700	302, 600	307, 600	312, 600	317, 600	322, 700	327, 800	333, 000	338, 100	343, 300	348, 500	353, 700	358, 900	364, 000	369, 100	96
98	277, 500	283, 100	288, 400	293, 500	298, 400	303, 300	308, 200	313, 100	318, 000	323, 100	328, 200	333, 300	338, 500	343, 700	348, 900	354, 200	359, 400	364, 700	369, 900	375, 000	380, 200	98
99	287, 100	292, 800	298, 300	303, 600	308, 700	313, 800	318, 800	323, 900	329, 000	334, 200	339, 500	344, 800	350, 100	355, 500	360, 900	366, 300	371, 700	377, 100	382, 400	387, 700	393, 000	99
101	297, 200	303, 100	308, 700	314, 000	319, 200	324, 200	329, 300	334, 300	339, 500	344, 700	350, 000	355, 400	360, 800	366, 200	371, 600	377, 100	382, 500	388, 000	393, 400	398, 700	404, 100	101
102	306, 800	312, 900	318, 600	324, 100	329, 500	334, 700	339, 900	345, 100	350, 500	355, 900	361, 300	366, 800	372, 400	378, 000	383, 600	389, 200	394, 800	400, 400	405, 900	411, 400	416, 900	102
104	317, 000	323, 100	329, 000	334, 500	339, 900	345, 100	350, 300	355, 600	360, 900	366, 400	371, 900	377, 400	383, 100	388, 700	394, 300	400, 000	405, 700	411, 300	416, 900	422, 400	427, 900	104
105	326, 500	332, 900	338, 900	344, 600	350, 200	355, 600	361, 000	366, 400	371, 900	377, 500	383, 200	388, 900	394, 700	400, 500	406, 300	412, 100	417, 900	423, 700	429, 400	435, 100	440, 800	105
106	331, 000	337, 400	343, 400	349, 100	354, 600	360, 000	365, 300	370, 700	376, 300	381, 900	387, 600	393, 300	399, 200	405, 000	410, 900	416, 800	422, 600	428, 500	434, 300	440, 000	445, 700	106
107	350, 100	356, 900	363, 300	369, 300	375, 200	380, 900	386, 600	392, 400	398, 200	404, 200	410, 200	416, 300	422, 400	428, 600	434, 700	440, 900	447, 100	453, 300	459, 400	465, 400	471, 400	107
108	359, 300	366, 100	372, 600	378, 700	384, 600	390, 300	396, 100	401, 800	407, 700	413, 700	419, 800	425, 900	432, 100	438, 300	444, 600	450, 800	457, 100	463, 300	469, 400	475, 500	481, 500	108
109	368, 800	375, 900	382, 500	388, 800	394, 900	400, 800	406, 700	412, 600	418, 700	424, 800	431, 100	437, 400	443, 700	450, 100	456, 500	462, 900	469, 300	475, 700	482, 000	488, 200	494, 400	109
110	378, 000	385, 200	391, 900	398, 200	404, 300	410, 300	416, 200	422, 100	428, 200	434, 400	440, 700	447, 000	453, 400	459, 900	466, 300	472, 800	479, 200	485, 700	492, 000	498, 300	504, 500	110
111	387, 600	394, 900	401, 800	408, 300	414, 600	420, 700	426, 800	432, 900	439, 200	445, 500	452, 000	458, 500	465, 000	471, 600	478, 300	484, 900	491, 500	498, 100	504, 600	511, 000	517, 300	111
112	395, 200	402, 600	409, 600	416, 100	422, 300	428, 400	434, 500	440, 600	446, 900	453, 200	459, 700	466, 200	472, 800	479, 400	486, 100	492, 700	499, 300	505, 900	512, 400	518, 900	525, 200	112
113	415, 900	423, 700	431, 100	438, 000	444, 600	451, 100	457, 500	464, 000	470, 600	477, 300	484, 200	491, 100	498, 000	505, 000	512, 000	519, 000	525, 900	532, 800	539, 700	546, 500	553, 200	113
114	425, 100	433, 000	440, 400	447, 400	454, 000	460, 500	467, 000	473, 500	480, 100	486, 900	493, 800	500, 700	507, 700	514, 700	521, 800	528, 800	535, 900	542, 900	549, 800	556, 600	563, 300	114
115	434, 600	442, 800	450, 300	457, 500	464, 300	471, 000	477, 600	484, 300	491, 100	498, 000	505, 100	512, 200	519, 300	526, 500	533, 700	540, 900	548, 100	555, 200	562, 300	569, 300	576, 200	115
116	442, 300	450, 500	458, 100	465, 200	472, 100	478, 700	485, 300	492, 000	498, 800	505, 700	512, 800	519, 900	527, 100	534, 300	541, 500	548, 800	556, 000	563, 100	570, 200	577, 200	584, 100	116
117	453, 400	461, 800	469, 600	477, 000	484, 000	490, 900	497, 700	504, 600	511, 600	518, 700	526, 000	533, 300	540, 700	548, 100	555, 500	562, 900	570, 300	577, 600	584, 900	592, 100	599, 200	117
118	470, 600	479, 200	487, 300	494, 800	502, 000	509, 100	516, 000	523, 000	530, 200	537, 500	544, 900	552, 400	559, 900	567, 500	575, 100	582, 700	590, 200	597, 700	605, 100			118
119	489, 300	498, 300	506, 600	514, 300	521, 800	529, 000	536, 100	543, 300	550, 700	558, 200	565, 800	573, 500	581, 200	589, 000	596, 800	604, 600						119
120	506, 500	515, 700	524, 200	532, 200	539, 800	547, 100	554, 400	561, 700	569, 200	576, 900	584, 700	592, 600	600, 500	608, 500								120

HEADWATER 596 to 600
TAILWATER 590.51 to 591.50

MARCH 2004

GUNTERSVILLE DAM

SPILLWAY DISCHARGE

IN CUBIC FEET PER SECOND

HEADWATER ELEVATION

GATE ARRANGEMENT	592.0	592.2	592.4	592.6	592.8	593.0	593.2	593.4	593.6	593.8	594.0	594.2	594.4	594.6	594.8	595.0	595.2	595.4	595.6	595.8	596.0	GATE ARRANGEMENT
95																					238,500	95
96																				241,200	247,400	96
98																		238,200	244,400	250,600	256,800	98
99																	239,800	246,300	252,800	259,200	265,700	99
101																242,200	248,900	255,500	262,000	268,500	275,100	101
102															242,600	249,800	256,800	263,600	270,400	277,100	283,900	102
104														243,700	251,400	258,700	265,800	272,800	279,600	286,500	293,300	104
105													242,500	250,800	258,800	266,400	273,700	280,900	288,000	295,100	302,200	105
106												237,700	246,700	255,100	263,200	270,800	278,200	285,400	292,400	299,500	306,600	106
107											241,000	251,100	260,600	269,500	278,000	286,100	294,000	301,700	309,200	316,800	324,300	107
108											248,000	258,300	268,000	277,100	285,900	294,200	302,200	309,900	317,500	325,200	332,800	108
109										243,000	254,300	264,900	274,900	284,300	293,300	301,800	310,100	318,100	326,000	333,800	341,700	109
110									237,100	249,800	261,300	272,100	282,300	292,000	301,100	309,900	318,200	326,300	334,300	342,200	350,200	110
111									242,800	255,800	267,700	278,800	289,200	299,100	308,500	317,500	326,100	334,500	342,700	350,800	359,000	111
112									248,500	261,700	273,600	284,900	295,600	305,700	315,200	324,300	333,000	341,400	349,700	357,800	366,100	112
113								245,000	260,700	274,700	287,400	299,300	310,500	321,100	331,200	340,900	350,100	359,000	367,800	376,500	385,200	113
114								251,300	267,300	281,400	294,300	306,400	317,900	328,800	339,100	348,900	358,200	367,300	376,100	384,900	393,700	114
115							237,700	256,600	273,000	287,500	300,700	313,100	324,900	336,000	346,500	356,500	366,100	375,400	384,500	393,500	402,600	115
116							242,800	262,100	278,700	293,300	306,700	319,300	331,200	342,500	353,200	363,400	373,100	382,400	391,500	400,500	409,700	116
117							248,500	268,100	285,200	300,300	314,000	327,000	339,200	350,800	361,800	372,200	382,200	391,800	401,200	410,600	419,900	117
118							258,500	278,900	296,600	312,200	326,400	339,800	352,500	364,500	375,900	386,700	397,000	406,900	416,600	426,200	435,900	118
119						244,300	269,200	290,500	308,900	325,000	339,700	353,600	366,800	379,300	391,200	402,400	413,100	423,300	433,300	443,200	453,200	119
120						253,300	279,200	301,300	320,300	336,900	352,100	366,400	380,100	393,000	405,300	416,900	427,900	438,400	448,700	458,900	469,100	120

MARCH 2004

HEADWATER 592 to 596
TAILWATER 591.51 to 592.50

GUNTERSVILLE DAM
SPILLWAY DISCHARGE
IN CUBIC FEET PER SECOND

GATE ARRANGEMENT	HEADWATER ELEVATION																				GATE ARRANGEMENT
	596.0	596.2	596.4	596.6	596.8	597.0	597.2	597.4	597.6	597.8	598.0	598.2	598.4	598.6	598.8	599.0	599.2	599.4	599.6	599.8	600.0	
79																					239, 600	79
80																			238, 700	242, 900	247, 100	80
83																	239, 300	243, 500	247, 700	252, 000	256, 300	83
84														238, 100	242, 400	246, 700	251, 000	255, 400	259, 700	264, 100	268, 600	84
86												238, 400	242, 600	246, 900	251, 200	255, 500	259, 900	264, 300	268, 800	273, 300	277, 800	86
87										240, 500	244, 900	249, 300	253, 700	258, 100	262, 500	267, 100	271, 600	276, 200	280, 800	285, 400	290, 100	87
89								239, 800	244, 500	249, 000	253, 500	258, 000	262, 400	266, 800	271, 300	275, 900	280, 500	285, 200	289, 800	294, 500	299, 300	89
90						239, 900	245, 100	250, 100	254, 900	259, 600	264, 300	268, 900	273, 400	278, 100	282, 700	287, 400	292, 200	297, 000	301, 800	306, 700	311, 600	90
92				237, 200	242, 700	248, 200	253, 400	258, 500	263, 400	268, 200	272, 900	277, 500	282, 100	286, 800	291, 500	296, 300	301, 100	306, 000	310, 900	315, 800	320, 800	92
93			240, 900	246, 700	252, 400	258, 000	263, 500	268, 800	273, 800	278, 800	283, 600	288, 400	293, 200	298, 000	302, 900	307, 800	312, 800	317, 800	322, 900	328, 000	333, 100	93
95	238, 500	244, 500	250, 600	256, 600	262, 500	268, 200	273, 800	279, 200	284, 300	289, 300	294, 200	299, 000	303, 800	308, 700	313, 600	318, 500	323, 600	328, 600	333, 800	338, 900	344, 100	95
96	247, 400	253, 600	259, 900	266, 100	272, 200	278, 100	283, 900	289, 400	294, 800	299, 900	305, 000	309, 900	314, 900	319, 900	324, 900	330, 100	335, 300	340, 500	345, 800	351, 000	356, 400	96
98	256, 800	263, 100	269, 600	275, 900	282, 200	288, 300	294, 200	299, 900	305, 300	310, 500	315, 500	320, 500	325, 500	330, 500	335, 600	340, 800	346, 000	351, 300	356, 600	362, 000	367, 400	98
99	265, 700	272, 200	278, 900	285, 400	291, 900	298, 200	304, 300	310, 100	315, 700	321, 000	326, 300	331, 400	336, 600	341, 800	347, 000	352, 300	357, 700	363, 200	368, 600	374, 100	379, 700	99
101	275, 100	281, 700	288, 500	295, 300	301, 900	308, 400	314, 600	320, 500	326, 200	331, 600	336, 900	342, 000	347, 200	352, 400	357, 700	363, 100	368, 500	374, 000	379, 500	385, 100	390, 700	101
102	283, 900	290, 800	297, 800	304, 800	311, 600	318, 200	324, 700	330, 800	336, 600	342, 200	347, 600	352, 900	358, 300	363, 600	369, 100	374, 600	380, 200	385, 800	391, 500	397, 200	403, 000	102
104	293, 300	300, 300	307, 500	314, 600	321, 600	328, 400	335, 000	341, 200	347, 100	352, 700	358, 200	363, 500	368, 900	374, 300	379, 800	385, 300	391, 000	396, 700	402, 400	408, 200	414, 000	104
105	302, 200	309, 400	316, 800	324, 100	331, 300	338, 300	345, 100	351, 500	357, 500	363, 300	368, 900	374, 500	380, 000	385, 500	391, 100	396, 900	402, 700	408, 500	414, 400	420, 300	426, 300	105
106	306, 600	313, 900	321, 200	328, 600	335, 900	343, 000	349, 800	356, 300	362, 400	368, 200	373, 800	379, 300	384, 800	390, 400	396, 100	401, 800	407, 700	413, 600	419, 600	425, 600	431, 600	106
107	324, 300	332, 000	339, 800	347, 600	355, 300	362, 800	370, 000	376, 800	383, 200	389, 400	395, 300	401, 200	407, 000	412, 900	418, 800	424, 900	431, 100	437, 300	443, 600	449, 900	456, 200	107
108	332, 800	340, 600	348, 600	356, 500	364, 300	372, 000	379, 300	386, 200	392, 700	398, 900	404, 900	410, 800	416, 600	422, 500	428, 600	434, 700	440, 900	447, 200	453, 500	459, 900	466, 300	108
109	341, 700	349, 700	357, 900	366, 000	374, 000	381, 900	389, 400	396, 400	403, 100	409, 500	415, 700	421, 700	427, 700	433, 800	439, 900	446, 200	452, 600	459, 000	465, 500	472, 000	478, 600	109
110	350, 200	358, 300	366, 600	374, 900	383, 100	391, 100	398, 700	405, 900	412, 600	419, 100	425, 300	431, 300	437, 400	443, 500	449, 700	456, 000	462, 400	468, 900	475, 500	482, 100	488, 700	110
111	359, 000	367, 400	375, 900	384, 400	392, 800	400, 900	408, 800	416, 100	423, 100	429, 600	436, 000	442, 200	448, 400	454, 700	461, 100	467, 600	474, 100	480, 800	487, 500	494, 200	501, 000	111
112	366, 100	374, 500	383, 100	391, 700	400, 300	408, 500	416, 400	423, 900	430, 800	437, 400	443, 800	450, 000	456, 200	462, 500	468, 900	475, 400	482, 000	488, 600	495, 400	502, 100	508, 900	112
113	385, 200	394, 200	403, 200	412, 300	421, 200	429, 900	438, 200	446, 100	453, 400	460, 400	467, 100	473, 700	480, 200	486, 800	493, 600	500, 400	507, 400	514, 400	521, 400	528, 500	535, 700	113
114	393, 700	402, 800	412, 000	421, 200	430, 300	439, 100	447, 600	455, 500	462, 900	469, 900	476, 700	483, 300	489, 900	496, 500	503, 300	510, 200	517, 200	524, 300	531, 400	538, 600	545, 800	114
115	402, 600	411, 800	421, 300	430, 700	440, 000	449, 000	457, 600	465, 700	473, 300	480, 500	487, 400	494, 200	500, 900	507, 700	514, 700	521, 700	528, 900	536, 100	543, 400	550, 700	558, 100	115
116	409, 700	419, 000	428, 500	438, 000	447, 400	456, 600	465, 300	473, 500	481, 100	488, 300	495, 200	502, 000	508, 700	515, 500	522, 500	529, 500	536, 700	544, 000	551, 300	558, 600	566, 000	116
117	419, 900	429, 500	439, 300	449, 100	458, 700	468, 100	477, 000	485, 400	493, 300	500, 700	507, 800	514, 700	521, 700	528, 700	535, 800	543, 100	550, 400	557, 900	565, 400	572, 900	580, 500	117
118	435, 900	445, 700	455, 800	465, 900	475, 900	485, 500	494, 700	503, 300	511, 400	519, 000	526, 200	533, 300	540, 400	547, 500	554, 800	562, 200	569, 800	577, 400	585, 000	592, 800	600, 500	118
119	453, 200	463, 400	473, 800	484, 300	494, 600	504, 600	514, 100	523, 000	531, 300	539, 100	546, 600	553, 900	561, 100	568, 400	575, 900	583, 600	591, 300	599, 100	607, 000			119
120	469, 100	479, 600	490, 400	501, 100	511, 700	522, 000	531, 800	541, 000	549, 400	557, 400	565, 000	572, 500	579, 900	587, 300	595, 000	602, 800						120

HEADWATER 596 to 600
TAILWATER 591.51 to 592.50

MARCH 2004

GUNTERSVILLE DAM
SPILLWAY DISCHARGE
IN CUBIC FEET PER SECOND

GATE ARRANGEMENT	HEADWATER ELEVATION																				GATE ARRANGEMENT
	592.0	592.2	592.4	592.6	592.8	593.0	593.2	593.4	593.6	593.8	594.0	594.2	594.4	594.6	594.8	595.0	595.2	595.4	595.6	595.8	596.0	
101																					251, 500	101
102																				252, 100	259, 500	102
104																			252, 600	260, 700	268, 300	104
105																		251, 500	260, 200	268, 500	276, 400	105
106																		255, 600	264, 400	272, 800	280, 800	106
107																	260, 400	270, 300	279, 600	288, 500	296, 900	107
108																256, 700	267, 400	277, 500	287, 100	296, 200	304, 800	108
109															251, 600	263, 400	274, 500	284, 900	294, 700	304, 000	312, 900	109
110															258, 300	270, 300	281, 500	292, 100	302, 100	311, 700	320, 800	110
111															264, 700	277, 000	288, 600	299, 500	309, 800	319, 500	328, 800	111
112														256, 700	270, 400	282, 800	294, 500	305, 500	316, 000	326, 000	335, 500	112
113													253, 100	269, 600	284, 100	297, 400	309, 700	321, 400	332, 500	342, 900	352, 900	113
114													259, 300	276, 100	290, 800	304, 200	316, 800	328, 700	339, 900	350, 600	360, 800	114
115													264, 900	282, 100	297, 200	310, 900	323, 800	336, 000	347, 500	358, 500	368, 800	115
116													270, 300	287, 600	302, 900	316, 700	329, 800	342, 100	353, 800	364, 900	375, 500	116
117												256, 200	276, 700	294, 500	310, 300	324, 500	337, 900	350, 600	362, 600	374, 000	384, 800	117
118												266, 300	287, 600	306, 100	322, 400	337, 100	350, 900	364, 000	376, 500	388, 300	399, 500	118
119											251, 300	277, 200	299, 400	318, 600	335, 400	350, 700	365, 000	378, 600	391, 600	403, 800	415, 500	119
120											260, 400	287, 300	310, 300	330, 200	347, 500	363, 200	378, 000	392, 100	405, 400	418, 100	430, 200	120

MARCH 2004

HEADWATER 592 to 596
TAILWATER 592.51 to 593.50

GUNTERSVILLE DAM
SPILLWAY DISCHARGE
IN CUBIC FEET PER SECOND

GATE ARRANGEMENT	HEADWATER ELEVATION																				GATE ARRANGEMENT
	596.0	596.2	596.4	596.6	596.8	597.0	597.2	597.4	597.6	597.8	598.0	598.2	598.4	598.6	598.8	599.0	599.2	599.4	599.6	599.8	600.0	
84																				253,400	257,700	84
86																		253,600	258,000	262,400	266,800	86
87																255,800	260,400	264,900	269,400	274,000	278,600	87
89														255,100	259,900	264,600	269,300	273,800	278,400	283,000	287,700	89
90												255,500	260,700	265,800	270,700	275,600	280,400	285,100	289,900	294,600	299,400	90
92										252,800	258,400	264,000	269,300	274,500	279,500	284,400	289,300	294,100	298,900	303,700	308,500	92
93									256,700	262,700	268,500	274,300	279,800	285,100	290,300	295,400	300,400	305,300	310,300	315,200	320,200	93
95							254,200	260,400	266,700	272,800	278,800	284,700	290,400	295,800	301,100	306,200	311,200	316,200	321,100	326,100	331,200	95
96						257,200	263,500	269,900	276,400	282,700	288,900	295,000	300,800	306,500	311,900	317,200	322,300	327,500	332,600	337,700	342,900	96
98				254,000	260,300	266,700	273,100	279,600	286,300	292,800	299,200	305,400	311,400	317,100	322,600	327,900	333,100	338,300	343,400	348,600	353,800	98
99			256,100	262,700	269,300	275,800	282,500	289,200	296,100	302,800	309,300	315,700	321,900	327,800	333,400	338,900	344,300	349,600	354,800	360,200	365,500	99
101	251,500	258,400	265,200	272,000	278,600	285,300	292,100	298,900	306,000	312,800	319,600	326,200	332,500	338,400	344,200	349,700	355,100	360,400	365,700	371,000	376,500	101
102	259,500	266,700	273,700	280,700	287,500	294,400	301,400	308,500	315,700	322,800	329,700	336,400	342,900	349,100	355,000	360,700	366,200	371,700	377,100	382,600	388,200	102
104	268,300	275,700	282,900	289,900	296,900	303,900	311,000	318,200	325,600	332,900	340,000	346,900	353,500	359,800	365,700	371,400	377,000	382,500	388,000	393,500	399,100	104
105	276,400	284,000	291,400	298,600	305,800	313,100	320,400	327,800	335,400	342,800	350,100	357,200	364,000	370,400	376,500	382,400	388,100	393,800	399,400	405,100	410,800	105
106	280,800	288,500	295,900	303,200	310,500	317,800	325,100	332,600	340,200	347,800	355,200	362,400	369,300	375,800	382,000	387,900	393,700	399,300	405,000	410,700	416,500	106
107	296,900	305,000	312,900	320,600	328,300	336,000	343,800	351,700	359,700	367,600	375,400	383,000	390,200	397,100	403,600	409,800	415,900	421,900	427,800	433,900	440,000	107
108	304,800	313,100	321,100	329,000	336,800	344,600	352,500	360,500	368,700	376,800	384,700	392,500	399,800	406,800	413,300	419,600	425,800	431,800	437,800	443,800	450,000	108
109	312,900	321,400	329,600	337,700	345,700	353,700	361,800	370,100	378,400	386,700	394,900	402,800	410,300	417,400	424,200	430,600	436,900	443,000	449,200	455,400	461,700	109
110	320,800	329,500	337,900	346,100	354,200	362,300	370,500	378,900	387,400	395,900	404,200	412,200	419,900	427,100	433,900	440,400	446,700	452,900	459,100	465,400	471,700	110
111	328,800	337,700	346,300	354,800	363,100	371,400	379,900	388,500	397,100	405,800	414,300	422,500	430,400	437,800	444,700	451,400	457,900	464,200	470,500	476,900	483,500	111
112	335,500	344,500	353,200	361,700	370,100	378,500	387,000	395,700	404,500	413,300	421,900	430,300	438,200	445,600	452,700	459,300	465,800	472,100	478,500	484,900	491,400	112
113	352,900	362,400	371,600	380,500	389,400	398,200	407,200	416,400	425,600	434,800	443,800	452,600	460,900	468,700	476,100	483,100	490,000	496,600	503,300	510,100	516,900	113
114	360,800	370,500	379,800	388,900	397,900	406,800	415,900	425,200	434,600	444,000	453,200	462,000	470,500	478,400	485,900	493,000	499,800	506,500	513,200	520,000	526,900	114
115	368,800	378,800	388,300	397,600	406,800	415,900	425,200	434,700	444,300	453,900	463,300	472,300	481,000	489,100	496,700	503,900	510,900	517,800	524,700	531,600	538,700	115
116	375,500	385,500	395,200	404,500	413,800	423,000	432,400	442,000	451,700	461,400	470,900	480,100	488,800	497,000	504,600	511,900	518,900	525,800	532,600	539,600	546,600	116
117	384,800	395,100	405,000	414,700	424,100	433,600	443,300	453,100	463,100	473,000	482,700	492,100	501,000	509,400	517,200	524,700	531,900	539,000	546,000	553,200	560,400	117
118	399,500	410,200	420,400	430,300	440,000	449,800	459,700	469,800	480,100	490,300	500,300	510,000	519,200	527,800	535,800	543,500	550,800	558,000	565,200	572,500	579,900	118
119	415,500	426,500	437,100	447,300	457,400	467,500	477,700	488,200	498,800	509,400	519,800	529,800	539,300	548,100	556,400	564,200	571,800	579,200	586,500	594,000	601,600	119
120	430,200	441,600	452,400	463,000	473,300	483,700	494,200	504,900	515,800	526,700	537,400	547,700	557,500	566,500	575,000	583,000	590,700	598,200	605,700			120

HEADWATER 596 to 600
TAILWATER 592.51 to 593.50

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GUNTERSVILLE DAM
SPILLWAY DISCHARGE
IN CUBIC FEET PER SECOND

GATE ARRANGEMENT	HEADWATER ELEVATION																				GATE ARRANGEMENT
	592.0	592.2	592.4	592.6	592.8	593.0	593.2	593.4	593.6	593.8	594.0	594.2	594.4	594.6	594.8	595.0	595.2	595.4	595.6	595.8	596.0	
109																					272, 500	109
110																				266, 800	279, 400	110
111																				273, 500	286, 400	111
112																				279, 100	292, 100	112
113																			278, 400	293, 500	307, 300	113
114																		267, 300	284, 800	300, 200	314, 100	114
115																		273, 200	291, 100	306, 900	321, 200	115
116																		278, 400	296, 500	312, 500	326, 900	116
117																		285, 200	303, 800	320, 200	335, 000	117
118																	274, 100	296, 300	315, 600	332, 500	347, 800	118
119																	285, 100	308, 300	328, 300	345, 800	361, 600	119
120																267, 500	295, 300	319, 300	340, 100	358, 100	374, 400	120

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HEADWATER 592 to 596
TAILWATER 593.51 to 594.50

GUNTERSVILLE DAM
SPILLWAY DISCHARGE
IN CUBIC FEET PER SECOND

GATE ARRANGEMENT	HEADWATER ELEVATION																				GATE ARRANGEMENT
	596.0	596.2	596.4	596.6	596.8	597.0	597.2	597.4	597.6	597.8	598.0	598.2	598.4	598.6	598.8	599.0	599.2	599.4	599.6	599.8	600.0	
87																					266, 800	87
89																			266, 000	271, 100	276, 000	89
90																	265, 900	271, 500	276, 800	282, 000	287, 100	90
92																268, 800	274, 600	280, 300	285, 800	291, 100	296, 300	92
93														266, 700	273, 000	279, 100	285, 100	290, 900	296, 600	302, 100	307, 400	93
95													270, 400	276, 800	283, 200	289, 500	295, 700	301, 700	307, 500	313, 000	318, 400	95
96											267, 200	273, 700	280, 100	286, 700	293, 300	299, 800	306, 200	312, 300	318, 300	324, 000	329, 500	96
98										270, 400	276, 900	283, 400	290, 100	296, 700	303, 600	310, 200	316, 800	323, 100	329, 200	335, 000	340, 600	98
99								266, 100	272, 800	279, 500	286, 200	292, 900	299, 800	306, 700	313, 700	320, 500	327, 200	333, 700	340, 000	345, 900	351, 700	99
101							268, 400	275, 400	282, 200	289, 000	295, 900	302, 700	309, 700	316, 700	323, 900	330, 900	337, 800	344, 500	350, 800	356, 900	362, 700	101
102						269, 500	276, 900	284, 100	291, 100	298, 100	305, 200	312, 200	319, 400	326, 600	334, 000	341, 200	348, 300	355, 100	361, 600	367, 900	373, 800	102
104					270, 300	278, 300	285, 900	293, 300	300, 500	307, 700	314, 800	322, 000	329, 300	336, 700	344, 300	351, 600	358, 900	365, 800	372, 500	378, 800	384, 900	104
105				269, 800	278, 400	286, 600	294, 400	302, 000	309, 400	316, 800	324, 100	331, 500	339, 000	346, 600	354, 400	361, 900	369, 300	376, 500	383, 300	389, 800	396, 000	105
106				274, 100	282, 900	291, 200	299, 200	306, 900	314, 500	321, 900	329, 300	336, 800	344, 400	352, 100	359, 900	367, 600	375, 100	382, 400	389, 400	395, 900	402, 200	106
107		269, 700	280, 100	289, 800	299, 100	307, 800	316, 200	324, 300	332, 200	340, 100	347, 900	355, 800	363, 800	371, 900	380, 100	388, 100	396, 000	403, 700	411, 000	417, 900	424, 500	107
108		276, 700	287, 300	297, 300	306, 800	315, 800	324, 400	332, 700	340, 800	348, 700	356, 700	364, 600	372, 800	381, 100	389, 400	397, 600	405, 700	413, 500	420, 900	427, 900	434, 500	108
109	272, 500	284, 100	294, 900	305, 200	314, 900	324, 100	332, 900	341, 400	349, 700	357, 800	366, 000	374, 200	382, 500	391, 000	399, 500	407, 900	416, 200	424, 100	431, 700	438, 900	445, 700	109
110	279, 400	291, 100	302, 200	312, 600	322, 600	332, 000	341, 100	349, 700	358, 200	366, 500	374, 700	383, 000	391, 500	400, 100	408, 800	417, 400	425, 800	433, 900	441, 600	448, 900	455, 700	110
111	286, 400	298, 400	309, 800	320, 500	330, 700	340, 400	349, 600	358, 400	367, 100	375, 600	384, 000	392, 500	401, 200	410, 000	418, 900	427, 700	436, 300	444, 600	452, 400	459, 800	466, 900	111
112	292, 100	304, 300	315, 800	326, 700	337, 100	346, 900	356, 400	365, 400	374, 100	382, 700	391, 200	399, 800	408, 600	417, 500	426, 500	435, 400	444, 100	452, 500	460, 500	467, 900	475, 000	112
113	307, 300	320, 200	332, 300	343, 800	354, 600	364, 900	374, 800	384, 200	393, 400	402, 400	411, 400	420, 400	429, 600	439, 000	448, 400	457, 700	466, 800	475, 600	484, 000	491, 800	499, 200	113
114	314, 100	327, 200	339, 500	351, 200	362, 300	372, 900	382, 900	392, 500	401, 900	411, 000	420, 100	429, 300	438, 600	448, 100	457, 700	467, 200	476, 500	485, 400	493, 900	501, 800	509, 300	114
115	321, 200	334, 500	347, 200	359, 100	370, 400	381, 200	391, 400	401, 200	410, 800	420, 100	429, 400	438, 800	448, 300	458, 000	467, 800	477, 500	487, 000	496, 100	504, 700	512, 800	520, 400	115
116	326, 900	340, 300	353, 100	365, 300	376, 800	387, 800	398, 200	408, 200	417, 800	427, 200	436, 600	446, 100	455, 700	465, 500	475, 400	485, 200	494, 800	504, 000	512, 700	520, 900	528, 600	116
117	335, 000	348, 900	362, 000	374, 400	386, 200	397, 400	408, 100	418, 300	428, 200	437, 900	447, 500	457, 200	467, 000	477, 100	487, 200	497, 300	507, 100	516, 500	525, 400	533, 800	541, 600	117
118	347, 800	362, 100	375, 600	388, 500	400, 700	412, 300	423, 300	433, 900	444, 000	454, 000	463, 900	473, 800	484, 000	494, 300	504, 800	515, 100	525, 200	534, 900	544, 100	552, 600	560, 700	118
119	361, 600	376, 400	390, 500	403, 800	416, 500	428, 600	440, 000	450, 900	461, 400	471, 700	481, 900	492, 200	502, 700	513, 400	524, 200	534, 900	545, 300	555, 300	564, 800	573, 600	581, 900	119
120	374, 400	389, 600	404, 100	417, 900	431, 000	443, 400	455, 200	466, 500	477, 300	487, 900	498, 300	508, 900	519, 700	530, 700	541, 700	552, 700	563, 500	573, 800	583, 400	592, 500	600, 900	120

HEADWATER 596 to 600
TAILWATER 593.51 to 594.50

MARCH 2004

GUNTERSVILLE DAM

SPILLWAY DISCHARGE

IN CUBIC FEET PER SECOND

HEADWATER ELEVATION

GATE ARRANGEMENT	596.0	596.2	596.4	596.6	596.8	597.0	597.2	597.4	597.6	597.8	598.0	598.2	598.4	598.6	598.8	599.0	599.2	599.4	599.6	599.8	600.0	GATE ARRANGEMENT
93																				283, 300	289, 800	93
95																		280, 800	287, 300	293, 800	300, 400	95
96																	284, 000	290, 600	297, 300	304, 000	310, 800	96
98															280, 700	287, 400	294, 000	300, 700	307, 600	314, 400	321, 400	98
99														283, 200	290, 000	296, 800	303, 600	310, 500	317, 600	324, 600	331, 800	99
101													285, 700	292, 800	299, 700	306, 600	313, 600	320, 700	327, 800	335, 100	342, 500	101
102												287, 200	294, 600	301, 800	308, 900	316, 100	323, 200	330, 500	337, 900	345, 300	352, 900	102
104										280, 100	288, 400	296, 300	304, 000	311, 400	318, 700	325, 900	333, 200	340, 600	348, 100	355, 700	363, 500	104
105										288, 400	296, 900	305, 000	312, 800	320, 400	327, 900	335, 400	342, 900	350, 400	358, 100	365, 900	373, 900	105
106									284, 000	293, 200	301, 900	310, 300	318, 200	326, 000	333, 600	341, 100	348, 700	356, 400	364, 300	372, 200	380, 100	106
107								290, 000	300, 200	309, 800	318, 900	327, 600	335, 900	344, 000	352, 000	360, 000	368, 000	376, 100	384, 300	392, 600	400, 900	107
108							286, 200	297, 300	307, 700	317, 600	327, 000	335, 900	344, 400	352, 700	360, 900	369, 000	377, 100	385, 300	393, 700	402, 200	410, 600	108
109						281, 800	293, 800	305, 100	315, 800	325, 900	335, 400	344, 600	353, 300	361, 800	370, 100	378, 400	386, 700	395, 100	403, 700	412, 400	421, 000	109
110						288, 700	300, 900	312, 400	323, 300	333, 700	343, 500	352, 900	361, 800	370, 500	379, 000	387, 400	395, 800	404, 400	413, 100	421, 900	430, 700	110
111					282, 500	295, 900	308, 400	320, 200	331, 400	341, 900	352, 000	361, 500	370, 700	379, 500	388, 200	396, 800	405, 400	414, 200	423, 100	432, 100	441, 100	111
112					288, 200	301, 700	314, 300	326, 300	337, 600	348, 400	358, 600	368, 400	377, 700	386, 700	395, 500	404, 200	412, 900	421, 700	430, 700	439, 900	449, 000	112
113				287, 100	302, 900	317, 200	330, 600	343, 100	355, 000	366, 300	377, 000	387, 200	396, 900	406, 300	415, 500	424, 600	433, 800	443, 000	452, 500	462, 100	471, 600	113
114				293, 700	309, 700	324, 200	337, 700	350, 500	362, 600	374, 100	385, 100	395, 500	405, 400	415, 000	424, 400	433, 600	442, 900	452, 300	461, 900	471, 600	481, 300	114
115			281, 500	300, 100	316, 500	331, 400	345, 200	358, 300	370, 700	382, 400	393, 500	404, 200	414, 300	424, 000	433, 600	443, 000	452, 500	462, 100	471, 900	481, 800	491, 700	115
116			286, 700	305, 600	322, 200	337, 200	351, 100	364, 300	376, 900	388, 800	400, 200	411, 000	421, 300	431, 200	440, 900	450, 400	460, 000	469, 600	479, 500	489, 600	499, 600	116
117			293, 700	313, 100	330, 100	345, 500	359, 800	373, 400	386, 300	398, 500	410, 100	421, 100	431, 600	441, 800	451, 700	461, 500	471, 200	481, 200	491, 300	501, 600	511, 800	117
118		281, 800	304, 900	325, 000	342, 600	358, 500	373, 200	387, 200	400, 500	413, 100	425, 100	436, 500	447, 400	457, 900	468, 000	478, 100	488, 100	498, 300	508, 700	519, 300	529, 900	118
119		293, 000	317, 100	338, 000	356, 200	372, 600	387, 800	402, 300	416, 100	429, 200	441, 700	453, 500	464, 800	475, 600	486, 100	496, 500	506, 900	517, 400	528, 100	539, 100	550, 000	119
120		303, 300	328, 300	349, 900	368, 700	385, 500	401, 200	416, 100	430, 300	443, 800	456, 700	468, 900	480, 500	491, 700	502, 500	513, 100	523, 800	534, 600	545, 600	556, 800	568, 000	120

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HEADWATER 596 to 600
TAILWATER 594.51 to 595.50

GUNTERSVILLE DAM
GATE 18 TRASH DISCHARGE
IN CUBIC FEET PER SECOND

ONE SECTION REMOVED

HEADWATER ELEVATION	0.0	0.2	0.4	0.6	0.8
590	220	270	330	380	440
591	500	570	640	710	780
592	850	930	1,010	1,090	1,170
593	1,260	1,340	1,430	1,520	1,620
594	1,710	1,810	1,910	2,010	2,110
595*	2,210	2,310	2,420	2,520	2,610
596*	2,690	2,770	2,850	2,920	2,990
597*	3,060	3,130	3,190	3,250	3,320
598*	3,380	3,440	3,500	3,550	3,610
599*	3,660	3,720	3,770	3,830	3,880
600*	3,930				

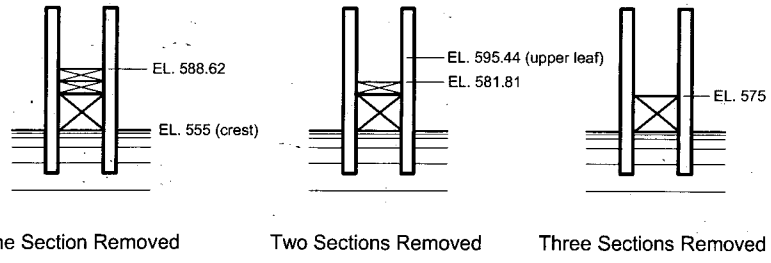
THREE SECTIONS REMOVED

HEADWATER ELEVATION	0.0	0.2	0.4	0.6	0.8
590	7,970	8,130	8,300	8,460	8,620
591	8,790	8,960	9,120	9,290	9,460
592	9,630	9,800	9,980	10,150	10,320
593	10,490	10,670	10,840	11,010	11,190
594	11,360	11,540	11,720	11,900	12,070
595*	12,250	12,430	12,620	12,790	12,950
596*	13,110	13,260	13,400	13,550	13,690
597*	13,830	13,960	14,090	14,220	14,350
598*	14,480	14,600	14,730	14,850	14,970
599*	15,090	15,210	15,330	15,450	15,570
600*	15,680				

TWO SECTIONS REMOVED

HEADWATER ELEVATION	0.0	0.2	0.4	0.6	0.8
590	3,210	3,330	3,450	3,570	3,700
591	3,820	3,950	4,070	4,200	4,330
592	4,460	4,590	4,730	4,860	5,000
593	5,130	5,270	5,410	5,550	5,690
594	5,840	5,980	6,130	6,270	6,420
595*	6,570	6,720	6,870	7,010	7,150
596*	7,270	7,390	7,510	7,630	7,740
597*	7,850	7,960	8,060	8,170	8,270
598*	8,370	8,470	8,570	8,660	8,760
599*	8,850	8,940	9,040	9,130	9,210
600*	9,300				

KEY



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**Trash gate discharge does not include portion that would overflow closed gate (top elevation 595.44) because this discharge is already included in the spillway tables.*

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TRANSACTIONS

Paper No. 2855

DISCHARGE COEFFICIENTS FOR SPILLWAYS AT TVA DAMS

BY KENNETH W. KIRKPATRICK,[1] A. M. ASCE

SYNOPSIS

Spillway ratings derived from model studies have been used in the preparation of spillway rating tables for the Tennessee Valley Authority dams. As a result of these studies, discharge coefficients for eleven of the Tennessee Valley Authority dams are given in this paper. Coefficients for both submerged and free discharge conditions are presented for discharges over standard spillway crests, irregular spillway crests, and a vertical-lift spillway gate. Discharge coefficients for Tainter gates placed on curved spillway crests are also given for various gate openings under free discharge conditions. In addition, data on the effect of model scale on the discharge coefficient and the effect of closing adjacent spillway bays and gates are presented. The coefficient relationships are shown in a form that may be used by designers as a guide in making determinations of the discharges for future spillways.

NOTATION

The letter symbols adopted for use in this paper are defined where they first appear, in the illustrations or in the text, and are arranged alphabetically, for convenience of reference, in the Appendix.

INTRODUCTION

The Tennessee Valley Authority (TVA) operates a system of nine dams on the Tennessee River and twenty-three on the tributary rivers. The successful operation of such a system requires accurate discharge ratings for each structure. Although enough water is seldom available to make complete ratings for most spillways from measurements conducted on the prototype structure, ratings can be determined from scale model tests. Therefore, the necessary ratings for the TVA spillways have been determined by this means. Model studies have been made at the TVA Hydraulic Laboratory at Norris, Tenn.,

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on nine different spillway crest shapes equipped with three types of control gates.

Seven of the nine crests were curved sections which approximated the shape of the lower nappe of a sharp-crested weir. The other two crests were flat. The two flat-crested weirs and one of the curved crests were equipped with double-leaf vertical lift gates. Five of the curved crests were equipped with Tainter gates and the other with vertical lift gates.

Data Presented.—Data are presented for the following conditions: (1) Free, ungated flow through a series of spillway bays; (2) submerged, ungated flow through a series of spillway bays; (3) free, ungated flow through a series of spillway bays, with adjacent bays fully open or closed; (4) free flow over a vertical lift gate; (5) submerged flow over a vertical lift gate; (6) flow under a series of Tainter gates set with equal openings; and (7) flow under a series of Tainter gates with adjacent gates closed.

Data are also presented to show the effect of model scale for the condition of free, ungated flow through a series of spillway bays.

General Model Arrangement.—The models were tested in flumes either 3.5 ft wide or 8 ft wide. Models installed in the smaller flume usually consisted of a reproduction of three of the prototype spillway bays. In the larger flume five or six spillway bays were reproduced. Each of these flumes was provided with glass panels for observation purposes. The models placed in the larger flume were constructed at scale ratios of from 1:28.72 to 1:50 with a ratio of approximately 1:35 generally used. Those tested in the smaller flume were built at scale ratios of 1:50, 1:100, and 1:200.

The models were usually provided with concrete crests and concrete piers to insure dimensional stability. Half piers were constructed on the ends of each model. If the model did not completely fill the flume one side was placed against the glass side of the flume and the other against a false wall. The river bed upstream and downstream from the model was reproduced at the elevation of the prototype river bed. Suitable baffling was provided to obtain a uniform distribution of flow in the spillway approach channel. The tailwater level was controlled at the end of the flumes by means of slat gates. Model discharges were determined from readings of a carefully calibrated diaphragm orifice located in the water supply line.

Headwater heights were measured at two piezometers at distances equal to approximately 5 and 8 times the design head upstream from the spillway crest. Tailwater heights were obtained at 2 piezometers at distances equal to approximately 9 and 12 times the design head downstream from the spillway crest—in all cases, sufficiently far enough downstream to eliminate the effect of the spillway apron.

In most studies the headwater and tailwater levels were determined by means of hook gages reading to 0.001 ft. For the 1/200-scale model the heads were measured with a micrometer point gage reading to 0.0001 ft.

Discharge Equations.—The model data have been reduced by the use of two commonly accepted discharge equations. For both free and submerged flow over a spillway crest the equation,

$$Q = C\,L\,H^{3/2} \quad \ldots\ldots (1)$$

was used, in which Q is the discharge in cubic feet per second, C is the coefficient of discharge determined from the model tests, L is the length of the crest, and H is the total head as shown in Fig. 1(*a*). Use was made of the same equation in the reduction of the data for free and submerged flows over a vertical gate with D, H, d, and P (Fig. 1(*a*)) being measured from the top of the gate.

For flow under a gate the equation for a rectangular orifice under low head,

$$Q = C\,L\,[H^{3/2} - (D_1 + h)^{3/2}] \qquad (2)$$

was used, in which D_1 is the depth of water to the bottom of the gate as defined in Fig. 1(*b*) and h is the approach velocity head.

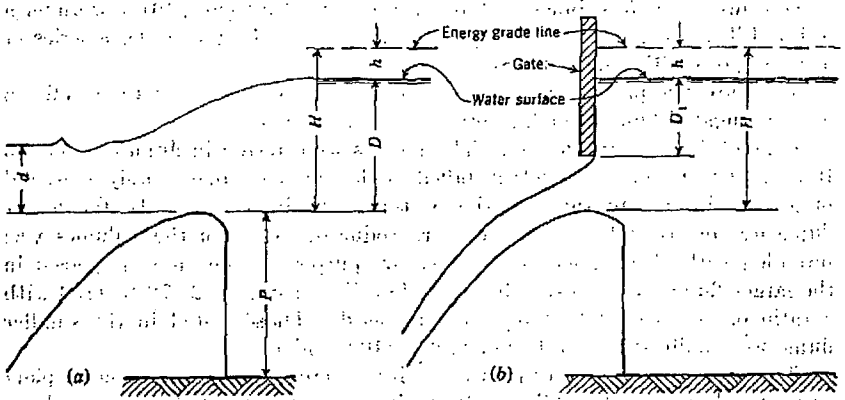


FIG. 1.—SPILLWAY-CREST DIAGRAM

FREE-DISCHARGE COEFFICIENTS, FLOW OVER SPILLWAY CRESTS

It is common practice for engineers to design spillway crests to approximate closely the shape of the lower portion of a jet issuing from a sharp-crested weir, and this type of crest is designated a standard crest.[2] Because the shape of the jet changes with the head on the weir, some particular head must be used for each design. This head for which a particular crest is designed is termed the design head. At this head, pressures approximating atmospheric pressure are developed at the spillway surface. At smaller heads, pressures are greater than atmospheric. Seven of the nine TVA crests for which data are available approximate standard crests in shape whereas the other two crests, which are flat, do not. Fig. 2 shows the basic details and dimensions of each of these crests. Fig. 3 presents the coefficient data obtained on the crests of Fig. 2. Pertinent design data concerning each crest, together with the scale to which each was modeled, appear in Table 1. Eleven spillways are also listed in Table 1. Two pairs of these, the Ocoee No. 3-Apalachia set, and the Douglas-Watts Bar set, both in Tennessee, have crest shapes that are identical within the pair but which were tested for different values of the approach depth, P.

[2] "Hydroelectric Handbook," by W. P. Creager and J. D. Justin, John Wiley & Sons, Inc., New York, N. Y., 2d Ed., 1950.

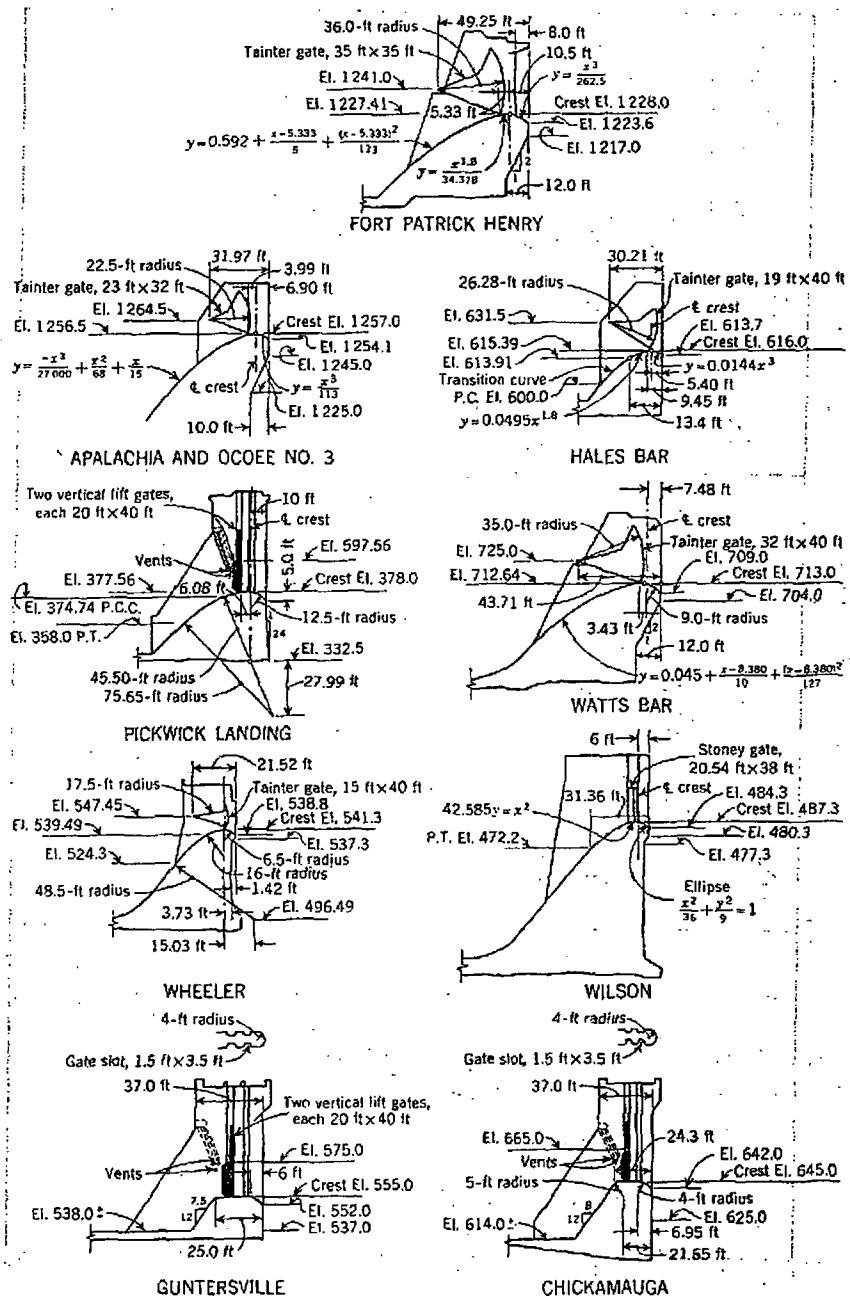


FIG. 2.—TVA SPILLWAY CRESTS (DATA IN FIG. 3)

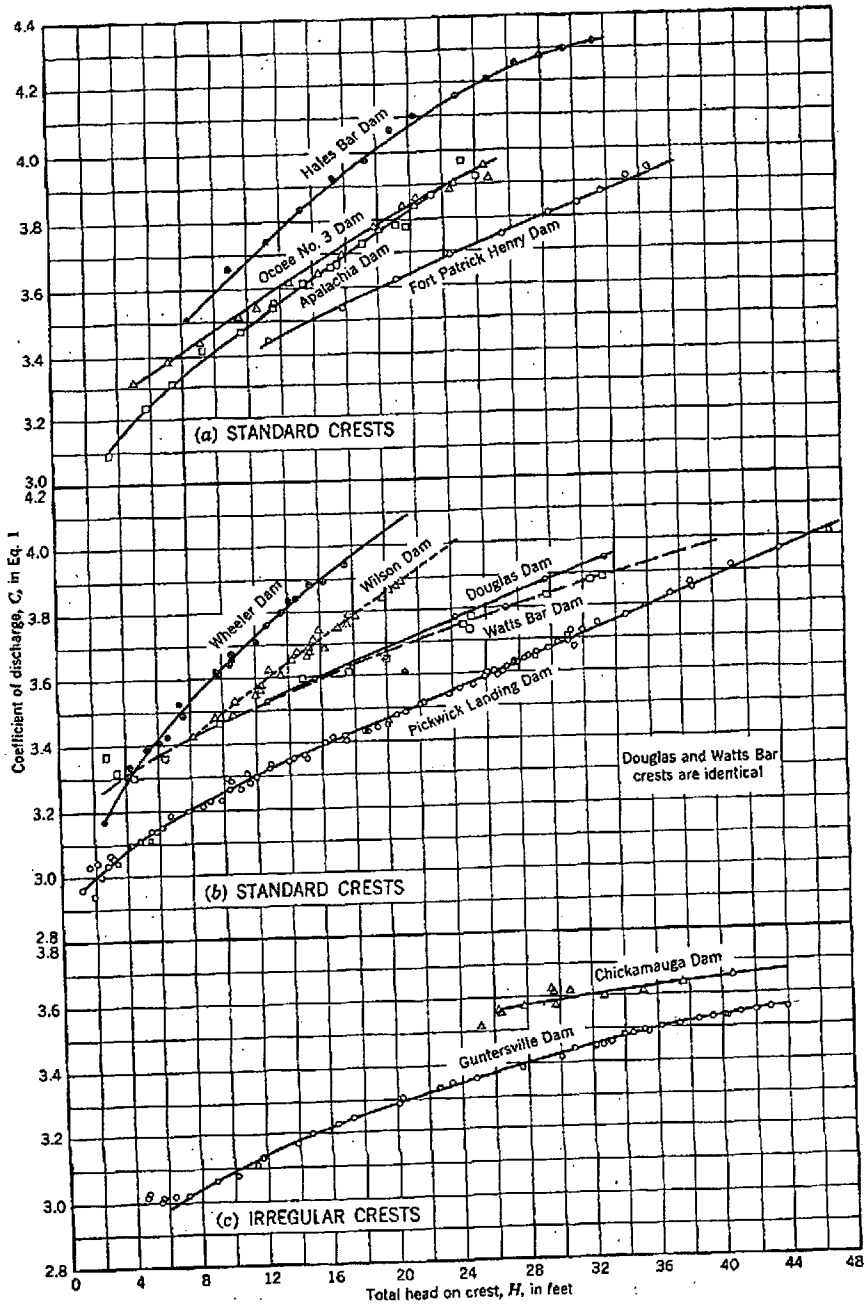


FIG. 3.—DISCHARGE COEFFICIENTS FOR FREE FLOW OVER THE SPILLWAY CRESTS OF FIG. 2

The accuracy of the data is evidenced by the plotting of the data points in Fig. 3. Except in some cases at low heads, the deviation of any plotted point from the coefficient curve does not exceed 0.5%.

Standard Crests.—It has been shown by various authors that the discharge coefficients for all standard crests can be related to each other and that, conversely, the coefficients to be used for a new design can be taken from previous test data.[2,3,4,5] Unfortunately, in most crest designs, due to other design considerations, it is necessary that the shape be varied from the standard form. Nevertheless, satisfactory coefficients can be obtained as sufficient data are now available on a range of crest shapes. By comparison of crest shapes designers may select a coefficient for any particular crest.

Dimensionless plotting provides a means for comparison of crest shapes. This method is used in Fig. 4 on which seven TVA crests which closely approximate standard crests are shown by the solid lines, with the dashed line representing a standard crest shape.[2] The horizontal coordinate, x, and the vertical coordinate, y, of the crest curve have been divided by the design head, H_o.

TABLE 1.—DESIGN DATA FOR ELEVEN MODELS OF TVA SPILLWAYS

Project	Model scale	Design head, H_o, in feet	Upstream depth, P, in feet	$\frac{H_o}{P}$	Pier nose radius, in feet
Hales Bar	1:34.76	18	32	0.56	3.00
Ocoee No. 3	1:28.72	23	67	0.35	3.00
Apalachia	1:28.72	23	97	0.24	3.00
Fort Patrick Henry	1:50	35	43	0.81	3.25
Wheeler	1:34.35	16.5	43	0.38	2.50
Wilson	1:39.4	19	75	0.25	4.00
Douglas	1:35	23.5	133	0.18	3.25
Watts Bar	1:35	23.5	52	0.45	3.25
Pickwick Landing	1:50	31.5	32	0.98	3.75
Chickamauga	1:50		20		4.00
Guntersville	1:50		18		4.00

The design head was determined by fitting the real and standard curves at the crest point ($x = 0$) and at the intersection of the curve with the upstream vertical face. These design-head values are presented in Table 1. The design-head discharge coefficients (C_o) determined from Fig. 3 are shown in Fig. 4.

The TVA crests all fairly closely approximate the standard curve from the upstream spillway face to a point somewhere downstream from the crest which was determined by the position of the gate seal. Below this latter point, the crest shape was modified to fit the trajectory of a jet issuing from under the gate when set at a small opening. The upstream face for a standard crest is vertical. The upstream face of the TVA crests, as shown in Fig. 4, deviates from the vertical. Other experimenters have established the fact that the shape of the upstream face generally has little influence on the discharge coefficient.[3]

[2] "Final Reports of Boulder Canyon Project," *Bulletin No. 3*, Part VI, Hydraulic Investigations, Bureau of Reclamation, U. S. Dept. of the Interior, Washington, D. C., 1947.

[4] "Engineering Hydraulics," edited by Hunter Rouse, John Wiley & Sons, Inc., New York, N. Y., 1950.

[5] "Discharge Coefficients for Irregular Overfall Spillways," by J. N. Bradley, *Engineering Monograph No. 9*, Bureau of Reclamation, U. S. Dept. of the Interior, Washington, D. C., 1952.

Fig. 4 indicates that the shape of the curve from the crest to a point somewhere in the neighborhood of $x/H_o = 0.5$ materially affects the coefficient. As the curve is raised above the standard curve, the coefficient is decreased. This can be seen by comparing the (y/H_o)-values at $x/H_o = 0.5$ with C_o. The comparative crests in Fig. 4 have been placed in the order of decreasing (Y/H_o)-values. No reasonable correlation of C_o with either upstream shape of H_o/P can be determined.

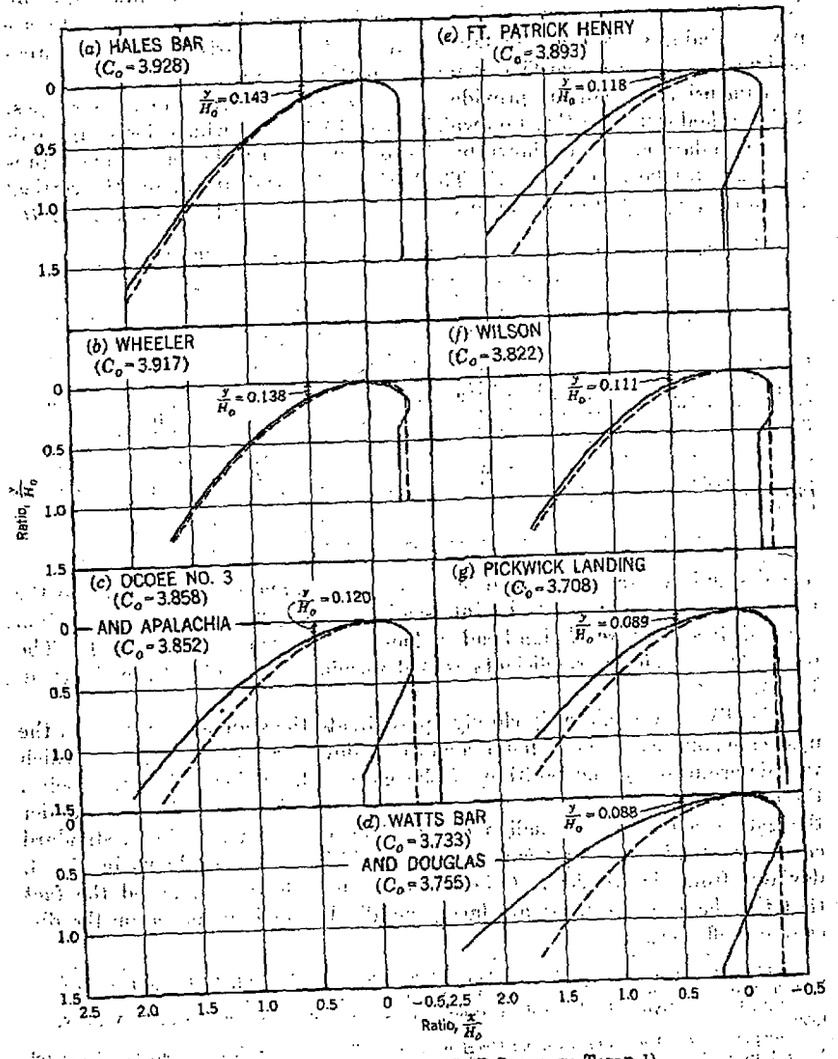


Fig. 4.—Comparative Crests (H_o/P Shown in Table 1)

The relationships between the discharge coefficient and the ratio of any head to the design head, H/H_o, are shown in Fig. 5. In Fig. 5(*a*) the value of C is plotted against H/H_o for the four crests—Apalachia, Ocoee No. 3, Hales Bar (Tennessee), and Fort Patrick Henry (Tennesse)—that most closely follow the standard crest shape. The maximum variation of the individual points from

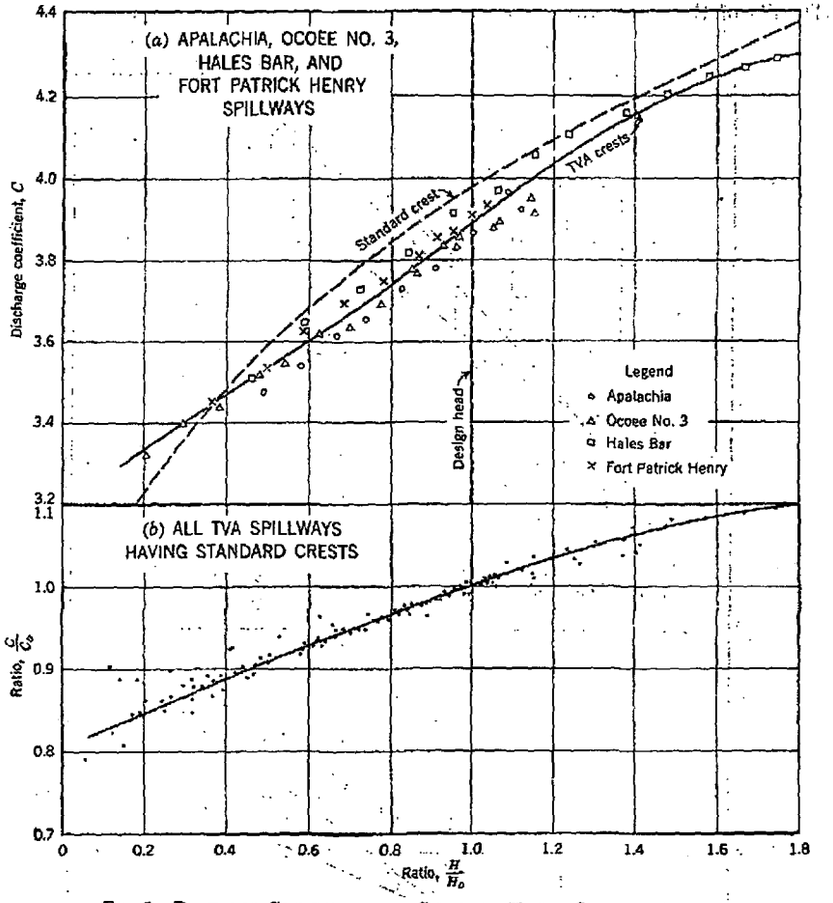


Fig. 5.—Discharge Coefficients for Spillways Having Standard Crests

the average curve for TVA crests is 0.5%. The standard-crest curve shown by the dashed line in Fig. 5 is that of W. P. Creager and J. D. Justin.[2] This curve is approximately 2% higher than the TVA curve. Fig. 5(*b*) is a dimensionless plot of the data from Figs. 3(*a*) and 3(*b*). The deviation of the points from the average curve is greater than in Fig. 5(*a*) because all crests are included, but for design purposes the curve should be useful. Actually, the

curve is more firmly established than it may appear because the curve itself obliterates several test points.

Irregular Spillway Crests.—The designation "irregular spillway crests" is used to distinguish between standard spillway crests and other crest forms. Only two of the TVA spillways, those at Chickamauga, Tenn., and Guntersville, Ala., have irregular spillway crests. Both are trapezoidal in cross section. Details of these spillway crests and the discharge coefficients computed using

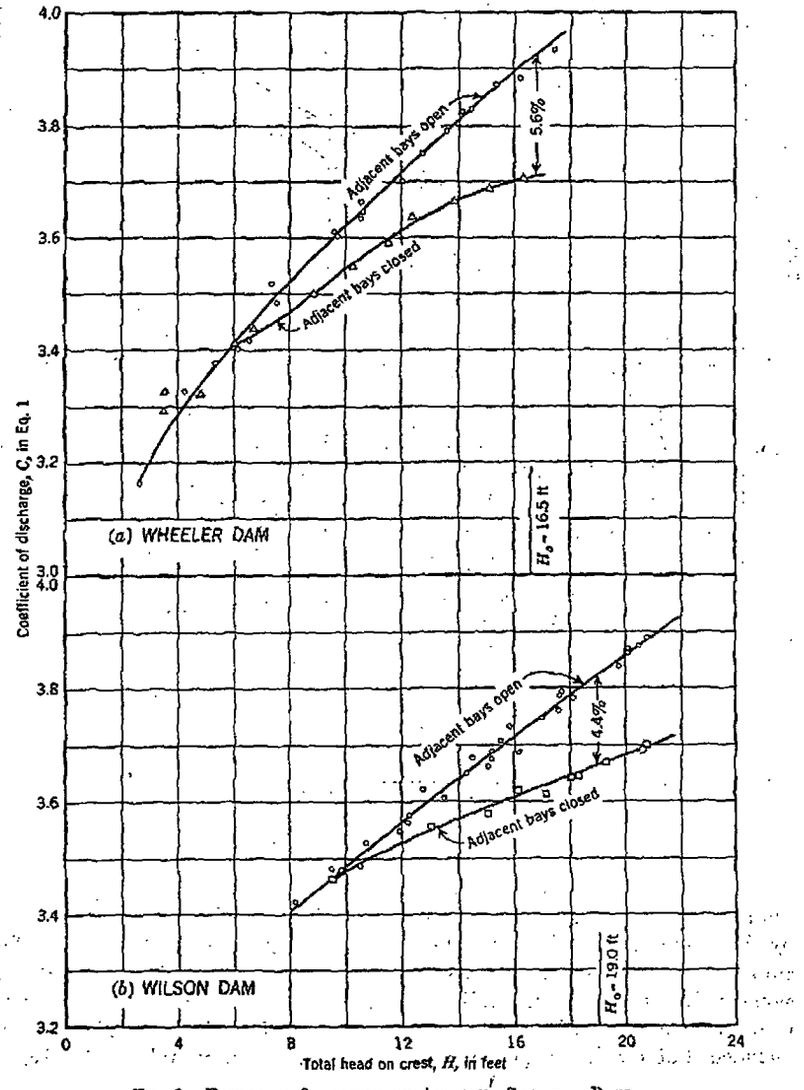


FIG. 6.—EFFECT OF OPERATION OF ADJACENT SPILLWAY BAYS

Eq. 1 from the model-study data are shown in Fig. 3(*c*). The two crests differ chiefly in the shape of the upstream and downstream edges of the crest and the height above the apron. Over the range of the tests of the Chickamauga spillway the coefficients are consistently from 3% to 5% greater than those for the Guntersville spillway. The additional height of the crest above the apron and the rounding of the near upstream edge of the Chickamauga crest would operate to increase the discharge coefficients.

The Effect of Operating Adjacent Spillway Bays.—In the TVA water-control operations, it is necessary to operate single spillway bays and groups of consecutive spillway bays. Because a greater contraction forms at a pier situated next to a closed bay, models of the Wilson and Wheeler spillways in Tennessee were tested with adjacent spillway bays open and closed to determine the difference in contraction effects at the piers.

Fig. 6 shows the head-coefficient relationships for the two conditions tested. The discharge coefficient at the design head was 5.6% higher at Wheeler Dam with adjacent bays opened and 4.4% higher at Wilson Dam than with these bays closed. These relationships show the importance of spillway pier contraction effects in spillway discharge determinations.

SUBMERGENCE DISCHARGE COEFFICIENTS FOR FLOW OVER SPILLWAY CRESTS

Chickamauga Dam, Guntersville Dam, Pickwick Landing Dam (Tennessee), and Watts Bar Dam are subject to submergence of the crest at periods of high discharge. To determine the effect of this submergence model tests were conducted by establishing a constant rate of discharge and varying the tailwater elevation to determine the relationship between the headwater and tailwater elevations. This procedure was repeated for several discharge rates covering the operating range at the dam.

Two flow conditions were observed in the model tests which are characterized as "plunging nappe" and "flowing nappe." In the condition of plunging nappe the discharge issuing from the spillway plunges down into the tailwater and appears to follow the boundary surface of the spillway.

In the condition of flowing nappe the flow is nearly horizontal, producing an undulating surface flow in the tailrace channel. The plunging nappe usually occurs with low submergence whereas the flowing nappe occurs with high submergence. When the headwater and tailwater head relationship at a constant rate of discharge was plotted for each series of tests, it was found that the change from plunging nappe to flowing nappe had no apparent effect on the discharge coefficient.

The results from these tests on the four spillways have been plotted in Fig. 7 in the dimensionless form, d/H, against C_s/C, in which d is the depth of submergence and H is the total head above the crest. The coefficient, C_s, was computed from Eq. 1 using the H-value for the submerged conditions; C was determined using the H-value for the free-flow condition.

No systematic variation of C_s/C could be determined for any variable except the (d/H)-ratio for any of the conditions tested. However, no relatively low discharges were tested because in practice the TVA installations can never be submerged at low discharges.

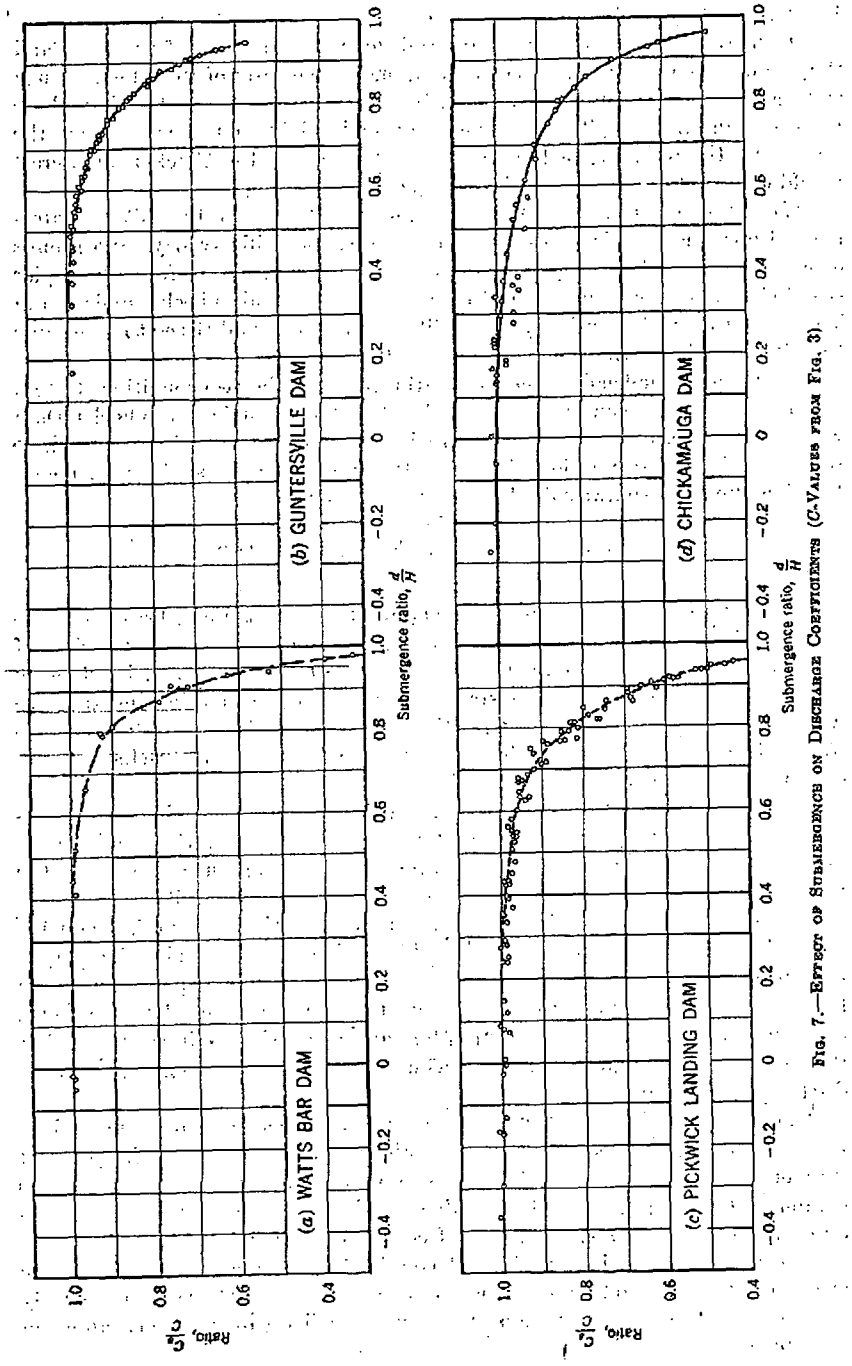


FIG. 7.—EFFECT OF SUBMERGENCE ON DISCHARGE COEFFICIENTS (C-VALUES FROM FIG. 3).

In Fig. 8 the four curves of Fig. 7 are shown on a single plot. Although the maximum spread between curves is about 10%, this is to be expected considering the wide range of crest shapes used in the tests.

FREE-DISCHARGE COEFFICIENTS FOR FLOW OVER VERTICAL LIFT GATES

The Pickwick Landing vertical lift gates are representative of this type of gate, which has been used on several TVA projects. In Fig. 9(*a*) are shown details of the lower spillway gate leaf. For heads greater than 2 ft, this gate is essentially a sharp-crested weir 40 ft long and 20 ft high with piers 7.5 ft thick at each end of the gate. Air intakes were installed in the sides of the piers just below the top of the gate to ventilate the underside of the nappe.[6] Model tests were conducted with the 1/50-scale, 3-bay spillway model.

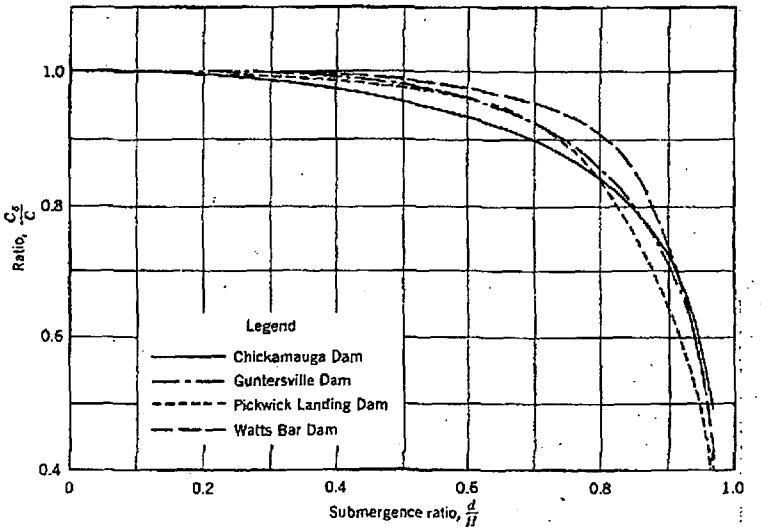
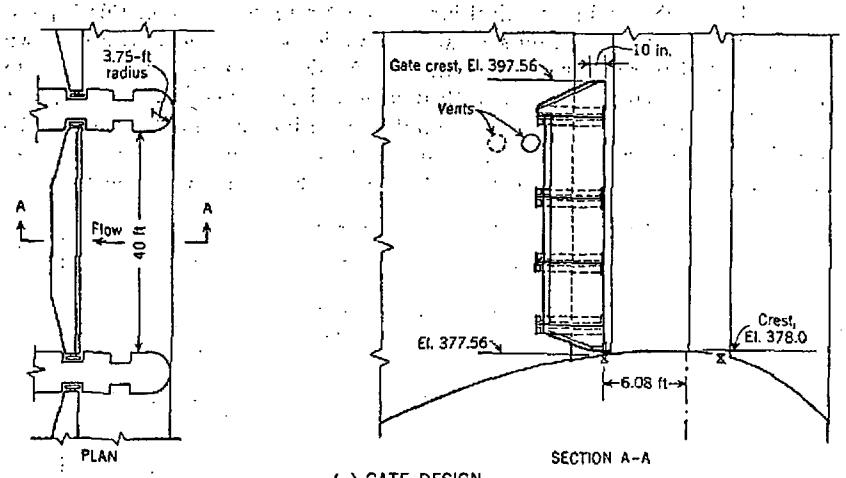


FIG. 8.—COMPARISON OF SUBMERGENCE EFFECTS FOR VARIOUS SPILLWAY CREST SHAPES

In Fig. 9(*b*) is shown the head-coefficient relationship for flow over the crest of the spillway gate. The coefficient, C, was computed from Eq. 1 using the top of the gate as crest elevation. The points define the head-coefficient relationship for heads between 3 ft and 28 ft. Each point was determined from the average of from 3 to 5 separate tests. A constant value of C equal to 3.428 is shown for heads in excess of 12 ft. For heads of from 12 ft to about 4 ft the model test curve shows a gradual rise in the coefficient, with an abrupt drop-off when the heads are approximately 4 ft and less. This curve takes the characteristic form for the coefficients of a sharp-crested weir, the rise and fall in the coefficient curve being due to the nappe clinging to the surface of the weir. This phenomenon is a function of the absolute head. Therefore, similarity between the model and prototype did not exist for prototype heads

[6] "Aeration of Spillways," by G. H. Hickox, *Transactions*, ASCE, Vol. 109, p. 537.

of less than 12 ft. Because the gate has a 10-in.-wide flat top, at low heads the prototype can be expected to exhibit discharge characteristics similar to those of the model. However, for a head in excess of about 2 ft the prototype can be expected to act similarly to a sharp-crested weir and to have a flat coefficient curve.



(a) GATE DESIGN

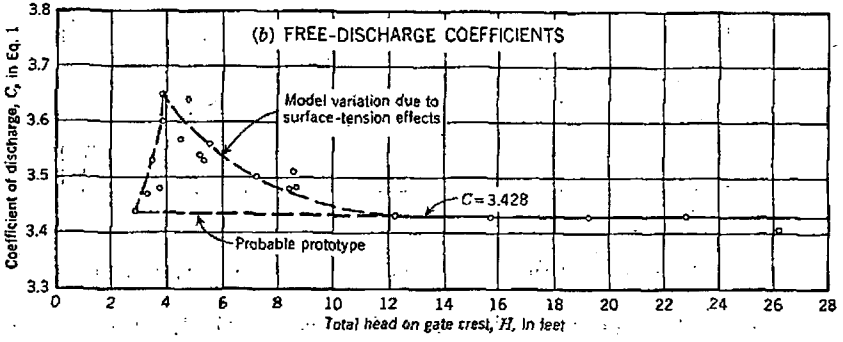


FIG. 9.—VERTICAL LIFT GATE, PICKWICK LANDING DAM

SUBMERGENCE DISCHARGE COEFFICIENTS FOR FLOW OVER A VERTICAL LIFT GATE

To obtain data on the effect of the submergence of flow over vertical-lift gates, model tests were conducted in a manner similar to that used in determining submergence effects on spillway crests. The coefficient, C_s, was computed from Eq. 1 in a manner similar to that used for the spillway crest data but using the top of gate as the crest elevation. Fig. 10 shows a plot of the headwater-tailwater relationships that have been determined. The data presented in Fig. 10 represent the rating of a three-bay, 1/50-scale model of the Pickwick Landing Dam. The total equivalent prototype crest width was

117.8 ft. The discharge was for three spillway bays. These curves illustrate the characteristic flow phenomena associated with this type of gate. Each constant-discharge curve begins with a horizontal line where the head-discharge relationship is not affected by the tailwater level. Just before the tailwater elevation reaches the gate crest level there is a drop in the headwater

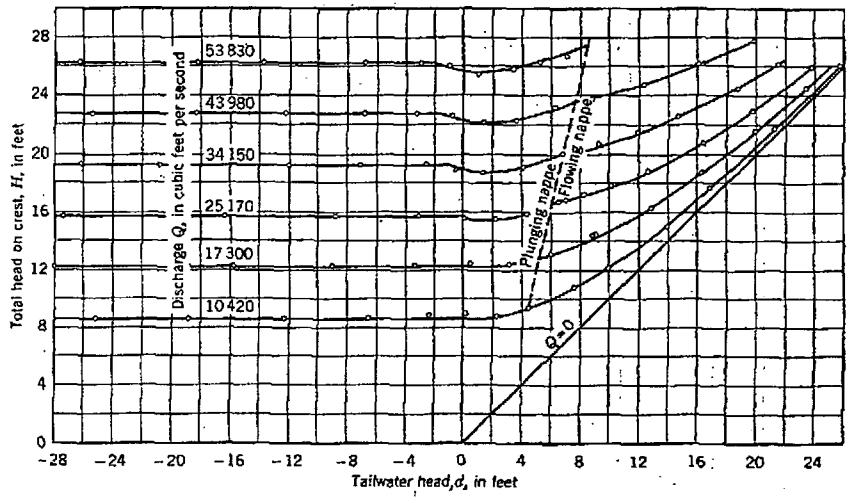


FIG. 10.—HEADWATER-TAILWATER RELATIONS FOR FLOW OVER A VERTICAL LIFT GATE (PROFILE SKETCH IN FIG. 11)

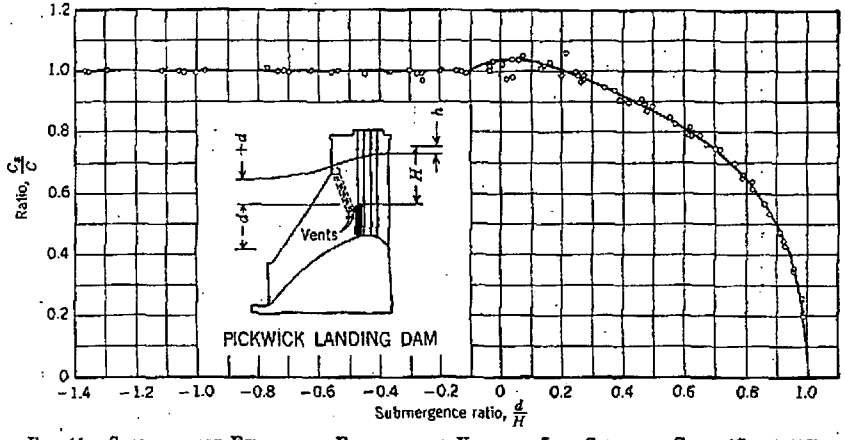


FIG. 11.—SUBMERGENCE EFFECT FOR FLOW OVER A VERTICAL LIFT SPILLWAY GATE ($C = 2.428$)

level for an increase in the tailwater level. Observations of the model operation showed that at this point the air vents, located in the sides of the piers just below the crest of the spillway gate, became submerged by the tailwater, reducing the contraction of the lower nappe issuing from the gate crest. The

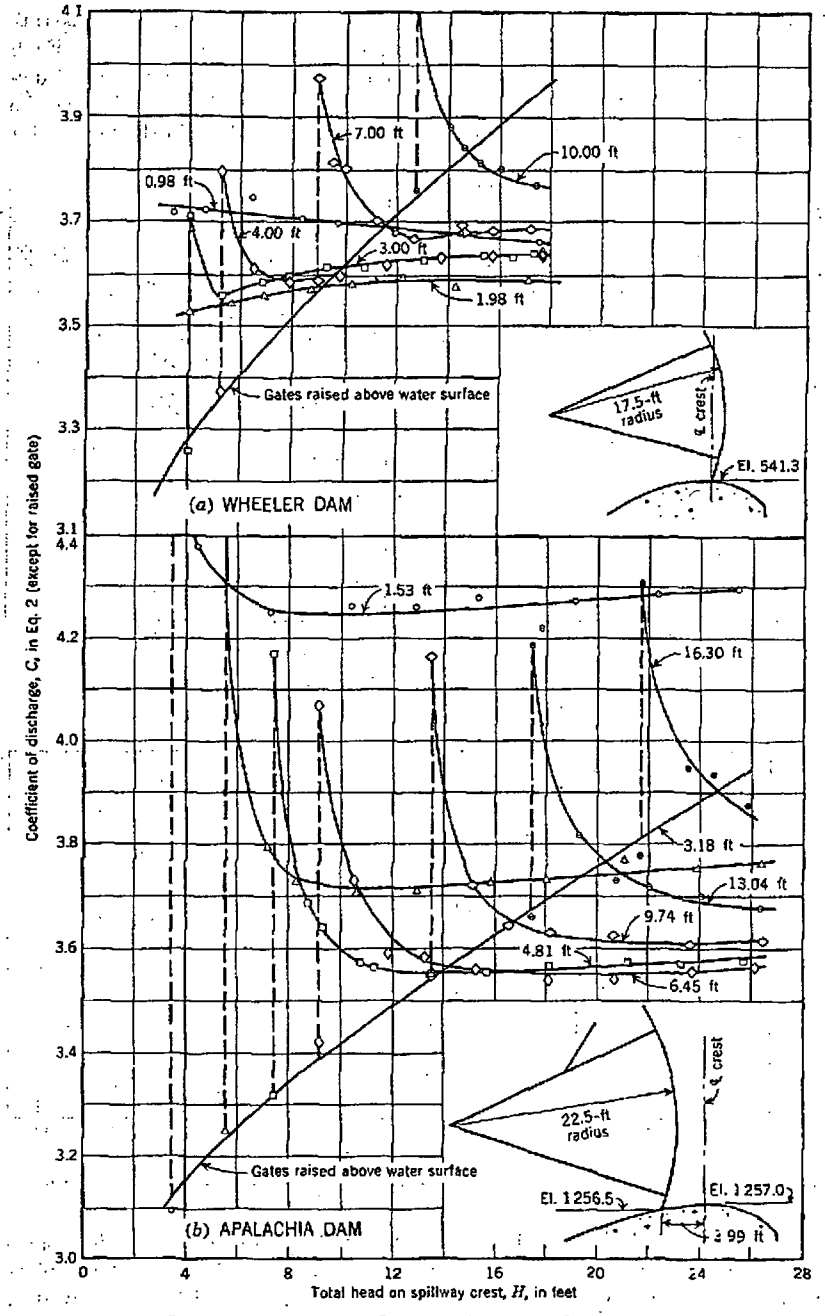


FIG. 12.—TAINTER-GATE SPILLWAY DISCHARGE COEFFICIENTS (DIMENSIONS ON CURVES ARE GATE OPENINGS)

discharge over the gate was thus increased with a consequent lowering of the headwater level.

The flow conditions of plunging nappe and flowing nappe, previously described, also occurred in this type of flow. In this case the change from one to the other is apparent in the data. The dashed line in Fig. 10 indicates the approximate location of the change. At these points the curves show a definite discontinuity in shape. The data of Fig. 10 can be reduced in coefficient form to the single-curve representation shown in Fig. 11. In this illustration, a constant value of C, equal to 3.428, was used in computing the ratio of C_s/C.

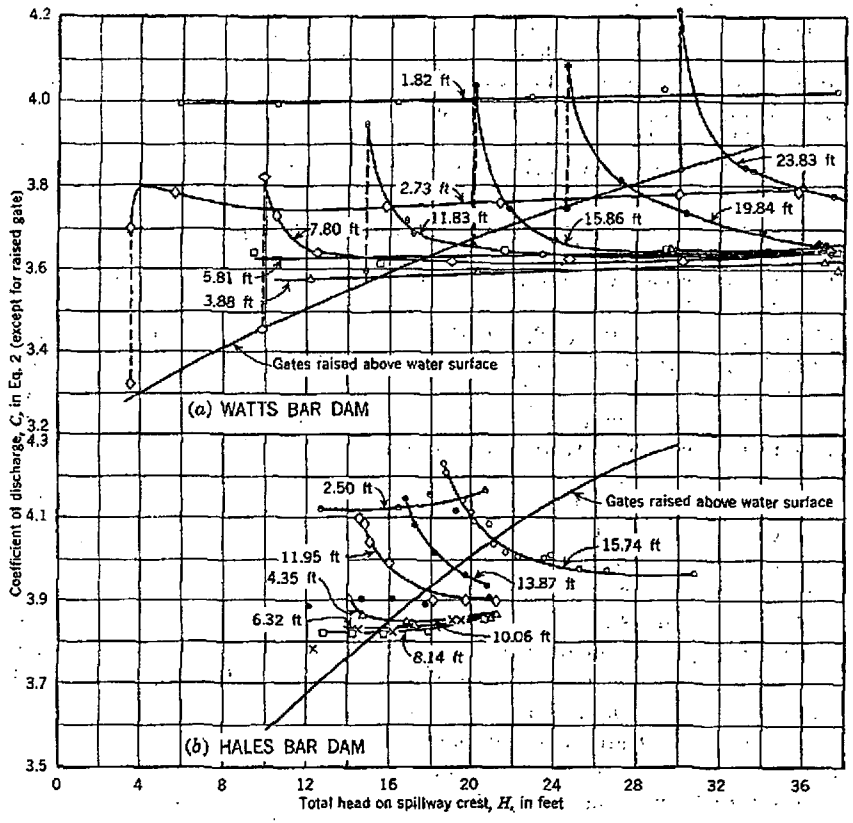


FIG. 13.—TAINTER-GATE SPILLWAY DISCHARGE COEFFICIENTS (DIMENSIONS ON CURVES ARE GATE OPENINGS)

DISCHARGE COEFFICIENTS FOR FLOW UNDER TAINTER GATES

The flow under Tainter gates mounted on curved crests is controlled by the geometry of three interrelated variables—the crest shape, the gate, and the gate setting. The major factors which influence the discharge relation-

ships are the position of the gate seal point with respect to the highest point of the spillway crest and the curvature of the upstream face of the gate. In obtaining the model data on the various TVA Tainter-gate installations no attempt has been made to determine the quantitative effect of these factors taken individually. The data presented in Figs. 12 and 13 for the gate settings at Wheeler Dam, Apalachia Dam, Watts Bar Dam, and Hales Bar Dam are not, therefore, applicable to other installations unless the several variables involved are similar.

Data on Tainter-gate coefficients previously published have, in most cases, been based on flow along a horizontal surface although many of these gates are installed on curved crests. The tests reported herein are for Tainter gates mounted on curved spillway crests where the pressure distribution differs considerably from that in a horizontal channel. The coefficients obtained from tests on a horizontal channel are not applicable to installations on curved crests.

The discharge coefficients for Figs. 12 and 13 were computed using Eq. 2, with the heads measured above the crest elevation. The curves designated "Gates raised above water surface" are the free-discharge curves taken from Figs. 3(*a*) and 3(*b*) for which *C*-values were computed using Eq. 1. The points connected by the dashed lines represent the point at which the water touched the bottom edge of the gate. The difference in the *C*-values is, of course, due to the use of Eq. 2 for the gate curve. The Hales Bar tests were not conducted in a manner that allowed the determination of the point of contact of the gate with the free water surface.

The gate opening was measured as the vertical distance above the crest. This definition leads to the somewhat peculiar variation in the coefficients for small gate openings. In Fig. 12(*a*) the data for Wheeler Dam are presented. The Wheeler gate was positioned, as shown in the insert, with the seal at the high point on the crest. With this design, except at the smallest opening, the coefficient curves for each gate position followed the general pattern of an increase in *C* for an increase in gate opening. In Fig. 12(*b*) the data for Apalachia Dam indicate that, when the gate seal is 3.99 ft downstream and 0.50 ft below the highest point on the crest, the coefficients for gate openings of less than 6.45 ft are increased materially with a decrease in gate opening. This is caused by an arbitrary use in Eq. 2 of an *H*-value as measured above the crest rather than as measured above the elevation of the spillway surface below the gate. Thus, although the *H*-value is consistently too small at the smaller gate openings, the effect becomes more appreciable and results in the increase in *C*.

Tainter-Gate Discharge Coefficients with Adjacent Gates Opened or Closed

The results of tests on the six-spillway-bay model of Wheeler Dam with one gate in operation and with six gates in operation are shown in Fig. 14. In operating with all six gates the contraction effect of the end piers was the same as that for the intermediate piers because the model was constructed

with half piers against the sidewalls of the flume. This operation thus represented the case in which all adjacent bays are open.

Effect of Model Scale on Free-Discharge Coefficients

In developing discharge ratings for prototype structures from model data, it is important that the scale at which the model is built be such that the coefficients determined are applicable to the prototype structure. One author has presented data to indicate that with an increase in the model size the discharge coefficients increase.[7] To study this relationship, a series of precise

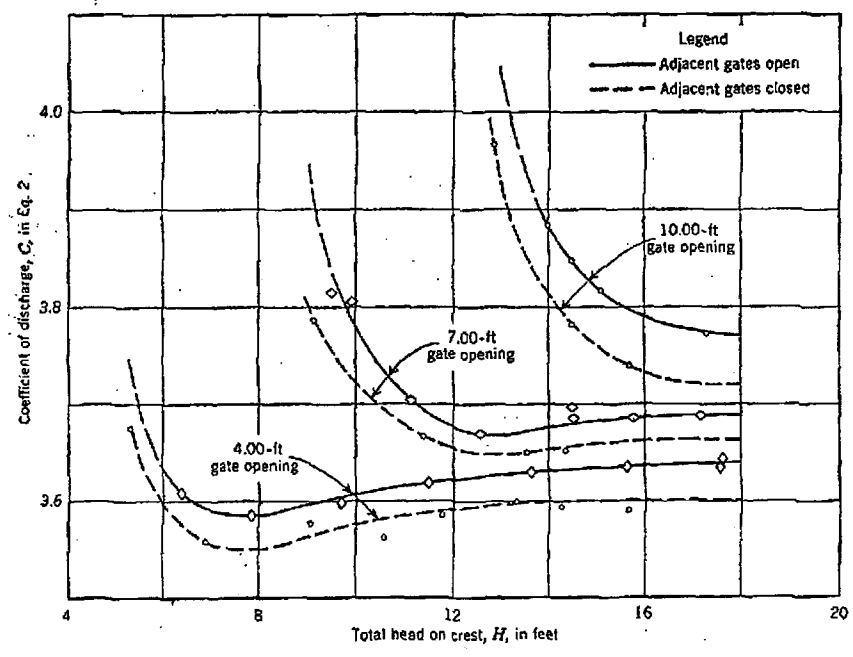


Fig. 14.—Tainter-Gate Discharge Coefficients, *C*, Wheeler Dam

tests was made at the TVA Hydraulic Laboratory under the joint sponsorship of the American Society for Engineering Education, the University of Tennessee (Knoxville) and the TVA.[8] In this study three models of Pickwick Landing spillway were constructed to scales of 1:50, 1:100, and 1:200. Each model consisted of a reproduction of three spillway bays. The shape of the spillway crest and the piers of Pickwick Landing Dam are shown in Figs. 2 and 9(*a*). Similar techniques were used in all tests with one exception. Hook gages reading to 0.0001 ft were used for the 1/200-scale

[7] "Überfallversuche in Berschiedener Modellgrosse," by F. Eisner, The Prussian Experiment Station for Hydraulic Structures and Shipbuilding, Berlin, 1933.

[8] "A Study of the Effect of Model Size on Spillway Coefficients," by C. R. Ownbey, thesis presented in 1949 to the University of Tennessee at Knoxville, in partial fulfilment of the requirements for the degree of Master of Science.

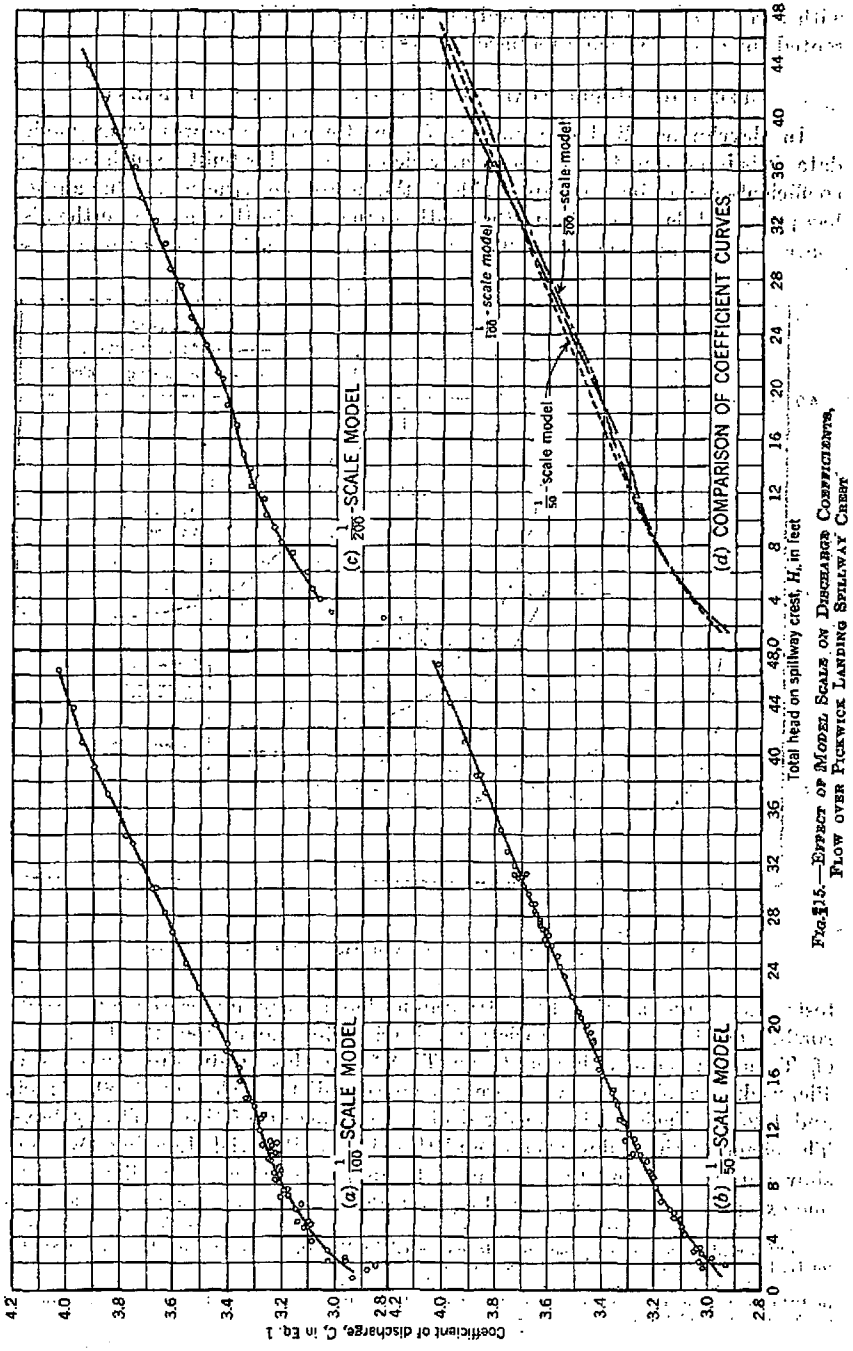


FIG. 15.—EFFECT OF MODEL SCALE ON DISCHARGE COEFFICIENTS, FLOW OVER PICKWICK LANDING SPILLWAY CREST

tests, and gages reading to 0.001 ft were used in the 1/50-scale tests and 1/100-scale tests.

Discharge coefficients for free flow over the crest of each model are shown in Figs. 15(*a*), 15(*b*), and 15(*c*). The coefficients of discharge were computed using Eq. 1. Each curve was drawn through the average of the plotted points.

A comparison of the three coefficient curves is shown in Fig. 15(*d*). The maximum spread of the curves does not exceed 2%. For prototype heads between 2 ft and 8 ft, the three coefficient curves are almost identical. At 13 ft the coefficient curve for the 1/100-scale model is approximately 1% lower than those for the 1/50-scale model and the 1/200-scale model. At 43 ft the curve for the 1/100-scale model is 1% higher than the data for the 1/50-scale model, and that of the 1/200-scale model is 1% lower than that of the 1/50-scale model. Because there is no consistent relationship between the coefficient curves, it is logical to conclude that these variations are merely the result of experimental error and that the model scale did not affect the stage-coefficient relationship. The close agreement of the coefficient curves at the three scales supports the validity of the preparation of prototype ratings based on model tests.

ACKNOWLEDGMENTS

The model studies were made under the general direction of Albert S. Fry, M. ASCE, chief of the Hydraulic Data Branch of the TVA, and under the immediate supervision of G. H. Hickox, M. ASCE, former head of the TVA Hydraulic Laboratory, and Rex A. Elder, M. ASCE, head of the TVA Hydraulic Laboratory. The assistance of Jack C. Jones, J. M. ASCE, is acknowledged in making the computations and preparing the illustrations in this paper. The writer also acknowledges the many helpful suggestions made by Mr. Hickox and Mr. Elder.

APPENDIX. NOTATION

The following letter symbols, adopted for use in the paper and for the guidance of discussers, conform essentially with American Standard Letter Symbols for Hydraulics (ASA-Z10.2-1942), prepared by a committee of the American Standards Association with Society representation, and approved by the Association in 1942:

- C = coefficient of discharge for any head:
  - C_o = coefficient of discharge for the design head;
  - C_s = coefficient of discharge for submerged flow;
- D = depth of flow above the crest, in feet (Fig. 1(*a*));
- D_1 = depth, bottom of gate to water surface, in feet (Fig. 1(*b*));
- d = submergence tailwater, measured above the crest, in feet (Fig. 1(*a*));
- g = acceleration due to gravity, in feet per second per second;

H = total head above the crest, including the velocity head of approach, in feet (Fig. 1);
H_o = design head for a standard crest, including the velocity head of approach, in feet;
h = velocity head of approach, $v^2/2g$, in feet (Fig. 1);
L = spillway crest length, in feet;
P = depth of the approach channel, crest to river bed, in feet (Fig. 1(*a*));
Q = total discharge, in cubic feet per second;
v = average velocity of approach, in feet per second; and
X, Y = crest coordinates, in feet.

AMERICAN SOCIETY OF CIVIL ENGINEERS

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TRANSACTIONS

Paper No. 2856

WATER CONTROL IN CENTRAL AND SOUTHERN FLORIDA

BY HAROLD A. SCOTT,[1] M. ASCE

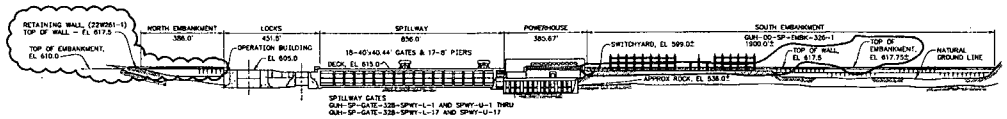
SYNOPSIS

This paper describes the historical efforts made to provide drainage and water control for central and southern Florida. Distribution and utilization of water in the comprehensive plan for flood control and multiple purposes are described. The need for a secondary water-control plan is emphasized.

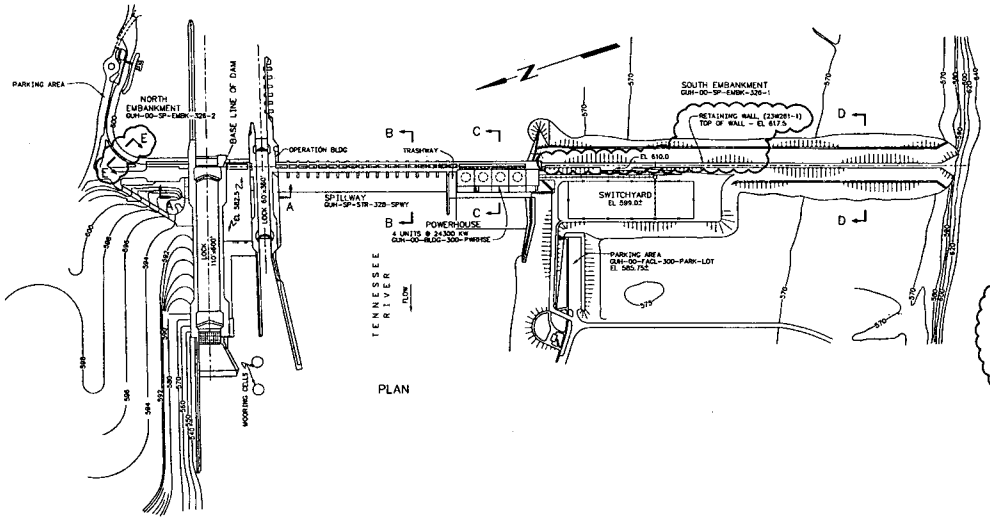
INTRODUCTION

The area described in this paper (Fig. 1) lies south of an east-west line through Lake Harney (about 35 miles north of Cocoa) in Florida in the St. Johns River basin and east of the ridge that extends through Haines City and Sebring. The ridge divides the waters which flow into the Atlantic Ocean and those which flow into the Gulf of Mexico. Water-control problems are quite common throughout the area, although there are a few variations in topography and soil. The area consists of approximately 15,000 sq miles of groveland, pastures, rich agricultural lands, lakes, and marshlands. Elevations range from approximately 7 ft in the vicinity of Miami and 15 ft around Lake Okeechobee to 80 ft in the area of the headwaters of the Kissimmee River basin. (All stages and elevations throughout this paper refer to mean sea level data.) However, the lands of a large part of the area are extremely flat, and natural water courses are not common. Except for the St. Johns River, the Kissimmee River, Fisheating Creek, and a few minor streams, most of the water control is accomplished by man-made canals and drainage districts. Soils in the area vary from sand to peat with a small amount of marl. The areas with higher elevations in the St. Johns and Kissimmee River basins consist of sand mixed with a small amount of organic material in the upper 6 in. to 12 in. In the low areas and marshes, deposits of peat of thicknesses ranging to several feet are found. The Everglades is covered with a layer of peat of thickness ranging to approximately 15 ft at Lake Okeechobee and gradually diminishing to zero at

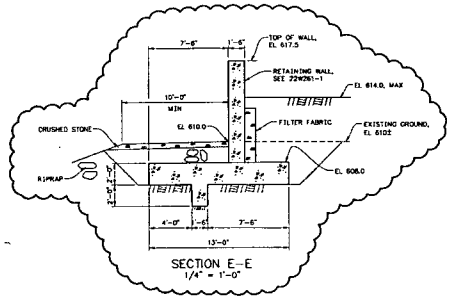
NOTE.—Published, essentially as printed here, in October, 1954, as *Proceedings-Separate No. 621*. Positions and titles given are those in effect when the paper was approved for publication in *Transactions*.
[1] Cons. Engr., Reynolds, Smith, and Hills, Jacksonville, Fla.



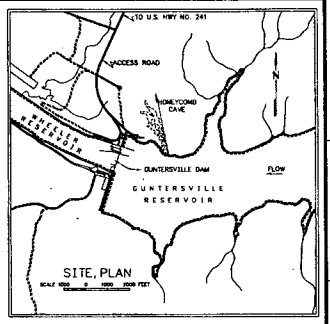
DOWNSTREAM ELEVATION



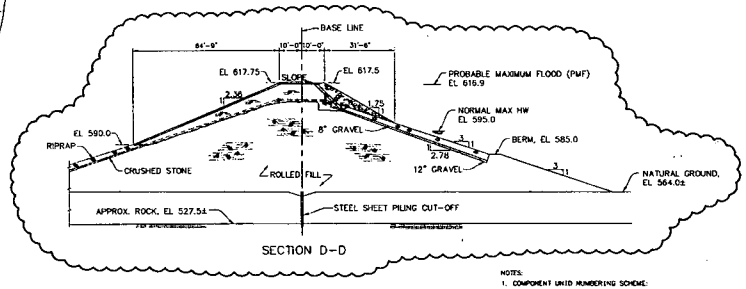
PLAN



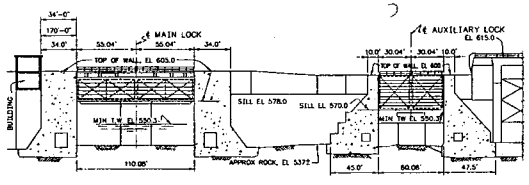
SECTION E–E
1/4" = 1'-0"



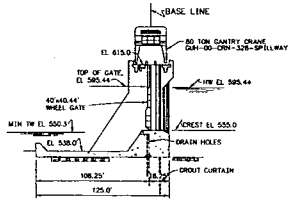
SITE, PLAN



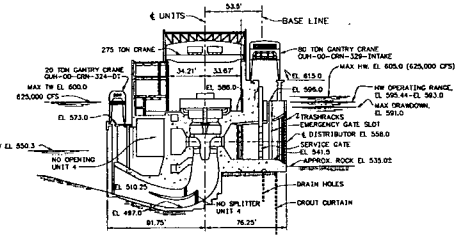
SECTION D–D



SECTION A–A
1" = 40'



SECTION B–B



SECTION C–C
UNITS 1, 2, & 3 AS SHOWN
UNIT 4 AS SHOWN & NOTED

NOTES:
1. COMPONENT UNID NUMBERING SCHEME:

PLANT	UNIT	FUNCTION	SYSTEM	SEQUENCE NO.
GUH	00	CRN	329	CRANE

2. UNITS ARE LISTED IN WHOLE ON THIS DRAWING WHEN IT IS PRACTICAL. OTHER COMPONENT UNITIDS ONLY LIST THE SEQUENCE NUMBER TO FIT ON THIS PAGE. FOR EXAMPLE TO HAVE THE COMPLETE UNID NUMBER FOR THE DAM ADD THE PREFIX "GUH-00-CRN-329-" TO THE SEQUENCE NUMBER.
3. COMPONENT UNID NUMBERS USE THE FOLLOWING SYSTEM AND FUNCTION CODES:

SYSTEM NUMBERS – SYSTEM NAME:	FUNCTION CODES – FUNCTION CODE NAMES:
300 – FACILITIES & GROUNDS	BLDG – POWERHOUSE
324 – DRAFT TUBE CLOSURE	CRN – DRAFT TUBE GATE GANTRY CRANE
328 – DAM	CRN – SPILLWAY GANTRY CRANE
328 – SPILLWAY	CRN – INTAKE GANTRY CRANE
329 – INTAKE SYSTEM	EMBK – EMBANKMENT
	FACL – PARKING LOT
	GATE – SPILLWAY GATE

FOR PROBABLE MAXIMUM FLOOD DETAILS AND MODIFICATIONS, SEE DRAWINGS:
22W260-SERIES – NORTH EMBANKMENT MODIFICATIONS
22W261-SERIES – NORTH WALL SECTIONS & DETAILS
23W260-SERIES – SOUTH EMBANKMENT MODIFICATIONS
23W261-SERIES – SOUTH WALL SECTIONS & DETAILS
23W262-SERIES – SOUTH EMBANKMENT MODIFICATIONS

REV	DATE	DRAWN BY	CHECKED BY	SUPERVISED BY	REVIEWED BY	APPROVED BY	ISSUED BY
B	JAN 08 2007						

ADDED PMF INFORMATION, ADDED SECTION E–E

REV	DRWN	CHKD	A.P.	S.P.	TRVL	RWT	WMC	HYDRAUL	C

REVISED FOR CRITICAL STRUCTURES, SYSTEMS & COMPONENTS VERIFICATION

REV	DATE	DRAWN	CHECKED	SUPERVISED	REVIEWED	APPROVED	ISSUED	PROJECT ENGINEER	AS BUILT
A	12-29-06								

SCALE: 1"=200' EXCEPT AS NOTED

MAIN DAM WORKS

GENERAL PLAN
ELEVATION AND SECTIONS

DESIGNED BY	DRAWN BY	CHECKED BY	SUPERVISED BY	REVIEWED BY	APPROVED BY	ISSUED BY

GUNTERSVILLE HYDRO PLANT
TENNESSEE VALLEY AUTHORITY
FOSSIL AND HYDRO ENGINEERING

AUTOCAD R2000	DATE	06	c	10W200	R 11
	12-29-36				

PLOT FACTOR:2400
W_TVA

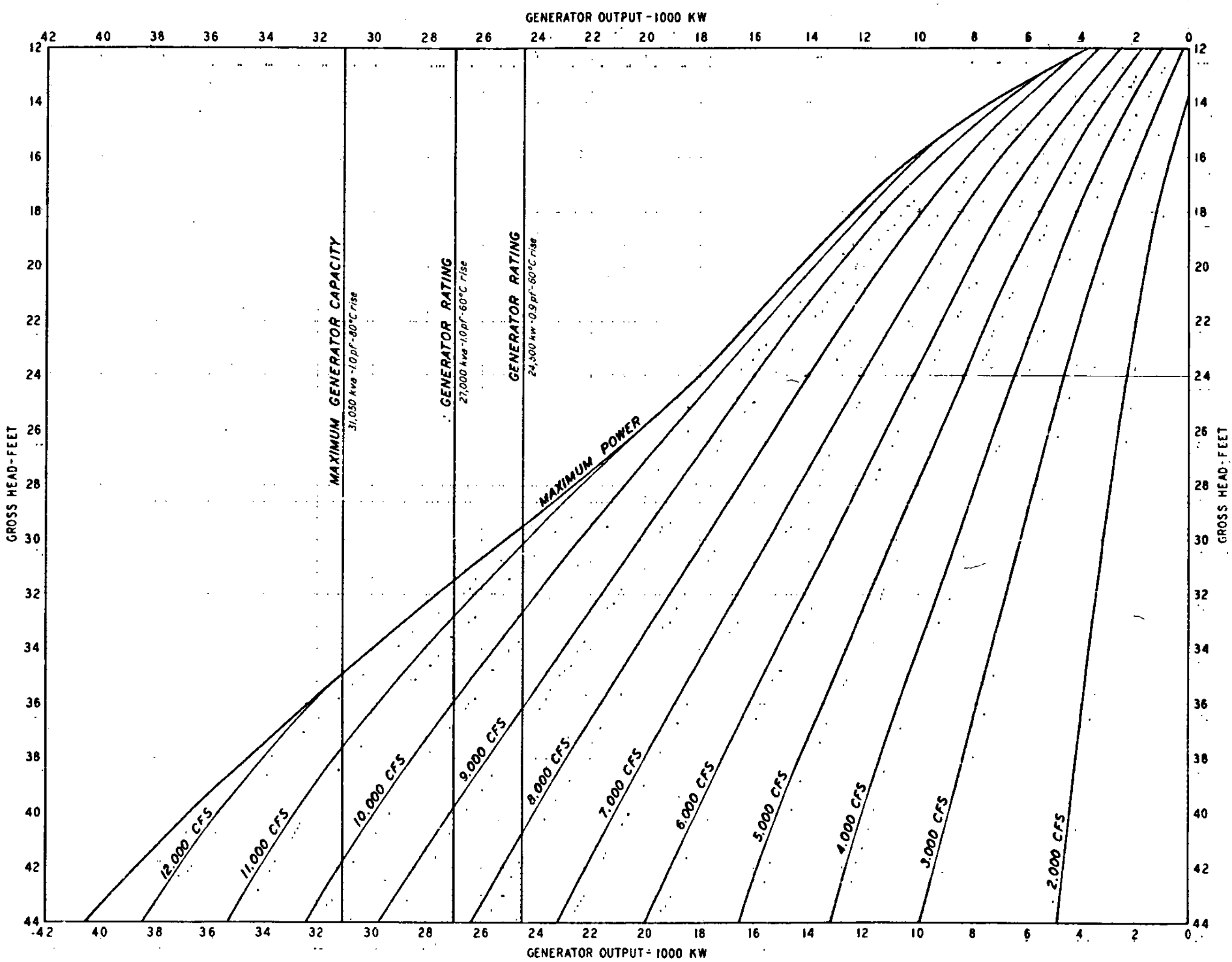
C.A.D. DRAWING
DO NOT ALTER MANUALLY

ELECTRONICALLY RESTORED DRAWING
THIS DRAWING HAS BEEN COMPLETELY REDRAWN AND SUPERSEDES :(10N200_R9)

TASK COMPLETED BY:
REV NO

10W200 C 06

Guntersville Calculation CDQ000020080011
Attachment 25



NOTES:
Curves are based on S. Morgan Smith Co. model test No. 1497 and modified in accordance with index test conducted March 21, 1952 at approximately 36 ft head. Tests should be made at other heads and curves revised accordingly.
TURBINE: 34,000 hp at 36 ft head and 69.2 rpm. Furnished by S. Morgan Smith Co., York, Pa.
GENERATOR: 27,000 kva, 3 phase, 60 cycle, 69.2 rpm. Furnished by General Electric Co.

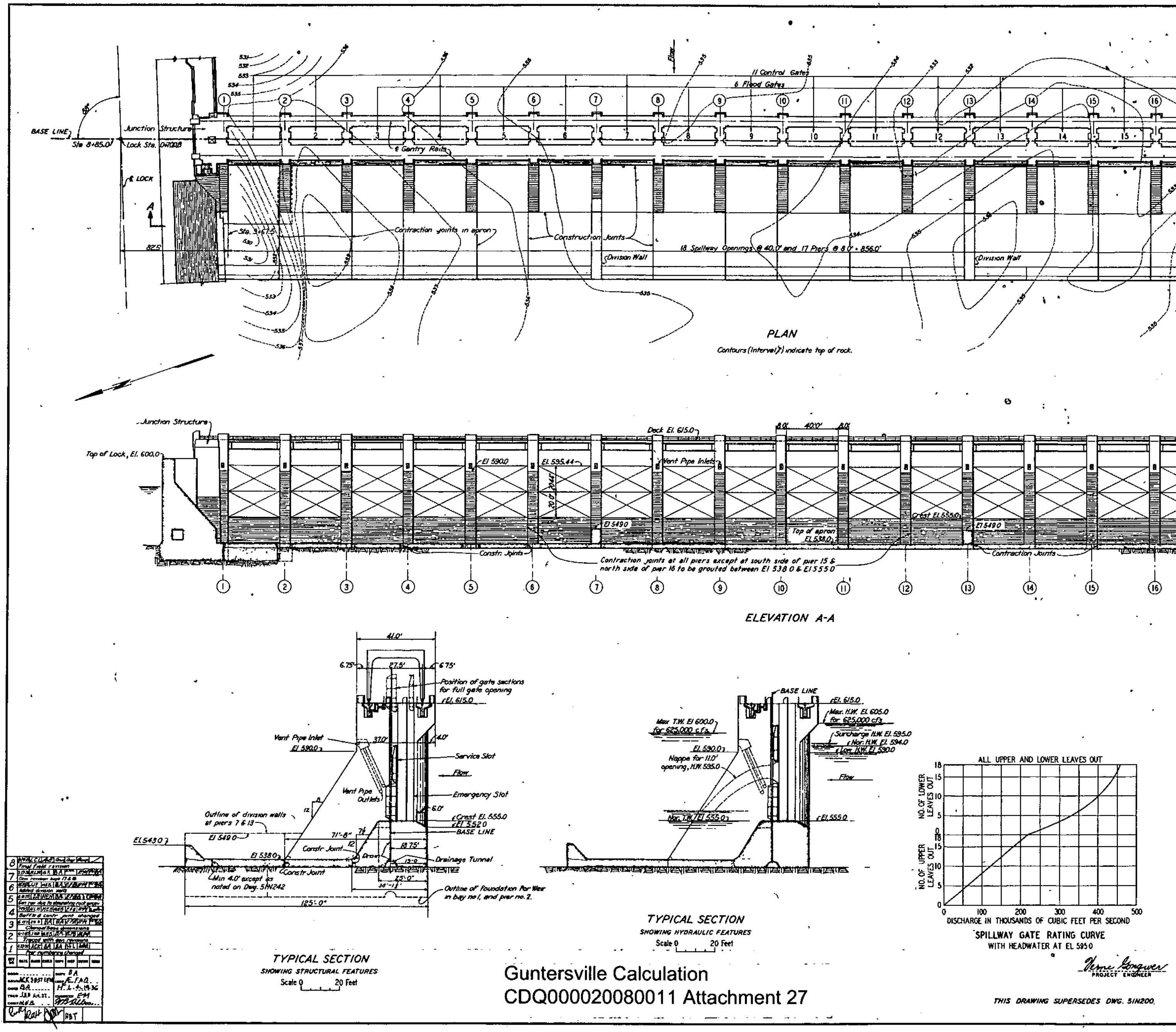
Guntersville Calculation
CDQ000020080011 Attachment 26

POWERHOUSE
UNIT 4

DISCHARGE CURVES
BASED ON INDEX TEST

GUNTERSVILLE PROJECT
TENNESSEE VALLEY AUTHORITY
DIVISION OF DESIGN

SUBMITTED	RECOMMENDED	APPROVED
C. F. Norris	[signature]	R. A. Monroe
KNOXVILLE	5-6-52	6 M 4 47K2900



REFERENCE DRAWINGS:

SPILLWAY DAM
- 51 N 273..BAYS 17 & 18-APRON & TRAINING WALL-OUTLINE
- 51 N 201..ROCK DOWELS, FOUNDATION GROUTING AND DRAINAGE.
- 51 N 222..JUNCTION WITH LOCK-GEN. PLANS AND SECTS.- OUTLINE.
- 51 N 408..STABILITY ANALYSIS AND STRESS DIAGRAMS.
- 51 N 206..TYPICAL PIER-EL.555.0 TO EL.615.0-OUTLINE.
- 51 N 242..TYPICAL PIER, WEIR AND APRON-FOUND. TO EL.555.0-OUTLINE.
- 51 N 210..GROUTING SYSTEM-JOINTS BETWEEN PIER AND WEIR.
- 51 N 246..JOINTS AND SEALS.
- 51 N 247..DETAILS AT CREST ELEVATION.
- 51 N 217..OPERATING BRIDGE DECK OUTLINE.
- 51 N 227..JUNCTION WITH LOCK-PIER NO.1 EL.555.0 TO EL.615.0-OUTLINE.
- 51 N 228.. " " " " " FOUND. TO EL.555.0- "
- 51 N 300..GATE TRACK SUPPORT TOWERS-INTERMEDIATE PIERS.
- 51 N 303.. " " " " END PIERS.
- 51 N 311..INTAKE & SPILLWAY-GATES & CRANES-GEN. ARRANGEMENT.
- 51N264 DIVISION WALL ABOVE APRON-OUTLINE & REINFORCEMENT

INTAKE -
- 31 N 200..GEN PLAN, ELEVATIONS AND SECTIONS.

ELECTRICAL -
- 15 N 119..SPILLWAY-GENERAL ARRANGEMENT.

LOCK -
- U.S.E.O. DRAWINGS.

Scale 0 30 60 Feet
Except as noted

THIS DRAWING SUPERSEDES DWG. 51N200

Verne Gongwer
PROJECT ENGINEER

SPILLWAY DAM

PLAN, ELEVATION AND SECTIONS

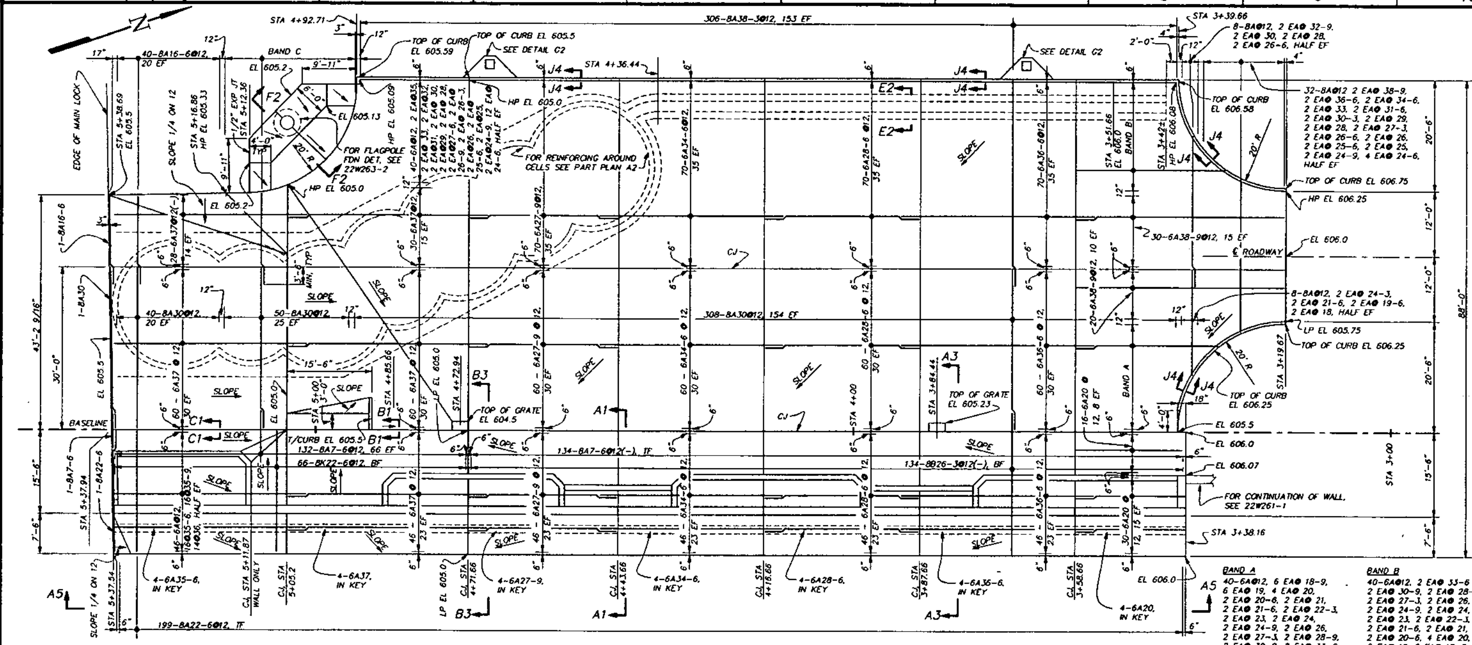
GUNTERSVILLE PROJECT
TENNESSEE VALLEY AUTHORITY
ENGINEERING DESIGN DEPARTMENT

SUBMITTED	RECOMMENDED	APPROVED
Ross M. Riegel	H. A. Hageman	Barton M. Jones

KNOXVILLE, TENN. 4-19-37 6 C 4 51N241 R8

RECORD DRAWING AS CONSTRUCTED 9-29-1939

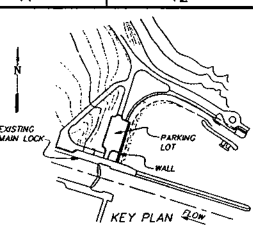
Guntersville Calculation
CDQ000020080011 Attachment 27



BAND A
40-6A@12, 6 EA@ 18-9, 6 EA@ 19, 4 EA@ 20, 2 EA@ 20-6, 2 EA@ 21, 2 EA@ 21-6, 2 EA@ 22-3, 2 EA@ 23, 2 EA@ 24, 2 EA@ 24-9, 2 EA@ 26, 2 EA@ 27-3, 2 EA@ 28-9, 2 EA@ 30-9, 2 EA@ 33-6, HALF EF

BAND B
40-6A@12, 2 EA@ 33-6 2 EA@ 30-9, 2 EA@ 28-9, 2 EA@ 27-3, 2 EA@ 26, 2 EA@ 24-9, 2 EA@ 24, 2 EA@ 23, 2 EA@ 22-3, 2 EA@ 21-6, 2 EA@ 21, 2 EA@ 20-6, 4 EA@ 20, 6 EA@ 19, 6 EA@ 18-9, HALF EF

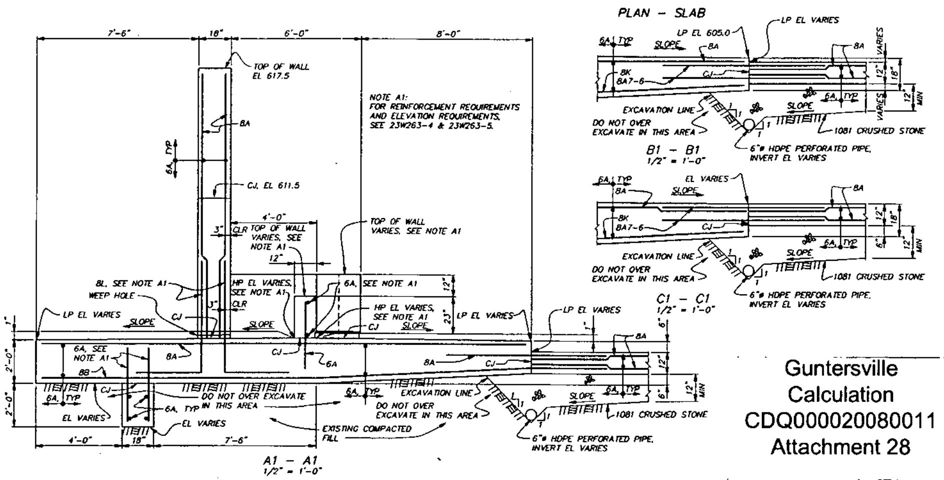
BAND C
50-8A@12, 10 EA@ 16-9, 6 EA@ 17, 4 EA@ 17-3 2 EA@ 17-6, 2 EA@ 17-9, 2 EA@ 18-6, 2 EA@ 18-9, 2 EA@ 19-3, 2 EA@ 20, 2 EA@ 20-6, 2 EA@ 21-3, 2 EA@ 22-3, 2 EA@ 23-3, 2 EA@ 24-3, 2 EA@ 25-9, 2 EA@ 27-3, 2 EA@ 29-3, 2 EA@ 32-3, HALF EF



KEY PLAN

BENT BAR LIST							
BAR MARK	NO. REQD	BENDING DIMENSIONS					
		a	b	c	e	f	r
8B26-3	134	12-9	10-0	3-6	0-6		
8K22-6	66	10-0	12-9		0-6		

NOTES:
1. ALL WORK SHALL CONFORM TO TVA GENERAL CONSTRUCTION SPECIFICATIONS T-1, G-2, AND G-8. REFERENCE TO SECTION NUMBERS ARE FROM TVA GENERAL CONSTRUCTION SPECIFICATION T-1.
2. RIPRAP SHALL CONFORM TO SECTION 575. 50 PERCENT OF THE STONES SHALL WEIGH 200 LBS. OR GREATER WITH A MAXIMUM STONE WEIGHT OF 600 LBS. NOT MORE THAN 5 PERCENT OF THE STONES BY WEIGHT IS TO PASS THE 1 INCH SIEVE. THE SIZE OF THE STONES IS TO BE REASONABLY WELL GRADED FROM THE SMALLER TO THE LARGER SIZE.
3. CRUSHED STONE FOR DRAINAGE SHALL CONFORM TO SECTION 1081.
4. CONCRETE SHALL BE PLACED IN ACCORDANCE WITH TVA GENERAL CONSTRUCTION SPECIFICATION G-2. CONCRETE SHALL BE IN ACCORDANCE WITH TVA STANDARD READY-MIX SPECIFICATION 26.037, CLASS 300.75 AFW. MAXIMUM PLACING TEMPERATURE OF CONCRETE TO BE 85 DEGREES FAHRENHEIT.
5. FORMWORK SHALL BE IN ACCORDANCE WITH TVA GENERAL CONSTRUCTION SPECIFICATION G-8.
6. CHAMFER ALL EXPOSED CONCRETE EDGES 3/4" UNLESS OTHERWISE NOTED.
7. ALL REINFORCEMENT SHALL CONFORM TO ASTM SPECIFICATION A-615, GRADE 60.
8. CLEAR COVER FOR REINFORCEMENT SHALL BE 3" FOR CONCRETE PLACED AGAINST EARTH AND 2" OTHERWISE UNLESS NOTED. ALL OTHER DIMENSIONS ARE TO CENTER LINE OF REINFORCING.
9. FILTER FABRIC SHALL BE PHILLIPS 66 SURPAC 9NP (NONWOVEN) OR EQUAL. FABRIC IS TO PLACED IN ACCORDANCE WITH SECTION 571. MINIMUM OVERLAP TO BE 18 INCHES. DAMAGED MATERIAL TO BE REPAIRED BY PLACING A PIECE OF MATERIAL OVER THE DAMAGED AREA LARGE ENOUGH TO COVER THE DAMAGED AREA AND MEETING THE OVERLAP REQUIREMENT.
10. FOR DESIGN CALCULATIONS AND FIELD INFORMATION SEE RIMS NUMBER B65 931209 003.
11. PIPE FOR WEEP HOLES SHALL BE 2"ϕ PVC SCH 40, WHITE, PLACED ON 10' CENTERS ± FROM STA 5+37.54 TO STA 3+38.16.



Guntersville Calculation CDQ000020080011 Attachment 28

STRAIGHT BAR LIST								
BAR SIZE	BAR LENGTH	NO. REQD	BAR SIZE	BAR LENGTH	NO. REQD	BAR SIZE	BAR LENGTH	NO. REQD
6	18-9	12	6	30-9	4			
	19-0	12		31-0	2			
	20-0	58		32-0	2			
	20-6	4		33-0	2			
	21-0	4		33-6	4			
	21-6	4		34-6	180			
	22-3	4		35-0	2			
	23-0	4		35-6	20			
	24-0	4		35-9	16			
	24-6	12		36-0	14			
	24-9	6		36-6	180			
	25-0	2		37-0	228			
	25-6	2		38-9	50			
	26-0	6						
	26-3	2						
	26-9	2						
	27-3	4						
	27-6	2						
	27-9	180						
	28-0	2						
	28-6	180						
	28-9	4						
	29-0	2						
	30-0	2						

STRAIGHT BAR LIST								
BAR SIZE	BAR LENGTH	NO. REQD	BAR SIZE	BAR LENGTH	NO. REQD	BAR SIZE	BAR LENGTH	NO. REQD
8	7-6	267	8	25-9	2			
	16-6	41		26-0	2			
	16-9	10		26-6	4			
	17-0	6		27-3	4			
	17-3	4		28-0	4			
	17-6	2		29-0	2			
	17-9	2		29-3	2			
	18-0	2		30-0	401			
	18-6	2		30-3	2			
	18-9	2		31-6	2			
	19-3	2		32-3	2			
	19-6	2		32-9	2			
	20-0	2		33-0	2			
	20-6	2		34-6	2			
	21-3	2		36-6	2			
	21-6	2		38-3	306			
	22-3	2		38-9	2			
	22-6	200						
	23-3	2						
	24-3	4						
	24-6	4						
	24-9	2						
	25-0	2						
	25-6	2						

REV. NO.	DATE	DSGN	DRWN	CHKD	SUPV	RVWD	APPD	ISSD	PROJECT ID	AS CONST
R 1	5-31-95	GLH	GLH	VAN	VAN	VAN	COW	JHC	RC22862	COW 6/95
FINAL FIELD REVISIONS										
R 0	8-1-94	KB	GLH	RLP	VAN	VAN	COW	JHC	RC22862	
ORIGINAL ISSUE										

SCALE: 1/8" = 1'-0" EXCEPT AS NOTED

NORTH EMBANKMENT
DAM SAFETY MODIFICATIONS

CONCRETE - SLABS
PARKING LOT & WALL
PLAN, SECTIONS & DETAILS

DESIGNED BY:	DRAWN BY:	CHECKED BY:	SUPERVISED BY:	REVIEWED BY:	APPROVED BY:	ISSUED BY:
K BROWN	GL HICKEY	RL PETTY	VA NEWELL	VA NEWELL	CD WAGNER	JH COULSON

GUNTERSVILLE PROJECT
TENNESSEE VALLEY AUTHORITY
FOSSIL AND HYDRO ENGINEERING

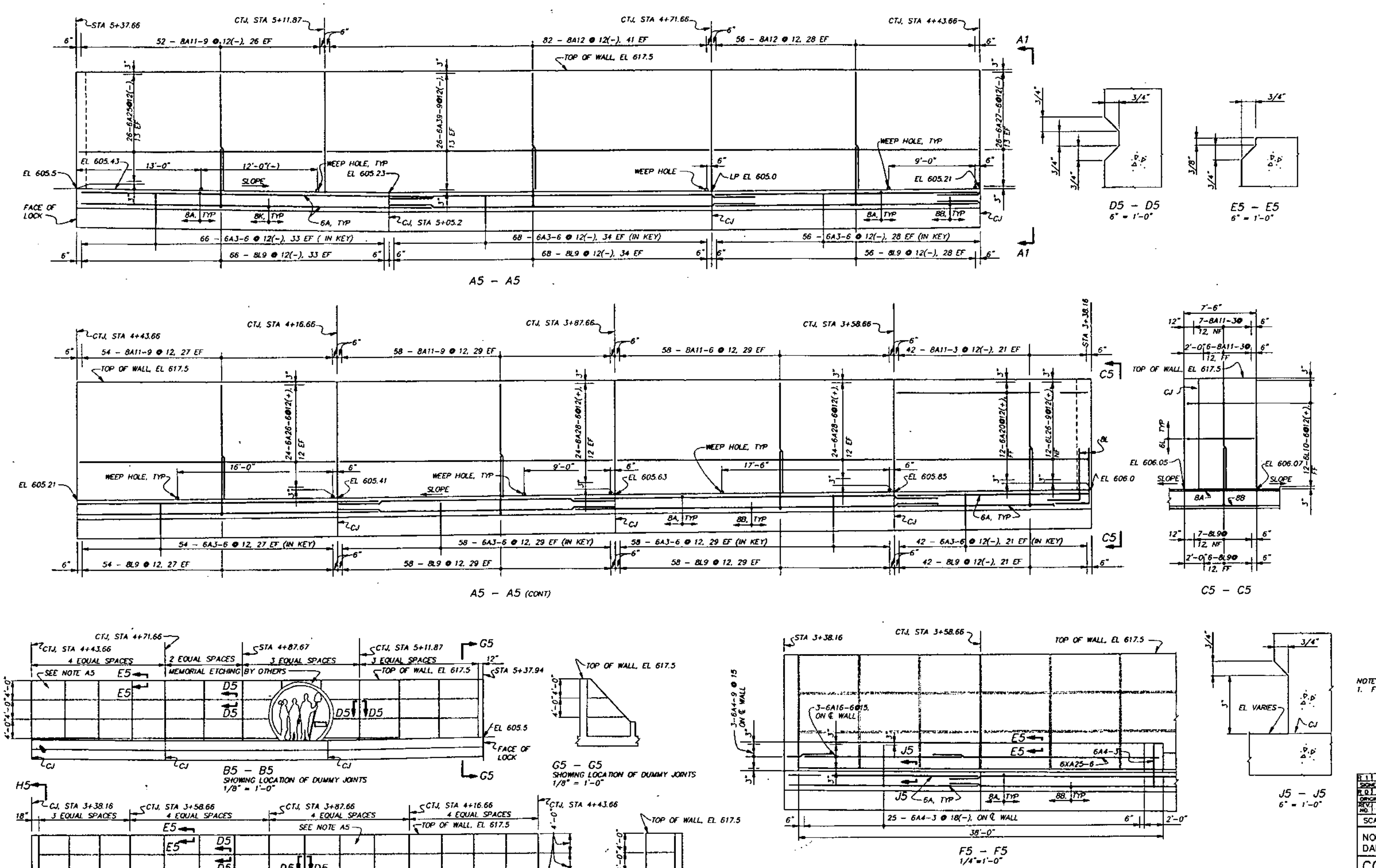
AUTOCAD R12 | DATE 8-1-94 | 6 | C | 22W263-1 | R 1

MF R1

PLOT FACTOR:1

C.A.D. DRAWING
DO NOT ALTER MANUALLY

TASK COMPLETED BY: | REV NO.



NOTE A5:
FORMWORK SHALL CONFORM TO TVA CONSTRUCTION SPECIFICATION G 8. FORM TIES SHALL BE USED BETWEEN STA 5+37.94 AND STA 3+38.16. SURFACE DEFECTS SHALL BE REPAIRED IMMEDIATELY AFTER FORM REMOVAL, BUT DO NOT PATCH TIE HOLES ON THE DOWNSTREAM FACE OF THE WALL. TIE HOLES ON THE UPSTREAM FACE OF THE WALL SHALL BE PATCHED PER TVA CONSTRUCTION SPECIFICATION G 8.

BENT BAR LIST

BAR MARK	NO. REQD	a	b	c	e	f	r
		BENDING DIMENSIONS					
6L10-6	12	7-0	EX				
6L26-9	12	7-0	EX				
8L9	415	5-8	EX				

STRAIGHT BAR LIST

BAR SIZE	BAR LENGTH	NO. REQD	BAR SIZE	BAR LENGTH	NO. REQD	BAR SIZE	BAR LENGTH	NO. REQD
6	3-6	402						
↓	4-3	26						
	4-9	3						
	16-6	3						
	20-0	12						
	25-0	26						
	26-6	24						
	27-6	26						
	28-6	48						
↓	39-9	26						
8	11-3	55						
↓	11-6	58						
	11-9	178						
↓	12	124						

NOTES:
1. FOR LIST SEE 22W263-1.

REV. NO.	DATE	DSGN	DRWN	CHKD	SUPV	RVWD	APPD	ISSD	PROJECT ID	AS CONST	REV CODE
R 1	5-31-95	KBW	CLH	VAN	VAN	VAN	CDW	JHC	RC22862	CDW 8/95	J
SIGNED AS CONSTRUCTED											
R 0	8-1-94	KB	CLH	RLP	VAN	VAN	CDW	JHC	RC22862		D
ORIGINAL ISSUE											

SCALE: 1/4" = 1'-0" EXCEPT AS NOTED

NORTH EMBANKMENT
DAM SAFETY MODIFICATIONS

CONCRETE – SLABS
PARKING LOT & WALL
PLAN, SECTIONS & DETAILS

DESIGNED BY:	DRAWN BY:	CHECKED BY:	SUPERVISED BY:	REVIEWED BY:	APPROVED BY:	ISSUED BY:
K BROWN	CL HICKEY	RL PETTY	VA NEWELL	VA NEWELL	CD WAGNER	JH COULSON

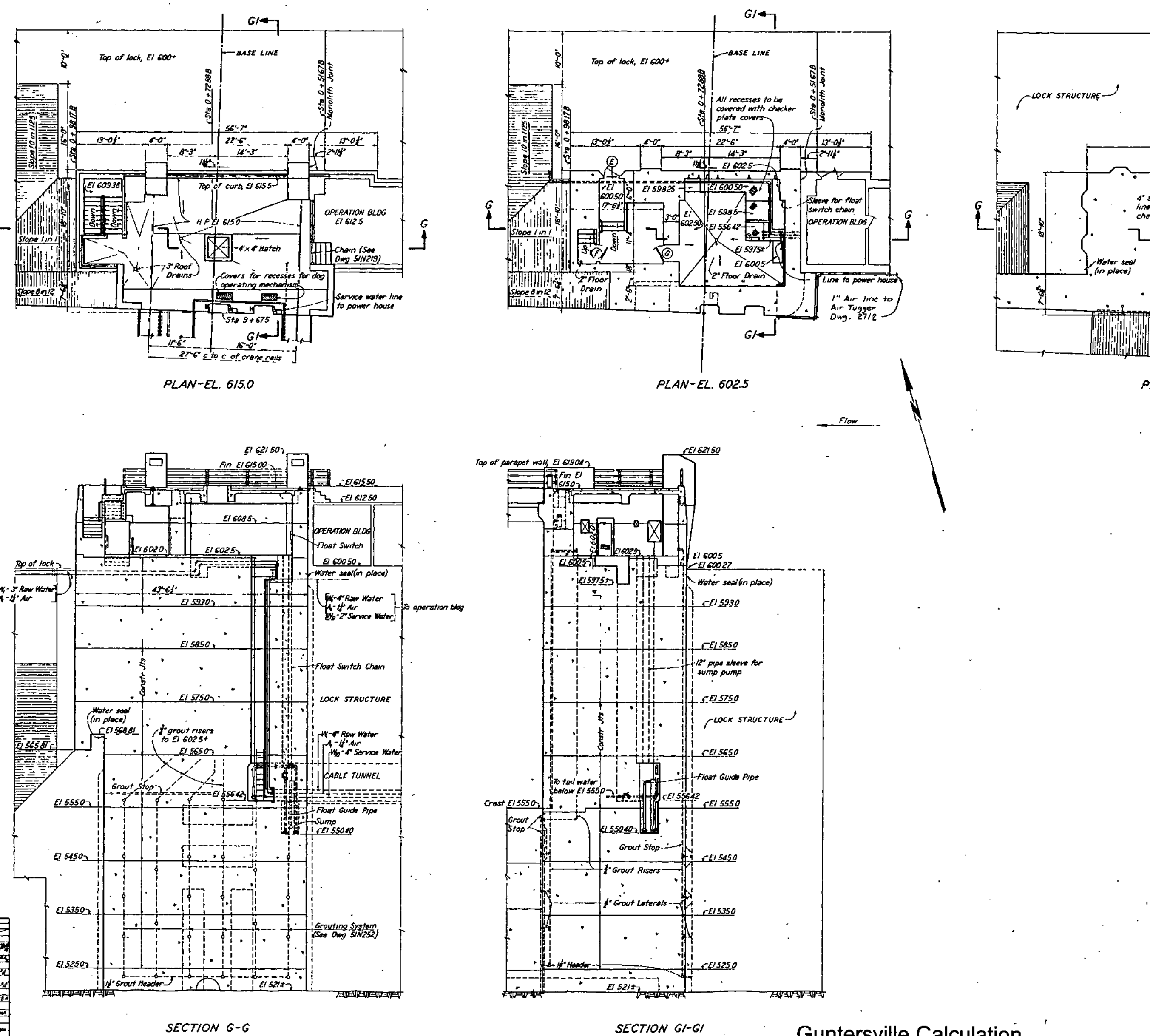
GUNTERSVILLE PROJECT
TENNESSEE VALLEY AUTHORITY
FOSSIL AND HYDRO ENGINEERING

AUTOCAD R12 | DATE 8-1-94 | 6 | C | 22W263-5 | R 1

PLOT FACTOR:1

C.A.D. DRAWING
DO NOT ALTER MANUALLY

Guntersville Calculation
CDQ000020080011 Attachment 29



REFERENCE DRAWINGS:

SPILLWAY DAM-JUNCTION WITH LOCK
- 51N224...CONC-EL 602.5 & EL 560.0-PLANS & DETAILS-OUTLINE
- 51N226... " -WEST & NORTH WALL ELEVATIONS-OUTLINE
- 51N227... " -PIER 1-EL 555.0 TO 615.0-OUTLINE.
- 51N228... " - " 1-FOUNDATION TO EL 555.0-OUTLINE.
- 51N231... " -WEST & NORTH WALL ELEVATIONS-REINF
- 51N232... " -EAST WALL & MISC DETAILS-REINF
- 51N233... " -PIER 1-EL 555.0 TO 615.0-REINF-SH. 1
- 51N234... " - " 1-FOUNDATION TO EL. 555.0-REINF
- 51N235...PIPING LAYOUT
- 51N236...MISC METAL DETAILS
- 51N237...CONC-EL 615.0-PLANS & DETAILS-OUTLINE
- 51N238... " -TRANSVERSE & LONG SECTIONS-OUTLINE
- 51N239... " -EL 615.0-PLANS & DETAILS-REINF
- 51N240...DOOR & LOUVRE DETAILS
- 51N246...CONC-JOINTS & SEALS-DETAILS
- 51N247... " -DETAILS AT CREST ELEVATION
- 51N251...PIPING-DETAILS
- 51N257...WATER SEAL CONNECTIONS-DETAILS
- 51N258...CONC-PIER 1-EL 555.0 TO 615.0-REINF-SH 2
- 51D9235...PIPING-SUMP PUMP DISCHARGE EXTENSION VALVE & STEM
- 30B215...STD DETAIL OF ROUND CORNER

SPILLWAY DAM
- 51K267...GATE TRACK SUPPORT TOWERS-FIELD CHANGES
- 51N201...ROCK EXCAVATION, FOUNDATION GROUTING, & DRAINAGE
- 51N217...OPERATING BRIDGE DECK
- 51N220... " " " -RAILING PLAN
- 51N221... " " " - " DETAILS
- 51N241...PLAN, ELEVATION, & SECTIONS
- 51N303...GATE TRACK SUPPORT TOWER-END PIER

ELECTRICAL
- 65N14...LIGHTING PLANS-LOCK & SPILLWAY JUNCTION
- 65N16...CONDUIT PLAN & SECTS-VAULT-LOCK & SPILLWAY JUNCTION

LOCK
- USEO 20/1...LOCK WALLS-PLAN-UPPER END
- USEO 20/8... " " -CABLE TUNNEL
- USEO 27/1...PIPING DIAGRAM & DETAILS
- USEO 70/1...OPERATION BUILDING-PLANS
- N-6201 ...REVISION IN RIVER WALL AT SPILLWAY-PLAN, ELEVATIONS, & SECTIONS

PIPING
- 61N213...TREATED WATER LINES

Scale 0 8 16 Feet
Except as noted

SPILLWAY DAM
JUNCTION WITH AUXILIARY LOCK

CONCRETE GENERAL PLANS & SECTIONS OUTLINE

GUNTERSVILLE PROJECT
TENNESSEE VALLEY AUTHORITY
ENGINEERING DESIGN DEPARTMENT

SUBMITTED	RECOMMENDED	APPROVED
Ross M Riegel	J A Hageman	Barton M Jones

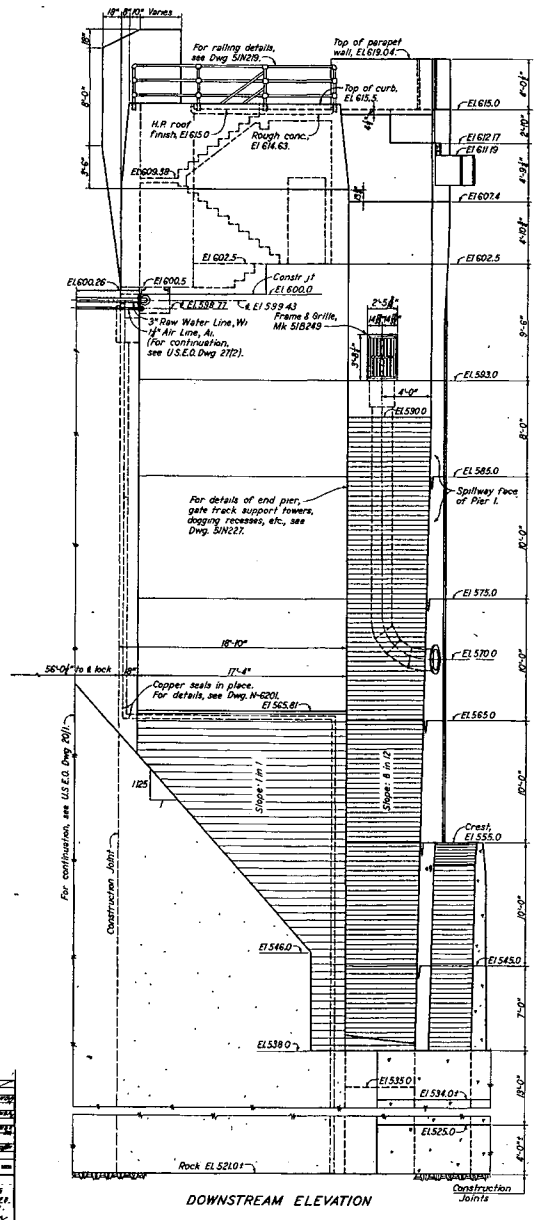
KNOXVILLE, TENN. | 5-12-37 | 6 | C | 4 | 51N222R8

RECORD DRAWING AS CONSTRUCTED 10-5-1939

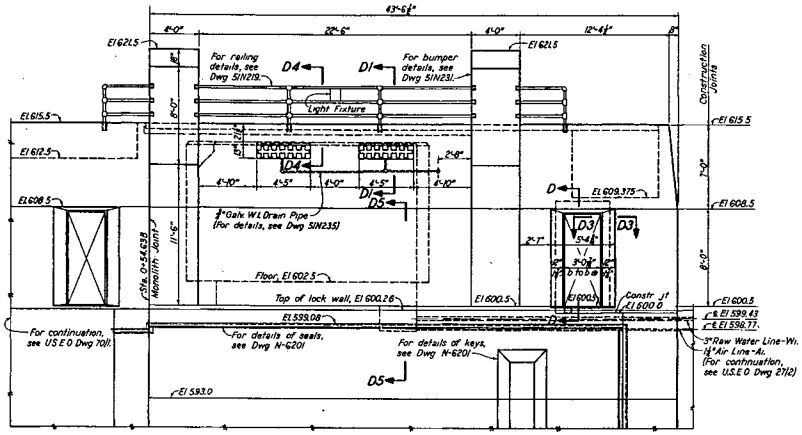
02-L349-27/7

Guntersville Calculation
CDQ000020080011 Attachment 30

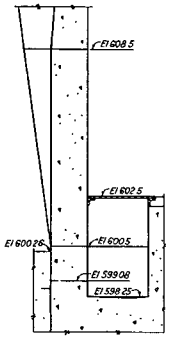
5IN226A



DOWNSTREAM ELEVATION

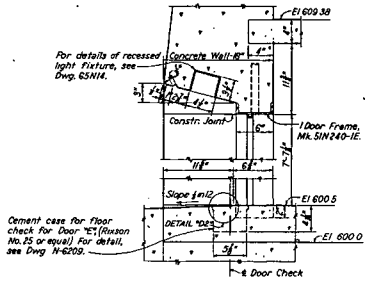


NORTH WALL ELEVATION



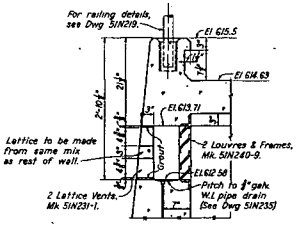
SECTION D5-D5

Scale 0 2 Feet



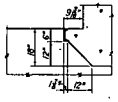
SECTION D-D

Scale 0 1 Foot



SECTION D1-D1

Scale 0 1 Foot

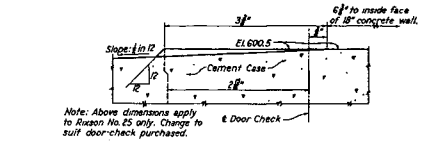


SECTION D3-D3

Scale 0 2 Feet

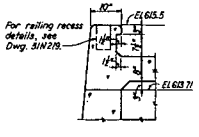
NOTES:
All concrete to be Class "A" (1:2:4) except as noted.

REFERENCE DRAWINGS:
SPILLWAY DAM - JUNCTION WITH LOCK
5I N 222....CONCRETE - GENERAL PLAN & SECTIONS - OUTLINE.
5I N 231.... " " - DOWNSTREAM & NORTH WALL - REINF.
5I N 236.... STR. STEEL - MISC. STEEL DETAILS. - SHEET 1.
5I N 240.... " " " " " " 2
5I N 252....CONCRETE - GROUTING SYSTEMS - VERTICAL JOINTS.
G DDG 308215....STANDARD DETAIL OF ROUND CORNERS



DETAIL D2

Scale 0 1 Inch



SECTION D4-D4

Scale 0 1 Foot

Scale 0 4 8 Feet
Except as noted

SPILLWAY DAM
JUNCTION WITH LOCK

CONCRETE WEST & NORTH WALL ELEVATIONS - OUTLINE

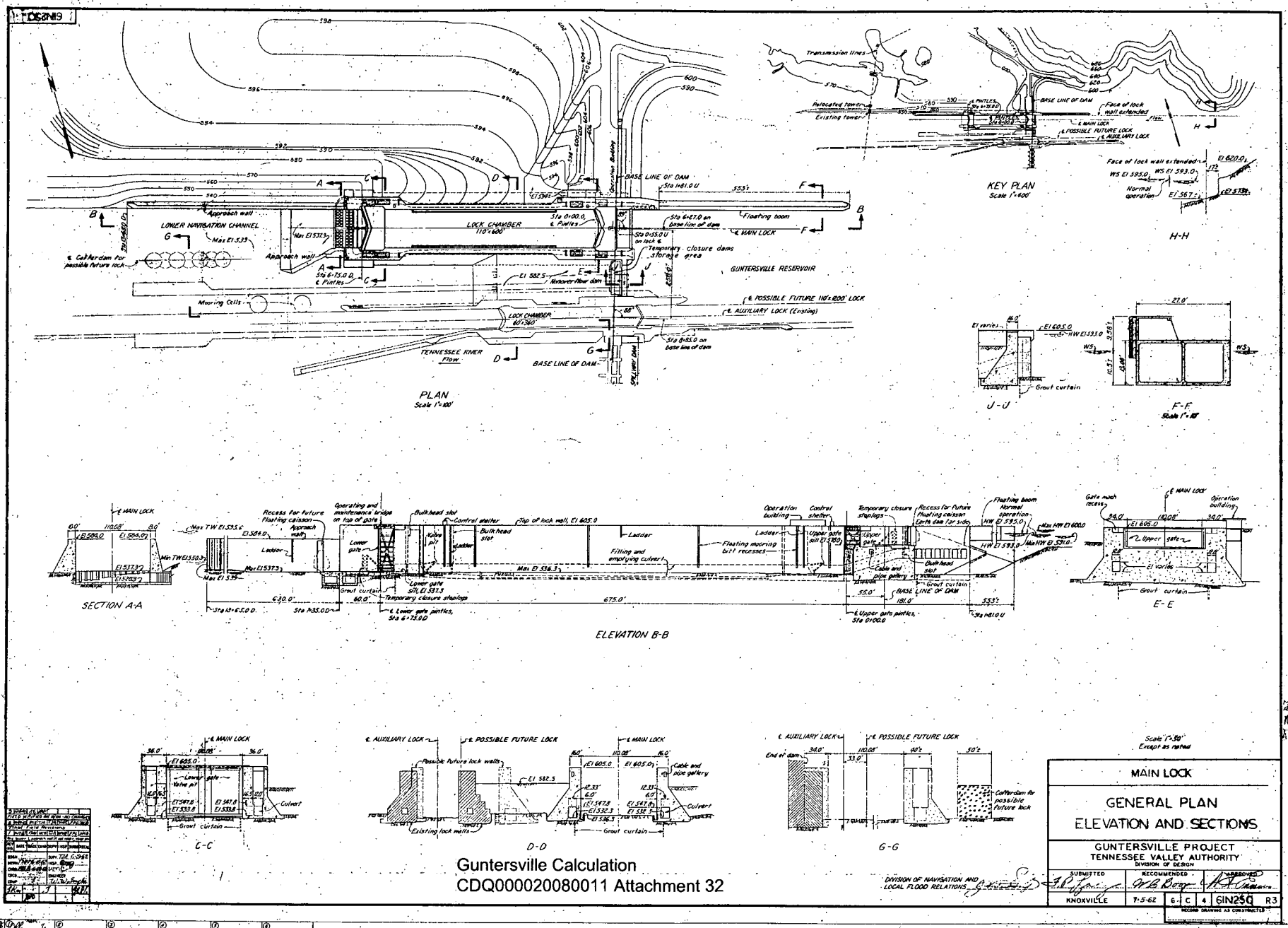
GUNTERSVILLE PROJECT
TENNESSEE VALLEY AUTHORITY
ENGINEERING DESIGN DEPARTMENT

SUBMITTED	RECOMMENDED	APPROVED
	Roy M. Rugg	Barton M. Jones

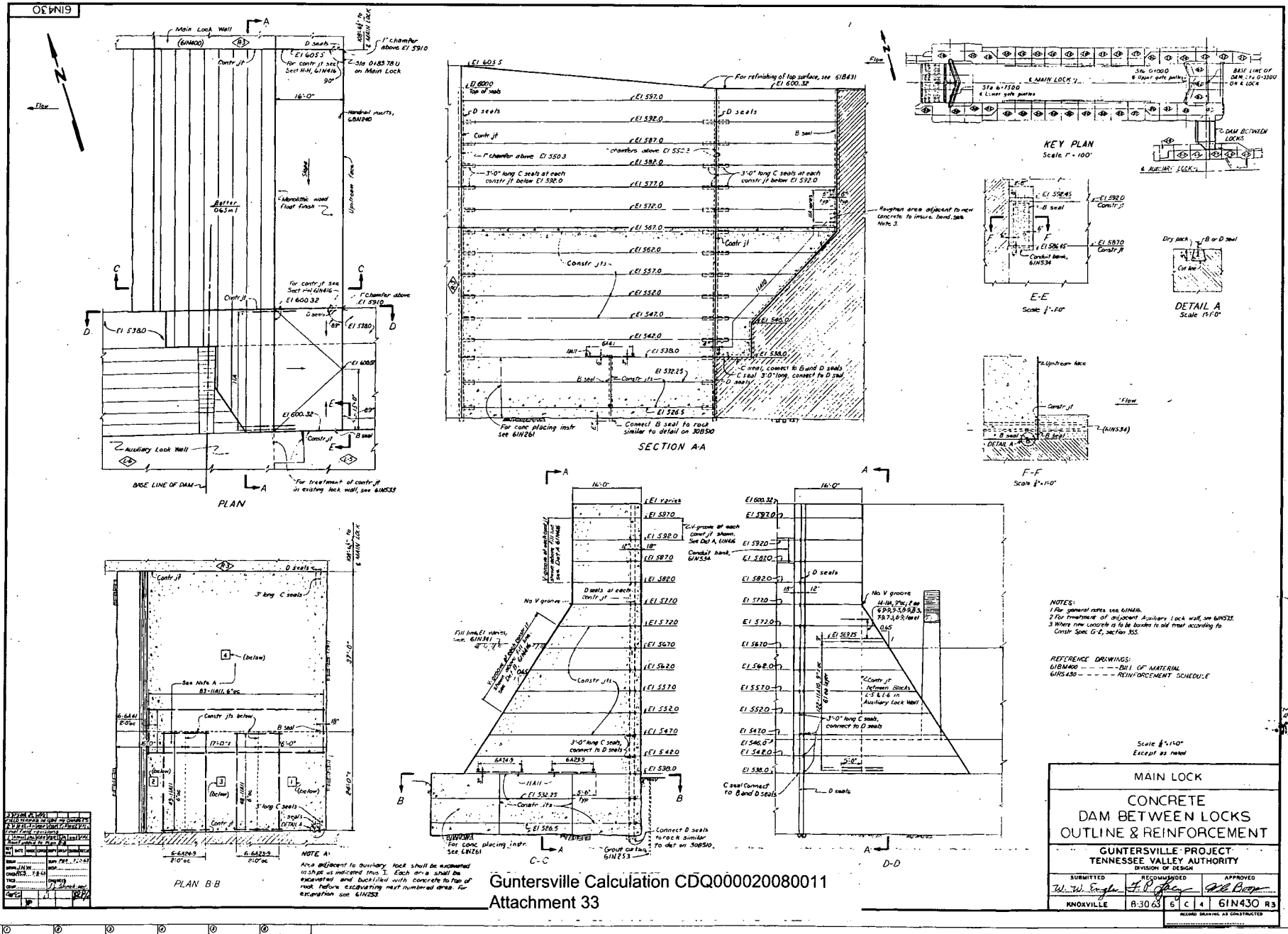
KNOXVILLE, TENN. 7-2-37 | 6 C 4 | 5IN226R6

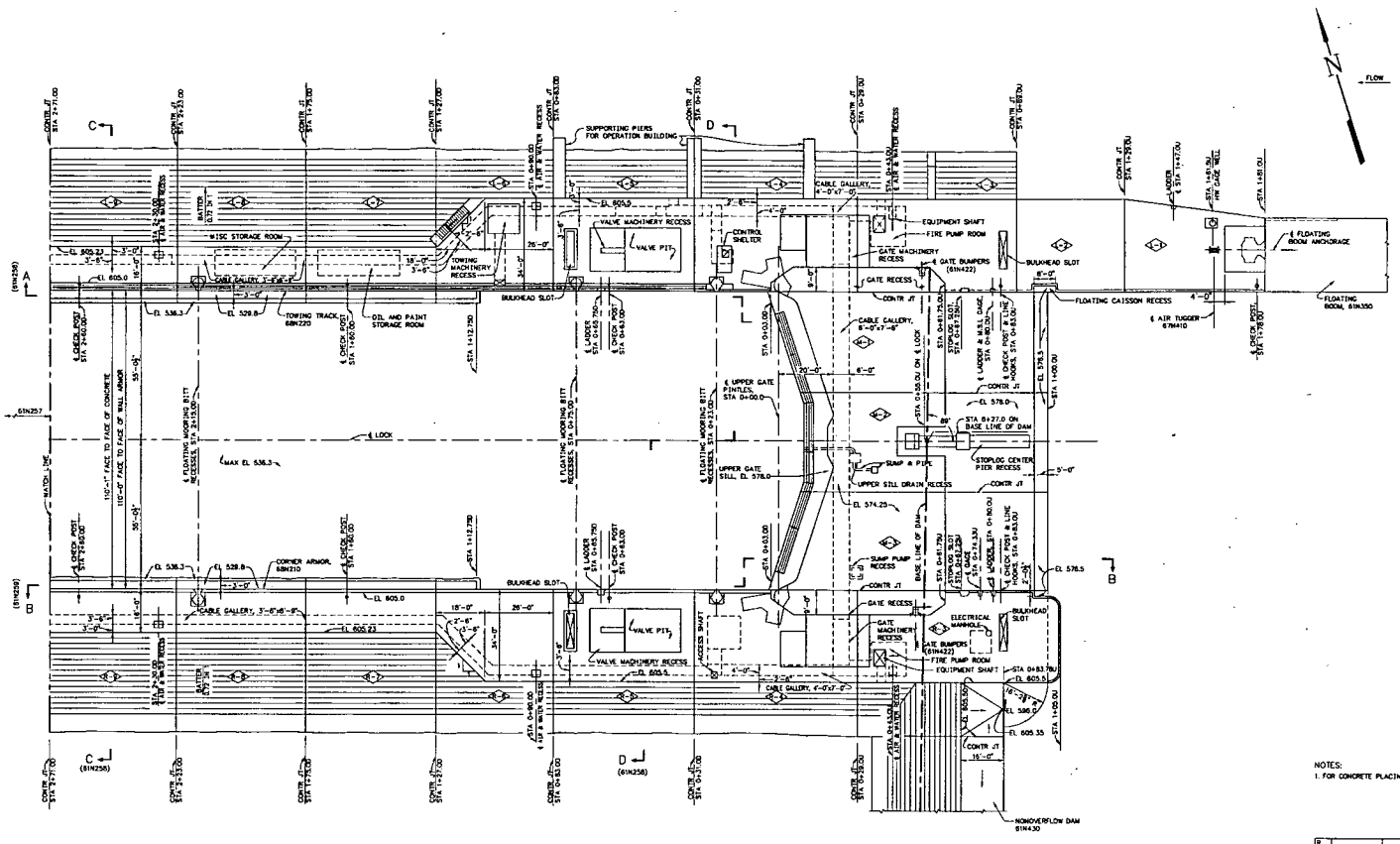
RECORD DRAWING AS CONSTRUCTED 11-29-1938

Guntersville Calculation
CDQ000020080011 Attachment 31



Guntersville Calculation
CDQ000020080011 Attachment 32





PLAN

Guntersville Calculation CDQ000020080011
Attachment 34

SCALE: 1/4"=1'-0" EXCEPT AS NOTED

MAIN LOCK

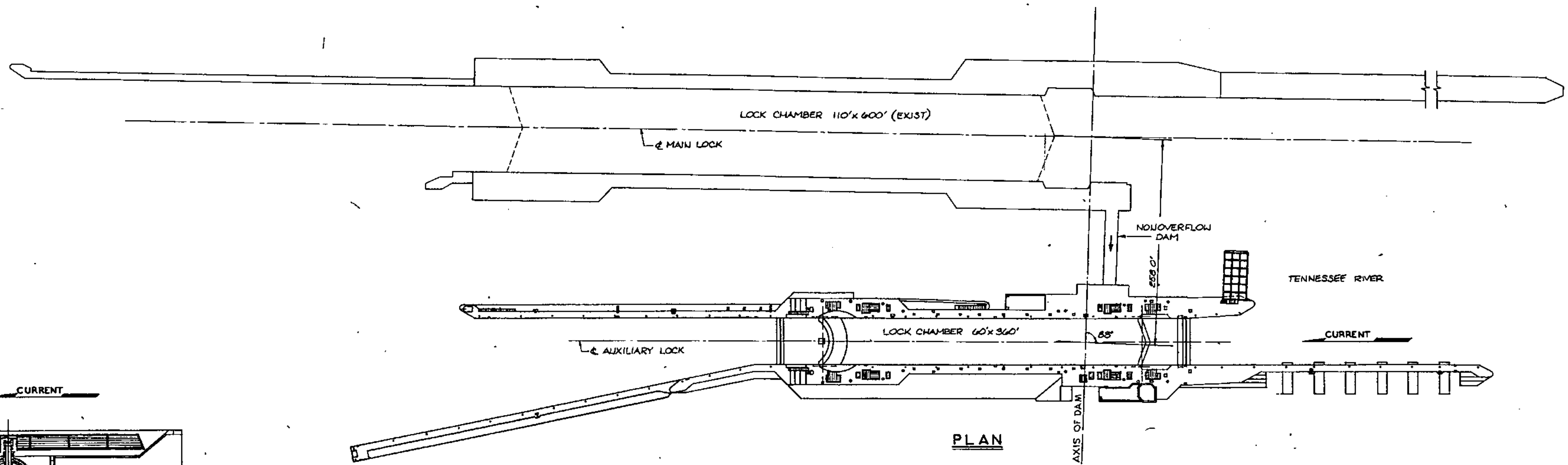
CONCRETE
PLAN–CHAMBER WALLS UPPER END
STA 1+81.0U TO STA 2+71.0D

GUNTERSVILLE PROJECT
TENNESSEE VALLEY AUTHORITY
FOSSIL AND HYDRO ENGINEERING

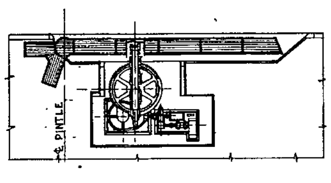
6 DS 61W256 R 4

ELECTRONICALLY RESTORED DRAWING
THIS DRAWING HAS BEEN COMPLETELY REDRAWN AND SUPERSEDES : (61N256 R3)

PLOT FACTOR:192
C.A.D. DRAWING
DO NOT ALTER MANUALLY

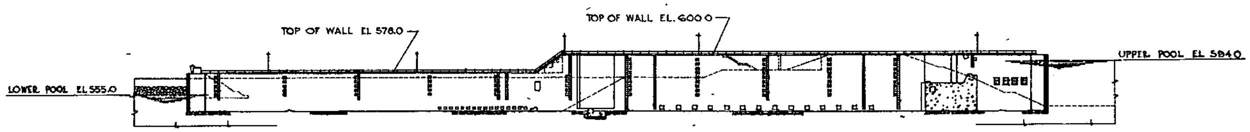


PLAN

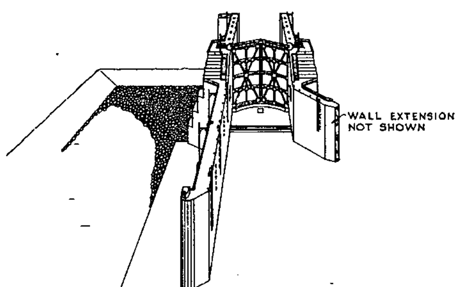


MITER GATE OPERATING MACHINERY

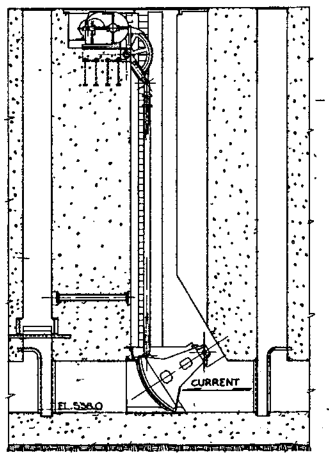
SCALE: ⅛"=1'-0"



ELEVATION ON ℄ OF LOCK

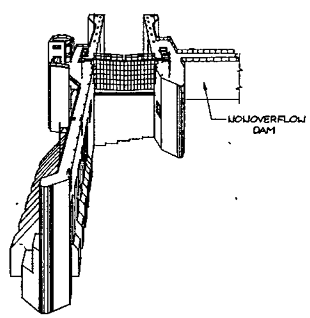


PERSPECTIVE SKETCH
DOWNSTREAM END



VALVE OPERATING MACHINERY

SCALE: ⅛"=1'-0"



PERSPECTIVE SKETCH
UPSTREAM END

UNITED STATES
TENNESSEE VALLEY AUTHORITY
GUNTERSVILLE AUXILIARY LOCK

GENERAL PLAN

60' 30' 0 60' 120'
SCALE: 1 INCH = 60 FEET

BY	DATE	CHARACTER
MOL	4-8-86	③ UPDATED AS-BUILT CONDITIONS (6/85)
RHT	12-28-42	② Revised to Conform with Construction Drawings
FPG	1-20-37	① Upper Guard Wall Revised

REVISION

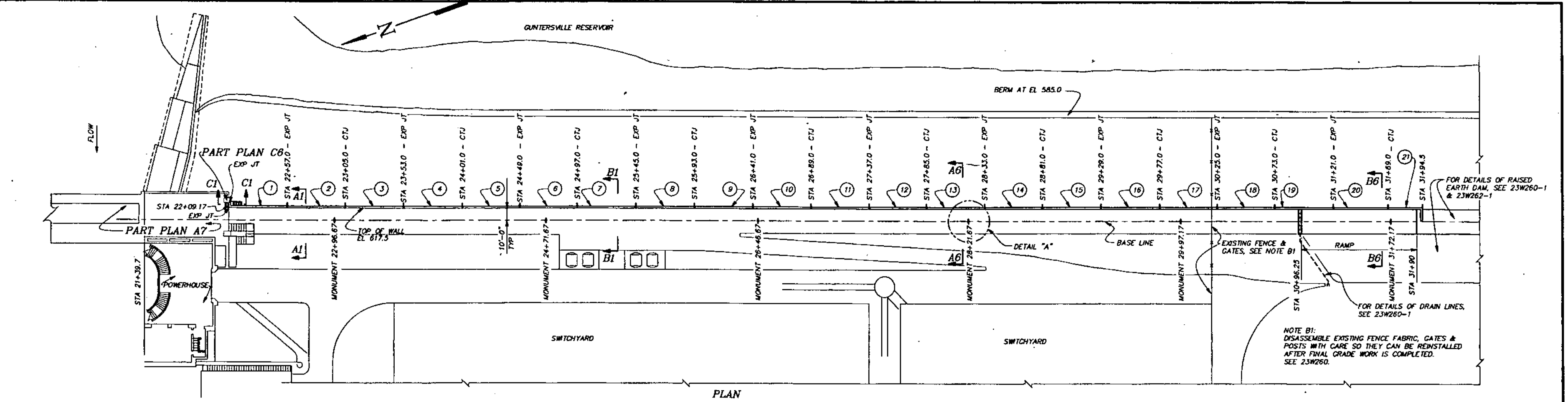
WAR DEPARTMENT
CORPS OF ENGINEERS U. S. ARMY
SUBMITTED: JULY 28, 1936.
Wm Meddy
SENIOR ENGINEER
APPROVED: JULY 28, 1936.
C.E. Perry
LT. COL. CORPS OF ENGINEERS
NASHVILLE, TENN.
DRAWN BY: F.J.M. CHECKED BY: F.P.G.

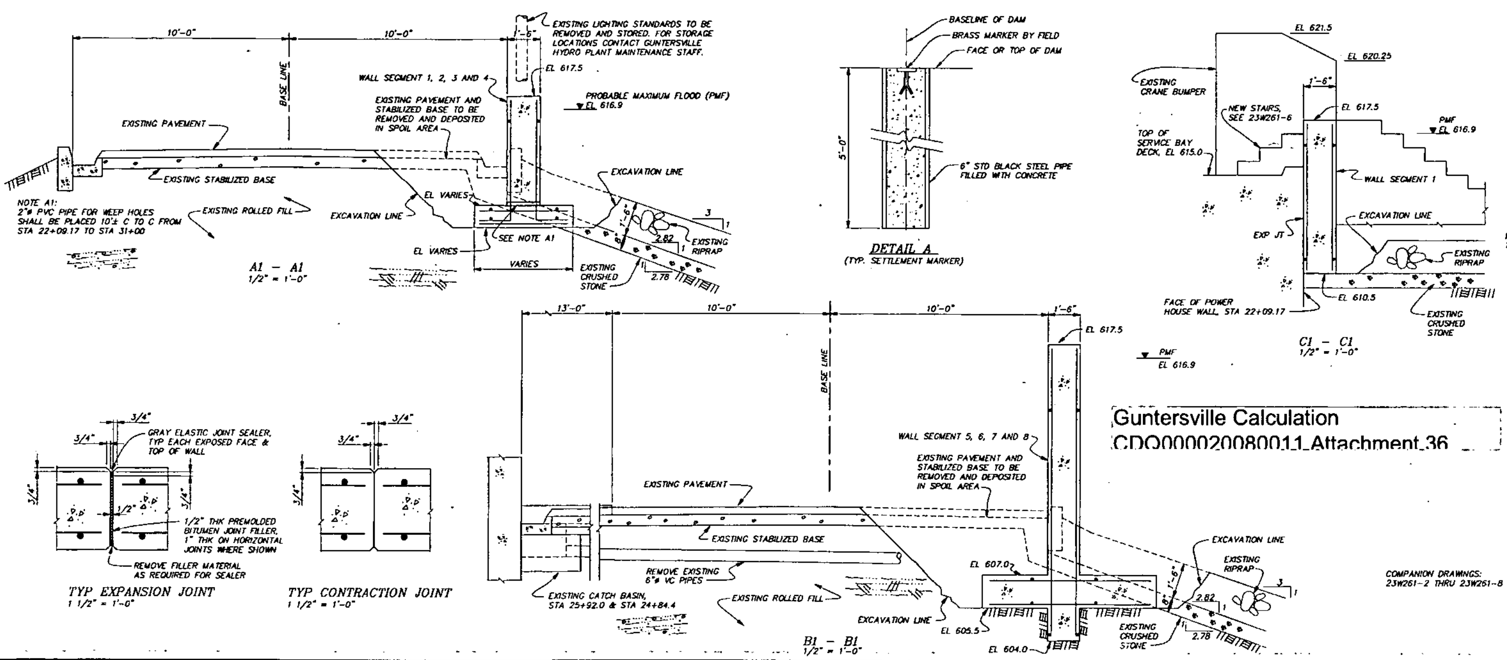
UNITED STATES
TENNESSEE VALLEY AUTHORITY
EXAMINED Ross M Riegel
RECOMMENDED Verne Gongwer
APPROVED C.A. Bock

K-1

10-L30-3/1.3

Guntersville Calculation
CDQ000020080011 Attachment 35





Guntersville Calculation
CDQ000020080011 Attachment 36

NOTES:

1. CONCRETE SHALL BE PLACED IN ACCORDANCE WITH TVA GENERAL CONSTRUCTION SPECIFICATION G-2. CONCRETE SHALL BE IN ACCORDANCE WITH TVA STANDARD READY-MIX SPECIFICATION 26.037, CLASS 300.75 AFW. MAXIMUM PLACING TEMPERATURE OF CONCRETE SHALL BE 85 DEGREES FAHRENHEIT.
2. FORMWORK SHALL BE IN ACCORDANCE WITH TVA GENERAL CONSTRUCTION SPECIFICATION G-8. ALL SURFACES ABOVE FINAL GRADE SHALL HAVE SMOOTH FORM FINISH.
3. CHAMFER ALL EXPOSED CONCRETE EDGES 3/4" UNLESS OTHERWISE NOTED.
4. ALL REINFORCEMENT SHALL CONFORM TO ASTM SPECIFICATION A 615, GRADE 60.
5. CLEAR COVER FOR REINFORCEMENT SHALL BE 3" FOR CONCRETE PLACED AGAINST EARTH, 2" ALL OTHER PLACES UNLESS OTHERWISE NOTED.
6. EXPANSION JOINT SEALER SHALL BE DYNATROL 1, COLOR LIMESTONE, AS MANUFACTURED BY PECORA CORP. HARLEYVILLE, PA, OR AN APPROVED EQUAL.
7. PIPE FOR WEEP HOLES SHALL BE PVC, SCHEDULE 40, WHITE, CONFORMING TO ASTM D2729.
8. RIPRAP EXCAVATED FROM THE UPSTREAM FACE OF THE DAM SHALL BE STOCKPILED AND SAVED FOR REUSE. ALL OTHER MATERIAL EXCAVATED SHALL BE SPOILED.
9. CORRUGATED METAL PIPE TO BE 14 GA CONFORMING TO TVA GENERAL CONSTRUCTION SPECIFICATION T-1, SECTION 1271.
10. FOR ADDITIONAL NOTES SEE 23W260-1.
11. FOR DESIGN CALCULATIONS AND FIELD INFORMATION, SEE RIMS NO. B65 931006 001.

PROJECT REVISION HISTORY

R 2 — REVISED TO SHOW SURVEY MONUMENTS IN CENTER OF ROAD. — RWT, MAC, J

1 — RLP, GLH, KB, VAN, VAN, CDW, JHC, J, CDW 1/95 — SIGNED AS CONSTRUCTED (PROJECT ID RG22862)

REV NO.	DATE	DSGN	DRWN	CHKD	SUPV	RVWD	APPD	ISSD	RCOD	AS CONST

SCALE: 1" = 80' EXCEPT AS NOTED

SOUTH EMBANKMENT
DAM SAFETY MODIFICATIONS

EMBANKMENT MODIFICATIONS CONCRETE WALL – PLANS, SECTIONS & DETAILS

GUNTERSVILLE PROJECT
TENNESSEE VALLEY AUTHORITY

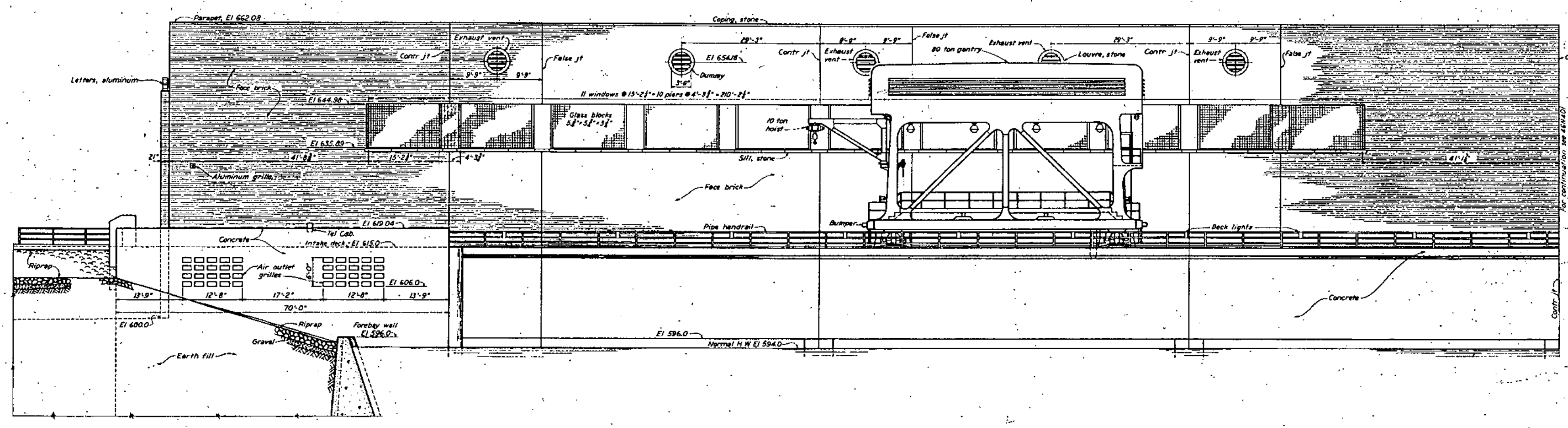
DESIGN		DISCIPLINE INTERFACE		ENGINEERING APPROVAL
DESIGNED R L PETTY	SUPERVISED V A NEWELL	1	2	C D WAGNER
DRAWN C L HICKEY	REVIEWED V A NEWELL	3	4	
CHECKED K BROWN				

ENGINEERING — DATE 12-03-93 — 6 — C — 23W261-1 — R2

ISSUED BY: J H COULSON

AS CONSTRUCTED:

6 C 23W261-1

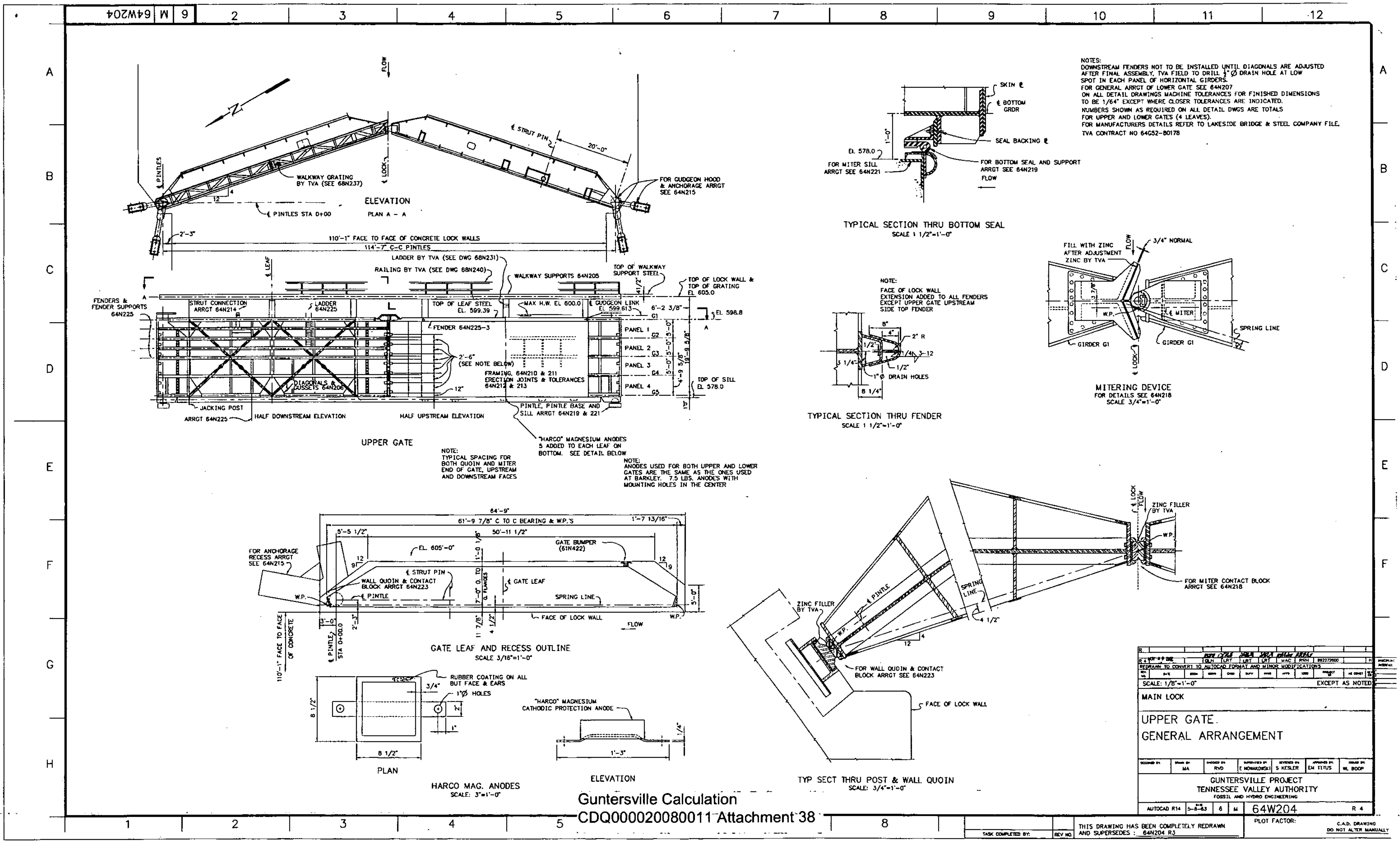


Scale 0 8 16 Feet

COMPANION DRAWINGS: 46W301 AND 46W302

Guntersville Calculation
CDQ000020080011 Attachment 37

POWERHOUSE				
ARCHITECTURAL UPSTREAM ELEVATION				
GUNTERSVILLE PROJECT TENNESSEE VALLEY AUTHORITY DESIGN DEPARTMENT				
SUBMITTED	RECOMMENDED			APPROVED
KNOXVILLE	4-26-38	6	A 4	46W300 R6
RECORD DRAWING AS CONSTRUCTED UNIT 6 10-9-52	RECORD DRAWING AS CONSTRUCTED 8-22-1940			


NOTES:
DOWNSTREAM FENDERS NOT TO BE INSTALLED UNTIL DIAGONALS ARE ADJUSTED AFTER FINAL ASSEMBLY. TVA FIELD TO DRILL 1/2" Ø DRAIN HOLE AT LOW SPOT IN EACH PANEL OF HORIZONTAL GIRDERS.
FOR GENERAL ARRGT OF LOWER GATE SEE 64N207
ON ALL DETAIL DRAWINGS MACHINE TOLERANCES FOR FINISHED DIMENSIONS TO BE 1/64" EXCEPT WHERE CLOSER TOLERANCES ARE INDICATED.
NUMBERS SHOWN AS REQUIRED ON ALL DETAIL DWGS ARE TOTALS FOR UPPER AND LOWER GATES (4 LEAVES).
FOR MANUFACTURERS DETAILS REFER TO LAKESIDE BRIDGE & STEEL COMPANY FILE.
TVA CONTRACT NO 64C52-80178
ELEVATION
PLAN A - A
110'-1" FACE TO FACE OF CONCRETE LOCK WALLS
114'-7" C-C PINTLES
UPPER GATE
HALF DOWNSTREAM ELEVATION
HALF UPSTREAM ELEVATION
TYPICAL SECTION THRU BOTTOM SEAL
SCALE 1 1/2"=1'-0"
TYPICAL SECTION THRU FENDER
SCALE 1 1/2"=1'-0"
MITERING DEVICE
FOR DETAILS SEE 64N218
SCALE 3/4"=1'-0"
GATE LEAF AND RECESS OUTLINE
SCALE 3/16"=1'-0"
PLAN
HARCO MAG. ANODES
SCALE: 3"=1'-0"
ELEVATION
TYP SECT THRU POST & WALL QUOIN
SCALE: 3/4"=1'-0"
NOTE:
ANODES USED FOR BOTH UPPER AND LOWER GATES ARE THE SAME AS THE ONES USED AT BARKLEY. 7.5 LBS. ANODES WITH MOUNTING HOLES IN THE CENTER
NOTE:
TYPICAL SPACING FOR BOTH QUOIN AND MITER END OF GATE, UPSTREAM AND DOWNSTREAM FACES
"HARCO" MAGNESIUM ANODES 5 ADDED TO EACH LEAF ON BOTTOM. SEE DETAIL BELOW

MAIN LOCK

UPPER GATE
GENERAL ARRANGEMENT

SCALE: 1/8"=1'-0" EXCEPT AS NOTED

GUNTERSVILLE PROJECT
TENNESSEE VALLEY AUTHORITY
FOSSIL AND HYDRO ENGINEERING

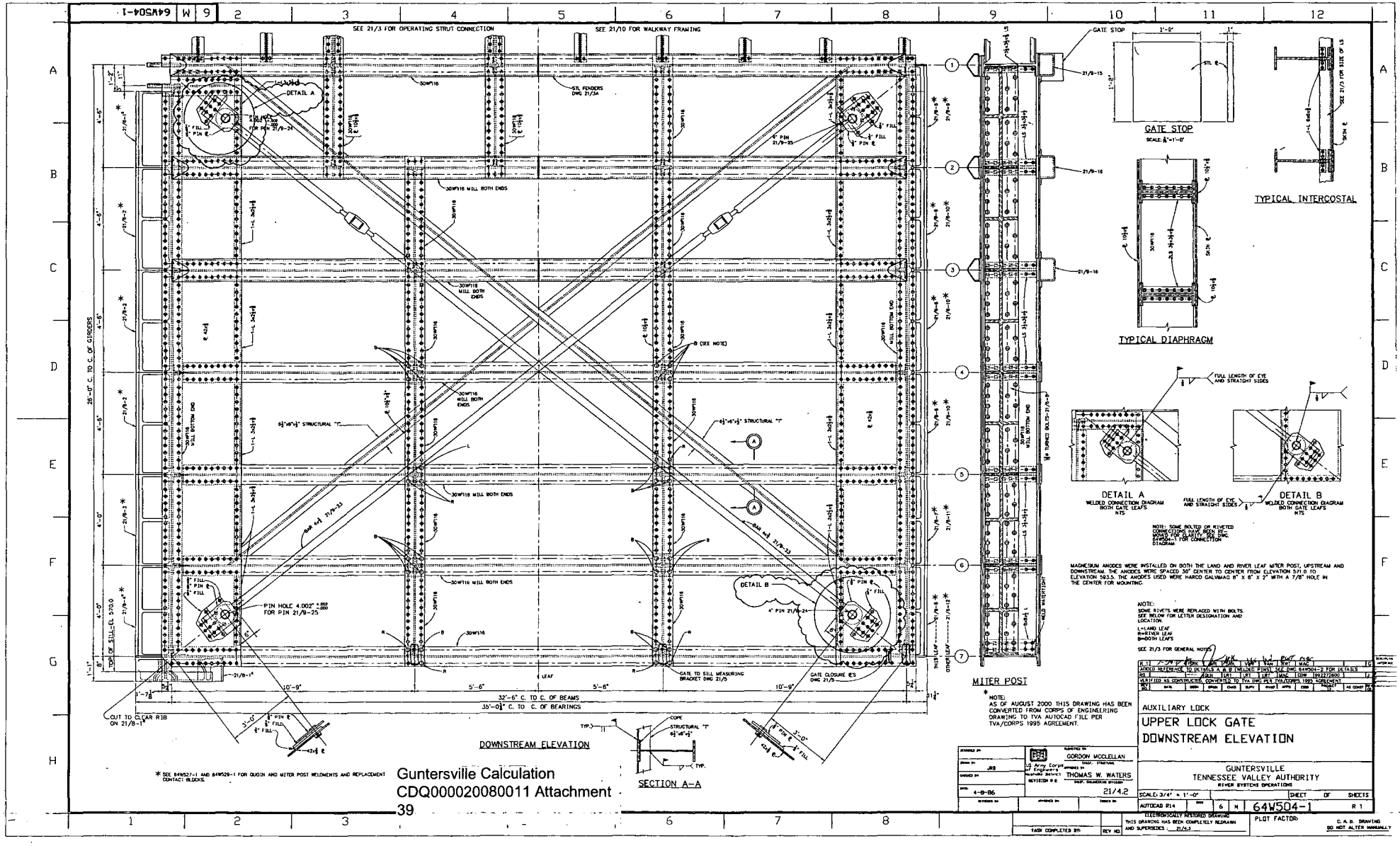
AUTOCAD R14 | 5-8-63 | 6 | M | 64W204 | R 4

REDRAWN TO CONVERT TO AUTOCAD FORMAT AND MINOR MODIFICATIONS

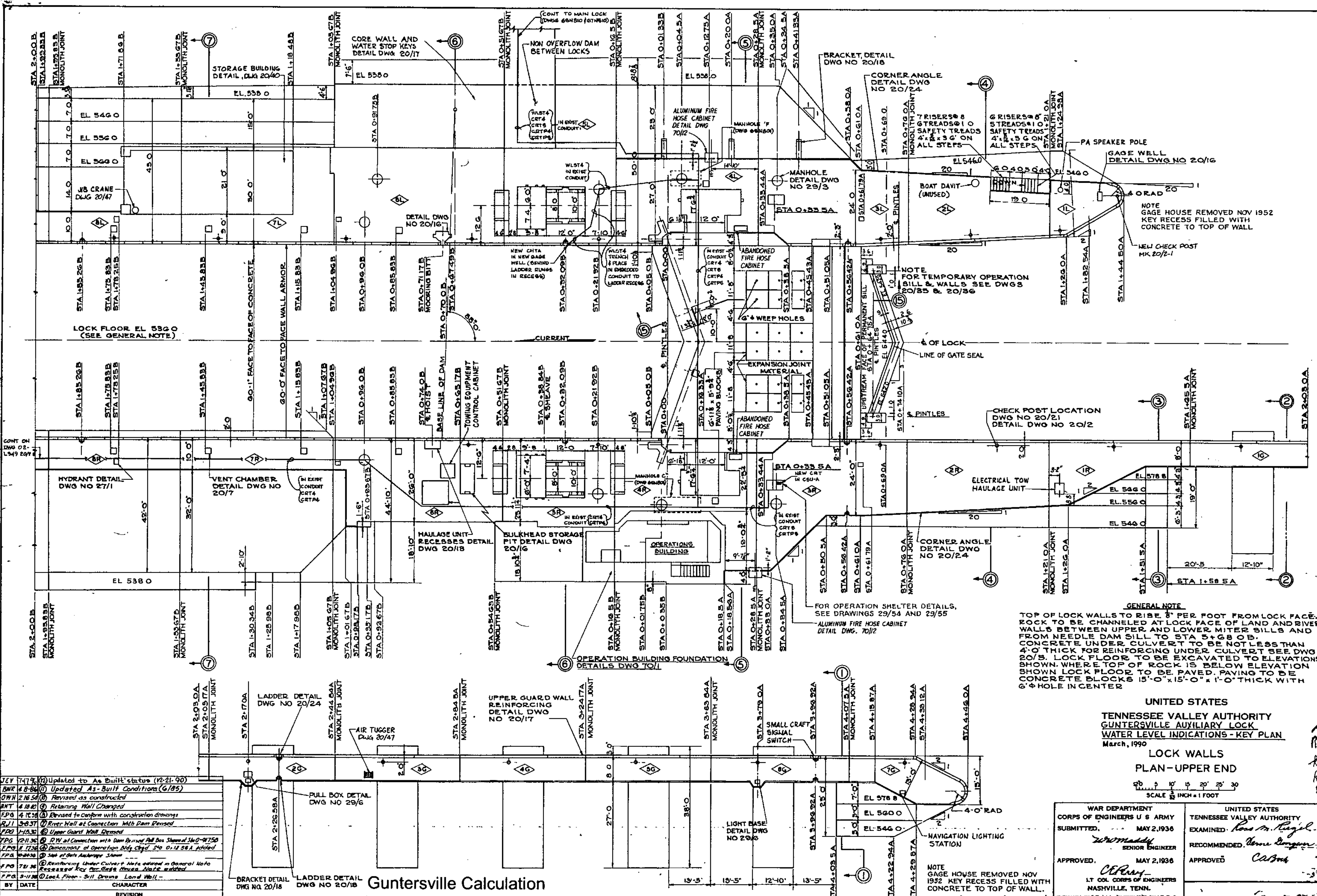
THIS DRAWING HAS BEEN COMPLETELY REDRAWN AND SUPERSEDES : 64N204 R3

C.A.D. DRAWING DO NOT ALTER MANUALLY

Guntersville Calculation
CDQ000020080011 Attachment 38



Guntersville Calculation CDQ000020080011 Attachment 39



GENERAL NOTE

TOP OF LOCK WALLS TO RISE ⅛" PER FOOT FROM LOCK FACE. ROCK TO BE CHANNELED AT LOCK FACE OF LAND AND RIVER WALLS BETWEEN UPPER AND LOWER MITER SILLS AND FROM NEEDLE DAM SILL TO STA 5+68 O.B. CONCRETE UNDER CULVERT TO BE NOT LESS THAN 4'-0" THICK FOR REINFORCING UNDER CULVERT SEE DWG 20/5. LOCK FLOOR TO BE EXCAVATED TO ELEVATIONS SHOWN. WHERE TOP OF ROCK IS BELOW ELEVATION SHOWN LOCK FLOOR TO BE PAVED. PAVING TO BE CONCRETE BLOCKS 15'-0" x 15'-0" x 1'-0" THICK WITH 6" ⌀ HOLE IN CENTER

UNITED STATES
TENNESSEE VALLEY AUTHORITY
GUNTERSVILLE AUXILIARY LOCK
WATER LEVEL INDICATIONS - KEY PLAN
March, 1990

LOCK WALLS
PLAN - UPPER END

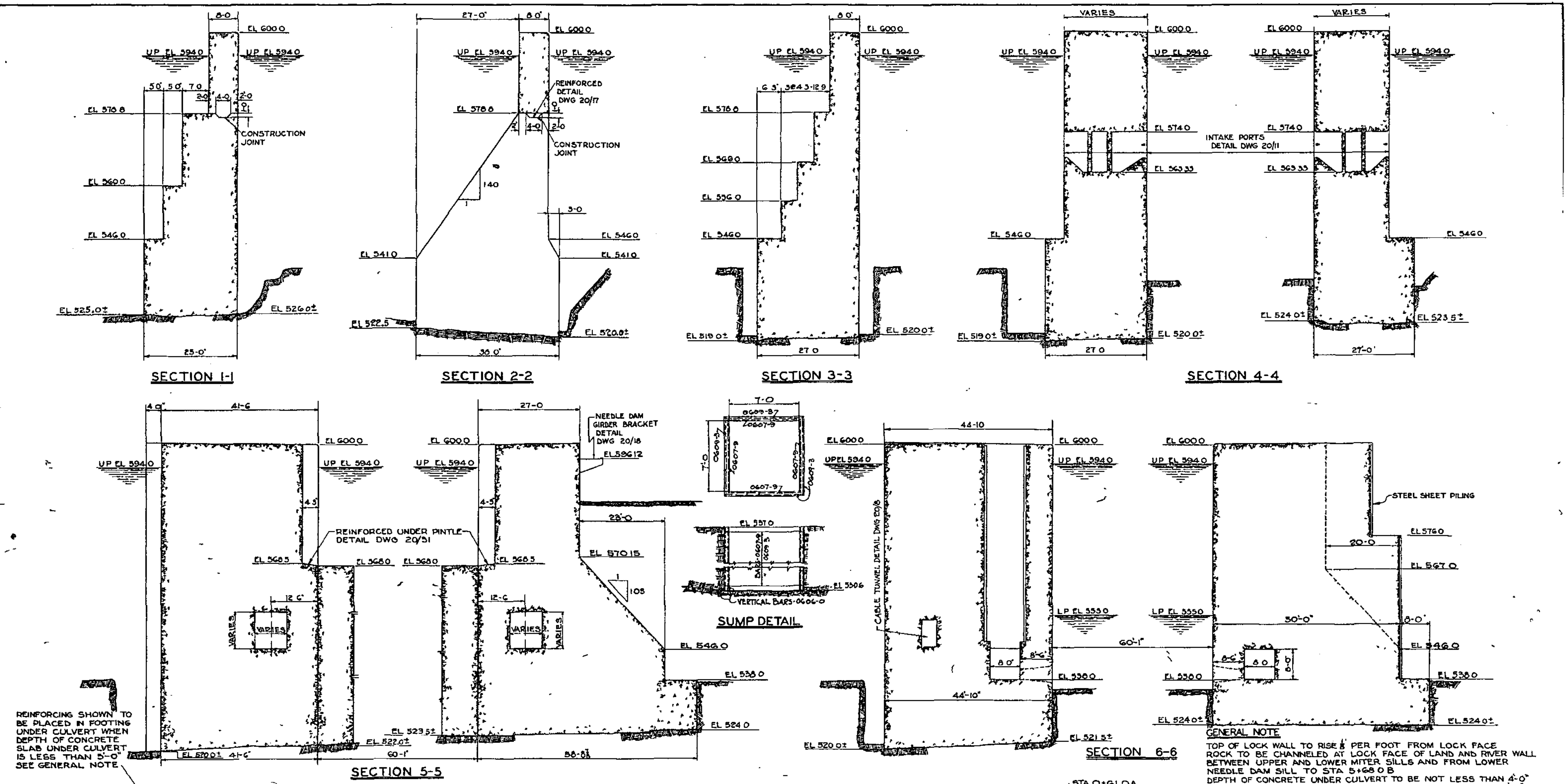
SCALE 3/32 INCH = 1 FOOT

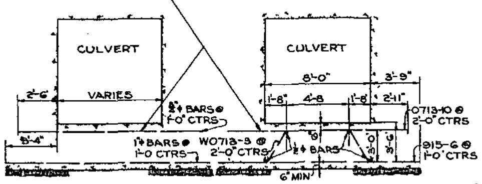
WAR DEPARTMENT CORPS OF ENGINEERS U S ARMY	UNITED STATES TENNESSEE VALLEY AUTHORITY
SUBMITTED. MAY 2, 1936 W.W. Maddy SENIOR ENGINEER	EXAMINED. Ross M. Riegel
APPROVED. MAY 2, 1936 C.E. Perry LT COL CORPS OF ENGINEERS NASHVILLE, TENN.	RECOMMENDED. Verne Gongwer
DRAWN BY F J M CHECKED BY F P G	APPROVED C.A. Bock

20/L12

BY	DATE	CHARACTER
JEV	7-17-90	(12) Updated to As Built status (12-21-90)
BWR	4-8-86	(11) Updated As-Built Conditions (6/85)
OWH	2-16-54	(10) Revised as constructed
RNT	4-18-40	(9) Retaining Wall Changed
FPG	4-10-38	(8) Revised to conform with construction drawings
RJI	3-8-37	(7) River Wall at Connection With Dam Revised
FPG	1-15-36	(6) Upper Guard Wall Revised
FPG	12-11-36	(5) RW at Connection with Dam Revised Pull Box Shown at Sta 0-91.75B
FPG	11-17-36	(4) Dimensions of Operation Bldg Chgd Sta 0+12.56A Added
FPG	10-24-36	(3) Slab at Gate Anchorage Shown
FPG	7-21-36	(2) Reinforcing Under Culvert Note added in General Note Recessed Key for Gage House Note added
FPG	5-11-36	(1) Lock Floor - Sill Drains Land Wall -
		REVISION

Guntersville Calculation
CDQ000020080011 Attachment 40





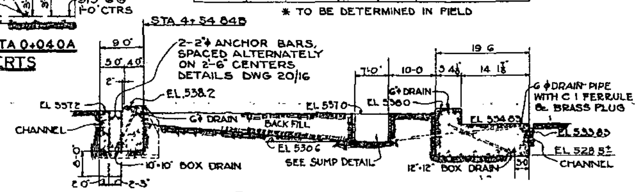
STA 5+66.0 B TO STA 4+25.43 B STA 4+25.43 B TO STA 0+04.0 A

TYPICAL REINFORCING UNDER CULVERTS
LAND AND RIVER WALLS

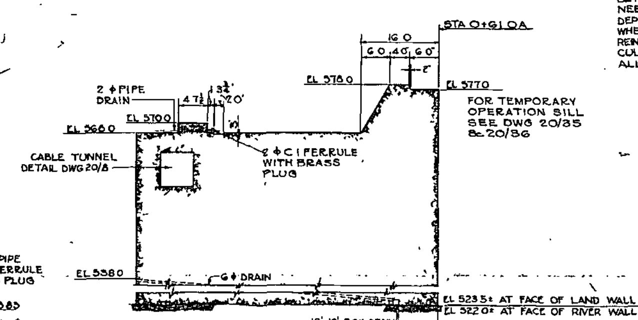
SCALE 1/4"=1'-0"

REINFORCING BAR SCHEDULE					
MARK	SIZE	LENGTH	MAKE	WT EA	BENDING DIAGRAM
W0713-3	7/8" ϕ	13'-3"	*	27.45	BAR-W0713-3
0713-10	7/8" ϕ	13'-10"	*	28.68	
915-6	1 1/8" □	15'-6"	*	67.45	
—	7/8" ϕ	*	*	*	
—	3/4" ϕ	*	*	*	
—	1" ϕ	*	*	*	

* TO BE DETERMINED IN FIELD



SECTION 14-14



SECTION 15-15

GENERAL NOTE

TOP OF LOCK WALL TO RISE 1/8" PER FOOT FROM LOCK FACE
ROCK TO BE CHANNELED AT LOCK FACE OF LAND AND RIVER WALL BETWEEN UPPER AND LOWER MITER SILLS AND FROM LOWER NEEDLE DAM SILL TO STA 5+68.0 B
DEPTH OF CONCRETE UNDER CULVERT TO BE NOT LESS THAN 4'-0"
WHERE DEPTH OF CONCRETE UNDER CULVERT IS LESS THAN 5'-0" REINFORCING TO BE PLACED AS SHOWN IN "TYPICAL REINFORCING UNDER CULVERT" DETAIL
ALL WALLS TO BE KEYED NOT LESS THAN 1'-0" INTO SOLID ROCK

UNITED STATES
TENNESSEE VALLEY AUTHORITY
GUNTERSVILLE AUXILIARY LOCK
LOCK WALLS
SECTIONS

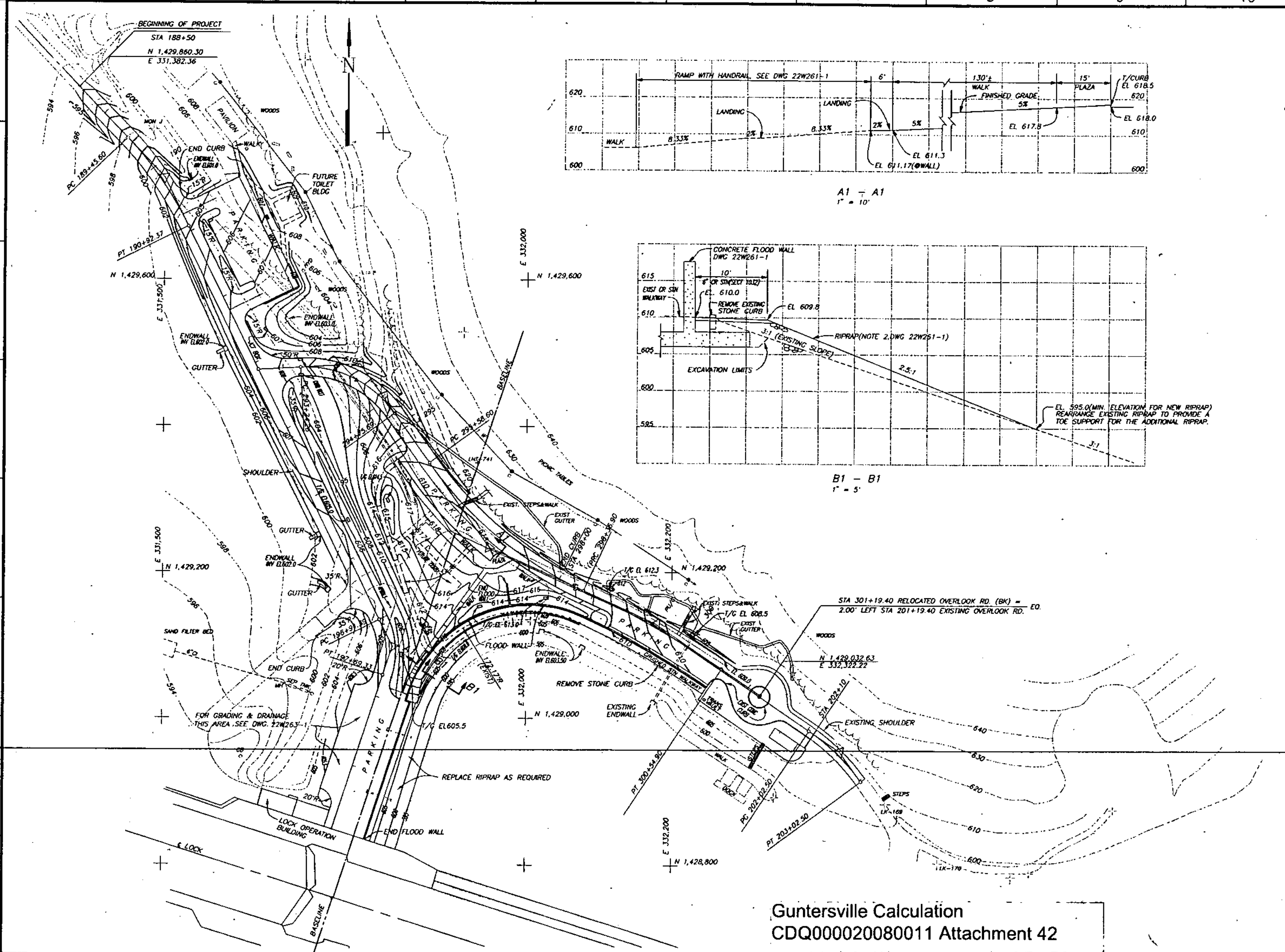
12 0 5 10 15 20 25 30'
SCALE 1/32 INCH = 1 FOOT

BY	DATE	CHARACTER
ELL	4 8 86	⑦ Updated As built Conditions 6/85
RHT	5 6 40	Section 15 15 Revised
FPG	3-23 38	⑤ Revised To Conform With Construction Drawings
FPG	12 18 36	④ Sect 5 5 El Needle Dam Girder Bracket
FPG	7-4 36	③ Reinforcing Bar W0713-6 to W0713-3
FPG	6-17-36	② General Note & Typical Reinforcing Under Culverts Added
FPG	5 12 36	① Sections 5 5 & 6 6 - 14 14 - 15 15
REVISION		

WAR DEPARTMENT	UNITED STATES
CORPS OF ENGINEERS U S ARMY	TENNESSEE VALLEY AUTHORITY
SUBMITTED MAY 2, 1936	EXAMINED Ross M. Riegel
[signature] SENIOR ENGINEER	RECOMMENDED Verne Gongwer
APPROVED MAY 2, 1936	APPROVED C. A. Bock
[signature] LT COL CORPS OF ENGINEERS NASHVILLE, TENN	
DRAWN BY C E D. CHECKED BY F P G	KE-10

02-L349 20/56

Guntersville Calculation
CDQ000020080011 Attachment 41



NOTES:

1. FOR GENERAL NOTES, SEE DRAWING 22W261-1.
2. ALL WORK SHALL BE DONE IN ACCORDANCE WITH GENERAL CONSTRUCTION SPECIFICATION NO. T-1 UNLESS OTHERWISE NOTED. ALL SECTION NUMBERS REFER DIRECTLY TO THE T-1 SPECIFICATION.
3. FOUNDATION PREPARATION FOR ALL EMBANKMENTS SHALL CONSIST OF REMOVING ORGANIC TOPSOIL TO A DEPTH THAT WILL REMOVE ALL ROOTS AND EXCAVATION SHALL CONTINUE TO A DEPTH THAT WILL OBTAIN A FOUNDATION THAT WILL SUPPORT EARTHMOVING EQUIPMENT WITHOUT RUTTING INTO THE GROUND AND HEAVING THE GROUND SO AS TO REDUCE ITS STABILITY. CLEARING AND GRUBBING SHALL BE IN ACCORDANCE WITH SECTION 101.
4. AT THE BEGINNING OF GRADING OPERATIONS, ALL TOPSOIL SUITABLE FOR USE IN ESTABLISHING VEGETATION IN FINISHED AREAS SHALL BE STOCKPILED FOR FUTURE USE.
5. EARTH BORROW IS TO BE OBTAINED FROM THE DESIGNATED BORROW AREA OR FROM AN OFFSITE BORROW PIT APPROVED BY THE ENGINEER.
6. CLASS "A" EARTHFILL, CAREFULLY CONTROLLED FILLS, SHALL BE PLACED IN 8 INCH THICK LAYERS IN ACCORDANCE WITH SECTION 120. EACH LAYER SHALL BE COMPECTED TO AT LEAST 95% OF MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D698. MOISTURE CONTENT SHALL BE BETWEEN 3% BELOW AND 3% ABOVE OPTIMUM MOISTURE CONTENT. IN-PLACE DENSITY TESTS USING THE SAND CONE (ASTM D1556) OR RUBBER BALLOON (ASTM D2167) TEST METHODS SHALL BE CONDUCTED AT A RATE OF AT LEAST ONE TEST PER EACH 2000 CY OF BACKFILL PLACED OR A MINIMUM OF ONE PER DAY THAT FILL IS PLACED. IF NUCLEAR DENSITY METHODS ARE USED (ASTM D2922) SUFFICIENT NUMBERS OF THE SAND CONE OR RUBBER BALLOON TEST WILL BE REQUIRED TO CORRELATE AND VERIFY THE NUCLEAR GAUGE RESULTS.
7. CLASS "B" EARTHFILL, COMMON FILLS, SHALL BE UNCLASSIFIED MATERIAL AND SHALL BE PLACED IN APPROXIMATELY 12 INCH LAYERS AND COMPACTED WITH HAULING EQUIPMENT.
8. PROFILE GRADE REPRESENTS FINISHED GRADE ELEVATION ON CENTERLINE ALIGNMENT.
9. DASHED CONTOURS INDICATE EXISTING GROUND. SOLID CONTOURS INDICATE FINISHED GRADING AND PAVING.
10. SEEDING SHALL BE TYPE 1, MIXTURE 2 REBEL FESCUE SPREAD AT A RATE OF 120 LBS. PER ACRE.
11. FERTILIZING, LIMING, AND SEEDING SHALL BE IN ACCORDANCE WITH SECTION 580. MULCHING SHALL BE IN ACCORDANCE WITH SECTION 582.

R 1	8-31-95	CHR		CBD	CBD	CDW	CDW	JHC	RG22862	CDW 8/95
FINAL FIELD REVISIONS										
R 0	8-1-94	CHR	CHR	CBD	CBD	CDW	CDW	JHC	RG22862	
ORIGINAL ISSUE										

SCALE: 1" = 50' EXCEPT AS NOTED

NORTH EMBANKMENT
DAM SAFETY MODIFICATIONS

GENERAL GRADING

C.H.ROBERTS	C.H.ROBERTS	C.B.DODD	C.B.DODD	C.D.WAGNER	C.D.WAGNER	J.H.COULSON

GUNTERSVILLE PROJECT
TENNESSEE VALLEY AUTHORITY
FOSSIL AND HYDRO ENGINEERING

AUTOCAD R12 | 8-1-94 | 6 | C | 22W260-1 | R 1

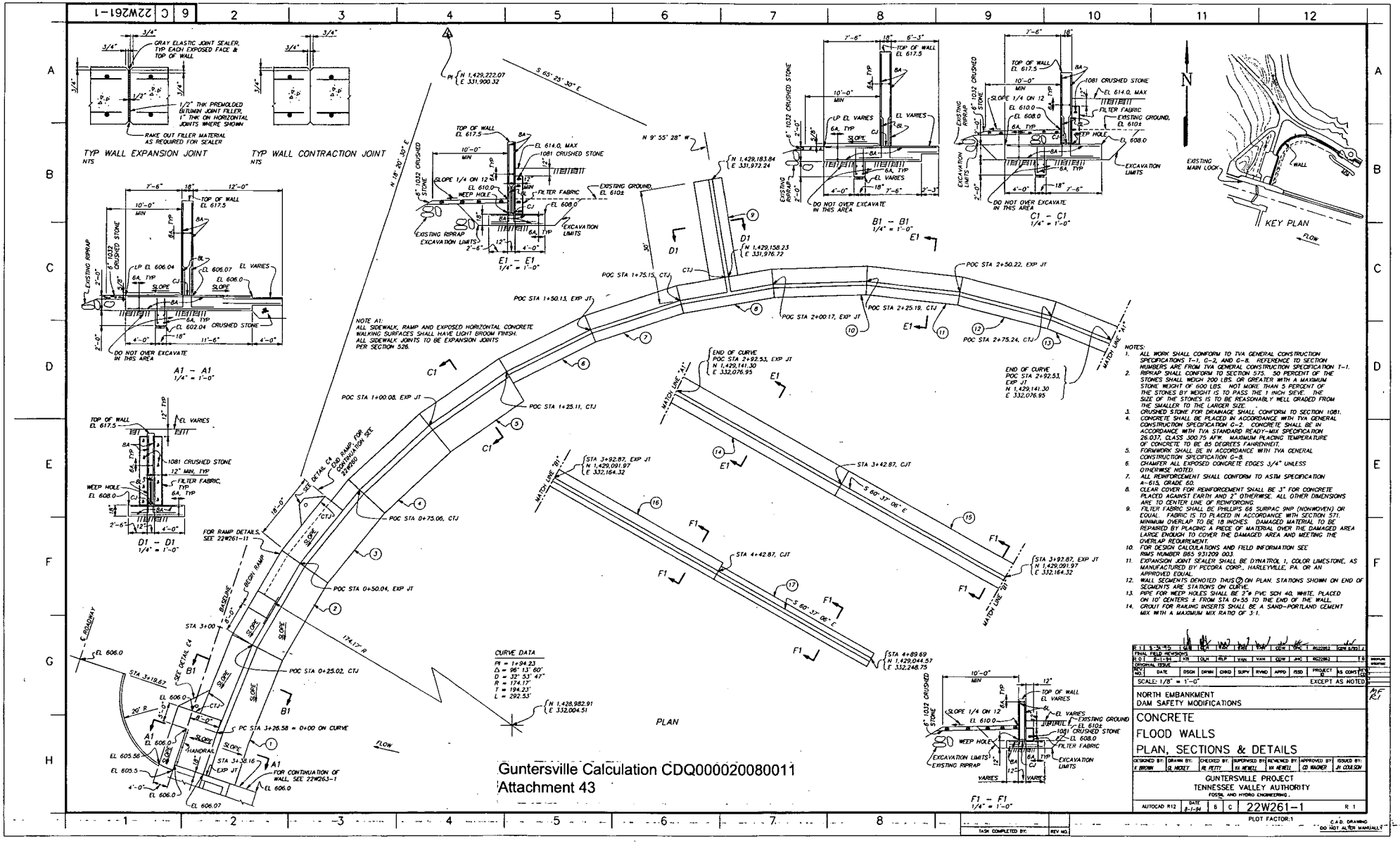
MF R1

PLOT FACTOR:1

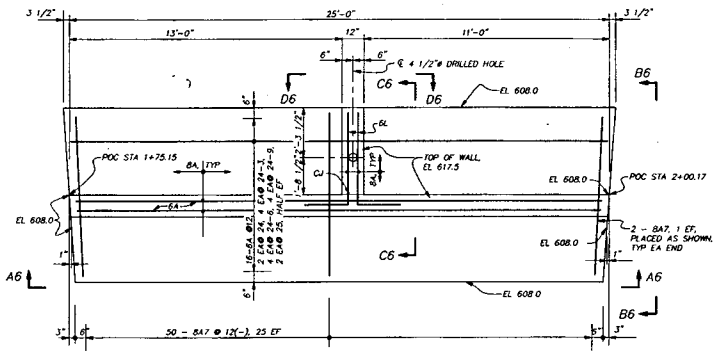
C.A.D. DRAWING
DO NOT ALTER MANUALLY

TASK COMPLETED BY: REV NO.

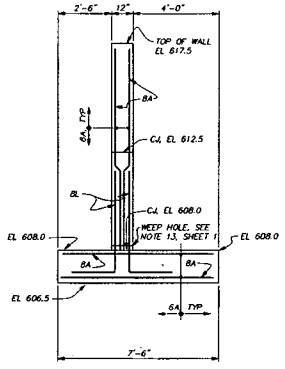
Guntersville Calculation
CDQ000020080011 Attachment 42



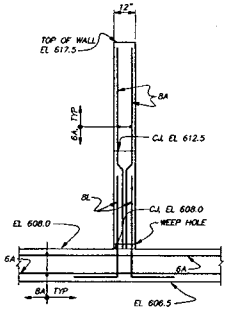
Guntersville Calculation CDQ000020080011
Attachment 43



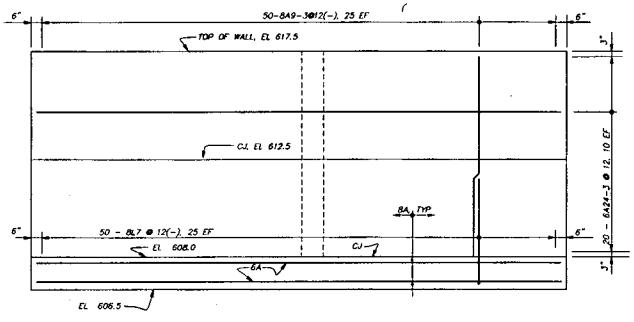
PLAN - WALL SEGMENT 8



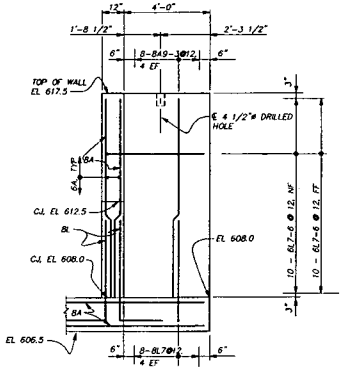
B6 - B6



D6 - D6



A6 - A6



C6 - C6

BENT BAR LIST

BAR MARK	NO. REQD	BENDING DIMENSIONS a	b	c	e	f	r
6L7-6	20	5-0	EX				
6L7	58	2-0	EX				

STRAIGHT BAR LIST

BAR SIZE	BAR LENGTH	NO. REQD	BAR SIZE	BAR LENGTH	NO. REQD	BAR SIZE	BAR LENGTH	NO. REQD
6	24-0	2	8	7-0	54			
	24-3	24		9-3	58			
	24-6	4						
	24-9	4						
	25-0	2						

NOTES:
1. FOR LIST SEE 22W261-1.

PROJECT REVISION HISTORY

NO.	DATE	DSGN	DRWN	CHKD	SUPV	RVWD	APPD	CSD	PROJECT ID	AS CONS
R1	5-11-95 AND LOCATION FOR DRILLED HOLES	GLH	GLH	VAN	VAN	VAN	CDW	JHC	R222962	F
R 2	5-31-95	GLH	GLH	VAN	VAN	VAN	CDW	JHC	R222962	CDW 8/25/
SIGNED AS CONSTRUCTED										
R 0	8-1-94	RJB	GLH	RLP	VAN	VAN	CDW	JHC	R222962	0
ORIGINAL ISSUE										

SCALE: 1/2" = 1'-0 EXCEPT AS NOTED

NORTH EMBANKMENT
DAM SAFETY MODIFICATIONS

CONCRETE
FLOOD WALLS
PLAN, SECTIONS & DETAILS

DESIGNED BY:	DRAWN BY:	CHECKED BY:	SUPERVISED BY:	REVIEWED BY:	APPROVED BY:	ISSUED BY:
K BROWN	Q HICKEY	RL PETTY	W NEWELL	W NEWELL	CD MAUNEY	JV COLSON

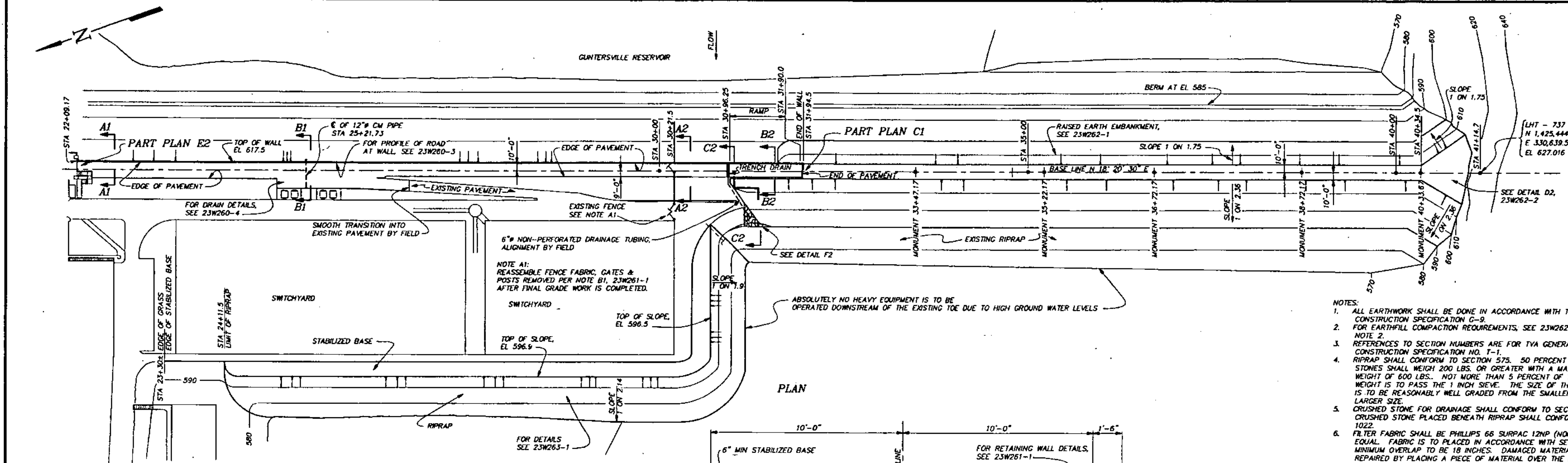
GUNTERSVILLE PROJECT
TENNESSEE VALLEY AUTHORITY
FOSSIL AND HYDRO ENGINEERING

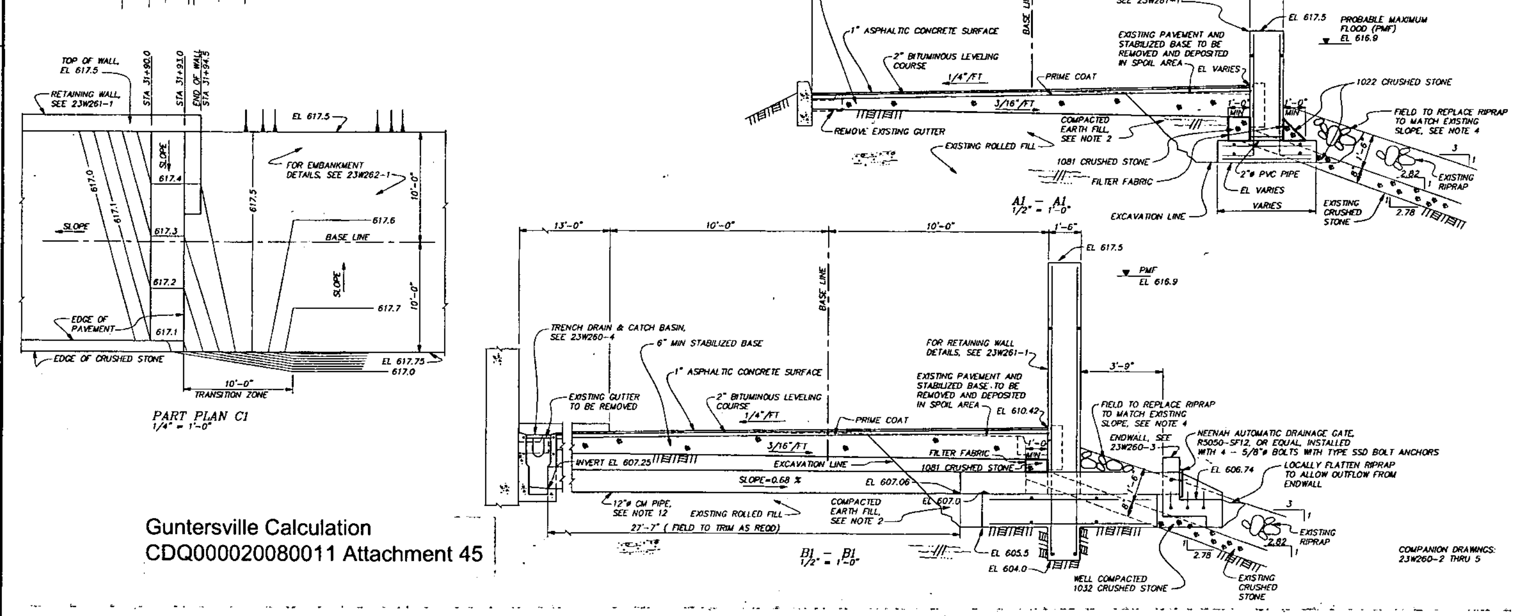
AUTOCAD R12 | DATE 8-1-94 | 6 | C | 22W261-6 | R 2

PLOT FACTOR:1 — C.A.D. DRAWING DO NOT ALTER MANUALLY

TASK COMPLETED BY: | REV NO.

Guntersville Calculation
CDQ000020080011 Attachment 44





NOTES:

1. ALL EARTHWORK SHALL BE DONE IN ACCORDANCE WITH TVA GENERAL CONSTRUCTION SPECIFICATION G-9.
2. FOR EARTHFILL COMPACTION REQUIREMENTS, SEE 23W262-1, GENERAL NOTE 2.
3. REFERENCES TO SECTION NUMBERS ARE FOR TVA GENERAL CONSTRUCTION SPECIFICATION NO. T-1.
4. RIPRAP SHALL CONFORM TO SECTION 575. 50 PERCENT OF THE STONES SHALL WEIGH 200 LBS. OR GREATER WITH A MAXIMUM STONE WEIGHT OF 600 LBS.. NOT MORE THAN 5 PERCENT OF THE STONES BY WEIGHT IS TO PASS THE 1 INCH SIEVE. THE SIZE OF THE STONES IS TO BE REASONABLY WELL GRADED FROM THE SMALLER TO THE LARGER SIZE.
5. CRUSHED STONE FOR DRAINAGE SHALL CONFORM TO SECTION 1081. CRUSHED STONE PLACED BENEATH RIPRAP SHALL CONFORM TO SECTION 1022.
6. FILTER FABRIC SHALL BE PHILLIPS 66 SURPAC 12NP (NONWOVEN) OR EQUAL. FABRIC IS TO PLACED IN ACCORDANCE WITH SECTION 571. MINIMUM OVERLAP TO BE 18 INCHES. DAMAGED MATERIAL TO BE REPAIRED BY PLACING A PIECE OF MATERIAL OVER THE DAMAGED AREA LARGE ENOUGH TO COVER THE DAMAGED AREA AND MEETING THE OVERLAP REQUIREMENT.
7. CONCRETE SHALL BE PLACED IN ACCORDANCE WITH TVA GENERAL CONSTRUCTION SPECIFICATION G-2. CONCRETE SHALL BE IN ACCORDANCE WITH TVA STANDARD READY-MIX SPECIFICATION 26.037, CLASS 300.75 AFW. MAXIMUM PLACING TEMPERATURE OF CONCRETE SHALL BE 85 DEGREES FAHRENHEIT.
8. FORMWORK SHALL BE IN ACCORDANCE WITH TVA GENERAL CONSTRUCTION SPECIFICATION G-8. ALL SURFACES ABOVE FINAL GRADE SHALL HAVE SMOOTH FORM FINISH.
9. CHAMFER ALL EXPOSED CONCRETE EDGES 3/4" UNLESS OTHERWISE NOTED.
10. ALL REINFORCEMENT SHALL CONFORM TO ASTM SPECIFICATION A-615, GRADE 60.
11. CLEAR COVER FOR REINFORCEMENT SHALL BE 3" UNLESS OTHERWISE NOTED. ALL OTHER DIMENSIONS ARE TO CENTERLINE OF REINFORCEMENT.
12. CORRUGATED METAL PIPE SHALL BE 14 GA CONFORMING TO SECTION 1271. EXCAVATION AND PLACEMENT OF PIPES ARE TO BE DONE IN STAGES SO THAT AT NO TIME IS AN EXCAVATED AREA OPEN ACROSS THE ENTIRE CREST OF THE DAM.
13. NON-PERFORATED DRAINAGE TUBING SHALL CONFORM TO AASHTO M252.
14. PAVEMENT MATERIALS SHALL CONFORM TO SECTION 225 FOR STABILIZED BASE, SECTION 320 FOR PRIME COAT, SECTION 335 FOR BITUMINOUS LEVELING COURSE AND SECTION 345 FOR ASPHALTIC CONCRETE.
15. FOR DESIGN CALCULATIONS AND FIELD INFORMATION SEE RIMS NUMBER B65 931006 001.

PROJECT REVISION HISTORY

R 2 | 4-27-94 | DJHF | | JAH | | | RWT | MAC | | | J
REVISED TO ADD SURVEY MONUMENTS

1 | | RLP | GLH | KB | VAN | VAN | CDW | JHC | J | CDW 1/95
SIGNED AS CONSTRUCTED (PROJECT ID RG22862)

SCALE: 1" = 100' EXCEPT AS NOTED

SOUTH EMBANKMENT
DAM SAFETY MODIFICATIONS

FINISHED GRADE PLANS, SECTIONS AND DETAILS

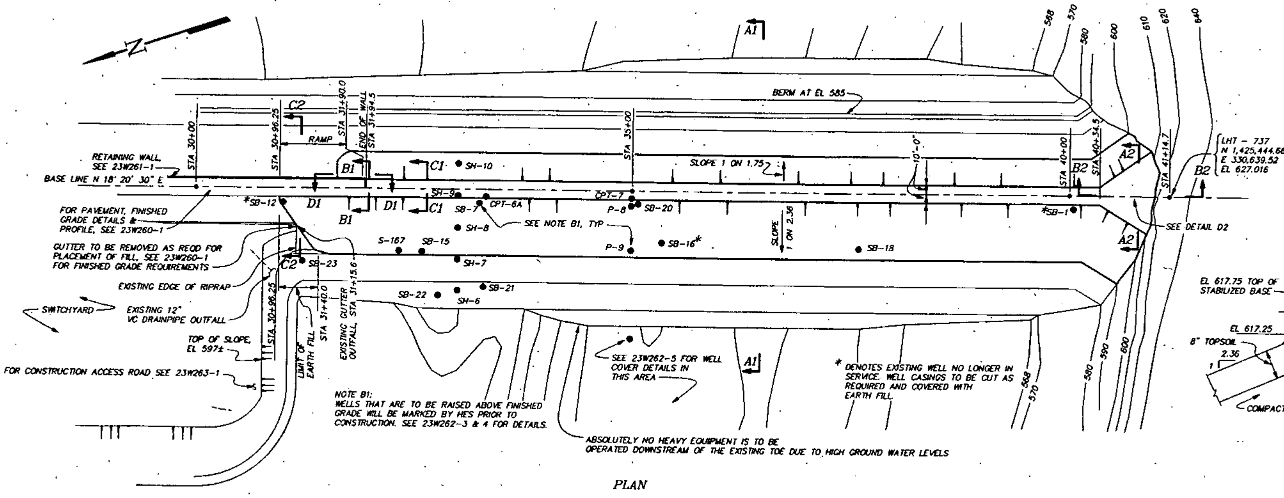
GUNTERSVILLE PROJECT
TENNESSEE VALLEY AUTHORITY

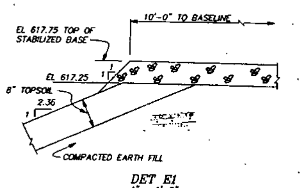
DESIGNED R L PETTY — SUPERVISED V A NEWELL
DRAWN C L HICKEY — REVIEWED V A NEWELL
CHECKED K BROWN
ENGINEERING APPROVAL C D WAGNER

ENGINEERING DATE 12-03-93 | 6 | C | 23W260-1 | R 2

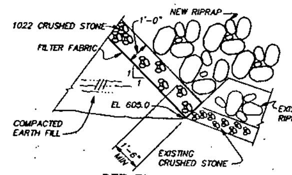
ISSUED BY: J M COULSON

Guntersville Calculation
CDQ000020080011 Attachment 45

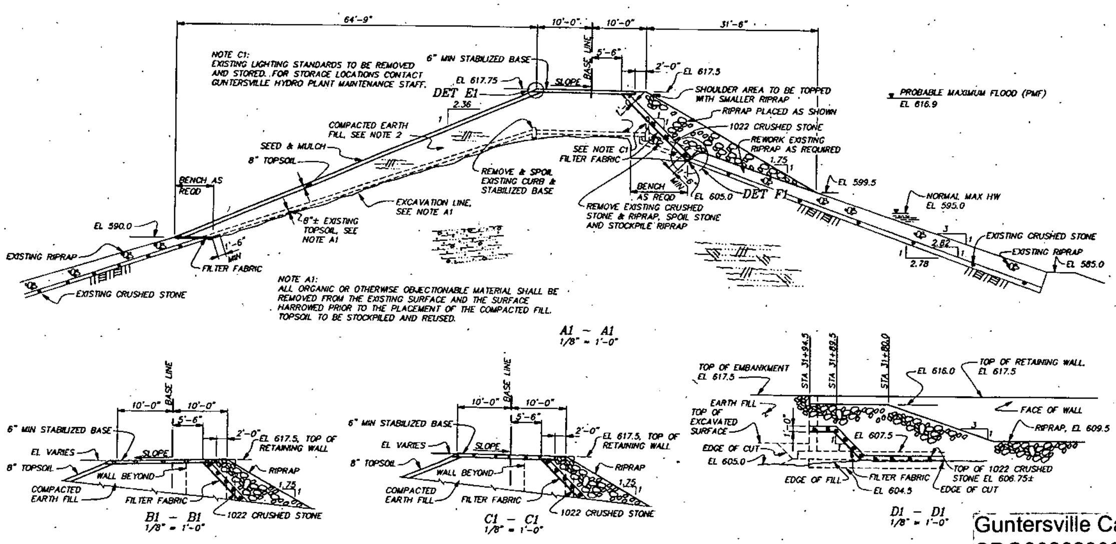




DET E1
1" = 1'-0"



DET F1
1/2" = 1'-0"



NOTES:

1. ALL EARTHWORK SHALL BE DONE IN ACCORDANCE WITH TVA GENERAL CONSTRUCTION SPECIFICATION G-9.
2. EARTHFILL MATERIAL IS TO BE OBTAINED FROM AN OFF-SITE BORROW AREA APPROVED BY THE ENGINEER. EARTHFILL SHALL BE PLACED IN LAYERS OF APPROXIMATELY 6 INCHES. EACH LAYER SHALL BE COMPACTED TO AT LEAST 95% OF MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D698. MOISTURE CONTENT SHALL BE WITHIN 3% ABOVE OR BELOW THE OPTIMUM MOISTURE CONTENT. IN-PLACE DENSITY TESTS USING THE SAND CONE (ASTM D1556) OR RUBBER BALLOON (ASTM D 2167) TEST METHODS SHALL BE CONDUCTED AT A RATE OF AT LEAST ONE TEST PER EACH 2000 CY OF EARTHFILL PLACED OR A MINIMUM OF ONE PER DAY THAT EARTHFILL IS PLACED. IF NUCLEAR DENSITY METHODS ARE USED (ASTM D2922), SUFFICIENT NUMBERS OF THE SAND CONE OR RUBBER BALLOON TESTS WILL BE REQUIRED TO CORRELATE AND VERIFY THE NUCLEAR GAUGE RESULTS.
3. REFERENCES TO SECTION NUMBERS ARE FOR TVA GENERAL CONSTRUCTION SPECIFICATION NO. T-1.
4. RIPRAP SHALL CONFORM TO SECTION 575. 50 PERCENT OF THE STONES SHALL WEIGH 200 LBS. OR GREATER WITH A MAXIMUM STONE WEIGHT OF 600 LBS.. NOT MORE THAN 5 PERCENT OF THE STONES BY WEIGHT IS TO PASS THE 1 INCH SIEVE. THE SIZE OF THE STONES IS TO BE REASONABLY WELL GRADED FROM THE SMALLER TO THE LARGER SIZE.
5. CRUSHED STONE FOR DRAINAGE SHALL CONFORM TO SECTION 1081. CRUSHED STONE PLACED BENEATH RIPRAP SHALL CONFORM TO SECTION 1022.
6. FILTER FABRIC SHALL BE PHILLIPS 66 SURPAC 12NP (NONWOVEN) OR EQUAL. FABRIC IS TO BE PLACED IN ACCORDANCE WITH SECTION 571. MINIMUM OVERLAP TO BE 18 INCHES. DAMAGED MATERIAL TO BE REPAIRED BY PLACING A PIECE OF MATERIAL OVER THE DAMAGED AREA LARGE ENOUGH TO COVER THE DAMAGED AREA AND MEETING THE OVERLAP REQUIREMENT.
7. STABILIZED BASE TO CONSIST OF CRUSHED STONE CONFORMING TO SECTION 1032, PLACED IN ACCORDANCE WITH SECTION 225.
8. CONCRETE USED TO FILL VOIDS IN EXISTING ROCK IN THE SOUTH ABUTMENT SHALL BE PLACED IN ACCORDANCE WITH TVA GENERAL CONSTRUCTION SPECIFICATION G-2. EXISTING EARTH IS TO BE REMOVED TO EXPOSE ROCK. ALL LOOSE ROCK IS TO BE REMOVED. CREVICES ARE TO BE CLEANED TO A DEPTH OF TWICE THEIR WIDTH OR AS DEEP AS PRACTICAL. NOTIFY HYDRO ENGINEERING SERVICES, CIVIL ENGINEERING SECTION FOR INSPECTION OF ROCK SURFACE PRIOR TO PLACEMENT OF CONCRETE. CONCRETE SHALL BE IN ACCORDANCE WITH TVA STANDARD READY-MIX SPECIFICATION 26.037, CLASS 300.75 AFW. MAXIMUM PLACING TEMPERATURE OF CONCRETE SHALL BE 85 DEGREES FAHRENHEIT. MINIMUM THICKNESS OF CONCRETE TO BE 12 INCHES.
9. FORMWORK SHALL BE IN ACCORDANCE WITH TVA GENERAL CONSTRUCTION SPECIFICATION G-8.
10. RIPRAP EXCAVATED FROM THE UPSTREAM FACE OF THE DAM SHALL BE STOCKPILED AND SAVED FOR REUSE.
11. FOR ADDITIONAL NOTES SEE 23W260-1.
12. FOR DESIGN CALCULATIONS AND FIELD INFORMATION, SEE RIMS NUMBER B65 931006 001.

GROUND WATER WELL TABLE

WELL NO.	COORDINATES		APPROXIMATE EXISTING ELEV TOP OF GROUND	APPROXIMATE FINISHED GRADE ELEV
	NORTH	EAST		
SH-10	1,426,208.8	330,923.4	603.7	606.7
SH-9	1,426,220.4	330,889.2	610.0	617.7
SH-8	1,426,232.0	330,854.7	598.8	603.3
S-167	1,426,302.8	330,850.3	590.0	592.0
SB-15	1,426,278.1	330,841.4	590.0	591.7
SB-7	1,426,199.7	330,873.6	608.2	615.2
CPT-6A	1,426,189.8	330,878.0	610.0	617.7
CPT-7	1,426,031.4	330,825.1	610.0	617.7
P-8	1,426,034.5	330,816.9	607.6	614.4
P-9	1,426,050.3	330,769.4	590.9	593.2
SB-20	1,426,026.5	330,816.9	608.4	615.5
SB-18	1,425,800.8	330,691.2	592.3	595.0

GROUND WATER WELLS NOT TO BE MODIFIED

SH-6	SH-7	SB-21	SB-22	SB-23		

COMPANION DRAWINGS:
23W262-2 THRU 8

Guntersville Calculation
CDQ000020080011 Attachment 46

1	2-16-95	RLP	BCH	KB	VAN	VAN	CDW	VHC	J	CDW 1/95
	SIGNED AS CONSTRUCTED (PROJECT ID RG22862)									

SCALE: 1" = 50' EXCEPT AS NOTED

SOUTH EMBANKMENT
DAM SAFETY MODIFICATIONS

EMBANKMENT MODIFICATIONS
EARTH DAM - PLANS,
SECTIONS & DETAILS

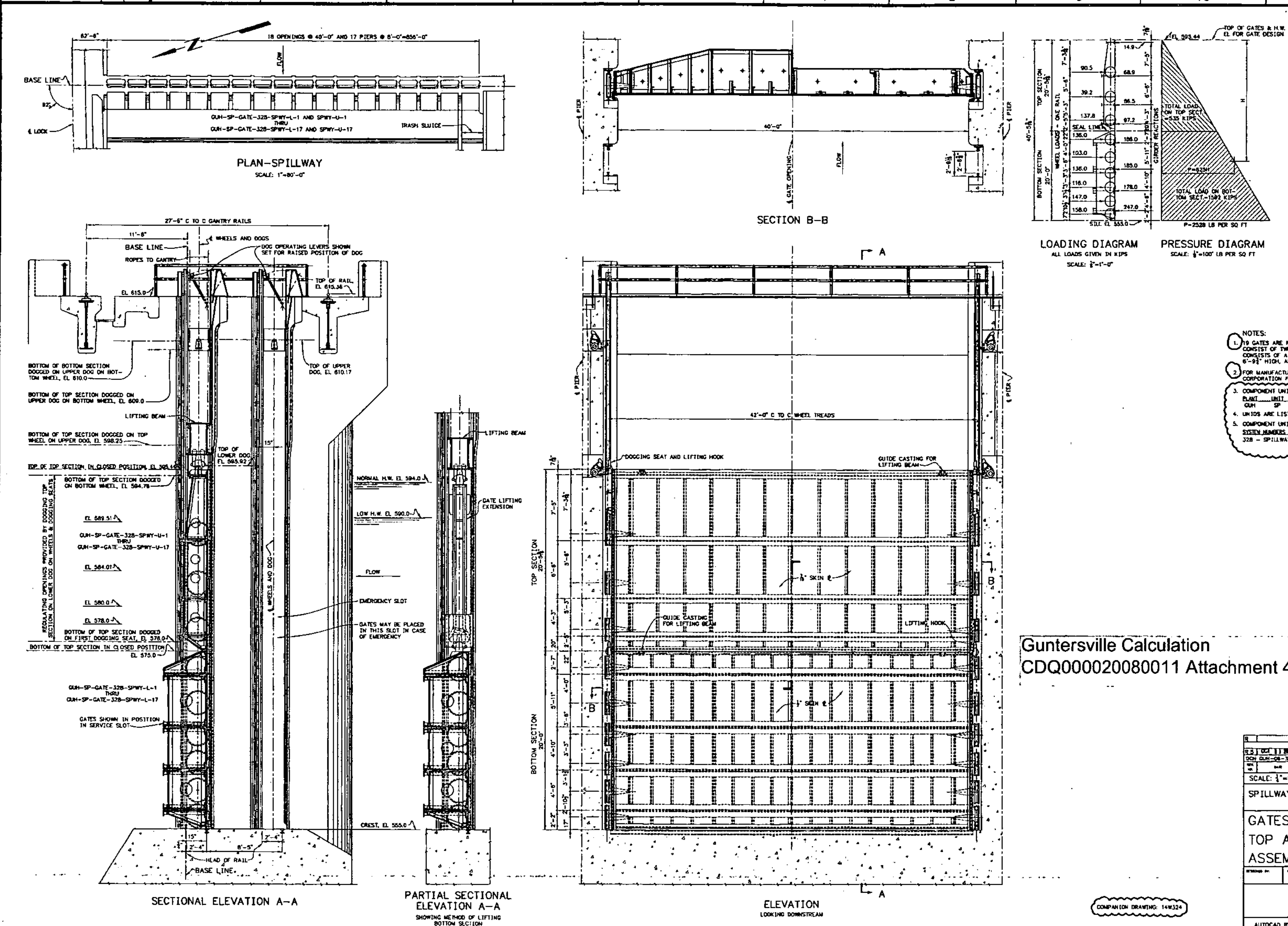
GUNTERSVILLE PROJECT
TENNESSEE VALLEY AUTHORITY

DESIGN		DISCIPLINE INTERFACE		ENGINEERING APPROVAL
DESIGNED R L PETTY	SUPERVISED V A NEWELL	1	2	C D WAGNER
DRAWN G L HICKEY				
CHECKED K BROWN	REVIEWED V A NEWELL	3	4	

ENGINEERING DATE 12-03-93 | 6 | C | 23W262-1 R1

ISSUED BY J H COULSON

CAD SYSTEM ORIGINAL
DO NOT CHANGE MANUALLY



NOTES:

1. 19 GATES ARE REQUIRED, ONE BEING FOR EMERGENCY USE 18 GATES CONSIST OF TWO SECTIONS EACH AS SHOWN THE TRASH SLUICE GATE CONSISTS OF A 20 FT BOTTOM SECTION AS SHOWN AND THREE SECTIONS 6'-9¾" HIGH, AS SHOWN ON 14W324.
2. FOR MANUFACTURERS DETAILS OF SPILLWAY GATES REFER TO DRAVO CORPORATION FILE, TVA CONTRACT NO. TV-18865.
3. COMPONENT UNID NUMBERING SCHEME:

PLANT	UNIT	FUNCTION	SYSTEM	SEQUENCE NO.
GUH	SP	GATE	328	SPWY-L-1

4. UNIDS ARE LISTED IN WHOLE ON THIS DRAWING.
5. COMPONENT UNID NUMBERS USE THE FOLLOWING SYSTEM AND FUNCTION CODES:

SYSTEM NUMBERS - SYSTEM NAME:	FUNCTION CODES - FUNCTION CODE NAMES:
328 - SPILLWAY	GATE - SPILLWAY GATE

Guntersville Calculation
CDQ000020080011 Attachment 47

COMPANION DRAWING: 14W324

R5 | DCN GUN-08-32: REVISED FOR CRITICAL STRUCTURES, SYSTEMS & COMPONENTS VERIFICATION | DMH | DMC | JLW | JLW | TKM | RWT | MAC | HY0043N

SCALE: ¼"=1'-0" EXCEPT AS NOTED

SPILLWAY

GATES
TOP AND BOTTOM SECTIONS
ASSEMBLY

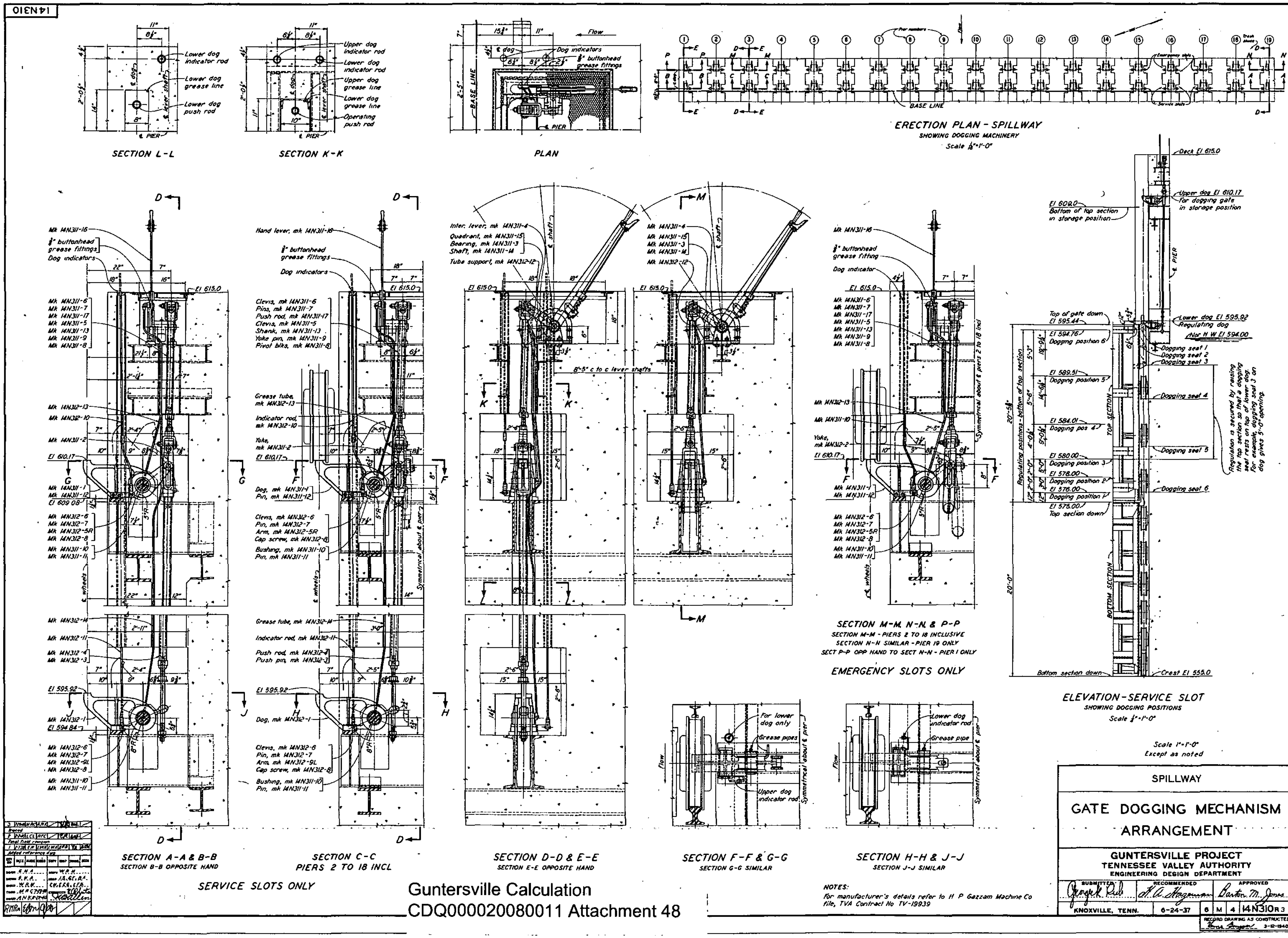
GUNTERSVILLE HYDRO PLANT
TENNESSEE VALLEY AUTHORITY
FOSSIL AND HYDRO ENGINEERING

AUTOCAD R2000 | 06-14-37 | 6 | M | 14W301 | R 5

ELECTRONICALLY RESTORED DRAWING
THIS DRAWING HAS BEEN COMPLETELY REDRAWN
AND SUPERSEDES :(14N301 R4)

PLOT FACTOR:48
W_TVA

C.A.D. DRAWING
DO NOT ALTER MANUALLY


14N310
SECTION L-L
Lower dog indicator rod
Lower dog grease line
Lower dog push rod
℄ PIER
SECTION K-K
Upper dog indicator rod
Lower dog indicator rod
Upper dog grease line
Lower dog grease line
Operating push rod
PLAN
Flow
Dog indicators
⅛" buttonhead grease fittings
BASE LINE
ERECTION PLAN - SPILLWAY
SHOWING DOGGING MACHINERY
Scale ⅛"=1'-0"
Deck El 615.0
Upper dog El 610.17
For dogging gate in storage position
El 609.0
Bottom of top section in storage position
Top of gate down El 595.44
Lower dog El 595.92
Regulating dog
Nor H W El 594.00
El 594.76
Dogging position 6
El 589.51
Dogging position 5
El 584.01
Dogging pos 4
El 580.00
Dogging position 3
El 578.00
Dogging position 2
El 576.00
Dogging position 1
El 575.00
Top section down
Dogging seat 1
Dogging seat 2
Dogging seat 3
Dogging seat 4
Dogging seat 5
Dogging seat 6
TOP SECTION
BOTTOM SECTION
Regulating positions - bottom of top section
Bottom section down
Crest El 555.0
ELEVATION - SERVICE SLOT
SHOWING DOGGING POSITIONS
Scale ¼"=1'-0"
Mk 14N311-16
Hand lever, mk 14N311-16
Inter. lever, mk 14N311-4
Quadrant, mk 14N311-15
Bearing, mk 14N311-3
Shaft, mk 14N311-14
Tube support, mk 14N312-12
Dog indicators
El 615.0
Clevis, mk 14N311-6
Pins, mk 14N311-7
Push rod, mk 14N311-17
Clevis, mk 14N311-5
Shank, mk 14N311-13
Yoke pin, mk 14N311-9
Pivot blks, mk 14N311-8
8'-5" c to c lever shafts
Grease tube, mk 14N312-13
Indicator rod, mk 14N312-10
Yoke, mk 14N311-2
El 610.17
Dog, mk 14N311-1
Pin, mk 14N311-12
El 609.08
Clevis, mk 14N312-6
Pin, mk 14N312-7
Arm, mk 14N312-5R
Cap screw, mk 14N312-8
Bushing, mk 14N311-10
Pin, mk 14N311-11
Grease tube, mk 14N312-14
Indicator rod, mk 14N312-11
Push rod, mk 14N312-4
Push pin, mk 14N312-3
El 595.92
Dog, mk 14N312-1
El 594.84
Arm, mk 14N312-9L
℄ wheels
Symmetrical about ℄ pier
Symmetrical about ℄ piers 2 to 18 incl
SECTION M-M, N-N, & P-P
SECTION M-M - PIERS 2 TO 18 INCLUSIVE
SECTION N-N SIMILAR - PIER 19 ONLY
SECT P-P OPP HAND TO SECT N-N - PIER 1 ONLY
EMERGENCY SLOTS ONLY
For lower dog only
Grease pipes
Upper dog indicator rod
Lower dog indicator rod
Grease pipe
SECTION A-A & B-B
SECTION B-B OPPOSITE HAND
SECTION C-C
PIERS 2 TO 18 INCL
SERVICE SLOTS ONLY
SECTION D-D & E-E
SECTION E-E OPPOSITE HAND
SECTION F-F & G-G
SECTION G-G SIMILAR
SECTION H-H & J-J
SECTION J-J SIMILAR
Scale 1"=1'-0"
Except as noted

NOTES:
For manufacturer's details refer to H P Gazzam Machine Co file, TVA Contract No TV-19939

SPILLWAY

GATE DOGGING MECHANISM ARRANGEMENT

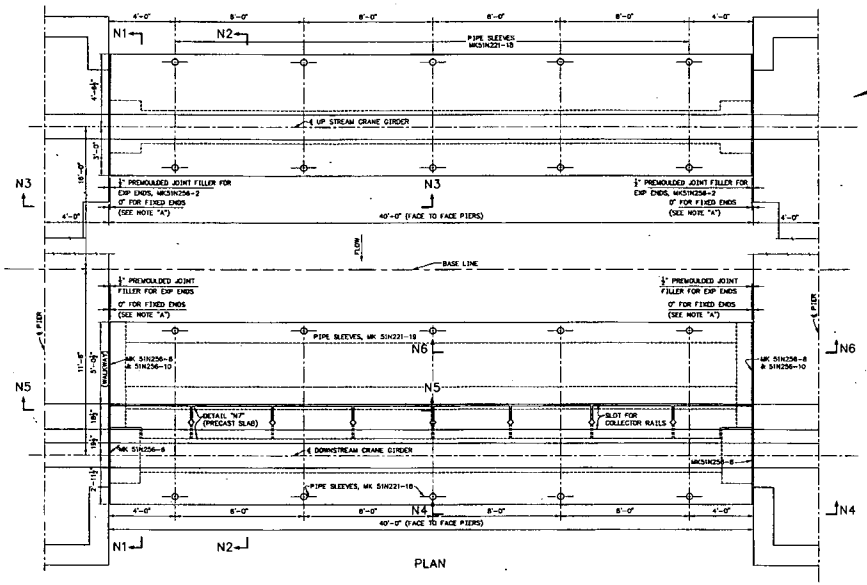
GUNTERSVILLE PROJECT
TENNESSEE VALLEY AUTHORITY
ENGINEERING DESIGN DEPARTMENT

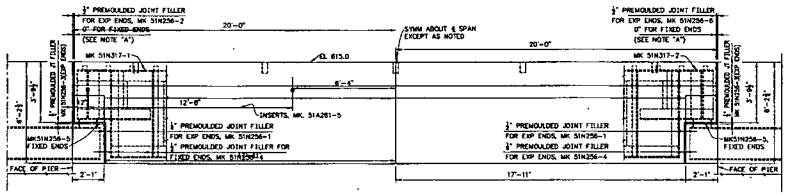
SUBMITTED	RECOMMENDED	APPROVED
[signature]	[signature]	Barton M. Jones

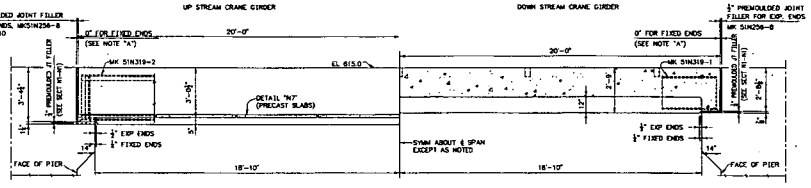
KNOXVILLE, TENN. 6-24-37 | 6 | M | 4 | 14N310R3

RECORD DRAWING AS CONSTRUCTED 3-12-1940

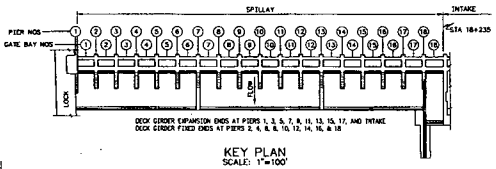
Guntersville Calculation
CDQ000020080011 Attachment 48



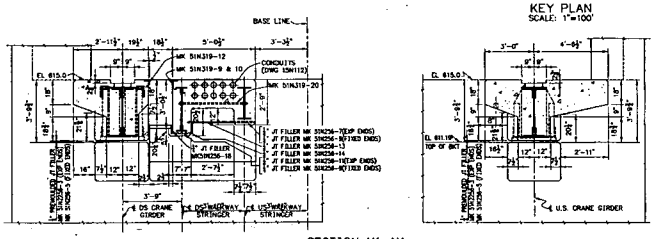




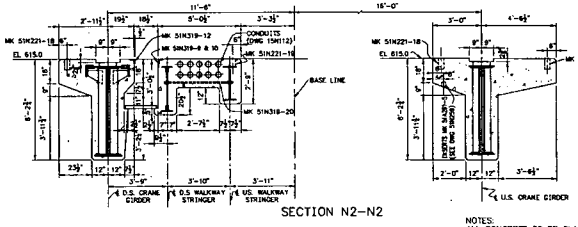
NOTE: "A"
PAINT FIXED END JOINTS WITH NON STAINING MINERAL OIL BEFORE POURING ADJACENT CONCRETE



KEY PLAN
SCALE: 1"=100'



SECTION N1–N1

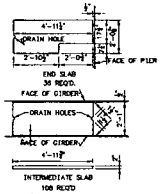


SECTION N2–N2

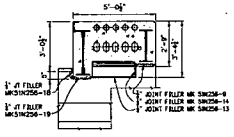
NOTES:
ALL CONCRETE TO BE CLASS "A" (3000 PSI)
ALL EXPOSED EDGES TO HAVE STANDARD ROUND CORNERS AS SHOWN ON DWG GD00308215, EXCEPT WHERE NOTED AND AT EL 615.0 ON JOINT BETWEEN OPERATING BRIDGE DECK AND PIER AT THIS POINT THE EDGE IS FINISHED WITH A STANDARD ½" EDGER

REFERENCE DRAWINGS:
SPILLWAY DAM
51N204 ---- CONCRETE–TOP OF PIER–DETAILS
51N206 ---- CONCRETE–TYPICAL PIER–EL 555.0 TO EL 615.0–OUTLINE.
51N218 ---- CONCRETE–OPERATING BRIDGE DECK–REINFORCEMENT
51N220 ---- ARCHITECTURAL–OPERATING BRIDGE DECK–RAILING PLAN
51N221 ---- ARCHITECTURAL–OPERATING BRIDGE DECK–RAILING DETAILS
51N241 ---- PLAN, ELEVATION, & SECTIONS
51N256 ---- PREMOULDED JOINT FILLER–OPERATING BRIDGE DECK–DETAILS
51N259 ---- PIPING–5 INCH WATER SERVICE LINE
51N315 ---- STRUCTURAL STEEL–OPERATING BRIDGE DECK–GENERAL PLAN & ERECTION DIAGRAM

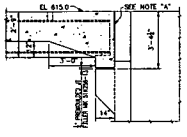
ELECTRICAL
15N112 ---- POWER CONDUITS–PLAN & SECTIONS
15N126 ---- GANTRY CRANE CONTACT TROLLEY–GEN ARRANGEMENT



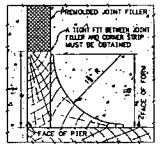
DETAIL N7
PRECAST CONCRETE SLAB



AUXILIARY SECTION N1–N1
FOR PIERS 4, 10 & 16



AUXILIARY SECTION N6–N6
FOR PIERS 4, 10 & 16



SECTION THRU DECK
TYPICAL DETAIL AT PIER
SCALE 12"=1'-0"

DESIGNED BY: L.V.M.	DRAWN BY: M.H.B.	CHECKED BY: M.H.B.	SUPERVISED BY: B.A.	REVIEWED BY: R.M.R.	APPROVED BY: H.A.H.	ISSUED BY: B.M.J.	

SCALE: ¼"=1'-0" EXCEPT AS NOTED

SPILLWAY DAM

CONCRETE
OPERATING BRIDGE DECK
OUTLINE

GUNTERSVILLE PROJECT
TENNESSEE VALLEY AUTHORITY
RIVER SYSTEMS OPERATIONS

AUTOCAD 2008 | DATE 8-20-37 | 6 | C | 51W217 | R 5

ELECTRONICALLY RESTORED DRAWING
THIS DRAWING HAS BEEN COMPLETELY REDRAWN AND SUPERSEDES :(51N217 R4)

PLOT FACTOR:.32
W_TVA

C.A.D. DRAWING
DO NOT ALTER MANUALLY

SAFETY MODIFICATIONS FOR PROBABLE MAXIMUM FLOOD

Chronology

Safety analysis studies for Guntersville Dam for the Probable Maximum Flood(PMF) were started in August 1984 and completed in February 1993. Final design started in April 1993. Onsite construction began in 1994 and was completed on June 30, 1995.

Cost of Modification

Design costs for the capital safety modifications to Guntersville Dam were approximately $5,460,000. Construction costs were approximately $31,869,070. The total project cost was approximately $37.3 million. This did not include costs for dam safety evaluation studies which resulted in the modifications.

Controlling Features

The embankments at Guntersville Dam were modified in order to safely pass the probable maximum flood. The embankments were raised to an elevation of 617.5 from the lowest embankment elevation of 610.0. The modifications to the south embankment consisted of a cantilever concrete wall, impervious earthfill embankment, and a stoplog system at the powerhouse. The modifications to the north embankment consisted of a cantilever concrete wall, sheet pile cells/wall cutoff, and a structural slab. These PMF modifications will prevent overtopping and erosion of the embankments and thus prevent breach and failure of the dam.

AMERICAN SOCIETY OF CIVIL ENGINEERS

Founded November 5, 1852

TRANSACTIONS

Paper No. 2855

DISCHARGE COEFFICIENTS FOR SPILLWAYS AT TVA DAMS

By Kenneth W. Kirkpatrick,[1] A. M. ASCE

Synopsis

Spillway ratings derived from model studies have been used in the preparation of spillway rating tables for the Tennessee Valley Authority dams. As a result of these studies, discharge coefficients for eleven of the Tennessee Valley Authority dams are given in this paper. Coefficients for both submerged and free discharge conditions are presented for discharges over standard spillway crests, irregular spillway crests, and a vertical-lift spillway gate. Discharge coefficients for Tainter gates placed on curved spillway crests are also given for various gate openings under free discharge conditions. In addition, data on the effect of model scale on the discharge coefficient and the effect of closing adjacent spillway bays and gates are presented. The coefficient relationships are shown in a form that may be used by designers as a guide in making determinations of the discharges for future spillways.

Notation

The letter symbols adopted for use in this paper are defined where they first appear, in the illustrations or in the text, and are arranged alphabetically, for convenience of reference, in the Appendix.

Introduction

The Tennessee Valley Authority (TVA) operates a system of nine dams on the Tennessee River and twenty-three on the tributary rivers. The successful operation of such a system requires accurate discharge ratings for each structure. Although enough water is seldom available to make complete ratings for most spillways from measurements conducted on the prototype structure, ratings can be determined from scale model tests. Therefore, the necessary ratings for the TVA spillways have been determined by this means. Model studies have been made at the TVA Hydraulic Laboratory at Norris, Tenn., on nine different spillway crest shapes equipped with three types of control gates.

Seven of the nine crests were curved sections which approximated the shape of the lower nappe of a sharp-crested weir. The other two crests were flat. The two flat-crested weirs and one of the curved crests were equipped with double-leaf vertical lift gates. Five of the curved crests were equipped with Tainter gates and the other with vertical lift gates.

Data Presented.—Data are presented for the following conditions: (1) Free, ungated flow through a series of spillway bays; (2) submerged, ungated flow through a series of spillway bays; (3) free, ungated flow through a series of spillway bays, with adjacent bays fully open or closed; (4) free flow over a vertical lift gate; (5) submerged flow over a vertical lift gate; (6) flow under a series of Tainter gates set with equal openings; and (7) flow under a series of Tainter gates with adjacent gates closed.

Data are also presented to show the effect of model scale for the condition of free, ungated flow through a series of spillway bays.

General Model Arrangement.—The models were tested in flumes either 3.5 ft wide or 8 ft wide. Models installed in the smaller flume usually consisted of a reproduction of three of the prototype spillway bays. In the larger flume five or six spillway bays were reproduced. Each of these flumes was provided with glass panels for observation purposes. The models placed in the larger flume were constructed at scale ratios of from 1:28.72 to 1:50 with a ratio of approximately 1:35 generally used. Those tested in the smaller flume were built at scale ratios of 1:50, 1:100, and 1:200.

The models were usually provided with concrete crests and concrete piers to insure dimensional stability. Half piers were constructed on the ends of each model. If the model did not completely fill the flume one side was placed against the glass side of the flume and the other against a false wall. The river bed upstream and downstream from the model was reproduced at the elevation of the prototype river bed. Suitable baffling was provided to obtain a uniform distribution of flow in the spillway approach channel. The tailwater level was controlled at the end of the flumes by means of slat gates. Model discharges were determined from readings of a carefully calibrated diaphragm orifice located in the water supply line.

Headwater heights were measured at two piezometers at distances equal to approximately 5 and 8 times the design head upstream from the spillway crest. Tailwater heights were obtained at 2 piezometers at distances equal to approximately 9 and 12 times the design head downstream from the spillway crest—in all cases, sufficiently far enough downstream to eliminate the effect of the spillway apron.

In most studies the headwater and tailwater levels were determined by means of hook gages reading to 0.001 ft. For the 1/200-scale model the heads were measured with a micrometer point gage reading to 0.0001 ft.

Discharge Equations.—The model data have been reduced by the use of two commonly accepted discharge equations. For both free and submerged flow over a spillway crest the equation,

$$Q = C\,L\,H^{3/2} \quad \ldots\ldots (1)$$

Note.—Published, essentially as printed here, in February, 1955, as *Proceedings-Separate No. 626*. Positions and titles given are those in effect when the paper was approved for publication in *Transactions*.

[1] Hydr. Engr., Hydr. Lab., Tennessee Valley Authority, Norris, Tenn.

was used, in which Q is the discharge in cubic feet per second, C is the coefficient of discharge determined from the model tests, L is the length of the crest, and H is the total head as shown in Fig. 1(*a*). Use was made of the same equation in the reduction of the data for free and submerged flows over a vertical gate with D, H, d, and P (Fig. 1(*a*)) being measured from the top of the gate.

For flow under a gate the equation for a rectangular orifice under low head,

$$Q = C\,L\,[H^{3/2} - (D_1 + h)^{3/2}] \quad \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots (2)$$

was used, in which D_1 is the depth of water to the bottom of the gate as defined in Fig. 1(*b*) and h is the approach velocity head.

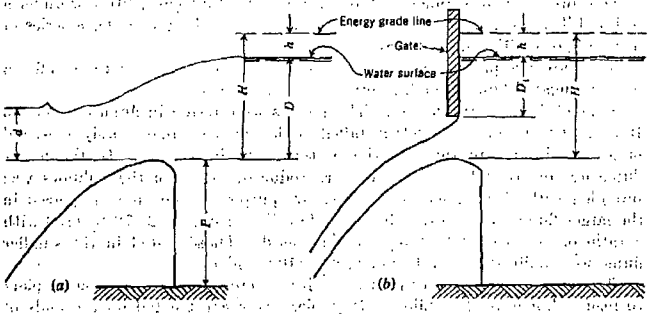


FIG. 1.—SPILLWAY-CREST DIAGRAM

FREE-DISCHARGE COEFFICIENTS, FLOW OVER SPILLWAY CRESTS

It is common practice for engineers to design spillway crests to approximate closely the shape of the lower portion of a jet issuing from a sharp-crested weir, and this type of crest is designated a standard crest.[3] Because the shape of the jet changes with the head on the weir, some particular head must be used for each design. This head for which a particular crest is designed is termed the design head. At this head, pressures approximating atmospheric pressure are developed at the spillway surface. At smaller heads, pressures are greater than atmospheric. Seven of the nine TVA crests for which data are available approximate standard crests in shape whereas the other two crests, which are flat, do not. Fig. 2 shows the basic details and dimensions of each of these crests. Fig. 3 presents the coefficient data obtained on the crests of Fig. 2. Pertinent design data concerning each crest, together with the scale to which each was modeled, appear in Table 1. Eleven spillways are also listed in Table 1. Two pairs of these, the Ocoee No. 3-Apalachia set, and the Douglas-Watts Bar set, both in Tennessee, have crest shapes that are identical within the pair but which were tested for different values of the approach depth, P.

[3] "Hydroelectric Handbook," by W. P. Creager and J. D. Justin, John Wiley & Sons, Inc., New York, N. Y., 2d Ed., 1950.

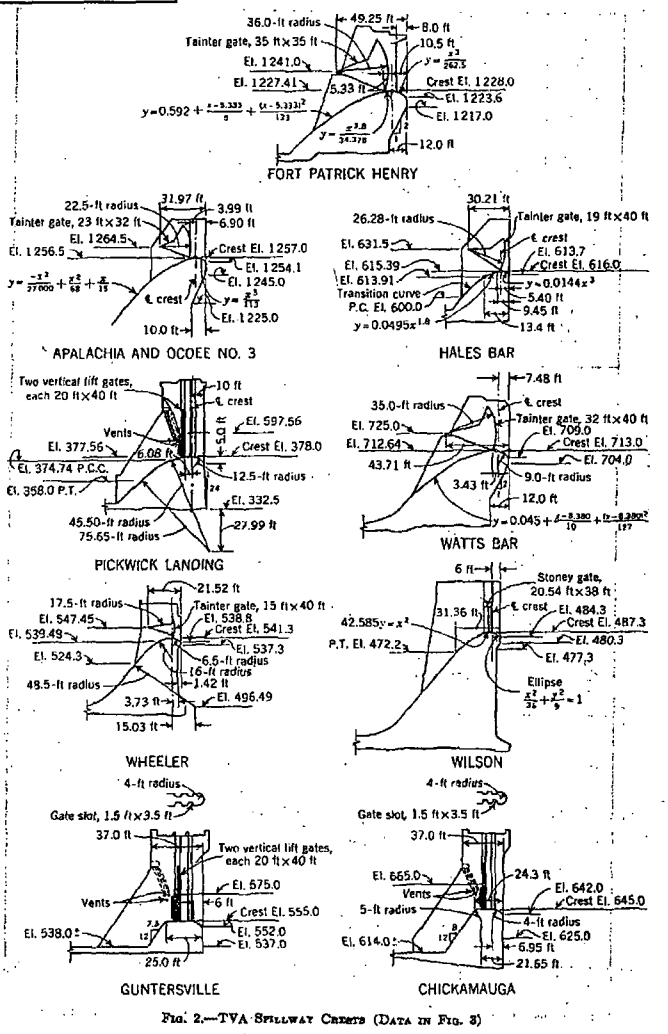


FIG. 2.—TVA SPILLWAY CRESTS (DATA IN FIG. 3)

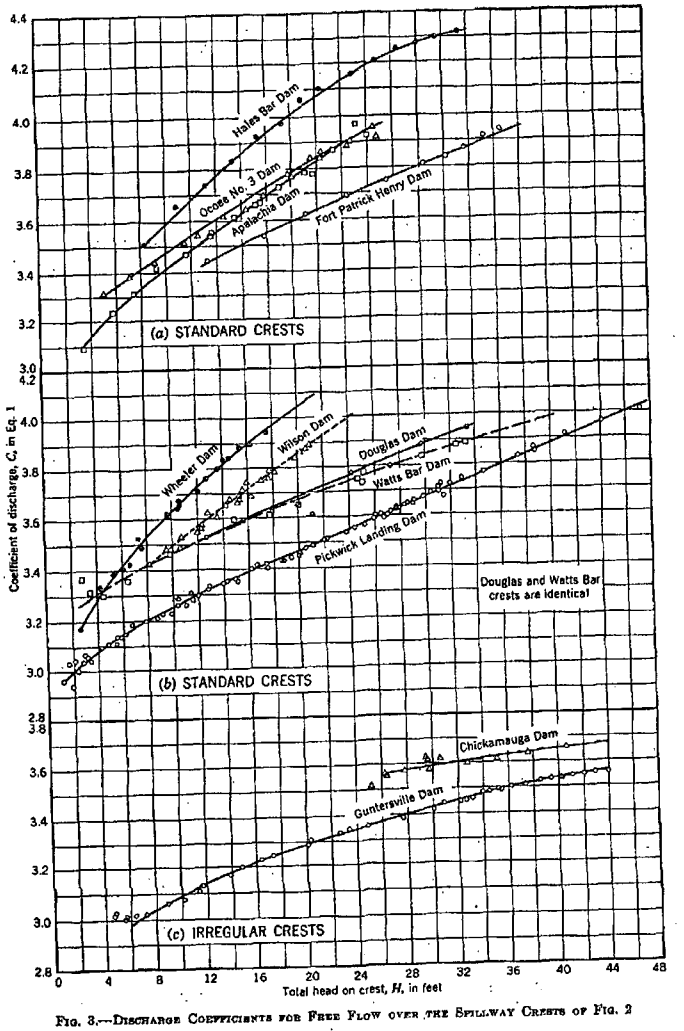


FIG. 3.—DISCHARGE COEFFICIENTS FOR FREE FLOW OVER THE SPILLWAY CRESTS OF FIG. 2

The accuracy of the data is evidenced by the plotting of the data points in Fig. 3: Except in some cases at low heads, the deviation of any plotted point from the coefficient curve does not exceed 0.5%.

Standard Crests.—It has been shown by various authors that the discharge coefficients for all standard crests can be related to each other and that, conversely, the coefficients to be used for a new design can be taken from previous test data.[2,3,4,5] Unfortunately, in most crest designs, due to other design considerations, it is necessary that the shape be varied from the standard form. Nevertheless, satisfactory coefficients can be obtained as sufficient data are now available on a range of crest shapes. By comparison of crest shapes designers may select a coefficient for any particular crest.

Dimensionless plotting provides a means for comparison of crest shapes. This method is used in Fig. 4 on which seven TVA crests which closely approximate standard crests are shown by the solid lines, with the dashed line representing a standard crest shape.[2] The horizontal coordinate, x, and the vertical coordinate, y, of the crest curve have been divided by the design head, H_e.

TABLE 1.—DESIGN DATA FOR ELEVEN MODELS OF TVA SPILLWAYS

Project	Model scale	Design head, H_e, in feet	Upstream depth, P, in feet	$\frac{H_e}{P}$	Pier nose radius, in feet
Hales Bar	1:34.76	16	32	0.56	3.00
Ocoee No. 3	1:28.72	23	67	0.35	3.00
Apalachia	1:28.72	23	97	0.24	3.00
Fort Patrick Henry	1:50	35	43	0.81	3.25
Wheeler	1:34.35	16.5	42	0.39	2.50
Wilson	1:39.4	19	75	0.25	4.00
Douglas	1:35	23.5	133	0.18	3.25
Watts Bar	1:35	23.5	52	0.45	3.25
Pickwick Landing	1:50	31.5	32	0.98	3.75
Chickamauga	1:50		20		4.00
Guntersville	1:50		18		4.00

The design head was determined by fitting the real and standard curves at the crest point ($x = 0$) and at the intersection of the curve with the upstream vertical face. These design-head values are presented in Table 1. The design-head discharge coefficients (C_e) determined from Fig. 3 are shown in Fig. 4.

The TVA crests all fairly closely approximate the standard curve from the upstream spillway face to a point somewhere downstream from the crest which was determined by the position of the gate seal. Below this latter point, the crest shape was modified to fit the trajectory of a jet issuing from under the gate when set at a small opening. The upstream face for a standard crest is vertical. The upstream face of the TVA crests, as shown in Fig. 4, deviates from the vertical. Other experimenters have established the fact that the shape of the upstream face generally has little influence on the discharge coefficient.[3]

[2] "Final Reports of Boulder Canyon Project," *Bulletin No. 3*, Part VI, Hydraulic Investigations, Bureau of Reclamation, U. S. Dept. of the Interior, Washington, D. C., 1947.

[4] "Engineering Hydraulics," edited by Hunter Rouse, John Wiley & Sons, Inc., New York, N. Y., 1950.

[5] "Discharge Coefficients for Irregular Overfall Spillways," by J. N. Bradley, *Engineering Monograph No. 9*, Bureau of Reclamation, U. S. Dept. of the Interior, Washington, D. C., 1952.

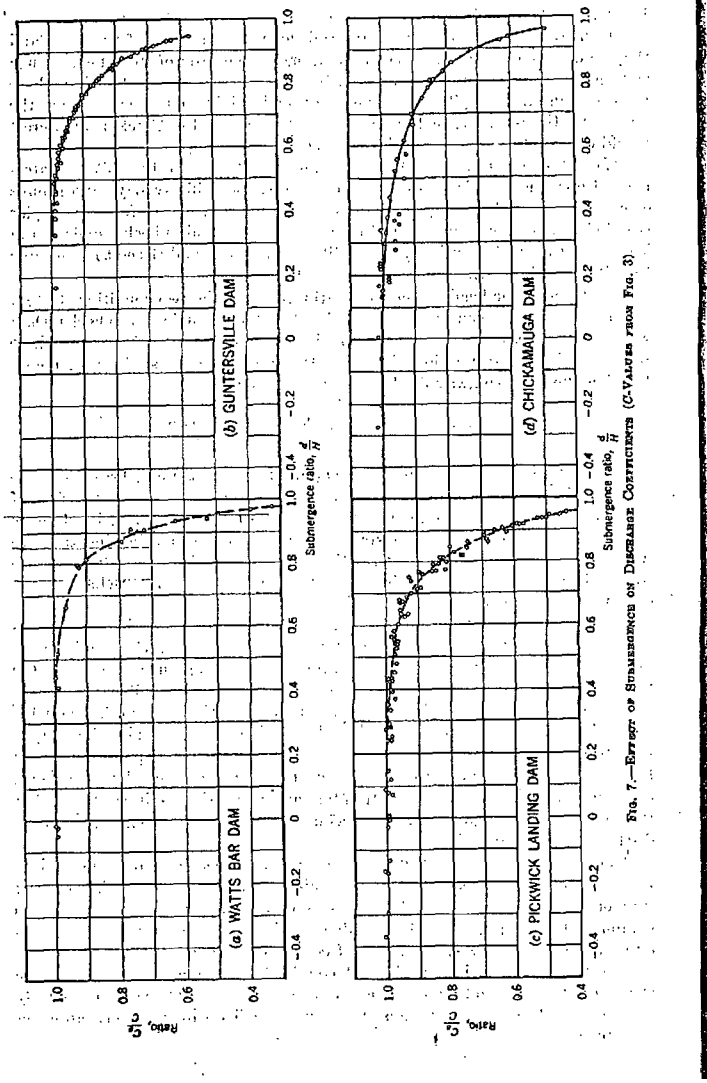


FIG. 7.—EFFECT OF SUBMERGENCE ON DISCHARGE COEFFICIENTS (C-VALUES FROM FIG. 3)

In Fig. 8 the four curves of Fig. 7 are shown on a single plot. Although the maximum spread between curves is about 10%, this is to be expected considering the wide range of crest shapes used in the tests.

FREE-DISCHARGE COEFFICIENTS FOR FLOW OVER VERTICAL LIFT GATES

The Pickwick Landing vertical lift gates are representative of this type of gate, which has been used on several TVA projects. In Fig. 9(*a*) are shown details of the lower spillway gate leaf. For heads greater than 2 ft, this gate is essentially a sharp-crested weir 40 ft long and 20 ft high with piers 7.5 ft thick at each end of the gate. Air intakes were installed in the sides of the piers just below the top of the gate to ventilate the underside of the nappe.[6] Model tests were conducted with the 1/50-scale, 3-bay spillway model.

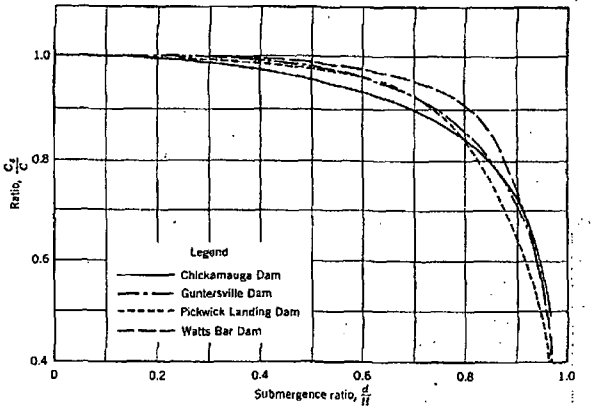


FIG. 8.—COMPARISON OF SUBMERGENCE EFFECTS FOR VARIOUS SPILLWAY CREST SHAPES

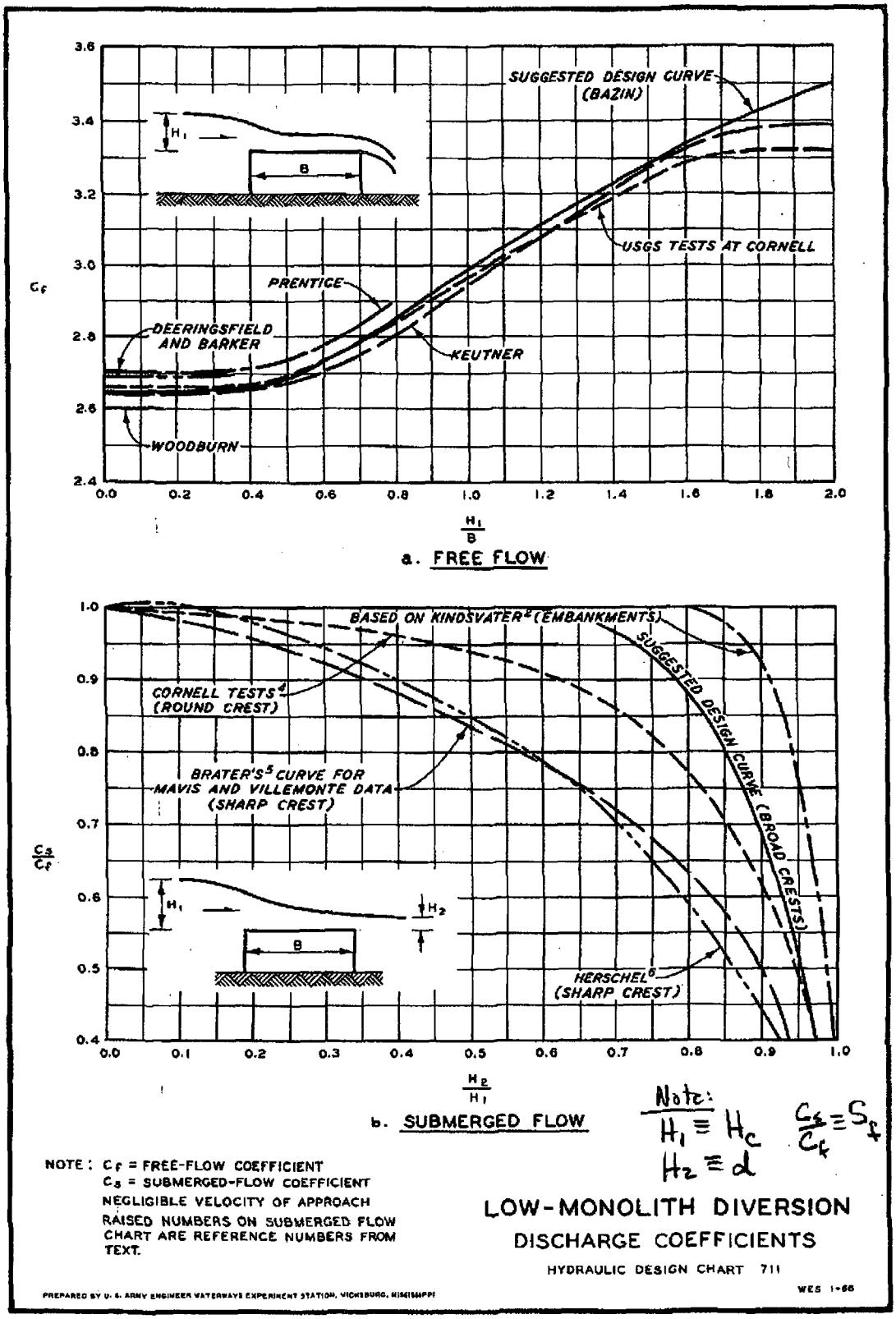
In Fig. 9(*b*) is shown the head-coefficient relationship for flow over the crest of the spillway gate. The coefficient, C, was computed from Eq. 1 using the top of the gate as crest elevation. The points define the head-coefficient relationship for heads between 3 ft and 28 ft. Each point was determined from the average of from 3 to 5 separate tests. A constant value of C equal to 3.428 is shown for heads in excess of 12 ft. For heads of from 12 ft to about 4 ft the model test curve shows a gradual rise in the coefficient, with an abrupt drop-off when the heads are approximately 4 ft and less. This curve takes the characteristic form for the coefficients of a sharp-crested weir, the rise and fall in the coefficient curve being due to the nappe clinging to the surface of the weir. This phenomenon is a function of the absolute head. Therefore, similarity between the model and prototype did not exist for prototype heads

[6] "Aeration of Spillways," by G. H. Hickox, *Transactions*, ASCE, Vol. 109, p. 537.

Attachment 10

Source: Reference 6

Calculation No: CDQ000020080011



Note:
$H_1 \equiv H_c$
$H_2 \equiv d$
$\frac{C_s}{C_f} = S_f$

NOTE: C_f = FREE-FLOW COEFFICIENT
C_s = SUBMERGED-FLOW COEFFICIENT
NEGLIGIBLE VELOCITY OF APPROACH
RAISED NUMBERS ON SUBMERGED FLOW CHART ARE REFERENCE NUMBERS FROM TEXT.

LOW-MONOLITH DIVERSION
DISCHARGE COEFFICIENTS

HYDRAULIC DESIGN CHART 711

PREPARED BY U. S. ARMY ENGINEER WATERWAYS EXPERIMENT STATION, VICKSBURG, MISSISSIPPI

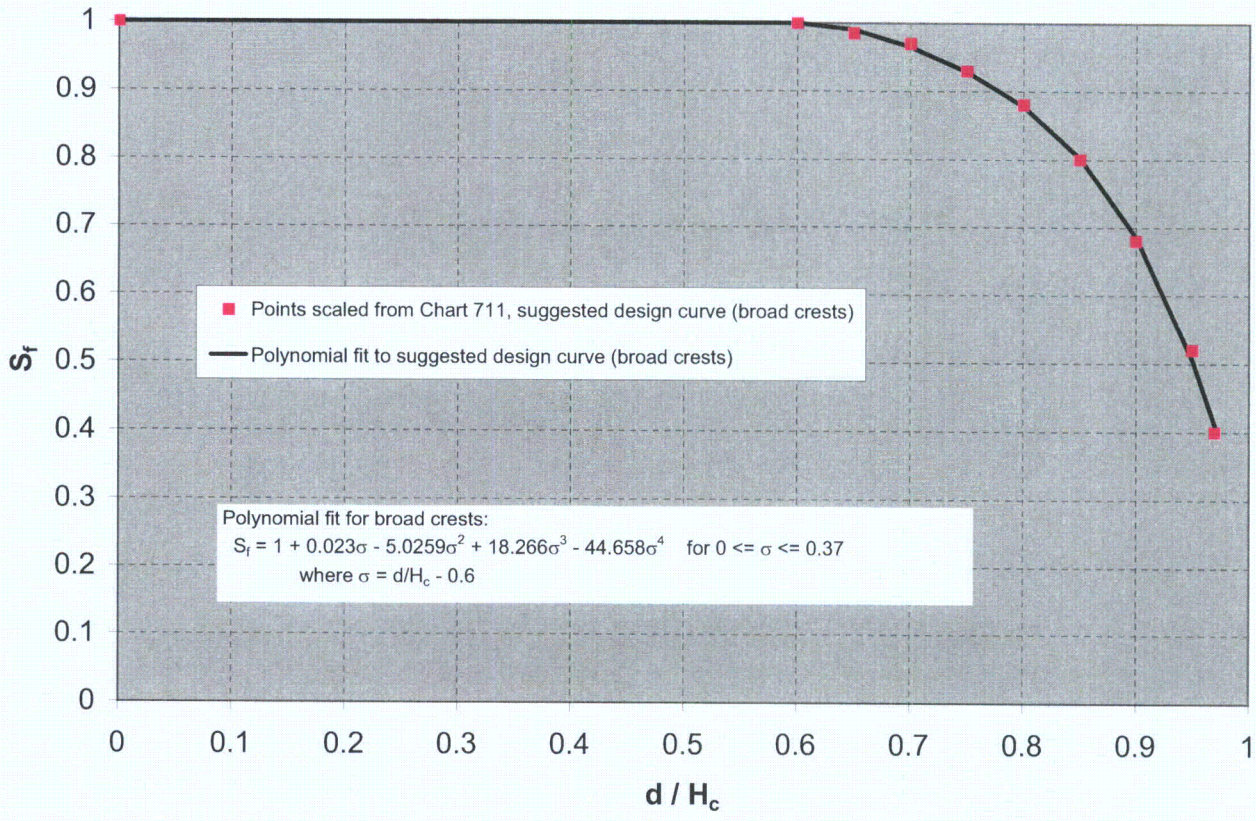
WES 1-66

Attachment 11

Source: Reference 6

Calculation No: CDQ000020080011

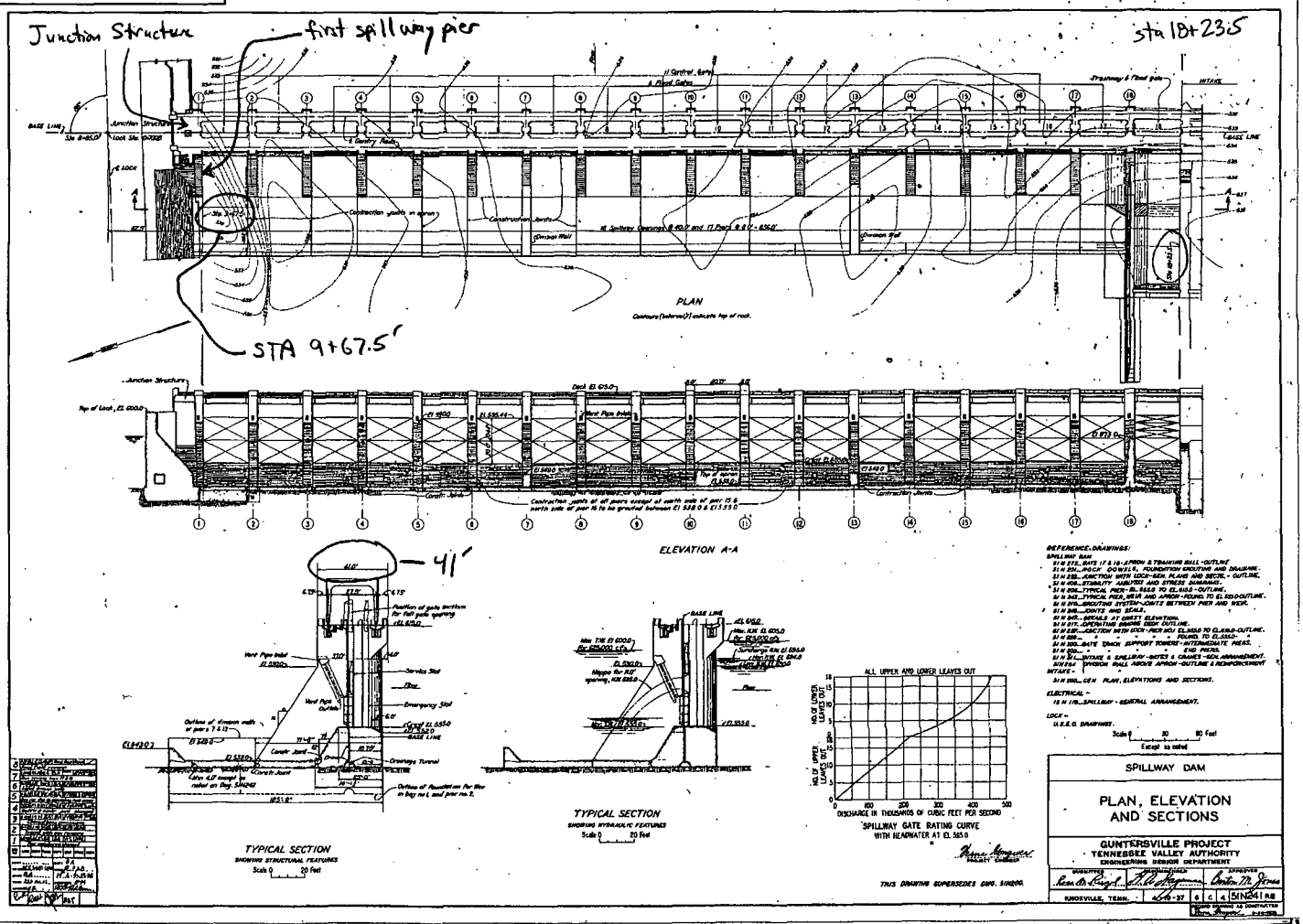
Submergence Factors for Weirs from Chart 711 in Hydraulic Design Criteria



Attachment 12

Source: Reference 8

Calculation No: CDQ000020080011



4

Attachment 13

Source: Reference 5

Calculation No: CDQ000020080011

Guntersville Rating Curves.xls Cf

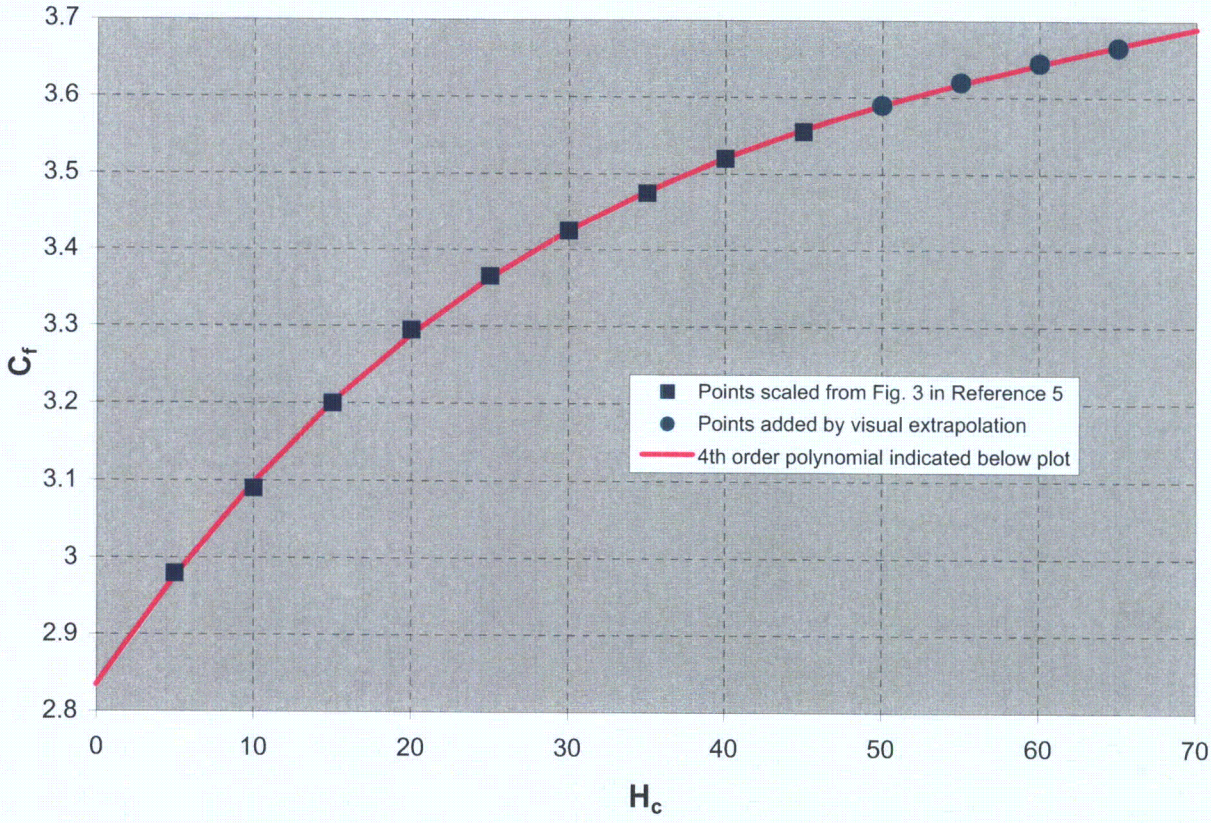
Data Scaled from Figure 3 in Reference 5

H_c, ft.	C_f	
5	2.980	
10	3.090	
15	3.200	
20	3.295	
25	3.365	
30	3.425	
35	3.475	
40	3.520	
45	3.555	
50	3.590	extrapolated
55	3.620	extrapolated
60	3.645	extrapolated
65	3.665	extrapolated

Curve fit using 4th-order polynomial (see plot)

H_c, ft	C_f from polynomial
0	2.834
5	2.976
10	3.098
15	3.201
20	3.289
25	3.363
30	3.425
35	3.477
40	3.521
45	3.558
50	3.590
55	3.618
60	3.643
65	3.667
70	3.689

Free Discharge Coefficient, C_f, for Guntersville Dam Spillway Crest



$$C_f = -9.1183\times10^{-9}H_c^{\,4} + 3.4794\times10^{-6}H_c^{\,3} - 4.6300\times10^{-4}H_c^{\,2} + 0.030717H_c + 2.8335$$

Attachment 14

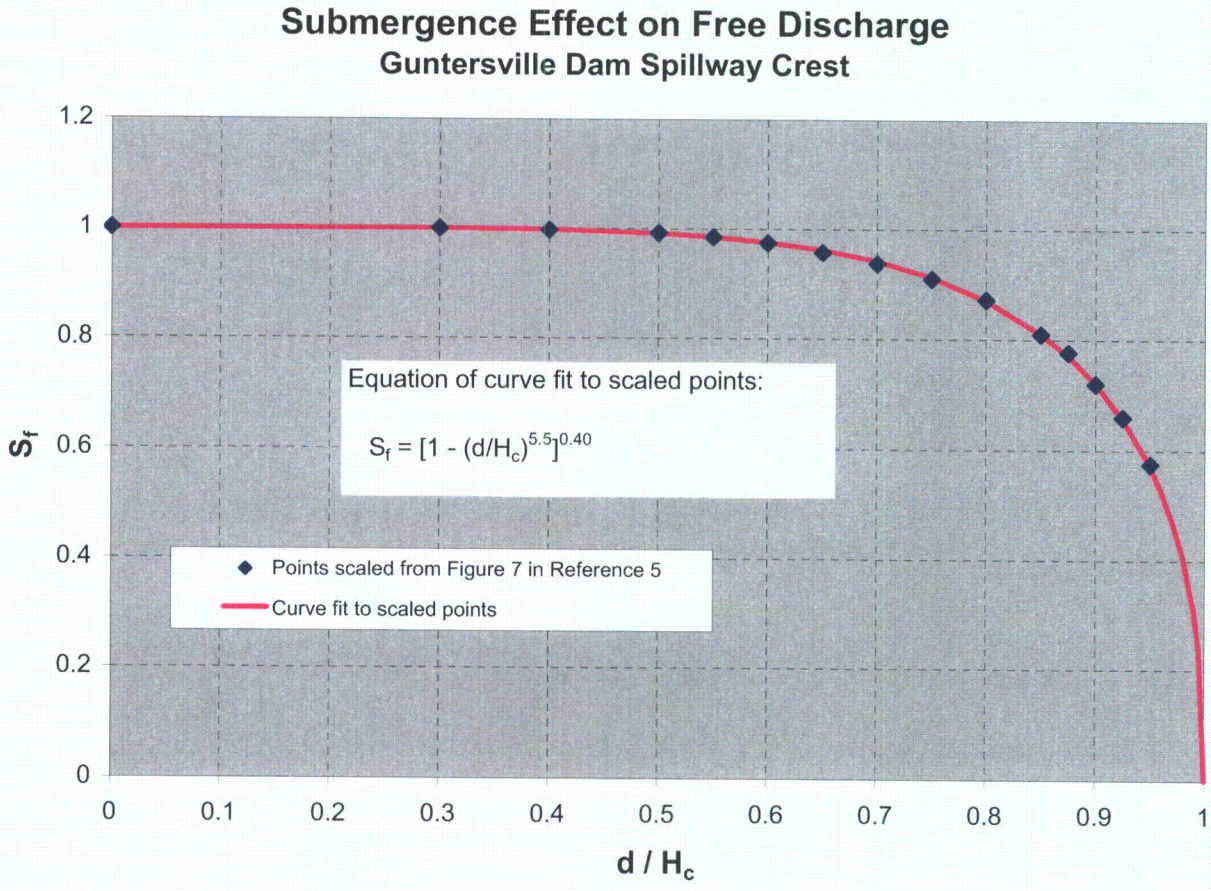
Source: Reference 5

Calculation No: CDQ000020080011

Guntersville Rating Curves.xls Sf

Data Scaled from Plot of C_s/C vs. d/H (Figure 7) in Reference 5

d / H_c	S_f	Curve fit to S_f	exponents (see chart)
0	1	1.000	5.5
0.300	1.000	0.999	0.4
0.400	0.997	0.997	
0.500	0.992	0.991	
0.550	0.985	0.985	
0.600	0.974	0.975	
0.650	0.957	0.961	
0.700	0.937	0.941	
0.750	0.909	0.912	
0.800	0.872	0.870	
0.850	0.810	0.810	
0.875	0.777	0.770	
0.9	0.72	0.720	
0.925	0.66	0.656	
0.95	0.575	0.570	
0.96		0.526	
0.97		0.473	
0.98		0.406	
0.99		0.311	
0.995		0.236	
1		0.000	



TVA 489 (EN DES-11-76)

SHEET 1 OF

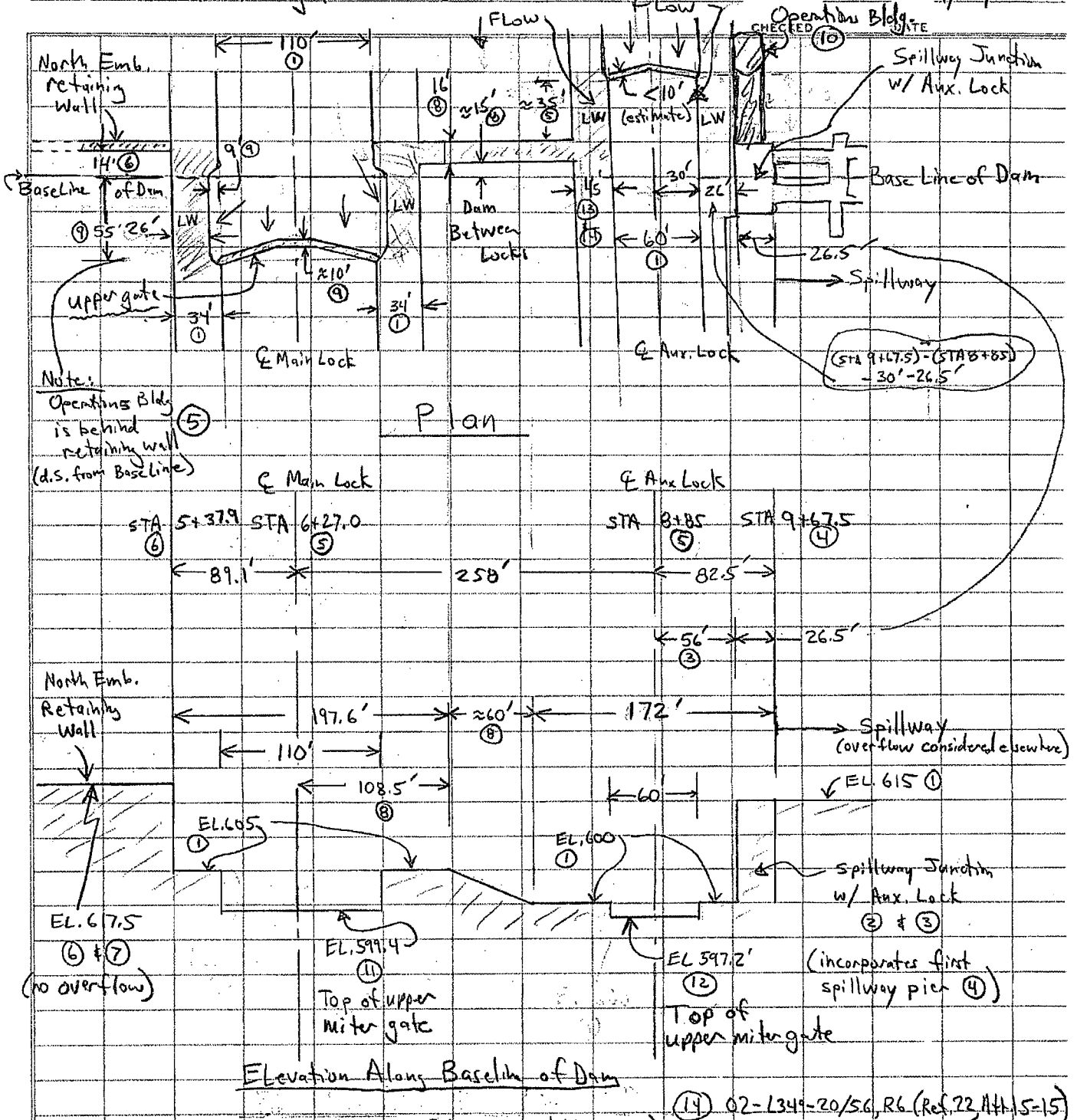
Attachment 15-1

Calculation No: CDQ000020080011

Guntersville Navigation Locks Overflow

COMPUTED GAS DATE 9/26/2008

CHECKED SITE



⑭ 02-L349-20/56, R6 (Ref. 22, Att. 15-15)

Drawings ⑬ 02-L349-20/1.12, R12 (Ref. 21, Att. 15-14)

① 10W200, R11 (Ref. 1, Att. 1)
② 51N222, R8 (Ref. 11, Att. 15-6)
③ 51N226, R5 (Ref. 12, Att. 15-7)
④ 51N241, R8 (Ref. 8, Att. 12)
⑤ 61N250, R3 (Ref. 13, Att. 15-8)
⑥ 22W263-1, R1 (Ref. 9, Att. 15-9)
⑦ 22W263-5, R1 (Ref. 10, Att. 15-10)
⑧ 61N430, R3 (Ref. 14, Att. 15-11)
⑨ 61W256, R4 (Ref. 15, Att. 15-12)
⑩ 02-L349-3/1.3 (Ref. 16, Att. 15-13)
⑪ 64W204, R4 (Ref. 19, Att. 3-1)
⑫ 64W504-1, R1 (Ref. 20, Att. 3-2)

Guntersville Navigation Locks Overflow

COMPUTED GAS DATE 12/19/2008

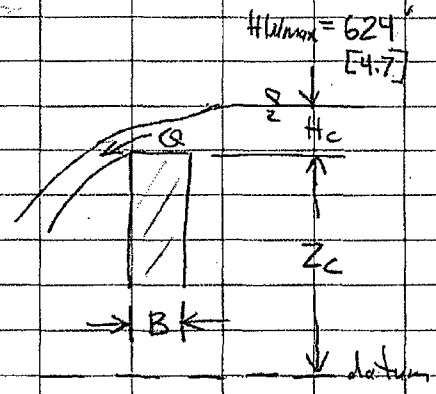
CHECKED DATE

Overflow Parameters

Main and auxiliary lock miter gates (see [4.12] for discussion).

For calculation convenience, use average overflow elevation and C_f for both:

$$\begin{cases} Z_c = \frac{1}{2}(599.4 + 597.1) \approx \underline{598.3'} \\ L = 110' + 60' = \underline{170'} \end{cases}$$



For C_f: $B \leq \approx 10'$

$$0 \leq H_c/B \leq \frac{624 - 598.3}{10} = 2.57^{*}$$

*larger for $B < 10$

From Attachment 10:

$2.65 \leq C_f \leq 3.4$ (sharp-crest)

- Use $\underline{C_f = 3.2}$ ~upper end of range since $B < 10'$ and $(H_c/B)_{max} > 2.0$

Note: The miter gate overflow is small compared to the spillway discharge. Use of the average overflow elevation for both gates and neglect of the gate angles in determining the length will have negligible impact on the rating curves.

Guntersville Navigation Locks Overflow

COMPUTED GAS DATE 12/19/2008

CHECKED DATE

• Auxiliary Lock Section, $Z_c = 600'$ (see sheet 1)

Identify two segments ⓐ and ⓑ (different overflow widths, B)

ⓐ dam between locks

$L = 172' - 82.5' - 30' - 45' = 14.5'$

(172' ↑ sheet 1, elevation view; 82.5' ↑ ½ lock width; 45' ↑ lock wall)

$B = 16'$, $0 \le \frac{H_c}{B} \le \frac{624-600}{16} = 1.5$ from Att. 10: $2.65 \le C_f \le 3.25$

ⓑ lock walls (no flow over Ops. Bldg)

$L = 35' + \frac{1}{2}26' = 61'$

(35' ↑ streamwise length between upper gate and dam between locks (sheet 1, plan); ½ 26' ↑ for flow between operations bldg and upper gate (sheet 1, plan))

$B = 26 \to 45'$ $0 \le \frac{H_c}{B} \le \frac{24'}{26'} = 0.92$ from Att. 10: $2.65 \le C_f \le 2.9$

Note: These overflows are small compared to the spillway discharge. Combination of some sections and utilization of a representative value of C_f will have negligible impact on the rating curve.

Combine sections and use:

$Z_c = 600'$

$L = 14.5^{ⓐ} + 61^{ⓑ} = 75.5'$

$C_f = 2.9$ ~ weighted towards ⓑ which is longer than ⓐ

Guntersville Navigation Locks Overflow

COMPUTED GAS DATE 9/24/2008

CHECKED DATE

• Main Lock Section, $Z_c = 605'$ (see sheet 1)

Identify two segments ⓐ and ⓑ (different overflow widths, B)

ⓐ dam between locks

$$L = 197.6' - 2(34') + 110' = 20'$$

197.6' : sheet 1, elevation view; 34' : 2 lock walls; 110' : lock width

$B = 16'$ $\quad 0 < \frac{H_c}{B} < \frac{624-605}{16} = 1.2$ $\quad$ from Att. 10: $2.65 \le C_f \le 3.1$

ⓑ lock walls

$$L = 2(55') + 14' + 15' = 139'$$

55' : streamwise lengths of wall between baseline of dam and upper gate (sheet 1, plan)

14' + 15' : streamwise lengths of wall between retaining wall and baseline and between "dam between locks" and baseline (sheet 1, plan)

$B = 34 - 9 = 25'$ between baseline and upper gate } use $B = 24'$ for C_f determination

$\approx 34'$ upstream from base line }

$0 \le \frac{H_c}{B} \le \frac{624-605}{25} = 0.76$ $\quad$ from Att. 10: $2.65 \le C_f \le 2.8$

Note: These overflows are small compared to the spillway discharge. Combination of some sections and utilization of a representative value of C_f will have negligible impact on the rating curve.

Combine sections and use

$Z_c = 605'$

$L = 139' + 20' = 159'$

$C_f = 2.80$ ~ weighted towards ⓑ which is longer than ⓐ

Guntersville Navigation Locks Overflow

COMPUTED GAS DATE 9/26/2008

CHECKED DATE

• Sloped Section of Dam Between Locks"

$L = 60'$ (sheet 1, elevation view)

$Z_c = \frac{1}{2}(600+605') = 602.5'$ ~ use average overflow elevation

$B = 16'$, $0 \le \frac{H_c}{B} \le \frac{624-602.5}{16} = 1.34$

$\Rightarrow 2.65 \le C_f \le 3.15$ from Att. 10

Use $\begin{cases} Z_c = 602.5 \\ L = 60' \\ C_f = 2.9 \end{cases}$

Summary for Navigation Locks Overflows:

Z_c, ft	L, ft.	C_f	
598.3	170	3.2	main and auxiliary upper miter gates
600	75.5	2.9	auxiliary lock section
602.5	60	2.9	sloped section of dam between locks
605	159	2.8	main lock section

Notes:

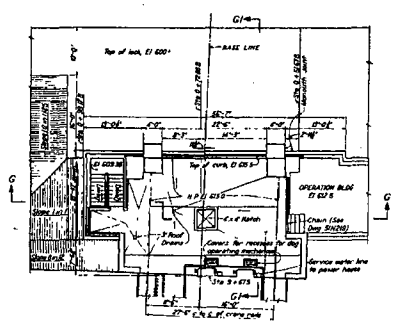
26.5' long section at EL. 615 (spillway junction w/ Aux. Lock) will be included with spillway pier overflow, also at EL. 615

Drawing ① shows "nominal elevations." Other drawings (e.g., ③ and ⑧) sometimes indicate slightly different elevations. Will use nominal elevations.

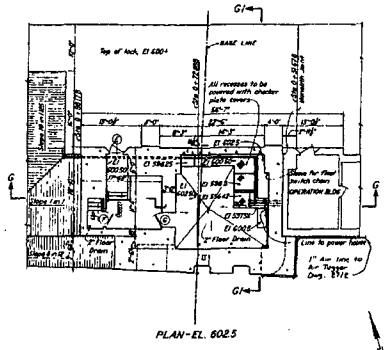
Attachment 15-6

Source: Reference 11

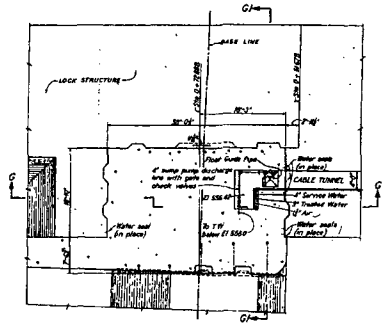
Calculation No: CDQ000020080011



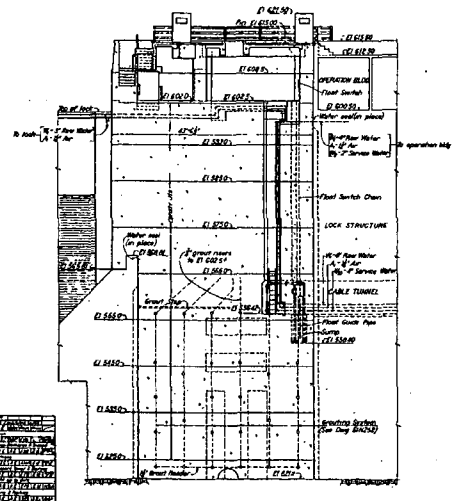
PLAN-EL. 615.0



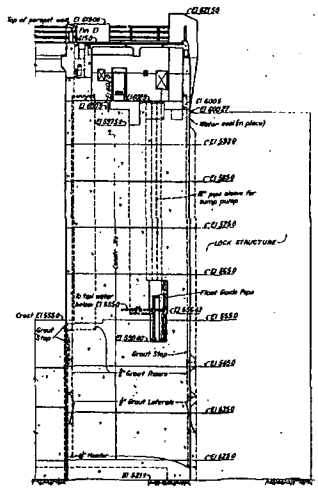
PLAN-EL. 602.5



PLAN-EL. 560.0



SECTION G-G



SECTION GI-GI

REFERENCE DRAWINGS

SPILLWAY DAM-JUNCTION WITH LOCK

- 31W 834-CONC-EL 604.3 & EL 560.0-PLANS & DETAILS-OUTLINE
- 31W 838-" " -WEST & NORTH WALL ELEVATIONS-OUTLINE
- 31W 837-" " -PIER I-EL 586.0 TO EL 615.0-OUTLINE
- 31W 836-" " -" " -FOUNDATION TO EL 551.0-OUTLINE
- 31W 831-" " -WEST & NORTH WALL ELEVATIONS-REINF
- 31W 835-" " -EAST WALL & MONT DETAILS-REINF
- 31W 833-" " -PIER I-EL 586.0 TO EL 615.0-REINF-SH.1
- 31W 834-" " -" " -FOUNDATION TO EL 551.0-REINF
- 31W 839-PIPING LAYOUT
- 31W 838-MISC. METAL DETAILS
- 31W 817-CONC-EL 615.0-PLANS & DETAILS-OUTLINE
- 31W 836-" " -TRANSVERSE & LONG. SECTIONS-OUTLINE
- 31W 826-" " -EL 615.0-PLANS & DETAILS-REINF
- 31W 810-DOOR & LOUVRE DETAILS
- 31W 848-CONC-JOINTS & SEALS-DETAILS
- 31W 817-" " -DETAILS AT CREST ELEVATION
- 31W 851-PIPING-DETAILS
- 31W 852-WATER SEAL CONNECTIONS-DETAILS
- 31W 856-CONC-PIER I-EL 586.0 TO 615.0-REINF-SH 3
- 31D 205-PIPING-SQUAR PLUG DISCHARGE EXTENSION VALVE & STEM
- 30D 815-STD DETAIL OF ROUND CORNER

SPILLWAY DAM

- 31W 887-GATE TRACK SUPPORT TOWERS-FIELD CHANGES
- 31W 801-ROCK EXCAVATION, FOUNDATION GROUTING & DRAINAGE
- 31W 817-OPERATING BRIDGE DECK
- 31W 830-" " -RAILING PLAN
- 31W 831-" " -DETAILS
- 31W 821-PLAN, ELEVATION, & SECTIONS
- 31W 805-GATE TRACK SUPPORT TOWER-END PIER

ELECTRICAL

- 46 W 14-LIGHTING PLANS-LOCK & SPILLWAY JUNCTION
- 46 W 18-CONDUIT PLAN & SECTS-INLET-LOCK & SPILLWAY JUNCTION

LOCK

- U S E O 2057-LOCK WALLS-PLAN-UPPER END
- U S E O 2049-" " -CABLE TUNNEL
- U S E O 2071-PIPING DIAGRAM & DETAILS
- U S E O 2071-OPERATION BUILDING-PLANS
- W-8291-REVISION IN RIVER SILLS AT SPILLWAY-PLAN, ELEVATIONS, & SECTIONS

PIPING

- 31 W 215-TREATED WATER LINES

Scale 0 8 16 feet

Except as noted

SPILLWAY DAM
JUNCTION WITH AUXILIARY LOCK

CONCRETE
GENERAL PLANS & SECTIONS
OUTLINE

GUNTERSVILLE PROJECT
TENNESSEE VALLEY AUTHORITY
ENGINEERING DESIGN DEPARTMENT

SUBMITTED: Peter M. Kyle
RECOMMENDED: [illegible]
APPROVED: Gordon McGregor

KNOXVILLE, TENN. 8-24-51

0 C 4 5 IN 222-D

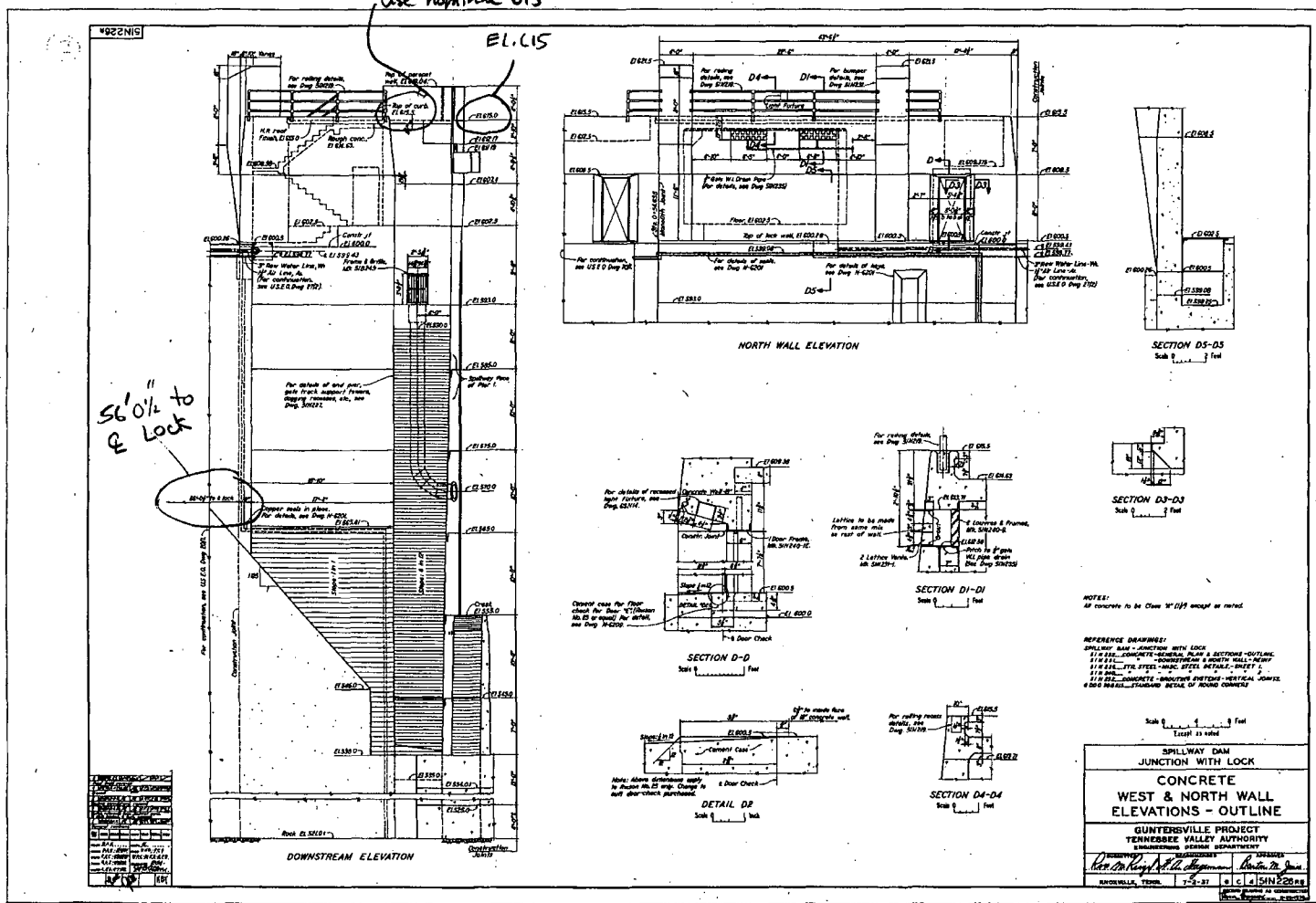
02-L349-27/7

(2)

Attachment 15-7

Source: Reference 12

Calculation No: CDQ0000020080011

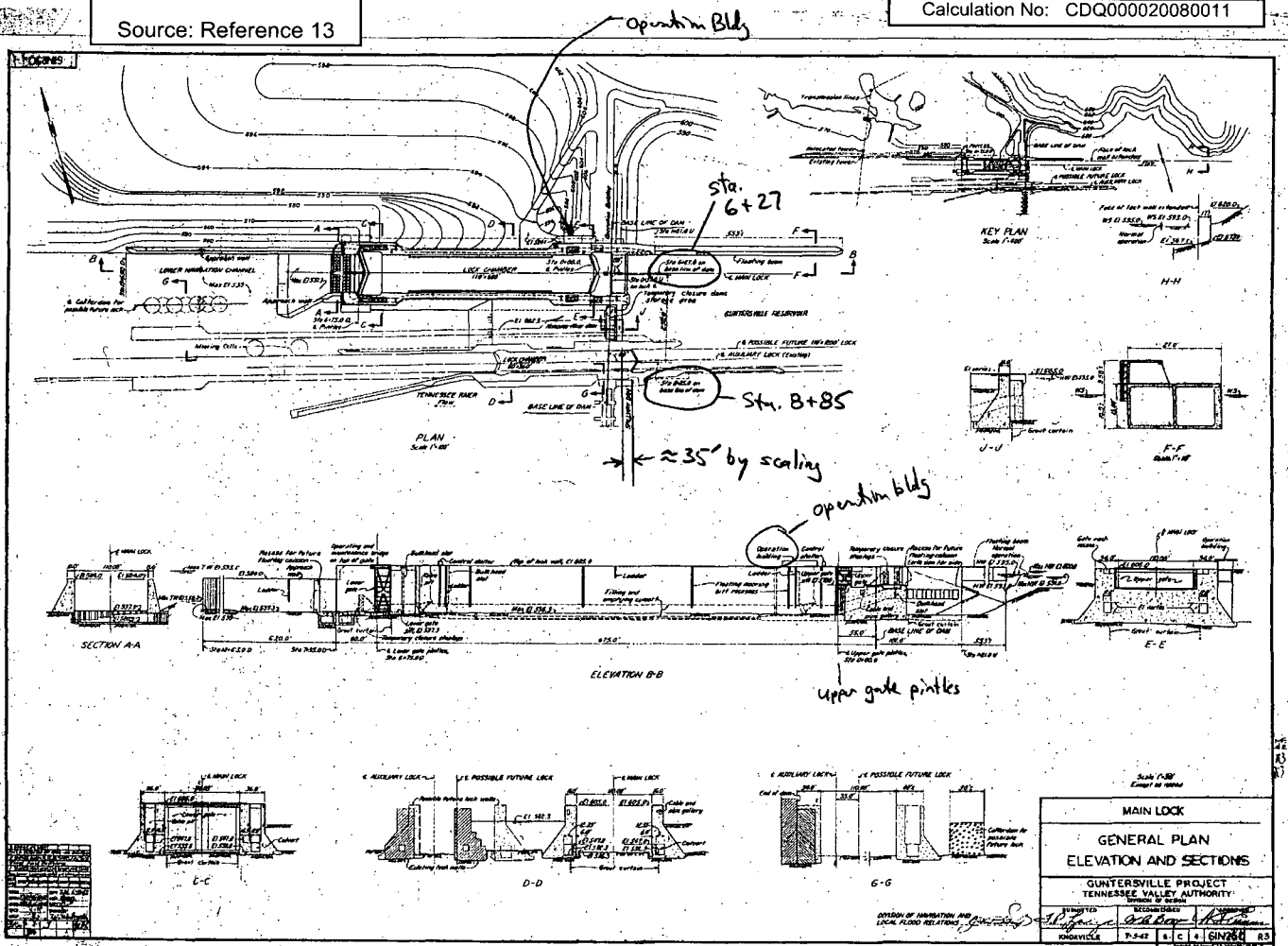


3

Attachment 15-8

Source: Reference 13

Calculation No: CDQ000020080011

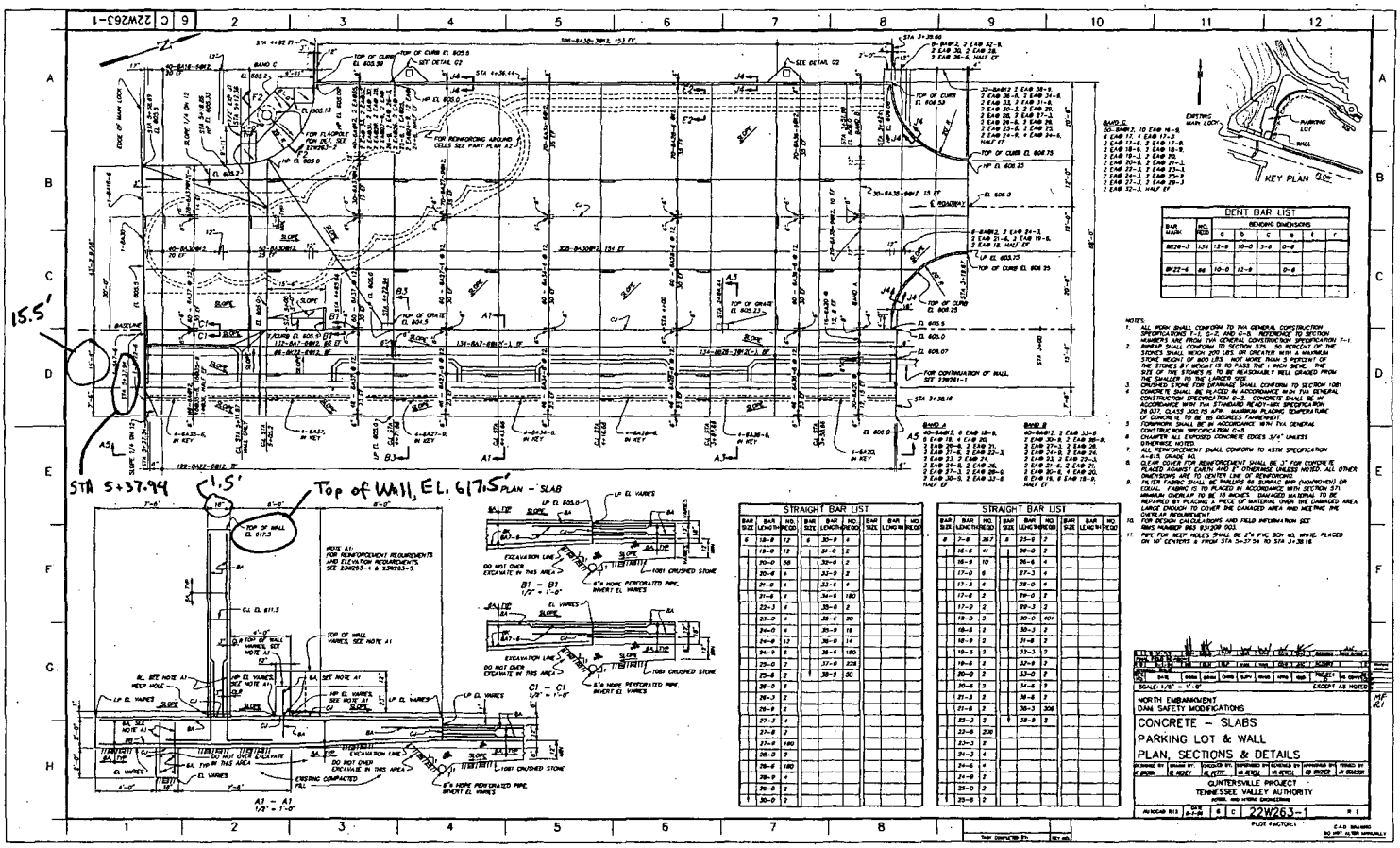


(5)

Attachment 15-9

Source: Reference 9

Calculation No: CDQ000020080011

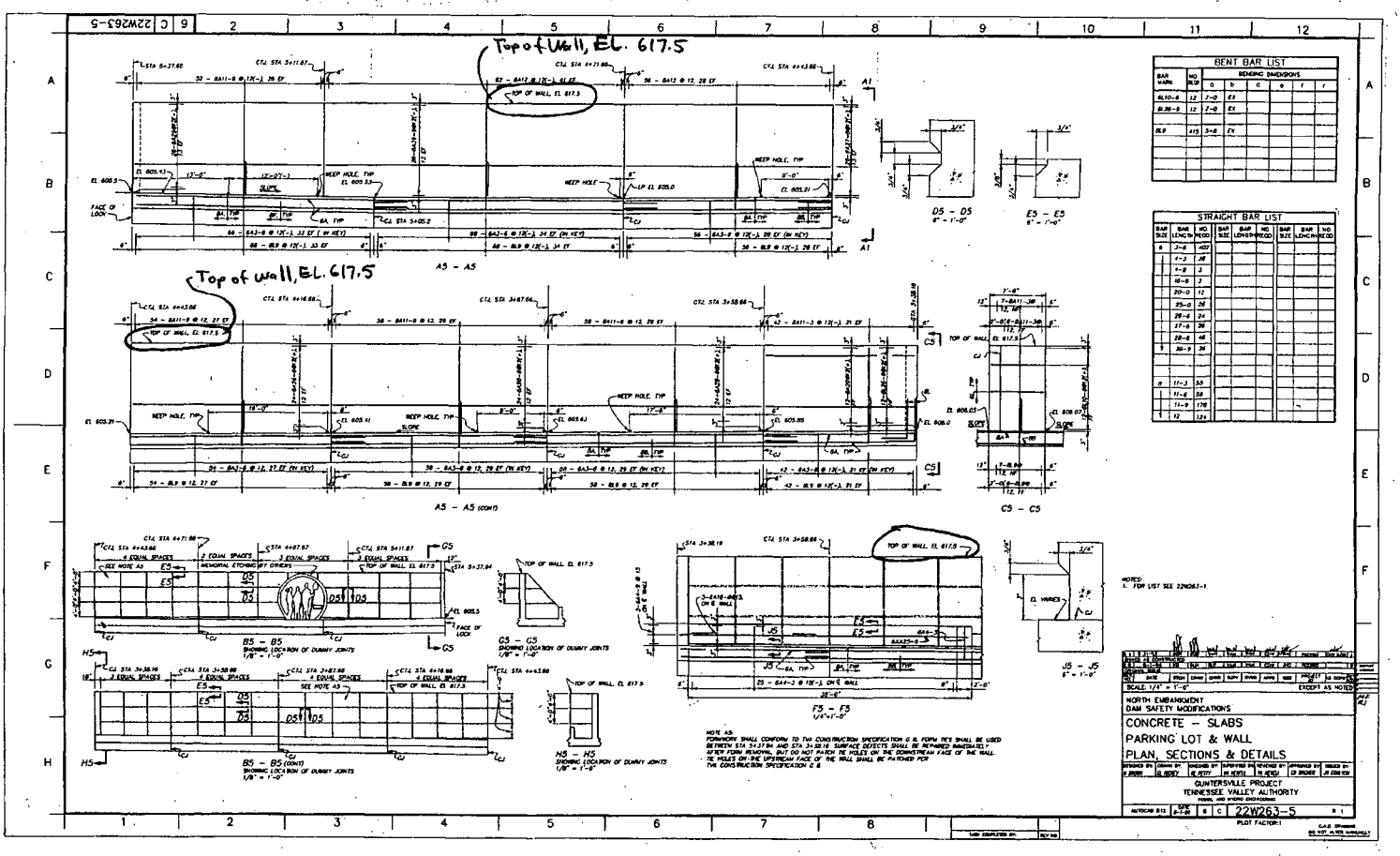


(6)

Attachment 15-10

Source: Reference 10

Calculation No: CDQ000020080011



(7)

Attachment 15-11

Source: Reference 14

Calculation No: CDQ000020080011

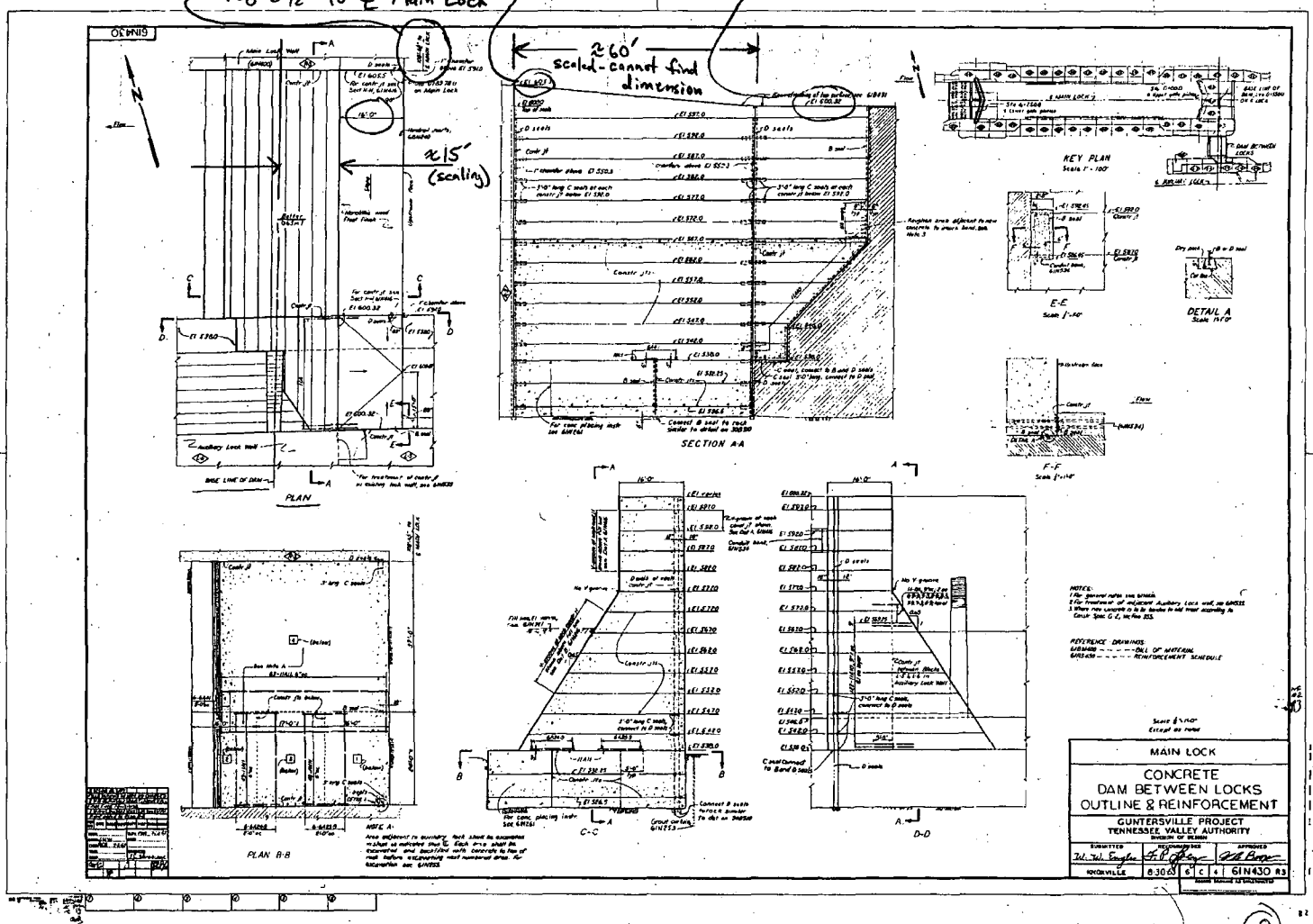
108' 6 1/2" to ℄ Main Lock

use nominal 605'

use nominal 600'

≈60' scaled - cannot find dimension

≈15' (scaling)

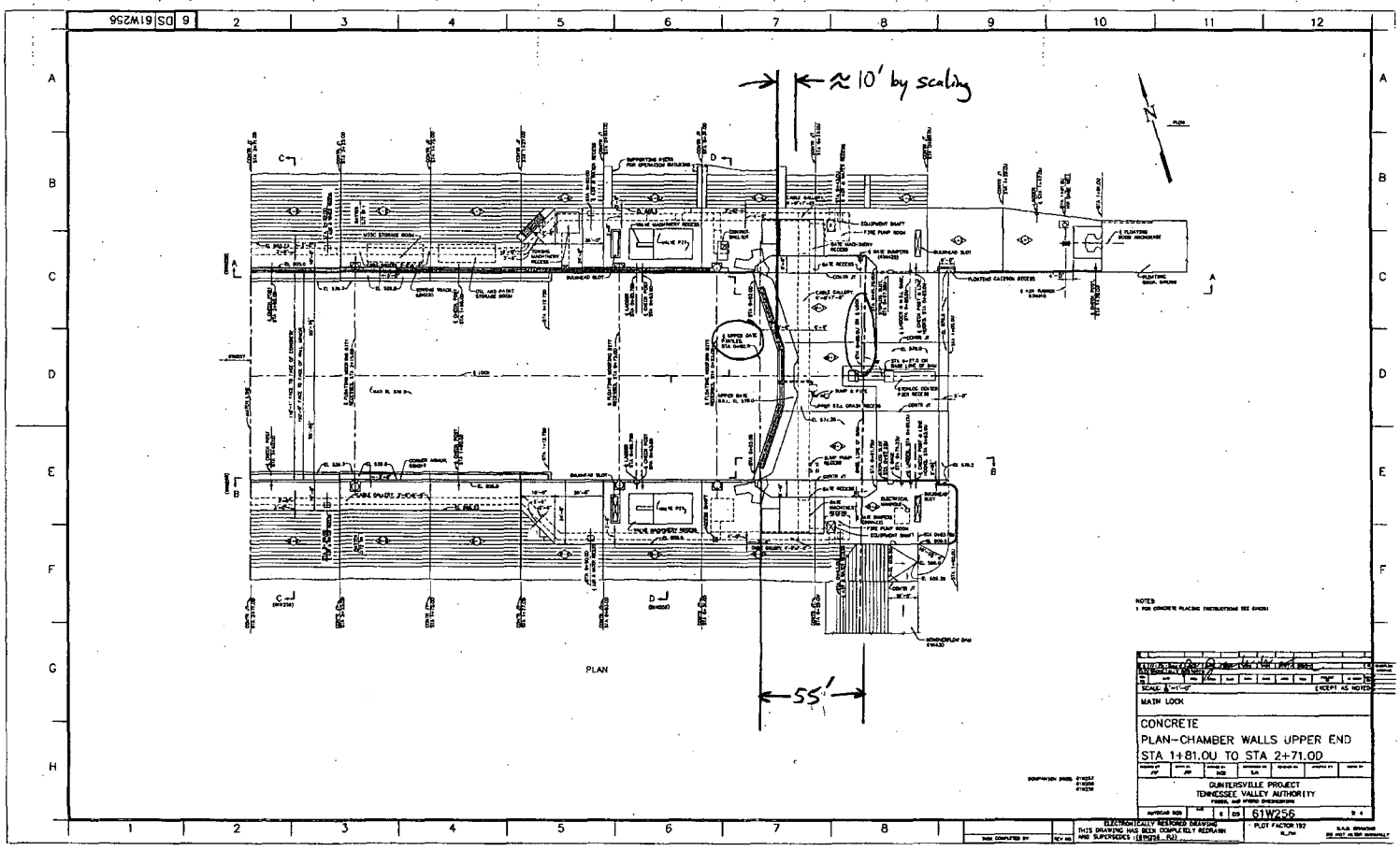


(8)

Attachment 15-12

Source: Reference 15

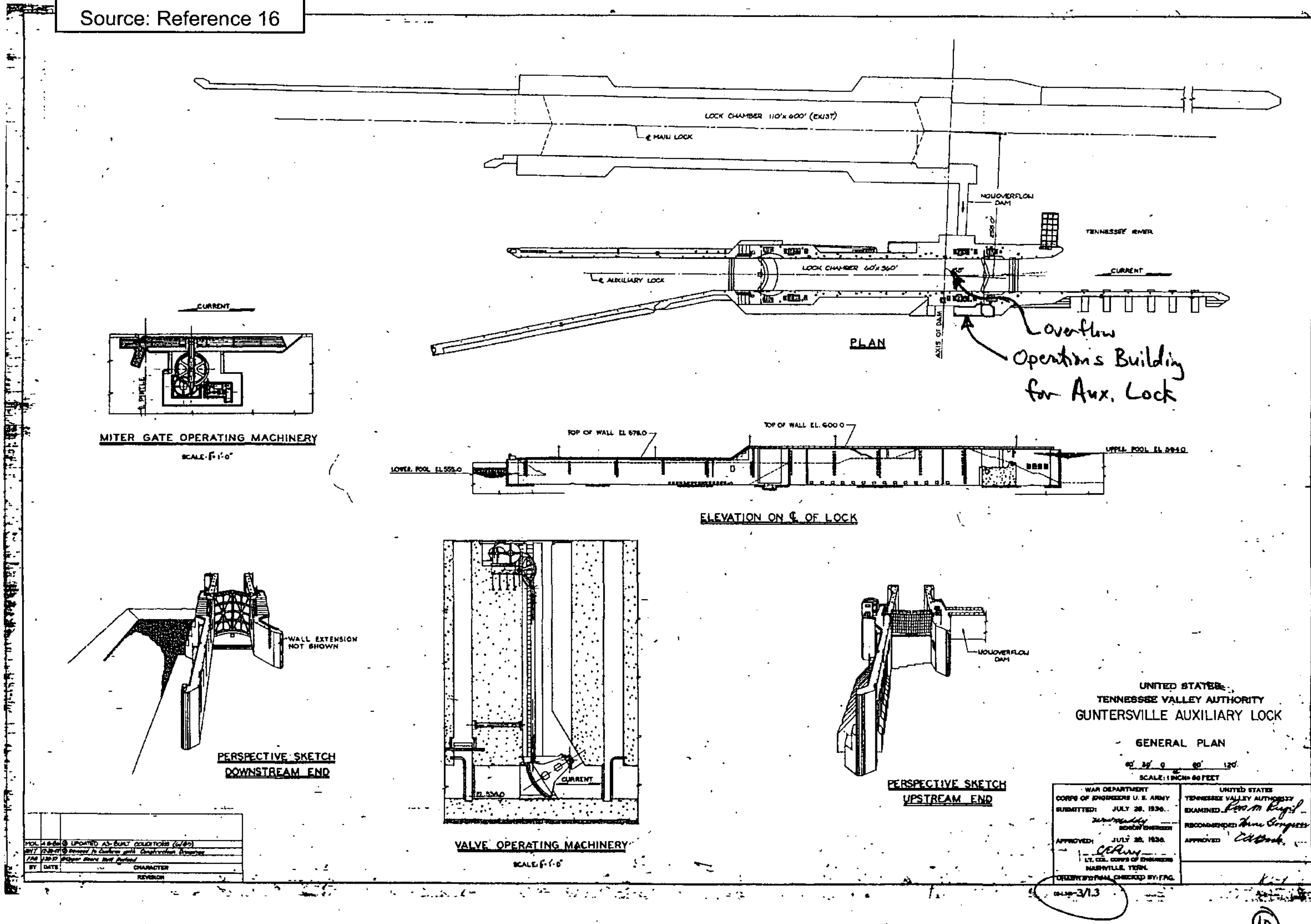
Calculation No: CDQ000020080011



Attachment 15-13

Source: Reference 16

Calculation No: CDQ000020080011

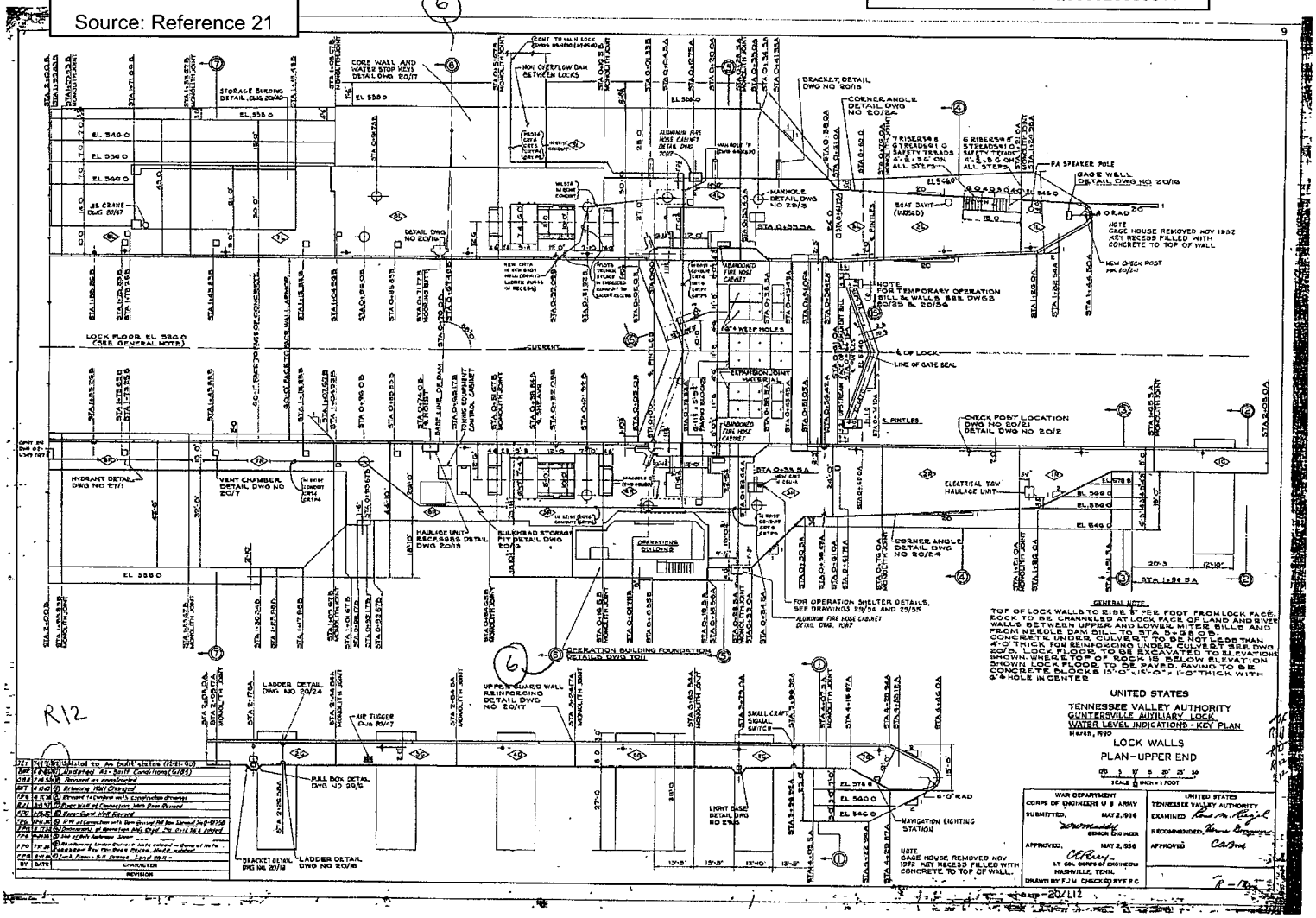


LOCK CHAMBER 110'x600' (EXIST)
℄ MAIN LOCK
NON-OVERFLOW DAM
TENNESSEE RIVER
CURRENT
LOCK CHAMBER 60'x360'
℄ AUXILIARY LOCK
AXIS OF DAM
PLAN
Overflow
Operations Building for Aux. Lock
MITER GATE OPERATING MACHINERY
SCALE: ⅛"=1'-0"
TOP OF WALL EL. 578.0
TOP OF WALL EL. 600.0
LOWER POOL EL. 555.0
UPPER POOL EL. 594.0
ELEVATION ON ℄ OF LOCK
WALL EXTENSION NOT SHOWN
PERSPECTIVE SKETCH DOWNSTREAM END
VALVE OPERATING MACHINERY
PERSPECTIVE SKETCH UPSTREAM END
UNITED STATES
TENNESSEE VALLEY AUTHORITY
GUNTERSVILLE AUXILIARY LOCK
GENERAL PLAN
WAR DEPARTMENT
CORPS OF ENGINEERS U. S. ARMY
SUBMITTED: JULY 28, 1936.
APPROVED: JULY 28, 1936.
NASHVILLE, TENN.
UNITED STATES
TENNESSEE VALLEY AUTHORITY
EXAMINED
RECOMMENDED
APPROVED
REVISION
3/1.3
10

Attachment 15-14

Source: Reference 21

Calculation No: CDQ000020080011

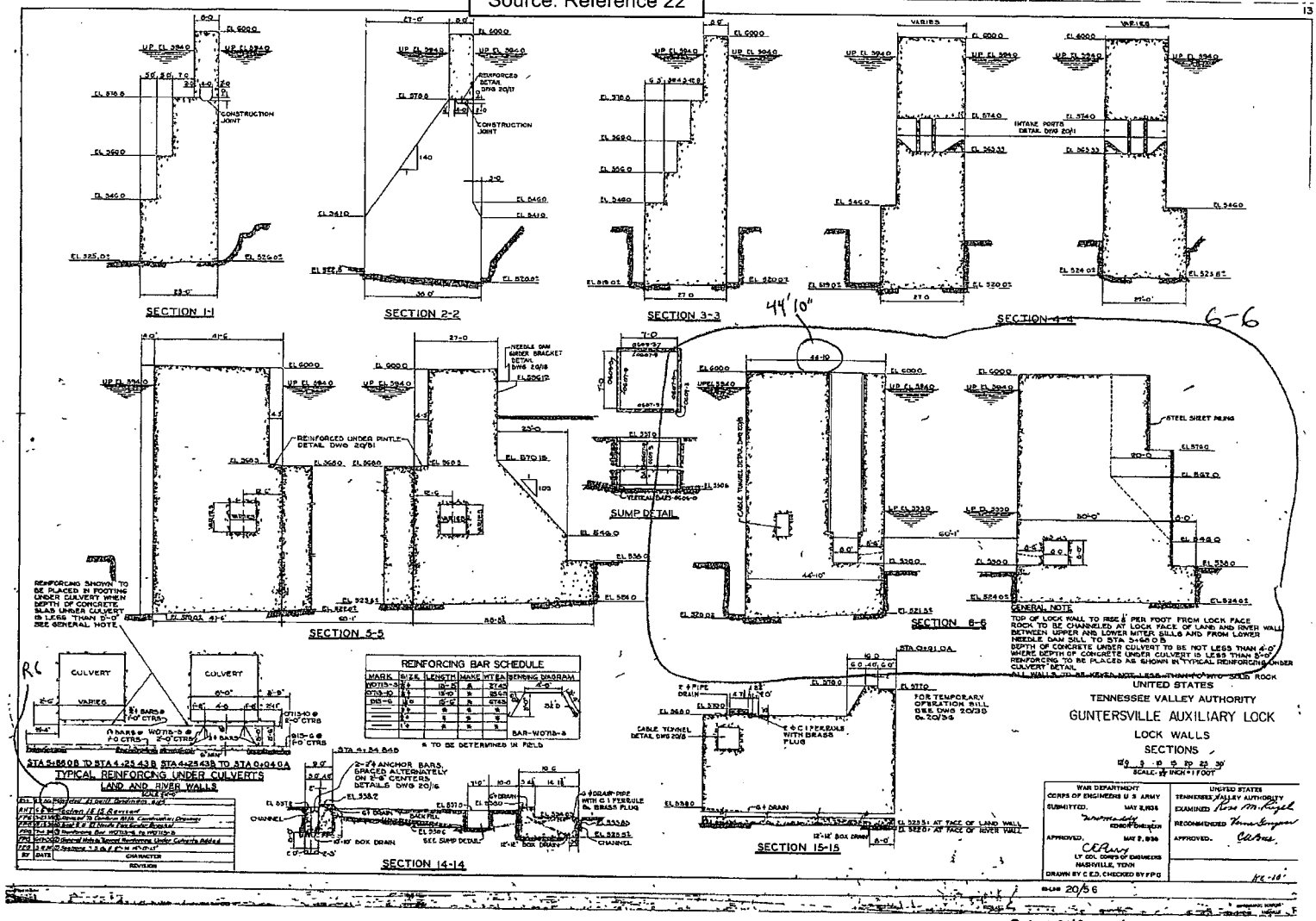


02-L349-20/1.12, R12

Attachment 15-15

Source: Reference 22

Calculation No: CDQ000020080011



02-L349-20/56_R6

TVA 489 (EN DES-11-76)

SHEET 1 OF

Attachment 16-1

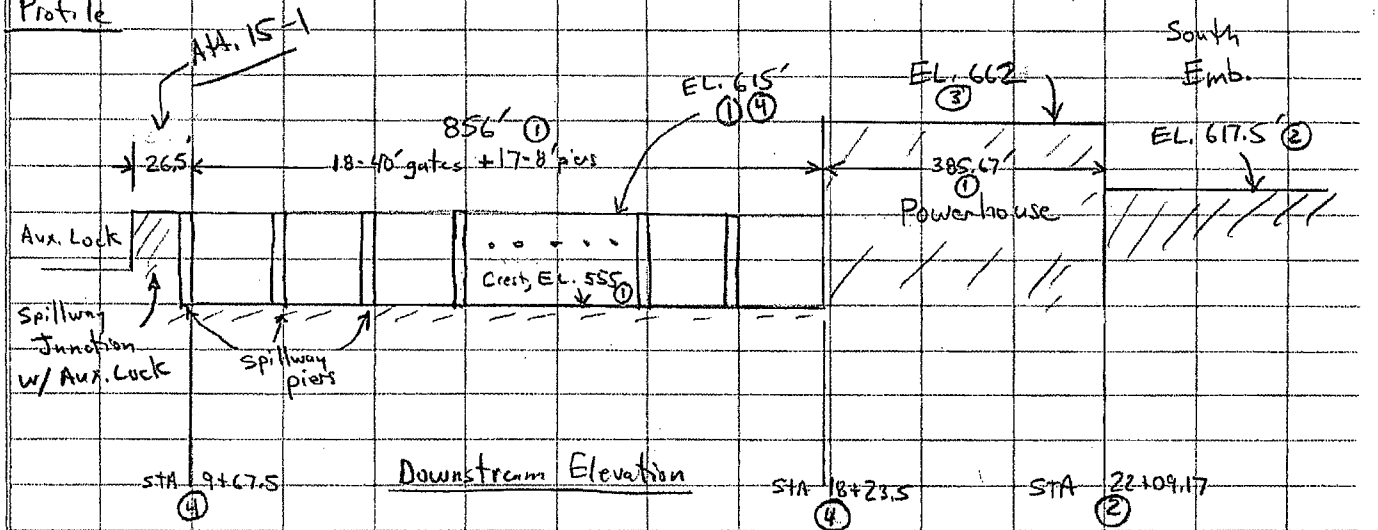
Calculation No: CDQ000020080011

Guntersville Overflow - Spillway Piers

COMPUTED DATE

CHECKED DATE

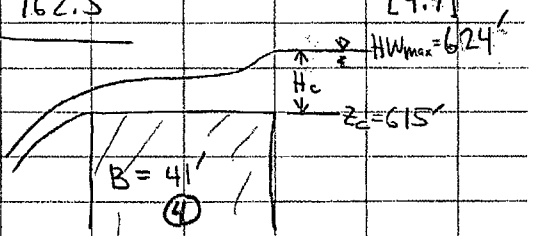
Profile



Overflow elevation 615': $Z_c = 615$

Tops of spillway piers

$L = 26.5 + 17 * 8' = 162.5'$ [4.7]



C_f determination (Ref. 7)

$$0 \le \frac{H_c}{B} \le \frac{624-615}{41} = 0.22$$

$\Rightarrow C_f = 2.65$

neglect effect of short section of junction structure that is less than 41' wide ④

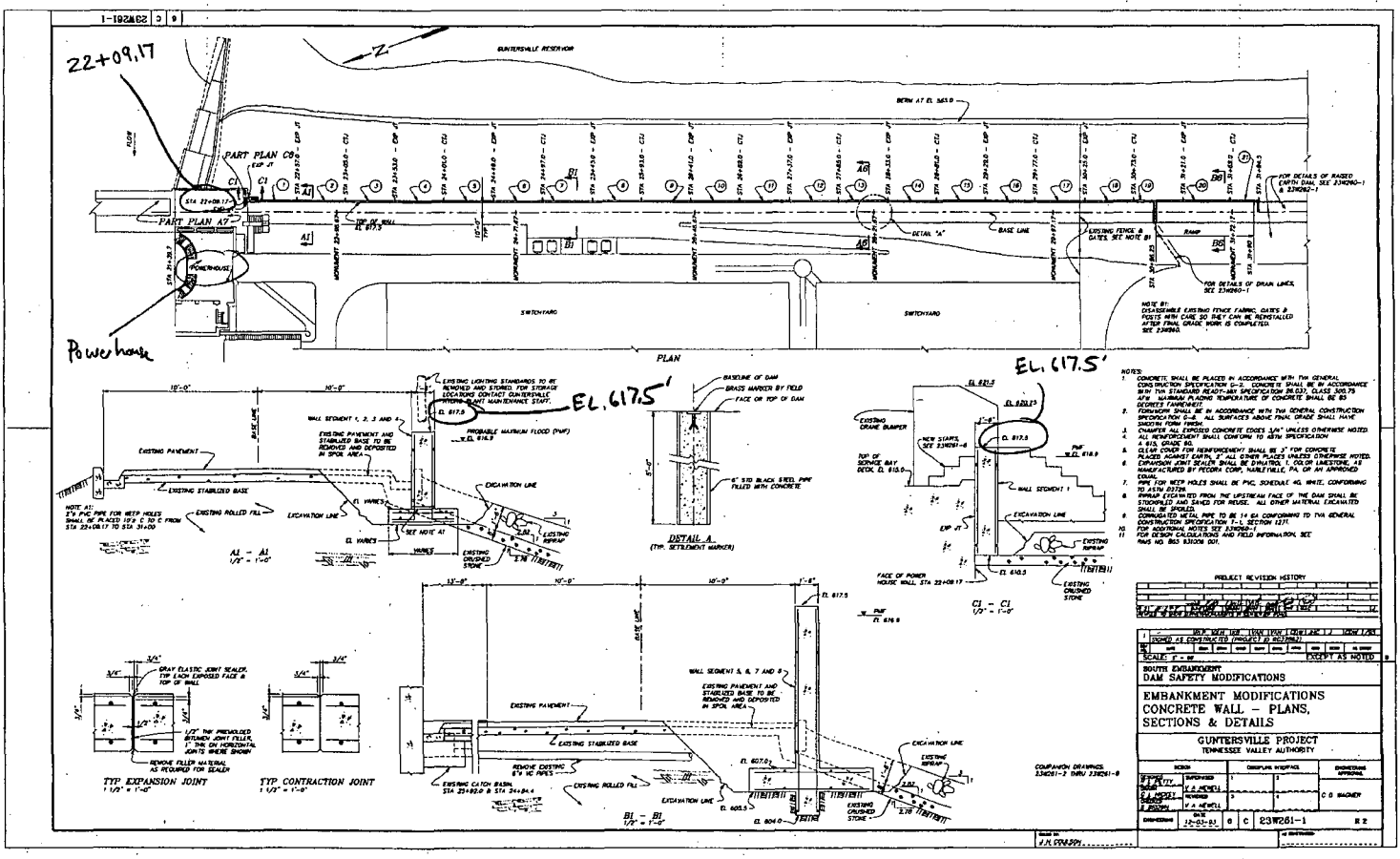
Drawings

① 10W200, R11 (Ref. 1, Att. 1)
② 23W261-1, R2 (Ref. 17, Att. 16-2)
③ 46W300, R6 (Ref. 18, Att. 16-3)
④ 5IN241, R8 (Ref. 8, Att. 12)

Attachment 16-2

Source: Reference 17

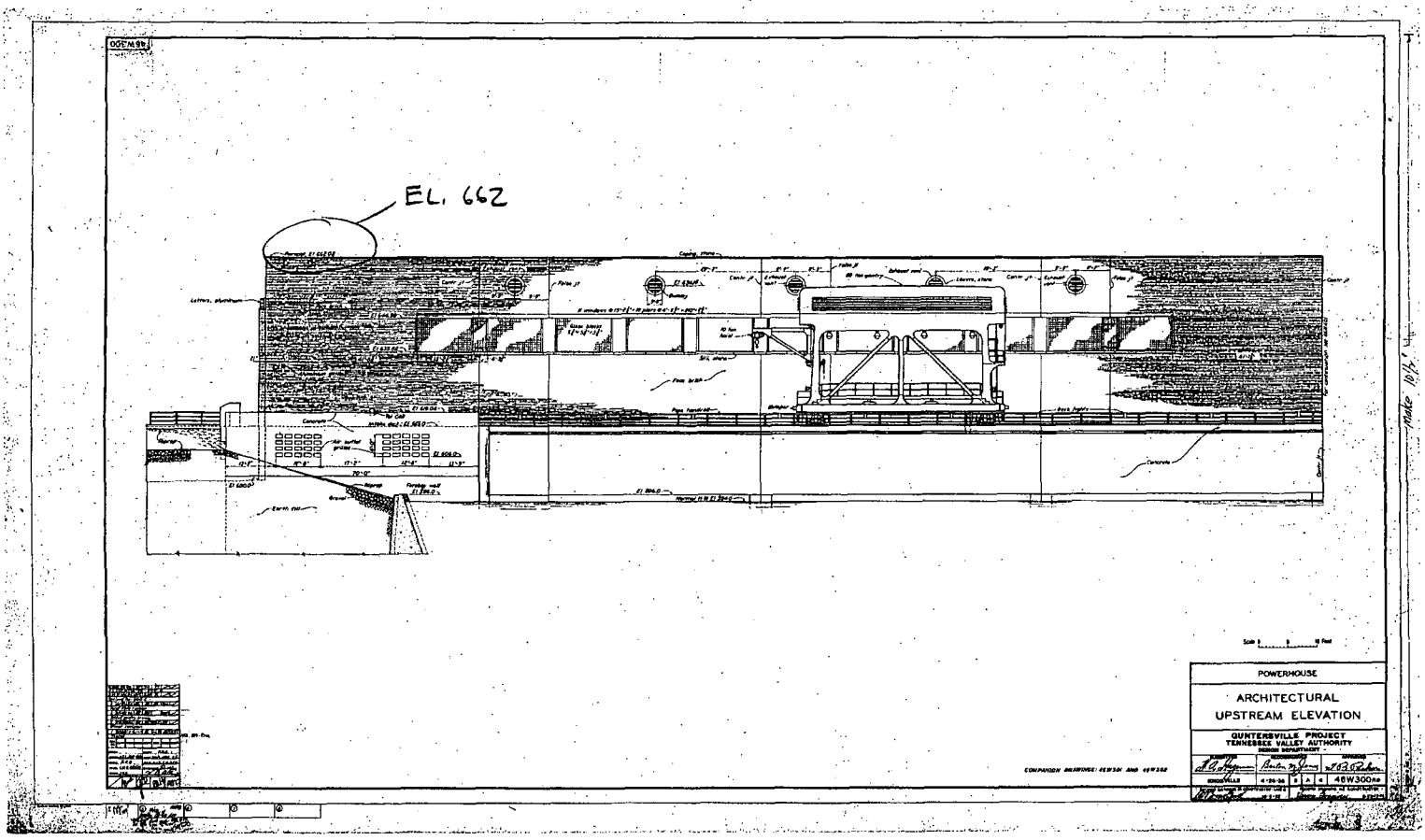
Calculation No: CDQ000020080011



Attachment 16-3

Source: Reference 18

Calculation No: CDQ000020080011



SHEET ____ OF ____

Attachment 17-1

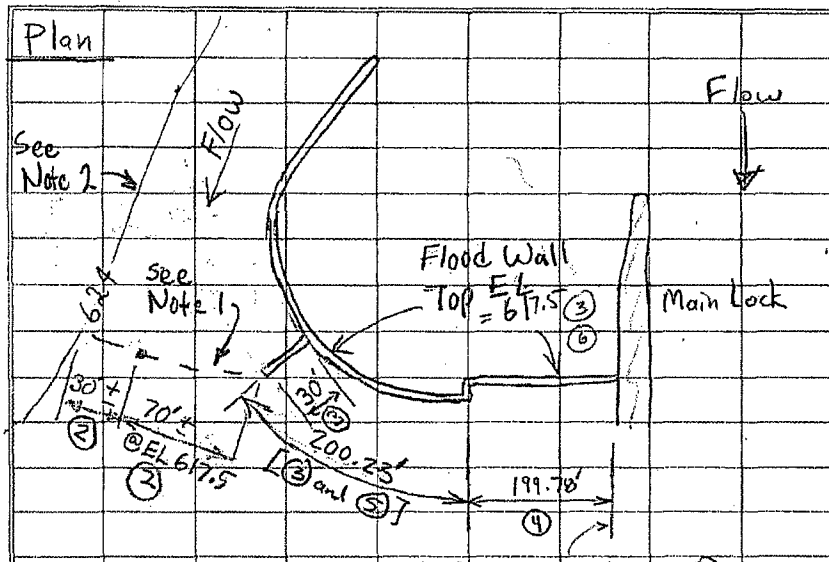
Calculation No: CDQ000020080011

Guntersville North Embankment - Flood Wall

COMPUTED CWHR DATE 11/24/08

CHECKED ____ DATE ____

Plan

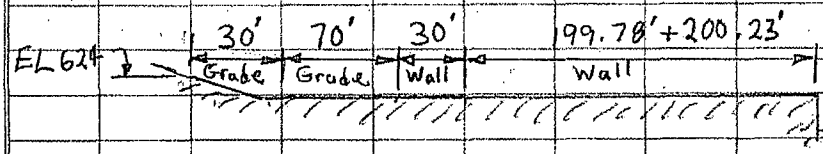


Drawings
① 10W200, R11 (Ref. 1, Att 1)
② 22W260-1, R1 (Ref. 23, Att. 17-2)
③ 22W261-1, R1 (Ref. 24, Att. 17-3)
④ 22W263-1, R1 (Ref. 9, Att. 15-9)
⑤ 22W261-6, R2 (Ref. 25, Att. 17-4)
⑥ 22W263-5, R1 (Ref. 10, Att. 15-10)

Note 1: Approximate crest = drainage divide estimated from ②

Note 2: Contour estimated from ②

Overflow Profile



Overflow Parameters

Flood Walls: $B = 1.5'$ ③, $Z_c = 617.5'$ ③

$0 \le H_e < 624 - 617.5 = 6.5'$

$0 \le H_e/B \le 6.5/1.5 = 4.3$ ∴ $2.65 \le C_f \le 3.3$ per Ref 6

$L = 200.23 + 199.78 + 30 = 430'$

Use $C_f = 3.2$

For Grade North of Flood Walls

Treat as weir with very broad crest, ∴ $C_f = 2.65$ per Ref 6

$Z_c = 617.5'$ for $L = 70'$ for parking area

$Z_c \simeq (624 + 617.5)/2 = 621'$ for $L = 30'$ for sloped section

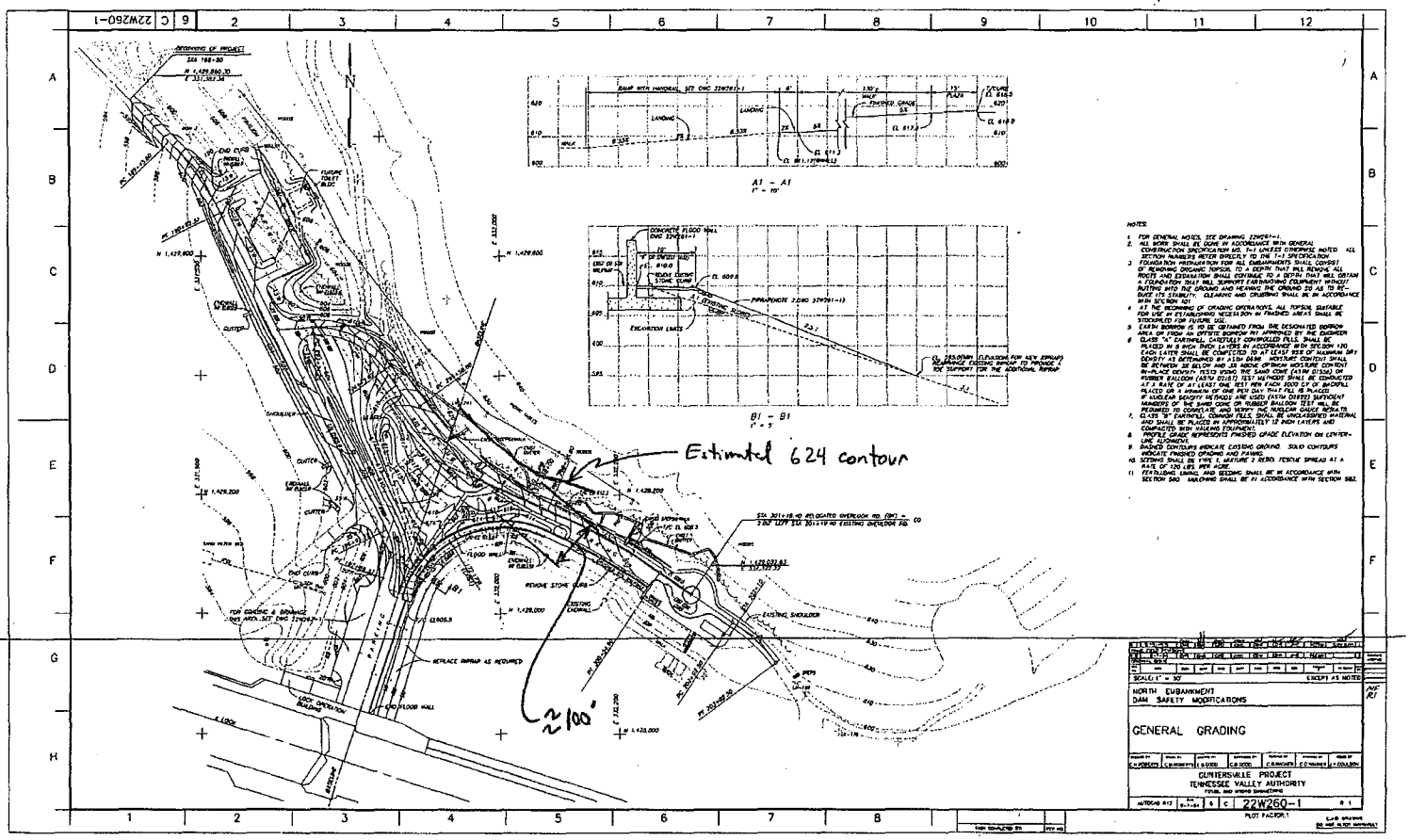
weighted average $= \frac{3.2(430) + 2.65(70)}{500} = 3.12$

Summary:	Z_c, ft	L, ft		C_f	
	617.5	430	500'	3.2	Flood Walls
	617.5	70		2.65	Grade including parking area
	621	30		2.65	Grade, sloped bank

Attachment 17-2

Source: Reference 23

Calculation No: CDQ000020080011

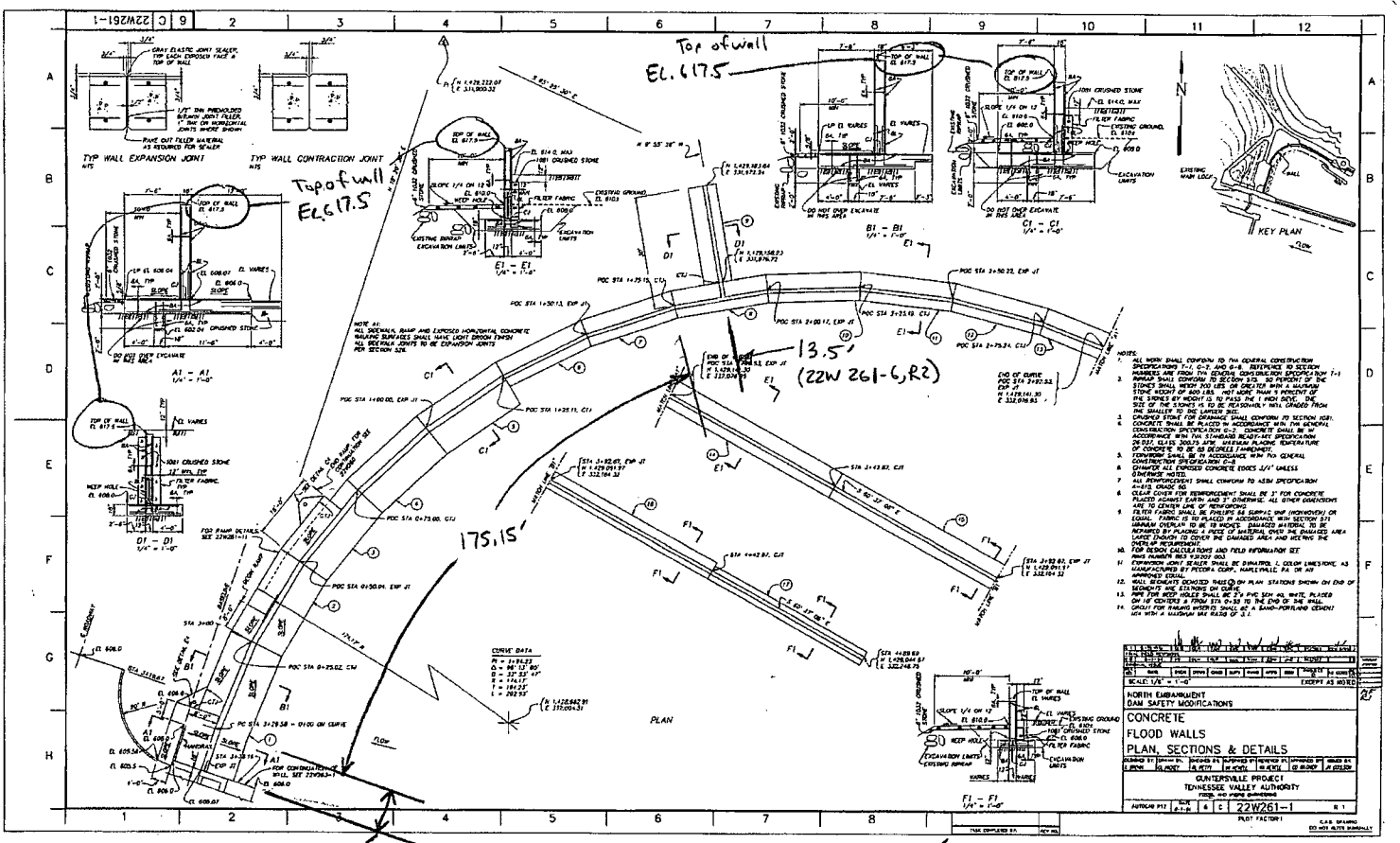


(2)

Attachment 17-3

Source: Reference 24

Calculation No: CDQ000020080011

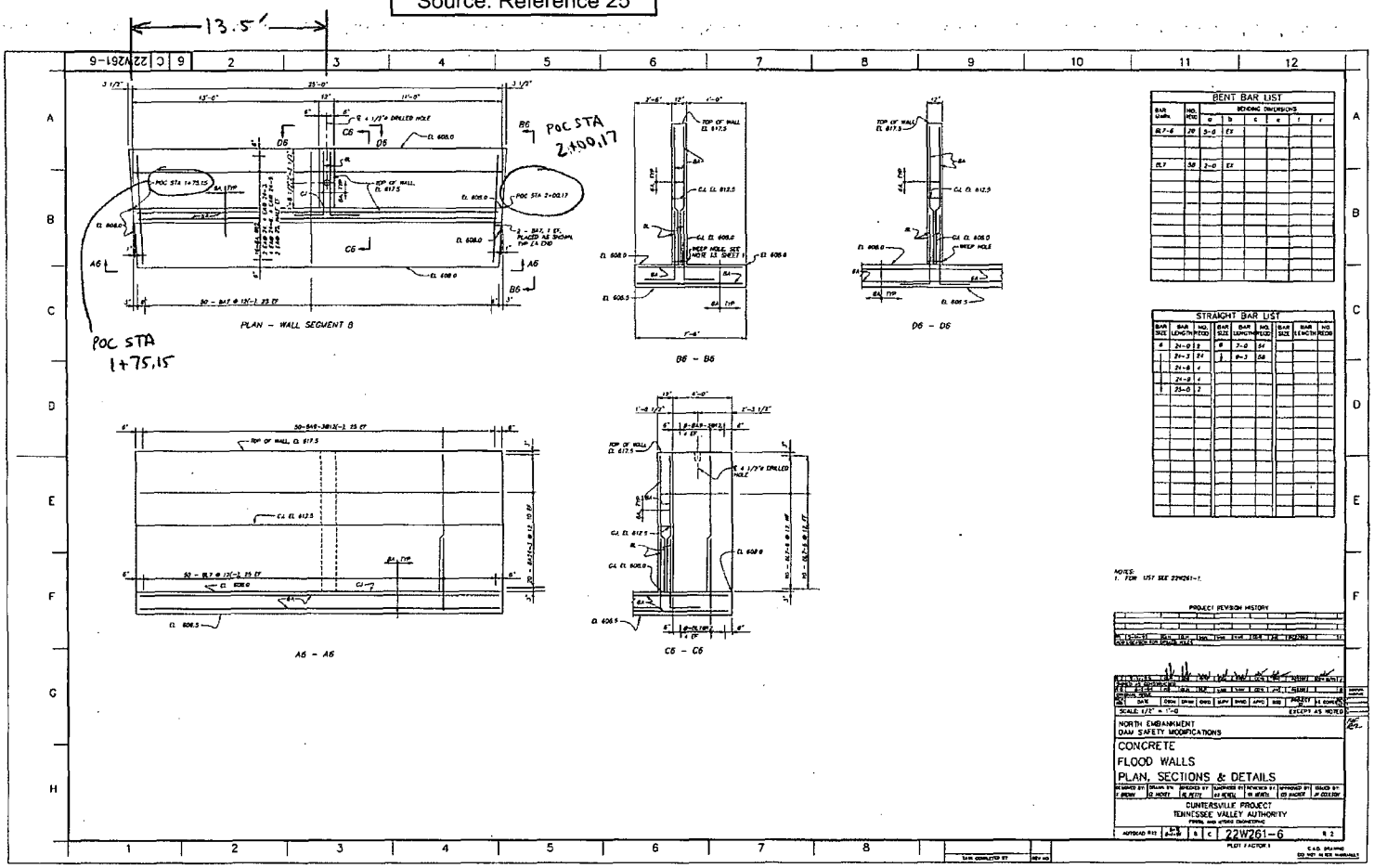


3

Attachment 17-4

Source: Reference 25

Calculation No: CDQ000020080011



(5)

A 489 (EN DES-11-76)

SHEET ____ OF ____

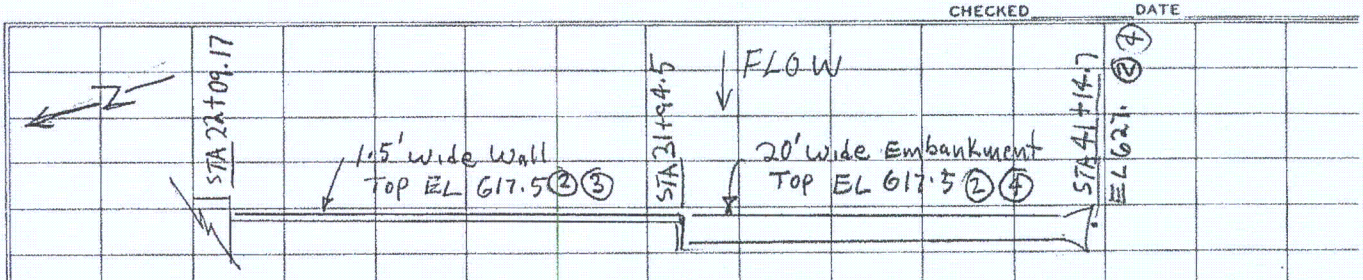
Attachment 18-1

Calculation No: CDQ000020080011

Guntersville South Embankment

COMPUTED WHR DATE 11-24-08

CHECKED ____ DATE ____



PLAN

Drawings

① 10W 200, R11 (Ref. 1, Att. 1)
② 23W 260-1, R2 (Ref. 26, Att. 18-2)
③ 23W 261-1, R1 (Ref. 17, Att. 16-2)
④ 23W 262-1, R1 (Ref. 27, Att. 18-3)

Flood Wall Section (sta 22+09.17 to sta 31+94.5)

$B = 1.5$ ② ③ $\quad Z_c = 617.5'$ ② ③

$0 \le H_c \le 624 - 617.5' = 6.5'$

$0 \le H_c/B \le 6.5/1.5 = 4.3$, $\therefore$ $2.65 \le C_f \le 3.3$ per Ref 6

Use $C_f = 3.2$

$L = 3194.5 - 2209.17 = 985.33'$

Embankment Section (beyond sta 31+94.5)

$B = 20'$ ② ④ $\quad Z_c = 617.5'$ ② ④

$0 \le H_c \le 6.5$

$0 \le H_c/B \le 6.5/20 = 0.33$ $\therefore$ $C_f = 2.65$ per Ref 6

From Det D2 and section B2-B2 on 23W 262-6, approximate end point for embankment = STA 40+99'

$L = 40+99 - 31+94.5 = 905'$

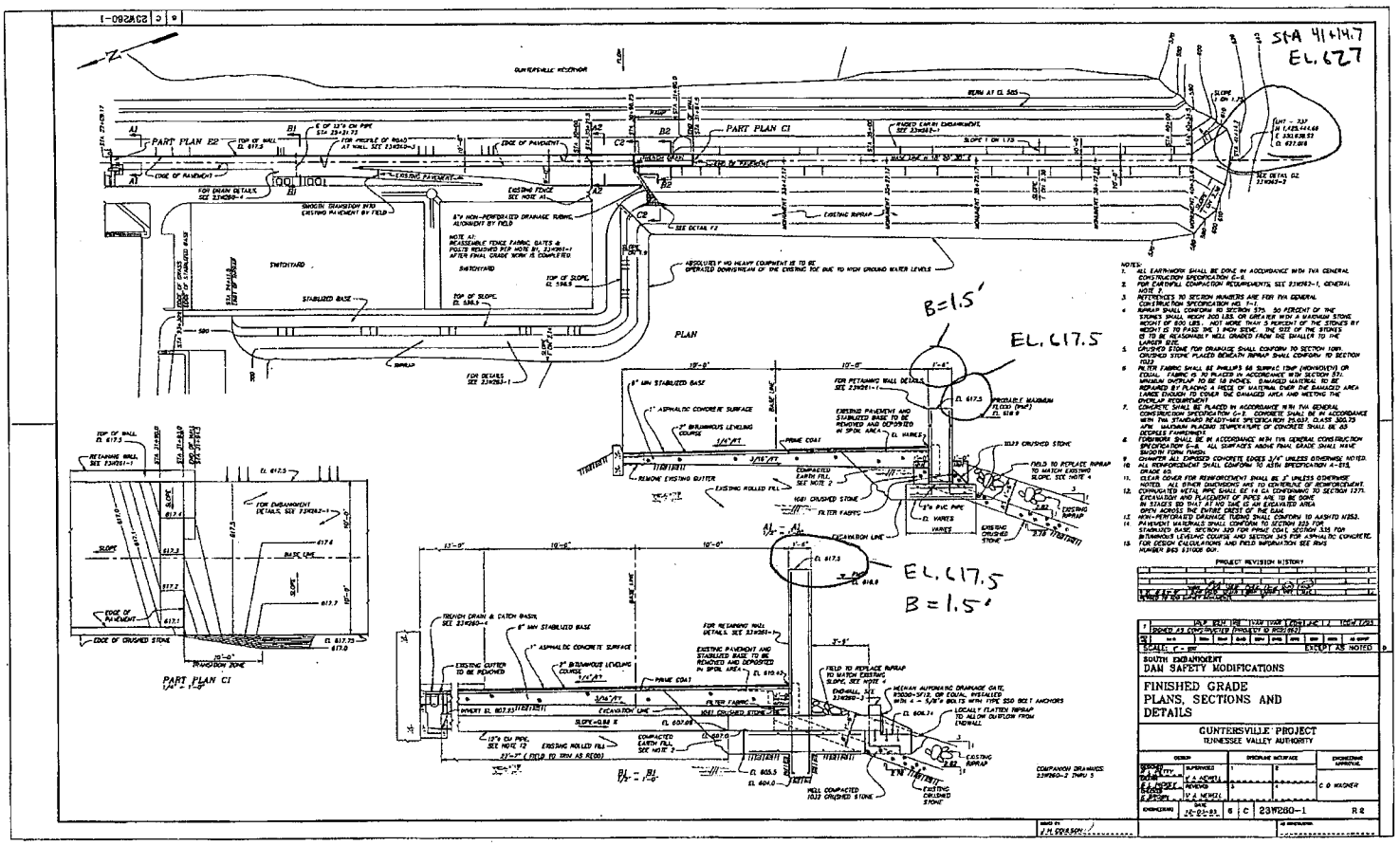
Summary

	Z_c, ft	L, ft	C_f	
	617.5	985'	3.2	Flood wall
	617.5	905'	2.65	Embankment
Use	617.5	1890	2.94	weighted average $= [3.2(985) + 2.65(905)]/1890$

Attachment 18-2

Source: Reference 26

Calculation No: CDQ000020080011

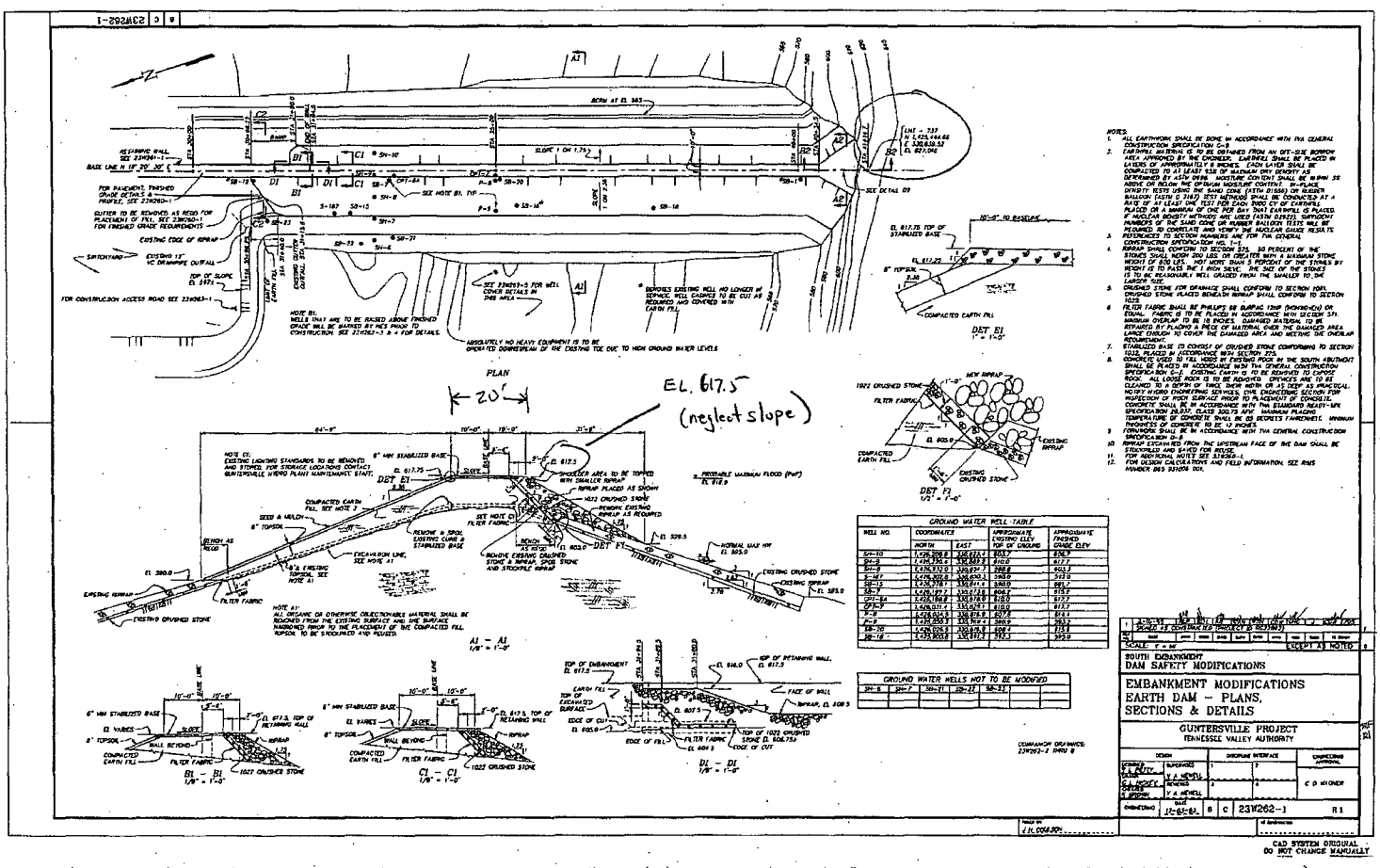


(2)

Attachment 18-3

Source: Reference 27

Calculation No: CDQ0000020080011



(4)

Attachment 19

Calculation No: CDQ000020080011

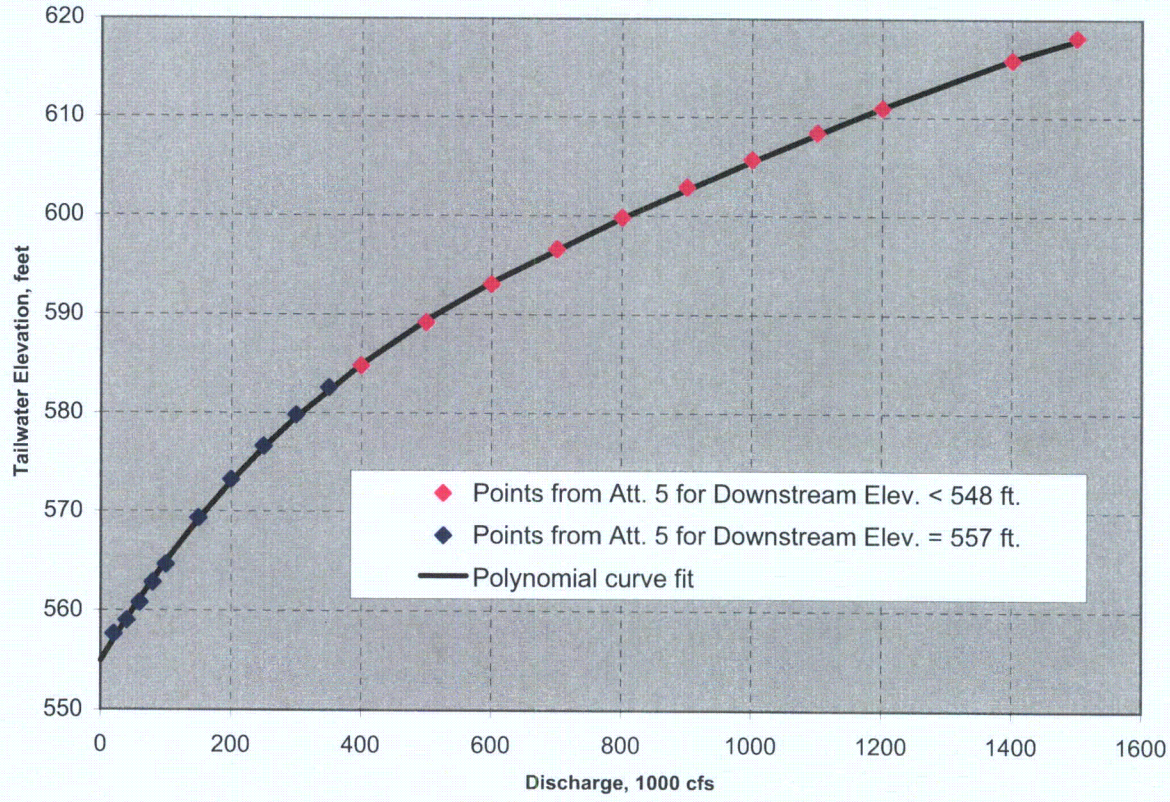
TW-Q points from Attachment 5

Downstream Elev. = 557 ft.		Downstream Elev. < 548 ft.		Polynomial Fit (1)	(2)
Discharge 1000 cfs	TW	Discharge 1000 cfs	TW	Discharge 1000 cfs	TW
20	557.6	400	584.8	0	554.9
40	559.0	500	589.2	25	557.6
60	560.8	600	593.1	50	560.2
80	562.8	700	596.6	75	562.6
100	564.6	800	599.8	100	564.9
150	569.3	900	602.9	150	569.2
200	573.2	1000	605.7	200	573.0
250	576.6	1100	608.4	250	576.4
300	579.8	1200	610.9	300	579.6
350	582.6	1400	615.8	400	585.0
		1500	618.1	500	589.4
				600	593.3
				800	599.8
				1000	605.5
				1200	611.0
				1400	615.9
				1500	617.9

Polynomial Curve Fit:

$$TW = 554.89 + 0.11085Q - 1.157\times10^{-4}Q^2 + 7.335\times10^{-8}Q^3 - 1.788\times10^{-11}Q^4$$

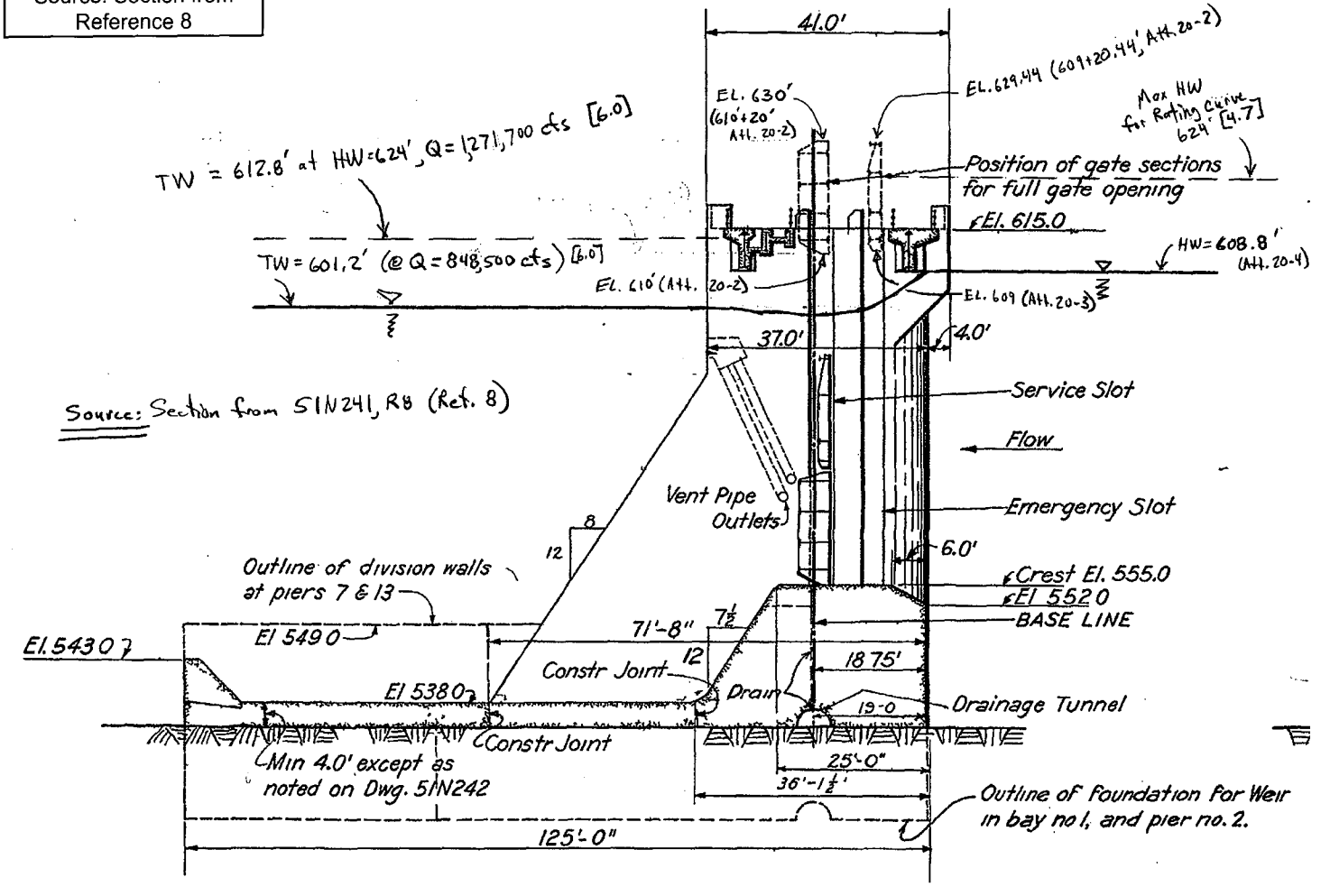
where TW = tailwater elevation in feet and Q = discharge in 1000 cfs



Attachment 20-1

Source: Section from Reference 8

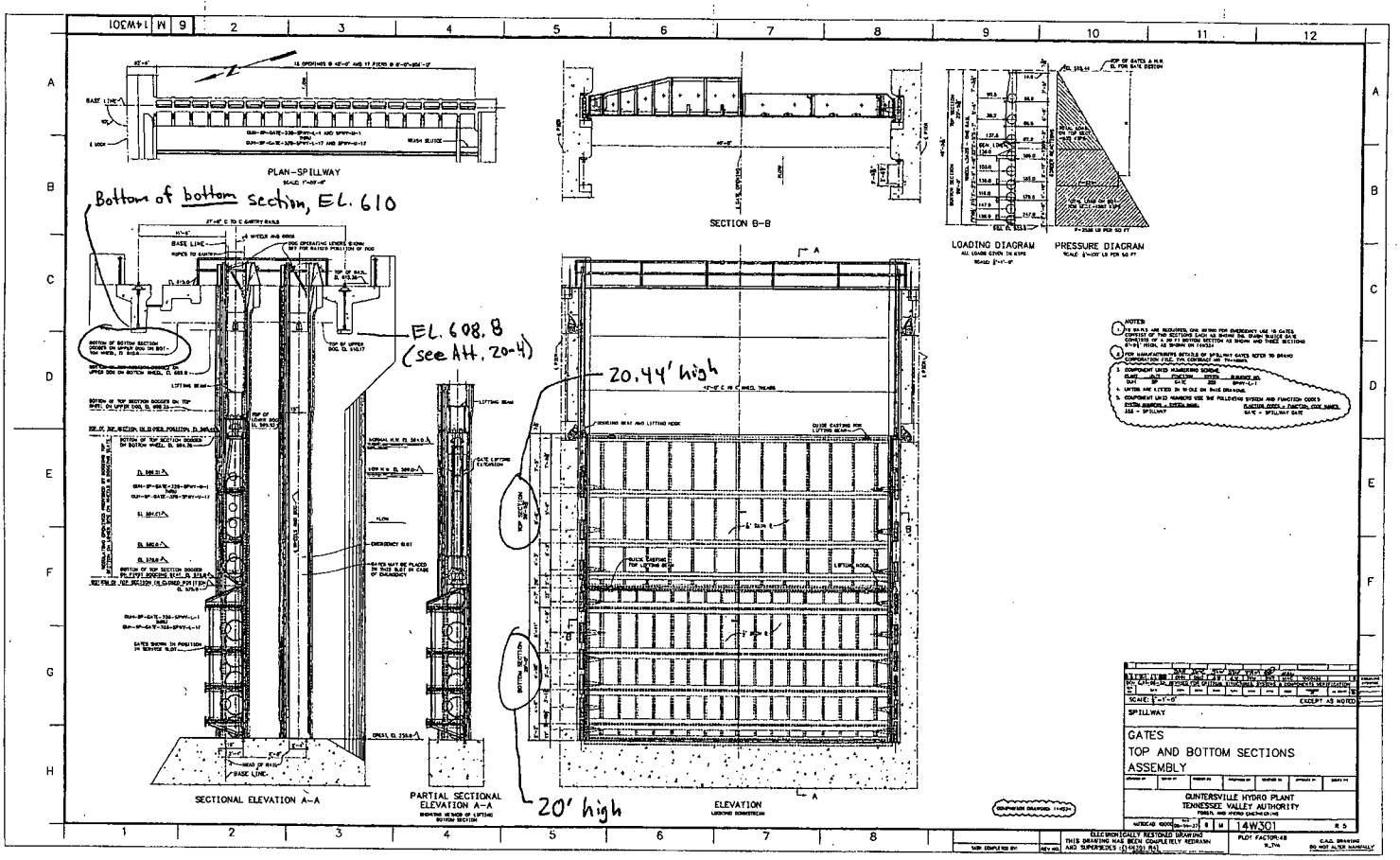
Calculation No: CDQ000020080011



Attachment 20-2

Source: Reference 28

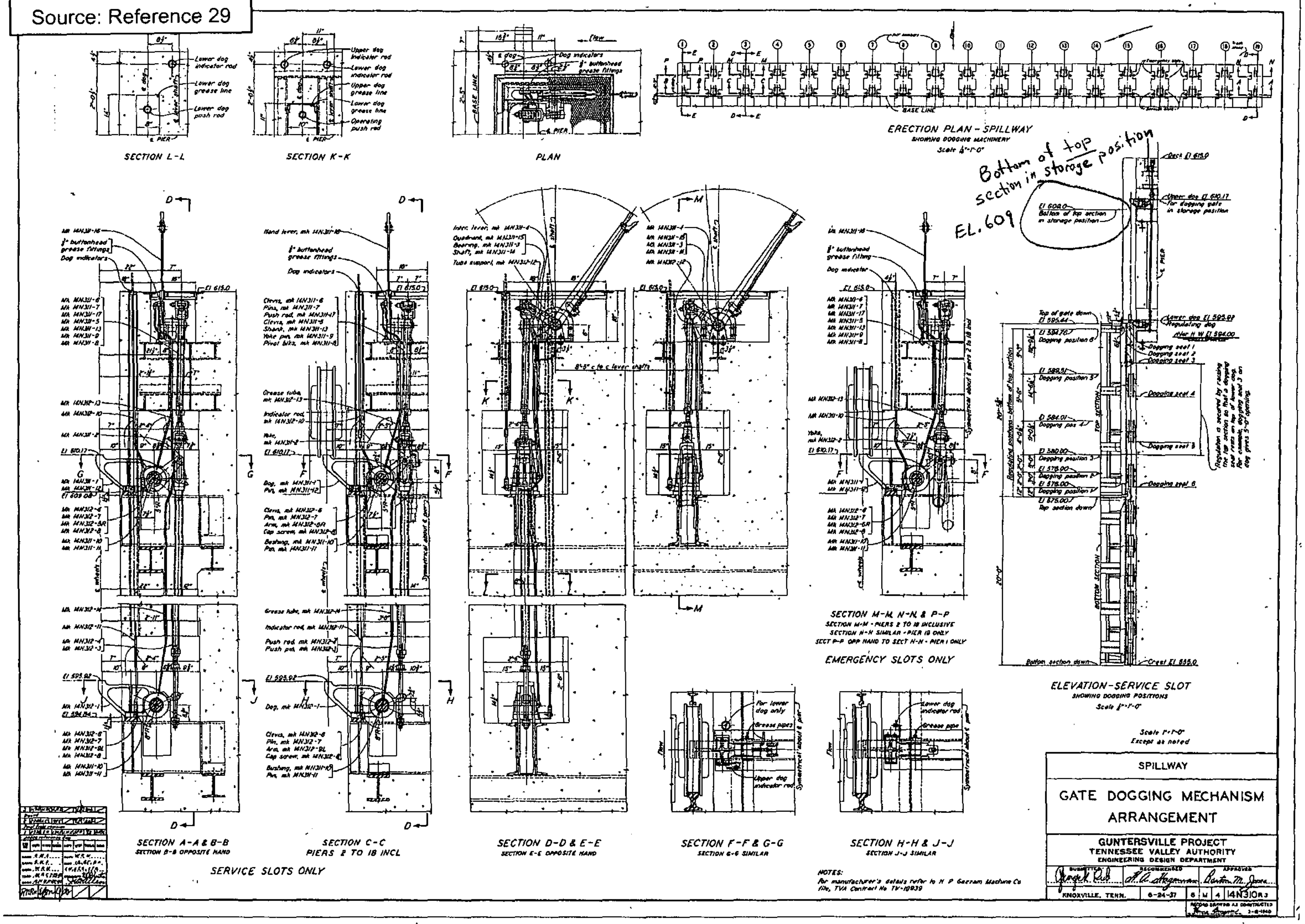
Calculation No: CDQ000020080011



Attachment 20-3

Source: Reference 29

Calculation No: CDQ000020080011



SECTION L-L
SECTION K-K
PLAN
ERECTION PLAN - SPILLWAY
SHOWING DOGGING MACHINERY
Bottom of top section in storage position
EL. 609
SECTION A-A & B-B
SECTION B-B OPPOSITE HAND
SECTION C-C
PIERS 2 TO 18 INCL
SERVICE SLOTS ONLY
SECTION D-D & E-E
SECTION E-E OPPOSITE HAND
SECTION F-F & G-G
SECTION G-G SIMILAR
SECTION H-H & J-J
SECTION J-J SIMILAR
SECTION M-M, N-N, & P-P
EMERGENCY SLOTS ONLY
ELEVATION-SERVICE SLOT
SHOWING DOGGING POSITIONS
SPILLWAY
GATE DOGGING MECHANISM
ARRANGEMENT
GUNTERSVILLE PROJECT
TENNESSEE VALLEY AUTHORITY
ENGINEERING DESIGN DEPARTMENT
KNOXVILLE, TENN.
6-24-37
14N310

Attachment 20-4

Source: Reference 30

Calculation No: CDQ0000020080011