CITY OF GAHANNA
DEPARTMENT OF PUBLIC SERVICE AND ENGINEERING

ZONING DIVISION
200 S. Hamilton Road
Gahanna, Ohio 43230
614-342-4025
zoning@gahanna.gov
www.gahanna.gov

FLOOD PLAIN USE APPLICATION

PLEASE NOTE: This application is not to be considered complete until all documents are received and approved by the Planning & Zoning Administrator.

Project/Property Address or Location: 485 Cherry Bottom Road, Gahanna, OH 43230	Project Name/Business Name *(if applicable)*: Stonybrook United Methodist Church	
Parcel ID No.(s): 025-001943 & 025-001944	Current Zoning: RID	Total Acreage: 5.24
Description of request: Replacing the south entrance to Stonybrook United Methodist Church with an aluminum box culvert.		
APPLICANT Name (primary contact) -do not use a business name: Ben Russell	Applicant Address: 59 Grant Street, Newark, OH 43055	
Applicant E-mail: brussell@hullinc.com	Applicant Phone No.: (740) 344-5451	
BUSINESS Name *(if applicable)*: Jobes Henderson & Associates, Inc.		
ATTORNEY/AGENT Name:	Attorney/Agent Address:	
Attorney/Agent E-Mail:	Attorney/Agent Phone No.:	
ADDITIONAL CONTACTS *(please list all applicable contacts)* Name(s):	Contact Information (phone no./email):	
Contractor Law General Contracting (Brice Corbin) Developer Architect	(740) 404-2579/brice@lawxtreme.com	
PROPERTY OWNER Name: *(if different from Applicant)* Rick Hensley	Property Owner Contact Information (phone no./email): rvhensle@att.net	

APPLICANT SIGNATURE BELOW CONFIRMS THE SUBMISSION REQUIREMENTS HAVE BEEN COMPLETED *(see page 2)*

I certify that the information on this application is complete and accurate to the best of my knowledge, and that the project as described, if approved, will be completed in accordance with the conditions and terms of that approval.

Applicant Signature: Ben Russell Date: 6/23/17

THIS FORM IS AVAILABLE TO BE SUBMITTED ONLINE: www.gahanna.gov

INTERNAL USE

Zoning File No. 17060033
PC Meeting Date: _____
PC File No. _____

RECEIVED: KAW
DATE: 6/23/17

PAID: 50.00
DATE: 6/27/17
CHECK#: 6121 VSA

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FLOOD PLAIN USE APPLICATION – SUBMISSION REQUIREMENTS

PLEASE NOTE: This application is not to be considered complete until all documents are received and approved by the Planning & Zoning Administrator.

STAFF USE - INTAKE	TO BE COMPLETED/SUBMITTED BY THE APPLICANT:	APPLICANT YES	APPLICANT N/A	STAFF USE YES	STAFF USE N/A
	1. Review Gahanna Code Section 1191 *(visit www.municode.com)*	✓			
	2. Review the Flood Insurance Study, Franklin County, Ohio and Incorporated Areas	✓			
	3. Pre-application conference with staff		✓		✓
	4. Legal Description		✓	✓	
	5. Location map showing the location of the site relative to adjacent sites (including scale)	✓		✓	
	6. Elevation in relation to mean sea level of the lowest floor, including basement, of all proposed structures located in special flood hazard areas where base flood elevation data are utilized	✓		✓	
	7. Elevation in relation to mean sea level to which any proposed structure will be floodproofed in accordance with Section 1191.02(b) where base flood elevation data are utilized		✓		
	8. Certification by a registered professional engineer or architect that the floodproofing methods for any non-residential structure meet the floodproofing criteria in Gahanna Code Section 1191.20(b) where base flood elevation data are utilized		✓		
	9. Description of the extent to which any watercourse will be altered or relocated as a result of the proposed development and certification by a registered professional engineer that the flood carrying capacity of the watercourse will not be diminished	✓		✓	
	10. A plan drawn to scale showing the nature, location, dimensions and elevation of the lot, existing or proposed structures, fill, storage of materials, floodproofing measures and the relationship of the above to the location of the channel	✓		✓	
	11. A typical valley cross section showing the channel of the stream, elevation of land areas adjoining each side of the channel, cross sectional areas to be occupied by the proposed development and high water information	✓		✓	
	12. Plan, surface, view, showing elevations or contours of the ground; pertinent structure, fill or storage elevations; size, location and spatial arrangement of all proposed and existing structures on the site; location and elevations of streets, water supply, sanitary facilities, photographs showing existing land uses and vegetation upstream and downstream, soil types, and other pertinent information	✓		✓	
	13. Profile showing the slope of the bottom of the channel or flow line of the stream for at least 500 feet in either direction from the proposed development		✓		
	14. Specifications for building construction and materials, flood proofing, filling, dredging, grading, channel improvement, storage of materials, water supply and sanitary facilities		✓		
	15. Kind of development proposed (check all that apply) ☐ Residential structure ☐ New structure ☐ Addition to structure ☐ Renovations/repairs/maintenance ☐ Manufactured home installation ☐ Non-residential structure ☑ New structure ☐ Addition to structure ☐ Renovations/repairs/maintenance ☐ Accessory structure: dimensions:_____ ☐ Filling or grading ☐ Dredging or excavation or mining ☐ Materials/equipment storage: please attached a description ☐ Watercourse alteration *(any change that occurs within the banks of a watercourse)* ☐ Water supply / sewage disposal ☑ Bridge or culvert placement / replacement ☐ Subdivision >50 lots or 5 acres ☐ Other development >5 acres ☐ Other: please attach description				

CONTINUE TO PAGE 3

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	16. If the proposed construction is an addition, renovation, repair or maintenance to an existing structure: • Cost of proposed construction: $_____ • Estimated market value of existing structure: $_____		✓		
	17. A statement including the following information: - The type of development (please list all that apply: new, residential, non-residential, installation, materials storage, existing structure, alteration, accessory, addition, filling/grading, mining/dredging, watercourse alteration, manufactured structure, other-explain). - If the proposed construction is an alteration, addition, or improvement to an existing structure, indicate the cost of the proposed construction. - If existing structure, please list the estimated market value. *NOTE: An existing structure must comply with the flood protection standards if it is substantially improved (an improvement equal to or greater than 50% of the market value of the structure). FEMA maintains that the "substantial improvement" definition applies to existing structures only, & that once a structure meets the definition of "new construction" any further improvements to that structure must meet "new construction" requirements. For floodplain management purposes, "new construction" means structures for which "start of construction" began on or after the effective date of the initial Flood Insurance Rate Map issued by FEMA for the community* - Does the proposed development involve a subdivision or other development containing at least 50 lots or 5 acres (whichever is less)? Yes or No *NOTE: If yes, base flood elevation data is required from applicant (if not provided by FEMA)*		✓	✓	
	18. Application fee (in accordance with the Building & Zoning Fee Schedule)				
	19. Application & all supporting documents submitted in digital format	✓		✓	
	20. Application & all supporting documents submitted in hardcopy format	✓		✓	
	21. Authorization Consent Form Complete & Notarized *(see page 4)*	✓		✓	
	22. **After structure is built:** return ELEVATION CERTIFICATE FORM to the Zoning Division of the City of Gahanna	✓			

THIS FORM IS AVAILABLE TO BE SUBMITTED ONLINE: www.gahanna.gov

APPLICATION ACCEPTANCE

INTERNAL USE

This application has been reviewed and is considered complete and is hereby accepted by the Zoning Division of the City of Gahanna and shall be:

☐ Forwarded to the City of Gahanna Planning Commission for consideration.
☑ Forwarded to the Local Floodplain Administrator for consideration.

Planning & Zoning Administrator Signature: Bonnie Gard Date: 7/19/17

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AUTHORIZATION CONSENT FORM

(must sign in the presence of a notary)

If you are filling out more than one application for the same project & address, you may submit a copy of this form with additional applications.

AUTHORIZATION FOR OWNER'S APPLICANT OR REPRESENTATIVE(S)

If the applicant is not the property owner, this section must be completed & notarized.

I, Rick Hensley, the owner or authorized owner's representative of the subject property listed on this application, hereby authorize Ben Russell to act as my applicant or representative(s) in all matters pertaining to the processing and approval of this application, including modifying the project. I agree to be bound by all terms and agreements made by the designated representative.

Property Owner Signature: Rick Hensley Date: 5-31-17

AUTHORIZATION TO VISIT THE PROPERTY

I, Rick Hensley, the owner or authorized owner's representative of the subject property listed on this application, hereby authorize City representatives to visit, photograph and post notice *(if applicable)* on the property as described in this application.

Property Owner Signature: Rick Hensley Date: 5-31-17

NOTARY

Subscribed and sworn to before me on this 31 day of May, 2017.

State of Ohio County of Licking

Notary Public Signature: Sara L Lott

NOTARIAL SEAL STATE OF OHIO

SARA L. LOTT
Notary Public, State of Ohio
My Commission Expires 12-04-2017

AGREEMENT TO COMPLY AS APPROVED

I, Ben Russell, the applicant of the subject property listed on this application, hereby agree that the project will be completed as approved and any proposed changes to the approved plans shall be submitted for review and approval to the Zoning Division staff.

Applicant Signature: Ben Russell Date: 5/31/17

NOTARY

Subscribed and sworn to before me on this 31 day of May, 2017.

State of Ohio County of Licking

Notary Public Signature: Sara L Lott

NOTARIAL SEAL STATE OF OHIO

SARA L. LOTT
Notary Public, State of Ohio
My Commission Expires 12-04-2017

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ELEVATION CERTIFICATE FORM
Supplement to Flood Plain Use Permit Application

THIS FORM MUST BE RETURNED TO THE ZONING DIVISION OF THE CITY OF GAHANNA AFTER THE STRUCTURE HAS BEEN BUILT FOR COMPLIANCE WITH FEDERAL GUIDELINES.

This form should be completed by a professional surveyor and submitted to the City of Gahanna Zoning Division after the structure has been built. It can be used by the property owner to certify that the completed construction meets the flood elevation standards of the community. For communities participating in the Federal Insurance Administration Community Rating System, the NFIP "ELEVATION CERTIFICATE" (O.M.B. No. 3067-0077) must be used to record as-built lowest floor elevation data.

I, the undersigned, do hereby certify to the following elevation at the referenced property as required by Chapter 1191 of the Codified Ordinances of the City of Gahanna.

Site Location/Address: 485 Cherry Bottom Road, Gahanna, OH 43230 Permit No. _____

Community – Panel Number of FEMA Map: 39049C0194K
(obtained from the Zoning Division of the City of Gahanna)

Date of Construction Completion: _____

Lowest Floor Elevation* Feet Above Mean Sea Level: _____
(obtained by the surveyor)

**"Lowest Floor" means the lowest floor of the lowest enclosed area (including basement). An unfinished or flood resistant enclosure, useable solely for parking of vehicles, building access or storage in an area other than a basement area is not considered a buildings lowest floor; provided, that such enclosure is not built so as to render the structure in violation of the applicable design requirements for enclosed areas below the lowest floor.*

Name of Surveyor: _____

Signature of Surveyor: _____ Date: _____

Professional Seal:

RECEIVED: _____

DATE: _____

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FLOOD PLAIN USE *ADMINISTRATIVE USE ONLY* – *LOCAL FLOOD PLAIN ADMINISTRATOR*

Note: *All references to elevations are in feet mean sea level (MSL). The term base flood elevation means the same as the 100 year elevation.*

1. The proposed development is in:
   - ☐ An identified floodway.
     - ☑ A hydrologic and hydraulic engineering analysis accompanies the application
     - ☑ The analysis has a certification that flood heights will not be increased
     - ☑ Is the analysis certified by a Registered Professional Engineer
   - ☐ A flood hazard area where base flood elevations exist with no identified floodway.
     - ☐ A hydrologic and hydraulic engineering analysis accompanies the application
     - ☐ The analysis has a certification that flood heights will not be increased less than the height designated in the community's flood damage reduction regulations (in no case will this be more than one foot)
     - ☐ Is the analysis certified by a Registered Professional Engineer
   - ☐ An area within the floodplain fringe.
   - ☐ An approximate flood hazard area (Zone A).
   - ☐ Within the banks of a watercourse.
     - ☐ The analysis demonstrating that the flood carrying capacity has not been diminished accompanies the application

   Base flood elevation (100-year) at proposed site 796.30 feet m.s.l.

   Elevation in relation to mean sea level of the lowest floor, including basement, of all proposed structures located in special flood hazard areas where base flood elevation data are utilized _____

   Elevation in relation to mean sea level to which any proposed structure will be floodproofed in accordance with Section 1191.02(b) where base flood elevation data are utilized _____

   Data source FIRM

   Map effective date 6/17/2008 Community-Panel No. 194

2. Does proposed development meet NFIP and local "Use and Development Standards" of your regulations?
   - ☑ Permitted Use.
   - ☐ Water and wastewater systems standards met.
   - ☐ Subdivision standards met (All public utilities and facilities safe from flooding, adequate drainage, flood elevations generated where applicable.
   - ☐ Residential/non-residential structures standards met. Lowest floor elevation _____ feet m.s.l.
     - Substantial improvement / substantial damage
     - Anchored properly (manufactured home affixed to permanent foundation)
     - Utilities protected against flooding
     - Construction materials below flood protection elevation resistant to flood damage
     - Lowest floor elevated to or above flood protection elevation (BFE + freeboard)
     - Has an enclosure below lowest floor (crawl space, walkout basement)
       - Enclosure have proper number and area of openings
       - Enclosure unfinished and only used for parking, materials storage or entry
   - ☐ Accessory structure standards met (square footage, use, foundation openings).
   - ☐ Recreational vehicle standards met.
   - ☐ Above ground gas or liquid storage tank anchored.
   - ☐ Flood carrying capacity maintained for floodway development, areas where FEMA has provided BFE data but no floodways, or for alterations of a watercourse.

3. The proposed development triggers a requirement to submit a Letter of Map Revision or Conditional Letter of Map Revision

4. COMPLIANCE WITH APPLICABLE FLOODPLAIN STANDARDS:
   - ☑ COMPLIANT - permit issued on: 7/19/17
   - ☐ NOT-COMPLIANT - permit denied on: _____

   Note: *All structures must be build with the lowest floor, including the basement, elevated or floodproofed to or above the base flood elevation (100 year) unless a variance has been granted. Only non-residential structures may be floodproofed.*

5. EXEMPTION:
   - ☐ The proposed development is EXEMPT from the floodplain standards per Section 1191.14 of the Regulatory Flood Hazard Area Chapter 1191

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www.gahanna.gov

INTERNAL USE

FLOOD PLAIN USE PERMIT APPROVAL

In accordance with Section 1191 of the Codified Ordinances of the City of Gahanna, Ohio, I hereby certify that the project, as stated on the submitted application, was approved by Bonnie Gard on 7/19/17. The applicant shall comply with any conditions approved and shall comply with all building, zoning and landscaping regulations of the City of Gahanna.

Site Location/Address: 485 Cherry Bottom Road, Gahanna, OH 43230 Permit No. _____

CONDITIONS: _____

The permittee understands and agrees that:

- *An as-built Elevation Certificate will be submitted to the Floodplain Administrator after the first floor of a new, substantially improved, or substantially damaged, residential or non-residential structure is constructed;*
- *A final Letter of Map Revision will be obtained where a Conditional Letter of Map Revision was required as part of the permit application;*
- *The permit is issued on the representations made herein and on the application for permit;*
- *The permit may be revoked because of any breach of representation;*
- *Once a permit is revoked all work shall cease until the permit is reissued or a new permit is issued;*
- *The permit will not grant any right or privilege to erect any structure or use any premises described for any purposes or in any manner prohibited by the codes or regulations of the community;*
- *The permittee hereby gives consent to the Floodplain Administrator to enter and inspect activity covered under the provisions of the Floodplain Management Regulations;*
- *The permit form will be posted in a conspicuous place on the premises in plain view;*
- *The permit will expire if no work is commenced within one year of issuance; and*
- *AN ELEVATION CERTIFICATE FORM MUST BE COMPLETED AND RETURNED TO THE ZONING DIVISION OF THE CITY OF GAHANNA <u>AFTER</u> THE STRUCTURE HAS BEEN BUILT FOR COMPLIANCE WITH FEDERAL GUIDELINES.*

Local Flood Plain Administrator/
Planning & Zoning Administrator Signature: Bonnie Gard Date: 7/19/17

WARRANTY DEED (To a Corporation)
4256-D

Certified Corporation & Office Supply Co.
Cleveland 14, Ohio

Know all Men by these Presents

That Ernst W. Ruck and Augusta A. Ruck, Husband and Wife,

, *the Grantor s,*

who claim title by or through instrument , recorded in Volume 1374 , *Page* 41 , *County Recorder's Office, for the consideration of* one dollar and other valuable considerations [redacted] *($* 1.00 *)*

received to their *full satisfaction of* Stonyybrook Methodist Church, XXXX

the Grantee ,

whose TAX MAILING ADDRESS will be Gahanna, Ohio

, *do give, grant, bargain,*

sell and convey unto the said Grantee, its successors and assigns, the following described premises, situated in the {Village / Township *of* Gahanna, and Mifflin} *County of* Franklin

and State of Ohio:

Being part of a quarter-Township 1, Township 1, Range 17, U.S. Military Lands and being a part of a 96.33 acre tract conveyed to Isaac Monroe Grover by deed shown of record in Deed Book 141, page 303, Recorder's Office, Franklin County, Ohio, and being more particularly described as follows:

Beginning at a railroad spike in the center line of Cherry Bottom Road, N.2° 40' E. 341.04 feet from the center line tangent intersection of a 1½° curve in Johnstown Road; thence continuing with the center line of Cherry Bottom Road: N. 2° 40' E., 100.17 feet to a spike; thence on a line parallel to the north line of above mentioned 96.33 acre tract, N. 84° 41' W. 822 feet more or less, to a point in the easterly line of Conroy's Subdivision, shown of record in Plat Book 19, page 32, Recorder's Office, Franklin County, Ohio; thence with the easterly line of Conroy's Subdivision by measuring on a traverse line of the easterly line of [illegible] Walnut Creek, S. [illegible]° W. 172.15 feet to an iron pipe; thence from the said easterly line of Conroy's Subdivision, [illegible] 770 feet, more or less, to the place of beginning, and containing 2.33 acres, more or less and being subject to all legal highways.

[illegible] described premises being known as parcels 34 of Allen [illegible] parcel plat as shown on the Franklin County [illegible] plat.

In trust, that said premises shall be used, kept, and maintained as a place of devine worship of the Methodist ministry and members of The Methodist Church; subject to the Discipline, usage, and ministerial appointments of said church as from time to time authorized and declared by the General Conference and by the Annual Conference within whose bounds the said premises are situated. This provision is solely for the benefit of the grantee, and the grantor reserves no right or interest in said premises.

be the same more or less but subject to all legal highways.

To Have and to Hold *the above granted and bargained premises, with the appurtenances thereof, unto the said Grantee, its successors and assigns forever. And* they *the said Grantor* s *, do for* themselves *and* their *heirs, executors and administrators, covenant with the said Grantee, its successors and assigns, that at and until the ensealing of these presents* they are *well seized of the above described premises, as a good and indefeasible estate in FEE SIMPLE, and have good right to bargain and sell the same in manner and form as above written, and that the same are free from all incumbrances whatsoever* except taxes now due and hereafter payable; but subject to restrictions and conditions contained in prior deed,

and that they *will* **Warrant and Defend** *said premises, with the appurtenances thereunto belonging, to the said Grantee, its successors and assigns, against all lawful claims and demands whatsoever* except as aforesaid.

And for valuable consideration Ernst W. Ruck and Augusta A. Ruck, husband and wife *do hereby remise, release and forever quit-claim unto the said Grantee, its successors and assigns, all* their *right and expectancy of* **Dower** *in the above described premises.*

In Witness Whereof, They *have hereunto set* their *hand* s *, the* 22nd *day of* June *, in the year of our Lord one thousand nine hundred and* Sixty-Five

Signed and acknowledged in the presence of

Theresa M. Monett

B. N. Murray

Ernst W. Ruck
Ernst W. Ruck

Augusta A. Ruck
Augusta A. Ruck

This instrument was prepared by:

B. N. Murray

State of Ohio,
Franklin County, ss

Before me, *a* Notary Public *in and for said County, personally appeared the above named* Ernst W. Ruck and Augusta A. Ruck *who acknowledged that* they *did sign the foregoing instrument, and that the same is* their *free act and deed.*

In Testimony Whereof, *I have hereunto set my hand and official seal, at* Gahanna, Ohio *this* 22nd *day of* June *A. D.* 1965

B. N. Murray

B. N. MURRAY, Attorney At Law
Notary Public - State of Ohio
My commission has no expiration date.
Section 147.03 R. C.

NOTARIAL SEAL STATE OF OHIO

AIL

Charles F. Dugan

14899

Warranty Deed

Ernst W. Ruck and Augusta A. Ruck (H & W)

TO

Stonybrook Methodist Church, XXXX
3615 Cherry Bottom Road
Gahanna, Ohio

Transferred 19

TRANSFERRED JUL 13 1965
ARCH J. WARREN
AUDITOR FRANKLIN COUNTY, OHIO

State of Ohio

County of FRANKLIN ss

Received for Record on the day of JUL 13 1965 19 at 3:10 o'clock P M

and **Recorded** JUL 15 1965 19 in **Deed Book** Page

James A. Schaefer
COUNTY RECORDER

Recorders Fee $ 2.00

Taxes to premises.

Hydraulics Report

May 24, 2017

For:

Stonybrook
United Methodist Church

Prepared By:

Jobes Henderson
A HULL COMPANY

Project Engineer – Ben Russell, P.E.

Form LD-50
Revised January 2015

No-Rise Certification

This is to certify that I am a qualified licensed professional engineer in the State of Ohio. It is to further certify that the attached analysis supports the fact that the proposed Roadway project:

Stonybrook United Methodist Church Bridge in the floodway will not increase the
(Name of Project)

Base Flood Elevation (100-year flood), floodway elevation, or floodway widths on

Beem Ditch (aka McKenna Creek) at published sections in the Flood Insurance
(Name of Stream)

Study for City of Gahanna, dated June 17, 2008
(Name of Community)

and will not increase the Base Flood Elevations (100-year flood), floodway elevations, or floodway widths at unpublished cross-sections in the vicinity of the proposed roadway project.

Engineer's Name: Benjamin W. Russell

Signature: Ben Russell **Date:** 5/30/2017

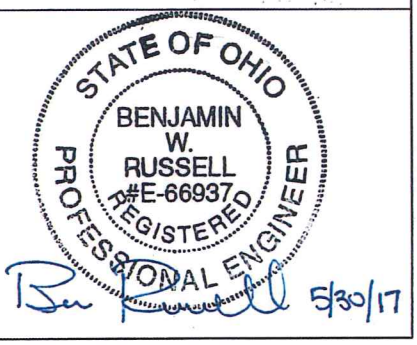
Phone Number: (740) 344-5451 **E-MAIL:** brussell@hullinc.com

Agency/Firm: Jobes Henderson & Associates, Inc.

Address: 59 Grant Street

City: Newark **State:** OH **Zip Code:** 43055

ENGINEERS SEAL:



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LIST OF PHOTOGRAPHS

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APPENDIX B

APPENDIX C

APPENDIX D

1.0 Introduction

The Stonybrook United Methodist Church Bridge Replacement Project involves the complete replacement of the existing south entrance bridge over Beem Ditch (aka McKenna Creek) approximately 0.05 miles north of SR 62 on Cherry Bottom Road in Gahanna, Mifflin Township, Franklin County, Ohio.

Beem Ditch has two branches. The east fork begins as an intermittent stream off Morse Road in New Albany, Ohio, and the west branch begins at the northwest corner of North Hamilton Road. The two branches converge near Shagbark Road and continue through residential neighborhoods before passing under Cherry Bottom Road and into Big Walnut Creek.

FEMA mapping indicates this project location falls in Zone AE with a 100 year flood elevation between 803.00 and 807.00. The City of Gahanna requires projects that include work within the floodway of a Zone AE Special Flood Hazard Area to result in a "no rise" for the 100 year flood event.

2.0 Existing Conditions

At the existing bridge location, the Beem Ditch flows through a valley having relatively steep slopes on both sides. The east bank of the stream is primarily scattered brush and heavy weeds, while the west bank consists of bare earth, brush and rocks. (See Photographs No. 1 and No. 2).

HEC-RAS Version 4.10 was used to create a model of the natural stream conditions in accordance with ODOT Bridge Design Manual Section 201.2.3 and the ODOT Location and Design Manual, Volume 2, Section 1118.2. The results of this analysis can be seen in Table No. 1 and the cross sections in Figure No. 2.

3.0 Proposed Structure

The alignment and profile of the proposed bridge is shown on the site plan and typical section sheets (see Appendix A).

The proposed structure is an 8'-10" rise x 21'-2" span aluminum box culvert. The culvert profile is on a 0.28% straight grade with a minimum outlet elevation of 796.30.

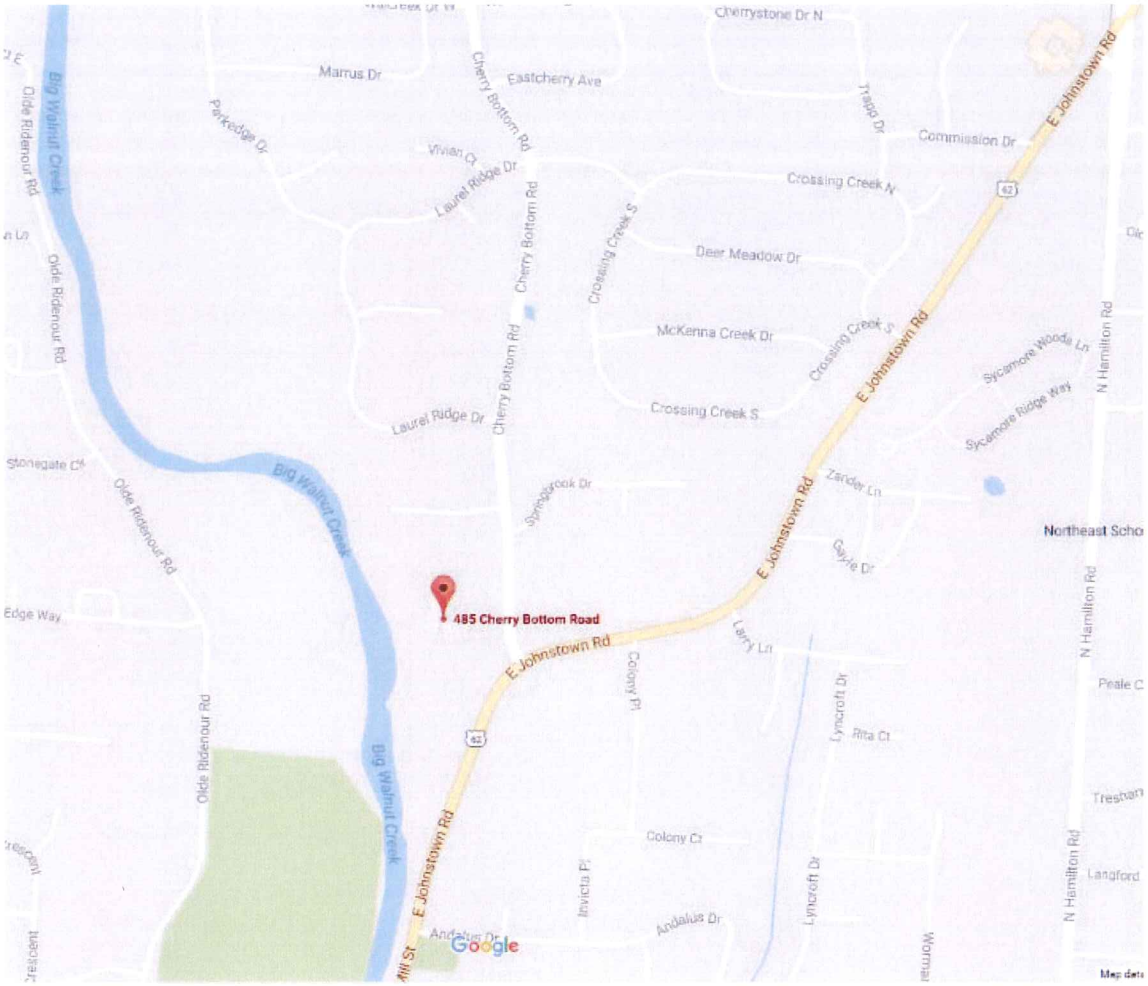
4.0 Hydraulic Analysis

A model of the existing stream was created based on survey data and USGS mapping. StreamStats 4.0 indicates that Beem Ditch has a drainage area of approximately 1.29 square miles at the proposed project location. However, the corresponding 100 year flow associated with a drainage area of 1.29 square miles at this location is 516 cubic feet per second. The FEMA HEC-2 data for Beem Ditch indicates the flow in this location is 910 cubic feet per second. As such, the StreamStats drainage area was disregarded, and the 910 cubic feet per second value was used for input into the HEC-RAS model. The StreamStats information is included in Appendix B for reference. The HEC-2 model data is included in Appendix D. The HEC-2 data was input into the HEC-RAS program to model the existing and proposed conditions. A comparison of the existing and proposed analysis indicates no increase in water surface elevation from the existing bridge condition to the proposed bridge condition.

Visual inspection of the existing abutments give no indication of scour. 26" deep x 4" 'L' shaped un-corrugated plate toe walls attached to the underside of the full aluminum invert will act as a scour counter-measure.

5.0 Summary

The results of the HEC-RAS model indicate the proposed structure chosen for the replacement of the south entrance bridge over Beem Ditch at the Stonybrook United Methodist Church will not increase the 100 year water surface elevation.



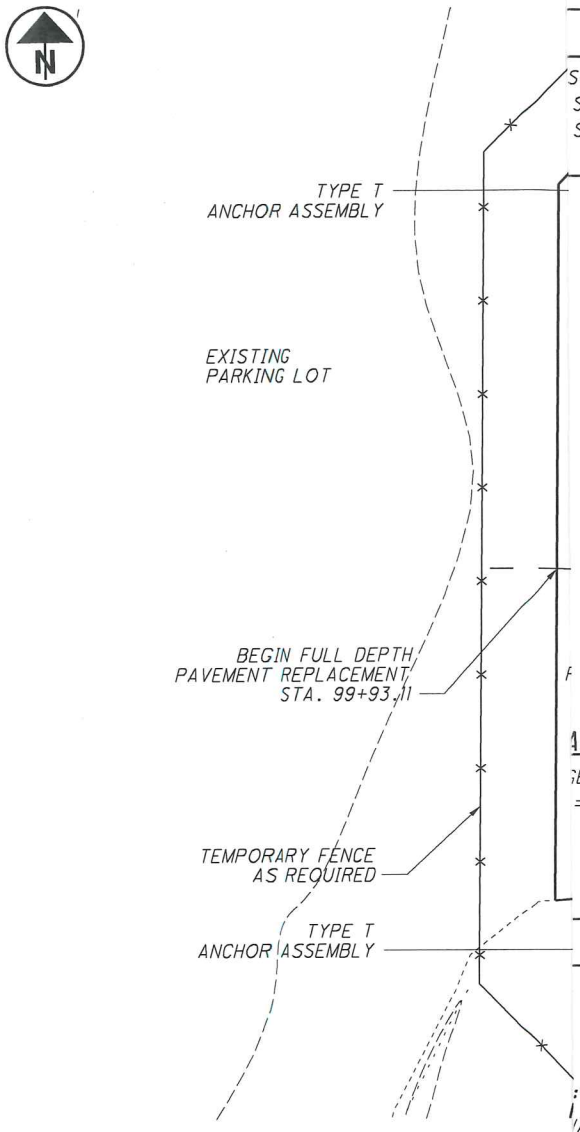
Location Map

Photograph No. 1 –Looking North/Upstream from South Entrance

Photograph No. 2 –Looking South/Downstream from North Entrance

Appendix A

SITE PLAN OF PROPOSED STONYBROOK UNITED METHODIST CHURCH BRIDGE



BENCHMARK DATA

STA. 99+13.44	ELEV. 809.13	OFFSET 146.28' LT.
STA. 99+36.33	ELEV. 804.24	OFFSET 158.80' RT.
STA. 100+12.68	ELEV. 805.09	OFFSET 15.42' RT.

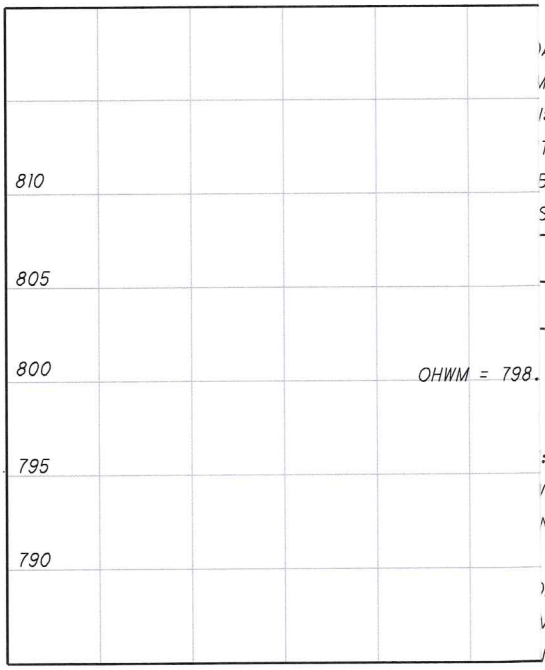
AULIC DATA

GE AREA = 1.29± SQ. MILES
= 910 CFS V (100) = 7.50 FPS

EXISTING STRUCTURE

STEEL BEAM/REINFORCED CONCRETE SLAB

: 18'-0"±
AY: 32'-1" OUT TO OUT
NG: UNKNOWN - LOAD RATED FOR 3 TONS IN 2007
NONE
ACH SLABS: NONE
MENT: TANGENT
I: 0.016± FT/FT
TURAL FILE NUMBER: N/A
BUILT: UNKNOWN
SITION: TO BE REPLACED



PROPOSED STRUCTURE

ALUMINUM BOX CULVERT WITH FULL ALUMINUM INVERT
FOUNDATION, ALUMINUM HEADWALLS AND WINGWALLS

: 21'-2" SPAN X 8'-10" RISE
AY: 32'-0" FACE TO FACE OF RAILING
NG: HS-20
NONE
ACH SLABS: NONE
MENT: TANGENT
I: 0.016 FT/FT
DINATES: LATITUDE 40°01'51" N
LONGITUDE 82°52'32" W

Jobes Henderson
A HULL COMPANY

DESIGNED	DRAWN	REVIEWED	DATE
BWR	BWR	XXX	XXX
CHECKED	REVISED	STRUCTURE FILE NUMBER	
XXX		N/A	

STA. 99+93.11 TO
STA. 100+47.71

SOUTH ENTRANCE BRIDGE
REPLACEMENT PLAN AND PROFILE

STONYBROOK UNITED METHODIST CHURCH

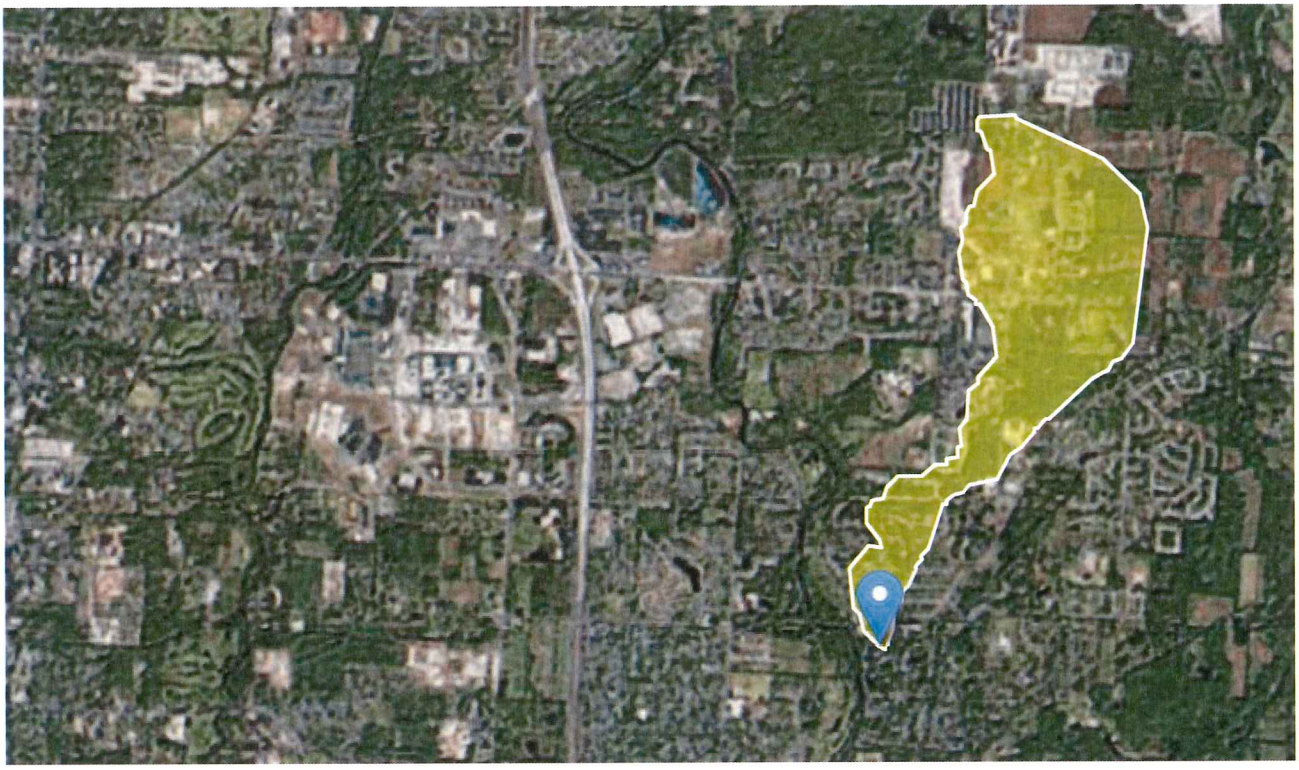
F:\Clients\Active\LGC\LGC030\00030_STONEYBROOK_UMC\Design\Structures\sheets\LGC030SP001.dgn Sheet 5/24/2017 10:03:56 AM brussell

Appendix B

STREAMSTATS DATA

Stonybrook United Methodist Church Bridge Replacement StreamStats Report

Region ID:
OH
Workspace ID:
OH20170502105857342000
Clicked Point (Latitude, Longitude):
40.03083, -82.87532
Time:
2017-05-02 12:59:27 -0400



Basin Characteristics

Parameter Code	Parameter Description	Value	Unit
OHREGA	Ohio Region A Indicator	1	dimensionless
OHREGC	Ohio Region C Indicator	0	dimensionless
DRNAREA	Area that drains to a point on a stream	1.29	square miles
CSL1085LFP	Change in elevation divided by length between points 10 and 85 percent of distance along the longest flow path to the basin divide, LFP from 2D grid	53.5	feet per mi

Parameter Code	Parameter Description	Value	Unit
LC92STOR	Percentage of water bodies and wetlands determined from the NLCD	1.25	percent

Peak-Flow Statistics Parameters [100 Percent (1.29 square miles) Peak Flow Full Model]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
DRNAREA	Drainage Area	1.29	square miles	0.01	7422
CSL1085LFP	Stream Slope 10 and 85 Longest Flow Path	53.5	feet per mi	1.53	674
OHREGC	Ohio Region C Indicator 1 if in C else 0	0	dimensionless	0	1
OHREGA	Ohio Region A Indicator 1 if in A else 0	1	dimensionless	0	1
LC92STOR	Percent Storage from NLCD1992	1.25	percent	0	25.8

Peak-Flow Statistics Flow Report [100 Percent (1.29 square miles) Peak Flow Full Model]

Statistic	Value	Unit	Average standard error (of either estimate or prediction)	Equivalent years of record	Lower Prediction Interval	Upper Prediction Interval
2 Year Peak Flood	126	ft^3/s	37	2.1	61.9	255
5 Year Peak Flood	220	ft^3/s	34.6	3.3	112	430
10 Year Peak Flood	289	ft^3/s	34.4	4.4	147	568
25 Year Peak Flood	380	ft^3/s	35.4	5.9	189	764
50 Year Peak Flood	447	ft^3/s	36.5	6.8	216	923
100 Year Peak Flood	516	ft^3/s	37.9	7.5	242	1100

Statistic	Value	Unit	Average standard error (of either estimate or prediction)	Equivalent years of record	Lower Prediction Interval	Upper Prediction Interval
500 Year Peak Flood	679	ft^3/s	42.1	8.6	294	1570

Peak-Flow Statistics Citations

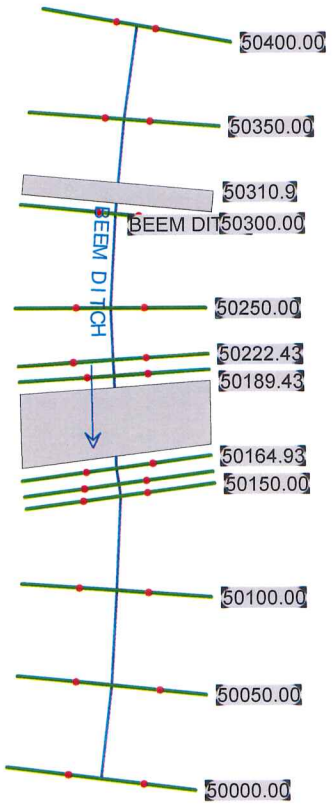
Koltun, G.F., Kula, S.P., and Puskas, B.M.,2006, A Streamflow Statistics (StreamStats) Web Application for Ohio: U.S. Geological Survey Scientific Investigations Report 2006-5312, 62 p. (http://pubs.usgs.gov/sir/2006/5312/)

Appendix C

HEC-RAS ANALYSIS

HEC-RAS River: BEEM DITCH Reach: BEEM DITCH Profile: 100yr

Reach	River Sta	Profile	Plan	Q Total	W.S. Elev	Vel Chnl
				(cfs)	(ft)	(ft/s)
BEEM DITCH	50400.00	100yr	EXIST	910.00	806.69	1.22
BEEM DITCH	50400.00	100yr	PROP	910.00	806.48	1.25
BEEM DITCH	50350.00	100yr	EXIST	910.00	806.38	4.72
BEEM DITCH	50350.00	100yr	PROP	910.00	806.13	5.04
BEEM DITCH	50310.9			Bridge		
BEEM DITCH	50300.00	100yr	EXIST	910.00	803.45	10.13
BEEM DITCH	50300.00	100yr	PROP	910.00	802.99	11.26
BEEM DITCH	50250.00	100yr	EXIST	910.00	803.51	7.17
BEEM DITCH	50250.00	100yr	PROP	910.00	802.96	8.15
BEEM DITCH	50222.43	100yr	EXIST	910.00	803.36	6.97
BEEM DITCH	50222.43	100yr	PROP	910.00	802.68	8.22
BEEM DITCH	50213.93	100yr	EXIST	910.00	803.34	6.82
BEEM DITCH	50213.93	100yr	PROP	910.00	802.63	8.02
BEEM DITCH	50189.44			Bridge		
BEEM DITCH	50164.93	100yr	EXIST	910.00	802.11	7.50
BEEM DITCH	50164.93	100yr	PROP	910.00	802.11	7.50
BEEM DITCH	50156.43	100yr	EXIST	910.00	802.09	7.22
BEEM DITCH	50156.43	100yr	PROP	910.00	802.09	7.22
BEEM DITCH	50150.00	100yr	EXIST	910.00	801.98	7.44
BEEM DITCH	50150.00	100yr	PROP	910.00	801.98	7.44
BEEM DITCH	50100.00	100yr	EXIST	910.00	801.67	7.16
BEEM DITCH	50100.00	100yr	PROP	910.00	801.67	7.16
BEEM DITCH	50050.00	100yr	EXIST	910.00	800.98	8.14
BEEM DITCH	50050.00	100yr	PROP	910.00	800.98	8.14
BEEM DITCH	50000.00	100yr	EXIST	910.00	800.19	8.84
BEEM DITCH	50000.00	100yr	PROP	910.00	800.19	8.84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BEEM DITCH
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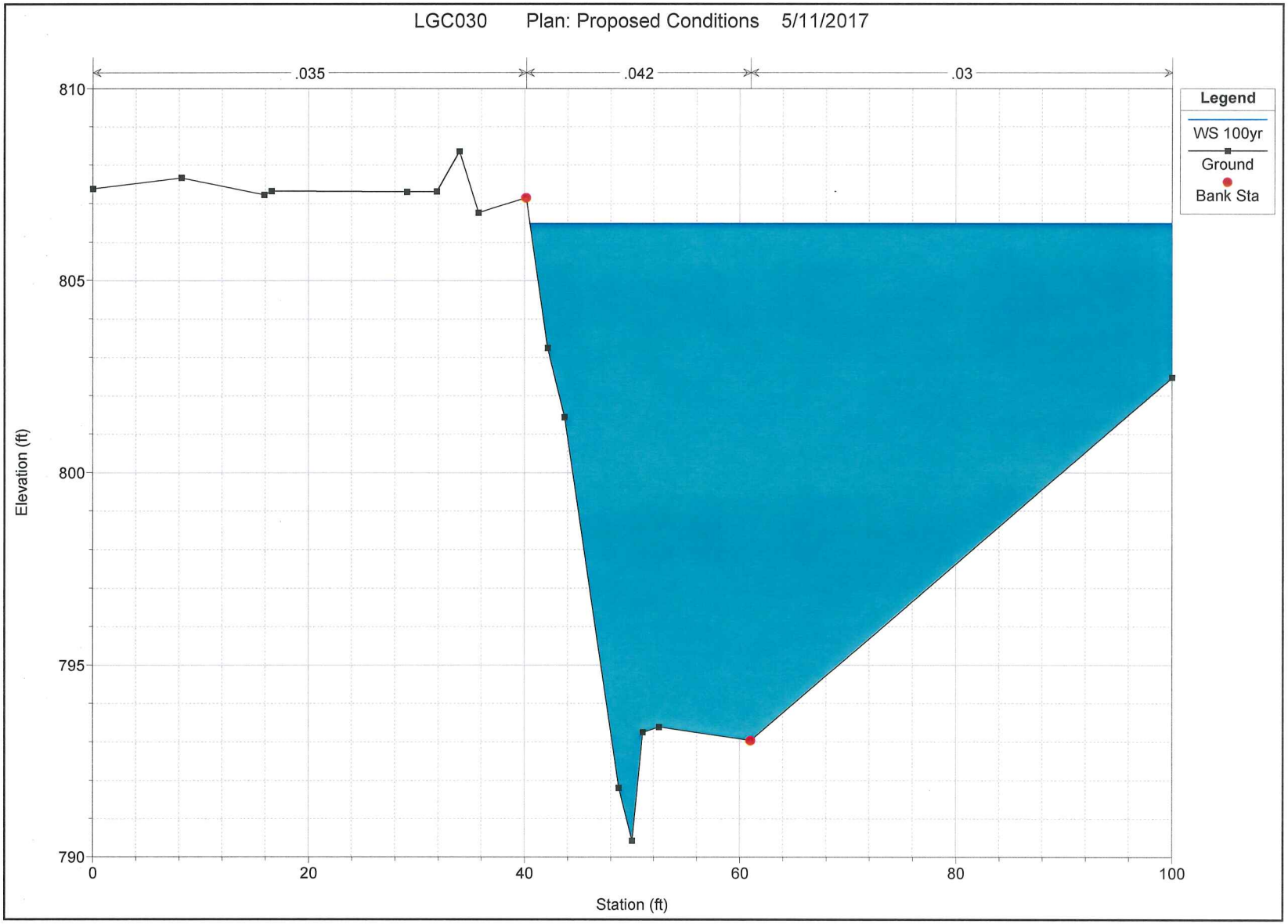
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Legend
WS 100yr
Ground
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Elevation (ft)
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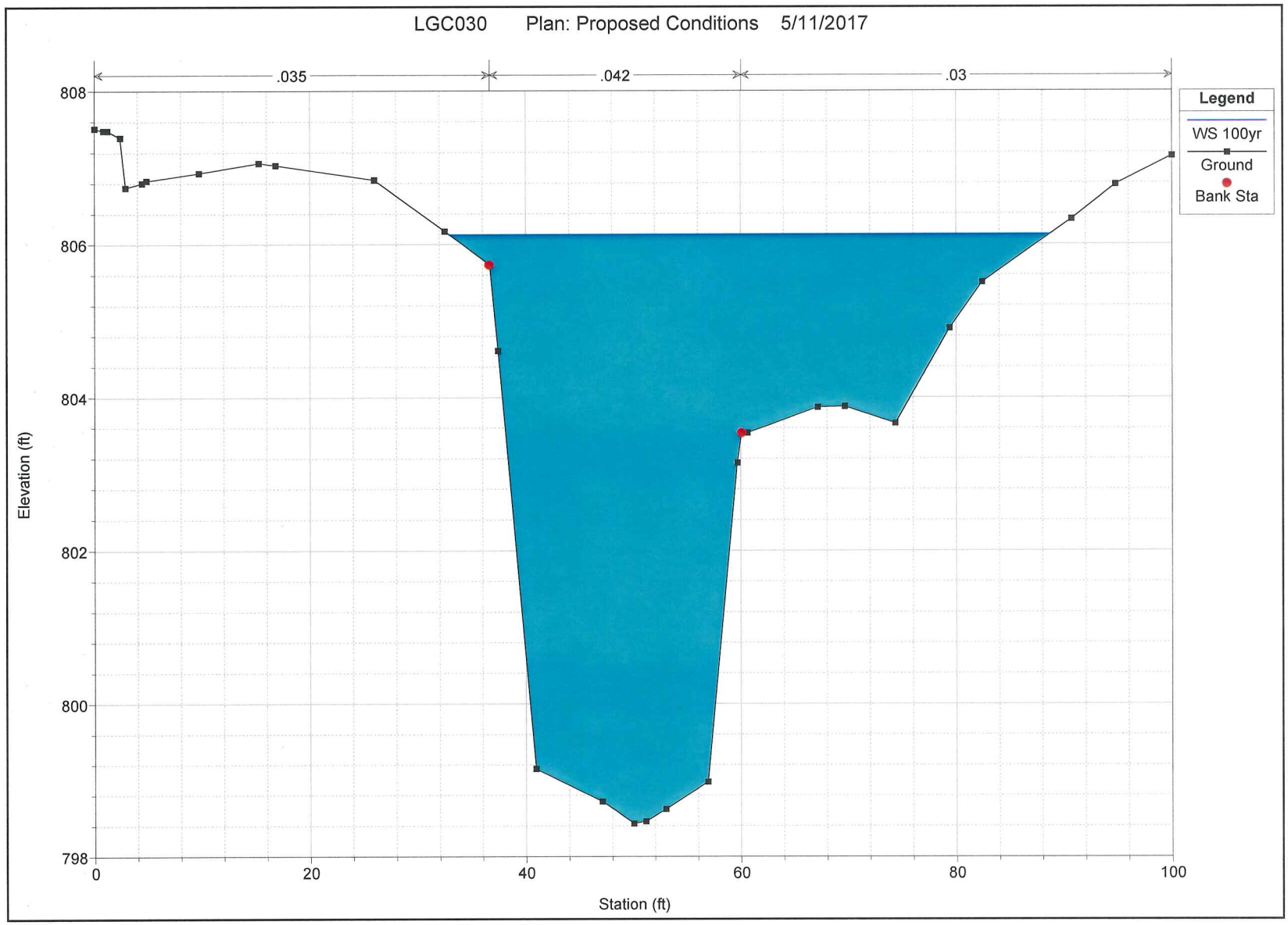
Station (ft)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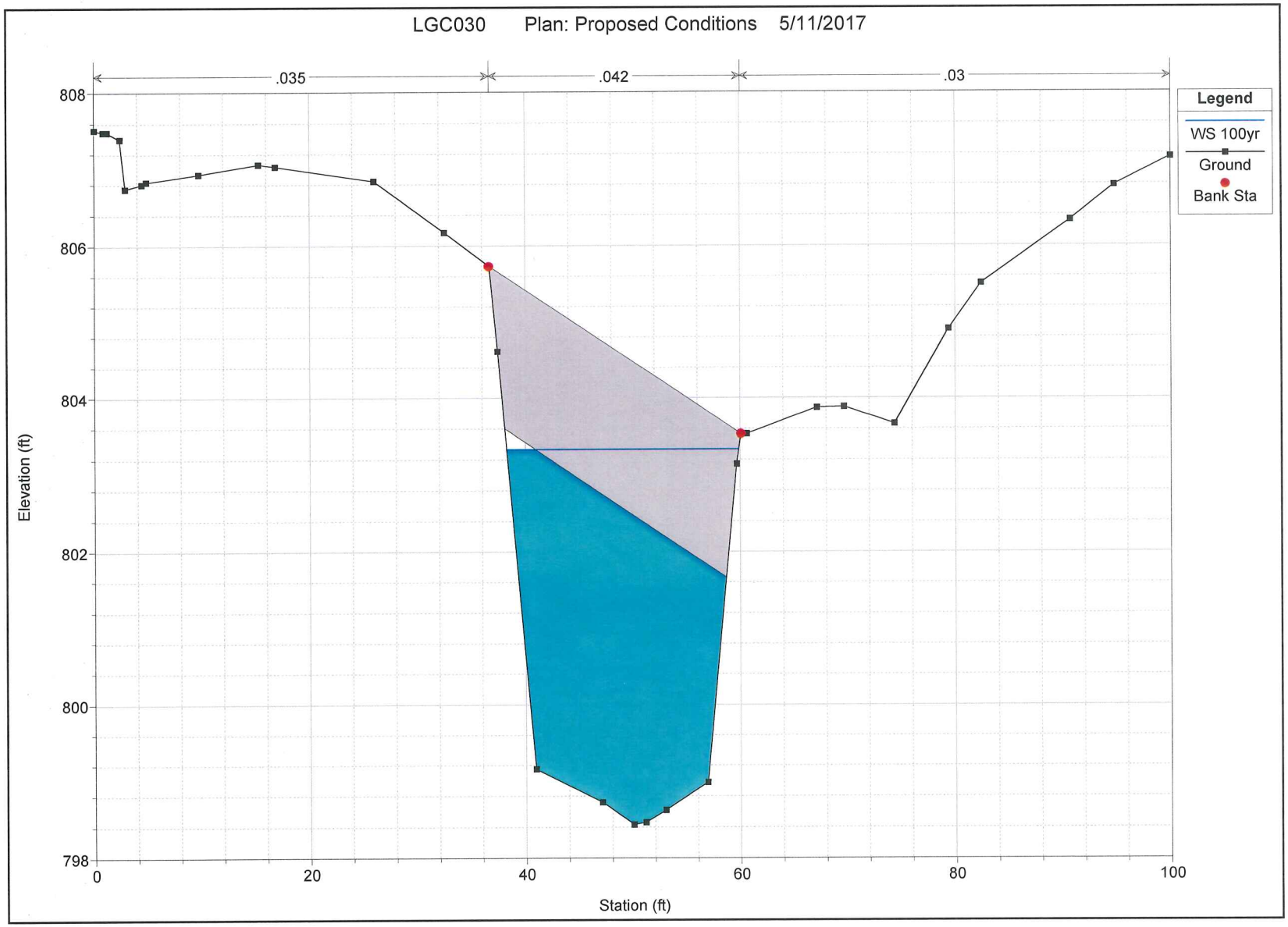
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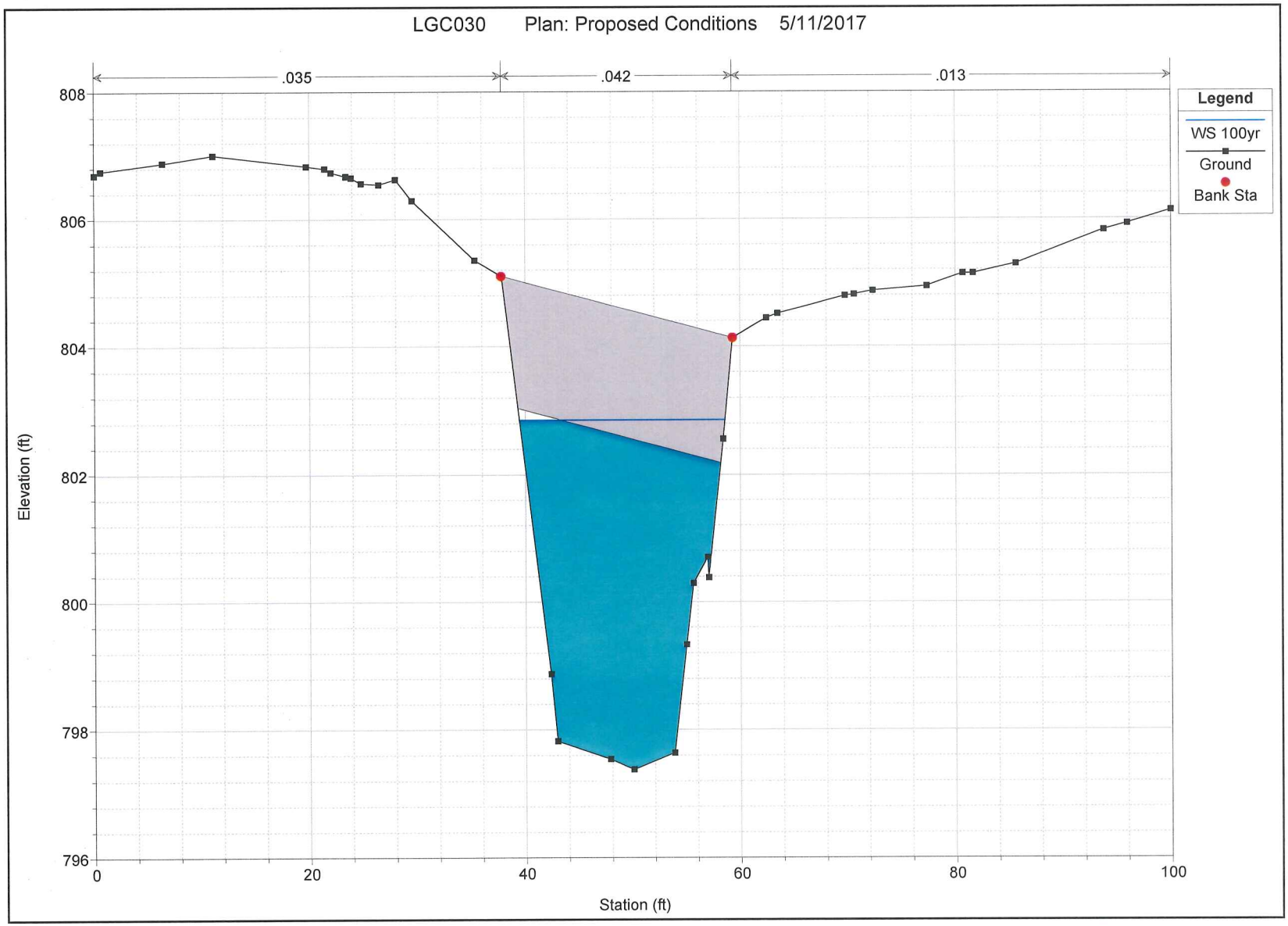
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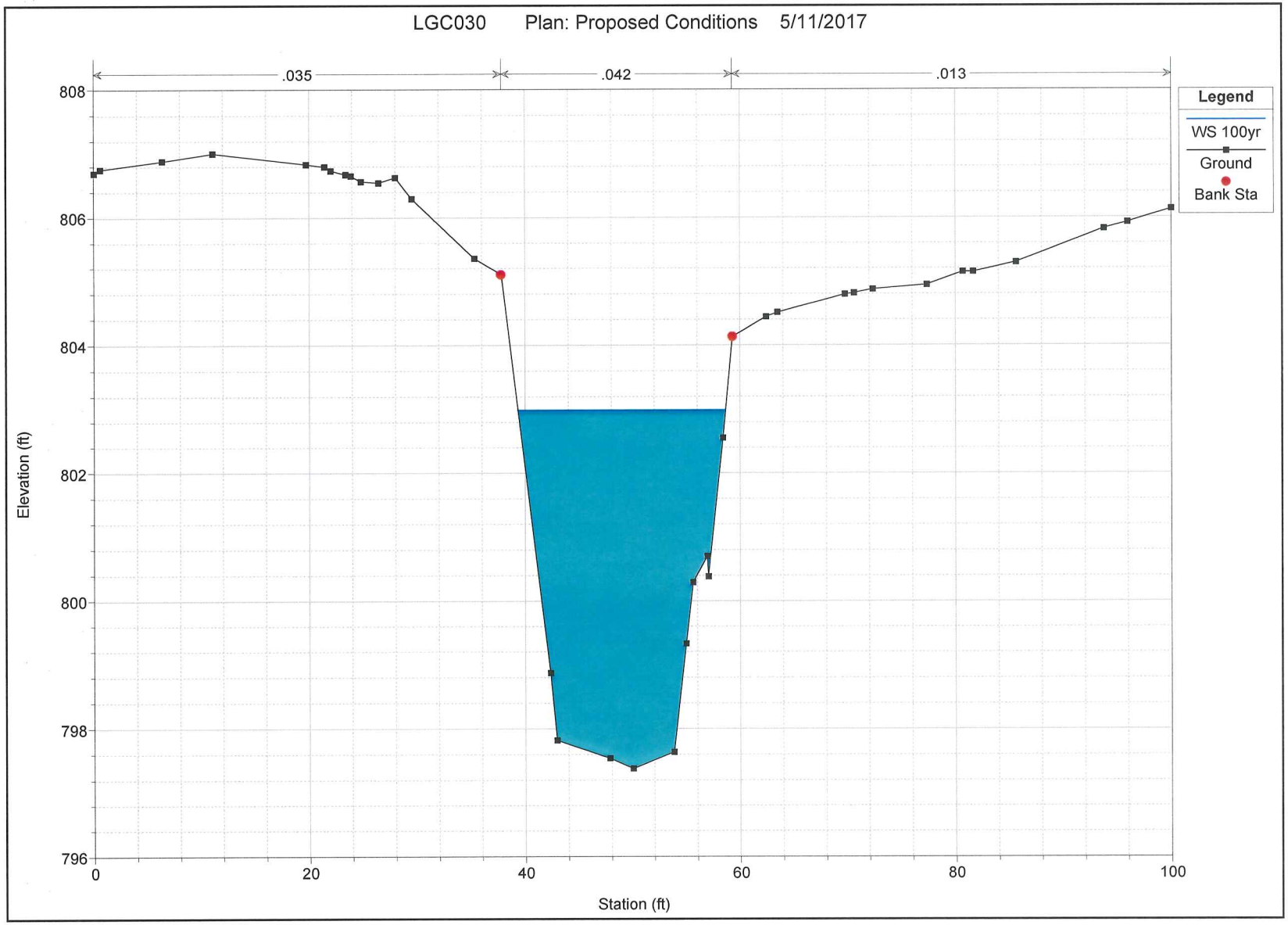
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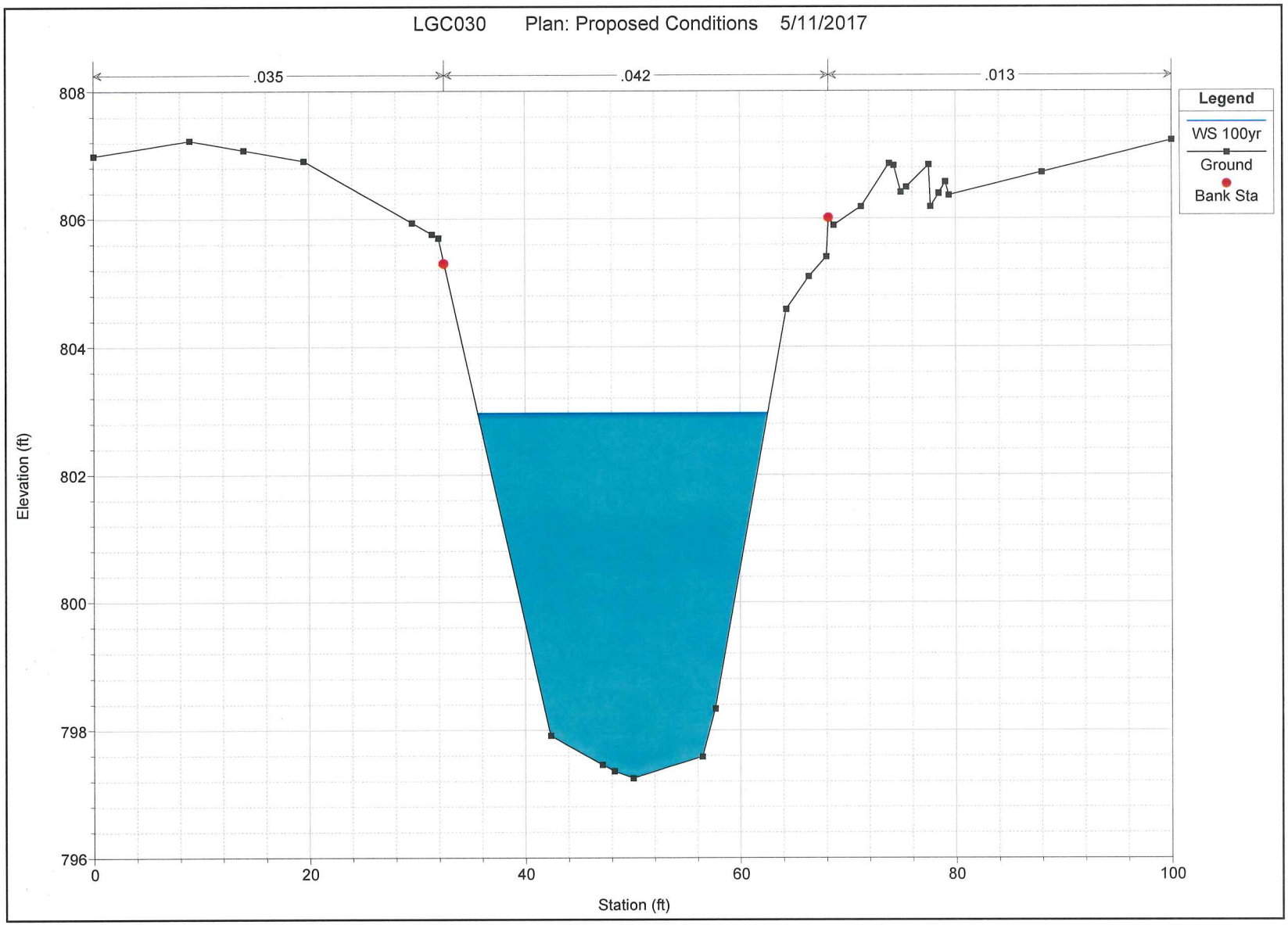
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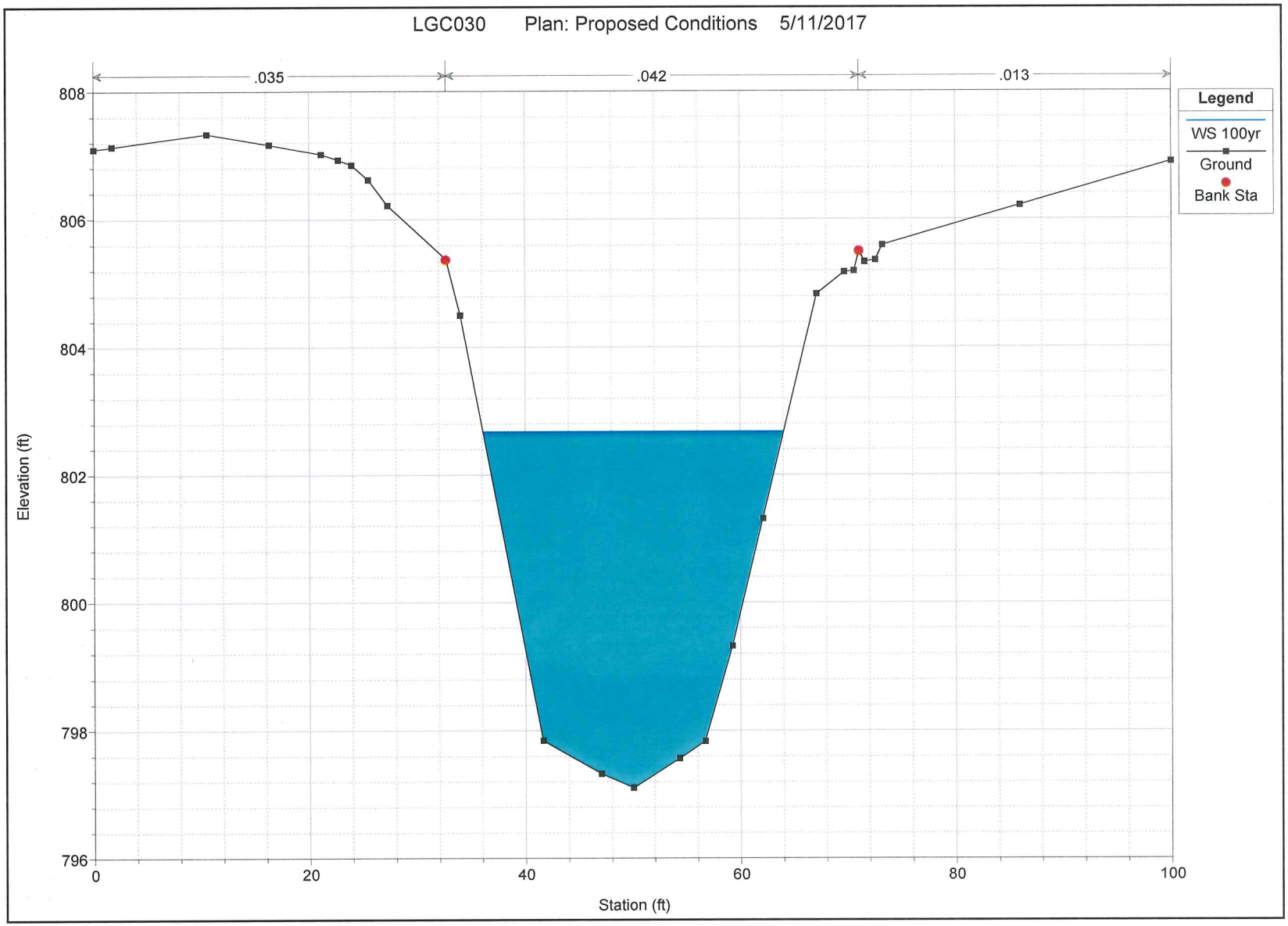
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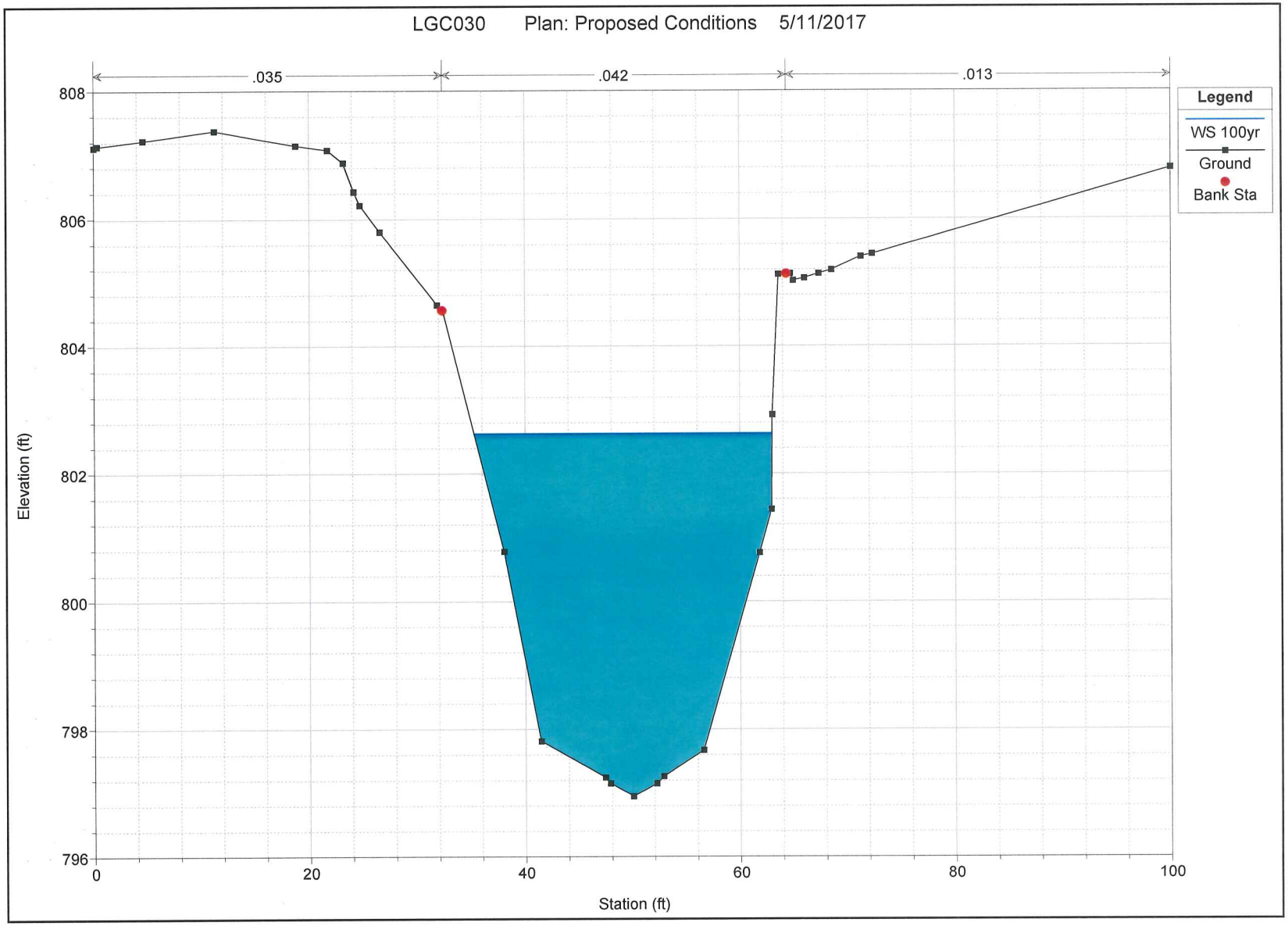
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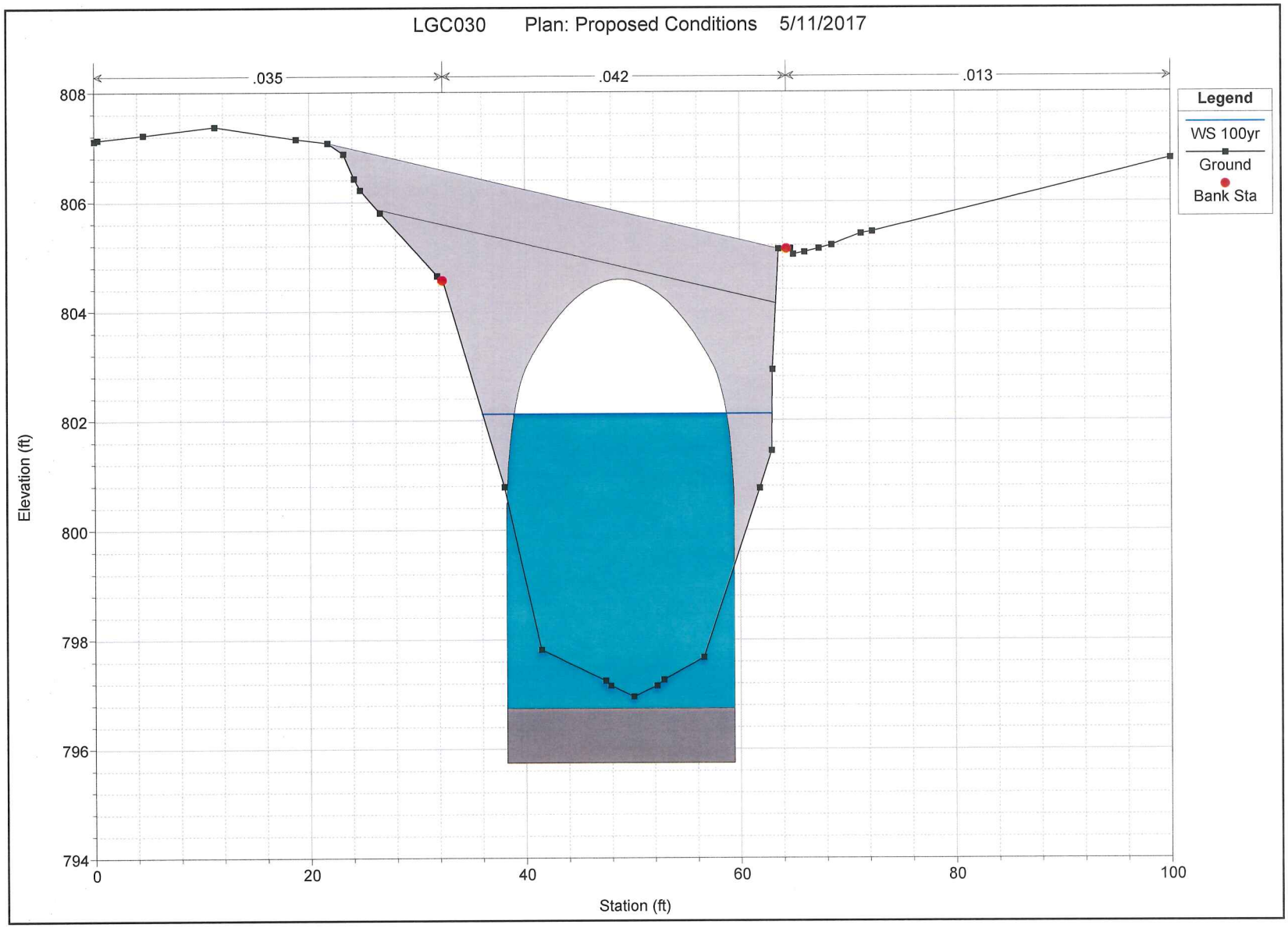
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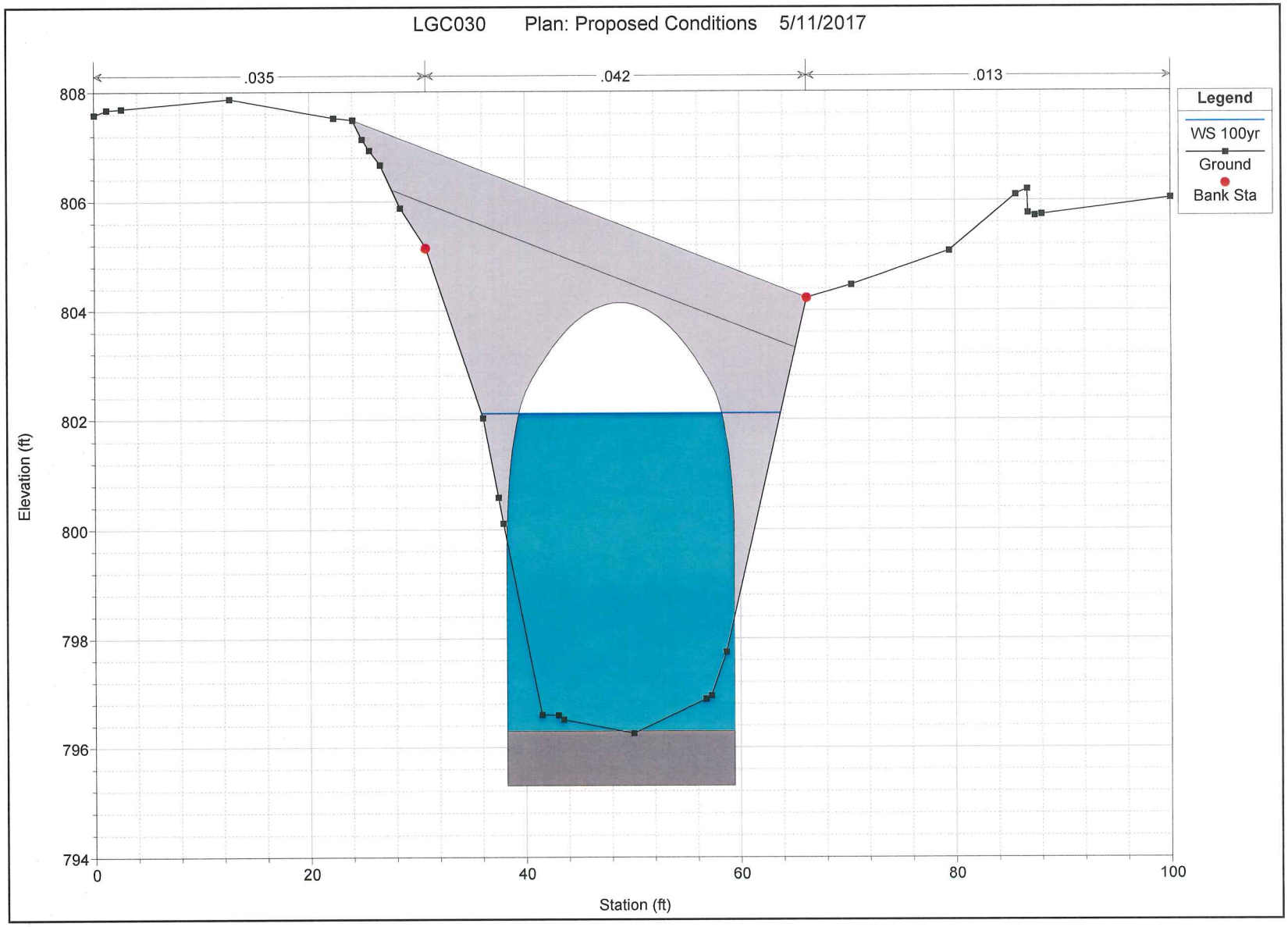
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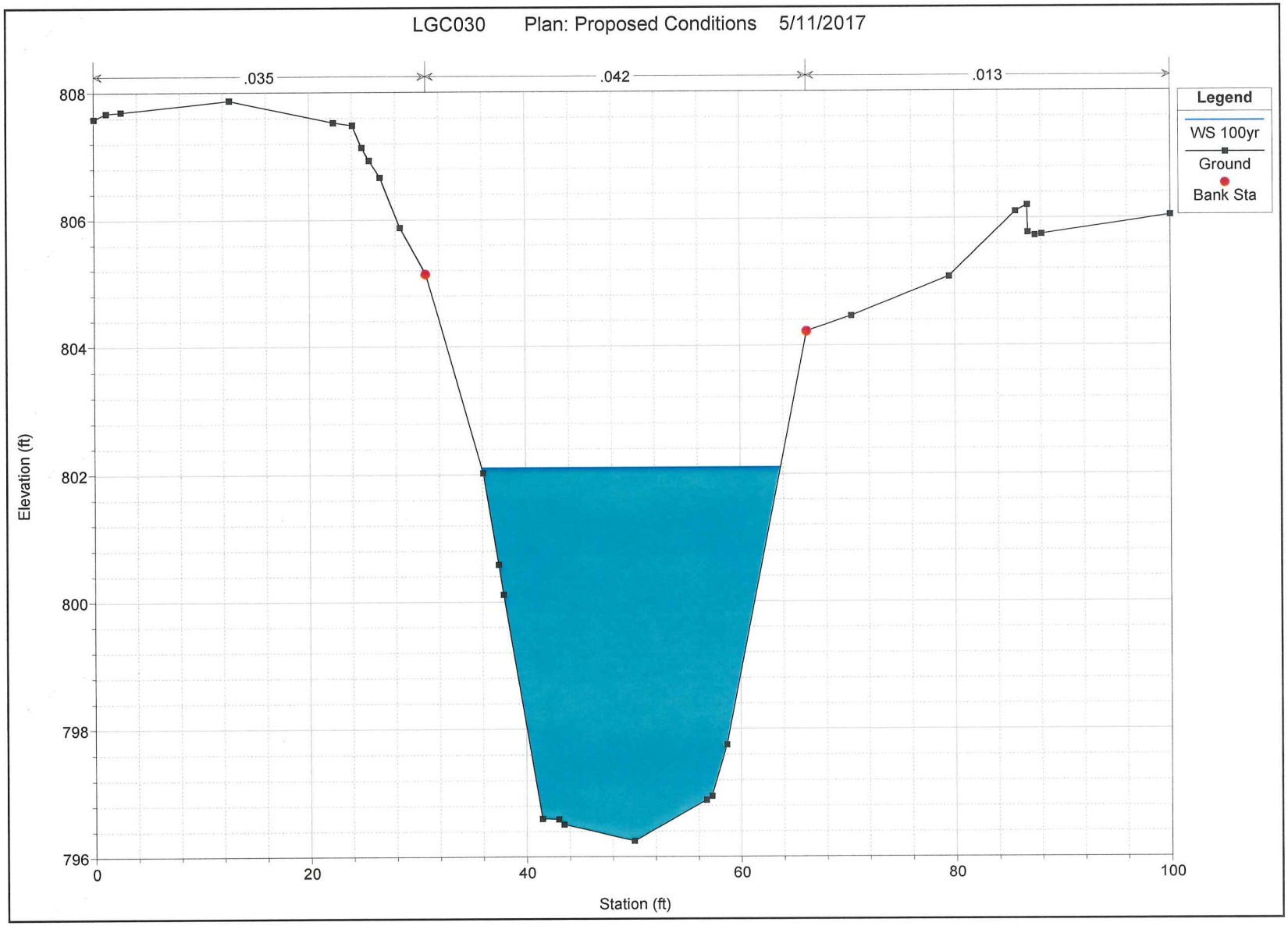
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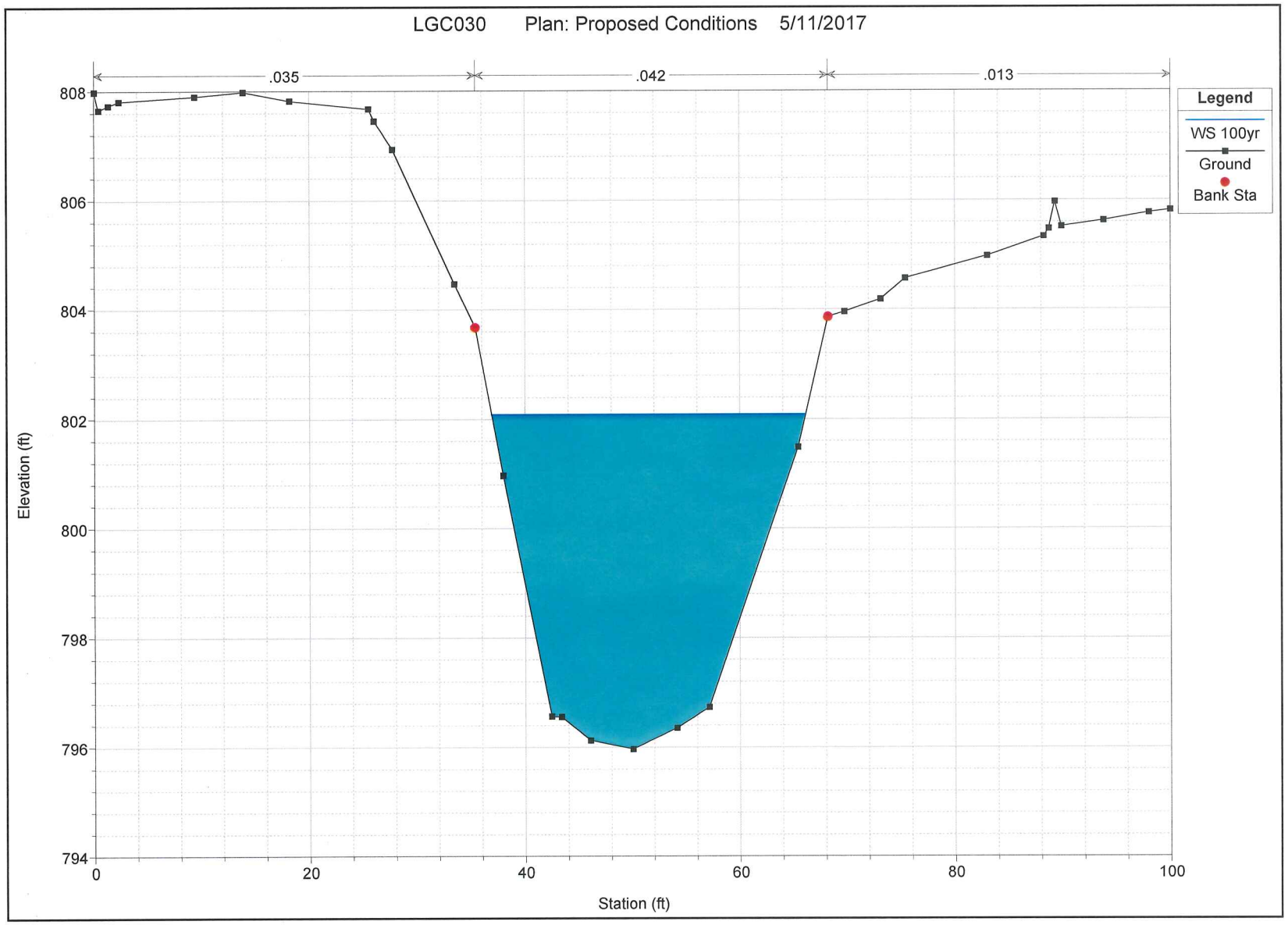
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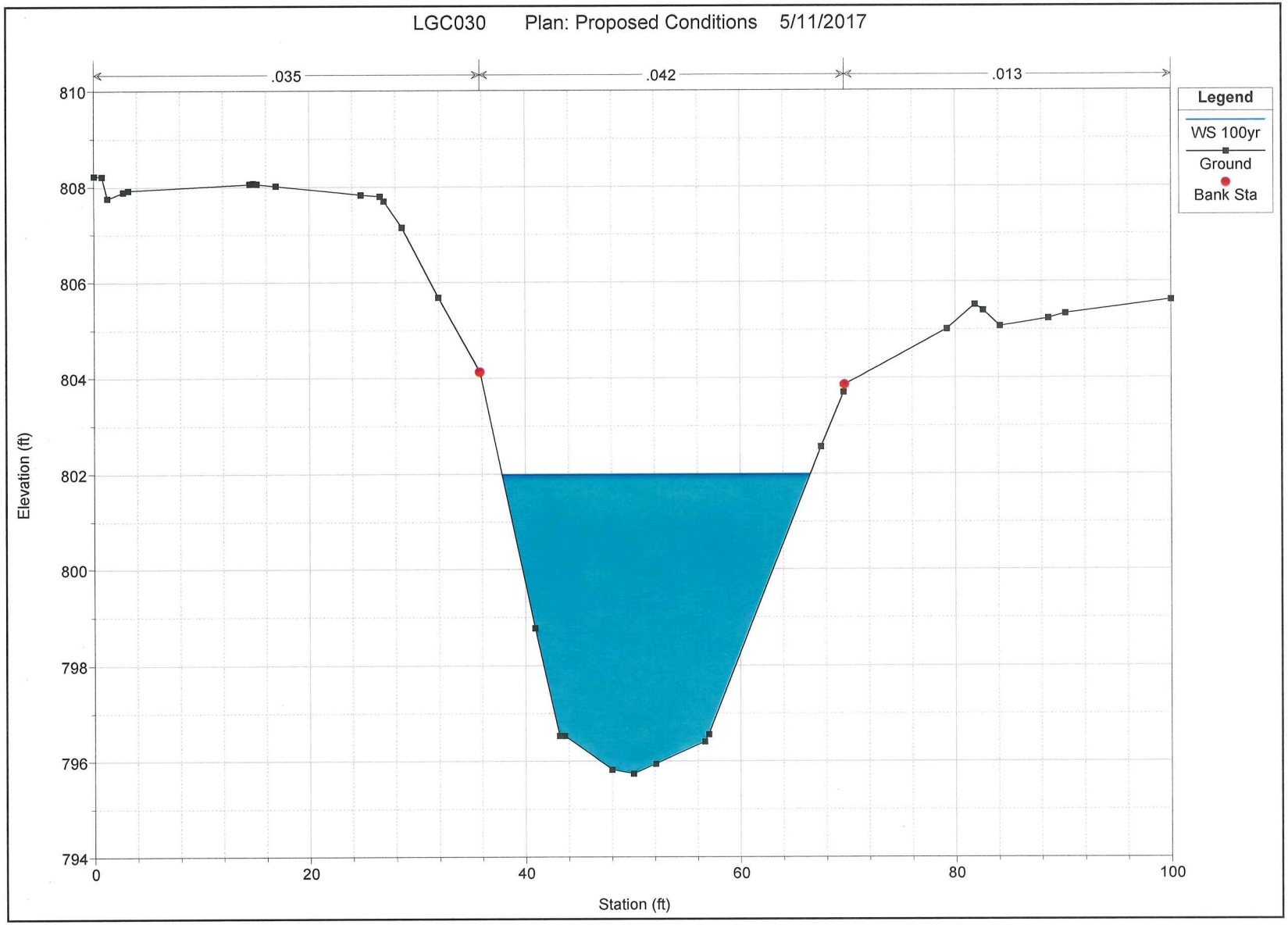
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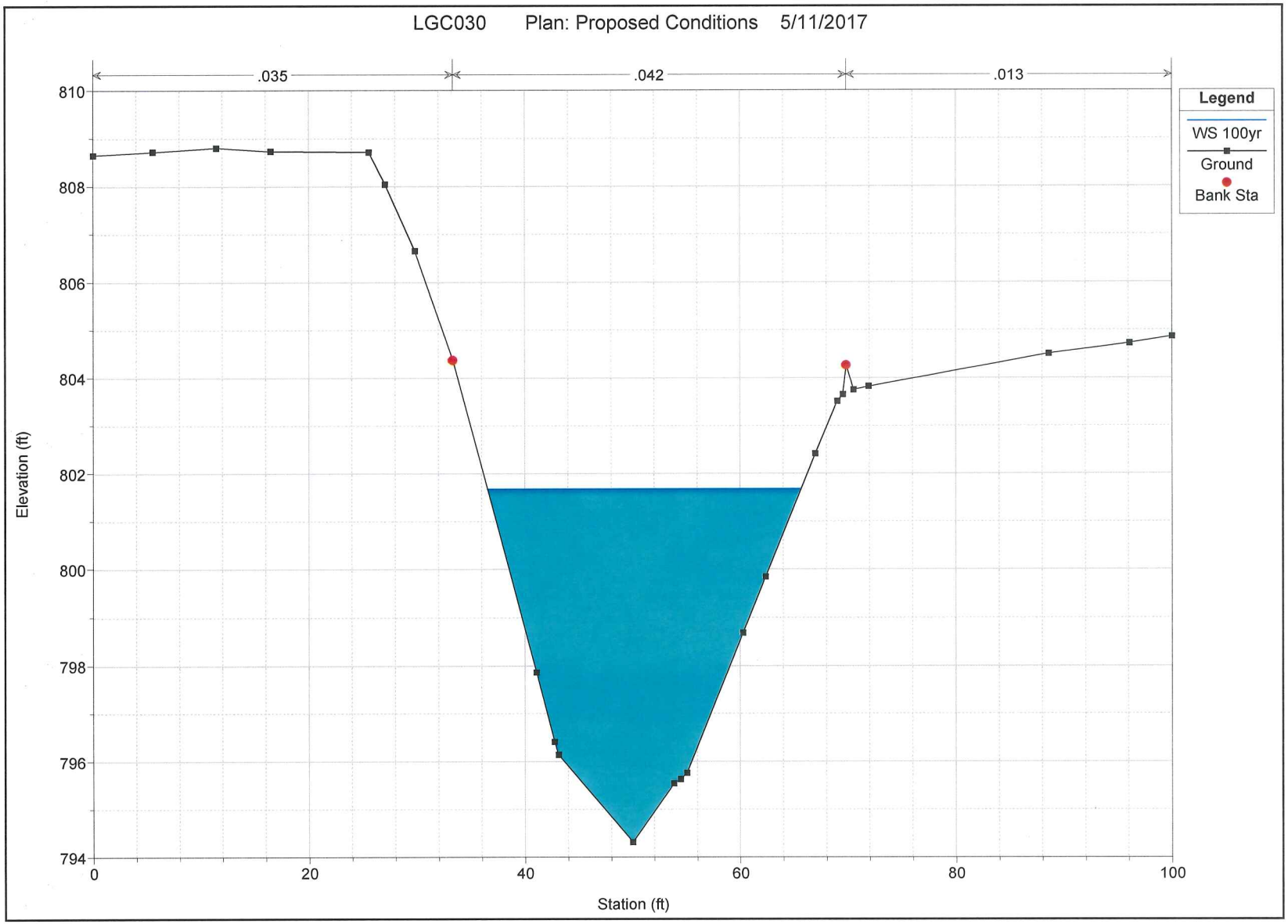
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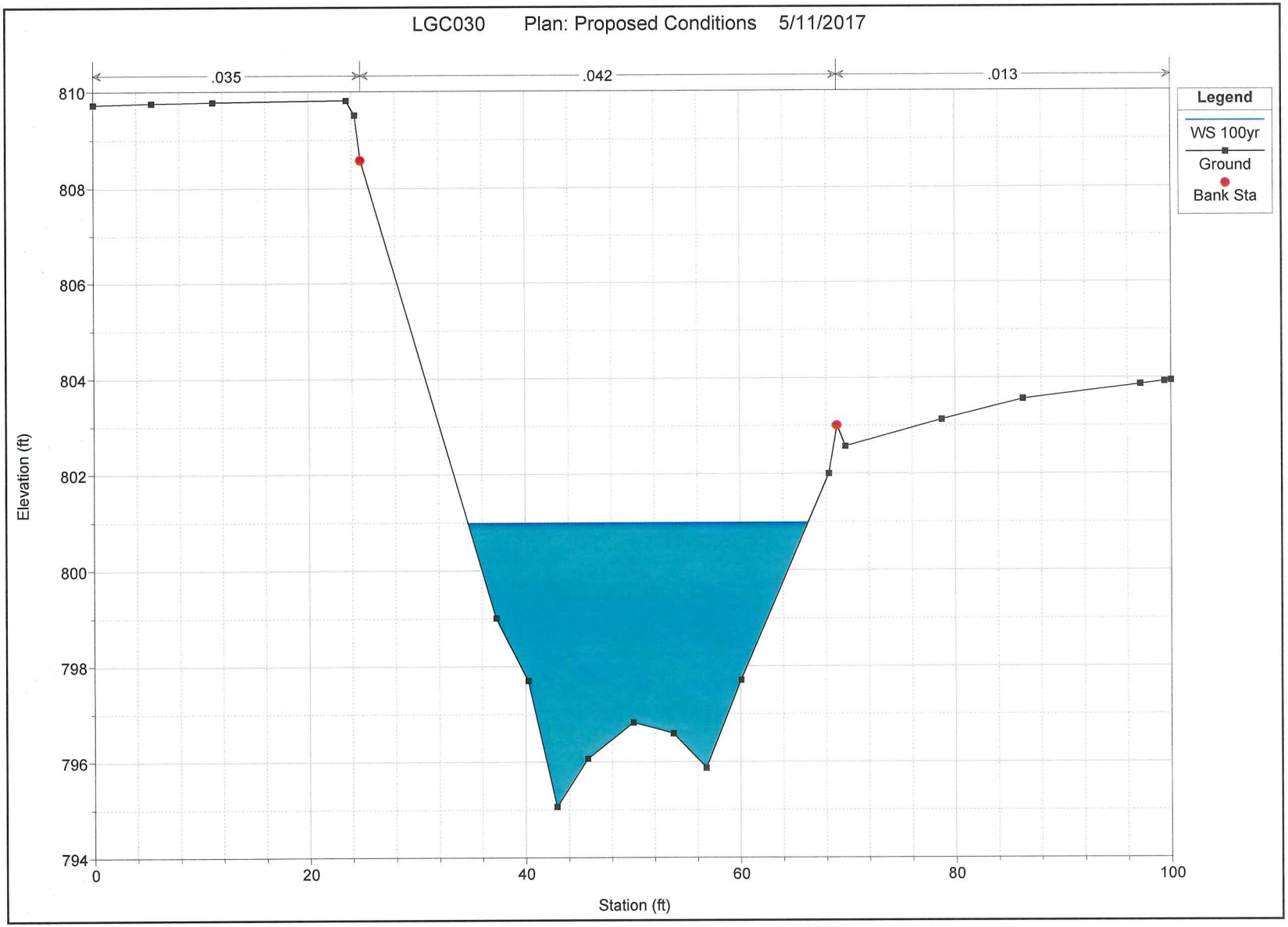
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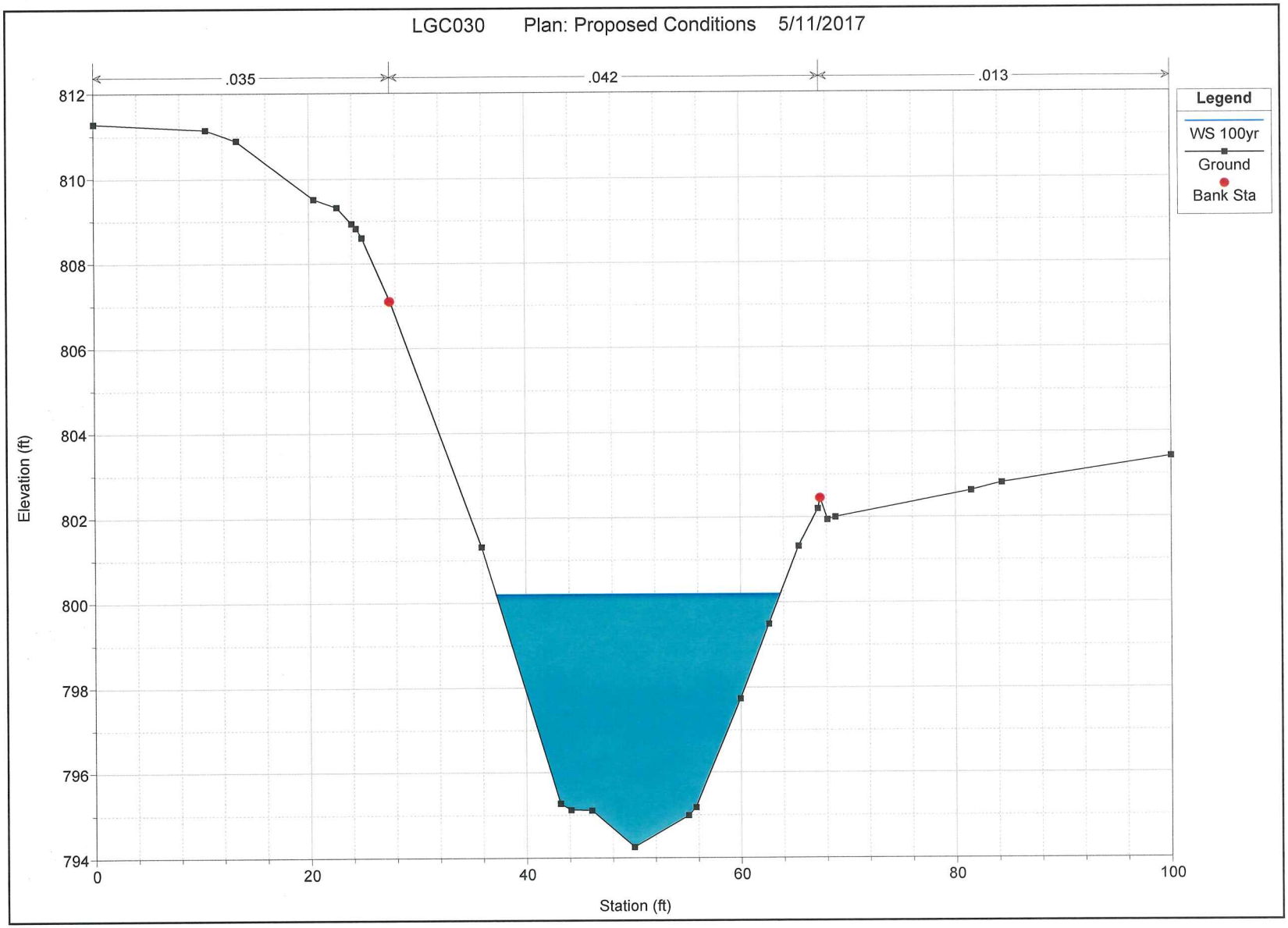
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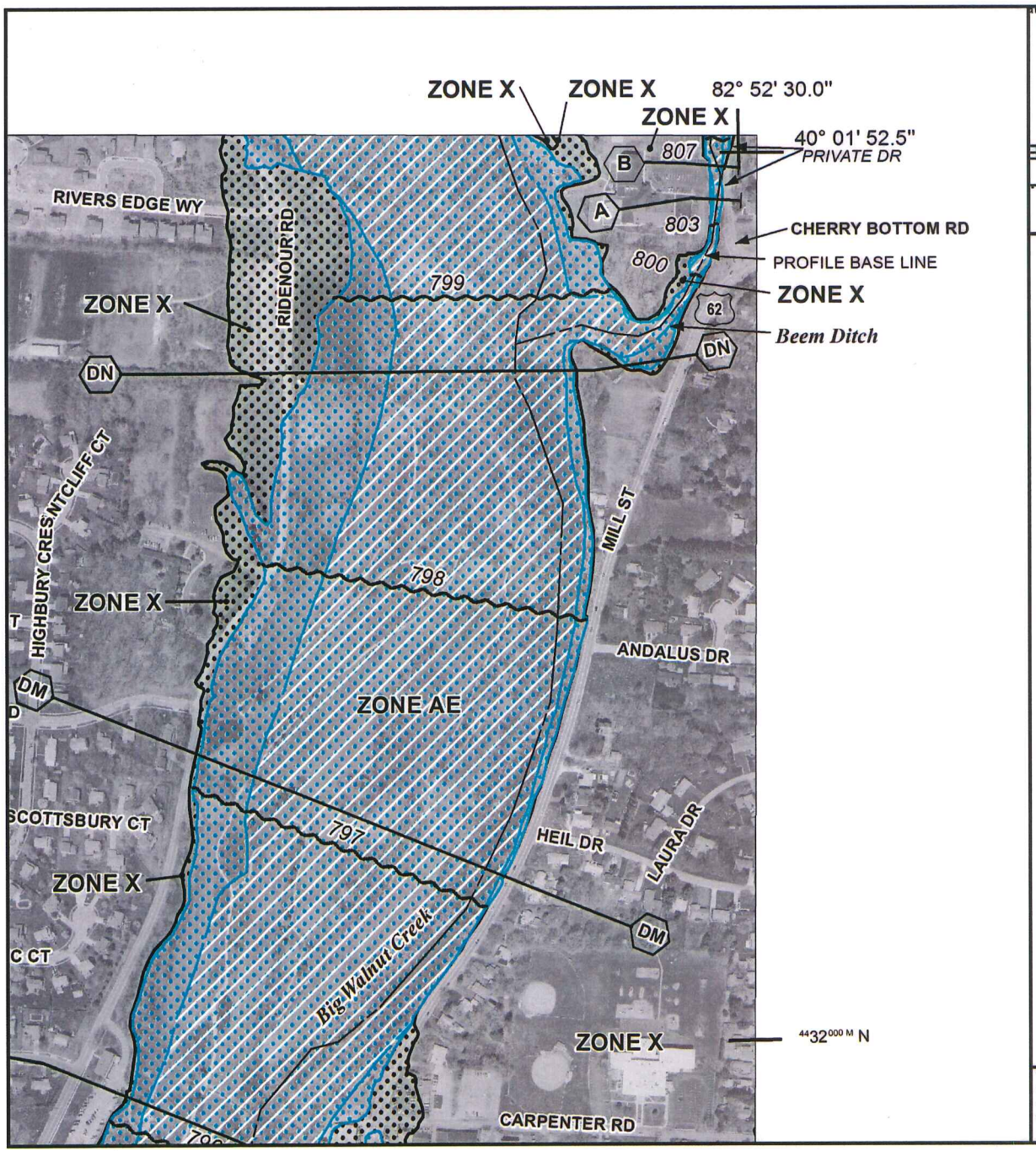
Station (ft)

Appendix D

FEMA MAPPING AND HEC-2 DATA



MAP SCALE 1 " = 500 '

0 500 1000 FEET

NFIP

NATIONAL FLOOD INSURANCE PROGRAM

PANEL 0194K

FIRM

FLOOD INSURANCE RATE MAP

FRANKLIN COUNTY, OHIO

AND INCORPORATED AREAS

PANEL 194 OF 465

(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
COLUMBUS, CITY OF	390170	0194	K
FRANKLIN COUNTY	390167	0194	K
GAHANNA, CITY OF	390171	0194	K

Notice to User: The **Map Number** shown below should be used when placing map orders; the **Community Number** shown above should be used on insurance applications for the subject community.

MAP NUMBER
39049C0194K

MAP REVISED
JUNE 17, 2008

Federal Emergency Management Agency

TRIB. 5 BIG WALNUT CREEK

```
**************************************************
  HEC2 RELEASE DATED NOV 76 UPDATED  AUG1977
  ERROR CORR -  01,02
  MODIFICATION -  50,51,52,53
**************************************************

T1      GAHANNA, OHIO - FLOOD INSURANCE STUDY      JOB #6117  .854 REVISED
T2      ANALYSIS OF TRIB 5 OF BIG WALNUT CREEK FROM RM 0.062 TO RM 2.066
T3      TRIB 5 BIG WALNUT                  10 YEAR FLOOD FREQUENCY  *RUN 5*

J1  ICHECK     INUO       NINV       IDTR       SIRT       METRIC     HVINS      0          WSEL       FQ
        0.        2.         0.         0.   0.017200        0.0        0.0        0.         0.0        0.0

J2  NPROF      IPLOT      PRFVS      XSECV      XSECH      FN         ALLDC      IBW        CHNIM      ITRACE
    1.000        0.0     -1.000        0.0        0.0        0.0        0.0        0.0        0.0        0.0

J3  VARIABLE CODES FOR SUMMARY PRINTOUT
    38.000     39.000     40.000     41.000     42.000     43.000      1.000      4.000      7.000      8.000

    10.000     13.000     15.000        0.0     38.000     43.000      1.000     50.000     51.000     52.000

     5.000     16.000     17.000     18.000      4.000     53.000     54.000        0.0    100.000        0.0

   201.000        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0

NC      0.060      0.070      0.035      0.100      0.300        0.0        0.0        0.0        0.0        0.0
QT      4.000    480.000    775.000    910.000   1200.000        0.0        0.0        0.0        0.0        0.0

X1      0.062     13.000    606.000    642.000        0.0        0.0        0.0        0.0        0.0        0.0
GR    811.000    454.000    810.000    486.000    801.000    523.000    800.000    534.000    797.000    544.000
GR    796.000    587.000    794.000    606.000    789.000    624.000    789.000    632.000    791.000    642.000
GR    791.000    666.000    794.000    687.000    809.000    795.000        0.0        0.0        0.0        0.0

X1      0.063        0.0        0.0        0.0      5.000      5.000      5.000        0.0        0.0        0.0

X1      0.106     10.000    421.000    502.000    225.000    165.000    227.000        0.0        0.0        0.0
GR    815.000    280.000    812.000    319.000    811.000    344.000    811.000    364.000    805.000    384.000
GR    798.000    421.000    793.000    461.000    793.000    471.000    800.000    502.000    809.000    541.000

X1      0.107        0.0        0.0        0.0      5.000      5.000      5.000        0.0        0.0        0.0
NC        0.0      0.050        0.0        0.0        0.0        0.0        0.0        0.0        0.0        0.0

X1      0.194     14.000    553.000    600.000    395.000    365.000    460.000        0.0        0.0        0.0
GR    820.000    288.000    819.000    364.000    815.000    386.000    814.000    435.000    813.000    482.000
GR    807.000    528.000    807.000    553.000    799.000    569.000    799.000    572.000    805.000    600.000
GR    806.000    613.000    806.000    623.000    811.000    733.000    811.000    784.000        0.0        0.0
```

McKENNA CREEK PROFILES

X1	0.195	0.0	0.0	0.0	5.000	5.000	5.000	0.0	0.0	0.0
NC	0.050	0.030	0.0	0.300	0.500	0.0	0.0	0.0	0.0	0.0
X1	0.203	0.0	0.0	0.0	43.000	43.000	43.000	0.0	0.200	0.0
X3	10.000	0.0	0.0	0.0	0.0	0.0	0.0	805.700	805.700	0.0
Sn	1.050	1.590	2.600	0.0	15.500	0.670	96.300	0.150	799.200	799.200
X1	0.209	0.0	0.0	0.0	30.000	30.000	30.000	0.0	0.0	0.0
X2	0.0	0.0	1.000	805.300	806.000	0.0	0.0	0.0	0.0	0.0
X3	10.000	0.0	0.0	0.0	0.0	0.0	0.0	806.000	806.000	0.0
RT	11.000	300.400	822.000	0.0	398.000	822.000	0.0	448.800	817.000	0.0
RT	347.000	811.000	0.0	407.400	814.000	0.0	533.000	814.000	0.0	981.000
RT	807.000	0.0	594.000	807.000	0.0	426.200	807.000	0.0	443.200	806.000
RT	0.0	351.400	812.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0
X1	0.216	0.0	0.0	0.0	37.000	37.000	37.000	0.0	0.0	0.0
X4	[illegible]	[illegible]	[illegible]	[illegible]	571.400	0.0	0.0	0.0	0.0	0.0
X1	0.227	0.0	0.0	0.0	58.000	58.000	58.000	0.0	0.0	0.0
X3	10.000	0.0	0.0	0.0	0.0	0.0	0.0	805.200	805.200	0.0
X4	2.000	799.700	569.500	799.700	571.500	0.0	0.0	0.0	0.0	0.0
[illegible]	[illegible]	[illegible]	[illegible]	0.0	[illegible]	[illegible]	73.400	1.190	798.700	798.700
X1	0.229	0.0	0.0	0.0	12.000	12.000	12.000	0.0	0.0	0.0
X2	0.0	0.0	1.000	804.400	806.000	0.0	0.0	0.0	0.0	0.0
X3	12.000	0.0	0.0	0.0	0.0	0.0	0.0	806.000	806.000	0.0
RT	[illegible]	[illegible]	[illegible]	0.0	[illegible]	[illegible]	0.0	137.100	819.700	0.0
RT	[illegible]	[illegible]	0.0	[illegible]	[illegible]	0.0	345.100	817.100	0.0	534.200
RT	[illegible]	0.0	[illegible]	[illegible]	0.0	391.100	306.150	0.0	564.400	306.000
RT	0.0	701.600	806.000	0.0	444.000	814.100	0.0	0.0	0.0	0.0
NC	0.0	0.050	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0.0	-3.000	0.0
SR	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	340.100	308.400	534.000	308.400	851.000
SR	817.000	671.000	810.000	677.000	817.000	795.000	809.000	799.000	817.000	860.000
SR	818.000	846.300	818.000	807.300	814.000	1054.000	0.0	0.0	0.0	0.0
NC	0.0	0.0	0.0	1.100	1.500	0.0	0.0	0.0	0.0	0.0
X1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	305.100	130.100	0.0	-2.100	0.0
SR	824.000	566.000	825.000	808.000	816.000	854.000	812.000	445.000	811.000	574.000
SR	807.400	663.000	808.000	677.000	808.000	688.000	808.000	798.000	808.000	716.000
SR	817.000	796.000	814.000	847.000	815.000	809.000	819.000	952.000	819.000	1005.000
SR	[illegible]	1224.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NC	0.0	0.0	0.0	1.500	1.500	0.0	0.0	0.0	0.0	0.0
X1	0.374	0.0	0.0	0.0	49.000	20.000	37.000	0.0	0.300	0.0
X3	10.000	0.0	0.0	0.0	0.0	0.0	0.0	807.800	807.400	0.0
S4	3.400	1.550	2.600	[illegible]	3.710	[illegible]	44.200	0.910	802.300	802.300
GT	[illegible]	860.000	740.000	677.000	1150.000	0.0	0.0	0.0	0.0	0.0
X1	0.385	0.0	0.0	0.0	52.000	52.000	52.000	0.0	0.0	0.0
X2	0.0	0.0	1.000	807.500	806.000	0.0	0.0	0.0	0.0	0.0

X3	10.000	0.0	0.0	0.0	0.0	0.0	0.0	808.000	808.000	0.0
BT	16.000	1295.000	824.000	0.0	1377.600	823.000	0.0	1455.800	821.000	0.0
BT	1498.800	813.000	0.0	1591.000	809.000	0.0	1672.800	806.000	0.0	1690.400
BT	809.000	0.0	1708.000	809.000	0.0	1725.000	808.000	0.0	1855.000	814.000
BT	0.0	1925.000	814.000	0.0	2024.000	817.000	0.0	2050.000	818.000	0.0
BT	2132.000	818.000	0.0	2239.000	820.000	0.0	2273.000	820.000	0.0	0.0
NC	0.045	0.0	0.040	0.0	0.0	0.0	0.0	0.0	0.0	0.0
X1	0.296	17.000	713.000	742.000	25.000	55.000	58.000	0.0	-1.000	0.0
GR	827.000	257.000	823.000	809.000	817.000	484.000	814.000	519.000	810.000	625.000
GR	807.000	667.000	806.000	713.000	804.000	720.000	804.000	725.000	809.000	742.000
GR	809.000	757.000	808.000	766.000	814.000	904.000	814.000	967.000	815.000	1070.000
GR	815.000	1180.000	819.000	1400.000	0.0	0.0	0.0	0.0	0.0	0.0
NC	0.0	0.0	0.0	0.100	0.300	0.0	0.0	0.0	0.0	0.0
X1	0.440	15.000	890.000	939.000	685.000	695.000	760.000	0.0	0.0	0.0
GR	824.000	448.000	821.000	507.000	821.000	619.000	815.000	727.000	813.000	801.000
GR	812.000	890.000	809.000	904.000	811.000	939.000	815.000	976.000	815.000	1003.000
GR	814.000	1018.000	817.000	1092.000	821.000	1220.000	821.000	1330.000	822.000	1713.000
X1	0.441	0.0	0.0	0.0	5.000	5.000	5.000	0.0	0.0	0.0
NC	0.0	0.040	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
X1	0.653	8.000	912.000	974.000	825.000	795.000	1120.000	0.0	0.0	0.0
GR	828.000	375.000	826.000	558.000	824.000	720.000	822.000	912.000	819.000	946.000
GR	820.000	974.000	829.000	1139.000	829.000	1153.000	0.0	0.0	0.0	0.0
NC	0.0	0.045	0.035	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OT	4.000	417.000	675.000	785.000	1040.000	0.0	0.0	0.0	0.0	0.0
X1	0.854	24.000	1732.000	1758.000	860.000	820.000	1061.000	0.0	0.0	0.0
GR	835.000	1000.000	835.000	1164.000	832.000	1424.000	828.900	1564.000	825.200	1710.000
GR	825.000	1728.000	824.000	1732.000	823.000	1738.000	822.000	1740.000	822.000	1755.000
GR	823.000	1760.000	824.000	1761.000	825.000	1768.000	826.000	1796.000	827.000	1814.000
GR	830.000	1834.000	832.000	1854.000	834.000	1890.000	834.100	2036.000	834.100	2390.000
GR	834.100	2690.000	835.000	2700.000	835.000	2722.000	837.000	2906.000	0.0	0.0
X1	1.017	34.000	1138.000	1193.000	620.000	780.000	860.000	0.0	0.250	0.0
GR	846.000	0.0	844.000	112.000	844.000	182.000	843.000	199.000	843.000	261.000
GR	841.000	297.000	841.000	342.000	841.000	374.000	841.000	431.000	839.000	503.000
GR	837.000	535.000	836.000	594.000	836.000	617.000	836.000	674.000	834.000	781.000
GR	834.000	882.000	834.000	945.000	833.000	994.000	832.000	1136.000	834.000	1153.000
GR	829.000	1172.000	831.000	1193.000	833.000	1226.000	834.000	1273.000	834.000	1340.000
GR	834.000	1364.000	834.000	1392.000	834.000	1443.000	833.000	1485.000	833.000	1510.000
GR	833.000	1621.000	834.000	1712.000	834.000	1797.000	835.000	1871.000	0.0	0.0
NC	0.055	0.055	0.0	0.300	0.500	0.0	0.0	0.0	0.0	0.0
X1	1.033	0.0	0.0	0.0	84.000	84.000	84.000	0.0	1.400	0.0
X3	10.000	0.0	0.0	0.0	0.0	0.0	0.0	832.800	832.800	0.0
SB	0.900	1.640	2.800	0.0	19.100	0.010	44.100	0.430	830.400	830.400
OT	4.000	405.000	650.000	770.000	1010.000	0.0	0.0	0.0	0.0	0.0
X1	1.040	0.0	0.0	0.0	36.000	36.000	36.000	0.0	0.0	0.0
X2	0.0	0.0	1.000	832.600	833.000	0.0	0.0	0.0	0.0	0.0
X3	10.000	0.0	0.0	0.0	0.0	0.0	0.0	833.000	833.000	0.0

	BT	18.000	50.000	846.000	0.0	115.000	844.000	0.0	135.000	843.000	0.0
	BT	195.000	843.000	0.0	233.000	841.000	0.0	366.000	841.000	0.0	440.000
	BT	839.000	0.0	470.000	837.000	0.0	530.000	836.000	0.0	610.000	836.000
	BT	0.0	700.000	834.000	0.0	965.000	833.000	0.0	1103.000	834.000	0.0
	BT	1220.000	833.500	0.0	1321.000	834.000	0.0	1580.000	835.000	0.0	1872.000
1	BT	835.000	0.0	1947.000	836.000	0.0	0.0	0.0	0.0	0.0	0.0
2	NC	0.060	0.060	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3											
4											
5	X1	1.047	22.000	1057.000	1103.000	37.000	37.000	37.000	0.0	1.400	0.0
6	GR	846.000	63.000	845.000	121.000	844.000	187.000	840.000	355.000	837.000	400.000
7	GR	837.000	426.000	838.000	533.000	836.000	776.000	834.000	819.000	834.000	849.000
8	GR	836.000	908.000	835.000	937.000	833.000	1057.000	829.000	1071.000	829.000	1090.000
9	GR	833.000	1103.000	834.000	1296.000	835.000	1555.000	835.000	1826.000	836.000	1890.000
10	GR	836.000	1925.000	836.000	1948.000	0.0	0.0	0.0	0.0	0.0	0.0
11	NC	0.070	0.065	0.0	0.100	0.300	0.0	0.0	0.0	0.0	0.0
12											
13											
14	X1	1.300	8.000	600.000	640.000	980.000	1260.000	1336.000	0.0	0.0	0.0
15	GR	856.000	393.000	853.000	452.000	846.000	503.000	841.000	600.000	837.000	620.000
16	GR	837.000	632.000	840.000	640.000	856.000	736.000	0.0	0.0	0.0	0.0
17	NC	0.110	0.100	0.040	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	QT	4.000	367.000	590.000	693.000	920.000	0.0	0.0	0.0	0.0	0.0
19											
20											
21	X1	1.545	11.000	0.000	469.000	970.000	915.000	1294.000	0.0	0.0	0.0
22	GR	883.000	0.0	883.000	186.000	880.000	278.000	859.000	409.000	849.000	416.000
23	GR	849.000	441.000	851.000	469.000	850.000	581.000	874.000	729.000	874.000	772.000
24	GR	882.000	854.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25											
26											
27	X1	1.546	0.0	0.0	0.0	5.000	5.000	5.000	0.0	0.0	0.0
28	NC	0.0	0.100	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29											
30											
31	X1	1.800	12.000	498.000	526.000	1060.000	1060.000	1341.000	0.0	0.0	0.0
32	GR	898.000	0.0	891.000	184.000	887.000	302.000	885.000	349.000	867.000	452.000
33	GR	867.000	498.000	866.000	510.000	867.000	526.000	869.000	603.000	893.000	787.000
34	GR	894.000	794.000	894.000	1220.000	0.0	0.0	0.0	0.0	0.0	0.0
35											
36											
37	X1	1.801	0.0	0.0	0.0	5.000	5.000	5.000	0.0	0.0	0.0
38	NC	0.090	0.090	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
39											
40											
41	X1	2.032	21.000	977.000	1016.000	1035.000	1135.000	1220.000	0.0	0.0	0.0
42	GR	909.000	732.000	908.000	784.000	900.000	829.000	896.000	890.000	894.000	915.000
43	GR	886.000	977.000	882.000	1000.000	884.000	1016.000	888.000	1099.000	900.000	1159.000
44	GR	911.000	1285.000	916.000	1377.000	917.000	1416.000	919.000	1486.000	923.000	1615.000
45	GR	927.000	1755.000	926.000	1834.000	928.000	1916.000	929.000	1965.000	931.000	2025.000
46	GR	932.000	2196.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
47											
48											
49	X1	2.033	0.0	0.0	0.0	5.000	5.000	5.000	0.0	0.0	0.0
50	NC	0.0	0.0	0.0	0.400	0.600	0.0	0.0	0.0	0.0	0.0
51											
52											
53	X1	2.047	0.0	0.0	0.0	74.000	74.000	74.000	0.0	1.600	0.0
54	X3	10.000	0.0	0.0	0.0	0.0	0.0	0.0	898.700	898.700	0.0
55	SB	0.900	1.650	2.600	0.0	14.900	0.010	143.500	0.0	883.600	883.600
56											
57											

X1	2.062	0.0	0.0	0.0	80.000	80.000	80.000	0.0	0.0	0.0
X2	0.0	0.0	1.000	893.300	904.000	0.0	0.0	0.0	0.0	0.0
X3	10.000	0.0	0.0	0.0	0.0	0.0	0.0	904.000	904.000	0.0
BT	8.000	869.000	909.000	0.0	579.000	907.000	0.0	707.000	906.000	0.0
BT	1029.400	904.000	0.0	1316.900	913.000	0.0	1621.000	918.000	0.0	1958.000
BT	930.000	0.0	2239.000	935.000	0.0	0.0	0.0	0.0	0.0	0.0
NC	0.100	0.100	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BT	8.000	367.000	590.000	693.000	920.000	0.0	0.0	0.0	0.0	0.0
X1	2.066	23.000	1010.000	1030.000	21.000	21.000	21.000	0.0	-1.000	0.0
GR	909.000	459.000	907.000	569.000	905.000	767.000	905.000	837.000	897.000	934.000
GR	898.000	990.000	895.000	1010.000	885.000	1020.000	894.000	1030.000	895.000	1112.000
GR	897.000	1198.000	905.000	1236.000	905.000	1250.000	918.000	1346.000	918.000	1402.000
GR	921.000	1529.000	928.000	1653.000	923.000	1665.000	928.000	1687.000	927.000	1791.000
GR	939.000	1955.000	933.000	2097.000	936.000	2223.000	0.0	0.0	0.0	0.0
X1	2.067	0.0	0.0	0.0	5.000	5.000	5.000	0.0	0.0	0.0
EJ	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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  HEC2 RELEASE DATED NOV 76 UPDATED  AUG1977
  ERROR CORR -  01,02
  MODIFICATION -  50,51,52,53
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T1      GAHANNA, OHIO FLOOD INSURANCE STUDY
T2      ANALYSIS OF TRIB 5 OF BIG WALNUT CREEK FROM RM 0.062 TO RM 2.066
T3      TRIB 5 BIG WALNUT                    100 YEAR FLOOD FREQUENCY *RUN 1*

J1   ICHECK     INQ        NINV       IDIR       STRT       METRIC     HVINS      Q          WSEL       FQ
          0.         4.         0.         0.   0.017200        0.0        0.0         0.        0.0        0.0

J2   NPROF      IPLOT      PRFVS      XSECV      XSECH      FN         ALLDC      IBW        CHNIM      ITRACE
         3.000      0.0       -1.000      0.0        0.0        0.0        0.0        0.0        0.0        0.0
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  HEC2 RELEASE DATED NOV 76 UPDATED  AUG1977
  ERROR CORR -  01,02
  MODIFICATION -  50,51,52,53
**************************************************

T1      GAHANNA, OHIO FLOOD INSURANCE STUDY
T2      ANALYSIS OF TRIB 5 OF BIG WALNUT CREEK FROM RM 0.062 TO RM 2.066
T3      TRIB 5 BIG WALNUT                    500 YEAR FLOOD FREQUENCY *RUN 1*

J1  ICHECK    INQ       NINV      IDIR      STRT      METRIC    HVINS     Q         WSEL      FQ
            0.        5.        0.        0.  0.017200    0.0       0.0       0.        0.0       0.0

J2  NPROF     IPLOT     PRFVS     XSECV     XSECH     FN        ALLDC     IBW       CHNIM     ITRACE
         15.000    0.0       -1.000    0.0       0.0       0.0       0.0       0.0       0.0       0.0
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HEC2 RELEASE DATED NOV 76 UPDATED AUG1977

ERROR CORR - 01,02

MODIFICATION - 50,51,52,53

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NOTE- ASTERISK (*) AT LEFT OF CROSS-SECTION NUMBER INDICATES MESSAGE IN SUMMARY OF ERRORS LIST

TRIB 5 BIG WALNUT

SUMMARY PRINTOUT

	SECNO	XLCH	ELTRD	ELLC	ELMIN	Q	CWSEL	TOPWID	VOL	DEPTH	HV	QLOB	QROB
*	0.062	0.0	0.0	0.0	789.00	480.00	791.92	58.92	0.0	2.92	0.76	0.0	52.63
*	0.062	0.0	0.0	0.0	789.00	775.00	792.52	65.36	0.0	3.52	0.96	0.0	130.38
*	0.062	0.0	0.0	0.0	789.00	910.00	792.76	67.88	0.0	3.76	1.03	0.0	169.48
*	0.062	0.0	0.0	0.0	789.00	1200.00	793.21	72.67	0.0	4.21	1.17	0.0	253.02
	0.063	5.00	0.0	0.0	789.00	480.00	792.26	62.70	0.01	3.26	0.49	0.0	70.29
	0.063	5.00	0.0	0.0	789.00	775.00	792.91	69.42	0.02	3.91	0.65	0.0	152.04
	0.063	5.00	0.0	0.0	789.00	910.00	793.16	72.11	0.02	4.16	0.71	0.0	192.87
	0.063	5.00	0.0	0.0	789.00	1200.00	793.65	77.24	0.02	4.65	0.82	0.0	284.72
*	0.106	227.00	0.0	0.0	793.00	480.00	795.56	41.87	0.43	2.56	0.81	0.0	0.0
*	0.106	227.00	0.0	0.0	793.00	775.00	796.23	50.16	0.61	3.23	0.99	0.0	0.0
*	0.106	227.00	0.0	0.0	793.00	910.00	796.48	53.31	0.68	3.48	1.06	0.0	0.0
*	0.106	227.00	0.0	0.0	793.00	1200.00	796.97	59.28	0.84	3.97	1.19	0.0	0.0
	0.107	5.00	0.0	0.0	793.00	480.00	795.95	46.63	0.44	2.95	0.51	0.0	0.0
	0.107	5.00	0.0	0.0	793.00	775.00	796.65	55.37	0.62	3.65	0.66	0.0	0.0
	0.107	5.00	0.0	0.0	793.00	910.00	796.92	58.71	0.70	3.92	0.71	0.0	0.0
	0.107	5.00	0.0	0.0	793.00	1200.00	797.43	65.00	0.86	4.43	0.81	0.0	0.0
*	0.194	460.00	0.0	0.0	799.00	480.00	802.75	27.99	1.19	3.75	1.06	0.0	0.0
*	0.194	460.00	0.0	0.0	799.00	775.00	803.62	33.81	1.70	4.62	1.29	0.0	0.0
*	0.194	460.00	0.0	0.0	799.00	910.00	803.95	36.03	1.92	4.95	1.38	0.0	0.0
*	0.194	460.00	0.0	0.0	799.00	1200.00	804.59	40.24	2.37	5.59	1.53	0.0	0.0
A	0.195	5.00	0.0	0.0	799.00	480.00	803.20	30.95	1.19	4.20	0.71	0.0	0.0
	0.195	5.00	0.0	0.0	799.00	775.00	804.12	37.07	1.71	5.12	0.89	0.0	0.0
	0.195	5.00	0.0	0.0	799.00	910.00	804.46	39.38	1.93	5.46	0.96	0.0	0.0
	0.195	5.00	0.0	0.0	799.00	1200.00	805.13	44.93	2.39	6.13	1.09	0.0	0.05
	0.203	43.00	0.0	0.0	799.20	480.00	803.73	33.12	1.27	4.53	0.54	0.0	0.0
	0.203	43.00	0.0	0.0	799.20	775.00	804.70	39.70	1.82	5.50	0.68	0.0	0.0
	0.203	43.00	0.0	0.0	799.20	910.00	805.07	42.18	2.05	5.87	0.73	0.0	0.0
	0.203	43.00	0.0	0.0	799.20	1200.00	805.72	50.66	2.54	6.52	0.87	0.0	2.59
	0.209	30.00	806.00	805.30	799.20	480.00	803.80	33.70	1.33	4.60	0.50	0.0	0.0
	0.209	30.00	806.00	805.30	799.20	775.00	805.95	44.51	1.92	6.75	0.32	0.0	0.0
	0.209	30.00	806.00	805.30	799.20	910.00	806.72	80.49	2.18	7.52	0.27	0.0	34.10
*	0.209	30.00	806.00	805.30	799.20	1200.00	807.45	124.62	2.69	8.25	0.29	2.94	111.56

		SECNO	XLCH	FLTRD	FLLC	FLMTN	Q	CWSEL	TOPWID	VOL	DEPTH	HV	QLOB	QROB
B		0.216	37.00	0.0	0.0	799.00	480.00	804.13	35.85	1.40	5.13	0.39	0.0	0.0
		0.216	37.00	0.0	0.0	799.00	775.00	806.05	55.74	2.07	7.05	0.30	0.0	5.61
		0.216	37.00	0.0	0.0	799.00	910.00	806.79	82.09	2.37	7.79	0.26	0.0	38.10
		0.216	37.00	0.0	0.0	799.00	1200.00	807.52	126.58	2.95	8.52	0.28	4.20	117.69
		0.227	58.00	0.0	0.0	798.70	480.00	804.43	37.83	1.54	5.73	0.31	0.0	0.0
		0.227	58.00	0.0	0.0	798.70	775.00	806.18	57.53	2.31	7.48	0.27	0.0	7.57
		0.227	58.00	0.0	0.0	798.70	910.00	806.88	84.24	2.69	8.18	0.24	0.0	43.69
		0.227	58.00	0.0	0.0	798.70	1200.00	807.62	129.08	3.37	8.92	0.26	6.01	125.64
		0.229	12.00	806.00	804.40	798.70	480.00	805.08	42.19	1.57	6.38	0.20	0.0	0.0
		0.229	12.00	806.00	804.40	798.70	775.00	807.16	90.94	2.38	8.46	0.15	0.0	53.47
		0.229	12.00	806.00	804.40	798.70	910.00	807.66	130.57	2.77	8.96	0.15	5.43	98.91
		0.229	12.00	806.00	804.40	798.70	1200.00	808.27	148.85	3.47	9.57	0.17	24.30	188.99
C		0.236	37.00	0.0	0.0	800.00	480.00	805.30	95.32	1.74	5.30	0.06	0.0	0.0
		0.236	37.00	0.0	0.0	800.00	775.00	807.32	240.43	2.74	7.32	0.03	57.28	5.40
		0.236	37.00	0.0	0.0	800.00	910.00	807.82	258.34	3.22	7.82	0.03	93.91	11.88
		0.236	37.00	0.0	0.0	800.00	1200.00	808.45	281.28	4.03	8.45	0.04	163.41	26.90
D		0.272	190.00	0.0	0.0	802.00	480.00	805.27	47.73	2.48	3.27	0.46	0.0	0.29
		0.272	190.00	0.0	0.0	802.00	775.00	807.30	148.28	4.71	5.30	0.17	88.70	36.21
		0.272	190.00	0.0	0.0	802.00	910.00	807.80	166.77	5.62	5.80	0.15	139.90	54.88
		0.272	190.00	0.0	0.0	802.00	1200.00	808.43	190.28	7.06	6.43	0.16	237.11	91.83
		0.279	37.00	0.0	0.0	802.30	480.00	805.51	44.05	2.55	3.21	0.49	0.0	0.0
		0.279	37.00	0.0	0.0	802.30	775.00	807.28	48.00	4.91	4.98	0.33	0.0	0.0
		0.279	37.00	0.0	0.0	802.30	910.00	807.82	156.38	5.93	5.52	0.19	120.28	48.00
		0.279	37.00	0.0	0.0	802.30	1200.00	808.45	179.85	7.47	6.15	0.19	214.77	83.39
		0.285	32.00	806.00	807.50	802.30	460.00	805.51	44.05	2.62	3.21	0.45	0.0	0.0
		0.285	32.00	806.00	807.50	802.30	740.00	808.30	174.26	5.12	6.00	0.08	124.65	48.56
		0.285	32.00	806.00	807.50	802.30	873.00	808.75	190.87	6.23	6.45	0.08	173.39	67.15
		0.285	32.00	806.00	807.50	802.30	1150.00	809.26	209.86	7.85	6.96	0.10	263.67	102.33
E	*	0.296	58.00	0.0	0.0	803.00	460.00	806.29	73.17	2.72	3.29	0.58	113.57	0.0
	*	0.296	58.00	0.0	0.0	803.00	740.00	808.32	161.88	5.48	5.32	0.11	374.74	26.84
	*	0.296	58.00	0.0	0.0	803.00	873.00	808.77	178.78	6.67	5.77	0.10	446.26	57.21
	*	0.296	58.00	0.0	0.0	803.00	1150.00	809.29	201.45	8.37	6.29	0.11	591.64	112.21
		0.440	760.00	0.0	0.0	809.00	460.00	812.25	83.13	4.43	3.25	0.28	1.69	11.20
	*	0.440	760.00	0.0	0.0	809.00	740.00	812.07	65.59	8.84	3.07	0.90	0.12	13.98
	*	0.440	760.00	0.0	0.0	809.00	873.00	812.40	97.68	10.87	3.40	0.86	9.66	25.25
	*	0.440	760.00	0.0	0.0	809.00	1150.00	812.96	152.23	13.93	3.96	0.76	82.26	51.67
F		0.441	5.00	0.0	0.0	809.00	460.00	812.29	87.39	4.45	3.29	0.27	2.48	11.81
		0.441	5.00	0.0	0.0	809.00	740.00	812.56	113.42	8.85	3.56	0.51	17.55	25.01
		0.441	5.00	0.0	0.0	809.00	873.00	812.83	139.77	10.89	3.83	0.51	47.23	36.27
		0.441	5.00	0.0	0.0	809.00	1150.00	813.30	170.30	13.96	4.30	0.48	154.69	60.35
G		0.653	1120.00	0.0	0.0	819.00	460.00	821.10	72.22	6.92	2.10	0.53	0.0	37.40
		0.653	1120.00	0.0	0.0	819.00	740.00	821.90	95.59	12.39	2.90	0.42	0.0	113.96
		0.653	1120.00	0.0	0.0	819.00	873.00	822.03	100.91	14.93	3.03	0.50	0.00	143.06
		0.653	1120.00	0.0	0.0	819.00	1150.00	822.18	118.80	18.96	3.18	0.72	1.14	199.82

		SECNO	XLCH	FLTRD	FLLC	FLMIN	Q	CWSEL	TOPWID	VOL	DEPTH	HV	QLOB	QROB
H		0.854	1061.00	0.0	0.0	822.00	417.00	825.85	106.83	9.54	3.85	0.18	28.81	7.58
		0.854	1061.00	0.0	0.0	822.00	675.00	826.33	136.20	16.37	4.33	0.27	82.64	32.13
1		0.854	1061.00	0.0	0.0	822.00	785.00	826.58	150.91	19.42	4.58	0.27	117.89	50.60
2		0.854	1061.00	0.0	0.0	822.00	1040.00	827.07	178.60	24.49	5.07	0.27	208.47	98.59
3														
4	I *	1.017	860.00	0.0	0.0	829.25	417.00	831.13	48.21	11.50	1.88	0.67	0.0	0.0
5	*	1.017	860.00	0.0	0.0	829.25	675.00	831.68	59.30	19.11	2.43	0.84	0.0	2.21
6	*	1.017	860.00	0.0	0.0	829.25	785.00	831.89	63.84	22.59	2.64	0.89	0.0	6.17
7	*	1.017	860.00	0.0	0.0	829.25	1040.00	832.30	79.96	28.60	3.05	1.02	0.07	22.09
8														
9		1.033	84.00	0.0	0.0	830.65	417.00	832.55	48.43	11.62	1.90	0.66	0.0	0.0
10	*	1.033	84.00	0.0	0.0	830.65	675.00	833.08	59.19	19.28	2.43	0.85	0.0	1.76
11	*	1.033	84.00	0.0	0.0	830.65	785.00	833.27	63.44	22.80	2.63	0.92	0.0	4.75
12	*	1.033	84.00	0.0	0.0	830.65	1040.00	833.70	80.08	28.86	3.05	1.03	0.06	18.17
13														
14		1.040	36.00	833.00	832.60	830.65	405.00	833.40	66.27	11.69	2.75	0.21	0.0	3.67
15		1.040	36.00	833.00	832.60	830.65	650.00	833.38	65.94	19.37	2.73	0.55	0.0	5.64
16		1.040	36.00	833.00	832.60	830.65	770.00	833.52	68.83	22.89	2.87	0.67	0.0	9.39
17		1.040	36.00	833.00	832.60	830.65	1010.00	834.05	135.58	28.99	3.40	0.69	8.96	29.07
18														
19	J	1.047	37.00	0.0	0.0	830.40	405.00	833.48	39.80	11.73	3.08	0.31	0.0	0.0
20		1.047	37.00	0.0	0.0	830.40	650.00	833.61	40.65	19.46	3.21	0.72	0.0	0.0
21		1.047	37.00	0.0	0.0	830.40	770.00	833.76	41.72	22.98	3.36	0.88	0.0	0.0
22		1.047	37.00	0.0	0.0	830.40	1010.00	834.16	44.40	29.11	3.76	1.11	0.0	0.0
23														
24	K	1.300	1336.00	0.0	0.0	837.00	405.00	840.05	35.58	14.28	3.05	0.49	0.0	0.00
25		1.300	1336.00	0.0	0.0	837.00	650.00	841.28	53.13	22.83	4.28	0.45	0.27	5.17
26		1.300	1336.00	0.0	0.0	837.00	770.00	841.66	62.85	26.78	4.66	0.48	2.60	9.98
27		1.300	1336.00	0.0	0.0	837.00	1010.00	842.26	78.33	33.78	5.26	0.56	14.40	22.33
28														
29		1.545	1294.00	0.0	0.0	849.00	367.00	850.86	152.60	16.86	1.86	0.30	0.0	36.67
30	*	1.545	1294.00	0.0	0.0	849.00	590.00	851.08	173.11	26.63	2.08	0.48	0.0	86.81
31	*	1.545	1294.00	0.0	0.0	849.00	693.00	851.18	173.81	31.09	2.18	0.54	0.0	117.04
32	*	1.545	1294.00	0.0	0.0	849.00	920.00	851.41	175.41	39.13	2.41	0.63	0.0	193.56
33														
34	L	1.546	5.00	0.0	0.0	849.00	367.00	850.98	170.91	16.87	1.98	0.23	0.0	46.34
35		1.546	5.00	0.0	0.0	849.00	590.00	851.34	174.87	26.65	2.34	0.30	0.0	116.49
36		1.546	5.00	0.0	0.0	849.00	693.00	851.47	175.81	31.11	2.47	0.33	0.0	151.88
37		1.546	5.00	0.0	0.0	849.00	920.00	851.73	177.58	39.15	2.73	0.40	0.0	232.72
38														
39	*	1.800	1341.00	0.0	0.0	866.00	367.00	867.95	115.90	20.18	1.95	0.49	80.99	21.46
40	*	1.800	1341.00	0.0	0.0	866.00	590.00	868.33	132.91	31.37	2.33	0.62	144.96	53.23
41	*	1.800	1341.00	0.0	0.0	866.00	693.00	868.49	139.99	36.43	2.49	0.67	174.74	71.46
42	*	1.800	1341.00	0.0	0.0	866.00	920.00	868.77	152.08	45.58	2.77	0.80	239.04	114.51
43														
44		1.801	5.00	0.0	0.0	866.00	367.00	868.23	128.00	20.20	2.23	0.29	88.12	29.79
45		1.801	5.00	0.0	0.0	866.00	590.00	868.67	147.75	31.39	2.67	0.38	151.91	68.99
46		1.801	5.00	0.0	0.0	866.00	693.00	868.84	155.21	36.45	2.84	0.41	181.07	90.00
47		1.801	5.00	0.0	0.0	866.00	920.00	869.22	165.40	45.61	3.22	0.44	243.16	152.09
48														
49	*	2.032	1220.00	0.0	0.0	882.00	367.00	884.81	49.03	22.78	2.81	0.73	0.0	8.49
50	*	2.032	1220.00	0.0	0.0	882.00	590.00	885.42	65.10	35.23	3.42	0.86	0.0	35.59
51	*	2.032	1220.00	0.0	0.0	882.00	693.00	885.65	71.27	40.83	3.65	0.91	0.0	52.54
52	*	2.032	1220.00	0.0	0.0	882.00	920.00	886.06	82.07	51.20	4.06	1.04	0.00	94.03
53														
54														
55														
56														
57														

	SECNO	XLCH	ELTRD	ELLC	ELMIN	Q	CWSEL	TOPWID	VOL	DEPTH	HV	QLOB	QROB
m	2.033	5.00	0.0	0.0	882.00	367.00	885.19	58.86	22.79	3.19	0.44	0.0	16.53
	2.033	5.00	0.0	0.0	882.00	590.00	885.84	76.39	35.24	3.84	0.53	0.0	52.36
	2.033	5.00	0.0	0.0	882.00	693.00	886.08	83.04	40.84	4.08	0.57	0.00	72.17
	2.033	5.00	0.0	0.0	882.00	920.00	886.52	95.43	51.22	4.52	0.67	0.66	118.04
*	2.047	74.00	0.0	0.0	883.60	367.00	886.38	31.97	22.90	2.78	0.82	0.0	0.0
*	2.047	74.00	0.0	0.0	883.60	590.00	887.02	35.66	35.40	3.42	1.03	0.0	0.0
*	2.047	74.00	0.0	0.0	883.60	693.00	887.27	37.13	41.03	3.67	1.12	0.0	0.0
*	2.047	74.00	0.0	0.0	883.60	920.00	887.75	39.00	51.46	4.15	1.32	0.0	0.0
	2.062	80.00	904.00	893.30	883.60	367.00	886.38	31.99	22.99	2.78	0.81	0.0	0.0
	2.062	80.00	904.00	893.30	883.60	590.00	887.02	35.68	35.54	3.42	1.03	0.0	0.0
	2.062	80.00	904.00	893.30	883.60	693.00	887.28	37.15	41.18	3.68	1.13	0.0	0.0
	2.062	80.00	904.00	893.30	883.60	920.00	887.76	39.00	51.64	4.16	1.31	0.0	0.0
*	2.066	21.00	0.0	0.0	884.00	367.00	889.95	12.56	23.01	5.95	1.50	0.0	0.0
*	2.066	21.00	0.0	0.0	884.00	590.00	891.19	15.17	35.57	7.19	1.82	0.0	0.0
*	2.066	21.00	0.0	0.0	884.00	693.00	891.66	16.18	41.22	7.66	1.94	0.0	0.0
*	2.066	21.00	0.0	0.0	884.00	920.00	892.50	17.95	51.69	8.50	2.26	0.0	0.0
	2.067	5.00	0.0	0.0	884.00	367.00	891.07	14.92	23.01	7.07	0.75	0.0	0.0
	2.067	5.00	0.0	0.0	884.00	590.00	892.50	17.93	35.57	8.50	0.93	0.0	0.0
	2.067	5.00	0.0	0.0	884.00	693.00	893.06	25.85	41.23	9.06	0.99	0.00	0.02
	2.067	5.00	0.0	0.0	884.00	920.00	895.27	216.58	51.71	11.27	0.30	76.14	173.29

	SECND	Q	CWSEL	DTEWSP	DTEWSX	DTEKWS	10K*S	K*XNL	K*XNCH	K*XNR	TOPWID	SSTA	ENDST
	0.236	480.00	805.30	0.0	0.22	0.0	5.54	50.00	35.00	50.00	95.32	683.82	779.14
	0.236	775.00	807.32	2.02	0.16	0.0	1.91	50.00	35.00	50.00	240.43	574.92	815.35
	0.236	910.00	807.82	0.50	0.16	0.0	1.68	50.00	35.00	50.00	258.34	566.96	825.30
	0.236	1200.00	808.45	0.64	0.18	0.0	1.73	50.00	35.00	50.00	281.28	556.76	838.05
	0.272	480.00	805.27	0.0	-0.03	0.0	66.14	50.00	35.00	50.00	47.73	691.63	739.37
	0.272	775.00	807.30	2.03	-0.02	0.0	11.67	50.00	35.00	50.00	148.28	616.07	764.34
	0.272	910.00	807.80	0.50	-0.02	0.0	9.40	50.00	35.00	50.00	166.77	603.73	770.50
	0.272	1200.00	808.43	0.63	-0.02	0.0	8.85	50.00	35.00	50.00	190.28	588.05	778.32
	0.279	480.00	805.51	0.0	0.24	0.0	72.92	50.00	35.00	50.00	44.05	691.95	736.00
	0.279	775.00	807.28	1.77	-0.02	0.0	22.35	50.00	35.00	50.00	48.00	688.00	736.00
	0.279	910.00	807.82	0.54	0.02	0.0	12.64	50.00	35.00	50.00	156.38	610.67	767.04
	0.279	1200.00	808.45	0.63	0.02	0.0	11.52	50.00	35.00	50.00	179.85	595.00	774.85
	0.285	460.00	805.51	0.0	0.00	0.0	66.97	50.00	35.00	50.00	44.05	691.95	736.00
	0.285	740.00	808.30	2.79	1.02	0.0	5.07	50.00	35.00	50.00	174.26	598.74	772.99
	0.285	873.00	808.75	0.45	0.93	0.0	4.62	50.00	35.00	50.00	190.87	587.65	778.52
	0.285	1150.00	809.26	0.51	0.81	0.0	5.12	50.00	35.00	50.00	209.86	574.98	784.84
*	0.296	460.00	806.29	0.0	0.78	0.0	123.58	45.00	40.00	50.00	73.17	663.00	736.17
	0.296	740.00	808.32	2.03	0.02	0.0	14.25	45.00	40.00	50.00	161.88	634.51	796.38
	0.296	873.00	808.77	0.45	0.02	0.0	11.42	45.00	40.00	50.00	178.78	628.11	806.89
	0.296	1150.00	809.29	0.52	0.03	0.0	11.20	45.00	40.00	50.00	201.45	617.26	818.72
	0.440	460.00	812.25	0.0	5.97	0.0	50.55	45.00	40.00	50.00	83.13	867.46	950.59
*	0.440	740.00	812.07	-0.18	3.75	0.0	178.89	45.00	40.00	50.00	65.59	883.35	948.94
*	0.440	873.00	812.40	0.33	3.63	0.0	141.66	45.00	40.00	50.00	97.68	854.28	951.96
*	0.440	1150.00	812.96	0.56	3.67	0.0	100.08	45.00	40.00	50.00	152.23	804.87	957.10
	0.441	460.00	812.29	0.0	0.04	0.0	46.94	45.00	40.00	50.00	87.39	863.60	950.99
	0.441	740.00	812.56	0.27	0.48	0.0	78.07	45.00	40.00	50.00	113.42	840.02	953.44
	0.441	873.00	812.83	0.28	0.43	0.0	70.46	45.00	40.00	50.00	139.77	816.15	955.93
	0.441	1150.00	813.30	0.47	0.34	0.0	57.83	45.00	40.00	50.00	170.30	789.96	960.26
	0.653	460.00	821.10	0.0	8.81	0.0	175.74	45.00	40.00	40.00	72.22	922.10	994.32
	0.653	740.00	821.90	0.80	9.34	0.0	93.11	45.00	40.00	40.00	95.59	913.17	1008.77
	0.653	873.00	822.03	0.13	9.19	0.0	104.91	45.00	40.00	40.00	100.91	910.12	1011.03
	0.653	1150.00	822.18	0.15	8.88	0.0	137.48	45.00	40.00	40.00	118.80	895.10	1013.89
	0.854	417.00	825.85	0.0	4.75	0.0	17.10	45.00	35.00	45.00	106.83	1684.71	1791.54
	0.854	675.00	826.33	0.48	4.43	0.0	22.39	45.00	35.00	45.00	136.20	1665.63	1801.84
	0.854	785.00	826.58	0.25	4.56	0.0	21.36	45.00	35.00	45.00	150.91	1655.54	1806.44
	0.854	1040.00	827.07	0.49	4.89	0.0	19.84	45.00	35.00	45.00	178.60	1635.92	1814.52
*	1.017	417.00	831.13	0.0	5.29	0.0	168.37	45.00	35.00	45.00	48.21	1143.58	1191.79
*	1.017	675.00	831.68	0.55	5.35	0.0	145.16	45.00	35.00	45.00	59.30	1140.84	1200.13
*	1.017	785.00	831.89	0.21	5.31	0.0	136.11	45.00	35.00	45.00	63.84	1139.78	1203.62
*	1.017	1040.00	832.30	0.41	5.23	0.0	126.27	45.00	35.00	45.00	79.96	1130.41	1210.37
	1.033	417.00	832.55	0.0	1.41	0.0	163.44	55.00	35.00	55.00	48.43	1143.51	1191.94
*	1.033	675.00	833.08	0.53	1.40	0.0	146.63	55.00	35.00	55.00	59.19	1140.86	1200.05
*	1.033	785.00	833.27	0.20	1.38	0.0	140.76	55.00	35.00	55.00	63.44	1139.87	1203.31
*	1.033	1040.00	833.70	0.43	1.40	0.0	127.11	55.00	35.00	55.00	80.08	1130.30	1210.38

SEC NO	D	CWSF	DTFWSP	DTFNSX	DTFKWS	10K*S	K*XNL	K*XNCH	K*XNR	TOPWID	SSTA	ENDST
1.040	405.00	833.40	0.0	0.86	0.0	30.27	55.00	35.00	55.00	66.27	1139.22	1205.48
1.040	650.00	833.38	-0.02	0.31	0.0	79.88	55.00	35.00	55.00	65.94	1139.29	1205.23
1.040	770.00	833.52	0.13	0.24	0.0	91.00	55.00	35.00	55.00	68.83	1138.62	1207.45
1.040	1010.00	834.05	0.53	0.34	0.0	71.60	55.00	35.00	55.00	135.58	1080.51	1216.09
1.047	405.00	833.48	0.0	0.08	0.0	38.13	60.00	35.00	60.00	39.80	1060.21	1100.01
1.047	650.00	833.61	0.13	0.22	0.0	84.27	60.00	35.00	60.00	40.65	1059.77	1100.43
1.047	770.00	833.76	0.16	0.25	0.0	98.33	60.00	35.00	60.00	41.72	1059.22	1100.94
1.047	1010.00	834.16	0.39	0.11	0.0	109.96	60.00	35.00	60.00	44.40	1057.83	1102.23
1.300	405.00	840.05	0.0	6.57	0.0	68.80	70.00	35.00	65.00	35.58	604.74	640.32
1.300	650.00	841.28	1.22	7.67	0.0	38.99	70.00	35.00	65.00	53.13	594.56	647.68
1.300	770.00	841.66	0.38	7.90	0.0	35.99	70.00	35.00	65.00	62.85	587.13	649.98
1.300	1010.00	842.26	0.60	8.11	0.0	34.11	70.00	35.00	65.00	78.33	575.31	653.64
1.545	367.00	850.86	0.0	10.81	0.0	104.85	110.00	40.00	100.00	152.60	414.71	586.24
* 1.545	590.00	851.08	0.22	9.80	0.0	151.78	110.00	40.00	100.00	173.11	414.54	587.65
* 1.545	693.00	851.18	0.10	9.52	0.0	160.88	110.00	40.00	100.00	173.81	414.47	588.29
* 1.545	920.00	851.41	0.23	9.15	0.0	165.29	110.00	40.00	100.00	175.41	414.31	589.72
1.546	367.00	850.98	0.0	0.13	0.0	75.11	110.00	40.00	100.00	170.91	414.61	587.09
1.546	590.00	851.34	0.35	0.26	0.0	80.93	110.00	40.00	100.00	174.87	414.37	589.23
1.546	693.00	851.47	0.14	0.29	0.0	83.04	110.00	40.00	100.00	175.81	414.27	590.08
1.546	920.00	851.73	0.26	0.32	0.0	88.63	110.00	40.00	100.00	177.58	414.09	591.67
* 1.800	367.00	867.95	0.0	16.96	0.0	189.17	110.00	40.00	100.00	115.90	446.58	562.48
* 1.800	590.00	868.33	0.38	17.00	0.0	189.21	110.00	40.00	100.00	132.91	444.38	577.28
* 1.800	693.00	868.49	0.16	17.02	0.0	186.09	110.00	40.00	100.00	139.99	443.46	583.45
* 1.800	920.00	868.77	0.27	17.03	0.0	194.81	110.00	40.00	100.00	152.08	441.90	593.98
1.801	367.00	868.23	0.0	0.28	0.0	94.16	110.00	40.00	100.00	128.00	445.01	573.01
1.801	590.00	868.67	0.44	0.34	0.0	95.83	110.00	40.00	100.00	147.75	442.46	590.21
1.801	693.00	868.84	0.17	0.35	0.0	97.57	110.00	40.00	100.00	155.21	441.49	596.70
1.801	920.00	869.22	0.38	0.45	0.0	90.81	110.00	40.00	100.00	165.40	439.29	604.69
* 2.032	367.00	884.81	0.0	16.58	0.0	187.42	90.00	40.00	90.00	49.03	983.83	1032.86
* 2.032	590.00	885.42	0.61	16.75	0.0	168.55	90.00	40.00	90.00	65.10	980.34	1045.44
* 2.032	693.00	885.65	0.23	16.81	0.0	163.46	90.00	40.00	90.00	71.27	979.00	1050.27
* 2.032	920.00	886.06	0.40	16.84	0.0	163.11	90.00	40.00	90.00	82.07	976.57	1058.64
2.033	367.00	885.19	0.0	0.38	0.0	95.74	90.00	40.00	90.00	58.86	981.70	1040.55
2.033	590.00	885.84	0.65	0.42	0.0	89.96	90.00	40.00	90.00	76.39	977.89	1054.28
2.033	693.00	886.08	0.24	0.43	0.0	88.05	90.00	40.00	90.00	83.04	976.31	1059.35
2.033	920.00	886.52	0.43	0.46	0.0	85.95	90.00	40.00	90.00	95.43	972.94	1068.37
* 2.047	367.00	886.38	0.0	1.19	0.0	209.30	90.00	40.00	90.00	31.97	984.03	1016.00
* 2.047	590.00	887.02	0.64	1.18	0.0	190.82	90.00	40.00	90.00	35.66	980.34	1016.00
* 2.047	693.00	887.27	0.25	1.19	0.0	185.81	90.00	40.00	90.00	37.13	978.87	1016.00
* 2.047	920.00	887.75	0.48	1.24	0.0	178.28	90.00	40.00	90.00	39.00	977.00	1016.00
2.062	367.00	886.38	0.0	0.00	0.0	208.07	90.00	40.00	90.00	31.99	984.01	1016.00
2.062	590.00	887.02	0.64	0.00	0.0	189.76	90.00	40.00	90.00	35.68	980.32	1016.00
2.062	693.00	887.28	0.26	0.00	0.0	184.75	90.00	40.00	90.00	37.15	978.85	1016.00
2.062	920.00	887.76	0.48	0.01	0.0	177.05	90.00	40.00	90.00	39.00	977.00	1016.00

	SECNO	Q	CWSEL	DIFWSP	DIFWSX	DIFKWS	10K*S	K*XNL	K*XNCH	K*XNR	TOPWID	SSTA	ENDST
*	2.066	367.00	889.95	0.0	3.57	0.0	250.23	100.00	40.00	100.00	12.56	1014.05	1026.61
*	2.066	590.00	891.19	1.24	4.16	0.0	236.22	100.00	40.00	100.00	15.17	1012.81	1027.99
*	2.066	693.00	891.66	0.48	4.39	0.0	231.50	100.00	40.00	100.00	16.18	1012.34	1028.52
*	2.066	920.00	892.50	0.84	4.75	0.0	234.56	100.00	40.00	100.00	17.95	1011.50	1029.45
	2.067	367.00	891.07	0.0	1.12	0.0	100.17	100.00	40.00	100.00	14.92	1012.93	1027.85
	2.067	590.00	892.50	1.43	1.31	0.0	96.93	100.00	40.00	100.00	17.93	1011.51	1029.44
	2.067	693.00	893.06	0.56	1.39	0.0	94.62	100.00	40.00	100.00	25.85	988.95	1034.62
	2.067	920.00	895.27	2.21	2.76	0.0	24.13	100.00	40.00	100.00	216.58	947.58	1164.17

PTR & RTG #ALMNT

SUMMARY PRINTOUT TABLE 100

SECNO	FBLWC	FLLC	FCPRS	FLTRO	OPR	QWFIR	CLASS	HI	DEPTH	CWSEL	VCH	EG
0.200	808.51	805.30	0.0	806.00	880.00	0.0	1.00	0.08	4.60	803.80	5.68	804.31
0.200	806.83	805.30	808.50	806.00	766.33	2.31	30.00	0.10	6.75	805.95	4.53	806.27
0.200	805.80	805.30	807.28	806.00	888.66	61.86	30.00	0.11	7.52	806.72	4.26	806.99
0.200	807.05	805.30	809.55	806.00	873.74	329.95	30.00	0.0	8.25	807.45	4.52	807.75
0.200	808.73	808.00	805.28	806.00	880.00	0.0	10.00	0.00	6.38	805.08	3.58	805.28
[illegible]	[illegible]	[illegible]	[illegible]	806.01	552.03	221.42	30.00	0.00	8.46	807.16	3.18	807.30
[illegible]	[illegible]	[illegible]	[illegible]	806.00	898.56	411.81	30.00	0.00	8.96	807.66	3.21	807.80
[illegible]	[illegible]	[illegible]	[illegible]	806.00	872.29	729.90	30.00	0.00	9.57	808.27	3.53	808.44
0.885	805.96	807.50	0.0	806.00	880.00	0.0	1.00	0.00	3.21	805.51	5.37	806.00
0.285	808.30	807.50	808.38	806.00	869.96	270.02	30.00	0.00	6.00	808.30	2.60	808.38
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	6.45	808.75	2.64	808.83
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	8.96	809.26	2.97	809.36
1.080	833.17	832.60	838.60	833.00	285.70	120.39	30.00	0.00	2.75	833.40	3.71	833.62
1.080	833.93	832.60	838.61	833.00	256.33	394.15	30.00	0.00	2.73	833.38	6.00	833.94
1.080	838.19	832.60	841.00	833.00	240.61	530.97	30.00	0.00	2.87	833.52	6.63	834.19
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	3.47	834.05	6.78	834.73
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1.00	0.00	2.76	886.38	7.23	887.19
2.062	888.65	883.80	0.0	906.00	590.00	0.0	1.00	0.00	3.82	887.02	8.14	888.05
2.062	888.34	883.80	0.0	906.00	693.00	0.0	1.00	0.00	3.68	886.88	8.48	888.39
2.062	888.07	883.80	0.0	906.00	920.00	0.0	1.00	0.01	.16	887.76	9.19	889.07

SUMMARY OF ERRORS

[illegible]

CAUTION SECNO= 0.062 PROFILE= 4 TOTAL DEPTH ASSUMED

[illegible]

CAUTION SECNO= 0.186 PROFILE= 1 CRITICAL DEPTH ASSUMED

[illegible]

CAUTION SECNO= 0.186 PROFILE= 2 PROBABLE MINIMUM SPECIFIC ENERGY

CAUTION SECNO= 0.186 PROFILE= 2 20 TRIALS ATTEMPTED TO BALANCE WSEL

CAUTION SECNO= 0.186 PROFILE= 3 CRITICAL DEPTH ASSUMED

[illegible]

CAUTION SECNO= 0.186 PROFILE= 4 20 TRIALS ATTEMPTED TO BALANCE WSEL

CAUTION SECNO= 0.186 PROFILE= 1 CRITICAL DEPTH ASSUMED

CAUTION SECNO= 0.186 PROFILE= 4 PROBABLE MINIMUM SPECIFIC ENERGY

CAUTION SECNO= 0.186 PROFILE= 4 20 TRIALS ATTEMPTED TO BALANCE WSEL

[illegible]

CAUTION SECNO= 0.594 PROFILE= 1 CRITICAL DEPTH ASSUMED

[illegible]

CAUTION SECNO= 0.594 PROFILE= 2 CRITICAL DEPTH ASSUMED

CAUTION SECNO= 0.594 PROFILE= 2 MINIMUM SPECIFIC ENERGY

CAUTION SECNO= 0.594 PROFILE= 3 CRITICAL DEPTH ASSUMED

CAUTION SECNO= 0.594 PROFILE= 3 MINIMUM SPECIFIC ENERGY

McKENNA CREEK FLOODWAY

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***************************************************
 HEC2 RELEASE DATED NOV 76 UPDATED  AUG1977
 ERROR CORR -  01,02
 MODIFICATION -  50,51,52,53
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T1      GAHANNA, OHIO - FLOOD INSURANCE STUDY      JOB #6117   .854 REVISED
T2      ANALYSIS OF TRIB 5 OF BIG WALNUT CREEK FROM RM 0.062 TO RM 2.066
T3      TRIB 5 BIG WALNUT                 100 YEAR FLOOD FREQUENCY   *RUN 16*

J1  ICHECK     INQ       NINV      IDIR      STRT      METRIC    HVINS     Q         WSEL      FQ

       0.        2.        0.        0.   0.0          0.0       0.0       0.   793.160      0.0

J2  NPROF     IPLOT     PREVS     XSECV     XSECH     FN        ALLDC     IBW       CHNIM     ITRACE

     1.000     0.0     -1.000     0.0       0.0       0.0       0.0       0.0       0.0       0.0

I3  VARIABLE CODES FOR SUMMARY PRINTOUT

    38.000    51.000    50.000    61.000     4.000    53.000    21.000    22.000    54.000    40.000

    46.000    13.000    15.000     0.0     200.000     0.0      38.000    42.000    43.000     1.000

    50.000    51.000     4.000     8.000    10.000    40.000    46.000    13.000    15.000     0.0

NC       0.060     0.070     0.035     0.100     0.300     0.0       0.0       0.0       0.0       0.0
QT       2.000   910.000   910.000     0.0       0.0       0.0       0.0       0.0       0.0       0.0
ET       0.0       0.0       5.410     0.0       0.0       0.0       0.0       0.0       0.0       0.0

X1       0.062    13.000   606.000   642.000     0.0       0.0       0.0       0.0       0.0       0.0
GR     811.000   452.000   810.000   486.000   801.000   523.000   800.000   534.000   797.000   544.000
GR     796.000   587.000   794.000   606.000   789.000   624.000   789.000   632.000   791.000   642.000
GR     791.000   666.000   794.000   687.000   809.000   795.000     0.0       0.0       0.0       0.0

X1       0.063     0.0       0.0       0.0       5.000     5.000     5.000     0.0       0.0       0.0
X5       2.000   793.160   793.660     0.0       0.0       0.0       0.0       0.0       0.0       0.0

X1       0.106    10.000   421.000   502.000   225.000   165.000   227.000     0.0       0.0       0.0
GR     815.000   280.000   812.000   319.000   811.000   344.000   811.000   364.000   805.000   384.000
GR     798.000   421.000   793.000   461.000   793.000   471.000   800.000   502.000   809.000   541.000

X1       0.107     0.0       0.0       0.0       5.000     5.000     5.000     0.0       0.0       0.0
NC       0.0       0.050     0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0

X1       0.194    15.000   553.000   600.000   395.000   365.000   460.000     0.0       0.0       0.0
GR     819.700   300.000   819.000   364.000   815.000   386.000   814.000   435.000   813.000   482.000
GR     807.000   528.000   807.000   553.000   799.000   569.000   799.000   572.000   805.000   600.000
GR     806.000   613.000   806.000   623.000   811.000   733.000   811.000   784.000   811.000   812.000
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X1	0.195	0.0	0.0	0.0	5.000	5.000	5.000	0.0	0.0	0.0
NC	0.050	0.030	0.0	0.300	0.500	0.0	0.0	0.0	0.0	0.0
ET	0.0	0.0	5.110	0.0	550.000	615.000	0.0	0.0	0.0	0.0
X1	0.203	0.0	0.0	0.0	43.000	43.000	43.000	0.0	0.200	0.0
X3	10.000	0.0	0.0	0.0	0.0	0.0	0.0	805.700	805.700	0.0
SB	1.050	1.590	2.600	0.0	15.500	0.670	96.300	0.150	799.200	799.200
ET	0.0	0.0	5.110	0.0	550.000	615.000	0.0	0.0	0.0	0.0
X1	0.209	0.0	0.0	0.0	30.000	30.000	30.000	0.0	0.0	0.0
X2	0.0	0.0	1.000	805.300	806.000	0.0	0.0	0.0	0.0	0.0
X3	10.000	0.0	0.0	0.0	0.0	0.0	0.0	806.000	806.000	0.0
BT	11.000	299.400	822.000	0.0	342.000	822.000	0.0	393.400	817.100	0.0
BT	407.000	814.000	0.0	437.800	811.000	0.0	477.000	814.000	0.0	525.000
BT	807.000	0.0	542.000	807.000	0.0	570.201	807.000	0.0	607.200	806.000
BT	0.0	795.000	812.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ET	0.0	0.0	5.410	0.0	0.0	0.0	0.0	0.0	0.0	0.0
X1	0.214	0.0	0.0	0.0	37.000	37.000	37.000	0.0	0.0	0.0
X4	2.000	799.000	569.200	799.000	571.900	0.0	0.0	0.0	0.0	0.0
ET	0.0	0.0	5.110	0.0	550.000	620.000	0.0	0.0	0.0	0.0
X1	0.227	0.0	0.0	0.0	58.000	58.000	58.000	0.0	0.0	0.0
X3	10.000	0.0	0.0	0.0	0.0	0.0	0.0	805.200	805.200	0.0
X4	2.000	798.200	569.500	799.200	571.500	0.0	0.0	0.0	0.0	0.0
SB	0.900	1.247	2.800	0.0	11.600	0.010	72.400	0.190	798.700	798.700
ET	0.0	0.0	5.110	0.0	550.000	620.000	0.0	0.0	0.0	0.0
X1	0.229	0.0	0.0	0.0	12.000	12.000	12.000	0.0	0.0	0.0
X2	0.0	0.0	1.000	[illegible]	806.000	0.0	0.0	0.0	0.0	0.0
X3	10.000	0.0	0.0	0.0	0.0	0.0	0.0	806.000	806.000	0.0
BT	12.000	241.600	824.000	0.0	306.600	824.000	0.0	343.000	819.300	0.0
BT	373.000	814.800	0.0	396.000	814.200	0.0	491.000	810.000	0.0	542.200
BT	807.000	[illegible]	562.000	[illegible]	0.0	566.000	806.450	0.0	570.400	806.000
BT	0.0	[illegible]	816.000	0.0	805.000	816.000	0.0	0.0	0.0	0.0
NC	0.0	0.150	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ET	0.0	0.0	5.410	0.0	0.0	0.0	0.0	0.0	0.0	0.0
X1	1.246	[illegible]	[illegible]	[illegible]	37.000	37.000	37.000	0.0	-3.000	0.0
GR	[illegible]	[illegible]	[illegible]	165.000	810.000	380.000	808.400	634.000	808.400	651.000
GR	810.000	679.000	810.000	677.000	803.000	705.000	809.000	789.000	813.000	869.000
GR	818.000	946.000	818.000	997.000	818.000	1034.000	0.0	0.0	0.0	0.0
NC	0.0	0.0	0.0	0.100	0.300	0.0	0.0	0.0	0.0	0.0
X1	0.272	12.000	1688.000	1736.000	185.000	205.000	130.000	0.0	-2.000	0.0
GR	824.000	1295.000	823.000	1306.000	816.000	1354.000	812.000	1493.000	811.000	1574.000
GR	807.400	1663.000	808.000	1672.000	808.000	1688.000	804.000	1708.000	804.000	1716.000
GR	807.000	1736.000	816.000	1847.000	818.000	1909.000	819.000	1952.000	819.000	2003.000
GR	819.000	2229.000	819.000	2273.000	0.0	0.0	0.0	0.0	0.0	0.0
NC	0.0	0.0	0.0	0.300	0.500	0.0	0.0	0.0	0.0	0.0
ET	0.0	0.0	5.110	0.0	1600.000	1740.000	0.0	0.0	0.0	0.0
X1	0.279	0.0	0.0	0.0	49.000	20.000	37.000	0.0	0.300	0.0
X3	10.000	0.0	0.0	0.0	0.0	0.0	0.0	807.000	807.000	0.0

X1	1.033	0.0	0.0	0.0	84.000	84.000	84.000	0.0	1.400	0.0
X3	10.000	0.0	0.0	0.0	0.0	0.0	0.0	832.800	832.800	0.0
SR	0.900	1.640	2.800	0.0	19.100	0.010	44.100	0.430	830.400	830.400
DT	2.000	770.000	770.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0
FT	0.0	0.0	5.110	0.0	1000.000	1193.000	0.0	0.0	0.0	0.0
X1	1.080	0.0	0.0	0.0	36.000	36.000	36.000	0.0	0.0	0.0
X2	0.0	0.0	1.000	832.600	833.000	0.0	0.0	0.0	0.0	0.0
X3	10.000	0.0	0.0	0.0	0.0	0.0	0.0	833.000	833.000	0.0
RT	19.000	175.000	849.000	0.0	195.000	843.000	0.0	225.000	843.000	0.0
RT	243.000	841.000	0.0	826.000	841.000	0.0	500.000	839.000	0.0	530.000
RT	837.000	0.0	590.000	836.000	0.0	670.000	836.000	0.0	760.000	834.000
RT	0.0	1028.000	833.000	0.0	1164.000	834.000	0.0	1280.000	833.500	0.0
RT	1381.000	834.000	0.0	1640.000	835.000	0.0	1032.000	835.000	0.0	1933.000
RT	835.000	0.0	1939.000	836.000	0.0	0.0	0.0	0.0	0.0	0.0
NC	0.060	1.060	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
FT	0.0	0.0	5.410	0.0	0.0	0.0	0.0	0.0	0.0	0.0
X1	1.017	32.000	1057.000	1103.000	37.000	37.000	37.000	0.0	1.400	0.0
GR	846.000	43.000	845.000	121.000	840.000	187.000	840.000	355.000	837.000	400.000
GR	837.000	326.000	838.000	533.000	836.000	776.000	834.000	819.000	834.000	849.000
GR	836.000	908.000	835.000	937.000	833.000	1057.000	829.000	1071.000	829.000	1090.000
GR	833.000	1103.000	834.000	1296.000	835.000	1555.000	835.000	1826.000	836.000	1890.000
GR	836.000	1925.000	836.000	1348.000	0.0	0.0	0.0	0.0	0.0	0.0
NC	0.070	0.065	0.0	0.100	0.300	0.0	0.0	0.0	0.0	0.0
X1	1.300	8.000	600.000	640.000	980.000	1260.000	1336.000	0.0	0.0	0.0
GR	856.000	393.000	853.000	852.000	846.000	503.000	841.000	600.000	837.000	620.000
GR	837.000	532.000	840.000	640.000	856.000	736.000	0.0	0.0	0.0	0.0
NC	0.110	0.100	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DT	2.000	993.000	993.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0
X1	1.545	11.000	809.000	869.000	940.000	915.000	1294.000	0.0	0.0	0.0
GR	883.000	0.0	883.000	156.000	880.000	278.000	859.000	809.000	849.000	816.000
GR	849.000	111.000	851.000	869.000	850.000	531.000	874.000	729.000	874.000	772.000
GR	852.000	458.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
X1	1.545	0.0	0.0	0.0	5.000	5.000	5.000	0.0	0.0	0.0
NC	0.0	0.100	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
X1	1.300	12.000	898.000	526.000	1060.000	1060.000	1341.000	0.0	0.0	0.0
GR	898.000	0.0	891.000	188.000	887.000	302.000	885.000	849.000	867.000	852.000
GR	867.000	898.000	866.000	510.000	867.000	526.000	869.000	603.000	893.000	787.000
GR	894.000	794.000	894.000	1220.000	0.0	0.0	0.0	0.0	0.0	0.0
FT	0.0	0.0	5.100	0.0	882.000	542.000	0.0	0.0	0.0	0.0
X1	1.801	0.0	0.0	0.0	5.000	5.000	5.000	0.0	0.0	0.0
NC	0.090	0.090	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
FT	0.0	0.0	5.410	0.0	0.0	0.0	0.0	0.0	0.0	0.0
X1	2.032	31.000	977.000	1016.000	1035.000	1135.000	1220.000	0.0	0.0	0.0
GR	909.000	732.000	908.000	784.000	900.000	829.000	896.000	890.000	894.000	915.000
GR	886.001	977.000	882.000	1000.000	884.000	1016.000	888.000	1099.000	900.000	1159.000
GR	911.000	1285.000	916.000	1377.000	917.000	1416.000	919.000	1486.000	923.000	1615.000

GR	927.000	1755.000	926.000	1834.000	928.000	1914.000	929.000	1965.000	931.000	2025.000
GR	932.000	2196.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
X1	2.033	0.0	0.0	0.0	5.000	5.000	5.000	0.0	0.0	0.0
NC	0.0	0.0	0.0	0.400	0.600	0.0	0.0	0.0	0.0	0.0
ET	0.0	0.0	5.110	0.0	977.000	1040.000	0.0	0.0	0.0	0.0
X1	2.047	0.0	0.0	0.0	78.000	78.000	78.000	0.0	1.600	0.0
X3	10.000	0.0	0.0	0.0	0.0	0.0	0.0	898.700	898.700	0.0
SB	0.900	1.650	2.600	0.0	14.900	0.010	143.500	0.0	883.600	883.600
ET	0.0	0.0	5.110	0.0	977.000	1040.000	0.0	0.0	0.0	0.0
X1	2.052	0.0	0.0	0.0	80.000	80.000	80.000	0.0	0.0	0.0
X2	0.0	0.0	1.000	893.300	904.000	0.0	0.0	0.0	0.0	0.0
X3	10.000	0.0	0.0	0.0	0.0	0.0	0.0	904.000	904.000	0.0
BT	8.000	439.000	909.000	0.0	549.000	907.000	0.0	660.000	906.000	0.0
BT	702.000	905.700	0.0	1000.000	904.000	0.0	1270.000	912.500	0.0	1470.000
BT	918.500	0.0	1672.000	828.000	0.0	0.0	0.0	0.0	0.0	0.0
NC	0.100	0.100	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OT	2.000	693.000	603.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ET	0.0	0.0	5.010	0.0	0.0	0.0	0.0	0.0	0.0	0.0
X1	2.056	23.000	1010.000	1030.000	21.000	21.000	21.000	0.0	-1.000	0.0
GR	909.000	859.000	907.000	569.000	905.000	767.000	905.000	837.000	897.000	934.000
GR	894.000	999.000	895.000	1010.000	885.000	1020.000	894.000	1030.000	895.000	1112.000
GR	897.000	1194.000	905.000	1236.000	905.000	1250.000	918.000	1346.000	918.000	1402.000
GR	921.000	1529.000	924.000	1653.000	923.000	1665.000	924.000	1687.000	927.000	1791.000
GR	929.000	1955.000	933.000	2097.000	936.000	2223.000	0.0	0.0	0.0	0.0
X1	2.057	0.0	0.0	0.0	5.000	5.000	5.000	0.0	0.0	0.0
FJ	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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 HEC2 RELEASE DATED NOV 76 UPDATED  AUG1977
 ERROR CORR -   01,02
 MODIFICATION -   50,51,52,53
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T1        GAHANNA, OHIO FLOOD INSURANCE STUDY
T2        ANALYSIS OF TRIB 5 OF BIG WALNUT CREEK FROM RM 0.062 TO RM 2.066
T3        TRIB 5 BIG WALNUT          100 YEAR ENCROACHMENT FLOOD   *METHOD 5.41*
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	ICHECK	INQ	NINV	IDIR	STRT	METRIC	HVINS	Q	WSEL	FQ
J1	0.	3.	0.	0.	0.0	0.0	0.0	0.	793.660	0.0

	NPROF	IPLOT	PREVS	XSECV	XSECH	FN	ALLDC	IBW	CHNIM	ITRACE
J2	15.000	0.0	-1.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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  HEC2 RELEASE DATED NOV 76 UPDATED  AUG1977
  ERROR CORR -  01,02
  MODIFICATION -  50,51,52,53
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NOTE- ASTERISK (*) AT LEFT OF CROSS-SECTION NUMBER INDICATES MESSAGE IN SUMMARY OF ERRORS LIST

TRIB 5 BTS WALNUT

SUMMARY PRINTOUT

	SECNO	DIFWSX	DIFWSP	DIFEG	TOPWID	SSTA	STCHL	STCHR	ENDST	ELTRD	QWEIR	QLOB	QROB
	0.062	0.0	0.0	0.0	72.10	609.02	606.00	642.00	681.12	0.0	0.0	0.0	192.80
	0.062	0.0	0.50	0.0	35.17	607.22	606.00	642.00	642.39	0.0	0.0	0.0	0.96
*	0.063	0.0	0.0	0.0	72.10	609.02	606.00	642.00	681.12	0.0	0.0	0.0	192.80
*	0.063	0.0	0.50	0.0	35.17	607.22	606.00	642.00	642.39	0.0	0.0	0.0	0.96
*	0.106	2.32	0.0	0.0	53.31	433.12	421.00	502.00	486.43	0.0	0.0	0.0	0.0
*	0.106	2.82	0.0	0.0	53.31	433.12	421.00	502.00	486.43	0.0	0.0	0.0	0.0
	0.107	0.44	0.0	0.0	58.71	429.65	421.00	502.00	488.36	0.0	0.0	0.0	0.0
	0.107	0.44	-0.00	0.0	58.68	429.66	421.00	502.00	488.35	0.0	0.0	0.0	0.0
*	0.194	7.03	0.0	0.0	36.03	550.06	553.00	600.00	595.12	0.0	0.0	0.0	0.0
*	0.194	7.04	0.01	0.0	36.06	550.08	553.00	600.00	595.14	0.0	0.0	0.0	0.0
	0.195	0.51	0.0	0.0	39.38	558.09	553.00	600.00	597.46	0.0	0.0	0.0	0.0
	0.195	0.50	-0.00	0.0	39.37	558.09	553.00	600.00	597.46	0.0	0.0	0.0	0.0
	0.203	0.61	0.0	0.0	42.18	557.25	553.00	600.00	599.42	0.0	0.0	0.0	0.0
	0.203	0.61	0.00	0.0	42.19	557.24	553.00	600.00	599.43	0.0	0.0	0.0	0.0
	0.209	1.65	0.0	0.0	86.50	553.96	553.00	600.00	634.46	806.00	61.41	0.0	34.14
	0.209	1.67	0.02	0.0	61.08	553.92	553.00	600.00	615.00	806.00	52.86	0.0	27.51
	0.215	0.07	0.0	0.0	82.12	553.92	553.00	600.00	635.95	0.0	0.0	0.0	38.18
	0.216	0.05	-0.00	0.0	46.17	553.87	553.00	600.00	600.00	0.0	0.0	0.0	0.0
	0.227	0.	0.	0.0	84.25	553.65	553.00	600.00	637.90	0.0	0.0	0.0	43.73
	0.227	0.1	0.05	0.0	66.47	553.53	553.00	600.00	620.00	0.0	0.0	0.0	39.08
	0.229	0.76	0.0	0.0	130.36	520.55	553.00	600.00	654.90	806.00	413.28	5.31	98.40
	0.229	0.80	0.09	0.0	70.00	550.00	553.00	600.00	620.00	806.00	400.45	0.74	71.40
	0.236	0.16	0.0	0.0	258.13	567.05	677.00	789.00	825.18	0.0	0.0	93.61	11.80
	0.236	0.16	0.09	0.0	112.00	677.00	677.00	789.00	789.00	0.0	0.0	0.0	0.0
	0.272	-0.02	0.0	0.0	166.52	1603.90	1688.00	1736.00	1770.42	0.0	0.0	139.45	54.72
	0.272	-0.06	0.05	0.0	63.50	1672.50	1688.00	1736.00	1736.00	0.0	0.0	44.75	0.0

	SECND	DTEWSX	DTEWSP	DTEEG	TOPWID	SSTA	STCHL	STCHR	ENDST	ELTRD	QWEIR	QLOB	QROB
	0.279	0.02	0.0	0.0	156.13	1610.83	1688.00	1736.00	1766.96	0.0	0.0	119.81	47.83
	0.279	0.12	0.15	0.0	100.00	1640.00	1688.00	1736.00	1740.00	0.0	0.0	127.63	13.96
	0.285	0.93	0.0	0.0	190.76	1587.73	1688.00	1736.00	1778.49	806.00	427.72	173.23	67.09
	0.285	1.06	0.27	0.0	100.00	1640.00	1688.00	1736.00	1740.00	806.00	393.21	168.97	14.01
	0.296	0.02	0.0	0.0	178.68	628.15	713.00	742.00	806.83	0.0	0.0	446.25	57.05
	0.296	0.00	0.26	0.0	72.52	669.48	713.00	742.00	742.00	0.0	0.0	428.57	0.0
*	0.440	3.64	0.0	0.0	97.83	854.15	890.00	939.00	951.98	0.0	0.0	9.74	25.29
*	0.440	3.25	-0.13	0.0	49.00	890.00	890.00	939.00	939.00	0.0	0.0	0.0	0.0
	0.441	0.43	0.0	0.0	139.87	816.06	890.00	939.00	955.93	0.0	0.0	47.35	36.29
	0.441	0.46	-0.10	0.0	89.00	890.00	890.00	939.00	939.00	0.0	0.0	0.0	0.0
	0.653	9.19	0.0	0.0	100.82	910.19	912.00	974.00	1011.01	0.0	0.0	0.00	143.01
	0.653	9.82	0.54	0.0	62.00	912.00	912.00	974.00	974.00	0.0	0.0	0.0	0.0
	0.854	4.56	0.0	0.0	150.90	1655.54	1732.00	1768.00	1806.44	0.0	0.0	117.88	50.60
	0.854	4.00	0.38	0.0	40.09	1727.91	1732.00	1768.00	1768.00	0.0	0.0	28.96	0.0
*	1.017	5.31	0.0	0.0	63.84	1139.78	1138.00	1193.00	1203.62	0.0	0.0	0.0	6.17
*	1.017	0.89	-0.04	0.0	53.00	1140.00	1138.00	1193.00	1193.00	0.0	0.0	0.0	0.0
*	1.033	1.28	0.0	0.0	63.44	1139.87	1138.00	1193.00	1203.31	0.0	0.0	0.0	4.75
*	1.033	1.00	-0.02	0.0	53.01	1139.99	1138.00	1193.00	1193.00	0.0	0.0	0.0	0.0
	1.040	0.24	0.0	0.0	68.82	1138.62	1138.00	1193.00	1207.44	833.00	530.80	0.0	9.38
	1.040	0.65	0.39	0.0	92.01	1100.99	1138.00	1193.00	1193.00	833.00	474.38	2.44	0.0
	1.047	0.25	0.0	0.0	41.72	1059.22	1057.00	1103.00	1100.94	0.0	0.0	0.0	0.0
	1.047	0.13	0.27	0.0	43.51	1058.29	1057.00	1103.00	1101.80	0.0	0.0	0.0	0.0
	1.300	7.90	0.0	0.0	62.85	587.13	600.00	640.00	649.98	0.0	0.0	2.60	9.98
	1.300	7.57	-0.06	0.0	40.00	600.00	600.00	640.00	640.00	0.0	0.0	0.0	0.0
*	1.505	9.52	0.0	0.0	173.82	414.07	409.00	469.00	588.29	0.0	0.0	0.0	117.21
	1.505	9.68	0.10	0.0	54.60	414.40	409.00	469.00	469.00	0.0	0.0	0.0	0.0
	1.546	0.29	0.0	0.0	175.80	414.27	409.00	469.00	590.07	0.0	0.0	0.0	151.83
	1.546	0.35	0.15	0.0	54.88	414.16	409.00	469.00	469.00	0.0	0.0	0.0	0.0
*	1.800	17.02	0.0	0.0	139.96	443.47	498.00	526.00	583.42	0.0	0.0	174.72	71.42
	1.800	17.52	0.65	0.0	36.15	489.85	498.00	526.00	526.00	0.0	0.0	43.67	0.0
	1.801	0.35	0.0	0.0	155.19	441.49	498.00	526.00	596.69	0.0	0.0	181.06	89.98
	1.801	0.87	1.18	0.0	60.00	482.00	498.00	526.00	542.00	0.0	0.0	77.42	76.72
*	2.032	16.81	0.0	0.0	71.27	979.00	977.00	1016.00	1050.27	0.0	0.0	0.0	52.54
*	2.032	15.65	0.02	0.0	37.11	978.89	977.00	1016.00	1016.00	0.0	0.0	0.0	0.0
	2.033	0.43	0.0	0.0	83.04	976.31	977.00	1016.00	1059.35	0.0	0.0	0.00	72.17
	2.033	0.49	0.08	0.0	39.00	977.00	977.00	1016.00	1016.00	0.0	0.0	0.0	0.0
*	2.047	1.19	0.0	0.0	37.13	978.87	977.00	1016.00	1016.00	0.0	0.0	0.0	0.0
*	2.047	1.11	-0.00	0.0	37.11	978.89	977.00	1016.00	1016.00	0.0	0.0	0.0	0.0

	SECNO	DIFWSX	DIFWSP	DIFEG	TOPWID	SSTA	STCHL	STCHR	ENDST	ELTRD	QWEIR	QLOB	QROB
	2.062	0.00	0.0	0.0	37.15	978.85	977.00	1016.00	1016.00	904.00	0.0	0.0	0.0
	2.062	0.00	-0.00	0.0	37.13	978.87	977.00	1016.00	1016.00	904.00	0.0	0.0	0.0
*	2.066	4.39	0.0	0.0	16.18	1012.34	1010.00	1030.00	1028.52	0.0	0.0	0.0	0.0
*	2.066	4.39	-0.00	0.0	16.18	1012.34	1010.00	1030.00	1028.51	0.0	0.0	0.0	0.0
	2.067	1.39	0.0	0.0	25.85	988.95	1010.00	1030.00	1034.62	0.0	0.0	0.00	0.02
	2.067	1.00	0.01	0.0	19.07	1010.94	1010.00	1030.00	1030.00	0.0	0.0	0.0	0.0

TRIB S ATC [illegible]

SUMMARY PRINTOUT

	SECNO	ELMIN	Q	CWSEL	DIFWSP	DIFWSX	TOPWID	DEPTH	HV	ELTRD	QWEIR	QLOB	QROB
	0.06[illegible]	789.00	910.00	793.16	0.0	0.0	72.10	4.16	0.71	0.0	0.0	0.0	192.80
	0.063	789.00	910.00	793.66	0.5[illegible]	[illegible]	35.17	4.66	1.00	0.0	0.0	0.0	0.96
*	0.063	789.00	910.00	793.16	0.0	0.0	72.10	4.16	0.71	0.0	0.0	0.0	192.80
*	0.063	789.00	910.00	793.66	0.56	0.0	35.17	4.66	1.00	0.0	0.0	0.0	0.96
*	[illegible]	793.[illegible]	910.[illegible]	796.[illegible]	[illegible]	[illegible]	53.31	3.48	1.06	0.0	0.0	0.0	0.0
*	[illegible]	[illegible]	910.[illegible]	796.[illegible]	[illegible]	[illegible]	53.31	3.48	1.06	0.0	0.0	0.0	0.0
	0.107	793.00	910.00	796.92	0.0	0.44	58.71	3.92	0.71	0.0	0.0	0.0	0.0
	0.107	793.00	910.00	796.92	-0.00	0.44	58.68	3.92	0.71	0.0	0.0	0.0	0.0
*	[illegible]	[illegible]	910.00	803.95	0.0	7.[illegible]	36.03	4.95	1.38	0.0	0.0	0.0	0.0
*	[illegible]	[illegible]	910.00	803.96	[illegible]	7.[illegible]	36.06	4.96	1.37	0.0	0.0	0.0	0.0
	0.195	799.00	910.00	804.46	0.0	0.51	39.38	5.46	0.96	0.0	0.0	0.0	0.0
	0.195	799.00	910.00	804.46	-0.00	0.50	39.37	5.46	0.96	0.0	0.0	0.0	0.0
	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	42.18	5.87	0.73	0.0	0.0	0.0	0.0
	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	42.19	5.87	0.73	0.0	0.0	0.0	0.0
	0.204	799.20	910.00	806.72	0.0	1.65	80.50	7.52	0.27	806.00	61.41	0.0	34.14
	0.209	799.20	910.00	806.74	0.02	1.67	61.08	7.54	0.28	806.00	52.86	0.0	27.51
	[illegible]	[illegible]	910.[illegible]	[illegible]	0.0	[illegible]	82.12	7.79	0.26	0.0	0.0	0.0	38.18
	0.21[illegible]	[illegible]	[illegible]	806.79	[illegible]	[illegible]	46.17	7.79	0.29	0.0	0.0	0.0	0.0
	0.227	798.70	910.00	806.89	0.0	[illegible]	84.25	8.19	0.24	0.0	0.0	0.0	43.73
	0.227	798.70	910.00	806.94	0.05	0.15	66.47	8.24	0.24	0.0	0.0	0.0	39.08
	[illegible]	[illegible]	[illegible]	807.65	0.0	[illegible]	130.36	8.95	0.15	806.00	413.28	5.31	98.40
	0.229	798.70	[illegible]	807.7[illegible]	[illegible]	[illegible]	70.00	9.04	0.16	806.00	400.45	0.74	71.40
	0.236	800.00	910.00	807.81	0.0	0.16	258.13	7.81	0.03	0.0	0.0	93.61	11.80
	0.236	800.00	910.00	807.90	0.09	0.16	112.00	7.90	0.04	0.0	0.0	0.0	0.0
	[illegible]	[illegible]	[illegible]	807.79	0.0	-0.02	166.52	5.79	0.15	0.0	0.0	139.45	54.72
	[illegible]	[illegible]	[illegible]	807.8[illegible]	0.05	[illegible]	63.50	5.84	0.25	0.0	0.0	44.75	0.0
	0.279	802.3[illegible]	910.00	807.81	0.0	0.02	156.13	5.51	0.19	0.0	0.0	119.81	47.83
	0.279	802.3[illegible]	910.00	807.96	0.15	0.12	100.00	5.66	0.20	0.0	0.0	127.63	13.96
	[illegible]	802.30	873.00	808.79	0.0	[illegible]	190.76	6.44	0.08	806.00	427.72	173.23	67.09
	[illegible]	802.30	873.00	809.02	0.27	1.[illegible]	100.00	6.72	0.10	806.00	393.21	168.97	14.01
	0.296	803.00	873.00	808.77	0.0	0.02	178.68	5.77	0.10	0.0	0.0	446.25	57.05
	0.296	803.00	873.00	809.02	0.26	0.00	72.52	6.02	0.16	0.0	0.0	428.57	0.0
*	0.440	809.00	873.00	812.40	0.0	3.63	97.83	3.40	0.86	0.0	0.0	9.74	25.29
*	0.440	809.00	873.00	812.27	-0.13	3.25	49.00	3.27	1.09	0.0	0.0	0.0	0.0
	0.441	809.00	873.00	812.83	0.0	0.43	139.87	3.83	0.51	0.0	0.0	47.35	36.29
	0.441	809.00	873.00	812.73	-0.10	0.46	49.00	3.73	0.73	0.0	0.0	0.0	0.0

	SECNO	ELMIN	Q	CWSEL	OTEWSP	OTEWSX	TOPWID	DEPTH	HV	ELTRD	QWEIR	QLOB	QROB
	0.658	819.00	873.00	822.02	0.0	0.19	100.82	3.02	0.50	0.0	0.0	0.00	143.01
	0.653	819.00	873.00	822.56	0.58	0.82	62.00	3.56	0.49	0.0	0.0	0.0	0.0
	0.854	822.00	785.00	826.58	0.0	4.56	150.90	4.58	0.27	0.0	0.0	117.88	50.60
	0.854	822.00	785.00	826.96	0.38	4.40	40.09	4.96	0.40	0.0	0.0	28.96	0.0
*	1.017	829.25	785.00	831.89	0.0	5.31	63.84	2.64	0.89	0.0	0.0	0.0	6.17
*	1.017	829.25	785.00	831.85	-0.04	4.89	53.00	2.60	0.96	0.0	0.0	0.0	0.0
*	1.033	830.65	785.00	833.27	0.0	1.38	63.40	2.63	0.92	0.0	0.0	0.0	4.75
*	1.033	830.65	785.00	833.25	-0.02	1.00	53.01	2.60	0.96	0.0	0.0	0.0	0.0
	1.040	830.65	770.00	833.52	0.0	0.28	68.82	2.87	0.68	833.00	530.80	0.0	9.38
	1.040	830.65	770.00	833.91	0.39	0.65	92.01	3.26	0.50	833.00	474.38	2.44	0.0
	1.047	830.40	770.00	833.76	0.0	0.25	41.72	3.36	0.88	0.0	0.0	0.0	0.0
	1.047	830.40	770.00	834.03	0.27	0.13	43.51	3.63	0.71	0.0	0.0	0.0	0.0
	1.500	837.00	770.00	841.66	0.0	7.90	62.85	4.66	0.48	0.0	0.0	2.60	9.98
	1.500	837.00	770.00	841.60	-0.06	7.57	40.00	4.60	0.53	0.0	0.0	0.0	0.0
*	1.505	849.00	693.00	851.18	0.0	9.52	173.82	2.18	0.54	0.0	0.0	0.0	117.21
*	1.505	849.00	693.00	851.28	0.10	9.68	54.60	2.28	0.83	0.0	0.0	0.0	0.0
	1.506	849.00	693.00	851.07	0.0	0.29	175.80	2.47	0.33	0.0	0.0	0.0	151.83
	1.506	849.00	693.00	851.63	0.15	0.35	54.84	2.63	0.58	0.0	0.0	0.0	0.0
*	1.800	866.00	693.00	868.89	0.0	17.02	139.96	2.89	0.67	0.0	0.0	174.72	71.42
*	1.800	866.00	693.00	869.14	0.65	17.52	36.15	3.14	1.13	0.0	0.0	43.67	0.0
	1.801	866.00	693.00	868.81	0.0	0.35	155.19	2.84	0.41	0.0	0.0	181.06	89.98
	1.801	866.00	693.00	870.02	1.18	0.87	60.00	4.02	0.37	0.0	0.0	77.42	76.72
*	2.032	882.00	693.00	885.65	0.0	16.81	71.27	3.65	0.91	0.0	0.0	0.0	52.54
*	2.032	882.00	693.00	885.67	0.02	15.65	37.11	3.67	1.12	0.0	0.0	0.0	0.0
	2.033	882.00	693.00	886.08	0.0	0.43	83.04	4.08	0.57	0.0	0.0	0.00	72.17
	2.033	882.00	693.00	886.16	0.08	0.49	39.00	4.16	0.74	0.0	0.0	0.0	0.0
*	2.047	883.60	693.00	887.27	0.0	1.19	37.13	3.67	1.12	0.0	0.0	0.0	0.0
*	2.047	883.60	693.00	887.27	-0.00	1.11	37.11	3.67	1.12	0.0	0.0	0.0	0.0
	2.062	883.60	693.00	887.28	0.0	0.00	37.15	3.68	1.12	904.00	0.0	0.0	0.0
	2.062	883.60	693.00	887.27	-0.00	0.00	37.13	3.68	1.12	904.00	0.0	0.0	0.0
*	2.066	884.00	693.00	891.66	0.0	4.39	16.18	7.66	1.94	0.0	0.0	0.0	0.0
*	2.066	884.00	693.00	891.66	-0.00	4.39	16.18	7.66	1.94	0.0	0.0	0.0	0.0
	2.067	884.00	693.00	893.06	0.0	1.39	25.85	9.06	0.99	0.0	0.0	0.00	0.02
	2.067	884.00	693.00	893.06	0.01	1.00	19.07	9.06	0.99	0.0	0.0	0.0	0.0

SUMMARY OF ERRORS

NOTE SECNO= 0.063 PROFILE= 1 WSEL BASED ON XS CARD
NOTE SECNO= 0.063 PROFILE= 2 WSEL BASED ON XS CARD

FLOODWAY DATA, TRIB 5 BIG WA VOT
PROFILE NO. 2

	STATION	FLOODWAY WIDTH (FT)	FLOODWAY SECTION AREA	FLOODWAY MEAN VELOCITY	WATER SURFACE ELEVATION WITH FLOODWAY	WITHOUT FLOODWAY	DIFFERENCE
	0.062	35.	110.	.0	793.7	793.2	0.5
	0.063	35.	110.	.0	793.7	793.2	0.5
	0.106	53.	110.	8.2	796.5	796.5	0.0
	0.107	59.	135.	6.8	796.9	796.9	0.0
	0.194	36.	97.	9.4	804.0	804.0	0.0
A	0.195	30.	116.	7.9	804.5	804.5	0.0
	0.203	42.	133.	6.9	805.1	805.1	0.0
	0.209	61.	221.	4.1	806.7	806.7	0.0
	0.216	46.	209.	4.8	806.8	806.8	0.0
B	0.227	66.	238.	3.8	807.0	806.9	0.1
	0.229	70.	293.	3.1	807.7	807.6	0.1
C	0.236	112.	535.	1.7	807.9	807.8	0.1
D	0.272	60.	239.	3.8	807.8	807.8	0.0
	0.279	100.	297.	3.1	807.9	807.8	0.1
	0.285	100.	403.	2.2	808.0	808.7	0.3
E	0.296	73.	280.	3.1	809.1	808.8	0.3
	0.440	49.	104.	8.0	812.4	812.4	0.0
F	0.441	49.	127.	6.0	812.8	812.8	0.0
G	0.655	62.	156.	5.6	822.5	822.0	0.5
H	0.858	40.	157.	5.0	827.0	826.6	0.4
I	1.017	53.	100.	7.9	831.9	831.9	0.0
	1.033 F	53.	100.	7.9	833.3	833.3 ok	0.0
	1.040 F	92.	140.	5.5	833.9	833.5 "	0.4
J	1.087	39.	119.	6.8	834.1	833.8 F	0.3
K	1.300	40.	132.	5.8	841.7	841.7	0.0
	1.545	55.	95.	7.3	851.3	851.2	0.1
L	1.546	55.	113.	6.1	851.7	851.5	0.2
	1.800	36.	91.	7.6	869.2	868.5	0.7
	1.801	60.	192.	4.6	870.0	868.8	1.2
	2.032	37.	81.	8.5	885.7	885.7	0.0
M	2.033	39.	100.	6.9	886.2	886.1	0.1
	2.047	37.	81.	8.5	887.3	887.3	0.0
	2.062	37.	82.	8.5	887.3	887.3	0.0
	2.066	16.	62.	11.2	891.7	891.7	0.0
	2.067	19.	87.	8.0	893.1	893.1	0.0

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  HEC2 RELEASE DATED NOV 76 UPDATED  AUG1977
  ERROR CORR -  01,02
  MODIFICATION -  50,51,52,53
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T1      GAHANNA, OHIO FLOOD INSURANCE STUDY
T2      ANALYSIS OF TRIB 5 OF BIG WALNUT CREEK FROM RM 0.062 TO RM 2.066
T3      TRIB 5 BIG WALNUT          100 YEAR ENCROACHMENT FLOOD  *METHOD 5.41*

J1  ICHECK     INQ        NINV       IDIR       STRT       METRIC     HVINS      0          WSEL       FQ

        0.         3.         0.         0.   0.0          0.0        0.0        0.       793.660      0.0

J2  NPROF      IPLOT      PRFVS      XSECV      XSECH      FN         ALLDC      IBW        CHNIM      ITRACE

     15.000      0.0       -1.000      0.0        0.0        0.0        0.0        0.0        0.0        0.0
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HEC2 RELEASE DATED NOV 76 UPDATED AUG1977
ERROR CORR - 01,02
MODIFICATION - 50,51,52,53

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NOTE- ASTERISK (*) AT LEFT OF CROSS-SECTION NUMBER INDICATES MESSAGE IN SUMMARY OF ERRORS LIST

TRIB 5 BTS WALNUT

SUMMARY PRINTOUT

	SECNO	DIFWSX	DIFWSP	DIFEG	TOPWID	SSTA	STCHL	STCHR	ENDST	ELTRD	QWEIR	QLOB	QROB
	0.062	0.0	0.0	0.0	72.10	609.02	606.00	642.00	681.12	0.0	0.0	0.0	192.80
	0.062	0.0	0.50	0.0	35.17	607.22	606.00	642.00	642.39	0.0	0.0	0.0	0.96
*	0.063	0.0	0.0	0.0	72.10	609.02	606.00	642.00	681.12	0.0	0.0	0.0	192.80
*	0.063	0.0	0.50	0.0	35.17	607.22	606.00	642.00	642.39	0.0	0.0	0.0	0.96
*	0.106	3.32	0.0	0.0	53.31	433.12	421.00	502.00	486.43	0.0	0.0	0.0	0.0
*	0.106	2.82	0.0	0.0	53.31	433.12	421.00	502.00	486.43	0.0	0.0	0.0	0.0
	0.107	0.44	0.0	0.0	58.71	429.65	421.00	502.00	488.36	0.0	0.0	0.0	0.0
	0.107	0.44	-0.00	0.0	58.68	429.66	421.00	502.00	488.35	0.0	0.0	0.0	0.0
*	0.194	7.63	0.0	0.0	[illegible]	550.00	553.00	600.00	595.12	0.0	0.0	0.0	0.0
*	0.194	7.64	0.01	0.0	36.06	550.08	553.00	600.00	595.14	0.0	0.0	0.0	0.0
	0.195	0.51	0.0	0.0	39.38	558.09	553.00	600.00	597.46	0.0	0.0	0.0	0.0
	0.195	0.50	-0.00	0.0	39.37	558.09	553.00	600.00	597.46	0.0	0.0	0.0	0.0
	0.203	0.61	0.0	0.0	42.18	557.25	553.00	600.00	599.42	0.0	0.0	0.0	0.0
	0.203	0.61	0.00	0.0	42.19	557.24	553.00	600.00	599.43	0.0	0.0	0.0	0.0
	0.209	1.65	0.0	0.0	80.50	553.96	553.00	600.00	634.46	806.00	61.41	0.0	34.14
	0.209	1.67	0.02	0.0	61.08	553.92	553.00	600.00	615.00	806.00	52.86	0.0	27.51
	0.216	0.07	0.0	0.0	82.12	553.82	553.00	600.00	635.95	0.0	0.0	0.0	38.18
	0.216	0.06	-0.00	0.0	46.17	[illegible]	553.00	600.00	600.00	0.0	0.0	0.0	0.0
	0.227	0.	0.	0.0	84.25	553.65	553.00	600.00	637.90	0.0	0.0	0.0	43.73
	0.227	0.1	0.05	0.0	66.47	553.53	553.00	600.00	620.00	0.0	0.0	0.0	39.08
	0.229	0.76	0.0	0.0	130.36	524.55	553.00	600.00	654.90	806.00	413.28	5.31	98.40
	0.229	0.80	0.09	0.0	70.00	550.00	553.00	600.00	620.00	806.00	400.45	0.74	71.40
	0.236	0.16	0.0	0.0	258.13	567.05	677.00	789.00	825.18	0.0	0.0	93.61	11.80
	0.236	0.16	0.09	0.0	112.00	677.00	677.00	789.00	789.00	0.0	0.0	0.0	0.0
	0.272	-0.02	0.0	0.0	166.52	1603.90	1688.00	1736.00	1770.42	0.0	0.0	139.45	54.72
	0.272	-0.06	0.05	0.0	63.50	1672.50	1688.00	1736.00	1736.00	0.0	0.0	44.75	0.0

	SECND	DTFWSX	DTFWSP	DTFFG	TOPWID	SSTA	STCHL	STCHR	ENDST	FLTRD	QWETR	QLOB	QROB
	0.279	0.02	0.0	0.0	156.13	1610.83	1688.00	1736.00	1766.96	0.0	0.0	119.81	47.83
	0.279	0.12	0.15	0.0	100.00	1640.00	1688.00	1736.00	1740.00	0.0	0.0	127.63	13.96
	0.285	0.93	0.0	0.0	190.76	1587.73	1688.00	1736.00	1778.49	806.00	427.72	173.23	67.09
	0.285	1.06	0.27	0.0	100.00	1640.00	1688.00	1736.00	1740.00	806.00	393.21	168.97	14.01
	0.296	0.02	0.0	0.0	178.68	628.15	713.00	742.00	806.83	0.0	0.0	446.25	57.05
	0.296	0.00	0.26	0.0	72.52	669.48	713.00	742.00	742.00	0.0	0.0	428.57	0.0
*	0.440	3.64	0.0	0.0	97.83	854.15	890.00	939.00	951.98	0.0	0.0	9.74	25.29
*	0.440	3.25	-0.13	0.0	49.00	890.00	890.00	939.00	939.00	0.0	0.0	0.0	0.0
	0.441	0.43	0.0	0.0	139.87	816.06	890.00	939.00	955.93	0.0	0.0	47.35	36.29
	0.441	0.46	-0.10	0.0	49.00	890.00	890.00	939.00	939.00	0.0	0.0	0.0	0.0
	0.653	9.19	0.0	0.0	100.82	910.19	912.00	974.00	1011.01	0.0	0.0	0.00	143.01
	0.653	9.82	0.54	0.0	62.00	912.00	912.00	974.00	974.00	0.0	0.0	0.0	0.0
	0.854	4.56	0.0	0.0	150.90	1655.54	1732.00	1768.00	1806.44	0.0	0.0	117.88	50.60
	0.854	4.00	0.38	0.0	40.09	1727.91	1732.00	1768.00	1768.00	0.0	0.0	28.96	0.0
*	1.017	5.31	0.0	0.0	63.84	1139.78	1138.00	1193.00	1203.62	0.0	0.0	0.0	6.17
*	1.017	4.89	-0.04	0.0	53.00	1140.00	1138.00	1193.00	1193.00	0.0	0.0	0.0	0.0
*	1.033	1.38	0.0	0.0	63.44	1139.87	1138.00	1193.00	1203.31	0.0	0.0	0.0	4.75
*	1.033	1.40	-0.02	0.0	53.01	1139.99	1138.00	1193.00	1193.00	0.0	0.0	0.0	0.0
	1.040	0.24	0.0	0.0	68.82	1138.62	1138.00	1193.00	1207.44	833.00	530.80	0.0	9.38
	1.040	0.65	0.39	0.0	92.01	1100.99	1138.00	1193.00	1193.00	833.00	474.38	2.44	0.0
	1.047	0.25	0.0	0.0	41.72	1059.22	1057.00	1103.00	1100.94	0.0	0.0	0.0	0.0
	1.047	0.13	0.27	0.0	43.51	1058.29	1057.00	1103.00	1101.80	0.0	0.0	0.0	0.0
	1.300	7.90	0.0	0.0	62.85	587.13	600.00	640.00	649.98	0.0	0.0	2.60	9.98
	1.300	7.57	-0.06	0.0	40.00	600.00	600.00	640.00	640.00	0.0	0.0	0.0	0.0
*	1.505	9.52	0.0	0.0	173.82	414.07	409.00	469.00	588.29	0.0	0.0	0.0	117.21
	1.505	9.68	0.10	0.0	58.60	414.40	409.00	469.00	469.00	0.0	0.0	0.0	0.0
	1.546	0.29	0.0	0.0	175.80	414.27	409.00	469.00	590.07	0.0	0.0	0.0	151.83
	1.546	0.35	0.15	0.0	58.80	414.16	409.00	469.00	469.00	0.0	0.0	0.0	0.0
*	1.800	17.02	0.0	0.0	139.36	443.47	498.00	526.00	583.42	0.0	0.0	174.72	71.42
	1.800	17.52	0.55	0.0	36.15	489.85	498.00	526.00	526.00	0.0	0.0	43.67	0.0
	1.801	0.35	0.0	0.0	155.19	441.49	498.00	526.00	596.69	0.0	0.0	181.06	89.98
	1.801	0.87	1.18	0.0	60.00	482.00	498.00	526.00	542.00	0.0	0.0	77.42	76.72
*	2.032	16.81	0.0	0.0	71.27	979.00	977.00	1016.00	1050.27	0.0	0.0	0.0	52.54
*	2.032	15.65	0.02	0.0	37.11	978.89	977.00	1016.00	1016.00	0.0	0.0	0.0	0.0
	2.033	0.43	0.0	0.0	83.04	976.31	977.00	1016.00	1059.35	0.0	0.0	0.00	72.17
	2.033	0.49	0.08	0.0	39.00	977.00	977.00	1016.00	1016.00	0.0	0.0	0.0	0.0
*	2.047	1.19	0.0	0.0	37.13	978.87	977.00	1016.00	1016.00	0.0	0.0	0.0	0.0
*	2.047	1.11	-0.00	0.0	37.11	978.89	977.00	1016.00	1016.00	0.0	0.0	0.0	0.0

	SECNO	DIFWSX	DIFWSP	DIFFG	TOPWID	SSTA	STCHL	STCHR	ENDST	FLTRD	QWEIR	QLOB	QROB
	2.062	0.00	0.0	0.0	37.15	978.85	977.00	1016.00	1016.00	904.00	0.0	0.0	0.0
	2.062	0.00	-0.00	0.0	37.13	978.87	977.00	1016.00	1016.00	904.00	0.0	0.0	0.0
*	2.066	4.39	0.0	0.0	16.18	1012.34	1010.00	1030.00	1028.52	0.0	0.0	0.0	0.0
*	2.066	4.39	-0.00	0.0	16.18	1012.34	1010.00	1030.00	1028.51	0.0	0.0	0.0	0.0
	2.067	1.39	0.0	0.0	25.85	988.95	1010.00	1030.00	1034.62	0.0	0.0	0.00	0.02
	2.067	1.40	0.01	0.0	19.07	1010.94	1010.00	1030.00	1030.00	0.0	0.0	0.0	0.0

TRIB 5 [illegible]

SUMMARY PRINTOUT

	SECNO	ELMIN	[illegible]	CWSEL	DIFWSP	DIFWSX	TOPWID	DEPTH	HV	ELTRD	QWEIR	QLOB	QROB
	0.063	789.00	910.00	793.16	0.0	0.0	72.10	4.16	0.71	0.0	0.0	0.0	192.80
	0.063	789.00	910.00	793.66	0.50	[illegible]	35.17	4.66	1.00	0.0	0.0	0.0	0.96
*	0.063	789.00	910.00	793.16	0.0	0.0	72.10	4.16	0.71	0.0	0.0	0.0	192.80
*	0.063	789.00	910.00	793.66	0.50	0.0	35.17	4.66	1.00	0.0	0.0	0.0	0.96
*	[illegible]	793.[illegible]	910.00	796.[illegible]	0.0	2.[illegible]	53.31	3.48	1.06	0.0	0.0	0.0	0.0
*	[illegible]	[illegible]	910.00	796.[illegible]	[illegible]	2.[illegible]	53.31	3.48	1.06	0.0	0.0	0.0	0.0
	0.107	793.00	910.00	796.92	0.0	0.44	58.71	3.92	0.71	0.0	0.0	0.0	0.0
	0.107	793.00	910.00	796.92	-0.00	0.44	58.68	3.92	0.71	0.0	0.0	0.0	0.0
*	[illegible]	[illegible]	910.00	803.05	0.0	7.03	36.03	4.95	1.38	0.0	0.0	0.0	0.0
*	[illegible]	[illegible]	910.00	803.06	[illegible]	7.0[illegible]	36.06	4.96	1.37	0.0	0.0	0.0	0.0
	0.195	799.00	910.00	804.46	0.0	0.51	39.38	5.46	0.96	0.0	0.0	0.0	0.0
	0.195	799.00	910.00	804.46	-0.00	0.50	39.37	5.46	0.96	0.0	0.0	0.0	0.0
	[illegible]	[illegible]	[illegible]	805.07	[illegible]	[illegible]	42.18	5.87	0.73	0.0	0.0	0.0	0.0
	[illegible]	[illegible]	[illegible]	805.07	[illegible]	[illegible]	42.19	5.87	0.73	0.0	0.0	0.0	0.0
	0.209	799.20	910.00	806.72	0.0	1.6[illegible]	80.50	7.52	0.27	806.00	61.41	0.0	34.14
	0.209	799.20	910.00	806.74	0.02	1.62	61.08	7.54	0.28	806.00	52.86	0.0	27.51
	[illegible]	[illegible]	[illegible]	[illegible]	0.0	[illegible]	82.12	7.79	0.26	0.0	0.0	0.0	38.18
	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	46.17	7.79	0.29	0.0	0.0	0.0	0.0
	0.227	798.70	910.00	806.89	0.0	[illegible]	84.25	8.19	0.24	0.0	0.0	0.0	43.73
	0.227	798.70	910.00	806.94	0.05	[illegible]	66.47	8.24	0.24	0.0	0.0	0.0	39.08
	[illegible]	[illegible]	[illegible]	807.65	0.0	[illegible]	130.36	8.95	0.15	806.00	413.28	5.31	98.40
	0.229	[illegible]	[illegible]	807.74	[illegible]	[illegible]	70.00	9.04	0.16	806.00	400.45	0.74	71.40
	0.236	800.00	910.00	807.81	0.0	0.16	258.13	7.81	0.03	0.0	0.0	93.61	11.80
	0.236	800.00	910.00	807.90	0.09	0.16	112.00	7.90	0.04	0.0	0.0	0.0	0.0
	[illegible]	[illegible]	[illegible]	[illegible]	0.0	-0.02	166.52	5.79	0.15	0.0	0.0	139.45	54.72
	[illegible]	[illegible]	[illegible]	[illegible]	0.05	[illegible]	63.50	5.84	0.25	0.0	0.0	44.75	0.0
	0.279	[illegible]	910.00	807.81	0.0	0.02	156.13	5.51	0.19	0.0	0.0	119.81	47.83
	0.279	[illegible]	910.00	807.96	0.15	0.12	100.00	5.66	0.20	0.0	0.0	127.63	13.96
	[illegible]	[illegible]	873.00	808.74	0.0	[illegible]	190.76	6.44	0.08	806.00	427.72	173.23	67.09
	[illegible]	[illegible]	873.00	809.02	0.27	[illegible]	100.00	6.72	0.10	806.00	393.21	168.97	14.01
	0.296	803.00	873.00	808.77	0.0	0.02	178.68	5.77	0.10	0.0	0.0	446.25	57.05
	0.296	803.00	873.00	809.02	0.26	0.00	72.52	6.02	0.16	0.0	0.0	428.57	0.0
*	0.440	809.00	873.00	812.40	0.0	3.64	97.83	3.40	0.86	0.0	0.0	9.74	25.29
*	0.440	809.00	873.00	812.27	-0.13	3.25	49.00	3.27	1.09	0.0	0.0	0.0	0.0
	0.441	809.00	873.00	812.83	0.0	0.43	139.87	3.83	0.51	0.0	0.0	47.35	36.29
	0.441	809.00	873.00	812.73	-0.10	0.46	49.00	3.73	0.73	0.0	0.0	0.0	0.0

	SECNO	FLMIN	O	CWSEL	OTEWSP	OTEWSX	TOPWID	DEPTH	HV	ELTRD	QWEIR	QLOB	QROB
	0.653	819.00	873.00	822.02	0.0	9.19	100.82	3.02	0.58	0.0	0.0	0.00	143.01
	0.653	819.00	873.00	822.56	0.54	9.82	62.00	3.56	0.49	0.0	0.0	0.0	0.0
	0.854	822.00	785.00	826.58	0.0	4.56	150.90	4.58	0.27	0.0	0.0	117.88	50.60
	0.854	822.00	785.00	826.96	0.38	4.40	40.09	4.96	0.40	0.0	0.0	28.96	0.0
*	1.017	829.25	785.00	831.89	0.0	5.31	63.84	2.64	0.89	0.0	0.0	0.0	6.17
*	1.017	829.25	785.00	831.85	-0.04	4.89	53.00	2.60	0.96	0.0	0.0	0.0	0.0
*	1.033	830.65	785.00	833.27	0.0	1.38	63.48	2.63	0.92	0.0	0.0	0.0	4.75
*	1.033	830.65	785.00	833.25	-0.02	1.00	53.01	2.60	0.96	0.0	0.0	0.0	0.0
	1.040	830.65	770.00	833.52	0.0	0.26	68.82	2.87	0.68	833.00	530.80	0.0	9.38
	1.040	830.65	770.00	833.91	0.39	0.65	92.01	3.26	0.50	833.00	474.38	2.44	0.0
	1.047	830.80	770.00	833.76	0.0	0.25	41.72	3.36	0.88	0.0	0.0	0.0	0.0
	1.047	830.80	770.00	834.03	0.27	0.13	43.51	3.63	0.71	0.0	0.0	0.0	0.0
	1.300	837.00	770.00	841.66	0.0	7.90	62.85	4.66	0.48	0.0	0.0	2.60	9.98
	1.300	837.00	770.00	841.60	-0.06	7.57	40.00	4.60	0.53	0.0	0.0	0.0	0.0
*	1.545	849.00	693.00	851.18	0.0	9.52	173.82	2.18	0.54	0.0	0.0	0.0	117.21
	1.545	849.00	693.00	851.28	0.10	9.68	58.60	2.28	0.83	0.0	0.0	0.0	0.0
	1.586	849.00	693.00	851.47	0.0	0.29	175.80	2.47	0.33	0.0	0.0	0.0	151.83
	1.586	849.00	693.00	851.63	0.15	0.35	58.84	2.63	0.58	0.0	0.0	0.0	0.0
*	1.800	866.00	693.00	868.89	0.0	17.02	139.96	2.89	0.67	0.0	0.0	174.72	71.42
	1.800	866.00	693.00	869.14	0.65	17.52	36.15	3.14	1.13	0.0	0.0	43.67	0.0
	1.801	866.00	693.00	868.84	0.0	0.35	155.19	2.84	0.41	0.0	0.0	181.06	89.98
	1.801	866.00	693.00	870.02	1.18	0.87	60.00	4.02	0.37	0.0	0.0	77.42	76.72
*	2.032	882.00	693.00	885.65	0.0	16.81	71.27	3.65	0.91	0.0	0.0	0.0	52.54
*	2.032	882.00	693.00	885.67	0.02	15.65	37.11	3.67	1.12	0.0	0.0	0.0	0.0
	2.033	882.00	693.00	886.08	0.0	0.43	83.04	4.08	0.57	0.0	0.0	0.00	72.17
	2.033	882.00	693.00	886.16	0.08	0.49	39.00	4.16	0.74	0.0	0.0	0.0	0.0
*	2.047	883.60	693.00	887.27	0.0	1.19	37.13	3.67	1.12	0.0	0.0	0.0	0.0
*	2.047	883.60	693.00	887.27	-0.00	1.11	37.11	3.67	1.12	0.0	0.0	0.0	0.0
	2.062	883.60	693.00	887.28	0.0	0.00	37.15	3.68	1.12	904.00	0.0	0.0	0.0
	2.062	883.60	693.00	887.27	-0.00	0.00	37.13	3.68	1.12	904.00	0.0	0.0	0.0
*	2.066	884.00	693.00	891.66	0.0	4.39	16.18	7.66	1.94	0.0	0.0	0.0	0.0
*	2.066	884.00	693.00	891.66	-0.00	4.39	16.18	7.66	1.94	0.0	0.0	0.0	0.0
	2.067	884.00	693.00	893.06	0.0	1.39	25.85	9.06	0.99	0.0	0.0	0.00	0.02
	2.067	884.00	693.00	893.06	0.01	1.00	19.07	9.06	0.99	0.0	0.0	0.0	0.0

SUMMARY OF ERRORS

NOTE SECNO= 0.063 PROFILE= 1 WSEL BASED ON XS CARD
NOTE SECNO= 0.063 PROFILE= 2 WSEL BASED ON XS CARD

FLOODWAY DATA, TRIB 5 BIG WA WBT
PROFILE NO. 2

	STATION	FLOODWAY WIDTH (FT)	FLOODWAY SECTION AREA	FLOODWAY MEAN VELOCITY	WATER SURFACE ELEVATION WITH FLOODWAY	WITHOUT FLOODWAY	DIFFERENCE
	0.062	35.	114.	.0	793.7	793.2	0.5
	0.063	35.	114.	.0	793.7	793.2	0.5
	0.106	53.	110.	8.2	796.5	796.5	0.0
	0.107	59.	135.	6.8	796.9	796.9	0.0
	0.194	36.	97.	9.4	804.0	804.0	0.0
A	0.195	30.	116.	7.9	804.5	804.5	0.0
	0.203	42.	133.	6.9	805.1	805.1	0.0
	0.209	61.	221.	4.1	806.7	806.7	0.0
B	0.216	46.	209.	4.8	806.8	806.8	0.0
	0.227	66.	238.	3.8	807.0	806.9	0.1
	0.229	70.	293.	3.1	807.7	807.6	0.1
C	0.236	112.	535.	1.7	807.9	807.8	0.1
D	0.272	60.	239.	3.8	807.8	807.8	0.0
	0.279	100.	297.	3.1	807.9	807.8	0.1
	0.285	100.	403.	2.2	809.0	808.7	0.3
E	0.296	73.	280.	3.1	809.1	808.8	0.3
	0.440	49.	104.	8.8	812.4	812.4	0.0
F	0.441	49.	127.	6.9	812.8	812.8	0.0
G	0.655	82.	156.	5.6	822.5	822.0	0.5
H	0.858	40.	157.	5.0	827.0	826.6	0.4
I	1.017	53.	100.	7.9	831.9	831.9	0.0
	1.034 F	53.	100.	7.9	833.3	833.3 ok	0.0
	1.040 F	42.	100.	5.5	833.9	833.5 ok	0.4
J	1.047	40.	110.	6.8	834.1	833.8	0.3
K	1.300	40.	132.	5.8	841.7	841.7	0.0
	1.545	55.	95.	7.3	851.3	851.2	0.1
L	1.546	55.	113.	6.1	851.7	851.5	0.2
	1.800	36.	91.	7.6	869.2	868.5	0.7
	1.801	60.	192.	3.6	870.0	868.8	1.2
	2.032	37.	81.	8.5	885.7	885.7	0.0
M	2.033	39.	100.	6.9	886.2	886.1	0.1
	2.047	37.	81.	8.5	887.3	887.3	0.0
	2.062	37.	82.	8.5	887.3	887.3	0.0
	2.066	16.	62.	11.2	891.7	891.7	0.0
	2.067	19.	87.	8.0	893.1	893.1	0.0