

NO-RISE REPORT

PREPARED FOR:

DAVID EUBANKS

PARCEL NUMBER 01-7S-15-01439-751
COLUMBIA COUNTY, FLORIDA

FEBRUARY 7TH, 2024

REVISION #1

PREPARED BY:

COVINGTON ENGINEERING SERVICES
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Digitally signed by Travis L Covington
DN: CN=Travis L Covington,
dnQualifier=A01410C00000186740C7DE200082C08,
O=Florida, C=US
Date: 2024.02.07 11:18:57-05'00'

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PROJECT DESCRIPTION

David Eubanks would like to permit improvements to his property, parcel 01-7S-15-01439-751, Section 1, Township 7 South, Range 15 East, Columbia County, Florida. The permit will be for the construction of a new mobile home. A Location Map and Site Plan are attached.

The river station (RS) was determined by approximating length along the river centerline from a combination of GIS property lines and aerial imagery. The site falls on RS 12.45, which falls between existing cross-sections 13.03 and 11.3. Per the SRWMD Flood Report, the base flood elevation (BFE) is 34.4 feet.

ANALYSIS

A No-Rise Certification with supporting documentation is attached. A new cross-section was interpolated from existing cross-sections and is shown on the Site Plan. The following steps were executed in performing the no-rise calculations:

1. Run the model with Suwannee River Water Management District (SRWMD) existing cross-sections. Verify that the model matches the original flood study results.

The output from the run using the existing cross-sections matched that of the original flood study. The HEC-RAS model was obtained from SRWMD.

2. Interpolate between existing cross-sections and add a new cross-section at the site location.

A new cross-section, RS 12.45, was interpolated from RS 13.03 and RS 11.3.

3. Verify the run by confirming that the additional cross-section matches the original output.

The interpolated cross-section was calculated using HEC-RAS 6.3.1 from the model obtained from SRWMD. The 100-year flood levels are consistent with the current flood study.

4. Add obstructions along the new cross-section to model the new development.

One obstruction was added to cross-section RS 12.45 to model the new home within the floodway.

5. Verify the run including the obstacles does not obstruct flows or cause more than a 0.01 foot rise in the 100-year flood elevations of the Sante Fe River.

Calculations show no obstruction of flow, and the water surface elevations show no increase greater than 0.01 feet, therefore a no-rise condition is achieved.

Tables 1 & 2 show the profile data for pre-development and post-development conditions, respectively. Tables 3 & 4 show the blocked obstructions for pre-development and post-development conditions, respectively. Tables 5 and 6 list the stations and elevations for the cross-section at RS 12.45 for pre-development and post-development conditions, respectively.

HEC-RAS Plan: FW River: Santa Fe Reach: Main													Reload Data
Reach	River Sta	Profile	Q Total (cfs)	Min Ch El (ft)	W.S. Elev (ft)	Crit W.S. (ft)	E.G. Elev (ft)	E.G. Slope (ft/ft)	Vel Chnl (ft/s)	Flow Area (sq ft)	Top Width (ft)	Froude # Ch	
Main	14.08	100 Year	16359.00	9.84	34.88		34.93	0.000086	2.37	27853.29	3125.71	0.09	
Main	14.08	FW	16359.00	9.84	35.67		35.73	0.000080	2.34	25269.36	1883.00	0.09	
Main	13.03	100 Year	16359.00	-6.11	34.56		34.60	0.000046	2.06	39596.33	3890.61	0.07	
Main	13.03	FW	16359.00	-6.11	35.33		35.39	0.000051	2.22	27937.09	1832.00	0.07	
Main	12.45*	100 Year	16359.00	-1.93	34.44		34.48	0.000044	1.99	34337.38	3597.93	0.07	
Main	12.45*	FW	16359.00	-1.93	35.23		35.26	0.000039	1.90	37193.97	3636.64	0.06	
Main	11.3	100 Year	16359.00	6.34	34.23		34.26	0.000035	1.70	32793.67	2491.64	0.06	
Main	11.3	FW	16359.00	6.34	35.03		35.06	0.000035	1.73	28340.08	1615.00	0.06	
Main	10.06	100 Year	16359.00	1.15	33.89		33.96	0.000068	2.39	21181.91	2550.91	0.08	
Main	10.06	FW	16359.00	1.15	34.70		34.77	0.000064	2.37	17765.12	1217.00	0.08	

TABLE 1. PRE-DEVELOPMENT PROFILE DATA.

HEC-RAS Plan: FW River: Santa Fe Reach: Main													Reload Data
Reach	River Sta	Profile	Q Total (cfs)	Min Ch El (ft)	W.S. Elev (ft)	Crit W.S. (ft)	E.G. Elev (ft)	E.G. Slope (ft/ft)	Vel Chnl (ft/s)	Flow Area (sq ft)	Top Width (ft)	Froude # Ch	
Main	14.08	100 Year	16359.00	9.84	34.88		34.93	0.000086	2.37	27853.38	3125.71	0.09	
Main	14.08	FW	16359.00	9.84	35.67		35.73	0.000080	2.34	25269.49	1883.00	0.09	
Main	13.03	100 Year	16359.00	-6.11	34.56		34.60	0.000046	2.06	39596.47	3890.61	0.07	
Main	13.03	FW	16359.00	-6.11	35.33		35.39	0.000051	2.22	27937.22	1832.00	0.07	
Main	12.45*	100 Year	16359.00	-1.93	34.44		34.48	0.000044	1.99	34305.27	3570.46	0.07	
Main	12.45*	FW	16359.00	-1.93	35.23		35.26	0.000039	1.90	37140.24	3609.18	0.06	
Main	11.3	100 Year	16359.00	6.34	34.23		34.26	0.000035	1.70	32793.67	2491.64	0.06	
Main	11.3	FW	16359.00	6.34	35.03		35.06	0.000035	1.73	28340.08	1615.00	0.06	
Main	10.06	100 Year	16359.00	1.15	33.89		33.96	0.000068	2.39	21181.91	2550.91	0.08	
Main	10.06	FW	16359.00	1.15	34.70		34.77	0.000064	2.37	17765.12	1217.00	0.08	

TABLE 2. POST-DEVELOPMENT PROFILE DATA.

Cross Section Blocked Obstruction Table

River:

Santa Fe

▼

☒ Show All River Stations



Reach:

Main

▼

Selected Area Edit Options

Add Constant ...

Multiply Factor ...

Set Values ...

Replace Values ...

Cross Section with Blocked Obstructions

	RS	Left	Right	Elev
127	14.08			
128	13.03			
129	12.45*			
130	11.3			
131	10.06			

TABLE 3. PRE-DEVELOPMENT BLOCKED OBSTRUCTIONS.

Cross Section Blocked Obstruction Table

River:

Santa Fe

Show All River Stations

Reach:

Main

Selected Area Edit Options

Add Constant ...

Multiply Factor ...

Set Values ...

Replace Values ...

Cross Section with Blocked Obstructions

	RS	Left	Right	Elev
127	14.08			
128	13.03			
129	12.45*	13740.09	13767.56	40
130	11.3			
131	10.06			

TABLE 4. POST-DEVELOPMENT BLOCKED OBSTRUCTIONS.

Cross Section Coordinates			
	Station	Elevation	▲
1	10000	39.34	
2	10106.61	37.28	
3	10147.13	37.04	
4	10226.78	36.67	
5	10300.87	36.29	
6	10330.68	35.25	
7	10342.46	34.84	
8	10432.78	33.09	
9	10507.77	31.98	
10	10549.21	32.12	
11	10767.38	32.29	
12	10775.21	32.28	
13	10957.63	32.65	
14	11114.03	31.44	
15	11227.8	30.95	
16	11418.06	29.36	
17	11422.12	29.35	
18	11577.53	26.24	
19	11749.11	24.88	
20	11771.78	24.91	
21	12086.5	28.81	
22	12181.97	28.9	
23	12290.4	26.76	
24	12354.13	23.73	
25	12409.66	21.21	
26	12458.13	20.29	
27	12591.26	17.55	
28	12638.25	12.94	
29	12649.25	11.05	
30	12689.29	7.69	
31	12704.3	4.1	
32	12731.82	-1.93	
33	12779.53	7.48	
34	12787.07	8.12	
35	12836.79	12.94	
36	12875.06	15.87	
37	12928.04	17.29	
38	12938.03	17.33	
39	13087.41	17.09	
40	13106.88	16.87	
41	13147.91	16.78	
42	13255.62	17.71	
43	13428.08	17.12	
44	13473.84	17.72	
45	13498.34	18.1	
46	13581.38	19.69	
47	13646.68	19.99	
48	13690.09	33	
49	13740.09	33.127	
50	13767.56	33.405	

Cross Section Coordinates			
	Station	Elevation	▲
51	13890.09	30.3	
52	13913.52	27.93	
53	13930.09	27.618	
54	13952.87	33.47	
55	14008.42	39.91	
56			
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TABLE 5. PRE-DEVELOPMENT RS 12.45 CROSS-SECTION DATA.

Cross Section Coordinates			
	Station	Elevation	▲
1	10000	39.34	
2	10106.61	37.28	
3	10147.13	37.04	
4	10226.78	36.67	
5	10300.87	36.29	
6	10330.68	35.25	
7	10342.46	34.84	
8	10432.78	33.09	
9	10507.77	31.98	
10	10549.21	32.12	
11	10767.38	32.29	
12	10775.21	32.28	
13	10957.63	32.65	
14	11114.03	31.44	
15	11227.8	30.95	
16	11418.06	29.36	
17	11422.12	29.35	
18	11577.53	26.24	
19	11749.11	24.88	
20	11771.78	24.91	
21	12086.5	28.81	
22	12181.97	28.9	
23	12290.4	26.76	
24	12354.13	23.73	
25	12409.66	21.21	
26	12458.13	20.29	
27	12591.26	17.55	
28	12638.25	12.94	
29	12649.25	11.05	
30	12689.29	7.69	
31	12704.3	4.1	
32	12731.82	-1.93	
33	12779.53	7.48	
34	12787.07	8.12	
35	12836.79	12.94	
36	12875.06	15.87	
37	12928.04	17.29	
38	12938.03	17.33	
39	13087.41	17.09	
40	13106.88	16.87	
41	13147.91	16.78	
42	13255.62	17.71	
43	13428.08	17.12	
44	13473.84	17.72	
45	13498.34	18.1	
46	13581.38	19.69	
47	13646.68	19.99	
48	13690.09	33	
49	13740.09	33.127	
50	13767.56	33.405	▼

Cross Section Coordinates			
	Station	Elevation	▲
51	13890.09	30.3	
52	13913.52	27.93	
53	13930.09	27.618	
54	13952.87	33.47	
55	14008.42	39.91	
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TABLE 6. POST-DEVELOPMENT RS 12.45 CROSS-SECTION DATA.

CONCLUSION

Calculations show no obstruction of flow. The water surface elevations for the developed cross section at RS 12.45, the nearest upstream cross sections, and the downstream cross sections do not increase by more than 0.01 ft; therefore, a no-rise is achieved per SRWMD & FEMA requirements.

EXHIBIT A

NO-RISE CERTIFICATION

COVINGTON ENGINEERING SERVICES
272 NW COUNTRY LAKE DR
LAKE CITY, FL 32055
813.770.9470
TRAVIS@COVINGTONENG.COM

JANUARY 25TH, 2024

NO-RISE CERTIFICATION

OWNER:	DAVID EUBANKS
PARCEL NUMBER:	01-7S-15-01439-751
PROPERTY ADDRESS:	406 SW MONUMENT DR, FT WHITE, FL 32038
PROPERTY DESCRIPTION:	BLOCK 10, LOT 1, WILSON SPRINGS COMMUNITY PHASE 4
STRUCTURE IN FLOODWAY:	NEW RESIDENTIAL HOME (APPROX. 1500 SF)
RIVER MILE:	RS 12.45
ELEVATION OF 100-YEAR FLOOD:	34.4 FEET (PER SRWMD FLOOD REPORT)
COMMUNITY PANEL(S):	12023C0469C (EFFECTIVE DATE 2/4/2009)

I HEREBY CERTIFY THAT THE CONSTRUCTION OF THE PROPOSED STRUCTURES WILL NOT OBSTRUCT FLOW OR INCREASE THE 100-YEAR FLOOD ELEVATION OF THE SANTE FE RIVER.

TRAVIS COVINGTON, P.E



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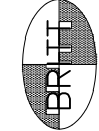
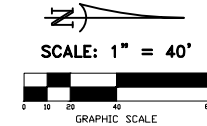
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EXHIBIT B

SURVEY

SYMBOL LEGEND:

H	400' GEOMETRIC HORIZONTAL POINT
D	400' GEOMETRIC HORIZONTAL SET
+	400' POINT
+	100' FOR AS AND SET SET
+	50' SET IN PLACEMENT
+	RELATED PROPERTY OWNER
+	AS & SET
+	ROAD POLE
+	IRON POLE
+	WATER METER
+	UTILITY SET
+	WELL
+	UNIDENTIFIED HAZARDOUS
+	CONTAMINATE
+	SECTION LINE
+	GLACIATED LENS
+	MINOR FENCE
+	CHAIN LINK FENCE
+	WOODEN FENCE
+	AS FOR A PLANT OF TREES
+	AS FOR A KIND OF TREES
+	AS FOR CALLUNA
+	AS FOR FOLIAGE PLANTINGS
P.R.M.	PERMANENT RESIDENTIAL PROXIMITY
P.C.P.	PERMANENT CENTRAL POINT



LAND SURVEYORS AND MAPPERS, L.B. # 8016

I HEREBY CERTIFY THAT THIS SURVEY WAS MADE UNDER MY RESPONSIBLE CHARGE AND MEETS THE MINIMUM TECHNICAL STANDARDS AS SET FORTH BY THE FLORIDA BOARD OF PROFESSIONAL SURVEYORS AND MAPPERS IN CHAPTER 5-1-17, FLORIDA ADMINISTRATIVE CODE, PURSUANT TO SECTION 472.007, FLORIDA STATUTES.

01/02/2024
FIELD SURVEY DATE

01/02/2024
DRAWING DATE

SCOTT BRITT, P.E.
CERTIFICATION # 5757

NOTE: UNLESS IT BEARS THE ORIGINAL SIGNATURE AND THE ORIGINAL RAISED SEAL OF A FLORIDA LICENSED SURVEYOR AND MAPPER THIS DRAWING, SKETCH, PLAT OR MAP IS FOR INFORMATIONAL PURPOSES ONLY AND IS NOT VALID.

CERTIFIED TO:

DAVID L. & MARY ANN EUBANKS

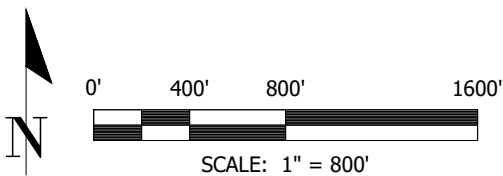
FIELD BOOK: SEE PAGE(S): FILE
JOB NUMBER: L-29993

1 OF 1

EXHIBIT C

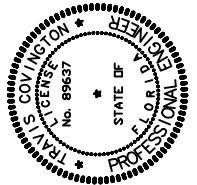
LOCATION MAP

LOCATION MAP
PARCEL ID #: 01-7S-15-01439-751
COLUMBIA COUNTY, FL



COVINGTON ENGINEERING SERVICES

272 NW COUNTRY LAKE DR
LAKE CITY, FL 32055
813-770-9470
travis@covingtoneng.com



PREPARED FOR:

DAVID EUBANKS
39109 EMERALDA ISLAND RD
LEESBURG, FL 34788

EUBANKS RESIDENCE

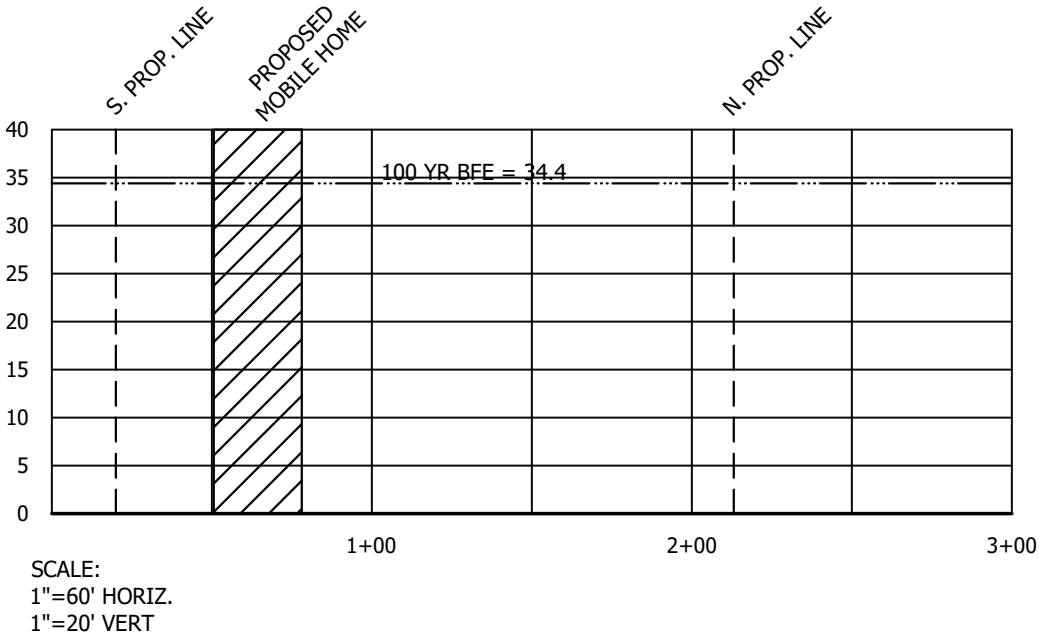
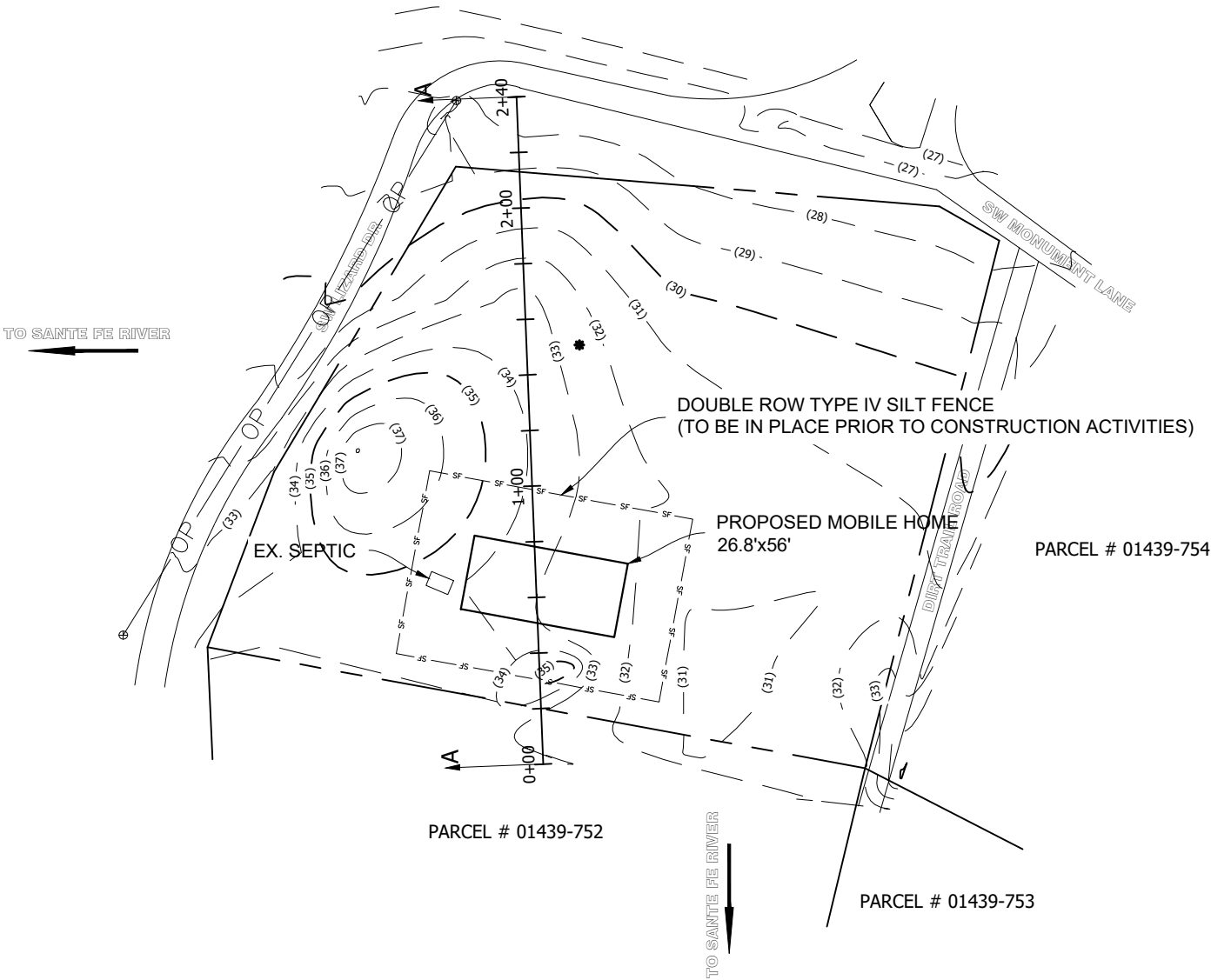
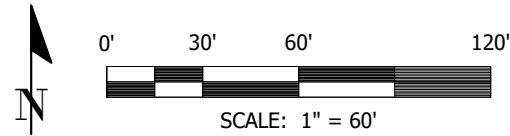
SITE PLAN & CROSS SECTION
406 SW MONUMENT DR, FORT WHITE 32038

PROJECT NO.	FL00033
DATE	01/25/24
SHEET NO.	1 OF 1

EXHIBIT D

SITE PLAN & CROSS SECTION

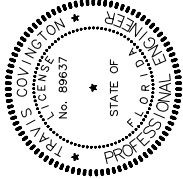
SITE PLAN
PARCEL ID #: 01-7S-15-01439-751
SECTION 1, TOWNSHIP 7 SOUTH, RANGE 15 EAST
COLUMBIA COUNTY, FL



SECTION A-A

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COVINGTON ENGINEERING SERVICES

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813-770-9470

PREPARED FOR:

DAVID EUBANKS
39109 EMERALDA ISLAND RD
LEESBURG, FL 34788

EUBANKS RESIDENCE

SITE PLAN & CROSS SECTION

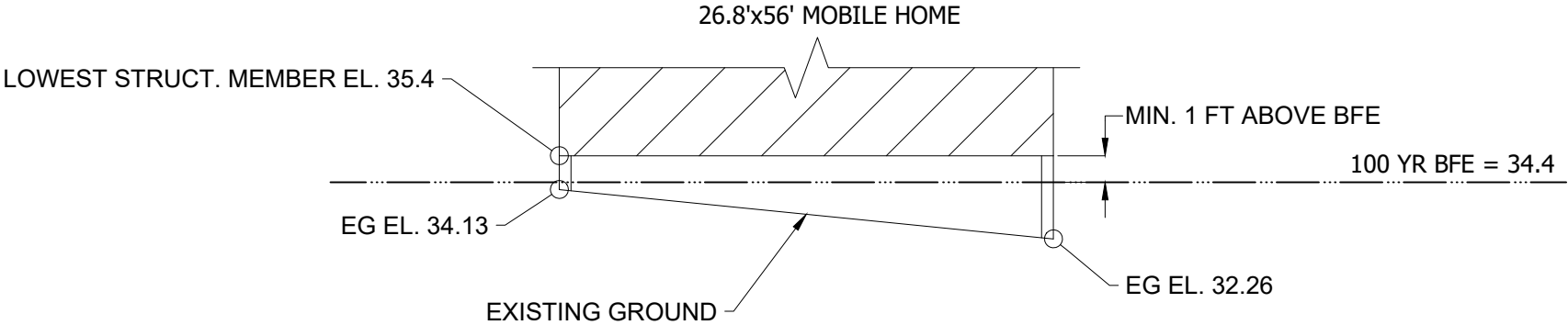
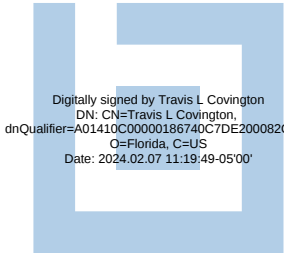
406 SW MONUMENT DR, FORT WHITE 32038

PROJECT NO.	FL00033
DATE	01/25/24
SHEET NO.	1 OF 1

PROFILE VIEW
PARCEL ID #: 01-7S-15-01439-751
SECTION 1, TOWNSHIP 7 SOUTH, RANGE 15 EAST
COLUMBIA COUNTY, FL

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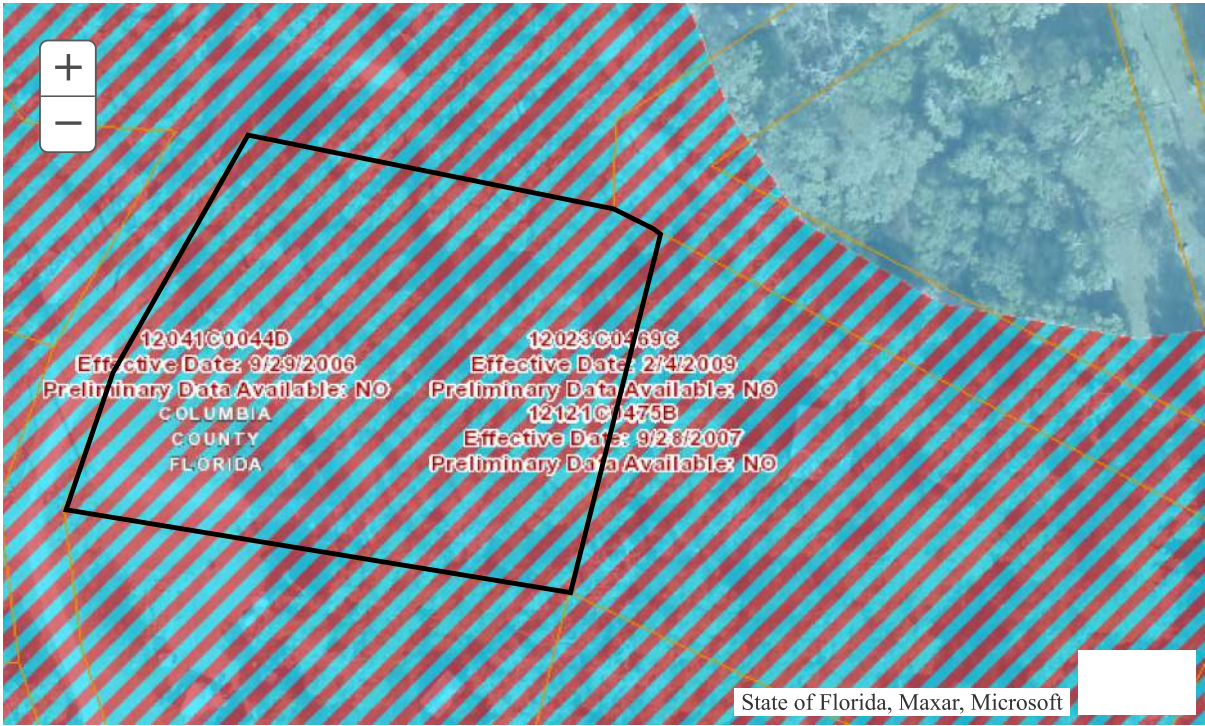
SCALE:
1"=20' HORIZ.
1"=6.67' VERT

PROJECT NO. FL00033	COVINGTON ENGINEERING SERVICES		
	272 NW COUNTRY LAKE DR LAKE CITY, FL 32055		
	813-770-9470		
	travis@covingtoneng.com		
DATE 01/25/24			
	PREPARED FOR:		
	DAVID EUBANKS		
	39109 EMERALDA ISLAND RD LEESBURG, FL 34788		
SHEET NO.	EUBANKS RESIDENCE		
	SITE PLAN & CROSS SECTION		
	406 SW MONUMENT DR, FORT WHITE 32038		
	1 OF 1		

EXHIBIT E

SRWMD FLOOD REPORT

EFFECTIVE FLOOD INFORMATION REPORT



Location Information

County: **COLUMBIA**
Parcel: **017S1501439751**
Flood Zone: **AE FW**
Flood Risk: **HIGH**

1% Annual Chance Base Flood Elev* **34.4 (feet)**
10% Annual Chance Flood Elev* **28.4 (feet)**
50% Annual Chance Flood Elev* **22.8 (feet)**

* Flood Elevations shown on this report are in NAVD 88 and are derived from FEMA flood mapping products, rounded to the nearest tenth of a foot. For more information, please see the note below

Legend with Flood Zone Designations

- | | | | |
|--|----------------------------|-------------------|----------|
| 1% Flood -Floodway (High Risk) | Area Not Included | CrossSections | Wetlands |
| 1% Flood - Zone AE (High Risk) | SFHA Decrease | County Boundaries | |
| 1% Flood - Zone A (HighRisk) | SFHA Increase | FIRM Panel Index | |
| 1% Flood - Zone VE (HighRisk) | Depressions | Parcels | |
| 0.2% Flood-Shaded Zone X (Moderate Risk) | BaseFlood Elevations (BFE) | River Marks | |

Supplemental Information

Watershed	Santa Fe	Map Effective Date	2/4/2009	Special Flood Hazard Area	Yes
FIRM Panel(s)	12023C0469C				

Anywhere it can rain, it can flood
Know your risk.

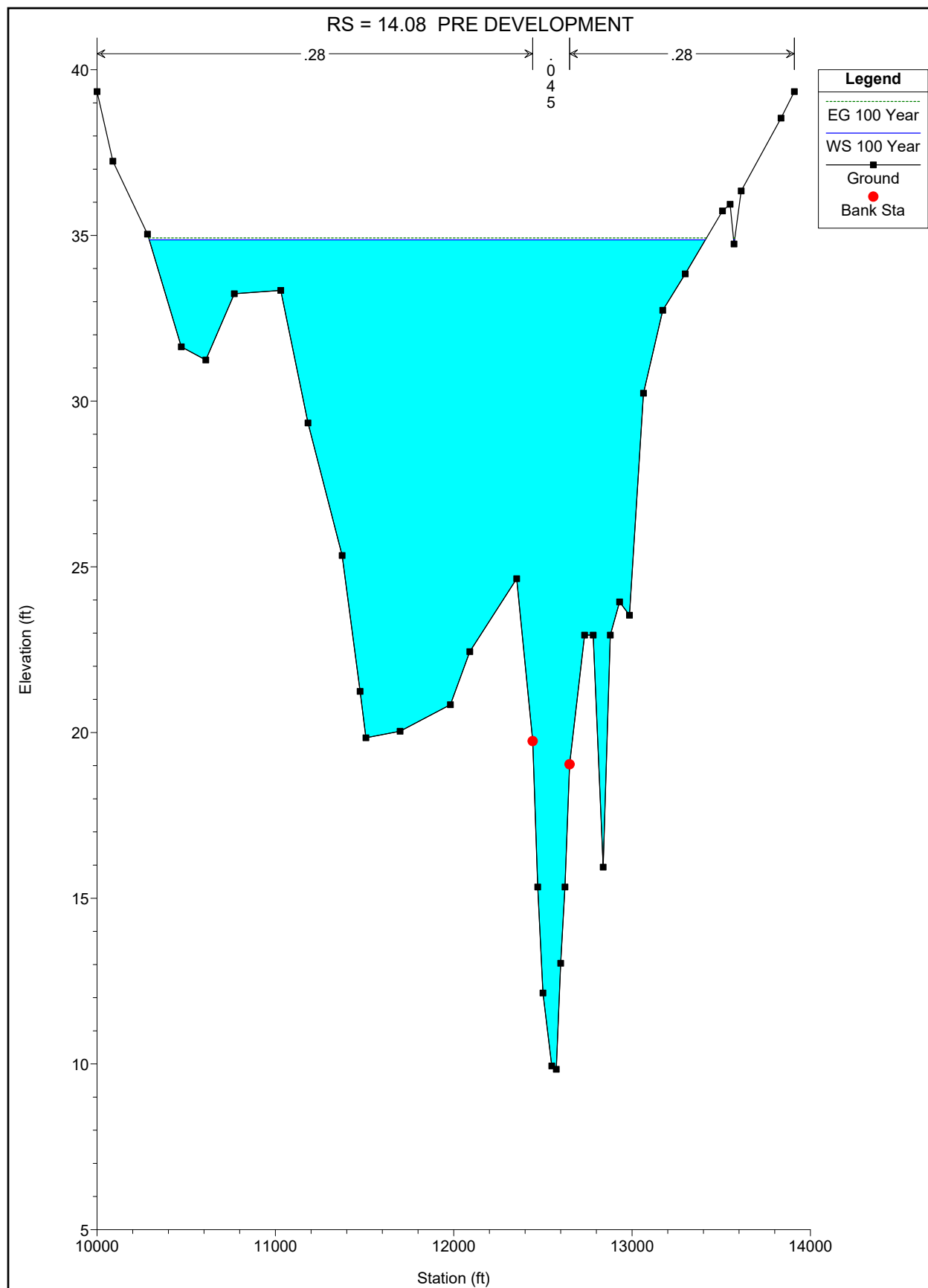


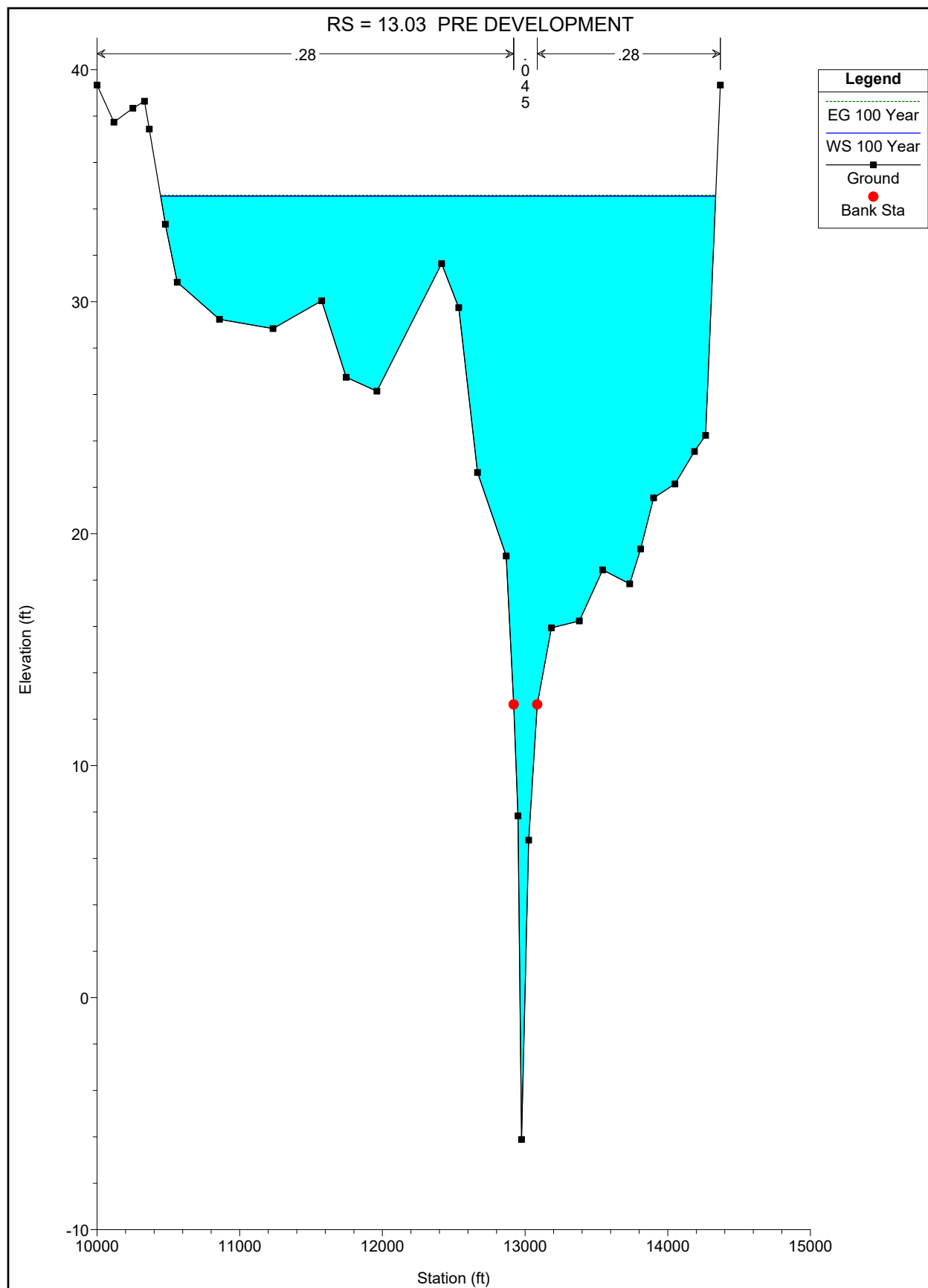
www.srwmfloodreport.com

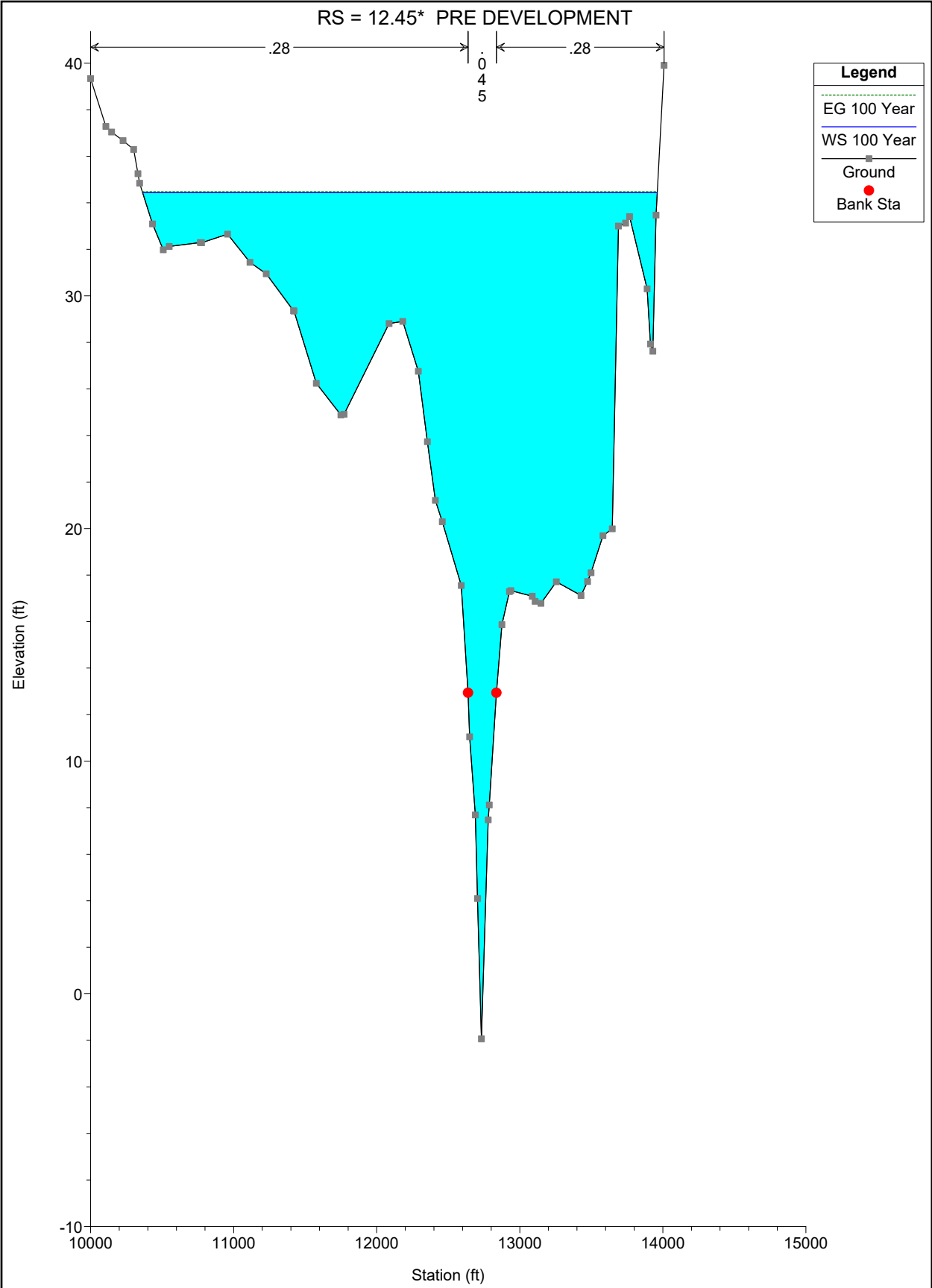
The information herein represents the best available data as of the effective map date shown. The Federal Emergency Management Agency (FEMA) Flood Map Service Center (<https://msc.fema.gov>) maintains the database of Flood Insurance Studies and Digital Flood Insurance Rate Maps, as well as additional information such as how the Base Flood Elevations (BFEs) and/or floodways have been determined and previously issued Letters of Map Change. Requests to revise flood information may be provided to the District during the community review period on preliminary maps, or through the appropriate process with FEMA [Change Your Flood Zone Designation | FEMA.gov](https://www.floodsmart.com). Information about flood insurance may be obtained at <https://www.floodsmart.com>

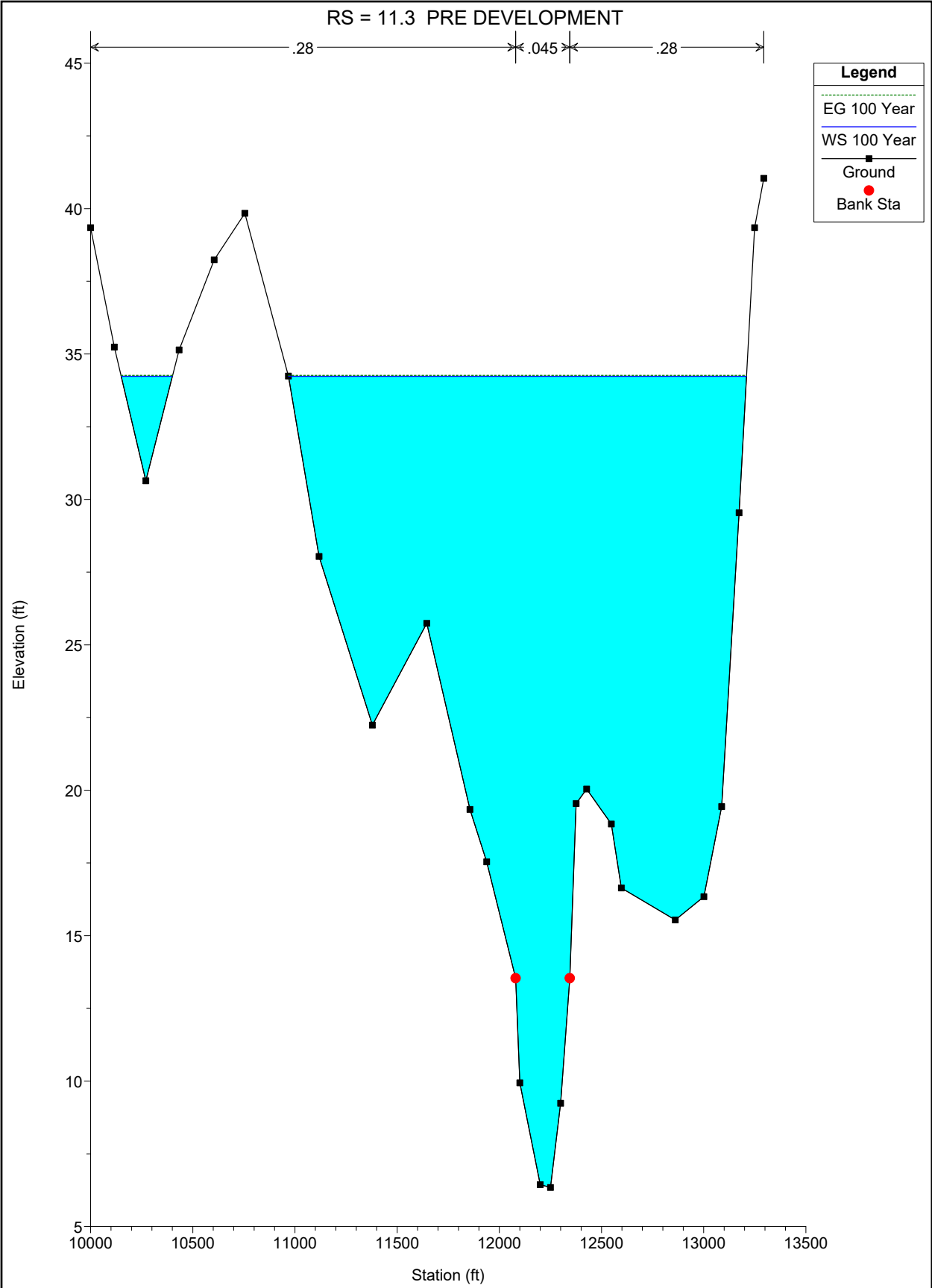
EXHIBIT F

PRE-DEVELOPMENT CROSS SECTIONS









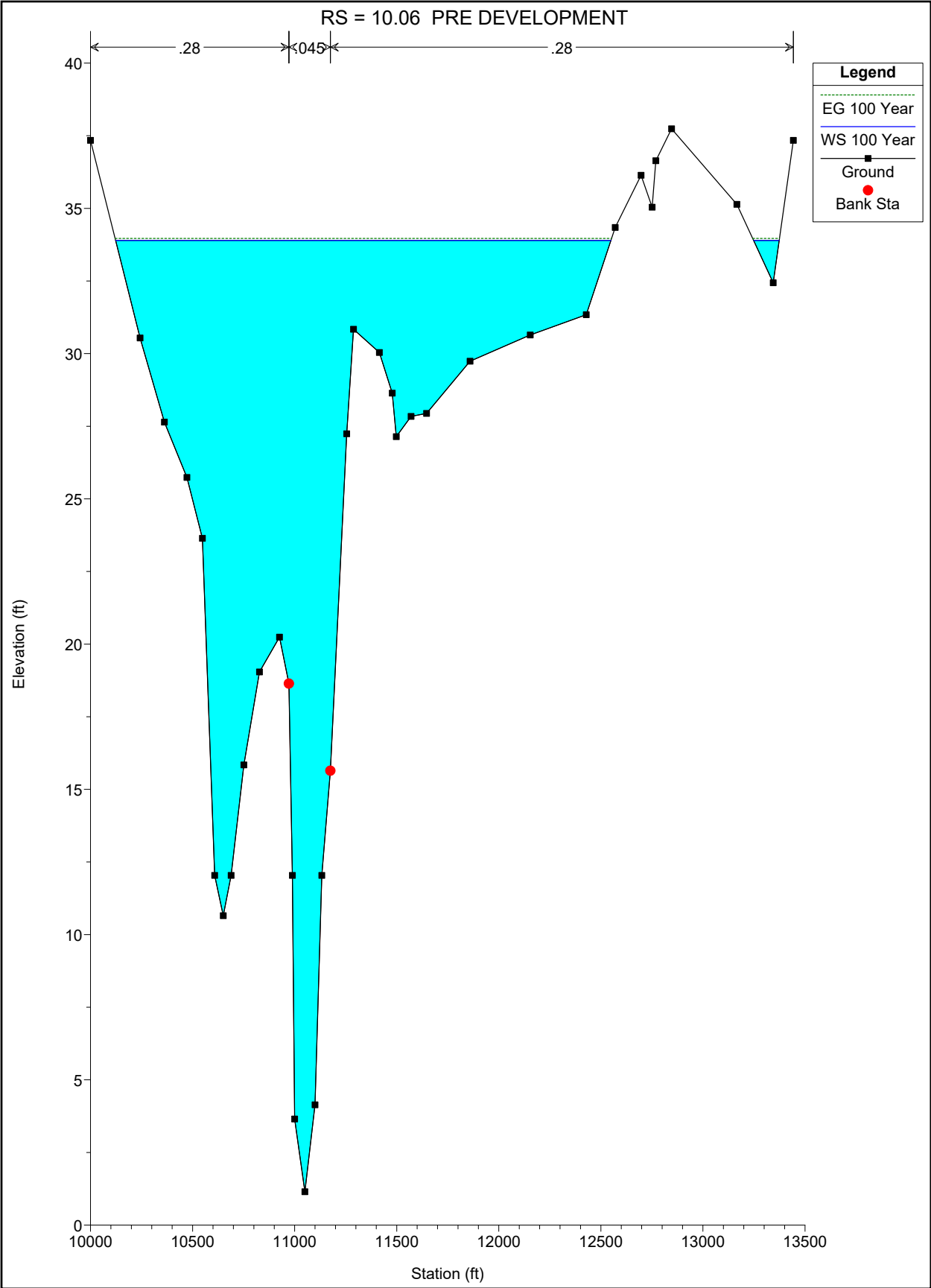
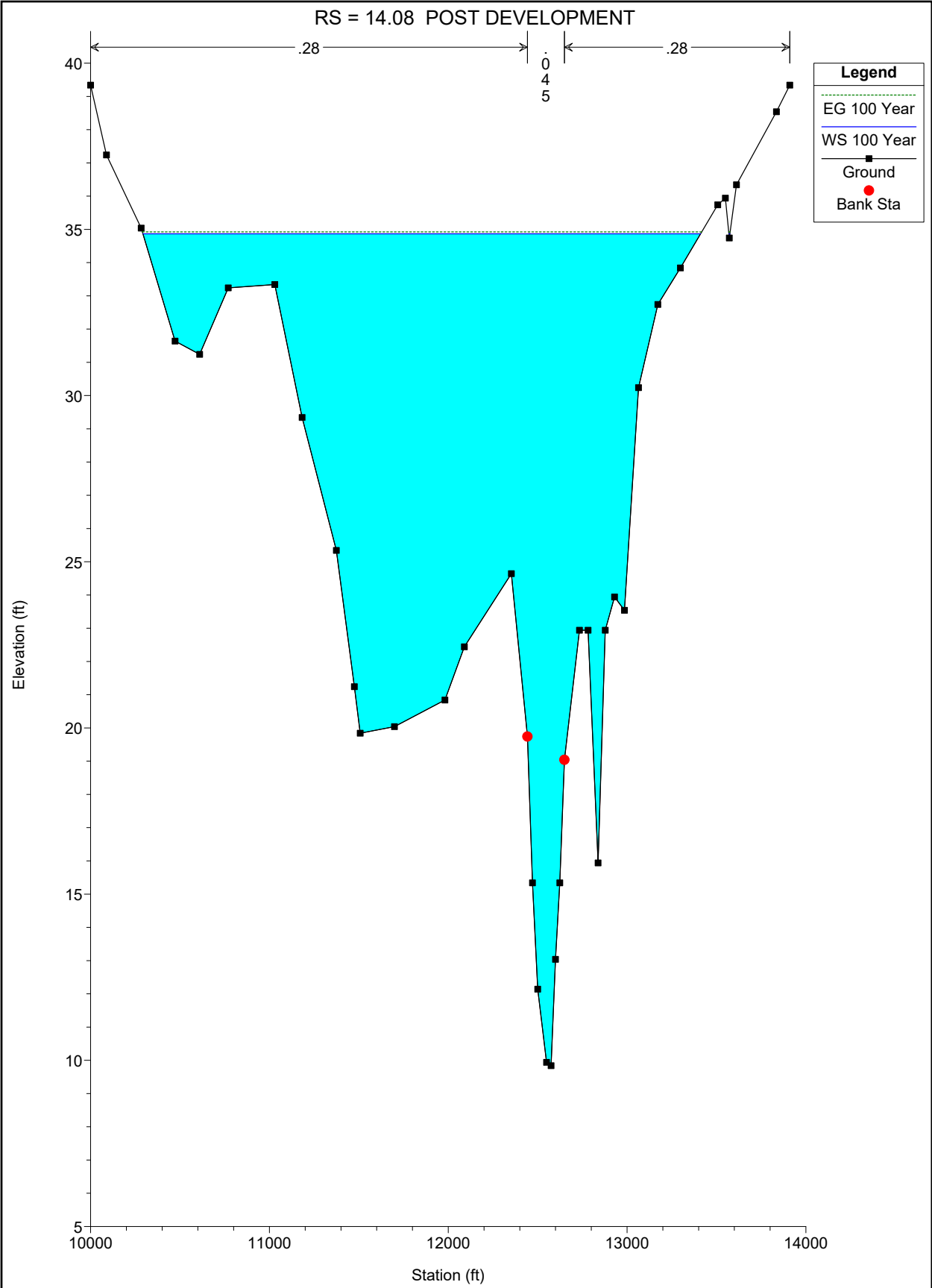
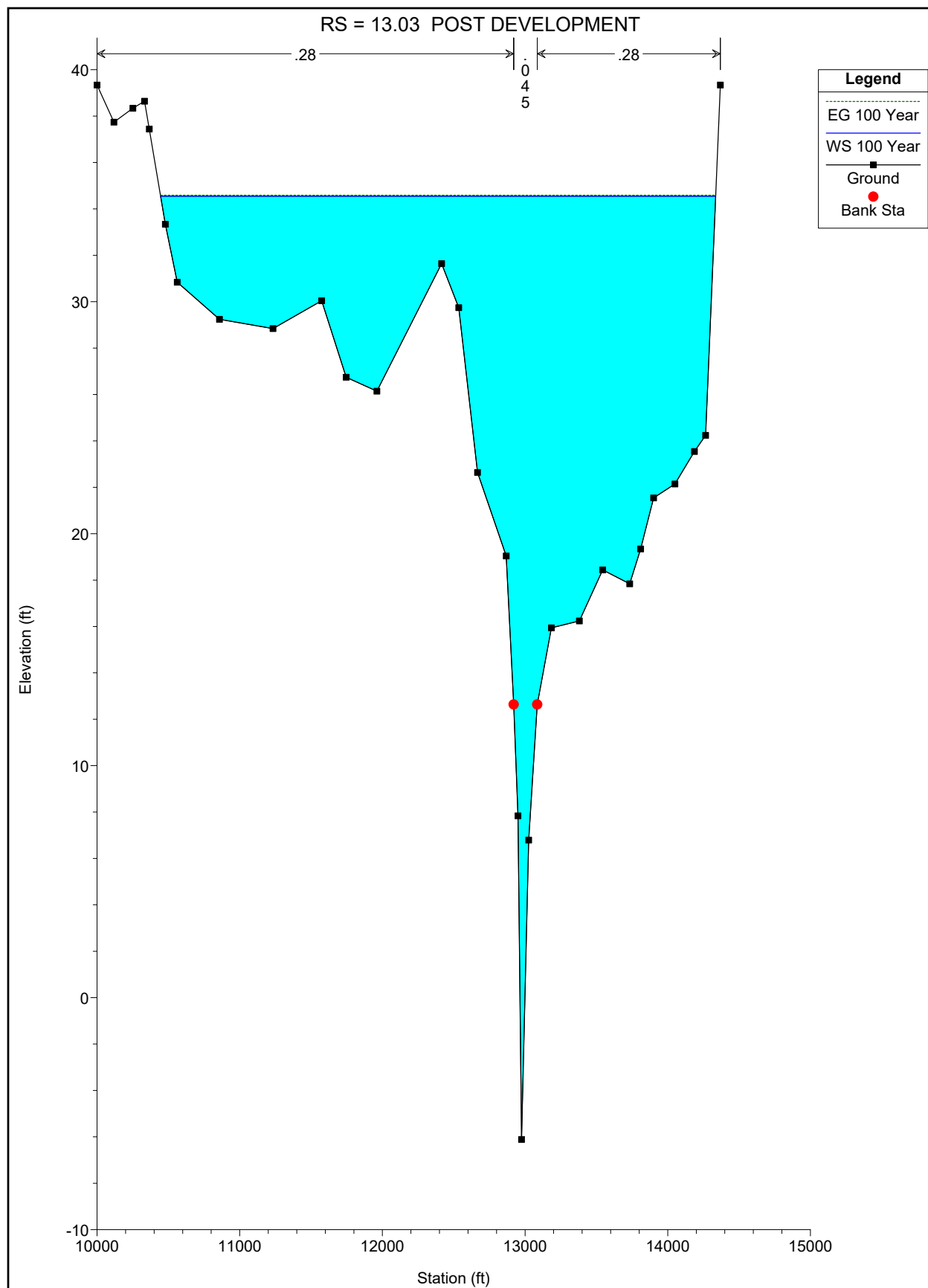
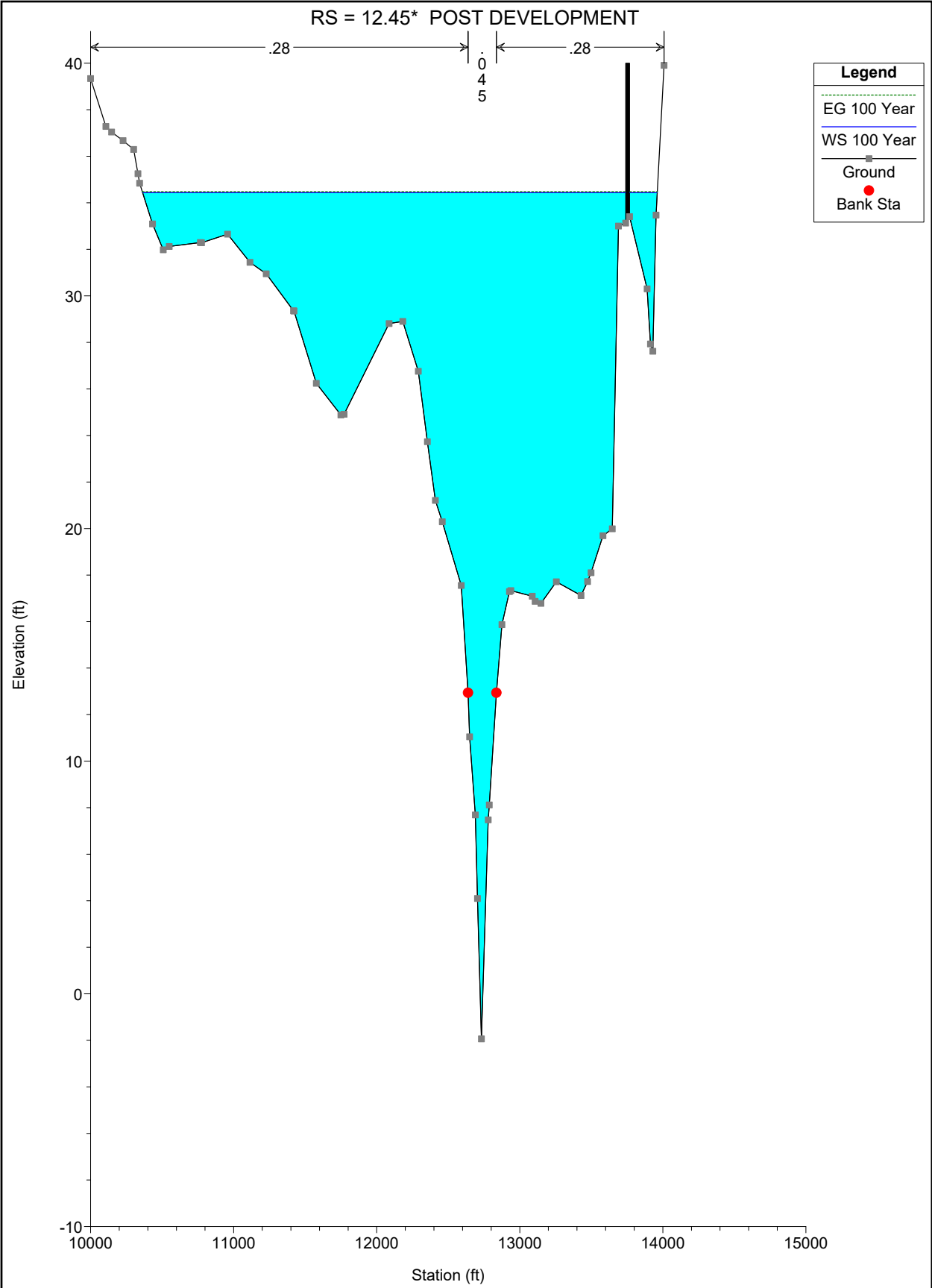


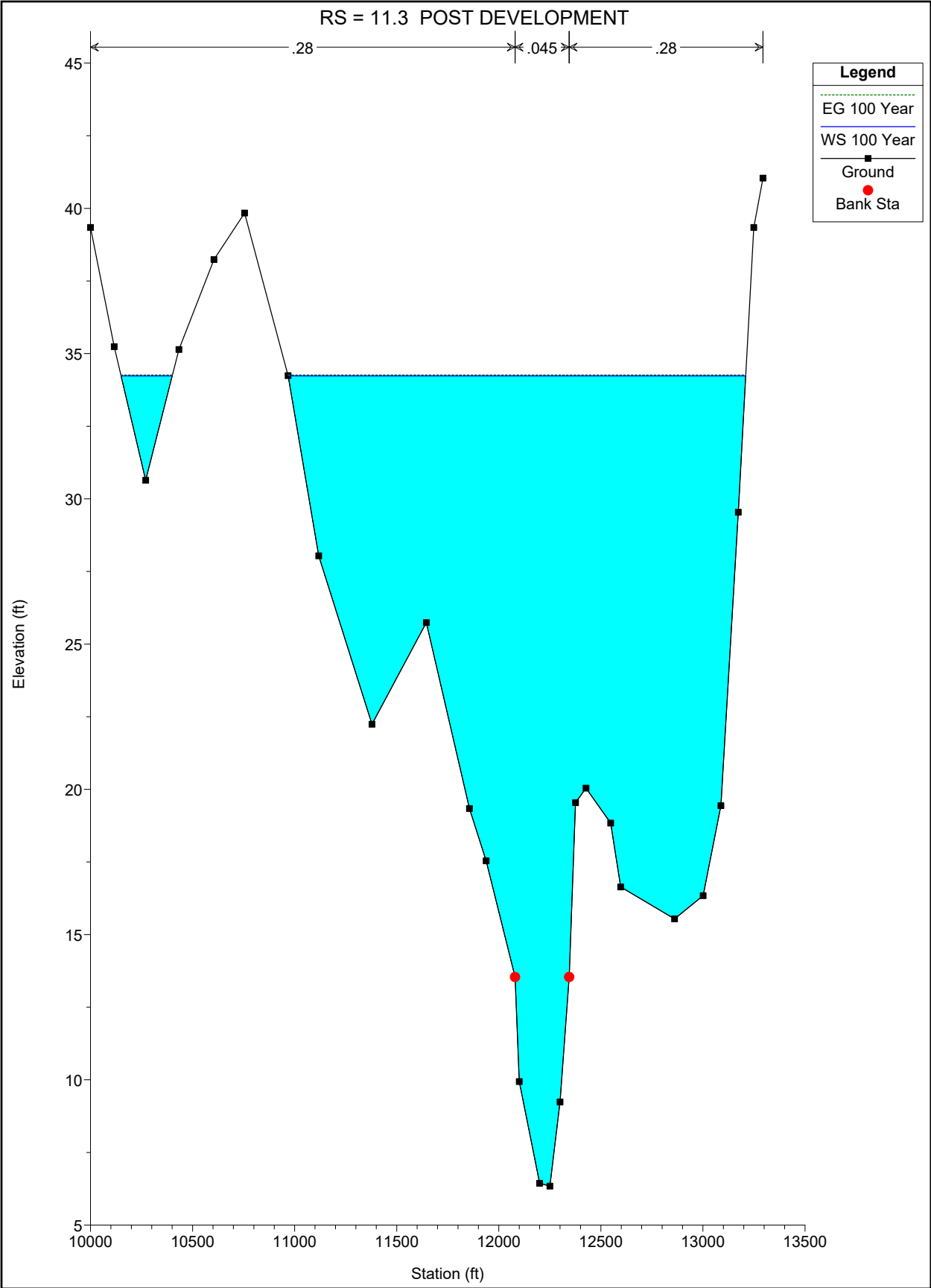
EXHIBIT G

POST-DEVELOPMENT CROSS SECTIONS









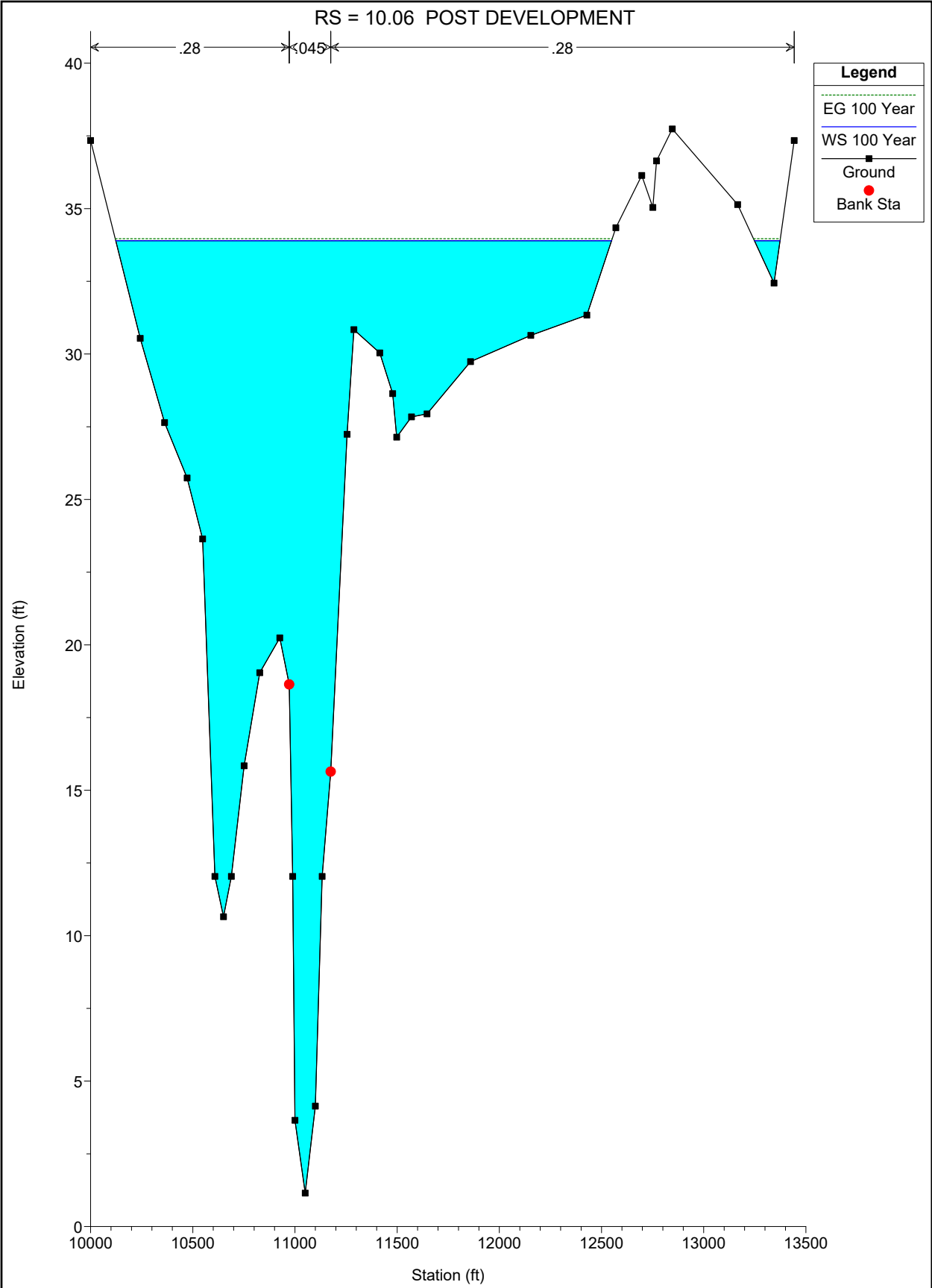


EXHIBIT H

HEC-RAS ANALYSIS & RESULTS

PRE-DEVELOPEMENT

HEC-RAS HEC-RAS 6.3.1 September 2022
U.S. Army Corps of Engineers
Hydrologic Engineering Center
609 Second Street
Davis, California

```

X      X  XXXXXX      XXXX      XXXX      XX      XXXX
X      X  X          X      X      X      X      X
X      X  X          X          X      X      X      X
XXXXXXX XXXX      X          XXX XXXX      XXXXXX      XXXX
X      X  X          X          X      X      X          X
X      X  X          X      X      X      X      X
X      X  XXXXXX      XXXX      X      X      X      XXXXX

```

PROJECT DATA

Project Title: PRE
Project File : PRE.prj
Run Date and Time: 2/7/2024 9:15:33 AM

Project in English units

Project Description:

Upper Suwannee River Floodplain Model 10, 50, 100, 500
Taylor Engineering Adapted from HEC-2 Provided by SRWMD

Model was truncated to only include: Dixie, Gilchrist and Lafayette Counties.
Converted to HEC-RAS 3.1.3, with some updates to structures and adjacent cross
sections August 2005 by Dewberry and Davis LLC - Atlanta Office

The floodway did not require any adjustments to width following updated survey data.
Floodway stations were moved to account for new stationing on some sections.

PLAN DATA

Plan Title: Floodway Run
Plan File : C:\Users\TravisCovington\OneDrive - Covington Engineering
Services\Documents\PROJECTS\No Rise\FL00033 - EUBANKS\DWGS\HEC-RAS\PRE
DEVELOPMENT\PRE.p02

Geometry Title: Updated 2005
Geometry File : C:\Users\TravisCovington\OneDrive - Covington Engineering
Services\Documents\PROJECTS\No Rise\FL00033 - EUBANKS\DWGS\HEC-RAS\PRE
DEVELOPMENT\PRE.g01

Flow Title : Floodway
Flow File : C:\Users\TravisCovington\OneDrive - Covington Engineering
Services\Documents\PROJECTS\No Rise\FL00033 - EUBANKS\DWGS\HEC-RAS\PRE
DEVELOPMENT\PRE.f02

Plan Summary Information:

Number of:	Cross Sections	=	298	Multiple Openings	=	0
	Culverts	=	0	Inline Structures	=	0

Bridges = 27 Lateral Structures = 0

Computational Information

Water surface calculation tolerance = 0.003
Critical depth calculation tolerance = 0.003
Maximum number of iterations = 20
Maximum difference tolerance = 0.1
Flow tolerance factor = 0.001

Computation Options

Critical depth computed only where necessary
Conveyance Calculation Method: Between every coordinate point (HEC2 Style)
Friction Slope Method: Average Conveyance
Computational Flow Regime: Subcritical Flow

Encroachment Data

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

River = Santa Fe		Reach = Main		
RS	Profile	Method	Value1	Value2
79.85	FW	1	11748	13914
79.1	FW	1	11751	14501
78.16	FW	1	11175	14425
76.67	FW	1	11077	12902
75.55	FW	1	13117	13450
75.15	FW	1	13519	13841
75	FW	1	13519	13691
74.98	FW	1	13730	13798
74.97	FW	1	13730	13798
74.92	FW	1	12760	13058
74.35	FW	1	13535	13911
74.3	FW	1	13778	14066
74.28	FW	1	12900	13101
74.27	FW	1	12900	13101
74.23	FW	1	13778	14066
74.04	FW	1	13578	14216
73.94	FW	1	13528	14446
73.36	FW	1	11527	13077
73.32	FW	1	11906.2	13864.7
73.31	FW	1	11092.3	11363
73.3	FW	1	10888.7	12618.1
73.27	FW	1	10888.7	12618.1
72.59	FW	1	10388	11224
71.46	FW	1	11917	12761
70.18	FW	1	10513.9	11110.1
69.45	FW	1	10622.3	10950.5
69.38	FW	1	11550	11652
69.37	FW	1	11550	11652
69.22	FW	1	10831	11293
68.72	FW	1	10736	11214
67.83	FW	1	11957.3	12768.6
67.11	FW	1	10562	11152
65.99	FW	1	10799	11834.2
65.97	FW	1	10996.4	11617
65.96	FW	1	11085.6	11617
65.89	FW	1	10903.2	11798.1
65.86	FW	1	10910.1	11796.1
64.57	FW	1	10976.2	11472.7

63.6	FW	1	10143	11830
62.24	FW	1	10171	12971
61.02	FW	1	10591	13058
59.68	FW	1	11827.6	12959.4
59.66	FW	1	10865	11065
59.65	FW	1	10865	11065
59.57	FW	1	11834.8	12950.8
59.26	FW	1	11560	12380
58.81	FW	1	11510	12035
58.79	FW	1	10315	10479
58.78	FW	1	10315	10476
58.7	FW	1	11510	12335
58.15	FW	1	11398	12448
57.21	FW	1	10927	11727
56.22	FW	1	11067	11967
55.99	FW	1	11067	11967
55.96	FW	1	12460	13610
55.95	FW	1	12460	13610
55.83	FW	1	10813	12613
54.27	FW	1	11100	12385
53.44	FW	1	10333	11733
51.87	FW	1	11150	13550
49.61	FW	1	12785	14322
49.48	FW	1	13817	15609
49.46	FW	1	13901	15349
49.45	FW	1	13901	15349
49.38	FW	1	13817	15609
49.31	FW	1	13817	15609
49.29	FW	1	14693	16393
49.28	FW	1	14693	16393
49.19	FW	1	14839.3	16588.4
48.04	FW	1	16259	17693.5
46.59	FW	1	12394.1	14173.5
45.48	FW	1	10484.9	12085.4
44.02	FW	1	11805	13551
42.54	FW	1	10083	14281
41.67	FW	1	11164	14130
41.63	FW	1	11164	14130
41.62	FW	1	11321	14621
41.61	FW	1	11321	14621
41.56	FW	1	10640	14637
40.91	FW	1	10572	12069
39.81	FW	1	11200	12953
39.02	FW	1	10108	10730
37.98	FW	1	10982	13472
37.25	FW	1	10533	13666
37.19	FW	1	10533	13666
37.17	FW	1	10550	13865
37.16	FW	1	10550	13865
37.07	FW	1	10406	13994
35.58	FW	1	10782	16371
35.57	FW	1	10782	16371
33.85	FW	1	10981	15203
33.09	FW	1	11012	13334
32.18	FW	1	11413	13528
30.42	FW	1	10675	17380
28.94	FW	1	10136	14876
27.82	FW	1	10997	13555
27.79	FW	1	10997	13555
27.77	FW	1	10897	13384

27.76	FW	1	10897	13384
27.68	FW	1	10373	12821
26.52	FW	1	9800	12900
25.19	FW	1	11176	11726
24.54	FW	1	10906	11301
24.52	FW	1	10906	11301
24.51	FW	1	11125	11595
24.5	FW	1	11125	11595
24.49	FW	1	10906	11301
24.48	FW	1	11678	12222
24.47	FW	1	11678	12222
24.44	FW	1	10942	11309
24.15	FW	1	10471	11010
23.82	FW	1	10508	10999
23.14	FW	1	10720	11461
22.24	FW	1	10634	11158
21.59	FW	1	12184	12725
20.44	FW	1	10537	11905
19.62	FW	1	10940	12164
18.49	FW	1	10716	12303
17.78	FW	1	11513	13128
17.28	FW	1	10213	11698
16.53	FW	1	11939	13607
15.75	FW	1	13828	15755
15.72	FW	1	13974.5	15901.5
15.7	FW	1	113800.25	15570.25
15.66	FW	1	14195	15938
15.08	FW	1	10868	12511
14.08	FW	1	11417	13300
13.03	FW	1	12170	14002
11.3	FW	1	11380	12995
10.06	FW	1	10391	11608
8.43	FW	1	12043	14142
7.64	FW	1	11909	13603
6.46	FW	1	13592	15193
4.73	FW	1	10932	12384
3.6	FW	1	10109	11719
2.88	FW	1	10951	12711
2.5	FW	1	11586	13299
2.46	FW	1	10705	12409
2.42	FW	1	110471.66	12121.66
2.39	FW	1	11054	12568
1.61	FW	1	10219	11589

River = Suwannee		Reach = BelowSF		
RS	Profile	Method	Value1	Value2
65.66	FW	1	15173	22192
63.87	FW	1	11283	15888
63.27	FW	1	10872	17455
62.67	FW	1	11369	18740
62.24	FW	1	10539	19904
61.75	FW	1	12213	20931
60.91	FW	1	11324	14718
60.38	FW	1	17809	20000
60.36	FW	1	12890.6	18955
59.56	FW	1	6939	12872.9
58.2	FW	1	5751.7	11047.7
57.9	FW	1	5884	10229.29
56.9	FW	1	5905.26	11503.76
56.53	FW	1	6198	13198.31

55.31	FW	1	4711	9204
53.94	FW	1	6305	13000
52.03	FW	1	5241.112967	96
50.53	FW	1	5680.411585	24
47.35	FW	1	8627.6413422	92
44.31	FW	1	18404	22661
41.97	FW		121589.5425774	01
39.76	FW	1	22097.4	27175.2
38.9	FW		123038.4931829	46
37.9	FW	1	24332.7	29319.7
37.38	FW	1	20952	25199
36.1	FW	1	19720	25555
35.9	FW	1	4257.55	6720.55
34.9	FW	1	4287.23	6700.43
34.21	FW	1	3944	10020
33.48	FW	1	6978	10150
32.32	FW	1	8245	11166
30.46	FW	1	13104	16201
28.07	FW	1	13760	18448
26.54	FW		119165.41	22696.1
24.83	FW	1	11938	15621
23.47	FW	1	6630	10578
21.49	FW	1	17326	22173
19.92	FW	1	19869	26472
17.65	FW	1	23194	31001
15.4	FW	1	24298	31389
13.11	FW	1	26701	41400
9.81	FW	1	31912	47714
7.49	FW	1	39512	53434
5.83	FW	1	53257	71534
3.15	FW	1	49704	72725

River = Suwannee		Reach = WtoSF		
RS	Profile	Method	Value1	Value2
127.51	FW	1	11175	16586
127.49	FW	1	11175	16586
127.47	FW	1	10661	16102
127.46	FW	1	10661	16102
127.44	FW	1	10900	16327
127.38	FW	1	10900	16327
127.35	FW	1	10900	16327
127.33	FW	1	11000	16840
127.32	FW	1	11000	16840
127.3	FW	1	11950	17780
127.24	FW	1	11950	17780
126.58	FW	1	11200	15729
125.56	FW	1	12475	17810
124.93	FW	1	12567	18886
124.88	FW	1	12567	18886
124.86	FW	1	12478	19170
124.85	FW	1	12478	19170
124.83	FW	1	12134	18877
124.78	FW	1	12134	18877
124.42	FW	1	12338	20334
122.45	FW	1	16777	21388
121.63	FW	1	19677	24546
120.87	FW		113195.4219331	25
119.69	FW		111740.1118355	39
118.66	FW		113289.1318112	82
117.17	FW		114644.9219079	15

116.26	FW	112012.2316988.05
114.94	FW	1 14480 17107
114.37	FW	1 14720 17255
113.29	FW	1 11877 15570
112.92	FW	1 11126 14179
112.91	FW	1 13430 16483
112.88	FW	1 13457 16458
112.86	FW	1 13511 16512
112.83	FW	1 14273 17320
112.8	FW	1 14273 17320
112.77	FW	1 14154 17096
112.72	FW	1 13615 16557
112.46	FW	1 13568 15834
112.17	FW	1 13303 15450
111.18	FW	1 1334216316.48
110.69	FW	1 11466 14165
109.87	FW	1 12956 16119
109.22	FW	1 14193 17538
108.57	FW	114546.8717280.01
107.88	FW	1 13828 16417
107.34	FW	1 14064 17627
106.69	FW	113529.3117864.05
105.88	FW	113743.39 17683.6
105.36	FW	115834.33 19297
104.59	FW	113718.1817202.81
104.03	FW	1 13700 17268
103.3	FW	1 14318 18210
102.89	FW	1 17687 21090
101.82	FW	1 15517 19825
101.48	FW	1 14893.8 19782.6
100.51	FW	114272.9917799.21
100.23	FW	1 14900 18661
99.18	FW	1 14714 20826
98.23	FW	1 14076 20826
98.19	FW	1 13909 20693
98.169	FW	1 13908.7 20514.7
98.12	FW	1 14112 20718
97.37	FW	1 12000 18100
96.6	FW	1 12300 17600
95.91	FW	113228.8817520.16
95.541	FW	1 14053 19214
95.54	FW	1 13953 19212
93.85	FW	1 17046 19061
92.89	FW	1 15110 17179
92.2	FW	1 15200 17150
91.48	FW	1 11968 14288
90.11	FW	1 13792.516627.67
89.24	FW	1 17057 21161
88.24	FW	1 17816 20540
87.45	FW	1 20732 23657
86.73	FW	1 20546 23972
85.95	FW	1 18864 23034
85.7	FW	1 20999 25109
84.85	FW	1 15027 18561
84.2	FW	1 17588 21670
83.08	FW	1 16417 20776
82.16	FW	1 16586 22193
81.59	FW	1 18793 23013
81.32	FW	1 19185 23588
80.2	FW	1 12000 17554

79.52	FW	1	16035	20721
79.01	FW	1	13500	18053
78.5	FW	1	13000	17960
77.99	FW	111898.0814888.81		
77.49	FW	1	11600	15174
77.06	FW	1	11548	13937
76.77	FW	1	11541	15594
76.51	FW	1	11012	14595
76.15	FW	1	1101216048.84	
76.12	FW	1	1133416370.17	
76.1	FW	111634.9515127.66		
76.06	FW	1	10968	14640
75.84	FW	1	1073115237.19	
75.58	FW	1	15156	19780
75.07	FW	114978.0619456.14		
74.71	FW	113342.8417107.24		
74.27	FW	1	13902	17310
73.55	FW	1	12687	17648
73.09	FW	1	15083	20157
72.77	FW	1	16325	20594
71.96	FW	1	15588	21664
70.98	FW	1	15366	21709
69.16	FW	1	11039	18223
68.53	FW	1	13250	18969
66.47	FW	1	17087	24124

FLOW DATA

Flow Title: Floodway

Flow File : C:\Users\TravisCovington\OneDrive - Covington Engineering
Services\Documents\PROJECTS\No Rise\FL00033 - EUBANKS\DWGS\HEC-RAS\PRE
DEVELOPMENT\PRE.f02

Flow Data (cfs)

River	Reach	RS	100 Year	FW
Santa Fe	Main	79.85	374	374
Santa Fe	Main	73.36	2965	2965
Santa Fe	Main	67.11	4665	4665
Santa Fe	Main	57.21	8767	8767
Santa Fe	Main	49.61	25162	25162
Santa Fe	Main	44.02	23767	23767
Santa Fe	Main	39.81	32800	32800
Santa Fe	Main	37.25	32569	32569
Santa Fe	Main	33.85	24427	24427
Santa Fe	Main	28.94	23206	23206
Santa Fe	Main	27.79	20910	20910
Santa Fe	Main	25.19	19587	19587
Santa Fe	Main	19.62	16717	16717
Santa Fe	Main	15.66	16359	16359
Suwannee	WtoSF	127.51	76500	76500
Suwannee	WtoSF	124.93	71400	71400
Suwannee	WtoSF	112.92	69500	69500
Suwannee	WtoSF	106.69	67800	67800
Suwannee	WtoSF	101.82	66300	66300
Suwannee	WtoSF	98.23	64900	64900
Suwannee	WtoSF	91.48	63900	63900

Suwannee	WtoSF	86.73	63250	63250
Suwannee	WtoSF	82.16	62950	62950
Suwannee	WtoSF	76.12	62100	62100
Suwannee	WtoSF	70.98	62100	62100
Suwannee	BelowSF	65.66	67300	67300

Boundary Conditions

River	Reach	Profile	Upstream
Downstream			
Suwannee	BelowSF	100 Year	
Known WS = 1.87			
Suwannee	BelowSF	FW	
Known WS = 1.87			

Observed Water Surface Marks

River	Reach	RS	100 Year	FW
RIVER-1	Reach-1	97	58	
RIVER-1	Reach-1	96	58	
RIVER-1	Reach-1	95	57	
RIVER-1	Reach-1	94	56.9	
RIVER-1	Reach-1	93	56.9	
RIVER-1	Reach-1	92	56.9	
RIVER-1	Reach-1	91	56.8	
RIVER-1	Reach-1	90	56.8	
RIVER-1	Reach-1	89	56.8	
RIVER-1	Reach-1	88	56.8	
RIVER-1	Reach-1	87	56.7	
RIVER-1	Reach-1	86	56.6	
RIVER-1	Reach-1	85	56.5	
RIVER-1	Reach-1	84	56.3	
RIVER-1	Reach-1	83	56	
RIVER-1	Reach-1	82	55.8	
RIVER-1	Reach-1	81	55.2	
RIVER-1	Reach-1	80	55	
RIVER-1	Reach-1	79	54.7	
RIVER-1	Reach-1	78	54.2	
RIVER-1	Reach-1	77	54	
RIVER-1	Reach-1	76	53.8	
RIVER-1	Reach-1	75	53.3	
RIVER-1	Reach-1	74	53	
RIVER-1	Reach-1	73	52.9	
RIVER-1	Reach-1	72	52.5	
RIVER-1	Reach-1	71	52.1	
RIVER-1	Reach-1	70	52	
RIVER-1	Reach-1	69	51.5	
RIVER-1	Reach-1	68	51.2	
RIVER-1	Reach-1	67	51	
RIVER-1	Reach-1	66	51	
RIVER-1	Reach-1	65	50.8	
RIVER-1	Reach-1	64	50.2	
RIVER-1	Reach-1	63	49.9	
RIVER-1	Reach-1	62	49.8	
RIVER-1	Reach-1	61	49.6	
RIVER-1	Reach-1	60	49.6	
RIVER-1	Reach-1	59	49.5	

RIVER-1	Reach-1	58	48.8
RIVER-1	Reach-1	57	47.8
RIVER-1	Reach-1	56	47.2
RIVER-1	Reach-1	55	47.1
RIVER-1	Reach-1	54	47.1
RIVER-1	Reach-1	53	46.2
RIVER-1	Reach-1	52	45.8
RIVER-1	Reach-1	51	45.3
RIVER-1	Reach-1	50	45
RIVER-1	Reach-1	49	44.2
RIVER-1	Reach-1	48	43.8
RIVER-1	Reach-1	47	43
RIVER-1	Reach-1	46	42.2
RIVER-1	Reach-1	45	42
RIVER-1	Reach-1	44	41.5
RIVER-1	Reach-1	43	41.2
RIVER-1	Reach-1	42	40.8
RIVER-1	Reach-1	41	40.1
RIVER-1	Reach-1	40	39.5
RIVER-1	Reach-1	39	38.9
RIVER-1	Reach-1	38	38.5
RIVER-1	Reach-1	37	38.2
RIVER-1	Reach-1	36	37.8
RIVER-1	Reach-1	35	37.3
RIVER-1	Reach-1	34	37
RIVER-1	Reach-1	33	36.8
RIVER-1	Reach-1	32	36.5
RIVER-1	Reach-1	31	36.2
RIVER-1	Reach-1	30	36
RIVER-1	Reach-1	29	36
RIVER-1	Reach-1	28	35.9
RIVER-1	Reach-1	27	35.7
RIVER-1	Reach-1	26	35.6
RIVER-1	Reach-1	25	35.2
RIVER-1	Reach-1	24	35.1
RIVER-1	Reach-1	23	35.1
RIVER-1	Reach-1	22	35
RIVER-1	Reach-1	21	35
RIVER-1	Reach-1	20	35
RIVER-1	Reach-1	19	34.9
RIVER-1	Reach-1	18	34.8
RIVER-1	Reach-1	17	34.6
RIVER-1	Reach-1	16	34.2
RIVER-1	Reach-1	15	34
RIVER-1	Reach-1	14	33.9
RIVER-1	Reach-1	13	33.4
Upper Suwannee	Upper	112.932	58
Upper Suwannee	Upper	112.922	58
Upper Suwannee	Upper	112.912	57
Upper Suwannee	Upper	112.902	56.9
Upper Suwannee	Upper	112.892	56.9
Upper Suwannee	Upper	112.872	56.9
Upper Suwannee	Upper	112.842	56.8
Upper Suwannee	Upper	112.812	56.8
Upper Suwannee	Upper	112.802	56.8
Upper Suwannee	Upper	112.792	56.8
Upper Suwannee	Upper	112.782	56.7
Upper Suwannee	Upper	112.732	56.6
Upper Suwannee	Upper	112.472	56.5
Upper Suwannee	Upper	112.182	56.3

Upper Suwannee	Upper	111.192	56
Upper Suwannee	Upper	110.702	55.8
Upper Suwannee	Upper	109.882	55.2
Upper Suwannee	Upper	109.232	55
Upper Suwannee	Upper	108.582	54.7
Upper Suwannee	Upper	107.892	54.2
Upper Suwannee	Upper	107.352	54
Upper Suwannee	Upper	106.702	53.8
Upper Suwannee	Upper	105.892	53.3
Upper Suwannee	Upper	105.372	53
Upper Suwannee	Upper	104.602	52.9
Upper Suwannee	Upper	104.042	52.5
Upper Suwannee	Upper	103.312	52.1
Upper Suwannee	Upper	102.902	52
Upper Suwannee	Upper	101.832	51.5
Upper Suwannee	Upper	101.492	51.2
Upper Suwannee	Upper	100.521	51
Upper Suwannee	Upper	100.242	51
Upper Suwannee	Upper	99.192	50.8
Upper Suwannee	Upper	98.242	50.2
Upper Suwannee	Upper	98.202	49.9
Upper Suwannee	Upper	98.192	49.8
Upper Suwannee	Upper	98.186	49.6
Upper Suwannee	Upper	98.182	49.6
Upper Suwannee	Upper	98.132	49.5
Upper Suwannee	Upper	97.382	48.8
Upper Suwannee	Upper	96.611	47.8
Upper Suwannee	Upper	95.921	47.2
Upper Suwannee	Upper	95.551	47.1
Upper Suwannee	Upper	95.549	47.1
Upper Suwannee	Upper	93.860	46.2
Upper Suwannee	Upper	92.900	45.8
Upper Suwannee	Upper	92.210	45.3
Upper Suwannee	Upper	91.490	45
Upper Suwannee	Upper	90.120	44.2
Upper Suwannee	Upper	89.250	43.8
Upper Suwannee	Upper	88.250	43
Upper Suwannee	Upper	87.460	42.2
Upper Suwannee	Upper	86.740	42
Upper Suwannee	Upper	85.960	41.5
Upper Suwannee	Upper	85.710	41.2
Upper Suwannee	Upper	84.860	40.8
Upper Suwannee	Upper	84.210	40.1
Upper Suwannee	Upper	83.090	39.5
Upper Suwannee	Upper	82.170	38.9
Upper Suwannee	Upper	81.600	38.5
Upper Suwannee	Upper	81.330	38.2
Upper Suwannee	Upper	80.212	37.8
Upper Suwannee	Upper	79.532	37.3
Upper Suwannee	Upper	79.022	37
Upper Suwannee	Upper	78.512	36.8
Upper Suwannee	Upper	78.002	36.5
Upper Suwannee	Upper	77.502	36.2
Upper Suwannee	Upper	77.072	36
Upper Suwannee	Upper	76.782	36
Upper Suwannee	Upper	76.522	35.9
Upper Suwannee	Upper	76.162	35.7
Upper Suwannee	Upper	76.132	35.6
Upper Suwannee	Upper	76.122	35.2
Upper Suwannee	Upper	76.117	35.1

Upper Suwannee	Upper	76.112	35.1
Upper Suwannee	Upper	76.072	35
Upper Suwannee	Upper	75.852	35
Upper Suwannee	Upper	75.592	35
Upper Suwannee	Upper	75.082	34.9
Upper Suwannee	Upper	74.722	34.8
Upper Suwannee	Upper	74.282	34.6
Upper Suwannee	Upper	73.562	34.2
Upper Suwannee	Upper	73.102	34
Upper Suwannee	Upper	72.782	33.9
Upper Suwannee	Upper	71.972	33.4
Suwannee	UpstreamEnd	112.932	58
Suwannee	UpstreamEnd	112.922	58
Suwannee	UpstreamEnd	112.912	57
Suwannee	UpstreamEnd	112.902	56.9
Suwannee	UpstreamEnd	112.892	56.9
Suwannee	UpstreamEnd	112.872	56.9
Suwannee	UpstreamEnd	112.842	56.8
Suwannee	UpstreamEnd	112.812	56.8
Suwannee	UpstreamEnd	112.802	56.8
Suwannee	UpstreamEnd	112.792	56.8
Suwannee	UpstreamEnd	112.782	56.7
Suwannee	UpstreamEnd	112.732	56.6
Suwannee	UpstreamEnd	112.472	56.5
Suwannee	UpstreamEnd	112.182	56.3
Suwannee	UpstreamEnd	111.192	56
Suwannee	UpstreamEnd	110.702	55.8
Suwannee	UpstreamEnd	109.882	55.2
Suwannee	UpstreamEnd	109.232	55
Suwannee	UpstreamEnd	108.582	54.7
Suwannee	UpstreamEnd	107.892	54.2
Suwannee	UpstreamEnd	107.352	54
Suwannee	UpstreamEnd	106.702	53.8
Suwannee	UpstreamEnd	105.892	53.3
Suwannee	UpstreamEnd	105.372	53
Suwannee	UpstreamEnd	104.602	52.9
Suwannee	UpstreamEnd	104.042	52.5
Suwannee	UpstreamEnd	103.312	52.1
Suwannee	UpstreamEnd	102.902	52
Suwannee	UpstreamEnd	101.832	51.5
Suwannee	UpstreamEnd	101.492	51.2
Suwannee	UpstreamEnd	100.521	51
Suwannee	UpstreamEnd	100.242	51
Suwannee	UpstreamEnd	99.192	50.8
Suwannee	UpstreamEnd	98.242	50.2
Suwannee	UpstreamEnd	98.202	49.9
Suwannee	UpstreamEnd	98.192	49.8
Suwannee	UpstreamEnd	98.186	49.6
Suwannee	UpstreamEnd	98.182	49.6
Suwannee	UpstreamEnd	98.132	49.5
Suwannee	UpstreamEnd	97.382	48.8
Suwannee	UpstreamEnd	96.611	47.8
Suwannee	UpstreamEnd	95.921	47.2
Suwannee	UpstreamEnd	95.551	47.1
Suwannee	UpstreamEnd	95.549	47.1
Suwannee	UpstreamEnd	93.860	46.2
Suwannee	UpstreamEnd	92.900	45.8
Suwannee	UpstreamEnd	92.210	45.3
Suwannee	UpstreamEnd	91.490	45
Suwannee	UpstreamEnd	90.120	44.2

Suwannee	UpstreamEnd	89.250	43.8
Suwannee	UpstreamEnd	88.250	43
Suwannee	UpstreamEnd	87.460	42.2
Suwannee	UpstreamEnd	86.740	42
Suwannee	UpstreamEnd	85.960	41.5
Suwannee	UpstreamEnd	85.710	41.2
Suwannee	UpstreamEnd	84.860	40.8
Suwannee	UpstreamEnd	84.210	40.1
Suwannee	UpstreamEnd	83.090	39.5
Suwannee	UpstreamEnd	82.170	38.9
Suwannee	UpstreamEnd	81.600	38.5
Suwannee	UpstreamEnd	81.330	38.2
Suwannee	UpstreamEnd	80.212	37.8
Suwannee	UpstreamEnd	79.532	37.3
Suwannee	UpstreamEnd	79.022	37
Suwannee	UpstreamEnd	78.512	36.8
Suwannee	UpstreamEnd	78.002	36.5
Suwannee	UpstreamEnd	77.502	36.2
Suwannee	UpstreamEnd	77.072	36
Suwannee	UpstreamEnd	76.782	36
Suwannee	UpstreamEnd	76.522	35.9
Suwannee	UpstreamEnd	76.162	35.7
Suwannee	UpstreamEnd	76.132	35.6
Suwannee	UpstreamEnd	76.122	35.2
Suwannee	UpstreamEnd	76.117	35.1
Suwannee	UpstreamEnd	76.112	35.1
Suwannee	UpstreamEnd	76.072	35
Suwannee	UpstreamEnd	75.852	35
Suwannee	UpstreamEnd	75.592	35
Suwannee	UpstreamEnd	75.082	34.9
Suwannee	UpstreamEnd	74.722	34.8
Suwannee	UpstreamEnd	74.282	34.6
Suwannee	UpstreamEnd	73.562	34.2
Suwannee	UpstreamEnd	73.102	34
Suwannee	UpstreamEnd	72.782	33.9
Suwannee	UpstreamEnd	71.972	33.4

GEOMETRY DATA

Geometry Title: Updated 2005
Geometry File : C:\Users\TravisCovington\OneDrive - Covington Engineering Services\Documents\PROJECTS\No Rise\FL00033 - EUBANKS\DWGS\HEC-RAS\PRE DEVELOPMENT\PRE.g01

Reach Connection Table

River	Reach	Upstream Boundary	Downstream Boundary
Santa Fe	Main		Santa Fe
Suwannee	WtoSF		Santa Fe
Suwannee	BelowSF	Santa Fe	

CROSS SECTION

RIVER: Santa Fe

REACH: Main

RS: 14.08

CROSS SECTION OUTPUT Profile #100 Year

E.G. Elev (ft)	34.93	Element	Left OB	Channel	Right OB
Vel Head (ft)	0.06	Wt. n-Val.	0.280	0.045	0.280
W.S. Elev (ft)	34.88	Reach Len. (ft)	4700.00	5540.00	5500.00
Crit W.S. (ft)		Flow Area (sq ft)	17712.23	4456.97	5684.09
E.G. Slope (ft/ft)	0.000086	Area (sq ft)	17712.23	4456.97	5684.09
Q Total (cfs)	16359.00	Flow (cfs)	4399.22	10550.36	1409.42
Top Width (ft)	3125.71	Top Width (ft)	2150.88	207.00	767.83
Vel Total (ft/s)	0.59	Avg. Vel. (ft/s)	0.25	2.37	0.25
Max Chl Dpth (ft)	25.04	Hydr. Depth (ft)	8.23	21.53	7.40
Conv. Total (cfs)	1759662.0	Conv. (cfs)	473204.0	1134854.0	151604.5
Length Wtd. (ft)	5362.08	Wetted Per. (ft)	2151.28	208.14	769.30
Min Ch El (ft)	9.84	Shear (lb/sq ft)	0.04	0.12	0.04
Alpha	10.54	Stream Power (lb/ft s)	0.01	0.27	0.01
Frctn Loss (ft)	0.33	Cum Volume (acre-ft)	18591.62	10164.97	33812.84
C & E Loss (ft)	0.00	Cum SA (acres)	2014.05	302.06	1969.83

Warning: Divided flow computed for this cross-section.

CROSS SECTION OUTPUT Profile #FW

E.G. Elev (ft)	35.73	Element	Left OB	Channel	Right OB
Vel Head (ft)	0.06	Wt. n-Val.	0.280	0.045	0.280
W.S. Elev (ft)	35.67	Reach Len. (ft)	4700.00	5540.00	5500.00
Crit W.S. (ft)		Flow Area (sq ft)	14502.72	4621.93	6144.72
E.G. Slope (ft/ft)	0.000080	Area (sq ft)	14502.72	4621.93	6144.72
Q Total (cfs)	16359.00	Flow (cfs)	4028.76	10803.68	1526.56
Top Width (ft)	1883.00	Top Width (ft)	1026.00	207.00	650.00
Vel Total (ft/s)	0.65	Avg. Vel. (ft/s)	0.28	2.34	0.25
Max Chl Dpth (ft)	25.83	Hydr. Depth (ft)	14.14	22.33	9.45
Conv. Total (cfs)	1825706.0	Conv. (cfs)	449620.1	1205718.0	170368.0
Length Wtd. (ft)	5395.25	Wetted Per. (ft)	1038.31	208.14	653.28
Min Ch El (ft)	9.84	Shear (lb/sq ft)	0.07	0.11	0.05
Alpha	8.67	Stream Power (lb/ft s)	0.02	0.26	0.01
Frctn Loss (ft)	0.34	Cum Volume (acre-ft)	15218.91	10460.79	20596.90
C & E Loss (ft)	0.00	Cum SA (acres)	1052.63	302.22	851.37

CROSS SECTION

RIVER: Santa Fe

REACH: Main

RS: 13.03

CROSS SECTION OUTPUT Profile #100 Year

E.G. Elev (ft)	34.60	Element	Left OB	Channel	Right OB
Vel Head (ft)	0.04	Wt. n-Val.	0.280	0.045	0.280
W.S. Elev (ft)	34.56	Reach Len. (ft)	2046.07	3062.40	1811.28
Crit W.S. (ft)		Flow Area (sq ft)	16054.47	4773.24	18768.62
E.G. Slope (ft/ft)	0.000046	Area (sq ft)	16054.47	4773.24	18768.62
Q Total (cfs)	16359.00	Flow (cfs)	2261.26	9844.05	4253.69

Top Width (ft)	3890.61	Top Width (ft)	2474.55	165.00	1251.06
Vel Total (ft/s)	0.41	Avg. Vel. (ft/s)	0.14	2.06	0.23
Max Chl Dpth (ft)	40.67	Hydr. Depth (ft)	6.49	28.93	15.00
Conv. Total (cfs)	2410862.0	Conv. (cfs)	333246.4	1450740.0	626875.6
Length Wtd. (ft)	2637.84	Wetted Per. (ft)	2475.31	170.93	1251.93
Min Ch El (ft)	-6.11	Shear (lb/sq ft)	0.02	0.08	0.04
Alpha	15.09	Stream Power (lb/ft s)	0.00	0.17	0.01
Frctn Loss (ft)	0.12	Cum Volume (acre-ft)	16769.95	9578.02	32269.11
C & E Loss (ft)	0.00	Cum SA (acres)	1764.51	278.40	1842.37

CROSS SECTION OUTPUT Profile #FW

E.G. Elev (ft)	35.39	Element	Left OB	Channel	Right OB
Vel Head (ft)	0.05	Wt. n-Val.	0.280	0.045	0.280
W.S. Elev (ft)	35.33	Reach Len. (ft)	2046.07	3062.40	1811.28
Crit W.S. (ft)		Flow Area (sq ft)	6959.73	4901.35	16076.01
E.G. Slope (ft/ft)	0.000051	Area (sq ft)	6959.73	4901.35	16076.01
Q Total (cfs)	16359.00	Flow (cfs)	1339.36	10879.05	4140.58
Top Width (ft)	1832.00	Top Width (ft)	750.00	165.00	917.00
Vel Total (ft/s)	0.59	Avg. Vel. (ft/s)	0.19	2.22	0.26
Max Chl Dpth (ft)	41.44	Hydr. Depth (ft)	9.28	29.71	17.53
Conv. Total (cfs)	2279952.0	Conv. (cfs)	186667.0	1516212.0	577072.6
Length Wtd. (ft)	2663.08	Wetted Per. (ft)	757.31	170.93	930.50
Min Ch El (ft)	-6.11	Shear (lb/sq ft)	0.03	0.09	0.06
Alpha	9.61	Stream Power (lb/ft s)	0.01	0.20	0.01
Frctn Loss (ft)	0.12	Cum Volume (acre-ft)	14061.04	9855.20	19194.08
C & E Loss (ft)	0.00	Cum SA (acres)	956.82	278.57	752.44

CROSS SECTION

RIVER: Santa Fe

REACH: Main

RS: 12.45*

CROSS SECTION OUTPUT Profile #100 Year

E.G. Elev (ft)	34.48	Element	Left OB	Channel	Right OB
Vel Head (ft)	0.04	Wt. n-Val.	0.280	0.045	0.280
W.S. Elev (ft)	34.44	Reach Len. (ft)	4053.93	6067.60	3588.72
Crit W.S. (ft)		Flow Area (sq ft)	14016.39	5496.84	14824.15
E.G. Slope (ft/ft)	0.000044	Area (sq ft)	14016.39	5496.84	14824.15
Q Total (cfs)	16359.00	Flow (cfs)	2090.27	10954.75	3313.99
Top Width (ft)	3597.93	Top Width (ft)	2274.97	198.54	1124.42
Vel Total (ft/s)	0.48	Avg. Vel. (ft/s)	0.15	1.99	0.22
Max Chl Dpth (ft)	36.37	Hydr. Depth (ft)	6.16	27.69	13.18
Conv. Total (cfs)	2459544.0	Conv. (cfs)	314267.7	1647025.0	498251.4
Length Wtd. (ft)	5353.19	Wetted Per. (ft)	2275.48	201.10	1127.45
Min Ch El (ft)	-1.93	Shear (lb/sq ft)	0.02	0.08	0.04
Alpha	11.77	Stream Power (lb/ft s)	0.00	0.15	0.01
Frctn Loss (ft)	0.21	Cum Volume (acre-ft)	16063.72	9217.01	31570.70
C & E Loss (ft)	0.00	Cum SA (acres)	1652.97	265.62	1792.99

CROSS SECTION OUTPUT Profile #FW

E.G. Elev (ft)	35.26	Element	Left OB	Channel	Right OB
Vel Head (ft)	0.04	Wt. n-Val.	0.280	0.045	0.280
W.S. Elev (ft)	35.23	Reach Len. (ft)	4053.93	6067.60	3588.72

Crit W.S. (ft)		Flow Area (sq ft)	15826.20	5653.53	15714.24
E.G. Slope (ft/ft)	0.000039	Area (sq ft)	15826.20	5653.53	15714.24
Q Total (cfs)	16359.00	Flow (cfs)	2281.18	10716.99	3360.83
Top Width (ft)	3636.64	Top Width (ft)	2306.88	198.54	1131.23
Vel Total (ft/s)	0.44	Avg. Vel. (ft/s)	0.14	1.90	0.21
Max Chl Dpth (ft)	37.16	Hydr. Depth (ft)	6.86	28.48	13.89
Conv. Total (cfs)	2634684.0	Conv. (cfs)	367393.4	1726015.0	541275.9
Length Wtd. (ft)	5376.06	Wetted Per. (ft)	2307.40	201.10	1134.30
Min Ch El (ft)	-1.93	Shear (lb/sq ft)	0.02	0.07	0.03
Alpha	12.23	Stream Power (lb/ft s)	0.00	0.13	0.01
Frctn Loss (ft)	0.20	Cum Volume (acre-ft)	13525.89	9484.18	18533.14
C & E Loss (ft)	0.00	Cum SA (acres)	885.02	265.79	709.85

CROSS SECTION

RIVER: Santa Fe

REACH: Main

RS: 11.3

CROSS SECTION OUTPUT Profile #100 Year

E.G. Elev (ft)	34.26	Element	Left OB	Channel	Right OB
Vel Head (ft)	0.03	Wt. n-Val.	0.280	0.045	0.280
W.S. Elev (ft)	34.23	Reach Len. (ft)	5900.00	6550.00	4400.00
Crit W.S. (ft)		Flow Area (sq ft)	12428.15	6796.34	13569.18
E.G. Slope (ft/ft)	0.000035	Area (sq ft)	12428.15	6796.34	13569.18
Q Total (cfs)	16359.00	Flow (cfs)	2027.40	11561.22	2770.38
Top Width (ft)	2491.64	Top Width (ft)	1362.25	265.00	864.39
Vel Total (ft/s)	0.50	Avg. Vel. (ft/s)	0.16	1.70	0.20
Max Chl Dpth (ft)	27.89	Hydr. Depth (ft)	9.12	25.65	15.70
Conv. Total (cfs)	2756964.0	Conv. (cfs)	341674.8	1948400.0	466889.4
Length Wtd. (ft)	6223.48	Wetted Per. (ft)	1362.74	265.67	865.99
Min Ch El (ft)	6.34	Shear (lb/sq ft)	0.02	0.06	0.03
Alpha	8.26	Stream Power (lb/ft s)	0.00	0.10	0.01
Frctn Loss (ft)	0.30	Cum Volume (acre-ft)	14833.18	8360.83	30401.09
C & E Loss (ft)	0.00	Cum SA (acres)	1483.72	233.34	1711.06

Warning: Divided flow computed for this cross-section.

CROSS SECTION OUTPUT Profile #FW

E.G. Elev (ft)	35.06	Element	Left OB	Channel	Right OB
Vel Head (ft)	0.03	Wt. n-Val.	0.280	0.045	0.280
W.S. Elev (ft)	35.03	Reach Len. (ft)	5900.00	6550.00	4400.00
Crit W.S. (ft)		Flow Area (sq ft)	9687.52	7007.72	11644.84
E.G. Slope (ft/ft)	0.000035	Area (sq ft)	9687.52	7007.72	11644.84
Q Total (cfs)	16359.00	Flow (cfs)	1790.02	12109.57	2459.41
Top Width (ft)	1615.00	Top Width (ft)	700.00	265.00	650.00
Vel Total (ft/s)	0.58	Avg. Vel. (ft/s)	0.18	1.73	0.21
Max Chl Dpth (ft)	28.69	Hydr. Depth (ft)	13.84	26.44	17.92
Conv. Total (cfs)	2769971.0	Conv. (cfs)	303093.5	2050440.0	416437.3
Length Wtd. (ft)	6267.96	Wetted Per. (ft)	712.97	265.67	669.36
Min Ch El (ft)	6.34	Shear (lb/sq ft)	0.03	0.06	0.04
Alpha	6.67	Stream Power (lb/ft s)	0.01	0.10	0.01
Frctn Loss (ft)	0.29	Cum Volume (acre-ft)	12338.67	8602.37	17406.14
C & E Loss (ft)	0.00	Cum SA (acres)	745.10	233.50	636.48

CROSS SECTION

RIVER: Santa Fe

REACH: Main

RS: 10.06

CROSS SECTION OUTPUT Profile #100 Year

E.G. Elev (ft)	33.96	Element	Left OB	Channel	Right OB
Vel Head (ft)	0.07	Wt. n-Val.	0.280	0.045	0.280
W.S. Elev (ft)	33.89	Reach Len. (ft)	5500.00	8600.00	6200.00
Crit W.S. (ft)		Flow Area (sq ft)	9619.86	5432.82	6129.22
E.G. Slope (ft/ft)	0.000068	Area (sq ft)	9619.86	5432.82	6129.22
Q Total (cfs)	16359.00	Flow (cfs)	2536.89	13003.49	818.62
Top Width (ft)	2550.91	Top Width (ft)	848.84	203.00	1499.07
Vel Total (ft/s)	0.77	Avg. Vel. (ft/s)	0.26	2.39	0.13
Max Chl Dpth (ft)	32.74	Hydr. Depth (ft)	11.33	26.76	4.09
Conv. Total (cfs)	1984803.0	Conv. (cfs)	307795.4	1577686.0	99321.6
Length Wtd. (ft)	7928.28	Wetted Per. (ft)	850.35	208.31	1500.26
Min Ch El (ft)	1.15	Shear (lb/sq ft)	0.05	0.11	0.02
Alpha	7.65	Stream Power (lb/ft s)	0.01	0.26	0.00
Frctn Loss (ft)	0.47	Cum Volume (acre-ft)	13340.03	7441.40	29406.22
C & E Loss (ft)	0.00	Cum SA (acres)	1333.98	198.15	1591.70

Warning: Divided flow computed for this cross-section.

CROSS SECTION OUTPUT Profile #FW

E.G. Elev (ft)	34.77	Element	Left OB	Channel	Right OB
Vel Head (ft)	0.07	Wt. n-Val.	0.280	0.045	0.280
W.S. Elev (ft)	34.70	Reach Len. (ft)	5500.00	8600.00	6200.00
Crit W.S. (ft)		Flow Area (sq ft)	9127.23	5596.54	3041.36
E.G. Slope (ft/ft)	0.000064	Area (sq ft)	9127.23	5596.54	3041.36
Q Total (cfs)	16359.00	Flow (cfs)	2553.23	13286.33	519.44
Top Width (ft)	1217.00	Top Width (ft)	581.00	203.00	433.00
Vel Total (ft/s)	0.92	Avg. Vel. (ft/s)	0.28	2.37	0.17
Max Chl Dpth (ft)	33.55	Hydr. Depth (ft)	15.71	27.57	7.02
Conv. Total (cfs)	2041087.0	Conv. (cfs)	318562.2	1657715.0	64809.8
Length Wtd. (ft)	7995.08	Wetted Per. (ft)	589.98	208.31	440.92
Min Ch El (ft)	1.15	Shear (lb/sq ft)	0.06	0.11	0.03
Alpha	5.41	Stream Power (lb/ft s)	0.02	0.26	0.00
Frctn Loss (ft)	0.47	Cum Volume (acre-ft)	11064.49	7654.74	16664.42
C & E Loss (ft)	0.00	Cum SA (acres)	658.35	198.32	581.78

POST-DEVELOPEMENT

HEC-RAS HEC-RAS 6.3.1 September 2022
U.S. Army Corps of Engineers
Hydrologic Engineering Center
609 Second Street
Davis, California

```

X      X  XXXXXX      XXXX      XXXX      XX      XXXX
X      X  X          X      X      X  X      X  X      X
X      X  X          X          X  X      X  X      X
XXXXXXX XXXX      X          XXX XXXX      XXXXXX      XXXX
X      X  X          X          X  X      X  X          X
X      X  X          X      X      X  X      X  X          X
X      X  XXXXXX      XXXX      X      X      X  X      XXXXX

```

PROJECT DATA

Project Title: POST

Project File : POST.prj

Run Date and Time: 2/7/2024 10:51:18 AM

Project in English units

Project Description:

Upper Suwannee River Floodplain Model 10, 50, 100, 500

Taylor Engineering Adapted from HEC-2 Provided by SRWMD

Model was truncated to only include: Dixie, Gilchrist and Lafayette Counties.
Converted to HEC-RAS 3.1.3, with some updates to structures and adjacent cross
sections August 2005 by Dewberry and Davis LLC - Atlanta Office

The floodway did not require any adjustments to width following updated survey data.
Floodway stations were moved to account for new stationing on some sections.

PLAN DATA

Plan Title: Floodway Run

Plan File : C:\Users\TravisCovington\OneDrive - Covington Engineering
Services\Documents\PROJECTS\No Rise\FL00033 - EUBANKS\DWGS\HEC-RAS\POST
DEVELOPMENT\POST.p02

Geometry Title: Updated 2005

Geometry File : C:\Users\TravisCovington\OneDrive - Covington Engineering
Services\Documents\PROJECTS\No Rise\FL00033 - EUBANKS\DWGS\HEC-RAS\POST
DEVELOPMENT\POST.g01

Flow Title : Floodway

Flow File : C:\Users\TravisCovington\OneDrive - Covington Engineering
Services\Documents\PROJECTS\No Rise\FL00033 - EUBANKS\DWGS\HEC-RAS\POST
DEVELOPMENT\POST.f02

Plan Summary Information:

Number of:	Cross Sections	=	298	Multiple Openings	=	0
	Culverts	=	0	Inline Structures	=	0

Bridges = 27 Lateral Structures = 0

Computational Information

Water surface calculation tolerance = 0.003
Critical depth calculation tolerance = 0.003
Maximum number of iterations = 20
Maximum difference tolerance = 0.1
Flow tolerance factor = 0.001

Computation Options

Critical depth computed only where necessary
Conveyance Calculation Method: Between every coordinate point (HEC2 Style)
Friction Slope Method: Average Conveyance
Computational Flow Regime: Subcritical Flow

Encroachment Data

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

River = Santa Fe		Reach = Main		
RS	Profile	Method	Value1	Value2
79.85	FW	1	11748	13914
79.1	FW	1	11751	14501
78.16	FW	1	11175	14425
76.67	FW	1	11077	12902
75.55	FW	1	13117	13450
75.15	FW	1	13519	13841
75	FW	1	13519	13691
74.98	FW	1	13730	13798
74.97	FW	1	13730	13798
74.92	FW	1	12760	13058
74.35	FW	1	13535	13911
74.3	FW	1	13778	14066
74.28	FW	1	12900	13101
74.27	FW	1	12900	13101
74.23	FW	1	13778	14066
74.04	FW	1	13578	14216
73.94	FW	1	13528	14446
73.36	FW	1	11527	13077
73.32	FW	1	11906.2	13864.7
73.31	FW	1	11092.3	11363
73.3	FW	1	10888.7	12618.1
73.27	FW	1	10888.7	12618.1
72.59	FW	1	10388	11224
71.46	FW	1	11917	12761
70.18	FW	1	10513.9	11110.1
69.45	FW	1	10622.3	10950.5
69.38	FW	1	11550	11652
69.37	FW	1	11550	11652
69.22	FW	1	10831	11293
68.72	FW	1	10736	11214
67.83	FW	1	11957.3	12768.6
67.11	FW	1	10562	11152
65.99	FW	1	10799	11834.2
65.97	FW	1	10996.4	11617
65.96	FW	1	11085.6	11617
65.89	FW	1	10903.2	11798.1
65.86	FW	1	10910.1	11796.1
64.57	FW	1	10976.2	11472.7

63.6	FW	1	10143	11830
62.24	FW	1	10171	12971
61.02	FW	1	10591	13058
59.68	FW	1	11827.6	12959.4
59.66	FW	1	10865	11065
59.65	FW	1	10865	11065
59.57	FW	1	11834.8	12950.8
59.26	FW	1	11560	12380
58.81	FW	1	11510	12035
58.79	FW	1	10315	10479
58.78	FW	1	10315	10476
58.7	FW	1	11510	12335
58.15	FW	1	11398	12448
57.21	FW	1	10927	11727
56.22	FW	1	11067	11967
55.99	FW	1	11067	11967
55.96	FW	1	12460	13610
55.95	FW	1	12460	13610
55.83	FW	1	10813	12613
54.27	FW	1	11100	12385
53.44	FW	1	10333	11733
51.87	FW	1	11150	13550
49.61	FW	1	12785	14322
49.48	FW	1	13817	15609
49.46	FW	1	13901	15349
49.45	FW	1	13901	15349
49.38	FW	1	13817	15609
49.31	FW	1	13817	15609
49.29	FW	1	14693	16393
49.28	FW	1	14693	16393
49.19	FW	1	14839.3	16588.4
48.04	FW	1	16259	17693.5
46.59	FW	1	12394.1	14173.5
45.48	FW	1	10484.9	12085.4
44.02	FW	1	11805	13551
42.54	FW	1	10083	14281
41.67	FW	1	11164	14130
41.63	FW	1	11164	14130
41.62	FW	1	11321	14621
41.61	FW	1	11321	14621
41.56	FW	1	10640	14637
40.91	FW	1	10572	12069
39.81	FW	1	11200	12953
39.02	FW	1	10108	10730
37.98	FW	1	10982	13472
37.25	FW	1	10533	13666
37.19	FW	1	10533	13666
37.17	FW	1	10550	13865
37.16	FW	1	10550	13865
37.07	FW	1	10406	13994
35.58	FW	1	10782	16371
35.57	FW	1	10782	16371
33.85	FW	1	10981	15203
33.09	FW	1	11012	13334
32.18	FW	1	11413	13528
30.42	FW	1	10675	17380
28.94	FW	1	10136	14876
27.82	FW	1	10997	13555
27.79	FW	1	10997	13555
27.77	FW	1	10897	13384

27.76	FW	1	10897	13384
27.68	FW	1	10373	12821
26.52	FW	1	9800	12900
25.19	FW	1	11176	11726
24.54	FW	1	10906	11301
24.52	FW	1	10906	11301
24.51	FW	1	11125	11595
24.5	FW	1	11125	11595
24.49	FW	1	10906	11301
24.48	FW	1	11678	12222
24.47	FW	1	11678	12222
24.44	FW	1	10942	11309
24.15	FW	1	10471	11010
23.82	FW	1	10508	10999
23.14	FW	1	10720	11461
22.24	FW	1	10634	11158
21.59	FW	1	12184	12725
20.44	FW	1	10537	11905
19.62	FW	1	10940	12164
18.49	FW	1	10716	12303
17.78	FW	1	11513	13128
17.28	FW	1	10213	11698
16.53	FW	1	11939	13607
15.75	FW	1	13828	15755
15.72	FW	1	13974.5	15901.5
15.7	FW	1	113800.25	15570.25
15.66	FW	1	14195	15938
15.08	FW	1	10868	12511
14.08	FW	1	11417	13300
13.03	FW	1	12170	14002
11.3	FW	1	11380	12995
10.06	FW	1	10391	11608
8.43	FW	1	12043	14142
7.64	FW	1	11909	13603
6.46	FW	1	13592	15193
4.73	FW	1	10932	12384
3.6	FW	1	10109	11719
2.88	FW	1	10951	12711
2.5	FW	1	11586	13299
2.46	FW	1	10705	12409
2.42	FW	1	110471.66	12121.66
2.39	FW	1	11054	12568
1.61	FW	1	10219	11589

River = Suwannee		Reach = BelowSF		
RS	Profile	Method	Value1	Value2
65.66	FW	1	15173	22192
63.87	FW	1	11283	15888
63.27	FW	1	10872	17455
62.67	FW	1	11369	18740
62.24	FW	1	10539	19904
61.75	FW	1	12213	20931
60.91	FW	1	11324	14718
60.38	FW	1	17809	20000
60.36	FW	1	12890.6	18955
59.56	FW	1	6939	12872.9
58.2	FW	1	5751.7	11047.7
57.9	FW	1	5884	10229.29
56.9	FW	1	5905.26	11503.76
56.53	FW	1	6198	13198.31

55.31	FW	1	4711	9204
53.94	FW	1	6305	13000
52.03	FW	1	5241.112967	96
50.53	FW	1	5680.411585	24
47.35	FW	1	8627.6413422	92
44.31	FW	1	18404	22661
41.97	FW		121589.5425774	01
39.76	FW	1	22097.4	27175.2
38.9	FW		123038.4931829	46
37.9	FW	1	24332.7	29319.7
37.38	FW	1	20952	25199
36.1	FW	1	19720	25555
35.9	FW	1	4257.55	6720.55
34.9	FW	1	4287.23	6700.43
34.21	FW	1	3944	10020
33.48	FW	1	6978	10150
32.32	FW	1	8245	11166
30.46	FW	1	13104	16201
28.07	FW	1	13760	18448
26.54	FW		119165.41	22696.1
24.83	FW	1	11938	15621
23.47	FW	1	6630	10578
21.49	FW	1	17326	22173
19.92	FW	1	19869	26472
17.65	FW	1	23194	31001
15.4	FW	1	24298	31389
13.11	FW	1	26701	41400
9.81	FW	1	31912	47714
7.49	FW	1	39512	53434
5.83	FW	1	53257	71534
3.15	FW	1	49704	72725

River = Suwannee		Reach = WtoSF		
RS	Profile	Method	Value1	Value2
127.51	FW	1	11175	16586
127.49	FW	1	11175	16586
127.47	FW	1	10661	16102
127.46	FW	1	10661	16102
127.44	FW	1	10900	16327
127.38	FW	1	10900	16327
127.35	FW	1	10900	16327
127.33	FW	1	11000	16840
127.32	FW	1	11000	16840
127.3	FW	1	11950	17780
127.24	FW	1	11950	17780
126.58	FW	1	11200	15729
125.56	FW	1	12475	17810
124.93	FW	1	12567	18886
124.88	FW	1	12567	18886
124.86	FW	1	12478	19170
124.85	FW	1	12478	19170
124.83	FW	1	12134	18877
124.78	FW	1	12134	18877
124.42	FW	1	12338	20334
122.45	FW	1	16777	21388
121.63	FW	1	19677	24546
120.87	FW		113195.4219331	25
119.69	FW		111740.1118355	39
118.66	FW		113289.1318112	82
117.17	FW		114644.9219079	15

116.26	FW	112012.2316988.05
114.94	FW	1 14480 17107
114.37	FW	1 14720 17255
113.29	FW	1 11877 15570
112.92	FW	1 11126 14179
112.91	FW	1 13430 16483
112.88	FW	1 13457 16458
112.86	FW	1 13511 16512
112.83	FW	1 14273 17320
112.8	FW	1 14273 17320
112.77	FW	1 14154 17096
112.72	FW	1 13615 16557
112.46	FW	1 13568 15834
112.17	FW	1 13303 15450
111.18	FW	1 1334216316.48
110.69	FW	1 11466 14165
109.87	FW	1 12956 16119
109.22	FW	1 14193 17538
108.57	FW	114546.8717280.01
107.88	FW	1 13828 16417
107.34	FW	1 14064 17627
106.69	FW	113529.3117864.05
105.88	FW	113743.39 17683.6
105.36	FW	115834.33 19297
104.59	FW	113718.1817202.81
104.03	FW	1 13700 17268
103.3	FW	1 14318 18210
102.89	FW	1 17687 21090
101.82	FW	1 15517 19825
101.48	FW	1 14893.8 19782.6
100.51	FW	114272.9917799.21
100.23	FW	1 14900 18661
99.18	FW	1 14714 20826
98.23	FW	1 14076 20826
98.19	FW	1 13909 20693
98.169	FW	1 13908.7 20514.7
98.12	FW	1 14112 20718
97.37	FW	1 12000 18100
96.6	FW	1 12300 17600
95.91	FW	113228.8817520.16
95.541	FW	1 14053 19214
95.54	FW	1 13953 19212
93.85	FW	1 17046 19061
92.89	FW	1 15110 17179
92.2	FW	1 15200 17150
91.48	FW	1 11968 14288
90.11	FW	1 13792.516627.67
89.24	FW	1 17057 21161
88.24	FW	1 17816 20540
87.45	FW	1 20732 23657
86.73	FW	1 20546 23972
85.95	FW	1 18864 23034
85.7	FW	1 20999 25109
84.85	FW	1 15027 18561
84.2	FW	1 17588 21670
83.08	FW	1 16417 20776
82.16	FW	1 16586 22193
81.59	FW	1 18793 23013
81.32	FW	1 19185 23588
80.2	FW	1 12000 17554

79.52	FW	1	16035	20721
79.01	FW	1	13500	18053
78.5	FW	1	13000	17960
77.99	FW	111898.0814888.81		
77.49	FW	1	11600	15174
77.06	FW	1	11548	13937
76.77	FW	1	11541	15594
76.51	FW	1	11012	14595
76.15	FW	1	1101216048.84	
76.12	FW	1	1133416370.17	
76.1	FW	111634.9515127.66		
76.06	FW	1	10968	14640
75.84	FW	1	1073115237.19	
75.58	FW	1	15156	19780
75.07	FW	114978.0619456.14		
74.71	FW	113342.8417107.24		
74.27	FW	1	13902	17310
73.55	FW	1	12687	17648
73.09	FW	1	15083	20157
72.77	FW	1	16325	20594
71.96	FW	1	15588	21664
70.98	FW	1	15366	21709
69.16	FW	1	11039	18223
68.53	FW	1	13250	18969
66.47	FW	1	17087	24124

FLOW DATA

Flow Title: Floodway

Flow File : C:\Users\TravisCovington\OneDrive - Covington Engineering
Services\Documents\PROJECTS\No Rise\FL00033 - EUBANKS\DWGS\HEC-RAS\POST
DEVELOPMENT\POST.f02

Flow Data (cfs)

River	Reach	RS	100 Year	FW
Santa Fe	Main	79.85	374	374
Santa Fe	Main	73.36	2965	2965
Santa Fe	Main	67.11	4665	4665
Santa Fe	Main	57.21	8767	8767
Santa Fe	Main	49.61	25162	25162
Santa Fe	Main	44.02	23767	23767
Santa Fe	Main	39.81	32800	32800
Santa Fe	Main	37.25	32569	32569
Santa Fe	Main	33.85	24427	24427
Santa Fe	Main	28.94	23206	23206
Santa Fe	Main	27.79	20910	20910
Santa Fe	Main	25.19	19587	19587
Santa Fe	Main	19.62	16717	16717
Santa Fe	Main	15.66	16359	16359
Suwannee	WtoSF	127.51	76500	76500
Suwannee	WtoSF	124.93	71400	71400
Suwannee	WtoSF	112.92	69500	69500
Suwannee	WtoSF	106.69	67800	67800
Suwannee	WtoSF	101.82	66300	66300
Suwannee	WtoSF	98.23	64900	64900
Suwannee	WtoSF	91.48	63900	63900

Suwannee	WtoSF	86.73	63250	63250
Suwannee	WtoSF	82.16	62950	62950
Suwannee	WtoSF	76.12	62100	62100
Suwannee	WtoSF	70.98	62100	62100
Suwannee	BelowSF	65.66	67300	67300

Boundary Conditions

River	Reach	Profile	Upstream
Downstream			
Suwannee	BelowSF	100 Year	
Known WS = 1.87			
Suwannee	BelowSF	FW	
Known WS = 1.87			

Observed Water Surface Marks

River	Reach	RS	100 Year	FW
RIVER-1	Reach-1	97	58	
RIVER-1	Reach-1	96	58	
RIVER-1	Reach-1	95	57	
RIVER-1	Reach-1	94	56.9	
RIVER-1	Reach-1	93	56.9	
RIVER-1	Reach-1	92	56.9	
RIVER-1	Reach-1	91	56.8	
RIVER-1	Reach-1	90	56.8	
RIVER-1	Reach-1	89	56.8	
RIVER-1	Reach-1	88	56.8	
RIVER-1	Reach-1	87	56.7	
RIVER-1	Reach-1	86	56.6	
RIVER-1	Reach-1	85	56.5	
RIVER-1	Reach-1	84	56.3	
RIVER-1	Reach-1	83	56	
RIVER-1	Reach-1	82	55.8	
RIVER-1	Reach-1	81	55.2	
RIVER-1	Reach-1	80	55	
RIVER-1	Reach-1	79	54.7	
RIVER-1	Reach-1	78	54.2	
RIVER-1	Reach-1	77	54	
RIVER-1	Reach-1	76	53.8	
RIVER-1	Reach-1	75	53.3	
RIVER-1	Reach-1	74	53	
RIVER-1	Reach-1	73	52.9	
RIVER-1	Reach-1	72	52.5	
RIVER-1	Reach-1	71	52.1	
RIVER-1	Reach-1	70	52	
RIVER-1	Reach-1	69	51.5	
RIVER-1	Reach-1	68	51.2	
RIVER-1	Reach-1	67	51	
RIVER-1	Reach-1	66	51	
RIVER-1	Reach-1	65	50.8	
RIVER-1	Reach-1	64	50.2	
RIVER-1	Reach-1	63	49.9	
RIVER-1	Reach-1	62	49.8	
RIVER-1	Reach-1	61	49.6	
RIVER-1	Reach-1	60	49.6	
RIVER-1	Reach-1	59	49.5	

RIVER-1	Reach-1	58	48.8
RIVER-1	Reach-1	57	47.8
RIVER-1	Reach-1	56	47.2
RIVER-1	Reach-1	55	47.1
RIVER-1	Reach-1	54	47.1
RIVER-1	Reach-1	53	46.2
RIVER-1	Reach-1	52	45.8
RIVER-1	Reach-1	51	45.3
RIVER-1	Reach-1	50	45
RIVER-1	Reach-1	49	44.2
RIVER-1	Reach-1	48	43.8
RIVER-1	Reach-1	47	43
RIVER-1	Reach-1	46	42.2
RIVER-1	Reach-1	45	42
RIVER-1	Reach-1	44	41.5
RIVER-1	Reach-1	43	41.2
RIVER-1	Reach-1	42	40.8
RIVER-1	Reach-1	41	40.1
RIVER-1	Reach-1	40	39.5
RIVER-1	Reach-1	39	38.9
RIVER-1	Reach-1	38	38.5
RIVER-1	Reach-1	37	38.2
RIVER-1	Reach-1	36	37.8
RIVER-1	Reach-1	35	37.3
RIVER-1	Reach-1	34	37
RIVER-1	Reach-1	33	36.8
RIVER-1	Reach-1	32	36.5
RIVER-1	Reach-1	31	36.2
RIVER-1	Reach-1	30	36
RIVER-1	Reach-1	29	36
RIVER-1	Reach-1	28	35.9
RIVER-1	Reach-1	27	35.7
RIVER-1	Reach-1	26	35.6
RIVER-1	Reach-1	25	35.2
RIVER-1	Reach-1	24	35.1
RIVER-1	Reach-1	23	35.1
RIVER-1	Reach-1	22	35
RIVER-1	Reach-1	21	35
RIVER-1	Reach-1	20	35
RIVER-1	Reach-1	19	34.9
RIVER-1	Reach-1	18	34.8
RIVER-1	Reach-1	17	34.6
RIVER-1	Reach-1	16	34.2
RIVER-1	Reach-1	15	34
RIVER-1	Reach-1	14	33.9
RIVER-1	Reach-1	13	33.4
Upper Suwannee	Upper	112.932	58
Upper Suwannee	Upper	112.922	58
Upper Suwannee	Upper	112.912	57
Upper Suwannee	Upper	112.902	56.9
Upper Suwannee	Upper	112.892	56.9
Upper Suwannee	Upper	112.872	56.9
Upper Suwannee	Upper	112.842	56.8
Upper Suwannee	Upper	112.812	56.8
Upper Suwannee	Upper	112.802	56.8
Upper Suwannee	Upper	112.792	56.8
Upper Suwannee	Upper	112.782	56.7
Upper Suwannee	Upper	112.732	56.6
Upper Suwannee	Upper	112.472	56.5
Upper Suwannee	Upper	112.182	56.3

Upper Suwannee	Upper	111.192	56
Upper Suwannee	Upper	110.702	55.8
Upper Suwannee	Upper	109.882	55.2
Upper Suwannee	Upper	109.232	55
Upper Suwannee	Upper	108.582	54.7
Upper Suwannee	Upper	107.892	54.2
Upper Suwannee	Upper	107.352	54
Upper Suwannee	Upper	106.702	53.8
Upper Suwannee	Upper	105.892	53.3
Upper Suwannee	Upper	105.372	53
Upper Suwannee	Upper	104.602	52.9
Upper Suwannee	Upper	104.042	52.5
Upper Suwannee	Upper	103.312	52.1
Upper Suwannee	Upper	102.902	52
Upper Suwannee	Upper	101.832	51.5
Upper Suwannee	Upper	101.492	51.2
Upper Suwannee	Upper	100.521	51
Upper Suwannee	Upper	100.242	51
Upper Suwannee	Upper	99.192	50.8
Upper Suwannee	Upper	98.242	50.2
Upper Suwannee	Upper	98.202	49.9
Upper Suwannee	Upper	98.192	49.8
Upper Suwannee	Upper	98.186	49.6
Upper Suwannee	Upper	98.182	49.6
Upper Suwannee	Upper	98.132	49.5
Upper Suwannee	Upper	97.382	48.8
Upper Suwannee	Upper	96.611	47.8
Upper Suwannee	Upper	95.921	47.2
Upper Suwannee	Upper	95.551	47.1
Upper Suwannee	Upper	95.549	47.1
Upper Suwannee	Upper	93.860	46.2
Upper Suwannee	Upper	92.900	45.8
Upper Suwannee	Upper	92.210	45.3
Upper Suwannee	Upper	91.490	45
Upper Suwannee	Upper	90.120	44.2
Upper Suwannee	Upper	89.250	43.8
Upper Suwannee	Upper	88.250	43
Upper Suwannee	Upper	87.460	42.2
Upper Suwannee	Upper	86.740	42
Upper Suwannee	Upper	85.960	41.5
Upper Suwannee	Upper	85.710	41.2
Upper Suwannee	Upper	84.860	40.8
Upper Suwannee	Upper	84.210	40.1
Upper Suwannee	Upper	83.090	39.5
Upper Suwannee	Upper	82.170	38.9
Upper Suwannee	Upper	81.600	38.5
Upper Suwannee	Upper	81.330	38.2
Upper Suwannee	Upper	80.212	37.8
Upper Suwannee	Upper	79.532	37.3
Upper Suwannee	Upper	79.022	37
Upper Suwannee	Upper	78.512	36.8
Upper Suwannee	Upper	78.002	36.5
Upper Suwannee	Upper	77.502	36.2
Upper Suwannee	Upper	77.072	36
Upper Suwannee	Upper	76.782	36
Upper Suwannee	Upper	76.522	35.9
Upper Suwannee	Upper	76.162	35.7
Upper Suwannee	Upper	76.132	35.6
Upper Suwannee	Upper	76.122	35.2
Upper Suwannee	Upper	76.117	35.1

Upper Suwannee	Upper	76.112	35.1
Upper Suwannee	Upper	76.072	35
Upper Suwannee	Upper	75.852	35
Upper Suwannee	Upper	75.592	35
Upper Suwannee	Upper	75.082	34.9
Upper Suwannee	Upper	74.722	34.8
Upper Suwannee	Upper	74.282	34.6
Upper Suwannee	Upper	73.562	34.2
Upper Suwannee	Upper	73.102	34
Upper Suwannee	Upper	72.782	33.9
Upper Suwannee	Upper	71.972	33.4
Suwannee	UpstreamEnd	112.932	58
Suwannee	UpstreamEnd	112.922	58
Suwannee	UpstreamEnd	112.912	57
Suwannee	UpstreamEnd	112.902	56.9
Suwannee	UpstreamEnd	112.892	56.9
Suwannee	UpstreamEnd	112.872	56.9
Suwannee	UpstreamEnd	112.842	56.8
Suwannee	UpstreamEnd	112.812	56.8
Suwannee	UpstreamEnd	112.802	56.8
Suwannee	UpstreamEnd	112.792	56.8
Suwannee	UpstreamEnd	112.782	56.7
Suwannee	UpstreamEnd	112.732	56.6
Suwannee	UpstreamEnd	112.472	56.5
Suwannee	UpstreamEnd	112.182	56.3
Suwannee	UpstreamEnd	111.192	56
Suwannee	UpstreamEnd	110.702	55.8
Suwannee	UpstreamEnd	109.882	55.2
Suwannee	UpstreamEnd	109.232	55
Suwannee	UpstreamEnd	108.582	54.7
Suwannee	UpstreamEnd	107.892	54.2
Suwannee	UpstreamEnd	107.352	54
Suwannee	UpstreamEnd	106.702	53.8
Suwannee	UpstreamEnd	105.892	53.3
Suwannee	UpstreamEnd	105.372	53
Suwannee	UpstreamEnd	104.602	52.9
Suwannee	UpstreamEnd	104.042	52.5
Suwannee	UpstreamEnd	103.312	52.1
Suwannee	UpstreamEnd	102.902	52
Suwannee	UpstreamEnd	101.832	51.5
Suwannee	UpstreamEnd	101.492	51.2
Suwannee	UpstreamEnd	100.521	51
Suwannee	UpstreamEnd	100.242	51
Suwannee	UpstreamEnd	99.192	50.8
Suwannee	UpstreamEnd	98.242	50.2
Suwannee	UpstreamEnd	98.202	49.9
Suwannee	UpstreamEnd	98.192	49.8
Suwannee	UpstreamEnd	98.186	49.6
Suwannee	UpstreamEnd	98.182	49.6
Suwannee	UpstreamEnd	98.132	49.5
Suwannee	UpstreamEnd	97.382	48.8
Suwannee	UpstreamEnd	96.611	47.8
Suwannee	UpstreamEnd	95.921	47.2
Suwannee	UpstreamEnd	95.551	47.1
Suwannee	UpstreamEnd	95.549	47.1
Suwannee	UpstreamEnd	93.860	46.2
Suwannee	UpstreamEnd	92.900	45.8
Suwannee	UpstreamEnd	92.210	45.3
Suwannee	UpstreamEnd	91.490	45
Suwannee	UpstreamEnd	90.120	44.2

Suwannee	UpstreamEnd	89.250	43.8
Suwannee	UpstreamEnd	88.250	43
Suwannee	UpstreamEnd	87.460	42.2
Suwannee	UpstreamEnd	86.740	42
Suwannee	UpstreamEnd	85.960	41.5
Suwannee	UpstreamEnd	85.710	41.2
Suwannee	UpstreamEnd	84.860	40.8
Suwannee	UpstreamEnd	84.210	40.1
Suwannee	UpstreamEnd	83.090	39.5
Suwannee	UpstreamEnd	82.170	38.9
Suwannee	UpstreamEnd	81.600	38.5
Suwannee	UpstreamEnd	81.330	38.2
Suwannee	UpstreamEnd	80.212	37.8
Suwannee	UpstreamEnd	79.532	37.3
Suwannee	UpstreamEnd	79.022	37
Suwannee	UpstreamEnd	78.512	36.8
Suwannee	UpstreamEnd	78.002	36.5
Suwannee	UpstreamEnd	77.502	36.2
Suwannee	UpstreamEnd	77.072	36
Suwannee	UpstreamEnd	76.782	36
Suwannee	UpstreamEnd	76.522	35.9
Suwannee	UpstreamEnd	76.162	35.7
Suwannee	UpstreamEnd	76.132	35.6
Suwannee	UpstreamEnd	76.122	35.2
Suwannee	UpstreamEnd	76.117	35.1
Suwannee	UpstreamEnd	76.112	35.1
Suwannee	UpstreamEnd	76.072	35
Suwannee	UpstreamEnd	75.852	35
Suwannee	UpstreamEnd	75.592	35
Suwannee	UpstreamEnd	75.082	34.9
Suwannee	UpstreamEnd	74.722	34.8
Suwannee	UpstreamEnd	74.282	34.6
Suwannee	UpstreamEnd	73.562	34.2
Suwannee	UpstreamEnd	73.102	34
Suwannee	UpstreamEnd	72.782	33.9
Suwannee	UpstreamEnd	71.972	33.4

GEOMETRY DATA

Geometry Title: Updated 2005
Geometry File : C:\Users\TravisCovington\OneDrive - Covington Engineering Services\Documents\PROJECTS\No Rise\FL00033 - EUBANKS\DWGS\HEC-RAS\POST DEVELOPMENT\POST.g01

Reach Connection Table

River	Reach	Upstream Boundary	Downstream Boundary
Santa Fe	Main		Santa Fe
Suwannee	WtoSF		Santa Fe
Suwannee	BelowSF	Santa Fe	

CROSS SECTION

RIVER: Santa Fe

REACH: Main

RS: 14.08

CROSS SECTION OUTPUT Profile #100 Year

E.G. Elev (ft)	34.93	Element	Left OB	Channel	Right OB
Vel Head (ft)	0.06	Wt. n-Val.	0.280	0.045	0.280
W.S. Elev (ft)	34.88	Reach Len. (ft)	4700.00	5540.00	5500.00
Crit W.S. (ft)		Flow Area (sq ft)	17712.29	4456.98	5684.12
E.G. Slope (ft/ft)	0.000086	Area (sq ft)	17712.29	4456.98	5684.12
Q Total (cfs)	16359.00	Flow (cfs)	4399.23	10550.35	1409.42
Top Width (ft)	3125.71	Top Width (ft)	2150.88	207.00	767.83
Vel Total (ft/s)	0.59	Avg. Vel. (ft/s)	0.25	2.37	0.25
Max Chl Dpth (ft)	25.04	Hydr. Depth (ft)	8.23	21.53	7.40
Conv. Total (cfs)	1759668.0	Conv. (cfs)	473206.2	1134856.0	151605.2
Length Wtd. (ft)	5362.08	Wetted Per. (ft)	2151.28	208.14	769.31
Min Ch El (ft)	9.84	Shear (lb/sq ft)	0.04	0.12	0.04
Alpha	10.54	Stream Power (lb/ft s)	0.01	0.27	0.01
Frctn Loss (ft)	0.33	Cum Volume (acre-ft)	18591.63	10164.97	33810.86
C & E Loss (ft)	0.00	Cum SA (acres)	2014.05	302.06	1968.13

Warning: Divided flow computed for this cross-section.

CROSS SECTION OUTPUT Profile #FW

E.G. Elev (ft)	35.73	Element	Left OB	Channel	Right OB
Vel Head (ft)	0.06	Wt. n-Val.	0.280	0.045	0.280
W.S. Elev (ft)	35.67	Reach Len. (ft)	4700.00	5540.00	5500.00
Crit W.S. (ft)		Flow Area (sq ft)	14502.79	4621.94	6144.76
E.G. Slope (ft/ft)	0.000080	Area (sq ft)	14502.79	4621.94	6144.76
Q Total (cfs)	16359.00	Flow (cfs)	4028.77	10803.66	1526.57
Top Width (ft)	1883.00	Top Width (ft)	1026.00	207.00	650.00
Vel Total (ft/s)	0.65	Avg. Vel. (ft/s)	0.28	2.34	0.25
Max Chl Dpth (ft)	25.83	Hydr. Depth (ft)	14.14	22.33	9.45
Conv. Total (cfs)	1825717.0	Conv. (cfs)	449623.7	1205724.0	170369.6
Length Wtd. (ft)	5395.25	Wetted Per. (ft)	1038.31	208.14	653.28
Min Ch El (ft)	9.84	Shear (lb/sq ft)	0.07	0.11	0.05
Alpha	8.67	Stream Power (lb/ft s)	0.02	0.26	0.01
Frctn Loss (ft)	0.34	Cum Volume (acre-ft)	15218.92	10460.79	20593.58
C & E Loss (ft)	0.00	Cum SA (acres)	1052.63	302.22	849.66

CROSS SECTION

RIVER: Santa Fe

REACH: Main

RS: 13.03

CROSS SECTION OUTPUT Profile #100 Year

E.G. Elev (ft)	34.60	Element	Left OB	Channel	Right OB
Vel Head (ft)	0.04	Wt. n-Val.	0.280	0.045	0.280
W.S. Elev (ft)	34.56	Reach Len. (ft)	2046.07	3062.40	1811.28
Crit W.S. (ft)		Flow Area (sq ft)	16054.56	4773.25	18768.66
E.G. Slope (ft/ft)	0.000046	Area (sq ft)	16054.56	4773.25	18768.66
Q Total (cfs)	16359.00	Flow (cfs)	2261.27	9844.04	4253.69

Top Width (ft)	3890.61	Top Width (ft)	2474.55	165.00	1251.06
Vel Total (ft/s)	0.41	Avg. Vel. (ft/s)	0.14	2.06	0.23
Max Chl Dpth (ft)	40.67	Hydr. Depth (ft)	6.49	28.93	15.00
Conv. Total (cfs)	2410869.0	Conv. (cfs)	333248.9	1450742.0	626877.9
Length Wtd. (ft)	2637.88	Wetted Per. (ft)	2475.32	170.93	1251.93
Min Ch El (ft)	-6.11	Shear (lb/sq ft)	0.02	0.08	0.04
Alpha	15.09	Stream Power (lb/ft s)	0.00	0.17	0.01
Frctn Loss (ft)	0.12	Cum Volume (acre-ft)	16769.96	9578.02	32267.12
C & E Loss (ft)	0.00	Cum SA (acres)	1764.51	278.40	1840.67

CROSS SECTION OUTPUT Profile #FW

E.G. Elev (ft)	35.39	Element	Left OB	Channel	Right OB
Vel Head (ft)	0.05	Wt. n-Val.	0.280	0.045	0.280
W.S. Elev (ft)	35.33	Reach Len. (ft)	2046.07	3062.40	1811.28
Crit W.S. (ft)		Flow Area (sq ft)	6959.78	4901.36	16076.08
E.G. Slope (ft/ft)	0.000051	Area (sq ft)	6959.78	4901.36	16076.08
Q Total (cfs)	16359.00	Flow (cfs)	1339.37	10879.04	4140.59
Top Width (ft)	1832.00	Top Width (ft)	750.00	165.00	917.00
Vel Total (ft/s)	0.59	Avg. Vel. (ft/s)	0.19	2.22	0.26
Max Chl Dpth (ft)	41.44	Hydr. Depth (ft)	9.28	29.71	17.53
Conv. Total (cfs)	2279964.0	Conv. (cfs)	186669.0	1516218.0	577076.6
Length Wtd. (ft)	2663.17	Wetted Per. (ft)	757.31	170.93	930.50
Min Ch El (ft)	-6.11	Shear (lb/sq ft)	0.03	0.09	0.06
Alpha	9.61	Stream Power (lb/ft s)	0.01	0.20	0.01
Frctn Loss (ft)	0.12	Cum Volume (acre-ft)	14061.04	9855.20	19190.75
C & E Loss (ft)	0.00	Cum SA (acres)	956.82	278.57	750.74

CROSS SECTION

RIVER: Santa Fe

REACH: Main

RS: 12.45*

CROSS SECTION OUTPUT Profile #100 Year

E.G. Elev (ft)	34.48	Element	Left OB	Channel	Right OB
Vel Head (ft)	0.04	Wt. n-Val.	0.280	0.045	0.280
W.S. Elev (ft)	34.44	Reach Len. (ft)	4053.93	6067.60	3588.72
Crit W.S. (ft)		Flow Area (sq ft)	14016.42	5496.84	14792.01
E.G. Slope (ft/ft)	0.000044	Area (sq ft)	14016.42	5496.84	14792.01
Q Total (cfs)	16359.00	Flow (cfs)	2090.45	10955.70	3312.85
Top Width (ft)	3570.46	Top Width (ft)	2274.97	198.54	1096.95
Vel Total (ft/s)	0.48	Avg. Vel. (ft/s)	0.15	1.99	0.22
Max Chl Dpth (ft)	36.37	Hydr. Depth (ft)	6.16	27.69	13.48
Conv. Total (cfs)	2459332.0	Conv. (cfs)	314268.3	1647026.0	498037.2
Length Wtd. (ft)	5353.27	Wetted Per. (ft)	2275.48	201.10	1102.32
Min Ch El (ft)	-1.93	Shear (lb/sq ft)	0.02	0.08	0.04
Alpha	11.76	Stream Power (lb/ft s)	0.00	0.15	0.01
Frctn Loss (ft)	0.21	Cum Volume (acre-ft)	16063.72	9217.01	31569.37
C & E Loss (ft)	0.00	Cum SA (acres)	1652.97	265.62	1791.85

Warning: Divided flow computed for this cross-section.

CROSS SECTION OUTPUT Profile #FW

E.G. Elev (ft)	35.26	Element	Left OB	Channel	Right OB
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Vel Head (ft)	0.04	Wt. n-Val.	0.280	0.045	0.280
W.S. Elev (ft)	35.23	Reach Len. (ft)	4053.93	6067.60	3588.72
Crit W.S. (ft)		Flow Area (sq ft)	15826.27	5653.54	15660.44
E.G. Slope (ft/ft)	0.000039	Area (sq ft)	15826.27	5653.54	15660.44
Q Total (cfs)	16359.00	Flow (cfs)	2281.64	10719.10	3358.26
Top Width (ft)	3609.18	Top Width (ft)	2306.88	198.54	1103.76
Vel Total (ft/s)	0.44	Avg. Vel. (ft/s)	0.14	1.90	0.21
Max Chl Dpth (ft)	37.16	Hydr. Depth (ft)	6.86	28.48	14.19
Conv. Total (cfs)	2634170.0	Conv. (cfs)	367395.6	1726018.0	540755.9
Length Wtd. (ft)	5376.23	Wetted Per. (ft)	2307.40	201.10	1110.75
Min Ch El (ft)	-1.93	Shear (lb/sq ft)	0.02	0.07	0.03
Alpha	12.20	Stream Power (lb/ft s)	0.00	0.13	0.01
Frctn Loss (ft)	0.20	Cum Volume (acre-ft)	13525.90	9484.18	18530.92
C & E Loss (ft)	0.00	Cum SA (acres)	885.02	265.79	708.72

Warning: Divided flow computed for this cross-section.

CROSS SECTION

RIVER: Santa Fe

REACH: Main

RS: 11.3

CROSS SECTION OUTPUT Profile #100 Year

E.G. Elev (ft)	34.26	Element	Left OB	Channel	Right OB
Vel Head (ft)	0.03	Wt. n-Val.	0.280	0.045	0.280
W.S. Elev (ft)	34.23	Reach Len. (ft)	5900.00	6550.00	4400.00
Crit W.S. (ft)		Flow Area (sq ft)	12428.15	6796.34	13569.18
E.G. Slope (ft/ft)	0.000035	Area (sq ft)	12428.15	6796.34	13569.18
Q Total (cfs)	16359.00	Flow (cfs)	2027.40	11561.22	2770.38
Top Width (ft)	2491.64	Top Width (ft)	1362.25	265.00	864.39
Vel Total (ft/s)	0.50	Avg. Vel. (ft/s)	0.16	1.70	0.20
Max Chl Dpth (ft)	27.89	Hydr. Depth (ft)	9.12	25.65	15.70
Conv. Total (cfs)	2756964.0	Conv. (cfs)	341674.8	1948400.0	466889.4
Length Wtd. (ft)	6223.48	Wetted Per. (ft)	1362.74	265.67	865.99
Min Ch El (ft)	6.34	Shear (lb/sq ft)	0.02	0.06	0.03
Alpha	8.26	Stream Power (lb/ft s)	0.00	0.10	0.01
Frctn Loss (ft)	0.30	Cum Volume (acre-ft)	14833.18	8360.83	30401.09
C & E Loss (ft)	0.00	Cum SA (acres)	1483.72	233.34	1711.06

Warning: Divided flow computed for this cross-section.

CROSS SECTION OUTPUT Profile #FW

E.G. Elev (ft)	35.06	Element	Left OB	Channel	Right OB
Vel Head (ft)	0.03	Wt. n-Val.	0.280	0.045	0.280
W.S. Elev (ft)	35.03	Reach Len. (ft)	5900.00	6550.00	4400.00
Crit W.S. (ft)		Flow Area (sq ft)	9687.52	7007.72	11644.84
E.G. Slope (ft/ft)	0.000035	Area (sq ft)	9687.52	7007.72	11644.84
Q Total (cfs)	16359.00	Flow (cfs)	1790.02	12109.57	2459.41
Top Width (ft)	1615.00	Top Width (ft)	700.00	265.00	650.00
Vel Total (ft/s)	0.58	Avg. Vel. (ft/s)	0.18	1.73	0.21
Max Chl Dpth (ft)	28.69	Hydr. Depth (ft)	13.84	26.44	17.92
Conv. Total (cfs)	2769971.0	Conv. (cfs)	303093.5	2050440.0	416437.3
Length Wtd. (ft)	6267.96	Wetted Per. (ft)	712.97	265.67	669.36
Min Ch El (ft)	6.34	Shear (lb/sq ft)	0.03	0.06	0.04
Alpha	6.67	Stream Power (lb/ft s)	0.01	0.10	0.01

Frctn Loss (ft)	0.29	Cum Volume (acre-ft)	12338.67	8602.37	17406.14
C & E Loss (ft)	0.00	Cum SA (acres)	745.10	233.50	636.48

CROSS SECTION

RIVER: Santa Fe

REACH: Main

RS: 10.06

CROSS SECTION OUTPUT Profile #100 Year

E.G. Elev (ft)	33.96	Element	Left OB	Channel	Right OB
Vel Head (ft)	0.07	Wt. n-Val.	0.280	0.045	0.280
W.S. Elev (ft)	33.89	Reach Len. (ft)	5500.00	8600.00	6200.00
Crit W.S. (ft)		Flow Area (sq ft)	9619.86	5432.82	6129.22
E.G. Slope (ft/ft)	0.000068	Area (sq ft)	9619.86	5432.82	6129.22
Q Total (cfs)	16359.00	Flow (cfs)	2536.89	13003.49	818.62
Top Width (ft)	2550.91	Top Width (ft)	848.84	203.00	1499.07
Vel Total (ft/s)	0.77	Avg. Vel. (ft/s)	0.26	2.39	0.13
Max Chl Dpth (ft)	32.74	Hydr. Depth (ft)	11.33	26.76	4.09
Conv. Total (cfs)	1984803.0	Conv. (cfs)	307795.4	1577686.0	99321.6
Length Wtd. (ft)	7928.28	Wetted Per. (ft)	850.35	208.31	1500.26
Min Ch El (ft)	1.15	Shear (lb/sq ft)	0.05	0.11	0.02
Alpha	7.65	Stream Power (lb/ft s)	0.01	0.26	0.00
Frctn Loss (ft)	0.47	Cum Volume (acre-ft)	13340.03	7441.40	29406.22
C & E Loss (ft)	0.00	Cum SA (acres)	1333.98	198.15	1591.70

Warning: Divided flow computed for this cross-section.

CROSS SECTION OUTPUT Profile #FW

E.G. Elev (ft)	34.77	Element	Left OB	Channel	Right OB
Vel Head (ft)	0.07	Wt. n-Val.	0.280	0.045	0.280
W.S. Elev (ft)	34.70	Reach Len. (ft)	5500.00	8600.00	6200.00
Crit W.S. (ft)		Flow Area (sq ft)	9127.23	5596.54	3041.36
E.G. Slope (ft/ft)	0.000064	Area (sq ft)	9127.23	5596.54	3041.36
Q Total (cfs)	16359.00	Flow (cfs)	2553.23	13286.33	519.44
Top Width (ft)	1217.00	Top Width (ft)	581.00	203.00	433.00
Vel Total (ft/s)	0.92	Avg. Vel. (ft/s)	0.28	2.37	0.17
Max Chl Dpth (ft)	33.55	Hydr. Depth (ft)	15.71	27.57	7.02
Conv. Total (cfs)	2041087.0	Conv. (cfs)	318562.2	1657715.0	64809.8
Length Wtd. (ft)	7995.08	Wetted Per. (ft)	589.98	208.31	440.92
Min Ch El (ft)	1.15	Shear (lb/sq ft)	0.06	0.11	0.03
Alpha	5.41	Stream Power (lb/ft s)	0.02	0.26	0.00
Frctn Loss (ft)	0.47	Cum Volume (acre-ft)	11064.49	7654.74	16664.42
C & E Loss (ft)	0.00	Cum SA (acres)	658.35	198.32	581.78