

June 19, 1984


City Engineer's Office  
City Hall - Seventh Floor  
455 North Main St.  
Wichita, Ks. 67202

Subject: Brush Creek Addition  
Platted Floodway

Att'n: Mr. Chris Breitenstein

Dear Chris:

Attached herewith are selected exhibits which I furnished Baughman Co., P.A. to use in the defining a proposed platted floodway for Brush Creek Addition. Exhibit 1 is a copy of a section of Panel 150 of the Flood Boundary and Floodway Map by HNTB showing the location of Sections H and I with respect to Brush Creek Addition. Exhibit 2 is the Floodway Data Table for East Fork Chisholm Creek from the HNTB Flood Insurance Study Report. Exhibit 3 is the HNTB Summary of Discharges for East Fork Chisholm Creek. Exhibit 4 is the HEC-2 input table for cross sections H thru J reach of East Fork Chisholm Creek thru Brush Creek Addition. Exhibit 5 is a portion of HEC-2 output which locates the Regulatory Floodway boundaries thru the Brush Creek Addition and lists the Base Flood Elevation and Floodway Elevation at each cross section.



M. S. Mitchell  
Flood Plain Management & Land Development Specialist  
1215 Forest • Wichita, KS 67203  
(316) 265-9812

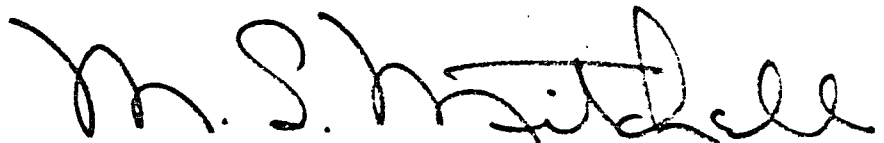
Brush Creek Addition  
Platted Floodway

Exhibit 6 is the HEC-2 input table from the G&O FIS and Exhibit 7 locates the Regulatory Floodway Boundary from the G&O study. Exhibit 8 is a comparison of output from the two Flood Insurance Studies for East Fork Chisholm Creek between Woodlawn Avenue and 37th Street North. Exhibit 9 is a table of ground point coordinates taken from the new topographic map at the locations of cross sections used in the two insurance studies. Exhibit 10 is a table of section properties for a channel improvement option considered by the Brush Creek developer. Exhibit 11 is a plot of cross sections at River Miles 12.12, 12.22, 12.32(I) and 12.353 showing the differences between ground points for the flood insurance cross sections and calculated regulatory floodway boundary locations for the HNTB and G&O studies. Superimposed on the cross sections is the location of the proposed platted floodway and the area outside the platted floodway which should be filled. Exhibit 12 shows the location of cross sections 12.12 thru 12.32, the RF boundaries for the two flood insurance studies and the proposed platted floodway.

The inconsistencies of the two flood insurance floodway widths and the fact that a future channel improvement which would pass the 100 year discharge (either 4030 cfs per G&O or 3440 cfs per HNTB) in a width approximately half the proposed platted floodway width of 350 feet were the main reasons for the recommendation submitted to your office. If further background information or calculations are needed, please advise.

Yours truly,

enc.  
MSM/e

A handwritten signature in black ink, appearing to read "M. S. Mitchell". The signature is written in a cursive style with a large, sweeping initial "M".

CITY OF ROCK  
AREA NOT INCLUDED

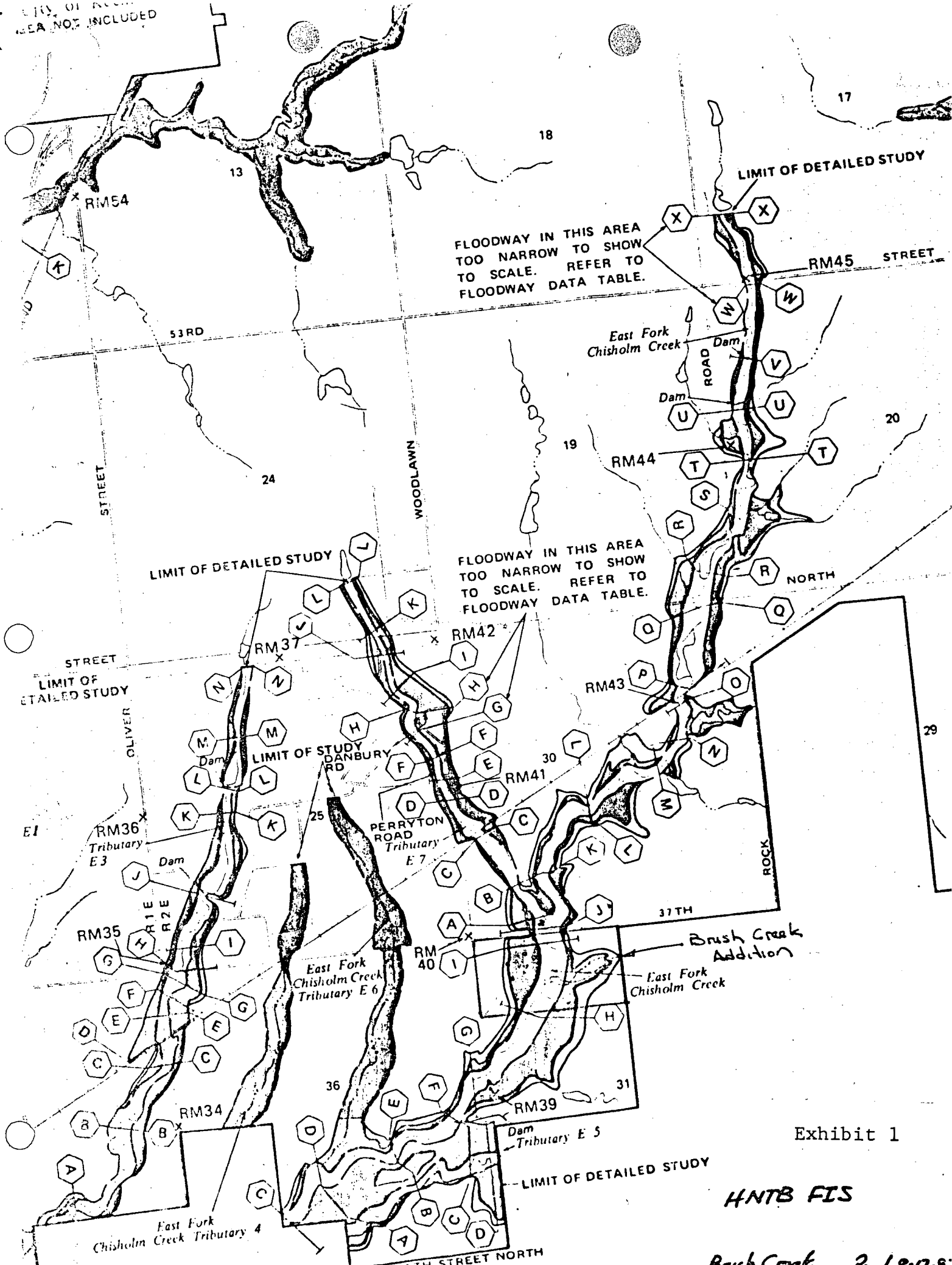


Exhibit 1

HNTB FIS

Brush Creek 2.10.20

HNTB FIS  
BRUSH CREEK  
10-1959

FLOODING SOURCE		FLOODWAY				BASE FLOOD WATER SURFACE ELEVATION			
CROSS SECTION	DISTANCE <sup>1</sup>	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/SEC.)	REGULATORY (NGVD)	WITHOUT FLOODWAY (NGVD)	WITH FLOODWAY (NGVD)	INCREASE (FEET)	
EAST FORK CHISOLM CREEK									
A	8.98	1160	3351	1.8	1339.5	1339.5	1340.4	0.9	
B	9.13	1150	3710	1.6	1340.1	1340.1	1340.7	0.6	
C	10.67	180	767	4.9	1349.9	1349.9	1349.9	0.0	
D	10.90	292	1595	2.3	1351.9	1351.9	1352.1	0.2	
E	11.24	186	1088	3.2	1353.3	1353.3	1353.7	0.4	
F	11.56	242	1463	2.4	1354.7	1354.7	1355.2	0.5	
G	11.72	386	1391	2.5	1356.9	1356.9	1357.8	0.9	
H	12.02	472	2199	1.6	1359.9	1359.9	1360.5	0.6	
I	12.32	403	1781	1.9	1361.0	1361.0	1361.5	0.5	
J	12.38	399	2652	1.3	1362.1	1362.1	1362.6	0.5	
K	12.61	250	1681	1.6	1362.3	1362.3	1362.9	0.6	
L	12.97	147	864	3.3	1363.2	1363.2	1363.5	0.3	
M	13.31	87	543	5.1	1365.7	1365.7	1366.2	0.5	
N	13.43	168	959	2.9	1366.9	1366.9	1367.4	0.5	
O	13.60	117	613	4.5	1367.7	1367.7	1368.2	0.5	
P	13.69	475	4280	0.6	1376.2	1376.2	1376.7	0.5	
Q	13.99	504	3285	0.3	1376.2	1376.2	1376.7	0.5	
R	14.14	368	1843	0.5	1376.3	1376.3	1376.8	0.5	
S	14.29	187	638	1.5	1376.4	1376.4	1376.9	0.5	
T	14.62	61	156	6.1	1378.2	1378.2	1378.8	0.6	
U	14.82	151	401	2.4	1383.3	1383.3	1383.4	0.1	
V	15.00	133	366	2.6	1388.9	1388.9	1389.6	0.7	
W	15.28	54	115	8.3	1394.5	1394.5	1394.8	0.3	
X	15.53	80	131	7.3	1401.9	1401.9	1402.4	0.5	

<sup>1</sup>MILES ABOVE MOUTH

FLOODWAY DATA  
EAST FORK CHISHOLM CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY  
Federal Insurance Administration  
COUNTY OF SEDGWICK, KS  
(UNINCORPORATED AREAS)

TABLE 3

HNTB FIS  
Brush Creek

TABLE 2: SUMMARY OF DISCHARGES (continued)

FLOODING SOURCE AND LOCATION	DRAINAGE AREA SQ MILES	PEAK DISCHARGES (CFS)		
		10-YEAR	50-YEAR	100-YEAR
PARK CITY TRIBUTARY Interstate Highway 135 Above mouth of Tributary P2	0.8 0.2	490 320	720 460	830 540
TRIBUTARY P2 At confluence with Park City Tributary	0.5	300	440	510
WEST FORK CHISHOLM CREEK At confluence with Chisholm Creek	8.3	2,710	4,930	6,040
MIDDLE FORK CHISHOLM CREEK Broadway Above mouth of Tributary M1 53rd Street North	13.4 11.7 9.5	3,280 2,990 2,580	5,000 5,280 4,570	5,000 6,190 5,360
TRIBUTARY M1 At confluence with Middle Fork Chisholm Creek Hydraulic Avenue	1.6 1.1	1,160 950	2,110 1,740	2,580 2,120
EASTFORK CHISHOLM CREEK Below Cross Section D Above Cross Section D Above confluence with Tributary E7 45th Street North	6.2 5.5 4.0 1.6	1,820 1,670 1,350 460	3,200 2,940 2,370 810	3,740 3,440 2,770 950
				500-YEAR
				1,090 780
				670
				9,250
				5,000 8,920 7,720
				3,900 3,230
				5,500 5,060
				4,070 1,390

HA	1348.400	10000.000	1358.200	10100.000	1357.400	10125.000	1352.400	7740.000	1358.400	7050.000
HA	1354.400	0165.000	1349.400	10215.000	1350.400	10225.000	1352.400	10140.000	1351.100	10150.000
GR	1360.400	0265.000	1356.400	10275.000	1357.400	10300.000	1358.400	10240.000	1353.400	10255.000
GR	1365.400	10370.000	1361.400	10420.000	1362.400	10475.000	1363.400	10315.000	1359.400	10320.000
GR	1365.400	10545.000	1366.400	10625.000	1367.400	10695.000	0.0	10495.000	1364.400	10515.000
X1	12.120	0.0	0.0	0.0	490.000	430.000	520.000	0.0	1.200	0.0
X1	12.220	0.0	0.0	0.0	490.000	430.000	520.000	0.0	1.200	0.0
NC	0.045	0.045	0.035	0.300	0.500	0.0	0.0	0.0	0.0	0.0
X1	12.320	29.000	10128.000	10249.000	490.000	430.000	520.000	0.0	0.0	0.0
GR	1367.400	0.0	1366.400	9690.000	1365.400	9750.000	1364.400	9780.000	1363.400	9900.000
GR	1362.500	9950.000	1362.500	10000.000	1362.100	10100.000	1360.900	10128.000	1356.000	10155.000
GR	1355.500	10170.000	1351.800	10178.000	1351.700	10208.000	1352.000	10233.000	1350.400	10249.000
GR	1360.500	10264.000	1357.900	10284.000	1357.600	10438.000	1359.200	10522.000	1359.600	10700.000
SR	1359.600	11000.000	1360.400	11040.000	1361.400	11080.000	1362.400	11115.000	1363.400	11180.000
SR	1364.400	11250.000	1365.400	11320.000	1366.400	11370.000	1367.400	11420.000	0.0	0.0
X1	12.353	17.000	10630.000	10679.000	191.000	191.000	191.000	0.0	0.0	0.0
X3	10.000	0.0	0.0	0.0	0.0	0.0	0.0	1359.100	1359.100	0.0
SR	1366.400	10072.000	1365.400	10142.000	1364.400	10202.000	1363.400	10232.000	1362.400	10352.000
SR	1361.500	10402.000	1361.100	10552.000	1359.900	10580.000	1355.000	10607.000	1354.500	10622.000
SR	1350.700	10630.000	1350.700	10679.000	1356.900	10701.000	1356.600	10890.000	1358.200	10974.000
SR	1358.600	11452.000	1370.000	11772.000	0.0	0.0	0.0	0.0	0.0	0.0
SR	1.250	1.600	2.700	0.0	32.000	10.000	252.000	1.020	0.0	0.0
(1)	12.355	0.0	0.0	0.0	90.000	90.000	90.000	0.0	0.0	0.0
(2)	0.0	0.0	1.000	1359.000	1359.300	0.0	0.0	0.0	0.0	0.0
(3)	10.000	0.0	0.0	0.0	0.0	0.0	0.0	1359.300	1360.000	0.0
IT	16.000	10072.000	1366.400	0.0	10142.000	1365.400	0.0	10202.000	1364.400	0.0
IT	10232.000	1363.400	0.0	10352.000	1362.400	0.0	10402.000	1361.500	0.0	10552.000
IT	1361.100	0.0	10580.000	1359.900	0.0	10507.000	1359.300	0.0	10622.000	1359.600
IT	0.0	10630.000	1360.000	0.0	10679.000	1360.000	0.0	10701.000	1360.600	0.0
IT	10890.000	1362.500	0.0	10974.000	1363.300	0.0	11452.000	1369.000	0.0	0.0
C	0.055	0.060	0.040	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I	12.380	33.000	10243.000	10326.000	44.000	44.000	44.000	0.0	0.0	0.0
R	1368.400	9490.000	1367.400	9520.000	1366.400	9590.000	1365.400	9740.000	1364.400	9840.000
R	1364.400	10000.000	1363.200	10100.000	1361.500	10200.000	1360.300	10243.000	1352.900	10263.000
R	1351.000	10296.000	1352.100	10314.000	1357.400	10326.000	1355.700	10436.000	1356.900	10486.000
R	1356.900	10695.000	1359.600	10709.000	1360.200	10740.000	1362.900	10770.000	1363.600	10800.000
R	1364.600	11009.000	1364.700	11060.000	1364.900	11120.000	1365.500	11171.000	1366.000	11296.000
R	1365.500	11302.000	1365.500	11320.000	1366.300	11417.000	1367.200	11425.000	1369.900	11520.000
R	1370.700	11693.000	1373.300	11708.000	1374.200	11720.000	0.0	0.0	0.0	0.0
C	0.050	0.060	0.060	0.100	0.300	0.0	0.0	0.0	0.0	0.0
T	4.000	1350.000	2370.000	2770.000	4070.000	0.0	0.0	0.0	0.0	0.0
I	12.430	21.000	10000.000	10207.000	290.000	260.000	280.000	0.0	0.0	0.0
R	1373.400	9580.000	1372.400	9710.000	1370.400	9820.000	1369.400	9880.000	1368.400	9945.000
R	1368.200	10000.000	1355.000	10015.000	1352.700	10018.000	1352.300	10045.000	1352.700	10074.000
R	1354.100	10085.000	1353.500	10110.000	1352.300	10182.000	1359.900	10206.000	1359.900	10207.000
R	1357.700	10211.000	1359.100	10330.000	1358.800	10430.000	1361.400	10515.000	1361.400	11080.000
R	1367.400	11500.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C	0.045	0.045	0.050	0.0	0.0	0.0	0.0	0.0	0.0	0.0

N<sup>o</sup> 1 EAST BRANCH - CHINDOLM CREEK - HNTB SODA CO. FIS

NO	CHANNEL LENGTH	IN EL OF ROADWAY	MAX EL OF LOW CHORD	MIN EL OF GROUND	DISCHARGE %CFS	CWSEL	EG	TOPWID	STENCL	STENCR	WSEL
11.79	62.00	0.0	0.0	1348.60	3440.00	1359.42	1606.31	1359.48	563.60	0.0	0.0
11.79	62.00	0.0	0.0	1348.60	3440.00	1360.06	1661.14	1360.12	321.95	10342.79	10670.00
11.79	62.00	0.0	0.0	1348.60	3440.00	1360.32	1681.07	1360.39	283.86	10381.93	10670.00
11.79	62.00	0.0	0.0	1348.60	3440.00	1360.63	1721.95	1360.70	256.93	10410.07	10670.00
12.02	1230.00	0.0	0.0	1348.40	3440.00	1359.92	1922.02	1359.96	983.68	0.0	0.0
12.02	1230.00	0.0	0.0	1348.40	3440.00	1360.53	1961.50	1360.57	471.62	9803.38	10275.00
12.02	1230.00	0.0	0.0	1348.40	3440.00	1360.79	1981.51	1360.83	395.10	9879.90	10275.00
12.02	1230.00	0.0	0.0	1348.40	3440.00	1361.08	2014.33	1361.13	338.12	9936.88	10275.00
12.12	520.00	0.0	0.0	1349.60	3440.00	1360.12	1232.29	1360.22	786.51	0.0	0.0
12.12	520.00	0.0	0.0	1349.60	3440.00	1360.72	1244.44	1360.83	214.73	10060.27	10275.00
12.12	520.00	0.0	0.0	1349.60	3440.00	1360.97	1249.83	1361.09	150.00	10125.00	10275.00
12.12	520.00	0.0	0.0	1349.60	3440.00	1361.26	1318.09	1361.36	150.00	10125.00	10275.00
12.22	520.00	0.0	0.0	1350.80	3440.00	1360.60	931.81	1360.76	545.39	0.0	0.0
12.22	520.00	0.0	0.0	1350.80	3440.00	1361.17	1020.90	1361.32	150.00	10125.00	10275.00
12.22	520.00	0.0	0.0	1350.80	3440.00	1361.41	1073.76	1361.55	150.00	10125.00	10275.00
12.22	520.00	0.0	0.0	1350.80	3440.00	1361.65	1128.48	1361.78	150.00	10125.00	10275.00
12.32	520.00	0.0	0.0	1351.70	3440.00	1361.00	1989.61	1361.07	938.70	0.0	0.0
12.32	520.00	0.0	0.0	1351.70	3440.00	1361.53	1997.48	1361.60	403.15	10128.00	10531.15
12.32	520.00	0.0	0.0	1351.70	3440.00	1361.73	1999.63	1361.82	339.30	10128.00	10467.30
12.32	520.00	0.0	0.0	1351.70	3440.00	1361.95	2006.11	1362.04	305.39	10128.00	10433.39
12.35	191.00	0.0	0.0	1350.70	3440.00	1361.08	3308.25	1361.11	969.27	0.0	0.0
12.35	191.00	0.0	0.0	1350.70	3440.00	1361.62	3344.97	1361.65	695.20	10629.63	11324.82
12.35	191.00	0.0	0.0	1350.70	3440.00	1361.84	3218.51	1361.87	608.13	10630.00	11238.13
12.35	191.00	0.0	0.0	1350.70	3440.00	1362.06	3223.27	1362.09	536.54	10630.00	11166.54
12.35	90.00	0.0	0.0	1350.70	3440.00	1362.12	4763.08	1362.13	1183.77	0.0	0.0
12.35	90.00	0.0	0.0	1350.70	3440.00	1362.65	4808.64	1362.67	750.89	10620.78	11371.68
12.35	90.00	0.0	0.0	1350.70	3440.00	1362.88	4654.12	1362.89	705.25	10630.00	11335.25
12.35	90.00	0.0	0.0	1350.70	3440.00	1363.09	4663.70	1363.11	643.49	10630.00	11273.49
12.38	44.00	0.0	0.0	1351.00	3440.00	1362.11	2727.58	1362.14	597.91	0.0	0.0
12.38	44.00	0.0	0.0	1351.00	3440.00	1362.65	2730.02	1362.68	398.61	10243.00	10641.61
12.38	44.00	0.0	0.0	1351.00	3440.00	1362.87	2738.27	1362.91	371.46	10243.00	10614.46
12.38	44.00	0.0	0.0	1351.00	3440.00	1363.09	2742.76	1363.13	346.54	10243.00	10589.54
12.43	280.00	0.0	0.0	1352.30	2770.00	1362.17	2360.28	1362.19	1126.37	0.0	0.0
12.43	280.00	0.0	0.0	1352.30	2770.00	1362.70	2378.69	1362.72	371.71	10000.00	10377.96
12.43	280.00	0.0	0.0	1352.30	2770.00	1362.93	2387.19	1362.95	324.46	10000.00	10330.46
12.43	280.00	0.0	0.0	1352.30	2770.00	1363.14	2395.98	1363.17	291.55	10000.00	10297.30
12.61	950.00	0.0	0.0	1353.00	2770.00	1362.34	1555.95	1362.39	438.04	0.0	0.0
12.61	950.00	0.0	0.0	1353.00	2770.00	1362.86	1764.72	1362.90	250.00	10200.00	10450.00
12.61	950.00	0.0	0.0	1353.00	2770.00	1363.07	1857.73	1363.11	250.00	10200.00	10450.00
12.61	950.00	0.0	0.0	1353.00	2770.00	1363.29	1951.74	1363.33	250.00	10200.00	10450.00

MIN ELEV 1348.4 @ 10.135  
MIN ELEV 1348.4 @ 10.135  
MIN ELEV 1351.70 @ 10.208  
MIN ELEV 1351.70 @ 10.208



12.120	.000	7.100	.000	490.000	430.000	925.000	10275.000	1.200	.000
12.220	.000	.000	.000	490.000	430.000	520.000	.000	1.200	.000
10.045	.000	.000	.000	.000	.000	.000	.000	.000	.000
.000	.000	7.100	.000	.000	.000	10128.000	10478.000	.000	.000
12.320	29.000	10128.000	10249.000	490.000	430.000	530.000	.000	.000	.000
1357.400	9220.000	11762.000	9790.000	1332.7000	10100.0000	1330.0000	9790.0000	1357.4000	9220.0000
1352.500	10170.000	11517.0000	10000.0000	1357.6000	10233.0000	1352.5000	10128.0000	1352.5000	10170.0000
1355.500	11000.000	11520.0000	11000.0000	1361.4000	11030.0000	1355.5000	10522.0000	1355.5000	11000.0000
1352.400	11250.000	11520.0000	11320.0000	1366.4000	11137.0000	1352.4000	11115.0000	1352.4000	11250.0000
.000	.000	7.100	.000	.000	.000	10630.000	11090.000	.000	.000

37TH ST. N.

12.350	17.000	10670.000	10679.000	191.000	191.000	191.000	.000	.000	.000
10.000	1072.000	1369.4000	10142.0000	134.4000	10202.0000	1343.4000	1359.1000	1369.4000	1072.0000
1390.500	10402.000	1350.7000	10352.0000	1358.5000	10701.0000	1355.6000	10690.0000	1358.5000	10402.0000
1355.100	11452.000	1370.7000	11172.0000	32.0000	10.0000	252.0000	1.0000	32.0000	11452.0000
12.350	.000	.000	1359.000	90.000	90.000	90.000	.000	.000	.000
10.000	.000	1.000	.000	139.000	1365.000	.000	.000	1364.000	.000
10225.000	1072.000	1366.4000	10352.0000	10142.0000	1365.0000	10402.0000	1359.1000	10225.0000	1072.0000
1361.100	1363.000	10980.0000	10359.0000	1362.0000	10607.0000	1359.0000	10701.0000	1362.0000	1363.0000
10890.000	.000	7.100	.000	10679.000	10974.0000	11452.0000	10543.0000	10679.0000	.000

12.400	30.000	10477.4000	10320.0000	44.000	44.000	44.000	.000	.000	.000
10.000	30.000	1352.4000	10510.0000	1361.5000	10320.0000	1355.7000	9740.0000	1361.5000	30.000
1351.000	10000.000	1352.4000	10314.0000	1357.0000	10320.0000	1355.7000	10273.0000	1357.0000	10000.0000
1364.500	11000.000	1364.5000	10760.0000	1364.5000	11120.0000	1364.5000	10771.0000	1364.5000	11000.0000
1365.500	11000.000	1365.5000	11060.0000	1364.5000	11147.0000	1365.5000	11142.0000	1364.5000	11000.0000



Brush Creek Subdivision  
East Fork of Chisholm Creek

Flood Insurance		Comparison of Flood Insurance Studies					
S'ly By	Section Woodlawn	100 Q	100 YR WS		FLDY	FLDY	MEAN
		(cfs)	W/FLDY	W/FLDY	WIDTH	AREA	VEL
			(MSL Elev)		(feet)	(Sq.ft)	(fps)
HNTB		3440	1358.34	1359.20	62		
G&O	(17%)	4030	1360.2	1360.7	400	2298	1.8
	11.790						
HNTB		3440	1359.42	1360.06	322		
G&O		4030	1360.2	1360.7	349	2056	2.0
	H 12.02						
HNTB		3440	1359.92	1360.5	472	2199	1.6
G&O		4030	1360.6	1361.2	350	2118	1.9
	Repeat H @ 12.12						
HNTB		3440	1360.12	1360.72	215		
G&O		4030	1360.8	1361.4	350	1783	2.3
	Repeat H @ 12.22						
HNTB		3440	1360.6	1361.2	150		
G&O		4030	1361.2	1361.8	350	1504	2.7
	I @ 12.32						
HNTB		3440	1361.0	1361.53	403	1781	1.9
G&O		4030	1361.5	1362.1	350	1845	2.2
	12.353						
HNTB		3440	1361.08	1361.62	695		
G&O		4030	1361.6	1362.2	450	2609	1.5
	37th St 12.355						
HNTB		3440	1362.12	1362.65	751		
G&O		4030	1362.5	1362.7	450	2821	1.4

Exhibit 8

M.M. - May 1982

Brush Creek Subdivision

11-26  
12:00

East Branch Chisholm Creek - X-Sections from new topographic map

X-Section 11.79

GR	1355.4	725	1356.0	780	1356.2	865	1356.4	1000
GR	1356.0	1095	1354.0	1105	1352.0	1110	1350.0	1115
GR		1125		1150	1350.0	1155	1352.0	1160
GR	1354.0	1165	1356.0	1170	1358.0	1175	1360.0	1180
GR	1361.0	1195	1361.3	1212				

X-Section H E 12.02 ✓

GR	1361.0	0	1360.0	100	1358.0	350	1357.5	490
GR	1357.5	600	1357.5	710	1358.0	800	1358.9	855
GR	1358.0	880	1356.0	900	1354.0	915	1352.0	935
GR	1350.0	940		945		955	1350.0	960
GR	1352.0	1000	1354.0	1040	1356.0	1055	1358.0	1070
GR	1360.0	1135	1362.0	1175				

X-Section 12.12 ✓

GR		0	1361.0	10	1360.3	55	1360.0	200
GR	1358.9	455	1358.0	610	1357.7	665	1358.0	700
GR	1358.0	720	1356.0	730	1354.0	740	1352.0	780
GR	1350.0	790		795		800	1350.0	805
GR	1352.0	820	1354.0	860	1356.0	870	1358.0	880
GR	1358.0	910	1356.0	990	1354.0	1010		1040
GR	1354.0	1055	1356.0	1080	1358.0	1110		1130
GR	1362.0	1170						

Brush Creek Subdivision

2-5

East Branch of Chisholm Creek - X-Sections from new topographic map

	X-Section		12.22					
GR	1362.0	0	1360.4	160	1360.0	380	1358.0	400
GR	1356.0	410	1354.0	420	1352.0	430	FL	440
GR	1352.0	445	1354.0	455	1354.0	490	1352.0	535
GR		540		545	1352.0	555	1354.0	560
GR	1356.0	565	1358.0	570	1360.0	590	1360.0	600
GR	1358.8	720	1358.0	840	1357.0	930	1358.0	1025
GR	1360.0	1120	1362.0	1250				

X-Section I @ 12.32

GR	1364.0	0	1363.2	30	1362.0	220	1360.0	250
GR	1360.0	275	1358.0	277	1356.0	285	1354.0	290
GR	1354.0	295	1352.0	300		310		315
GR	1352.0	325	1354.0	345	1354.0	390	1356.0	450
GR	1358.0	470	1358.9	610	1359.2	820	1359.2	980
GR	1359.4	1100	1360.0	1125	1360.6	1160	1362.0	1220
GR	1362.0	1240	1362.0	1270	1364.0	1390		

X-Section 12.353

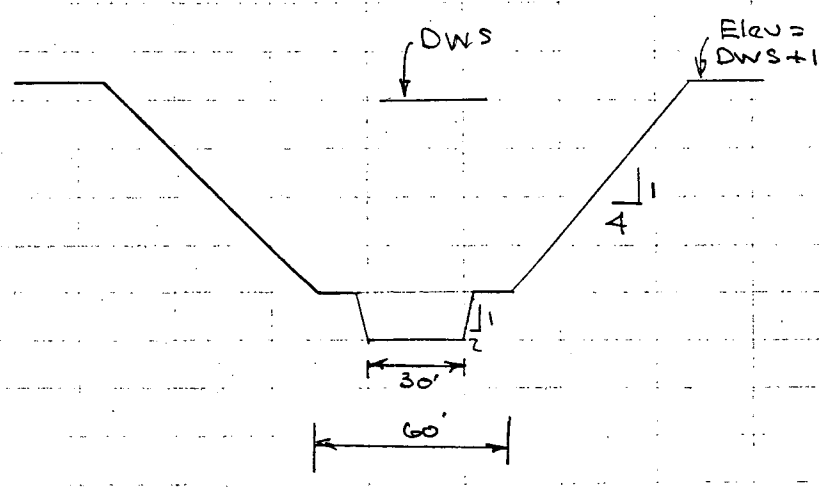
GR	1365.0	0	1364.0	120	1363.2	205	1362.0	270
	1362.0	335	1360.0	340	1358.0	355	1358.0	435
	1356.0	445	1354.0	450	1352.0	460		480
	1352.0	505	1354.0	515	1356.0	517	1358.0	520
	1360.0	525	1360.0	570	1358.0	665	1358.0	690
	1360.0	810	1360.0	890	1359.2	950	1360.0	1050
	1360.0	1080	1360.0	1215	1362.0	1300	1364.0	1375

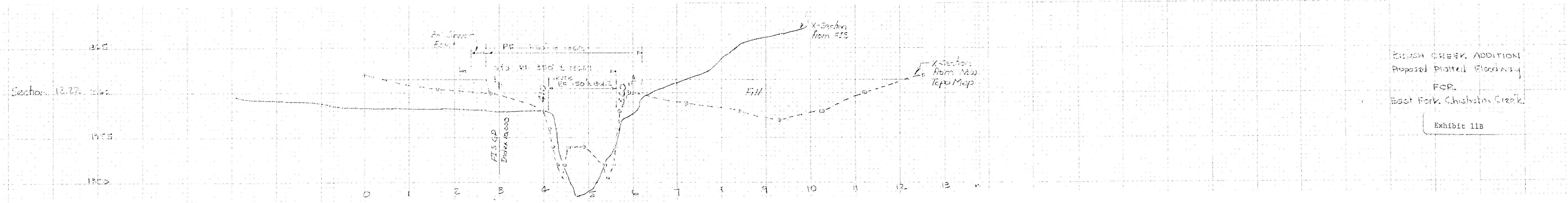
Exhibit 9B

Q=4030 cfs

① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩

Station	FL Elev	WS Elev	Total Depth FT	Main Chan Depth FT	Main Chan Depth +1' FB	Colb x 4 = 2 x 2	Top Width Ft	Main Access Ft	Colb x 2 Ft	Total R/W Width Ft	
1+00	47.63	58.95	11.32	9.32	10.32	41.28	82.56	14.3	15	30	173
3+00	47.88	59.03	11.15	9.15	10.15	40.6	81.2	14.1	15	30	171
5+00	48.13	59.12	10.99	8.99	9.99	39.96	79.92	14.0	15	30	170
7+00	48.38	59.24	10.86	8.86	9.86	39.44	78.88	13.9	15	30	169
9+00	48.63	59.35	10.72	8.72	9.72	38.88	77.76	13.8	15	30	168
11+00	48.89	59.47	10.58	8.58	9.58	38.32	76.64	13.7	15	30	167





BIJOSH CREEK ADDITION  
 Proposed Platted Floodway  
 FOR  
 East Fork Chisholm Creek

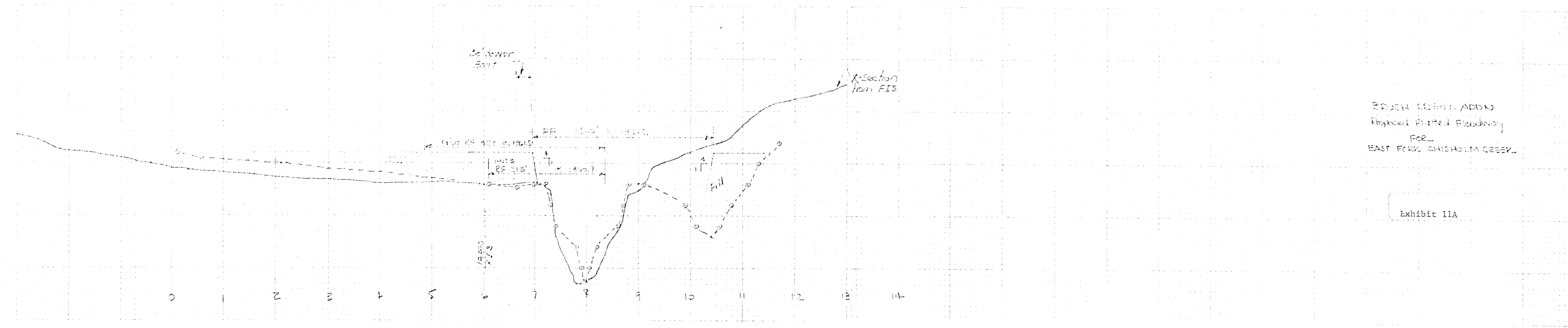
Exhibit 11B

Section 12.12 1360

Section 12.12 1360

1355

1350



BRUSH CREEK ADDN  
Proposed Floodway  
FOR  
EAST FORK CHISHOLM CREEK

Exhibit 11A

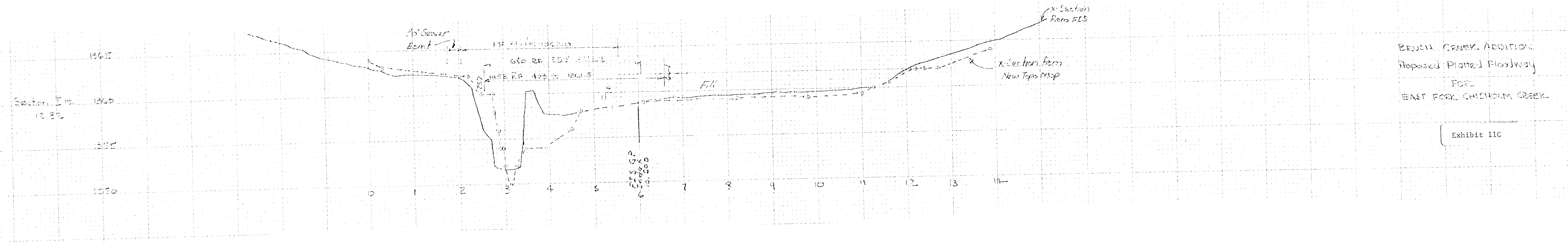


Exhibit 11C

NO. 1254  
CLEARPRINT

5

BRUSH CREEK ASSDN  
Proposed Flatted Floodway  
FOOT  
EAST FORK CHISHOLM CREEK  
Exhibit IID

20

9

8

7

6

5

4

3

2

1

10

9

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7

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5

4

3

2

1

0

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4

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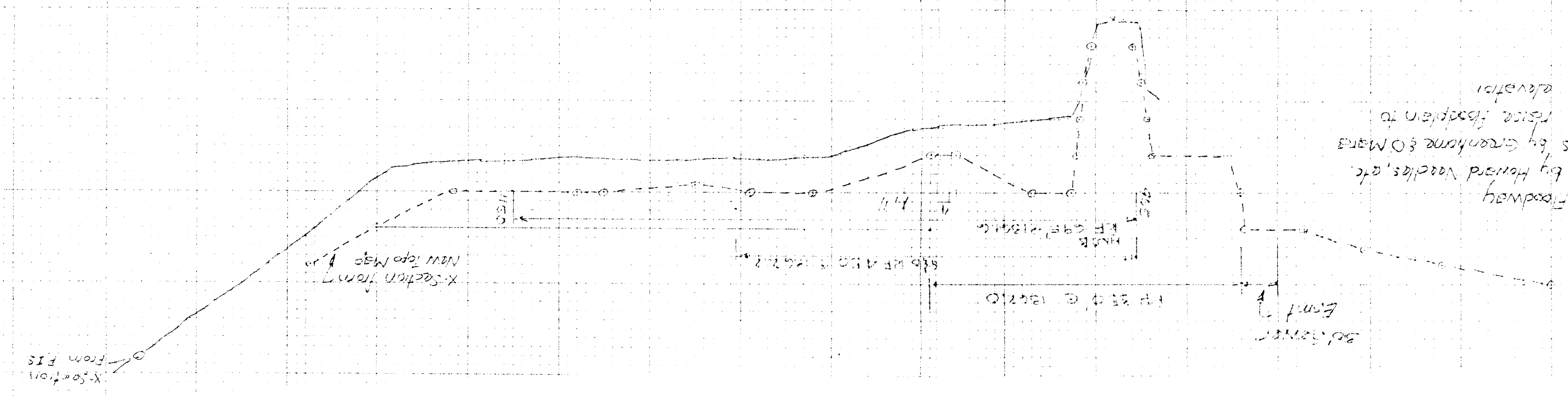
6

7

8

9

10



PF - Proposed Flatted Floodway  
 HNTB - Floodway per FIS by Howard Needles, etc.  
 GSD - Floodway per FIS by Greenhorne & O'Mara  
 Fill - Proposed fill to raise floodway to  
 FIS Floodway elevation

FIS 48  
 Index  
 10,700



NO. 1254 - GROSS SECTION 10 x 10  
 CLEARPRINT PAPER CO.  
 MADE IN U.S.A.

Section 12.553.240  
 1250  
 1240  
 1230  
 1220  
 1210