DESIGN PLAN

FOR

SOUTH CANYON/LIME CREEK DRAINAGE BASIN

VOLUME 2 OF 2
APPENDIX C & APPENDIX D

MARCH, 1990

PREPARED FOR:

CITY OF RAPID CITY

RAPID CITY, SOUTH DAKOTA

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APPENDIX C

EXISTING LAND USE
AND
EXISTING HYDRAULIC CONDITION COMPUTER PRINTOUTS

This appendix contains complete existing land use and existing hydraulic condition computer printouts. Printouts for both the CUHPE/PC and the UDSWM2-PC model are included.

APPENDIX C - CUHPE/PC - 10 YR

EXISTING LAND USE
AND EXISTING HYDRAULIC CONDITIONS

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE AT TIME

CUHPE/PC VERSION MODIFIED IN JANUARY 1985

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

SOUTH CANYON-LIME CREEK DRAINAGE DESIGN PLAN BY FMG, INC

BASIN ID: -- BASIN COMMENT: BASIN 1 EXISTING CONDITIONS

AREA OF BASIN (SQMI)	LENGTH OF BASIN (MI)	DIST TO CENTROID (MI)	IMPERVIOUS AREA (PCT)	SLOPE (FT/FT)	UNIT DURATION (MIN)
.19	.64	.27	22.00	.0143	5.00

COEFFICIENT (REFLECTING TIME TO PEAK)	COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF)
.108	.259

CALCULATED UNIT HYDROGRAPH

TIME TO PEAK (MIN)	PEAK RATE OF RUNOFF (CFS/SQMI)	UNIT HYDROGRAP PEAK (CFS)	VOLUME OF RUNOFF (AF)
10.22	1289.43	246.28	10.19

WIDTH AT 50 = 23. MIN. WIDTH AT 75 = 12. MIN. K50 = .26 K75 = .36

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. = .40 IN. MAX. IMPERVIOUS RET. = .08 IN.
INFILTRATION = 4.20 IN./HR. DECAY = .00180/SECOND FNINFL = .60 IN./HR.

TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH
0.	0.	35.	90.	70.	21.
5.	158.	40.	73.	75.	17.
10.	246.	45.	60.	80.	14.
15.	210.	50.	48.	85.	11.
20.	171.	55.	39.	90.	9.
25.	139.	60.	32.	95.	8.
30.	110.	65.	26.	100.	0.

1 BASIN ID: -- BASIN COMMENT: BASIN 1 EXISTING CONDITIONS

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 10

TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)	*	TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)	*
0.	.00	.000	0.	*	85.	.04	.007	39.	*
5.	.04	.000	0.	*	90.	.04	.007	33.	*
10.	.07	.005	1.	*	95.	.04	.007	29.	*
15.	.15	.032	6.	*	100.	.04	.007	26.	*
20.	.28	.058	18.	*	105.	.04	.007	23.	*
25.	.47	.251	62.	*	110.	.04	.007	21.	*
30.	.22	.170	107.	*	115.	.03	.007	18.	*
35.	.10	.057	119.	*	120.	.02	.005	15.	*
40.	.08	.036	111.	*	125.	.00	.000	12.	*
45.	.07	.029	99.	*	130.	.00	.000	9.	*
50.	.06	.018	86.	*	135.	.00	.000	7.	*
55.	.06	.019	75.	*	140.	.00	.000	6.	*
60.	.06	.019	67.	*	145.	.00	.000	5.	*
65.	.06	.020	60.	*	150.	.00	.000	4.	*
70.	.06	.020	54.	*	155.	.00	.000	3.	*
75.	.06	.020	50.	*	160.	.00	.000	2.	*
80.	.05	.010	44.	*	165.	.00	.000	2.	*

TOTAL PRECIP. = 2.15 (1-HOUR RAIN = 1.86) EXECESS PRECIP. = .819 INCHES
VOLUME OF EXCESS PRECIP = 8. ACRE-FEET
PEAK Q = 119. CFS TIME OF PEAK = 35. MIN.
INFILT.= 4.20 IN/HR DECAY = .00180 FNINF = .60 IN/HR
MAX.PERV.RET.= .40 IN. MAX.IMP.RET.= .08 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE AT TIME

CUHPE/PC VERSION MODIFIED IN JANUARY 1985

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

SOUTH CANYON-LIME CREEK DRAINAGE DESIGN PLAN BY FMG, INC

BASIN ID: -- BASIN COMMENT: BASIN 2 EXISTING CONDITIONS

AREA OF BASIN (SQMI)	LENGTH OF BASIN (MI)	DIST TO CENTROID (MI)	IMPERVIOUS AREA (PCT)	SLOPE (FT/FT)	UNIT DURATION (MIN)
.05	.66	.36	17.00	.0396	5.00

COEFFICIENT (REFLECTING TIME TO PEAK)	COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF)
.115	.196

CALCULATED UNIT HYDROGRAPH

TIME TO PEAK	TIME OF CONCENTRATION	PEAK RATE OF RUNOFF	UNIT HYDROGRAPH PEAK	VOLUME OF RUNOFF

(MIN)	(MIN)	(CFS/SQMI)	(CFS)	(AF)
6.10	22.00	2087.35	108.54	2.77

*** NOTE : THE TIME TO PEAK IS CALCULATED BASED ON THE TIME OF CONCENTRATION PROVIDED BY THE USER, REPLACING THE ONE COMPUTED BY CUHPD (TP= 9.98)

WIDTH AT 50 = 14. MIN. WIDTH AT 75 = 7. MIN. K50 = .25 K75 = .35

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. = .35 IN. MAX. IMPERVIOUS RET. = .09 IN.
INFILTRATION = 4.00 IN./HR. DECAY = .00180/SECOND FNINFL = .60 IN./HR.

TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH
0.	0.	20.	45.	40.	13.
5.	104.	25.	33.	45.	10.
10.	85.	30.	25.	50.	0.
15.	63.	35.	18.	0.	0.

1 BASIN ID: -- BASIN COMMENT: BASIN 2 EXISTING CONDITIONS

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 10

TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)	TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)
0.	.00	.000	0.	65.	.06	.017	13.
5.	.04	.000	0.	70.	.06	.017	9.
10.	.07	.003	0.	75.	.06	.017	8.
15.	.15	.025	3.	80.	.05	.008	6.
20.	.28	.045	7.	85.	.04	.006	5.
25.	.47	.287	35.	90.	.04	.006	4.
30.	.22	.168	46.	95.	.04	.006	3.
35.	.10	.055	41.	100.	.04	.006	3.
40.	.08	.034	34.	105.	.04	.006	3.
45.	.07	.026	28.	110.	.04	.006	3.
50.	.06	.016	22.	115.	.03	.005	2.
55.	.06	.017	18.	120.	.02	.004	2.
60.	.06	.017	15.	125.	.00	.000	1.

TOTAL PRECIP. = 2.15 (1-HOUR RAIN = 1.86) EXECESS PRECIP. = .794 INCHES
VOLUME OF EXCESS PRECIP = 2. ACRE-FEET
PEAK Q = 46. CFS TIME OF PEAK = 30. MIN.
INFILT.= 4.00 IN/HR DECAY = .00180 FNINF = .60 IN/HR
MAX.PERV.RET.= .35 IN. MAX.IMP.RET.= .09 IN.

RATIONAL FORMULA C = .37
I = 3.5 INCHES/HOUR
A = 33.3 ACRES
Q = 43. CFS

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE AT TIME

CUHPE/PC VERSION MODIFIED IN JANUARY 1985

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

SOUTH CANYON-LIME CREEK DRAINAGE DESIGN PLAN BY FMG, INC

BASIN ID: -- BASIN COMMENT: BASIN 3 EXISTING CONDITIONS

AREA OF BASIN (SQMI)	LENGTH OF BASIN (MI)	DIST TO CENTROID (MI)	IMPERVIOUS AREA (PCT)	SLOPE (FT/FT)	UNIT DURATION (MIN)
.14	.78	.45	14.50	.0268	5.00

COEFFICIENT (REFLECTING TIME TO PEAK)	COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF)
.118	.221

CALCULATED UNIT HYDROGRAPH

TIME TO PEAK (MIN)	PEAK RATE OF RUNOFF (CFS/SQMI)	UNIT HYDROGRAP PEAK (CFS)	VOLUME OF RUNOFF (AF)
12.74	828.25	117.61	7.57

WIDTH AT 50 = 36. MIN. WIDTH AT 75 = 19. MIN. K50 = .21 K75 = .29

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. = .38 IN. MAX. IMPERVIOUS RET. = .08 IN.
INFILTRATION = 3.90 IN./HR. DECAY = .00180/SECOND FNINFL = .55 IN./HR.

TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH
0.	0.	45.	54.	90.	19.
5.	57.	50.	48.	95.	17.

10.	111.	*	55.	43.	*	100.	15.	*
15.	114.	*	60.	38.	*	105.	13.	*
20.	94.	*	65.	34.	*	110.	12.	*
25.	85.	*	70.	30.	*	115.	10.	*
30.	81.	*	75.	27.	*	120.	9.	*
35.	71.	*	80.	24.	*	125.	8.	*
40.	61.	*	85.	21.	*	130.	0.	*

1 BASIN ID: -- BASIN COMMENT: BASIN 3 EXISTING CONDITIONS

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 10

TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)	*	TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)	*
0.	.00	.000	0.	*	90.	.04	.005	31.	*
5.	.04	.000	0.	*	95.	.04	.005	28.	*
10.	.07	.004	0.	*	100.	.04	.005	26.	*
15.	.15	.021	2.	*	105.	.04	.005	23.	*
20.	.28	.038	5.	*	110.	.04	.005	21.	*
25.	.47	.269	22.	*	115.	.03	.004	20.	*
30.	.22	.170	46.	*	120.	.02	.003	18.	*
35.	.10	.057	59.	*	125.	.00	.000	16.	*
40.	.08	.036	58.	*	130.	.00	.000	14.	*
45.	.07	.029	56.	*	135.	.00	.000	13.	*
50.	.06	.018	54.	*	140.	.00	.000	11.	*
55.	.06	.019	51.	*	145.	.00	.000	10.	*
60.	.06	.019	48.	*	150.	.00	.000	7.	*
65.	.06	.020	44.	*	155.	.00	.000	5.	*
70.	.06	.020	42.	*	160.	.00	.000	4.	*
75.	.06	.020	40.	*	165.	.00	.000	3.	*
80.	.05	.007	37.	*	170.	.00	.000	2.	*
85.	.04	.005	34.	*	175.	.00	.000	2.	*

TOTAL PRECIP. = 2.15 (1-HOUR RAIN = 1.86) EXECESS PRECIP. = .784 INCHES
VOLUME OF EXCESS PRECIP = 6. ACRE-FEET
PEAK Q = 59. CFS TIME OF PEAK = 35. MIN.
INFILT.= 3.90 IN/HR DECAY = .00180 FNINF = .55 IN/HR
MAX.PERV.RET.= .38 IN. MAX.IMP.RET.= .08 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE AT TIME

CUHPE/PC VERSION MODIFIED IN JANUARY 1985

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

SOUTH CANYON-LIME CREEK DRAINAGE DESIGN PLAN BY FMG, INC

BASIN ID: -- BASIN COMMENT: BASIN 4 EXISTING CONDITIONS

AREA OF BASIN (SQMI)	LENGTH OF BASIN (MI)	DIST TO CENTROID (MI)	IMPERVIOUS AREA (PCT)	SLOPE (FT/FT)	UNIT DURATION (MIN)
.06	.42	.17	50.00	.0274	5.00

COEFFICIENT (REFLECTING TIME TO PEAK)	COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF)
.088	.407

CALCULATED UNIT HYDROGRAPH

TIME TO PEAK (MIN)	TIME OF CONCENTRATION (MIN)	PEAK RATE OF RUNOFF (CFS/SQMI)	UNIT HYDROGRAPH PEAK (CFS)	VOLUME OF RUNOFF (AF)
3.25	5.00	20728.68	1202.26	3.09

*** NOTE : THE TIME TO PEAK IS CALCULATED BASED ON THE TIME OF CONCENTRATION PROVIDED BY THE USER, REPLACING THE ONE COMPUTED BY CUHPD (TP= 6.03)

WIDTH AT 50 = 1. MIN. WIDTH AT 75 = 1. MIN. K50 = .35 K75 = .45

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. = .35 IN. MAX. IMPERVIOUS RET. = .08 IN.
INFILTRATION = 3.90 IN./HR. DECAY = .00180/SECOND FNINFL = .55 IN./HR.

TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH
0.	0.	10.	28.	0.	0.
5.	393.	15.	0.	0.	0.

1 BASIN ID: -- BASIN COMMENT: BASIN 4 EXISTING CONDITIONS

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 10

TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)	TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)
0.	.00	.000	0.	60.	.06	.035	15.
5.	.04	.000	0.	65.	.06	.035	15.
10.	.07	.012	5.	70.	.06	.035	15.
15.	.15	.072	29.	75.	.06	.035	15.

20.	.28	.133	54.	*	80.	.05	.022	10.	*
25.	.47	.356	144.	*	85.	.04	.017	7.	*
30.	.22	.188	84.	*	90.	.04	.017	7.	*
35.	.10	.074	35.	*	95.	.04	.017	7.	*
40.	.08	.053	23.	*	100.	.04	.017	7.	*
45.	.07	.045	19.	*	105.	.04	.017	7.	*
50.	.06	.034	15.	*	110.	.04	.017	7.	*
55.	.06	.035	15.	*	115.	.03	.015	6.	*

TOTAL PRECIP. = 2.15 (1-HOUR RAIN = 1.86) EXECESS PRECIP. = 1.291 INCHES
VOLUME OF EXCESS PRECIP = 4. ACRE-FEET
PEAK Q = 144. CFS TIME OF PEAK = 25. MIN.
INFILT.= 3.90 IN/HR DECAY = .00180 FNINF = .55 IN/HR
MAX.PERV.RET.= .35 IN. MAX.IMP.RET.= .08 IN.

RATIONAL FORMULA C = .60
I = 6.3 INCHES/HOUR
A = 37.1 ACRES
Q = 140. CFS

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE AT TIME

CUHPE/PC VERSION MODIFIED IN JANUARY 1985

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

SOUTH CANYON-LIME CREEK DRAINAGE DESIGN PLAN BY FMG, INC

BASIN ID: -- BASIN COMMENT: BASIN 5 EXISTING CONDITIONS

AREA OF BASIN (SQMI)	LENGTH OF BASIN (MI)	DIST TO CENTROID (MI)	IMPERVIOUS AREA (PCT)	SLOPE (FT/FT)	UNIT DURATION (MIN)
.64	1.89	1.02	1.00	.0463	5.00

COEFFICIENT (REFLECTING TIME TO PEAK)	COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF)
.159	.320

CALCULATED UNIT HYDROGRAPH

TIME TO PEAK (MIN)	PEAK RATE OF RUNOFF (CFS/SQMI)	UNIT HYDROGRAP PEAK (CFS)	VOLUME OF RUNOFF (AF)
29.88	449.20	287.04	34.08

WIDTH AT 50 = 67. MIN. WIDTH AT 75 = 35. MIN. K50 = .27 K75 = .36

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. = .50 IN. MAX. IMPERVIOUS RET. = .09 IN.
INFILTRATION = 4.00 IN./HR. DECAY = .00180/SECOND FNINFL = .60 IN./HR.

TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH
0.	0.	100.	105.	200.	25.
5.	38.	105.	98.	205.	23.
10.	112.	110.	91.	210.	21.
15.	189.	115.	85.	215.	20.
20.	246.	120.	79.	220.	18.
25.	278.	125.	73.	225.	17.
30.	287.	130.	68.	230.	16.
35.	279.	135.	63.	235.	15.
40.	261.	140.	59.	240.	14.
45.	240.	145.	55.	245.	13.
50.	221.	150.	51.	250.	12.
55.	207.	155.	47.	255.	11.
60.	194.	160.	44.	260.	10.
65.	180.	165.	41.	265.	10.
70.	167.	170.	38.	270.	9.
75.	154.	175.	35.	275.	8.
80.	141.	180.	33.	280.	8.
85.	131.	185.	31.	285.	0.
90.	122.	190.	28.	0.	0.
95.	113.	195.	26.	0.	0.

1 BASIN ID: -- BASIN COMMENT: BASIN 5 EXISTING CONDITIONS

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 10

TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)	TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)
0.	.00	.000	0.	155.	.00	.000	32.
5.	.04	.000	0.	160.	.00	.000	29.
10.	.07	.000	0.	165.	.00	.000	27.
15.	.15	.001	0.	170.	.00	.000	25.
20.	.28	.003	0.	175.	.00	.000	24.
25.	.47	.109	5.	180.	.00	.000	22.
30.	.22	.159	19.	185.	.00	.000	20.
35.	.10	.046	41.	190.	.00	.000	19.
40.	.08	.026	64.	195.	.00	.000	18.
45.	.07	.018	83.	200.	.00	.000	16.
50.	.06	.008	95.	205.	.00	.000	15.
55.	.06	.009	101.	210.	.00	.000	14.
60.	.06	.009	102.	215.	.00	.000	13.
65.	.06	.010	99.	220.	.00	.000	12.
70.	.06	.010	95.	225.	.00	.000	11.

75.	.06	.010	92.	*	230.	.00	.000	11.	*
80.	.05	.000	89.	*	235.	.00	.000	10.	*
85.	.04	.000	85.	*	240.	.00	.000	9.	*
90.	.04	.000	81.	*	245.	.00	.000	9.	*
95.	.04	.000	76.	*	250.	.00	.000	8.	*
100.	.04	.000	71.	*	255.	.00	.000	7.	*
105.	.04	.000	65.	*	260.	.00	.000	7.	*
110.	.04	.000	61.	*	265.	.00	.000	6.	*
115.	.03	.000	57.	*	270.	.00	.000	6.	*
120.	.02	.000	53.	*	275.	.00	.000	6.	*
125.	.00	.000	49.	*	280.	.00	.000	5.	*
130.	.00	.000	46.	*	285.	.00	.000	5.	*
135.	.00	.000	42.	*	290.	.00	.000	4.	*
140.	.00	.000	39.	*	295.	.00	.000	4.	*
145.	.00	.000	37.	*	300.	.00	.000	4.	*
150.	.00	.000	34.	*	305.	.00	.000	3.	*

TOTAL PRECIP. = 2.15 (1-HOUR RAIN = 1.86) EXECESS PRECIP. = .421 INCHES
VOLUME OF EXCESS PRECIP = 14. ACRE-FEET
PEAK Q = 102. CFS TIME OF PEAK = 60. MIN.
INFILT.= 4.00 IN/HR DECAY = .00180 FNINF = .60 IN/HR
MAX.PERV.RET.= .50 IN. MAX.IMP.RET.= .09 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE AT TIME

CUHPE/PC VERSION MODIFIED IN JANUARY 1985

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

SOUTH CANYON-LIME CREEK DRAINAGE DESIGN PLAN BY FMG, INC

BASIN ID: -- BASIN COMMENT: BASIN 6 EXISTING CONDITIONS

AREA OF BASIN (SQMI)	LENGTH OF BASIN (MI)	DIST TO CENTROID (MI)	IMPERVIOUS AREA (PCT)	SLOPE (FT/FT)	UNIT DURATION (MIN)
.13	.98	.51	39.50	.0187	5.00

COEFFICIENT (REFLECTING TIME TO PEAK)	COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF)
.093	.379

CALCULATED UNIT HYDROGRAPH

TIME TO PEAK (MIN)	TIME OF CONCENTRATION (MIN)	PEAK RATE OF RUNOFF (CFS/SQMI)	UNIT HYDROGRAPH PEAK (CFS)	VOLUME OF RUNOFF (AF)
8.12	20.00	2589.79	339.26	6.99

*** NOTE : THE TIME TO PEAK IS CALCULATED BASED ON THE TIME OF CONCENTRATION PROVIDED BY THE USER,

REPLACING THE ONE COMPUTED BY CUHPD (TP= 12.94)

WIDTH AT 50 = 12. MIN. WIDTH AT 75 = 6. MIN. K50 = .35 K75 = .45

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. = .35 IN. MAX. IMPERVIOUS RET. = .07 IN.
INFILTRATION = 3.90 IN./HR. DECAY = .00180/SECOND FNINFL = .60 IN./HR.

TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH
0.	0.	20.	114.	40.	19.
5.	228.	25.	73.	45.	12.
10.	309.	30.	46.	50.	8.
15.	183.	35.	29.	55.	0.

1 BASIN ID: -- BASIN COMMENT: BASIN 6 EXISTING CONDITIONS

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 10

TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)	TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)
0.	.00	.000	0.	70.	.06	.028	34.
5.	.04	.000	0.	75.	.06	.028	31.
10.	.07	.014	3.	80.	.05	.017	27.
15.	.15	.057	17.	85.	.04	.013	22.
20.	.28	.105	44.	90.	.04	.013	19.
25.	.47	.331	120.	95.	.04	.013	17.
30.	.22	.180	170.	100.	.04	.013	16.
35.	.10	.067	148.	105.	.04	.013	15.
40.	.08	.045	112.	110.	.04	.013	14.
45.	.07	.037	86.	115.	.03	.012	14.
50.	.06	.027	66.	120.	.02	.009	12.
55.	.06	.028	52.	125.	.00	.000	9.
60.	.06	.028	44.	130.	.00	.000	5.
65.	.06	.028	38.	135.	.00	.000	3.

TOTAL PRECIP. = 2.15 (1-HOUR RAIN = 1.86) EXECESS PRECIP. = 1.121 INCHES
VOLUME OF EXCESS PRECIP = 8. ACRE-FEET
PEAK Q = 170. CFS TIME OF PEAK = 30. MIN.
INFILT.= 3.90 IN/HR DECAY = .00180 FNINF = .60 IN/HR
MAX.PERV.RET.= .35 IN. MAX.IMP.RET.= .07 IN.

RATIONAL FORMULA C = .52
I = 3.7 INCHES/HOUR
A = 83.8 ACRES
Q = 159. CFS

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE AT TIME

CUHPE/PC VERSION MODIFIED IN JANUARY 1985

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

SOUTH CANYON-LIME CREEK DRAINAGE DESIGN PLAN BY FMG, INC

BASIN ID: -- BASIN COMMENT: BASIN 7 EXISTING CONDITIONS

AREA OF BASIN (SQMI)	LENGTH OF BASIN (MI)	DIST TO CENTROID (MI)	IMPERVIOUS AREA (PCT)	SLOPE (FT/FT)	UNIT DURATION (MIN)
.11	.68	.34	23.50	.0408	5.00

COEFFICIENT (REFLECTING TIME TO PEAK)	COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF)
.106	.247

CALCULATED UNIT HYDROGRAPH

TIME TO PEAK (MIN)	TIME OF CONCENTRATION (MIN)	PEAK RATE OF RUNOFF (CFS/SQMI)	UNIT HYDROGRAPH PEAK (CFS)	VOLUME OF RUNOFF (AF)
5.98	19.00	2726.24	308.06	6.03

*** NOTE : THE TIME TO PEAK IS CALCULATED BASED ON THE TIME OF CONCENTRATION PROVIDED BY THE USER, REPLACING THE ONE COMPUTED BY CUHPD (TP= 9.29)

WIDTH AT 50 = 11. MIN. WIDTH AT 75 = 6. MIN. K50 = .33 K75 = .44

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. = .38 IN. MAX. IMPERVIOUS RET. = .07 IN.
INFILTRATION = 3.70 IN./HR. DECAY = .00180/SECOND FNINFL = .50 IN./HR.

TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH
0.	0.	20.	85.	40.	14.
5.	298.	25.	54.	45.	9.

10.	216.	*	30.	34.	*	50.	0.	*
15.	133.	*	35.	22.	*	0.	0.	*

1 BASIN ID: -- BASIN COMMENT: BASIN 7 EXISTING CONDITIONS

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 10

TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)	*	TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)	*
0.	.00	.000	0.	*	70.	.06	.027	26.	*
5.	.04	.000	0.	*	75.	.06	.027	24.	*
10.	.07	.008	2.	*	80.	.05	.014	20.	*
15.	.15	.034	12.	*	85.	.04	.008	15.	*
20.	.28	.062	27.	*	90.	.04	.008	12.	*
25.	.47	.302	108.	*	95.	.04	.008	10.	*
30.	.22	.178	130.	*	100.	.04	.008	9.	*
35.	.10	.065	105.	*	105.	.04	.008	8.	*
40.	.08	.044	81.	*	110.	.04	.008	7.	*
45.	.07	.036	63.	*	115.	.03	.007	7.	*
50.	.06	.026	49.	*	120.	.02	.005	6.	*
55.	.06	.026	39.	*	125.	.00	.000	4.	*
60.	.06	.027	33.	*	130.	.00	.000	2.	*
65.	.06	.027	29.	*	135.	.00	.000	1.	*

TOTAL PRECIP. = 2.15 (1-HOUR RAIN = 1.86) EXECESS PRECIP. = .961 INCHES
VOLUME OF EXCESS PRECIP = 6. ACRE-FEET
PEAK Q = 130. CFS TIME OF PEAK = 30. MIN.
INFILT.= 3.70 IN/HR DECAY = .00180 FNINF = .50 IN/HR
MAX.PERV.RET.= .38 IN. MAX.IMP.RET.= .07 IN.

RATIONAL FORMULA C = .45
I = 3.7 INCHES/HOUR
A = 72.3 ACRES
Q = 121. CFS

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE AT TIME

CUHPE/PC VERSION MODIFIED IN JANUARY 1985

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

SOUTH CANYON-LIME CREEK DRAINAGE DESIGN PLAN BY FMG, INC

BASIN ID: -- BASIN COMMENT: BASIN 8 EXISTING CONDITIONS

AREA OF BASIN (SQMI)	LENGTH OF BASIN (MI)	DIST TO CENTROID (MI)	IMPERVIOUS AREA (PCT)	SLOPE (FT/FT)	UNIT DURATION (MIN)
.22	.89	.47	22.50	.0448	5.00

COEFFICIENT (REFLECTING TIME TO PEAK)	COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF)
.107	.268

CALCULATED UNIT HYDROGRAPH

TIME TO PEAK (MIN)	PEAK RATE OF RUNOFF (CFS/SQMI)	UNIT HYDROGRAP PEAK (CFS)	VOLUME OF RUNOFF (AF)
11.42	1153.47	257.22	11.89

WIDTH AT 50 = 26. MIN. WIDTH AT 75 = 14. MIN. K50 = .26 K75 = .36

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. = .45 IN. MAX. IMPERVIOUS RET. = .07 IN.
INFILTRATION = 3.50 IN./HR. DECAY = .00180/SECOND FNINFL = .50 IN./HR.

TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH
0.	0.	40.	91.	80.	21.
5.	144.	45.	76.	85.	17.
10.	253.	50.	63.	90.	14.
15.	237.	55.	52.	95.	12.
20.	193.	60.	44.	100.	10.
25.	163.	65.	36.	105.	8.
30.	132.	70.	30.	110.	0.
35.	109.	75.	25.	0.	0.

1 BASIN ID: -- BASIN COMMENT: BASIN 8 EXISTING CONDITIONS

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 10

TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)	TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)
0.	.00	.000	0.	90.	.04	.008	50.
5.	.04	.000	0.	95.	.04	.008	44.
10.	.07	.008	1.	100.	.04	.008	39.
15.	.15	.033	7.	105.	.04	.008	34.
20.	.28	.060	19.	110.	.04	.008	31.
25.	.47	.252	61.	115.	.03	.007	28.
30.	.22	.178	111.	120.	.02	.005	25.
35.	.10	.065	132.	125.	.00	.000	21.

40.	.08	.043	129.	*	130.	.00	.000	16.	*
45.	.07	.036	119.	*	135.	.00	.000	12.	*
50.	.06	.025	108.	*	140.	.00	.000	9.	*
55.	.06	.026	97.	*	145.	.00	.000	7.	*
60.	.06	.026	88.	*	150.	.00	.000	6.	*
65.	.06	.026	81.	*	155.	.00	.000	5.	*
70.	.06	.026	75.	*	160.	.00	.000	4.	*
75.	.06	.026	71.	*	165.	.00	.000	3.	*
80.	.05	.014	65.	*	170.	.00	.000	2.	*
85.	.04	.008	57.	*	175.	.00	.000	2.	*

TOTAL PRECIP. = 2.15 (1-HOUR RAIN = 1.86) EXECESS PRECIP. = .902 INCHES
VOLUME OF EXCESS PRECIP = 11. ACRE-FEET
PEAK Q = 132. CFS TIME OF PEAK = 35. MIN.
INFILT.= 3.50 IN/HR DECAY = .00180 FNINF = .50 IN/HR
MAX.PERV.RET.= .45 IN. MAX.IMP.RET.= .07 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE AT TIME

CUHPE/PC VERSION MODIFIED IN JANUARY 1985

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

SOUTH CANYON-LIME CREEK DRAINAGE DESIGN PLAN BY FMG, INC

BASIN ID: -- BASIN COMMENT: BASIN 9 EXISTING CONDITIONS

AREA OF BASIN (SQMI)	LENGTH OF BASIN (MI)	DIST TO CENTROID (MI)	IMPERVIOUS AREA (PCT)	SLOPE (FT/FT)	UNIT DURATION (MIN)
.15	.83	.47	36.50	.0232	5.00

COEFFICIENT (REFLECTING TIME TO PEAK)	COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF)
.095	.356

CALCULATED UNIT HYDROGRAPH

TIME TO PEAK (MIN)	PEAK RATE OF RUNOFF (CFS/SQMI)	UNIT HYDROGRAP PEAK (CFS)	VOLUME OF RUNOFF (AF)
11.44	1528.62	229.29	8.00

WIDTH AT 50 = 20. MIN. WIDTH AT 75 = 10. MIN. K50 = .35 K75 = .48

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. = .35 IN. MAX. IMPERVIOUS RET. = .07 IN.
INFILTRATION = 4.00 IN./HR. DECAY = .00180/SECOND FNINFL = .60 IN./HR.

TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH
0.	0.	30.	86.	60.	19.
5.	128.	35.	67.	65.	15.
10.	225.	40.	52.	70.	11.
15.	203.	45.	40.	75.	9.
20.	147.	50.	31.	80.	0.
25.	110.	55.	24.	0.	0.

1 BASIN ID: -- BASIN COMMENT: BASIN 9 EXISTING CONDITIONS

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 10

TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)	TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)
0.	.00	.000	0.	80.	.05	.016	42.
5.	.04	.000	0.	85.	.04	.012	37.
10.	.07	.012	2.	90.	.04	.012	31.
15.	.15	.053	10.	95.	.04	.012	27.
20.	.28	.097	27.	100.	.04	.012	22.
25.	.47	.323	76.	105.	.04	.012	19.
30.	.22	.178	124.	110.	.04	.012	18.
35.	.10	.065	135.	115.	.03	.011	17.
40.	.08	.044	120.	120.	.02	.008	15.
45.	.07	.036	102.	125.	.00	.000	13.
50.	.06	.026	87.	130.	.00	.000	10.
55.	.06	.026	74.	135.	.00	.000	7.
60.	.06	.026	65.	140.	.00	.000	6.
65.	.06	.026	57.	145.	.00	.000	4.
70.	.06	.027	52.	150.	.00	.000	3.
75.	.06	.027	47.	155.	.00	.000	2.

TOTAL PRECIP. = 2.15 (1-HOUR RAIN = 1.86) EXECESS PRECIP. = 1.075 INCHES
VOLUME OF EXCESS PRECIP = 9. ACRE-FEET
PEAK Q = 135. CFS TIME OF PEAK = 35. MIN.
INFILT.= 4.00 IN/HR DECAY = .00180 FNINF = .60 IN/HR
MAX.PERV.RET.= .35 IN. MAX.IMP.RET.= .07 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE AT TIME

CUHPE/PC VERSION MODIFIED IN JANUARY 1985

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

SOUTH CANYON-LIME CREEK DRAINAGE DESIGN PLAN BY FMG, INC

BASIN ID: -- BASIN COMMENT: BASIN 10 EXISTING CONDITIONS

AREA OF BASIN (SQMI)	LENGTH OF BASIN (MI)	DIST TO CENTROID (MI)	IMPERVIOUS AREA (PCT)	SLOPE (FT/FT)	UNIT DURATION (MIN)
.63	1.70	.78	5.00	.0476	5.00

COEFFICIENT (REFLECTING TIME TO PEAK)	COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF)
.144	.291

CALCULATED UNIT HYDROGRAPH

TIME TO PEAK (MIN)	PEAK RATE OF RUNOFF (CFS/SQMI)	UNIT HYDROGRAP PEAK (CFS)	VOLUME OF RUNOFF (AF)
23.11	542.74	341.93	33.60

WIDTH AT 50 = 55. MIN. WIDTH AT 75 = 29. MIN. K50 = .25 K75 = .34

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. = .50 IN. MAX. IMPERVIOUS RET. = .08 IN.
INFILTRATION = 4.10 IN./HR. DECAY = .00180/SECOND FNINFL = .60 IN./HR.

TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH
0.	0.	85.	119.	170.	27.
5.	69.	90.	109.	175.	25.
10.	189.	95.	100.	180.	22.
15.	286.	100.	92.	185.	21.
20.	335.	105.	84.	190.	19.
25.	340.	110.	77.	195.	17.
30.	318.	115.	70.	200.	16.
35.	286.	120.	64.	205.	14.
40.	261.	125.	59.	210.	13.
45.	245.	130.	54.	215.	12.
50.	226.	135.	50.	220.	11.
55.	207.	140.	45.	225.	10.
60.	188.	145.	42.	230.	9.
65.	170.	150.	38.	235.	9.
70.	155.	155.	35.	240.	8.
75.	142.	160.	32.	245.	0.
80.	130.	165.	29.	0.	0.

1 BASIN ID: -- BASIN COMMENT: BASIN 10 EXISTING CONDITIONS

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 10

TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)	*	TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)	*
0.	.00	.000	0.	*	140.	.00	.000	40.	*
5.	.04	.000	0.	*	145.	.00	.000	37.	*
10.	.07	.001	0.	*	150.	.00	.000	34.	*
15.	.15	.007	1.	*	155.	.00	.000	31.	*
20.	.28	.013	3.	*	160.	.00	.000	28.	*
25.	.47	.118	13.	*	165.	.00	.000	26.	*
30.	.22	.161	40.	*	170.	.00	.000	24.	*
35.	.10	.048	75.	*	175.	.00	.000	22.	*
40.	.08	.027	104.	*	180.	.00	.000	20.	*
45.	.07	.020	121.	*	185.	.00	.000	18.	*
50.	.06	.010	127.	*	190.	.00	.000	17.	*
55.	.06	.011	124.	*	195.	.00	.000	15.	*
60.	.06	.011	119.	*	200.	.00	.000	14.	*
65.	.06	.012	114.	*	205.	.00	.000	13.	*
70.	.06	.012	111.	*	210.	.00	.000	12.	*
75.	.06	.012	107.	*	215.	.00	.000	11.	*
80.	.05	.002	102.	*	220.	.00	.000	10.	*
85.	.04	.002	96.	*	225.	.00	.000	9.	*
90.	.04	.002	89.	*	230.	.00	.000	8.	*
95.	.04	.002	83.	*	235.	.00	.000	8.	*
100.	.04	.002	76.	*	240.	.00	.000	7.	*
105.	.04	.002	71.	*	245.	.00	.000	6.	*
110.	.04	.002	65.	*	250.	.00	.000	6.	*
115.	.03	.002	61.	*	255.	.00	.000	5.	*
120.	.02	.001	56.	*	260.	.00	.000	5.	*
125.	.00	.000	52.	*	265.	.00	.000	3.	*
130.	.00	.000	48.	*	270.	.00	.000	2.	*
135.	.00	.000	44.	*	275.	.00	.000	2.	*

TOTAL PRECIP. = 2.15 (1-HOUR RAIN = 1.86) EXECESS PRECIP. = .479 INCHES
VOLUME OF EXCESS PRECIP = 16. ACRE-FEET
PEAK Q = 127. CFS TIME OF PEAK = 50. MIN.
INFILT.= 4.10 IN/HR DECAY = .00180 FNINF = .60 IN/HR
MAX.PERV.RET.= .50 IN. MAX.IMP.RET.= .08 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE AT TIME

CUHPE/PC VERSION MODIFIED IN JANUARY 1985

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

SOUTH CANYON-LIME CREEK DRAINAGE DESIGN PLAN BY FMG, INC

BASIN ID: -- BASIN COMMENT: BASIN 11 EXISTING CONDITIONS

AREA OF BASIN LENGTH OF BASIN DIST TO CENTROID IMPERVIOUS AREA SLOPE UNIT DURATION

(SQMI)	(MI)	(MI)	(PCT)	(FT/FT)	(MIN)
.44	1.95	1.06	3.50	.0292	5.00

COEFFICIENT (REFLECTING TIME TO PEAK)	COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF)
.150	.285

CALCULATED UNIT HYDROGRAPH

TIME TO PEAK (MIN)	PEAK RATE OF RUNOFF (CFS/SQMI)	UNIT HYDROGRAP PEAK (CFS)	VOLUME OF RUNOFF (AF)
32.28	367.21	161.21	23.41

WIDTH AT 50 = 82. MIN. WIDTH AT 75 = 42. MIN. K50 = .24 K75 = .32

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. = .50 IN. MAX. IMPERVIOUS RET. = .08 IN.
INFILTRATION = 4.50 IN./HR. DECAY = .00180/SECOND FNINFL = .60 IN./HR.

TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH
0.	0.	105.	72.	210.	22.
5.	19.	110.	68.	215.	21.
10.	56.	115.	64.	220.	20.
15.	97.	120.	61.	225.	19.
20.	130.	125.	57.	230.	18.
25.	151.	130.	54.	235.	17.
30.	160.	135.	51.	240.	16.
35.	160.	140.	49.	245.	15.
40.	153.	145.	46.	250.	14.
45.	143.	150.	44.	255.	14.
50.	132.	155.	41.	260.	13.
55.	124.	160.	39.	265.	12.
60.	121.	165.	37.	270.	11.
65.	116.	170.	35.	275.	11.
70.	110.	175.	33.	280.	10.
75.	104.	180.	31.	285.	10.
80.	98.	185.	29.	290.	9.
85.	92.	190.	28.	295.	9.
90.	86.	195.	26.	300.	8.
95.	80.	200.	25.	305.	8.
100.	76.	205.	24.	310.	0.

1 BASIN ID: -- BASIN COMMENT: BASIN 11 EXISTING CONDITIONS

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 10

TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)	*	TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)	*
0.	.00	.000	0.	*	170.	.00	.000	22.	*
5.	.04	.000	0.	*	175.	.00	.000	21.	*
10.	.07	.001	0.	*	180.	.00	.000	20.	*
15.	.15	.005	0.	*	185.	.00	.000	19.	*
20.	.28	.009	1.	*	190.	.00	.000	18.	*
25.	.47	.097	3.	*	195.	.00	.000	17.	*
30.	.22	.158	10.	*	200.	.00	.000	16.	*
35.	.10	.046	21.	*	205.	.00	.000	15.	*
40.	.08	.026	33.	*	210.	.00	.000	14.	*
45.	.07	.019	44.	*	215.	.00	.000	13.	*
50.	.06	.009	52.	*	220.	.00	.000	13.	*
55.	.06	.010	56.	*	225.	.00	.000	12.	*
60.	.06	.011	58.	*	230.	.00	.000	11.	*
65.	.06	.011	58.	*	235.	.00	.000	11.	*
70.	.06	.011	56.	*	240.	.00	.000	10.	*
75.	.06	.011	55.	*	245.	.00	.000	10.	*
80.	.05	.002	54.	*	250.	.00	.000	9.	*
85.	.04	.001	53.	*	255.	.00	.000	9.	*
90.	.04	.001	52.	*	260.	.00	.000	8.	*
95.	.04	.001	50.	*	265.	.00	.000	8.	*
100.	.04	.001	48.	*	270.	.00	.000	7.	*
105.	.04	.001	45.	*	275.	.00	.000	7.	*
110.	.04	.001	43.	*	280.	.00	.000	6.	*
115.	.03	.001	40.	*	285.	.00	.000	6.	*
120.	.02	.001	38.	*	290.	.00	.000	6.	*
125.	.00	.000	36.	*	295.	.00	.000	5.	*
130.	.00	.000	34.	*	300.	.00	.000	5.	*
135.	.00	.000	33.	*	305.	.00	.000	5.	*
140.	.00	.000	31.	*	310.	.00	.000	5.	*
145.	.00	.000	29.	*	315.	.00	.000	4.	*
150.	.00	.000	28.	*	320.	.00	.000	4.	*
155.	.00	.000	26.	*	325.	.00	.000	4.	*
160.	.00	.000	25.	*	330.	.00	.000	3.	*
165.	.00	.000	23.	*	335.	.00	.000	2.	*

TOTAL PRECIP. = 2.15 (1-HOUR RAIN = 1.86) EXECESS PRECIP. = .436 INCHES
VOLUME OF EXCESS PRECIP = 10. ACRE-FEET
PEAK Q = 58. CFS TIME OF PEAK = 60. MIN.
INFILT.= 4.50 IN/HR DECAY = .00180 FNINF = .60 IN/HR
MAX.PERV.RET.= .50 IN. MAX.IMP.RET.= .08 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE AT TIME

CUHPE/PC VERSION MODIFIED IN JANUARY 1985

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

SOUTH CANYON-LIME CREEK DRAINAGE DESIGN PLAN BY FMG, INC

BASIN ID: -- BASIN COMMENT: BASIN 12 EXISTING CONDITIONS

AREA OF BASIN (SQMI)	LENGTH OF BASIN (MI)	DIST TO CENTROID (MI)	IMPERVIOUS AREA (PCT)	SLOPE (FT/FT)	UNIT DURATION (MIN)
.05	.57	.32	3.00	.0451	5.00

COEFFICIENT (REFLECTING TIME TO PEAK)	COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF)
.152	.206

CALCULATED UNIT HYDROGRAPH

TIME TO PEAK (MIN)	TIME OF CONCENTRATION (MIN)	PEAK RATE OF RUNOFF (CFS/SQMI)	UNIT HYDROGRAPH PEAK (CFS)	VOLUME OF RUNOFF (AF)
4.88	13.00	3322.69	156.17	2.51

*** NOTE : THE TIME TO PEAK IS CALCULATED BASED ON THE TIME OF CONCENTRATION PROVIDED BY THE USER, REPLACING THE ONE COMPUTED BY CUHPD (TP= 10.97)

WIDTH AT 50 = 9. MIN. WIDTH AT 75 = 5. MIN. K50 = .32 K75 = .44

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. = .40 IN. MAX. IMPERVIOUS RET. = .10 IN.
INFILTRATION = 4.10 IN./HR. DECAY = .00180/SECOND FNINFL = .60 IN./HR.

TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH
0.	0.	15.	52.	30.	11.
5.	156.	20.	31.	35.	0.
10.	89.	25.	19.	0.	0.

1 BASIN ID: -- BASIN COMMENT: BASIN 12 EXISTING CONDITIONS

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 10

TIME	INCREMENT RAINFALL	TOTAL EXCESS	STORM HYDROGRAPH	TIME	INCREMENT RAINFALL	TOTAL EXCESS	STORM HYDROGRAPH

(MIN.)	(IN)	PRECIP	(CFS)	*	(MIN.)	(IN)	PRECIP	(CFS)	*
				*					*
				*					*
0.	.00	.000	0.	*	45.	.07	.019	17.	*
5.	.04	.000	0.	*	50.	.06	.009	11.	*
10.	.07	.000	0.	*	55.	.06	.010	7.	*
15.	.15	.004	1.	*	60.	.06	.010	5.	*
20.	.28	.008	2.	*	65.	.06	.011	4.	*
25.	.47	.208	33.	*	70.	.06	.011	4.	*
30.	.22	.160	44.	*	75.	.06	.011	4.	*
35.	.10	.047	33.	*	80.	.05	.001	2.	*
40.	.08	.026	23.	*	85.	.04	.001	1.	*

TOTAL PRECIP. = 2.15 (1-HOUR RAIN = 1.86) EXECESS PRECIP. = .544 INCHES
VOLUME OF EXCESS PRECIP = 1. ACRE-FEET
PEAK Q = 44. CFS TIME OF PEAK = 30. MIN.
INFILT.= 4.10 IN/HR DECAY = .00180 FNINF = .60 IN/HR
MAX.PERV.RET.= .40 IN. MAX.IMP.RET.= .10 IN.

RATIONAL FORMULA C = .25
I = 4.5 INCHES/HOUR
A = 30.1 ACRES
Q = 34. CFS

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE AT TIME

CUHPE/PC VERSION MODIFIED IN JANUARY 1985

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

SOUTH CANYON-LIME CREEK DRAINAGE DESIGN PLAN BY FMG, INC

BASIN ID: -- BASIN COMMENT: BASIN 13 EXISTING CONDITIONS

AREA OF BASIN (SQMI)	LENGTH OF BASIN (MI)	DIST TO CENTROID (MI)	IMPERVIOUS AREA (PCT)	SLOPE (FT/FT)	UNIT DURATION (MIN)
.24	.74	.38	1.00	.0510	5.00

COEFFICIENT (REFLECTING TIME TO PEAK)	COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF)
.159	.277

CALCULATED UNIT HYDROGRAPH

TIME TO PEAK (MIN)	PEAK RATE OF RUNOFF (CFS/SQMI)	UNIT HYDROGRAP PEAK (CFS)	VOLUME OF RUNOFF (AF)
13.12	1001.94	243.47	12.96

WIDTH AT 50 = 30. MIN. WIDTH AT 75 = 16. MIN. K50 = .26 K75 = .36

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. = .50 IN. MAX. IMPERVIOUS RET. = .10 IN.
INFILTRATION = 4.10 IN./HR. DECAY = .00180/SECOND FNINFL = .60 IN./HR.

TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH
0.	0.	45.	89.	90.	21.
5.	114.	50.	76.	95.	18.
10.	226.	55.	64.	100.	15.
15.	239.	60.	55.	105.	13.
20.	202.	65.	47.	110.	11.
25.	173.	70.	40.	115.	9.
30.	148.	75.	34.	120.	8.
35.	123.	80.	29.	125.	0.
40.	104.	85.	25.	0.	0.

1 BASIN ID: -- BASIN COMMENT: BASIN 13 EXISTING CONDITIONS

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 10

TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)	TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)
0.	.00	.000	0.	80.	.05	.000	34.
5.	.04	.000	0.	85.	.04	.000	30.
10.	.07	.000	0.	90.	.04	.000	25.
15.	.15	.001	0.	95.	.04	.000	22.
20.	.28	.003	1.	100.	.04	.000	19.
25.	.47	.105	13.	105.	.04	.000	16.
30.	.22	.159	43.	110.	.04	.000	14.
35.	.10	.046	67.	115.	.03	.000	12.
40.	.08	.025	73.	120.	.02	.000	10.
45.	.07	.018	70.	125.	.00	.000	9.
50.	.06	.008	64.	130.	.00	.000	7.
55.	.06	.009	57.	135.	.00	.000	6.
60.	.06	.009	51.	140.	.00	.000	5.
65.	.06	.010	46.	145.	.00	.000	4.
70.	.06	.010	42.	150.	.00	.000	2.
75.	.06	.010	38.	155.	.00	.000	2.

TOTAL PRECIP. = 2.15 (1-HOUR RAIN = 1.86) EXECESS PRECIP. = .416 INCHES
VOLUME OF EXCESS PRECIP = 5. ACRE-FEET
PEAK Q = 73. CFS TIME OF PEAK = 40. MIN.
INFILT.= 4.10 IN/HR DECAY = .00180 FNINF = .60 IN/HR

MAX.PERV.RET.= .50 IN. MAX.IMP.RET.= .10 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE AT TIME

CUHPE/PC VERSION MODIFIED IN JANUARY 1985

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

SOUTH CANYON-LIME CREEK DRAINAGE DESIGN PLAN BY FMG, INC

BASIN ID: -- BASIN COMMENT: BASIN 14 EXISTING CONDITIONS

AREA OF BASIN (SQMI)	LENGTH OF BASIN (MI)	DIST TO CENTROID (MI)	IMPERVIOUS AREA (PCT)	SLOPE (FT/FT)	UNIT DURATION (MIN)
.44	1.33	.72	1.00	.0504	5.00

COEFFICIENT (REFLECTING TIME TO PEAK)	COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF)
.159	.303

CALCULATED UNIT HYDROGRAPH

TIME TO PEAK (MIN)	PEAK RATE OF RUNOFF (CFS/SQMI)	UNIT HYDROGRAP PEAK (CFS)	VOLUME OF RUNOFF (AF)
21.67	606.31	266.17	23.41

WIDTH AT 50 = 49. MIN. WIDTH AT 75 = 26. MIN. K50 = .26 K75 = .36

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. = .50 IN. MAX. IMPERVIOUS RET. = .10 IN.
INFILTRATION = 4.50 IN./HR. DECAY = .00180/SECOND FNINFL = .60 IN./HR.

TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH
0.	0.	75.	96.	150.	22.
5.	59.	80.	87.	155.	20.
10.	159.	85.	79.	160.	18.
15.	233.	90.	72.	165.	17.
20.	264.	95.	65.	170.	15.
25.	260.	100.	59.	175.	14.
30.	237.	105.	53.	180.	12.
35.	211.	110.	48.	185.	11.
40.	194.	115.	44.	190.	10.
45.	177.	120.	40.	195.	9.
50.	160.	125.	36.	200.	8.

55.	144.	*	130.	33.	*	205.	8.	*
60.	128.	*	135.	30.	*	210.	0.	*
65.	116.	*	140.	27.	*	0.	0.	*
70.	106.	*	145.	25.	*	0.	0.	*

1 BASIN ID: -- BASIN COMMENT: BASIN 14 EXISTING CONDITIONS

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 10

TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)	*	TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)	*
0.	.00	.000	0.	*	120.	.02	.000	30.	*
5.	.04	.000	0.	*	125.	.00	.000	27.	*
10.	.07	.000	0.	*	130.	.00	.000	25.	*
15.	.15	.001	0.	*	135.	.00	.000	22.	*
20.	.28	.003	0.	*	140.	.00	.000	20.	*
25.	.47	.088	6.	*	145.	.00	.000	18.	*
30.	.22	.157	24.	*	150.	.00	.000	17.	*
35.	.10	.045	49.	*	155.	.00	.000	15.	*
40.	.08	.025	70.	*	160.	.00	.000	14.	*
45.	.07	.018	81.	*	165.	.00	.000	13.	*
50.	.06	.008	84.	*	170.	.00	.000	11.	*
55.	.06	.009	81.	*	175.	.00	.000	10.	*
60.	.06	.009	77.	*	180.	.00	.000	9.	*
65.	.06	.010	73.	*	185.	.00	.000	8.	*
70.	.06	.010	69.	*	190.	.00	.000	8.	*
75.	.06	.010	66.	*	195.	.00	.000	7.	*
80.	.05	.000	62.	*	200.	.00	.000	6.	*
85.	.04	.000	58.	*	205.	.00	.000	6.	*
90.	.04	.000	53.	*	210.	.00	.000	5.	*
95.	.04	.000	48.	*	215.	.00	.000	5.	*
100.	.04	.000	44.	*	220.	.00	.000	4.	*
105.	.04	.000	40.	*	225.	.00	.000	4.	*
110.	.04	.000	36.	*	230.	.00	.000	3.	*
115.	.03	.000	33.	*	235.	.00	.000	2.	*

TOTAL PRECIP. = 2.15 (1-HOUR RAIN = 1.86) EXECESS PRECIP. = .396 INCHES
VOLUME OF EXCESS PRECIP = 9. ACRE-FEET
PEAK Q = 84. CFS TIME OF PEAK = 50. MIN.
INFILT.= 4.50 IN/HR DECAY = .00180 FNINF = .60 IN/HR
MAX.PERV.RET.= .50 IN. MAX.IMP.RET.= .10 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE AT TIME

CUHPE/PC VERSION MODIFIED IN JANUARY 1985

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

SOUTH CANYON-LIME CREEK DRAINAGE DESIGN PLAN BY FMG, INC

BASIN ID: -- BASIN COMMENT: BASIN 15 EXISTING CONDITIONS

AREA OF BASIN (SQMI)	LENGTH OF BASIN (MI)	DIST TO CENTROID (MI)	IMPERVIOUS AREA (PCT)	SLOPE (FT/FT)	UNIT DURATION (MIN)
.65	2.22	1.10	1.00	.0493	5.00

COEFFICIENT (REFLECTING TIME TO PEAK)	COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF)
.159	.321

CALCULATED UNIT HYDROGRAPH

TIME TO PEAK (MIN)	PEAK RATE OF RUNOFF (CFS/SQMI)	UNIT HYDROGRAP PEAK (CFS)	VOLUME OF RUNOFF (AF)
32.71	407.86	263.88	34.51

WIDTH AT 50 = 74. MIN. WIDTH AT 75 = 38. MIN. K50 = .27 K75 = .36

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. = .50 IN. MAX. IMPERVIOUS RET. = .10 IN.
INFILTRATION = 4.30 IN./HR. DECAY = .00180/SECOND FNINFL = .60 IN./HR.

TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH
0.	0.	105.	104.	210.	26.
5.	31.	110.	97.	215.	24.
10.	90.	115.	91.	220.	23.
15.	157.	120.	85.	225.	21.
20.	210.	125.	80.	230.	20.
25.	246.	130.	75.	235.	19.
30.	262.	135.	70.	240.	18.
35.	263.	140.	65.	245.	16.
40.	252.	145.	61.	250.	15.
45.	236.	150.	57.	255.	14.
50.	218.	155.	54.	260.	13.
55.	202.	160.	50.	265.	13.
60.	191.	165.	47.	270.	12.
65.	180.	170.	44.	275.	11.
70.	169.	175.	41.	280.	10.
75.	158.	180.	39.	285.	10.
80.	147.	185.	36.	290.	9.
85.	136.	190.	34.	295.	8.
90.	126.	195.	32.	300.	8.
95.	118.	200.	30.	305.	7.

```
    100.        111.    *   205.        28.    *   310.        0.    *
1         BASIN ID:          --  BASIN COMMENT:  BASIN 15 EXISTING CONDITIONS
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**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 10

TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)	*	TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)	*
0.	.00	.000	0.	*	165.	.00	.000	29.	*
5.	.04	.000	0.	*	170.	.00	.000	27.	*
10.	.07	.000	0.	*	175.	.00	.000	26.	*
15.	.15	.001	0.	*	180.	.00	.000	24.	*
20.	.28	.003	0.	*	185.	.00	.000	22.	*
25.	.47	.096	3.	*	190.	.00	.000	21.	*
30.	.22	.158	14.	*	195.	.00	.000	20.	*
35.	.10	.045	32.	*	200.	.00	.000	18.	*
40.	.08	.025	51.	*	205.	.00	.000	17.	*
45.	.07	.018	68.	*	210.	.00	.000	16.	*
50.	.06	.008	80.	*	215.	.00	.000	15.	*
55.	.06	.009	88.	*	220.	.00	.000	14.	*
60.	.06	.009	91.	*	225.	.00	.000	13.	*
65.	.06	.010	91.	*	230.	.00	.000	12.	*
70.	.06	.010	88.	*	235.	.00	.000	12.	*
75.	.06	.010	86.	*	240.	.00	.000	11.	*
80.	.05	.000	83.	*	245.	.00	.000	10.	*
85.	.04	.000	80.	*	250.	.00	.000	9.	*
90.	.04	.000	77.	*	255.	.00	.000	9.	*
95.	.04	.000	73.	*	260.	.00	.000	8.	*
100.	.04	.000	69.	*	265.	.00	.000	8.	*
105.	.04	.000	65.	*	270.	.00	.000	7.	*
110.	.04	.000	60.	*	275.	.00	.000	7.	*
115.	.03	.000	56.	*	280.	.00	.000	6.	*
120.	.02	.000	53.	*	285.	.00	.000	6.	*
125.	.00	.000	49.	*	290.	.00	.000	6.	*
130.	.00	.000	46.	*	295.	.00	.000	5.	*
135.	.00	.000	43.	*	300.	.00	.000	5.	*
140.	.00	.000	41.	*	305.	.00	.000	5.	*
145.	.00	.000	38.	*	310.	.00	.000	4.	*
150.	.00	.000	35.	*	315.	.00	.000	4.	*
155.	.00	.000	33.	*	320.	.00	.000	4.	*
160.	.00	.000	31.	*	325.	.00	.000	4.	*

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    TOTAL PRECIP. =  2.15 (1-HOUR RAIN =  1.86)     EXECESS PRECIP. =  .406  INCHES
    VOLUME OF EXCESS PRECIP =    14.  ACRE-FEET
    PEAK Q =   91. CFS      TIME OF PEAK =  60. MIN.
    INFILT.= 4.30 IN/HR    DECAY = .00180    FNINF =  .60 IN/HR
    MAX.PERV.RET.= .50 IN.     MAX.IMP.RET.= .10 IN.
1   U.D.F.C.D. CUHP RUNOFF ANALYSIS     EXECUTED ON DATE                AT TIME
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CUHPE/PC VERSION MODIFIED IN JANUARY 1985

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

SOUTH CANYON-LIME CREEK DRAINAGE DESIGN PLAN BY FMG, INC

BASIN ID: -- BASIN COMMENT: BASIN 16 EXISTING CONDITIONS

AREA OF BASIN (SQMI)	LENGTH OF BASIN (MI)	DIST TO CENTROID (MI)	IMPERVIOUS AREA (PCT)	SLOPE (FT/FT)	UNIT DURATION (MIN)
.29	.87	.53	1.00	.0520	5.00

COEFFICIENT (REFLECTING TIME TO PEAK)	COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF)
.159	.285

CALCULATED UNIT HYDROGRAPH

TIME TO PEAK (MIN)	PEAK RATE OF RUNOFF (CFS/SQMI)	UNIT HYDROGRAP PEAK (CFS)	VOLUME OF RUNOFF (AF)
15.91	815.22	237.23	15.52

WIDTH AT 50 = 37. MIN. WIDTH AT 75 = 19. MIN. K50 = .26 K75 = .35

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. = .50 IN. MAX. IMPERVIOUS RET. = .10 IN.
INFILTRATION = 4.40 IN./HR. DECAY = .00180/SECOND FNINFL = .60 IN./HR.

TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH
0.	0.	55.	87.	110.	21.
5.	85.	60.	77.	115.	18.
10.	193.	65.	67.	120.	16.
15.	236.	70.	59.	125.	14.
20.	224.	75.	52.	130.	12.
25.	192.	80.	46.	135.	11.
30.	171.	85.	40.	140.	10.
35.	151.	90.	35.	145.	8.
40.	131.	95.	31.	150.	7.
45.	113.	100.	27.	155.	0.
50.	99.	105.	24.	0.	0.

1 BASIN ID: -- BASIN COMMENT: BASIN 16 EXISTING CONDITIONS

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 10

TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)	*	TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)	*
0.	.00	.000	0.	*	90.	.04	.000	33.	*
5.	.04	.000	0.	*	95.	.04	.000	29.	*
10.	.07	.000	0.	*	100.	.04	.000	26.	*
15.	.15	.001	0.	*	105.	.04	.000	23.	*
20.	.28	.003	1.	*	110.	.04	.000	20.	*
25.	.47	.092	9.	*	115.	.03	.000	18.	*
30.	.22	.158	32.	*	120.	.02	.000	16.	*
35.	.10	.045	57.	*	125.	.00	.000	14.	*
40.	.08	.025	70.	*	130.	.00	.000	12.	*
45.	.07	.018	71.	*	135.	.00	.000	11.	*
50.	.06	.008	67.	*	140.	.00	.000	9.	*
55.	.06	.009	62.	*	145.	.00	.000	8.	*
60.	.06	.009	57.	*	150.	.00	.000	7.	*
65.	.06	.010	53.	*	155.	.00	.000	6.	*
70.	.06	.010	49.	*	160.	.00	.000	6.	*
75.	.06	.010	45.	*	165.	.00	.000	5.	*
80.	.05	.000	42.	*	170.	.00	.000	4.	*
85.	.04	.000	37.	*	175.	.00	.000	3.	*

TOTAL PRECIP. = 2.15 (1-HOUR RAIN = 1.86) EXECESS PRECIP. = .401 INCHES
VOLUME OF EXCESS PRECIP = 6. ACRE-FEET
PEAK Q = 71. CFS TIME OF PEAK = 45. MIN.
INFILT.= 4.40 IN/HR DECAY = .00180 FNINF = .60 IN/HR
MAX.PERV.RET.= .50 IN. MAX.IMP.RET.= .10 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE AT TIME

CUHPE/PC VERSION MODIFIED IN JANUARY 1985

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

SOUTH CANYON-LIME CREEK DRAINAGE DESIGN PLAN BY FMG, INC

BASIN ID: -- BASIN COMMENT: BASIN 17 EXISTING CONDITIONS

AREA OF BASIN (SQMI)	LENGTH OF BASIN (MI)	DIST TO CENTROID (MI)	IMPERVIOUS AREA (PCT)	SLOPE (FT/FT)	UNIT DURATION (MIN)
.32	.83	.38	1.00	.0292	5.00

COEFFICIENT (REFLECTING TIME TO PEAK)	COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF)
.159	.289

CALCULATED UNIT HYDROGRAPH

TIME TO PEAK (MIN)	PEAK RATE OF RUNOFF (CFS/SQMI)	UNIT HYDROGRAP PEAK (CFS)	VOLUME OF RUNOFF (AF)
15.33	866.02	281.46	17.33

WIDTH AT 50 = 35. MIN. WIDTH AT 75 = 18. MIN. K50 = .27 K75 = .36

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. = .50 IN. MAX. IMPERVIOUS RET. = .10 IN.
INFILTRATION = 4.40 IN./HR. DECAY = .00180/SECOND FNINFL = .60 IN./HR.

TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH
0.	0.	55.	95.	110.	20.
5.	106.	60.	82.	115.	18.
10.	236.	65.	71.	120.	15.
15.	281.	70.	62.	125.	13.
20.	261.	75.	54.	130.	12.
25.	221.	80.	47.	135.	10.
30.	195.	85.	41.	140.	9.
35.	170.	90.	36.	145.	8.
40.	145.	95.	31.	150.	0.
45.	125.	100.	27.	0.	0.
50.	109.	105.	23.	0.	0.

1 BASIN ID: -- BASIN COMMENT: BASIN 17 EXISTING CONDITIONS

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 10

TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)	TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)
0.	.00	.000	0.	90.	.04	.000	36.
5.	.04	.000	0.	95.	.04	.000	31.
10.	.07	.000	0.	100.	.04	.000	27.
15.	.15	.001	0.	105.	.04	.000	24.
20.	.28	.003	1.	110.	.04	.000	21.
25.	.47	.092	11.	115.	.03	.000	18.
30.	.22	.158	40.	120.	.02	.000	16.
35.	.10	.045	69.	125.	.00	.000	14.
40.	.08	.025	83.	130.	.00	.000	12.
45.	.07	.018	83.	135.	.00	.000	11.
50.	.06	.008	77.	140.	.00	.000	9.

55.	.06	.009	71.	*	145.	.00	.000	8.	*
60.	.06	.009	65.	*	150.	.00	.000	7.	*
65.	.06	.010	59.	*	155.	.00	.000	6.	*
70.	.06	.010	54.	*	160.	.00	.000	5.	*
75.	.06	.010	51.	*	165.	.00	.000	5.	*
80.	.05	.000	46.	*	170.	.00	.000	3.	*
85.	.04	.000	41.	*	175.	.00	.000	2.	*

TOTAL PRECIP. = 2.15 (1-HOUR RAIN = 1.86) EXECESS PRECIP. = .401 INCHES
VOLUME OF EXCESS PRECIP = 7. ACRE-FEET
PEAK Q = 83. CFS TIME OF PEAK = 45. MIN.
INFILT.= 4.40 IN/HR DECAY = .00180 FNINF = .60 IN/HR
MAX.PERV.RET.= .50 IN. MAX.IMP.RET.= .10 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE AT TIME

CUHPE/PC VERSION MODIFIED IN JANUARY 1985

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

SOUTH CANYON-LIME CREEK DRAINAGE DESIGN PLAN BY FMG, INC

BASIN ID: -- BASIN COMMENT: BASIN 18 EXISTING CONDITIONS

AREA OF BASIN (SQMI)	LENGTH OF BASIN (MI)	DIST TO CENTROID (MI)	IMPERVIOUS AREA (PCT)	SLOPE (FT/FT)	UNIT DURATION (MIN)
.56	1.29	.64	1.50	.0428	5.00

COEFFICIENT (REFLECTING TIME TO PEAK)	COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF)
.157	.310

CALCULATED UNIT HYDROGRAPH

TIME TO PEAK (MIN)	PEAK RATE OF RUNOFF (CFS/SQMI)	UNIT HYDROGRAP PEAK (CFS)	VOLUME OF RUNOFF (AF)
20.90	646.94	362.29	29.87

WIDTH AT 50 = 46. MIN. WIDTH AT 75 = 24. MIN. K50 = .27 K75 = .37

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. = .40 IN. MAX. IMPERVIOUS RET. = .10 IN.
INFILTRATION = 4.50 IN./HR. DECAY = .00180/SECOND FNINFL = .60 IN./HR.

TIME	UNIT HYDROGRAPH	*	TIME	UNIT HYDROGRAPH	*	TIME	UNIT HYDROGRAPH	*

0.	0.	70.	131.	140.	29.
5.	85.	75.	118.	145.	26.
10.	226.	80.	106.	150.	24.
15.	325.	85.	95.	155.	21.
20.	362.	90.	85.	160.	19.
25.	350.	95.	77.	165.	17.
30.	314.	100.	69.	170.	15.
35.	278.	105.	62.	175.	14.
40.	253.	110.	56.	180.	12.
45.	229.	115.	50.	185.	11.
50.	204.	120.	45.	190.	10.
55.	180.	125.	40.	195.	9.
60.	162.	130.	36.	200.	8.
65.	145.	135.	33.	205.	0.

1 BASIN ID: -- BASIN COMMENT: BASIN 18 EXISTING CONDITIONS

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 10

TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)	TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)
0.	.00	.000	0.	115.	.03	.000	49.
5.	.04	.000	0.	120.	.02	.000	44.
10.	.07	.000	0.	125.	.00	.000	40.
15.	.15	.002	0.	130.	.00	.000	36.
20.	.28	.004	1.	135.	.00	.000	32.
25.	.47	.188	18.	140.	.00	.000	29.
30.	.22	.157	58.	145.	.00	.000	26.
35.	.10	.045	103.	150.	.00	.000	23.
40.	.08	.025	134.	155.	.00	.000	21.
45.	.07	.018	147.	160.	.00	.000	19.
50.	.06	.008	145.	165.	.00	.000	17.
55.	.06	.009	137.	170.	.00	.000	15.
60.	.06	.010	128.	175.	.00	.000	14.
65.	.06	.010	120.	180.	.00	.000	12.
70.	.06	.010	112.	185.	.00	.000	11.
75.	.06	.010	104.	190.	.00	.000	10.
80.	.05	.001	97.	195.	.00	.000	9.
85.	.04	.001	89.	200.	.00	.000	8.
90.	.04	.001	81.	205.	.00	.000	7.
95.	.04	.001	73.	210.	.00	.000	6.
100.	.04	.001	66.	215.	.00	.000	6.
105.	.04	.001	60.	220.	.00	.000	5.
110.	.04	.001	54.	225.	.00	.000	3.

TOTAL PRECIP. = 2.15 (1-HOUR RAIN = 1.86) EXECESS PRECIP. = .502 INCHES
VOLUME OF EXCESS PRECIP = 15. ACRE-FEET

PEAK Q = 147. CFS TIME OF PEAK = 45. MIN.
INFILT.= 4.50 IN/HR DECAY = .00180 FNINF = .60 IN/HR
MAX.PERV.RET.= .40 IN. MAX.IMP.RET.= .10 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE AT TIME

CUHPE/PC VERSION MODIFIED IN JANUARY 1985

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

SOUTH CANYON-LIME CREEK DRAINAGE DESIGN PLAN BY FMG, INC

BASIN ID: -- BASIN COMMENT: BASIN 19 EXISTING CONDITIONS

AREA OF BASIN (SQMI)	LENGTH OF BASIN (MI)	DIST TO CENTROID (MI)	IMPERVIOUS AREA (PCT)	SLOPE (FT/FT)	UNIT DURATION (MIN)
.27	.61	.19	1.50	.0511	5.00

COEFFICIENT (REFLECTING TIME TO PEAK)	COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF)
.157	.278

CALCULATED UNIT HYDROGRAPH

TIME TO PEAK (MIN)	PEAK RATE OF RUNOFF (CFS/SQMI)	UNIT HYDROGRAP PEAK (CFS)	VOLUME OF RUNOFF (AF)
9.32	1565.14	422.59	14.40

WIDTH AT 50 = 19. MIN. WIDTH AT 75 = 10. MIN. K50 = .29 K75 = .40

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. = .40 IN. MAX. IMPERVIOUS RET. = .10 IN.
INFILTRATION = 4.50 IN./HR. DECAY = .00180/SECOND FNINFL = .60 IN./HR.

TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH
0.	0.	35.	113.	70.	18.
5.	298.	40.	87.	75.	14.
10.	420.	45.	67.	80.	11.
15.	324.	50.	52.	85.	8.
20.	252.	55.	40.	90.	0.
25.	189.	60.	31.	0.	0.
30.	146.	65.	24.	0.	0.

1 BASIN ID: -- BASIN COMMENT: BASIN 19 EXISTING CONDITIONS

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 10

TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)	*	TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)	*
0.	.00	.000	0.	*	65.	.06	.010	51.	*
5.	.04	.000	0.	*	70.	.06	.010	44.	*
10.	.07	.000	0.	*	75.	.06	.010	39.	*
15.	.15	.002	1.	*	80.	.05	.001	32.	*
20.	.28	.004	2.	*	85.	.04	.001	25.	*
25.	.47	.188	58.	*	90.	.04	.001	20.	*
30.	.22	.157	128.	*	95.	.04	.001	15.	*
35.	.10	.045	142.	*	100.	.04	.001	12.	*
40.	.08	.025	126.	*	105.	.04	.001	9.	*
45.	.07	.018	107.	*	110.	.04	.001	6.	*
50.	.06	.008	88.	*	115.	.03	.000	4.	*
55.	.06	.009	72.	*	120.	.02	.000	3.	*
60.	.06	.010	60.	*	125.	.00	.000	2.	*

TOTAL PRECIP. = 2.15 (1-HOUR RAIN = 1.86) EXECESS PRECIP. = .502 INCHES
VOLUME OF EXCESS PRECIP = 7. ACRE-FEET
PEAK Q = 142. CFS TIME OF PEAK = 35. MIN.
INFILT.= 4.50 IN/HR DECAY = .00180 FNINF = .60 IN/HR
MAX.PERV.RET.= .40 IN. MAX.IMP.RET.= .10 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE AT TIME

CUHPE/PC VERSION MODIFIED IN JANUARY 1985

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

SOUTH CANYON-LIME CREEK DRAINAGE DESIGN PLAN BY FMG, INC

BASIN ID: -- BASIN COMMENT: BASIN 20 EXISITNG CONDITIONS

AREA OF BASIN (SQMI)	LENGTH OF BASIN (MI)	DIST TO CENTROID (MI)	IMPERVIOUS AREA (PCT)	SLOPE (FT/FT)	UNIT DURATION (MIN)
.97	1.63	.81	2.50	.0341	5.00

COEFFICIENT (REFLECTING TIME TO PEAK)	COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF)
.154	.328

CALCULATED UNIT HYDROGRAPH

TIME TO PEAK (MIN)	PEAK RATE OF RUNOFF (CFS/SQMI)	UNIT HYDROGRAP PEAK (CFS)	VOLUME OF RUNOFF (AF)

26.21 531.65 515.70 51.73

WIDTH AT 50 = 56. MIN. WIDTH AT 75 = 29. MIN. K50 = .28 K75 = .38

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. = .50 IN. MAX. IMPERVIOUS RET. = .09 IN.
INFILTRATION = 4.50 IN./HR. DECAY = .00180/SECOND FNINFL = .60 IN./HR.

TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH
0.	0.	95.	156.	190.	29.
5.	85.	100.	143.	195.	26.
10.	242.	105.	131.	200.	24.
15.	385.	110.	120.	205.	22.
20.	480.	115.	110.	210.	20.
25.	514.	120.	100.	215.	19.
30.	505.	125.	92.	220.	17.
35.	469.	130.	84.	225.	16.
40.	423.	135.	77.	230.	14.
45.	384.	140.	70.	235.	13.
50.	355.	145.	64.	240.	12.
55.	326.	150.	59.	245.	11.
60.	298.	155.	54.	250.	10.
65.	269.	160.	49.	255.	9.
70.	244.	165.	45.	260.	8.
75.	223.	170.	41.	265.	8.
80.	204.	175.	38.	270.	0.
85.	187.	180.	35.	0.	0.
90.	171.	185.	32.	0.	0.

1 BASIN ID: -- BASIN COMMENT: BASIN 20 EXISITNG CONDITIONS

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 10

TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)	TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)
0.	.00	.000	0.	150.	.00	.000	45.
5.	.04	.000	0.	155.	.00	.000	41.
10.	.07	.000	0.	160.	.00	.000	38.
15.	.15	.004	0.	165.	.00	.000	35.
20.	.28	.007	2.	170.	.00	.000	32.
25.	.47	.093	11.	175.	.00	.000	29.
30.	.22	.158	41.	180.	.00	.000	26.

35.	.10	.046	83.	*	185.	.00	.000	24.	*
40.	.08	.026	124.	*	190.	.00	.000	22.	*
45.	.07	.019	154.	*	195.	.00	.000	20.	*
50.	.06	.009	170.	*	200.	.00	.000	19.	*
55.	.06	.010	174.	*	205.	.00	.000	17.	*
60.	.06	.010	169.	*	210.	.00	.000	16.	*
65.	.06	.010	162.	*	215.	.00	.000	14.	*
70.	.06	.010	154.	*	220.	.00	.000	13.	*
75.	.06	.011	148.	*	225.	.00	.000	12.	*
80.	.05	.001	142.	*	230.	.00	.000	11.	*
85.	.04	.001	134.	*	235.	.00	.000	10.	*
90.	.04	.001	125.	*	240.	.00	.000	9.	*
95.	.04	.001	115.	*	245.	.00	.000	8.	*
100.	.04	.001	106.	*	250.	.00	.000	8.	*
105.	.04	.001	98.	*	255.	.00	.000	7.	*
110.	.04	.001	90.	*	260.	.00	.000	6.	*
115.	.03	.001	83.	*	265.	.00	.000	6.	*
120.	.02	.001	76.	*	270.	.00	.000	5.	*
125.	.00	.000	70.	*	275.	.00	.000	5.	*
130.	.00	.000	64.	*	280.	.00	.000	4.	*
135.	.00	.000	59.	*	285.	.00	.000	4.	*
140.	.00	.000	54.	*	290.	.00	.000	3.	*
145.	.00	.000	49.	*	295.	.00	.000	2.	*

TOTAL PRECIP. = 2.15 (1-HOUR RAIN = 1.86) EXECESS PRECIP. = .419 INCHES
VOLUME OF EXCESS PRECIP = 22. ACRE-FEET
PEAK Q = 174. CFS TIME OF PEAK = 55. MIN.
INFILT.= 4.50 IN/HR DECAY = .00180 FNINF = .60 IN/HR
MAX.PERV.RET.= .50 IN. MAX.IMP.RET.= .09 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE AT TIME

CUHPE/PC VERSION MODIFIED IN JANUARY 1985

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

SOUTH CANYON-LIME CREEK DRAINAGE DESIGN PLAN BY FMG, INC

BASIN ID: -- BASIN COMMENT: BASIN 21 EXISTING CONDITIONS

AREA OF BASIN (SQMI)	LENGTH OF BASIN (MI)	DIST TO CENTROID (MI)	IMPERVIOUS AREA (PCT)	SLOPE (FT/FT)	UNIT DURATION (MIN)
.18	.87	.34	5.00	.0449	5.00

COEFFICIENT (REFLECTING TIME TO PEAK)	COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF)
.144	.241

CALCULATED UNIT HYDROGRAPH

TIME TO PEAK PEAK RATE OF RUNOFF UNIT HYDROGRAP PEAK VOLUME OF RUNOFF

(MIN)	(CFS/SQMI)	(CFS)	(AF)
12.69	909.46	163.70	9.60

WIDTH AT 50 = 33. MIN. WIDTH AT 75 = 17. MIN. K50 = .23 K75 = .31

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. = .50 IN. MAX. IMPERVIOUS RET. = .09 IN.
INFILTRATION = 4.50 IN./HR. DECAY = .00180/SECOND FNINFL = .60 IN./HR.

TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH
0.	0.	45.	68.	90.	20.
5.	80.	50.	59.	95.	17.
10.	155.	55.	52.	100.	15.
15.	159.	60.	45.	105.	13.
20.	132.	65.	39.	110.	11.
25.	121.	70.	34.	115.	10.
30.	106.	75.	30.	120.	9.
35.	91.	80.	26.	125.	8.
40.	78.	85.	23.	130.	0.

1 BASIN ID: -- BASIN COMMENT: BASIN 21 EXISTING CONDITIONS

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 10

TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)	TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)
0.	.00	.000	0.	85.	.04	.002	25.
5.	.04	.000	0.	90.	.04	.002	23.
10.	.07	.001	0.	95.	.04	.002	20.
15.	.15	.007	1.	100.	.04	.002	18.
20.	.28	.013	2.	105.	.04	.002	16.
25.	.47	.102	12.	110.	.04	.002	14.
30.	.22	.159	32.	115.	.03	.002	13.
35.	.10	.047	47.	120.	.02	.001	11.
40.	.08	.027	51.	125.	.00	.000	10.
45.	.07	.020	49.	130.	.00	.000	9.
50.	.06	.010	46.	135.	.00	.000	8.
55.	.06	.011	43.	140.	.00	.000	7.
60.	.06	.011	39.	145.	.00	.000	6.
65.	.06	.012	36.	150.	.00	.000	4.
70.	.06	.012	33.	155.	.00	.000	3.
75.	.06	.012	31.	160.	.00	.000	2.

80.	.05	.002	29.	*	165.	.00	.000	2.	*

TOTAL PRECIP. = 2.15 (1-HOUR RAIN = 1.86) EXECESS PRECIP. = .459 INCHES
VOLUME OF EXCESS PRECIP = 4. ACRE-FEET
PEAK Q = 51. CFS TIME OF PEAK = 40. MIN.
INFILT.= 4.50 IN/HR DECAY = .00180 FNINF = .60 IN/HR
MAX.PERV.RET.= .50 IN. MAX.IMP.RET.= .09 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE AT TIME

CUHPE/PC VERSION MODIFIED IN JANUARY 1985

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

SOUTH CANYON-LIME CREEK DRAINAGE DESIGN PLAN BY FMG, INC

BASIN ID: -- BASIN COMMENT: BASIN 22 EXISTING CONDITIONS

AREA OF BASIN (SQMI)	LENGTH OF BASIN (MI)	DIST TO CENTROID (MI)	IMPERVIOUS AREA (PCT)	SLOPE (FT/FT)	UNIT DURATION (MIN)
.25	.99	.49	4.00	.0310	5.00

COEFFICIENT (REFLECTING TIME TO PEAK)	COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF)
.148	.259

CALCULATED UNIT HYDROGRAPH

TIME TO PEAK (MIN)	PEAK RATE OF RUNOFF (CFS/SQMI)	UNIT HYDROGRAP PEAK (CFS)	VOLUME OF RUNOFF (AF)
16.95	688.66	173.54	13.44

WIDTH AT 50 = 44. MIN. WIDTH AT 75 = 23. MIN. K50 = .23 K75 = .32

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. = .50 IN. MAX. IMPERVIOUS RET. = .09 IN.
INFILTRATION = 4.50 IN./HR. DECAY = .00180/SECOND FNINFL = .60 IN./HR.

TIME	UNIT HYDROGRAPH		TIME	UNIT HYDROGRAPH		TIME	UNIT HYDROGRAPH	
0.	0.	*	60.	71.	*	120.	20.	*
5.	56.	*	65.	64.	*	125.	18.	*
10.	133.	*	70.	58.	*	130.	16.	*
15.	171.	*	75.	52.	*	135.	15.	*

20.	169.	*	80.	47.	*	140.	13.	*
25.	148.	*	85.	42.	*	145.	12.	*
30.	131.	*	90.	38.	*	150.	11.	*
35.	124.	*	95.	34.	*	155.	10.	*
40.	112.	*	100.	31.	*	160.	9.	*
45.	100.	*	105.	28.	*	165.	8.	*
50.	88.	*	110.	25.	*	170.	0.	*
55.	79.	*	115.	23.	*	0.	0.	*

1 BASIN ID: -- BASIN COMMENT: BASIN 22 EXISTING CONDITIONS

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 10

TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)	*	TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)	*
0.	.00	.000	0.	*	100.	.04	.001	27.	*
5.	.04	.000	0.	*	105.	.04	.001	25.	*
10.	.07	.001	0.	*	110.	.04	.001	22.	*
15.	.15	.006	0.	*	115.	.03	.001	20.	*
20.	.28	.011	1.	*	120.	.02	.001	19.	*
25.	.47	.099	8.	*	125.	.00	.000	17.	*
30.	.22	.159	25.	*	130.	.00	.000	15.	*
35.	.10	.047	43.	*	135.	.00	.000	14.	*
40.	.08	.026	54.	*	140.	.00	.000	12.	*
45.	.07	.019	56.	*	145.	.00	.000	11.	*
50.	.06	.010	54.	*	150.	.00	.000	10.	*
55.	.06	.010	51.	*	155.	.00	.000	9.	*
60.	.06	.011	49.	*	160.	.00	.000	8.	*
65.	.06	.011	47.	*	165.	.00	.000	7.	*
70.	.06	.011	44.	*	170.	.00	.000	7.	*
75.	.06	.011	41.	*	175.	.00	.000	6.	*
80.	.05	.002	39.	*	180.	.00	.000	5.	*
85.	.04	.001	36.	*	185.	.00	.000	5.	*
90.	.04	.001	33.	*	190.	.00	.000	4.	*
95.	.04	.001	30.	*	195.	.00	.000	2.	*

TOTAL PRECIP. = 2.15 (1-HOUR RAIN = 1.86) EXECESS PRECIP. = .443 INCHES
VOLUME OF EXCESS PRECIP = 6. ACRE-FEET
PEAK Q = 56. CFS TIME OF PEAK = 45. MIN.
INFILT.= 4.50 IN/HR DECAY = .00180 FNINF = .60 IN/HR
MAX.PERV.RET.= .50 IN. MAX.IMP.RET.= .09 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE AT TIME

CUHPE/PC VERSION MODIFIED IN JANUARY 1985

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

SOUTH CANYON-LIME CREEK DRAINAGE DESIGN PLAN BY FMG, INC

BASIN ID: -- BASIN COMMENT: BASIN 23 EXISTING CONDITIONS

AREA OF BASIN (SQMI)	LENGTH OF BASIN (MI)	DIST TO CENTROID (MI)	IMPERVIOUS AREA (PCT)	SLOPE (FT/FT)	UNIT DURATION (MIN)
.26	1.06	.55	42.50	.0179	5.00

COEFFICIENT (REFLECTING TIME TO PEAK)	COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF)
.092	.449

CALCULATED UNIT HYDROGRAPH

TIME TO PEAK (MIN)	PEAK RATE OF RUNOFF (CFS/SQMI)	UNIT HYDROGRAP PEAK (CFS)	VOLUME OF RUNOFF (AF)
13.68	1542.57	397.98	13.76

WIDTH AT 50 = 19. MIN. WIDTH AT 75 = 10. MIN. K50 = .35 K75 = .45

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. = .35 IN. MAX. IMPERVIOUS RET. = .07 IN.
INFILTRATION = 4.00 IN./HR. DECAY = .00180/SECOND FNINFL = .60 IN./HR.

TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH
0.	0.	35.	123.	70.	18.
5.	123.	40.	93.	75.	13.
10.	335.	45.	71.	80.	10.
15.	391.	50.	54.	85.	8.
20.	288.	55.	41.	90.	0.
25.	218.	60.	31.	0.	0.
30.	162.	65.	23.	0.	0.

1 BASIN ID: -- BASIN COMMENT: BASIN 23 EXISTING CONDITIONS

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 10

TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)	TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)
0.	.00	.000	0.	85.	.04	.014	70.
5.	.04	.000	0.	90.	.04	.014	60.

10.	.07	.015	2.	*	95.	.04	.014	53.	*
15.	.15	.062	12.	*	100.	.04	.014	46.	*
20.	.28	.113	40.	*	105.	.04	.014	42.	*
25.	.47	.335	107.	*	110.	.04	.014	37.	*
30.	.22	.181	199.	*	115.	.03	.013	33.	*
35.	.10	.068	248.	*	120.	.02	.010	31.	*
40.	.08	.047	232.	*	125.	.00	.000	27.	*
45.	.07	.039	199.	*	130.	.00	.000	22.	*
50.	.06	.029	169.	*	135.	.00	.000	16.	*
55.	.06	.029	143.	*	140.	.00	.000	12.	*
60.	.06	.029	122.	*	145.	.00	.000	9.	*
65.	.06	.029	107.	*	150.	.00	.000	7.	*
70.	.06	.029	95.	*	155.	.00	.000	5.	*
75.	.06	.029	87.	*	160.	.00	.000	3.	*
80.	.05	.019	79.	*	165.	.00	.000	3.	*

TOTAL PRECIP. = 2.15 (1-HOUR RAIN = 1.86) EXECESS PRECIP. = 1.160 INCHES
VOLUME OF EXCESS PRECIP = 16. ACRE-FEET
PEAK Q = 248. CFS TIME OF PEAK = 35. MIN.
INFILT.= 4.00 IN/HR DECAY = .00180 FNINF = .60 IN/HR
MAX.PERV.RET.= .35 IN. MAX.IMP.RET.= .07 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE AT TIME

CUHPE/PC VERSION MODIFIED IN JANUARY 1985

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

SOUTH CANYON-LIME CREEK DRAINAGE DESIGN PLAN BY FMG, INC

BASIN ID: -- BASIN COMMENT: BASIN 24 EXISTING CONDITIONS

AREA OF BASIN (SQMI)	LENGTH OF BASIN (MI)	DIST TO CENTROID (MI)	IMPERVIOUS AREA (PCT)	SLOPE (FT/FT)	UNIT DURATION (MIN)
.22	.81	.38	26.00	.0359	5.00

COEFFICIENT (REFLECTING TIME TO PEAK)	COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF)
.103	.288

CALCULATED UNIT HYDROGRAPH

TIME TO PEAK (MIN)	PEAK RATE OF RUNOFF (CFS/SQMI)	UNIT HYDROGRAP PEAK (CFS)	VOLUME OF RUNOFF (AF)
10.32	1415.75	311.46	11.73

WIDTH AT 50 = 21. MIN. WIDTH AT 75 = 11. MIN. K50 = .29 K75 = .40

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. = .40 IN. MAX. IMPERVIOUS RET. = .07 IN.
INFILTRATION = 4.00 IN./HR. DECAY = .00180/SECOND FNINFL = .60 IN./HR.

TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH
0.	0.	35.	99.	70.	19.
5.	197.	40.	79.	75.	15.
10.	311.	45.	62.	80.	12.
15.	264.	50.	49.	85.	10.
20.	205.	55.	39.	90.	8.
25.	159.	60.	31.	95.	0.
30.	125.	65.	25.	0.	0.

1 BASIN ID: -- BASIN COMMENT: BASIN 24 EXISTING CONDITIONS

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 10

TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)	TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)
0.	.00	.000	0.	85.	.04	.009	45.
5.	.04	.000	0.	90.	.04	.009	39.
10.	.07	.009	2.	95.	.04	.009	34.
15.	.15	.038	10.	100.	.04	.009	30.
20.	.28	.069	28.	105.	.04	.009	27.
25.	.47	.267	86.	110.	.04	.009	24.
30.	.22	.173	144.	115.	.03	.008	20.
35.	.10	.060	157.	120.	.02	.006	17.
40.	.08	.038	143.	125.	.00	.000	14.
45.	.07	.031	124.	130.	.00	.000	11.
50.	.06	.021	107.	135.	.00	.000	9.
55.	.06	.021	92.	140.	.00	.000	7.
60.	.06	.021	81.	145.	.00	.000	5.
65.	.06	.022	72.	150.	.00	.000	4.
70.	.06	.022	64.	155.	.00	.000	3.
75.	.06	.022	59.	160.	.00	.000	2.
80.	.05	.011	53.	165.	.00	.000	2.

TOTAL PRECIP. = 2.15 (1-HOUR RAIN = 1.86) EXECESS PRECIP. = .889 INCHES
VOLUME OF EXCESS PRECIP = 10. ACRE-FEET
PEAK Q = 157. CFS TIME OF PEAK = 35. MIN.
INFILT.= 4.00 IN/HR DECAY = .00180 FNINF = .60 IN/HR
MAX.PERV.RET.= .40 IN. MAX.IMP.RET.= .07 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE AT TIME

CUHPE/PC VERSION MODIFIED IN JANUARY 1985

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

SOUTH CANYON-LIME CREEK DRAINAGE DESIGN PLAN BY FMG, INC

BASIN ID: -- BASIN COMMENT: BASIN 25 EXISTING CONDITIONS

AREA OF BASIN (SQMI)	LENGTH OF BASIN (MI)	DIST TO CENTROID (MI)	IMPERVIOUS AREA (PCT)	SLOPE (FT/FT)	UNIT DURATION (MIN)
.49	1.40	.61	5.00	.0239	5.00

COEFFICIENT (REFLECTING TIME TO PEAK)	COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF)
.144	.281

CALCULATED UNIT HYDROGRAPH

TIME TO PEAK (MIN)	PEAK RATE OF RUNOFF (CFS/SQMI)	UNIT HYDROGRAP PEAK (CFS)	VOLUME OF RUNOFF (AF)
22.19	547.35	268.75	26.19

WIDTH AT 50 = 55. MIN. WIDTH AT 75 = 29. MIN. K50 = .24 K75 = .33

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. = .40 IN. MAX. IMPERVIOUS RET. = .08 IN.
INFILTRATION = 3.40 IN./HR. DECAY = .00180/SECOND FNINFL = .50 IN./HR.

TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH
0.	0.	80.	101.	160.	25.
5.	57.	85.	93.	165.	23.
10.	156.	90.	85.	170.	21.
15.	232.	95.	78.	175.	20.
20.	266.	100.	72.	180.	18.
25.	265.	105.	66.	185.	16.
30.	244.	110.	60.	190.	15.
35.	218.	115.	55.	195.	14.
40.	202.	120.	51.	200.	13.
45.	190.	125.	46.	205.	12.
50.	175.	130.	43.	210.	11.
55.	160.	135.	39.	215.	10.
60.	145.	140.	36.	220.	9.
65.	131.	145.	33.	225.	8.

70.	120.	*	150.	30.	*	230.	8.	*
75.	110.	*	155.	28.	*	235.	0.	*

1 BASIN ID: -- BASIN COMMENT: BASIN 25 EXISTING CONDITIONS

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 10

TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)	*	TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)	*
0.	.00	.000	0.	*	140.	.00	.000	46.	*
5.	.04	.000	0.	*	145.	.00	.000	42.	*
10.	.07	.001	0.	*	150.	.00	.000	39.	*
15.	.15	.007	1.	*	155.	.00	.000	36.	*
20.	.28	.013	2.	*	160.	.00	.000	33.	*
25.	.47	.261	19.	*	165.	.00	.000	30.	*
30.	.22	.171	56.	*	170.	.00	.000	28.	*
35.	.10	.057	96.	*	175.	.00	.000	25.	*
40.	.08	.036	126.	*	180.	.00	.000	23.	*
45.	.07	.029	140.	*	185.	.00	.000	21.	*
50.	.06	.018	143.	*	190.	.00	.000	19.	*
55.	.06	.019	138.	*	195.	.00	.000	18.	*
60.	.06	.019	133.	*	200.	.00	.000	16.	*
65.	.06	.020	130.	*	205.	.00	.000	15.	*
70.	.06	.020	127.	*	210.	.00	.000	14.	*
75.	.06	.020	123.	*	215.	.00	.000	13.	*
80.	.05	.007	118.	*	220.	.00	.000	12.	*
85.	.04	.002	111.	*	225.	.00	.000	11.	*
90.	.04	.002	104.	*	230.	.00	.000	10.	*
95.	.04	.002	96.	*	235.	.00	.000	9.	*
100.	.04	.002	89.	*	240.	.00	.000	8.	*
105.	.04	.002	82.	*	245.	.00	.000	7.	*
110.	.04	.002	76.	*	250.	.00	.000	7.	*
115.	.03	.002	70.	*	255.	.00	.000	4.	*
120.	.02	.001	65.	*	260.	.00	.000	3.	*
125.	.00	.000	60.	*	265.	.00	.000	2.	*
130.	.00	.000	55.	*	270.	.00	.000	2.	*
135.	.00	.000	50.	*	275.	.00	.000	1.	*

TOTAL PRECIP. = 2.15 (1-HOUR RAIN = 1.86) EXECESS PRECIP. = .711 INCHES
VOLUME OF EXCESS PRECIP = 19. ACRE-FEET
PEAK Q = 143. CFS TIME OF PEAK = 50. MIN.
INFILT.= 3.40 IN/HR DECAY = .00180 FNINF = .50 IN/HR
MAX.PERV.RET.= .40 IN. MAX.IMP.RET.= .08 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE AT TIME

CUHPE/PC VERSION MODIFIED IN JANUARY 1985

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

SOUTH CANYON-LIME CREEK DRAINAGE DESIGN PLAN BY FMG, INC

BASIN ID: -- BASIN COMMENT: BASIN 26 EXISTING CONDITIONS

AREA OF BASIN (SQMI)	LENGTH OF BASIN (MI)	DIST TO CENTROID (MI)	IMPERVIOUS AREA (PCT)	SLOPE (FT/FT)	UNIT DURATION (MIN)
.32	1.08	.57	18.50	.0294	5.00

COEFFICIENT (REFLECTING TIME TO PEAK)	COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF)
.112	.264

CALCULATED UNIT HYDROGRAPH

TIME TO PEAK (MIN)	PEAK RATE OF RUNOFF (CFS/SQMI)	UNIT HYDROGRAP PEAK (CFS)	VOLUME OF RUNOFF (AF)
14.96	812.46	263.24	17.28

WIDTH AT 50 = 37. MIN. WIDTH AT 75 = 19. MIN. K50 = .24 K75 = .33

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. = .40 IN. MAX. IMPERVIOUS RET. = .07 IN.
INFILTRATION = 3.70 IN./HR. DECAY = .00180/SECOND FNINFL = .50 IN./HR.

TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH
0.	0.	55.	96.	110.	23.
5.	103.	60.	85.	115.	21.
10.	225.	65.	75.	120.	18.
15.	263.	70.	66.	125.	16.
20.	240.	75.	58.	130.	14.
25.	205.	80.	51.	135.	12.
30.	188.	85.	45.	140.	11.
35.	166.	90.	39.	145.	10.
40.	144.	95.	35.	150.	8.
45.	125.	100.	30.	155.	7.
50.	110.	105.	27.	160.	0.

1 BASIN ID: -- BASIN COMMENT: BASIN 26 EXISTING CONDITIONS

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 10

INCREMENT TOTAL STORM * INCREMENT TOTAL STORM *

TIME (MIN.)	RAINFALL (IN)	EXCESS PRECIP	HYDROGRAPH (CFS)	*	TIME (MIN.)	RAINFALL (IN)	EXCESS PRECIP	HYDROGRAPH (CFS)	*
0.	.00	.000	0.	*	110.	.04	.006	54.	*
5.	.04	.000	0.	*	115.	.03	.006	50.	*
10.	.07	.006	1.	*	120.	.02	.004	45.	*
15.	.15	.027	4.	*	125.	.00	.000	41.	*
20.	.28	.049	13.	*	130.	.00	.000	36.	*
25.	.47	.276	48.	*	135.	.00	.000	32.	*
30.	.22	.176	101.	*	140.	.00	.000	28.	*
35.	.10	.063	137.	*	145.	.00	.000	25.	*
40.	.08	.041	147.	*	150.	.00	.000	22.	*
45.	.07	.034	143.	*	155.	.00	.000	19.	*
50.	.06	.024	137.	*	160.	.00	.000	17.	*
55.	.06	.024	130.	*	165.	.00	.000	15.	*
60.	.06	.025	121.	*	170.	.00	.000	13.	*
65.	.06	.025	114.	*	175.	.00	.000	11.	*
70.	.06	.025	107.	*	180.	.00	.000	8.	*
75.	.06	.025	102.	*	185.	.00	.000	6.	*
80.	.05	.012	96.	*	190.	.00	.000	5.	*
85.	.04	.006	88.	*	195.	.00	.000	4.	*
90.	.04	.006	80.	*	200.	.00	.000	3.	*
95.	.04	.006	73.	*	205.	.00	.000	3.	*
100.	.04	.006	66.	*	210.	.00	.000	2.	*
105.	.04	.006	60.	*	215.	.00	.000	2.	*

TOTAL PRECIP. = 2.15 (1-HOUR RAIN = 1.86) EXECESS PRECIP. = .879 INCHES
VOLUME OF EXCESS PRECIP = 15. ACRE-FEET
PEAK Q = 147. CFS TIME OF PEAK = 40. MIN.
INFILT.= 3.70 IN/HR DECAY = .00180 FNINF = .50 IN/HR
MAX.PERV.RET.= .40 IN. MAX.IMP.RET.= .07 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE AT TIME

CUHPE/PC VERSION MODIFIED IN JANUARY 1985

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

SOUTH CANYON-LIME CREEK DRAINAGE DESIGN PLAN BY FMG, INC

BASIN ID: -- BASIN COMMENT: BASIN 27 EXISTING CONDITIONS

AREA OF BASIN (SQMI)	LENGTH OF BASIN (MI)	DIST TO CENTROID (MI)	IMPERVIOUS AREA (PCT)	SLOPE (FT/FT)	UNIT DURATION (MIN)
.34	1.34	.64	2.00	.0345	5.00

COEFFICIENT (REFLECTING TIME TO PEAK)	COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF)
.156	.284

CALCULATED UNIT HYDROGRAPH

TIME TO PEAK (MIN)	PEAK RATE OF RUNOFF (CFS/SQMI)	UNIT HYDROGRAP PEAK (CFS)	VOLUME OF RUNOFF (AF)
21.95	560.02	189.29	18.03

WIDTH AT 50 = 54. MIN. WIDTH AT 75 = 28. MIN. K50 = .25 K75 = .33

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. = .50 IN. MAX. IMPERVIOUS RET. = .09 IN.
INFILTRATION = 3.70 IN./HR. DECAY = .00180/SECOND FNINFL = .50 IN./HR.

TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH
0.	0.	75.	76.	150.	21.
5.	41.	80.	70.	155.	19.
10.	112.	85.	64.	160.	17.
15.	165.	90.	59.	165.	16.
20.	188.	95.	54.	170.	15.
25.	186.	100.	49.	175.	13.
30.	170.	105.	45.	180.	12.
35.	152.	110.	41.	185.	11.
40.	142.	115.	38.	190.	10.
45.	132.	120.	35.	195.	9.
50.	121.	125.	32.	200.	9.
55.	111.	130.	29.	205.	8.
60.	100.	135.	27.	210.	0.
65.	90.	140.	25.	0.	0.
70.	83.	145.	23.	0.	0.

1 BASIN ID: -- BASIN COMMENT: BASIN 27 EXISTING CONDITIONS

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 10

TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)	TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)
0.	.00	.000	0.	125.	.00	.000	33.
5.	.04	.000	0.	130.	.00	.000	30.
10.	.07	.000	0.	135.	.00	.000	28.
15.	.15	.003	0.	140.	.00	.000	25.
20.	.28	.005	1.	145.	.00	.000	23.
25.	.47	.145	7.	150.	.00	.000	21.
30.	.22	.169	25.	155.	.00	.000	20.

35.	.10	.055	46.	*	160.	.00	.000	18.	*
40.	.08	.035	64.	*	165.	.00	.000	16.	*
45.	.07	.027	74.	*	170.	.00	.000	15.	*
50.	.06	.017	77.	*	175.	.00	.000	14.	*
55.	.06	.018	76.	*	180.	.00	.000	13.	*
60.	.06	.018	74.	*	185.	.00	.000	12.	*
65.	.06	.018	72.	*	190.	.00	.000	11.	*
70.	.06	.018	71.	*	195.	.00	.000	10.	*
75.	.06	.019	69.	*	200.	.00	.000	9.	*
80.	.05	.006	67.	*	205.	.00	.000	8.	*
85.	.04	.001	63.	*	210.	.00	.000	8.	*
90.	.04	.001	59.	*	215.	.00	.000	7.	*
95.	.04	.001	55.	*	220.	.00	.000	6.	*
100.	.04	.001	50.	*	225.	.00	.000	6.	*
105.	.04	.001	46.	*	230.	.00	.000	4.	*
110.	.04	.001	42.	*	235.	.00	.000	3.	*
115.	.03	.001	39.	*	240.	.00	.000	2.	*
120.	.02	.000	36.	*	245.	.00	.000	2.	*

TOTAL PRECIP. = 2.15 (1-HOUR RAIN = 1.86) EXECESS PRECIP. = .558 INCHES
VOLUME OF EXCESS PRECIP = 10. ACRE-FEET
PEAK Q = 77. CFS TIME OF PEAK = 50. MIN.
INFILT.= 3.70 IN/HR DECAY = .00180 FNINF = .50 IN/HR
MAX.PERV.RET.= .50 IN. MAX.IMP.RET.= .09 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE AT TIME

CUHPE/PC VERSION MODIFIED IN JANUARY 1985

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

SOUTH CANYON-LIME CREEK DRAINAGE DESIGN PLAN BY FMG, INC

BASIN ID: -- BASIN COMMENT: BASIN 28 EXISTING CONDITIONS

AREA OF BASIN (SQMI)	LENGTH OF BASIN (MI)	DIST TO CENTROID (MI)	IMPERVIOUS AREA (PCT)	SLOPE (FT/FT)	UNIT DURATION (MIN)
.83	1.40	.72	3.50	.0350	5.00

COEFFICIENT (REFLECTING TIME TO PEAK)	COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF)
.150	.313

CALCULATED UNIT HYDROGRAPH

TIME TO PEAK (MIN)	PEAK RATE OF RUNOFF (CFS/SQMI)	UNIT HYDROGRAP PEAK (CFS)	VOLUME OF RUNOFF (AF)
22.70	595.44	493.02	44.16

WIDTH AT 50 = 50. MIN. WIDTH AT 75 = 26. MIN. K50 = .27 K75 = .37

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. = .45 IN. MAX. IMPERVIOUS RET. = .09 IN.
INFILTRATION = 3.80 IN./HR. DECAY = .00180/SECOND FNINFL = .60 IN./HR.

TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH
0.	0.	85.	148.	170.	27.
5.	102.	90.	134.	175.	25.
10.	279.	95.	122.	180.	23.
15.	418.	100.	110.	185.	20.
20.	485.	105.	100.	190.	18.
25.	488.	110.	90.	195.	17.
30.	452.	115.	82.	200.	15.
35.	403.	120.	74.	205.	14.
40.	365.	125.	67.	210.	12.
45.	335.	130.	61.	215.	11.
50.	304.	135.	55.	220.	10.
55.	274.	140.	50.	225.	9.
60.	244.	145.	45.	230.	8.
65.	221.	150.	41.	235.	8.
70.	200.	155.	37.	240.	0.
75.	181.	160.	33.	0.	0.
80.	164.	165.	30.	0.	0.

1 BASIN ID: -- BASIN COMMENT: BASIN 28 EXISTING CONDITIONS

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 10

TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)	TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)
0.	.00	.000	0.	135.	.00	.000	55.
5.	.04	.000	0.	140.	.00	.000	50.
10.	.07	.001	0.	145.	.00	.000	45.
15.	.15	.005	1.	150.	.00	.000	41.
20.	.28	.009	3.	155.	.00	.000	37.
25.	.47	.173	23.	160.	.00	.000	33.
30.	.22	.161	71.	165.	.00	.000	30.
35.	.10	.048	130.	170.	.00	.000	27.
40.	.08	.027	175.	175.	.00	.000	25.
45.	.07	.020	199.	180.	.00	.000	22.
50.	.06	.010	204.	185.	.00	.000	20.
55.	.06	.010	197.	190.	.00	.000	18.
60.	.06	.011	186.	195.	.00	.000	17.

65.	.06	.011	176.	*	200.	.00	.000	15.	*
70.	.06	.011	166.	*	205.	.00	.000	14.	*
75.	.06	.011	157.	*	210.	.00	.000	12.	*
80.	.05	.002	147.	*	215.	.00	.000	11.	*
85.	.04	.001	137.	*	220.	.00	.000	10.	*
90.	.04	.001	126.	*	225.	.00	.000	9.	*
95.	.04	.001	115.	*	230.	.00	.000	8.	*
100.	.04	.001	105.	*	235.	.00	.000	8.	*
105.	.04	.001	96.	*	240.	.00	.000	7.	*
110.	.04	.001	88.	*	245.	.00	.000	6.	*
115.	.03	.001	80.	*	250.	.00	.000	6.	*
120.	.02	.001	73.	*	255.	.00	.000	5.	*
125.	.00	.000	67.	*	260.	.00	.000	3.	*
130.	.00	.000	61.	*	265.	.00	.000	2.	*

TOTAL PRECIP. = 2.15 (1-HOUR RAIN = 1.86) EXECESS PRECIP. = .518 INCHES
VOLUME OF EXCESS PRECIP = 23. ACRE-FEET
PEAK Q = 204. CFS TIME OF PEAK = 50. MIN.
INFILT.= 3.80 IN/HR DECAY = .00180 FNINF = .60 IN/HR
MAX.PERV.RET.= .45 IN. MAX.IMP.RET.= .09 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE AT TIME

CUHPE/PC VERSION MODIFIED IN JANUARY 1985

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

SOUTH CANYON-LIME CREEK DRAINAGE DESIGN PLAN BY FMG, INC

BASIN ID: -- BASIN COMMENT: BASIN 29 EXISTING CONDITIONS

AREA OF BASIN (SQMI)	LENGTH OF BASIN (MI)	DIST TO CENTROID (MI)	IMPERVIOUS AREA (PCT)	SLOPE (FT/FT)	UNIT DURATION (MIN)
.14	.76	.30	2.00	.0260	5.00

COEFFICIENT (REFLECTING TIME TO PEAK)	COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF)
.156	.249

CALCULATED UNIT HYDROGRAPH

TIME TO PEAK (MIN)	PEAK RATE OF RUNOFF (CFS/SQMI)	UNIT HYDROGRAP PEAK (CFS)	VOLUME OF RUNOFF (AF)
13.52	866.84	122.22	7.52

WIDTH AT 50 = 35. MIN. WIDTH AT 75 = 18. MIN. K50 = .23 K75 = .32

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. = .40 IN. MAX. IMPERVIOUS RET. = .10 IN.

INFILTRATION = 3.90 IN./HR. DECAY = .00180/SECOND FNINFL = .60 IN./HR.

TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH
0.	0.	45.	54.	90.	17.
5.	55.	50.	47.	95.	15.
10.	112.	55.	42.	100.	13.
15.	121.	60.	37.	105.	12.
20.	104.	65.	32.	110.	10.
25.	91.	70.	29.	115.	9.
30.	83.	75.	25.	120.	8.
35.	72.	80.	22.	125.	0.
40.	61.	85.	19.	0.	0.

1 BASIN ID: -- BASIN COMMENT: BASIN 29 EXISTING CONDITIONS

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 10

TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)	TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)
0.	.00	.000	0.	80.	.05	.001	25.
5.	.04	.000	0.	85.	.04	.001	23.
10.	.07	.000	0.	90.	.04	.001	20.
15.	.15	.003	0.	95.	.04	.001	18.
20.	.28	.005	1.	100.	.04	.001	16.
25.	.47	.214	13.	105.	.04	.001	14.
30.	.22	.160	34.	110.	.04	.001	12.
35.	.10	.047	47.	115.	.03	.001	11.
40.	.08	.026	49.	120.	.02	.000	10.
45.	.07	.019	46.	125.	.00	.000	9.
50.	.06	.009	44.	130.	.00	.000	8.
55.	.06	.010	40.	135.	.00	.000	7.
60.	.06	.010	36.	140.	.00	.000	6.
65.	.06	.010	33.	145.	.00	.000	4.
70.	.06	.010	30.	150.	.00	.000	2.
75.	.06	.010	28.	155.	.00	.000	1.

TOTAL PRECIP. = 2.15 (1-HOUR RAIN = 1.86) EXECESS PRECIP. = .540 INCHES
VOLUME OF EXCESS PRECIP = 4. ACRE-FEET
PEAK Q = 49. CFS TIME OF PEAK = 40. MIN.
INFILT.= 3.90 IN/HR DECAY = .00180 FNINF = .60 IN/HR
MAX.PERV.RET.= .40 IN. MAX.IMP.RET.= .10 IN.

1 U.D.F.C.D. CUHPD RUNOFF ANALYSIS EXECUTED ON DATE AT TIME

CUHPE/PC VERSION MODIFIED IN JANUARY 1985 TO WRITE OUTPUT FILE OF STORM HYDROGRAPHS FOR SUBSEQUENT USE WITH MULTI-PLAN RIVER ROUTING ROUTINES OF HEC-1

SOUTH CANYON-LIME CREEK DRAINAGE DESIGN PLAN BY FMG, INC

NO HYDROGRAPH VALUES WERE WRITTEN TO AN OUTPUTFILE FOR THIS RUN OF CUHPD.

APPENDIX C - CUHPE/PC - 50 YR

EXISTING LAND USE
AND EXISTING HYDRAULIC CONDITIONS

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE AT TIME

CUHPE/PC VERSION MODIFIED IN JANUARY 1985

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

SOUTH CANYON-LIME CREEK DRAINAGE DESIGN PLAN BY FMG, INC

BASIN ID: -- BASIN COMMENT: BASIN 1 EXISTING CONDITIONS

AREA OF BASIN (SQMI)	LENGTH OF BASIN (MI)	DIST TO CENTROID (MI)	IMPERVIOUS AREA (PCT)	SLOPE (FT/FT)	UNIT DURATION (MIN)
.19	.64	.27	22.00	.0143	5.00

COEFFICIENT (REFLECTING TIME TO PEAK)	COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF)
.108	.259

CALCULATED UNIT HYDROGRAPH

TIME TO PEAK (MIN)	PEAK RATE OF RUNOFF (CFS/SQMI)	UNIT HYDROGRAP PEAK (CFS)	VOLUME OF RUNOFF (AF)
10.22	1289.43	246.28	10.19

WIDTH AT 50 = 23. MIN. WIDTH AT 75 = 12. MIN. K50 = .26 K75 = .36

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. = .40 IN. MAX. IMPERVIOUS RET. = .08 IN.
INFILTRATION = 4.20 IN./HR. DECAY = .00180/SECOND FNINFL = .60 IN./HR.

TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH
0.	0.	35.	90.	70.	21.
5.	158.	40.	73.	75.	17.
10.	246.	45.	60.	80.	14.
15.	210.	50.	48.	85.	11.
20.	171.	55.	39.	90.	9.
25.	139.	60.	32.	95.	8.
30.	110.	65.	26.	100.	0.

1 BASIN ID: -- BASIN COMMENT: BASIN 1 EXISTING CONDITIONS

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 50

TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)	*	TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)	*
0.	.00	.000	0.	*	85.	.05	.010	84.	*
5.	.03	.000	0.	*	90.	.04	.008	71.	*
10.	.09	.010	2.	*	95.	.04	.008	60.	*
15.	.13	.028	7.	*	100.	.04	.008	51.	*
20.	.21	.045	16.	*	105.	.04	.008	43.	*
25.	.40	.121	38.	*	110.	.04	.008	37.	*
30.	.67	.609	141.	*	115.	.04	.008	32.	*
35.	.32	.271	231.	*	120.	.04	.008	28.	*
40.	.21	.168	252.	*	125.	.00	.000	20.	*
45.	.13	.091	242.	*	130.	.00	.000	15.	*
50.	.13	.092	223.	*	135.	.00	.000	11.	*
55.	.09	.045	199.	*	140.	.00	.000	8.	*
60.	.09	.045	174.	*	145.	.00	.000	6.	*
65.	.09	.045	154.	*	150.	.00	.000	5.	*
70.	.06	.024	135.	*	155.	.00	.000	4.	*
75.	.06	.024	117.	*	160.	.00	.000	3.	*
80.	.05	.010	99.	*	165.	.00	.000	2.	*

TOTAL PRECIP. = 3.09 (1-HOUR RAIN = 2.67) EXECESS PRECIP. = 1.693 INCHES
VOLUME OF EXCESS PRECIP = 17. ACRE-FEET
PEAK Q = 252. CFS TIME OF PEAK = 40. MIN.
INFILT.= 4.20 IN/HR DECAY = .00180 FNINF = .60 IN/HR
MAX.PERV.RET.= .40 IN. MAX.IMP.RET.= .08 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE AT TIME

CUHPE/PC VERSION MODIFIED IN JANUARY 1985

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

SOUTH CANYON-LIME CREEK DRAINAGE DESIGN PLAN BY FMG, INC

BASIN ID: -- BASIN COMMENT: BASIN 2 EXISTING CONDITIONS

AREA OF BASIN (SQMI)	LENGTH OF BASIN (MI)	DIST TO CENTROID (MI)	IMPERVIOUS AREA (PCT)	SLOPE (FT/FT)	UNIT DURATION (MIN)
.05	.66	.36	17.00	.0396	5.00

COEFFICIENT (REFLECTING TIME TO PEAK)	COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF)
.115	.196

CALCULATED UNIT HYDROGRAPH

TIME TO PEAK TIME OF CONCENTRATION PEAK RATE OF RUNOFF UNIT HYDROGRAPH PEAK VOLUME OF RUNOFF

(MIN)	(MIN)	(CFS/SQMI)	(CFS)	(AF)
6.10	22.00	2087.35	108.54	2.77

*** NOTE : THE TIME TO PEAK IS CALCULATED BASED ON THE TIME OF CONCENTRATION PROVIDED BY THE USER, REPLACING THE ONE COMPUTED BY CUHPD (TP= 9.98)

WIDTH AT 50 = 14. MIN. WIDTH AT 75 = 7. MIN. K50 = .25 K75 = .35

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. = .35 IN. MAX. IMPERVIOUS RET. = .09 IN.
INFILTRATION = 4.00 IN./HR. DECAY = .00180/SECOND FNINFL = .60 IN./HR.

TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH
0.	0.	20.	45.	40.	13.
5.	104.	25.	33.	45.	10.
10.	85.	30.	25.	50.	0.
15.	63.	35.	18.	0.	0.

1 BASIN ID: -- BASIN COMMENT: BASIN 2 EXISTING CONDITIONS

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 50

TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)	TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)
0.	.00	.000	0.	65.	.09	.043	36.
5.	.03	.000	0.	70.	.06	.022	28.
10.	.09	.006	1.	75.	.06	.022	19.
15.	.13	.022	3.	80.	.05	.008	13.
20.	.21	.034	6.	85.	.05	.008	9.
25.	.40	.153	21.	90.	.04	.006	7.
30.	.67	.608	80.	95.	.04	.006	5.
35.	.32	.269	92.	100.	.04	.006	4.
40.	.21	.166	87.	105.	.04	.006	3.
45.	.13	.088	74.	110.	.04	.006	3.
50.	.13	.089	64.	115.	.04	.006	3.
55.	.09	.042	52.	120.	.04	.006	2.
60.	.09	.043	43.	125.	.00	.000	2.

TOTAL PRECIP. = 3.09 (1-HOUR RAIN = 2.67) EXECESS PRECIP. = 1.666 INCHES
VOLUME OF EXCESS PRECIP = 5. ACRE-FEET
PEAK Q = 92. CFS TIME OF PEAK = 35. MIN.
INFILT.= 4.00 IN/HR DECAY = .00180 FNINF = .60 IN/HR
MAX.PERV.RET.= .35 IN. MAX.IMP.RET.= .09 IN.

RATIONAL FORMULA C = .54
I = 5.0 INCHES/HOUR
A = 33.3 ACRES
Q = 90. CFS

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE AT TIME

CUHPE/PC VERSION MODIFIED IN JANUARY 1985

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

SOUTH CANYON-LIME CREEK DRAINAGE DESIGN PLAN BY FMG, INC

BASIN ID: -- BASIN COMMENT: BASIN 3 EXISTING CONDITIONS

AREA OF BASIN (SQMI)	LENGTH OF BASIN (MI)	DIST TO CENTROID (MI)	IMPERVIOUS AREA (PCT)	SLOPE (FT/FT)	UNIT DURATION (MIN)
.14	.78	.45	14.50	.0268	5.00

COEFFICIENT (REFLECTING TIME TO PEAK)	COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF)
.118	.221

CALCULATED UNIT HYDROGRAPH

TIME TO PEAK (MIN)	PEAK RATE OF RUNOFF (CFS/SQMI)	UNIT HYDROGRAP PEAK (CFS)	VOLUME OF RUNOFF (AF)
12.74	828.25	117.61	7.57

WIDTH AT 50 = 36. MIN. WIDTH AT 75 = 19. MIN. K50 = .21 K75 = .29

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. = .38 IN. MAX. IMPERVIOUS RET. = .08 IN.
INFILTRATION = 3.90 IN./HR. DECAY = .00180/SECOND FNINFL = .55 IN./HR.

TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH
0.	0.	45.	54.	90.	19.
5.	57.	50.	48.	95.	17.

10.	111.	*	55.	43.	*	100.	15.	*
15.	114.	*	60.	38.	*	105.	13.	*
20.	94.	*	65.	34.	*	110.	12.	*
25.	85.	*	70.	30.	*	115.	10.	*
30.	81.	*	75.	27.	*	120.	9.	*
35.	71.	*	80.	24.	*	125.	8.	*
40.	61.	*	85.	21.	*	130.	0.	*

1 BASIN ID: -- BASIN COMMENT: BASIN 3 EXISTING CONDITIONS

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 50

TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)	*	TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)	*
0.	.00	.000	0.	*	95.	.04	.005	62.	*
5.	.03	.000	0.	*	100.	.04	.005	56.	*
10.	.09	.007	0.	*	105.	.04	.005	50.	*
15.	.13	.018	2.	*	110.	.04	.005	45.	*
20.	.21	.029	4.	*	115.	.04	.005	41.	*
25.	.40	.133	14.	*	120.	.04	.005	37.	*
30.	.67	.611	55.	*	125.	.00	.000	33.	*
35.	.32	.272	103.	*	130.	.00	.000	30.	*
40.	.21	.169	127.	*	135.	.00	.000	26.	*
45.	.13	.091	128.	*	140.	.00	.000	23.	*
50.	.13	.092	127.	*	145.	.00	.000	20.	*
55.	.09	.045	124.	*	150.	.00	.000	17.	*
60.	.09	.045	117.	*	155.	.00	.000	11.	*
65.	.09	.045	109.	*	160.	.00	.000	8.	*
70.	.06	.024	101.	*	165.	.00	.000	6.	*
75.	.06	.024	93.	*	170.	.00	.000	4.	*
80.	.05	.008	85.	*	175.	.00	.000	3.	*
85.	.05	.008	77.	*	180.	.00	.000	2.	*
90.	.04	.005	69.	*	185.	.00	.000	2.	*

TOTAL PRECIP. = 3.09 (1-HOUR RAIN = 2.67) EXECESS PRECIP. = 1.659 INCHES
VOLUME OF EXCESS PRECIP = 13. ACRE-FEET
PEAK Q = 128. CFS TIME OF PEAK = 45. MIN.
INFILT.= 3.90 IN/HR DECAY = .00180 FNINF = .55 IN/HR
MAX.PERV.RET.= .38 IN. MAX.IMP.RET.= .08 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE AT TIME

CUHPE/PC VERSION MODIFIED IN JANUARY 1985

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

SOUTH CANYON-LIME CREEK DRAINAGE DESIGN PLAN BY FMG, INC

BASIN ID: -- BASIN COMMENT: BASIN 4 EXISTING CONDITIONS

AREA OF BASIN (SQMI)	LENGTH OF BASIN (MI)	DIST TO CENTROID (MI)	IMPERVIOUS AREA (PCT)	SLOPE (FT/FT)	UNIT DURATION (MIN)
.06	.42	.17	50.00	.0274	5.00

COEFFICIENT (REFLECTING TIME TO PEAK)	COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF)
.088	.407

CALCULATED UNIT HYDROGRAPH

TIME TO PEAK (MIN)	TIME OF CONCENTRATION (MIN)	PEAK RATE OF RUNOFF (CFS/SQMI)	UNIT HYDROGRAPH PEAK (CFS)	VOLUME OF RUNOFF (AF)
3.25	5.00	20728.68	1202.26	3.09

*** NOTE : THE TIME TO PEAK IS CALCULATED BASED ON THE TIME OF CONCENTRATION PROVIDED BY THE USER, REPLACING THE ONE COMPUTED BY CUHPD (TP= 6.03)

WIDTH AT 50 = 1. MIN. WIDTH AT 75 = 1. MIN. K50 = .35 K75 = .45

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. = .35 IN. MAX. IMPERVIOUS RET. = .08 IN.
INFILTRATION = 3.90 IN./HR. DECAY = .00180/SECOND FNINFL = .55 IN./HR.

TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH
0.	0.	10.	28.	0.	0.
5.	393.	15.	0.	0.	0.

1 BASIN ID: -- BASIN COMMENT: BASIN 4 EXISTING CONDITIONS

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 50

TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)	TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)
0.	.00	.000	0.	60.	.09	.060	25.
5.	.03	.000	0.	65.	.09	.060	25.
10.	.09	.023	9.	70.	.06	.039	17.

15.	.13	.063	26.	*	75.	.06	.040	17.	*
20.	.21	.101	42.	*	80.	.05	.024	11.	*
25.	.40	.251	101.	*	85.	.05	.024	10.	*
30.	.67	.621	251.	*	90.	.04	.018	8.	*
35.	.32	.285	130.	*	95.	.04	.018	7.	*
40.	.21	.183	80.	*	100.	.04	.018	7.	*
45.	.13	.106	47.	*	105.	.04	.018	7.	*
50.	.13	.106	45.	*	110.	.04	.018	7.	*
55.	.09	.060	27.	*	115.	.04	.018	7.	*

TOTAL PRECIP. = 3.09 (1-HOUR RAIN = 2.67) EXECESS PRECIP. = 2.171 INCHES
VOLUME OF EXCESS PRECIP = 7. ACRE-FEET
PEAK Q = 251. CFS TIME OF PEAK = 30. MIN.
INFILT.= 3.90 IN/HR DECAY = .00180 FNINF = .55 IN/HR
MAX.PERV.RET.= .35 IN. MAX.IMP.RET.= .08 IN.

RATIONAL FORMULA C = .70
I = 9.0 INCHES/HOUR
A = 37.1 ACRES
Q = 236. CFS

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE AT TIME

CUHPE/PC VERSION MODIFIED IN JANUARY 1985

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

SOUTH CANYON-LIME CREEK DRAINAGE DESIGN PLAN BY FMG, INC

BASIN ID: -- BASIN COMMENT: BASIN 5 EXISTING CONDITIONS

AREA OF BASIN (SQMI)	LENGTH OF BASIN (MI)	DIST TO CENTROID (MI)	IMPERVIOUS AREA (PCT)	SLOPE (FT/FT)	UNIT DURATION (MIN)
.64	1.89	1.02	1.00	.0463	5.00

COEFFICIENT (REFLECTING TIME TO PEAK)	COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF)
.159	.320

CALCULATED UNIT HYDROGRAPH

TIME TO PEAK (MIN)	PEAK RATE OF RUNOFF (CFS/SQMI)	UNIT HYDROGRAP PEAK (CFS)	VOLUME OF RUNOFF (AF)
29.88	449.20	287.04	34.08

WIDTH AT 50 = 67. MIN. WIDTH AT 75 = 35. MIN. K50 = .27 K75 = .36

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. = .50 IN. MAX. IMPERVIOUS RET. = .09 IN.

INFILTRATION = 4.00 IN./HR. DECAY = .00180/SECOND FNINFL = .60 IN./HR.

TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH
0.	0.	100.	105.	200.	25.
5.	38.	105.	98.	205.	23.
10.	112.	110.	91.	210.	21.
15.	189.	115.	85.	215.	20.
20.	246.	120.	79.	220.	18.
25.	278.	125.	73.	225.	17.
30.	287.	130.	68.	230.	16.
35.	279.	135.	63.	235.	15.
40.	261.	140.	59.	240.	14.
45.	240.	145.	55.	245.	13.
50.	221.	150.	51.	250.	12.
55.	207.	155.	47.	255.	11.
60.	194.	160.	44.	260.	10.
65.	180.	165.	41.	265.	10.
70.	167.	170.	38.	270.	9.
75.	154.	175.	35.	275.	8.
80.	141.	180.	33.	280.	8.
85.	131.	185.	31.	285.	0.
90.	122.	190.	28.	0.	0.
95.	113.	195.	26.	0.	0.

1 BASIN ID: -- BASIN COMMENT: BASIN 5 EXISTING CONDITIONS

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 50

TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)	TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)
0.	.00	.000	0.	165.	.00	.000	86.
5.	.03	.000	0.	170.	.00	.000	80.
10.	.09	.000	0.	175.	.00	.000	75.
15.	.13	.001	0.	180.	.00	.000	70.
20.	.21	.002	0.	185.	.00	.000	65.
25.	.40	.004	1.	190.	.00	.000	60.
30.	.67	.560	23.	195.	.00	.000	56.
35.	.32	.262	75.	200.	.00	.000	52.
40.	.21	.159	143.	205.	.00	.000	48.
45.	.13	.081	210.	210.	.00	.000	45.
50.	.13	.082	265.	215.	.00	.000	42.
55.	.09	.035	301.	220.	.00	.000	39.
60.	.09	.035	319.	225.	.00	.000	36.
65.	.09	.036	322.	230.	.00	.000	34.

70.	.06	.014	315.	*	235.	.00	.000	31.	*
75.	.06	.014	303.	*	240.	.00	.000	29.	*
80.	.05	.000	290.	*	245.	.00	.000	27.	*
85.	.05	.000	276.	*	250.	.00	.000	25.	*
90.	.04	.000	260.	*	255.	.00	.000	23.	*
95.	.04	.000	244.	*	260.	.00	.000	22.	*
100.	.04	.000	226.	*	265.	.00	.000	20.	*
105.	.04	.000	209.	*	270.	.00	.000	19.	*
110.	.04	.000	194.	*	275.	.00	.000	17.	*
115.	.04	.000	180.	*	280.	.00	.000	16.	*
120.	.04	.000	167.	*	285.	.00	.000	15.	*
125.	.00	.000	155.	*	290.	.00	.000	14.	*
130.	.00	.000	144.	*	295.	.00	.000	13.	*
135.	.00	.000	134.	*	300.	.00	.000	12.	*
140.	.00	.000	125.	*	305.	.00	.000	11.	*
145.	.00	.000	116.	*	310.	.00	.000	6.	*
150.	.00	.000	108.	*	315.	.00	.000	4.	*
155.	.00	.000	100.	*	320.	.00	.000	3.	*
160.	.00	.000	93.	*	325.	.00	.000	2.	*

TOTAL PRECIP. = 3.09 (1-HOUR RAIN = 2.67) EXECESS PRECIP. = 1.290 INCHES
VOLUME OF EXCESS PRECIP = 44. ACRE-FEET
PEAK Q = 322. CFS TIME OF PEAK = 65. MIN.
INFILT.= 4.00 IN/HR DECAY = .00180 FNINF = .60 IN/HR
MAX.PERV.RET.= .50 IN. MAX.IMP.RET.= .09 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE AT TIME

CUHPE/PC VERSION MODIFIED IN JANUARY 1985

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

SOUTH CANYON-LIME CREEK DRAINAGE DESIGN PLAN BY FMG, INC

BASIN ID: -- BASIN COMMENT: BASIN 6 EXISTING CONDITIONS

AREA OF BASIN (SQMI)	LENGTH OF BASIN (MI)	DIST TO CENTROID (MI)	IMPERVIOUS AREA (PCT)	SLOPE (FT/FT)	UNIT DURATION (MIN)
.13	.98	.51	39.50	.0187	5.00

COEFFICIENT (REFLECTING TIME TO PEAK)	COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF)
.093	.379

CALCULATED UNIT HYDROGRAPH

TIME TO PEAK (MIN)	TIME OF CONCENTRATION (MIN)	PEAK RATE OF RUNOFF (CFS/SQMI)	UNIT HYDROGRAPH PEAK (CFS)	VOLUME OF RUNOFF (AF)
8.12	20.00	2589.79	339.26	6.99

*** NOTE : THE TIME TO PEAK IS CALCULATED BASED ON THE TIME OF CONCENTRATION PROVIDED BY THE USER, REPLACING THE ONE COMPUTED BY CUHPD (TP= 12.94)

WIDTH AT 50 = 12. MIN. WIDTH AT 75 = 6. MIN. K50 = .35 K75 = .45

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. = .35 IN. MAX. IMPERVIOUS RET. = .07 IN.
INFILTRATION = 3.90 IN./HR. DECAY = .00180/SECOND FNINFL = .60 IN./HR.

TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH
0.	0.	20.	114.	40.	19.
5.	228.	25.	73.	45.	12.
10.	309.	30.	46.	50.	8.
15.	183.	35.	29.	55.	0.

1 BASIN ID: -- BASIN COMMENT: BASIN 6 EXISTING CONDITIONS

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 50

TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)	TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)
0.	.00	.000	0.	75.	.06	.032	56.
5.	.03	.000	0.	80.	.05	.018	41.
10.	.09	.022	5.	85.	.05	.018	32.
15.	.13	.050	18.	90.	.04	.014	25.
20.	.21	.080	38.	95.	.04	.014	21.
25.	.40	.217	86.	100.	.04	.014	18.
30.	.67	.616	229.	105.	.04	.014	16.
35.	.32	.279	307.	110.	.04	.014	15.
40.	.21	.176	272.	115.	.04	.014	15.
45.	.13	.099	220.	120.	.04	.014	15.
50.	.13	.100	176.	125.	.00	.000	11.
55.	.09	.053	139.	130.	.00	.000	7.
60.	.09	.053	107.	135.	.00	.000	4.
65.	.09	.053	88.	140.	.00	.000	3.
70.	.06	.032	71.	145.	.00	.000	2.

TOTAL PRECIP. = 3.09 (1-HOUR RAIN = 2.67) EXECESS PRECIP. = 1.997 INCHES
VOLUME OF EXCESS PRECIP = 14. ACRE-FEET

PEAK Q = 307. CFS TIME OF PEAK = 35. MIN.
INFILT.= 3.90 IN/HR DECAY = .00180 FNINF = .60 IN/HR
MAX.PERV.RET.= .35 IN. MAX.IMP.RET.= .07 IN.

RATIONAL FORMULA C = .65
I = 5.2 INCHES/HOUR
A = 83.8 ACRES
Q = 284. CFS

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE AT TIME

CUHPE/PC VERSION MODIFIED IN JANUARY 1985

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

SOUTH CANYON-LIME CREEK DRAINAGE DESIGN PLAN BY FMG, INC

BASIN ID: -- BASIN COMMENT: BASIN 7 EXISTING CONDITIONS

AREA OF BASIN (SQMI)	LENGTH OF BASIN (MI)	DIST TO CENTROID (MI)	IMPERVIOUS AREA (PCT)	SLOPE (FT/FT)	UNIT DURATION (MIN)
.11	.68	.34	23.50	.0408	5.00

COEFFICIENT (REFLECTING TIME TO PEAK)	COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF)
.106	.247

CALCULATED UNIT HYDROGRAPH

TIME TO PEAK (MIN)	TIME OF CONCENTRATION (MIN)	PEAK RATE OF RUNOFF (CFS/SQMI)	UNIT HYDROGRAPH PEAK (CFS)	VOLUME OF RUNOFF (AF)
5.98	19.00	2726.24	308.06	6.03

*** NOTE : THE TIME TO PEAK IS CALCULATED BASED ON THE TIME OF CONCENTRATION PROVIDED BY THE USER, REPLACING THE ONE COMPUTED BY CUHPD (TP= 9.29)

WIDTH AT 50 = 11. MIN. WIDTH AT 75 = 6. MIN. K50 = .33 K75 = .44

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. = .38 IN. MAX. IMPERVIOUS RET. = .07 IN.
INFILTRATION = 3.70 IN./HR. DECAY = .00180/SECOND FNINFL = .50 IN./HR.

TIME	UNIT HYDROGRAPH *	TIME	UNIT HYDROGRAPH *	TIME	UNIT HYDROGRAPH *

		*			*			
		*			*			
0.	0.	*	20.	85.	*	40.	14.	*
5.	298.	*	25.	54.	*	45.	9.	*
10.	216.	*	30.	34.	*	50.	0.	*
15.	133.	*	35.	22.	*	0.	0.	*

1 BASIN ID: -- BASIN COMMENT: BASIN 7 EXISTING CONDITIONS

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 50

TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)	*	TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)	*
0.	.00	.000	0.	*	70.	.06	.031	54.	*
5.	.03	.000	0.	*	75.	.06	.031	41.	*
10.	.09	.013	4.	*	80.	.05	.016	30.	*
15.	.13	.030	12.	*	85.	.05	.016	23.	*
20.	.21	.048	22.	*	90.	.04	.008	17.	*
25.	.40	.173	67.	*	95.	.04	.008	13.	*
30.	.67	.617	231.	*	100.	.04	.008	11.	*
35.	.32	.279	245.	*	105.	.04	.008	9.	*
40.	.21	.176	213.	*	110.	.04	.008	8.	*
45.	.13	.098	169.	*	115.	.04	.008	8.	*
50.	.13	.099	139.	*	120.	.04	.008	7.	*
55.	.09	.052	106.	*	125.	.00	.000	5.	*
60.	.09	.052	84.	*	130.	.00	.000	3.	*
65.	.09	.052	70.	*	135.	.00	.000	2.	*

TOTAL PRECIP. = 3.09 (1-HOUR RAIN = 2.67) EXECESS PRECIP. = 1.841 INCHES
VOLUME OF EXCESS PRECIP = 11. ACRE-FEET
PEAK Q = 245. CFS TIME OF PEAK = 35. MIN.
INFILT.= 3.70 IN/HR DECAY = .00180 FNINF = .50 IN/HR
MAX.PERV.RET.= .38 IN. MAX.IMP.RET.= .07 IN.

RATIONAL FORMULA C = .60
I = 5.4 INCHES/HOUR
A = 72.3 ACRES
Q = 232. CFS

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE AT TIME

CUHPE/PC VERSION MODIFIED IN JANUARY 1985

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

SOUTH CANYON-LIME CREEK DRAINAGE DESIGN PLAN BY FMG, INC

BASIN ID: -- BASIN COMMENT: BASIN 8 EXISTING CONDITIONS

AREA OF BASIN (SQMI)	LENGTH OF BASIN (MI)	DIST TO CENTROID (MI)	IMPERVIOUS AREA (PCT)	SLOPE (FT/FT)	UNIT DURATION (MIN)
.22	.89	.47	22.50	.0448	5.00

COEFFICIENT (REFLECTING TIME TO PEAK)	COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF)
.107	.268

CALCULATED UNIT HYDROGRAPH

TIME TO PEAK (MIN)	PEAK RATE OF RUNOFF (CFS/SQMI)	UNIT HYDROGRAP PEAK (CFS)	VOLUME OF RUNOFF (AF)
11.42	1153.47	257.22	11.89

WIDTH AT 50 = 26. MIN. WIDTH AT 75 = 14. MIN. K50 = .26 K75 = .36

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. = .45 IN. MAX. IMPERVIOUS RET. = .07 IN.
INFILTRATION = 3.50 IN./HR. DECAY = .00180/SECOND FNINFL = .50 IN./HR.

TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH
0.	0.	40.	91.	80.	21.
5.	144.	45.	76.	85.	17.
10.	253.	50.	63.	90.	14.
15.	237.	55.	52.	95.	12.
20.	193.	60.	44.	100.	10.
25.	163.	65.	36.	105.	8.
30.	132.	70.	30.	110.	0.
35.	109.	75.	25.	0.	0.

1 BASIN ID: -- BASIN COMMENT: BASIN 8 EXISTING CONDITIONS

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 50

TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)	TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)
0.	.00	.000	0.	90.	.04	.008	100.
5.	.03	.000	0.	95.	.04	.008	86.
10.	.09	.012	2.	100.	.04	.008	73.
15.	.13	.029	7.	105.	.04	.008	63.

20.	.21	.046	17.	*	110.	.04	.008	55.	*
25.	.40	.123	38.	*	115.	.04	.008	48.	*
30.	.67	.618	139.	*	120.	.04	.008	42.	*
35.	.32	.279	241.	*	125.	.00	.000	36.	*
40.	.21	.176	279.	*	130.	.00	.000	29.	*
45.	.13	.098	274.	*	135.	.00	.000	20.	*
50.	.13	.099	260.	*	140.	.00	.000	15.	*
55.	.09	.052	237.	*	145.	.00	.000	11.	*
60.	.09	.052	213.	*	150.	.00	.000	8.	*
65.	.09	.052	192.	*	155.	.00	.000	6.	*
70.	.06	.031	172.	*	160.	.00	.000	5.	*
75.	.06	.031	152.	*	165.	.00	.000	4.	*
80.	.05	.015	134.	*	170.	.00	.000	3.	*
85.	.05	.015	116.	*	175.	.00	.000	2.	*

TOTAL PRECIP. = 3.09 (1-HOUR RAIN = 2.67) EXECESS PRECIP. = 1.781 INCHES
VOLUME OF EXCESS PRECIP = 21. ACRE-FEET
PEAK Q = 279. CFS TIME OF PEAK = 40. MIN.
INFILT.= 3.50 IN/HR DECAY = .00180 FNINF = .50 IN/HR
MAX.PERV.RET.= .45 IN. MAX.IMP.RET.= .07 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE AT TIME

CUHPE/PC VERSION MODIFIED IN JANUARY 1985

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

SOUTH CANYON-LIME CREEK DRAINAGE DESIGN PLAN BY FMG, INC

BASIN ID: -- BASIN COMMENT: BASIN 9 EXISTING CONDITIONS

AREA OF BASIN (SQMI)	LENGTH OF BASIN (MI)	DIST TO CENTROID (MI)	IMPERVIOUS AREA (PCT)	SLOPE (FT/FT)	UNIT DURATION (MIN)
.15	.83	.47	36.50	.0232	5.00

COEFFICIENT (REFLECTING TIME TO PEAK)	COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF)
.095	.356

CALCULATED UNIT HYDROGRAPH

TIME TO PEAK (MIN)	PEAK RATE OF RUNOFF (CFS/SQMI)	UNIT HYDROGRAP PEAK (CFS)	VOLUME OF RUNOFF (AF)
11.44	1528.62	229.29	8.00

WIDTH AT 50 = 20. MIN. WIDTH AT 75 = 10. MIN. K50 = .35 K75 = .48

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. = .35 IN. MAX. IMPERVIOUS RET. = .07 IN.

INFILTRATION = 4.00 IN./HR. DECAY = .00180/SECOND FNINFL = .60 IN./HR.

TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH
0.	0.	30.	86.	60.	19.
5.	128.	35.	67.	65.	15.
10.	225.	40.	52.	70.	11.
15.	203.	45.	40.	75.	9.
20.	147.	50.	31.	80.	0.
25.	110.	55.	24.	0.	0.

1 BASIN ID: -- BASIN COMMENT: BASIN 9 EXISTING CONDITIONS

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 50

TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)	TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)
0.	.00	.000	0.	85.	.05	.017	68.
5.	.03	.000	0.	90.	.04	.013	56.
10.	.09	.020	3.	95.	.04	.013	46.
15.	.13	.046	10.	100.	.04	.013	38.
20.	.21	.074	24.	105.	.04	.013	29.
25.	.40	.206	55.	110.	.04	.013	24.
30.	.67	.614	149.	115.	.04	.013	21.
35.	.32	.277	233.	120.	.04	.013	19.
40.	.21	.175	253.	125.	.00	.000	16.
45.	.13	.097	232.	130.	.00	.000	12.
50.	.13	.098	204.	135.	.00	.000	9.
55.	.09	.052	177.	140.	.00	.000	7.
60.	.09	.052	152.	145.	.00	.000	5.
65.	.09	.052	131.	150.	.00	.000	4.
70.	.06	.031	113.	155.	.00	.000	3.
75.	.06	.031	97.	160.	.00	.000	2.
80.	.05	.017	81.	165.	.00	.000	1.

TOTAL PRECIP. = 3.09 (1-HOUR RAIN = 2.67) EXECESS PRECIP. = 1.951 INCHES
VOLUME OF EXCESS PRECIP = 16. ACRE-FEET
PEAK Q = 253. CFS TIME OF PEAK = 40. MIN.
INFILT.= 4.00 IN/HR DECAY = .00180 FNINF = .60 IN/HR
MAX.PERV.RET.= .35 IN. MAX.IMP.RET.= .07 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE AT TIME

CUHPE/PC VERSION MODIFIED IN JANUARY 1985

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

SOUTH CANYON-LIME CREEK DRAINAGE DESIGN PLAN BY FMG, INC

BASIN ID: -- BASIN COMMENT: BASIN 10 EXISTING CONDITIONS

AREA OF BASIN (SQMI)	LENGTH OF BASIN (MI)	DIST TO CENTROID (MI)	IMPERVIOUS AREA (PCT)	SLOPE (FT/FT)	UNIT DURATION (MIN)
.63	1.70	.78	5.00	.0476	5.00

COEFFICIENT (REFLECTING TIME TO PEAK)	COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF)
.144	.291

CALCULATED UNIT HYDROGRAPH

TIME TO PEAK (MIN)	PEAK RATE OF RUNOFF (CFS/SQMI)	UNIT HYDROGRAP PEAK (CFS)	VOLUME OF RUNOFF (AF)
23.11	542.74	341.93	33.60

WIDTH AT 50 = 55. MIN. WIDTH AT 75 = 29. MIN. K50 = .25 K75 = .34

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. = .50 IN. MAX. IMPERVIOUS RET. = .08 IN.
INFILTRATION = 4.10 IN./HR. DECAY = .00180/SECOND FNINFL = .60 IN./HR.

TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH
0.	0.	85.	119.	170.	27.
5.	69.	90.	109.	175.	25.
10.	189.	95.	100.	180.	22.
15.	286.	100.	92.	185.	21.
20.	335.	105.	84.	190.	19.
25.	340.	110.	77.	195.	17.
30.	318.	115.	70.	200.	16.
35.	286.	120.	64.	205.	14.
40.	261.	125.	59.	210.	13.
45.	245.	130.	54.	215.	12.
50.	226.	135.	50.	220.	11.
55.	207.	140.	45.	225.	10.
60.	188.	145.	42.	230.	9.
65.	170.	150.	38.	235.	9.
70.	155.	155.	35.	240.	8.
75.	142.	160.	32.	245.	0.

80. 130. * 165. 29. * 0. 0. *

1 BASIN ID: -- BASIN COMMENT: BASIN 10 EXISTING CONDITIONS

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 50

TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)	*	TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)	*
0.	.00	.000	0.	*	145.	.00	.000	104.	*
5.	.03	.000	0.	*	150.	.00	.000	95.	*
10.	.09	.002	0.	*	155.	.00	.000	87.	*
15.	.13	.006	1.	*	160.	.00	.000	80.	*
20.	.21	.010	3.	*	165.	.00	.000	73.	*
25.	.40	.019	6.	*	170.	.00	.000	67.	*
30.	.67	.559	48.	*	175.	.00	.000	61.	*
35.	.32	.264	136.	*	180.	.00	.000	56.	*
40.	.21	.161	233.	*	185.	.00	.000	52.	*
45.	.13	.083	311.	*	190.	.00	.000	47.	*
50.	.13	.084	357.	*	195.	.00	.000	43.	*
55.	.09	.037	373.	*	200.	.00	.000	40.	*
60.	.09	.037	369.	*	205.	.00	.000	36.	*
65.	.09	.037	357.	*	210.	.00	.000	33.	*
70.	.06	.016	346.	*	215.	.00	.000	30.	*
75.	.06	.016	330.	*	220.	.00	.000	28.	*
80.	.05	.002	312.	*	225.	.00	.000	26.	*
85.	.05	.002	290.	*	230.	.00	.000	23.	*
90.	.04	.002	267.	*	235.	.00	.000	21.	*
95.	.04	.002	245.	*	240.	.00	.000	20.	*
100.	.04	.002	225.	*	245.	.00	.000	18.	*
105.	.04	.002	206.	*	250.	.00	.000	16.	*
110.	.04	.002	190.	*	255.	.00	.000	15.	*
115.	.04	.002	174.	*	260.	.00	.000	14.	*
120.	.04	.002	160.	*	265.	.00	.000	12.	*
125.	.00	.000	147.	*	270.	.00	.000	7.	*
130.	.00	.000	135.	*	275.	.00	.000	5.	*
135.	.00	.000	124.	*	280.	.00	.000	3.	*
140.	.00	.000	114.	*	285.	.00	.000	2.	*

TOTAL PRECIP. = 3.09 (1-HOUR RAIN = 2.67) EXECESS PRECIP. = 1.349 INCHES

VOLUME OF EXCESS PRECIP = 45. ACRE-FEET

PEAK Q = 373. CFS TIME OF PEAK = 55. MIN.

INFILT.= 4.10 IN/HR DECAY = .00180 FNINF = .60 IN/HR

MAX.PERV.RET.= .50 IN. MAX.IMP.RET.= .08 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE AT TIME

CUHPE/PC VERSION MODIFIED IN JANUARY 1985

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

SOUTH CANYON-LIME CREEK DRAINAGE DESIGN PLAN BY FMG, INC

BASIN ID: -- BASIN COMMENT: BASIN 11 EXISTING CONDITIONS

AREA OF BASIN (SQMI)	LENGTH OF BASIN (MI)	DIST TO CENTROID (MI)	IMPERVIOUS AREA (PCT)	SLOPE (FT/FT)	UNIT DURATION (MIN)
.44	1.95	1.06	3.50	.0292	5.00

COEFFICIENT (REFLECTING TIME TO PEAK)	COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF)
.150	.285

CALCULATED UNIT HYDROGRAPH

TIME TO PEAK (MIN)	PEAK RATE OF RUNOFF (CFS/SQMI)	UNIT HYDROGRAP PEAK (CFS)	VOLUME OF RUNOFF (AF)
32.28	367.21	161.21	23.41

WIDTH AT 50 = 82. MIN. WIDTH AT 75 = 42. MIN. K50 = .24 K75 = .32

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. = .50 IN. MAX. IMPERVIOUS RET. = .08 IN.
INFILTRATION = 4.50 IN./HR. DECAY = .00180/SECOND FNINFL = .60 IN./HR.

TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH
0.	0.	105.	72.	210.	22.
5.	19.	110.	68.	215.	21.
10.	56.	115.	64.	220.	20.
15.	97.	120.	61.	225.	19.
20.	130.	125.	57.	230.	18.
25.	151.	130.	54.	235.	17.
30.	160.	135.	51.	240.	16.
35.	160.	140.	49.	245.	15.
40.	153.	145.	46.	250.	14.
45.	143.	150.	44.	255.	14.
50.	132.	155.	41.	260.	13.
55.	124.	160.	39.	265.	12.
60.	121.	165.	37.	270.	11.
65.	116.	170.	35.	275.	11.
70.	110.	175.	33.	280.	10.
75.	104.	180.	31.	285.	10.
80.	98.	185.	29.	290.	9.
85.	92.	190.	28.	295.	9.

90.	86.	*	195.	26.	*	300.	8.	*
95.	80.	*	200.	25.	*	305.	8.	*
100.	76.	*	205.	24.	*	310.	0.	*

1 BASIN ID: -- BASIN COMMENT: BASIN 11 EXISTING CONDITIONS

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 50

TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)	*	TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)	*
0.	.00	.000	0.	*	175.	.00	.000	63.	*
5.	.03	.000	0.	*	180.	.00	.000	60.	*
10.	.09	.002	0.	*	185.	.00	.000	56.	*
15.	.13	.004	0.	*	190.	.00	.000	53.	*
20.	.21	.007	1.	*	195.	.00	.000	50.	*
25.	.40	.013	1.	*	200.	.00	.000	48.	*
30.	.67	.541	12.	*	205.	.00	.000	45.	*
35.	.32	.262	38.	*	210.	.00	.000	43.	*
40.	.21	.160	74.	*	215.	.00	.000	40.	*
45.	.13	.082	110.	*	220.	.00	.000	38.	*
50.	.13	.083	142.	*	225.	.00	.000	36.	*
55.	.09	.036	164.	*	230.	.00	.000	34.	*
60.	.09	.036	178.	*	235.	.00	.000	32.	*
65.	.09	.037	183.	*	240.	.00	.000	31.	*
70.	.06	.016	183.	*	245.	.00	.000	29.	*
75.	.06	.016	178.	*	250.	.00	.000	27.	*
80.	.05	.002	172.	*	255.	.00	.000	26.	*
85.	.05	.002	167.	*	260.	.00	.000	24.	*
90.	.04	.001	162.	*	265.	.00	.000	23.	*
95.	.04	.001	155.	*	270.	.00	.000	22.	*
100.	.04	.001	148.	*	275.	.00	.000	21.	*
105.	.04	.001	140.	*	280.	.00	.000	20.	*
110.	.04	.001	132.	*	285.	.00	.000	19.	*
115.	.04	.001	125.	*	290.	.00	.000	18.	*
120.	.04	.001	117.	*	295.	.00	.000	17.	*
125.	.00	.000	111.	*	300.	.00	.000	16.	*
130.	.00	.000	105.	*	305.	.00	.000	15.	*
135.	.00	.000	99.	*	310.	.00	.000	14.	*
140.	.00	.000	93.	*	315.	.00	.000	13.	*
145.	.00	.000	88.	*	320.	.00	.000	13.	*
150.	.00	.000	83.	*	325.	.00	.000	12.	*
155.	.00	.000	79.	*	330.	.00	.000	11.	*
160.	.00	.000	75.	*	335.	.00	.000	6.	*
165.	.00	.000	70.	*	340.	.00	.000	4.	*
170.	.00	.000	67.	*	345.	.00	.000	3.	*

TOTAL PRECIP. = 3.09 (1-HOUR RAIN = 2.67) EXECESS PRECIP. = 1.306 INCHES
VOLUME OF EXCESS PRECIP = 31. ACRE-FEET
PEAK Q = 183. CFS TIME OF PEAK = 65. MIN.

INFILT.= 4.50 IN/HR DECAY = .00180 FNINF = .60 IN/HR
MAX.PERV.RET.= .50 IN. MAX.IMP.RET.= .08 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE AT TIME

CUHPE/PC VERSION MODIFIED IN JANUARY 1985

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

SOUTH CANYON-LIME CREEK DRAINAGE DESIGN PLAN BY FMG, INC

BASIN ID: -- BASIN COMMENT: BASIN 12 EXISTING CONDITIONS

AREA OF BASIN (SQMI)	LENGTH OF BASIN (MI)	DIST TO CENTROID (MI)	IMPERVIOUS AREA (PCT)	SLOPE (FT/FT)	UNIT DURATION (MIN)
.05	.57	.32	3.00	.0451	5.00

COEFFICIENT (REFLECTING TIME TO PEAK)	COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF)
.152	.206

CALCULATED UNIT HYDROGRAPH

TIME TO PEAK (MIN)	TIME OF CONCENTRATION (MIN)	PEAK RATE OF RUNOFF (CFS/SQMI)	UNIT HYDROGRAPH PEAK (CFS)	VOLUME OF RUNOFF (AF)
4.88	13.00	3322.69	156.17	2.51

*** NOTE : THE TIME TO PEAK IS CALCULATED BASED ON THE TIME OF CONCENTRATION PROVIDED BY THE USER, REPLACING THE ONE COMPUTED BY CUHPD (TP= 10.97)

WIDTH AT 50 = 9. MIN. WIDTH AT 75 = 5. MIN. K50 = .32 K75 = .44

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. = .40 IN. MAX. IMPERVIOUS RET. = .10 IN.
INFILTRATION = 4.10 IN./HR. DECAY = .00180/SECOND FNINFL = .60 IN./HR.

TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH
0.	0.	15.	52.	30.	11.
5.	156.	20.	31.	35.	0.
10.	89.	25.	19.	0.	0.

1 BASIN ID: -- BASIN COMMENT: BASIN 12 EXISTING CONDITIONS

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 50

TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)	*	TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)	*
0.	.00	.000	0.	*	45.	.13	.082	61.	*
5.	.03	.000	0.	*	50.	.13	.083	49.	*
10.	.09	.001	0.	*	55.	.09	.036	34.	*
15.	.13	.004	1.	*	60.	.09	.036	22.	*
20.	.21	.006	1.	*	65.	.09	.036	17.	*
25.	.40	.062	10.	*	70.	.06	.015	11.	*
30.	.67	.603	100.	*	75.	.06	.015	8.	*
35.	.32	.263	98.	*	80.	.05	.001	5.	*
40.	.21	.160	82.	*	85.	.05	.001	3.	*

TOTAL PRECIP. = 3.09 (1-HOUR RAIN = 2.67) EXECESS PRECIP. = 1.414 INCHES
VOLUME OF EXCESS PRECIP = 4. ACRE-FEET
PEAK Q = 100. CFS TIME OF PEAK = 30. MIN.
INFILT.= 4.10 IN/HR DECAY = .00180 FNINF = .60 IN/HR
MAX.PERV.RET.= .40 IN. MAX.IMP.RET.= .10 IN.

RATIONAL FORMULA C = .46
I = 6.5 INCHES/HOUR
A = 30.1 ACRES
Q = 89. CFS

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE AT TIME

CUHPE/PC VERSION MODIFIED IN JANUARY 1985

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

SOUTH CANYON-LIME CREEK DRAINAGE DESIGN PLAN BY FMG, INC

BASIN ID: -- BASIN COMMENT: BASIN 13 EXISTING CONDITIONS

AREA OF BASIN (SQMI)	LENGTH OF BASIN (MI)	DIST TO CENTROID (MI)	IMPERVIOUS AREA (PCT)	SLOPE (FT/FT)	UNIT DURATION (MIN)
.24	.74	.38	1.00	.0510	5.00

COEFFICIENT (REFLECTING TIME TO PEAK)	COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF)
.159	.277

CALCULATED UNIT HYDROGRAPH

TIME TO PEAK (MIN)	PEAK RATE OF RUNOFF (CFS/SQMI)	UNIT HYDROGRAP PEAK (CFS)	VOLUME OF RUNOFF (AF)
13.12	1001.94	243.47	12.96

WIDTH AT 50 = 30. MIN. WIDTH AT 75 = 16. MIN. K50 = .26 K75 = .36

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. = .50 IN. MAX. IMPERVIOUS RET. = .10 IN.
INFILTRATION = 4.10 IN./HR. DECAY = .00180/SECOND FNINFL = .60 IN./HR.

TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH
0.	0.	45.	89.	90.	21.
5.	114.	50.	76.	95.	18.
10.	226.	55.	64.	100.	15.
15.	239.	60.	55.	105.	13.
20.	202.	65.	47.	110.	11.
25.	173.	70.	40.	115.	9.
30.	148.	75.	34.	120.	8.
35.	123.	80.	29.	125.	0.
40.	104.	85.	25.	0.	0.

1 BASIN ID: -- BASIN COMMENT: BASIN 13 EXISTING CONDITIONS

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 50

TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)	TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)
0.	.00	.000	0.	85.	.05	.000	98.
5.	.03	.000	0.	90.	.04	.000	83.
10.	.09	.000	0.	95.	.04	.000	71.
15.	.13	.001	0.	100.	.04	.000	60.
20.	.21	.002	1.	105.	.04	.000	52.
25.	.40	.004	1.	110.	.04	.000	44.
30.	.67	.556	65.	115.	.04	.000	38.
35.	.32	.262	157.	120.	.04	.000	32.
40.	.21	.159	211.	125.	.00	.000	27.
45.	.13	.081	221.	130.	.00	.000	23.
50.	.13	.082	216.	135.	.00	.000	20.
55.	.09	.035	202.	140.	.00	.000	17.
60.	.09	.035	183.	145.	.00	.000	14.
65.	.09	.036	165.	150.	.00	.000	8.
70.	.06	.014	148.	155.	.00	.000	5.

75.	.06	.014	131.	*	160.	.00	.000	4.	*
80.	.05	.000	114.	*	165.	.00	.000	2.	*

TOTAL PRECIP. = 3.09 (1-HOUR RAIN = 2.67) EXECESS PRECIP. = 1.285 INCHES
VOLUME OF EXCESS PRECIP = 17. ACRE-FEET
PEAK Q = 221. CFS TIME OF PEAK = 45. MIN.
INFILT.= 4.10 IN/HR DECAY = .00180 FNINF = .60 IN/HR
MAX.PERV.RET.= .50 IN. MAX.IMP.RET.= .10 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE AT TIME

CUHPE/PC VERSION MODIFIED IN JANUARY 1985

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

SOUTH CANYON-LIME CREEK DRAINAGE DESIGN PLAN BY FMG, INC

BASIN ID: -- BASIN COMMENT: BASIN 14 EXISTING CONDITIONS

AREA OF BASIN (SQMI)	LENGTH OF BASIN (MI)	DIST TO CENTROID (MI)	IMPERVIOUS AREA (PCT)	SLOPE (FT/FT)	UNIT DURATION (MIN)
.44	1.33	.72	1.00	.0504	5.00

COEFFICIENT (REFLECTING TIME TO PEAK)	COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF)
.159	.303

CALCULATED UNIT HYDROGRAPH

TIME TO PEAK (MIN)	PEAK RATE OF RUNOFF (CFS/SQMI)	UNIT HYDROGRAP PEAK (CFS)	VOLUME OF RUNOFF (AF)
21.67	606.31	266.17	23.41

WIDTH AT 50 = 49. MIN. WIDTH AT 75 = 26. MIN. K50 = .26 K75 = .36

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. = .50 IN. MAX. IMPERVIOUS RET. = .10 IN.
INFILTRATION = 4.50 IN./HR. DECAY = .00180/SECOND FNINFL = .60 IN./HR.

TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH
0.	0.	75.	96.	150.	22.
5.	59.	80.	87.	155.	20.
10.	159.	85.	79.	160.	18.

15.	233.	*	90.	72.	*	165.	17.	*
20.	264.	*	95.	65.	*	170.	15.	*
25.	260.	*	100.	59.	*	175.	14.	*
30.	237.	*	105.	53.	*	180.	12.	*
35.	211.	*	110.	48.	*	185.	11.	*
40.	194.	*	115.	44.	*	190.	10.	*
45.	177.	*	120.	40.	*	195.	9.	*
50.	160.	*	125.	36.	*	200.	8.	*
55.	144.	*	130.	33.	*	205.	8.	*
60.	128.	*	135.	30.	*	210.	0.	*
65.	116.	*	140.	27.	*	0.	0.	*
70.	106.	*	145.	25.	*	0.	0.	*

1 BASIN ID: -- BASIN COMMENT: BASIN 14 EXISTING CONDITIONS

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 50

TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)	*	TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)	*
0.	.00	.000	0.	*	125.	.00	.000	90.	*
5.	.03	.000	0.	*	130.	.00	.000	81.	*
10.	.09	.000	0.	*	135.	.00	.000	74.	*
15.	.13	.001	0.	*	140.	.00	.000	67.	*
20.	.21	.002	0.	*	145.	.00	.000	61.	*
25.	.40	.004	1.	*	150.	.00	.000	55.	*
30.	.67	.538	33.	*	155.	.00	.000	50.	*
35.	.32	.261	103.	*	160.	.00	.000	45.	*
40.	.21	.158	178.	*	165.	.00	.000	41.	*
45.	.13	.081	235.	*	170.	.00	.000	37.	*
50.	.13	.082	265.	*	175.	.00	.000	34.	*
55.	.09	.035	273.	*	180.	.00	.000	31.	*
60.	.09	.035	266.	*	185.	.00	.000	28.	*
65.	.09	.036	257.	*	190.	.00	.000	25.	*
70.	.06	.014	245.	*	195.	.00	.000	23.	*
75.	.06	.014	230.	*	200.	.00	.000	21.	*
80.	.05	.000	213.	*	205.	.00	.000	19.	*
85.	.05	.000	195.	*	210.	.00	.000	17.	*
90.	.04	.000	177.	*	215.	.00	.000	16.	*
95.	.04	.000	161.	*	220.	.00	.000	14.	*
100.	.04	.000	146.	*	225.	.00	.000	13.	*
105.	.04	.000	132.	*	230.	.00	.000	12.	*
110.	.04	.000	120.	*	235.	.00	.000	7.	*
115.	.04	.000	109.	*	240.	.00	.000	4.	*
120.	.04	.000	99.	*	245.	.00	.000	3.	*

TOTAL PRECIP. = 3.09 (1-HOUR RAIN = 2.67) EXECESS PRECIP. = 1.265 INCHES
VOLUME OF EXCESS PRECIP = 30. ACRE-FEET
PEAK Q = 273. CFS TIME OF PEAK = 55. MIN.
INFILT.= 4.50 IN/HR DECAY = .00180 FNINF = .60 IN/HR

MAX.PERV.RET.= .50 IN. MAX.IMP.RET.= .10 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE AT TIME

CUHPE/PC VERSION MODIFIED IN JANUARY 1985

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

SOUTH CANYON-LIME CREEK DRAINAGE DESIGN PLAN BY FMG, INC

BASIN ID: -- BASIN COMMENT: BASIN 15 EXISTING CONDITIONS

AREA OF BASIN (SQMI)	LENGTH OF BASIN (MI)	DIST TO CENTROID (MI)	IMPERVIOUS AREA (PCT)	SLOPE (FT/FT)	UNIT DURATION (MIN)
.65	2.22	1.10	1.00	.0493	5.00

COEFFICIENT (REFLECTING TIME TO PEAK)	COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF)
.159	.321

CALCULATED UNIT HYDROGRAPH

TIME TO PEAK (MIN)	PEAK RATE OF RUNOFF (CFS/SQMI)	UNIT HYDROGRAP PEAK (CFS)	VOLUME OF RUNOFF (AF)
32.71	407.86	263.88	34.51

WIDTH AT 50 = 74. MIN. WIDTH AT 75 = 38. MIN. K50 = .27 K75 = .36

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. = .50 IN. MAX. IMPERVIOUS RET. = .10 IN.
INFILTRATION = 4.30 IN./HR. DECAY = .00180/SECOND FNINFL = .60 IN./HR.

TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH
0.	0.	105.	104.	210.	26.
5.	31.	110.	97.	215.	24.
10.	90.	115.	91.	220.	23.
15.	157.	120.	85.	225.	21.
20.	210.	125.	80.	230.	20.
25.	246.	130.	75.	235.	19.
30.	262.	135.	70.	240.	18.
35.	263.	140.	65.	245.	16.
40.	252.	145.	61.	250.	15.
45.	236.	150.	57.	255.	14.
50.	218.	155.	54.	260.	13.

55.	202.	*	160.	50.	*	265.	13.	*
60.	191.	*	165.	47.	*	270.	12.	*
65.	180.	*	170.	44.	*	275.	11.	*
70.	169.	*	175.	41.	*	280.	10.	*
75.	158.	*	180.	39.	*	285.	10.	*
80.	147.	*	185.	36.	*	290.	9.	*
85.	136.	*	190.	34.	*	295.	8.	*
90.	126.	*	195.	32.	*	300.	8.	*
95.	118.	*	200.	30.	*	305.	7.	*
100.	111.	*	205.	28.	*	310.	0.	*

1 BASIN ID: -- BASIN COMMENT: BASIN 15 EXISTING CONDITIONS

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 50

TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)	*	TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)	*
0.	.00	.000	0.	*	175.	.00	.000	82.	*
5.	.03	.000	0.	*	180.	.00	.000	77.	*
10.	.09	.000	0.	*	185.	.00	.000	72.	*
15.	.13	.001	0.	*	190.	.00	.000	67.	*
20.	.21	.002	0.	*	195.	.00	.000	63.	*
25.	.40	.004	1.	*	200.	.00	.000	59.	*
30.	.67	.547	18.	*	205.	.00	.000	55.	*
35.	.32	.262	59.	*	210.	.00	.000	52.	*
40.	.21	.159	116.	*	215.	.00	.000	49.	*
45.	.13	.081	174.	*	220.	.00	.000	45.	*
50.	.13	.082	226.	*	225.	.00	.000	43.	*
55.	.09	.035	264.	*	230.	.00	.000	40.	*
60.	.09	.035	287.	*	235.	.00	.000	37.	*
65.	.09	.036	297.	*	240.	.00	.000	35.	*
70.	.06	.014	296.	*	245.	.00	.000	33.	*
75.	.06	.014	288.	*	250.	.00	.000	31.	*
80.	.05	.000	277.	*	255.	.00	.000	29.	*
85.	.05	.000	266.	*	260.	.00	.000	27.	*
90.	.04	.000	253.	*	265.	.00	.000	25.	*
95.	.04	.000	239.	*	270.	.00	.000	24.	*
100.	.04	.000	225.	*	275.	.00	.000	22.	*
105.	.04	.000	211.	*	280.	.00	.000	21.	*
110.	.04	.000	196.	*	285.	.00	.000	19.	*
115.	.04	.000	183.	*	290.	.00	.000	18.	*
120.	.04	.000	171.	*	295.	.00	.000	17.	*
125.	.00	.000	159.	*	300.	.00	.000	16.	*
130.	.00	.000	149.	*	305.	.00	.000	15.	*
135.	.00	.000	140.	*	310.	.00	.000	14.	*
140.	.00	.000	131.	*	315.	.00	.000	13.	*
145.	.00	.000	122.	*	320.	.00	.000	12.	*
150.	.00	.000	114.	*	325.	.00	.000	11.	*
155.	.00	.000	107.	*	330.	.00	.000	11.	*
160.	.00	.000	100.	*	335.	.00	.000	6.	*

165.	.00	.000	94.	*	340.	.00	.000	4.	*
170.	.00	.000	88.	*	345.	.00	.000	3.	*

TOTAL PRECIP. = 3.09 (1-HOUR RAIN = 2.67) EXECESS PRECIP. = 1.275 INCHES
VOLUME OF EXCESS PRECIP = 44. ACRE-FEET
PEAK Q = 297. CFS TIME OF PEAK = 65. MIN.
INFILT.= 4.30 IN/HR DECAY = .00180 FNINF = .60 IN/HR
MAX.PERV.RET.= .50 IN. MAX.IMP.RET.= .10 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE AT TIME

CUHPE/PC VERSION MODIFIED IN JANUARY 1985

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

SOUTH CANYON-LIME CREEK DRAINAGE DESIGN PLAN BY FMG, INC

BASIN ID: -- BASIN COMMENT: BASIN 16 EXISTING CONDITIONS

AREA OF BASIN (SQMI)	LENGTH OF BASIN (MI)	DIST TO CENTROID (MI)	IMPERVIOUS AREA (PCT)	SLOPE (FT/FT)	UNIT DURATION (MIN)
.29	.87	.53	1.00	.0520	5.00

COEFFICIENT (REFLECTING TIME TO PEAK)	COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF)
.159	.285

CALCULATED UNIT HYDROGRAPH

TIME TO PEAK (MIN)	PEAK RATE OF RUNOFF (CFS/SQMI)	UNIT HYDROGRAP PEAK (CFS)	VOLUME OF RUNOFF (AF)
15.91	815.22	237.23	15.52

WIDTH AT 50 = 37. MIN. WIDTH AT 75 = 19. MIN. K50 = .26 K75 = .35

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. = .50 IN. MAX. IMPERVIOUS RET. = .10 IN.
INFILTRATION = 4.40 IN./HR. DECAY = .00180/SECOND FNINFL = .60 IN./HR.

TIME	UNIT HYDROGRAPH	*	TIME	UNIT HYDROGRAPH	*	TIME	UNIT HYDROGRAPH	*
0.	0.	*	55.	87.	*	110.	21.	*
5.	85.	*	60.	77.	*	115.	18.	*
10.	193.	*	65.	67.	*	120.	16.	*

15.	236.	*	70.	59.	*	125.	14.	*
20.	224.	*	75.	52.	*	130.	12.	*
25.	192.	*	80.	46.	*	135.	11.	*
30.	171.	*	85.	40.	*	140.	10.	*
35.	151.	*	90.	35.	*	145.	8.	*
40.	131.	*	95.	31.	*	150.	7.	*
45.	113.	*	100.	27.	*	155.	0.	*
50.	99.	*	105.	24.	*	0.	0.	*

1 BASIN ID: -- BASIN COMMENT: BASIN 16 EXISTING CONDITIONS

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 50

TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)	*	TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)	*
0.	.00	.000	0.	*	100.	.04	.000	85.	*
5.	.03	.000	0.	*	105.	.04	.000	75.	*
10.	.09	.000	0.	*	110.	.04	.000	66.	*
15.	.13	.001	0.	*	115.	.04	.000	58.	*
20.	.21	.002	0.	*	120.	.04	.000	51.	*
25.	.40	.004	1.	*	125.	.00	.000	45.	*
30.	.67	.542	47.	*	130.	.00	.000	39.	*
35.	.32	.261	128.	*	135.	.00	.000	34.	*
40.	.21	.159	193.	*	140.	.00	.000	30.	*
45.	.13	.081	222.	*	145.	.00	.000	27.	*
50.	.13	.082	224.	*	150.	.00	.000	23.	*
55.	.09	.035	217.	*	155.	.00	.000	21.	*
60.	.09	.035	205.	*	160.	.00	.000	18.	*
65.	.09	.036	190.	*	165.	.00	.000	16.	*
70.	.06	.014	174.	*	170.	.00	.000	14.	*
75.	.06	.014	158.	*	175.	.00	.000	12.	*
80.	.05	.000	142.	*	180.	.00	.000	7.	*
85.	.05	.000	125.	*	185.	.00	.000	5.	*
90.	.04	.000	110.	*	190.	.00	.000	3.	*
95.	.04	.000	97.	*	195.	.00	.000	2.	*

TOTAL PRECIP. = 3.09 (1-HOUR RAIN = 2.67) EXECESS PRECIP. = 1.270 INCHES
VOLUME OF EXCESS PRECIP = 20. ACRE-FEET
PEAK Q = 224. CFS TIME OF PEAK = 50. MIN.
INFILT.= 4.40 IN/HR DECAY = .00180 FNINF = .60 IN/HR
MAX.PERV.RET.= .50 IN. MAX.IMP.RET.= .10 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE AT TIME

CUHPE/PC VERSION MODIFIED IN JANUARY 1985

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

SOUTH CANYON-LIME CREEK DRAINAGE DESIGN PLAN BY FMG, INC

BASIN ID: -- BASIN COMMENT: BASIN 17 EXISTING CONDITIONS

AREA OF BASIN (SQMI)	LENGTH OF BASIN (MI)	DIST TO CENTROID (MI)	IMPERVIOUS AREA (PCT)	SLOPE (FT/FT)	UNIT DURATION (MIN)
.32	.83	.38	1.00	.0292	5.00

COEFFICIENT (REFLECTING TIME TO PEAK)	COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF)
.159	.289

CALCULATED UNIT HYDROGRAPH

TIME TO PEAK (MIN)	PEAK RATE OF RUNOFF (CFS/SQMI)	UNIT HYDROGRAP PEAK (CFS)	VOLUME OF RUNOFF (AF)
15.33	866.02	281.46	17.33

WIDTH AT 50 = 35. MIN. WIDTH AT 75 = 18. MIN. K50 = .27 K75 = .36

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. = .50 IN. MAX. IMPERVIOUS RET. = .10 IN.
INFILTRATION = 4.40 IN./HR. DECAY = .00180/SECOND FNINFL = .60 IN./HR.

TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH
0.	0.	55.	95.	110.	20.
5.	106.	60.	82.	115.	18.
10.	236.	65.	71.	120.	15.
15.	281.	70.	62.	125.	13.
20.	261.	75.	54.	130.	12.
25.	221.	80.	47.	135.	10.
30.	195.	85.	41.	140.	9.
35.	170.	90.	36.	145.	8.
40.	145.	95.	31.	150.	0.
45.	125.	100.	27.	0.	0.
50.	109.	105.	23.	0.	0.

1 BASIN ID: -- BASIN COMMENT: BASIN 17 EXISTING CONDITIONS

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 50

TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)	TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)

				*					*
				*					*
0.	.00	.000	0.	*	95.	.04	.000	104.	*
5.	.03	.000	0.	*	100.	.04	.000	91.	*
10.	.09	.000	0.	*	105.	.04	.000	79.	*
15.	.13	.001	0.	*	110.	.04	.000	69.	*
20.	.21	.002	1.	*	115.	.04	.000	60.	*
25.	.40	.004	1.	*	120.	.04	.000	52.	*
30.	.67	.542	59.	*	125.	.00	.000	45.	*
35.	.32	.261	158.	*	130.	.00	.000	39.	*
40.	.21	.159	233.	*	135.	.00	.000	34.	*
45.	.13	.081	262.	*	140.	.00	.000	30.	*
50.	.13	.082	262.	*	145.	.00	.000	26.	*
55.	.09	.035	252.	*	150.	.00	.000	23.	*
60.	.09	.035	235.	*	155.	.00	.000	20.	*
65.	.09	.036	216.	*	160.	.00	.000	17.	*
70.	.06	.014	196.	*	165.	.00	.000	15.	*
75.	.06	.014	177.	*	170.	.00	.000	13.	*
80.	.05	.000	157.	*	175.	.00	.000	8.	*
85.	.05	.000	138.	*	180.	.00	.000	5.	*
90.	.04	.000	120.	*	185.	.00	.000	3.	*

TOTAL PRECIP. = 3.09 (1-HOUR RAIN = 2.67) EXECESS PRECIP. = 1.270 INCHES
VOLUME OF EXCESS PRECIP = 22. ACRE-FEET
PEAK Q = 262. CFS TIME OF PEAK = 45. MIN.
INFILT.= 4.40 IN/HR DECAY = .00180 FNINF = .60 IN/HR
MAX.PERV.RET.= .50 IN. MAX.IMP.RET.= .10 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE AT TIME

CUHPE/PC VERSION MODIFIED IN JANUARY 1985

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

SOUTH CANYON-LIME CREEK DRAINAGE DESIGN PLAN BY FMG, INC

BASIN ID: -- BASIN COMMENT: BASIN 18 EXISTING CONDITIONS

AREA OF BASIN (SQMI)	LENGTH OF BASIN (MI)	DIST TO CENTROID (MI)	IMPERVIOUS AREA (PCT)	SLOPE (FT/FT)	UNIT DURATION (MIN)
.56	1.29	.64	1.50	.0428	5.00

COEFFICIENT (REFLECTING TIME TO PEAK)	COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF)
.157	.310

CALCULATED UNIT HYDROGRAPH

TIME TO PEAK (MIN)	PEAK RATE OF RUNOFF (CFS/SQMI)	UNIT HYDROGRAP PEAK (CFS)	VOLUME OF RUNOFF (AF)

20.90 646.94 362.29 29.87

WIDTH AT 50 = 46. MIN. WIDTH AT 75 = 24. MIN. K50 = .27 K75 = .37

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. = .40 IN. MAX. IMPERVIOUS RET. = .10 IN.
INFILTRATION = 4.50 IN./HR. DECAY = .00180/SECOND FNINFL = .60 IN./HR.

TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH
0.	0.	70.	131.	140.	29.
5.	85.	75.	118.	145.	26.
10.	226.	80.	106.	150.	24.
15.	325.	85.	95.	155.	21.
20.	362.	90.	85.	160.	19.
25.	350.	95.	77.	165.	17.
30.	314.	100.	69.	170.	15.
35.	278.	105.	62.	175.	14.
40.	253.	110.	56.	180.	12.
45.	229.	115.	50.	185.	11.
50.	204.	120.	45.	190.	10.
55.	180.	125.	40.	195.	9.
60.	162.	130.	36.	200.	8.
65.	145.	135.	33.	205.	0.

1 BASIN ID: -- BASIN COMMENT: BASIN 18 EXISTING CONDITIONS

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 50

TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)	TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)
0.	.00	.000	0.	125.	.00	.000	115.
5.	.03	.000	0.	130.	.00	.000	103.
10.	.09	.000	0.	135.	.00	.000	93.
15.	.13	.002	0.	140.	.00	.000	83.
20.	.21	.003	1.	145.	.00	.000	75.
25.	.40	.042	5.	150.	.00	.000	67.
30.	.67	.601	63.	155.	.00	.000	61.
35.	.32	.261	174.	160.	.00	.000	54.
40.	.21	.159	285.	165.	.00	.000	49.
45.	.13	.081	361.	170.	.00	.000	44.
50.	.13	.082	396.	175.	.00	.000	39.
55.	.09	.035	398.	180.	.00	.000	35.
60.	.09	.035	383.	185.	.00	.000	32.

65.	.09	.036	365.	*	190.	.00	.000	29.	*
70.	.06	.015	345.	*	195.	.00	.000	26.	*
75.	.06	.015	320.	*	200.	.00	.000	23.	*
80.	.05	.001	293.	*	205.	.00	.000	21.	*
85.	.05	.001	266.	*	210.	.00	.000	19.	*
90.	.04	.001	240.	*	215.	.00	.000	17.	*
95.	.04	.001	216.	*	220.	.00	.000	15.	*
100.	.04	.001	194.	*	225.	.00	.000	13.	*
105.	.04	.001	175.	*	230.	.00	.000	7.	*
110.	.04	.001	157.	*	235.	.00	.000	5.	*
115.	.04	.001	142.	*	240.	.00	.000	3.	*
120.	.04	.001	127.	*	245.	.00	.000	2.	*

TOTAL PRECIP. = 3.09 (1-HOUR RAIN = 2.67) EXECESS PRECIP. = 1.372 INCHES
VOLUME OF EXCESS PRECIP = 41. ACRE-FEET
PEAK Q = 398. CFS TIME OF PEAK = 55. MIN.
INFILT.= 4.50 IN/HR DECAY = .00180 FNINF = .60 IN/HR
MAX.PERV.RET.= .40 IN. MAX.IMP.RET.= .10 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE AT TIME

CUHPE/PC VERSION MODIFIED IN JANUARY 1985

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

SOUTH CANYON-LIME CREEK DRAINAGE DESIGN PLAN BY FMG, INC

BASIN ID: -- BASIN COMMENT: BASIN 19 EXISTING CONDITIONS

AREA OF BASIN (SQMI)	LENGTH OF BASIN (MI)	DIST TO CENTROID (MI)	IMPERVIOUS AREA (PCT)	SLOPE (FT/FT)	UNIT DURATION (MIN)
.27	.61	.19	1.50	.0511	5.00

COEFFICIENT (REFLECTING TIME TO PEAK)	COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF)
.157	.278

CALCULATED UNIT HYDROGRAPH

TIME TO PEAK (MIN)	PEAK RATE OF RUNOFF (CFS/SQMI)	UNIT HYDROGRAP PEAK (CFS)	VOLUME OF RUNOFF (AF)
9.32	1565.14	422.59	14.40

WIDTH AT 50 = 19. MIN. WIDTH AT 75 = 10. MIN. K50 = .29 K75 = .40

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. = .40 IN. MAX. IMPERVIOUS RET. = .10 IN.
INFILTRATION = 4.50 IN./HR. DECAY = .00180/SECOND FNINFL = .60 IN./HR.

TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH
0.	0.	35.	113.	70.	18.
5.	298.	40.	87.	75.	14.
10.	420.	45.	67.	80.	11.
15.	324.	50.	52.	85.	8.
20.	252.	55.	40.	90.	0.
25.	189.	60.	31.	0.	0.
30.	146.	65.	24.	0.	0.

1 BASIN ID: -- BASIN COMMENT: BASIN 19 EXISTING CONDITIONS

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 50

TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)	TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)
0.	.00	.000	0.	70.	.06	.015	150.
5.	.03	.000	0.	75.	.06	.015	123.
10.	.09	.000	0.	80.	.05	.001	98.
15.	.13	.002	1.	85.	.05	.001	76.
20.	.21	.003	2.	90.	.04	.001	59.
25.	.40	.042	14.	95.	.04	.001	45.
30.	.67	.601	198.	100.	.04	.001	35.
35.	.32	.261	345.	105.	.04	.001	27.
40.	.21	.159	363.	110.	.04	.001	21.
45.	.13	.081	335.	115.	.04	.001	13.
50.	.13	.082	296.	120.	.04	.001	8.
55.	.09	.035	254.	125.	.00	.000	6.
60.	.09	.035	212.	130.	.00	.000	4.
65.	.09	.036	181.	135.	.00	.000	2.

TOTAL PRECIP. = 3.09 (1-HOUR RAIN = 2.67) EXECESS PRECIP. = 1.372 INCHES
VOLUME OF EXCESS PRECIP = 20. ACRE-FEET
PEAK Q = 363. CFS TIME OF PEAK = 40. MIN.
INFILT.= 4.50 IN/HR DECAY = .00180 FNINF = .60 IN/HR
MAX.PERV.RET.= .40 IN. MAX.IMP.RET.= .10 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE AT TIME

CUHPE/PC VERSION MODIFIED IN JANUARY 1985

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

SOUTH CANYON-LIME CREEK DRAINAGE DESIGN PLAN BY FMG, INC

BASIN ID: -- BASIN COMMENT: BASIN 20 EXISITNG CONDITIONS

AREA OF BASIN (SQMI)	LENGTH OF BASIN (MI)	DIST TO CENTROID (MI)	IMPERVIOUS AREA (PCT)	SLOPE (FT/FT)	UNIT DURATION (MIN)
.97	1.63	.81	2.50	.0341	5.00

COEFFICIENT (REFLECTING TIME TO PEAK)	COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF)
.154	.328

CALCULATED UNIT HYDROGRAPH

TIME TO PEAK (MIN)	PEAK RATE OF RUNOFF (CFS/SQMI)	UNIT HYDROGRAP PEAK (CFS)	VOLUME OF RUNOFF (AF)
26.21	531.65	515.70	51.73

WIDTH AT 50 = 56. MIN. WIDTH AT 75 = 29. MIN. K50 = .28 K75 = .38

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. = .50 IN. MAX. IMPERVIOUS RET. = .09 IN.
INFILTRATION = 4.50 IN./HR. DECAY = .00180/SECOND FNINFL = .60 IN./HR.

TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH
0.	0.	95.	156.	190.	29.
5.	85.	100.	143.	195.	26.
10.	242.	105.	131.	200.	24.
15.	385.	110.	120.	205.	22.
20.	480.	115.	110.	210.	20.
25.	514.	120.	100.	215.	19.
30.	505.	125.	92.	220.	17.
35.	469.	130.	84.	225.	16.
40.	423.	135.	77.	230.	14.
45.	384.	140.	70.	235.	13.
50.	355.	145.	64.	240.	12.
55.	326.	150.	59.	245.	11.
60.	298.	155.	54.	250.	10.
65.	269.	160.	49.	255.	9.
70.	244.	165.	45.	260.	8.
75.	223.	170.	41.	265.	8.
80.	204.	175.	38.	270.	0.
85.	187.	180.	35.	0.	0.
90.	171.	185.	32.	0.	0.

1 BASIN ID: -- BASIN COMMENT: BASIN 20 EXISITNG CONDITIONS

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 50

TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)	*	TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)	*
0.	.00	.000	0.	*	155.	.00	.000	129.	*
5.	.03	.000	0.	*	160.	.00	.000	118.	*
10.	.09	.001	0.	*	165.	.00	.000	108.	*
15.	.13	.003	0.	*	170.	.00	.000	99.	*
20.	.21	.005	2.	*	175.	.00	.000	90.	*
25.	.40	.010	4.	*	180.	.00	.000	83.	*
30.	.67	.540	52.	*	185.	.00	.000	76.	*
35.	.32	.262	161.	*	190.	.00	.000	69.	*
40.	.21	.159	294.	*	195.	.00	.000	63.	*
45.	.13	.081	414.	*	200.	.00	.000	58.	*
50.	.13	.083	500.	*	205.	.00	.000	53.	*
55.	.09	.035	546.	*	210.	.00	.000	48.	*
60.	.09	.036	557.	*	215.	.00	.000	44.	*
65.	.09	.036	545.	*	220.	.00	.000	41.	*
70.	.06	.015	523.	*	225.	.00	.000	37.	*
75.	.06	.015	499.	*	230.	.00	.000	34.	*
80.	.05	.001	472.	*	235.	.00	.000	31.	*
85.	.05	.001	440.	*	240.	.00	.000	28.	*
90.	.04	.001	406.	*	245.	.00	.000	26.	*
95.	.04	.001	372.	*	250.	.00	.000	24.	*
100.	.04	.001	340.	*	255.	.00	.000	22.	*
105.	.04	.001	311.	*	260.	.00	.000	20.	*
110.	.04	.001	285.	*	265.	.00	.000	18.	*
115.	.04	.001	261.	*	270.	.00	.000	17.	*
120.	.04	.001	239.	*	275.	.00	.000	15.	*
125.	.00	.000	219.	*	280.	.00	.000	14.	*
130.	.00	.000	201.	*	285.	.00	.000	13.	*
135.	.00	.000	184.	*	290.	.00	.000	12.	*
140.	.00	.000	168.	*	295.	.00	.000	7.	*
145.	.00	.000	154.	*	300.	.00	.000	4.	*
150.	.00	.000	141.	*	305.	.00	.000	3.	*

TOTAL PRECIP. = 3.09 (1-HOUR RAIN = 2.67) EXECESS PRECIP. = 1.290 INCHES
VOLUME OF EXCESS PRECIP = 67. ACRE-FEET
PEAK Q = 557. CFS TIME OF PEAK = 60. MIN.
INFILT.= 4.50 IN/HR DECAY = .00180 FNINF = .60 IN/HR
MAX.PERV.RET.= .50 IN. MAX.IMP.RET.= .09 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE AT TIME

CUHPE/PC VERSION MODIFIED IN JANUARY 1985

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

SOUTH CANYON-LIME CREEK DRAINAGE DESIGN PLAN BY FMG, INC

BASIN ID: -- BASIN COMMENT: BASIN 21 EXISTING CONDITIONS

AREA OF BASIN (SQMI)	LENGTH OF BASIN (MI)	DIST TO CENTROID (MI)	IMPERVIOUS AREA (PCT)	SLOPE (FT/FT)	UNIT DURATION (MIN)
.18	.87	.34	5.00	.0449	5.00

COEFFICIENT (REFLECTING TIME TO PEAK)	COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF)
.144	.241

CALCULATED UNIT HYDROGRAPH

TIME TO PEAK (MIN)	PEAK RATE OF RUNOFF (CFS/SQMI)	UNIT HYDROGRAP PEAK (CFS)	VOLUME OF RUNOFF (AF)
12.69	909.46	163.70	9.60

WIDTH AT 50 = 33. MIN. WIDTH AT 75 = 17. MIN. K50 = .23 K75 = .31

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. = .50 IN. MAX. IMPERVIOUS RET. = .09 IN.
INFILTRATION = 4.50 IN./HR. DECAY = .00180/SECOND FNINFL = .60 IN./HR.

TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH
0.	0.	45.	68.	90.	20.
5.	80.	50.	59.	95.	17.
10.	155.	55.	52.	100.	15.
15.	159.	60.	45.	105.	13.
20.	132.	65.	39.	110.	11.
25.	121.	70.	34.	115.	10.
30.	106.	75.	30.	120.	9.
35.	91.	80.	26.	125.	8.
40.	78.	85.	23.	130.	0.

1 BASIN ID: -- BASIN COMMENT: BASIN 21 EXISTING CONDITIONS

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 50

TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)	TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)

				*					*
				*					*
0.	.00	.000	0.	*	90.	.04	.002	68.	*
5.	.03	.000	0.	*	95.	.04	.002	60.	*
10.	.09	.002	0.	*	100.	.04	.002	52.	*
15.	.13	.006	1.	*	105.	.04	.002	46.	*
20.	.21	.010	2.	*	110.	.04	.002	40.	*
25.	.40	.019	4.	*	115.	.04	.002	36.	*
30.	.67	.542	49.	*	120.	.04	.002	31.	*
35.	.32	.263	110.	*	125.	.00	.000	28.	*
40.	.21	.160	144.	*	130.	.00	.000	24.	*
45.	.13	.083	149.	*	135.	.00	.000	21.	*
50.	.13	.084	149.	*	140.	.00	.000	18.	*
55.	.09	.037	143.	*	145.	.00	.000	16.	*
60.	.09	.037	132.	*	150.	.00	.000	14.	*
65.	.09	.037	121.	*	155.	.00	.000	8.	*
70.	.06	.016	110.	*	160.	.00	.000	6.	*
75.	.06	.016	100.	*	165.	.00	.000	4.	*
80.	.05	.002	89.	*	170.	.00	.000	3.	*
85.	.05	.002	78.	*	175.	.00	.000	2.	*

TOTAL PRECIP. = 3.09 (1-HOUR RAIN = 2.67) EXECESS PRECIP. = 1.329 INCHES

VOLUME OF EXCESS PRECIP = 13. ACRE-FEET

PEAK Q = 149. CFS TIME OF PEAK = 45. MIN.

INFILT.= 4.50 IN/HR DECAY = .00180 FNINF = .60 IN/HR

MAX.PERV.RET.= .50 IN. MAX.IMP.RET.= .09 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE AT TIME

CUHPE/PC VERSION MODIFIED IN JANUARY 1985

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

SOUTH CANYON-LIME CREEK DRAINAGE DESIGN PLAN BY FMG, INC

BASIN ID: -- BASIN COMMENT: BASIN 22 EXISTING CONDITIONS

AREA OF BASIN (SQMI)	LENGTH OF BASIN (MI)	DIST TO CENTROID (MI)	IMPERVIOUS AREA (PCT)	SLOPE (FT/FT)	UNIT DURATION (MIN)
.25	.99	.49	4.00	.0310	5.00

COEFFICIENT (REFLECTING TIME TO PEAK)	COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF)
.148	.259

CALCULATED UNIT HYDROGRAPH

TIME TO PEAK (MIN)	PEAK RATE OF RUNOFF (CFS/SQMI)	UNIT HYDROGRAP PEAK (CFS)	VOLUME OF RUNOFF (AF)
16.95	688.66	173.54	13.44

WIDTH AT 50 = 44. MIN. WIDTH AT 75 = 23. MIN. K50 = .23 K75 = .32

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. = .50 IN. MAX. IMPERVIOUS RET. = .09 IN.
INFILTRATION = 4.50 IN./HR. DECAY = .00180/SECOND FNINFL = .60 IN./HR.

TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH
0.	0.	60.	71.	120.	20.
5.	56.	65.	64.	125.	18.
10.	133.	70.	58.	130.	16.
15.	171.	75.	52.	135.	15.
20.	169.	80.	47.	140.	13.
25.	148.	85.	42.	145.	12.
30.	131.	90.	38.	150.	11.
35.	124.	95.	34.	155.	10.
40.	112.	100.	31.	160.	9.
45.	100.	105.	28.	165.	8.
50.	88.	110.	25.	170.	0.
55.	79.	115.	23.	0.	0.

1 BASIN ID: -- BASIN COMMENT: BASIN 22 EXISTING CONDITIONS

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 50

TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)	TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)
0.	.00	.000	0.	110.	.04	.001	68.
5.	.03	.000	0.	115.	.04	.001	61.
10.	.09	.001	0.	120.	.04	.001	56.
15.	.13	.005	0.	125.	.00	.000	50.
20.	.21	.008	1.	130.	.00	.000	45.
25.	.40	.015	3.	135.	.00	.000	41.
30.	.67	.541	35.	140.	.00	.000	37.
35.	.32	.262	92.	145.	.00	.000	33.
40.	.21	.160	141.	150.	.00	.000	30.
45.	.13	.082	166.	155.	.00	.000	27.
50.	.13	.083	171.	160.	.00	.000	24.
55.	.09	.036	167.	165.	.00	.000	22.
60.	.09	.037	163.	170.	.00	.000	20.
65.	.09	.037	156.	175.	.00	.000	18.
70.	.06	.016	147.	180.	.00	.000	16.
75.	.06	.016	135.	185.	.00	.000	14.

80.	.05	.002	124.	*	190.	.00	.000	13.	*
85.	.05	.002	113.	*	195.	.00	.000	8.	*
90.	.04	.001	102.	*	200.	.00	.000	5.	*
95.	.04	.001	92.	*	205.	.00	.000	3.	*
100.	.04	.001	83.	*	210.	.00	.000	2.	*
105.	.04	.001	75.	*	215.	.00	.000	2.	*

TOTAL PRECIP. = 3.09 (1-HOUR RAIN = 2.67) EXECESS PRECIP. = 1.313 INCHES
VOLUME OF EXCESS PRECIP = 18. ACRE-FEET
PEAK Q = 171. CFS TIME OF PEAK = 50. MIN.
INFILT.= 4.50 IN/HR DECAY = .00180 FNINF = .60 IN/HR
MAX.PERV.RET.= .50 IN. MAX.IMP.RET.= .09 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE AT TIME

CUHPE/PC VERSION MODIFIED IN JANUARY 1985

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

SOUTH CANYON-LIME CREEK DRAINAGE DESIGN PLAN BY FMG, INC

BASIN ID: -- BASIN COMMENT: BASIN 23 EXISTING CONDITIONS

AREA OF BASIN (SQMI)	LENGTH OF BASIN (MI)	DIST TO CENTROID (MI)	IMPERVIOUS AREA (PCT)	SLOPE (FT/FT)	UNIT DURATION (MIN)
.26	1.06	.55	42.50	.0179	5.00

COEFFICIENT (REFLECTING TIME TO PEAK)	COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF)
.092	.449

CALCULATED UNIT HYDROGRAPH

TIME TO PEAK (MIN)	PEAK RATE OF RUNOFF (CFS/SQMI)	UNIT HYDROGRAP PEAK (CFS)	VOLUME OF RUNOFF (AF)
13.68	1542.57	397.98	13.76

WIDTH AT 50 = 19. MIN. WIDTH AT 75 = 10. MIN. K50 = .35 K75 = .45

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. = .35 IN. MAX. IMPERVIOUS RET. = .07 IN.
INFILTRATION = 4.00 IN./HR. DECAY = .00180/SECOND FNINFL = .60 IN./HR.

TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH

		*			*			
0.	0.	*	35.	123.	*	70.	18.	*
5.	123.	*	40.	93.	*	75.	13.	*
10.	335.	*	45.	71.	*	80.	10.	*
15.	391.	*	50.	54.	*	85.	8.	*
20.	288.	*	55.	41.	*	90.	0.	*
25.	218.	*	60.	31.	*	0.	0.	*
30.	162.	*	65.	23.	*	0.	0.	*

1 BASIN ID: -- BASIN COMMENT: BASIN 23 EXISTING CONDITIONS

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 50

TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)	*	TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)	*
0.	.00	.000	0.	*	90.	.04	.015	102.	*
5.	.03	.000	0.	*	95.	.04	.015	85.	*
10.	.09	.023	3.	*	100.	.04	.015	72.	*
15.	.13	.054	15.	*	105.	.04	.015	61.	*
20.	.21	.086	38.	*	110.	.04	.015	53.	*
25.	.40	.223	84.	*	115.	.04	.015	44.	*
30.	.67	.616	205.	*	120.	.04	.015	39.	*
35.	.32	.280	368.	*	125.	.00	.000	34.	*
40.	.21	.177	451.	*	130.	.00	.000	27.	*
45.	.13	.100	430.	*	135.	.00	.000	20.	*
50.	.13	.101	384.	*	140.	.00	.000	15.	*
55.	.09	.054	332.	*	145.	.00	.000	11.	*
60.	.09	.055	284.	*	150.	.00	.000	8.	*
65.	.09	.055	241.	*	155.	.00	.000	6.	*
70.	.06	.034	207.	*	160.	.00	.000	4.	*
75.	.06	.034	176.	*	165.	.00	.000	3.	*
80.	.05	.019	148.	*	170.	.00	.000	2.	*
85.	.05	.019	124.	*	175.	.00	.000	2.	*

TOTAL PRECIP. = 3.09 (1-HOUR RAIN = 2.67) EXECESS PRECIP. = 2.037 INCHES
VOLUME OF EXCESS PRECIP = 28. ACRE-FEET
PEAK Q = 451. CFS TIME OF PEAK = 40. MIN.
INFILT.= 4.00 IN/HR DECAY = .00180 FNINF = .60 IN/HR
MAX.PERV.RET.= .35 IN. MAX.IMP.RET.= .07 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE AT TIME

CUHPE/PC VERSION MODIFIED IN JANUARY 1985

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

SOUTH CANYON-LIME CREEK DRAINAGE DESIGN PLAN BY FMG, INC

BASIN ID: -- BASIN COMMENT: BASIN 24 EXISTING CONDITIONS

AREA OF BASIN (SQMI)	LENGTH OF BASIN (MI)	DIST TO CENTROID (MI)	IMPERVIOUS AREA (PCT)	SLOPE (FT/FT)	UNIT DURATION (MIN)
.22	.81	.38	26.00	.0359	5.00

COEFFICIENT (REFLECTING TIME TO PEAK)	COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF)
.103	.288

CALCULATED UNIT HYDROGRAPH

TIME TO PEAK (MIN)	PEAK RATE OF RUNOFF (CFS/SQMI)	UNIT HYDROGRAP PEAK (CFS)	VOLUME OF RUNOFF (AF)
10.32	1415.75	311.46	11.73

WIDTH AT 50 = 21. MIN. WIDTH AT 75 = 11. MIN. K50 = .29 K75 = .40

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. = .40 IN. MAX. IMPERVIOUS RET. = .07 IN.
INFILTRATION = 4.00 IN./HR. DECAY = .00180/SECOND FNINFL = .60 IN./HR.

TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH
0.	0.	35.	99.	70.	19.
5.	197.	40.	79.	75.	15.
10.	311.	45.	62.	80.	12.
15.	264.	50.	49.	85.	10.
20.	205.	55.	39.	90.	8.
25.	159.	60.	31.	95.	0.
30.	125.	65.	25.	0.	0.

1 BASIN ID: -- BASIN COMMENT: BASIN 24 EXISTING CONDITIONS

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 50

TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)	TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)
0.	.00	.000	0.	85.	.05	.012	93.
5.	.03	.000	0.	90.	.04	.009	77.
10.	.09	.014	3.	95.	.04	.009	64.
15.	.13	.033	11.	100.	.04	.009	54.

20.	.21	.053	24.	*	105.	.04	.009	46.	*
25.	.40	.141	56.	*	110.	.04	.009	40.	*
30.	.67	.611	187.	*	115.	.04	.009	34.	*
35.	.32	.273	299.	*	120.	.04	.009	26.	*
40.	.21	.170	323.	*	125.	.00	.000	21.	*
45.	.13	.093	302.	*	130.	.00	.000	16.	*
50.	.13	.094	272.	*	135.	.00	.000	12.	*
55.	.09	.047	238.	*	140.	.00	.000	9.	*
60.	.09	.047	206.	*	145.	.00	.000	7.	*
65.	.09	.047	180.	*	150.	.00	.000	5.	*
70.	.06	.026	155.	*	155.	.00	.000	4.	*
75.	.06	.026	132.	*	160.	.00	.000	3.	*
80.	.05	.012	111.	*	165.	.00	.000	2.	*

TOTAL PRECIP. = 3.09 (1-HOUR RAIN = 2.67) EXECESS PRECIP. = 1.762 INCHES
VOLUME OF EXCESS PRECIP = 21. ACRE-FEET
PEAK Q = 323. CFS TIME OF PEAK = 40. MIN.
INFILT.= 4.00 IN/HR DECAY = .00180 FNINF = .60 IN/HR
MAX.PERV.RET.= .40 IN. MAX.IMP.RET.= .07 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE AT TIME

CUHPE/PC VERSION MODIFIED IN JANUARY 1985

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

SOUTH CANYON-LIME CREEK DRAINAGE DESIGN PLAN BY FMG, INC

BASIN ID: -- BASIN COMMENT: BASIN 25 EXISTING CONDITIONS

AREA OF BASIN (SQMI)	LENGTH OF BASIN (MI)	DIST TO CENTROID (MI)	IMPERVIOUS AREA (PCT)	SLOPE (FT/FT)	UNIT DURATION (MIN)
.49	1.40	.61	5.00	.0239	5.00

COEFFICIENT (REFLECTING TIME TO PEAK)	COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF)
.144	.281

CALCULATED UNIT HYDROGRAPH

TIME TO PEAK (MIN)	PEAK RATE OF RUNOFF (CFS/SQMI)	UNIT HYDROGRAP PEAK (CFS)	VOLUME OF RUNOFF (AF)
22.19	547.35	268.75	26.19

WIDTH AT 50 = 55. MIN. WIDTH AT 75 = 29. MIN. K50 = .24 K75 = .33

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. = .40 IN. MAX. IMPERVIOUS RET. = .08 IN.
INFILTRATION = 3.40 IN./HR. DECAY = .00180/SECOND FNINFL = .50 IN./HR.

TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH
0.	0.	80.	101.	160.	25.
5.	57.	85.	93.	165.	23.
10.	156.	90.	85.	170.	21.
15.	232.	95.	78.	175.	20.
20.	266.	100.	72.	180.	18.
25.	265.	105.	66.	185.	16.
30.	244.	110.	60.	190.	15.
35.	218.	115.	55.	195.	14.
40.	202.	120.	51.	200.	13.
45.	190.	125.	46.	205.	12.
50.	175.	130.	43.	210.	11.
55.	160.	135.	39.	215.	10.
60.	145.	140.	36.	220.	9.
65.	131.	145.	33.	225.	8.
70.	120.	150.	30.	230.	8.
75.	110.	155.	28.	235.	0.

1 BASIN ID: -- BASIN COMMENT: BASIN 25 EXISTING CONDITIONS

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 50

TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)	TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)
0.	.00	.000	0.	145.	.00	.000	96.
5.	.03	.000	0.	150.	.00	.000	88.
10.	.09	.002	0.	155.	.00	.000	81.
15.	.13	.006	1.	160.	.00	.000	74.
20.	.21	.010	2.	165.	.00	.000	68.
25.	.40	.116	10.	170.	.00	.000	63.
30.	.67	.614	58.	175.	.00	.000	57.
35.	.32	.273	144.	180.	.00	.000	53.
40.	.21	.169	231.	185.	.00	.000	48.
45.	.13	.091	293.	190.	.00	.000	44.
50.	.13	.092	326.	195.	.00	.000	41.
55.	.09	.045	334.	200.	.00	.000	37.
60.	.09	.045	327.	205.	.00	.000	34.
65.	.09	.045	319.	210.	.00	.000	31.
70.	.06	.024	310.	215.	.00	.000	29.
75.	.06	.024	297.	220.	.00	.000	26.
80.	.05	.008	281.	225.	.00	.000	24.
85.	.05	.008	263.	230.	.00	.000	22.
90.	.04	.002	243.	235.	.00	.000	20.

95.	.04	.002	224.	*	240.	.00	.000	19.	*
100.	.04	.002	207.	*	245.	.00	.000	17.	*
105.	.04	.002	190.	*	250.	.00	.000	16.	*
110.	.04	.002	175.	*	255.	.00	.000	13.	*
115.	.04	.002	161.	*	260.	.00	.000	8.	*
120.	.04	.002	148.	*	265.	.00	.000	6.	*
125.	.00	.000	136.	*	270.	.00	.000	4.	*
130.	.00	.000	125.	*	275.	.00	.000	3.	*
135.	.00	.000	115.	*	280.	.00	.000	2.	*
140.	.00	.000	105.	*	285.	.00	.000	2.	*

TOTAL PRECIP. = 3.09 (1-HOUR RAIN = 2.67) EXECESS PRECIP. = 1.588 INCHES
VOLUME OF EXCESS PRECIP = 42. ACRE-FEET
PEAK Q = 334. CFS TIME OF PEAK = 55. MIN.
INFILT.= 3.40 IN/HR DECAY = .00180 FNINF = .50 IN/HR
MAX.PERV.RET.= .40 IN. MAX.IMP.RET.= .08 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE AT TIME

CUHPE/PC VERSION MODIFIED IN JANUARY 1985

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

SOUTH CANYON-LIME CREEK DRAINAGE DESIGN PLAN BY FMG, INC

BASIN ID: -- BASIN COMMENT: BASIN 26 EXISTING CONDITIONS

AREA OF BASIN (SQMI)	LENGTH OF BASIN (MI)	DIST TO CENTROID (MI)	IMPERVIOUS AREA (PCT)	SLOPE (FT/FT)	UNIT DURATION (MIN)
.32	1.08	.57	18.50	.0294	5.00

COEFFICIENT (REFLECTING TIME TO PEAK)	COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF)
.112	.264

CALCULATED UNIT HYDROGRAPH

TIME TO PEAK (MIN)	PEAK RATE OF RUNOFF (CFS/SQMI)	UNIT HYDROGRAP PEAK (CFS)	VOLUME OF RUNOFF (AF)
14.96	812.46	263.24	17.28

WIDTH AT 50 = 37. MIN. WIDTH AT 75 = 19. MIN. K50 = .24 K75 = .33

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. = .40 IN. MAX. IMPERVIOUS RET. = .07 IN.
INFILTRATION = 3.70 IN./HR. DECAY = .00180/SECOND FNINFL = .50 IN./HR.

TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH
0.	0.	55.	96.	110.	23.
5.	103.	60.	85.	115.	21.
10.	225.	65.	75.	120.	18.
15.	263.	70.	66.	125.	16.
20.	240.	75.	58.	130.	14.
25.	205.	80.	51.	135.	12.
30.	188.	85.	45.	140.	11.
35.	166.	90.	39.	145.	10.
40.	144.	95.	35.	150.	8.
45.	125.	100.	30.	155.	7.
50.	110.	105.	27.	160.	0.

1 BASIN ID: -- BASIN COMMENT: BASIN 26 EXISTING CONDITIONS

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 50

TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)	TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)
0.	.00	.000	0.	110.	.04	.007	107.
5.	.03	.000	0.	115.	.04	.007	96.
10.	.09	.010	1.	120.	.04	.007	87.
15.	.13	.023	5.	125.	.00	.000	78.
20.	.21	.038	12.	130.	.00	.000	69.
25.	.40	.143	32.	135.	.00	.000	60.
30.	.67	.616	113.	140.	.00	.000	53.
35.	.32	.277	221.	145.	.00	.000	47.
40.	.21	.174	291.	150.	.00	.000	41.
45.	.13	.096	312.	155.	.00	.000	36.
50.	.13	.097	308.	160.	.00	.000	32.
55.	.09	.050	300.	165.	.00	.000	28.
60.	.09	.050	284.	170.	.00	.000	24.
65.	.09	.050	265.	175.	.00	.000	21.
70.	.06	.029	245.	180.	.00	.000	18.
75.	.06	.029	226.	185.	.00	.000	12.
80.	.05	.014	206.	190.	.00	.000	8.
85.	.05	.014	186.	195.	.00	.000	6.
90.	.04	.007	168.	200.	.00	.000	5.
95.	.04	.007	150.	205.	.00	.000	4.
100.	.04	.007	134.	210.	.00	.000	3.
105.	.04	.007	120.	215.	.00	.000	2.

TOTAL PRECIP. = 3.09 (1-HOUR RAIN = 2.67) EXECESS PRECIP. = 1.758 INCHES
VOLUME OF EXCESS PRECIP = 30. ACRE-FEET
PEAK Q = 312. CFS TIME OF PEAK = 45. MIN.

INFILT.= 3.70 IN/HR DECAY = .00180 FNINF = .50 IN/HR
MAX.PERV.RET.= .40 IN. MAX.IMP.RET.= .07 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE AT TIME

CUHPE/PC VERSION MODIFIED IN JANUARY 1985

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

SOUTH CANYON-LIME CREEK DRAINAGE DESIGN PLAN BY FMG, INC

BASIN ID: -- BASIN COMMENT: BASIN 27 EXISTING CONDITIONS

AREA OF BASIN (SQMI)	LENGTH OF BASIN (MI)	DIST TO CENTROID (MI)	IMPERVIOUS AREA (PCT)	SLOPE (FT/FT)	UNIT DURATION (MIN)
.34	1.34	.64	2.00	.0345	5.00

COEFFICIENT (REFLECTING TIME TO PEAK)	COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF)
.156	.284

CALCULATED UNIT HYDROGRAPH

TIME TO PEAK (MIN)	PEAK RATE OF RUNOFF (CFS/SQMI)	UNIT HYDROGRAP PEAK (CFS)	VOLUME OF RUNOFF (AF)
21.95	560.02	189.29	18.03

WIDTH AT 50 = 54. MIN. WIDTH AT 75 = 28. MIN. K50 = .25 K75 = .33

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. = .50 IN. MAX. IMPERVIOUS RET. = .09 IN.
INFILTRATION = 3.70 IN./HR. DECAY = .00180/SECOND FNINFL = .50 IN./HR.

TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH
0.	0.	75.	76.	150.	21.
5.	41.	80.	70.	155.	19.
10.	112.	85.	64.	160.	17.
15.	165.	90.	59.	165.	16.
20.	188.	95.	54.	170.	15.
25.	186.	100.	49.	175.	13.
30.	170.	105.	45.	180.	12.
35.	152.	110.	41.	185.	11.
40.	142.	115.	38.	190.	10.
45.	132.	120.	35.	195.	9.

50.	121.	*	125.	32.	*	200.	9.	*
55.	111.	*	130.	29.	*	205.	8.	*
60.	100.	*	135.	27.	*	210.	0.	*
65.	90.	*	140.	25.	*	0.	0.	*
70.	83.	*	145.	23.	*	0.	0.	*

1 BASIN ID: -- BASIN COMMENT: BASIN 27 EXISTING CONDITIONS

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 50

TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)	*	TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)	*
0.	.00	.000	0.	*	130.	.00	.000	78.	*
5.	.03	.000	0.	*	135.	.00	.000	72.	*
10.	.09	.001	0.	*	140.	.00	.000	66.	*
15.	.13	.003	0.	*	145.	.00	.000	60.	*
20.	.21	.004	1.	*	150.	.00	.000	55.	*
25.	.40	.008	1.	*	155.	.00	.000	51.	*
30.	.67	.603	27.	*	160.	.00	.000	46.	*
35.	.32	.271	81.	*	165.	.00	.000	42.	*
40.	.21	.168	139.	*	170.	.00	.000	39.	*
45.	.13	.090	183.	*	175.	.00	.000	36.	*
50.	.13	.091	207.	*	180.	.00	.000	33.	*
55.	.09	.044	214.	*	185.	.00	.000	30.	*
60.	.09	.044	210.	*	190.	.00	.000	28.	*
65.	.09	.044	205.	*	195.	.00	.000	25.	*
70.	.06	.023	199.	*	200.	.00	.000	23.	*
75.	.06	.023	191.	*	205.	.00	.000	21.	*
80.	.05	.007	180.	*	210.	.00	.000	19.	*
85.	.05	.007	168.	*	215.	.00	.000	18.	*
90.	.04	.001	155.	*	220.	.00	.000	16.	*
95.	.04	.001	143.	*	225.	.00	.000	15.	*
100.	.04	.001	131.	*	230.	.00	.000	14.	*
105.	.04	.001	120.	*	235.	.00	.000	8.	*
110.	.04	.001	110.	*	240.	.00	.000	5.	*
115.	.04	.001	101.	*	245.	.00	.000	4.	*
120.	.04	.001	93.	*	250.	.00	.000	3.	*
125.	.00	.000	85.	*	255.	.00	.000	2.	*

TOTAL PRECIP. = 3.09 (1-HOUR RAIN = 2.67) EXECESS PRECIP. = 1.435 INCHES
VOLUME OF EXCESS PRECIP = 26. ACRE-FEET
PEAK Q = 214. CFS TIME OF PEAK = 55. MIN.
INFILT.= 3.70 IN/HR DECAY = .00180 FNINF = .50 IN/HR
MAX.PERV.RET.= .50 IN. MAX.IMP.RET.= .09 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE AT TIME

CUHPE/PC VERSION MODIFIED IN JANUARY 1985

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

SOUTH CANYON-LIME CREEK DRAINAGE DESIGN PLAN BY FMG, INC

BASIN ID: -- BASIN COMMENT: BASIN 28 EXISTING CONDITIONS

AREA OF BASIN (SQMI)	LENGTH OF BASIN (MI)	DIST TO CENTROID (MI)	IMPERVIOUS AREA (PCT)	SLOPE (FT/FT)	UNIT DURATION (MIN)
.83	1.40	.72	3.50	.0350	5.00

COEFFICIENT (REFLECTING TIME TO PEAK)	COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF)
.150	.313

CALCULATED UNIT HYDROGRAPH

TIME TO PEAK (MIN)	PEAK RATE OF RUNOFF (CFS/SQMI)	UNIT HYDROGRAP PEAK (CFS)	VOLUME OF RUNOFF (AF)
22.70	595.44	493.02	44.16

WIDTH AT 50 = 50. MIN. WIDTH AT 75 = 26. MIN. K50 = .27 K75 = .37

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. = .45 IN. MAX. IMPERVIOUS RET. = .09 IN.
INFILTRATION = 3.80 IN./HR. DECAY = .00180/SECOND FNINFL = .60 IN./HR.

TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH
0.	0.	85.	148.	170.	27.
5.	102.	90.	134.	175.	25.
10.	279.	95.	122.	180.	23.
15.	418.	100.	110.	185.	20.
20.	485.	105.	100.	190.	18.
25.	488.	110.	90.	195.	17.
30.	452.	115.	82.	200.	15.
35.	403.	120.	74.	205.	14.
40.	365.	125.	67.	210.	12.
45.	335.	130.	61.	215.	11.
50.	304.	135.	55.	220.	10.
55.	274.	140.	50.	225.	9.
60.	244.	145.	45.	230.	8.
65.	221.	150.	41.	235.	8.
70.	200.	155.	37.	240.	0.
75.	181.	160.	33.	0.	0.
80.	164.	165.	30.	0.	0.

1 BASIN ID: -- BASIN COMMENT: BASIN 28 EXISTING CONDITIONS

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 50

TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)	*	TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)	*
0.	.00	.000	0.	*	145.	.00	.000	125.	*
5.	.03	.000	0.	*	150.	.00	.000	113.	*
10.	.09	.001	0.	*	155.	.00	.000	102.	*
15.	.13	.004	1.	*	160.	.00	.000	93.	*
20.	.21	.007	2.	*	165.	.00	.000	84.	*
25.	.40	.028	7.	*	170.	.00	.000	76.	*
30.	.67	.605	75.	*	175.	.00	.000	69.	*
35.	.32	.264	213.	*	180.	.00	.000	62.	*
40.	.21	.160	362.	*	185.	.00	.000	56.	*
45.	.13	.082	476.	*	190.	.00	.000	51.	*
50.	.13	.083	539.	*	195.	.00	.000	46.	*
55.	.09	.036	557.	*	200.	.00	.000	42.	*
60.	.09	.037	545.	*	205.	.00	.000	38.	*
65.	.09	.037	523.	*	210.	.00	.000	34.	*
70.	.06	.016	498.	*	215.	.00	.000	31.	*
75.	.06	.016	469.	*	220.	.00	.000	28.	*
80.	.05	.002	436.	*	225.	.00	.000	25.	*
85.	.05	.002	399.	*	230.	.00	.000	23.	*
90.	.04	.001	364.	*	235.	.00	.000	21.	*
95.	.04	.001	330.	*	240.	.00	.000	19.	*
100.	.04	.001	300.	*	245.	.00	.000	17.	*
105.	.04	.001	272.	*	250.	.00	.000	15.	*
110.	.04	.001	247.	*	255.	.00	.000	14.	*
115.	.04	.001	224.	*	260.	.00	.000	12.	*
120.	.04	.001	203.	*	265.	.00	.000	7.	*
125.	.00	.000	185.	*	270.	.00	.000	5.	*
130.	.00	.000	168.	*	275.	.00	.000	3.	*
135.	.00	.000	152.	*	280.	.00	.000	2.	*
140.	.00	.000	138.	*	285.	.00	.000	1.	*

TOTAL PRECIP. = 3.09 (1-HOUR RAIN = 2.67) EXECESS PRECIP. = 1.388 INCHES
VOLUME OF EXCESS PRECIP = 61. ACRE-FEET
PEAK Q = 557. CFS TIME OF PEAK = 55. MIN.
INFILT.= 3.80 IN/HR DECAY = .00180 FNINF = .60 IN/HR
MAX.PERV.RET.= .45 IN. MAX.IMP.RET.= .09 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE AT TIME

CUHPE/PC VERSION MODIFIED IN JANUARY 1985

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

SOUTH CANYON-LIME CREEK DRAINAGE DESIGN PLAN BY FMG, INC

BASIN ID: -- BASIN COMMENT: BASIN 29 EXISTING CONDITIONS

AREA OF BASIN (SQMI)	LENGTH OF BASIN (MI)	DIST TO CENTROID (MI)	IMPERVIOUS AREA (PCT)	SLOPE (FT/FT)	UNIT DURATION (MIN)
.14	.76	.30	2.00	.0260	5.00

COEFFICIENT (REFLECTING TIME TO PEAK)	COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF)
.156	.249

CALCULATED UNIT HYDROGRAPH

TIME TO PEAK (MIN)	PEAK RATE OF RUNOFF (CFS/SQMI)	UNIT HYDROGRAP PEAK (CFS)	VOLUME OF RUNOFF (AF)
13.52	866.84	122.22	7.52

WIDTH AT 50 = 35. MIN. WIDTH AT 75 = 18. MIN. K50 = .23 K75 = .32

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. = .40 IN. MAX. IMPERVIOUS RET. = .10 IN.
INFILTRATION = 3.90 IN./HR. DECAY = .00180/SECOND FNINFL = .60 IN./HR.

TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH
0.	0.	45.	54.	90.	17.
5.	55.	50.	47.	95.	15.
10.	112.	55.	42.	100.	13.
15.	121.	60.	37.	105.	12.
20.	104.	65.	32.	110.	10.
25.	91.	70.	29.	115.	9.
30.	83.	75.	25.	120.	8.
35.	72.	80.	22.	125.	0.
40.	61.	85.	19.	0.	0.

1 BASIN ID: -- BASIN COMMENT: BASIN 29 EXISTING CONDITIONS

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 50

TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)	TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)

				*					*
0.	.00	.000	0.	*	85.	.05	.001	65.	*
5.	.03	.000	0.	*	90.	.04	.001	57.	*
10.	.09	.001	0.	*	95.	.04	.001	50.	*
15.	.13	.003	0.	*	100.	.04	.001	44.	*
20.	.21	.004	1.	*	105.	.04	.001	39.	*
25.	.40	.067	4.	*	110.	.04	.001	35.	*
30.	.67	.604	41.	*	115.	.04	.001	31.	*
35.	.32	.263	91.	*	120.	.04	.001	27.	*
40.	.21	.160	119.	*	125.	.00	.000	24.	*
45.	.13	.082	124.	*	130.	.00	.000	21.	*
50.	.13	.083	121.	*	135.	.00	.000	18.	*
55.	.09	.035	117.	*	140.	.00	.000	16.	*
60.	.09	.036	109.	*	145.	.00	.000	14.	*
65.	.09	.036	99.	*	150.	.00	.000	8.	*
70.	.06	.015	91.	*	155.	.00	.000	5.	*
75.	.06	.015	82.	*	160.	.00	.000	3.	*
80.	.05	.001	73.	*	165.	.00	.000	2.	*

TOTAL PRECIP. = 3.09 (1-HOUR RAIN = 2.67) EXECESS PRECIP. = 1.409 INCHES
VOLUME OF EXCESS PRECIP = 11. ACRE-FEET
PEAK Q = 124. CFS TIME OF PEAK = 45. MIN.
INFILT.= 3.90 IN/HR DECAY = .00180 FNINF = .60 IN/HR
MAX.PERV.RET.= .40 IN. MAX.IMP.RET.= .10 IN.

1 U.D.F.C.D. CUHPD RUNOFF ANALYSIS EXECUTED ON DATE AT TIME

CUHPE/PC VERSION MODIFIED IN JANUARY 1985 TO WRITE OUTPUT FILE OF STORM HYDROGRAPHS FOR SUBSEQUENT USE WITH MULTI-PLAN RIVER ROUTING ROUTINES OF HEC-1

SOUTH CANYON-LIME CREEK DRAINAGE DESIGN PLAN BY FMG, INC

NO HYDROGRAPH VALUES WERE WRITTEN TO AN OUTPUTFILE FOR THIS RUN OF CUHPD.

APPENDIX C - CUHPE/PC - 100 YR

EXISTING LAND USE
AND EXISTING HYDRAULIC CONDITIONS

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE AT TIME

CUHPE/PC VERSION MODIFIED IN JANUARY 1985

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

SOUTH CANYON-LIME CREEK DRAINAGE DESIGN PLAN BY FMG, INC

BASIN ID: -- BASIN COMMENT: BASIN 1 EXISTING CONDITIONS

AREA OF BASIN (SQMI)	LENGTH OF BASIN (MI)	DIST TO CENTROID (MI)	IMPERVIOUS AREA (PCT)	SLOPE (FT/FT)	UNIT DURATION (MIN)
.19	.64	.27	22.00	.0143	5.00

COEFFICIENT (REFLECTING TIME TO PEAK)	COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF)
.108	.259

CALCULATED UNIT HYDROGRAPH

TIME TO PEAK (MIN)	PEAK RATE OF RUNOFF (CFS/SQMI)	UNIT HYDROGRAP PEAK (CFS)	VOLUME OF RUNOFF (AF)
10.22	1289.43	246.28	10.19

WIDTH AT 50 = 23. MIN. WIDTH AT 75 = 12. MIN. K50 = .26 K75 = .36

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. = .40 IN. MAX. IMPERVIOUS RET. = .08 IN.
INFILTRATION = 4.20 IN./HR. DECAY = .00180/SECOND FNINFL = .60 IN./HR.

TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH
0.	0.	35.	90.	70.	21.
5.	158.	40.	73.	75.	17.
10.	246.	45.	60.	80.	14.
15.	210.	50.	48.	85.	11.
20.	171.	55.	39.	90.	9.
25.	139.	60.	32.	95.	8.
30.	110.	65.	26.	100.	0.

1 BASIN ID: -- BASIN COMMENT: BASIN 1 EXISTING CONDITIONS

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 100

TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)	*	TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)	*
0.	.00	.000	0.	*	85.	.04	.007	103.	*
5.	.03	.000	0.	*	90.	.04	.007	86.	*
10.	.09	.008	1.	*	95.	.04	.007	72.	*
15.	.14	.028	6.	*	100.	.04	.007	61.	*
20.	.24	.049	16.	*	105.	.04	.007	51.	*
25.	.41	.153	44.	*	110.	.04	.007	44.	*
30.	.74	.678	161.	*	115.	.04	.007	37.	*
35.	.41	.362	269.	*	120.	.04	.007	32.	*
40.	.24	.190	299.	*	125.	.00	.000	22.	*
45.	.18	.140	291.	*	130.	.00	.000	16.	*
50.	.15	.105	271.	*	135.	.00	.000	12.	*
55.	.12	.077	245.	*	140.	.00	.000	9.	*
60.	.12	.077	220.	*	145.	.00	.000	6.	*
65.	.12	.077	201.	*	150.	.00	.000	5.	*
70.	.06	.019	176.	*	155.	.00	.000	3.	*
75.	.06	.019	149.	*	160.	.00	.000	2.	*
80.	.04	.007	125.	*	165.	.00	.000	2.	*

TOTAL PRECIP. = 3.41 (1-HOUR RAIN = 2.95) EXECESS PRECIP. = 2.051 INCHES
VOLUME OF EXCESS PRECIP = 21. ACRE-FEET
PEAK Q = 299. CFS TIME OF PEAK = 40. MIN.
INFILT.= 4.20 IN/HR DECAY = .00180 FNINF = .60 IN/HR
MAX.PERV.RET.= .40 IN. MAX.IMP.RET.= .08 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE AT TIME

CUHPE/PC VERSION MODIFIED IN JANUARY 1985

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

SOUTH CANYON-LIME CREEK DRAINAGE DESIGN PLAN BY FMG, INC

BASIN ID: -- BASIN COMMENT: BASIN 2 EXISTING CONDITIONS

AREA OF BASIN (SQMI)	LENGTH OF BASIN (MI)	DIST TO CENTROID (MI)	IMPERVIOUS AREA (PCT)	SLOPE (FT/FT)	UNIT DURATION (MIN)
.05	.66	.36	17.00	.0396	5.00

COEFFICIENT (REFLECTING TIME TO PEAK)	COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF)
.115	.196

CALCULATED UNIT HYDROGRAPH

TIME TO PEAK TIME OF CONCENTRATION PEAK RATE OF RUNOFF UNIT HYDROGRAPH PEAK VOLUME OF RUNOFF

(MIN)	(MIN)	(CFS/SQMI)	(CFS)	(AF)
6.10	22.00	2087.35	108.54	2.77

*** NOTE : THE TIME TO PEAK IS CALCULATED BASED ON THE TIME OF CONCENTRATION PROVIDED BY THE USER, REPLACING THE ONE COMPUTED BY CUHPD (TP= 9.98)

WIDTH AT 50 = 14. MIN. WIDTH AT 75 = 7. MIN. K50 = .25 K75 = .35

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. = .35 IN. MAX. IMPERVIOUS RET. = .09 IN.
INFILTRATION = 4.00 IN./HR. DECAY = .00180/SECOND FNINFL = .60 IN./HR.

TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH
0.	0.	20.	45.	40.	13.
5.	104.	25.	33.	45.	10.
10.	85.	30.	25.	50.	0.
15.	63.	35.	18.	0.	0.

1 BASIN ID: -- BASIN COMMENT: BASIN 2 EXISTING CONDITIONS

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 100

TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)	TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)
0.	.00	.000	0.	65.	.12	.075	50.
5.	.03	.000	0.	70.	.06	.017	38.
10.	.09	.005	0.	75.	.06	.017	25.
15.	.14	.022	3.	80.	.04	.006	16.
20.	.24	.038	6.	85.	.04	.006	11.
25.	.41	.186	24.	90.	.04	.006	8.
30.	.74	.678	90.	95.	.04	.006	6.
35.	.41	.361	110.	100.	.04	.006	4.
40.	.24	.188	103.	105.	.04	.006	3.
45.	.18	.137	91.	110.	.04	.006	3.
50.	.15	.103	79.	115.	.04	.006	2.
55.	.12	.075	66.	120.	.04	.006	2.
60.	.12	.075	57.	125.	.00	.000	2.

TOTAL PRECIP. = 3.41 (1-HOUR RAIN = 2.95) EXECESS PRECIP. = 2.028 INCHES
VOLUME OF EXCESS PRECIP = 6. ACRE-FEET
PEAK Q = 110. CFS TIME OF PEAK = 35. MIN.
INFILT.= 4.00 IN/HR DECAY = .00180 FNINF = .60 IN/HR
MAX.PERV.RET.= .35 IN. MAX.IMP.RET.= .09 IN.

RATIONAL FORMULA C = .59
I = 5.5 INCHES/HOUR
A = 33.3 ACRES
Q = 109. CFS

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE AT TIME

CUHPE/PC VERSION MODIFIED IN JANUARY 1985

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

SOUTH CANYON-LIME CREEK DRAINAGE DESIGN PLAN BY FMG, INC

BASIN ID: -- BASIN COMMENT: BASIN 3 EXISTING CONDITIONS

AREA OF BASIN (SQMI)	LENGTH OF BASIN (MI)	DIST TO CENTROID (MI)	IMPERVIOUS AREA (PCT)	SLOPE (FT/FT)	UNIT DURATION (MIN)
.14	.78	.45	14.50	.0268	5.00

COEFFICIENT (REFLECTING TIME TO PEAK)	COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF)
.118	.221

CALCULATED UNIT HYDROGRAPH

TIME TO PEAK (MIN)	PEAK RATE OF RUNOFF (CFS/SQMI)	UNIT HYDROGRAP PEAK (CFS)	VOLUME OF RUNOFF (AF)
12.74	828.25	117.61	7.57

WIDTH AT 50 = 36. MIN. WIDTH AT 75 = 19. MIN. K50 = .21 K75 = .29

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. = .38 IN. MAX. IMPERVIOUS RET. = .08 IN.
INFILTRATION = 3.90 IN./HR. DECAY = .00180/SECOND FNINFL = .55 IN./HR.

TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH
0.	0.	45.	54.	90.	19.
5.	57.	50.	48.	95.	17.

10.	111.	*	55.	43.	*	100.	15.	*
15.	114.	*	60.	38.	*	105.	13.	*
20.	94.	*	65.	34.	*	110.	12.	*
25.	85.	*	70.	30.	*	115.	10.	*
30.	81.	*	75.	27.	*	120.	9.	*
35.	71.	*	80.	24.	*	125.	8.	*
40.	61.	*	85.	21.	*	130.	0.	*

1 BASIN ID: -- BASIN COMMENT: BASIN 3 EXISTING CONDITIONS

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 100

TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)	*	TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)	*
0.	.00	.000	0.	*	95.	.04	.005	76.	*
5.	.03	.000	0.	*	100.	.04	.005	68.	*
10.	.09	.005	0.	*	105.	.04	.005	61.	*
15.	.14	.019	2.	*	110.	.04	.005	55.	*
20.	.24	.033	5.	*	115.	.04	.005	50.	*
25.	.41	.166	16.	*	120.	.04	.005	45.	*
30.	.74	.681	63.	*	125.	.00	.000	40.	*
35.	.41	.364	120.	*	130.	.00	.000	36.	*
40.	.24	.191	149.	*	135.	.00	.000	32.	*
45.	.18	.140	153.	*	140.	.00	.000	28.	*
50.	.15	.106	153.	*	145.	.00	.000	25.	*
55.	.12	.077	151.	*	150.	.00	.000	21.	*
60.	.12	.077	145.	*	155.	.00	.000	13.	*
65.	.12	.078	138.	*	160.	.00	.000	9.	*
70.	.06	.019	129.	*	165.	.00	.000	7.	*
75.	.06	.019	118.	*	170.	.00	.000	5.	*
80.	.04	.005	106.	*	175.	.00	.000	4.	*
85.	.04	.005	95.	*	180.	.00	.000	3.	*
90.	.04	.005	85.	*	185.	.00	.000	2.	*

TOTAL PRECIP. = 3.41 (1-HOUR RAIN = 2.95) EXECESS PRECIP. = 2.019 INCHES
VOLUME OF EXCESS PRECIP = 15. ACRE-FEET
PEAK Q = 153. CFS TIME OF PEAK = 45. MIN.
INFILT.= 3.90 IN/HR DECAY = .00180 FNINF = .55 IN/HR
MAX.PERV.RET.= .38 IN. MAX.IMP.RET.= .08 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE AT TIME

CUHPE/PC VERSION MODIFIED IN JANUARY 1985

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

SOUTH CANYON-LIME CREEK DRAINAGE DESIGN PLAN BY FMG, INC

BASIN ID: -- BASIN COMMENT: BASIN 4 EXISTING CONDITIONS

AREA OF BASIN (SQMI)	LENGTH OF BASIN (MI)	DIST TO CENTROID (MI)	IMPERVIOUS AREA (PCT)	SLOPE (FT/FT)	UNIT DURATION (MIN)
.06	.42	.17	50.00	.0274	5.00

COEFFICIENT (REFLECTING TIME TO PEAK)	COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF)
.088	.407

CALCULATED UNIT HYDROGRAPH

TIME TO PEAK (MIN)	TIME OF CONCENTRATION (MIN)	PEAK RATE OF RUNOFF (CFS/SQMI)	UNIT HYDROGRAPH PEAK (CFS)	VOLUME OF RUNOFF (AF)
3.25	5.00	20728.68	1202.26	3.09

*** NOTE : THE TIME TO PEAK IS CALCULATED BASED ON THE TIME OF CONCENTRATION PROVIDED BY THE USER, REPLACING THE ONE COMPUTED BY CUHPD (TP= 6.03)

WIDTH AT 50 = 1. MIN. WIDTH AT 75 = 1. MIN. K50 = .35 K75 = .45

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. = .35 IN. MAX. IMPERVIOUS RET. = .08 IN.
INFILTRATION = 3.90 IN./HR. DECAY = .00180/SECOND FNINFL = .55 IN./HR.

TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH
0.	0.	10.	28.	0.	0.
5.	393.	15.	0.	0.	0.

1 BASIN ID: -- BASIN COMMENT: BASIN 4 EXISTING CONDITIONS

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 100

TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)	TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)
0.	.00	.000	0.	60.	.12	.092	39.
5.	.03	.000	0.	65.	.12	.092	39.
10.	.09	.018	7.	70.	.06	.035	16.

15.	.14	.064	26.	*	75.	.06	.035	15.	*
20.	.24	.112	46.	*	80.	.04	.017	8.	*
25.	.41	.275	111.	*	85.	.04	.017	7.	*
30.	.74	.689	279.	*	90.	.04	.017	7.	*
35.	.41	.376	167.	*	95.	.04	.017	7.	*
40.	.24	.205	91.	*	100.	.04	.017	7.	*
45.	.18	.154	66.	*	105.	.04	.017	7.	*
50.	.15	.120	52.	*	110.	.04	.017	7.	*
55.	.12	.092	39.	*	115.	.04	.017	7.	*

TOTAL PRECIP. = 3.41 (1-HOUR RAIN = 2.95) EXECESS PRECIP. = 2.509 INCHES
VOLUME OF EXCESS PRECIP = 8. ACRE-FEET
PEAK Q = 279. CFS TIME OF PEAK = 30. MIN.
INFILT.= 3.90 IN/HR DECAY = .00180 FNINF = .55 IN/HR
MAX.PERV.RET.= .35 IN. MAX.IMP.RET.= .08 IN.

RATIONAL FORMULA C = .74
I = 10.0 INCHES/HOUR
A = 37.1 ACRES
Q = 273. CFS

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE AT TIME

CUHPE/PC VERSION MODIFIED IN JANUARY 1985

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

SOUTH CANYON-LIME CREEK DRAINAGE DESIGN PLAN BY FMG, INC

BASIN ID: -- BASIN COMMENT: BASIN 5 EXISTING CONDITIONS

AREA OF BASIN (SQMI)	LENGTH OF BASIN (MI)	DIST TO CENTROID (MI)	IMPERVIOUS AREA (PCT)	SLOPE (FT/FT)	UNIT DURATION (MIN)
.64	1.89	1.02	1.00	.0463	5.00

COEFFICIENT (REFLECTING TIME TO PEAK)	COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF)
.159	.320

CALCULATED UNIT HYDROGRAPH

TIME TO PEAK (MIN)	PEAK RATE OF RUNOFF (CFS/SQMI)	UNIT HYDROGRAP PEAK (CFS)	VOLUME OF RUNOFF (AF)
29.88	449.20	287.04	34.08

WIDTH AT 50 = 67. MIN. WIDTH AT 75 = 35. MIN. K50 = .27 K75 = .36

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. = .50 IN. MAX. IMPERVIOUS RET. = .09 IN.

INFILTRATION = 4.00 IN./HR. DECAY = .00180/SECOND FNINFL = .60 IN./HR.

TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH
0.	0.	100.	105.	200.	25.
5.	38.	105.	98.	205.	23.
10.	112.	110.	91.	210.	21.
15.	189.	115.	85.	215.	20.
20.	246.	120.	79.	220.	18.
25.	278.	125.	73.	225.	17.
30.	287.	130.	68.	230.	16.
35.	279.	135.	63.	235.	15.
40.	261.	140.	59.	240.	14.
45.	240.	145.	55.	245.	13.
50.	221.	150.	51.	250.	12.
55.	207.	155.	47.	255.	11.
60.	194.	160.	44.	260.	10.
65.	180.	165.	41.	265.	10.
70.	167.	170.	38.	270.	9.
75.	154.	175.	35.	275.	8.
80.	141.	180.	33.	280.	8.
85.	131.	185.	31.	285.	0.
90.	122.	190.	28.	0.	0.
95.	113.	195.	26.	0.	0.

1 BASIN ID: -- BASIN COMMENT: BASIN 5 EXISTING CONDITIONS

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 100

TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)	TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)
0.	.00	.000	0.	165.	.00	.000	113.
5.	.03	.000	0.	170.	.00	.000	105.
10.	.09	.000	0.	175.	.00	.000	97.
15.	.14	.001	0.	180.	.00	.000	90.
20.	.24	.002	0.	185.	.00	.000	84.
25.	.41	.004	1.	190.	.00	.000	78.
30.	.74	.667	27.	195.	.00	.000	73.
35.	.41	.355	90.	200.	.00	.000	68.
40.	.24	.181	175.	205.	.00	.000	63.
45.	.18	.130	258.	210.	.00	.000	58.
50.	.15	.096	327.	215.	.00	.000	54.
55.	.12	.067	375.	220.	.00	.000	51.
60.	.12	.068	401.	225.	.00	.000	47.
65.	.12	.068	410.	230.	.00	.000	44.

70.	.06	.009	406.	*	235.	.00	.000	41.	*
75.	.06	.009	395.	*	240.	.00	.000	38.	*
80.	.04	.000	380.	*	245.	.00	.000	35.	*
85.	.04	.000	362.	*	250.	.00	.000	33.	*
90.	.04	.000	341.	*	255.	.00	.000	30.	*
95.	.04	.000	318.	*	260.	.00	.000	28.	*
100.	.04	.000	295.	*	265.	.00	.000	26.	*
105.	.04	.000	273.	*	270.	.00	.000	24.	*
110.	.04	.000	253.	*	275.	.00	.000	23.	*
115.	.04	.000	234.	*	280.	.00	.000	21.	*
120.	.04	.000	218.	*	285.	.00	.000	20.	*
125.	.00	.000	202.	*	290.	.00	.000	18.	*
130.	.00	.000	188.	*	295.	.00	.000	17.	*
135.	.00	.000	174.	*	300.	.00	.000	16.	*
140.	.00	.000	162.	*	305.	.00	.000	15.	*
145.	.00	.000	151.	*	310.	.00	.000	9.	*
150.	.00	.000	140.	*	315.	.00	.000	6.	*
155.	.00	.000	130.	*	320.	.00	.000	4.	*
160.	.00	.000	121.	*	325.	.00	.000	3.	*

TOTAL PRECIP. = 3.41 (1-HOUR RAIN = 2.95) EXECESS PRECIP. = 1.663 INCHES
VOLUME OF EXCESS PRECIP = 57. ACRE-FEET
PEAK Q = 410. CFS TIME OF PEAK = 65. MIN.
INFILT.= 4.00 IN/HR DECAY = .00180 FNINF = .60 IN/HR
MAX.PERV.RET.= .50 IN. MAX.IMP.RET.= .09 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE AT TIME

CUHPE/PC VERSION MODIFIED IN JANUARY 1985

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

SOUTH CANYON-LIME CREEK DRAINAGE DESIGN PLAN BY FMG, INC

BASIN ID: -- BASIN COMMENT: BASIN 6 EXISTING CONDITIONS

AREA OF BASIN (SQMI)	LENGTH OF BASIN (MI)	DIST TO CENTROID (MI)	IMPERVIOUS AREA (PCT)	SLOPE (FT/FT)	UNIT DURATION (MIN)
.13	.98	.51	39.50	.0187	5.00

COEFFICIENT (REFLECTING TIME TO PEAK)	COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF)
.093	.379

CALCULATED UNIT HYDROGRAPH

TIME TO PEAK (MIN)	TIME OF CONCENTRATION (MIN)	PEAK RATE OF RUNOFF (CFS/SQMI)	UNIT HYDROGRAPH PEAK (CFS)	VOLUME OF RUNOFF (AF)
8.12	20.00	2589.79	339.26	6.99

*** NOTE : THE TIME TO PEAK IS CALCULATED BASED ON THE TIME OF CONCENTRATION PROVIDED BY THE USER, REPLACING THE ONE COMPUTED BY CUHPD (TP= 12.94)

WIDTH AT 50 = 12. MIN. WIDTH AT 75 = 6. MIN. K50 = .35 K75 = .45

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. = .35 IN. MAX. IMPERVIOUS RET. = .07 IN.
INFILTRATION = 3.90 IN./HR. DECAY = .00180/SECOND FNINFL = .60 IN./HR.

TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH
0.	0.	20.	114.	40.	19.
5.	228.	25.	73.	45.	12.
10.	309.	30.	46.	50.	8.
15.	183.	35.	29.	55.	0.

1 BASIN ID: -- BASIN COMMENT: BASIN 6 EXISTING CONDITIONS

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 100

TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)	TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)
0.	.00	.000	0.	75.	.06	.028	69.
5.	.03	.000	0.	80.	.04	.013	48.
10.	.09	.018	4.	85.	.04	.013	33.
15.	.14	.051	17.	90.	.04	.013	25.
20.	.24	.089	39.	95.	.04	.013	20.
25.	.41	.244	94.	100.	.04	.013	17.
30.	.74	.684	255.	105.	.04	.013	16.
35.	.41	.370	355.	110.	.04	.013	15.
40.	.24	.198	322.	115.	.04	.013	14.
45.	.18	.147	264.	120.	.04	.013	14.
50.	.15	.113	215.	125.	.00	.000	11.
55.	.12	.085	172.	130.	.00	.000	6.
60.	.12	.085	141.	135.	.00	.000	4.
65.	.12	.085	121.	140.	.00	.000	2.
70.	.06	.027	96.	145.	.00	.000	2.

TOTAL PRECIP. = 3.41 (1-HOUR RAIN = 2.95) EXECESS PRECIP. = 2.344 INCHES
VOLUME OF EXCESS PRECIP = 16. ACRE-FEET

PEAK Q = 355. CFS TIME OF PEAK = 35. MIN.
INFILT.= 3.90 IN/HR DECAY = .00180 FNINF = .60 IN/HR
MAX.PERV.RET.= .35 IN. MAX.IMP.RET.= .07 IN.

RATIONAL FORMULA C = .69
I = 5.8 INCHES/HOUR
A = 83.8 ACRES
Q = 334. CFS

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE AT TIME

CUHPE/PC VERSION MODIFIED IN JANUARY 1985

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

SOUTH CANYON-LIME CREEK DRAINAGE DESIGN PLAN BY FMG, INC

BASIN ID: -- BASIN COMMENT: BASIN 7 EXISTING CONDITIONS

AREA OF BASIN (SQMI)	LENGTH OF BASIN (MI)	DIST TO CENTROID (MI)	IMPERVIOUS AREA (PCT)	SLOPE (FT/FT)	UNIT DURATION (MIN)
.11	.68	.34	23.50	.0408	5.00

COEFFICIENT (REFLECTING TIME TO PEAK)	COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF)
.106	.247

CALCULATED UNIT HYDROGRAPH

TIME TO PEAK (MIN)	TIME OF CONCENTRATION (MIN)	PEAK RATE OF RUNOFF (CFS/SQMI)	UNIT HYDROGRAPH PEAK (CFS)	VOLUME OF RUNOFF (AF)
5.98	19.00	2726.24	308.06	6.03

*** NOTE : THE TIME TO PEAK IS CALCULATED BASED ON THE TIME OF CONCENTRATION PROVIDED BY THE USER, REPLACING THE ONE COMPUTED BY CUHPD (TP= 9.29)

WIDTH AT 50 = 11. MIN. WIDTH AT 75 = 6. MIN. K50 = .33 K75 = .44

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. = .38 IN. MAX. IMPERVIOUS RET. = .07 IN.
INFILTRATION = 3.70 IN./HR. DECAY = .00180/SECOND FNINFL = .50 IN./HR.

TIME	UNIT HYDROGRAPH *	TIME	UNIT HYDROGRAPH *	TIME	UNIT HYDROGRAPH *

		*			*			
		*			*			
0.	0.	*	20.	85.	*	40.	14.	*
5.	298.	*	25.	54.	*	45.	9.	*
10.	216.	*	30.	34.	*	50.	0.	*
15.	133.	*	35.	22.	*	0.	0.	*

1 BASIN ID: -- BASIN COMMENT: BASIN 7 EXISTING CONDITIONS

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 100

TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)	*	TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)	*
0.	.00	.000	0.	*	70.	.06	.026	71.	*
5.	.03	.000	0.	*	75.	.06	.026	50.	*
10.	.09	.011	3.	*	80.	.04	.008	32.	*
15.	.14	.030	11.	*	85.	.04	.008	22.	*
20.	.24	.053	24.	*	90.	.04	.008	16.	*
25.	.41	.205	77.	*	95.	.04	.008	12.	*
30.	.74	.686	259.	*	100.	.04	.008	10.	*
35.	.41	.370	292.	*	105.	.04	.008	8.	*
40.	.24	.198	252.	*	110.	.04	.008	7.	*
45.	.18	.147	208.	*	115.	.04	.008	7.	*
50.	.15	.113	169.	*	120.	.04	.008	7.	*
55.	.12	.084	135.	*	125.	.00	.000	4.	*
60.	.12	.084	113.	*	130.	.00	.000	3.	*
65.	.12	.084	98.	*	135.	.00	.000	2.	*

TOTAL PRECIP. = 3.41 (1-HOUR RAIN = 2.95) EXECESS PRECIP. = 2.189 INCHES
VOLUME OF EXCESS PRECIP = 13. ACRE-FEET
PEAK Q = 292. CFS TIME OF PEAK = 35. MIN.
INFILT.= 3.70 IN/HR DECAY = .00180 FNINF = .50 IN/HR
MAX.PERV.RET.= .38 IN. MAX.IMP.RET.= .07 IN.

RATIONAL FORMULA C = .64
I = 5.9 INCHES/HOUR
A = 72.3 ACRES
Q = 276. CFS

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE AT TIME

CUHPE/PC VERSION MODIFIED IN JANUARY 1985

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

SOUTH CANYON-LIME CREEK DRAINAGE DESIGN PLAN BY FMG, INC

BASIN ID: -- BASIN COMMENT: BASIN 8 EXISTING CONDITIONS

AREA OF BASIN (SQMI)	LENGTH OF BASIN (MI)	DIST TO CENTROID (MI)	IMPERVIOUS AREA (PCT)	SLOPE (FT/FT)	UNIT DURATION (MIN)
.22	.89	.47	22.50	.0448	5.00

COEFFICIENT (REFLECTING TIME TO PEAK)	COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF)
.107	.268

CALCULATED UNIT HYDROGRAPH

TIME TO PEAK (MIN)	PEAK RATE OF RUNOFF (CFS/SQMI)	UNIT HYDROGRAP PEAK (CFS)	VOLUME OF RUNOFF (AF)
11.42	1153.47	257.22	11.89

WIDTH AT 50 = 26. MIN. WIDTH AT 75 = 14. MIN. K50 = .26 K75 = .36

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. = .45 IN. MAX. IMPERVIOUS RET. = .07 IN.
INFILTRATION = 3.50 IN./HR. DECAY = .00180/SECOND FNINFL = .50 IN./HR.

TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH
0.	0.	40.	91.	80.	21.
5.	144.	45.	76.	85.	17.
10.	253.	50.	63.	90.	14.
15.	237.	55.	52.	95.	12.
20.	193.	60.	44.	100.	10.
25.	163.	65.	36.	105.	8.
30.	132.	70.	30.	110.	0.
35.	109.	75.	25.	0.	0.

1 BASIN ID: -- BASIN COMMENT: BASIN 8 EXISTING CONDITIONS

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 100

TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)	TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)
0.	.00	.000	0.	90.	.04	.008	118.
5.	.03	.000	0.	95.	.04	.008	100.
10.	.09	.010	1.	100.	.04	.008	86.
15.	.14	.029	7.	105.	.04	.008	73.

20.	.24	.050	17.	*	110.	.04	.008	63.	*
25.	.41	.154	44.	*	115.	.04	.008	55.	*
30.	.74	.687	157.	*	120.	.04	.008	48.	*
35.	.41	.370	279.	*	125.	.00	.000	40.	*
40.	.24	.198	328.	*	130.	.00	.000	33.	*
45.	.18	.147	328.	*	135.	.00	.000	22.	*
50.	.15	.112	313.	*	140.	.00	.000	16.	*
55.	.12	.084	289.	*	145.	.00	.000	12.	*
60.	.12	.084	265.	*	150.	.00	.000	9.	*
65.	.12	.084	245.	*	155.	.00	.000	7.	*
70.	.06	.026	220.	*	160.	.00	.000	5.	*
75.	.06	.026	192.	*	165.	.00	.000	4.	*
80.	.04	.008	164.	*	170.	.00	.000	2.	*
85.	.04	.008	139.	*	175.	.00	.000	2.	*

TOTAL PRECIP. = 3.41 (1-HOUR RAIN = 2.95) EXECESS PRECIP. = 2.130 INCHES
VOLUME OF EXCESS PRECIP = 25. ACRE-FEET
PEAK Q = 328. CFS TIME OF PEAK = 40. MIN.
INFILT.= 3.50 IN/HR DECAY = .00180 FNINF = .50 IN/HR
MAX.PERV.RET.= .45 IN. MAX.IMP.RET.= .07 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE AT TIME

CUHPE/PC VERSION MODIFIED IN JANUARY 1985

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

SOUTH CANYON-LIME CREEK DRAINAGE DESIGN PLAN BY FMG, INC

BASIN ID: -- BASIN COMMENT: BASIN 9 EXISTING CONDITIONS

AREA OF BASIN (SQMI)	LENGTH OF BASIN (MI)	DIST TO CENTROID (MI)	IMPERVIOUS AREA (PCT)	SLOPE (FT/FT)	UNIT DURATION (MIN)
.15	.83	.47	36.50	.0232	5.00

COEFFICIENT (REFLECTING TIME TO PEAK)	COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF)
.095	.356

CALCULATED UNIT HYDROGRAPH

TIME TO PEAK (MIN)	PEAK RATE OF RUNOFF (CFS/SQMI)	UNIT HYDROGRAP PEAK (CFS)	VOLUME OF RUNOFF (AF)
11.44	1528.62	229.29	8.00

WIDTH AT 50 = 20. MIN. WIDTH AT 75 = 10. MIN. K50 = .35 K75 = .48

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. = .35 IN. MAX. IMPERVIOUS RET. = .07 IN.

INFILTRATION = 4.00 IN./HR. DECAY = .00180/SECOND FNINFL = .60 IN./HR.

TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH
0.	0.	30.	86.	60.	19.
5.	128.	35.	67.	65.	15.
10.	225.	40.	52.	70.	11.
15.	203.	45.	40.	75.	9.
20.	147.	50.	31.	80.	0.
25.	110.	55.	24.	0.	0.

1 BASIN ID: -- BASIN COMMENT: BASIN 9 EXISTING CONDITIONS

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 100

TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)	TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)
0.	.00	.000	0.	80.	.04	.012	99.
5.	.03	.000	0.	85.	.04	.012	80.
10.	.09	.017	2.	90.	.04	.012	65.
15.	.14	.047	10.	95.	.04	.012	53.
20.	.24	.082	24.	100.	.04	.012	43.
25.	.41	.234	60.	105.	.04	.012	32.
30.	.74	.683	166.	110.	.04	.012	26.
35.	.41	.368	267.	115.	.04	.012	22.
40.	.24	.197	295.	120.	.04	.012	19.
45.	.18	.146	275.	125.	.00	.000	16.
50.	.15	.112	245.	130.	.00	.000	12.
55.	.12	.083	216.	135.	.00	.000	9.
60.	.12	.084	190.	140.	.00	.000	6.
65.	.12	.084	169.	145.	.00	.000	4.
70.	.06	.026	147.	150.	.00	.000	3.
75.	.06	.026	122.	155.	.00	.000	2.

TOTAL PRECIP. = 3.41 (1-HOUR RAIN = 2.95) EXECESS PRECIP. = 2.300 INCHES
VOLUME OF EXCESS PRECIP = 18. ACRE-FEET
PEAK Q = 295. CFS TIME OF PEAK = 40. MIN.
INFILT.= 4.00 IN/HR DECAY = .00180 FNINF = .60 IN/HR
MAX.PERV.RET.= .35 IN. MAX.IMP.RET.= .07 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE AT TIME

CUHPE/PC VERSION MODIFIED IN JANUARY 1985

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

SOUTH CANYON-LIME CREEK DRAINAGE DESIGN PLAN BY FMG, INC

BASIN ID: -- BASIN COMMENT: BASIN 10 EXISTING CONDITIONS

AREA OF BASIN (SQMI)	LENGTH OF BASIN (MI)	DIST TO CENTROID (MI)	IMPERVIOUS AREA (PCT)	SLOPE (FT/FT)	UNIT DURATION (MIN)
.63	1.70	.78	5.00	.0476	5.00

COEFFICIENT (REFLECTING TIME TO PEAK)	COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF)
.144	.291

CALCULATED UNIT HYDROGRAPH

TIME TO PEAK (MIN)	PEAK RATE OF RUNOFF (CFS/SQMI)	UNIT HYDROGRAP PEAK (CFS)	VOLUME OF RUNOFF (AF)
23.11	542.74	341.93	33.60

WIDTH AT 50 = 55. MIN. WIDTH AT 75 = 29. MIN. K50 = .25 K75 = .34

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. = .50 IN. MAX. IMPERVIOUS RET. = .08 IN.
INFILTRATION = 4.10 IN./HR. DECAY = .00180/SECOND FNINFL = .60 IN./HR.

TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH
0.	0.	85.	119.	170.	27.
5.	69.	90.	109.	175.	25.
10.	189.	95.	100.	180.	22.
15.	286.	100.	92.	185.	21.
20.	335.	105.	84.	190.	19.
25.	340.	110.	77.	195.	17.
30.	318.	115.	70.	200.	16.
35.	286.	120.	64.	205.	14.
40.	261.	125.	59.	210.	13.
45.	245.	130.	54.	215.	12.
50.	226.	135.	50.	220.	11.
55.	207.	140.	45.	225.	10.
60.	188.	145.	42.	230.	9.
65.	170.	150.	38.	235.	9.
70.	155.	155.	35.	240.	8.
75.	142.	160.	32.	245.	0.
80.	130.	165.	29.	0.	0.

1 BASIN ID: -- BASIN COMMENT: BASIN 10 EXISTING CONDITIONS

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 100

TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)	*	TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)	*
0.	.00	.000	0.	*	150.	.00	.000	122.	*
5.	.03	.000	0.	*	155.	.00	.000	112.	*
10.	.09	.002	0.	*	160.	.00	.000	103.	*
15.	.14	.006	1.	*	165.	.00	.000	94.	*
20.	.24	.011	3.	*	170.	.00	.000	86.	*
25.	.41	.020	6.	*	175.	.00	.000	79.	*
30.	.74	.664	55.	*	180.	.00	.000	72.	*
35.	.41	.356	162.	*	185.	.00	.000	66.	*
40.	.24	.183	283.	*	190.	.00	.000	61.	*
45.	.18	.132	380.	*	195.	.00	.000	55.	*
50.	.15	.098	440.	*	200.	.00	.000	51.	*
55.	.12	.069	465.	*	205.	.00	.000	47.	*
60.	.12	.070	465.	*	210.	.00	.000	43.	*
65.	.12	.070	457.	*	215.	.00	.000	39.	*
70.	.06	.011	449.	*	220.	.00	.000	36.	*
75.	.06	.011	431.	*	225.	.00	.000	33.	*
80.	.04	.002	407.	*	230.	.00	.000	30.	*
85.	.04	.002	377.	*	235.	.00	.000	27.	*
90.	.04	.002	346.	*	240.	.00	.000	25.	*
95.	.04	.002	317.	*	245.	.00	.000	23.	*
100.	.04	.002	290.	*	250.	.00	.000	21.	*
105.	.04	.002	267.	*	255.	.00	.000	19.	*
110.	.04	.002	245.	*	260.	.00	.000	18.	*
115.	.04	.002	225.	*	265.	.00	.000	16.	*
120.	.04	.002	206.	*	270.	.00	.000	10.	*
125.	.00	.000	189.	*	275.	.00	.000	6.	*
130.	.00	.000	174.	*	280.	.00	.000	5.	*
135.	.00	.000	159.	*	285.	.00	.000	3.	*
140.	.00	.000	146.	*	290.	.00	.000	2.	*
145.	.00	.000	134.	*	295.	.00	.000	2.	*

TOTAL PRECIP. = 3.41 (1-HOUR RAIN = 2.95) EXECESS PRECIP. = 1.719 INCHES
VOLUME OF EXCESS PRECIP = 58. ACRE-FEET
PEAK Q = 465. CFS TIME OF PEAK = 60. MIN.
INFILT.= 4.10 IN/HR DECAY = .00180 FNINF = .60 IN/HR
MAX.PERV.RET.= .50 IN. MAX.IMP.RET.= .08 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE AT TIME

CUHPE/PC VERSION MODIFIED IN JANUARY 1985

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

SOUTH CANYON-LIME CREEK DRAINAGE DESIGN PLAN BY FMG, INC

BASIN ID: -- BASIN COMMENT: BASIN 11 EXISTING CONDITIONS

AREA OF BASIN (SQMI)	LENGTH OF BASIN (MI)	DIST TO CENTROID (MI)	IMPERVIOUS AREA (PCT)	SLOPE (FT/FT)	UNIT DURATION (MIN)
.44	1.95	1.06	3.50	.0292	5.00

COEFFICIENT (REFLECTING TIME TO PEAK)	COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF)
.150	.285

CALCULATED UNIT HYDROGRAPH

TIME TO PEAK (MIN)	PEAK RATE OF RUNOFF (CFS/SQMI)	UNIT HYDROGRAP PEAK (CFS)	VOLUME OF RUNOFF (AF)
32.28	367.21	161.21	23.41

WIDTH AT 50 = 82. MIN. WIDTH AT 75 = 42. MIN. K50 = .24 K75 = .32

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. = .50 IN. MAX. IMPERVIOUS RET. = .08 IN.
INFILTRATION = 4.50 IN./HR. DECAY = .00180/SECOND FNINFL = .60 IN./HR.

TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH
0.	0.	105.	72.	210.	22.
5.	19.	110.	68.	215.	21.
10.	56.	115.	64.	220.	20.
15.	97.	120.	61.	225.	19.
20.	130.	125.	57.	230.	18.
25.	151.	130.	54.	235.	17.
30.	160.	135.	51.	240.	16.
35.	160.	140.	49.	245.	15.
40.	153.	145.	46.	250.	14.
45.	143.	150.	44.	255.	14.
50.	132.	155.	41.	260.	13.
55.	124.	160.	39.	265.	12.
60.	121.	165.	37.	270.	11.
65.	116.	170.	35.	275.	11.
70.	110.	175.	33.	280.	10.
75.	104.	180.	31.	285.	10.
80.	98.	185.	29.	290.	9.
85.	92.	190.	28.	295.	9.

90.	86.	*	195.	26.	*	300.	8.	*
95.	80.	*	200.	25.	*	305.	8.	*
100.	76.	*	205.	24.	*	310.	0.	*

1 BASIN ID: -- BASIN COMMENT: BASIN 11 EXISTING CONDITIONS

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 100

TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)	*	TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)	*
0.	.00	.000	0.	*	180.	.00	.000	77.	*
5.	.03	.000	0.	*	185.	.00	.000	73.	*
10.	.09	.001	0.	*	190.	.00	.000	69.	*
15.	.14	.005	0.	*	195.	.00	.000	65.	*
20.	.24	.008	1.	*	200.	.00	.000	62.	*
25.	.41	.014	1.	*	205.	.00	.000	58.	*
30.	.74	.646	14.	*	210.	.00	.000	55.	*
35.	.41	.355	46.	*	215.	.00	.000	52.	*
40.	.24	.182	90.	*	220.	.00	.000	49.	*
45.	.18	.131	135.	*	225.	.00	.000	47.	*
50.	.15	.097	175.	*	230.	.00	.000	44.	*
55.	.12	.068	204.	*	235.	.00	.000	42.	*
60.	.12	.069	223.	*	240.	.00	.000	39.	*
65.	.12	.069	233.	*	245.	.00	.000	37.	*
70.	.06	.010	235.	*	250.	.00	.000	35.	*
75.	.06	.011	231.	*	255.	.00	.000	33.	*
80.	.04	.001	224.	*	260.	.00	.000	32.	*
85.	.04	.001	218.	*	265.	.00	.000	30.	*
90.	.04	.001	210.	*	270.	.00	.000	28.	*
95.	.04	.001	201.	*	275.	.00	.000	27.	*
100.	.04	.001	191.	*	280.	.00	.000	25.	*
105.	.04	.001	181.	*	285.	.00	.000	24.	*
110.	.04	.001	171.	*	290.	.00	.000	23.	*
115.	.04	.001	161.	*	295.	.00	.000	21.	*
120.	.04	.001	152.	*	300.	.00	.000	20.	*
125.	.00	.000	143.	*	305.	.00	.000	19.	*
130.	.00	.000	135.	*	310.	.00	.000	18.	*
135.	.00	.000	128.	*	315.	.00	.000	17.	*
140.	.00	.000	121.	*	320.	.00	.000	16.	*
145.	.00	.000	114.	*	325.	.00	.000	15.	*
150.	.00	.000	108.	*	330.	.00	.000	14.	*
155.	.00	.000	102.	*	335.	.00	.000	9.	*
160.	.00	.000	96.	*	340.	.00	.000	6.	*
165.	.00	.000	91.	*	345.	.00	.000	4.	*
170.	.00	.000	86.	*	350.	.00	.000	3.	*
175.	.00	.000	81.	*	355.	.00	.000	2.	*

TOTAL PRECIP. = 3.41 (1-HOUR RAIN = 2.95) EXECESS PRECIP. = 1.676 INCHES
VOLUME OF EXCESS PRECIP = 39. ACRE-FEET

PEAK Q = 235. CFS TIME OF PEAK = 70. MIN.
INFILT.= 4.50 IN/HR DECAY = .00180 FNINF = .60 IN/HR
MAX.PERV.RET.= .50 IN. MAX.IMP.RET.= .08 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE AT TIME

CUHPE/PC VERSION MODIFIED IN JANUARY 1985

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

SOUTH CANYON-LIME CREEK DRAINAGE DESIGN PLAN BY FMG, INC

BASIN ID: -- BASIN COMMENT: BASIN 12 EXISTING CONDITIONS

AREA OF BASIN (SQMI)	LENGTH OF BASIN (MI)	DIST TO CENTROID (MI)	IMPERVIOUS AREA (PCT)	SLOPE (FT/FT)	UNIT DURATION (MIN)
.05	.57	.32	3.00	.0451	5.00

COEFFICIENT (REFLECTING TIME TO PEAK)	COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF)
.152	.206

CALCULATED UNIT HYDROGRAPH

TIME TO PEAK (MIN)	TIME OF CONCENTRATION (MIN)	PEAK RATE OF RUNOFF (CFS/SQMI)	UNIT HYDROGRAPH PEAK (CFS)	VOLUME OF RUNOFF (AF)
4.88	13.00	3322.69	156.17	2.51

*** NOTE : THE TIME TO PEAK IS CALCULATED BASED ON THE TIME OF CONCENTRATION PROVIDED BY THE USER, REPLACING THE ONE COMPUTED BY CUHPD (TP= 10.97)

WIDTH AT 50 = 9. MIN. WIDTH AT 75 = 5. MIN. K50 = .32 K75 = .44

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. = .40 IN. MAX. IMPERVIOUS RET. = .10 IN.
INFILTRATION = 4.10 IN./HR. DECAY = .00180/SECOND FNINFL = .60 IN./HR.

TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH
0.	0.	15.	52.	30.	11.
5.	156.	20.	31.	35.	0.
10.	89.	25.	19.	0.	0.

1 BASIN ID: -- BASIN COMMENT: BASIN 12 EXISTING CONDITIONS

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 100

TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)	*	TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)	*
0.	.00	.000	0.	*	45.	.18	.131	78.	*
5.	.03	.000	0.	*	50.	.15	.097	61.	*
10.	.09	.001	0.	*	55.	.12	.068	46.	*
15.	.14	.004	1.	*	60.	.12	.069	33.	*
20.	.24	.007	1.	*	65.	.12	.069	28.	*
25.	.41	.098	16.	*	70.	.06	.010	17.	*
30.	.74	.673	114.	*	75.	.06	.010	11.	*
35.	.41	.355	121.	*	80.	.04	.001	6.	*
40.	.24	.182	98.	*	85.	.04	.001	3.	*

TOTAL PRECIP. = 3.41 (1-HOUR RAIN = 2.95) EXECESS PRECIP. = 1.785 INCHES
VOLUME OF EXCESS PRECIP = 4. ACRE-FEET
PEAK Q = 121. CFS TIME OF PEAK = 35. MIN.
INFILT.= 4.10 IN/HR DECAY = .00180 FNINF = .60 IN/HR
MAX.PERV.RET.= .40 IN. MAX.IMP.RET.= .10 IN.

RATIONAL FORMULA C = .52
I = 7.1 INCHES/HOUR
A = 30.1 ACRES
Q = 112. CFS

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE AT TIME

CUHPE/PC VERSION MODIFIED IN JANUARY 1985

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

SOUTH CANYON-LIME CREEK DRAINAGE DESIGN PLAN BY FMG, INC

BASIN ID: -- BASIN COMMENT: BASIN 13 EXISTING CONDITIONS

AREA OF BASIN (SQMI)	LENGTH OF BASIN (MI)	DIST TO CENTROID (MI)	IMPERVIOUS AREA (PCT)	SLOPE (FT/FT)	UNIT DURATION (MIN)
.24	.74	.38	1.00	.0510	5.00

COEFFICIENT (REFLECTING TIME TO PEAK)	COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF)
.159	.277

CALCULATED UNIT HYDROGRAPH

TIME TO PEAK (MIN)	PEAK RATE OF RUNOFF (CFS/SQMI)	UNIT HYDROGRAP PEAK (CFS)	VOLUME OF RUNOFF (AF)
13.12	1001.94	243.47	12.96

WIDTH AT 50 = 30. MIN. WIDTH AT 75 = 16. MIN. K50 = .26 K75 = .36

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. = .50 IN. MAX. IMPERVIOUS RET. = .10 IN.
INFILTRATION = 4.10 IN./HR. DECAY = .00180/SECOND FNINFL = .60 IN./HR.

TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH
0.	0.	45.	89.	90.	21.
5.	114.	50.	76.	95.	18.
10.	226.	55.	64.	100.	15.
15.	239.	60.	55.	105.	13.
20.	202.	65.	47.	110.	11.
25.	173.	70.	40.	115.	9.
30.	148.	75.	34.	120.	8.
35.	123.	80.	29.	125.	0.
40.	104.	85.	25.	0.	0.

1 BASIN ID: -- BASIN COMMENT: BASIN 13 EXISTING CONDITIONS

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 100

TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)	TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)
0.	.00	.000	0.	90.	.04	.000	110.
5.	.03	.000	0.	95.	.04	.000	94.
10.	.09	.000	0.	100.	.04	.000	80.
15.	.14	.001	0.	105.	.04	.000	68.
20.	.24	.002	1.	110.	.04	.000	58.
25.	.41	.004	1.	115.	.04	.000	50.
30.	.74	.662	77.	120.	.04	.000	42.
35.	.41	.355	192.	125.	.00	.000	36.
40.	.24	.181	261.	130.	.00	.000	31.
45.	.18	.130	275.	135.	.00	.000	26.
50.	.15	.096	271.	140.	.00	.000	22.
55.	.12	.067	257.	145.	.00	.000	19.
60.	.12	.068	238.	150.	.00	.000	12.
65.	.12	.068	221.	155.	.00	.000	7.

70.	.06	.009	201.	*	160.	.00	.000	5.	*
75.	.06	.009	176.	*	165.	.00	.000	3.	*
80.	.04	.000	151.	*	170.	.00	.000	2.	*
85.	.04	.000	129.	*	175.	.00	.000	2.	*

TOTAL PRECIP. = 3.41 (1-HOUR RAIN = 2.95) EXECESS PRECIP. = 1.658 INCHES
VOLUME OF EXCESS PRECIP = 21. ACRE-FEET
PEAK Q = 275. CFS TIME OF PEAK = 45. MIN.
INFILT.= 4.10 IN/HR DECAY = .00180 FNINF = .60 IN/HR
MAX.PERV.RET.= .50 IN. MAX.IMP.RET.= .10 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE AT TIME

CUHPE/PC VERSION MODIFIED IN JANUARY 1985

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

SOUTH CANYON-LIME CREEK DRAINAGE DESIGN PLAN BY FMG, INC

BASIN ID: -- BASIN COMMENT: BASIN 14 EXISTING CONDITIONS

AREA OF BASIN (SQMI)	LENGTH OF BASIN (MI)	DIST TO CENTROID (MI)	IMPERVIOUS AREA (PCT)	SLOPE (FT/FT)	UNIT DURATION (MIN)
.44	1.33	.72	1.00	.0504	5.00

COEFFICIENT (REFLECTING TIME TO PEAK)	COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF)
.159	.303

CALCULATED UNIT HYDROGRAPH

TIME TO PEAK (MIN)	PEAK RATE OF RUNOFF (CFS/SQMI)	UNIT HYDROGRAP PEAK (CFS)	VOLUME OF RUNOFF (AF)
21.67	606.31	266.17	23.41

WIDTH AT 50 = 49. MIN. WIDTH AT 75 = 26. MIN. K50 = .26 K75 = .36

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. = .50 IN. MAX. IMPERVIOUS RET. = .10 IN.
INFILTRATION = 4.50 IN./HR. DECAY = .00180/SECOND FNINFL = .60 IN./HR.

TIME	UNIT HYDROGRAPH	*	TIME	UNIT HYDROGRAPH	*	TIME	UNIT HYDROGRAPH	*
0.	0.	*	75.	96.	*	150.	22.	*

5.	59.	*	80.	87.	*	155.	20.	*
10.	159.	*	85.	79.	*	160.	18.	*
15.	233.	*	90.	72.	*	165.	17.	*
20.	264.	*	95.	65.	*	170.	15.	*
25.	260.	*	100.	59.	*	175.	14.	*
30.	237.	*	105.	53.	*	180.	12.	*
35.	211.	*	110.	48.	*	185.	11.	*
40.	194.	*	115.	44.	*	190.	10.	*
45.	177.	*	120.	40.	*	195.	9.	*
50.	160.	*	125.	36.	*	200.	8.	*
55.	144.	*	130.	33.	*	205.	8.	*
60.	128.	*	135.	30.	*	210.	0.	*
65.	116.	*	140.	27.	*	0.	0.	*
70.	106.	*	145.	25.	*	0.	0.	*

1 BASIN ID: -- BASIN COMMENT: BASIN 14 EXISTING CONDITIONS

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 100

TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)	*	TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)	*
0.	.00	.000	0.	*	130.	.00	.000	107.	*
5.	.03	.000	0.	*	135.	.00	.000	97.	*
10.	.09	.000	0.	*	140.	.00	.000	88.	*
15.	.14	.001	0.	*	145.	.00	.000	80.	*
20.	.24	.002	0.	*	150.	.00	.000	72.	*
25.	.41	.004	1.	*	155.	.00	.000	66.	*
30.	.74	.644	40.	*	160.	.00	.000	59.	*
35.	.41	.354	125.	*	165.	.00	.000	54.	*
40.	.24	.181	219.	*	170.	.00	.000	49.	*
45.	.18	.130	291.	*	175.	.00	.000	44.	*
50.	.15	.096	332.	*	180.	.00	.000	40.	*
55.	.12	.067	344.	*	185.	.00	.000	37.	*
60.	.12	.068	340.	*	190.	.00	.000	33.	*
65.	.12	.068	333.	*	195.	.00	.000	30.	*
70.	.06	.009	323.	*	200.	.00	.000	27.	*
75.	.06	.009	305.	*	205.	.00	.000	25.	*
80.	.04	.000	283.	*	210.	.00	.000	22.	*
85.	.04	.000	258.	*	215.	.00	.000	20.	*
90.	.04	.000	233.	*	220.	.00	.000	18.	*
95.	.04	.000	211.	*	225.	.00	.000	17.	*
100.	.04	.000	192.	*	230.	.00	.000	15.	*
105.	.04	.000	174.	*	235.	.00	.000	9.	*
110.	.04	.000	158.	*	240.	.00	.000	6.	*
115.	.04	.000	143.	*	245.	.00	.000	4.	*
120.	.04	.000	129.	*	250.	.00	.000	3.	*
125.	.00	.000	118.	*	255.	.00	.000	2.	*

TOTAL PRECIP. = 3.41 (1-HOUR RAIN = 2.95) EXECESS PRECIP. = 1.637 INCHES

VOLUME OF EXCESS PRECIP = 38. ACRE-FEET
PEAK Q = 344. CFS TIME OF PEAK = 55. MIN.
INFILT.= 4.50 IN/HR DECAY = .00180 FNINF = .60 IN/HR
MAX.PERV.RET.= .50 IN. MAX.IMP.RET.= .10 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE AT TIME

CUHPE/PC VERSION MODIFIED IN JANUARY 1985

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

SOUTH CANYON-LIME CREEK DRAINAGE DESIGN PLAN BY FMG, INC

BASIN ID: -- BASIN COMMENT: BASIN 15 EXISTING CONDITIONS

AREA OF BASIN (SQMI)	LENGTH OF BASIN (MI)	DIST TO CENTROID (MI)	IMPERVIOUS AREA (PCT)	SLOPE (FT/FT)	UNIT DURATION (MIN)
.65	2.22	1.10	1.00	.0493	5.00

COEFFICIENT (REFLECTING TIME TO PEAK)	COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF)
.159	.321

CALCULATED UNIT HYDROGRAPH

TIME TO PEAK (MIN)	PEAK RATE OF RUNOFF (CFS/SQMI)	UNIT HYDROGRAP PEAK (CFS)	VOLUME OF RUNOFF (AF)
32.71	407.86	263.88	34.51

WIDTH AT 50 = 74. MIN. WIDTH AT 75 = 38. MIN. K50 = .27 K75 = .36

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. = .50 IN. MAX. IMPERVIOUS RET. = .10 IN.
INFILTRATION = 4.30 IN./HR. DECAY = .00180/SECOND FNINFL = .60 IN./HR.

TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH
0.	0.	105.	104.	210.	26.
5.	31.	110.	97.	215.	24.
10.	90.	115.	91.	220.	23.
15.	157.	120.	85.	225.	21.
20.	210.	125.	80.	230.	20.
25.	246.	130.	75.	235.	19.
30.	262.	135.	70.	240.	18.
35.	263.	140.	65.	245.	16.

40.	252.	*	145.	61.	*	250.	15.	*
45.	236.	*	150.	57.	*	255.	14.	*
50.	218.	*	155.	54.	*	260.	13.	*
55.	202.	*	160.	50.	*	265.	13.	*
60.	191.	*	165.	47.	*	270.	12.	*
65.	180.	*	170.	44.	*	275.	11.	*
70.	169.	*	175.	41.	*	280.	10.	*
75.	158.	*	180.	39.	*	285.	10.	*
80.	147.	*	185.	36.	*	290.	9.	*
85.	136.	*	190.	34.	*	295.	8.	*
90.	126.	*	195.	32.	*	300.	8.	*
95.	118.	*	200.	30.	*	305.	7.	*
100.	111.	*	205.	28.	*	310.	0.	*

1 BASIN ID: -- BASIN COMMENT: BASIN 15 EXISTING CONDITIONS

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 100

TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)	*	TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)	*
0.	.00	.000	0.	*	180.	.00	.000	100.	*
5.	.03	.000	0.	*	185.	.00	.000	94.	*
10.	.09	.000	0.	*	190.	.00	.000	88.	*
15.	.14	.001	0.	*	195.	.00	.000	82.	*
20.	.24	.002	0.	*	200.	.00	.000	77.	*
25.	.41	.004	1.	*	205.	.00	.000	72.	*
30.	.74	.653	21.	*	210.	.00	.000	68.	*
35.	.41	.354	71.	*	215.	.00	.000	63.	*
40.	.24	.181	142.	*	220.	.00	.000	59.	*
45.	.18	.130	215.	*	225.	.00	.000	55.	*
50.	.15	.096	280.	*	230.	.00	.000	52.	*
55.	.12	.067	329.	*	235.	.00	.000	49.	*
60.	.12	.068	361.	*	240.	.00	.000	46.	*
65.	.12	.068	378.	*	245.	.00	.000	43.	*
70.	.06	.009	382.	*	250.	.00	.000	40.	*
75.	.06	.009	375.	*	255.	.00	.000	37.	*
80.	.04	.000	363.	*	260.	.00	.000	35.	*
85.	.04	.000	348.	*	265.	.00	.000	33.	*
90.	.04	.000	331.	*	270.	.00	.000	31.	*
95.	.04	.000	313.	*	275.	.00	.000	29.	*
100.	.04	.000	294.	*	280.	.00	.000	27.	*
105.	.04	.000	275.	*	285.	.00	.000	25.	*
110.	.04	.000	256.	*	290.	.00	.000	24.	*
115.	.04	.000	238.	*	295.	.00	.000	22.	*
120.	.04	.000	223.	*	300.	.00	.000	21.	*
125.	.00	.000	208.	*	305.	.00	.000	19.	*
130.	.00	.000	195.	*	310.	.00	.000	18.	*
135.	.00	.000	182.	*	315.	.00	.000	17.	*
140.	.00	.000	170.	*	320.	.00	.000	16.	*
145.	.00	.000	159.	*	325.	.00	.000	15.	*

150.	.00	.000	149.	*	330.	.00	.000	14.	*
155.	.00	.000	140.	*	335.	.00	.000	8.	*
160.	.00	.000	131.	*	340.	.00	.000	5.	*
165.	.00	.000	122.	*	345.	.00	.000	4.	*
170.	.00	.000	114.	*	350.	.00	.000	3.	*
175.	.00	.000	107.	*	355.	.00	.000	2.	*

TOTAL PRECIP. = 3.41 (1-HOUR RAIN = 2.95) EXECESS PRECIP. = 1.647 INCHES
VOLUME OF EXCESS PRECIP = 57. ACRE-FEET
PEAK Q = 382. CFS TIME OF PEAK = 70. MIN.
INFILT.= 4.30 IN/HR DECAY = .00180 FNINF = .60 IN/HR
MAX.PERV.RET.= .50 IN. MAX.IMP.RET.= .10 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE AT TIME

CUHPE/PC VERSION MODIFIED IN JANUARY 1985

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

SOUTH CANYON-LIME CREEK DRAINAGE DESIGN PLAN BY FMG, INC

BASIN ID: -- BASIN COMMENT: BASIN 16 EXISTING CONDITIONS

AREA OF BASIN (SQMI)	LENGTH OF BASIN (MI)	DIST TO CENTROID (MI)	IMPERVIOUS AREA (PCT)	SLOPE (FT/FT)	UNIT DURATION (MIN)
.29	.87	.53	1.00	.0520	5.00

COEFFICIENT (REFLECTING TIME TO PEAK)	COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF)
.159	.285

CALCULATED UNIT HYDROGRAPH

TIME TO PEAK (MIN)	PEAK RATE OF RUNOFF (CFS/SQMI)	UNIT HYDROGRAP PEAK (CFS)	VOLUME OF RUNOFF (AF)
15.91	815.22	237.23	15.52

WIDTH AT 50 = 37. MIN. WIDTH AT 75 = 19. MIN. K50 = .26 K75 = .35

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. = .50 IN. MAX. IMPERVIOUS RET. = .10 IN.
INFILTRATION = 4.40 IN./HR. DECAY = .00180/SECOND FNINFL = .60 IN./HR.

TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH

		*			*			
0.	0.	*	55.	87.	*	110.	21.	*
5.	85.	*	60.	77.	*	115.	18.	*
10.	193.	*	65.	67.	*	120.	16.	*
15.	236.	*	70.	59.	*	125.	14.	*
20.	224.	*	75.	52.	*	130.	12.	*
25.	192.	*	80.	46.	*	135.	11.	*
30.	171.	*	85.	40.	*	140.	10.	*
35.	151.	*	90.	35.	*	145.	8.	*
40.	131.	*	95.	31.	*	150.	7.	*
45.	113.	*	100.	27.	*	155.	0.	*
50.	99.	*	105.	24.	*	0.	0.	*

1 BASIN ID: -- BASIN COMMENT: BASIN 16 EXISTING CONDITIONS

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 100

TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)	*	TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)	*
0.	.00	.000	0.	*	100.	.04	.000	112.	*
5.	.03	.000	0.	*	105.	.04	.000	98.	*
10.	.09	.000	0.	*	110.	.04	.000	86.	*
15.	.14	.001	0.	*	115.	.04	.000	76.	*
20.	.24	.002	0.	*	120.	.04	.000	67.	*
25.	.41	.004	1.	*	125.	.00	.000	59.	*
30.	.74	.649	56.	*	130.	.00	.000	52.	*
35.	.41	.354	157.	*	135.	.00	.000	45.	*
40.	.24	.181	239.	*	140.	.00	.000	40.	*
45.	.18	.130	276.	*	145.	.00	.000	35.	*
50.	.15	.096	281.	*	150.	.00	.000	31.	*
55.	.12	.067	276.	*	155.	.00	.000	27.	*
60.	.12	.068	265.	*	160.	.00	.000	24.	*
65.	.12	.068	252.	*	165.	.00	.000	21.	*
70.	.06	.009	234.	*	170.	.00	.000	18.	*
75.	.06	.009	212.	*	175.	.00	.000	16.	*
80.	.04	.000	188.	*	180.	.00	.000	10.	*
85.	.04	.000	166.	*	185.	.00	.000	6.	*
90.	.04	.000	146.	*	190.	.00	.000	4.	*
95.	.04	.000	128.	*	195.	.00	.000	3.	*

TOTAL PRECIP. = 3.41 (1-HOUR RAIN = 2.95) EXECESS PRECIP. = 1.642 INCHES
VOLUME OF EXCESS PRECIP = 25. ACRE-FEET
PEAK Q = 281. CFS TIME OF PEAK = 50. MIN.
INFILT.= 4.40 IN/HR DECAY = .00180 FNINF = .60 IN/HR
MAX.PERV.RET.= .50 IN. MAX.IMP.RET.= .10 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE AT TIME

CUHPE/PC VERSION MODIFIED IN JANUARY 1985

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

SOUTH CANYON-LIME CREEK DRAINAGE DESIGN PLAN BY FMG, INC

BASIN ID: -- BASIN COMMENT: BASIN 17 EXISTING CONDITIONS

AREA OF BASIN (SQMI)	LENGTH OF BASIN (MI)	DIST TO CENTROID (MI)	IMPERVIOUS AREA (PCT)	SLOPE (FT/FT)	UNIT DURATION (MIN)
.32	.83	.38	1.00	.0292	5.00

COEFFICIENT (REFLECTING TIME TO PEAK)	COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF)
.159	.289

CALCULATED UNIT HYDROGRAPH

TIME TO PEAK (MIN)	PEAK RATE OF RUNOFF (CFS/SQMI)	UNIT HYDROGRAP PEAK (CFS)	VOLUME OF RUNOFF (AF)
15.33	866.02	281.46	17.33

WIDTH AT 50 = 35. MIN. WIDTH AT 75 = 18. MIN. K50 = .27 K75 = .36

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. = .50 IN. MAX. IMPERVIOUS RET. = .10 IN.
INFILTRATION = 4.40 IN./HR. DECAY = .00180/SECOND FNINFL = .60 IN./HR.

TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH
0.	0.	55.	95.	110.	20.
5.	106.	60.	82.	115.	18.
10.	236.	65.	71.	120.	15.
15.	281.	70.	62.	125.	13.
20.	261.	75.	54.	130.	12.
25.	221.	80.	47.	135.	10.
30.	195.	85.	41.	140.	9.
35.	170.	90.	36.	145.	8.
40.	145.	95.	31.	150.	0.
45.	125.	100.	27.	0.	0.
50.	109.	105.	23.	0.	0.

1 BASIN ID: -- BASIN COMMENT: BASIN 17 EXISTING CONDITIONS

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 100

TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)	*	TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)	*
0.	.00	.000	0.	*	100.	.04	.000	119.	*
5.	.03	.000	0.	*	105.	.04	.000	104.	*
10.	.09	.000	0.	*	110.	.04	.000	90.	*
15.	.14	.001	0.	*	115.	.04	.000	79.	*
20.	.24	.002	1.	*	120.	.04	.000	69.	*
25.	.41	.004	1.	*	125.	.00	.000	60.	*
30.	.74	.649	71.	*	130.	.00	.000	52.	*
35.	.41	.354	193.	*	135.	.00	.000	45.	*
40.	.24	.181	287.	*	140.	.00	.000	39.	*
45.	.18	.130	327.	*	145.	.00	.000	34.	*
50.	.15	.096	329.	*	150.	.00	.000	30.	*
55.	.12	.067	320.	*	155.	.00	.000	26.	*
60.	.12	.068	304.	*	160.	.00	.000	22.	*
65.	.12	.068	286.	*	165.	.00	.000	19.	*
70.	.06	.009	264.	*	170.	.00	.000	17.	*
75.	.06	.009	237.	*	175.	.00	.000	10.	*
80.	.04	.000	209.	*	180.	.00	.000	7.	*
85.	.04	.000	182.	*	185.	.00	.000	5.	*
90.	.04	.000	158.	*	190.	.00	.000	3.	*
95.	.04	.000	138.	*	195.	.00	.000	2.	*

TOTAL PRECIP. = 3.41 (1-HOUR RAIN = 2.95) EXECESS PRECIP. = 1.642 INCHES
VOLUME OF EXCESS PRECIP = 28. ACRE-FEET
PEAK Q = 329. CFS TIME OF PEAK = 50. MIN.
INFILT.= 4.40 IN/HR DECAY = .00180 FNINF = .60 IN/HR
MAX.PERV.RET.= .50 IN. MAX.IMP.RET.= .10 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE AT TIME

CUHPE/PC VERSION MODIFIED IN JANUARY 1985

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

SOUTH CANYON-LIME CREEK DRAINAGE DESIGN PLAN BY FMG, INC

BASIN ID: -- BASIN COMMENT: BASIN 18 EXISTING CONDITIONS

AREA OF BASIN (SQMI)	LENGTH OF BASIN (MI)	DIST TO CENTROID (MI)	IMPERVIOUS AREA (PCT)	SLOPE (FT/FT)	UNIT DURATION (MIN)
.56	1.29	.64	1.50	.0428	5.00

COEFFICIENT (REFLECTING TIME TO PEAK)	COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF)
.157	.310

CALCULATED UNIT HYDROGRAPH

TIME TO PEAK (MIN)	PEAK RATE OF RUNOFF (CFS/SQMI)	UNIT HYDROGRAP PEAK (CFS)	VOLUME OF RUNOFF (AF)
20.90	646.94	362.29	29.87

WIDTH AT 50 = 46. MIN. WIDTH AT 75 = 24. MIN. K50 = .27 K75 = .37

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. = .40 IN. MAX. IMPERVIOUS RET. = .10 IN.
INFILTRATION = 4.50 IN./HR. DECAY = .00180/SECOND FNINFL = .60 IN./HR.

TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH
0.	0.	70.	131.	140.	29.
5.	85.	75.	118.	145.	26.
10.	226.	80.	106.	150.	24.
15.	325.	85.	95.	155.	21.
20.	362.	90.	85.	160.	19.
25.	350.	95.	77.	165.	17.
30.	314.	100.	69.	170.	15.
35.	278.	105.	62.	175.	14.
40.	253.	110.	56.	180.	12.
45.	229.	115.	50.	185.	11.
50.	204.	120.	45.	190.	10.
55.	180.	125.	40.	195.	9.
60.	162.	130.	36.	200.	8.
65.	145.	135.	33.	205.	0.

1 BASIN ID: -- BASIN COMMENT: BASIN 18 EXISTING CONDITIONS

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 100

TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)	TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)
0.	.00	.000	0.	130.	.00	.000	133.
5.	.03	.000	0.	135.	.00	.000	120.
10.	.09	.000	0.	140.	.00	.000	107.
15.	.14	.002	0.	145.	.00	.000	97.
20.	.24	.003	1.	150.	.00	.000	87.
25.	.41	.078	8.	155.	.00	.000	78.
30.	.74	.671	77.	160.	.00	.000	70.
35.	.41	.354	209.	165.	.00	.000	63.

40.	.24	.181	344.	*	170.	.00	.000	57.	*
45.	.18	.130	439.	*	175.	.00	.000	51.	*
50.	.15	.096	485.	*	180.	.00	.000	46.	*
55.	.12	.068	493.	*	185.	.00	.000	41.	*
60.	.12	.068	481.	*	190.	.00	.000	37.	*
65.	.12	.068	467.	*	195.	.00	.000	33.	*
70.	.06	.009	447.	*	200.	.00	.000	30.	*
75.	.06	.010	418.	*	205.	.00	.000	27.	*
80.	.04	.001	383.	*	210.	.00	.000	24.	*
85.	.04	.001	346.	*	215.	.00	.000	22.	*
90.	.04	.001	311.	*	220.	.00	.000	19.	*
95.	.04	.001	280.	*	225.	.00	.000	17.	*
100.	.04	.001	252.	*	230.	.00	.000	10.	*
105.	.04	.001	226.	*	235.	.00	.000	7.	*
110.	.04	.001	203.	*	240.	.00	.000	5.	*
115.	.04	.001	183.	*	245.	.00	.000	3.	*
120.	.04	.001	164.	*	250.	.00	.000	2.	*
125.	.00	.000	148.	*	255.	.00	.000	1.	*

TOTAL PRECIP. = 3.41 (1-HOUR RAIN = 2.95) EXECESS PRECIP. = 1.743 INCHES
VOLUME OF EXCESS PRECIP = 52. ACRE-FEET
PEAK Q = 493. CFS TIME OF PEAK = 55. MIN.
INFILT.= 4.50 IN/HR DECAY = .00180 FNINF = .60 IN/HR
MAX.PERV.RET.= .40 IN. MAX.IMP.RET.= .10 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE AT TIME

CUHPE/PC VERSION MODIFIED IN JANUARY 1985

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

SOUTH CANYON-LIME CREEK DRAINAGE DESIGN PLAN BY FMG, INC

BASIN ID: -- BASIN COMMENT: BASIN 19 EXISTING CONDITIONS

AREA OF BASIN (SQMI)	LENGTH OF BASIN (MI)	DIST TO CENTROID (MI)	IMPERVIOUS AREA (PCT)	SLOPE (FT/FT)	UNIT DURATION (MIN)
.27	.61	.19	1.50	.0511	5.00

COEFFICIENT (REFLECTING TIME TO PEAK)	COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF)
.157	.278

CALCULATED UNIT HYDROGRAPH

TIME TO PEAK (MIN)	PEAK RATE OF RUNOFF (CFS/SQMI)	UNIT HYDROGRAP PEAK (CFS)	VOLUME OF RUNOFF (AF)
9.32	1565.14	422.59	14.40

WIDTH AT 50 = 19. MIN. WIDTH AT 75 = 10. MIN. K50 = .29 K75 = .40

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. = .40 IN. MAX. IMPERVIOUS RET. = .10 IN.
INFILTRATION = 4.50 IN./HR. DECAY = .00180/SECOND FNINFL = .60 IN./HR.

TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH
0.	0.	35.	113.	70.	18.
5.	298.	40.	87.	75.	14.
10.	420.	45.	67.	80.	11.
15.	324.	50.	52.	85.	8.
20.	252.	55.	40.	90.	0.
25.	189.	60.	31.	0.	0.
30.	146.	65.	24.	0.	0.

1 BASIN ID: -- BASIN COMMENT: BASIN 19 EXISTING CONDITIONS

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 100

TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)	TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)
0.	.00	.000	0.	70.	.06	.009	208.
5.	.03	.000	0.	75.	.06	.010	165.
10.	.09	.000	0.	80.	.04	.001	129.
15.	.14	.002	1.	85.	.04	.001	100.
20.	.24	.003	2.	90.	.04	.001	77.
25.	.41	.078	25.	95.	.04	.001	60.
30.	.74	.671	234.	100.	.04	.001	46.
35.	.41	.354	414.	105.	.04	.001	36.
40.	.24	.181	441.	110.	.04	.001	27.
45.	.18	.130	414.	115.	.04	.001	17.
50.	.15	.096	370.	120.	.04	.001	11.
55.	.12	.068	323.	125.	.00	.000	7.
60.	.12	.068	281.	130.	.00	.000	5.
65.	.12	.068	250.	135.	.00	.000	3.

TOTAL PRECIP. = 3.41 (1-HOUR RAIN = 2.95) EXECESS PRECIP. = 1.743 INCHES
VOLUME OF EXCESS PRECIP = 25. ACRE-FEET
PEAK Q = 441. CFS TIME OF PEAK = 40. MIN.
INFILT.= 4.50 IN/HR DECAY = .00180 FNINF = .60 IN/HR
MAX.PERV.RET.= .40 IN. MAX.IMP.RET.= .10 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE AT TIME

CUHPE/PC VERSION MODIFIED IN JANUARY 1985

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

SOUTH CANYON-LIME CREEK DRAINAGE DESIGN PLAN BY FMG, INC

BASIN ID: -- BASIN COMMENT: BASIN 20 EXISITNG CONDITIONS

AREA OF BASIN (SQMI)	LENGTH OF BASIN (MI)	DIST TO CENTROID (MI)	IMPERVIOUS AREA (PCT)	SLOPE (FT/FT)	UNIT DURATION (MIN)
.97	1.63	.81	2.50	.0341	5.00

COEFFICIENT (REFLECTING TIME TO PEAK)	COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF)
.154	.328

CALCULATED UNIT HYDROGRAPH

TIME TO PEAK (MIN)	PEAK RATE OF RUNOFF (CFS/SQMI)	UNIT HYDROGRAP PEAK (CFS)	VOLUME OF RUNOFF (AF)
26.21	531.65	515.70	51.73

WIDTH AT 50 = 56. MIN. WIDTH AT 75 = 29. MIN. K50 = .28 K75 = .38

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. = .50 IN. MAX. IMPERVIOUS RET. = .09 IN.
INFILTRATION = 4.50 IN./HR. DECAY = .00180/SECOND FNINFL = .60 IN./HR.

TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH
0.	0.	95.	156.	190.	29.
5.	85.	100.	143.	195.	26.
10.	242.	105.	131.	200.	24.
15.	385.	110.	120.	205.	22.
20.	480.	115.	110.	210.	20.
25.	514.	120.	100.	215.	19.
30.	505.	125.	92.	220.	17.
35.	469.	130.	84.	225.	16.
40.	423.	135.	77.	230.	14.
45.	384.	140.	70.	235.	13.
50.	355.	145.	64.	240.	12.
55.	326.	150.	59.	245.	11.
60.	298.	155.	54.	250.	10.
65.	269.	160.	49.	255.	9.

70.	244.	*	165.	45.	*	260.	8.	*
75.	223.	*	170.	41.	*	265.	8.	*
80.	204.	*	175.	38.	*	270.	0.	*
85.	187.	*	180.	35.	*	0.	0.	*
90.	171.	*	185.	32.	*	0.	0.	*

1 BASIN ID: -- BASIN COMMENT: BASIN 20 EXISITNG CONDITIONS

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 100

TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)	*	TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)	*
0.	.00	.000	0.	*	160.	.00	.000	153.	*
5.	.03	.000	0.	*	165.	.00	.000	140.	*
10.	.09	.001	0.	*	170.	.00	.000	128.	*
15.	.14	.003	0.	*	175.	.00	.000	117.	*
20.	.24	.006	2.	*	180.	.00	.000	107.	*
25.	.41	.010	4.	*	185.	.00	.000	98.	*
30.	.74	.645	61.	*	190.	.00	.000	90.	*
35.	.41	.354	195.	*	195.	.00	.000	82.	*
40.	.24	.181	359.	*	200.	.00	.000	75.	*
45.	.18	.131	510.	*	205.	.00	.000	69.	*
50.	.15	.097	621.	*	210.	.00	.000	63.	*
55.	.12	.068	683.	*	215.	.00	.000	58.	*
60.	.12	.068	705.	*	220.	.00	.000	53.	*
65.	.12	.069	700.	*	225.	.00	.000	48.	*
70.	.06	.010	681.	*	230.	.00	.000	44.	*
75.	.06	.010	655.	*	235.	.00	.000	40.	*
80.	.04	.001	621.	*	240.	.00	.000	37.	*
85.	.04	.001	579.	*	245.	.00	.000	34.	*
90.	.04	.001	532.	*	250.	.00	.000	31.	*
95.	.04	.001	486.	*	255.	.00	.000	28.	*
100.	.04	.001	444.	*	260.	.00	.000	26.	*
105.	.04	.001	406.	*	265.	.00	.000	24.	*
110.	.04	.001	372.	*	270.	.00	.000	22.	*
115.	.04	.001	340.	*	275.	.00	.000	20.	*
120.	.04	.001	312.	*	280.	.00	.000	18.	*
125.	.00	.000	285.	*	285.	.00	.000	17.	*
130.	.00	.000	261.	*	290.	.00	.000	15.	*
135.	.00	.000	239.	*	295.	.00	.000	9.	*
140.	.00	.000	219.	*	300.	.00	.000	6.	*
145.	.00	.000	200.	*	305.	.00	.000	4.	*
150.	.00	.000	183.	*	310.	.00	.000	3.	*
155.	.00	.000	168.	*	315.	.00	.000	2.	*

TOTAL PRECIP. = 3.41 (1-HOUR RAIN = 2.95) EXECESS PRECIP. = 1.660 INCHES
VOLUME OF EXCESS PRECIP = 86. ACRE-FEET
PEAK Q = 705. CFS TIME OF PEAK = 60. MIN.
INFILT.= 4.50 IN/HR DECAY = .00180 FNINF = .60 IN/HR

MAX.PERV.RET.= .50 IN. MAX.IMP.RET.= .09 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE AT TIME

CUHPE/PC VERSION MODIFIED IN JANUARY 1985

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

SOUTH CANYON-LIME CREEK DRAINAGE DESIGN PLAN BY FMG, INC

BASIN ID: -- BASIN COMMENT: BASIN 21 EXISTING CONDITIONS

AREA OF BASIN (SQMI)	LENGTH OF BASIN (MI)	DIST TO CENTROID (MI)	IMPERVIOUS AREA (PCT)	SLOPE (FT/FT)	UNIT DURATION (MIN)
.18	.87	.34	5.00	.0449	5.00

COEFFICIENT (REFLECTING TIME TO PEAK)	COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF)
.144	.241

CALCULATED UNIT HYDROGRAPH

TIME TO PEAK (MIN)	PEAK RATE OF RUNOFF (CFS/SQMI)	UNIT HYDROGRAP PEAK (CFS)	VOLUME OF RUNOFF (AF)
12.69	909.46	163.70	9.60

WIDTH AT 50 = 33. MIN. WIDTH AT 75 = 17. MIN. K50 = .23 K75 = .31

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. = .50 IN. MAX. IMPERVIOUS RET. = .09 IN.
INFILTRATION = 4.50 IN./HR. DECAY = .00180/SECOND FNINFL = .60 IN./HR.

TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH
0.	0.	45.	68.	90.	20.
5.	80.	50.	59.	95.	17.
10.	155.	55.	52.	100.	15.
15.	159.	60.	45.	105.	13.
20.	132.	65.	39.	110.	11.
25.	121.	70.	34.	115.	10.
30.	106.	75.	30.	120.	9.
35.	91.	80.	26.	125.	8.
40.	78.	85.	23.	130.	0.

1 BASIN ID: -- BASIN COMMENT: BASIN 21 EXISTING CONDITIONS

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 100

TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)	*	TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)	*
0.	.00	.000	0.	*	90.	.04	.002	89.	*
5.	.03	.000	0.	*	95.	.04	.002	78.	*
10.	.09	.001	0.	*	100.	.04	.002	68.	*
15.	.14	.006	1.	*	105.	.04	.002	60.	*
20.	.24	.011	2.	*	110.	.04	.002	52.	*
25.	.41	.020	5.	*	115.	.04	.002	46.	*
30.	.74	.646	58.	*	120.	.04	.002	40.	*
35.	.41	.355	134.	*	125.	.00	.000	35.	*
40.	.24	.183	177.	*	130.	.00	.000	31.	*
45.	.18	.132	185.	*	135.	.00	.000	27.	*
50.	.15	.098	186.	*	140.	.00	.000	23.	*
55.	.12	.069	181.	*	145.	.00	.000	20.	*
60.	.12	.070	171.	*	150.	.00	.000	18.	*
65.	.12	.070	161.	*	155.	.00	.000	11.	*
70.	.06	.011	148.	*	160.	.00	.000	7.	*
75.	.06	.011	132.	*	165.	.00	.000	5.	*
80.	.04	.002	116.	*	170.	.00	.000	4.	*
85.	.04	.002	102.	*	175.	.00	.000	3.	*

TOTAL PRECIP. = 3.41 (1-HOUR RAIN = 2.95) EXECESS PRECIP. = 1.698 INCHES
VOLUME OF EXCESS PRECIP = 16. ACRE-FEET
PEAK Q = 186. CFS TIME OF PEAK = 50. MIN.
INFILT.= 4.50 IN/HR DECAY = .00180 FNINF = .60 IN/HR
MAX.PERV.RET.= .50 IN. MAX.IMP.RET.= .09 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE AT TIME

CUHPE/PC VERSION MODIFIED IN JANUARY 1985

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

SOUTH CANYON-LIME CREEK DRAINAGE DESIGN PLAN BY FMG, INC

BASIN ID: -- BASIN COMMENT: BASIN 22 EXISTING CONDITIONS

AREA OF BASIN (SQMI)	LENGTH OF BASIN (MI)	DIST TO CENTROID (MI)	IMPERVIOUS AREA (PCT)	SLOPE (FT/FT)	UNIT DURATION (MIN)
.25	.99	.49	4.00	.0310	5.00

COEFFICIENT (REFLECTING TIME TO PEAK)	COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF)
.148	.259

CALCULATED UNIT HYDROGRAPH

TIME TO PEAK (MIN)	PEAK RATE OF RUNOFF (CFS/SQMI)	UNIT HYDROGRAP PEAK (CFS)	VOLUME OF RUNOFF (AF)
16.95	688.66	173.54	13.44

WIDTH AT 50 = 44. MIN. WIDTH AT 75 = 23. MIN. K50 = .23 K75 = .32

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. = .50 IN. MAX. IMPERVIOUS RET. = .09 IN.
INFILTRATION = 4.50 IN./HR. DECAY = .00180/SECOND FNINFL = .60 IN./HR.

TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH
0.	0.	60.	71.	120.	20.
5.	56.	65.	64.	125.	18.
10.	133.	70.	58.	130.	16.
15.	171.	75.	52.	135.	15.
20.	169.	80.	47.	140.	13.
25.	148.	85.	42.	145.	12.
30.	131.	90.	38.	150.	11.
35.	124.	95.	34.	155.	10.
40.	112.	100.	31.	160.	9.
45.	100.	105.	28.	165.	8.
50.	88.	110.	25.	170.	0.
55.	79.	115.	23.	0.	0.

1 BASIN ID: -- BASIN COMMENT: BASIN 22 EXISTING CONDITIONS

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 100

TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)	TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)
0.	.00	.000	0.	110.	.04	.001	88.
5.	.03	.000	0.	115.	.04	.001	80.
10.	.09	.001	0.	120.	.04	.001	72.
15.	.14	.005	0.	125.	.00	.000	65.
20.	.24	.009	1.	130.	.00	.000	59.
25.	.41	.016	3.	135.	.00	.000	53.
30.	.74	.646	41.	140.	.00	.000	48.
35.	.41	.355	111.	145.	.00	.000	43.
40.	.24	.182	173.	150.	.00	.000	39.

45.	.18	.131	205.	*	155.	.00	.000	35.	*
50.	.15	.097	213.	*	160.	.00	.000	31.	*
55.	.12	.069	210.	*	165.	.00	.000	28.	*
60.	.12	.069	208.	*	170.	.00	.000	25.	*
65.	.12	.069	203.	*	175.	.00	.000	23.	*
70.	.06	.011	194.	*	180.	.00	.000	21.	*
75.	.06	.011	179.	*	185.	.00	.000	18.	*
80.	.04	.001	163.	*	190.	.00	.000	17.	*
85.	.04	.001	147.	*	195.	.00	.000	10.	*
90.	.04	.001	133.	*	200.	.00	.000	7.	*
95.	.04	.001	120.	*	205.	.00	.000	5.	*
100.	.04	.001	108.	*	210.	.00	.000	3.	*
105.	.04	.001	98.	*	215.	.00	.000	2.	*

TOTAL PRECIP. = 3.41 (1-HOUR RAIN = 2.95) EXECESS PRECIP. = 1.683 INCHES
VOLUME OF EXCESS PRECIP = 23. ACRE-FEET
PEAK Q = 213. CFS TIME OF PEAK = 50. MIN.
INFILT.= 4.50 IN/HR DECAY = .00180 FNINF = .60 IN/HR
MAX.PERV.RET.= .50 IN. MAX.IMP.RET.= .09 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE AT TIME

CUHPE/PC VERSION MODIFIED IN JANUARY 1985

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

SOUTH CANYON-LIME CREEK DRAINAGE DESIGN PLAN BY FMG, INC

BASIN ID: -- BASIN COMMENT: BASIN 23 EXISTING CONDITIONS

AREA OF BASIN (SQMI)	LENGTH OF BASIN (MI)	DIST TO CENTROID (MI)	IMPERVIOUS AREA (PCT)	SLOPE (FT/FT)	UNIT DURATION (MIN)
.26	1.06	.55	42.50	.0179	5.00

COEFFICIENT (REFLECTING TIME TO PEAK)	COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF)
.092	.449

CALCULATED UNIT HYDROGRAPH

TIME TO PEAK (MIN)	PEAK RATE OF RUNOFF (CFS/SQMI)	UNIT HYDROGRAP PEAK (CFS)	VOLUME OF RUNOFF (AF)
13.68	1542.57	397.98	13.76

WIDTH AT 50 = 19. MIN. WIDTH AT 75 = 10. MIN. K50 = .35 K75 = .45

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. = .35 IN. MAX. IMPERVIOUS RET. = .07 IN.
INFILTRATION = 4.00 IN./HR. DECAY = .00180/SECOND FNINFL = .60 IN./HR.

TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH
0.	0.	35.	123.	70.	18.
5.	123.	40.	93.	75.	13.
10.	335.	45.	71.	80.	10.
15.	391.	50.	54.	85.	8.
20.	288.	55.	41.	90.	0.
25.	218.	60.	31.	0.	0.
30.	162.	65.	23.	0.	0.

1 BASIN ID: -- BASIN COMMENT: BASIN 23 EXISTING CONDITIONS

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 100

TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)	TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)
0.	.00	.000	0.	90.	.04	.014	118.
5.	.03	.000	0.	95.	.04	.014	96.
10.	.09	.019	2.	100.	.04	.014	80.
15.	.14	.055	13.	105.	.04	.014	67.
20.	.24	.095	38.	110.	.04	.014	56.
25.	.41	.249	90.	115.	.04	.014	46.
30.	.74	.685	225.	120.	.04	.014	39.
35.	.41	.371	415.	125.	.00	.000	34.
40.	.24	.199	520.	130.	.00	.000	27.
45.	.18	.149	505.	135.	.00	.000	19.
50.	.15	.115	456.	140.	.00	.000	14.
55.	.12	.086	401.	145.	.00	.000	10.
60.	.12	.086	349.	150.	.00	.000	7.
65.	.12	.087	306.	155.	.00	.000	5.
70.	.06	.029	267.	160.	.00	.000	4.
75.	.06	.029	224.	165.	.00	.000	3.
80.	.04	.014	182.	170.	.00	.000	2.
85.	.04	.014	146.	175.	.00	.000	1.

TOTAL PRECIP. = 3.41 (1-HOUR RAIN = 2.95) EXECESS PRECIP. = 2.382 INCHES
VOLUME OF EXCESS PRECIP = 33. ACRE-FEET
PEAK Q = 520. CFS TIME OF PEAK = 40. MIN.
INFILT.= 4.00 IN/HR DECAY = .00180 FNINF = .60 IN/HR
MAX.PERV.RET.= .35 IN. MAX.IMP.RET.= .07 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE AT TIME

CUHPE/PC VERSION MODIFIED IN JANUARY 1985

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

SOUTH CANYON-LIME CREEK DRAINAGE DESIGN PLAN BY FMG, INC

BASIN ID: -- BASIN COMMENT: BASIN 24 EXISTING CONDITIONS

AREA OF BASIN (SQMI)	LENGTH OF BASIN (MI)	DIST TO CENTROID (MI)	IMPERVIOUS AREA (PCT)	SLOPE (FT/FT)	UNIT DURATION (MIN)
.22	.81	.38	26.00	.0359	5.00

COEFFICIENT (REFLECTING TIME TO PEAK)	COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF)
.103	.288

CALCULATED UNIT HYDROGRAPH

TIME TO PEAK (MIN)	PEAK RATE OF RUNOFF (CFS/SQMI)	UNIT HYDROGRAP PEAK (CFS)	VOLUME OF RUNOFF (AF)
10.32	1415.75	311.46	11.73

WIDTH AT 50 = 21. MIN. WIDTH AT 75 = 11. MIN. K50 = .29 K75 = .40

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. = .40 IN. MAX. IMPERVIOUS RET. = .07 IN.
INFILTRATION = 4.00 IN./HR. DECAY = .00180/SECOND FNINFL = .60 IN./HR.

TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH
0.	0.	35.	99.	70.	19.
5.	197.	40.	79.	75.	15.
10.	311.	45.	62.	80.	12.
15.	264.	50.	49.	85.	10.
20.	205.	55.	39.	90.	8.
25.	159.	60.	31.	95.	0.
30.	125.	65.	25.	0.	0.

1 BASIN ID: -- BASIN COMMENT: BASIN 24 EXISTING CONDITIONS

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 100

TIME	INCREMENT RAINFALL	TOTAL EXCESS	STORM HYDROGRAPH	TIME	INCREMENT RAINFALL	TOTAL EXCESS	STORM HYDROGRAPH

(MIN.)	(IN)	PRECIP	(CFS)	*	(MIN.)	(IN)	PRECIP	(CFS)	*
				*					*
				*					*
0.	.00	.000	0.	*	85.	.04	.009	113.	*
5.	.03	.000	0.	*	90.	.04	.009	92.	*
10.	.09	.012	2.	*	95.	.04	.009	76.	*
15.	.14	.034	10.	*	100.	.04	.009	64.	*
20.	.24	.058	25.	*	105.	.04	.009	53.	*
25.	.41	.171	63.	*	110.	.04	.009	45.	*
30.	.74	.680	211.	*	115.	.04	.009	38.	*
35.	.41	.364	347.	*	120.	.04	.009	29.	*
40.	.24	.192	381.	*	125.	.00	.000	22.	*
45.	.18	.141	362.	*	130.	.00	.000	16.	*
50.	.15	.107	329.	*	135.	.00	.000	12.	*
55.	.12	.079	293.	*	140.	.00	.000	9.	*
60.	.12	.079	260.	*	145.	.00	.000	7.	*
65.	.12	.079	234.	*	150.	.00	.000	5.	*
70.	.06	.021	203.	*	155.	.00	.000	3.	*
75.	.06	.021	169.	*	160.	.00	.000	2.	*
80.	.04	.009	139.	*	165.	.00	.000	2.	*

TOTAL PRECIP. = 3.41 (1-HOUR RAIN = 2.95) EXECESS PRECIP. = 2.118 INCHES
VOLUME OF EXCESS PRECIP = 25. ACRE-FEET
PEAK Q = 381. CFS TIME OF PEAK = 40. MIN.
INFILT.= 4.00 IN/HR DECAY = .00180 FNINF = .60 IN/HR
MAX.PERV.RET.= .40 IN. MAX.IMP.RET.= .07 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE AT TIME

CUHPE/PC VERSION MODIFIED IN JANUARY 1985

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

SOUTH CANYON-LIME CREEK DRAINAGE DESIGN PLAN BY FMG, INC

BASIN ID: -- BASIN COMMENT: BASIN 25 EXISTING CONDITIONS

AREA OF BASIN (SQMI)	LENGTH OF BASIN (MI)	DIST TO CENTROID (MI)	IMPERVIOUS AREA (PCT)	SLOPE (FT/FT)	UNIT DURATION (MIN)
.49	1.40	.61	5.00	.0239	5.00

COEFFICIENT (REFLECTING TIME TO PEAK)	COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF)
.144	.281

CALCULATED UNIT HYDROGRAPH

TIME TO PEAK (MIN)	PEAK RATE OF RUNOFF (CFS/SQMI)	UNIT HYDROGRAP PEAK (CFS)	VOLUME OF RUNOFF (AF)
22.19	547.35	268.75	26.19

WIDTH AT 50 = 55. MIN. WIDTH AT 75 = 29. MIN. K50 = .24 K75 = .33

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. = .40 IN. MAX. IMPERVIOUS RET. = .08 IN.
INFILTRATION = 3.40 IN./HR. DECAY = .00180/SECOND FNINFL = .50 IN./HR.

TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH
0.	0.	80.	101.	160.	25.
5.	57.	85.	93.	165.	23.
10.	156.	90.	85.	170.	21.
15.	232.	95.	78.	175.	20.
20.	266.	100.	72.	180.	18.
25.	265.	105.	66.	185.	16.
30.	244.	110.	60.	190.	15.
35.	218.	115.	55.	195.	14.
40.	202.	120.	51.	200.	13.
45.	190.	125.	46.	205.	12.
50.	175.	130.	43.	210.	11.
55.	160.	135.	39.	215.	10.
60.	145.	140.	36.	220.	9.
65.	131.	145.	33.	225.	8.
70.	120.	150.	30.	230.	8.
75.	110.	155.	28.	235.	0.

1 BASIN ID: -- BASIN COMMENT: BASIN 25 EXISTING CONDITIONS

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 100

TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)	TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)
0.	.00	.000	0.	145.	.00	.000	118.
5.	.03	.000	0.	150.	.00	.000	108.
10.	.09	.002	0.	155.	.00	.000	99.
15.	.14	.006	1.	160.	.00	.000	91.
20.	.24	.011	2.	165.	.00	.000	83.
25.	.41	.152	12.	170.	.00	.000	76.
30.	.74	.684	68.	175.	.00	.000	70.
35.	.41	.366	168.	180.	.00	.000	64.
40.	.24	.192	272.	185.	.00	.000	59.
45.	.18	.141	349.	190.	.00	.000	54.
50.	.15	.106	392.	195.	.00	.000	50.
55.	.12	.077	405.	200.	.00	.000	45.

60.	.12	.078	402.	*	205.	.00	.000	42.	*
65.	.12	.078	397.	*	210.	.00	.000	38.	*
70.	.06	.019	390.	*	215.	.00	.000	35.	*
75.	.06	.019	375.	*	220.	.00	.000	32.	*
80.	.04	.002	354.	*	225.	.00	.000	29.	*
85.	.04	.002	328.	*	230.	.00	.000	27.	*
90.	.04	.002	301.	*	235.	.00	.000	25.	*
95.	.04	.002	276.	*	240.	.00	.000	23.	*
100.	.04	.002	254.	*	245.	.00	.000	21.	*
105.	.04	.002	233.	*	250.	.00	.000	19.	*
110.	.04	.002	214.	*	255.	.00	.000	16.	*
115.	.04	.002	197.	*	260.	.00	.000	10.	*
120.	.04	.002	181.	*	265.	.00	.000	7.	*
125.	.00	.000	166.	*	270.	.00	.000	5.	*
130.	.00	.000	153.	*	275.	.00	.000	4.	*
135.	.00	.000	140.	*	280.	.00	.000	3.	*
140.	.00	.000	128.	*	285.	.00	.000	2.	*

TOTAL PRECIP. = 3.41 (1-HOUR RAIN = 2.95) EXECESS PRECIP. = 1.946 INCHES
VOLUME OF EXCESS PRECIP = 51. ACRE-FEET
PEAK Q = 405. CFS TIME OF PEAK = 55. MIN.
INFILT.= 3.40 IN/HR DECAY = .00180 FNINF = .50 IN/HR
MAX.PERV.RET.= .40 IN. MAX.IMP.RET.= .08 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE AT TIME

CUHPE/PC VERSION MODIFIED IN JANUARY 1985

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

SOUTH CANYON-LIME CREEK DRAINAGE DESIGN PLAN BY FMG, INC

BASIN ID: -- BASIN COMMENT: BASIN 26 EXISTING CONDITIONS

AREA OF BASIN (SQMI)	LENGTH OF BASIN (MI)	DIST TO CENTROID (MI)	IMPERVIOUS AREA (PCT)	SLOPE (FT/FT)	UNIT DURATION (MIN)
.32	1.08	.57	18.50	.0294	5.00

COEFFICIENT (REFLECTING TIME TO PEAK)	COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF)
.112	.264

CALCULATED UNIT HYDROGRAPH

TIME TO PEAK (MIN)	PEAK RATE OF RUNOFF (CFS/SQMI)	UNIT HYDROGRAP PEAK (CFS)	VOLUME OF RUNOFF (AF)
14.96	812.46	263.24	17.28

WIDTH AT 50 = 37. MIN. WIDTH AT 75 = 19. MIN. K50 = .24 K75 = .33

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. = .40 IN. MAX. IMPERVIOUS RET. = .07 IN.
INFILTRATION = 3.70 IN./HR. DECAY = .00180/SECOND FNINFL = .50 IN./HR.

TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH
0.	0.	55.	96.	110.	23.
5.	103.	60.	85.	115.	21.
10.	225.	65.	75.	120.	18.
15.	263.	70.	66.	125.	16.
20.	240.	75.	58.	130.	14.
25.	205.	80.	51.	135.	12.
30.	188.	85.	45.	140.	11.
35.	166.	90.	39.	145.	10.
40.	144.	95.	35.	150.	8.
45.	125.	100.	30.	155.	7.
50.	110.	105.	27.	160.	0.

1 BASIN ID: -- BASIN COMMENT: BASIN 26 EXISTING CONDITIONS

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 100

TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)	TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)
0.	.00	.000	0.	110.	.04	.006	127.
5.	.03	.000	0.	115.	.04	.006	114.
10.	.09	.008	1.	120.	.04	.006	102.
15.	.14	.024	4.	125.	.00	.000	91.
20.	.24	.041	12.	130.	.00	.000	80.
25.	.41	.176	36.	135.	.00	.000	71.
30.	.74	.686	128.	140.	.00	.000	62.
35.	.41	.369	255.	145.	.00	.000	55.
40.	.24	.196	340.	150.	.00	.000	48.
45.	.18	.145	370.	155.	.00	.000	42.
50.	.15	.111	369.	160.	.00	.000	37.
55.	.12	.082	362.	165.	.00	.000	33.
60.	.12	.083	348.	170.	.00	.000	29.
65.	.12	.083	332.	175.	.00	.000	25.
70.	.06	.024	310.	180.	.00	.000	21.
75.	.06	.024	284.	185.	.00	.000	14.
80.	.04	.006	255.	190.	.00	.000	10.
85.	.04	.006	227.	195.	.00	.000	7.
90.	.04	.006	202.	200.	.00	.000	5.
95.	.04	.006	180.	205.	.00	.000	4.

100.	.04	.006	160.	*	210.	.00	.000	3.	*
105.	.04	.006	142.	*	215.	.00	.000	2.	*

TOTAL PRECIP. = 3.41 (1-HOUR RAIN = 2.95) EXECESS PRECIP. = 2.108 INCHES
VOLUME OF EXCESS PRECIP = 36. ACRE-FEET
PEAK Q = 370. CFS TIME OF PEAK = 45. MIN.
INFILT.= 3.70 IN/HR DECAY = .00180 FNINF = .50 IN/HR
MAX.PERV.RET.= .40 IN. MAX.IMP.RET.= .07 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE AT TIME

CUHPE/PC VERSION MODIFIED IN JANUARY 1985

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

SOUTH CANYON-LIME CREEK DRAINAGE DESIGN PLAN BY FMG, INC

BASIN ID: -- BASIN COMMENT: BASIN 27 EXISTING CONDITIONS

AREA OF BASIN (SQMI)	LENGTH OF BASIN (MI)	DIST TO CENTROID (MI)	IMPERVIOUS AREA (PCT)	SLOPE (FT/FT)	UNIT DURATION (MIN)
.34	1.34	.64	2.00	.0345	5.00

COEFFICIENT (REFLECTING TIME TO PEAK)	COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF)
.156	.284

CALCULATED UNIT HYDROGRAPH

TIME TO PEAK (MIN)	PEAK RATE OF RUNOFF (CFS/SQMI)	UNIT HYDROGRAP PEAK (CFS)	VOLUME OF RUNOFF (AF)
21.95	560.02	189.29	18.03

WIDTH AT 50 = 54. MIN. WIDTH AT 75 = 28. MIN. K50 = .25 K75 = .33

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. = .50 IN. MAX. IMPERVIOUS RET. = .09 IN.
INFILTRATION = 3.70 IN./HR. DECAY = .00180/SECOND FNINFL = .50 IN./HR.

TIME	UNIT HYDROGRAPH	*	TIME	UNIT HYDROGRAPH	*	TIME	UNIT HYDROGRAPH	*
0.	0.	*	75.	76.	*	150.	21.	*
5.	41.	*	80.	70.	*	155.	19.	*
10.	112.	*	85.	64.	*	160.	17.	*

15.	165.	*	90.	59.	*	165.	16.	*
20.	188.	*	95.	54.	*	170.	15.	*
25.	186.	*	100.	49.	*	175.	13.	*
30.	170.	*	105.	45.	*	180.	12.	*
35.	152.	*	110.	41.	*	185.	11.	*
40.	142.	*	115.	38.	*	190.	10.	*
45.	132.	*	120.	35.	*	195.	9.	*
50.	121.	*	125.	32.	*	200.	9.	*
55.	111.	*	130.	29.	*	205.	8.	*
60.	100.	*	135.	27.	*	210.	0.	*
65.	90.	*	140.	25.	*	0.	0.	*
70.	83.	*	145.	23.	*	0.	0.	*

1 BASIN ID: -- BASIN COMMENT: BASIN 27 EXISTING CONDITIONS

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 100

TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)	*	TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)	*
0.	.00	.000	0.	*	130.	.00	.000	97.	*
5.	.03	.000	0.	*	135.	.00	.000	89.	*
10.	.09	.001	0.	*	140.	.00	.000	82.	*
15.	.14	.003	0.	*	145.	.00	.000	75.	*
20.	.24	.004	1.	*	150.	.00	.000	69.	*
25.	.41	.034	2.	*	155.	.00	.000	63.	*
30.	.74	.683	33.	*	160.	.00	.000	58.	*
35.	.41	.364	98.	*	165.	.00	.000	53.	*
40.	.24	.190	168.	*	170.	.00	.000	49.	*
45.	.18	.139	222.	*	175.	.00	.000	45.	*
50.	.15	.105	253.	*	180.	.00	.000	41.	*
55.	.12	.076	264.	*	185.	.00	.000	37.	*
60.	.12	.077	262.	*	190.	.00	.000	34.	*
65.	.12	.077	260.	*	195.	.00	.000	31.	*
70.	.06	.018	255.	*	200.	.00	.000	29.	*
75.	.06	.018	245.	*	205.	.00	.000	26.	*
80.	.04	.001	231.	*	210.	.00	.000	24.	*
85.	.04	.001	214.	*	215.	.00	.000	22.	*
90.	.04	.001	196.	*	220.	.00	.000	20.	*
95.	.04	.001	179.	*	225.	.00	.000	19.	*
100.	.04	.001	164.	*	230.	.00	.000	17.	*
105.	.04	.001	150.	*	235.	.00	.000	10.	*
110.	.04	.001	138.	*	240.	.00	.000	7.	*
115.	.04	.001	126.	*	245.	.00	.000	5.	*
120.	.04	.001	116.	*	250.	.00	.000	4.	*
125.	.00	.000	106.	*	255.	.00	.000	2.	*

TOTAL PRECIP. = 3.41 (1-HOUR RAIN = 2.95) EXECESS PRECIP. = 1.794 INCHES
VOLUME OF EXCESS PRECIP = 32. ACRE-FEET
PEAK Q = 264. CFS TIME OF PEAK = 55. MIN.

INFILT.= 3.70 IN/HR DECAY = .00180 FNINF = .50 IN/HR
MAX.PERV.RET.= .50 IN. MAX.IMP.RET.= .09 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE AT TIME

CUHPE/PC VERSION MODIFIED IN JANUARY 1985

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

SOUTH CANYON-LIME CREEK DRAINAGE DESIGN PLAN BY FMG, INC

BASIN ID: -- BASIN COMMENT: BASIN 28 EXISTING CONDITIONS

AREA OF BASIN (SQMI)	LENGTH OF BASIN (MI)	DIST TO CENTROID (MI)	IMPERVIOUS AREA (PCT)	SLOPE (FT/FT)	UNIT DURATION (MIN)
.83	1.40	.72	3.50	.0350	5.00

COEFFICIENT (REFLECTING TIME TO PEAK)	COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF)
.150	.313

CALCULATED UNIT HYDROGRAPH

TIME TO PEAK (MIN)	PEAK RATE OF RUNOFF (CFS/SQMI)	UNIT HYDROGRAP PEAK (CFS)	VOLUME OF RUNOFF (AF)
22.70	595.44	493.02	44.16

WIDTH AT 50 = 50. MIN. WIDTH AT 75 = 26. MIN. K50 = .27 K75 = .37

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. = .45 IN. MAX. IMPERVIOUS RET. = .09 IN.
INFILTRATION = 3.80 IN./HR. DECAY = .00180/SECOND FNINFL = .60 IN./HR.

TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH
0.	0.	85.	148.	170.	27.
5.	102.	90.	134.	175.	25.
10.	279.	95.	122.	180.	23.
15.	418.	100.	110.	185.	20.
20.	485.	105.	100.	190.	18.
25.	488.	110.	90.	195.	17.
30.	452.	115.	82.	200.	15.
35.	403.	120.	74.	205.	14.
40.	365.	125.	67.	210.	12.
45.	335.	130.	61.	215.	11.

50.	304.	*	135.	55.	*	220.	10.	*
55.	274.	*	140.	50.	*	225.	9.	*
60.	244.	*	145.	45.	*	230.	8.	*
65.	221.	*	150.	41.	*	235.	8.	*
70.	200.	*	155.	37.	*	240.	0.	*
75.	181.	*	160.	33.	*	0.	0.	*
80.	164.	*	165.	30.	*	0.	0.	*

1 BASIN ID: -- BASIN COMMENT: BASIN 28 EXISTING CONDITIONS

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 100

TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)	*	TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)	*
0.	.00	.000	0.	*	145.	.00	.000	159.	*
5.	.03	.000	0.	*	150.	.00	.000	144.	*
10.	.09	.001	0.	*	155.	.00	.000	131.	*
15.	.14	.005	1.	*	160.	.00	.000	118.	*
20.	.24	.008	2.	*	165.	.00	.000	107.	*
25.	.41	.064	11.	*	170.	.00	.000	97.	*
30.	.74	.675	93.	*	175.	.00	.000	88.	*
35.	.41	.356	258.	*	180.	.00	.000	80.	*
40.	.24	.183	437.	*	185.	.00	.000	72.	*
45.	.18	.132	577.	*	190.	.00	.000	65.	*
50.	.15	.097	659.	*	195.	.00	.000	59.	*
55.	.12	.069	688.	*	200.	.00	.000	53.	*
60.	.12	.069	681.	*	205.	.00	.000	48.	*
65.	.12	.069	665.	*	210.	.00	.000	44.	*
70.	.06	.010	642.	*	215.	.00	.000	40.	*
75.	.06	.011	609.	*	220.	.00	.000	36.	*
80.	.04	.001	566.	*	225.	.00	.000	33.	*
85.	.04	.001	517.	*	230.	.00	.000	29.	*
90.	.04	.001	469.	*	235.	.00	.000	27.	*
95.	.04	.001	425.	*	240.	.00	.000	24.	*
100.	.04	.001	385.	*	245.	.00	.000	22.	*
105.	.04	.001	349.	*	250.	.00	.000	20.	*
110.	.04	.001	317.	*	255.	.00	.000	18.	*
115.	.04	.001	287.	*	260.	.00	.000	16.	*
120.	.04	.001	261.	*	265.	.00	.000	10.	*
125.	.00	.000	236.	*	270.	.00	.000	6.	*
130.	.00	.000	214.	*	275.	.00	.000	4.	*
135.	.00	.000	194.	*	280.	.00	.000	3.	*
140.	.00	.000	176.	*	285.	.00	.000	2.	*

TOTAL PRECIP. = 3.41 (1-HOUR RAIN = 2.95) EXECESS PRECIP. = 1.759 INCHES
VOLUME OF EXCESS PRECIP = 78. ACRE-FEET
PEAK Q = 688. CFS TIME OF PEAK = 55. MIN.
INFILT.= 3.80 IN/HR DECAY = .00180 FNINF = .60 IN/HR
MAX.PERV.RET.= .45 IN. MAX.IMP.RET.= .09 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE AT TIME

CUHPE/PC VERSION MODIFIED IN JANUARY 1985

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

SOUTH CANYON-LIME CREEK DRAINAGE DESIGN PLAN BY FMG, INC

BASIN ID: -- BASIN COMMENT: BASIN 29 EXISTING CONDITIONS

AREA OF BASIN (SQMI)	LENGTH OF BASIN (MI)	DIST TO CENTROID (MI)	IMPERVIOUS AREA (PCT)	SLOPE (FT/FT)	UNIT DURATION (MIN)
.14	.76	.30	2.00	.0260	5.00

COEFFICIENT (REFLECTING TIME TO PEAK)	COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF)
.156	.249

CALCULATED UNIT HYDROGRAPH

TIME TO PEAK (MIN)	PEAK RATE OF RUNOFF (CFS/SQMI)	UNIT HYDROGRAP PEAK (CFS)	VOLUME OF RUNOFF (AF)
13.52	866.84	122.22	7.52

WIDTH AT 50 = 35. MIN. WIDTH AT 75 = 18. MIN. K50 = .23 K75 = .32

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. = .40 IN. MAX. IMPERVIOUS RET. = .10 IN.
INFILTRATION = 3.90 IN./HR. DECAY = .00180/SECOND FNINFL = .60 IN./HR.

TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH
0.	0.	45.	54.	90.	17.
5.	55.	50.	47.	95.	15.
10.	112.	55.	42.	100.	13.
15.	121.	60.	37.	105.	12.
20.	104.	65.	32.	110.	10.
25.	91.	70.	29.	115.	9.
30.	83.	75.	25.	120.	8.
35.	72.	80.	22.	125.	0.
40.	61.	85.	19.	0.	0.

1 BASIN ID: -- BASIN COMMENT: BASIN 29 EXISTING CONDITIONS

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 100

TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)	*	TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)	*
0.	.00	.000	0.	*	90.	.04	.001	74.	*
5.	.03	.000	0.	*	95.	.04	.001	65.	*
10.	.09	.000	0.	*	100.	.04	.001	57.	*
15.	.14	.003	0.	*	105.	.04	.001	50.	*
20.	.24	.004	1.	*	110.	.04	.001	44.	*
25.	.41	.104	7.	*	115.	.04	.001	39.	*
30.	.74	.674	49.	*	120.	.04	.001	35.	*
35.	.41	.356	108.	*	125.	.00	.000	31.	*
40.	.24	.182	143.	*	130.	.00	.000	27.	*
45.	.18	.131	151.	*	135.	.00	.000	24.	*
50.	.15	.097	149.	*	140.	.00	.000	21.	*
55.	.12	.068	145.	*	145.	.00	.000	18.	*
60.	.12	.068	138.	*	150.	.00	.000	11.	*
65.	.12	.069	129.	*	155.	.00	.000	7.	*
70.	.06	.010	119.	*	160.	.00	.000	5.	*
75.	.06	.010	107.	*	165.	.00	.000	3.	*
80.	.04	.001	95.	*	170.	.00	.000	2.	*
85.	.04	.001	84.	*	175.	.00	.000	2.	*

TOTAL PRECIP. = 3.41 (1-HOUR RAIN = 2.95) EXECESS PRECIP. = 1.781 INCHES
VOLUME OF EXCESS PRECIP = 13. ACRE-FEET
PEAK Q = 151. CFS TIME OF PEAK = 45. MIN.
INFILT.= 3.90 IN/HR DECAY = .00180 FNINF = .60 IN/HR
MAX.PERV.RET.= .40 IN. MAX.IMP.RET.= .10 IN.

1 U.D.F.C.D. CUHPD RUNOFF ANALYSIS EXECUTED ON DATE AT TIME

CUHPE/PC VERSION MODIFIED IN JANUARY 1985 TO WRITE OUTPUT FILE OF STORM HYDROGRAPHS FOR SUBSEQUENT USE WITH MULTI-PLAN RIVER ROUTING ROUTINES OF HEC-1

SOUTH CANYON-LIME CREEK DRAINAGE DESIGN PLAN BY FMG, INC

NO HYDROGRAPH VALUES WERE WRITTEN TO AN OUTPUTFILE FOR THIS RUN OF CUHPD.

APPENDIX C - CUHPE/PC - 500 YR

EXISTING LAND USE
AND EXISTING HYDRAULIC CONDITIONS

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE AT TIME

CUHPE/PC VERSION MODIFIED IN JANUARY 1985

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

SOUTH CANYON-LIME CREEK DRAINAGE DESIGN PLAN BY FMG, INC

BASIN ID: -- BASIN COMMENT: BASIN 1 EXISTING CONDITIONS 500 YR

AREA OF BASIN (SQMI)	LENGTH OF BASIN (MI)	DIST TO CENTROID (MI)	IMPERVIOUS AREA (PCT)	SLOPE (FT/FT)	UNIT DURATION (MIN)
.19	.64	.27	22.00	.0143	5.00

COEFFICIENT (REFLECTING TIME TO PEAK)	COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF)
.108	.259

CALCULATED UNIT HYDROGRAPH

TIME TO PEAK (MIN)	PEAK RATE OF RUNOFF (CFS/SQMI)	UNIT HYDROGRAP PEAK (CFS)	VOLUME OF RUNOFF (AF)
10.22	1289.43	246.28	10.19

WIDTH AT 50 = 23. MIN. WIDTH AT 75 = 12. MIN. K50 = .26 K75 = .36

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. = .30 IN. MAX. IMPERVIOUS RET. = .08 IN.
INFILTRATION = .61 IN./HR. DECAY = .00180/SECOND FNINFL = .60 IN./HR.

TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH
0.	0.	35.	90.	70.	21.
5.	158.	40.	73.	75.	17.
10.	246.	45.	60.	80.	14.
15.	210.	50.	48.	85.	11.
20.	171.	55.	39.	90.	9.
25.	139.	60.	32.	95.	8.
30.	110.	65.	26.	100.	0.

1 BASIN ID: -- BASIN COMMENT: BASIN 1 EXISTING CONDITIONS 500 YR

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 500

TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)	*	TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)	*
0.	.00	.000	0.	*	100.	.08	.039	196.	*
5.	.07	.000	0.	*	105.	.08	.039	171.	*
10.	.20	.038	6.	*	110.	.08	.039	149.	*
15.	.30	.154	34.	*	115.	.08	.039	129.	*
20.	.53	.483	122.	*	120.	.08	.039	111.	*
25.	.92	.875	296.	*	125.	.00	.000	85.	*
30.	1.65	1.593	600.	*	130.	.00	.000	64.	*
35.	.92	.875	822.	*	135.	.00	.000	49.	*
40.	.53	.483	864.	*	140.	.00	.000	38.	*
45.	.41	.366	825.	*	145.	.00	.000	29.	*
50.	.33	.287	761.	*	150.	.00	.000	22.	*
55.	.26	.222	688.	*	155.	.00	.000	17.	*
60.	.26	.222	621.	*	160.	.00	.000	12.	*
65.	.26	.222	568.	*	165.	.00	.000	9.	*
70.	.13	.092	504.	*	170.	.00	.000	7.	*
75.	.13	.092	437.	*	175.	.00	.000	5.	*
80.	.08	.039	373.	*	180.	.00	.000	4.	*
85.	.08	.039	314.	*	185.	.00	.000	3.	*
90.	.08	.039	266.	*	190.	.00	.000	2.	*
95.	.08	.039	228.	*	195.	.00	.000	2.	*

TOTAL PRECIP. = 7.63 (1-HOUR RAIN = 6.60) EXECESS PRECIP. = 6.358 INCHES
VOLUME OF EXCESS PRECIP = 65. ACRE-FEET
PEAK Q = 864. CFS TIME OF PEAK = 40. MIN.
INFILT.= .61 IN/HR DECAY = .00180 FNINF = .60 IN/HR
MAX.PERV.RET.= .30 IN. MAX.IMP.RET.= .08 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE AT TIME

CUHPE/PC VERSION MODIFIED IN JANUARY 1985

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

SOUTH CANYON-LIME CREEK DRAINAGE DESIGN PLAN BY FMG, INC

BASIN ID: -- BASIN COMMENT: BASIN 2 EXISTING CONDITIONS 500 YR

AREA OF BASIN (SQMI)	LENGTH OF BASIN (MI)	DIST TO CENTROID (MI)	IMPERVIOUS AREA (PCT)	SLOPE (FT/FT)	UNIT DURATION (MIN)
.05	.66	.36	17.00	.0396	5.00

COEFFICIENT (REFLECTING TIME TO PEAK)	COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF)
.115	.196

CALCULATED UNIT HYDROGRAPH

TIME TO PEAK (MIN)	TIME OF CONCENTRATION (MIN)	PEAK RATE OF RUNOFF (CFS/SQMI)	UNIT HYDROGRAPH PEAK (CFS)	VOLUME OF RUNOFF (AF)
6.10	22.00	2087.35	108.54	2.77

*** NOTE : THE TIME TO PEAK IS CALCULATED BASED ON THE TIME OF CONCENTRATION PROVIDED BY THE USER, REPLACING THE ONE COMPUTED BY CUHPD (TP= 9.98)

WIDTH AT 50 = 14. MIN. WIDTH AT 75 = 7. MIN. K50 = .25 K75 = .35

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. = .30 IN. MAX. IMPERVIOUS RET. = .09 IN.
INFILTRATION = .61 IN./HR. DECAY = .00180/SECOND FNINFL = .60 IN./HR.

TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH
0.	0.	20.	45.	40.	13.
5.	104.	25.	33.	45.	10.
10.	85.	30.	25.	50.	0.
15.	63.	35.	18.	0.	0.

1 BASIN ID: -- BASIN COMMENT: BASIN 2 EXISTING CONDITIONS 500 YR

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 500

TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)	TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)
0.	.00	.000	0.	75.	.13	.089	77.
5.	.07	.000	0.	80.	.08	.037	55.
10.	.20	.028	3.	85.	.08	.037	41.
15.	.30	.146	18.	90.	.08	.037	32.
20.	.53	.482	64.	95.	.08	.037	25.
25.	.92	.875	143.	100.	.08	.037	21.
30.	1.65	1.594	279.	105.	.08	.037	18.
35.	.92	.875	309.	110.	.08	.037	16.
40.	.53	.482	284.	115.	.08	.037	15.
45.	.41	.364	249.	120.	.08	.037	15.
50.	.33	.286	216.	125.	.00	.000	11.
55.	.26	.220	184.	130.	.00	.000	8.

60.	.26	.220	159.	*	135.	.00	.000	5.	*
65.	.26	.220	138.	*	140.	.00	.000	4.	*
70.	.13	.089	107.	*	145.	.00	.000	2.	*

TOTAL PRECIP. = 7.63 (1-HOUR RAIN = 6.60) EXECESS PRECIP. = 6.304 INCHES
VOLUME OF EXCESS PRECIP = 17. ACRE-FEET
PEAK Q = 309. CFS TIME OF PEAK = 35. MIN.
INFILT.= .61 IN/HR DECAY = .00180 FNINF = .60 IN/HR
MAX.PERV.RET.= .30 IN. MAX.IMP.RET.= .09 IN.

RATIONAL FORMULA C = .83
I = 12.3 INCHES/HOUR
A = 33.3 ACRES
Q = 339. CFS

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE AT TIME

CUHPE/PC VERSION MODIFIED IN JANUARY 1985

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

SOUTH CANYON-LIME CREEK DRAINAGE DESIGN PLAN BY FMG, INC

BASIN ID: -- BASIN COMMENT: BASIN 3 EXISTING CONDITIONS 500 YR

AREA OF BASIN (SQMI)	LENGTH OF BASIN (MI)	DIST TO CENTROID (MI)	IMPERVIOUS AREA (PCT)	SLOPE (FT/FT)	UNIT DURATION (MIN)
.14	.78	.45	14.50	.0268	5.00

COEFFICIENT (REFLECTING TIME TO PEAK)	COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF)
.118	.221

CALCULATED UNIT HYDROGRAPH

TIME TO PEAK (MIN)	PEAK RATE OF RUNOFF (CFS/SQMI)	UNIT HYDROGRAP PEAK (CFS)	VOLUME OF RUNOFF (AF)
12.74	828.25	117.61	7.57

WIDTH AT 50 = 36. MIN. WIDTH AT 75 = 19. MIN. K50 = .21 K75 = .29

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. = .32 IN. MAX. IMPERVIOUS RET. = .08 IN.
INFILTRATION = .56 IN./HR. DECAY = .00180/SECOND FNINFL = .55 IN./HR.

TIME	UNIT	'	TIME	UNIT	'	TIME	UNIT	'

	HYDROGRAPH			HYDROGRAPH			HYDROGRAPH	
0.	0.	*	45.	54.	*	90.	19.	*
5.	57.	*	50.	48.	*	95.	17.	*
10.	111.	*	55.	43.	*	100.	15.	*
15.	114.	*	60.	38.	*	105.	13.	*
20.	94.	*	65.	34.	*	110.	12.	*
25.	85.	*	70.	30.	*	115.	10.	*
30.	81.	*	75.	27.	*	120.	9.	*
35.	71.	*	80.	24.	*	125.	8.	*
40.	61.	*	85.	21.	*	130.	0.	*

1 BASIN ID: -- BASIN COMMENT: BASIN 3 EXISTING CONDITIONS 500 YR

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 500

TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)	*	TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)	*
0.	.00	.000	0.	*	115.	.08	.039	164.	*
5.	.07	.000	0.	*	120.	.08	.039	151.	*
10.	.20	.025	1.	*	125.	.00	.000	137.	*
15.	.30	.135	11.	*	130.	.00	.000	122.	*
20.	.53	.485	46.	*	135.	.00	.000	108.	*
25.	.92	.878	122.	*	140.	.00	.000	95.	*
30.	1.65	1.599	259.	*	145.	.00	.000	81.	*
35.	.92	.878	387.	*	150.	.00	.000	66.	*
40.	.53	.485	445.	*	155.	.00	.000	47.	*
45.	.41	.367	451.	*	160.	.00	.000	35.	*
50.	.33	.288	447.	*	165.	.00	.000	28.	*
55.	.26	.223	437.	*	170.	.00	.000	22.	*
60.	.26	.223	419.	*	175.	.00	.000	17.	*
65.	.26	.223	398.	*	180.	.00	.000	14.	*
70.	.13	.092	374.	*	185.	.00	.000	11.	*
75.	.13	.092	345.	*	190.	.00	.000	8.	*
80.	.08	.039	315.	*	195.	.00	.000	6.	*
85.	.08	.039	286.	*	200.	.00	.000	5.	*
90.	.08	.039	259.	*	205.	.00	.000	4.	*
95.	.08	.039	235.	*	210.	.00	.000	3.	*
100.	.08	.039	214.	*	215.	.00	.000	3.	*
105.	.08	.039	195.	*	220.	.00	.000	2.	*
110.	.08	.039	179.	*	225.	.00	.000	2.	*

TOTAL PRECIP. = 7.63 (1-HOUR RAIN = 6.60) EXECESS PRECIP. = 6.348 INCHES
VOLUME OF EXCESS PRECIP = 48. ACRE-FEET
PEAK Q = 451. CFS TIME OF PEAK = 45. MIN.
INFILT.= .56 IN/HR DECAY = .00180 FNINF = .55 IN/HR
MAX.PERV.RET.= .32 IN. MAX.IMP.RET.= .08 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE AT TIME

CUHPE/PC VERSION MODIFIED IN JANUARY 1985

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

SOUTH CANYON-LIME CREEK DRAINAGE DESIGN PLAN BY FMG, INC

BASIN ID: -- BASIN COMMENT: BASIN 4 EXISTING CONDITIONS 500 YR

AREA OF BASIN (SQMI)	LENGTH OF BASIN (MI)	DIST TO CENTROID (MI)	IMPERVIOUS AREA (PCT)	SLOPE (FT/FT)	UNIT DURATION (MIN)
.06	.42	.17	50.00	.0274	5.00

COEFFICIENT (REFLECTING TIME TO PEAK)	COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF)
.088	.407

CALCULATED UNIT HYDROGRAPH

TIME TO PEAK (MIN)	TIME OF CONCENTRATION (MIN)	PEAK RATE OF RUNOFF (CFS/SQMI)	UNIT HYDROGRAPH PEAK (CFS)	VOLUME OF RUNOFF (AF)
3.25	5.00	20728.68	1202.26	3.09

*** NOTE : THE TIME TO PEAK IS CALCULATED BASED ON THE TIME OF CONCENTRATION PROVIDED BY THE USER, REPLACING THE ONE COMPUTED BY CUHPD (TP= 6.03)

WIDTH AT 50 = 1. MIN. WIDTH AT 75 = 1. MIN. K50 = .35 K75 = .45

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. = .30 IN. MAX. IMPERVIOUS RET. = .08 IN.
INFILTRATION = .56 IN./HR. DECAY = .00180/SECOND FNINFL = .55 IN./HR.

TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH
0.	0.	10.	28.	0.	0.
5.	393.	15.	0.	0.	0.

1 BASIN ID: -- BASIN COMMENT: BASIN 4 EXISTING CONDITIONS 500 YR

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 500

TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)	*	TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)	*
0.	.00	.000	0.	*	65.	.26	.234	99.	*
5.	.07	.000	0.	*	70.	.13	.106	48.	*
10.	.20	.087	34.	*	75.	.13	.106	45.	*
15.	.30	.209	85.	*	80.	.08	.054	24.	*
20.	.53	.492	199.	*	85.	.08	.054	23.	*
25.	.92	.878	359.	*	90.	.08	.054	23.	*
30.	1.65	1.586	648.	*	95.	.08	.054	23.	*
35.	.92	.878	390.	*	100.	.08	.054	23.	*
40.	.53	.492	218.	*	105.	.08	.054	23.	*
45.	.41	.376	162.	*	110.	.08	.054	23.	*
50.	.33	.299	128.	*	115.	.08	.054	23.	*
55.	.26	.234	101.	*	120.	.08	.054	23.	*
60.	.26	.234	99.	*	125.	.00	.000	2.	*

TOTAL PRECIP. = 7.63 (1-HOUR RAIN = 6.60) EXECESS PRECIP. = 6.700 INCHES
VOLUME OF EXCESS PRECIP = 21. ACRE-FEET
PEAK Q = 648. CFS TIME OF PEAK = 30. MIN.
INFILT.= .56 IN/HR DECAY = .00180 FNINF = .55 IN/HR
MAX.PERV.RET.= .30 IN. MAX.IMP.RET.= .08 IN.

RATIONAL FORMULA C = .88
I = 22.3 INCHES/HOUR
A = 37.1 ACRES
Q = 728. CFS

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE AT TIME

CUHPE/PC VERSION MODIFIED IN JANUARY 1985

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

SOUTH CANYON-LIME CREEK DRAINAGE DESIGN PLAN BY FMG, INC

BASIN ID: -- BASIN COMMENT: BASIN 5 EXISTING CONDITIONS 500 YR

AREA OF BASIN (SQMI)	LENGTH OF BASIN (MI)	DIST TO CENTROID (MI)	IMPERVIOUS AREA (PCT)	SLOPE (FT/FT)	UNIT DURATION (MIN)
.64	1.89	1.02	1.00	.0463	5.00

COEFFICIENT (REFLECTING TIME TO PEAK)	COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF)
.159	.320

CALCULATED UNIT HYDROGRAPH

TIME TO PEAK (MIN)	PEAK RATE OF RUNOFF (CFS/SQMI)	UNIT HYDROGRAP PEAK (CFS)	VOLUME OF RUNOFF (AF)
29.88	449.20	287.04	34.08

WIDTH AT 50 = 67. MIN. WIDTH AT 75 = 35. MIN. K50 = .27 K75 = .36

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. = .40 IN. MAX. IMPERVIOUS RET. = .09 IN.
INFILTRATION = .61 IN./HR. DECAY = .00180/SECOND FNINFL = .60 IN./HR.

TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH
0.	0.	100.	105.	200.	25.
5.	38.	105.	98.	205.	23.
10.	112.	110.	91.	210.	21.
15.	189.	115.	85.	215.	20.
20.	246.	120.	79.	220.	18.
25.	278.	125.	73.	225.	17.
30.	287.	130.	68.	230.	16.
35.	279.	135.	63.	235.	15.
40.	261.	140.	59.	240.	14.
45.	240.	145.	55.	245.	13.
50.	221.	150.	51.	250.	12.
55.	207.	155.	47.	255.	11.
60.	194.	160.	44.	260.	10.
65.	180.	165.	41.	265.	10.
70.	167.	170.	38.	270.	9.
75.	154.	175.	35.	275.	8.
80.	141.	180.	33.	280.	8.
85.	131.	185.	31.	285.	0.
90.	122.	190.	28.	0.	0.
95.	113.	195.	26.	0.	0.

1 BASIN ID: -- BASIN COMMENT: BASIN 5 EXISTING CONDITIONS 500 YR

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 500

TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)	TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)
0.	.00	.000	0.	185.	.00	.000	317.
5.	.07	.000	0.	190.	.00	.000	295.
10.	.20	.002	0.	195.	.00	.000	274.
15.	.30	.019	1.	200.	.00	.000	255.

20.	.53	.478	21.	*	205.	.00	.000	237.	*
25.	.92	.874	91.	*	210.	.00	.000	220.	*
30.	1.65	1.600	255.	*	215.	.00	.000	205.	*
35.	.92	.874	501.	*	220.	.00	.000	190.	*
40.	.53	.478	772.	*	225.	.00	.000	177.	*
45.	.41	.359	1012.	*	230.	.00	.000	165.	*
50.	.33	.280	1191.	*	235.	.00	.000	153.	*
55.	.26	.214	1301.	*	240.	.00	.000	142.	*
60.	.26	.214	1352.	*	245.	.00	.000	132.	*
65.	.26	.214	1360.	*	250.	.00	.000	123.	*
70.	.13	.082	1343.	*	255.	.00	.000	114.	*
75.	.13	.082	1311.	*	260.	.00	.000	106.	*
80.	.08	.030	1270.	*	265.	.00	.000	99.	*
85.	.08	.030	1218.	*	270.	.00	.000	92.	*
90.	.08	.030	1156.	*	275.	.00	.000	85.	*
95.	.08	.030	1089.	*	280.	.00	.000	79.	*
100.	.08	.030	1021.	*	285.	.00	.000	74.	*
105.	.08	.030	955.	*	290.	.00	.000	69.	*
110.	.08	.030	896.	*	295.	.00	.000	64.	*
115.	.08	.030	843.	*	300.	.00	.000	56.	*
120.	.08	.030	793.	*	305.	.00	.000	46.	*
125.	.00	.000	746.	*	310.	.00	.000	31.	*
130.	.00	.000	700.	*	315.	.00	.000	23.	*
135.	.00	.000	655.	*	320.	.00	.000	18.	*
140.	.00	.000	611.	*	325.	.00	.000	14.	*
145.	.00	.000	569.	*	330.	.00	.000	11.	*
150.	.00	.000	529.	*	335.	.00	.000	9.	*
155.	.00	.000	492.	*	340.	.00	.000	7.	*
160.	.00	.000	457.	*	345.	.00	.000	5.	*
165.	.00	.000	425.	*	350.	.00	.000	4.	*
170.	.00	.000	395.	*	355.	.00	.000	3.	*
175.	.00	.000	367.	*	360.	.00	.000	2.	*
180.	.00	.000	341.	*	365.	.00	.000	2.	*

TOTAL PRECIP. = 7.63 (1-HOUR RAIN = 6.60) EXECESS PRECIP. = 6.039 INCHES
VOLUME OF EXCESS PRECIP = 206. ACRE-FEET
PEAK Q = 1360. CFS TIME OF PEAK = 65. MIN.
INFILT.= .61 IN/HR DECAY = .00180 FNINF = .60 IN/HR
MAX.PERV.RET.= .40 IN. MAX.IMP.RET.= .09 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE AT TIME

CUHPE/PC VERSION MODIFIED IN JANUARY 1985

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

SOUTH CANYON-LIME CREEK DRAINAGE DESIGN PLAN BY FMG, INC

BASIN ID: -- BASIN COMMENT: BASIN 6 EXISTING CONDITIONS 500 YR

AREA OF BASIN (SQMI)	LENGTH OF BASIN (MI)	DIST TO CENTROID (MI)	IMPERVIOUS AREA (PCT)	SLOPE (FT/FT)	UNIT DURATION (MIN)

.13	.98	.51	39.50	.0187	5.00

COEFFICIENT (REFLECTING TIME TO PEAK)	COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF)
.093	.379

CALCULATED UNIT HYDROGRAPH

TIME TO PEAK (MIN)	TIME OF CONCENTRATION (MIN)	PEAK RATE OF RUNOFF (CFS/SQMI)	UNIT HYDROGRAPH PEAK (CFS)	VOLUME OF RUNOFF (AF)
8.12	20.00	2589.79	339.26	6.99

*** NOTE : THE TIME TO PEAK IS CALCULATED BASED ON THE TIME OF CONCENTRATION PROVIDED BY THE USER, REPLACING THE ONE COMPUTED BY CUHPD (TP= 12.94)

WIDTH AT 50 = 12. MIN. WIDTH AT 75 = 6. MIN. K50 = .35 K75 = .45

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. = .30 IN. MAX. IMPERVIOUS RET. = .07 IN.
INFILTRATION = .61 IN./HR. DECAY = .00180/SECOND FNINFL = .60 IN./HR.

TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH
0.	0.	20.	114.	40.	19.
5.	228.	25.	73.	45.	12.
10.	309.	30.	46.	50.	8.
15.	183.	35.	29.	55.	0.

1 BASIN ID: -- BASIN COMMENT: BASIN 6 EXISTING CONDITIONS 500 YR

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 500

TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)	TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)
0.	.00	.000	0.	80.	.08	.047	141.
5.	.07	.000	0.	85.	.08	.047	102.
10.	.20	.073	17.	90.	.08	.047	81.
15.	.30	.184	65.	95.	.08	.047	67.
20.	.53	.487	181.	100.	.08	.047	59.

25.	.92	.875	392.	*	105.	.08	.047	54.	*
30.	1.65	1.587	748.	*	110.	.08	.047	51.	*
35.	.92	.875	922.	*	115.	.08	.047	49.	*
40.	.53	.487	818.	*	120.	.08	.047	49.	*
45.	.41	.371	670.	*	125.	.00	.000	38.	*
50.	.33	.293	545.	*	130.	.00	.000	23.	*
55.	.26	.229	441.	*	135.	.00	.000	14.	*
60.	.26	.229	365.	*	140.	.00	.000	9.	*
65.	.26	.229	317.	*	145.	.00	.000	5.	*
70.	.13	.099	256.	*	150.	.00	.000	3.	*
75.	.13	.099	194.	*	155.	.00	.000	2.	*

TOTAL PRECIP. = 7.63 (1-HOUR RAIN = 6.60) EXECESS PRECIP. = 6.544 INCHES
VOLUME OF EXCESS PRECIP = 46. ACRE-FEET
PEAK Q = 922. CFS TIME OF PEAK = 35. MIN.
INFILT.= .61 IN/HR DECAY = .00180 FNINF = .60 IN/HR
MAX.PERV.RET.= .30 IN. MAX.IMP.RET.= .07 IN.

RATIONAL FORMULA C = .86
I = 13.0 INCHES/HOUR
A = 83.8 ACRES
Q = 932. CFS

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE AT TIME

CUHPE/PC VERSION MODIFIED IN JANUARY 1985

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

SOUTH CANYON-LIME CREEK DRAINAGE DESIGN PLAN BY FMG, INC

BASIN ID: -- BASIN COMMENT: BASIN 7 EXISTING CONDITIONS 500 YR

AREA OF BASIN (SQMI)	LENGTH OF BASIN (MI)	DIST TO CENTROID (MI)	IMPERVIOUS AREA (PCT)	SLOPE (FT/FT)	UNIT DURATION (MIN)
.11	.68	.34	23.50	.0408	5.00

COEFFICIENT (REFLECTING TIME TO PEAK)	COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF)
.106	.247

CALCULATED UNIT HYDROGRAPH

TIME TO PEAK (MIN)	TIME OF CONCENTRATION (MIN)	PEAK RATE OF RUNOFF (CFS/SQMI)	UNIT HYDROGRAPH PEAK (CFS)	VOLUME OF RUNOFF (AF)
5.98	19.00	2726.24	308.06	6.03

*** NOTE : THE TIME TO PEAK IS CALCULATED BASED ON THE TIME OF CONCENTRATION PROVIDED BY THE USER,

REPLACING THE ONE COMPUTED BY CUHPD (TP= 9.29)

WIDTH AT 50 = 11. MIN. WIDTH AT 75 = 6. MIN. K50 = .33 K75 = .44

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. = .32 IN. MAX. IMPERVIOUS RET. = .07 IN.
INFILTRATION = .51 IN./HR. DECAY = .00180/SECOND FNINFL = .50 IN./HR.

TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH
0.	0.	20.	85.	40.	14.
5.	298.	25.	54.	45.	9.
10.	216.	30.	34.	50.	0.
15.	133.	35.	22.	0.	0.

1 BASIN ID: -- BASIN COMMENT: BASIN 7 EXISTING CONDITIONS 500 YR

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 500

TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)	TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)
0.	.00	.000	0.	75.	.13	.099	146.
5.	.07	.000	0.	80.	.08	.046	104.
10.	.20	.043	13.	85.	.08	.046	78.
15.	.30	.161	57.	90.	.08	.046	62.
20.	.53	.490	186.	95.	.08	.046	53.
25.	.92	.881	393.	100.	.08	.046	47.
30.	1.65	1.599	747.	105.	.08	.046	44.
35.	.92	.881	777.	110.	.08	.046	41.
40.	.53	.490	657.	115.	.08	.046	41.
45.	.41	.373	539.	120.	.08	.046	40.
50.	.33	.294	438.	125.	.00	.000	26.
55.	.26	.229	353.	130.	.00	.000	16.
60.	.26	.229	297.	135.	.00	.000	10.
65.	.26	.229	260.	140.	.00	.000	6.
70.	.13	.099	195.	145.	.00	.000	4.

TOTAL PRECIP. = 7.63 (1-HOUR RAIN = 6.60) EXECESS PRECIP. = 6.513 INCHES
VOLUME OF EXCESS PRECIP = 39. ACRE-FEET
PEAK Q = 777. CFS TIME OF PEAK = 35. MIN.
INFILT.= .51 IN/HR DECAY = .00180 FNINF = .50 IN/HR
MAX.PERV.RET.= .32 IN. MAX.IMP.RET.= .07 IN.

RATIONAL FORMULA C = .85
I = 13.3 INCHES/HOUR
A = 72.3 ACRES
Q = 821. CFS

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE AT TIME

CUHPE/PC VERSION MODIFIED IN JANUARY 1985

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

SOUTH CANYON-LIME CREEK DRAINAGE DESIGN PLAN BY FMG, INC

BASIN ID: -- BASIN COMMENT: BASIN 8 EXISTING CONDITIONS 500 YR

AREA OF BASIN (SQMI)	LENGTH OF BASIN (MI)	DIST TO CENTROID (MI)	IMPERVIOUS AREA (PCT)	SLOPE (FT/FT)	UNIT DURATION (MIN)
.22	.89	.47	22.50	.0448	5.00

COEFFICIENT (REFLECTING TIME TO PEAK)	COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF)
.107	.268

CALCULATED UNIT HYDROGRAPH

TIME TO PEAK (MIN)	PEAK RATE OF RUNOFF (CFS/SQMI)	UNIT HYDROGRAP PEAK (CFS)	VOLUME OF RUNOFF (AF)
11.42	1153.47	257.22	11.89

WIDTH AT 50 = 26. MIN. WIDTH AT 75 = 14. MIN. K50 = .26 K75 = .36

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. = .35 IN. MAX. IMPERVIOUS RET. = .07 IN.
INFILTRATION = .51 IN./HR. DECAY = .00180/SECOND FNINFL = .50 IN./HR.

TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH
0.	0.	40.	91.	80.	21.
5.	144.	45.	76.	85.	17.
10.	253.	50.	63.	90.	14.
15.	237.	55.	52.	95.	12.
20.	193.	60.	44.	100.	10.
25.	163.	65.	36.	105.	8.
30.	132.	70.	30.	110.	0.

35. 109. * 75. 25. * 0. 0. *

1 BASIN ID: -- BASIN COMMENT: BASIN 8 EXISTING CONDITIONS 500 YR

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 500

TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)	*	TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)	*
0.	.00	.000	0.	*	105.	.08	.046	236.	*
5.	.07	.000	0.	*	110.	.08	.046	210.	*
10.	.20	.041	6.	*	115.	.08	.046	188.	*
15.	.30	.136	30.	*	120.	.08	.046	169.	*
20.	.53	.490	115.	*	125.	.00	.000	145.	*
25.	.92	.881	291.	*	130.	.00	.000	115.	*
30.	1.65	1.599	603.	*	135.	.00	.000	84.	*
35.	.92	.881	863.	*	140.	.00	.000	64.	*
40.	.53	.490	945.	*	145.	.00	.000	50.	*
45.	.41	.372	923.	*	150.	.00	.000	39.	*
50.	.33	.294	869.	*	155.	.00	.000	30.	*
55.	.26	.229	799.	*	160.	.00	.000	24.	*
60.	.26	.229	731.	*	165.	.00	.000	18.	*
65.	.26	.229	675.	*	170.	.00	.000	13.	*
70.	.13	.098	611.	*	175.	.00	.000	10.	*
75.	.13	.098	540.	*	180.	.00	.000	8.	*
80.	.08	.046	470.	*	185.	.00	.000	6.	*
85.	.08	.046	406.	*	190.	.00	.000	5.	*
90.	.08	.046	350.	*	195.	.00	.000	4.	*
95.	.08	.046	305.	*	200.	.00	.000	3.	*
100.	.08	.046	267.	*	205.	.00	.000	2.	*

TOTAL PRECIP. = 7.63 (1-HOUR RAIN = 6.60) EXECESS PRECIP. = 6.481 INCHES
VOLUME OF EXCESS PRECIP = 77. ACRE-FEET
PEAK Q = 945. CFS TIME OF PEAK = 40. MIN.
INFILT.= .51 IN/HR DECAY = .00180 FNINF = .50 IN/HR
MAX.PERV.RET.= .35 IN. MAX.IMP.RET.= .07 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE AT TIME

CUHPE/PC VERSION MODIFIED IN JANUARY 1985

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

SOUTH CANYON-LIME CREEK DRAINAGE DESIGN PLAN BY FMG, INC

BASIN ID: -- BASIN COMMENT: BASIN 9 EXISTING CONDITIONS 500 YR

AREA OF BASIN (SQMI)	LENGTH OF BASIN (MI)	DIST TO CENTROID (MI)	IMPERVIOUS AREA (PCT)	SLOPE (FT/FT)	UNIT DURATION (MIN)

.15	.83	.47	36.50	.0232	5.00

COEFFICIENT (REFLECTING TIME TO PEAK)	COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF)
.095	.356

CALCULATED UNIT HYDROGRAPH

TIME TO PEAK (MIN)	PEAK RATE OF RUNOFF (CFS/SQMI)	UNIT HYDROGRAP PEAK (CFS)	VOLUME OF RUNOFF (AF)
11.44	1528.62	229.29	8.00

WIDTH AT 50 = 20. MIN. WIDTH AT 75 = 10. MIN. K50 = .35 K75 = .48

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. = .30 IN. MAX. IMPERVIOUS RET. = .07 IN.
INFILTRATION = .61 IN./HR. DECAY = .00180/SECOND FNINFL = .60 IN./HR.

TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH
0.	0.	30.	86.	60.	19.
5.	128.	35.	67.	65.	15.
10.	225.	40.	52.	70.	11.
15.	203.	45.	40.	75.	9.
20.	147.	50.	31.	80.	0.
25.	110.	55.	24.	0.	0.

1 BASIN ID: -- BASIN COMMENT: BASIN 9 EXISTING CONDITIONS 500 YR

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 500

TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)	TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)
0.	.00	.000	0.	90.	.08	.046	187.
5.	.07	.000	0.	95.	.08	.046	154.
10.	.20	.067	9.	100.	.08	.046	126.
15.	.30	.179	38.	105.	.08	.046	99.
20.	.53	.487	116.	110.	.08	.046	83.
25.	.92	.875	268.	115.	.08	.046	74.
30.	1.65	1.588	533.	120.	.08	.046	67.
35.	.92	.875	744.	125.	.00	.000	56.
40.	.53	.487	784.	130.	.00	.000	43.

45.	.41	.370	722.	*	135.	.00	.000	31.	*
50.	.33	.292	643.	*	140.	.00	.000	22.	*
55.	.26	.227	567.	*	145.	.00	.000	17.	*
60.	.26	.227	501.	*	150.	.00	.000	12.	*
65.	.26	.227	449.	*	155.	.00	.000	9.	*
70.	.13	.098	393.	*	160.	.00	.000	7.	*
75.	.13	.098	333.	*	165.	.00	.000	5.	*
80.	.08	.046	277.	*	170.	.00	.000	4.	*
85.	.08	.046	227.	*	175.	.00	.000	2.	*

TOTAL PRECIP. = 7.63 (1-HOUR RAIN = 6.60) EXECESS PRECIP. = 6.513 INCHES
VOLUME OF EXCESS PRECIP = 52. ACRE-FEET
PEAK Q = 784. CFS TIME OF PEAK = 40. MIN.
INFILT.= .61 IN/HR DECAY = .00180 FNINF = .60 IN/HR
MAX.PERV.RET.= .30 IN. MAX.IMP.RET.= .07 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE AT TIME

CUHPE/PC VERSION MODIFIED IN JANUARY 1985

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

SOUTH CANYON-LIME CREEK DRAINAGE DESIGN PLAN BY FMG, INC

BASIN ID: -- BASIN COMMENT: BASIN 10 EXISTING CONDITIONS 500 YR

AREA OF BASIN (SQMI)	LENGTH OF BASIN (MI)	DIST TO CENTROID (MI)	IMPERVIOUS AREA (PCT)	SLOPE (FT/FT)	UNIT DURATION (MIN)
.63	1.70	.78	5.00	.0476	5.00

COEFFICIENT (REFLECTING TIME TO PEAK)	COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF)
.144	.291

CALCULATED UNIT HYDROGRAPH

TIME TO PEAK (MIN)	PEAK RATE OF RUNOFF (CFS/SQMI)	UNIT HYDROGRAP PEAK (CFS)	VOLUME OF RUNOFF (AF)
23.11	542.74	341.93	33.60

WIDTH AT 50 = 55. MIN. WIDTH AT 75 = 29. MIN. K50 = .25 K75 = .34

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. = .40 IN. MAX. IMPERVIOUS RET. = .08 IN.
INFILTRATION = .61 IN./HR. DECAY = .00180/SECOND FNINFL = .60 IN./HR.

TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH
0.	0.	85.	119.	170.	27.
5.	69.	90.	109.	175.	25.
10.	189.	95.	100.	180.	22.
15.	286.	100.	92.	185.	21.
20.	335.	105.	84.	190.	19.
25.	340.	110.	77.	195.	17.
30.	318.	115.	70.	200.	16.
35.	286.	120.	64.	205.	14.
40.	261.	125.	59.	210.	13.
45.	245.	130.	54.	215.	12.
50.	226.	135.	50.	220.	11.
55.	207.	140.	45.	225.	10.
60.	188.	145.	42.	230.	9.
65.	170.	150.	38.	235.	9.
70.	155.	155.	35.	240.	8.
75.	142.	160.	32.	245.	0.
80.	130.	165.	29.	0.	0.

1 BASIN ID: -- BASIN COMMENT: BASIN 10 EXISTING CONDITIONS 500 YR

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 500

TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)	TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)
0.	.00	.000	0.	170.	.00	.000	319.
5.	.07	.000	0.	175.	.00	.000	292.
10.	.20	.009	1.	180.	.00	.000	267.
15.	.30	.030	4.	185.	.00	.000	245.
20.	.53	.479	41.	190.	.00	.000	224.
25.	.92	.874	162.	195.	.00	.000	205.
30.	1.65	1.598	425.	200.	.00	.000	188.
35.	.92	.874	786.	205.	.00	.000	172.
40.	.53	.479	1123.	210.	.00	.000	158.
45.	.41	.361	1360.	215.	.00	.000	145.
50.	.33	.282	1485.	220.	.00	.000	132.
55.	.26	.216	1520.	225.	.00	.000	121.
60.	.26	.216	1508.	230.	.00	.000	111.
65.	.26	.216	1483.	235.	.00	.000	102.
70.	.13	.084	1452.	240.	.00	.000	93.
75.	.13	.084	1400.	245.	.00	.000	85.
80.	.08	.032	1329.	250.	.00	.000	78.
85.	.08	.032	1244.	255.	.00	.000	71.
90.	.08	.032	1155.	260.	.00	.000	62.
95.	.08	.032	1070.	265.	.00	.000	50.
100.	.08	.032	993.	270.	.00	.000	35.
105.	.08	.032	922.	275.	.00	.000	26.

110.	.08	.032	857.	*	280.	.00	.000	20.	*
115.	.08	.032	798.	*	285.	.00	.000	16.	*
120.	.08	.032	743.	*	290.	.00	.000	12.	*
125.	.00	.000	691.	*	295.	.00	.000	10.	*
130.	.00	.000	640.	*	300.	.00	.000	7.	*
135.	.00	.000	589.	*	305.	.00	.000	5.	*
140.	.00	.000	541.	*	310.	.00	.000	4.	*
145.	.00	.000	495.	*	315.	.00	.000	3.	*
150.	.00	.000	454.	*	320.	.00	.000	3.	*
155.	.00	.000	416.	*	325.	.00	.000	2.	*
160.	.00	.000	381.	*	330.	.00	.000	2.	*
165.	.00	.000	349.	*	335.	.00	.000	1.	*

TOTAL PRECIP. = 7.63 (1-HOUR RAIN = 6.60) EXECESS PRECIP. = 6.085 INCHES
VOLUME OF EXCESS PRECIP = 204. ACRE-FEET
PEAK Q = 1520. CFS TIME OF PEAK = 55. MIN.
INFILT.= .61 IN/HR DECAY = .00180 FNINF = .60 IN/HR
MAX.PERV.RET.= .40 IN. MAX.IMP.RET.= .08 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE AT TIME

CUHPE/PC VERSION MODIFIED IN JANUARY 1985

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

SOUTH CANYON-LIME CREEK DRAINAGE DESIGN PLAN BY FMG, INC

BASIN ID: -- BASIN COMMENT: BASIN 11 EXISTING CONDITIONS 500 YR

AREA OF BASIN (SQMI)	LENGTH OF BASIN (MI)	DIST TO CENTROID (MI)	IMPERVIOUS AREA (PCT)	SLOPE (FT/FT)	UNIT DURATION (MIN)
.44	1.95	1.06	3.50	.0292	5.00

COEFFICIENT (REFLECTING TIME TO PEAK)	COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF)
.150	.285

CALCULATED UNIT HYDROGRAPH

TIME TO PEAK (MIN)	PEAK RATE OF RUNOFF (CFS/SQMI)	UNIT HYDROGRAP PEAK (CFS)	VOLUME OF RUNOFF (AF)
32.28	367.21	161.21	23.41

WIDTH AT 50 = 82. MIN. WIDTH AT 75 = 42. MIN. K50 = .24 K75 = .32

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. = .40 IN. MAX. IMPERVIOUS RET. = .08 IN.
INFILTRATION = .61 IN./HR. DECAY = .00180/SECOND FNINFL = .60 IN./HR.

TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH
0.	0.	105.	72.	210.	22.
5.	19.	110.	68.	215.	21.
10.	56.	115.	64.	220.	20.
15.	97.	120.	61.	225.	19.
20.	130.	125.	57.	230.	18.
25.	151.	130.	54.	235.	17.
30.	160.	135.	51.	240.	16.
35.	160.	140.	49.	245.	15.
40.	153.	145.	46.	250.	14.
45.	143.	150.	44.	255.	14.
50.	132.	155.	41.	260.	13.
55.	124.	160.	39.	265.	12.
60.	121.	165.	37.	270.	11.
65.	116.	170.	35.	275.	11.
70.	110.	175.	33.	280.	10.
75.	104.	180.	31.	285.	10.
80.	98.	185.	29.	290.	9.
85.	92.	190.	28.	295.	9.
90.	86.	195.	26.	300.	8.
95.	80.	200.	25.	305.	8.
100.	76.	205.	24.	310.	0.

1 BASIN ID: -- BASIN COMMENT: BASIN 11 EXISTING CONDITIONS 500 YR

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 500

TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)	TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)
0.	.00	.000	0.	200.	.00	.000	227.
5.	.07	.000	0.	205.	.00	.000	215.
10.	.20	.006	0.	210.	.00	.000	203.
15.	.30	.026	1.	215.	.00	.000	192.
20.	.53	.479	11.	220.	.00	.000	182.
25.	.92	.874	47.	225.	.00	.000	172.
30.	1.65	1.599	130.	230.	.00	.000	163.
35.	.92	.874	258.	235.	.00	.000	154.
40.	.53	.479	404.	240.	.00	.000	146.
45.	.41	.360	540.	245.	.00	.000	138.
50.	.33	.281	649.	250.	.00	.000	130.
55.	.26	.215	723.	255.	.00	.000	123.
60.	.26	.215	765.	260.	.00	.000	117.
65.	.26	.215	782.	265.	.00	.000	110.
70.	.13	.084	781.	270.	.00	.000	104.

75.	.13	.084	770.	*	275.	.00	.000	99.	*
80.	.08	.031	755.	*	280.	.00	.000	93.	*
85.	.08	.031	740.	*	285.	.00	.000	88.	*
90.	.08	.031	718.	*	290.	.00	.000	83.	*
95.	.08	.031	692.	*	295.	.00	.000	79.	*
100.	.08	.031	662.	*	300.	.00	.000	75.	*
105.	.08	.031	632.	*	305.	.00	.000	71.	*
110.	.08	.031	601.	*	310.	.00	.000	67.	*
115.	.08	.031	572.	*	315.	.00	.000	63.	*
120.	.08	.031	544.	*	320.	.00	.000	60.	*
125.	.00	.000	519.	*	325.	.00	.000	53.	*
130.	.00	.000	494.	*	330.	.00	.000	44.	*
135.	.00	.000	469.	*	335.	.00	.000	29.	*
140.	.00	.000	445.	*	340.	.00	.000	21.	*
145.	.00	.000	421.	*	345.	.00	.000	17.	*
150.	.00	.000	398.	*	350.	.00	.000	13.	*
155.	.00	.000	376.	*	355.	.00	.000	10.	*
160.	.00	.000	355.	*	360.	.00	.000	8.	*
165.	.00	.000	336.	*	365.	.00	.000	6.	*
170.	.00	.000	318.	*	370.	.00	.000	4.	*
175.	.00	.000	301.	*	375.	.00	.000	4.	*
180.	.00	.000	285.	*	380.	.00	.000	3.	*
185.	.00	.000	269.	*	385.	.00	.000	2.	*
190.	.00	.000	254.	*	390.	.00	.000	2.	*
195.	.00	.000	240.	*	395.	.00	.000	2.	*

TOTAL PRECIP. = 7.63 (1-HOUR RAIN = 6.60) EXECESS PRECIP. = 6.068 INCHES
VOLUME OF EXCESS PRECIP = 142. ACRE-FEET
PEAK Q = 782. CFS TIME OF PEAK = 65. MIN.
INFILT.= .61 IN/HR DECAY = .00180 FNINF = .60 IN/HR
MAX.PERV.RET.= .40 IN. MAX.IMP.RET.= .08 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE AT TIME

CUHPE/PC VERSION MODIFIED IN JANUARY 1985

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

SOUTH CANYON-LIME CREEK DRAINAGE DESIGN PLAN BY FMG, INC

BASIN ID: -- BASIN COMMENT: BASIN 12 EXISTING CONDITIONS 500 YR

AREA OF BASIN (SQMI)	LENGTH OF BASIN (MI)	DIST TO CENTROID (MI)	IMPERVIOUS AREA (PCT)	SLOPE (FT/FT)	UNIT DURATION (MIN)
.05	.57	.32	3.00	.0451	5.00

COEFFICIENT (REFLECTING TIME TO PEAK)	COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF)
.152	.206

CALCULATED UNIT HYDROGRAPH

TIME TO PEAK (MIN)	TIME OF CONCENTRATION (MIN)	PEAK RATE OF RUNOFF (CFS/SQMI)	UNIT HYDROGRAPH PEAK (CFS)	VOLUME OF RUNOFF (AF)
4.88	13.00	3322.69	156.17	2.51

*** NOTE : THE TIME TO PEAK IS CALCULATED BASED ON THE TIME OF CONCENTRATION PROVIDED BY THE USER, REPLACING THE ONE COMPUTED BY CUHPD (TP= 10.97)

WIDTH AT 50 = 9. MIN. WIDTH AT 75 = 5. MIN. K50 = .32 K75 = .44

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. = .35 IN. MAX. IMPERVIOUS RET. = .10 IN.
INFILTRATION = .61 IN./HR. DECAY = .00180/SECOND FNINFL = .60 IN./HR.

TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH
0.	0.	15.	52.	30.	11.
5.	156.	20.	31.	35.	0.
10.	89.	25.	19.	0.	0.

1 BASIN ID: -- BASIN COMMENT: BASIN 12 EXISTING CONDITIONS 500 YR

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 500

TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)	TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)
0.	.00	.000	0.	70.	.13	.083	59.
5.	.07	.000	0.	75.	.13	.083	45.
10.	.20	.005	1.	80.	.08	.031	30.
15.	.30	.073	12.	85.	.08	.031	21.
20.	.53	.479	81.	90.	.08	.031	16.
25.	.92	.874	183.	95.	.08	.031	12.
30.	1.65	1.599	355.	100.	.08	.031	12.
35.	.92	.874	340.	105.	.08	.031	11.
40.	.53	.479	272.	110.	.08	.031	11.
45.	.41	.360	215.	115.	.08	.031	11.
50.	.33	.281	167.	120.	.08	.031	11.
55.	.26	.215	126.	125.	.00	.000	6.
60.	.26	.215	97.	130.	.00	.000	3.
65.	.26	.215	85.	135.	.00	.000	2.

TOTAL PRECIP. = 7.63 (1-HOUR RAIN = 6.60) EXECESS PRECIP. = 6.110 INCHES
VOLUME OF EXCESS PRECIP = 15. ACRE-FEET
PEAK Q = 355. CFS TIME OF PEAK = 30. MIN.
INFILT.= .61 IN/HR DECAY = .00180 FNINF = .60 IN/HR
MAX.PERV.RET.= .35 IN. MAX.IMP.RET.= .10 IN.

RATIONAL FORMULA C = .80
I = 16.0 INCHES/HOUR
A = 30.1 ACRES
Q = 385. CFS

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE AT TIME

CUHPE/PC VERSION MODIFIED IN JANUARY 1985

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

SOUTH CANYON-LIME CREEK DRAINAGE DESIGN PLAN BY FMG, INC

BASIN ID: -- BASIN COMMENT: BASIN 13 EXISTING CONDITIONS 500 YR

AREA OF BASIN (SQMI)	LENGTH OF BASIN (MI)	DIST TO CENTROID (MI)	IMPERVIOUS AREA (PCT)	SLOPE (FT/FT)	UNIT DURATION (MIN)
.24	.74	.38	1.00	.0510	5.00

COEFFICIENT (REFLECTING TIME TO PEAK)	COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF)
.159	.277

CALCULATED UNIT HYDROGRAPH

TIME TO PEAK (MIN)	PEAK RATE OF RUNOFF (CFS/SQMI)	UNIT HYDROGRAP PEAK (CFS)	VOLUME OF RUNOFF (AF)
13.12	1001.94	243.47	12.96

WIDTH AT 50 = 30. MIN. WIDTH AT 75 = 16. MIN. K50 = .26 K75 = .36

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. = .40 IN. MAX. IMPERVIOUS RET. = .10 IN.
INFILTRATION = .61 IN./HR. DECAY = .00180/SECOND FNINFL = .60 IN./HR.

TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH

0.	0.	*	45.	89.	*	90.	21.	*
5.	114.	*	50.	76.	*	95.	18.	*
10.	226.	*	55.	64.	*	100.	15.	*
15.	239.	*	60.	55.	*	105.	13.	*
20.	202.	*	65.	47.	*	110.	11.	*
25.	173.	*	70.	40.	*	115.	9.	*
30.	148.	*	75.	34.	*	120.	8.	*
35.	123.	*	80.	29.	*	125.	0.	*
40.	104.	*	85.	25.	*	0.	0.	*

1 BASIN ID: -- BASIN COMMENT: BASIN 13 EXISTING CONDITIONS 500 YR

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 500

TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)	*	TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)	*
0.	.00	.000	0.	*	110.	.08	.030	230.	*
5.	.07	.000	0.	*	115.	.08	.030	204.	*
10.	.20	.002	0.	*	120.	.08	.030	182.	*
15.	.30	.019	3.	*	125.	.00	.000	160.	*
20.	.53	.478	59.	*	130.	.00	.000	138.	*
25.	.92	.874	213.	*	135.	.00	.000	117.	*
30.	1.65	1.600	499.	*	140.	.00	.000	96.	*
35.	.92	.874	771.	*	145.	.00	.000	76.	*
40.	.53	.478	897.	*	150.	.00	.000	54.	*
45.	.41	.359	905.	*	155.	.00	.000	40.	*
50.	.33	.280	871.	*	160.	.00	.000	31.	*
55.	.26	.214	817.	*	165.	.00	.000	24.	*
60.	.26	.214	756.	*	170.	.00	.000	18.	*
65.	.26	.214	703.	*	175.	.00	.000	14.	*
70.	.13	.082	644.	*	180.	.00	.000	11.	*
75.	.13	.082	577.	*	185.	.00	.000	8.	*
80.	.08	.030	509.	*	190.	.00	.000	6.	*
85.	.08	.030	444.	*	195.	.00	.000	4.	*
90.	.08	.030	386.	*	200.	.00	.000	4.	*
95.	.08	.030	337.	*	205.	.00	.000	3.	*
100.	.08	.030	295.	*	210.	.00	.000	2.	*
105.	.08	.030	260.	*	215.	.00	.000	2.	*

TOTAL PRECIP. = 7.63 (1-HOUR RAIN = 6.60) EXECESS PRECIP. = 6.039 INCHES
VOLUME OF EXCESS PRECIP = 78. ACRE-FEET
PEAK Q = 905. CFS TIME OF PEAK = 45. MIN.
INFILT.= .61 IN/HR DECAY = .00180 FNINF = .60 IN/HR
MAX.PERV.RET.= .40 IN. MAX.IMP.RET.= .10 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE AT TIME

CUHPE/PC VERSION MODIFIED IN JANUARY 1985

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

SOUTH CANYON-LIME CREEK DRAINAGE DESIGN PLAN BY FMG, INC

BASIN ID: -- BASIN COMMENT: BASIN 14 EXISTING CONDITIONS 500 YR

AREA OF BASIN (SQMI)	LENGTH OF BASIN (MI)	DIST TO CENTROID (MI)	IMPERVIOUS AREA (PCT)	SLOPE (FT/FT)	UNIT DURATION (MIN)
.44	1.33	.72	1.00	.0504	5.00

COEFFICIENT (REFLECTING TIME TO PEAK)	COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF)
.159	.303

CALCULATED UNIT HYDROGRAPH

TIME TO PEAK (MIN)	PEAK RATE OF RUNOFF (CFS/SQMI)	UNIT HYDROGRAP PEAK (CFS)	VOLUME OF RUNOFF (AF)
21.67	606.31	266.17	23.41

WIDTH AT 50 = 49. MIN. WIDTH AT 75 = 26. MIN. K50 = .26 K75 = .36

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. = .40 IN. MAX. IMPERVIOUS RET. = .10 IN.
INFILTRATION = .61 IN./HR. DECAY = .00180/SECOND FNINFL = .60 IN./HR.

TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH
0.	0.	75.	96.	150.	22.
5.	59.	80.	87.	155.	20.
10.	159.	85.	79.	160.	18.
15.	233.	90.	72.	165.	17.
20.	264.	95.	65.	170.	15.
25.	260.	100.	59.	175.	14.
30.	237.	105.	53.	180.	12.
35.	211.	110.	48.	185.	11.
40.	194.	115.	44.	190.	10.
45.	177.	120.	40.	195.	9.
50.	160.	125.	36.	200.	8.
55.	144.	130.	33.	205.	8.
60.	128.	135.	30.	210.	0.
65.	116.	140.	27.	0.	0.
70.	106.	145.	25.	0.	0.

1 BASIN ID: -- BASIN COMMENT: BASIN 14 EXISTING CONDITIONS 500 YR

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 500

TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)	*	TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)	*
0.	.00	.000	0.	*	150.	.00	.000	285.	*
5.	.07	.000	0.	*	155.	.00	.000	258.	*
10.	.20	.002	0.	*	160.	.00	.000	234.	*
15.	.30	.019	1.	*	165.	.00	.000	212.	*
20.	.53	.478	32.	*	170.	.00	.000	193.	*
25.	.92	.874	133.	*	175.	.00	.000	175.	*
30.	1.65	1.600	351.	*	180.	.00	.000	158.	*
35.	.92	.874	642.	*	185.	.00	.000	144.	*
40.	.53	.478	901.	*	190.	.00	.000	130.	*
45.	.41	.359	1070.	*	195.	.00	.000	118.	*
50.	.33	.280	1145.	*	200.	.00	.000	107.	*
55.	.26	.214	1155.	*	205.	.00	.000	97.	*
60.	.26	.214	1134.	*	210.	.00	.000	88.	*
65.	.26	.214	1106.	*	215.	.00	.000	80.	*
70.	.13	.082	1069.	*	220.	.00	.000	73.	*
75.	.13	.082	1016.	*	225.	.00	.000	62.	*
80.	.08	.030	951.	*	230.	.00	.000	51.	*
85.	.08	.030	879.	*	235.	.00	.000	35.	*
90.	.08	.030	809.	*	240.	.00	.000	26.	*
95.	.08	.030	743.	*	245.	.00	.000	20.	*
100.	.08	.030	683.	*	250.	.00	.000	16.	*
105.	.08	.030	628.	*	255.	.00	.000	12.	*
110.	.08	.030	579.	*	260.	.00	.000	10.	*
115.	.08	.030	534.	*	265.	.00	.000	7.	*
120.	.08	.030	494.	*	270.	.00	.000	5.	*
125.	.00	.000	455.	*	275.	.00	.000	4.	*
130.	.00	.000	418.	*	280.	.00	.000	3.	*
135.	.00	.000	381.	*	285.	.00	.000	3.	*
140.	.00	.000	346.	*	290.	.00	.000	2.	*
145.	.00	.000	314.	*	295.	.00	.000	2.	*

TOTAL PRECIP. = 7.63 (1-HOUR RAIN = 6.60) EXECESS PRECIP. = 6.039 INCHES
VOLUME OF EXCESS PRECIP = 141. ACRE-FEET
PEAK Q = 1155. CFS TIME OF PEAK = 55. MIN.
INFILT.= .61 IN/HR DECAY = .00180 FNINF = .60 IN/HR
MAX.PERV.RET.= .40 IN. MAX.IMP.RET.= .10 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE AT TIME

CUHPE/PC VERSION MODIFIED IN JANUARY 1985

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

SOUTH CANYON-LIME CREEK DRAINAGE DESIGN PLAN BY FMG, INC

BASIN ID: -- BASIN COMMENT: BASIN 15 EXISTING CONDITIONS 500 YR

AREA OF BASIN (SQMI)	LENGTH OF BASIN (MI)	DIST TO CENTROID (MI)	IMPERVIOUS AREA (PCT)	SLOPE (FT/FT)	UNIT DURATION (MIN)
.65	2.22	1.10	1.00	.0493	5.00

COEFFICIENT (REFLECTING TIME TO PEAK)	COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF)
.159	.321

CALCULATED UNIT HYDROGRAPH

TIME TO PEAK (MIN)	PEAK RATE OF RUNOFF (CFS/SQMI)	UNIT HYDROGRAP PEAK (CFS)	VOLUME OF RUNOFF (AF)
32.71	407.86	263.88	34.51

WIDTH AT 50 = 74. MIN. WIDTH AT 75 = 38. MIN. K50 = .27 K75 = .36

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. = .40 IN. MAX. IMPERVIOUS RET. = .10 IN.
INFILTRATION = .61 IN./HR. DECAY = .00180/SECOND FNINFL = .60 IN./HR.

TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH
0.	0.	105.	104.	210.	26.
5.	31.	110.	97.	215.	24.
10.	90.	115.	91.	220.	23.
15.	157.	120.	85.	225.	21.
20.	210.	125.	80.	230.	20.
25.	246.	130.	75.	235.	19.
30.	262.	135.	70.	240.	18.
35.	263.	140.	65.	245.	16.
40.	252.	145.	61.	250.	15.
45.	236.	150.	57.	255.	14.
50.	218.	155.	54.	260.	13.
55.	202.	160.	50.	265.	13.
60.	191.	165.	47.	270.	12.
65.	180.	170.	44.	275.	11.
70.	169.	175.	41.	280.	10.
75.	158.	180.	39.	285.	10.
80.	147.	185.	36.	290.	9.
85.	136.	190.	34.	295.	8.
90.	126.	195.	32.	300.	8.
95.	118.	200.	30.	305.	7.

100. 111. * 205. 28. * 310. 0. *

1 BASIN ID: -- BASIN COMMENT: BASIN 15 EXISTING CONDITIONS 500 YR

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 500

TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)	*	TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)	*
0.	.00	.000	0.	*	200.	.00	.000	291.	*
5.	.07	.000	0.	*	205.	.00	.000	272.	*
10.	.20	.002	0.	*	210.	.00	.000	255.	*
15.	.30	.019	1.	*	215.	.00	.000	239.	*
20.	.53	.478	17.	*	220.	.00	.000	224.	*
25.	.92	.874	73.	*	225.	.00	.000	209.	*
30.	1.65	1.600	207.	*	230.	.00	.000	196.	*
35.	.92	.874	413.	*	235.	.00	.000	184.	*
40.	.53	.478	650.	*	240.	.00	.000	172.	*
45.	.41	.359	872.	*	245.	.00	.000	161.	*
50.	.33	.280	1052.	*	250.	.00	.000	151.	*
55.	.26	.214	1177.	*	255.	.00	.000	141.	*
60.	.26	.214	1250.	*	260.	.00	.000	132.	*
65.	.26	.214	1280.	*	265.	.00	.000	124.	*
70.	.13	.082	1278.	*	270.	.00	.000	116.	*
75.	.13	.082	1257.	*	275.	.00	.000	108.	*
80.	.08	.030	1223.	*	280.	.00	.000	101.	*
85.	.08	.030	1183.	*	285.	.00	.000	95.	*
90.	.08	.030	1136.	*	290.	.00	.000	89.	*
95.	.08	.030	1082.	*	295.	.00	.000	83.	*
100.	.08	.030	1024.	*	300.	.00	.000	78.	*
105.	.08	.030	966.	*	305.	.00	.000	73.	*
110.	.08	.030	910.	*	310.	.00	.000	68.	*
115.	.08	.030	858.	*	315.	.00	.000	64.	*
120.	.08	.030	812.	*	320.	.00	.000	60.	*
125.	.00	.000	768.	*	325.	.00	.000	53.	*
130.	.00	.000	725.	*	330.	.00	.000	43.	*
135.	.00	.000	683.	*	335.	.00	.000	29.	*
140.	.00	.000	642.	*	340.	.00	.000	21.	*
145.	.00	.000	602.	*	345.	.00	.000	17.	*
150.	.00	.000	564.	*	350.	.00	.000	13.	*
155.	.00	.000	528.	*	355.	.00	.000	10.	*
160.	.00	.000	494.	*	360.	.00	.000	8.	*
165.	.00	.000	462.	*	365.	.00	.000	6.	*
170.	.00	.000	433.	*	370.	.00	.000	4.	*
175.	.00	.000	405.	*	375.	.00	.000	3.	*
180.	.00	.000	379.	*	380.	.00	.000	3.	*
185.	.00	.000	355.	*	385.	.00	.000	2.	*
190.	.00	.000	332.	*	390.	.00	.000	2.	*
195.	.00	.000	311.	*	395.	.00	.000	2.	*

TOTAL PRECIP. = 7.63 (1-HOUR RAIN = 6.60) EXECESS PRECIP. = 6.039 INCHES
VOLUME OF EXCESS PRECIP = 208. ACRE-FEET
PEAK Q = 1280. CFS TIME OF PEAK = 65. MIN.
INFILT.= .61 IN/HR DECAY = .00180 FNINF = .60 IN/HR
MAX.PERV.RET.= .40 IN. MAX.IMP.RET.= .10 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE AT TIME

CUHPE/PC VERSION MODIFIED IN JANUARY 1985

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

SOUTH CANYON-LIME CREEK DRAINAGE DESIGN PLAN BY FMG, INC

BASIN ID: -- BASIN COMMENT: BASIN 16 EXISTING CONDITIONS 500 YR

AREA OF BASIN (SQMI)	LENGTH OF BASIN (MI)	DIST TO CENTROID (MI)	IMPERVIOUS AREA (PCT)	SLOPE (FT/FT)	UNIT DURATION (MIN)
.29	.87	.53	1.00	.0520	5.00

COEFFICIENT (REFLECTING TIME TO PEAK)	COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF)
.159	.285

CALCULATED UNIT HYDROGRAPH

TIME TO PEAK (MIN)	PEAK RATE OF RUNOFF (CFS/SQMI)	UNIT HYDROGRAP PEAK (CFS)	VOLUME OF RUNOFF (AF)
15.91	815.22	237.23	15.52

WIDTH AT 50 = 37. MIN. WIDTH AT 75 = 19. MIN. K50 = .26 K75 = .35

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. = .40 IN. MAX. IMPERVIOUS RET. = .10 IN.
INFILTRATION = .61 IN./HR. DECAY = .00180/SECOND FNINFL = .60 IN./HR.

TIME	UNIT HYDROGRAPH	*	TIME	UNIT HYDROGRAPH	*	TIME	UNIT HYDROGRAPH	*
0.	0.	*	55.	87.	*	110.	21.	*
5.	85.	*	60.	77.	*	115.	18.	*
10.	193.	*	65.	67.	*	120.	16.	*
15.	236.	*	70.	59.	*	125.	14.	*
20.	224.	*	75.	52.	*	130.	12.	*
25.	192.	*	80.	46.	*	135.	11.	*
30.	171.	*	85.	40.	*	140.	10.	*

35.	151.	*	90.	35.	*	145.	8.	*
40.	131.	*	95.	31.	*	150.	7.	*
45.	113.	*	100.	27.	*	155.	0.	*
50.	99.	*	105.	24.	*	0.	0.	*

1 BASIN ID: -- BASIN COMMENT: BASIN 16 EXISTING CONDITIONS 500 YR

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 500

TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)	*	TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)	*
0.	.00	.000	0.	*	125.	.00	.000	242.	*
5.	.07	.000	0.	*	130.	.00	.000	215.	*
10.	.20	.002	0.	*	135.	.00	.000	189.	*
15.	.30	.019	2.	*	140.	.00	.000	166.	*
20.	.53	.478	44.	*	145.	.00	.000	146.	*
25.	.92	.874	171.	*	150.	.00	.000	128.	*
30.	1.65	1.600	422.	*	155.	.00	.000	112.	*
35.	.92	.874	701.	*	160.	.00	.000	98.	*
40.	.53	.478	879.	*	165.	.00	.000	86.	*
45.	.41	.359	941.	*	170.	.00	.000	73.	*
50.	.33	.280	934.	*	175.	.00	.000	58.	*
55.	.26	.214	903.	*	180.	.00	.000	41.	*
60.	.26	.214	860.	*	185.	.00	.000	30.	*
65.	.26	.214	814.	*	190.	.00	.000	23.	*
70.	.13	.082	760.	*	195.	.00	.000	18.	*
75.	.13	.082	700.	*	200.	.00	.000	14.	*
80.	.08	.030	634.	*	205.	.00	.000	11.	*
85.	.08	.030	568.	*	210.	.00	.000	8.	*
90.	.08	.030	508.	*	215.	.00	.000	6.	*
95.	.08	.030	454.	*	220.	.00	.000	5.	*
100.	.08	.030	406.	*	225.	.00	.000	4.	*
105.	.08	.030	365.	*	230.	.00	.000	3.	*
110.	.08	.030	328.	*	235.	.00	.000	2.	*
115.	.08	.030	297.	*	240.	.00	.000	2.	*
120.	.08	.030	269.	*	245.	.00	.000	1.	*

TOTAL PRECIP. = 7.63 (1-HOUR RAIN = 6.60) EXECESS PRECIP. = 6.039 INCHES
VOLUME OF EXCESS PRECIP = 94. ACRE-FEET
PEAK Q = 941. CFS TIME OF PEAK = 45. MIN.
INFILT.= .61 IN/HR DECAY = .00180 FNINF = .60 IN/HR
MAX.PERV.RET.= .40 IN. MAX.IMP.RET.= .10 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE AT TIME

CUHPE/PC VERSION MODIFIED IN JANUARY 1985

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

SOUTH CANYON-LIME CREEK DRAINAGE DESIGN PLAN BY FMG, INC

BASIN ID: -- BASIN COMMENT: BASIN 17 EXISTING CONDITIONS 500 YR

AREA OF BASIN (SQMI)	LENGTH OF BASIN (MI)	DIST TO CENTROID (MI)	IMPERVIOUS AREA (PCT)	SLOPE (FT/FT)	UNIT DURATION (MIN)
.32	.83	.38	1.00	.0292	5.00

COEFFICIENT (REFLECTING TIME TO PEAK)	COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF)
.159	.289

CALCULATED UNIT HYDROGRAPH

TIME TO PEAK (MIN)	PEAK RATE OF RUNOFF (CFS/SQMI)	UNIT HYDROGRAP PEAK (CFS)	VOLUME OF RUNOFF (AF)
15.33	866.02	281.46	17.33

WIDTH AT 50 = 35. MIN. WIDTH AT 75 = 18. MIN. K50 = .27 K75 = .36

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. = .40 IN. MAX. IMPERVIOUS RET. = .10 IN.
INFILTRATION = .61 IN./HR. DECAY = .00180/SECOND FNINFL = .60 IN./HR.

TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH
0.	0.	55.	95.	110.	20.
5.	106.	60.	82.	115.	18.
10.	236.	65.	71.	120.	15.
15.	281.	70.	62.	125.	13.
20.	261.	75.	54.	130.	12.
25.	221.	80.	47.	135.	10.
30.	195.	85.	41.	140.	9.
35.	170.	90.	36.	145.	8.
40.	145.	95.	31.	150.	0.
45.	125.	100.	27.	0.	0.
50.	109.	105.	23.	0.	0.

1 BASIN ID: -- BASIN COMMENT: BASIN 17 EXISTING CONDITIONS 500 YR

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 500

TIME	INCREMENT RAINFALL	TOTAL EXCESS	STORM HYDROGRAPH	TIME	INCREMENT RAINFALL	TOTAL EXCESS	STORM HYDROGRAPH

(MIN.)	(IN)	PRECIP	(CFS)	*	(MIN.)	(IN)	PRECIP	(CFS)	*
				*					*
				*					*
0.	.00	.000	0.	*	120.	.08	.030	282.	*
5.	.07	.000	0.	*	125.	.00	.000	252.	*
10.	.20	.002	0.	*	130.	.00	.000	221.	*
15.	.30	.019	2.	*	135.	.00	.000	193.	*
20.	.53	.478	56.	*	140.	.00	.000	167.	*
25.	.92	.874	211.	*	145.	.00	.000	146.	*
30.	1.65	1.600	516.	*	150.	.00	.000	126.	*
35.	.92	.874	845.	*	155.	.00	.000	110.	*
40.	.53	.478	1044.	*	160.	.00	.000	95.	*
45.	.41	.359	1104.	*	165.	.00	.000	80.	*
50.	.33	.280	1085.	*	170.	.00	.000	64.	*
55.	.26	.214	1040.	*	175.	.00	.000	45.	*
60.	.26	.214	982.	*	180.	.00	.000	33.	*
65.	.26	.214	922.	*	185.	.00	.000	26.	*
70.	.13	.082	857.	*	190.	.00	.000	20.	*
75.	.13	.082	783.	*	195.	.00	.000	15.	*
80.	.08	.030	704.	*	200.	.00	.000	12.	*
85.	.08	.030	625.	*	205.	.00	.000	9.	*
90.	.08	.030	554.	*	210.	.00	.000	6.	*
95.	.08	.030	491.	*	215.	.00	.000	5.	*
100.	.08	.030	436.	*	220.	.00	.000	4.	*
105.	.08	.030	389.	*	225.	.00	.000	3.	*
110.	.08	.030	348.	*	230.	.00	.000	3.	*
115.	.08	.030	312.	*	235.	.00	.000	2.	*

TOTAL PRECIP. = 7.63 (1-HOUR RAIN = 6.60) EXECESS PRECIP. = 6.039 INCHES
VOLUME OF EXCESS PRECIP = 105. ACRE-FEET
PEAK Q = 1104. CFS TIME OF PEAK = 45. MIN.
INFILT.= .61 IN/HR DECAY = .00180 FNINF = .60 IN/HR
MAX.PERV.RET.= .40 IN. MAX.IMP.RET.= .10 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE AT TIME

CUHPE/PC VERSION MODIFIED IN JANUARY 1985

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

SOUTH CANYON-LIME CREEK DRAINAGE DESIGN PLAN BY FMG, INC

BASIN ID: -- BASIN COMMENT: BASIN 18 EXISTING CONDITIONS 500 YR

AREA OF BASIN (SQMI)	LENGTH OF BASIN (MI)	DIST TO CENTROID (MI)	IMPERVIOUS AREA (PCT)	SLOPE (FT/FT)	UNIT DURATION (MIN)
.56	1.29	.64	1.50	.0428	5.00

COEFFICIENT (REFLECTING TIME TO PEAK)	COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF)
.157	.310

CALCULATED UNIT HYDROGRAPH

TIME TO PEAK (MIN)	PEAK RATE OF RUNOFF (CFS/SQMI)	UNIT HYDROGRAP PEAK (CFS)	VOLUME OF RUNOFF (AF)
20.90	646.94	362.29	29.87

WIDTH AT 50 = 46. MIN. WIDTH AT 75 = 24. MIN. K50 = .27 K75 = .37

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. = .30 IN. MAX. IMPERVIOUS RET. = .10 IN.
INFILTRATION = .61 IN./HR. DECAY = .00180/SECOND FNINFL = .60 IN./HR.

TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH
0.	0.	70.	131.	140.	29.
5.	85.	75.	118.	145.	26.
10.	226.	80.	106.	150.	24.
15.	325.	85.	95.	155.	21.
20.	362.	90.	85.	160.	19.
25.	350.	95.	77.	165.	17.
30.	314.	100.	69.	170.	15.
35.	278.	105.	62.	175.	14.
40.	253.	110.	56.	180.	12.
45.	229.	115.	50.	185.	11.
50.	204.	120.	45.	190.	10.
55.	180.	125.	40.	195.	9.
60.	162.	130.	36.	200.	8.
65.	145.	135.	33.	205.	0.

1 BASIN ID: -- BASIN COMMENT: BASIN 18 EXISTING CONDITIONS 500 YR

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 500

TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)	TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)
0.	.00	.000	0.	150.	.00	.000	333.
5.	.07	.000	0.	155.	.00	.000	299.
10.	.20	.002	0.	160.	.00	.000	269.
15.	.30	.119	11.	165.	.00	.000	242.
20.	.53	.478	69.	170.	.00	.000	217.
25.	.92	.874	222.	175.	.00	.000	195.
30.	1.65	1.599	534.	180.	.00	.000	175.

35.	.92	.874	936.	*	185.	.00	.000	158.	*
40.	.53	.478	1280.	*	190.	.00	.000	142.	*
45.	.41	.360	1491.	*	195.	.00	.000	127.	*
50.	.33	.280	1574.	*	200.	.00	.000	114.	*
55.	.26	.215	1571.	*	205.	.00	.000	103.	*
60.	.26	.215	1529.	*	210.	.00	.000	92.	*
65.	.26	.215	1480.	*	215.	.00	.000	82.	*
70.	.13	.083	1418.	*	220.	.00	.000	70.	*
75.	.13	.083	1336.	*	225.	.00	.000	57.	*
80.	.08	.030	1240.	*	230.	.00	.000	39.	*
85.	.08	.030	1139.	*	235.	.00	.000	29.	*
90.	.08	.030	1040.	*	240.	.00	.000	23.	*
95.	.08	.030	948.	*	245.	.00	.000	18.	*
100.	.08	.030	865.	*	250.	.00	.000	14.	*
105.	.08	.030	790.	*	255.	.00	.000	11.	*
110.	.08	.030	723.	*	260.	.00	.000	8.	*
115.	.08	.030	662.	*	265.	.00	.000	6.	*
120.	.08	.030	608.	*	270.	.00	.000	5.	*
125.	.00	.000	557.	*	275.	.00	.000	3.	*
130.	.00	.000	507.	*	280.	.00	.000	3.	*
135.	.00	.000	459.	*	285.	.00	.000	2.	*
140.	.00	.000	413.	*	290.	.00	.000	2.	*
145.	.00	.000	371.	*	295.	.00	.000	2.	*

TOTAL PRECIP. = 7.63 (1-HOUR RAIN = 6.60) EXECESS PRECIP. = 6.143 INCHES
VOLUME OF EXCESS PRECIP = 183. ACRE-FEET
PEAK Q = 1574. CFS TIME OF PEAK = 50. MIN.
INFILT.= .61 IN/HR DECAY = .00180 FNINF = .60 IN/HR
MAX.PERV.RET.= .30 IN. MAX.IMP.RET.= .10 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE AT TIME

CUHPE/PC VERSION MODIFIED IN JANUARY 1985

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

SOUTH CANYON-LIME CREEK DRAINAGE DESIGN PLAN BY FMG, INC

BASIN ID: -- BASIN COMMENT: BASIN 19 EXISTING CONDITIONS 500 YR

AREA OF BASIN (SQMI)	LENGTH OF BASIN (MI)	DIST TO CENTROID (MI)	IMPERVIOUS AREA (PCT)	SLOPE (FT/FT)	UNIT DURATION (MIN)
.27	.61	.19	1.50	.0511	5.00

COEFFICIENT (REFLECTING TIME TO PEAK)	COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF)
.157	.278

CALCULATED UNIT HYDROGRAPH

TIME TO PEAK PEAK RATE OF RUNOFF UNIT HYDROGRAP PEAK VOLUME OF RUNOFF

(MIN)	(CFS/SQMI)	(CFS)	(AF)
9.32	1565.14	422.59	14.40

WIDTH AT 50 = 19. MIN. WIDTH AT 75 = 10. MIN. K50 = .29 K75 = .40

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. = .30 IN. MAX. IMPERVIOUS RET. = .10 IN.
INFILTRATION = .61 IN./HR. DECAY = .00180/SECOND FNINFL = .60 IN./HR.

TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH
0.	0.	35.	113.	70.	18.
5.	298.	40.	87.	75.	14.
10.	420.	45.	67.	80.	11.
15.	324.	50.	52.	85.	8.
20.	252.	55.	40.	90.	0.
25.	189.	60.	31.	0.	0.
30.	146.	65.	24.	0.	0.

1 BASIN ID: -- BASIN COMMENT: BASIN 19 EXISTING CONDITIONS 500 YR

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 500

TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)	TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)
0.	.00	.000	0.	95.	.08	.030	236.
5.	.07	.000	0.	100.	.08	.030	196.
10.	.20	.002	1.	105.	.08	.030	163.
15.	.30	.119	36.	110.	.08	.030	134.
20.	.53	.478	193.	115.	.08	.030	108.
25.	.92	.874	500.	120.	.08	.030	92.
30.	1.65	1.599	1029.	125.	.00	.000	73.
35.	.92	.874	1359.	130.	.00	.000	54.
40.	.53	.478	1356.	135.	.00	.000	40.
45.	.41	.360	1243.	140.	.00	.000	29.
50.	.33	.280	1105.	145.	.00	.000	21.
55.	.26	.215	966.	150.	.00	.000	15.
60.	.26	.215	849.	155.	.00	.000	11.
65.	.26	.215	758.	160.	.00	.000	8.
70.	.13	.083	650.	165.	.00	.000	6.
75.	.13	.083	541.	170.	.00	.000	4.
80.	.08	.030	441.	175.	.00	.000	3.
85.	.08	.030	354.	180.	.00	.000	2.

90.	.08	.030	288.	*	185.	.00	.000	2.	*

TOTAL PRECIP. = 7.63 (1-HOUR RAIN = 6.60) EXECESS PRECIP. = 6.143 INCHES
VOLUME OF EXCESS PRECIP = 88. ACRE-FEET
PEAK Q = 1359. CFS TIME OF PEAK = 35. MIN.
INFILT.= .61 IN/HR DECAY = .00180 FNINF = .60 IN/HR
MAX.PERV.RET.= .30 IN. MAX.IMP.RET.= .10 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE AT TIME

CUHPE/PC VERSION MODIFIED IN JANUARY 1985

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

SOUTH CANYON-LIME CREEK DRAINAGE DESIGN PLAN BY FMG, INC

BASIN ID: -- BASIN COMMENT: BASIN 20 EXISITNG CONDITIONS 500 YR

AREA OF BASIN (SQMI)	LENGTH OF BASIN (MI)	DIST TO CENTROID (MI)	IMPERVIOUS AREA (PCT)	SLOPE (FT/FT)	UNIT DURATION (MIN)
.97	1.63	.81	2.50	.0341	5.00

COEFFICIENT (REFLECTING TIME TO PEAK)	COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF)
.154	.328

CALCULATED UNIT HYDROGRAPH

TIME TO PEAK (MIN)	PEAK RATE OF RUNOFF (CFS/SQMI)	UNIT HYDROGRAP PEAK (CFS)	VOLUME OF RUNOFF (AF)
26.21	531.65	515.70	51.73

WIDTH AT 50 = 56. MIN. WIDTH AT 75 = 29. MIN. K50 = .28 K75 = .38

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. = .40 IN. MAX. IMPERVIOUS RET. = .09 IN.
INFILTRATION = .61 IN./HR. DECAY = .00180/SECOND FNINFL = .60 IN./HR.

TIME	UNIT HYDROGRAPH		TIME	UNIT HYDROGRAPH		TIME	UNIT HYDROGRAPH	
0.	0.	*	95.	156.	*	190.	29.	*
5.	85.	*	100.	143.	*	195.	26.	*
10.	242.	*	105.	131.	*	200.	24.	*
15.	385.	*	110.	120.	*	205.	22.	*

20.	480.	*	115.	110.	*	210.	20.	*
25.	514.	*	120.	100.	*	215.	19.	*
30.	505.	*	125.	92.	*	220.	17.	*
35.	469.	*	130.	84.	*	225.	16.	*
40.	423.	*	135.	77.	*	230.	14.	*
45.	384.	*	140.	70.	*	235.	13.	*
50.	355.	*	145.	64.	*	240.	12.	*
55.	326.	*	150.	59.	*	245.	11.	*
60.	298.	*	155.	54.	*	250.	10.	*
65.	269.	*	160.	49.	*	255.	9.	*
70.	244.	*	165.	45.	*	260.	8.	*
75.	223.	*	170.	41.	*	265.	8.	*
80.	204.	*	175.	38.	*	270.	0.	*
85.	187.	*	180.	35.	*	0.	0.	*
90.	171.	*	185.	32.	*	0.	0.	*

1 BASIN ID: -- BASIN COMMENT: BASIN 20 EXISITNG CONDITIONS 500 YR

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 500

TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)	*	TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)	*
0.	.00	.000	0.	*	180.	.00	.000	412.	*
5.	.07	.000	0.	*	185.	.00	.000	377.	*
10.	.20	.004	0.	*	190.	.00	.000	345.	*
15.	.30	.023	3.	*	195.	.00	.000	315.	*
20.	.53	.478	48.	*	200.	.00	.000	288.	*
25.	.92	.874	201.	*	205.	.00	.000	264.	*
30.	1.65	1.599	545.	*	210.	.00	.000	241.	*
35.	.92	.874	1041.	*	215.	.00	.000	221.	*
40.	.53	.479	1547.	*	220.	.00	.000	202.	*
45.	.41	.360	1954.	*	225.	.00	.000	185.	*
50.	.33	.281	2215.	*	230.	.00	.000	169.	*
55.	.26	.215	2335.	*	235.	.00	.000	155.	*
60.	.26	.215	2353.	*	240.	.00	.000	142.	*
65.	.26	.215	2316.	*	245.	.00	.000	130.	*
70.	.13	.083	2253.	*	250.	.00	.000	119.	*
75.	.13	.083	2174.	*	255.	.00	.000	108.	*
80.	.08	.030	2072.	*	260.	.00	.000	99.	*
85.	.08	.030	1947.	*	265.	.00	.000	91.	*
90.	.08	.030	1812.	*	270.	.00	.000	83.	*
95.	.08	.030	1678.	*	275.	.00	.000	76.	*
100.	.08	.030	1553.	*	280.	.00	.000	69.	*
105.	.08	.030	1439.	*	285.	.00	.000	60.	*
110.	.08	.030	1335.	*	290.	.00	.000	49.	*
115.	.08	.030	1240.	*	295.	.00	.000	34.	*
120.	.08	.030	1153.	*	300.	.00	.000	25.	*
125.	.00	.000	1071.	*	305.	.00	.000	19.	*
130.	.00	.000	991.	*	310.	.00	.000	15.	*
135.	.00	.000	914.	*	315.	.00	.000	12.	*

140.	.00	.000	839.	*	320.	.00	.000	9.	*
145.	.00	.000	769.	*	325.	.00	.000	7.	*
150.	.00	.000	703.	*	330.	.00	.000	5.	*
155.	.00	.000	643.	*	335.	.00	.000	4.	*
160.	.00	.000	588.	*	340.	.00	.000	3.	*
165.	.00	.000	538.	*	345.	.00	.000	3.	*
170.	.00	.000	492.	*	350.	.00	.000	2.	*
175.	.00	.000	450.	*	355.	.00	.000	2.	*

TOTAL PRECIP. = 7.63 (1-HOUR RAIN = 6.60) EXECESS PRECIP. = 6.056 INCHES
VOLUME OF EXCESS PRECIP = 313. ACRE-FEET
PEAK Q = 2353. CFS TIME OF PEAK = 60. MIN.
INFILT.= .61 IN/HR DECAY = .00180 FNINF = .60 IN/HR
MAX.PERV.RET.= .40 IN. MAX.IMP.RET.= .09 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE AT TIME

CUHPE/PC VERSION MODIFIED IN JANUARY 1985

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

SOUTH CANYON-LIME CREEK DRAINAGE DESIGN PLAN BY FMG, INC

BASIN ID: -- BASIN COMMENT: BASIN 21 EXISTING CONDITIONS 500 YR

AREA OF BASIN (SQMI)	LENGTH OF BASIN (MI)	DIST TO CENTROID (MI)	IMPERVIOUS AREA (PCT)	SLOPE (FT/FT)	UNIT DURATION (MIN)
.18	.87	.34	5.00	.0449	5.00

COEFFICIENT (REFLECTING TIME TO PEAK)	COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF)
.144	.241

CALCULATED UNIT HYDROGRAPH

TIME TO PEAK (MIN)	PEAK RATE OF RUNOFF (CFS/SQMI)	UNIT HYDROGRAP PEAK (CFS)	VOLUME OF RUNOFF (AF)
12.69	909.46	163.70	9.60

WIDTH AT 50 = 33. MIN. WIDTH AT 75 = 17. MIN. K50 = .23 K75 = .31

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. = .40 IN. MAX. IMPERVIOUS RET. = .09 IN.
INFILTRATION = .61 IN./HR. DECAY = .00180/SECOND FNINFL = .60 IN./HR.

TIME	UNIT	'	TIME	UNIT	'	TIME	UNIT	'

	HYDROGRAPH			HYDROGRAPH			HYDROGRAPH	
0.	0.	*	45.	68.	*	90.	20.	*
5.	80.	*	50.	59.	*	95.	17.	*
10.	155.	*	55.	52.	*	100.	15.	*
15.	159.	*	60.	45.	*	105.	13.	*
20.	132.	*	65.	39.	*	110.	11.	*
25.	121.	*	70.	34.	*	115.	10.	*
30.	106.	*	75.	30.	*	120.	9.	*
35.	91.	*	80.	26.	*	125.	8.	*
40.	78.	*	85.	23.	*	130.	0.	*

1 BASIN ID: -- BASIN COMMENT: BASIN 21 EXISTING CONDITIONS 500 YR

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 500

TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)	*	TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)	*
0.	.00	.000	0.	*	110.	.08	.032	195.	*
5.	.07	.000	0.	*	115.	.08	.032	176.	*
10.	.20	.008	1.	*	120.	.08	.032	160.	*
15.	.30	.030	4.	*	125.	.00	.000	143.	*
20.	.53	.479	44.	*	130.	.00	.000	125.	*
25.	.92	.874	150.	*	135.	.00	.000	109.	*
30.	1.65	1.598	345.	*	140.	.00	.000	95.	*
35.	.92	.874	524.	*	145.	.00	.000	80.	*
40.	.53	.479	605.	*	150.	.00	.000	63.	*
45.	.41	.361	614.	*	155.	.00	.000	45.	*
50.	.33	.282	603.	*	160.	.00	.000	33.	*
55.	.26	.216	576.	*	165.	.00	.000	26.	*
60.	.26	.216	542.	*	170.	.00	.000	20.	*
65.	.26	.216	510.	*	175.	.00	.000	16.	*
70.	.13	.084	473.	*	180.	.00	.000	12.	*
75.	.13	.084	430.	*	185.	.00	.000	9.	*
80.	.08	.032	386.	*	190.	.00	.000	7.	*
85.	.08	.032	344.	*	195.	.00	.000	5.	*
90.	.08	.032	305.	*	200.	.00	.000	4.	*
95.	.08	.032	272.	*	205.	.00	.000	3.	*
100.	.08	.032	243.	*	210.	.00	.000	3.	*
105.	.08	.032	217.	*	215.	.00	.000	2.	*

TOTAL PRECIP. = 7.63 (1-HOUR RAIN = 6.60) EXECESS PRECIP. = 6.085 INCHES
VOLUME OF EXCESS PRECIP = 58. ACRE-FEET
PEAK Q = 614. CFS TIME OF PEAK = 45. MIN.
INFILT.= .61 IN/HR DECAY = .00180 FNINF = .60 IN/HR
MAX.PERV.RET.= .40 IN. MAX.IMP.RET.= .09 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE AT TIME

CUHPE/PC VERSION MODIFIED IN JANUARY 1985

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

SOUTH CANYON-LIME CREEK DRAINAGE DESIGN PLAN BY FMG, INC

BASIN ID: -- BASIN COMMENT: BASIN 22 EXISTING CONDITIONS 500 YR

AREA OF BASIN (SQMI)	LENGTH OF BASIN (MI)	DIST TO CENTROID (MI)	IMPERVIOUS AREA (PCT)	SLOPE (FT/FT)	UNIT DURATION (MIN)
.25	.99	.49	4.00	.0310	5.00

COEFFICIENT (REFLECTING TIME TO PEAK)	COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF)
.148	.259

CALCULATED UNIT HYDROGRAPH

TIME TO PEAK (MIN)	PEAK RATE OF RUNOFF (CFS/SQMI)	UNIT HYDROGRAP PEAK (CFS)	VOLUME OF RUNOFF (AF)
16.95	688.66	173.54	13.44

WIDTH AT 50 = 44. MIN. WIDTH AT 75 = 23. MIN. K50 = .23 K75 = .32

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. = .40 IN. MAX. IMPERVIOUS RET. = .09 IN.
INFILTRATION = .61 IN./HR. DECAY = .00180/SECOND FNINFL = .60 IN./HR.

TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH
0.	0.	60.	71.	120.	20.
5.	56.	65.	64.	125.	18.
10.	133.	70.	58.	130.	16.
15.	171.	75.	52.	135.	15.
20.	169.	80.	47.	140.	13.
25.	148.	85.	42.	145.	12.
30.	131.	90.	38.	150.	11.
35.	124.	95.	34.	155.	10.
40.	112.	100.	31.	160.	9.
45.	100.	105.	28.	165.	8.
50.	88.	110.	25.	170.	0.
55.	79.	115.	23.	0.	0.

1 BASIN ID: -- BASIN COMMENT: BASIN 22 EXISTING CONDITIONS 500 YR

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 500

TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)	*	TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)	*
0.	.00	.000	0.	*	130.	.00	.000	226.	*
5.	.07	.000	0.	*	135.	.00	.000	204.	*
10.	.20	.007	0.	*	140.	.00	.000	184.	*
15.	.30	.027	2.	*	145.	.00	.000	166.	*
20.	.53	.479	32.	*	150.	.00	.000	149.	*
25.	.92	.874	119.	*	155.	.00	.000	134.	*
30.	1.65	1.599	294.	*	160.	.00	.000	121.	*
35.	.92	.874	497.	*	165.	.00	.000	109.	*
40.	.53	.479	639.	*	170.	.00	.000	98.	*
45.	.41	.360	699.	*	175.	.00	.000	88.	*
50.	.33	.281	707.	*	180.	.00	.000	79.	*
55.	.26	.215	695.	*	185.	.00	.000	68.	*
60.	.26	.215	681.	*	190.	.00	.000	55.	*
65.	.26	.215	660.	*	195.	.00	.000	38.	*
70.	.13	.084	628.	*	200.	.00	.000	28.	*
75.	.13	.084	588.	*	205.	.00	.000	22.	*
80.	.08	.031	543.	*	210.	.00	.000	17.	*
85.	.08	.031	498.	*	215.	.00	.000	14.	*
90.	.08	.031	455.	*	220.	.00	.000	11.	*
95.	.08	.031	416.	*	225.	.00	.000	8.	*
100.	.08	.031	381.	*	230.	.00	.000	6.	*
105.	.08	.031	349.	*	235.	.00	.000	5.	*
110.	.08	.031	320.	*	240.	.00	.000	3.	*
115.	.08	.031	294.	*	245.	.00	.000	3.	*
120.	.08	.031	271.	*	250.	.00	.000	2.	*
125.	.00	.000	249.	*	255.	.00	.000	2.	*

TOTAL PRECIP. = 7.63 (1-HOUR RAIN = 6.60) EXECESS PRECIP. = 6.073 INCHES
VOLUME OF EXCESS PRECIP = 82. ACRE-FEET
PEAK Q = 707. CFS TIME OF PEAK = 50. MIN.
INFILT.= .61 IN/HR DECAY = .00180 FNINF = .60 IN/HR
MAX.PERV.RET.= .40 IN. MAX.IMP.RET.= .09 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE AT TIME

CUHPE/PC VERSION MODIFIED IN JANUARY 1985

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

SOUTH CANYON-LIME CREEK DRAINAGE DESIGN PLAN BY FMG, INC

BASIN ID: -- BASIN COMMENT: BASIN 23 EXISTING CONDITIONS 500 YR

AREA OF BASIN LENGTH OF BASIN DIST TO CENTROID IMPERVIOUS AREA SLOPE UNIT DURATION

(SQMI)	(MI)	(MI)	(PCT)	(FT/FT)	(MIN)
.26	1.06	.55	42.50	.0179	5.00

COEFFICIENT (REFLECTING TIME TO PEAK)	COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF)
.092	.449

CALCULATED UNIT HYDROGRAPH

TIME TO PEAK (MIN)	PEAK RATE OF RUNOFF (CFS/SQMI)	UNIT HYDROGRAP PEAK (CFS)	VOLUME OF RUNOFF (AF)
13.68	1542.57	397.98	13.76

WIDTH AT 50 = 19. MIN. WIDTH AT 75 = 10. MIN. K50 = .35 K75 = .45

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. = .30 IN. MAX. IMPERVIOUS RET. = .07 IN.
INFILTRATION = .61 IN./HR. DECAY = .00180/SECOND FNINFL = .60 IN./HR.

TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH
0.	0.	35.	123.	70.	18.
5.	123.	40.	93.	75.	13.
10.	335.	45.	71.	80.	10.
15.	391.	50.	54.	85.	8.
20.	288.	55.	41.	90.	0.
25.	218.	60.	31.	0.	0.
30.	162.	65.	23.	0.	0.

1 BASIN ID: -- BASIN COMMENT: BASIN 23 EXISTING CONDITIONS 500 YR

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 500

TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)	TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)
0.	.00	.000	0.	95.	.08	.049	273.
5.	.07	.000	0.	100.	.08	.049	229.
10.	.20	.078	10.	105.	.08	.049	195.
15.	.30	.189	50.	110.	.08	.049	167.
20.	.53	.488	154.	115.	.08	.049	141.
25.	.92	.876	368.	120.	.08	.049	126.

30.	1.65	1.586	751.	*	125.	.00	.000	110.	*
35.	.92	.876	1176.	*	130.	.00	.000	88.	*
40.	.53	.488	1372.	*	135.	.00	.000	64.	*
45.	.41	.372	1309.	*	140.	.00	.000	47.	*
50.	.33	.294	1174.	*	145.	.00	.000	34.	*
55.	.26	.230	1032.	*	150.	.00	.000	25.	*
60.	.26	.230	901.	*	155.	.00	.000	18.	*
65.	.26	.230	794.	*	160.	.00	.000	13.	*
70.	.13	.100	699.	*	165.	.00	.000	10.	*
75.	.13	.100	595.	*	170.	.00	.000	7.	*
80.	.08	.049	492.	*	175.	.00	.000	5.	*
85.	.08	.049	403.	*	180.	.00	.000	4.	*
90.	.08	.049	329.	*	185.	.00	.000	2.	*

TOTAL PRECIP. = 7.63 (1-HOUR RAIN = 6.60) EXECESS PRECIP. = 6.576 INCHES
VOLUME OF EXCESS PRECIP = 90. ACRE-FEET
PEAK Q = 1372. CFS TIME OF PEAK = 40. MIN.
INFILT.= .61 IN/HR DECAY = .00180 FNINF = .60 IN/HR
MAX.PERV.RET.= .30 IN. MAX.IMP.RET.= .07 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE AT TIME

CUHPE/PC VERSION MODIFIED IN JANUARY 1985

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

SOUTH CANYON-LIME CREEK DRAINAGE DESIGN PLAN BY FMG, INC

BASIN ID: -- BASIN COMMENT: BASIN 24 EXISTING CONDITIONS 500 YR

AREA OF BASIN (SQMI)	LENGTH OF BASIN (MI)	DIST TO CENTROID (MI)	IMPERVIOUS AREA (PCT)	SLOPE (FT/FT)	UNIT DURATION (MIN)
.22	.81	.38	26.00	.0359	5.00

COEFFICIENT (REFLECTING TIME TO PEAK)	COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF)
.103	.288

CALCULATED UNIT HYDROGRAPH

TIME TO PEAK (MIN)	PEAK RATE OF RUNOFF (CFS/SQMI)	UNIT HYDROGRAP PEAK (CFS)	VOLUME OF RUNOFF (AF)
10.32	1415.75	311.46	11.73

WIDTH AT 50 = 21. MIN. WIDTH AT 75 = 11. MIN. K50 = .29 K75 = .40

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. = .30 IN. MAX. IMPERVIOUS RET. = .07 IN.
INFILTRATION = .61 IN./HR. DECAY = .00180/SECOND FNINFL = .60 IN./HR.

TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH
0.	0.	35.	99.	70.	19.
5.	197.	40.	79.	75.	15.
10.	311.	45.	62.	80.	12.
15.	264.	50.	49.	85.	10.
20.	205.	55.	39.	90.	8.
25.	159.	60.	31.	95.	0.
30.	125.	65.	25.	0.	0.

1 BASIN ID: -- BASIN COMMENT: BASIN 24 EXISTING CONDITIONS 500 YR

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 500

TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)	TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)
0.	.00	.000	0.	95.	.08	.041	238.
5.	.07	.000	0.	100.	.08	.041	203.
10.	.20	.048	9.	105.	.08	.041	175.
15.	.30	.161	47.	110.	.08	.041	150.
20.	.53	.484	158.	115.	.08	.041	129.
25.	.92	.875	375.	120.	.08	.041	107.
30.	1.65	1.592	754.	125.	.00	.000	86.
35.	.92	.875	1029.	130.	.00	.000	66.
40.	.53	.484	1069.	135.	.00	.000	50.
45.	.41	.367	1000.	140.	.00	.000	37.
50.	.33	.289	904.	145.	.00	.000	28.
55.	.26	.224	806.	150.	.00	.000	21.
60.	.26	.224	718.	155.	.00	.000	15.
65.	.26	.224	649.	160.	.00	.000	12.
70.	.13	.093	569.	165.	.00	.000	9.
75.	.13	.093	486.	170.	.00	.000	7.
80.	.08	.041	407.	175.	.00	.000	5.
85.	.08	.041	337.	180.	.00	.000	4.
90.	.08	.041	282.	185.	.00	.000	3.

TOTAL PRECIP. = 7.63 (1-HOUR RAIN = 6.60) EXECESS PRECIP. = 6.402 INCHES
VOLUME OF EXCESS PRECIP = 75. ACRE-FEET
PEAK Q = 1069. CFS TIME OF PEAK = 40. MIN.
INFILT.= .61 IN/HR DECAY = .00180 FNINF = .60 IN/HR
MAX.PERV.RET.= .30 IN. MAX.IMP.RET.= .07 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE AT TIME

CUHPE/PC VERSION MODIFIED IN JANUARY 1985

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

SOUTH CANYON-LIME CREEK DRAINAGE DESIGN PLAN BY FMG, INC

BASIN ID: -- BASIN COMMENT: BASIN 25 EXISTING CONDITIONS 500 YR

AREA OF BASIN (SQMI)	LENGTH OF BASIN (MI)	DIST TO CENTROID (MI)	IMPERVIOUS AREA (PCT)	SLOPE (FT/FT)	UNIT DURATION (MIN)
.49	1.40	.61	5.00	.0239	5.00

COEFFICIENT (REFLECTING TIME TO PEAK)	COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF)
.144	.281

CALCULATED UNIT HYDROGRAPH

TIME TO PEAK (MIN)	PEAK RATE OF RUNOFF (CFS/SQMI)	UNIT HYDROGRAP PEAK (CFS)	VOLUME OF RUNOFF (AF)
22.19	547.35	268.75	26.19

WIDTH AT 50 = 55. MIN. WIDTH AT 75 = 29. MIN. K50 = .24 K75 = .33

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. = .30 IN. MAX. IMPERVIOUS RET. = .08 IN.
INFILTRATION = .51 IN./HR. DECAY = .00180/SECOND FNINFL = .50 IN./HR.

TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH
0.	0.	80.	101.	160.	25.
5.	57.	85.	93.	165.	23.
10.	156.	90.	85.	170.	21.
15.	232.	95.	78.	175.	20.
20.	266.	100.	72.	180.	18.
25.	265.	105.	66.	185.	16.
30.	244.	110.	60.	190.	15.
35.	218.	115.	55.	195.	14.
40.	202.	120.	51.	200.	13.
45.	190.	125.	46.	205.	12.
50.	175.	130.	43.	210.	11.
55.	160.	135.	39.	215.	10.
60.	145.	140.	36.	220.	9.
65.	131.	145.	33.	225.	8.

70.	120.	*	150.	30.	*	230.	8.	*
75.	110.	*	155.	28.	*	235.	0.	*

1 BASIN ID: -- BASIN COMMENT: BASIN 25 EXISTING CONDITIONS 500 YR

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 500

TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)	*	TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)	*
0.	.00	.000	0.	*	165.	.00	.000	291.	*
5.	.07	.000	0.	*	170.	.00	.000	267.	*
10.	.20	.009	1.	*	175.	.00	.000	245.	*
15.	.30	.149	10.	*	180.	.00	.000	224.	*
20.	.53	.487	53.	*	185.	.00	.000	206.	*
25.	.92	.882	164.	*	190.	.00	.000	189.	*
30.	1.65	1.606	385.	*	195.	.00	.000	173.	*
35.	.92	.882	677.	*	200.	.00	.000	159.	*
40.	.53	.487	940.	*	205.	.00	.000	145.	*
45.	.41	.369	1115.	*	210.	.00	.000	133.	*
50.	.33	.290	1199.	*	215.	.00	.000	122.	*
55.	.26	.224	1218.	*	220.	.00	.000	112.	*
60.	.26	.224	1205.	*	225.	.00	.000	103.	*
65.	.26	.224	1188.	*	230.	.00	.000	94.	*
70.	.13	.092	1164.	*	235.	.00	.000	87.	*
75.	.13	.092	1122.	*	240.	.00	.000	79.	*
80.	.08	.039	1065.	*	245.	.00	.000	72.	*
85.	.08	.039	998.	*	250.	.00	.000	62.	*
90.	.08	.039	928.	*	255.	.00	.000	51.	*
95.	.08	.039	863.	*	260.	.00	.000	36.	*
100.	.08	.039	804.	*	265.	.00	.000	27.	*
105.	.08	.039	750.	*	270.	.00	.000	21.	*
110.	.08	.039	700.	*	275.	.00	.000	17.	*
115.	.08	.039	654.	*	280.	.00	.000	13.	*
120.	.08	.039	612.	*	285.	.00	.000	11.	*
125.	.00	.000	571.	*	290.	.00	.000	8.	*
130.	.00	.000	530.	*	295.	.00	.000	6.	*
135.	.00	.000	489.	*	300.	.00	.000	5.	*
140.	.00	.000	449.	*	305.	.00	.000	4.	*
145.	.00	.000	412.	*	310.	.00	.000	3.	*
150.	.00	.000	378.	*	315.	.00	.000	3.	*
155.	.00	.000	346.	*	320.	.00	.000	2.	*
160.	.00	.000	318.	*	325.	.00	.000	2.	*

TOTAL PRECIP. = 7.63 (1-HOUR RAIN = 6.60) EXECESS PRECIP. = 6.370 INCHES
VOLUME OF EXCESS PRECIP = 167. ACRE-FEET
PEAK Q = 1218. CFS TIME OF PEAK = 55. MIN.
INFILT.= .51 IN/HR DECAY = .00180 FNINF = .50 IN/HR
MAX.PERV.RET.= .30 IN. MAX.IMP.RET.= .08 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE AT TIME

CUHPE/PC VERSION MODIFIED IN JANUARY 1985

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

SOUTH CANYON-LIME CREEK DRAINAGE DESIGN PLAN BY FMG, INC

BASIN ID: -- BASIN COMMENT: BASIN 26 EXISTING CONDITIONS 500 YR

AREA OF BASIN (SQMI)	LENGTH OF BASIN (MI)	DIST TO CENTROID (MI)	IMPERVIOUS AREA (PCT)	SLOPE (FT/FT)	UNIT DURATION (MIN)
.32	1.08	.57	18.50	.0294	5.00

COEFFICIENT (REFLECTING TIME TO PEAK)	COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF)
.112	.264

CALCULATED UNIT HYDROGRAPH

TIME TO PEAK (MIN)	PEAK RATE OF RUNOFF (CFS/SQMI)	UNIT HYDROGRAP PEAK (CFS)	VOLUME OF RUNOFF (AF)
14.96	812.46	263.24	17.28

WIDTH AT 50 = 37. MIN. WIDTH AT 75 = 19. MIN. K50 = .24 K75 = .33

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. = .30 IN. MAX. IMPERVIOUS RET. = .07 IN.
INFILTRATION = .51 IN./HR. DECAY = .00180/SECOND FNINFL = .50 IN./HR.

TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH
0.	0.	55.	96.	110.	23.
5.	103.	60.	85.	115.	21.
10.	225.	65.	75.	120.	18.
15.	263.	70.	66.	125.	16.
20.	240.	75.	58.	130.	14.
25.	205.	80.	51.	135.	12.
30.	188.	85.	45.	140.	11.
35.	166.	90.	39.	145.	10.
40.	144.	95.	35.	150.	8.
45.	125.	100.	30.	155.	7.
50.	110.	105.	27.	160.	0.

1 BASIN ID: -- BASIN COMMENT: BASIN 26 EXISTING CONDITIONS 500 YR

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 500

TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)	*	TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)	*
0.	.00	.000	0.	*	130.	.00	.000	272.	*
5.	.07	.000	0.	*	135.	.00	.000	240.	*
10.	.20	.034	3.	*	140.	.00	.000	211.	*
15.	.30	.169	25.	*	145.	.00	.000	185.	*
20.	.53	.489	97.	*	150.	.00	.000	163.	*
25.	.92	.881	253.	*	155.	.00	.000	143.	*
30.	1.65	1.601	539.	*	160.	.00	.000	126.	*
35.	.92	.881	841.	*	165.	.00	.000	110.	*
40.	.53	.489	1019.	*	170.	.00	.000	96.	*
45.	.41	.371	1070.	*	175.	.00	.000	81.	*
50.	.33	.293	1058.	*	180.	.00	.000	66.	*
55.	.26	.228	1028.	*	185.	.00	.000	47.	*
60.	.26	.228	983.	*	190.	.00	.000	36.	*
65.	.26	.228	933.	*	195.	.00	.000	28.	*
70.	.13	.097	874.	*	200.	.00	.000	23.	*
75.	.13	.097	807.	*	205.	.00	.000	18.	*
80.	.08	.045	735.	*	210.	.00	.000	14.	*
85.	.08	.045	663.	*	215.	.00	.000	11.	*
90.	.08	.045	598.	*	220.	.00	.000	8.	*
95.	.08	.045	539.	*	225.	.00	.000	7.	*
100.	.08	.045	487.	*	230.	.00	.000	5.	*
105.	.08	.045	442.	*	235.	.00	.000	4.	*
110.	.08	.045	402.	*	240.	.00	.000	3.	*
115.	.08	.045	368.	*	245.	.00	.000	3.	*
120.	.08	.045	337.	*	250.	.00	.000	2.	*
125.	.00	.000	306.	*	255.	.00	.000	2.	*

TOTAL PRECIP. = 7.63 (1-HOUR RAIN = 6.60) EXECESS PRECIP. = 6.486 INCHES
VOLUME OF EXCESS PRECIP = 112. ACRE-FEET
PEAK Q = 1070. CFS TIME OF PEAK = 45. MIN.
INFILT.= .51 IN/HR DECAY = .00180 FNINF = .50 IN/HR
MAX.PERV.RET.= .30 IN. MAX.IMP.RET.= .07 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE AT TIME

CUHPE/PC VERSION MODIFIED IN JANUARY 1985

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

SOUTH CANYON-LIME CREEK DRAINAGE DESIGN PLAN BY FMG, INC

BASIN ID: -- BASIN COMMENT: BASIN 27 EXISTING CONDITIONS 500 YR

AREA OF BASIN LENGTH OF BASIN DIST TO CENTROID IMPERVIOUS AREA SLOPE UNIT DURATION

(SQMI)	(MI)	(MI)	(PCT)	(FT/FT)	(MIN)
.34	1.34	.64	2.00	.0345	5.00

COEFFICIENT (REFLECTING TIME TO PEAK)	COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF)
.156	.284

CALCULATED UNIT HYDROGRAPH

TIME TO PEAK (MIN)	PEAK RATE OF RUNOFF (CFS/SQMI)	UNIT HYDROGRAP PEAK (CFS)	VOLUME OF RUNOFF (AF)
21.95	560.02	189.29	18.03

WIDTH AT 50 = 54. MIN. WIDTH AT 75 = 28. MIN. K50 = .25 K75 = .33

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. = .40 IN. MAX. IMPERVIOUS RET. = .09 IN.
INFILTRATION = .51 IN./HR. DECAY = .00180/SECOND FNINFL = .50 IN./HR.

TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH
0.	0.	75.	76.	150.	21.
5.	41.	80.	70.	155.	19.
10.	112.	85.	64.	160.	17.
15.	165.	90.	59.	165.	16.
20.	188.	95.	54.	170.	15.
25.	186.	100.	49.	175.	13.
30.	170.	105.	45.	180.	12.
35.	152.	110.	41.	185.	11.
40.	142.	115.	38.	190.	10.
45.	132.	120.	35.	195.	9.
50.	121.	125.	32.	200.	9.
55.	111.	130.	29.	205.	8.
60.	100.	135.	27.	210.	0.
65.	90.	140.	25.	0.	0.
70.	83.	145.	23.	0.	0.

1 BASIN ID: -- BASIN COMMENT: BASIN 27 EXISTING CONDITIONS 500 YR

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 500

TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)	TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)

				*					*
				*					*
0.	.00	.000	0.	*	150.	.00	.000	255.	*
5.	.07	.000	0.	*	155.	.00	.000	234.	*
10.	.20	.003	0.	*	160.	.00	.000	215.	*
15.	.30	.046	2.	*	165.	.00	.000	197.	*
20.	.53	.487	26.	*	170.	.00	.000	180.	*
25.	.92	.882	99.	*	175.	.00	.000	165.	*
30.	1.65	1.607	254.	*	180.	.00	.000	151.	*
35.	.92	.882	461.	*	185.	.00	.000	139.	*
40.	.53	.487	647.	*	190.	.00	.000	127.	*
45.	.41	.368	771.	*	195.	.00	.000	117.	*
50.	.33	.289	829.	*	200.	.00	.000	107.	*
55.	.26	.223	841.	*	205.	.00	.000	98.	*
60.	.26	.223	832.	*	210.	.00	.000	90.	*
65.	.26	.223	820.	*	215.	.00	.000	82.	*
70.	.13	.091	801.	*	220.	.00	.000	75.	*
75.	.13	.091	770.	*	225.	.00	.000	65.	*
80.	.08	.038	729.	*	230.	.00	.000	53.	*
85.	.08	.038	682.	*	235.	.00	.000	37.	*
90.	.08	.038	633.	*	240.	.00	.000	28.	*
95.	.08	.038	588.	*	245.	.00	.000	22.	*
100.	.08	.038	547.	*	250.	.00	.000	17.	*
105.	.08	.038	510.	*	255.	.00	.000	14.	*
110.	.08	.038	476.	*	260.	.00	.000	11.	*
115.	.08	.038	444.	*	265.	.00	.000	9.	*
120.	.08	.038	415.	*	270.	.00	.000	6.	*
125.	.00	.000	387.	*	275.	.00	.000	5.	*
130.	.00	.000	359.	*	280.	.00	.000	4.	*
135.	.00	.000	331.	*	285.	.00	.000	3.	*
140.	.00	.000	304.	*	290.	.00	.000	3.	*
145.	.00	.000	279.	*	295.	.00	.000	2.	*

TOTAL PRECIP. = 7.63 (1-HOUR RAIN = 6.60) EXECESS PRECIP. = 6.247 INCHES
VOLUME OF EXCESS PRECIP = 113. ACRE-FEET
PEAK Q = 841. CFS TIME OF PEAK = 55. MIN.
INFILT.= .51 IN/HR DECAY = .00180 FNINF = .50 IN/HR
MAX.PERV.RET.= .40 IN. MAX.IMP.RET.= .09 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE AT TIME

CUHPE/PC VERSION MODIFIED IN JANUARY 1985

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

SOUTH CANYON-LIME CREEK DRAINAGE DESIGN PLAN BY FMG, INC

BASIN ID: -- BASIN COMMENT: BASIN 28 EXISTING CONDITIONS 500 YR

AREA OF BASIN (SQMI)	LENGTH OF BASIN (MI)	DIST TO CENTROID (MI)	IMPERVIOUS AREA (PCT)	SLOPE (FT/FT)	UNIT DURATION (MIN)
.83	1.40	.72	3.50	.0350	5.00

COEFFICIENT (REFLECTING TIME TO PEAK)	COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF)
.150	.313

CALCULATED UNIT HYDROGRAPH

TIME TO PEAK (MIN)	PEAK RATE OF RUNOFF (CFS/SQMI)	UNIT HYDROGRAP PEAK (CFS)	VOLUME OF RUNOFF (AF)
22.70	595.44	493.02	44.16

WIDTH AT 50 = 50. MIN. WIDTH AT 75 = 26. MIN. K50 = .27 K75 = .37

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. = .35 IN. MAX. IMPERVIOUS RET. = .09 IN.
INFILTRATION = .51 IN./HR. DECAY = .00180/SECOND FNINFL = .60 IN./HR.

TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH
0.	0.	85.	148.	170.	27.
5.	102.	90.	134.	175.	25.
10.	279.	95.	122.	180.	23.
15.	418.	100.	110.	185.	20.
20.	485.	105.	100.	190.	18.
25.	488.	110.	90.	195.	17.
30.	452.	115.	82.	200.	15.
35.	403.	120.	74.	205.	14.
40.	365.	125.	67.	210.	12.
45.	335.	130.	61.	215.	11.
50.	304.	135.	55.	220.	10.
55.	274.	140.	50.	225.	9.
60.	244.	145.	45.	230.	8.
65.	221.	150.	41.	235.	8.
70.	200.	155.	37.	240.	0.
75.	181.	160.	33.	0.	0.
80.	164.	165.	30.	0.	0.

1 BASIN ID: -- BASIN COMMENT: BASIN 28 EXISTING CONDITIONS 500 YR

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 500

TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)	TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)

				*					*
0.	.00	.000	0.	*	165.	.00	.000	400.	*
5.	.07	.000	0.	*	170.	.00	.000	362.	*
10.	.20	.006	1.	*	175.	.00	.000	328.	*
15.	.30	.086	10.	*	180.	.00	.000	297.	*
20.	.53	.480	75.	*	185.	.00	.000	269.	*
25.	.92	.875	262.	*	190.	.00	.000	243.	*
30.	1.65	1.599	652.	*	195.	.00	.000	220.	*
35.	.92	.874	1178.	*	200.	.00	.000	199.	*
40.	.53	.479	1661.	*	205.	.00	.000	181.	*
45.	.41	.360	1992.	*	210.	.00	.000	163.	*
50.	.33	.281	2157.	*	215.	.00	.000	148.	*
55.	.26	.215	2192.	*	220.	.00	.000	134.	*
60.	.26	.215	2157.	*	225.	.00	.000	121.	*
65.	.26	.215	2102.	*	230.	.00	.000	110.	*
70.	.13	.084	2031.	*	235.	.00	.000	100.	*
75.	.13	.084	1935.	*	240.	.00	.000	90.	*
80.	.08	.031	1815.	*	245.	.00	.000	82.	*
85.	.08	.031	1681.	*	250.	.00	.000	73.	*
90.	.08	.031	1547.	*	255.	.00	.000	63.	*
95.	.08	.031	1420.	*	260.	.00	.000	51.	*
100.	.08	.031	1304.	*	265.	.00	.000	35.	*
105.	.08	.031	1199.	*	270.	.00	.000	26.	*
110.	.08	.031	1104.	*	275.	.00	.000	20.	*
115.	.08	.031	1018.	*	280.	.00	.000	16.	*
120.	.08	.031	940.	*	285.	.00	.000	12.	*
125.	.00	.000	866.	*	290.	.00	.000	10.	*
130.	.00	.000	794.	*	295.	.00	.000	7.	*
135.	.00	.000	724.	*	300.	.00	.000	5.	*
140.	.00	.000	657.	*	305.	.00	.000	4.	*
145.	.00	.000	595.	*	310.	.00	.000	3.	*
150.	.00	.000	539.	*	315.	.00	.000	3.	*
155.	.00	.000	488.	*	320.	.00	.000	2.	*
160.	.00	.000	442.	*	325.	.00	.000	2.	*

TOTAL PRECIP. = 7.63 (1-HOUR RAIN = 6.60) EXECESS PRECIP. = 6.131 INCHES
VOLUME OF EXCESS PRECIP = 271. ACRE-FEET
PEAK Q = 2192. CFS TIME OF PEAK = 55. MIN.
INFILT.= .51 IN/HR DECAY = .00180 FNINF = .60 IN/HR
MAX.PERV.RET.= .35 IN. MAX.IMP.RET.= .09 IN.

1 U.D.F.C.D. CUHP RUNOFF ANALYSIS EXECUTED ON DATE AT TIME

CUHPE/PC VERSION MODIFIED IN JANUARY 1985

PRINT OPTION NUMBER SELECTED FOR THIS BASIN IS 7

SOUTH CANYON-LIME CREEK DRAINAGE DESIGN PLAN BY FMG, INC

BASIN ID: -- BASIN COMMENT: BASIN 29 EXISTING CONDITIONS 500 YR

AREA OF BASIN (SQMI)	LENGTH OF BASIN (MI)	DIST TO CENTROID (MI)	IMPERVIOUS AREA (PCT)	SLOPE (FT/FT)	UNIT DURATION (MIN)

.14	.76	.30	2.00	.0260	5.00

COEFFICIENT (REFLECTING TIME TO PEAK)	COEFFICIENT (RELATED TO PEAK RATE OF RUNOFF)
.156	.249

CALCULATED UNIT HYDROGRAPH

TIME TO PEAK (MIN)	PEAK RATE OF RUNOFF (CFS/SQMI)	UNIT HYDROGRAP PEAK (CFS)	VOLUME OF RUNOFF (AF)
13.52	866.84	122.22	7.52

WIDTH AT 50 = 35. MIN. WIDTH AT 75 = 18. MIN. K50 = .23 K75 = .32

RAINFALL LOSSES INPUT W/ BASIN DATA

MAX. PERVIOUS RET. = .30 IN. MAX. IMPERVIOUS RET. = .10 IN.
INFILTRATION = .61 IN./HR. DECAY = .00180/SECOND FNINFL = .60 IN./HR.

TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH	TIME	UNIT HYDROGRAPH
0.	0.	45.	54.	90.	17.
5.	55.	50.	47.	95.	15.
10.	112.	55.	42.	100.	13.
15.	121.	60.	37.	105.	12.
20.	104.	65.	32.	110.	10.
25.	91.	70.	29.	115.	9.
30.	83.	75.	25.	120.	8.
35.	72.	80.	22.	125.	0.
40.	61.	85.	19.	0.	0.

1 BASIN ID: -- BASIN COMMENT: BASIN 29 EXISTING CONDITIONS 500 YR

**** STORM NO. = 1 **** DATE OR RETURN PERIOD = 500

TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)	TIME (MIN.)	INCREMENT RAINFALL (IN)	TOTAL EXCESS PRECIP	STORM HYDROGRAPH (CFS)
0.	.00	.000	0.	110.	.08	.030	161.
5.	.07	.000	0.	115.	.08	.030	146.
10.	.20	.003	0.	120.	.08	.030	133.
15.	.30	.120	7.	125.	.00	.000	120.
20.	.53	.478	40.	130.	.00	.000	106.

25.	.92	.874	116.	*	135.	.00	.000	92.	*
30.	1.65	1.599	256.	*	140.	.00	.000	78.	*
35.	.92	.874	393.	*	145.	.00	.000	62.	*
40.	.53	.478	462.	*	150.	.00	.000	44.	*
45.	.41	.360	473.	*	155.	.00	.000	32.	*
50.	.33	.281	464.	*	160.	.00	.000	25.	*
55.	.26	.215	447.	*	165.	.00	.000	19.	*
60.	.26	.215	423.	*	170.	.00	.000	15.	*
65.	.26	.215	399.	*	175.	.00	.000	12.	*
70.	.13	.083	372.	*	180.	.00	.000	9.	*
75.	.13	.083	341.	*	185.	.00	.000	6.	*
80.	.08	.030	308.	*	190.	.00	.000	5.	*
85.	.08	.030	276.	*	195.	.00	.000	4.	*
90.	.08	.030	247.	*	200.	.00	.000	3.	*
95.	.08	.030	221.	*	205.	.00	.000	3.	*
100.	.08	.030	198.	*	210.	.00	.000	2.	*
105.	.08	.030	179.	*	215.	.00	.000	2.	*

TOTAL PRECIP. = 7.63 (1-HOUR RAIN = 6.60) EXECESS PRECIP. = 6.149 INCHES
VOLUME OF EXCESS PRECIP = 46. ACRE-FEET
PEAK Q = 473. CFS TIME OF PEAK = 45. MIN.
INFILT.= .61 IN/HR DECAY = .00180 FNINF = .60 IN/HR
MAX.PERV.RET.= .30 IN. MAX.IMP.RET.= .10 IN.

1 U.D.F.C.D. CUHPD RUNOFF ANALYSIS EXECUTED ON DATE AT TIME

CUHPE/PC VERSION MODIFIED IN JANUARY 1985 TO WRITE OUTPUT FILE OF STORM HYDROGRAPHS FOR SUBSEQUENT USE WITH MULTI-PLAN RIVER ROUTING ROUTINES OF HEC-1

SOUTH CANYON-LIME CREEK DRAINAGE DESIGN PLAN BY FMG, INC

NO HYDROGRAPH VALUES WERE WRITTEN TO AN OUTPUTFILE FOR THIS RUN OF CUHPD.

APPENDIX C - UDSWM2-PC - 10 YR

EXISTING LAND USE
AND EXISTING HYDRAULIC CONDITIONS

1

ENVIRONMENTAL PROTECTION AGENCY - STORM WATER MANAGEMENT MODEL - VERSION PC.1

DEVELOPED BY METCALF + EDDY, INC.

UNIVERSITY OF FLORIDA

WATER RESOURCES ENGINEEERS, INC. (SEPTEMBER 1970)

UPDATED BY UNIVERSITY OF FLORIDA (JUNE 1973)

HYDROLOGIC ENGINEERING CENTER, CORPS OF ENGINEERS

MISSOURI RIVER DIVISION, CORPS OF ENGINEERS (SEPTEMBER 1974)

BOYLE ENGINEERING CORPORATION (MARCH 1985, JULY 1985)

OTAPE OR DISK ASSIGNMENTS

JIN(1)	JIN(2)	JIN(3)	JIN(4)	JIN(5)	JIN(6)	JIN(7)	JIN(8)	JIN(9)	JIN(10)
2	1	0	0	0	0	0	0	0	0

JOUT(1)	JOUT(2)	JOUT(3)	JOUT(4)	JOUT(5)	JOUT(6)	JOUT(7)	JOUT(8)	JOUT(9)	JOUT(10)
1	2	0	0	0	0	0	0	0	0

NSCRAT(1)	NSCRAT(2)	NSCRAT(3)	NSCRAT(4)	NSCRAT(5)
3	4	0	0	0

1

WATERSHED PROGRAM CALLED

*** ENTRY MADE TO RUNOFF MODEL ***

SOUTH CANYON - LIME CREEK DRAINAGE DESIGN PLAN BY FMG, INC
EXISTING HYDROLOGIC CONDITIONS AND EXISTING HYDRAULIC CONDITIONS 10 YR STORM

ONUMBER OF TIME STEPS 50
OINTEGRATION TIME INTERVAL (MINUTES), 5.00

25.0 PERCENT OF IMPERVIOUS AREA HAS ZERO DETENTION DEPTH
1

SOUTH CANYON - LIME CREEK DRAINAGE DESIGN PLAN BY FMG, INC
EXISTING HYDROLOGIC CONDITIONS AND EXISTING HYDRAULIC CONDITIONS 10 YR STORM

HYDROGRAPHS FROM CUHPE/PC ARE LISTED FOR THE FOLLOWING 29 SUBCATCHMENTS

TIME(HR/MIN)	1	2	3	4	5	6	7	8	9	10
	11	12	13	14	15	16	17	18	19	20
	21	22	23	24	25	26	27	28	29	
0 0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.	0.	0.	0.	0.	
0 5.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.	0.	0.	0.	0.	
0 10.	1.	0.	0.	5.	0.	3.	2.	1.	2.	0.
	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	0.	0.	2.	2.	0.	1.	0.	0.	0.	

0	15.	6.	3.	2.	29.	0.	17.	12.	7.	10.	1.
		0.	1.	0.	0.	0.	0.	0.	0.	1.	0.
		1.	0.	12.	10.	1.	4.	0.	1.	0.	
0	20.	18.	7.	5.	54.	0.	44.	27.	19.	27.	3.
		1.	2.	1.	0.	0.	1.	1.	1.	2.	2.
		2.	1.	40.	28.	2.	13.	1.	3.	1.	
0	25.	62.	35.	22.	144.	5.	120.	108.	61.	76.	13.
		3.	33.	13.	6.	3.	9.	11.	18.	58.	11.
		12.	8.	107.	86.	19.	48.	7.	23.	13.	
0	30.	107.	46.	46.	84.	19.	170.	130.	111.	124.	40.
		10.	44.	43.	24.	14.	32.	40.	58.	128.	41.
		32.	25.	199.	144.	56.	101.	25.	71.	34.	
0	35.	119.	41.	59.	35.	41.	148.	105.	132.	135.	75.
		21.	33.	67.	49.	32.	57.	69.	103.	142.	83.
		47.	43.	248.	157.	96.	137.	47.	130.	47.	
0	40.	111.	34.	58.	23.	64.	112.	81.	129.	120.	104.
		33.	23.	73.	70.	51.	70.	83.	134.	126.	124.
		51.	54.	232.	143.	126.	147.	64.	175.	49.	
0	45.	99.	28.	56.	19.	83.	86.	63.	119.	102.	121.
		44.	17.	70.	81.	68.	71.	83.	147.	107.	154.
		49.	56.	199.	125.	140.	143.	74.	199.	46.	
0	50.	86.	22.	54.	15.	95.	66.	49.	108.	87.	127.
		52.	11.	64.	84.	80.	67.	77.	145.	88.	170.
		46.	54.	169.	107.	143.	137.	77.	204.	44.	
0	55.	75.	18.	51.	15.	101.	52.	39.	97.	74.	124.
		56.	7.	57.	81.	88.	62.	71.	137.	72.	174.
		43.	51.	143.	92.	138.	130.	76.	197.	40.	
1	0.	67.	15.	48.	15.	102.	44.	33.	88.	65.	119.
		58.	5.	51.	77.	91.	57.	65.	128.	60.	169.
		39.	49.	122.	81.	133.	121.	74.	186.	36.	

1	5.	60.	13.	44.	15.	99.	38.	29.	81.	57.	114.
		58.	4.	46.	73.	91.	53.	59.	120.	51.	162.
		36.	47.	107.	72.	130.	114.	72.	176.	33.	
1	10.	54.	9.	42.	15.	95.	34.	26.	75.	52.	111.
		56.	4.	42.	69.	88.	49.	54.	112.	44.	154.
		33.	44.	95.	64.	127.	107.	71.	166.	30.	
1	15.	50.	8.	40.	15.	92.	31.	24.	71.	47.	107.
		55.	4.	38.	66.	86.	45.	51.	104.	39.	148.
		31.	41.	87.	59.	123.	102.	69.	157.	28.	
1	20.	44.	6.	37.	10.	89.	27.	20.	65.	42.	102.
		54.	2.	34.	62.	83.	42.	46.	97.	32.	142.
		29.	39.	79.	53.	118.	96.	67.	147.	25.	
1	25.	39.	5.	34.	7.	85.	22.	15.	57.	37.	96.
		53.	1.	30.	58.	80.	37.	41.	89.	25.	134.
		25.	36.	70.	45.	111.	88.	63.	137.	23.	
1	30.	33.	4.	31.	7.	81.	19.	12.	50.	31.	89.
		52.	0.	25.	53.	77.	33.	36.	81.	20.	125.
		23.	33.	60.	39.	104.	80.	59.	126.	20.	
1	35.	29.	3.	28.	7.	76.	17.	10.	44.	27.	83.
		50.	0.	22.	48.	73.	29.	31.	73.	15.	115.
		20.	30.	53.	34.	96.	73.	55.	115.	18.	
1	40.	26.	3.	26.	7.	71.	16.	9.	39.	22.	76.
		48.	0.	19.	44.	69.	26.	27.	66.	12.	106.
		18.	27.	46.	30.	89.	66.	50.	105.	16.	
1	45.	23.	3.	23.	7.	65.	15.	8.	34.	19.	71.
		45.	0.	16.	40.	65.	23.	24.	60.	9.	98.
		16.	25.	42.	27.	82.	60.	46.	96.	14.	
1	50.	21.	3.	21.	7.	61.	14.	7.	31.	18.	65.
		43.	0.	14.	36.	60.	20.	21.	54.	6.	90.
		14.	22.	37.	24.	76.	54.	42.	88.	12.	

1	55.	18.	2.	20.	6.	57.	14.	7.	28.	17.	61.
		40.	0.	12.	33.	56.	18.	18.	49.	4.	83.
		13.	20.	33.	20.	70.	50.	39.	80.	11.	
2	0.	15.	2.	18.	5.	53.	12.	6.	25.	15.	56.
		38.	0.	10.	30.	53.	16.	16.	44.	3.	76.
		11.	19.	31.	17.	65.	45.	36.	73.	10.	
2	5.	12.	1.	16.	0.	49.	9.	4.	21.	13.	52.
		36.	0.	9.	27.	49.	14.	14.	40.	2.	70.
		10.	17.	27.	14.	60.	41.	33.	67.	9.	
2	10.	9.	0.	14.	0.	46.	5.	2.	16.	10.	48.
		34.	0.	7.	25.	46.	12.	12.	36.	2.	64.
		9.	15.	22.	11.	55.	36.	30.	61.	8.	
2	15.	7.	0.	13.	0.	42.	3.	1.	12.	7.	44.
		33.	0.	6.	22.	43.	11.	11.	32.	0.	59.
		8.	14.	16.	9.	50.	32.	28.	55.	7.	
2	20.	6.	0.	11.	0.	39.	2.	0.	9.	6.	40.
		31.	0.	5.	20.	41.	9.	9.	29.	0.	54.
		7.	12.	12.	7.	46.	28.	25.	50.	6.	
2	25.	5.	0.	10.	0.	37.	0.	0.	7.	4.	37.
		29.	0.	4.	18.	38.	8.	8.	26.	0.	49.
		6.	11.	9.	5.	42.	25.	23.	45.	4.	
2	30.	4.	0.	7.	0.	34.	0.	0.	6.	3.	34.
		28.	0.	2.	17.	35.	7.	7.	23.	0.	45.
		4.	10.	7.	4.	39.	22.	21.	41.	2.	
2	35.	3.	0.	5.	0.	32.	0.	0.	5.	2.	31.
		26.	0.	2.	15.	33.	6.	6.	21.	0.	41.
		3.	9.	5.	3.	36.	19.	20.	37.	1.	
2	40.	2.	0.	4.	0.	29.	0.	0.	4.	2.	28.
		25.	0.	0.	14.	31.	6.	5.	19.	0.	38.
		2.	8.	3.	2.	33.	17.	18.	33.	0.	

2	45.	2.	0.	3.	0.	27.	0.	0.	3.	0.	26.
		23.	0.	0.	13.	29.	5.	5.	17.	0.	35.
		2.	7.	3.	2.	30.	15.	16.	30.	0.	
2	50.	0.	0.	2.	0.	25.	0.	0.	2.	0.	24.
		22.	0.	0.	11.	27.	4.	3.	15.	0.	32.
		0.	7.	2.	0.	28.	13.	15.	27.	0.	
2	55.	0.	0.	2.	0.	24.	0.	0.	2.	0.	22.
		21.	0.	0.	10.	26.	3.	2.	14.	0.	29.
		0.	6.	0.	0.	25.	11.	14.	25.	0.	
3	0.	0.	0.	2.	0.	22.	0.	0.	0.	0.	20.
		20.	0.	0.	9.	24.	2.	0.	12.	0.	26.
		0.	5.	0.	0.	23.	8.	13.	23.	0.	
3	5.	0.	0.	0.	0.	20.	0.	0.	0.	0.	18.
		19.	0.	0.	8.	22.	0.	0.	11.	0.	24.
		0.	5.	0.	0.	21.	6.	12.	20.	0.	
3	10.	0.	0.	0.	0.	19.	0.	0.	0.	0.	17.
		18.	0.	0.	8.	21.	0.	0.	10.	0.	22.
		0.	4.	0.	0.	19.	5.	11.	18.	0.	
3	15.	0.	0.	0.	0.	18.	0.	0.	0.	0.	15.
		17.	0.	0.	7.	20.	0.	0.	9.	0.	20.
		0.	2.	0.	0.	18.	4.	10.	17.	0.	
3	20.	0.	0.	0.	0.	16.	0.	0.	0.	0.	14.
		16.	0.	0.	6.	18.	0.	0.	8.	0.	19.
		0.	2.	0.	0.	16.	3.	9.	15.	0.	
3	25.	0.	0.	0.	0.	15.	0.	0.	0.	0.	13.
		15.	0.	0.	6.	17.	0.	0.	7.	0.	17.
		0.	0.	0.	0.	15.	3.	8.	14.	0.	
3	30.	0.	0.	0.	0.	14.	0.	0.	0.	0.	12.
		14.	0.	0.	5.	16.	0.	0.	6.	0.	16.
		0.	0.	0.	0.	14.	2.	8.	12.	0.	

3	35.	0.	0.	0.	0.	13.	0.	0.	0.	0.	11.
		13.	0.	0.	5.	15.	0.	0.	6.	0.	14.
		0.	0.	0.	0.	13.	2.	7.	11.	0.	
3	40.	0.	0.	0.	0.	12.	0.	0.	0.	0.	10.
		13.	0.	0.	4.	14.	0.	0.	5.	0.	13.
		0.	0.	0.	0.	12.	0.	6.	10.	0.	
3	45.	0.	0.	0.	0.	11.	0.	0.	0.	0.	9.
		12.	0.	0.	4.	13.	0.	0.	3.	0.	12.
		0.	0.	0.	0.	11.	0.	6.	9.	0.	
3	50.	0.	0.	0.	0.	11.	0.	0.	0.	0.	8.
		11.	0.	0.	3.	12.	0.	0.	2.	0.	11.
		0.	0.	0.	0.	10.	0.	4.	8.	0.	
3	55.	0.	0.	0.	0.	10.	0.	0.	0.	0.	8.
		11.	0.	0.	2.	12.	0.	0.	0.	0.	10.
		0.	0.	0.	0.	9.	0.	3.	8.	0.	
4	0.	0.	0.	0.	0.	9.	0.	0.	0.	0.	7.
		10.	0.	0.	0.	11.	0.	0.	0.	0.	9.
		0.	0.	0.	0.	8.	0.	2.	7.	0.	
4	5.	0.	0.	0.	0.	9.	0.	0.	0.	0.	6.
		10.	0.	0.	0.	10.	0.	0.	0.	0.	8.
		0.	0.	0.	0.	7.	0.	2.	6.	0.	
4	10.	0.	0.	0.	0.	8.	0.	0.	0.	0.	6.
		9.	0.	0.	0.	10.	0.	0.	0.	0.	8.
		0.	0.	0.	0.	7.	0.	0.	6.	0.	

1

SOUTH CANYON - LIME CREEK DRAINAGE DESIGN PLAN BY FMG, INC
EXISTING HYDROLOGIC CONDITIONS AND EXISTING HYDRAULIC CONDITIONS 10 YR STORM

GUTTER NUMBER	GUTTER CONNECTION	NDP	NP		WIDTH OR DIAM (FT)	LENGTH (FT)	INVERT SLOPE (FT/FT)	SIDE SLOPES HORIZ TO VERT L	R	OVERBANK/SURCHARGE MANNING N	DEPTH (FT)	JK
40	0	0	4	CHANNEL	10.0	1450.	.0100	6.0	10.0	.063	7.00	0
				OVERFLOW	280.0	1100.	.0132	10.0	10.0	.044	15.00	
140	40	0	3		.0	1.	.0010	.0	.0	.001	10.00	0
41	140	0	4	CHANNEL	10.0	3550.	.0090	2.0	2.0	.063	4.00	0
				OVERFLOW	100.0	2850.	.0112	2.0	16.0	.044	14.00	
141	41	0	3		.0	1.	.0010	.0	.0	.001	10.00	0
42	141	0	4	CHANNEL	10.0	1100.	.0082	5.0	8.0	.063	4.00	0
				OVERFLOW	.0	600.	.0150	150.0	2.0	.071	7.00	
150	42	0	3		.0	1.	.0010	.0	.0	.001	10.00	0
50	150	0	4	CHANNEL	10.0	550.	.0145	3.0	4.0	.050	5.00	0
				OVERFLOW	100.0	550.	.0145	4.0	10.0	.050	10.00	
250	50	9	2	PIPE	.1	1.	.0100	.0	.0	.016	.10	0
		RESERVOIR STORAGE IN ACRE-FEET VS SPILLWAY OUTFLOW										
		.0	.0	.0 22.0	.2	95.0	.7	140.0	2.0	187.0	3.7 205.0	
		4.4	271.0	6.4 516.0	13.0	7680.0						
151	250	0	3		.0	1.	.0010	.0	.0	.001	10.00	0
51	151	0	1	CHANNEL	20.0	3500.	.0206	7.0	12.0	.056	10.00	0
251	51	9	2	PIPE	.1	1.	.0100	.0	.0	.016	.10	0
		RESERVOIR STORAGE IN ACRE-FEET VS SPILLWAY OUTFLOW										
		.0	.0	1.7 165.0	3.1	375.0	8.0	500.0	9.4	540.0	10.8 575.0	
		11.8	1000.0	12.8 1350.0	16.5	3050.0						
152	251	0	3		.0	1.	.0010	.0	.0	.001	10.00	0
52	152	0	5	PIPE	5.0	1000.	.0203	.0	.0	.016	5.00	0
				OVERFLOW	50.0	1000.	.0203	5.0	10.0	.038	15.00	
252	52	8	2	PIPE	.1	1.	.0203	.0	.0	.016	.10	0
		RESERVOIR STORAGE IN ACRE-FEET VS SPILLWAY OUTFLOW										
		.0	.0	2.5 26.0	5.5	40.0	7.3	55.0	8.5	125.0	14.0 293.0	
		25.1	532.0	36.1 2558.0								
43	141	0	4	CHANNEL	100.0	700.	.0160	5.0	37.0	.056	6.00	0
				OVERFLOW	200.0	700.	.0160	4.0	37.0	.056	12.00	
142	43	0	3		.0	1.	.0010	.0	.0	.001	10.00	0
160	142	0	3		.0	1.	.0010	.0	.0	.001	10.00	0
60	160	0	4	CHANNEL	15.0	4750.	.0148	5.0	3.0	.081	10.00	0
				OVERFLOW	.0	4750.	.0148	100.0	13.0	.094	16.00	
161	60	0	3		.0	1.	.0010	.0	.0	.001	10.00	0
162	161	0	3		.0	1.	.0010	.0	.0	.001	10.00	0

61	162	0	4	CHANNEL	15.0	350.	.0110	7.0	17.0	.050	6.00	0
				OVERFLOW	.0	350.	.0110	60.0	10.0	.094	10.00	
163	61	0	3		.0	1.	.0010	.0	.0	.001	10.00	0
62	163	0	4	CHANNEL	15.0	1150.	.0130	3.0	4.0	.056	8.00	0
				OVERFLOW	600.0	1150.	.0130	24.0	4.0	.094	11.00	
63	62	0	4	CHANNEL	70.0	550.	.0165	19.0	3.0	.067	2.00	0
				OVERFLOW	200.0	550.	.0165	22.0	3.0	.094	9.00	
64	63	0	4	CHANNEL	50.0	700.	.0143	50.0	10.0	.044	4.00	0
				OVERFLOW	350.0	700.	.0143	3.0	10.0	.081	10.00	
65	64	0	4	CHANNEL	15.0	650.	.0148	30.0	8.0	.044	6.00	0
				OVERFLOW	170.0	650.	.0148	10.0	18.0	.081	15.00	
164	65	0	3		.0	1.	.0010	.0	.0	.001	10.00	0
66	164	0	4	CHANNEL	18.0	700.	.0173	.0	.0	.019	3.50	0
				OVERFLOW	110.0	700.	.0173	63.0	5.0	.094	13.00	
67	66	0	1	CHANNEL	150.0	850.	.0270	10.0	10.0	.056	6.00	0
165	67	0	3		.0	1.	.0010	.0	.0	.001	10.00	0
166	165	0	3		.0	1.	.0010	.0	.0	.001	10.00	0
68	166	0	1	CHANNEL	10.0	1250.	.0256	3.0	4.0	.050	10.00	0
167	68	0	3		.0	1.	.0010	.0	.0	.001	10.00	0
69	167	0	1	CHANNEL	10.0	3500.	.0351	6.0	5.0	.063	8.00	0
168	69	0	3		.0	1.	.0010	.0	.0	.001	10.00	0
169	165	0	3		.0	1.	.0010	.0	.0	.001	10.00	0
70	169	0	4	CHANNEL	60.0	900.	.0213	10.0	20.0	.056	2.00	0
				OVERFLOW	50.0	900.	.0213	10.0	2.0	.038	10.00	
71	70	0	4	CHANNEL	15.0	7300.	.0263	2.0	2.0	.075	5.00	0
				OVERFLOW	35.0	7300.	.0263	3.0	3.0	.044	15.00	
260	71	6	2	PIPE	.1	1.	.0100	.0	.0	.016	.10	0
		RESERVOIR STORAGE IN ACRE-FEET VS SPILLWAY OUTFLOW										
		.0	.0	.3 110.0	1.9	310.0	3.1	375.0	5.3	2775.0	8.3 15125.0	
72	260	0	4	CHANNEL	15.0	1100.	.0200	3.0	3.0	.075	8.00	0
				OVERFLOW	60.0	1100.	.0200	3.0	2.0	.044	18.00	
261	72	5	2	PIPE	.1	1.	.0100	.0	.0	.016	.10	0
		RESERVOIR STORAGE IN ACRE-FEET VS SPILLWAY OUTFLOW										
		.0	.0	2.5 300.0	5.5	500.0	8.0	2900.0	10.5	11300.0		
170	261	0	3		.0	1.	.0010	.0	.0	.001	10.00	0
171	170	0	3		.0	1.	.0010	.0	.0	.001	10.00	0
73	171	0	1	CHANNEL	10.0	4800.	.0521	3.0	2.0	.063	10.00	0
74	170	0	1	CHANNEL	20.0	300.	.0280	4.0	8.0	.069	10.00	0
262	74	6	2	PIPE	.1	1.	.0100	.0	.0	.016	.10	0
		RESERVOIR STORAGE IN ACRE-FEET VS SPILLWAY OUTFLOW										

```
                .0      .0       .1    90.0       1.2   375.0       2.1   500.0       4.1  5100.0       5.8 13100.0
 75       262     0         4     CHANNEL        15.0     400.     .0200      3.0   2.0       .063      10.00        0
                                   OVERFLOW       60.0     400.     .0200      2.0   2.0       .044      15.00
263        75     7         2     PIPE             .1       1.     .0100       .0    .0       .016        .10        0
              RESERVOIR STORAGE IN ACRE-FEET VS SPILLWAY OUTFLOW
                .0      .0       .2    90.0       1.6   375.0       2.5   550.0       3.0  1024.0       4.0  6255.0
               6.5 11870.0
172       263     0         3                       .0       1.     .0010       .0    .0       .001      10.00        0
 76       172     0         4     CHANNEL        15.0    5150.     .0222      2.0   3.0       .069      10.00        0
                                   OVERFLOW       50.0    5150.     .0222      2.0   2.0       .044      15.00
173        76     0         3                       .0       1.     .0010       .0    .0       .001      10.00        0
 77       173     0         1     CHANNEL        15.0    2100.     .0262      2.0   4.0       .063      10.00        0
174        77     0         3                       .0       1.     .0010       .0    .0       .001      10.00        0
 78       174     0         1     CHANNEL        25.0     900.     .0333      4.0  10.0       .056      10.00        0
175       174     0         3                       .0       1.     .0010       .0    .0       .001      10.00        0
 79       175     0         1     CHANNEL        20.0    2500.     .0306      5.0   2.0       .069      10.00        0
264        79     6         2     PIPE             .1       1.     .0100       .0    .0       .028        .10        0
              RESERVOIR STORAGE IN ACRE-FEET VS SPILLWAY OUTFLOW
                .0      .0       1.0   115.0       2.1   205.0       6.3   280.0      10.5   350.0      18.0 10452.0
180       142     0         3                       .0       1.     .0010       .0    .0       .001      10.00        0
 80       180     0         4     CHANNEL        10.0    3650.     .0133      4.0   7.0       .075       6.00        0
                                   OVERFLOW      150.0    3650.     .0133     60.0  50.0       .094      14.00
181        80     0         3                       .0       1.     .0010       .0    .0       .001      10.00        0
 81       181     0         4     CHANNEL        10.0    1600.     .0138      6.0   4.0       .056       4.00        0
                                   OVERFLOW        .0    1600.     .0138     56.0   8.0       .081      14.00
182        81     0         3                       .0       1.     .0010       .0    .0       .001      10.00        0
 82       182     0         4     CHANNEL        10.0    1000.     .0160     10.0  12.0       .050       2.00        0
                                   OVERFLOW      220.0    1000.     .0160     35.0  10.0       .050       6.00
 83       182     0         4     CHANNEL        10.0    2800.     .0177     13.0   5.0       .063       6.00        0
                                   OVERFLOW      450.0    2100.     .0236     13.0  60.0       .056      12.00
183        83     0         3                       .0       1.     .0010       .0    .0       .001      10.00        0
 84       183     0         4     CHANNEL        10.0    2250.     .0136      4.0   4.0       .050       4.00        0
                                   OVERFLOW       80.0    2250.     .0136     10.0   4.0       .044      12.00
280        84     9         2     PIPE             .1       1.     .0100       .0    .0       .016        .10        0
              RESERVOIR STORAGE IN ACRE-FEET VS SPILLWAY OUTFLOW
                .0      .0       .2    35.0        .8   128.0       1.9   190.0       3.4   248.0       4.3   280.0
               5.4  1025.0      6.8  3320.0       8.6  8510.0
184       280     0         3                       .0       1.     .0010       .0    .0       .001      10.00        0
 85       184     0         1     CHANNEL        10.0    3600.     .0096     15.0   8.0       .050      10.00        0
185        85     0         3                       .0       1.     .0010       .0    .0       .001      10.00        0
```

86	185	0	1	CHANNEL	8.0	1600.	.0138	9.0	8.0	.044	8.00	0
281	86	9	2	PIPE	.1	1.	.0100	.0	.0	.016	.10	0

RESERVOIR STORAGE IN ACRE-FEET VS SPILLWAY OUTFLOW

.0	.0	.0	5.0	1.0	28.0	3.9	45.0	9.2	55.0	17.7	65.0
28.0	75.0	43.0	335.0	54.0	1300.0						

0TOTAL NUMBER OF GUTTERS/PIPES, 72

1

SOUTH CANYON - LIME CREEK DRAINAGE DESIGN PLAN BY FMG, INC

EXISTING HYDROLOGIC CONDITIONS AND EXISTING HYDRAULIC CONDITIONS 10 YR STORM

ARRANGEMENT OF SUBCATCHMENTS AND GUTTERS/PIPES

GUTTER	TRIBUTARY GUTTER/PIPE										TRIBUTARY SUBAREA										D.A.(AC)
40	140	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6138.9
41	141	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6016.6
42	150	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	570.2
43	142	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5446.4
50	250	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	537.0
51	251	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	446.1
52	252	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	409.0
60	161	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3698.6
61	163	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3530.2
62	63	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3387.5
63	64	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3387.5

64	65	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3387.5
65	164	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3387.5
66	67	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2984.3
67	165	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2984.3
68	167	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	850.6
69	168	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	695.0
70	71	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1822.7
71	260	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1822.7
72	261	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1822.7
73	0	0	0	0	0	0	0	0	0	0	17	0	0	0	0	0	0	0	0	0	0	208.0
74	262	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1428.5
75	263	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1428.5
76	173	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1070.1
77	174	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	897.3
78	0	0	0	0	0	0	0	0	0	0	20	0	0	0	0	0	0	0	0	0	0	620.8
79	264	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	161.3
80	181	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1498.9
81	182	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1358.1
82	0	0	0	0	0	0	0	0	0	0	25	0	0	0	0	0	0	0	0	0	0	314.2
83	183	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1043.8

84	280	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	836.5
85	185	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	620.2
86	281	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	90.2
140	41	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	6138.9
141	42	43	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6016.6
142	160	180	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5446.4
150	50	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	570.2
151	51	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	537.0
152	52	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	446.1
160	60	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	3782.4
161	162	0	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	3698.6
162	61	0	0	0	0	0	0	0	0	0	9	0	0	0	0	0	0	0	0	0	0	3626.2
163	62	0	0	0	0	0	0	0	0	0	8	0	0	0	0	0	0	0	0	0	0	3530.2
164	66	0	0	0	0	0	0	0	0	0	10	0	0	0	0	0	0	0	0	0	0	3387.5
165	166	169	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2984.3
166	68	0	0	0	0	0	0	0	0	0	12	0	0	0	0	0	0	0	0	0	0	880.6
167	69	0	0	0	0	0	0	0	0	0	13	0	0	0	0	0	0	0	0	0	0	850.6
168	0	0	0	0	0	0	0	0	0	0	14	15	0	0	0	0	0	0	0	0	0	695.0
169	70	0	0	0	0	0	0	0	0	0	11	0	0	0	0	0	0	0	0	0	0	2103.7
170	171	74	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1822.7

171	73	0	0	0	0	0	0	0	0	0	16	0	0	0	0	0	0	0	0	0	394.2
172	76	0	0	0	0	0	0	0	0	0	18	0	0	0	0	0	0	0	0	0	1428.5
173	77	0	0	0	0	0	0	0	0	0	19	0	0	0	0	0	0	0	0	0	1070.1
174	78	175	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	897.3
175	79	0	0	0	0	0	0	0	0	0	21	0	0	0	0	0	0	0	0	0	276.5
180	80	0	0	0	0	0	0	0	0	0	23	0	0	0	0	0	0	0	0	0	1664.0
181	81	0	0	0	0	0	0	0	0	0	24	0	0	0	0	0	0	0	0	0	1498.9
182	82	83	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1358.1
183	84	0	0	0	0	0	0	0	0	0	26	0	0	0	0	0	0	0	0	0	1043.8
184	85	0	0	0	0	0	0	0	0	0	27	0	0	0	0	0	0	0	0	0	836.5
185	86	0	0	0	0	0	0	0	0	0	28	0	0	0	0	0	0	0	0	0	620.2
250	151	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	537.0
251	152	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	446.1
252	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	409.0
260	72	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1822.7
261	170	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1822.7
262	75	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1428.5
263	172	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1428.5
264	0	0	0	0	0	0	0	0	0	0	22	0	0	0	0	0	0	0	0	0	161.3
280	184	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	836.5

281 0 0 0 0 0 0 0 0 0 0 29 0 0 0 0 0 0 0 0 0 90.2

1

SOUTH CANYON - LIME CREEK DRAINAGE DESIGN PLAN BY FMG, INC
EXISTING HYDROLOGIC CONDITIONS AND EXISTING HYDRAULIC CONDITIONS 10 YR STORM

HYDROGRAPHS ARE LISTED FOR THE FOLLOWING 72 CONVEYANCE ELEMENTS

THE UPPER NUMBER IS DISCHARGE IN CFS
THE LOWER NUMBER IS ONE OF THE FOLLOWING CASES:
( ) DENOTES DEPTH ABOVE INVERT IN FEET
(S) DENOTES STORAGE IN AC-FT FOR DETENSION DAM. DISCHARGE INCLUDES SPILLWAY OUTFLOW.
(I) DENOTES GUTTER INFLOW IN CFS FROM SPECIFIED INFLOW HYDROGRAPH
(D) DENOTES DISCHARGE IN CFS DIVERTED FROM THIS GUTTER
(O) DENOTES STORAGE IN AC-FT FOR SURCHARGED GUTTER

TIME(HR/MIN)	40	140	41	141	42	150	50	250	151	51
	251	152	52	252	43	142	160	60	161	162
	61	163	62	63	64	65	164	66	67	165
	166	68	167	69	168	169	70	71	260	72
	261	170	171	73	74	262	75	263	172	76
	173	77	174	78	175	79	264	180	80	181
	81	182	82	83	183	84	280	184	85	185
	86	281								
0 5.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	.0( )	.0( )	.0( )	.0( )	.0( )	.0( )	.0( )	.0(S)	.0( )	.0( )
	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	.0(S)	.0( )	.0( )	.0(S)	.0( )	.0( )	.0( )	.0( )	.0( )	.0( )
	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	.0( )	.0( )	.0( )	.0( )	.0( )	.0( )	.0( )	.0( )	.0( )	.0( )
	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	.0( )	.0( )	.0( )	.0( )	.0( )	.0( )	.0( )	.0( )	.0(S)	.0( )

		0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
		.0(S)	.0( )	.0( )	.0( )	.0( )	.0(S)	.0( )	.0(S)	.0( )	.0( )
		0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
		.0( )	.0( )	.0( )	.0( )	.0( )	.0( )	.0(S)	.0( )	.0( )	.0( )
		0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
		.0( )	.0( )	.0( )	.0( )	.0( )	.0( )	.0(S)	.0( )	.0( )	.0( )
		0.	0.								
		.0( )	.0(S)								
0	10.	0.	1.	0.	0.	0.	0.	0.	0.	0.	0.
		.0( )	.0( )	.0( )	.0( )	.0( )	.0( )	.0( )	.0(S)	.0( )	.0( )
		1.	5.	0.	0.	0.	5.	3.	0.	4.	2.
		.0(S)	.0( )	.0( )	.0(S)	.0( )	.0( )	.0( )	.0( )	.0( )	.0( )
		0.	1.	0.	0.	0.	0.	0.	0.	0.	0.
		.0( )	.0( )	.0( )	.0( )	.0( )	.0( )	.0( )	.0( )	.0( )	.0( )
		0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
		.0( )	.0( )	.0( )	.0( )	.0( )	.0( )	.0( )	.0( )	.0(S)	.0( )
		0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
		.0(S)	.0( )	.0( )	.0( )	.0( )	.0(S)	.0( )	.0(S)	.0( )	.0( )
		0.	0.	0.	0.	0.	0.	0.	2.	0.	2.
		.0( )	.0( )	.0( )	.0( )	.0( )	.0( )	.0(S)	.0( )	.0( )	.0( )
		0.	0.	0.	0.	1.	0.	0.	0.	0.	0.
		.0( )	.0( )	.0( )	.0( )	.0( )	.0( )	.0(S)	.0( )	.0( )	.0( )
		0.	0.								
		.0( )	.0(S)								
0	15.	0.	6.	0.	5.	0.	3.	0.	2.	2.	0.
		.1( )	.0( )	.0( )	.0( )	.0( )	.0( )	.1( )	.0(S)	.0( )	.0( )

		9.	29.	0.	0.	4.	30.	18.	0.	24.	12.
		.1(S)	.0( )	.0( )	.0(S)	.1( )	.0( )	.0( )	.1( )	.0( )	.0( )
		2.	7.	0.	0.	0.	0.	1.	0.	0.	1.
		.2( )	.0( )	.0( )	.0( )	.0( )	.0( )	.0( )	.0( )	.0( )	.0( )
		1.	0.	0.	0.	0.	0.	0.	0.	0.	0.
		.0( )	.0( )	.0( )	.0( )	.0( )	.0( )	.0( )	.0( )	.0(S)	.0( )
		0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
		.0(S)	.0( )	.0( )	.0( )	.0( )	.0(S)	.0( )	.0(S)	.0( )	.0( )
		1.	0.	1.	0.	1.	0.	0.	13.	0.	10.
		.0( )	.0( )	.0( )	.0( )	.0( )	.0( )	.0(S)	.0( )	.1( )	.0( )
		0.	0.	0.	0.	4.	0.	0.	0.	0.	1.
		.0( )	.0( )	.0( )	.0( )	.0( )	.0( )	.0(S)	.0( )	.0( )	.0( )
		0.	0.								
		.0( )	.0(S)								
0	20.	3.	19.	1.	33.	1.	9.	2.	6.	6.	1.
		.3( )	.0( )	.2( )	.0( )	.2( )	.0( )	.2( )	.0(S)	.0( )	.1( )
		25.	54.	0.	0.	32.	89.	47.	3.	65.	38.
		.3(S)	.0( )	.0( )	.0(S)	.2( )	.0( )	.0( )	.2( )	.0( )	.0( )
		11.	19.	0.	0.	0.	0.	3.	0.	0.	2.
		.4( )	.0( )	.0( )	.0( )	.0( )	.1( )	.0( )	.0( )	.0( )	.0( )
		2.	0.	1.	0.	1.	1.	0.	0.	0.	0.
		.0( )	.0( )	.0( )	.0( )	.0( )	.0( )	.0( )	.0( )	.0(S)	.0( )
		0.	1.	1.	0.	0.	0.	0.	1.	1.	0.
		.0(S)	.0( )	.0( )	.0( )	.0( )	.0(S)	.0( )	.0(S)	.0( )	.0( )
		2.	0.	2.	0.	2.	0.	1.	42.	1.	28.
		.0( )	.0( )	.0( )	.0( )	.0( )	.0( )	.0(S)	.0( )	.2( )	.0( )
		0.	1.	0.	1.	13.	0.	0.	1.	0.	3.

		.0( )	.0( )	.0( )	.1( )	.0( )	.0( )	.0(S)	.0( )	.0( )	.0( )
		0.	0.								
		.0( )	.0(S)								
0	25.	17.	76.	14.	146.	11.	49.	14.	26.	30.	7.
		.7( )	.0( )	.8( )	.0( )	.6( )	.0( )	.5( )	.0(S)	.0( )	.2( )
		62.	144.	0.	0.	135.	254.	139.	19.	225.	117.
		.6(S)	.0( )	.1( )	.0(S)	.6( )	.0( )	.0( )	.7( )	.0( )	.0( )
		41.	61.	0.	0.	0.	4.	14.	1.	4.	38.
		.8( )	.0( )	.0( )	.0( )	.0( )	.2( )	.0( )	.0( )	.0( )	.0( )
		35.	2.	13.	0.	9.	3.	0.	0.	0.	0.
		.0( )	.1( )	.0( )	.0( )	.0( )	.0( )	.0( )	.0( )	.0(S)	.0( )
		3.	10.	9.	0.	1.	3.	4.	12.	19.	1.
		.0(S)	.0( )	.0( )	.0( )	.1( )	.0(S)	.2( )	.0(S)	.0( )	.1( )
		59.	1.	14.	2.	12.	0.	3.	115.	8.	86.
		.0( )	.1( )	.0( )	.1( )	.0( )	.0( )	.0(S)	.0( )	.5( )	.0( )
		1.	9.	4.	5.	48.	0.	4.	8.	1.	23.
		.1( )	.0( )	.2( )	.3( )	.0( )	.0( )	.0(S)	.0( )	.1( )	.0( )
		0.	5.								
		.1( )	.0(S)								
0	30.	65.	183.	76.	375.	37.	85.	39.	51.	67.	21.
		1.4( )	.0( )	1.9( )	.0( )	1.2( )	.0( )	1.0( )	.1(S)	.0( )	.4( )
		88.	84.	0.	1.	337.	460.	234.	64.	348.	218.
		.9(S)	.0( )	.1( )	.1(S)	1.0( )	.0( )	.0( )	1.4( )	.0( )	.0( )
		94.	111.	0.	0.	6.	26.	54.	14.	25.	72.
		1.2( )	.0( )	.0( )	.0( )	.1( )	.5( )	.0( )	.2( )	.1( )	.0( )
		62.	18.	46.	3.	39.	10.	0.	0.	2.	3.
		.0( )	.5( )	.0( )	.2( )	.0( )	.0( )	.0( )	.0( )	.0(S)	.2( )

19.	50.	35.	3.	15.	27.	34.	52.	71.	13.
.2(S)	.0( )	.0( )	.2( )	.4( )	.0(S)	.8( )	.1(S)	.0( )	.4( )
136.	9.	48.	16.	32.	1.	11.	226.	27.	152.
.0( )	.3( )	.0( )	.3( )	.0( )	.1( )	.1(S)	.0( )	1.0( )	.0( )
8.	43.	22.	21.	102.	1.	17.	31.	6.	73.
.4( )	.0( )	.6( )	.7( )	.0( )	.1( )	.1(S)	.0( )	.4( )	.0( )
2.	8.								
.2( )	.1(S)								

0	35.	166.	330.	212.	592.	71.	112.	71.	84.	94.	35.
		2.2( )	.0( )	3.3( )	.0( )	1.6( )	.0( )	1.3( )	.2(S)	.0( )	.6( )
		74.	36.	2.	3.	521.	579.	274.	125.	369.	264.
		.8(S)	.0( )	.3( )	.3(S)	1.2( )	.0( )	.0( )	1.9( )	.0( )	.0( )
		129.	133.	1.	8.	36.	83.	127.	52.	63.	107.
		1.4( )	.0( )	.1( )	.1( )	.3( )	.9( )	.0( )	.5( )	.2( )	.0( )
		86.	53.	83.	16.	81.	21.	0.	0.	13.	21.
		.0( )	1.0( )	.0( )	.5( )	.0( )	.0( )	.0( )	.0( )	.0(S)	.6( )
		63.	137.	70.	13.	67.	83.	94.	109.	142.	39.
		.5(S)	.0( )	.0( )	.4( )	.9( )	.1(S)	1.4( )	.3(S)	.0( )	.9( )
		178.	36.	103.	53.	50.	3.	24.	306.	58.	196.
		.0( )	.7( )	.0( )	.6( )	.0( )	.1( )	.2(S)	.0( )	1.4( )	.0( )
		38.	109.	59.	50.	146.	8.	42.	69.	22.	134.
		1.0( )	.0( )	1.0( )	1.0( )	.0( )	.4( )	.2(S)	.0( )	.7( )	.0( )
		4.	13.								
		.3( )	.3(S)								

0	40.	301.	453.	342.	704.	100.	127.	94.	97.	101.	43.
		2.8( )	.0( )	4.1( )	.0( )	1.9( )	.0( )	1.6( )	.2(S)	.0( )	.7( )

	53.	28.	5.	6.	604.	620.	291.	179.	340.	259.
	.5(S)	.0( )	.4( )	.6(S)	1.3( )	.0( )	.0( )	2.3( )	.0( )	.0( )
	139.	141.	12.	53.	108.	166.	204.	101.	110.	150.
	1.4( )	.0( )	.4( )	.4( )	.6( )	1.2( )	.0( )	.7( )	.3( )	.0( )
	116.	93.	115.	42.	121.	33.	0.	1.	50.	71.
	.0( )	1.3( )	.0( )	.9( )	.0( )	.0( )	.0( )	.1( )	.1(S)	1.3( )
	130.	218.	100.	31.	118.	124.	153.	164.	209.	76.
	1.1(S)	.0( )	.0( )	.7( )	1.2( )	.2(S)	1.8( )	.6(S)	.0( )	1.3( )
	213.	87.	160.	100.	60.	9.	38.	329.	97.	242.
	.0( )	1.2( )	.0( )	.8( )	.0( )	.3( )	.3(S)	.0( )	1.8( )	.0( )
	99.	185.	99.	86.	173.	26.	74.	114.	50.	183.
	1.6( )	.0( )	1.3( )	1.4( )	.0( )	.8( )	.5(S)	.0( )	1.0( )	.0( )
	8.	18.								
	.4( )	.6(S)								
0 45.	432.	553.	454.	752.	117.	126.	98.	99.	100.	44.
	3.3( )	.0( )	4.4( )	.0( )	2.0( )	.0( )	1.6( )	.2(S)	.0( )	.7( )
	41.	28.	9.	11.	635.	647.	305.	218.	336.	272.
	.4(S)	.0( )	.6( )	1.1(S)	1.4( )	.0( )	.0( )	2.6( )	.0( )	.0( )
	170.	186.	67.	143.	196.	241.	270.	149.	156.	188.
	1.6( )	.0( )	1.2( )	.8( )	.9( )	1.5( )	.0( )	.9( )	.4( )	.0( )
	144.	127.	145.	75.	149.	44.	0.	7.	113.	145.
	.0( )	1.6( )	.0( )	1.2( )	.0( )	.0( )	.0( )	.3( )	.3(S)	1.9( )
	201.	284.	118.	47.	166.	179.	211.	224.	264.	117.
	1.7(S)	.0( )	.0( )	.9( )	1.5( )	.4(S)	2.2( )	.9(S)	.0( )	1.6( )
	252.	146.	207.	139.	68.	19.	48.	342.	143.	298.
	.0( )	1.6( )	.0( )	1.0( )	.0( )	.4( )	.4(S)	.0( )	2.2( )	.0( )
	174.	248.	126.	122.	198.	55.	115.	160.	85.	212.

		2.2( )	.0( )	1.4( )	1.6( )	.0( )	1.2( )	.7(S)	.0( )	1.3( )	.0( )
		13.	23.								
		.5( )	.8(S)								
0	50.	548.	653.	567.	789.	121.	121.	98.	98.	96.	42.
		3.6( )	.0( )	4.6( )	.0( )	2.0( )	.0( )	1.6( )	.2(S)	.0( )	.7( )
		35.	30.	15.	16.	668.	685.	321.	255.	382.	333.
		.4(S)	.0( )	.8( )	1.6(S)	1.4( )	.0( )	.0( )	2.8( )	.0( )	.0( )
		246.	270.	162.	234.	268.	299.	319.	192.	198.	223.
		1.9( )	.0( )	1.9( )	1.1( )	1.0( )	1.6( )	.0( )	1.1( )	.5( )	.0( )
		168.	156.	171.	107.	164.	56.	4.	21.	156.	222.
		.0( )	1.8( )	.0( )	1.4( )	.0( )	.0( )	.1( )	.6( )	.7(S)	2.4( )
		269.	352.	125.	59.	227.	235.	266.	274.	306.	161.
		2.2(S)	.0( )	.0( )	1.0( )	1.7( )	.7(S)	2.5( )	1.1(S)	.0( )	1.9( )
		284.	196.	239.	163.	76.	30.	52.	364.	195.	348.
		.0( )	1.9( )	.0( )	1.1( )	.0( )	.6( )	.5(S)	.0( )	2.6( )	.0( )
		241.	295.	139.	156.	228.	91.	142.	197.	120.	222.
		2.5( )	.0( )	1.5( )	1.8( )	.0( )	1.5( )	1.1(S)	.0( )	1.5( )	.0( )
		18.	26.								
		.6( )	.9(S)								
0	55.	652.	739.	664.	834.	119.	115.	97.	96.	91.	40.
		3.9( )	.0( )	4.7( )	.0( )	2.0( )	.0( )	1.6( )	.2(S)	.0( )	.6( )
		34.	35.	21.	22.	715.	739.	349.	297.	446.	407.
		.3(S)	.0( )	.9( )	2.1(S)	1.5( )	.0( )	.0( )	3.0( )	.0( )	.0( )
		332.	350.	252.	299.	321.	341.	355.	231.	236.	259.
		2.2( )	.0( )	2.4( )	1.2( )	1.1( )	1.7( )	.0( )	1.2( )	.5( )	.0( )
		186.	179.	189.	132.	169.	73.	17.	45.	216.	288.
		.0( )	1.9( )	.0( )	1.6( )	.0( )	.0( )	.2( )	.9( )	1.1(S)	2.8( )

321.	403.	127.	64.	276.	284.	307.	314.	339.	202.
2.8(S)	.0( )	.0( )	1.1( )	1.9( )	.8(S)	2.7( )	1.3(S)	.0( )	2.2( )
302.	230.	254.	173.	81.	38.	52.	390.	247.	384.
.0( )	2.1( )	.0( )	1.1( )	.0( )	.7( )	.5(S)	.0( )	2.9( )	.0( )
292.	330.	140.	190.	253.	124.	165.	224.	148.	219.
2.8( )	.0( )	1.5( )	2.0( )	.0( )	1.8( )	1.5(S)	.0( )	1.7( )	.0( )
22.	28.								
.7( )	1.0(S)								

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742.	814.	748.	891.	114.	107.	92.	89.	86.	39.
4.1( )	.0( )	4.8( )	.0( )	2.0( )	.0( )	1.5( )	.2(S)	.0( )	.6( )
36.	40.	26.	27.	777.	805.	388.	344.	491.	458.
.4(S)	.0( )	1.0( )	2.7(S)	1.5( )	.0( )	.0( )	3.3( )	.0( )	.0( )
393.	404.	315.	345.	360.	376.	389.	270.	276.	300.
2.3( )	.0( )	2.7( )	1.3( )	1.2( )	1.8( )	.0( )	1.3( )	.6( )	.0( )
198.	193.	198.	148.	168.	102.	45.	81.	274.	336.
.0( )	2.0( )	.0( )	1.6( )	.0( )	.0( )	.4( )	1.3( )	1.6(S)	3.0( )
358.	440.	123.	66.	316.	321.	340.	344.	363.	235.
3.4(S)	.0( )	.0( )	1.1( )	2.1( )	1.0(S)	2.8( )	1.4(S)	.0( )	2.4( )
307.	247.	254.	172.	83.	44.	51.	417.	295.	410.
.0( )	2.2( )	.0( )	1.1( )	.0( )	.7( )	.4(S)	.0( )	3.1( )	.0( )
330.	357.	137.	220.	274.	152.	187.	241.	167.	211.
2.9( )	.0( )	1.5( )	2.1( )	.0( )	2.0( )	1.9(S)	.0( )	1.8( )	.0( )
25.	28.								
.7( )	1.1(S)								

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821.	884.	824.	951.	107.	98.	86.	84.	83.	38.
4.3( )	.0( )	4.9( )	.0( )	1.9( )	.0( )	1.5( )	.2(S)	.0( )	.6( )

39.	43.	29.	29.	844.	871.	428.	390.	520.	491.
.4(S)	.0( )	1.0( )	3.2(S)	1.6( )	.0( )	.0( )	3.5( )	.0( )	.0( )
434.	441.	360.	382.	397.	414.	429.	315.	321.	348.
2.4( )	.0( )	2.9( )	1.4( )	1.2( )	1.9( )	.0( )	1.5( )	.6( )	.0( )
204.	200.	201.	155.	164.	144.	86.	125.	316.	373.
.0( )	2.0( )	.0( )	1.7( )	.0( )	.0( )	.5( )	1.7( )	2.0(S)	3.2( )
393.	463.	117.	64.	346.	349.	363.	366.	378.	258.
3.9(S)	.0( )	.0( )	1.1( )	2.2( )	1.1(S)	2.9( )	1.6(S)	.0( )	2.5( )
300.	250.	247.	165.	82.	46.	49.	443.	336.	430.
.0( )	2.2( )	.0( )	1.1( )	.0( )	.7( )	.4(S)	.0( )	3.3( )	.0( )
358.	379.	133.	246.	290.	176.	202.	251.	179.	203.
3.0( )	.0( )	1.5( )	2.2( )	.0( )	2.1( )	2.2(S)	.0( )	1.8( )	.0( )
27.	29.								
.7( )	1.1(S)								

1 10.

892.	949.	895.	1007.	100.	91.	82.	81.	81.	39.
4.5( )	.0( )	5.0( )	.0( )	1.9( )	.0( )	1.5( )	.2(S)	.0( )	.6( )
42.	45.	31.	31.	907.	931.	466.	432.	545.	520.
.4(S)	.0( )	1.1( )	3.6(S)	1.7( )	.0( )	.0( )	3.7( )	.0( )	.0( )
468.	475.	400.	422.	438.	458.	475.	364.	370.	396.
2.5( )	.0( )	3.1( )	1.5( )	1.3( )	2.0( )	.0( )	1.6( )	.7( )	.0( )
204.	200.	199.	158.	158.	191.	135.	171.	339.	406.
.0( )	2.0( )	.0( )	1.7( )	.0( )	.0( )	.7( )	2.0( )	2.4(S)	3.3( )
422.	476.	110.	62.	366.	368.	376.	377.	382.	270.
4.3(S)	.0( )	.0( )	1.0( )	2.2( )	1.2(S)	3.0( )	1.6(S)	.0( )	2.6( )
289.	245.	238.	158.	80.	47.	47.	465.	370.	445.
.0( )	2.2( )	.0( )	1.1( )	.0( )	.7( )	.4(S)	.0( )	3.5( )	.0( )
380.	397.	129.	268.	302.	195.	214.	255.	185.	194.

		3.1( )	.0( )	1.4( )	2.3( )	.0( )	2.3( )	2.5(S)	.0( )	1.9( )	.0( )
		28.	29.								
		.8( )	1.1(S)								
1	15.	958.	1009.	959.	1058.	93.	88.	80.	80.	80.	40.
		4.6( )	.0( )	5.1( )	.0( )	1.8( )	.0( )	1.4( )	.2(S)	.0( )	.6( )
		44.	48.	33.	33.	964.	985.	501.	470.	576.	552.
		.5(S)	.0( )	1.1( )	4.0(S)	1.7( )	.0( )	.0( )	3.8( )	.0( )	.0( )
		505.	513.	442.	466.	483.	503.	518.	412.	417.	439.
		2.6( )	.0( )	3.3( )	1.6( )	1.4( )	2.0( )	.0( )	1.7( )	.8( )	.0( )
		201.	197.	195.	156.	151.	238.	184.	214.	364.	431.
		.0( )	2.0( )	.0( )	1.7( )	.0( )	.0( )	.8( )	2.3( )	2.9(S)	3.4( )
		443.	480.	104.	58.	376.	377.	380.	380.	379.	274.
		4.6(S)	.0( )	.0( )	1.0( )	2.3( )	1.2(S)	3.0( )	1.6(S)	.0( )	2.6( )
		276.	237.	229.	151.	78.	47.	45.	484.	398.	457.
		.0( )	2.1( )	.0( )	1.1( )	.0( )	.7( )	.4(S)	.0( )	3.6( )	.0( )
		398.	410.	126.	285.	311.	209.	224.	255.	186.	186.
		3.2( )	.0( )	1.4( )	2.3( )	.0( )	2.3( )	2.8(S)	.0( )	1.9( )	.0( )
		28.	29.								
		.8( )	1.1(S)								
1	20.	1017.	1062.	1017.	1103.	89.	85.	79.	79.	78.	41.
		4.7( )	.0( )	5.2( )	.0( )	1.8( )	.0( )	1.4( )	.2(S)	.0( )	.6( )
		45.	44.	35.	35.	1014.	1031.	533.	507.	606.	586.
		.5(S)	.0( )	1.1( )	4.4(S)	1.8( )	.0( )	.0( )	3.9( )	.0( )	.0( )
		544.	552.	487.	511.	526.	544.	557.	455.	459.	479.
		2.7( )	.0( )	3.4( )	1.7( )	1.4( )	2.1( )	.0( )	1.8( )	.8( )	.0( )
		193.	191.	187.	153.	145.	286.	232.	262.	440.	448.
		.0( )	1.9( )	.0( )	1.7( )	.0( )	.0( )	.9( )	2.6( )	3.2(S)	3.5( )

455.	474.	97.	55.	378.	378.	376.	375.	369.	272.
4.8(S)	.0( )	.0( )	1.0( )	2.3( )	1.2(S)	3.0( )	1.6(S)	.0( )	2.6( )
260.	228.	219.	145.	74.	45.	42.	498.	419.	463.
.0( )	2.1( )	.0( )	1.0( )	.0( )	.7( )	.4(S)	.0( )	3.7( )	.0( )
410.	418.	121.	297.	316.	220.	231.	251.	185.	176.
3.2( )	.0( )	1.4( )	2.4( )	.0( )	2.4( )	3.0(S)	.0( )	1.9( )	.0( )
29.	29.								
.8( )	1.1(S)								

1	25.	1069.	1107.	1068.	1140.	86.	82.	78.	77.	76.	42.
		4.8( )	.0( )	5.2( )	.0( )	1.7( )	.0( )	1.4( )	.2(S)	.0( )	.6( )
		44.	44.	36.	37.	1054.	1068.	563.	541.	633.	618.
		.5(S)	.0( )	1.2( )	4.8(S)	1.8( )	.0( )	.0( )	4.1( )	.0( )	.0( )
		581.	588.	530.	552.	565.	580.	591.	496.	500.	519.
		2.8( )	.0( )	3.6( )	1.7( )	1.5( )	2.2( )	.0( )	2.0( )	.8( )	.0( )
		184.	183.	178.	148.	138.	335.	282.	312.	460.	458.
		.0( )	1.9( )	.0( )	1.6( )	.0( )	.0( )	1.1( )	2.8( )	3.2(S)	3.5( )
		460.	462.	88.	51.	374.	373.	366.	364.	354.	265.
		4.9(S)	.0( )	.0( )	.9( )	2.3( )	1.2(S)	3.0( )	1.5(S)	.0( )	2.5( )
		242.	217.	207.	138.	69.	43.	39.	504.	434.	463.
		.0( )	2.0( )	.0( )	1.0( )	.0( )	.7( )	.3(S)	.0( )	3.7( )	.0( )
		418.	421.	116.	306.	316.	228.	235.	244.	180.	165.
		3.2( )	.0( )	1.4( )	2.4( )	.0( )	2.4( )	3.1(S)	.0( )	1.9( )	.0( )
		29.	29.								
		.8( )	1.1(S)								

1	30.	1113.	1144.	1111.	1169.	83.	79.	75.	74.	73.	43.
		4.9( )	.0( )	5.3( )	.0( )	1.7( )	.0( )	1.4( )	.1(S)	.0( )	.7( )

44.	45.	38.	38.	1086.	1096.	592.	573.	656.	645.
.5(S)	.0( )	1.2( )	5.1(S)	1.8( )	.0( )	.0( )	4.2( )	.0( )	.0( )
613.	619.	569.	587.	599.	612.	623.	534.	537.	553.
2.8( )	.0( )	3.7( )	1.8( )	1.5( )	2.2( )	.0( )	2.0( )	.9( )	.0( )
173.	173.	167.	142.	130.	380.	329.	352.	457.	459.
.0( )	1.9( )	.0( )	1.6( )	.0( )	.0( )	1.1( )	3.0( )	3.2(S)	3.5( )
457.	442.	80.	47.	362.	360.	351.	348.	336.	254.
4.9(S)	.0( )	.0( )	.9( )	2.2( )	1.1(S)	2.9( )	1.5(S)	.0( )	2.5( )
225.	205.	193.	129.	64.	41.	37.	504.	444.	458.
.0( )	2.0( )	.0( )	1.0( )	.0( )	.7( )	.3(S)	.0( )	3.7( )	.0( )
419.	419.	109.	309.	312.	232.	236.	233.	174.	155.
3.3( )	.0( )	1.3( )	2.4( )	.0( )	2.5( )	3.1(S)	.0( )	1.8( )	.0( )
29.	28.								
.8( )	1.0(S)								

1 35.

1149.	1175.	1145.	1191.	80.	76.	73.	72.	71.	43.
5.0( )	.0( )	5.3( )	.0( )	1.7( )	.0( )	1.4( )	.1(S)	.0( )	.7( )
45.	46.	39.	39.	1111.	1120.	620.	603.	678.	669.
.5(S)	.0( )	1.2( )	5.4(S)	1.9( )	.0( )	.0( )	4.3( )	.0( )	.0( )
642.	647.	603.	619.	628.	639.	646.	564.	566.	577.
2.9( )	.0( )	3.8( )	1.8( )	1.6( )	2.3( )	.0( )	2.1( )	.9( )	.0( )
162.	162.	157.	135.	121.	414.	365.	381.	455.	452.
.0( )	1.8( )	.0( )	1.6( )	.0( )	.0( )	1.2( )	3.2( )	3.2(S)	3.5( )
447.	417.	72.	42.	346.	343.	333.	330.	315.	242.
4.7(S)	.0( )	.0( )	.8( )	2.2( )	1.1(S)	2.8( )	1.4(S)	.0( )	2.4( )
207.	192.	179.	120.	59.	39.	34.	500.	447.	450.
.0( )	1.9( )	.0( )	.9( )	.0( )	.7( )	.3(S)	.0( )	3.8( )	.0( )
416.	411.	102.	309.	306.	234.	234.	222.	167.	144.

		3.2( )	.0( )	1.3( )	2.4( )	.0( )	2.5( )	3.1(S)	.0( )	1.8( )	.0( )
		28.	28.								
		.8( )	1.0(S)								
1	40.	1179.	1199.	1173.	1208.	77.	74.	71.	70.	69.	44.
		5.0( )	.0( )	5.3( )	.0( )	1.7( )	.0( )	1.3( )	.1(S)	.0( )	.7( )
		46.	48.	40.	41.	1131.	1138.	645.	630.	696.	687.
		.5(S)	.0( )	1.2( )	5.6(S)	1.9( )	.0( )	.0( )	4.4( )	.0( )	.0( )
		665.	669.	631.	643.	649.	655.	659.	582.	584.	589.
		2.9( )	.0( )	3.9( )	1.9( )	1.6( )	2.3( )	.0( )	2.2( )	.9( )	.0( )
		152.	152.	146.	127.	113.	437.	389.	400.	441.	439.
		.0( )	1.7( )	.0( )	1.5( )	.0( )	.0( )	1.3( )	3.3( )	3.2(S)	3.5( )
		431.	391.	64.	38.	327.	324.	313.	309.	294.	228.
		4.5(S)	.0( )	.0( )	.8( )	2.1( )	1.0(S)	2.7( )	1.3(S)	.0( )	2.3( )
		191.	179.	165.	111.	54.	36.	31.	493.	446.	438.
		.0( )	1.8( )	.0( )	.9( )	.0( )	.6( )	.3(S)	.0( )	3.8( )	.0( )
		408.	401.	95.	306.	298.	232.	229.	209.	159.	133.
		3.2( )	.0( )	1.2( )	2.4( )	.0( )	2.5( )	2.9(S)	.0( )	1.8( )	.0( )
		28.	26.								
		.7( )	.9(S)								
1	45.	1202.	1217.	1194.	1221.	75.	72.	69.	68.	68.	45.
		5.1( )	.0( )	5.3( )	.0( )	1.6( )	.0( )	1.3( )	.1(S)	.0( )	.7( )
		47.	49.	42.	42.	1146.	1150.	668.	653.	709.	701.
		.5(S)	.0( )	1.3( )	5.8(S)	1.9( )	.0( )	.0( )	4.5( )	.0( )	.0( )
		682.	684.	650.	656.	659.	660.	660.	590.	590.	590.
		3.0( )	.0( )	3.9( )	1.9( )	1.6( )	2.3( )	.0( )	2.2( )	.9( )	.0( )
		141.	141.	135.	119.	104.	449.	404.	409.	424.	421.
		.0( )	1.7( )	.0( )	1.5( )	.0( )	.0( )	1.3( )	3.3( )	3.1(S)	3.4( )

		411.	363.	57.	34.	307.	303.	292.	288.	273.	213.
		4.2(S)	.0( )	.0( )	.7( )	2.0( )	.9(S)	2.6( )	1.2(S)	.0( )	2.3( )
		175.	165.	151.	102.	49.	34.	28.	483.	441.	424.
		.0( )	1.7( )	.0( )	.9( )	.0( )	.6( )	.2(S)	.0( )	3.7( )	.0( )
		398.	388.	88.	300.	288.	229.	223.	196.	150.	122.
		3.2( )	.0( )	1.2( )	2.4( )	.0( )	2.4( )	2.8(S)	.0( )	1.7( )	.0( )
		26.	24.								
		.7( )	.8(S)								
1	50.	1219.	1230.	1209.	1226.	72.	70.	68.	67.	67.	45.
		5.1( )	.0( )	5.4( )	.0( )	1.6( )	.0( )	1.3( )	.1(S)	.0( )	.7( )
		48.	50.	43.	43.	1154.	1155.	686.	672.	713.	706.
		.5(S)	.0( )	1.3( )	5.9(S)	1.9( )	.0( )	.0( )	4.5( )	.0( )	.0( )
		688.	688.	658.	659.	658.	656.	653.	587.	587.	583.
		3.0( )	.0( )	4.0( )	1.9( )	1.6( )	2.3( )	.0( )	2.2( )	.9( )	.0( )
		131.	131.	125.	112.	96.	452.	410.	410.	403.	400.
		.0( )	1.6( )	.0( )	1.4( )	.0( )	.0( )	1.3( )	3.3( )	3.1(S)	3.3( )
		388.	336.	50.	31.	286.	282.	271.	267.	252.	198.
		3.8(S)	.0( )	.0( )	.7( )	2.0( )	.8(S)	2.5( )	1.1(S)	.0( )	2.2( )
		159.	152.	139.	94.	45.	31.	25.	469.	432.	409.
		.0( )	1.7( )	.0( )	.8( )	.0( )	.6( )	.2(S)	.0( )	3.7( )	.0( )
		385.	374.	81.	293.	277.	223.	215.	183.	141.	112.
		3.1( )	.0( )	1.2( )	2.4( )	.0( )	2.4( )	2.6(S)	.0( )	1.7( )	.0( )
		25.	23.								
		.7( )	.8(S)								
1	55.	1230.	1236.	1217.	1224.	71.	69.	67.	66.	66.	46.
		5.1( )	.0( )	5.4( )	.0( )	1.6( )	.0( )	1.3( )	.1(S)	.0( )	.7( )

		49.	51.	44.	44.	1154.	1152.	698.	684.	708.	701.
		.5(S)	.0( )	1.3( )	6.0(S)	1.9( )	.0( )	.0( )	4.6( )	.0( )	.0( )
		685.	683.	655.	652.	648.	643.	638.	577.	576.	569.
		3.0( )	.0( )	4.0( )	1.9( )	1.6( )	2.3( )	.0( )	2.2( )	.9( )	.0( )
		121.	121.	116.	104.	89.	448.	408.	405.	380.	377.
		.0( )	1.5( )	.0( )	1.4( )	.0( )	.0( )	1.3( )	3.3( )	3.1(S)	3.2( )
		364.	310.	45.	27.	265.	262.	250.	247.	232.	184.
		3.5(S)	.0( )	.0( )	.6( )	1.9( )	.8(S)	2.4( )	1.0(S)	.0( )	2.1( )
		144.	140.	128.	87.	41.	29.	23.	455.	421.	391.
		.0( )	1.6( )	.0( )	.8( )	.0( )	.5( )	.2(S)	.0( )	3.7( )	.0( )
		371.	358.	75.	283.	265.	215.	206.	171.	131.	103.
		3.1( )	.0( )	1.1( )	2.3( )	.0( )	2.4( )	2.3(S)	.0( )	1.6( )	.0( )
		23.	21.								
		.7( )	.7(S)								
2	0.	1234.	1234.	1218.	1215.	69.	68.	66.	65.	65.	47.
		5.1( )	.0( )	5.4( )	.0( )	1.6( )	.0( )	1.3( )	.1(S)	.0( )	.7( )
		50.	50.	45.	45.	1145.	1140.	702.	690.	694.	688.
		.5(S)	.0( )	1.3( )	6.1(S)	1.9( )	.0( )	.0( )	4.6( )	.0( )	.0( )
		673.	670.	645.	638.	632.	624.	617.	561.	559.	551.
		3.0( )	.0( )	3.9( )	1.9( )	1.6( )	2.2( )	.0( )	2.1( )	.9( )	.0( )
		112.	112.	107.	97.	83.	439.	401.	397.	371.	353.
		.0( )	1.5( )	.0( )	1.3( )	.0( )	.0( )	1.3( )	3.2( )	3.0(S)	3.1( )
		339.	285.	40.	24.	245.	242.	231.	227.	213.	170.
		3.1(S)	.0( )	.0( )	.6( )	1.8( )	.7(S)	2.3( )	.9(S)	.0( )	2.0( )
		132.	129.	117.	80.	37.	26.	21.	438.	407.	373.
		.0( )	1.5( )	.0( )	.7( )	.0( )	.5( )	.2(S)	.0( )	3.6( )	.0( )
		355.	342.	69.	272.	252.	207.	196.	158.	123.	95.

		3.0( )	.0( )	1.1( )	2.3( )	.0( )	2.3( )	2.1(S)	.0( )	1.6( )	.0( )
		22.	19.								
		.7( )	.6(S)								
2	5.	1229.	1223.	1211.	1193.	68.	66.	65.	64.	64.	48.
		5.1( )	.0( )	5.4( )	.0( )	1.6( )	.0( )	1.3( )	.1(S)	.0( )	.7( )
		49.	45.	45.	45.	1125.	1115.	696.	687.	670.	666.
		.5(S)	.0( )	1.3( )	6.1(S)	1.9( )	.0( )	.0( )	4.6( )	.0( )	.0( )
		653.	649.	628.	619.	611.	602.	595.	543.	541.	532.
		2.9( )	.0( )	3.9( )	1.8( )	1.5( )	2.2( )	.0( )	2.1( )	.9( )	.0( )
		103.	103.	98.	90.	77.	429.	393.	388.	362.	328.
		.0( )	1.4( )	.0( )	1.3( )	.0( )	.0( )	1.3( )	3.2( )	2.9(S)	3.0( )
		314.	261.	35.	22.	226.	223.	212.	209.	196.	157.
		2.7(S)	.0( )	.0( )	.6( )	1.7( )	.6(S)	2.2( )	.8(S)	.0( )	1.9( )
		121.	119.	107.	73.	34.	24.	19.	419.	392.	353.
		.0( )	1.5( )	.0( )	.7( )	.0( )	.5( )	.2(S)	.0( )	3.5( )	.0( )
		339.	325.	64.	261.	238.	197.	184.	147.	114.	87.
		2.9( )	.0( )	1.0( )	2.3( )	.0( )	2.3( )	1.8(S)	.0( )	1.5( )	.0( )
		20.	18.								
		.6( )	.6(S)								
2	10.	1216.	1203.	1193.	1160.	66.	64.	64.	63.	62.	48.
		5.1( )	.0( )	5.3( )	.0( )	1.5( )	.0( )	1.3( )	.1(S)	.0( )	.7( )
		47.	45.	45.	45.	1093.	1079.	682.	677.	641.	638.
		.5(S)	.0( )	1.3( )	6.1(S)	1.8( )	.0( )	.0( )	4.5( )	.0( )	.0( )
		629.	623.	608.	597.	589.	580.	572.	524.	522.	513.
		2.9( )	.0( )	3.8( )	1.8( )	1.5( )	2.2( )	.0( )	2.0( )	.9( )	.0( )
		96.	96.	91.	84.	71.	418.	384.	379.	347.	302.
		.0( )	1.4( )	.0( )	1.2( )	.0( )	.0( )	1.3( )	3.2( )	2.6(S)	2.8( )

		285.	239.	31.	19.	208.	205.	195.	192.	180.	145.
		2.4(S)	.0( )	.0( )	.5( )	1.7( )	.5(S)	2.1( )	.7(S)	.0( )	1.8( )
		111.	109.	98.	68.	31.	22.	18.	397.	375.	333.
		.0( )	1.4( )	.0( )	.7( )	.0( )	.5( )	.2(S)	.0( )	3.5( )	.0( )
		322.	306.	59.	247.	222.	185.	170.	136.	106.	79.
		2.9( )	.0( )	1.0( )	2.2( )	.0( )	2.2( )	1.6(S)	.0( )	1.5( )	.0( )
		19.	16.								
		.6( )	.5(S)								
2	15.	1194.	1173.	1166.	1118.	64.	62.	62.	61.	60.	47.
		5.1( )	.0( )	5.3( )	.0( )	1.5( )	.0( )	1.3( )	.1(S)	.0( )	.7( )
		46.	45.	45.	45.	1054.	1037.	664.	660.	611.	610.
		.5(S)	.0( )	1.3( )	6.1(S)	1.8( )	.0( )	.0( )	4.5( )	.0( )	.0( )
		602.	597.	585.	574.	566.	557.	549.	505.	503.	494.
		2.8( )	.0( )	3.7( )	1.8( )	1.5( )	2.1( )	.0( )	2.0( )	.8( )	.0( )
		88.	88.	84.	78.	66.	406.	373.	367.	328.	271.
		.0( )	1.3( )	.0( )	1.2( )	.0( )	.0( )	1.2( )	3.1( )	2.2(S)	2.7( )
		252.	219.	28.	17.	191.	188.	179.	176.	165.	133.
		2.1(S)	.0( )	.0( )	.5( )	1.6( )	.5(S)	2.0( )	.6(S)	.0( )	1.7( )
		100.	100.	90.	62.	28.	20.	16.	373.	357.	312.
		.0( )	1.3( )	.0( )	.6( )	.0( )	.4( )	.1(S)	.0( )	3.4( )	.0( )
		304.	287.	54.	233.	205.	173.	157.	126.	98.	72.
		2.8( )	.0( )	1.0( )	2.1( )	.0( )	2.1( )	1.4(S)	.0( )	1.4( )	.0( )
		17.	15.								
		.6( )	.4(S)								
2	20.	1163.	1136.	1130.	1072.	62.	60.	60.	59.	58.	47.
		5.0( )	.0( )	5.3( )	.0( )	1.5( )	.0( )	1.2( )	.1(S)	.0( )	.7( )

		46.	45.	45.	45.	1010.	993.	642.	640.	583.	583.
		.5(S)	.0( )	1.3( )	6.1(S)	1.8( )	.0( )	.0( )	4.4( )	.0( )	.0( )
		577.	572.	563.	551.	543.	534.	525.	485.	483.	473.
		2.8( )	.0( )	3.7( )	1.7( )	1.4( )	2.1( )	.0( )	1.9( )	.8( )	.0( )
		82.	82.	78.	72.	61.	391.	360.	352.	301.	243.
		.0( )	1.2( )	.0( )	1.1( )	.0( )	.0( )	1.2( )	3.0( )	1.8(S)	2.5( )
		227.	200.	25.	15.	175.	173.	164.	161.	151.	123.
		1.9(S)	.0( )	.0( )	.5( )	1.5( )	.4(S)	1.9( )	.6(S)	.0( )	1.7( )
		92.	92.	82.	57.	25.	19.	14.	351.	339.	291.
		.0( )	1.3( )	.0( )	.6( )	.0( )	.4( )	.1(S)	.0( )	3.3( )	.0( )
		285.	268.	50.	218.	189.	161.	145.	116.	90.	66.
		2.7( )	.0( )	.9( )	2.1( )	.0( )	2.0( )	1.1(S)	.0( )	1.4( )	.0( )
		16.	14.								
		.6( )	.4(S)								
2	25.	1126.	1094.	1089.	1025.	60.	58.	58.	57.	56.	47.
		4.9( )	.0( )	5.2( )	.0( )	1.5( )	.0( )	1.2( )	.1(S)	.0( )	.7( )
		45.	45.	45.	45.	964.	946.	618.	618.	556.	556.
		.5(S)	.0( )	1.3( )	6.1(S)	1.7( )	.0( )	.0( )	4.3( )	.0( )	.0( )
		552.	547.	540.	528.	519.	508.	499.	462.	460.	448.
		2.7( )	.0( )	3.6( )	1.7( )	1.4( )	2.0( )	.0( )	1.9( )	.8( )	.0( )
		75.	75.	71.	67.	56.	372.	343.	333.	259.	220.
		.0( )	1.2( )	.0( )	1.1( )	.0( )	.0( )	1.2( )	2.9( )	1.5(S)	2.4( )
		206.	183.	22.	14.	161.	158.	151.	148.	139.	113.
		1.7(S)	.0( )	.0( )	.4( )	1.5( )	.4(S)	1.8( )	.5(S)	.0( )	1.6( )
		84.	84.	75.	52.	23.	17.	13.	329.	320.	271.
		.0( )	1.2( )	.0( )	.6( )	.0( )	.4( )	.1(S)	.0( )	3.2( )	.0( )
		266.	249.	46.	203.	174.	149.	134.	107.	83.	60.

		2.6( )	.0( )	.9( )	2.0( )	.0( )	2.0( )	.9(S)	.0( )	1.3( )	.0( )
		15.	12.								
		.5( )	.3(S)								
2	30.	1084.	1049.	1046.	977.	58.	55.	55.	54.	53.	46.
		4.9( )	.0( )	5.2( )	.0( )	1.4( )	.0( )	1.2( )	.1(S)	.0( )	.7( )
		45.	44.	44.	44.	919.	901.	594.	594.	530.	530.
		.5(S)	.0( )	1.3( )	6.0(S)	1.7( )	.0( )	.0( )	4.3( )	.0( )	.0( )
		527.	521.	515.	502.	492.	480.	470.	436.	433.	418.
		2.7( )	.0( )	3.5( )	1.6( )	1.4( )	2.0( )	.0( )	1.8( )	.8( )	.0( )
		69.	69.	65.	62.	52.	349.	322.	309.	229.	200.
		.0( )	1.1( )	.0( )	1.1( )	.0( )	.0( )	1.1( )	2.8( )	1.3(S)	2.3( )
		188.	167.	19.	12.	148.	145.	138.	136.	127.	104.
		1.6(S)	.0( )	.0( )	.4( )	1.4( )	.3(S)	1.7( )	.4(S)	.0( )	1.5( )
		77.	77.	68.	48.	20.	16.	12.	307.	300.	251.
		.0( )	1.1( )	.0( )	.6( )	.0( )	.4( )	.1(S)	.0( )	3.1( )	.0( )
		247.	230.	42.	188.	158.	137.	120.	98.	77.	54.
		2.5( )	.0( )	.8( )	1.9( )	.0( )	1.9( )	.8(S)	.0( )	1.3( )	.0( )
		13.	11.								
		.5( )	.3(S)								
2	35.	1040.	1004.	1001.	930.	56.	52.	52.	51.	50.	46.
		4.8( )	.0( )	5.1( )	.0( )	1.4( )	.0( )	1.1( )	.1(S)	.0( )	.7( )
		44.	44.	44.	43.	874.	855.	569.	569.	501.	501.
		.5(S)	.0( )	1.3( )	5.9(S)	1.6( )	.0( )	.0( )	4.2( )	.0( )	.0( )
		499.	493.	488.	474.	463.	449.	437.	406.	403.	387.
		2.6( )	.0( )	3.4( )	1.6( )	1.3( )	1.9( )	.0( )	1.7( )	.7( )	.0( )
		63.	63.	60.	58.	48.	324.	298.	284.	206.	182.
		.0( )	1.1( )	.0( )	1.0( )	.0( )	.0( )	1.1( )	2.7( )	1.1(S)	2.2( )

171.	153.	17.	11.	136.	133.	127.	124.	117.	96.
1.4(S)	.0( )	.0( )	.4( )	1.3( )	.3(S)	1.7( )	.4(S)	.0( )	1.4( )
70.	70.	61.	44.	17.	14.	10.	286.	281.	232.
.0( )	1.1( )	.0( )	.5( )	.0( )	.4( )	.1(S)	.0( )	3.1( )	.0( )
229.	211.	39.	173.	142.	123.	103.	90.	71.	49.
2.5( )	.0( )	.8( )	1.9( )	.0( )	1.8( )	.7(S)	.0( )	1.2( )	.0( )
12.	9.								
.5( )	.2(S)								

2	40.	994.	958.	955.	881.	53.	50.	50.	50.	49.	45.
		4.7( )	.0( )	5.1( )	.0( )	1.4( )	.0( )	1.1( )	.1(S)	.0( )	.7( )
		44.	43.	43.	43.	828.	809.	543.	543.	471.	471.
		.5(S)	.0( )	1.3( )	5.8(S)	1.6( )	.0( )	.0( )	4.1( )	.0( )	.0( )
		469.	463.	459.	443.	431.	416.	404.	376.	373.	357.
		2.5( )	.0( )	3.3( )	1.5( )	1.3( )	1.9( )	.0( )	1.6( )	.7( )	.0( )
		58.	58.	54.	54.	45.	299.	275.	262.	187.	167.
		.0( )	1.0( )	.0( )	1.0( )	.0( )	.0( )	1.0( )	2.6( )	.9(S)	2.1( )
		157.	140.	15.	10.	124.	122.	116.	114.	107.	88.
		1.3(S)	.0( )	.0( )	.4( )	1.3( )	.2(S)	1.6( )	.3(S)	.0( )	1.4( )
		63.	63.	55.	40.	15.	13.	9.	266.	262.	213.
		.0( )	1.0( )	.0( )	.5( )	.0( )	.3( )	.1(S)	.0( )	3.0( )	.0( )
		210.	193.	36.	157.	126.	110.	92.	83.	65.	44.
		2.4( )	.0( )	.8( )	1.8( )	.0( )	1.7( )	.6(S)	.0( )	1.2( )	.0( )
		11.	8.								
		.5( )	.2(S)								

2	45.	949.	911.	909.	833.	51.	49.	49.	48.	48.	45.
		4.6( )	.0( )	5.0( )	.0( )	1.4( )	.0( )	1.1( )	.1(S)	.0( )	.7( )

43.	42.	42.	42.	782.	763.	5.	516.	438.	438.
.4(S)	.0( )	1.3( )	5.7(S)	1.5( )	.0( )	.0( )	4.0( )	.0( )	.0( )
438.	431.	428.	411.	399.	385.	373.	347.	344.	329.
2.4( )	.0( )	3.2( )	1.5( )	1.2( )	1.8( )	.0( )	1.6( )	.7( )	.0( )
53.	53.	50.	50.	42.	276.	253.	240.	171.	153.
.0( )	1.0( )	.0( )	.9( )	.0( )	.0( )	1.0( )	2.5( )	.8(S)	2.0( )
143.	128.	13.	9.	114.	112.	107.	104.	98.	81.
1.2(S)	.0( )	.0( )	.3( )	1.2( )	.2(S)	1.5( )	.3(S)	.0( )	1.3( )
58.	58.	50.	37.	13.	12.	9.	247.	244.	194.
.0( )	1.0( )	.0( )	.5( )	.0( )	.3( )	.1(S)	.0( )	2.9( )	.0( )
193.	176.	33.	143.	113.	98.	84.	76.	60.	40.
2.3( )	.0( )	.7( )	1.7( )	.0( )	1.6( )	.5(S)	.0( )	1.1( )	.0( )
9.	7.								
.4( )	.1(S)								

2 50.

902.	863.	863.	785.	50.	48.	48.	47.	47.	44.
4.5( )	.0( )	5.0( )	.0( )	1.3( )	.0( )	1.1( )	.1(S)	.0( )	.7( )
42.	41.	41.	41.	735.	715.	488.	488.	406.	406.
.4(S)	.0( )	1.2( )	5.6(S)	1.5( )	.0( )	.0( )	3.9( )	.0( )	.0( )
406.	399.	397.	380.	369.	355.	345.	321.	318.	304.
2.4( )	.0( )	3.1( )	1.4( )	1.2( )	1.8( )	.0( )	1.5( )	.6( )	.0( )
49.	49.	47.	47.	39.	255.	233.	221.	156.	140.
.0( )	.9( )	.0( )	.9( )	.0( )	.0( )	.9( )	2.3( )	.7(S)	1.9( )
131.	116.	12.	8.	105.	103.	98.	96.	90.	74.
1.1(S)	.0( )	.0( )	.3( )	1.1( )	.1(S)	1.4( )	.2(S)	.0( )	1.2( )
52.	52.	45.	34.	11.	11.	8.	228.	226.	176.
.0( )	.9( )	.0( )	.5( )	.0( )	.3( )	.1(S)	.0( )	2.8( )	.0( )
176.	160.	30.	129.	102.	89.	77.	70.	54.	36.

		2.2( )	.0( )	.7( )	1.6( )	.0( )	1.5( )	.5(S)	.0( )	1.1( )	.0( )
		8.	6.								
		.4( )	.1(S)								
2	55.	855.	816.	816.	736.	48.	47.	47.	46.	46.	44.
		4.4( )	.0( )	4.9( )	.0( )	1.3( )	.0( )	1.1( )	.1(S)	.0( )	.7( )
		42.	40.	40.	40.	688.	667.	459.	459.	376.	376.
		.4(S)	.0( )	1.2( )	5.5(S)	1.4( )	.0( )	.0( )	3.8( )	.0( )	.0( )
		376.	370.	368.	352.	341.	329.	319.	297.	294.	281.
		2.3( )	.0( )	3.0( )	1.3( )	1.1( )	1.7( )	.0( )	1.4( )	.6( )	.0( )
		46.	46.	43.	43.	36.	235.	214.	203.	142.	128.
		.0( )	.9( )	.0( )	.9( )	.0( )	.0( )	.9( )	2.2( )	.6(S)	1.8( )
		119.	105.	10.	7.	96.	94.	89.	86.	82.	68.
		1.0(S)	.0( )	.0( )	.3( )	1.1( )	.1(S)	1.3( )	.2(S)	.0( )	1.2( )
		47.	47.	41.	31.	10.	10.	7.	208.	208.	160.
		.0( )	.9( )	.0( )	.4( )	.0( )	.3( )	.1(S)	.0( )	2.7( )	.0( )
		160.	145.	28.	117.	92.	81.	70.	64.	50.	32.
		2.1( )	.0( )	.7( )	1.6( )	.0( )	1.4( )	.4(S)	.0( )	1.0( )	.0( )
		7.	5.								
		.4( )	.0(S)								
3	0.	809.	770.	770.	688.	47.	46.	46.	45.	45.	43.
		4.3( )	.0( )	4.9( )	.0( )	1.3( )	.0( )	1.1( )	.1(S)	.0( )	.7( )
		41.	40.	40.	40.	641.	622.	430.	430.	347.	347.
		.4(S)	.0( )	1.2( )	5.4(S)	1.4( )	.0( )	.0( )	3.6( )	.0( )	.0( )
		347.	341.	341.	326.	316.	304.	295.	275.	272.	260.
		2.2( )	.0( )	2.9( )	1.3( )	1.1( )	1.6( )	.0( )	1.3( )	.6( )	.0( )
		43.	43.	40.	40.	33.	217.	197.	187.	130.	116.
		.0( )	.9( )	.0( )	.8( )	.0( )	.0( )	.9( )	2.1( )	.5(S)	1.7( )

		107.	91.	7.	6.	84.	81.	79.	77.	75.	63.
		.9(S)	.0( )	.0( )	.3( )	1.0( )	.1(S)	1.3( )	.2(S)	.0( )	1.1( )
		43.	43.	37.	28.	9.	9.	6.	192.	192.	146.
		.0( )	.8( )	.0( )	.4( )	.0( )	.3( )	.1(S)	.0( )	2.6( )	.0( )
		146.	132.	25.	106.	82.	74.	64.	58.	45.	28.
		2.0( )	.0( )	.7( )	1.5( )	.0( )	1.4( )	.4(S)	.0( )	1.0( )	.0( )
		5.	0.								
		.3( )	.0(S)								
3	5.	764.	725.	725.	644.	46.	44.	44.	43.	42.	42.
		4.2( )	.0( )	4.8( )	.0( )	1.3( )	.0( )	1.0( )	.1(S)	.0( )	.7( )
		40.	39.	39.	39.	598.	579.	402.	402.	321.	321.
		.4(S)	.0( )	1.2( )	5.3(S)	1.3( )	.0( )	.0( )	3.5( )	.0( )	.0( )
		321.	316.	316.	302.	293.	282.	273.	255.	252.	240.
		2.1( )	.0( )	2.7( )	1.2( )	1.1( )	1.6( )	.0( )	1.3( )	.6( )	.0( )
		40.	40.	38.	38.	31.	201.	182.	172.	118.	104.
		.0( )	.8( )	.0( )	.8( )	.0( )	.0( )	.8( )	2.0( )	.4(S)	1.6( )
		94.	79.	5.	5.	74.	73.	72.	71.	69.	58.
		.8(S)	.0( )	.0( )	.2( )	1.0( )	.1(S)	1.2( )	.2(S)	.0( )	1.1( )
		40.	40.	34.	26.	8.	8.	6.	176.	176.	133.
		.0( )	.8( )	.0( )	.4( )	.0( )	.3( )	.0(S)	.0( )	2.5( )	.0( )
		133.	120.	23.	96.	74.	68.	59.	53.	41.	24.
		1.9( )	.0( )	.6( )	1.4( )	.0( )	1.3( )	.3(S)	.0( )	.9( )	.0( )
		4.	0.								
		.3( )	.0(S)								
3	10.	720.	682.	682.	601.	44.	42.	42.	42.	42.	42.
		4.1( )	.0( )	4.8( )	.0( )	1.3( )	.0( )	1.0( )	.1(S)	.0( )	.6( )

	39.	39.	39.	38.	556.	538.	376.	376.	299.	299.
	.4(S)	.0( )	1.2( )	5.1(S)	1.3( )	.0( )	.0( )	3.4( )	.0( )	.0( )
	299.	293.	293.	280.	271.	261.	253.	236.	233.	222.
	2.1( )	.0( )	2.6( )	1.2( )	1.0( )	1.5( )	.0( )	1.2( )	.5( )	.0( )
	37.	37.	35.	35.	29.	185.	167.	158.	102.	92.
	.0( )	.8( )	.0( )	.8( )	.0( )	.0( )	.8( )	1.9( )	.3(S)	1.5( )
	83.	72.	4.	4.	69.	67.	67.	65.	63.	53.
	.7(S)	.0( )	.0( )	.2( )	.9( )	.1(S)	1.1( )	.1(S)	.0( )	1.0( )
	36.	36.	31.	24.	7.	7.	5.	162.	162.	121.
	.0( )	.7( )	.0( )	.4( )	.0( )	.2( )	.0(S)	.0( )	2.4( )	.0( )
	121.	109.	21.	87.	67.	62.	53.	48.	37.	21.
	1.8( )	.0( )	.6( )	1.4( )	.0( )	1.3( )	.3(S)	.0( )	.9( )	.0( )
	3.	0.								
	.2( )	.0(S)								
3 15.	677.	640.	640.	560.	43.	41.	41.	41.	41.	41.
	4.0( )	.0( )	4.7( )	.0( )	1.2( )	.0( )	1.0( )	.1(S)	.0( )	.6( )
	39.	38.	38.	38.	517.	500.	351.	351.	277.	277.
	.4(S)	.0( )	1.2( )	5.0(S)	1.2( )	.0( )	.0( )	3.3( )	.0( )	.0( )
	277.	272.	272.	260.	251.	241.	233.	218.	216.	204.
	2.0( )	.0( )	2.5( )	1.1( )	1.0( )	1.5( )	.0( )	1.2( )	.5( )	.0( )
	35.	35.	33.	33.	27.	170.	153.	143.	85.	82.
	.0( )	.8( )	.0( )	.8( )	.0( )	.0( )	.7( )	1.8( )	.2(S)	1.4( )
	75.	66.	3.	3.	63.	62.	61.	59.	58.	49.
	.6(S)	.0( )	.0( )	.2( )	.9( )	.1(S)	1.1( )	.1(S)	.0( )	1.0( )
	33.	33.	29.	22.	7.	7.	4.	149.	149.	110.
	.0( )	.7( )	.0( )	.4( )	.0( )	.2( )	.0(S)	.0( )	2.3( )	.0( )
	110.	99.	20.	79.	61.	57.	48.	43.	34.	19.

		1.7( )	.0( )	.6( )	1.3( )	.0( )	1.2( )	.3(S)	.0( )	.9( )	.0( )
		2.	0.								
		.2( )	.0(S)								
3	20.	637.	601.	601.	523.	42.	41.	41.	41.	40.	40.
		3.9( )	.0( )	4.6( )	.0( )	1.2( )	.0( )	1.0( )	.1(S)	.0( )	.6( )
		38.	37.	37.	37.	481.	464.	327.	327.	257.	257.
		.4(S)	.0( )	1.2( )	4.9(S)	1.2( )	.0( )	.0( )	3.2( )	.0( )	.0( )
		257.	252.	252.	241.	232.	223.	215.	201.	198.	187.
		1.9( )	.0( )	2.4( )	1.1( )	.9( )	1.4( )	.0( )	1.1( )	.5( )	.0( )
		32.	32.	30.	30.	25.	155.	139.	130.	77.	74.
		.0( )	.7( )	.0( )	.7( )	.0( )	.0( )	.7( )	1.7( )	.2(S)	1.3( )
		68.	61.	3.	3.	58.	57.	56.	55.	53.	45.
		.6(S)	.0( )	.0( )	.2( )	.8( )	.1(S)	1.0( )	.1(S)	.0( )	.9( )
		30.	30.	26.	20.	6.	6.	3.	137.	137.	101.
		.0( )	.7( )	.0( )	.3( )	.0( )	.2( )	.0(S)	.0( )	2.2( )	.0( )
		101.	90.	18.	72.	55.	52.	44.	39.	30.	16.
		1.6( )	.0( )	.6( )	1.2( )	.0( )	1.1( )	.2(S)	.0( )	.8( )	.0( )
		1.	0.								
		.1( )	.0(S)								
3	25.	599.	564.	564.	488.	41.	40.	40.	40.	40.	40.
		3.8( )	.0( )	4.6( )	.0( )	1.2( )	.0( )	1.0( )	.0(S)	.0( )	.6( )
		38.	37.	37.	36.	447.	431.	305.	305.	238.	238.
		.4(S)	.0( )	1.2( )	4.7(S)	1.1( )	.0( )	.0( )	3.1( )	.0( )	.0( )
		238.	234.	234.	222.	214.	205.	197.	185.	182.	171.
		1.9( )	.0( )	2.3( )	1.0( )	.9( )	1.4( )	.0( )	1.0( )	.5( )	.0( )
		30.	30.	28.	28.	23.	141.	126.	118.	70.	68.
		.0( )	.7( )	.0( )	.7( )	.0( )	.0( )	.7( )	1.6( )	.2(S)	1.3( )

		62.	56.	2.	2.	53.	52.	52.	50.	49.	42.
		.5(S)	.0( )	.0( )	.2( )	.8( )	.1(S)	1.0( )	.1(S)	.0( )	.9( )
		28.	28.	23.	18.	5.	5.	2.	126.	126.	92.
		.0( )	.6( )	.0( )	.3( )	.0( )	.2( )	.0(S)	.0( )	2.1( )	.0( )
		92.	82.	17.	66.	50.	47.	40.	36.	27.	15.
		1.6( )	.0( )	.5( )	1.2( )	.0( )	1.1( )	.2(S)	.0( )	.8( )	.0( )
		1.	0.								
		.1( )	.0(S)								
3	30.	563.	530.	530.	456.	41.	40.	40.	39.	39.	39.
		3.7( )	.0( )	4.5( )	.0( )	1.2( )	.0( )	1.0( )	.0(S)	.0( )	.6( )
		37.	36.	36.	36.	416.	401.	285.	285.	221.	221.
		.4(S)	.0( )	1.2( )	4.6(S)	1.1( )	.0( )	.0( )	3.0( )	.0( )	.0( )
		221.	216.	216.	205.	197.	188.	181.	169.	167.	157.
		1.8( )	.0( )	2.2( )	1.0( )	.9( )	1.3( )	.0( )	1.0( )	.4( )	.0( )
		28.	28.	26.	26.	21.	129.	115.	107.	64.	62.
		.0( )	.7( )	.0( )	.7( )	.0( )	.0( )	.6( )	1.6( )	.2(S)	1.2( )
		57.	51.	2.	2.	49.	48.	47.	46.	45.	39.
		.5(S)	.0( )	.0( )	.1( )	.8( )	.1(S)	.9( )	.1(S)	.0( )	.9( )
		25.	25.	21.	17.	4.	4.	1.	116.	116.	84.
		.0( )	.6( )	.0( )	.3( )	.0( )	.2( )	.0(S)	.0( )	2.0( )	.0( )
		84.	75.	15.	60.	45.	43.	36.	32.	25.	13.
		1.5( )	.0( )	.5( )	1.1( )	.0( )	1.0( )	.2(S)	.0( )	.7( )	.0( )
		1.	0.								
		.1( )	.0(S)								
3	35.	529.	498.	498.	426.	40.	39.	39.	39.	38.	38.
		3.6( )	.0( )	4.5( )	.0( )	1.2( )	.0( )	1.0( )	.0(S)	.0( )	.6( )

		36.	35.	35.	35.	386.	372.	266.	266.	204.	204.
		.4(S)	.0( )	1.2( )	4.4(S)	1.0( )	.0( )	.0( )	2.9( )	.0( )	.0( )
		204.	200.	200.	189.	182.	173.	167.	156.	154.	145.
		1.7( )	.0( )	2.2( )	.9( )	.8( )	1.3( )	.0( )	.9( )	.4( )	.0( )
		26.	26.	25.	25.	20.	118.	105.	98.	59.	57.
		.0( )	.7( )	.0( )	.6( )	.0( )	.0( )	.6( )	1.5( )	.2(S)	1.1( )
		52.	47.	2.	2.	45.	44.	44.	42.	41.	36.
		.4(S)	.0( )	.0( )	.1( )	.7( )	.0(S)	.9( )	.1(S)	.0( )	.8( )
		23.	23.	19.	15.	3.	3.	0.	106.	106.	77.
		.0( )	.6( )	.0( )	.3( )	.0( )	.2( )	.0(S)	.0( )	1.9( )	.0( )
		77.	69.	14.	54.	41.	39.	32.	29.	22.	12.
		1.4( )	.0( )	.5( )	1.1( )	.0( )	1.0( )	.2(S)	.0( )	.7( )	.0( )
		1.	0.								
		.1( )	.0(S)								
3	40.	498.	468.	468.	398.	39.	38.	38.	38.	38.	38.
		3.5( )	.0( )	4.4( )	.0( )	1.2( )	.0( )	1.0( )	.0(S)	.0( )	.6( )
		36.	34.	34.	34.	359.	345.	247.	247.	188.	188.
		.4(S)	.0( )	1.1( )	4.3(S)	1.0( )	.0( )	.0( )	2.8( )	.0( )	.0( )
		188.	184.	184.	174.	167.	160.	153.	144.	142.	133.
		1.7( )	.0( )	2.1( )	.9( )	.8( )	1.2( )	.0( )	.9( )	.4( )	.0( )
		25.	25.	23.	23.	18.	109.	96.	89.	54.	52.
		.0( )	.6( )	.0( )	.6( )	.0( )	.0( )	.6( )	1.4( )	.1(S)	1.1( )
		48.	43.	2.	2.	42.	41.	40.	39.	38.	33.
		.4(S)	.0( )	.0( )	.1( )	.7( )	.0(S)	.9( )	.1(S)	.0( )	.8( )
		21.	21.	17.	14.	3.	3.	0.	98.	98.	70.
		.0( )	.5( )	.0( )	.3( )	.0( )	.1( )	.0(S)	.0( )	1.9( )	.0( )
		70.	62.	13.	49.	35.	35.	29.	27.	20.	11.

		1.4( )	.0( )	.5( )	1.0( )	.0( )	.9( )	.1(S)	.0( )	.7( )	.0( )
		0.	0.								
		.1( )	.0(S)								
3	45.	468.	441.	441.	372.	39.	38.	38.	37.	37.	37.
		3.4( )	.0( )	4.4( )	.0( )	1.2( )	.0( )	1.0( )	.0(S)	.0( )	.6( )
		35.	34.	34.	34.	333.	320.	230.	230.	174.	174.
		.4(S)	.0( )	1.1( )	4.1(S)	1.0( )	.0( )	.0( )	2.7( )	.0( )	.0( )
		174.	170.	170.	161.	154.	147.	142.	133.	131.	123.
		1.6( )	.0( )	2.0( )	.9( )	.8( )	1.2( )	.0( )	.8( )	.4( )	.0( )
		23.	23.	21.	21.	17.	100.	88.	82.	50.	48.
		.0( )	.6( )	.0( )	.6( )	.0( )	.0( )	.5( )	1.3( )	.1(S)	1.0( )
		44.	39.	1.	1.	38.	37.	36.	35.	34.	30.
		.4(S)	.0( )	.0( )	.1( )	.7( )	.0(S)	.8( )	.1(S)	.0( )	.7( )
		19.	19.	15.	13.	2.	2.	0.	90.	90.	64.
		.0( )	.5( )	.0( )	.3( )	.0( )	.1( )	.0(S)	.0( )	1.8( )	.0( )
		64.	57.	12.	45.	32.	32.	26.	24.	19.	10.
		1.3( )	.0( )	.4( )	1.0( )	.0( )	.9( )	.1(S)	.0( )	.6( )	.0( )
		0.	0.								
		.1( )	.0(S)								
3	50.	441.	415.	415.	347.	38.	37.	37.	37.	36.	36.
		3.3( )	.0( )	4.3( )	.0( )	1.2( )	.0( )	.9( )	.0(S)	.0( )	.6( )
		34.	33.	33.	33.	310.	297.	214.	214.	161.	161.
		.4(S)	.0( )	1.1( )	4.0(S)	.9( )	.0( )	.0( )	2.6( )	.0( )	.0( )
		161.	157.	157.	149.	143.	136.	131.	123.	121.	114.
		1.5( )	.0( )	1.9( )	.8( )	.7( )	1.1( )	.0( )	.8( )	.4( )	.0( )
		21.	21.	20.	20.	15.	92.	81.	75.	46.	44.
		.0( )	.6( )	.0( )	.6( )	.0( )	.0( )	.5( )	1.3( )	.1(S)	1.0( )

		40.	35.	1.	1.	34.	33.	32.	31.	30.	28.
		.3(S)	.0( )	.0( )	.1( )	.6( )	.0(S)	.8( )	.1(S)	.0( )	.7( )
		17.	17.	14.	12.	2.	2.	0.	83.	83.	59.
		.0( )	.5( )	.0( )	.2( )	.0( )	.1( )	.0(S)	.0( )	1.7( )	.0( )
		59.	51.	11.	40.	29.	29.	23.	21.	17.	9.
		1.2( )	.0( )	.4( )	.9( )	.0( )	.8( )	.1(S)	.0( )	.6( )	.0( )
		0.	0.								
		.1( )	.0(S)								
3	55.	416.	392.	392.	325.	37.	36.	36.	36.	36.	36.
		3.2( )	.0( )	4.3( )	.0( )	1.2( )	.0( )	.9( )	.0(S)	.0( )	.6( )
		33.	32.	32.	32.	287.	276.	199.	199.	149.	149.
		.3(S)	.0( )	1.1( )	3.8(S)	.9( )	.0( )	.0( )	2.5( )	.0( )	.0( )
		149.	146.	146.	138.	132.	126.	121.	114.	112.	105.
		1.5( )	.0( )	1.8( )	.8( )	.7( )	1.1( )	.0( )	.8( )	.3( )	.0( )
		20.	20.	18.	18.	13.	85.	75.	69.	42.	40.
		.0( )	.6( )	.0( )	.5( )	.0( )	.0( )	.5( )	1.2( )	.1(S)	.9( )
		36.	31.	1.	1.	30.	29.	28.	27.	26.	26.
		.3(S)	.0( )	.0( )	.1( )	.6( )	.0(S)	.7( )	.1(S)	.0( )	.7( )
		16.	16.	13.	11.	2.	2.	0.	76.	76.	53.
		.0( )	.5( )	.0( )	.2( )	.0( )	.1( )	.0(S)	.0( )	1.6( )	.0( )
		53.	47.	10.	37.	26.	26.	20.	18.	15.	8.
		1.2( )	.0( )	.4( )	.9( )	.0( )	.8( )	.1(S)	.0( )	.6( )	.0( )
		0.	0.								
		.1( )	.0(S)								
4	0.	393.	370.	370.	304.	37.	36.	36.	35.	35.	35.
		3.2( )	.0( )	4.2( )	.0( )	1.1( )	.0( )	.9( )	.0(S)	.0( )	.6( )

		33.	32.	32.	31.	267.	256.	185.	185.	138.	138.
		.3(S)	.0( )	1.1( )	3.7(S)	.8( )	.0( )	.0( )	2.4( )	.0( )	.0( )
		138.	135.	135.	128.	123.	117.	112.	105.	104.	97.
		1.4( )	.0( )	1.7( )	.7( )	.7( )	1.1( )	.0( )	.7( )	.3( )	.0( )
		18.	18.	17.	17.	11.	79.	69.	64.	38.	36.
		.0( )	.5( )	.0( )	.5( )	.0( )	.0( )	.5( )	1.2( )	.1(S)	.9( )
		32.	28.	1.	1.	27.	26.	25.	24.	24.	24.
		.3(S)	.0( )	.0( )	.1( )	.5( )	.0(S)	.7( )	.1(S)	.0( )	.6( )
		14.	14.	12.	10.	1.	1.	0.	70.	70.	49.
		.0( )	.4( )	.0( )	.2( )	.0( )	.1( )	.0(S)	.0( )	1.6( )	.0( )
		49.	43.	9.	33.	23.	23.	18.	16.	14.	7.
		1.1( )	.0( )	.4( )	.9( )	.0( )	.7( )	.1(S)	.0( )	.5( )	.0( )
		0.	0.								
		.1( )	.0(S)								
4	5.	371.	350.	350.	284.	36.	35.	35.	35.	34.	34.
		3.1( )	.0( )	4.2( )	.0( )	1.1( )	.0( )	.9( )	.0(S)	.0( )	.6( )
		32.	31.	31.	31.	248.	238.	173.	173.	128.	128.
		.3(S)	.0( )	1.1( )	3.5(S)	.8( )	.0( )	.0( )	2.3( )	.0( )	.0( )
		128.	125.	125.	119.	114.	108.	104.	98.	96.	90.
		1.4( )	.0( )	1.7( )	.7( )	.6( )	1.0( )	.0( )	.7( )	.3( )	.0( )
		17.	17.	15.	15.	10.	73.	64.	59.	34.	32.
		.0( )	.5( )	.0( )	.5( )	.0( )	.0( )	.4( )	1.1( )	.1(S)	.8( )
		29.	25.	1.	1.	24.	23.	23.	23.	22.	22.
		.2(S)	.0( )	.0( )	.1( )	.5( )	.0(S)	.6( )	.1(S)	.0( )	.6( )
		13.	13.	10.	9.	1.	1.	0.	65.	65.	44.
		.0( )	.4( )	.0( )	.2( )	.0( )	.1( )	.0(S)	.0( )	1.5( )	.0( )
		44.	39.	9.	30.	21.	21.	16.	14.	13.	6.

```
            1.1( )    .0( )    .4( )    .8( )    .0( )    .7( )    .1(S)    .0( )    .5( )    .0( )

            0.       0.
             .0( )    .0(S)

 4   10.    352.     332.     332.     266.      35.      34.      34.      34.      34.      34.
            3.0( )    .0( )   4.1( )    .0( )   1.1( )    .0( )    .9( )   .0(S)    .0( )    .6( )

            31.      30.      30.      30.     231.     221.     161.     161.     119.     119.
             .3(S)    .0( )   1.1( )   3.4(S)    .8( )    .0( )    .0( )   2.2( )    .0( )    .0( )

           119.     117.     117.     110.     105.     100.      96.      90.      89.      83.
            1.3( )    .0( )   1.6( )    .7( )    .6( )   1.0( )    .0( )    .7( )    .3( )    .0( )

            15.      15.      14.      14.      10.      68.      59.      54.      31.      29.
             .0( )    .5( )    .0( )    .5( )    .0( )    .0( )    .4( )   1.1( )    .1(S)    .8( )

            26.      23.       1.       1.      22.      22.      21.      21.      20.      20.
             .2(S)    .0( )    .0( )    .1( )    .5( )   .0(S)    .6( )   .0(S)    .0( )    .6( )

            12.      12.      10.       8.       1.       1.       0.      60.      60.      41.
             .0( )    .4( )    .0( )    .2( )    .0( )    .1( )   .0(S)    .0( )   1.5( )    .0( )

            41.      35.       8.      27.      18.      18.      14.      12.      12.       6.
            1.0( )    .0( )    .4( )    .8( )    .0( )    .6( )   .1(S)    .0( )    .5( )    .0( )

            0.       0.
             .0( )    .0(S)

1


SOUTH CANYON - LIME CREEK DRAINAGE DESIGN PLAN BY FMG, INC
EXISTING HYDROLOGIC CONDITIONS AND EXISTING HYDRAULIC CONDITIONS  10 YR STORM


*** PEAK FLOWS, STAGES AND STORAGES OF GUTTERS AND DETENSION DAMS ***

  CONVEYANCE   PEAK      STAGE      STORAGE     TIME
```

ELEMENT	(CFS)	(FT)	(AC-FT)	(HR/MIN)
264	52.	.1	.5	0 55.
79	47.	.7		1 10.
175	83.	(DIRECT FLOW)		1 0.
78	173.	1.1		0 55.
174	254.	(DIRECT FLOW)		1 0.
77	250.	2.2		1 5.
173	307.	(DIRECT FLOW)		1 0.
76	274.	2.6		1 15.
172	382.	(DIRECT FLOW)		1 10.
263	380.	.1	1.6	1 15.
75	380.	3.0		1 15.
262	378.	.1	1.2	1 20.
73	66.	1.1		1 0.
74	378.	2.3		1 20.
171	127.	(DIRECT FLOW)		0 55.
170	480.	(DIRECT FLOW)		1 15.
261	460.	.1	4.9	1 25.
72	459.	3.5		1 30.
168	169.	(DIRECT FLOW)		0 55.
260	460.	.1	3.2	1 25.
69	158.	1.7		1 10.
71	410.	3.3		1 50.
167	201.	(DIRECT FLOW)		1 5.
70	410.	1.3		1 50.
68	200.	2.0		1 10.
169	452.	(DIRECT FLOW)		1 50.
166	204.	(DIRECT FLOW)		1 10.
281	29.	.1	1.1	1 15.
165	590.	(DIRECT FLOW)		1 45.
86	29.	.8		1 25.
67	590.	.9		1 45.
185	222.	(DIRECT FLOW)		0 50.
66	590.	2.2		1 45.
85	186.	1.9		1 15.
164	660.	(DIRECT FLOW)		1 45.
184	255.	(DIRECT FLOW)		1 10.
65	660.	2.3		1 45.
280	236.	.1	3.1	1 30.

64	659.	1.6		1	45.
84	234.	2.5		1	35.
63	659.	1.9		1	50.
252	45.	.1	6.1	2	10.
183	316.	(DIRECT FLOW)		1	25.
62	658.	4.0		1	50.
52	45.	1.3		2	10.
83	309.	2.4		1	30.
82	140.	1.5		0	55.
163	688.	(DIRECT FLOW)		1	50.
152	144.	(DIRECT FLOW)		0	25.
182	421.	(DIRECT FLOW)		1	25.
61	688.	3.0		1	50.
251	88.	.1	.9	0	30.
81	419.	3.3		1	30.
162	706.	(DIRECT FLOW)		1	50.
51	48.	.7		2	5.
181	463.	(DIRECT FLOW)		1	25.
161	713.	(DIRECT FLOW)		1	50.
151	101.	(DIRECT FLOW)		0	40.
80	447.	3.8		1	35.
60	690.	4.6		2	0.
250	99.	.1	.2	0	45.
180	504.	(DIRECT FLOW)		1	25.
160	702.	(DIRECT FLOW)		2	0.
50	98.	1.6		0	50.
142	1155.	(DIRECT FLOW)		1	50.
150	127.	(DIRECT FLOW)		0	40.
43	1154.	1.9		1	55.
42	121.	2.0		0	50.
141	1226.	(DIRECT FLOW)		1	50.
41	1218.	5.4		2	0.
140	1236.	(DIRECT FLOW)		1	55.
40	1234.	5.1		2	0.

1

ENDPROGRAM PROGRAM CALLED

APPENDIX C - UDSWM2-PC - 50 YR

EXISTING LAND USE
AND EXISTING HYDRAULIC CONDITIONS

1

ENVIRONMENTAL PROTECTION AGENCY - STORM WATER MANAGEMENT MODEL - VERSION PC.1

DEVELOPED BY METCALF + EDDY, INC.

UNIVERSITY OF FLORIDA

WATER RESOURCES ENGINEEERS, INC. (SEPTEMBER 1970)

UPDATED BY UNIVERSITY OF FLORIDA (JUNE 1973)

HYDROLOGIC ENGINEERING CENTER, CORPS OF ENGINEERS

MISSOURI RIVER DIVISION, CORPS OF ENGINEERS (SEPTEMBER 1974)

BOYLE ENGINEERING CORPORATION (MARCH 1985, JULY 1985)

OTAPE OR DISK ASSIGNMENTS

JIN(1)	JIN(2)	JIN(3)	JIN(4)	JIN(5)	JIN(6)	JIN(7)	JIN(8)	JIN(9)	JIN(10)
2	1	0	0	0	0	0	0	0	0

JOUT(1)	JOUT(2)	JOUT(3)	JOUT(4)	JOUT(5)	JOUT(6)	JOUT(7)	JOUT(8)	JOUT(9)	JOUT(10)
1	2	0	0	0	0	0	0	0	0

NSCRAT(1)	NSCRAT(2)	NSCRAT(3)	NSCRAT(4)	NSCRAT(5)
3	4	0	0	0

1

WATERSHED PROGRAM CALLED

*** ENTRY MADE TO RUNOFF MODEL ***

SOUTH CANYON - LIME CREEK - STEVENS HIGH DRAINAGE DESIGN PLAN BY FMG, INC
EXISTING HYDROLOGIC CONDITIONS AND EXISTING HYDRAULIC CONDITIONS 50 YR STORM

ONUMBER OF TIME STEPS 50
OINTEGRATION TIME INTERVAL (MINUTES), 5.00

25.0 PERCENT OF IMPERVIOUS AREA HAS ZERO DETENTION DEPTH
1

SOUTH CANYON - LIME CREEK - STEVENS HIGH DRAINAGE DESIGN PLAN BY FMG, INC
EXISTING HYDROLOGIC CONDITIONS AND EXISTING HYDRAULIC CONDITIONS 50 YR STORM

HYDROGRAPHS FROM CUHPE/PC ARE LISTED FOR THE FOLLOWING 29 SUBCATCHMENTS

TIME(HR/MIN)	1	2	3	4	5	6	7	8	9	10
	11	12	13	14	15	16	17	18	19	20
	21	22	23	24	25	26	27	28	29	
0 0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.	0.	0.	0.	0.	
0 5.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.	0.	0.	0.	0.	
0 10.	2.	1.	0.	9.	0.	5.	4.	2.	3.	0.
	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	0.	0.	3.	3.	0.	1.	0.	0.	0.	

0	15.	7.	3.	2.	26.	0.	18.	12.	7.	10.	1.
		0.	1.	0.	0.	0.	0.	0.	0.	1.	0.
		1.	0.	15.	11.	1.	5.	0.	1.	0.	
0	20.	16.	6.	4.	42.	0.	38.	22.	17.	24.	3.
		1.	1.	1.	0.	0.	0.	1.	1.	2.	2.
		2.	1.	38.	24.	2.	12.	1.	2.	1.	
0	25.	38.	21.	14.	101.	1.	86.	67.	38.	55.	6.
		1.	10.	1.	1.	1.	1.	1.	5.	14.	4.
		4.	3.	84.	56.	10.	32.	1.	7.	4.	
0	30.	141.	80.	55.	251.	23.	229.	231.	139.	149.	48.
		12.	100.	65.	33.	18.	47.	59.	63.	198.	52.
		49.	35.	205.	187.	58.	113.	27.	75.	41.	
0	35.	231.	92.	103.	130.	75.	307.	245.	241.	233.	136.
		38.	98.	157.	103.	59.	128.	158.	174.	345.	161.
		110.	92.	368.	299.	144.	221.	81.	213.	91.	
0	40.	252.	87.	127.	80.	143.	272.	213.	279.	253.	233.
		74.	82.	212.	178.	116.	194.	233.	285.	363.	294.
		144.	141.	451.	323.	231.	291.	139.	362.	119.	
0	45.	242.	74.	128.	47.	210.	220.	169.	274.	232.	311.
		110.	61.	221.	235.	174.	222.	262.	361.	335.	414.
		149.	166.	430.	302.	293.	312.	183.	476.	124.	
0	50.	223.	64.	127.	45.	265.	176.	139.	260.	204.	357.
		142.	49.	216.	265.	226.	224.	262.	396.	296.	500.
		149.	171.	384.	272.	326.	308.	207.	539.	121.	
0	55.	199.	52.	124.	27.	301.	139.	106.	237.	177.	373.
		164.	34.	202.	273.	264.	217.	252.	398.	254.	546.
		143.	167.	332.	238.	334.	300.	214.	557.	117.	
1	0.	174.	43.	117.	25.	319.	107.	84.	213.	152.	369.
		178.	22.	183.	266.	287.	205.	235.	383.	212.	557.
		132.	163.	284.	206.	327.	284.	210.	545.	109.	

1	5.	154.	36.	109.	25.	322.	88.	70.	192.	131.	357.
		183.	17.	165.	257.	297.	191.	216.	365.	181.	545.
		121.	156.	241.	180.	319.	265.	205.	523.	99.	
1	10.	135.	28.	101.	17.	315.	71.	54.	172.	113.	346.
		183.	11.	148.	245.	296.	174.	196.	345.	150.	523.
		110.	147.	207.	155.	310.	245.	199.	498.	91.	
1	15.	117.	19.	93.	17.	303.	56.	41.	152.	97.	330.
		178.	8.	131.	230.	288.	158.	177.	320.	123.	499.
		100.	136.	176.	132.	297.	226.	191.	469.	82.	
1	20.	99.	13.	85.	11.	290.	42.	30.	134.	81.	312.
		172.	5.	114.	213.	277.	142.	157.	293.	98.	472.
		89.	124.	148.	111.	281.	206.	180.	436.	73.	
1	25.	84.	9.	77.	10.	276.	32.	23.	116.	68.	290.
		167.	3.	98.	195.	266.	125.	138.	266.	76.	440.
		78.	113.	124.	93.	263.	186.	168.	399.	65.	
1	30.	71.	7.	69.	8.	260.	25.	17.	100.	56.	267.
		162.	2.	83.	177.	253.	110.	120.	240.	59.	406.
		68.	102.	103.	77.	243.	168.	155.	364.	57.	
1	35.	60.	5.	62.	7.	244.	21.	13.	86.	46.	245.
		155.	0.	71.	161.	239.	97.	104.	216.	45.	372.
		60.	92.	85.	64.	224.	150.	143.	330.	50.	
1	40.	51.	4.	56.	7.	226.	18.	11.	73.	38.	225.
		148.	0.	60.	146.	225.	85.	91.	194.	35.	340.
		52.	83.	72.	54.	207.	134.	131.	300.	44.	
1	45.	43.	3.	50.	7.	209.	16.	9.	63.	29.	206.
		140.	0.	52.	132.	211.	75.	79.	175.	27.	311.
		46.	75.	61.	46.	190.	120.	120.	272.	39.	
1	50.	37.	3.	45.	7.	194.	15.	8.	55.	24.	190.
		132.	0.	44.	120.	196.	66.	69.	157.	21.	285.
		40.	68.	53.	40.	175.	107.	110.	247.	35.	

1	55.	32.	3.	41.	7.	180.	15.	8.	48.	21.	174.
		125.	0.	38.	109.	183.	58.	60.	142.	13.	261.
		36.	61.	44.	34.	161.	96.	101.	224.	31.	
2	0.	28.	2.	37.	7.	167.	15.	7.	42.	19.	160.
		117.	0.	32.	99.	171.	51.	52.	127.	8.	239.
		31.	56.	39.	26.	148.	87.	93.	203.	27.	
2	5.	20.	2.	33.	0.	155.	11.	5.	36.	16.	147.
		111.	0.	27.	90.	159.	45.	45.	115.	6.	219.
		28.	50.	34.	21.	136.	78.	85.	185.	24.	
2	10.	15.	0.	30.	0.	144.	7.	3.	29.	12.	135.
		105.	0.	23.	81.	149.	39.	39.	103.	4.	201.
		24.	45.	27.	16.	125.	69.	78.	168.	21.	
2	15.	11.	0.	26.	0.	134.	4.	2.	20.	9.	124.
		99.	0.	20.	74.	140.	34.	34.	93.	2.	184.
		21.	41.	20.	12.	115.	60.	72.	152.	18.	
2	20.	8.	0.	23.	0.	125.	3.	0.	15.	7.	114.
		93.	0.	17.	67.	131.	30.	30.	83.	2.	168.
		18.	37.	15.	9.	105.	53.	66.	138.	16.	
2	25.	6.	0.	20.	0.	116.	2.	0.	11.	5.	104.
		88.	0.	14.	61.	122.	27.	26.	75.	0.	154.
		16.	33.	11.	7.	96.	47.	60.	125.	14.	
2	30.	5.	0.	17.	0.	108.	0.	0.	8.	4.	95.
		83.	0.	8.	55.	114.	23.	23.	67.	0.	141.
		14.	30.	8.	5.	88.	41.	55.	113.	8.	
2	35.	4.	0.	11.	0.	100.	0.	0.	6.	3.	87.
		79.	0.	5.	50.	107.	21.	20.	61.	0.	129.
		8.	27.	6.	4.	81.	36.	51.	102.	5.	
2	40.	3.	0.	8.	0.	93.	0.	0.	5.	2.	80.
		75.	0.	4.	45.	100.	18.	17.	54.	0.	118.
		6.	24.	4.	3.	74.	32.	46.	93.	3.	

2	45.	2.	0.	6.	0.	86.	0.	0.	4.	1.	73.
		71.	0.	2.	41.	94.	16.	15.	49.	0.	108.
		4.	22.	3.	2.	68.	28.	43.	84.	2.	
2	50.	1.	0.	4.	0.	80.	0.	0.	3.	0.	67.
		67.	0.	2.	37.	88.	14.	13.	44.	0.	99.
		3.	20.	2.	1.	63.	24.	39.	76.	2.	
2	55.	0.	0.	3.	0.	75.	0.	0.	2.	0.	61.
		63.	0.	0.	34.	82.	12.	8.	39.	0.	90.
		2.	18.	2.	0.	57.	21.	36.	69.	0.	
3	0.	0.	0.	2.	0.	70.	0.	0.	2.	0.	56.
		60.	0.	0.	31.	77.	7.	5.	35.	0.	83.
		0.	16.	0.	0.	53.	18.	33.	62.	0.	
3	5.	0.	0.	2.	0.	65.	0.	0.	0.	0.	52.
		56.	0.	0.	28.	72.	5.	3.	32.	0.	76.
		0.	14.	0.	0.	48.	12.	30.	56.	0.	
3	10.	0.	0.	0.	0.	60.	0.	0.	0.	0.	47.
		53.	0.	0.	25.	67.	3.	2.	29.	0.	69.
		0.	13.	0.	0.	44.	8.	28.	51.	0.	
3	15.	0.	0.	0.	0.	56.	0.	0.	0.	0.	43.
		50.	0.	0.	23.	63.	2.	0.	26.	0.	63.
		0.	8.	0.	0.	41.	6.	25.	46.	0.	
3	20.	0.	0.	0.	0.	52.	0.	0.	0.	0.	40.
		48.	0.	0.	21.	59.	0.	0.	23.	0.	58.
		0.	5.	0.	0.	37.	5.	23.	42.	0.	
3	25.	0.	0.	0.	0.	48.	0.	0.	0.	0.	36.
		45.	0.	0.	19.	55.	0.	0.	21.	0.	53.
		0.	3.	0.	0.	34.	4.	21.	38.	0.	
3	30.	0.	0.	0.	0.	45.	0.	0.	0.	0.	33.
		43.	0.	0.	17.	52.	0.	0.	19.	0.	48.
		0.	2.	0.	0.	31.	3.	19.	34.	0.	

3	35.	0.	0.	0.	0.	42.	0.	0.	0.	0.	30.
		40.	0.	0.	16.	49.	0.	0.	17.	0.	44.
		0.	2.	0.	0.	29.	2.	18.	31.	0.	
3	40.	0.	0.	0.	0.	39.	0.	0.	0.	0.	28.
		38.	0.	0.	14.	45.	0.	0.	15.	0.	41.
		0.	0.	0.	0.	26.	2.	16.	28.	0.	
3	45.	0.	0.	0.	0.	36.	0.	0.	0.	0.	26.
		36.	0.	0.	13.	43.	0.	0.	13.	0.	37.
		0.	0.	0.	0.	24.	0.	15.	25.	0.	
3	50.	0.	0.	0.	0.	34.	0.	0.	0.	0.	23.
		34.	0.	0.	12.	40.	0.	0.	7.	0.	34.
		0.	0.	0.	0.	22.	0.	14.	23.	0.	
3	55.	0.	0.	0.	0.	31.	0.	0.	0.	0.	21.
		32.	0.	0.	7.	37.	0.	0.	5.	0.	31.
		0.	0.	0.	0.	20.	0.	8.	21.	0.	
4	0.	0.	0.	0.	0.	29.	0.	0.	0.	0.	20.
		31.	0.	0.	4.	35.	0.	0.	3.	0.	28.
		0.	0.	0.	0.	19.	0.	5.	19.	0.	
4	5.	0.	0.	0.	0.	27.	0.	0.	0.	0.	18.
		29.	0.	0.	3.	33.	0.	0.	2.	0.	26.
		0.	0.	0.	0.	17.	0.	4.	17.	0.	
4	10.	0.	0.	0.	0.	25.	0.	0.	0.	0.	16.
		27.	0.	0.	2.	31.	0.	0.	1.	0.	24.
		0.	0.	0.	0.	16.	0.	3.	15.	0.	

1

SOUTH CANYON - LIME CREEK - STEVENS HIGH DRAINAGE DESIGN PLAN BY FMG, INC
EXISTING HYDROLOGIC CONDITIONS AND EXISTING HYDRAULIC CONDITIONS 50 YR STORM

GUTTER NUMBER	GUTTER CONNECTION	NDP	NP		WIDTH OR DIAM (FT)	LENGTH (FT)	INVERT SLOPE (FT/FT)	SIDE SLOPES HORIZ TO VERT L	R	OVERBANK/SURCHARGE MANNING N	DEPTH (FT)	JK
40	0	0	4	CHANNEL	10.0	1450.	.0100	6.0	10.0	.063	7.00	0
				OVERFLOW	280.0	1100.	.0132	10.0	10.0	.044	15.00	
140	40	0	3		.0	1.	.0010	.0	.0	.001	10.00	0
41	140	0	4	CHANNEL	10.0	3550.	.0090	2.0	2.0	.063	4.00	0
				OVERFLOW	100.0	2850.	.0112	2.0	16.0	.044	14.00	
141	41	0	3		.0	1.	.0010	.0	.0	.001	10.00	0
42	141	0	4	CHANNEL	10.0	1100.	.0082	5.0	8.0	.063	4.00	0
				OVERFLOW	.0	600.	.0150	150.0	2.0	.071	7.00	
150	42	0	3		.0	1.	.0010	.0	.0	.001	10.00	0
50	150	0	4	CHANNEL	10.0	550.	.0145	3.0	4.0	.050	5.00	0
				OVERFLOW	100.0	550.	.0145	4.0	10.0	.050	10.00	
250	50	9	2	PIPE	.1	1.	.0100	.0	.0	.016	.10	0
		RESERVOIR STORAGE IN ACRE-FEET VS SPILLWAY OUTFLOW										
		.0	.0	.0 22.0	.2	95.0	.7	140.0	2.0	187.0	3.7 205.0	
		4.4	271.0	6.4 516.0	13.0	7680.0						
151	250	0	3		.0	1.	.0010	.0	.0	.001	10.00	0
51	151	0	1	CHANNEL	20.0	3500.	.0206	7.0	12.0	.056	10.00	0
251	51	9	2	PIPE	.1	1.	.0100	.0	.0	.016	.10	0
		RESERVOIR STORAGE IN ACRE-FEET VS SPILLWAY OUTFLOW										
		.0	.0	1.7 165.0	3.1	375.0	8.0	500.0	9.4	540.0	10.8 575.0	
		11.8	1000.0	12.8 1350.0	16.5	3050.0						
152	251	0	3		.0	1.	.0010	.0	.0	.001	10.00	0
52	152	0	5	PIPE	5.0	1000.	.0203	.0	.0	.016	5.00	0
				OVERFLOW	50.0	1000.	.0203	5.0	10.0	.038	15.00	
252	52	8	2	PIPE	.1	1.	.0203	.0	.0	.016	.10	0
		RESERVOIR STORAGE IN ACRE-FEET VS SPILLWAY OUTFLOW										
		.0	.0	2.5 26.0	5.5	40.0	7.3	55.0	8.5	125.0	14.0 293.0	
		25.1	532.0	36.1 2558.0								
43	141	0	4	CHANNEL	100.0	700.	.0160	5.0	37.0	.056	6.00	0
				OVERFLOW	200.0	700.	.0160	4.0	37.0	.056	12.00	
142	43	0	3		.0	1.	.0010	.0	.0	.001	10.00	0
160	142	0	3		.0	1.	.0010	.0	.0	.001	10.00	0
60	160	0	4	CHANNEL	15.0	4750.	.0148	5.0	3.0	.081	10.00	0
				OVERFLOW	.0	4750.	.0148	100.0	13.0	.094	16.00	
161	60	0	3		.0	1.	.0010	.0	.0	.001	10.00	0
162	161	0	3		.0	1.	.0010	.0	.0	.001	10.00	0

61	162	0	4	CHANNEL	15.0	350.	.0110	7.0	17.0	.050	6.00	0
				OVERFLOW	.0	350.	.0110	60.0	10.0	.094	10.00	
163	61	0	3		.0	1.	.0010	.0	.0	.001	10.00	0
62	163	0	4	CHANNEL	15.0	1150.	.0130	3.0	4.0	.056	8.00	0
				OVERFLOW	600.0	1150.	.0130	24.0	4.0	.094	11.00	
63	62	0	4	CHANNEL	70.0	550.	.0165	19.0	3.0	.067	2.00	0
				OVERFLOW	200.0	550.	.0165	22.0	3.0	.094	9.00	
64	63	0	4	CHANNEL	50.0	700.	.0143	50.0	10.0	.044	4.00	0
				OVERFLOW	350.0	700.	.0143	3.0	10.0	.081	10.00	
65	64	0	4	CHANNEL	15.0	650.	.0148	30.0	8.0	.044	6.00	0
				OVERFLOW	170.0	650.	.0148	10.0	18.0	.081	15.00	
164	65	0	3		.0	1.	.0010	.0	.0	.001	10.00	0
66	164	0	4	CHANNEL	18.0	700.	.0173	.0	.0	.019	3.50	0
				OVERFLOW	110.0	700.	.0173	63.0	5.0	.094	13.00	
67	66	0	1	CHANNEL	150.0	850.	.0270	10.0	10.0	.056	6.00	0
165	67	0	3		.0	1.	.0010	.0	.0	.001	10.00	0
166	165	0	3		.0	1.	.0010	.0	.0	.001	10.00	0
68	166	0	1	CHANNEL	10.0	1250.	.0256	3.0	4.0	.050	10.00	0
167	68	0	3		.0	1.	.0010	.0	.0	.001	10.00	0
69	167	0	1	CHANNEL	10.0	3500.	.0351	6.0	5.0	.063	8.00	0
168	69	0	3		.0	1.	.0010	.0	.0	.001	10.00	0
169	165	0	3		.0	1.	.0010	.0	.0	.001	10.00	0
70	169	0	4	CHANNEL	60.0	900.	.0213	10.0	20.0	.056	2.00	0
				OVERFLOW	50.0	900.	.0213	10.0	2.0	.038	10.00	
71	70	0	4	CHANNEL	15.0	7300.	.0263	2.0	2.0	.075	5.00	0
				OVERFLOW	35.0	7300.	.0263	3.0	3.0	.044	15.00	
260	71	6	2	PIPE	.1	1.	.0100	.0	.0	.016	.10	0
		RESERVOIR STORAGE IN ACRE-FEET VS SPILLWAY OUTFLOW										
		.0	.0	.3 110.0	1.9	310.0	3.1	375.0	5.3	2775.0	8.3 15125.0	
72	260	0	4	CHANNEL	15.0	1100.	.0200	3.0	3.0	.075	8.00	0
				OVERFLOW	60.0	1100.	.0200	3.0	2.0	.044	18.00	
261	72	5	2	PIPE	.1	1.	.0100	.0	.0	.016	.10	0
		RESERVOIR STORAGE IN ACRE-FEET VS SPILLWAY OUTFLOW										
		.0	.0	2.5 300.0	5.5	500.0	8.0	2900.0	10.5	11300.0		
170	261	0	3		.0	1.	.0010	.0	.0	.001	10.00	0
171	170	0	3		.0	1.	.0010	.0	.0	.001	10.00	0
73	171	0	1	CHANNEL	10.0	4800.	.0521	3.0	2.0	.063	10.00	0
74	170	0	1	CHANNEL	20.0	300.	.0280	4.0	8.0	.069	10.00	0
262	74	6	2	PIPE	.1	1.	.0100	.0	.0	.016	.10	0
		RESERVOIR STORAGE IN ACRE-FEET VS SPILLWAY OUTFLOW										

```
                .0      .0       .1    90.0       1.2   375.0       2.1   500.0       4.1  5100.0       5.8 13100.0
 75      262     0         4     CHANNEL        15.0     400.     .0200      3.0   2.0       .063      10.00        0
                                   OVERFLOW     60.0     400.     .0200      2.0   2.0       .044      15.00
263       75     7         2     PIPE             .1       1.     .0100       .0    .0       .016        .10        0
              RESERVOIR STORAGE IN ACRE-FEET VS SPILLWAY OUTFLOW
                .0      .0       .2    90.0       1.6   375.0       2.5   550.0       3.0  1024.0       4.0  6255.0
               6.5 11870.0
172      263     0         3                       .0       1.     .0010       .0    .0       .001      10.00        0
 76      172     0         4     CHANNEL        15.0    5150.     .0222      2.0   3.0       .069      10.00        0
                                   OVERFLOW     50.0    5150.     .0222      2.0   2.0       .044      15.00
173       76     0         3                       .0       1.     .0010       .0    .0       .001      10.00        0
 77      173     0         1     CHANNEL        15.0    2100.     .0262      2.0   4.0       .063      10.00        0
174       77     0         3                       .0       1.     .0010       .0    .0       .001      10.00        0
 78      174     0         1     CHANNEL        25.0     900.     .0333      4.0  10.0       .056      10.00        0
175      174     0         3                       .0       1.     .0010       .0    .0       .001      10.00        0
 79      175     0         1     CHANNEL        20.0    2500.     .0306      5.0   2.0       .069      10.00        0
264       79     6         2     PIPE             .1       1.     .0100       .0    .0       .028        .10        0
              RESERVOIR STORAGE IN ACRE-FEET VS SPILLWAY OUTFLOW
                .0      .0       1.0   115.0       2.1   205.0       6.3   280.0      10.5   350.0      18.0 10452.0
180      142     0         3                       .0       1.     .0010       .0    .0       .001      10.00        0
 80      180     0         4     CHANNEL        10.0    3650.     .0133      4.0   7.0       .075       6.00        0
                                   OVERFLOW    150.0    3650.     .0133     60.0  50.0       .094      14.00
181       80     0         3                       .0       1.     .0010       .0    .0       .001      10.00        0
 81      181     0         4     CHANNEL        10.0    1600.     .0138      6.0   4.0       .056       4.00        0
                                   OVERFLOW      .0    1600.     .0138     56.0   8.0       .081      14.00
182       81     0         3                       .0       1.     .0010       .0    .0       .001      10.00        0
 82      182     0         4     CHANNEL        10.0    1000.     .0160     10.0  12.0       .050       2.00        0
                                   OVERFLOW    220.0    1000.     .0160     35.0  10.0       .050       6.00
 83      182     0         4     CHANNEL        10.0    2800.     .0177     13.0   5.0       .063       6.00        0
                                   OVERFLOW    450.0    2100.     .0236     13.0  60.0       .056      12.00
183       83     0         3                       .0       1.     .0010       .0    .0       .001      10.00        0
 84      183     0         4     CHANNEL        10.0    2250.     .0136      4.0   4.0       .050       4.00        0
                                   OVERFLOW     80.0    2250.     .0136     10.0   4.0       .044      12.00
280       84     9         2     PIPE             .1       1.     .0100       .0    .0       .016        .10        0
              RESERVOIR STORAGE IN ACRE-FEET VS SPILLWAY OUTFLOW
                .0      .0       .2    35.0        .8   128.0       1.9   190.0       3.4   248.0       4.3   280.0
               5.4  1025.0       6.8  3320.0       8.6  8510.0
184      280     0         3                       .0       1.     .0010       .0    .0       .001      10.00        0
 85      184     0         1     CHANNEL        10.0    3600.     .0096     15.0   8.0       .050      10.00        0
185       85     0         3                       .0       1.     .0010       .0    .0       .001      10.00        0
```

86	185	0	1	CHANNEL	8.0	1600.	.0138	9.0	8.0	.044	8.00	0
281	86	9	2	PIPE	.1	1.	.0100	.0	.0	.016	.10	0

RESERVOIR STORAGE IN ACRE-FEET VS SPILLWAY OUTFLOW

.0	.0	.0	5.0	1.0	28.0	3.9	45.0	9.2	55.0	17.7	65.0
28.0	75.0	43.0	335.0	54.0	1300.0						

OTOTAL NUMBER OF GUTTERS/PIPES, 72
1

SOUTH CANYON - LIME CREEK - STEVENS HIGH DRAINAGE DESIGN PLAN BY FMG, INC
EXISTING HYDROLOGIC CONDITIONS AND EXISTING HYDRAULIC CONDITIONS 50 YR STORM

ARRANGEMENT OF SUBCATCHMENTS AND GUTTERS/PIPES

GUTTER	TRIBUTARY GUTTER/PIPE										TRIBUTARY SUBAREA										D.A.(AC)
40	140	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6138.9
41	141	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6016.6
42	150	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	570.2
43	142	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5446.4
50	250	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	537.0
51	251	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	446.1
52	252	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	409.0
60	161	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3698.6
61	163	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3530.2
62	63	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3387.5
63	64	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3387.5

64	65	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3387.5
65	164	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3387.5
66	67	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2984.3
67	165	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2984.3
68	167	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	850.6
69	168	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	695.0
70	71	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1822.7
71	260	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1822.7
72	261	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1822.7
73	0	0	0	0	0	0	0	0	0	0	17	0	0	0	0	0	0	0	0	0	0	208.0
74	262	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1428.5
75	263	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1428.5
76	173	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1070.1
77	174	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	897.3
78	0	0	0	0	0	0	0	0	0	0	20	0	0	0	0	0	0	0	0	0	0	620.8
79	264	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	161.3
80	181	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1498.9
81	182	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1358.1
82	0	0	0	0	0	0	0	0	0	0	25	0	0	0	0	0	0	0	0	0	0	314.2
83	183	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1043.8

84	280	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	836.5
85	185	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	620.2
86	281	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	90.2
140	41	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	6138.9
141	42	43	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6016.6
142	160	180	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5446.4
150	50	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	570.2
151	51	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	537.0
152	52	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	446.1
160	60	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	3782.4
161	162	0	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	3698.6
162	61	0	0	0	0	0	0	0	0	0	9	0	0	0	0	0	0	0	0	0	0	3626.2
163	62	0	0	0	0	0	0	0	0	0	8	0	0	0	0	0	0	0	0	0	0	3530.2
164	66	0	0	0	0	0	0	0	0	0	10	0	0	0	0	0	0	0	0	0	0	3387.5
165	166	169	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2984.3
166	68	0	0	0	0	0	0	0	0	0	12	0	0	0	0	0	0	0	0	0	0	880.6
167	69	0	0	0	0	0	0	0	0	0	13	0	0	0	0	0	0	0	0	0	0	850.6
168	0	0	0	0	0	0	0	0	0	0	14	15	0	0	0	0	0	0	0	0	0	695.0
169	70	0	0	0	0	0	0	0	0	0	11	0	0	0	0	0	0	0	0	0	0	2103.7
170	171	74	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1822.7

171	73	0	0	0	0	0	0	0	0	0	16	0	0	0	0	0	0	0	0	0	0	394.2
172	76	0	0	0	0	0	0	0	0	0	18	0	0	0	0	0	0	0	0	0	0	1428.5
173	77	0	0	0	0	0	0	0	0	0	19	0	0	0	0	0	0	0	0	0	0	1070.1
174	78	175	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	897.3
175	79	0	0	0	0	0	0	0	0	0	21	0	0	0	0	0	0	0	0	0	0	276.5
180	80	0	0	0	0	0	0	0	0	0	23	0	0	0	0	0	0	0	0	0	0	1664.0
181	81	0	0	0	0	0	0	0	0	0	24	0	0	0	0	0	0	0	0	0	0	1498.9
182	82	83	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1358.1
183	84	0	0	0	0	0	0	0	0	0	26	0	0	0	0	0	0	0	0	0	0	1043.8
184	85	0	0	0	0	0	0	0	0	0	27	0	0	0	0	0	0	0	0	0	0	836.5
185	86	0	0	0	0	0	0	0	0	0	28	0	0	0	0	0	0	0	0	0	0	620.2
250	151	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	537.0
251	152	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	446.1
252	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	409.0
260	72	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1822.7
261	170	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1822.7
262	75	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1428.5
263	172	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1428.5
264	0	0	0	0	0	0	0	0	0	0	22	0	0	0	0	0	0	0	0	0	0	161.3
280	184	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	836.5

281 0 0 0 0 0 0 0 0 0 0 29 0 0 0 0 0 0 0 0 0 90.2

1

SOUTH CANYON - LIME CREEK - STEVENS HIGH DRAINAGE DESIGN PLAN BY FMG, INC
EXISTING HYDROLOGIC CONDITIONS AND EXISTING HYDRAULIC CONDITIONS 50 YR STORM

HYDROGRAPHS ARE LISTED FOR THE FOLLOWING 72 CONVEYANCE ELEMENTS

THE UPPER NUMBER IS DISCHARGE IN CFS
THE LOWER NUMBER IS ONE OF THE FOLLOWING CASES:
( ) DENOTES DEPTH ABOVE INVERT IN FEET
(S) DENOTES STORAGE IN AC-FT FOR DETENSION DAM. DISCHARGE INCLUDES SPILLWAY OUTFLOW.
(I) DENOTES GUTTER INFLOW IN CFS FROM SPECIFIED INFLOW HYDROGRAPH
(D) DENOTES DISCHARGE IN CFS DIVERTED FROM THIS GUTTER
(O) DENOTES STORAGE IN AC-FT FOR SURCHARGED GUTTER

TIME(HR/MIN)										
	40	140	41	141	42	150	50	250	151	51
	251	152	52	252	43	142	160	60	161	162
	61	163	62	63	64	65	164	66	67	165
	166	68	167	69	168	169	70	71	260	72
	261	170	171	73	74	262	75	263	172	76
	173	77	174	78	175	79	264	180	80	181
	81	182	82	83	183	84	280	184	85	185
	86	281								
0 5.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	.0( )	.0( )	.0( )	.0( )	.0( )	.0( )	.0( )	.0(S)	.0( )	.0( )
	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	.0(S)	.0( )	.0( )	.0(S)	.0( )	.0( )	.0( )	.0( )	.0( )	.0( )
	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	.0( )	.0( )	.0( )	.0( )	.0( )	.0( )	.0( )	.0( )	.0( )	.0( )
	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	.0( )	.0( )	.0( )	.0( )	.0( )	.0( )	.0( )	.0( )	.0(S)	.0( )

		0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
		.0(S)	.0( )	.0( )	.0( )	.0( )	.0(S)	.0( )	.0(S)	.0( )	.0( )
		0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
		.0( )	.0( )	.0( )	.0( )	.0( )	.0( )	.0(S)	.0( )	.0( )	.0( )
		0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
		.0( )	.0( )	.0( )	.0( )	.0( )	.0( )	.0(S)	.0( )	.0( )	.0( )
		0.	0.								
		.0( )	.0(S)								
0	10.	0.	2.	0.	0.	0.	1.	0.	0.	0.	0.
		.0( )	.0( )	.0( )	.0( )	.0( )	.0( )	.0( )	.0(S)	.0( )	.0( )
		2.	9.	0.	0.	0.	8.	5.	0.	7.	3.
		.0(S)	.0( )	.0( )	.0(S)	.0( )	.0( )	.0( )	.0( )	.0( )	.0( )
		0.	2.	0.	0.	0.	0.	0.	0.	0.	0.
		.0( )	.0( )	.0( )	.0( )	.0( )	.0( )	.0( )	.0( )	.0( )	.0( )
		0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
		.0( )	.0( )	.0( )	.0( )	.0( )	.0( )	.0( )	.0( )	.0(S)	.0( )
		0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
		.0(S)	.0( )	.0( )	.0( )	.0( )	.0(S)	.0( )	.0(S)	.0( )	.0( )
		0.	0.	0.	0.	0.	0.	0.	3.	0.	3.
		.0( )	.0( )	.0( )	.0( )	.0( )	.0( )	.0(S)	.0( )	.0( )	.0( )
		0.	0.	0.	0.	1.	0.	0.	0.	0.	0.
		.0( )	.0( )	.0( )	.0( )	.0( )	.0( )	.0(S)	.0( )	.0( )	.0( )
		0.	0.								
		.0( )	.0(S)								
0	15.	0.	7.	0.	6.	0.	3.	0.	2.	2.	0.
		.1( )	.0( )	.0( )	.0( )	.1( )	.0( )	.1( )	.0(S)	.0( )	.0( )

10.	26.	0.	0.	6.	33.	19.	0.	25.	13.
.1(S)	.0( )	.0( )	.0(S)	.1( )	.0( )	.0( )	.1( )	.0( )	.0( )
3.	7.	0.	0.	0.	0.	1.	0.	0.	1.
.2( )	.0( )	.0( )	.0( )	.0( )	.0( )	.0( )	.0( )	.0( )	.0( )
1.	0.	0.	0.	0.	0.	0.	0.	0.	0.
.0( )	.0( )	.0( )	.0( )	.0( )	.0( )	.0( )	.0( )	.0(S)	.0( )
0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
.0(S)	.0( )	.0( )	.0( )	.0( )	.0(S)	.0( )	.0(S)	.0( )	.0( )
1.	0.	1.	0.	1.	0.	0.	15.	0.	11.
.0( )	.0( )	.0( )	.0( )	.0( )	.0( )	.0(S)	.0( )	.1( )	.0( )
0.	0.	0.	0.	5.	0.	0.	0.	0.	1.
.0( )	.0( )	.0( )	.0( )	.0( )	.0( )	.0(S)	.0( )	.0( )	.0( )
0.	0.								
.0( )	.0(S)								

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3.	17.	1.	33.	1.	8.	2.	6.	6.	1.
.3( )	.0( )	.2( )	.0( )	.2( )	.0( )	.2( )	.0(S)	.0( )	.1( )
22.	42.	0.	0.	32.	80.	41.	3.	57.	35.
.2(S)	.0( )	.0( )	.0(S)	.2( )	.0( )	.0( )	.2( )	.0( )	.0( )
11.	17.	0.	0.	0.	1.	3.	0.	0.	2.
.4( )	.0( )	.0( )	.0( )	.0( )	.1( )	.0( )	.0( )	.0( )	.0( )
1.	0.	1.	0.	1.	1.	0.	0.	0.	0.
.0( )	.0( )	.0( )	.0( )	.0( )	.0( )	.0( )	.0( )	.0(S)	.0( )
0.	0.	0.	0.	0.	0.	0.	1.	1.	0.
.0(S)	.0( )	.0( )	.0( )	.0( )	.0(S)	.0( )	.0(S)	.0( )	.0( )
2.	0.	2.	0.	2.	0.	1.	39.	1.	24.
.0( )	.0( )	.0( )	.0( )	.0( )	.0( )	.0(S)	.0( )	.2( )	.0( )
0.	1.	0.	1.	12.	0.	0.	1.	0.	2.

		.0( )	.0( )	.0( )	.1( )	.0( )	.0( )	.0(S)	.0( )	.0( )	.0( )
		0.	0.								
		.0( )	.0(S)								
0	25.	12.	49.	12.	112.	7.	31.	11.	19.	19.	6.
		.6( )	.0( )	.7( )	.0( )	.5( )	.0( )	.5( )	.0(S)	.0( )	.2( )
		47.	101.	0.	0.	105.	189.	100.	14.	150.	83.
		.5(S)	.0( )	.0( )	.0(S)	.5( )	.0( )	.0( )	.6( )	.0( )	.0( )
		28.	38.	0.	0.	0.	2.	6.	0.	1.	12.
		.6( )	.0( )	.0( )	.0( )	.0( )	.1( )	.0( )	.0( )	.0( )	.0( )
		11.	0.	1.	0.	1.	1.	0.	0.	0.	0.
		.0( )	.0( )	.0( )	.0( )	.0( )	.0( )	.0( )	.0( )	.0(S)	.0( )
		1.	1.	1.	0.	0.	1.	1.	4.	5.	0.
		.0(S)	.0( )	.0( )	.0( )	.0( )	.0(S)	.1( )	.0(S)	.0( )	.0( )
		15.	0.	5.	1.	4.	0.	2.	90.	6.	56.
		.0( )	.1( )	.0( )	.0( )	.0( )	.0( )	.0(S)	.0( )	.4( )	.0( )
		0.	6.	2.	4.	32.	0.	1.	2.	0.	7.
		.1( )	.0( )	.2( )	.3( )	.0( )	.0( )	.0(S)	.0( )	.1( )	.0( )
		0.	2.								
		.0( )	.0(S)								
0	30.	60.	208.	67.	366.	37.	115.	35.	52.	75.	20.
		1.3( )	.0( )	1.8( )	.0( )	1.2( )	.0( )	.9( )	.1(S)	.0( )	.4( )
		112.	251.	0.	1.	329.	522.	292.	62.	479.	248.
		1.2(S)	.0( )	.1( )	.1(S)	.9( )	.0( )	.0( )	1.3( )	.0( )	.0( )
		99.	139.	0.	0.	4.	24.	61.	13.	28.	131.
		1.2( )	.0( )	.0( )	.0( )	.1( )	.5( )	.0( )	.2( )	.2( )	.0( )
		118.	18.	68.	3.	51.	12.	0.	0.	1.	2.
		.0( )	.5( )	.0( )	.2( )	.0( )	.0( )	.0( )	.0( )	.0(S)	.2( )

18.	59.	51.	3.	9.	19.	25.	47.	74.	11.
.1(S)	.0( )	.0( )	.2( )	.3( )	.0(S)	.6( )	.1(S)	.0( )	.4( )
207.	9.	65.	16.	50.	0.	11.	230.	25.	193.
.0( )	.3( )	.0( )	.3( )	.0( )	.0( )	.1(S)	.0( )	.9( )	.0( )
6.	37.	19.	19.	114.	1.	14.	31.	4.	76.
.4( )	.0( )	.6( )	.6( )	.0( )	.1( )	.1(S)	.0( )	.3( )	.0( )
1.	8.								
.1( )	.1(S)								

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212.	478.	247.	839.	99.	177.	85.	106.	151.	48.
2.4( )	.0( )	3.6( )	.0( )	1.9( )	.0( )	1.5( )	.3(S)	.0( )	.7( )
152.	132.	2.	4.	740.	931.	484.	177.	695.	449.
1.6(S)	.0( )	.3( )	.4(S)	1.5( )	.0( )	.0( )	2.3( )	.0( )	.0( )
216.	242.	1.	14.	57.	143.	243.	108.	138.	245.
1.8( )	.0( )	.1( )	.2( )	.4( )	1.2( )	.0( )	.7( )	.4( )	.0( )
207.	108.	187.	30.	162.	38.	0.	0.	17.	28.
.0( )	1.5( )	.0( )	.7( )	.0( )	.0( )	.0( )	.0( )	.0(S)	.8( )
92.	229.	157.	28.	72.	97.	123.	154.	247.	73.
.8(S)	.0( )	.0( )	.7( )	.9( )	.1(S)	1.6( )	.5(S)	.0( )	1.2( )
413.	68.	209.	94.	115.	4.	41.	446.	78.	342.
.0( )	1.1( )	.0( )	.8( )	.0( )	.2( )	.4(S)	.0( )	1.7( )	.0( )
43.	139.	76.	63.	230.	9.	55.	109.	28.	218.
1.1( )	.0( )	1.1( )	1.2( )	.0( )	.4( )	.3(S)	.0( )	.8( )	.0( )
4.	17.								
.3( )	.5(S)								

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463.	733.	481.	1271.	163.	218.	131.	139.	202.	75.
3.4( )	.0( )	4.4( )	.0( )	2.3( )	.0( )	1.9( )	.7(S)	.0( )	.9( )

131.	88.	8.	11.	1108.	1210.	593.	321.	767.	554.
1.3(S)	.0( )	.6( )	1.1(S)	1.9( )	.0( )	.0( )	3.2( )	.0( )	.0( )
301.	316.	38.	131.	252.	399.	512.	279.	300.	402.
2.1( )	.0( )	.9( )	.8( )	1.0( )	1.8( )	.0( )	1.4( )	.6( )	.0( )
328.	246.	313.	102.	294.	74.	0.	2.	86.	129.
.0( )	2.2( )	.0( )	1.4( )	.0( )	.0( )	.0( )	.2( )	.2(S)	1.8( )
240.	462.	280.	86.	182.	200.	290.	326.	478.	193.
2.0(S)	.0( )	.0( )	1.2( )	1.6( )	.5(S)	2.6( )	1.4(S)	.0( )	2.1( )
578.	214.	397.	232.	165.	21.	84.	617.	166.	472.
.0( )	2.0( )	.0( )	1.3( )	.0( )	.5( )	.7(S)	.0( )	2.4( )	.0( )
149.	307.	167.	140.	331.	40.	128.	228.	89.	373.
2.0( )	.0( )	1.6( )	1.7( )	.0( )	1.0( )	.8(S)	.0( )	1.4( )	.0( )
11.	28.								
.5( )	1.1(S)								

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783.	1097.	855.	1534.	203.	225.	151.	155.	217.	89.
4.2( )	.0( )	5.0( )	.0( )	2.6( )	.0( )	2.0( )	1.1(S)	.0( )	1.0( )
104.	66.	19.	23.	1331.	1393.	681.	461.	850.	681.
1.1(S)	.0( )	.9( )	2.2(S)	2.0( )	.0( )	.0( )	3.8( )	.0( )	.0( )
449.	500.	226.	421.	552.	681.	763.	453.	473.	551.
2.5( )	.0( )	2.3( )	1.5( )	1.5( )	2.3( )	.0( )	1.8( )	.8( )	.0( )
439.	378.	432.	211.	409.	112.	1.	14.	172.	293.
.0( )	2.7( )	.0( )	2.0( )	.0( )	.0( )	.0( )	.5( )	.8(S)	2.8( )
393.	723.	375.	153.	348.	383.	507.	543.	713.	351.
3.9(S)	.0( )	.0( )	1.7( )	2.2( )	1.3(S)	3.5( )	2.5(S)	.0( )	3.0( )
744.	409.	570.	369.	201.	52.	121.	712.	282.	622.
.0( )	2.8( )	.0( )	1.7( )	.0( )	.8( )	1.1(S)	.0( )	3.1( )	.0( )
320.	483.	251.	232.	408.	96.	184.	368.	185.	495.

		2.9( )	.0( )	1.9( )	2.1( )	.0( )	1.6( )	1.8(S)	.0( )	1.9( )	.0( )
		20.	32.								
		.6( )	1.7(S)								
0	50.	1159.	1459.	1236.	1743.	220.	229.	165.	169.	217.	91.
		5.0( )	.0( )	5.4( )	.0( )	2.7( )	.0( )	2.1( )	1.5(S)	.0( )	1.0( )
		87.	74.	30.	31.	1523.	1597.	794.	618.	1091.	952.
		.9(S)	.0( )	1.1( )	3.6(S)	2.2( )	.0( )	.0( )	4.3( )	.0( )	.0( )
		748.	816.	556.	732.	824.	912.	975.	618.	632.	700.
		3.1( )	.0( )	3.7( )	2.0( )	1.8( )	2.6( )	.0( )	2.3( )	1.0( )	.0( )
		546.	497.	543.	328.	491.	154.	12.	47.	327.	618.
		.0( )	3.1( )	.0( )	2.4( )	.0( )	.0( )	.2( )	1.0( )	2.2(S)	4.1( )
		861.	1105.	426.	202.	679.	733.	883.	956.	921.	525.
		5.9(S)	.0( )	.0( )	2.0( )	3.1( )	2.2(S)	4.7( )	2.9(S)	.0( )	3.6( )
		886.	589.	709.	472.	237.	88.	142.	803.	420.	763.
		.0( )	3.4( )	.0( )	2.0( )	.0( )	1.1( )	1.3(S)	.0( )	3.7( )	.0( )
		492.	607.	285.	322.	468.	160.	245.	500.	294.	566.
		3.5( )	.0( )	2.0( )	2.5( )	.0( )	2.0( )	3.3(S)	.0( )	2.3( )	.0( )
		27.	36.								
		.7( )	2.3(S)								
0	55.	1523.	1769.	1571.	1983.	226.	229.	176.	179.	212.	88.
		5.6( )	.0( )	5.7( )	.0( )	2.7( )	.0( )	2.2( )	1.8(S)	.0( )	1.0( )
		78.	64.	37.	39.	1757.	1842.	947.	809.	1312.	1206.
		.8(S)	.0( )	1.2( )	5.3(S)	2.4( )	.0( )	.0( )	4.9( )	.0( )	.0( )
		1028.	1061.	824.	908.	1036.	1105.	1156.	783.	800.	872.
		3.6( )	.0( )	4.4( )	2.2( )	2.0( )	2.8( )	.0( )	2.6( )	1.1( )	.0( )
		629.	595.	627.	424.	537.	243.	79.	185.	1099.	1258.
		.0( )	3.4( )	.0( )	2.7( )	.0( )	.0( )	.5( )	2.1( )	3.8(S)	5.8( )

		1579.	1552.	445.	228.	1107.	1154.	1056.	1030.	1086.	688.
		6.6(S)	.0( )	.0( )	2.1( )	3.9( )	2.4(S)	5.1( )	3.0(S)	.0( )	4.2( )
		975.	722.	794.	533.	261.	118.	154.	895.	562.	869.
		.0( )	3.8( )	.0( )	2.1( )	.0( )	1.2( )	1.5(S)	.0( )	4.2( )	.0( )
		630.	723.	307.	416.	583.	283.	485.	603.	390.	589.
		3.9( )	.0( )	2.1( )	2.8( )	.0( )	2.7( )	4.6(S)	.0( )	2.6( )	.0( )
		32.	39.								
		.8( )	2.9(S)								
1	0.	1843.	2051.	1876.	2240.	227.	227.	184.	185.	202.	84.
		6.1( )	.0( )	5.9( )	.0( )	2.7( )	.0( )	2.2( )	2.0(S)	.0( )	.9( )
		74.	76.	50.	54.	2013.	2096.	1113.	1006.	1451.	1367.
		.8(S)	.0( )	1.4( )	7.2(S)	2.6( )	.0( )	.0( )	5.5( )	.0( )	.0( )
		1215.	1246.	1033.	1136.	1244.	1321.	1391.	1023.	1048.	1165.
		3.8( )	.0( )	4.9( )	2.4( )	2.2( )	3.1( )	.0( )	3.1( )	1.3( )	.0( )
		678.	657.	672.	489.	553.	487.	309.	506.	1623.	1604.
		.0( )	3.6( )	.0( )	2.9( )	.0( )	.0( )	1.1( )	3.7( )	4.2(S)	6.5( )
		1555.	1574.	440.	235.	1134.	1093.	1183.	1242.	1198.	815.
		6.6(S)	.0( )	.0( )	2.1( )	3.9( )	2.4(S)	5.4( )	3.0(S)	.0( )	4.6( )
		1007.	795.	826.	556.	270.	138.	159.	983.	699.	976.
		.0( )	4.0( )	.0( )	2.1( )	.0( )	1.4( )	1.5(S)	.0( )	4.6( )	.0( )
		770.	861.	319.	542.	770.	486.	698.	669.	459.	581.
		4.2( )	.0( )	2.1( )	3.1( )	.0( )	3.5( )	4.9(S)	.0( )	2.8( )	.0( )
		36.	42.								
		.9( )	3.4(S)								
1	5.	2133.	2321.	2167.	2499.	226.	223.	187.	187.	193.	84.
		6.4( )	.0( )	6.1( )	.0( )	2.7( )	.0( )	2.2( )	2.0(S)	.0( )	.9( )

90.	138.	112.	132.	2274.	2356.	1286.	1198.	1632.	1562.
.9(S)	.0( )	2.1( )	8.7(S)	2.7( )	.0( )	.0( )	5.9( )	.0( )	.0( )
1431.	1470.	1278.	1383.	1499.	1593.	1670.	1313.	1424.	1567.
4.1( )	.0( )	5.5( )	2.6( )	2.4( )	3.3( )	.0( )	3.7( )	1.6( )	.0( )
701.	684.	690.	524.	553.	866.	683.	857.	1596.	1609.
.0( )	3.7( )	.0( )	3.0( )	.0( )	.0( )	1.7( )	4.9( )	4.2(S)	6.6( )
1661.	1674.	421.	231.	1253.	1320.	1259.	1218.	1261.	896.
6.7(S)	.0( )	.0( )	2.1( )	4.1( )	2.5(S)	5.6( )	3.0(S)	.0( )	4.8( )
1000.	819.	821.	550.	270.	149.	159.	1070.	829.	1084.
.0( )	4.1( )	.0( )	2.1( )	.0( )	1.4( )	1.5(S)	.0( )	4.9( )	.0( )
905.	1011.	321.	690.	895.	629.	682.	705.	500.	563.
4.5( )	.0( )	2.1( )	3.4( )	.0( )	3.9( )	4.9(S)	.0( )	2.9( )	.0( )
40.	44.								
.9( )	3.8(S)								

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2409.	2585.	2450.	2767.	222.	216.	188.	188.	193.	91.
6.8( )	.0( )	6.3( )	.0( )	2.7( )	.0( )	2.2( )	2.1(S)	.0( )	1.0( )
126.	186.	168.	167.	2546.	2630.	1471.	1400.	1854.	1800.
1.3(S)	.0( )	2.7( )	9.9(S)	2.9( )	.0( )	.0( )	6.4( )	.0( )	.0( )
1687.	1727.	1555.	1674.	1796.	1891.	1968.	1622.	1780.	1863.
4.4( )	.0( )	6.0( )	2.8( )	2.6( )	3.6( )	.0( )	4.1( )	1.8( )	.0( )
699.	688.	685.	537.	541.	1164.	981.	1071.	1672.	1680.
.0( )	3.7( )	.0( )	3.0( )	.0( )	.0( )	2.1( )	5.3( )	4.3(S)	6.7( )
1682.	1676.	393.	219.	1283.	1223.	1271.	1315.	1277.	933.
6.7(S)	.0( )	.0( )	2.1( )	4.1( )	2.4(S)	5.6( )	3.1(S)	.0( )	4.9( )
960.	810.	795.	531.	264.	154.	156.	1160.	953.	1183.
.0( )	4.0( )	.0( )	2.1( )	.0( )	1.5( )	1.5(S)	.0( )	5.2( )	.0( )
1028.	1120.	318.	803.	914.	668.	724.	718.	519.	541.

		4.7( )	.0( )	2.1( )	3.7( )	.0( )	4.0( )	5.0(S)	.0( )	2.9( )	.0( )
		43.	45.								
		.9( )	4.1(S)								
1	15.	2663.	2851.	2735.	3045.	214.	207.	188.	188.	202.	108.
		7.0( )	.0( )	6.5( )	.0( )	2.7( )	.0( )	2.2( )	2.1(S)	.0( )	1.1( )
		160.	204.	187.	194.	2831.	2916.	1678.	1622.	2108.	2067.
		1.7(S)	.0( )	2.9( )	10.8(S)	3.0( )	.0( )	.0( )	6.8( )	.0( )	.0( )
		1971.	2016.	1863.	1981.	2091.	2177.	2242.	1911.	1992.	2037.
		4.7( )	.0( )	6.5( )	3.0( )	2.8( )	3.8( )	.0( )	4.3( )	1.9( )	.0( )
		681.	673.	664.	533.	519.	1356.	1178.	1256.	1660.	1649.
		.0( )	3.6( )	.0( )	3.0( )	.0( )	.0( )	2.2( )	5.6( )	4.3(S)	6.6( )
		1624.	1613.	362.	204.	1251.	1304.	1266.	1221.	1253.	933.
		6.7(S)	.0( )	.0( )	2.0( )	4.1( )	2.4(S)	5.6( )	3.0(S)	.0( )	4.9( )
		906.	783.	760.	507.	253.	153.	149.	1238.	1062.	1249.
		.0( )	4.0( )	.0( )	2.0( )	.0( )	1.4( )	1.4(S)	.0( )	5.5( )	.0( )
		1117.	1173.	310.	863.	916.	690.	712.	713.	522.	513.
		4.8( )	.0( )	2.1( )	3.8( )	.0( )	4.1( )	5.0(S)	.0( )	2.9( )	.0( )
		44.	46.								
		.9( )	4.4(S)								
1	20.	2871.	3122.	3023.	3325.	208.	202.	189.	190.	217.	132.
		7.2( )	.0( )	6.7( )	.0( )	2.6( )	.0( )	2.2( )	2.3(S)	.0( )	1.2( )
		195.	223.	213.	214.	3117.	3199.	1904.	1862.	2358.	2328.
		1.9(S)	.0( )	3.1( )	11.4(S)	3.2( )	.0( )	.0( )	7.2( )	.0( )	.0( )
		2247.	2282.	2149.	2241.	2315.	2362.	2386.	2074.	2125.	2157.
		4.9( )	.0( )	7.0( )	3.1( )	2.9( )	3.9( )	.0( )	4.5( )	2.0( )	.0( )
		649.	644.	631.	517.	491.	1509.	1337.	1381.	1596.	1590.
		.0( )	3.5( )	.0( )	3.0( )	.0( )	.0( )	2.3( )	5.8( )	4.2(S)	6.5( )

		1570.	1565.	328.	187.	1237.	1180.	1203.	1232.	1201.	908.
		6.6(S)	.0( )	.0( )	1.9( )	4.1( )	2.4(S)	5.5( )	3.0(S)	.0( )	4.8( )
		844.	746.	719.	481.	237.	149.	141.	1295.	1147.	1275.
		.0( )	3.9( )	.0( )	2.0( )	.0( )	1.4( )	1.3(S)	.0( )	5.7( )	.0( )
		1164.	1188.	300.	889.	903.	697.	699.	693.	513.	481.
		4.9( )	.0( )	2.1( )	3.8( )	.0( )	4.1( )	4.9(S)	.0( )	2.9( )	.0( )
		45.	46.								
		1.0( )	4.6(S)								
1	25.	3153.	3389.	3306.	3587.	203.	201.	192.	192.	235.	158.
		7.3( )	.0( )	6.9( )	.0( )	2.6( )	.0( )	2.3( )	2.5(S)	.0( )	1.3( )
		218.	234.	224.	227.	3383.	3454.	2129.	2097.	2533.	2510.
		2.1(S)	.0( )	3.2( )	11.8(S)	3.3( )	.0( )	.0( )	7.6( )	.0( )	.0( )
		2442.	2462.	2346.	2395.	2426.	2444.	2459.	2169.	2194.	2201.
		5.1( )	.0( )	7.2( )	3.2( )	2.9( )	4.0( )	.0( )	4.6( )	2.0( )	.0( )
		610.	607.	592.	495.	461.	1591.	1424.	1443.	1520.	1506.
		.0( )	3.5( )	.0( )	2.9( )	.0( )	.0( )	2.4( )	5.9( )	4.1(S)	6.3( )
		1461.	1433.	294.	169.	1139.	1174.	1150.	1108.	1133.	866.
		6.5(S)	.0( )	.0( )	1.8( )	3.9( )	2.4(S)	5.3( )	3.0(S)	.0( )	4.7( )
		779.	704.	671.	451.	220.	142.	131.	1325.	1201.	1270.
		.0( )	3.8( )	.0( )	1.9( )	.0( )	1.4( )	1.2(S)	.0( )	5.8( )	.0( )
		1177.	1176.	287.	890.	878.	691.	669.	663.	495.	445.
		4.9( )	.0( )	2.0( )	3.8( )	.0( )	4.1( )	4.9(S)	.0( )	2.9( )	.0( )
		46.	47.								
		1.0( )	4.8(S)								
1	30.	3439.	3633.	3562.	3797.	202.	202.	195.	196.	252.	183.
		7.4( )	.0( )	7.0( )	.0( )	2.6( )	.0( )	2.3( )	2.8(S)	.0( )	1.4( )

232.	242.	234.	235.	3595.	3644.	2317.	2292.	2606.	2589.
2.1(S)	.0( )	3.3( )	12.1(S)	3.4( )	.0( )	.0( )	7.9( )	.0( )	.0( )
2533.	2538.	2438.	2454.	2463.	2466.	2462.	2195.	2191.	2182.
5.2( )	.0( )	7.4( )	3.2( )	3.0( )	4.0( )	.0( )	4.6( )	2.0( )	.0( )
569.	567.	551.	468.	430.	1613.	1451.	1452.	1414.	1400.
.0( )	3.3( )	.0( )	2.8( )	.0( )	.0( )	2.4( )	5.9( )	4.1(S)	6.1( )
1361.	1359.	261.	151.	1098.	1054.	1062.	1082.	1055.	815.
6.4(S)	.0( )	.0( )	1.7( )	3.9( )	2.3(S)	5.1( )	3.0(S)	.0( )	4.6( )
714.	656.	619.	418.	202.	133.	121.	1327.	1225.	1242.
.0( )	3.6( )	.0( )	1.8( )	.0( )	1.3( )	1.1(S)	.0( )	5.8( )	.0( )
1165.	1146.	272.	873.	841.	673.	634.	625.	470.	410.
4.9( )	.0( )	2.0( )	3.8( )	.0( )	4.0( )	4.8(S)	.0( )	2.8( )	.0( )
46.	47.								
1.0( )	4.9(S)								

1 35.

3682.	3825.	3765.	3929.	203.	204.	199.	200.	265.	203.
7.5( )	.0( )	7.1( )	.0( )	2.6( )	.0( )	2.3( )	3.3(S)	.0( )	1.5( )
240.	245.	238.	238.	3726.	3750.	2443.	2422.	2602.	2589.
2.2(S)	.0( )	3.3( )	12.2(S)	3.5( )	.0( )	.0( )	8.1( )	.0( )	.0( )
2543.	2540.	2455.	2450.	2439.	2422.	2405.	2160.	2137.	2115.
5.2( )	.0( )	7.4( )	3.2( )	2.9( )	3.9( )	.0( )	4.6( )	2.0( )	.0( )
527.	527.	510.	440.	400.	1588.	1433.	1420.	1312.	1299.
.0( )	3.2( )	.0( )	2.8( )	.0( )	.0( )	2.4( )	5.8( )	4.0(S)	5.9( )
1256.	1227.	231.	134.	996.	1017.	1004.	969.	975.	759.
6.3(S)	.0( )	.0( )	1.6( )	3.7( )	2.3(S)	5.0( )	2.9(S)	.0( )	4.4( )
651.	605.	567.	384.	183.	124.	109.	1307.	1222.	1193.
.0( )	3.5( )	.0( )	1.8( )	.0( )	1.3( )	.9(S)	.0( )	5.8( )	.0( )
1129.	1087.	242.	844.	798.	648.	594.	585.	443.	377.

		4.9( )	.0( )	1.9( )	3.7( )	.0( )	4.0( )	4.8(S)	.0( )	2.7( )	.0( )
		47.	47.								
		1.0( )	4.9(S)								
1	40.	3857.	3943.	3892.	3976.	205.	209.	204.	206.	273.	218.
		7.6( )	.0( )	7.2( )	.0( )	2.6( )	.0( )	2.3( )	3.7(S)	.0( )	1.6( )
		244.	245.	238.	238.	3771.	3771.	2504.	2486.	2546.	2536.
		2.2(S)	.0( )	3.3( )	12.2(S)	3.5( )	.0( )	.0( )	8.2( )	.0( )	.0( )
		2498.	2488.	2414.	2391.	2362.	2335.	2310.	2086.	2049.	2021.
		5.2( )	.0( )	7.3( )	3.2( )	2.9( )	3.9( )	.0( )	4.5( )	1.9( )	.0( )
		487.	487.	471.	411.	371.	1534.	1386.	1365.	1208.	1193.
		.0( )	3.1( )	.0( )	2.7( )	.0( )	.0( )	2.4( )	5.8( )	3.9(S)	5.7( )
		1149.	1146.	204.	119.	942.	909.	908.	918.	896.	701.
		6.2(S)	.0( )	.0( )	1.5( )	3.6( )	2.3(S)	4.7( )	2.9(S)	.0( )	4.2( )
		590.	555.	517.	352.	165.	113.	97.	1267.	1195.	1127.
		.0( )	3.3( )	.0( )	1.7( )	.0( )	1.2( )	.8(S)	.0( )	5.8( )	.0( )
		1072.	1019.	218.	801.	729.	595.	553.	545.	414.	346.
		4.8( )	.0( )	1.8( )	3.7( )	.0( )	3.8( )	4.7(S)	.0( )	2.7( )	.0( )
		47.	47.								
		1.0( )	4.9(S)								
1	45.	3951.	3985.	3941.	3953.	216.	232.	229.	240.	278.	228.
		7.6( )	.0( )	7.2( )	.0( )	2.7( )	.0( )	2.5( )	4.1(S)	.0( )	1.6( )
		244.	242.	234.	234.	3737.	3718.	2507.	2490.	2446.	2437.
		2.2(S)	.0( )	3.3( )	12.1(S)	3.5( )	.0( )	.0( )	8.2( )	.0( )	.0( )
		2409.	2393.	2330.	2294.	2257.	2223.	2193.	1987.	1944.	1910.
		5.1( )	.0( )	7.2( )	3.2( )	2.8( )	3.8( )	.0( )	4.4( )	1.9( )	.0( )
		449.	449.	434.	382.	343.	1461.	1321.	1294.	1105.	1092.
		.0( )	3.0( )	.0( )	2.6( )	.0( )	.0( )	2.3( )	5.7( )	3.8(S)	5.4( )

1052.	1025.	179.	105.	846.	857.	851.	825.	819.	644.
6.1(S)	.0( )	.0( )	1.4( )	3.4( )	2.3(S)	4.6( )	2.8(S)	.0( )	4.1( )
534.	506.	470.	322.	148.	102.	87.	1211.	1150.	1051.
.0( )	3.2( )	.0( )	1.6( )	.0( )	1.2( )	.8(S)	.0( )	5.7( )	.0( )
1005.	948.	201.	747.	671.	552.	514.	506.	385.	319.
4.7( )	.0( )	1.8( )	3.6( )	.0( )	3.7( )	4.7(S)	.0( )	2.6( )	.0( )
47.	47.								
1.0( )	4.9(S)								

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3970.	3961.	3923.	3877.	237.	259.	256.	259.	279.	233.
7.7( )	.0( )	7.2( )	.0( )	2.8( )	.0( )	2.6( )	4.3(S)	.0( )	1.6( )
241.	236.	229.	228.	3640.	3606.	2462.	2446.	2325.	2317.
2.2(S)	.0( )	3.3( )	11.9(S)	3.5( )	.0( )	.0( )	8.2( )	.0( )	.0( )
2293.	2276.	2221.	2178.	2135.	2097.	2065.	1875.	1828.	1792.
5.0( )	.0( )	7.1( )	3.1( )	2.8( )	3.7( )	.0( )	4.3( )	1.8( )	.0( )
414.	414.	399.	355.	316.	1379.	1246.	1216.	1008.	995.
.0( )	2.9( )	.0( )	2.5( )	.0( )	.0( )	2.3( )	5.6( )	3.7(S)	5.2( )
952.	948.	158.	92.	790.	766.	760.	760.	747.	590.
6.0(S)	.0( )	.0( )	1.3( )	3.3( )	2.2(S)	4.3( )	2.7(S)	.0( )	3.9( )
483.	462.	428.	295.	133.	92.	78.	1144.	1091.	974.
.0( )	3.0( )	.0( )	1.5( )	.0( )	1.1( )	.7(S)	.0( )	5.5( )	.0( )
935.	878.	185.	694.	619.	512.	476.	468.	358.	294.
4.5( )	.0( )	1.7( )	3.4( )	.0( )	3.6( )	4.6(S)	.0( )	2.5( )	.0( )
47.	47.								
1.0( )	4.8(S)								

1 55.

3927.	3882.	3850.	3754.	256.	268.	266.	268.	276.	235.
7.6( )	.0( )	7.2( )	.0( )	2.9( )	.0( )	2.7( )	4.4(S)	.0( )	1.6( )

235.	229.	221.	220.	3498.	3453.	2383.	2368.	2194.	2186.
2.2(S)	.0( )	3.2( )	11.6(S)	3.4( )	.0( )	.0( )	8.1( )	.0( )	.0( )
2165.	2146.	2098.	2052.	2006.	1966.	1933.	1758.	1710.	1673.
4.9( )	.0( )	6.9( )	3.0( )	2.7( )	3.6( )	.0( )	4.2( )	1.7( )	.0( )
380.	380.	366.	329.	291.	1293.	1168.	1136.	914.	903.
.0( )	2.8( )	.0( )	2.4( )	.0( )	.0( )	2.2( )	5.4( )	3.6(S)	5.0( )
865.	842.	139.	81.	703.	706.	704.	688.	679.	538.
5.9(S)	.0( )	.0( )	1.2( )	3.1( )	2.2(S)	4.2( )	2.6(S)	.0( )	3.7( )
434.	421.	390.	270.	119.	84.	70.	1070.	1026.	899.
.0( )	2.9( )	.0( )	1.5( )	.0( )	1.0( )	.6(S)	.0( )	5.4( )	.0( )
865.	813.	170.	643.	571.	475.	441.	433.	332.	271.
4.4( )	.0( )	1.6( )	3.3( )	.0( )	3.5( )	4.6(S)	.0( )	2.4( )	.0( )
47.	47.								
1.0( )	4.7(S)								

2	0.	3833.	3759.	3731.	3595.	267.	273.	270.	271.	271.	234.
		7.6( )	.0( )	7.1( )	.0( )	2.9( )	.0( )	2.7( )	4.4(S)	.0( )	1.6( )
		228.	220.	212.	211.	3329.	3279.	2282.	2267.	2059.	2051.
		2.1(S)	.0( )	3.1( )	11.3(S)	3.3( )	.0( )	.0( )	7.9( )	.0( )	.0( )
		2032.	2013.	1970.	1923.	1875.	1835.	1802.	1642.	1593.	1557.
		4.7( )	.0( )	6.7( )	2.9( )	2.6( )	3.5( )	.0( )	4.1( )	1.7( )	.0( )
		350.	350.	337.	304.	269.	1207.	1090.	1057.	829.	818.
		.0( )	2.6( )	.0( )	2.3( )	.0( )	.0( )	2.2( )	5.3( )	3.5(S)	4.7( )
		780.	776.	123.	72.	654.	638.	632.	627.	617.	489.
		5.8(S)	.0( )	.0( )	1.1( )	3.0( )	2.2(S)	3.9( )	2.6(S)	.0( )	3.5( )
		393.	384.	355.	248.	107.	76.	64.	997.	958.	824.
		.0( )	2.8( )	.0( )	1.4( )	.0( )	1.0( )	.6(S)	.0( )	5.2( )	.0( )
		798.	752.	157.	595.	527.	440.	408.	401.	308.	250.

		4.3( )	.0( )	1.6( )	3.2( )	.0( )	3.3( )	4.5(S)	.0( )	2.3( )	.0( )
		47.	46.								
		1.0( )	4.6(S)								
2	5.	3699.	3598.	3578.	3413.	270.	271.	269.	269.	262.	229.
		7.5( )	.0( )	7.0( )	.0( )	3.0( )	.0( )	2.7( )	4.4(S)	.0( )	1.6( )
		217.	203.	203.	201.	3143.	3087.	2164.	2153.	1920.	1915.
		2.0(S)	.0( )	3.0( )	11.0(S)	3.2( )	.0( )	.0( )	7.7( )	.0( )	.0( )
		1899.	1879.	1843.	1795.	1748.	1708.	1676.	1529.	1482.	1447.
		4.6( )	.0( )	6.5( )	2.9( )	2.5( )	3.4( )	.0( )	3.9( )	1.6( )	.0( )
		321.	321.	309.	282.	249.	1126.	1015.	983.	751.	741.
		.0( )	2.5( )	.0( )	2.2( )	.0( )	.0( )	2.1( )	5.2( )	3.4(S)	4.5( )
		709.	691.	108.	63.	583.	580.	579.	568.	560.	446.
		5.7(S)	.0( )	.0( )	1.0( )	2.8( )	2.1(S)	3.8( )	2.5(S)	.0( )	3.3( )
		356.	351.	324.	227.	96.	69.	58.	923.	889.	756.
		.0( )	2.6( )	.0( )	1.3( )	.0( )	.9( )	.5(S)	.0( )	5.1( )	.0( )
		735.	695.	144.	551.	486.	408.	377.	371.	286.	231.
		4.2( )	.0( )	1.5( )	3.1( )	.0( )	3.2( )	4.5(S)	.0( )	2.3( )	.0( )
		46.	46.								
		1.0( )	4.5(S)								
2	10.	3536.	3416.	3402.	3213.	269.	265.	265.	263.	251.	222.
		7.5( )	.0( )	6.9( )	.0( )	3.0( )	.0( )	2.6( )	4.3(S)	.0( )	1.6( )
		204.	193.	193.	192.	2945.	2886.	2037.	2030.	1783.	1780.
		2.0(S)	.0( )	2.9( )	10.7(S)	3.1( )	.0( )	.0( )	7.5( )	.0( )	.0( )
		1768.	1749.	1719.	1673.	1627.	1589.	1559.	1424.	1379.	1347.
		4.5( )	.0( )	6.3( )	2.8( )	2.5( )	3.3( )	.0( )	3.8( )	1.5( )	.0( )
		296.	296.	285.	261.	231.	1051.	946.	915.	682.	674.
		.0( )	2.4( )	.0( )	2.2( )	.0( )	.0( )	2.0( )	5.0( )	3.4(S)	4.3( )

		643.	641.	95.	56.	546.	540.	535.	533.	510.	406.
		5.6(S)	.0( )	.0( )	1.0( )	2.7( )	2.1(S)	3.6( )	2.4(S)	.0( )	3.2( )
		324.	321.	295.	209.	87.	63.	52.	849.	822.	691.
		.0( )	2.5( )	.0( )	1.3( )	.0( )	.9( )	.5(S)	.0( )	4.9( )	.0( )
		676.	642.	133.	509.	447.	378.	349.	343.	265.	214.
		4.0( )	.0( )	1.5( )	3.0( )	.0( )	3.1( )	4.4(S)	.0( )	2.2( )	.0( )
		46.	46.								
		1.0( )	4.3(S)								
2	15.	3357.	3221.	3210.	3009.	263.	257.	257.	254.	239.	213.
		7.4( )	.0( )	6.8( )	.0( )	2.9( )	.0( )	2.6( )	4.2(S)	.0( )	1.5( )
		193.	183.	183.	182.	2746.	2688.	1908.	1904.	1653.	1651.
		1.9(S)	.0( )	2.8( )	10.4(S)	3.0( )	.0( )	.0( )	7.3( )	.0( )	.0( )
		1642.	1623.	1602.	1558.	1513.	1477.	1448.	1324.	1279.	1243.
		4.3( )	.0( )	6.1( )	2.7( )	2.4( )	3.2( )	.0( )	3.7( )	1.5( )	.0( )
		273.	273.	262.	242.	213.	971.	872.	836.	628.	622.
		.0( )	2.3( )	.0( )	2.1( )	.0( )	.0( )	2.0( )	4.8( )	3.3(S)	4.1( )
		602.	591.	84.	49.	507.	504.	503.	496.	464.	371.
		5.6(S)	.0( )	.0( )	.9( )	2.6( )	2.1(S)	3.5( )	2.2(S)	.0( )	3.0( )
		295.	293.	269.	191.	78.	57.	47.	780.	760.	638.
		.0( )	2.4( )	.0( )	1.2( )	.0( )	.8( )	.4(S)	.0( )	4.7( )	.0( )
		626.	592.	122.	470.	411.	351.	323.	318.	246.	198.
		3.9( )	.0( )	1.4( )	2.9( )	.0( )	3.0( )	4.4(S)	.0( )	2.1( )	.0( )
		46.	45.								
		1.0( )	4.1(S)								
2	20.	3171.	3023.	3015.	2810.	255.	247.	247.	244.	227.	203.
		7.3( )	.0( )	6.7( )	.0( )	2.9( )	.0( )	2.6( )	4.1(S)	.0( )	1.5( )

183.	173.	173.	172.	2556.	2500.	1782.	1780.	1531.	1531.
1.8(S)	.0( )	2.7( )	10.0(S)	2.9( )	.0( )	.0( )	7.1( )	.0( )	.0( )
1524.	1506.	1492.	1449.	1404.	1367.	1337.	1223.	1174.	1137.
4.2( )	.0( )	5.9( )	2.6( )	2.3( )	3.1( )	.0( )	3.5( )	1.4( )	.0( )
251.	251.	242.	225.	198.	886.	792.	760.	587.	582.
.0( )	2.2( )	.0( )	2.0( )	.0( )	.0( )	1.9( )	4.6( )	3.3(S)	4.0( )
563.	562.	74.	44.	488.	487.	460.	453.	422.	339.
5.6(S)	.0( )	.0( )	.8( )	2.6( )	2.0(S)	3.3( )	2.0(S)	.0( )	2.9( )
269.	267.	245.	175.	70.	52.	42.	717.	703.	589.
.0( )	2.3( )	.0( )	1.2( )	.0( )	.8( )	.4(S)	.0( )	4.6( )	.0( )
580.	546.	112.	434.	378.	325.	299.	294.	229.	183.
3.8( )	.0( )	1.3( )	2.8( )	.0( )	2.9( )	4.4(S)	.0( )	2.1( )	.0( )
46.	45.								
1.0( )	3.9(S)								

2 25.

2987.	2829.	2823.	2620.	245.	235.	235.	232.	214.	194.
7.2( )	.0( )	6.6( )	.0( )	2.8( )	.0( )	2.5( )	4.0(S)	.0( )	1.5( )
173.	163.	163.	162.	2375.	2321.	1661.	1659.	1414.	1414.
1.8(S)	.0( )	2.6( )	9.7(S)	2.8( )	.0( )	.0( )	6.9( )	.0( )	.0( )
1409.	1390.	1379.	1331.	1275.	1225.	1177.	1073.	1077.	1046.
4.1( )	.0( )	5.7( )	2.6( )	2.2( )	3.0( )	.0( )	3.2( )	1.3( )	.0( )
232.	232.	223.	209.	183.	814.	725.	699.	553.	549.
.0( )	2.2( )	.0( )	1.9( )	.0( )	.0( )	1.8( )	4.4( )	3.3(S)	3.9( )
535.	527.	65.	38.	462.	457.	420.	413.	385.	310.
5.5(S)	.0( )	.0( )	.8( )	2.5( )	1.8(S)	3.2( )	1.8(S)	.0( )	2.8( )
244.	244.	223.	160.	63.	47.	38.	661.	650.	542.
.0( )	2.2( )	.0( )	1.1( )	.0( )	.7( )	.3(S)	.0( )	4.4( )	.0( )
536.	504.	103.	401.	349.	302.	280.	273.	213.	170.

		3.6( )	.0( )	1.3( )	2.7( )	.0( )	2.8( )	4.3(S)	.0( )	2.0( )	.0( )
		45.	44.								
		1.0( )	3.7(S)								
2	30.	2810.	2642.	2637.	2437.	234.	224.	224.	220.	201.	184.
		7.1( )	.0( )	6.5( )	.0( )	2.8( )	.0( )	2.4( )	3.9(S)	.0( )	1.4( )
		164.	154.	154.	152.	2203.	2150.	1541.	1541.	1291.	1291.
		1.7(S)	.0( )	2.5( )	9.4(S)	2.7( )	.0( )	.0( )	6.6( )	.0( )	.0( )
		1287.	1267.	1259.	1208.	1153.	1118.	1106.	1010.	995.	966.
		3.9( )	.0( )	5.4( )	2.5( )	2.1( )	2.9( )	.0( )	3.1( )	1.3( )	.0( )
		212.	212.	202.	194.	169.	753.	670.	647.	521.	516.
		.0( )	2.1( )	.0( )	1.9( )	.0( )	.0( )	1.7( )	4.2( )	3.2(S)	3.8( )
		497.	483.	57.	34.	425.	421.	383.	377.	351.	283.
		5.5(S)	.0( )	.0( )	.7( )	2.4( )	1.5(S)	3.0( )	1.6(S)	.0( )	2.6( )
		223.	223.	203.	147.	56.	43.	34.	609.	601.	501.
		.0( )	2.1( )	.0( )	1.0( )	.0( )	.7( )	.3(S)	.0( )	4.3( )	.0( )
		496.	466.	95.	372.	328.	287.	276.	253.	198.	157.
		3.5( )	.0( )	1.2( )	2.6( )	.0( )	2.7( )	4.2(S)	.0( )	1.9( )	.0( )
		44.	43.								
		.9( )	3.5(S)								
2	35.	2649.	2461.	2457.	2260.	222.	211.	211.	207.	186.	175.
		7.0( )	.0( )	6.4( )	.0( )	2.7( )	.0( )	2.4( )	3.7(S)	.0( )	1.4( )
		156.	145.	145.	143.	2038.	1986.	1424.	1424.	1176.	1176.
		1.6(S)	.0( )	2.4( )	9.1(S)	2.6( )	.0( )	.0( )	6.4( )	.0( )	.0( )
		1173.	1155.	1149.	1107.	1067.	1041.	1009.	922.	922.	896.
		3.8( )	.0( )	5.2( )	2.4( )	2.0( )	2.8( )	.0( )	2.9( )	1.2( )	.0( )
		194.	194.	185.	180.	157.	702.	623.	603.	494.	491.
		.0( )	2.0( )	.0( )	1.8( )	.0( )	.0( )	1.6( )	4.1( )	3.2(S)	3.7( )

484.	441.	51.	30.	391.	385.	349.	343.	320.	259.
5.3(S)	.0( )	.0( )	.7( )	2.3( )	1.3(S)	2.9( )	1.4(S)	.0( )	2.5( )
202.	202.	182.	135.	47.	39.	31.	563.	557.	464.
.0( )	2.0( )	.0( )	1.0( )	.0( )	.7( )	.3(S)	.0( )	4.1( )	.0( )
461.	435.	87.	348.	314.	278.	269.	234.	184.	145.
3.4( )	.0( )	1.2( )	2.6( )	.0( )	2.7( )	4.0(S)	.0( )	1.9( )	.0( )
43.	41.								
.9( )	3.3(S)								

2 40.

2418.	2289.	2286.	2095.	212.	204.	204.	203.	174.	167.
6.8( )	.0( )	6.2( )	.0( )	2.7( )	.0( )	2.3( )	3.6(S)	.0( )	1.4( )
148.	136.	136.	134.	1883.	1835.	1313.	1313.	1082.	1082.
1.5(S)	.0( )	2.4( )	8.8(S)	2.5( )	.0( )	.0( )	6.2( )	.0( )	.0( )
1081.	1067.	1062.	1029.	991.	963.	948.	868.	859.	836.
3.6( )	.0( )	5.0( )	2.3( )	1.9( )	2.7( )	.0( )	2.8( )	1.2( )	.0( )
178.	178.	171.	167.	146.	658.	583.	566.	474.	472.
.0( )	1.9( )	.0( )	1.7( )	.0( )	.0( )	1.6( )	3.9( )	3.2(S)	3.6( )
459.	392.	45.	27.	348.	340.	317.	312.	291.	237.
4.9(S)	.0( )	.0( )	.6( )	2.2( )	1.1(S)	2.7( )	1.3(S)	.0( )	2.4( )
182.	182.	164.	123.	41.	35.	28.	522.	517.	434.
.0( )	1.8( )	.0( )	.9( )	.0( )	.6( )	.2(S)	.0( )	4.0( )	.0( )
431.	410.	80.	330.	301.	269.	260.	217.	171.	134.
3.3( )	.0( )	1.1( )	2.5( )	.0( )	2.6( )	3.7(S)	.0( )	1.8( )	.0( )
42.	40.								
.9( )	3.0(S)								

2 45.

2237.	2129.	2127.	1949.	205.	202.	202.	201.	164.	159.
6.6( )	.0( )	6.1( )	.0( )	2.6( )	.0( )	2.3( )	3.3(S)	.0( )	1.3( )

140.	127.	127.	126.	1744.	1700.	1214.	1214.	1007.	1007.
1.4(S)	.0( )	2.3( )	8.5(S)	2.4( )	.0( )	.0( )	6.0( )	.0( )	.0( )
1005.	993.	989.	959.	923.	902.	880.	806.	804.	784.
3.5( )	.0( )	4.8( )	2.3( )	1.9( )	2.6( )	.0( )	2.7( )	1.1( )	.0( )
164.	164.	158.	155.	135.	620.	549.	534.	448.	443.
.0( )	1.8( )	.0( )	1.7( )	.0( )	.0( )	1.5( )	3.8( )	3.2(S)	3.5( )
426.	349.	39.	23.	310.	305.	289.	284.	265.	216.
4.4(S)	.0( )	.0( )	.6( )	2.1( )	.9(S)	2.6( )	1.2(S)	.0( )	2.3( )
165.	165.	148.	113.	36.	32.	25.	486.	482.	408.
.0( )	1.7( )	.0( )	.9( )	.0( )	.6( )	.2(S)	.0( )	3.9( )	.0( )
406.	387.	73.	314.	288.	260.	249.	201.	159.	124.
3.2( )	.0( )	1.1( )	2.4( )	.0( )	2.6( )	3.4(S)	.0( )	1.8( )	.0( )
40.	38.								
.9( )	2.8(S)								

2 50.

2083.	1986.	1985.	1822.	202.	199.	199.	198.	154.	150.
6.4( )	.0( )	6.0( )	.0( )	2.6( )	.0( )	2.3( )	3.0(S)	.0( )	1.3( )
130.	115.	115.	112.	1620.	1581.	1127.	1127.	938.	938.
1.3(S)	.0( )	2.1( )	8.3(S)	2.3( )	.0( )	.0( )	5.8( )	.0( )	.0( )
938.	927.	924.	897.	865.	843.	829.	762.	756.	737.
3.4( )	.0( )	4.7( )	2.2( )	1.8( )	2.5( )	.0( )	2.6( )	1.1( )	.0( )
152.	152.	146.	144.	125.	585.	518.	503.	414.	410.
.0( )	1.7( )	.0( )	1.6( )	.0( )	.0( )	1.5( )	3.7( )	3.1(S)	3.3( )
391.	317.	35.	21.	282.	278.	263.	259.	242.	198.
3.9(S)	.0( )	.0( )	.6( )	2.0( )	.8(S)	2.5( )	1.0(S)	.0( )	2.2( )
150.	150.	135.	103.	32.	29.	23.	454.	452.	385.
.0( )	1.7( )	.0( )	.9( )	.0( )	.6( )	.2(S)	.0( )	3.8( )	.0( )
384.	366.	67.	299.	273.	249.	236.	186.	147.	115.

		3.1( )	.0( )	1.1( )	2.4( )	.0( )	2.5( )	3.1(S)	.0( )	1.7( )	.0( )
		39.	37.								
		.9( )	2.5(S)								
2	55.	1946.	1857.	1857.	1709.	199.	196.	196.	195.	144.	141.
		6.2( )	.0( )	5.9( )	.0( )	2.6( )	.0( )	2.3( )	2.7(S)	.0( )	1.2( )
		119.	102.	102.	101.	1511.	1475.	1049.	1049.	879.	879.
		1.2(S)	.0( )	2.0( )	8.1(S)	2.2( )	.0( )	.0( )	5.6( )	.0( )	.0( )
		879.	869.	867.	843.	811.	792.	774.	713.	710.	691.
		3.3( )	.0( )	4.5( )	2.1( )	1.8( )	2.5( )	.0( )	2.5( )	1.0( )	.0( )
		141.	141.	134.	134.	116.	550.	487.	472.	381.	376.
		.0( )	1.7( )	.0( )	1.6( )	.0( )	.0( )	1.4( )	3.6( )	3.1(S)	3.2( )
		358.	287.	30.	18.	257.	253.	240.	236.	220.	181.
		3.4(S)	.0( )	.0( )	.5( )	1.9( )	.7(S)	2.4( )	.9(S)	.0( )	2.1( )
		137.	137.	123.	95.	28.	26.	20.	426.	425.	363.
		.0( )	1.6( )	.0( )	.8( )	.0( )	.5( )	.2(S)	.0( )	3.7( )	.0( )
		363.	346.	62.	284.	258.	237.	222.	173.	137.	106.
		3.0( )	.0( )	1.0( )	2.3( )	.0( )	2.5( )	2.8(S)	.0( )	1.6( )	.0( )
		37.	36.								
		.9( )	2.3(S)								
3	0.	1824.	1744.	1744.	1608.	195.	192.	192.	191.	134.	132.
		6.0( )	.0( )	5.8( )	.0( )	2.6( )	.0( )	2.3( )	2.4(S)	.0( )	1.2( )
		108.	93.	93.	91.	1412.	1379.	980.	980.	826.	826.
		1.1(S)	.0( )	1.9( )	7.9(S)	2.1( )	.0( )	.0( )	5.4( )	.0( )	.0( )
		826.	817.	815.	792.	761.	741.	727.	670.	665.	647.
		3.2( )	.0( )	4.4( )	2.1( )	1.7( )	2.4( )	.0( )	2.4( )	1.0( )	.0( )
		130.	130.	125.	125.	108.	517.	457.	443.	370.	344.
		.0( )	1.6( )	.0( )	1.5( )	.0( )	.0( )	1.4( )	3.4( )	3.0(S)	3.1( )

		326.	257.	22.	15.	234.	231.	219.	215.	201.	165.
		2.9(S)	.0( )	.0( )	.5( )	1.8( )	.6(S)	2.2( )	.8(S)	.0( )	2.0( )
		124.	124.	111.	87.	24.	24.	18.	400.	400.	343.
		.0( )	1.5( )	.0( )	.8( )	.0( )	.5( )	.2(S)	.0( )	3.6( )	.0( )
		343.	326.	57.	269.	242.	224.	209.	160.	127.	98.
		3.0( )	.0( )	1.0( )	2.3( )	.0( )	2.4( )	2.4(S)	.0( )	1.6( )	.0( )
		36.	34.								
		.9( )	2.0(S)								
3	5.	1715.	1641.	1641.	1515.	191.	187.	187.	185.	124.	122.
		5.9( )	.0( )	5.7( )	.0( )	2.5( )	.0( )	2.2( )	1.9(S)	.0( )	1.2( )
		99.	84.	84.	83.	1324.	1294.	918.	918.	776.	776.
		1.0(S)	.0( )	1.8( )	7.8(S)	2.0( )	.0( )	.0( )	5.2( )	.0( )	.0( )
		776.	767.	767.	745.	713.	695.	680.	628.	625.	609.
		3.2( )	.0( )	4.3( )	2.0( )	1.7( )	2.3( )	.0( )	2.3( )	1.0( )	.0( )
		121.	121.	116.	116.	100.	488.	432.	420.	356.	311.
		.0( )	1.5( )	.0( )	1.5( )	.0( )	.0( )	1.3( )	3.3( )	2.8(S)	2.9( )
		292.	231.	17.	12.	214.	211.	200.	196.	183.	151.
		2.4(S)	.0( )	.0( )	.4( )	1.7( )	.6(S)	2.1( )	.7(S)	.0( )	1.9( )
		113.	113.	101.	79.	22.	22.	17.	377.	377.	323.
		.0( )	1.4( )	.0( )	.7( )	.0( )	.5( )	.1(S)	.0( )	3.5( )	.0( )
		323.	306.	52.	253.	223.	211.	196.	148.	118.	91.
		2.9( )	.0( )	.9( )	2.2( )	.0( )	2.3( )	2.1(S)	.0( )	1.5( )	.0( )
		35.	33.								
		.8( )	1.8(S)								
3	10.	1615.	1548.	1548.	1428.	184.	175.	175.	170.	113.	113.
		5.7( )	.0( )	5.7( )	.0( )	2.5( )	.0( )	2.2( )	1.5(S)	.0( )	1.1( )

90.	77.	77.	76.	1244.	1216.	861.	861.	727.	727.
.9(S)	.0( )	1.7( )	7.7(S)	2.0( )	.0( )	.0( )	5.1( )	.0( )	.0( )
727.	717.	717.	692.	670.	653.	641.	594.	590.	576.
3.1( )	.0( )	4.1( )	2.0( )	1.6( )	2.3( )	.0( )	2.2( )	.9( )	.0( )
113.	113.	108.	108.	93.	463.	410.	399.	336.	274.
.0( )	1.5( )	.0( )	1.4( )	.0( )	.0( )	1.3( )	3.3( )	2.4(S)	2.7( )
250.	208.	13.	10.	195.	192.	182.	179.	167.	139.
2.1(S)	.0( )	.0( )	.4( )	1.6( )	.5(S)	2.0( )	.6(S)	.0( )	1.8( )
103.	103.	92.	73.	20.	20.	15.	355.	355.	303.
.0( )	1.3( )	.0( )	.7( )	.0( )	.4( )	.1(S)	.0( )	3.4( )	.0( )
303.	285.	48.	237.	206.	198.	181.	138.	110.	84.
2.8( )	.0( )	.9( )	2.2( )	.0( )	2.3( )	1.8(S)	.0( )	1.5( )	.0( )
33.	31.								
.8( )	1.6(S)								

3 15.

1524.	1459.	1459.	1341.	173.	160.	160.	157.	104.	104.
5.6( )	.0( )	5.6( )	.0( )	2.4( )	.0( )	2.1( )	1.2(S)	.0( )	1.1( )
82.	71.	71.	70.	1168.	1141.	807.	807.	676.	676.
.8(S)	.0( )	1.7( )	7.6(S)	1.9( )	.0( )	.0( )	4.9( )	.0( )	.0( )
676.	666.	666.	642.	631.	617.	605.	561.	558.	544.
3.0( )	.0( )	4.0( )	1.9( )	1.6( )	2.2( )	.0( )	2.1( )	.9( )	.0( )
105.	105.	100.	100.	86.	439.	389.	378.	311.	239.
.0( )	1.4( )	.0( )	1.4( )	.0( )	.0( )	1.3( )	3.2( )	1.9(S)	2.5( )
220.	189.	10.	8.	178.	175.	167.	163.	153.	127.
1.8(S)	.0( )	.0( )	.3( )	1.5( )	.4(S)	1.9( )	.6(S)	.0( )	1.7( )
95.	95.	84.	67.	18.	18.	12.	334.	334.	282.
.0( )	1.3( )	.0( )	.7( )	.0( )	.4( )	.1(S)	.0( )	3.3( )	.0( )
282.	265.	44.	221.	190.	184.	165.	128.	103.	78.

2.7( )	.0( )	.9( )	2.1( )	.0( )	2.2( )	1.5(S)	.0( )	1.4( )	.0( )	
32.	30.									
.8( )	1.4(S)									
3 . 20.	1436.	1373.	1373.	1256.	160.	148.	148.	144.	95.	95.
	5.5( )	.0( )	5.5( )	.0( )	2.3( )	.0( )	2.0( )	.8(S)	.0( )	1.0( )
	75.	66.	66.	65.	1096.	1070.	756.	756.	632.	632.
	.8(S)	.0( )	1.6( )	7.5(S)	1.8( )	.0( )	.0( )	4.8( )	.0( )	.0( )
	632.	625.	625.	608.	596.	581.	569.	530.	526.	511.
	2.9( )	.0( )	3.9( )	1.8( )	1.5( )	2.2( )	.0( )	2.0( )	.9( )	.0( )
	98.	98.	93.	93.	80.	413.	366.	352.	260.	211.
	.0( )	1.4( )	.0( )	1.3( )	.0( )	.0( )	1.2( )	3.0( )	1.5(S)	2.4( )
	196.	169.	6.	6.	163.	160.	152.	149.	140.	117.
	1.6(S)	.0( )	.0( )	.3( )	1.5( )	.4(S)	1.8( )	.5(S)	.0( )	1.6( )
	86.	86.	77.	61.	15.	15.	9.	314.	314.	263.
	.0( )	1.2( )	.0( )	.6( )	.0( )	.4( )	.1(S)	.0( )	3.2( )	.0( )
	263.	245.	40.	204.	174.	169.	152.	119.	95.	73.
	2.6( )	.0( )	.8( )	2.0( )	.0( )	2.1( )	1.3(S)	.0( )	1.4( )	.0( )
	31.	29.								
	.8( )	1.2(S)								
3 25.	1352.	1290.	1290.	1174.	146.	130.	130.	124.	88.	88.
	5.3( )	.0( )	5.4( )	.0( )	2.2( )	.0( )	1.9( )	.5(S)	.0( )	1.0( )
	69.	61.	61.	60.	1028.	1003.	709.	709.	597.	597.
	.7(S)	.0( )	1.5( )	7.4(S)	1.8( )	.0( )	.0( )	4.6( )	.0( )	.0( )
	597.	590.	590.	572.	560.	545.	532.	495.	492.	474.
	2.8( )	.0( )	3.8( )	1.8( )	1.5( )	2.1( )	.0( )	2.0( )	.8( )	.0( )
	91.	91.	87.	87.	74.	383.	338.	322.	224.	189.
	.0( )	1.3( )	.0( )	1.3( )	.0( )	.0( )	1.2( )	2.9( )	1.2(S)	2.2( )

		176.	154.	5.	5.	149.	147.	139.	137.	128.	107.
		1.5(S)	.0( )	.0( )	.2( )	1.4( )	.3(S)	1.7( )	.4(S)	.0( )	1.5( )
		79.	79.	69.	56.	13.	13.	6.	294.	294.	243.
		.0( )	1.2( )	.0( )	.6( )	.0( )	.3( )	.1(S)	.0( )	3.1( )	.0( )
		243.	226.	37.	189.	159.	156.	139.	110.	89.	67.
		2.5( )	.0( )	.8( )	2.0( )	.0( )	2.0( )	1.0(S)	.0( )	1.3( )	.0( )
		30.	28.								
		.8( )	1.0(S)								
3	30.	1271.	1210.	1210.	1095.	129.	111.	111.	105.	81.	81.
		5.2( )	.0( )	5.4( )	.0( )	2.1( )	.0( )	1.7( )	.3(S)	.0( )	.9( )
		64.	56.	56.	55.	965.	942.	667.	667.	561.	561.
		.7(S)	.0( )	1.5( )	7.3(S)	1.7( )	.0( )	.0( )	4.5( )	.0( )	.0( )
		561.	554.	554.	536.	522.	506.	492.	459.	455.	436.
		2.7( )	.0( )	3.6( )	1.7( )	1.4( )	2.0( )	.0( )	1.9( )	.8( )	.0( )
		85.	85.	81.	81.	69.	351.	309.	292.	198.	171.
		.0( )	1.3( )	.0( )	1.2( )	.0( )	.0( )	1.1( )	2.7( )	1.0(S)	2.1( )
		159.	141.	4.	4.	137.	134.	128.	125.	117.	99.
		1.3(S)	.0( )	.0( )	.2( )	1.3( )	.3(S)	1.7( )	.4(S)	.0( )	1.5( )
		71.	71.	62.	51.	11.	11.	4.	275.	275.	225.
		.0( )	1.1( )	.0( )	.6( )	.0( )	.3( )	.0(S)	.0( )	3.0( )	.0( )
		225.	209.	34.	174.	146.	144.	129.	102.	83.	62.
		2.4( )	.0( )	.8( )	1.9( )	.0( )	1.9( )	.8(S)	.0( )	1.3( )	.0( )
		28.	23.								
		.7( )	.8(S)								
3	35.	1192.	1132.	1132.	1019.	112.	94.	94.	89.	75.	75.
		5.1( )	.0( )	5.3( )	.0( )	2.0( )	.0( )	1.6( )	.2(S)	.0( )	.9( )

60.	54.	54.	54.	906.	883.	627.	627.	525.	525.
.6(S)	.0( )	1.4( )	7.2(S)	1.7( )	.0( )	.0( )	4.4( )	.0( )	.0( )
525.	517.	517.	497.	483.	466.	452.	422.	418.	400.
2.7( )	.0( )	3.5( )	1.6( )	1.4( )	2.0( )	.0( )	1.8( )	.8( )	.0( )
79.	79.	75.	75.	64.	321.	280.	265.	177.	155.
.0( )	1.2( )	.0( )	1.2( )	.0( )	.0( )	1.0( )	2.6( )	.8(S)	2.0( )
145.	129.	4.	4.	125.	123.	117.	115.	107.	90.
1.2(S)	.0( )	.0( )	.2( )	1.3( )	.2(S)	1.6( )	.3(S)	.0( )	1.4( )
65.	65.	56.	47.	9.	9.	3.	256.	256.	208.
.0( )	1.0( )	.0( )	.5( )	.0( )	.3( )	.0(S)	.0( )	2.9( )	.0( )
208.	192.	31.	161.	132.	130.	110.	95.	77.	56.
2.3( )	.0( )	.7( )	1.8( )	.0( )	1.8( )	.7(S)	.0( )	1.3( )	.0( )
25.	20.								
.7( )	.6(S)								

3 40.

1116.	1058.	1058.	946.	96.	77.	77.	71.	70.	70.
4.9( )	.0( )	5.2( )	.0( )	1.8( )	.0( )	1.4( )	.1(S)	.0( )	.9( )
57.	54.	54.	54.	850.	827.	589.	589.	487.	487.
.6(S)	.0( )	1.4( )	7.1(S)	1.6( )	.0( )	.0( )	4.2( )	.0( )	.0( )
487.	479.	479.	459.	445.	429.	415.	387.	383.	366.
2.6( )	.0( )	3.4( )	1.6( )	1.3( )	1.9( )	.0( )	1.7( )	.7( )	.0( )
74.	74.	70.	70.	60.	293.	254.	240.	160.	141.
.0( )	1.2( )	.0( )	1.1( )	.0( )	.0( )	1.0( )	2.5( )	.7(S)	1.9( )
132.	118.	3.	3.	115.	113.	107.	105.	98.	83.
1.1(S)	.0( )	.0( )	.2( )	1.2( )	.2(S)	1.5( )	.3(S)	.0( )	1.3( )
59.	59.	50.	43.	7.	7.	2.	239.	239.	191.
.0( )	1.0( )	.0( )	.5( )	.0( )	.2( )	.0(S)	.0( )	2.8( )	.0( )
191.	175.	29.	147.	117.	116.	98.	87.	71.	50.

		2.3( )	.0( )	.7( )	1.7( )	.0( )	1.7( )	.6(S)	.0( )	1.2( )	.0( )
		22.	17.								
		.7( )	.5(S)								
3	45.	1044.	987.	987.	877.	82.	68.	68.	68.	66.	66.
		4.8( )	.0( )	5.1( )	.0( )	1.7( )	.0( )	1.3( )	.1(S)	.0( )	.8( )
		55.	53.	53.	53.	795.	773.	551.	551.	450.	450.
		.6(S)	.0( )	1.4( )	7.0(S)	1.5( )	.0( )	.0( )	4.1( )	.0( )	.0( )
		450.	442.	442.	422.	409.	394.	381.	356.	352.	336.
		2.5( )	.0( )	3.3( )	1.5( )	1.3( )	1.8( )	.0( )	1.6( )	.7( )	.0( )
		69.	69.	66.	66.	55.	267.	231.	218.	145.	129.
		.0( )	1.1( )	.0( )	1.1( )	.0( )	.0( )	.9( )	2.3( )	.6(S)	1.8( )
		121.	107.	3.	3.	105.	103.	98.	96.	89.	76.
		1.0(S)	.0( )	.0( )	.2( )	1.2( )	.2(S)	1.4( )	.2(S)	.0( )	1.3( )
		53.	53.	45.	39.	6.	6.	1.	222.	222.	175.
		.0( )	.9( )	.0( )	.5( )	.0( )	.2( )	.0(S)	.0( )	2.7( )	.0( )
		175.	159.	26.	133.	104.	104.	89.	80.	65.	44.
		2.2( )	.0( )	.7( )	1.7( )	.0( )	1.6( )	.6(S)	.0( )	1.2( )	.0( )
		19.	14.								
		.6( )	.4(S)								
3	50.	975.	920.	920.	815.	73.	65.	65.	64.	62.	62.
		4.7( )	.0( )	5.1( )	.0( )	1.6( )	.0( )	1.3( )	.1(S)	.0( )	.8( )
		54.	52.	52.	52.	742.	720.	514.	514.	415.	415.
		.6(S)	.0( )	1.4( )	6.9(S)	1.5( )	.0( )	.0( )	4.0( )	.0( )	.0( )
		415.	407.	407.	389.	376.	362.	350.	327.	324.	309.
		2.4( )	.0( )	3.1( )	1.4( )	1.2( )	1.8( )	.0( )	1.5( )	.6( )	.0( )
		64.	64.	61.	61.	51.	245.	211.	199.	132.	118.
		.0( )	1.1( )	.0( )	1.1( )	.0( )	.0( )	.9( )	2.2( )	.5(S)	1.7( )

		110.	97.	2.	2.	95.	93.	87.	83.	77.	70.
		.9(S)	.0( )	.0( )	.1( )	1.1( )	.1(S)	1.3( )	.2(S)	.0( )	1.2( )
		48.	48.	41.	36.	5.	5.	0.	205.	205.	160.
		.0( )	.9( )	.0( )	.5( )	.0( )	.2( )	.0(S)	.0( )	2.6( )	.0( )
		160.	145.	24.	120.	94.	94.	81.	73.	60.	39.
		2.1( )	.0( )	.6( )	1.6( )	.0( )	1.6( )	.5(S)	.0( )	1.1( )	.0( )
		16.	12.								
		.6( )	.3(S)								
3	55.	910.	858.	858.	758.	67.	62.	62.	61.	60.	60.
		4.5( )	.0( )	5.0( )	.0( )	1.5( )	.0( )	1.3( )	.1(S)	.0( )	.8( )
		53.	51.	51.	51.	691.	669.	479.	479.	382.	382.
		.5(S)	.0( )	1.4( )	6.8(S)	1.4( )	.0( )	.0( )	3.8( )	.0( )	.0( )
		382.	375.	375.	358.	347.	333.	323.	301.	298.	284.
		2.3( )	.0( )	3.0( )	1.4( )	1.2( )	1.7( )	.0( )	1.4( )	.6( )	.0( )
		60.	60.	56.	56.	44.	225.	192.	181.	120.	107.
		.0( )	1.1( )	.0( )	1.0( )	.0( )	.0( )	.8( )	2.1( )	.4(S)	1.6( )
		98.	82.	2.	2.	80.	75.	74.	71.	69.	64.
		.8(S)	.0( )	.0( )	.1( )	1.0( )	.1(S)	1.2( )	.2(S)	.0( )	1.1( )
		43.	43.	37.	33.	4.	4.	0.	190.	190.	146.
		.0( )	.8( )	.0( )	.4( )	.0( )	.2( )	.0(S)	.0( )	2.5( )	.0( )
		146.	131.	22.	109.	85.	85.	73.	63.	54.	35.
		2.0( )	.0( )	.6( )	1.5( )	.0( )	1.5( )	.4(S)	.0( )	1.1( )	.0( )
		14.	10.								
		.5( )	.2(S)								
4	0.	850.	801.	801.	705.	63.	59.	59.	58.	57.	57.
		4.4( )	.0( )	4.9( )	.0( )	1.5( )	.0( )	1.2( )	.1(S)	.0( )	.8( )

		51.	50.	50.	49.	642.	621.	446.	446.	353.	353.
		.5(S)	.0( )	1.4( )	6.6(S)	1.4( )	.0( )	.0( )	3.7( )	.0( )	.0( )
		353.	346.	346.	330.	320.	307.	297.	277.	274.	261.
		2.2( )	.0( )	2.9( )	1.3( )	1.1( )	1.6( )	.0( )	1.3( )	.6( )	.0( )
		55.	55.	51.	51.	39.	206.	176.	165.	107.	95.
		.0( )	1.0( )	.0( )	1.0( )	.0( )	.0( )	.8( )	2.0( )	.3(S)	1.5( )
		85.	69.	2.	2.	68.	67.	65.	64.	62.	59.
		.7(S)	.0( )	.0( )	.1( )	.9( )	.1(S)	1.1( )	.1(S)	.0( )	1.1( )
		39.	39.	34.	30.	3.	3.	0.	175.	175.	133.
		.0( )	.8( )	.0( )	.4( )	.0( )	.1( )	.0(S)	.0( )	2.4( )	.0( )
		133.	119.	21.	99.	77.	77.	64.	55.	50.	31.
		1.9( )	.0( )	.6( )	1.4( )	.0( )	1.4( )	.4(S)	.0( )	1.0( )	.0( )
		12.	9.								
		.5( )	.2(S)								
4	5.	794.	748.	748.	656.	60.	57.	57.	56.	56.	56.
		4.3( )	.0( )	4.8( )	.0( )	1.5( )	.0( )	1.2( )	.1(S)	.0( )	.8( )
		50.	49.	49.	48.	595.	575.	414.	414.	326.	326.
		.5(S)	.0( )	1.4( )	6.5(S)	1.3( )	.0( )	.0( )	3.6( )	.0( )	.0( )
		326.	320.	320.	305.	295.	283.	273.	255.	252.	239.
		2.1( )	.0( )	2.8( )	1.2( )	1.1( )	1.6( )	.0( )	1.3( )	.6( )	.0( )
		50.	50.	46.	46.	36.	189.	160.	150.	87.	83.
		.0( )	1.0( )	.0( )	.9( )	.0( )	.0( )	.8( )	1.9( )	.2(S)	1.4( )
		74.	63.	1.	1.	62.	60.	60.	58.	56.	54.
		.6(S)	.0( )	.0( )	.1( )	.9( )	.1(S)	1.1( )	.1(S)	.0( )	1.0( )
		36.	36.	30.	28.	3.	3.	0.	161.	161.	121.
		.0( )	.7( )	.0( )	.4( )	.0( )	.1( )	.0(S)	.0( )	2.4( )	.0( )
		121.	109.	19.	90.	68.	68.	56.	49.	45.	28.

1.8( )	.0( )	.6( )	1.4( )	.0( )	1.3( )	.3(S)	.0( )	1.0( )	.0( )

10.	7.
.5( )	.1(S)

4	10.	743.	699.	699.	610.	58.	55.	55.	55.	54.	54.
		4.1( )	.0( )	4.8( )	.0( )	1.4( )	.0( )	1.2( )	.1(S)	.0( )	.7( )
		49.	47.	47.	47.	552.	533.	385.	385.	301.	301.
		.5(S)	.0( )	1.3( )	6.3(S)	1.3( )	.0( )	.0( )	3.5( )	.0( )	.0( )
		301.	295.	295.	281.	271.	259.	250.	234.	231.	218.
		2.1( )	.0( )	2.6( )	1.2( )	1.0( )	1.5( )	.0( )	1.2( )	.5( )	.0( )
		45.	45.	42.	42.	33.	172.	145.	135.	77.	73.
		.0( )	.9( )	.0( )	.9( )	.0( )	.0( )	.7( )	1.8( )	.2(S)	1.3( )
		66.	57.	1.	1.	56.	55.	54.	52.	51.	49.
		.6(S)	.0( )	.0( )	.1( )	.8( )	.1(S)	1.0( )	.1(S)	.0( )	1.0( )
		33.	33.	28.	26.	2.	2.	0.	148.	148.	110.
		.0( )	.7( )	.0( )	.4( )	.0( )	.1( )	.0(S)	.0( )	2.3( )	.0( )
		110.	98.	17.	81.	61.	61.	50.	44.	41.	24.
		1.7( )	.0( )	.5( )	1.3( )	.0( )	1.2( )	.3(S)	.0( )	.9( )	.0( )
		9.	6.								
		.4( )	.1(S)								

1

SOUTH CANYON - LIME CREEK - STEVENS HIGH DRAINAGE DESIGN PLAN BY FMG, INC
EXISTING HYDROLOGIC CONDITIONS AND EXISTING HYDRAULIC CONDITIONS 50 YR STORM

*** PEAK FLOWS, STAGES AND STORAGES OF GUTTERS AND DETENSION DAMS ***

CONVEYANCE	PEAK	STAGE	STORAGE	TIME

ELEMENT	(CFS)	(FT)	(AC-FT)	(HR/MIN)
264	159.	.1	1.5	1 5.
79	154.	1.5		1 10.
175	270.	(DIRECT FLOW)		1 0.
78	556.	2.1		1 0.
174	826.	(DIRECT FLOW)		1 0.
77	819.	4.1		1 5.
173	1007.	(DIRECT FLOW)		1 0.
76	933.	4.9		1 15.
172	1277.	(DIRECT FLOW)		1 10.
263	1315.	.1	3.1	1 10.
75	1271.	5.6		1 10.
262	1320.	.1	2.5	1 5.
73	235.	2.1		1 0.
74	1283.	4.1		1 10.
171	445.	(DIRECT FLOW)		0 55.
170	1676.	(DIRECT FLOW)		1 10.
261	1682.	.1	6.7	1 10.
72	1680.	6.7		1 10.
168	553.	(DIRECT FLOW)		1 5.
260	1672.	.1	4.3	1 10.
69	537.	3.0		1 10.
71	1452.	5.9		1 30.
167	690.	(DIRECT FLOW)		1 5.
70	1451.	2.4		1 30.
68	688.	3.7		1 10.
169	1613.	(DIRECT FLOW)		1 30.
166	701.	(DIRECT FLOW)		1 5.
281	47.	.1	4.9	1 40.
165	2201.	(DIRECT FLOW)		1 25.
86	47.	1.0		1 45.
67	2194.	2.0		1 25.
185	589.	(DIRECT FLOW)		0 55.
66	2195.	4.6		1 30.
85	522.	2.9		1 15.
164	2462.	(DIRECT FLOW)		1 30.
184	718.	(DIRECT FLOW)		1 10.
65	2466.	4.0		1 30.
280	724.	.1	5.0	1 10.

64	2463.	3.0		1	30.
84	697.	4.1		1	20.
63	2454.	3.2		1	30.
252	238.	.1	12.2	1	35.
183	916.	(DIRECT FLOW)		1	15.
62	2455.	7.4		1	35.
52	238.	3.3		1	40.
83	890.	3.8		1	25.
82	321.	2.1		1	5.
163	2540.	(DIRECT FLOW)		1	35.
152	251.	(DIRECT FLOW)		0	30.
182	1188.	(DIRECT FLOW)		1	20.
61	2543.	5.2		1	35.
251	244.	.1	2.2	1	45.
81	1177.	4.9		1	25.
162	2589.	(DIRECT FLOW)		1	35.
51	235.	1.6		1	55.
181	1275.	(DIRECT FLOW)		1	20.
161	2606.	(DIRECT FLOW)		1	30.
151	279.	(DIRECT FLOW)		1	50.
80	1225.	5.8		1	30.
60	2490.	8.2		1	45.
250	271.	.1	4.4	2	0.
180	1327.	(DIRECT FLOW)		1	30.
160	2507.	(DIRECT FLOW)		1	45.
50	270.	2.7		2	0.
142	3771.	(DIRECT FLOW)		1	40.
150	273.	(DIRECT FLOW)		2	0.
43	3771.	3.5		1	40.
42	270.	3.0		2	5.
141	3976.	(DIRECT FLOW)		1	40.
41	3941.	7.2		1	45.
140	3985.	(DIRECT FLOW)		1	45.
40	3970.	7.7		1	50.

1

ENDPROGRAM PROGRAM CALLED

APPENDIX C - UDSWM2-PC - 100 YR

EXISTING LAND USE
AND EXISTING HYDRAULIC CONDITIONS

1

ENVIRONMENTAL PROTECTION AGENCY - STORM WATER MANAGEMENT MODEL - VERSION PC.1

DEVELOPED BY METCALF + EDDY, INC.

UNIVERSITY OF FLORIDA

WATER RESOURCES ENGINEEERS, INC. (SEPTEMBER 1970)

UPDATED BY UNIVERSITY OF FLORIDA (JUNE 1973)

HYDROLOGIC ENGINEERING CENTER, CORPS OF ENGINEERS

MISSOURI RIVER DIVISION, CORPS OF ENGINEERS (SEPTEMBER 1974)

BOYLE ENGINEERING CORPORATION (MARCH 1985, JULY 1985)

OTAPE OR DISK ASSIGNMENTS

JIN(1)	JIN(2)	JIN(3)	JIN(4)	JIN(5)	JIN(6)	JIN(7)	JIN(8)	JIN(9)	JIN(10)
2	1	0	0	0	0	0	0	0	0

JOUT(1)	JOUT(2)	JOUT(3)	JOUT(4)	JOUT(5)	JOUT(6)	JOUT(7)	JOUT(8)	JOUT(9)	JOUT(10)
1	2	0	0	0	0	0	0	0	0

NSCRAT(1)	NSCRAT(2)	NSCRAT(3)	NSCRAT(4)	NSCRAT(5)
3	4	0	0	0

1

WATERSHED PROGRAM CALLED

*** ENTRY MADE TO RUNOFF MODEL ***

SOUTH CANYON - LIME CREEK DRAINAGE DESIGN PLAN BY FMG, INC
EXISTING HYDROLOGIC CONDITIONS AND EXISTING HYDRAULIC CONDITIONS 100 YR STORM

ONUMBER OF TIME STEPS 50
OINTEGRATION TIME INTERVAL (MINUTES), 5.00

25.0 PERCENT OF IMPERVIOUS AREA HAS ZERO DETENTION DEPTH
1

SOUTH CANYON - LIME CREEK DRAINAGE DESIGN PLAN BY FMG, INC
EXISTING HYDROLOGIC CONDITIONS AND EXISTING HYDRAULIC CONDITIONS 100 YR STORM

HYDROGRAPHS FROM CUHPE/PC ARE LISTED FOR THE FOLLOWING 29 SUBCATCHMENTS

TIME(HR/MIN)	1	2	3	4	5	6	7	8	9	10
	11	12	13	14	15	16	17	18	19	20
	21	22	23	24	25	26	27	28	29	
0 0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.	0.	0.	0.	0.	
0 5.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.	0.	0.	0.	0.	
0 10.	1.	0.	0.	7.	0.	4.	3.	1.	2.	0.
	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	0.	0.	2.	2.	0.	1.	0.	0.	0.	

0	15.	6.	3.	2.	26.	0.	17.	11.	7.	10.	1.
		0.	1.	0.	0.	0.	0.	0.	0.	1.	0.
		1.	0.	13.	10.	1.	4.	0.	1.	0.	
0	20.	16.	6.	5.	46.	0.	39.	24.	17.	24.	3.
		1.	1.	1.	0.	0.	0.	1.	1.	2.	2.
		2.	1.	38.	25.	2.	12.	1.	2.	1.	
0	25.	44.	24.	16.	111.	1.	94.	77.	44.	60.	6.
		1.	16.	1.	1.	1.	1.	1.	8.	25.	4.
		5.	3.	90.	63.	12.	36.	2.	11.	7.	
0	30.	161.	90.	63.	279.	27.	255.	259.	157.	166.	55.
		14.	114.	77.	40.	21.	56.	71.	77.	234.	61.
		58.	41.	225.	211.	68.	128.	33.	93.	49.	
0	35.	269.	110.	120.	167.	90.	355.	292.	279.	267.	162.
		46.	121.	192.	125.	71.	157.	193.	209.	414.	195.
		134.	111.	415.	347.	168.	255.	98.	258.	108.	
0	40.	299.	103.	149.	91.	175.	322.	252.	328.	295.	283.
		90.	98.	261.	219.	142.	239.	287.	344.	441.	359.
		177.	173.	520.	381.	272.	340.	168.	437.	143.	
0	45.	291.	91.	153.	66.	258.	264.	208.	328.	275.	380.
		135.	78.	275.	291.	215.	276.	327.	439.	414.	510.
		185.	205.	505.	362.	349.	370.	222.	577.	151.	
0	50.	271.	79.	153.	52.	327.	215.	169.	313.	245.	440.
		175.	61.	271.	332.	280.	281.	329.	485.	370.	621.
		186.	213.	456.	329.	392.	369.	253.	659.	149.	
0	55.	245.	66.	151.	39.	375.	172.	135.	289.	216.	465.
		204.	46.	257.	344.	329.	276.	320.	493.	323.	683.
		181.	210.	401.	293.	405.	362.	264.	688.	145.	
1	0.	220.	57.	145.	39.	401.	141.	113.	265.	190.	465.
		223.	33.	238.	340.	361.	265.	304.	481.	281.	705.
		171.	208.	349.	260.	402.	348.	262.	681.	138.	

1	5.	201.	50.	138.	39.	410.	121.	98.	245.	169.	457.
		233.	28.	221.	333.	378.	252.	286.	467.	250.	700.
		161.	203.	306.	234.	397.	332.	260.	665.	129.	
1	10.	176.	38.	129.	16.	406.	96.	71.	220.	147.	449.
		235.	17.	201.	323.	382.	234.	264.	447.	208.	681.
		148.	194.	267.	203.	390.	310.	255.	642.	119.	
1	15.	149.	25.	118.	15.	395.	69.	50.	192.	122.	431.
		231.	11.	176.	305.	375.	212.	237.	418.	165.	655.
		132.	179.	224.	169.	375.	284.	245.	609.	107.	
1	20.	125.	16.	106.	8.	380.	48.	32.	164.	99.	407.
		224.	6.	151.	283.	363.	188.	209.	383.	129.	621.
		116.	163.	182.	139.	354.	255.	231.	566.	95.	
1	25.	103.	11.	95.	7.	362.	33.	22.	139.	80.	377.
		218.	3.	129.	258.	348.	166.	182.	346.	100.	579.
		102.	147.	146.	113.	328.	227.	214.	517.	84.	
1	30.	86.	8.	85.	7.	341.	25.	16.	118.	65.	346.
		210.	2.	110.	233.	331.	146.	158.	311.	77.	532.
		89.	133.	118.	92.	301.	202.	196.	469.	74.	
1	35.	72.	6.	76.	7.	318.	20.	12.	100.	53.	317.
		201.	0.	94.	211.	313.	128.	138.	280.	60.	486.
		78.	120.	96.	76.	276.	180.	179.	425.	65.	
1	40.	61.	4.	68.	7.	295.	17.	10.	86.	43.	290.
		191.	0.	80.	192.	294.	112.	119.	252.	46.	444.
		68.	108.	80.	64.	254.	160.	164.	385.	57.	
1	45.	52.	3.	61.	7.	273.	16.	8.	73.	32.	267.
		181.	0.	68.	174.	275.	98.	104.	226.	36.	406.
		60.	98.	67.	53.	233.	142.	150.	349.	50.	
1	50.	44.	3.	55.	7.	253.	15.	7.	63.	26.	245.
		171.	0.	58.	158.	256.	86.	90.	203.	27.	372.
		52.	88.	56.	45.	214.	127.	138.	317.	44.	

1	55.	37.	2.	50.	7.	234.	14.	7.	55.	22.	225.
		161.	0.	50.	143.	238.	76.	79.	183.	17.	340.
		46.	80.	46.	38.	197.	114.	126.	287.	39.	
2	0.	32.	2.	45.	7.	218.	14.	7.	48.	19.	206.
		152.	0.	42.	129.	223.	67.	69.	164.	11.	312.
		40.	72.	39.	29.	181.	102.	116.	261.	35.	
2	5.	22.	2.	40.	0.	202.	11.	4.	40.	16.	189.
		143.	0.	36.	118.	208.	59.	60.	148.	7.	285.
		35.	65.	34.	22.	166.	91.	106.	237.	31.	
2	10.	16.	0.	36.	0.	188.	6.	3.	33.	12.	174.
		135.	0.	31.	107.	195.	52.	52.	133.	5.	261.
		31.	59.	27.	16.	153.	80.	97.	214.	27.	
2	15.	12.	0.	32.	0.	174.	4.	2.	22.	9.	159.
		128.	0.	26.	97.	182.	45.	45.	120.	3.	239.
		27.	53.	19.	12.	140.	71.	89.	194.	24.	
2	20.	9.	0.	28.	0.	162.	2.	0.	16.	6.	146.
		121.	0.	22.	88.	170.	40.	39.	107.	2.	219.
		24.	48.	14.	9.	128.	62.	82.	176.	21.	
2	25.	7.	0.	25.	0.	151.	2.	0.	12.	4.	134.
		114.	0.	19.	80.	159.	35.	34.	97.	0.	200.
		20.	43.	10.	7.	118.	55.	75.	159.	18.	
2	30.	5.	0.	21.	0.	140.	0.	0.	9.	3.	122.
		108.	0.	12.	72.	149.	31.	30.	87.	0.	183.
		18.	39.	7.	5.	108.	48.	69.	144.	11.	
2	35.	3.	0.	13.	0.	130.	0.	0.	7.	2.	112.
		102.	0.	7.	66.	140.	27.	26.	78.	0.	168.
		11.	35.	5.	3.	99.	42.	63.	131.	7.	
2	40.	2.	0.	9.	0.	121.	0.	0.	5.	2.	103.
		96.	0.	5.	59.	131.	24.	22.	70.	0.	153.
		7.	31.	4.	2.	91.	37.	58.	118.	5.	

2	45.	2.	0.	7.	0.	113.	0.	0.	4.	0.	94.
		91.	0.	3.	54.	122.	21.	19.	63.	0.	140.
		5.	28.	3.	2.	83.	33.	53.	107.	3.	
2	50.	0.	0.	5.	0.	105.	0.	0.	2.	0.	86.
		86.	0.	2.	49.	114.	18.	17.	57.	0.	128.
		4.	25.	2.	0.	76.	29.	49.	97.	2.	
2	55.	0.	0.	4.	0.	97.	0.	0.	2.	0.	79.
		81.	0.	2.	44.	107.	16.	10.	51.	0.	117.
		3.	23.	1.	0.	70.	25.	45.	88.	2.	
3	0.	0.	0.	3.	0.	90.	0.	0.	0.	0.	72.
		77.	0.	0.	40.	100.	10.	7.	46.	0.	107.
		2.	21.	0.	0.	64.	21.	41.	80.	0.	
3	5.	0.	0.	2.	0.	84.	0.	0.	0.	0.	66.
		73.	0.	0.	37.	94.	6.	5.	41.	0.	98.
		0.	19.	0.	0.	59.	14.	37.	72.	0.	
3	10.	0.	0.	0.	0.	78.	0.	0.	0.	0.	61.
		69.	0.	0.	33.	88.	4.	3.	37.	0.	90.
		0.	17.	0.	0.	54.	10.	34.	65.	0.	
3	15.	0.	0.	0.	0.	73.	0.	0.	0.	0.	55.
		65.	0.	0.	30.	82.	3.	2.	33.	0.	82.
		0.	10.	0.	0.	50.	7.	31.	59.	0.	
3	20.	0.	0.	0.	0.	68.	0.	0.	0.	0.	51.
		62.	0.	0.	27.	77.	2.	0.	30.	0.	75.
		0.	7.	0.	0.	45.	5.	29.	53.	0.	
3	25.	0.	0.	0.	0.	63.	0.	0.	0.	0.	47.
		58.	0.	0.	25.	72.	0.	0.	27.	0.	69.
		0.	5.	0.	0.	42.	4.	26.	48.	0.	
3	30.	0.	0.	0.	0.	58.	0.	0.	0.	0.	43.
		55.	0.	0.	22.	68.	0.	0.	24.	0.	63.
		0.	3.	0.	0.	38.	3.	24.	44.	0.	

3	35.	0.	0.	0.	0.	54.	0.	0.	0.	0.	39.
		52.	0.	0.	20.	63.	0.	0.	22.	0.	58.
		0.	2.	0.	0.	35.	2.	22.	40.	0.	
3	40.	0.	0.	0.	0.	51.	0.	0.	0.	0.	36.
		49.	0.	0.	18.	59.	0.	0.	19.	0.	53.
		0.	2.	0.	0.	32.	0.	20.	36.	0.	
3	45.	0.	0.	0.	0.	47.	0.	0.	0.	0.	33.
		47.	0.	0.	17.	55.	0.	0.	17.	0.	48.
		0.	0.	0.	0.	29.	0.	19.	33.	0.	
3	50.	0.	0.	0.	0.	44.	0.	0.	0.	0.	30.
		44.	0.	0.	15.	52.	0.	0.	10.	0.	44.
		0.	0.	0.	0.	27.	0.	17.	29.	0.	
3	55.	0.	0.	0.	0.	41.	0.	0.	0.	0.	27.
		42.	0.	0.	9.	49.	0.	0.	7.	0.	40.
		0.	0.	0.	0.	25.	0.	10.	27.	0.	
4	0.	0.	0.	0.	0.	38.	0.	0.	0.	0.	25.
		39.	0.	0.	6.	46.	0.	0.	5.	0.	37.
		0.	0.	0.	0.	23.	0.	7.	24.	0.	
4	5.	0.	0.	0.	0.	35.	0.	0.	0.	0.	23.
		37.	0.	0.	4.	43.	0.	0.	3.	0.	34.
		0.	0.	0.	0.	21.	0.	5.	22.	0.	
4	10.	0.	0.	0.	0.	33.	0.	0.	0.	0.	21.
		35.	0.	0.	3.	40.	0.	0.	2.	0.	31.
		0.	0.	0.	0.	19.	0.	4.	20.	0.	

1

SOUTH CANYON - LIME CREEK DRAINAGE DESIGN PLAN BY FMG, INC
EXISTING HYDROLOGIC CONDITIONS AND EXISTING HYDRAULIC CONDITIONS 100 YR STORM

GUTTER NUMBER	GUTTER CONNECTION	NDP	NP		WIDTH OR DIAM (FT)	LENGTH (FT)	INVERT SLOPE (FT/FT)	SIDE SLOPES HORIZ TO VERT L	R	OVERBANK/SURCHARGE MANNING N	DEPTH (FT)	JK
40	0	0	4	CHANNEL	10.0	1450.	.0100	6.0	10.0	.063	7.00	0
				OVERFLOW	280.0	1100.	.0132	10.0	10.0	.044	15.00	
140	40	0	3		.0	1.	.0010	.0	.0	.001	10.00	0
41	140	0	4	CHANNEL	10.0	3550.	.0090	2.0	2.0	.063	4.00	0
				OVERFLOW	100.0	2850.	.0112	2.0	16.0	.044	14.00	
141	41	0	3		.0	1.	.0010	.0	.0	.001	10.00	0
42	141	0	4	CHANNEL	10.0	1100.	.0082	5.0	8.0	.063	4.00	0
				OVERFLOW	.0	600.	.0150	150.0	2.0	.071	7.00	
150	42	0	3		.0	1.	.0010	.0	.0	.001	10.00	0
50	150	0	4	CHANNEL	10.0	550.	.0145	3.0	4.0	.050	5.00	0
				OVERFLOW	100.0	550.	.0145	4.0	10.0	.050	10.00	
250	50	9	2	PIPE	.1	1.	.0100	.0	.0	.016	.10	0
		RESERVOIR STORAGE IN ACRE-FEET VS SPILLWAY OUTFLOW										
		.0	.0	.0 22.0	.2	95.0	.7	140.0	2.0	187.0	3.7 205.0	
		4.4	271.0	6.4 516.0	13.0	7680.0						
151	250	0	3		.0	1.	.0010	.0	.0	.001	10.00	0
51	151	0	1	CHANNEL	20.0	3500.	.0206	7.0	12.0	.056	10.00	0
251	51	9	2	PIPE	.1	1.	.0100	.0	.0	.016	.10	0
		RESERVOIR STORAGE IN ACRE-FEET VS SPILLWAY OUTFLOW										
		.0	.0	1.7 165.0	3.1	375.0	8.0	500.0	9.4	540.0	10.8 575.0	
		11.8	1000.0	12.8 1350.0	16.5	3050.0						
152	251	0	3		.0	1.	.0010	.0	.0	.001	10.00	0
52	152	0	5	PIPE	5.0	1000.	.0203	.0	.0	.016	5.00	0
				OVERFLOW	50.0	1000.	.0203	5.0	10.0	.038	15.00	
252	52	8	2	PIPE	.1	1.	.0203	.0	.0	.016	.10	0
		RESERVOIR STORAGE IN ACRE-FEET VS SPILLWAY OUTFLOW										
		.0	.0	2.5 26.0	5.5	40.0	7.3	55.0	8.5	125.0	14.0 293.0	
		25.1	532.0	36.1 2558.0								
43	141	0	4	CHANNEL	100.0	700.	.0160	5.0	37.0	.056	6.00	0
				OVERFLOW	200.0	700.	.0160	4.0	37.0	.056	12.00	
142	43	0	3		.0	1.	.0010	.0	.0	.001	10.00	0
160	142	0	3		.0	1.	.0010	.0	.0	.001	10.00	0
60	160	0	4	CHANNEL	15.0	4750.	.0148	5.0	3.0	.081	10.00	0
				OVERFLOW	.0	4750.	.0148	100.0	13.0	.094	16.00	
161	60	0	3		.0	1.	.0010	.0	.0	.001	10.00	0
162	161	0	3		.0	1.	.0010	.0	.0	.001	10.00	0

61	162	0	4	CHANNEL	15.0	350.	.0110	7.0	17.0	.050	6.00	0
				OVERFLOW	.0	350.	.0110	60.0	10.0	.094	10.00	
163	61	0	3		.0	1.	.0010	.0	.0	.001	10.00	0
62	163	0	4	CHANNEL	15.0	1150.	.0130	3.0	4.0	.056	8.00	0
				OVERFLOW	600.0	1150.	.0130	24.0	4.0	.094	11.00	
63	62	0	4	CHANNEL	70.0	550.	.0165	19.0	3.0	.067	2.00	0
				OVERFLOW	200.0	550.	.0165	22.0	3.0	.094	9.00	
64	63	0	4	CHANNEL	50.0	700.	.0143	50.0	10.0	.044	4.00	0
				OVERFLOW	350.0	700.	.0143	3.0	10.0	.081	10.00	
65	64	0	4	CHANNEL	15.0	650.	.0148	30.0	8.0	.044	6.00	0
				OVERFLOW	170.0	650.	.0148	10.0	18.0	.081	15.00	
164	65	0	3		.0	1.	.0010	.0	.0	.001	10.00	0
66	164	0	4	CHANNEL	18.0	700.	.0173	.0	.0	.019	3.50	0
				OVERFLOW	110.0	700.	.0173	63.0	5.0	.094	13.00	
67	66	0	1	CHANNEL	150.0	850.	.0270	10.0	10.0	.056	6.00	0
165	67	0	3		.0	1.	.0010	.0	.0	.001	10.00	0
166	165	0	3		.0	1.	.0010	.0	.0	.001	10.00	0
68	166	0	1	CHANNEL	10.0	1250.	.0256	3.0	4.0	.050	10.00	0
167	68	0	3		.0	1.	.0010	.0	.0	.001	10.00	0
69	167	0	1	CHANNEL	10.0	3500.	.0351	6.0	5.0	.063	8.00	0
168	69	0	3		.0	1.	.0010	.0	.0	.001	10.00	0
169	165	0	3		.0	1.	.0010	.0	.0	.001	10.00	0
70	169	0	4	CHANNEL	60.0	900.	.0213	10.0	20.0	.056	2.00	0
				OVERFLOW	50.0	900.	.0213	10.0	2.0	.038	10.00	
71	70	0	4	CHANNEL	15.0	7300.	.0263	2.0	2.0	.075	5.00	0
				OVERFLOW	35.0	7300.	.0263	3.0	3.0	.044	15.00	
260	71	6	2	PIPE	.1	1.	.0100	.0	.0	.016	.10	0
		RESERVOIR STORAGE IN ACRE-FEET VS SPILLWAY OUTFLOW										
		.0	.0	.3 110.0	1.9	310.0	3.1	375.0	5.3	2775.0	8.3 15125.0	
72	260	0	4	CHANNEL	15.0	1100.	.0200	3.0	3.0	.075	8.00	0
				OVERFLOW	60.0	1100.	.0200	3.0	2.0	.044	18.00	
261	72	5	2	PIPE	.1	1.	.0100	.0	.0	.016	.10	0
		RESERVOIR STORAGE IN ACRE-FEET VS SPILLWAY OUTFLOW										
		.0	.0	2.5 300.0	5.5	500.0	8.0	2900.0	10.5	11300.0		
170	261	0	3		.0	1.	.0010	.0	.0	.001	10.00	0
171	170	0	3		.0	1.	.0010	.0	.0	.001	10.00	0
73	171	0	1	CHANNEL	10.0	4800.	.0521	3.0	2.0	.063	10.00	0
74	170	0	1	CHANNEL	20.0	300.	.0280	4.0	8.0	.069	10.00	0
262	74	6	2	PIPE	.1	1.	.0100	.0	.0	.016	.10	0
		RESERVOIR STORAGE IN ACRE-FEET VS SPILLWAY OUTFLOW										

		.0	.0	.1	90.0	1.2	375.0	2.1	500.0	4.1	5100.0	5.8	13100.0	
75	262	0	4	CHANNEL		15.0	400.	.0200	3.0	2.0	.063	10.00		0
				OVERFLOW		60.0	400.	.0200	2.0	2.0	.044	15.00		
263	75	7	2	PIPE		.1	1.	.0100	.0	.0	.016	.10		0
		RESERVOIR STORAGE IN ACRE-FEET VS SPILLWAY OUTFLOW												
		.0	.0	.2	90.0	1.6	375.0	2.5	550.0	3.0	1024.0	4.0	6255.0	
		6.5	11870.0											
172	263	0	3			.0	1.	.0010	.0	.0	.001	10.00		0
76	172	0	4	CHANNEL		15.0	5150.	.0222	2.0	3.0	.069	10.00		0
				OVERFLOW		50.0	5150.	.0222	2.0	2.0	.044	15.00		
173	76	0	3			.0	1.	.0010	.0	.0	.001	10.00		0
77	173	0	1	CHANNEL		15.0	2100.	.0262	2.0	4.0	.063	10.00		0
174	77	0	3			.0	1.	.0010	.0	.0	.001	10.00		0
78	174	0	1	CHANNEL		25.0	900.	.0333	4.0	10.0	.056	10.00		0
175	174	0	3			.0	1.	.0010	.0	.0	.001	10.00		0
79	175	0	1	CHANNEL		20.0	2500.	.0306	5.0	2.0	.069	10.00		0
264	79	6	2	PIPE		.1	1.	.0100	.0	.0	.028	.10		0
		RESERVOIR STORAGE IN ACRE-FEET VS SPILLWAY OUTFLOW												
		.0	.0	1.0	115.0	2.1	205.0	6.3	280.0	10.5	350.0	18.0	10452.0	
180	142	0	3			.0	1.	.0010	.0	.0	.001	10.00		0
80	180	0	4	CHANNEL		10.0	3650.	.0133	4.0	7.0	.075	6.00		0
				OVERFLOW		150.0	3650.	.0133	60.0	50.0	.094	14.00		
181	80	0	3			.0	1.	.0010	.0	.0	.001	10.00		0
81	181	0	4	CHANNEL		10.0	1600.	.0138	6.0	4.0	.056	4.00		0
				OVERFLOW		.0	1600.	.0138	56.0	8.0	.081	14.00		
182	81	0	3			.0	1.	.0010	.0	.0	.001	10.00		0
82	182	0	4	CHANNEL		10.0	1000.	.0160	10.0	12.0	.050	2.00		0
				OVERFLOW		220.0	1000.	.0160	35.0	10.0	.050	6.00		
83	182	0	4	CHANNEL		10.0	2800.	.0177	13.0	5.0	.063	6.00		0
				OVERFLOW		450.0	2100.	.0236	13.0	60.0	.056	12.00		
183	83	0	3			.0	1.	.0010	.0	.0	.001	10.00		0
84	183	0	4	CHANNEL		10.0	2250.	.0136	4.0	4.0	.050	4.00		0
				OVERFLOW		80.0	2250.	.0136	10.0	4.0	.044	12.00		
280	84	9	2	PIPE		.1	1.	.0100	.0	.0	.016	.10		0
		RESERVOIR STORAGE IN ACRE-FEET VS SPILLWAY OUTFLOW												
		.0	.0	.2	35.0	.8	128.0	1.9	190.0	3.4	248.0	4.3	280.0	
		5.4	1025.0	6.8	3320.0	8.6	8510.0							
184	280	0	3			.0	1.	.0010	.0	.0	.001	10.00		0
85	184	0	1	CHANNEL		10.0	3600.	.0096	15.0	8.0	.050	10.00		0
185	85	0	3			.0	1.	.0010	.0	.0	.001	10.00		0

86	185	0	1	CHANNEL	8.0	1600.	.0138	9.0	8.0	.044	8.00	0
281	86	9	2	PIPE	.1	1.	.0100	.0	.0	.016	.10	0

RESERVOIR STORAGE IN ACRE-FEET VS SPILLWAY OUTFLOW

.0	.0	.0	5.0	1.0	28.0	3.9	45.0	9.2	55.0	17.7	65.0
28.0	75.0	43.0	335.0	54.0	1300.0						

OTOTAL NUMBER OF GUTTERS/PIPES, 72

1

SOUTH CANYON - LIME CREEK . DRAINAGE DESIGN PLAN BY FMG, INC

EXISTING HYDROLOGIC CONDITIONS AND EXISTING HYDRAULIC CONDITIONS 100 YR STORM

ARRANGEMENT OF SUBCATCHMENTS AND GUTTERS/PIPES

GUTTER	TRIBUTARY GUTTER/PIPE										TRIBUTARY SUBAREA										D.A.(AC)
40	140	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6138.9
41	141	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6016.6
42	150	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	570.2
43	142	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5446.4
50	250	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	537.0
51	251	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	446.1
52	252	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	409.0
60	161	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3698.6
61	163	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3530.2
62	63	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3387.5
63	64	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3387.5

64	65	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3387.5
65	164	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3387.5
66	67	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2984.3
67	165	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2984.3
68	167	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	850.6
69	168	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	695.0
70	71	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1822.7
71	260	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1822.7
72	261	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1822.7
73	0	0	0	0	0	0	0	0	0	0	17	0	0	0	0	0	0	0	0	0	0	208.0
74	262	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1428.5
75	263	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1428.5
76	173	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1070.1
77	174	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	897.3
78	0	0	0	0	0	0	0	0	0	0	20	0	0	0	0	0	0	0	0	0	0	620.8
79	264	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	161.3
80	181	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1498.9
81	182	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1358.1
82	0	0	0	0	0	0	0	0	0	0	25	0	0	0	0	0	0	0	0	0	0	314.2
83	183	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1043.8

84	280	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	836.5
85	185	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	620.2
86	281	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	90.2
140	41	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	6138.9
141	42	43	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6016.6
142	160	180	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5446.4
150	50	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	570.2
151	51	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	537.0
152	52	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	446.1
160	60	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	3782.4
161	162	0	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	3698.6
162	61	0	0	0	0	0	0	0	0	0	9	0	0	0	0	0	0	0	0	0	0	3626.2
163	62	0	0	0	0	0	0	0	0	0	8	0	0	0	0	0	0	0	0	0	0	3530.2
164	66	0	0	0	0	0	0	0	0	0	10	0	0	0	0	0	0	0	0	0	0	3387.5
165	166	169	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2984.3
166	68	0	0	0	0	0	0	0	0	0	12	0	0	0	0	0	0	0	0	0	0	880.6
167	69	0	0	0	0	0	0	0	0	0	13	0	0	0	0	0	0	0	0	0	0	850.6
168	0	0	0	0	0	0	0	0	0	0	14	15	0	0	0	0	0	0	0	0	0	695.0
169	70	0	0	0	0	0	0	0	0	0	11	0	0	0	0	0	0	0	0	0	0	2103.7
170	171	74	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1822.7

171	73	0	0	0	0	0	0	0	0	0	16	0	0	0	0	0	0	0	0	0	394.2
172	76	0	0	0	0	0	0	0	0	0	18	0	0	0	0	0	0	0	0	0	1428.5
173	77	0	0	0	0	0	0	0	0	0	19	0	0	0	0	0	0	0	0	0	1070.1
174	78	175	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	897.3
175	79	0	0	0	0	0	0	0	0	0	21	0	0	0	0	0	0	0	0	0	276.5
180	80	0	0	0	0	0	0	0	0	0	23	0	0	0	0	0	0	0	0	0	1664.0
181	81	0	0	0	0	0	0	0	0	0	24	0	0	0	0	0	0	0	0	0	1498.9
182	82	83	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1358.1
183	84	0	0	0	0	0	0	0	0	0	26	0	0	0	0	0	0	0	0	0	1043.8
184	85	0	0	0	0	0	0	0	0	0	27	0	0	0	0	0	0	0	0	0	836.5
185	86	0	0	0	0	0	0	0	0	0	28	0	0	0	0	0	0	0	0	0	620.2
250	151	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	537.0
251	152	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	446.1
252	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	409.0
260	72	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1822.7
261	170	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1822.7
262	75	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1428.5
263	172	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1428.5
264	0	0	0	0	0	0	0	0	0	0	22	0	0	0	0	0	0	0	0	0	161.3
280	184	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	836.5

281 0 0 0 0 0 0 0 0 0 0 29 0 0 0 0 0 0 0 0 0 90.2

1

SOUTH CANYON - LIME CREEK DRAINAGE DESIGN PLAN BY FMG, INC

EXISTING HYDROLOGIC CONDITIONS AND EXISTING HYDRAULIC CONDITIONS 100 YR STORM

HYDROGRAPHS ARE LISTED FOR THE FOLLOWING 72 CONVEYANCE ELEMENTS

THE UPPER NUMBER IS DISCHARGE IN CFS

THE LOWER NUMBER IS ONE OF THE FOLLOWING CASES:

( ) DENOTES DEPTH ABOVE INVERT IN FEET

(S) DENOTES STORAGE IN AC-FT FOR DETENSION DAM. DISCHARGE INCLUDES SPILLWAY OUTFLOW.

(I) DENOTES GUTTER INFLOW IN CFS FROM SPECIFIED INFLOW HYDROGRAPH

(D) DENOTES DISCHARGE IN CFS DIVERTED FROM THIS GUTTER

(O) DENOTES STORAGE IN AC-FT FOR SURCHARGED GUTTER

TIME(HR/MIN)	40	140	41	141	42	150	50	250	151	51
	251	152	52	252	43	142	160	60	161	162
	61	163	62	63	64	65	164	66	67	165
	166	68	167	69	168	169	70	71	260	72
	261	170	171	73	74	262	75	263	172	76
	173	77	174	78	175	79	264	180	80	181
	81	182	82	83	183	84	280	184	85	185
	86	281								
0 5.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	.0( )	.0( )	.0( )	.0( )	.0( )	.0( )	.0( )	.0(S)	.0( )	.0( )
	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	.0(S)	.0( )	.0( )	.0(S)	.0( )	.0( )	.0( )	.0( )	.0( )	.0( )
	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	.0( )	.0( )	.0( )	.0( )	.0( )	.0( )	.0( )	.0( )	.0( )	.0( )
	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	.0( )	.0( )	.0( )	.0( )	.0( )	.0( )	.0( )	.0( )	.0(S)	.0( )

		0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
		.0(S)	.0( )	.0( )	.0( )	.0( )	.0(S)	.0( )	.0(S)	.0( )	.0( )
		0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
		.0( )	.0( )	.0( )	.0( )	.0( )	.0( )	.0(S)	.0( )	.0( )	.0( )
		0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
		.0( )	.0( )	.0( )	.0( )	.0( )	.0( )	.0(S)	.0( )	.0( )	.0( )
		0.	0.								
		.0( )	.0(S)								
0	10.	0.	1.	0.	0.	0.	0.	0.	0.	0.	0.
		.0( )	.0( )	.0( )	.0( )	.0( )	.0( )	.0( )	.0(S)	.0( )	.0( )
		2.	7.	0.	0.	0.	7.	4.	0.	6.	2.
		.0(S)	.0( )	.0( )	.0(S)	.0( )	.0( )	.0( )	.0( )	.0( )	.0( )
		0.	1.	0.	0.	0.	0.	0.	0.	0.	0.
		.0( )	.0( )	.0( )	.0( )	.0( )	.0( )	.0( )	.0( )	.0( )	.0( )
		0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
		.0( )	.0( )	.0( )	.0( )	.0( )	.0( )	.0( )	.0( )	.0(S)	.0( )
		0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
		.0(S)	.0( )	.0( )	.0( )	.0( )	.0(S)	.0( )	.0(S)	.0( )	.0( )
		0.	0.	0.	0.	0.	0.	0.	2.	0.	2.
		.0( )	.0( )	.0( )	.0( )	.0( )	.0( )	.0(S)	.0( )	.0( )	.0( )
		0.	0.	0.	0.	1.	0.	0.	0.	0.	0.
		.0( )	.0( )	.0( )	.0( )	.0( )	.0( )	.0(S)	.0( )	.0( )	.0( )
		0.	0.								
		.0( )	.0(S)								
0	15.	0.	6.	0.	5.	0.	3.	0.	2.	2.	0.
		.1( )	.0( )	.0( )	.0( )	.0( )	.0( )	.1( )	.0(S)	.0( )	.0( )

		9.	26.	0.	0.	5.	31.	18.	0.	24.	12.
		.1(S)	.0( )	.0( )	.0(S)	.1( )	.0( )	.0( )	.1( )	.0( )	.0( )
		3.	7.	0.	0.	0.	0.	1.	0.	0.	1.
		.2( )	.0( )	.0( )	.0( )	.0( )	.0( )	.0( )	.0( )	.0( )	.0( )
		1.	0.	0.	0.	0.	0.	0.	0.	0.	0.
		.0( )	.0( )	.0( )	.0( )	.0( )	.0( )	.0( )	.0( )	.0(S)	.0( )
		0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
		.0(S)	.0( )	.0( )	.0( )	.0( )	.0(S)	.0( )	.0(S)	.0( )	.0( )
		1.	0.	1.	0.	1.	0.	0.	13.	0.	10.
		.0( )	.0( )	.0( )	.0( )	.0( )	.0( )	.0(S)	.0( )	.1( )	.0( )
		0.	0.	0.	0.	4.	0.	0.	0.	0.	1.
		.0( )	.0( )	.0( )	.0( )	.0( )	.0( )	.0(S)	.0( )	.0( )	.0( )
		0.	0.								
		.0( )	.0(S)								
0	20.	3.	18.	1.	32.	1.	8.	2.	6.	6.	1.
		.3( )	.0( )	.2( )	.0( )	.2( )	.0( )	.2( )	.0(S)	.0( )	.1( )
		23.	46.	0.	0.	31.	81.	42.	3.	59.	35.
		.2(S)	.0( )	.0( )	.0(S)	.2( )	.0( )	.0( )	.2( )	.0( )	.0( )
		11.	17.	0.	0.	0.	0.	3.	0.	0.	2.
		.4( )	.0( )	.0( )	.0( )	.0( )	.1( )	.0( )	.0( )	.0( )	.0( )
		1.	0.	1.	0.	1.	1.	0.	0.	0.	0.
		.0( )	.0( )	.0( )	.0( )	.0( )	.0( )	.0( )	.0( )	.0(S)	.0( )
		0.	0.	0.	0.	0.	0.	0.	1.	1.	0.
		.0(S)	.0( )	.0( )	.0( )	.0( )	.0(S)	.0( )	.0(S)	.0( )	.0( )
		2.	0.	2.	0.	2.	0.	1.	39.	1.	25.
		.0( )	.0( )	.0( )	.0( )	.0( )	.0( )	.0(S)	.0( )	.2( )	.0( )
		0.	1.	0.	1.	12.	0.	0.	1.	0.	2.

		.0( )	.0( )	.0( )	.1( )	.0( )	.0( )	.0(S)	.0( )	.0( )	.0( )
		0.	0.								
		.0( )	.0(S)								
0	25.	13.	55.	12.	119.	8.	36.	12.	22.	22.	6.
		.6( )	.0( )	.7( )	.0( )	.5( )	.0( )	.5( )	.0(S)	.0( )	.2( )
		51.	111.	0.	0.	111.	205.	109.	15.	169.	91.
		.5(S)	.0( )	.0( )	.0(S)	.5( )	.0( )	.0( )	.6( )	.0( )	.0( )
		31.	44.	0.	0.	0.	2.	6.	0.	1.	18.
		.7( )	.0( )	.0( )	.0( )	.0( )	.1( )	.0( )	.0( )	.0( )	.0( )
		16.	0.	1.	0.	1.	1.	0.	0.	0.	0.
		.0( )	.0( )	.0( )	.0( )	.0( )	.0( )	.0( )	.0( )	.0(S)	.0( )
		1.	1.	1.	0.	0.	1.	2.	6.	9.	0.
		.0(S)	.0( )	.0( )	.0( )	.0( )	.0(S)	.1( )	.0(S)	.0( )	.1( )
		26.	0.	5.	1.	5.	0.	2.	96.	6.	64.
		.0( )	.1( )	.0( )	.0( )	.0( )	.0( )	.0(S)	.0( )	.4( )	.0( )
		0.	7.	3.	4.	36.	0.	1.	3.	0.	11.
		.1( )	.0( )	.2( )	.3( )	.0( )	.0( )	.0(S)	.0( )	.1( )	.0( )
		0.	3.								
		.0( )	.0(S)								
0	30.	69.	235.	74.	410.	43.	130.	40.	57.	85.	22.
		1.4( )	.0( )	1.9( )	.0( )	1.2( )	.0( )	1.0( )	.1(S)	.0( )	.4( )
		123.	279.	0.	1.	367.	580.	326.	71.	538.	279.
		1.3(S)	.0( )	.1( )	.1(S)	1.0( )	.0( )	.0( )	1.4( )	.0( )	.0( )
		113.	157.	0.	0.	6.	29.	74.	18.	37.	152.
		1.3( )	.0( )	.0( )	.0( )	.1( )	.5( )	.0( )	.3( )	.2( )	.0( )
		137.	23.	81.	4.	61.	14.	0.	0.	1.	3.
		.0( )	.6( )	.0( )	.2( )	.0( )	.0( )	.0( )	.0( )	.0(S)	.2( )

		22.	74.	61.	4.	13.	27.	34.	60.	93.	16.
		.2(S)	.0( )	.0( )	.2( )	.4( )	.0(S)	.8( )	.1(S)	.0( )	.5( )
		245.	11.	77.	19.	58.	1.	13.	254.	29.	219.
		.0( )	.4( )	.0( )	.3( )	.0( )	.1( )	.1(S)	.0( )	1.0( )	.0( )
		7.	44.	23.	21.	129.	1.	18.	39.	6.	94.
		.4( )	.0( )	.6( )	.7( )	.0( )	.1( )	.1(S)	.0( )	.3( )	.0( )
		1.	8.								
		.1( )	.2(S)								
0	35.	250.	556.	286.	964.	115.	202.	92.	114.	176.	55.
		2.6( )	.0( )	3.9( )	.0( )	2.0( )	.0( )	1.5( )	.4(S)	.0( )	.8( )
		177.	170.	3.	5.	849.	1070.	563.	208.	810.	518.
		1.8(S)	.0( )	.3( )	.5(S)	1.6( )	.0( )	.0( )	2.5( )	.0( )	.0( )
		251.	282.	2.	20.	76.	183.	303.	141.	176.	303.
		1.9( )	.0( )	.2( )	.3( )	.5( )	1.3( )	.0( )	.9( )	.5( )	.0( )
		257.	136.	230.	38.	197.	46.	0.	0.	22.	37.
		.0( )	1.6( )	.0( )	.8( )	.0( )	.0( )	.0( )	.0( )	.1(S)	.9( )
		113.	281.	194.	37.	87.	113.	151.	184.	305.	96.
		.9(S)	.0( )	.0( )	.8( )	1.0( )	.2(S)	1.8( )	.7(S)	.0( )	1.4( )
		500.	87.	256.	116.	140.	6.	49.	507.	92.	400.
		.0( )	1.2( )	.0( )	.9( )	.0( )	.2( )	.4(S)	.0( )	1.8( )	.0( )
		53.	166.	91.	74.	267.	12.	66.	135.	37.	263.
		1.2( )	.0( )	1.2( )	1.3( )	.0( )	.5( )	.4(S)	.0( )	.9( )	.0( )
		5.	19.								
		.3( )	.6(S)								
0	40.	552.	865.	566.	1488.	186.	243.	140.	148.	238.	88.
		3.7( )	.0( )	4.6( )	.0( )	2.5( )	.0( )	1.9( )	.9(S)	.0( )	1.0( )

153.	101.	10.	14.	1302.	1426.	706.	384.	912.	660.
1.6(S)	.0( )	.6( )	1.3(S)	2.0( )	.0( )	.0( )	3.4( )	.0( )	.0( )
365.	387.	59.	183.	330.	507.	641.	358.	383.	499.
2.3( )	.0( )	1.1( )	.9( )	1.1( )	2.0( )	.0( )	1.6( )	.7( )	.0( )
409.	310.	391.	130.	361.	90.	0.	3.	110.	166.
.0( )	2.5( )	.0( )	1.5( )	.0( )	.0( )	.0( )	.2( )	.3(S)	2.1( )
296.	572.	350.	112.	221.	246.	357.	402.	595.	251.
2.5(S)	.0( )	.0( )	1.4( )	1.7( )	.7(S)	2.9( )	1.7(S)	.0( )	2.5( )
714.	274.	491.	288.	204.	27.	102.	721.	200.	565.
.0( )	2.3( )	.0( )	1.5( )	.0( )	.5( )	.9(S)	.0( )	2.6( )	.0( )
184.	367.	199.	168.	389.	49.	143.	283.	114.	450.
2.2( )	.0( )	1.8( )	1.8( )	.0( )	1.1( )	1.1(S)	.0( )	1.5( )	.0( )
13.	30.								
.5( )	1.3(S)								

0	45.	952.	1337.	1046.	1827.	230.	255.	164.	170.	258.	105.
		4.6( )	.0( )	5.2( )	.0( )	2.8( )	.0( )	2.1( )	1.5(S)	.0( )	1.1( )
		124.	89.	23.	27.	1597.	1680.	829.	565.	1063.	855.
		1.3(S)	.0( )	.9( )	2.7(S)	2.3( )	.0( )	.0( )	4.2( )	.0( )	.0( )
		580.	649.	321.	560.	711.	861.	959.	578.	602.	695.
		2.8( )	.0( )	2.8( )	1.7( )	1.7( )	2.6( )	.0( )	2.2( )	.9( )	.0( )
		557.	479.	545.	269.	506.	138.	2.	19.	202.	359.
		.0( )	3.1( )	.0( )	2.2( )	.0( )	.0( )	.1( )	.6( )	1.0(S)	3.1( )
		463.	909.	473.	197.	436.	477.	723.	792.	894.	455.
		5.0(S)	.0( )	.0( )	2.0( )	2.4( )	1.9(S)	4.2( )	2.8(S)	.0( )	3.4( )
		932.	519.	708.	457.	251.	66.	143.	851.	345.	748.
		.0( )	3.2( )	.0( )	1.9( )	.0( )	.9( )	1.3(S)	.0( )	3.3( )	.0( )
		386.	562.	283.	280.	482.	112.	210.	457.	234.	599.

		3.1( )	.0( )	2.0( )	2.3( )	.0( )	1.7( )	2.4(S)	.0( )	2.1( )	.0( )
		22.	34.								
		.7( )	2.1(S)								
0	50.	1434.	1797.	1526.	2115.	250.	262.	183.	188.	261.	108.
		5.5( )	.0( )	5.6( )	.0( )	2.9( )	.0( )	2.2( )	2.1(S)	.0( )	1.1( )
		106.	85.	34.	35.	1865.	1961.	990.	775.	1368.	1199.
		1.1(S)	.0( )	1.1( )	4.5(S)	2.5( )	.0( )	.0( )	4.8( )	.0( )	.0( )
		954.	1026.	713.	884.	1051.	1156.	1233.	792.	810.	891.
		3.4( )	.0( )	4.1( )	2.2( )	2.0( )	2.9( )	.0( )	2.7( )	1.1( )	.0( )
		693.	633.	688.	417.	611.	198.	23.	78.	561.	1053.
		.0( )	3.5( )	.0( )	2.7( )	.0( )	.0( )	.2( )	1.3( )	3.3(S)	5.4( )
		1609.	1659.	540.	259.	1119.	1245.	1142.	1187.	1165.	680.
		6.7(S)	.0( )	.0( )	2.3( )	3.9( )	2.4(S)	5.3( )	3.0(S)	.0( )	4.2( )
		1113.	743.	883.	587.	296.	110.	172.	971.	515.	913.
		.0( )	3.9( )	.0( )	2.2( )	.0( )	1.2( )	1.7(S)	.0( )	4.0( )	.0( )
		584.	716.	327.	390.	564.	195.	308.	622.	369.	688.
		3.8( )	.0( )	2.1( )	2.7( )	.0( )	2.3( )	4.4(S)	.0( )	2.5( )	.0( )
		29.	39.								
		.8( )	2.9(S)								
0	55.	1898.	2196.	1952.	2442.	258.	259.	193.	193.	257.	106.
		6.1( )	.0( )	6.0( )	.0( )	2.9( )	.0( )	2.3( )	2.6(S)	.0( )	1.1( )
		95.	85.	45.	49.	2184.	2293.	1199.	1027.	1648.	1513.
		1.0(S)	.0( )	1.3( )	6.6(S)	2.7( )	.0( )	.0( )	5.5( )	.0( )	.0( )
		1297.	1342.	1053.	1190.	1336.	1429.	1504.	1040.	1066.	1178.
		3.9( )	.0( )	5.0( )	2.4( )	2.2( )	3.2( )	.0( )	3.2( )	1.3( )	.0( )
		804.	758.	797.	539.	673.	374.	170.	361.	1941.	1816.
		.0( )	3.8( )	.0( )	3.0( )	.0( )	.0( )	.8( )	3.1( )	4.5(S)	6.9( )

		1862.	1889.	566.	291.	1323.	1241.	1343.	1349.	1380.	887.
		6.9(S)	.0( )	.0( )	2.4( )	4.2( )	2.4(S)	5.8( )	3.1(S)	.0( )	4.8( )
		1230.	908.	994.	666.	328.	147.	190.	1094.	693.	1067.
		.0( )	4.3( )	.0( )	2.4( )	.0( )	1.4( )	1.9(S)	.0( )	4.6( )	.0( )
		774.	898.	368.	530.	799.	437.	843.	752.	488.	723.
		4.2( )	.0( )	2.2( )	3.1( )	.0( )	3.3( )	5.1(S)	.0( )	2.9( )	.0( )
		35.	43.								
		.8( )	3.6(S)								
1	0.	2313.	2572.	2351.	2800.	256.	253.	196.	197.	249.	104.
		6.6( )	.0( )	6.3( )	.0( )	2.9( )	.0( )	2.3( )	3.0(S)	.0( )	1.1( )
		106.	148.	109.	130.	2543.	2657.	1437.	1296.	1891.	1779.
		1.1(S)	.0( )	2.1( )	8.7(S)	2.9( )	.0( )	.0( )	6.1( )	.0( )	.0( )
		1589.	1637.	1373.	1504.	1631.	1732.	1817.	1352.	1496.	1677.
		4.3( )	.0( )	5.7( )	2.7( )	2.5( )	3.4( )	.0( )	3.7( )	1.6( )	.0( )
		873.	840.	860.	622.	701.	804.	581.	835.	1854.	1956.
		.0( )	4.0( )	.0( )	3.2( )	.0( )	.0( )	1.6( )	4.8( )	4.5(S)	7.2( )
		2012.	2030.	566.	301.	1464.	1576.	1515.	1551.	1531.	1050.
		7.1(S)	.0( )	.0( )	2.4( )	4.4( )	2.6(S)	6.1( )	3.1(S)	.0( )	5.2( )
		1285.	1004.	1044.	701.	343.	173.	198.	1220.	871.	1220.
		.0( )	4.5( )	.0( )	2.4( )	.0( )	1.5( )	2.0(S)	.0( )	5.0( )	.0( )
		960.	1115.	390.	725.	1026.	678.	775.	837.	575.	721.
		4.6( )	.0( )	2.2( )	3.5( )	.0( )	4.1( )	5.0(S)	.0( )	3.1( )	.0( )
		40.	46.								
		.9( )	4.3(S)								
1	5.	2680.	2951.	2750.	3185.	253.	250.	200.	201.	249.	111.
		7.0( )	.0( )	6.5( )	.0( )	2.9( )	.0( )	2.3( )	3.3(S)	.0( )	1.1( )

145.	218.	180.	182.	2932.	3051.	1697.	1575.	2179.	2080.
1.5(S)	.0( )	2.8( )	10.4(S)	3.1( )	.0( )	.0( )	6.7( )	.0( )	.0( )
1911.	1960.	1716.	1855.	2002.	2133.	2250.	1792.	2024.	2167.
4.6( )	.0( )	6.3( )	2.9( )	2.7( )	3.7( )	.0( )	4.2( )	1.9( )	.0( )
910.	882.	892.	670.	711.	1257.	1024.	1166.	2133.	2106.
.0( )	4.1( )	.0( )	3.4( )	.0( )	.0( )	2.1( )	5.5( )	4.7(S)	7.4( )
2158.	2184.	550.	298.	1634.	1557.	1615.	1602.	1625.	1158.
7.2(S)	.0( )	.0( )	2.4( )	4.6( )	2.6(S)	6.3( )	3.1(S)	.0( )	5.5( )
1292.	1042.	1052.	703.	349.	188.	202.	1354.	1048.	1379.
.0( )	4.6( )	.0( )	2.4( )	.0( )	1.6( )	2.1(S)	.0( )	5.4( )	.0( )
1145.	1298.	396.	902.	1085.	754.	899.	888.	628.	708.
4.9( )	.0( )	2.2( )	3.9( )	.0( )	4.2( )	5.2(S)	.0( )	3.2( )	.0( )
43.	47.								
.9( )	4.9(S)								

1 10.

2991.	3335.	3159.	3587.	248.	242.	204.	205.	260.	131.
7.2( )	.0( )	6.8( )	.0( )	2.8( )	.0( )	2.3( )	3.7(S)	.0( )	1.2( )
192.	233.	216.	225.	3339.	3454.	1972.	1876.	2506.	2435.
1.9(S)	.0( )	3.1( )	11.8(S)	3.3( )	.0( )	.0( )	7.3( )	.0( )	.0( )
2288.	2349.	2129.	2297.	2466.	2609.	2720.	2271.	2425.	2510.
5.0( )	.0( )	6.9( )	3.2( )	3.0( )	4.1( )	.0( )	4.7( )	2.1( )	.0( )
911.	894.	893.	692.	704.	1599.	1364.	1494.	2141.	2171.
.0( )	4.1( )	.0( )	3.4( )	.0( )	.0( )	2.4( )	5.9( )	4.7(S)	7.5( )
2165.	2141.	520.	287.	1620.	1695.	1654.	1676.	1657.	1210.
7.2(S)	.0( )	.0( )	2.4( )	4.6( )	2.6(S)	6.4( )	3.1(S)	.0( )	5.6( )
1250.	1041.	1031.	688.	343.	195.	200.	1482.	1215.	1501.
.0( )	4.6( )	.0( )	2.4( )	.0( )	1.7( )	2.0(S)	.0( )	5.8( )	.0( )
1298.	1413.	394.	1018.	1140.	830.	899.	910.	655.	688.

		5.1( )	.0( )	2.2( )	4.1( )	.0( )	4.3( )	5.2(S)	.0( )	3.2( )	.0( )
		46.	48.								
		1.0( )	5.4(S)								
1	15.	3408.	3721.	3572.	3981.	246.	249.	224.	234.	277.	160.
		7.4( )	.0( )	7.0( )	.0( )	2.8( )	.0( )	2.4( )	4.0(S)	.0( )	1.3( )
		233.	270.	255.	259.	3735.	3841.	2280.	2211.	2895.	2846.
		2.2(S)	.0( )	3.5( )	12.9(S)	3.5( )	.0( )	.0( )	7.8( )	.0( )	.0( )
		2724.	2785.	2593.	2753.	2884.	2978.	3036.	2605.	2711.	2781.
		5.4( )	.0( )	7.6( )	3.4( )	3.2( )	4.3( )	.0( )	4.9( )	2.3( )	.0( )
		889.	878.	868.	692.	680.	1892.	1662.	1740.	2170.	2148.
		.0( )	4.1( )	.0( )	3.4( )	.0( )	.0( )	2.6( )	6.2( )	4.7(S)	7.5( )
		2138.	2155.	481.	269.	1674.	1610.	1640.	1615.	1631.	1212.
		7.2(S)	.0( )	.0( )	2.3( )	4.7( )	2.6(S)	6.3( )	3.1(S)	.0( )	5.6( )
		1181.	1015.	992.	664.	328.	197.	194.	1561.	1337.	1573.
		.0( )	4.5( )	.0( )	2.3( )	.0( )	1.7( )	2.0(S)	.0( )	6.0( )	.0( )
		1404.	1478.	387.	1091.	1156.	872.	913.	907.	662.	656.
		5.2( )	.0( )	2.2( )	4.2( )	.0( )	4.4( )	5.2(S)	.0( )	3.2( )	.0( )
		47.	49.								
		1.0( )	5.9(S)								
1	20.	3834.	4099.	3975.	4350.	256.	271.	254.	260.	298.	192.
		7.6( )	.0( )	7.3( )	.0( )	2.9( )	.0( )	2.6( )	4.3(S)	.0( )	1.5( )
		264.	286.	279.	283.	4094.	4184.	2609.	2561.	3199.	3167.
		2.4(S)	.0( )	3.8( )	13.7(S)	3.7( )	.0( )	.0( )	8.3( )	.0( )	.0( )
		3068.	3099.	2935.	3076.	3146.	3196.	3235.	2829.	2893.	2920.
		5.6( )	.0( )	8.0( )	3.5( )	3.3( )	4.4( )	.0( )	5.1( )	2.4( )	.0( )
		848.	842.	827.	675.	645.	2072.	1848.	1891.	2082.	2080.
		.0( )	4.0( )	.0( )	3.4( )	.0( )	.0( )	2.7( )	6.4( )	4.7(S)	7.4( )

2041.	1996.	435.	247.	1561.	1602.	1571.	1580.	1562.	1180.
7.1(S)	.0( )	.0( )	2.2( )	4.6( )	2.6(S)	6.2( )	3.1(S)	.0( )	5.5( )
1102.	973.	941.	632.	308.	192.	184.	1575.	1394.	1603.
.0( )	4.4( )	.0( )	2.3( )	.0( )	1.6( )	1.8(S)	.0( )	6.1( )	.0( )
1464.	1497.	373.	1124.	1143.	888.	888.	883.	651.	614.
5.3( )	.0( )	2.2( )	4.2( )	.0( )	4.4( )	5.2(S)	.0( )	3.2( )	.0( )
48.	49.								
1.0( )	6.2(S)								

1	25.	4228.	4450.	4346.	4673.	274.	291.	280.	287.	319.	224.
		7.7( )	.0( )	7.4( )	.0( )	3.0( )	.0( )	2.7( )	4.5(S)	.0( )	1.6( )
		285.	303.	296.	298.	4399.	4472.	2883.	2850.	3270.	3248.
		2.5(S)	.0( )	4.0( )	14.2(S)	3.8( )	.0( )	.0( )	8.7( )	.0( )	.0( )
		3168.	3163.	3023.	3247.	3280.	3303.	3311.	2934.	2948.	2950.
		5.7( )	.0( )	8.1( )	3.6( )	3.4( )	4.5( )	.0( )	5.1( )	2.4( )	.0( )
		798.	794.	776.	647.	606.	2153.	1935.	1947.	1982.	1957.
		.0( )	3.9( )	.0( )	3.3( )	.0( )	.0( )	2.7( )	6.4( )	4.6(S)	7.2( )
		1906.	1911.	388.	222.	1523.	1474.	1489.	1461.	1471.	1125.
		7.0(S)	.0( )	.0( )	2.1( )	4.5( )	2.5(S)	6.1( )	3.1(S)	.0( )	5.4( )
		1018.	918.	879.	593.	286.	184.	171.	1589.	1442.	1594.
		.0( )	4.3( )	.0( )	2.2( )	.0( )	1.6( )	1.7(S)	.0( )	6.2( )	.0( )
		1481.	1478.	354.	1124.	1105.	878.	852.	841.	628.	566.
		5.3( )	.0( )	2.1( )	4.2( )	.0( )	4.4( )	5.2(S)	.0( )	3.2( )	.0( )
		49.	50.								
		1.0( )	6.5(S)								

1	30.	4572.	4746.	4660.	4912.	295.	313.	305.	311.	336.	251.
		7.9( )	.0( )	7.6( )	.0( )	3.1( )	.0( )	2.8( )	4.7(S)	.0( )	1.7( )

300.	311.	304.	305.	4618.	4659.	3067.	3042.	3312.	3296.
2.6(S)	.0( )	4.1( )	14.6(S)	3.9( )	.0( )	.0( )	9.0( )	.0( )	.0( )
3231.	3252.	3135.	3302.	3301.	3290.	3276.	2930.	2914.	2894.
5.7( )	.0( )	8.2( )	3.7( )	3.4( )	4.5( )	.0( )	5.1( )	2.4( )	.0( )
743.	741.	722.	612.	565.	2151.	1940.	1932.	1836.	1822.
.0( )	3.8( )	.0( )	3.2( )	.0( )	.0( )	2.7( )	6.4( )	4.4(S)	6.9( )
1773.	1729.	344.	198.	1385.	1405.	1382.	1384.	1369.	1058.
6.8(S)	.0( )	.0( )	2.0( )	4.3( )	2.5(S)	5.8( )	3.1(S)	.0( )	5.2( )
932.	855.	810.	548.	262.	173.	158.	1592.	1474.	1554.
.0( )	4.2( )	.0( )	2.1( )	.0( )	1.6( )	1.5(S)	.0( )	6.2( )	.0( )
1462.	1430.	332.	1098.	1051.	849.	802.	791.	595.	519.
5.3( )	.0( )	2.1( )	4.2( )	.0( )	4.3( )	5.1(S)	.0( )	3.1( )	.0( )
50.	50.								
1.0( )	6.7(S)								

1 35.	4843.	4965.	4893.	5064.	315.	331.	325.	329.	349.	272.
	8.0( )	.0( )	7.7( )	.0( )	3.2( )	.0( )	2.9( )	4.9(S)	.0( )	1.7( )
	309.	315.	308.	309.	4750.	4776.	3194.	3174.	3370.	3358.
	2.7(S)	.0( )	4.2( )	14.7(S)	4.0( )	.0( )	.0( )	9.2( )	.0( )	.0( )
	3305.	3303.	3203.	3254.	3226.	3197.	3170.	2853.	2812.	2778.
	5.8( )	.0( )	8.2( )	3.6( )	3.3( )	4.4( )	.0( )	5.1( )	2.3( )	.0( )
	687.	687.	667.	574.	525.	2091.	1889.	1866.	1699.	1676.
	.0( )	3.7( )	.0( )	3.1( )	.0( )	.0( )	2.7( )	6.4( )	4.3(S)	6.7( )
	1616.	1613.	303.	175.	1311.	1275.	1282.	1255.	1263.	983.
	6.7(S)	.0( )	.0( )	1.8( )	4.2( )	2.4(S)	5.6( )	3.0(S)	.0( )	5.0( )
	847.	787.	740.	502.	239.	161.	144.	1582.	1486.	1491.
	.0( )	4.0( )	.0( )	2.0( )	.0( )	1.5( )	1.4(S)	.0( )	6.2( )	.0( )
	1415.	1363.	309.	1054.	988.	809.	748.	737.	558.	475.

```
     5.3( )    .0( )    2.1( )    4.1( )    .0( )    4.3( )    5.0(S)    .0( )    3.0( )    .0( )

    50.       50.
     1.0( )    6.8(S)

1   40.   5031.    5108.    5047.    5151.    332.     344.     340.     343.     356.     288.
           8.0( )    .0( )    7.8( )    .0( )    3.2( )    .0( )    3.0( )    5.0(S)    .0( )    1.8( )

          314.     316.     309.     308.    4819.    4829.    3272.    3254.    3340.    3330.
           2.7(S)    .0( )    4.2( )   14.7(S)    4.0( )    .0( )    .0( )    9.3( )    .0( )    .0( )

         3287.    3285.    3199.    3137.    3095.    3053.    3016.    2726.    2671.    2630.
           5.8( )    .0( )    8.2( )    3.6( )    3.3( )    4.3( )    .0( )    5.0( )    2.2( )    .0( )

          635.     635.     615.     536.     486.    1995.    1803.    1772.    1551.    1534.
            .0( )    3.5( )    .0( )    3.0( )    .0( )    .0( )    2.6( )    6.3( )    4.2(S)    6.4( )

         1484.    1447.     267.     155.    1181.    1189.    1171.    1170.    1157.     906.
           6.5(S)    .0( )    .0( )    1.7( )    4.0( )    2.4(S)    5.4( )    3.0(S)    .0( )    4.8( )

          767.     721.     674.     458.     216.     148.     131.    1557.    1478.    1413.
            .0( )    3.8( )    .0( )    1.9( )    .0( )    1.4( )    1.2(S)    .0( )    6.2( )    .0( )

         1350.    1286.     288.     999.     923.     763.     695.     684.     520.     436.
           5.2( )    .0( )    2.0( )    4.0( )    .0( )    4.2( )    4.9(S)    .0( )    2.9( )    .0( )

    50.       51.
     1.0( )    6.9(S)

1   45.   5141.    5178.    5127.    5164.    345.     353.     350.     352.     360.     299.
           8.0( )    .0( )    7.8( )    .0( )    3.3( )    .0( )    3.0( )    5.1(S)    .0( )    1.8( )

          314.     313.     306.     305.    4819.    4809.    3291.    3275.    3261.    3253.
           2.7(S)    .0( )    4.2( )   14.6(S)    4.0( )    .0( )    .0( )    9.3( )    .0( )    .0( )

         3221.    3207.    3133.    2982.    2929.    2880.    2839.    2573.    2510.    2464.
           5.7( )    .0( )    8.2( )    3.5( )    3.2( )    4.2( )    .0( )    4.9( )    2.2( )    .0( )

          585.     585.     566.     498.     449.    1880.    1698.    1661.    1416.    1397.
            .0( )    3.4( )    .0( )    2.9( )    .0( )    .0( )    2.6( )    6.1( )    4.1(S)    6.1( )
```

		1339.	1332.	234.	136.	1097.	1071.	1074.	1050.	1056.	830.
		6.4(S)	.0( )	.0( )	1.6( )	3.9( )	2.3(S)	5.2( )	3.0(S)	.0( )	4.6( )
		694.	658.	614.	419.	195.	136.	119.	1519.	1452.	1329.
		.0( )	3.6( )	.0( )	1.8( )	.0( )	1.4( )	1.0(S)	.0( )	6.2( )	.0( )
		1276.	1208.	269.	939.	859.	716.	643.	633.	482.	400.
		5.1( )	.0( )	2.0( )	3.9( )	.0( )	4.1( )	4.9(S)	.0( )	2.8( )	.0( )
		50.	51.								
		1.0( )	6.9(S)								
1	50.	5176.	5175.	5131.	5103.	353.	358.	356.	357.	360.	305.
		8.1( )	.0( )	7.8( )	.0( )	3.3( )	.0( )	3.1( )	5.1(S)	.0( )	1.8( )
		312.	308.	300.	299.	4750.	4724.	3256.	3242.	3139.	3131.
		2.7(S)	.0( )	4.1( )	14.3(S)	4.0( )	.0( )	.0( )	9.2( )	.0( )	.0( )
		3106.	3090.	3027.	2805.	2748.	2695.	2652.	2407.	2342.	2294.
		5.7( )	.0( )	8.1( )	3.4( )	3.1( )	4.1( )	.0( )	4.8( )	2.1( )	.0( )
		538.	538.	520.	462.	413.	1756.	1585.	1546.	1285.	1270.
		.0( )	3.3( )	.0( )	2.8( )	.0( )	.0( )	2.5( )	6.0( )	3.9(S)	5.9( )
		1226.	1198.	206.	120.	992.	995.	982.	982.	962.	758.
		6.3(S)	.0( )	.0( )	1.5( )	3.7( )	2.3(S)	4.9( )	3.0(S)	.0( )	4.4( )
		628.	600.	559.	384.	175.	123.	105.	1467.	1411.	1235.
		.0( )	3.5( )	.0( )	1.8( )	.0( )	1.3( )	.9(S)	.0( )	6.1( )	.0( )
		1190.	1107.	229.	879.	799.	672.	594.	585.	447.	367.
		4.9( )	.0( )	1.9( )	3.8( )	.0( )	4.0( )	4.8(S)	.0( )	2.7( )	.0( )
		51.	51.								
		1.0( )	6.9(S)								
1	55.	5140.	5104.	5066.	4979.	358.	360.	357.	357.	356.	306.
		8.0( )	.0( )	7.8( )	.0( )	3.4( )	.0( )	3.1( )	5.1(S)	.0( )	1.8( )

306.	300.	293.	291.	4622.	4581.	3177.	3163.	2989.	2982.
2.6(S)	.0( )	4.0( )	13.9(S)	3.9( )	.0( )	.0( )	9.1( )	.0( )	.0( )
2961.	2937.	2883.	2621.	2561.	2508.	2464.	2240.	2174.	2127.
5.5( )	.0( )	8.0( )	3.3( )	3.0( )	4.0( )	.0( )	4.6( )	2.0( )	.0( )
494.	494.	477.	427.	381.	1633.	1472.	1432.	1172.	1158.
.0( )	3.1( )	.0( )	2.7( )	.0( )	.0( )	2.4( )	5.9( )	3.8(S)	5.6( )
1111.	1103.	181.	105.	922.	903.	904.	883.	873.	691.
6.1(S)	.0( )	.0( )	1.4( )	3.5( )	2.3(S)	4.7( )	2.9(S)	.0( )	4.2( )
564.	547.	508.	352.	157.	111.	93.	1405.	1359.	1137.
.0( )	3.3( )	.0( )	1.7( )	.0( )	1.2( )	.8(S)	.0( )	6.1( )	.0( )
1099.	1025.	208.	817.	729.	616.	549.	540.	413.	338.
4.8( )	.0( )	1.8( )	3.7( )	.0( )	3.9( )	4.7(S)	.0( )	2.7( )	.0( )
51.	51.								
1.0( )	6.8(S)								

2	0.	5034.	4960.	4928.	4768.	358.	358.	355.	354.	349.	305.
		8.0( )	.0( )	7.7( )	.0( )	3.4( )	.0( )	3.1( )	5.1(S)	.0( )	1.8( )
		298.	288.	281.	279.	4409.	4338.	3018.	3004.	2616.	2609.
		2.6(S)	.0( )	3.8( )	13.5(S)	3.8( )	.0( )	.0( )	8.9( )	.0( )	.0( )
		2590.	2512.	2465.	2439.	2379.	2326.	2284.	2077.	2014.	1968.
		5.2( )	.0( )	7.4( )	3.2( )	2.9( )	3.9( )	.0( )	4.5( )	1.9( )	.0( )
		453.	453.	437.	395.	352.	1515.	1363.	1324.	1065.	1051.
		.0( )	3.0( )	.0( )	2.6( )	.0( )	.0( )	2.4( )	5.7( )	3.7(S)	5.3( )
		1009.	986.	159.	93.	826.	822.	811.	806.	792.	628.
		6.0(S)	.0( )	.0( )	1.3( )	3.4( )	2.2(S)	4.5( )	2.8(S)	.0( )	4.0( )
		509.	498.	462.	322.	140.	99.	83.	1320.	1281.	1041.
		.0( )	3.2( )	.0( )	1.6( )	.0( )	1.1( )	.7(S)	.0( )	5.9( )	.0( )
		1012.	942.	191.	751.	655.	553.	506.	498.	382.	311.

		4.7( )	.0( )	1.7( )	3.6( )	.0( )	3.7( )	4.7(S)	.0( )	2.6( )	.0( )
		50.	50.								
		1.0( )	6.7(S)								
2	5.	4846.	4720.	4698.	4442.	356.	352.	350.	348.	339.	299.
		8.0( )	.0( )	7.6( )	.0( )	3.3( )	.0( )	3.0( )	5.0(S)	.0( )	1.8( )
		284.	268.	268.	266.	4087.	3986.	2794.	2784.	2379.	2374.
		2.5(S)	.0( )	3.7( )	13.1(S)	3.7( )	.0( )	.0( )	8.6( )	.0( )	.0( )
		2359.	2372.	2331.	2263.	2204.	2154.	2113.	1924.	1864.	1820.
		5.0( )	.0( )	7.2( )	3.1( )	2.8( )	3.8( )	.0( )	4.4( )	1.8( )	.0( )
		417.	417.	402.	366.	326.	1404.	1260.	1222.	962.	949.
		.0( )	2.9( )	.0( )	2.5( )	.0( )	.0( )	2.3( )	5.6( )	3.6(S)	5.1( )
		904.	896.	140.	82.	755.	742.	743.	729.	719.	571.
		5.9(S)	.0( )	.0( )	1.2( )	3.2( )	2.2(S)	4.3( )	2.7(S)	.0( )	3.8( )
		461.	454.	420.	295.	125.	89.	75.	1192.	1158.	950.
		.0( )	3.0( )	.0( )	1.5( )	.0( )	1.1( )	.7(S)	.0( )	5.7( )	.0( )
		928.	861.	176.	686.	598.	507.	467.	460.	354.	287.
		4.5( )	.0( )	1.7( )	3.4( )	.0( )	3.6( )	4.6(S)	.0( )	2.5( )	.0( )
		50.	50.								
		1.0( )	6.6(S)								
2	10.	4580.	4413.	4397.	4098.	349.	341.	341.	339.	325.	290.
		7.9( )	.0( )	7.5( )	.0( )	3.3( )	.0( )	3.0( )	5.0(S)	.0( )	1.8( )
		268.	254.	254.	252.	3750.	3667.	2589.	2583.	2251.	2248.
		2.4(S)	.0( )	3.5( )	12.7(S)	3.5( )	.0( )	.0( )	8.4( )	.0( )	.0( )
		2236.	2188.	2155.	2097.	2041.	1993.	1954.	1781.	1724.	1682.
		4.9( )	.0( )	7.0( )	3.0( )	2.7( )	3.6( )	.0( )	4.2( )	1.7( )	.0( )
		383.	383.	370.	339.	301.	1299.	1164.	1126.	870.	858.
		.0( )	2.8( )	.0( )	2.5( )	.0( )	.0( )	2.2( )	5.4( )	3.6(S)	4.8( )

		823.	807.	123.	72.	683.	679.	670.	663.	652.	519.
		5.8(S)	.0( )	.0( )	1.1( )	3.1( )	2.2(S)	4.1( )	2.6(S)	.0( )	3.6( )
		418.	413.	382.	270.	112.	81.	67.	1078.	1051.	863.
		.0( )	2.9( )	.0( )	1.5( )	.0( )	1.0( )	.6(S)	.0( )	5.5( )	.0( )
		847.	789.	162.	628.	548.	468.	432.	424.	327.	265.
		4.4( )	.0( )	1.6( )	3.3( )	.0( )	3.4( )	4.5(S)	.0( )	2.4( )	.0( )
		50.	50.								
		1.0( )	6.5(S)								
2	15.	4277.	4097.	4085.	3797.	339.	329.	329.	326.	310.	278.
		7.8( )	.0( )	7.3( )	.0( )	3.3( )	.0( )	2.9( )	4.9(S)	.0( )	1.8( )
		254.	241.	241.	239.	3458.	3379.	2403.	2399.	2043.	2041.
		2.3(S)	.0( )	3.4( )	12.2(S)	3.4( )	.0( )	.0( )	8.1( )	.0( )	.0( )
		2033.	2022.	1999.	1943.	1889.	1844.	1807.	1648.	1595.	1556.
		4.7( )	.0( )	6.7( )	3.0( )	2.6( )	3.5( )	.0( )	4.1( )	1.7( )	.0( )
		353.	353.	340.	314.	279.	1202.	1075.	1038.	788.	777.
		.0( )	2.7( )	.0( )	2.4( )	.0( )	.0( )	2.1( )	5.3( )	3.5(S)	4.6( )
		740.	731.	109.	63.	622.	611.	612.	601.	593.	473.
		5.7(S)	.0( )	.0( )	1.0( )	2.9( )	2.1(S)	3.9( )	2.6(S)	.0( )	3.5( )
		380.	377.	348.	248.	100.	73.	61.	976.	957.	785.
		.0( )	2.7( )	.0( )	1.4( )	.0( )	.9( )	.5(S)	.0( )	5.2( )	.0( )
		773.	724.	149.	576.	503.	432.	399.	392.	303.	244.
		4.2( )	.0( )	1.5( )	3.2( )	.0( )	3.3( )	4.5(S)	.0( )	2.3( )	.0( )
		50.	50.								
		1.0( )	6.3(S)								
2	20.	3979.	3799.	3791.	3512.	326.	315.	315.	312.	294.	266.
		7.7( )	.0( )	7.2( )	.0( )	3.2( )	.0( )	2.9( )	4.7(S)	.0( )	1.7( )

240.	227.	227.	225.	3186.	3111.	2224.	2222.	1904.	1904.
2.2(S)	.0( )	3.2( )	11.8(S)	3.2( )	.0( )	.0( )	7.8( )	.0( )	.0( )
1898.	1869.	1853.	1801.	1749.	1706.	1672.	1527.	1477.	1441.
4.6( )	.0( )	6.5( )	2.9( )	2.5( )	3.4( )	.0( )	3.9( )	1.6( )	.0( )
326.	326.	314.	291.	258.	1115.	994.	960.	713.	703.
.0( )	2.6( )	.0( )	2.3( )	.0( )	.0( )	2.1( )	5.1( )	3.4(S)	4.4( )
673.	661.	96.	56.	566.	562.	555.	548.	539.	431.
5.7(S)	.0( )	.0( )	1.0( )	2.8( )	2.1(S)	3.7( )	2.5(S)	.0( )	3.3( )
346.	344.	317.	227.	89.	66.	55.	886.	872.	715.
.0( )	2.6( )	.0( )	1.3( )	.0( )	.9( )	.5(S)	.0( )	5.0( )	.0( )
706.	666.	137.	529.	462.	400.	368.	362.	281.	226.
4.1( )	.0( )	1.5( )	3.1( )	.0( )	3.2( )	4.5(S)	.0( )	2.3( )	.0( )
50.	49.								
1.0( )	6.1(S)								

2 25.

3700.	3521.	3515.	3250.	312.	300.	300.	296.	278.	253.
7.5( )	.0( )	7.0( )	.0( )	3.2( )	.0( )	2.8( )	4.6(S)	.0( )	1.7( )
227.	214.	214.	212.	2938.	2869.	2062.	2061.	1752.	1752.
2.1(S)	.0( )	3.1( )	11.4(S)	3.1( )	.0( )	.0( )	7.6( )	.0( )	.0( )
1748.	1731.	1719.	1670.	1621.	1581.	1550.	1417.	1371.	1337.
4.5( )	.0( )	6.3( )	2.8( )	2.4( )	3.3( )	.0( )	3.8( )	1.5( )	.0( )
300.	300.	289.	270.	239.	1037.	923.	890.	651.	644.
.0( )	2.5( )	.0( )	2.2( )	.0( )	.0( )	2.0( )	5.0( )	3.4(S)	4.2( )
618.	613.	84.	49.	529.	522.	524.	521.	490.	394.
5.6(S)	.0( )	.0( )	.9( )	2.7( )	2.1(S)	3.6( )	2.4(S)	.0( )	3.1( )
313.	313.	288.	208.	80.	60.	49.	807.	797.	654.
.0( )	2.5( )	.0( )	1.3( )	.0( )	.8( )	.4(S)	.0( )	4.8( )	.0( )
647.	612.	125.	487.	425.	370.	341.	335.	260.	209.

		4.0( )	.0( )	1.4( )	3.0( )	.0( )	3.1( )	4.4(S)	.0( )	2.2( )	.0( )
		49.	49.								
		1.0( )	5.9(S)								
2	30.	3442.	3265.	3260.	3010.	297.	284.	284.	280.	261.	240.
		7.4( )	.0( )	6.9( )	.0( )	3.1( )	.0( )	2.7( )	4.5(S)	.0( )	1.6( )
		214.	201.	201.	199.	2713.	2649.	1911.	1911.	1629.	1629.
		2.0(S)	.0( )	3.0( )	10.9(S)	3.0( )	.0( )	.0( )	7.3( )	.0( )	.0( )
		1625.	1604.	1595.	1549.	1502.	1465.	1434.	1311.	1263.	1223.
		4.3( )	.0( )	6.1( )	2.7( )	2.4( )	3.2( )	.0( )	3.7( )	1.5( )	.0( )
		275.	275.	262.	251.	221.	948.	840.	802.	604.	598.
		.0( )	2.3( )	.0( )	2.1( )	.0( )	.0( )	1.9( )	4.7( )	3.3(S)	4.0( )
		580.	573.	74.	43.	499.	497.	487.	479.	446.	360.
		5.6(S)	.0( )	.0( )	.8( )	2.6( )	2.1(S)	3.4( )	2.1(S)	.0( )	3.0( )
		286.	286.	262.	190.	72.	54.	44.	738.	731.	604.
		.0( )	2.4( )	.0( )	1.2( )	.0( )	.8( )	.4(S)	.0( )	4.7( )	.0( )
		599.	564.	115.	449.	391.	343.	315.	310.	241.	193.
		3.8( )	.0( )	1.4( )	2.9( )	.0( )	3.0( )	4.4(S)	.0( )	2.1( )	.0( )
		49.	48.								
		1.0( )	5.7(S)								
2	35.	3205.	3030.	3026.	2792.	282.	268.	268.	264.	241.	227.
		7.3( )	.0( )	6.7( )	.0( )	3.0( )	.0( )	2.7( )	4.3(S)	.0( )	1.6( )
		201.	189.	189.	187.	2510.	2452.	1774.	1774.	1506.	1506.
		1.9(S)	.0( )	2.9( )	10.5(S)	2.9( )	.0( )	.0( )	7.1( )	.0( )	.0( )
		1504.	1486.	1480.	1435.	1387.	1349.	1317.	1205.	1151.	1114.
		4.2( )	.0( )	5.9( )	2.6( )	2.3( )	3.1( )	.0( )	3.5( )	1.4( )	.0( )
		251.	251.	240.	233.	205.	863.	761.	731.	568.	564.
		.0( )	2.2( )	.0( )	2.1( )	.0( )	.0( )	1.8( )	4.5( )	3.3(S)	3.9( )

		548.	545.	65.	38.	480.	476.	443.	437.	407.	329.
		5.6(S)	.0( )	.0( )	.8( )	2.6( )	1.9(S)	3.3( )	1.9(S)	.0( )	2.8( )
		259.	259.	235.	174.	60.	49.	40.	678.	672.	556.
		.0( )	2.2( )	.0( )	1.2( )	.0( )	.8( )	.3(S)	.0( )	4.5( )	.0( )
		553.	519.	106.	414.	360.	317.	292.	287.	224.	179.
		3.7( )	.0( )	1.3( )	2.8( )	.0( )	2.9( )	4.3(S)	.0( )	2.0( )	.0( )
		48.	48.								
		1.0( )	5.4(S)								
2	40.	2991.	2814.	2812.	2591.	266.	253.	253.	249.	224.	215.
		7.2( )	.0( )	6.6( )	.0( )	2.9( )	.0( )	2.6( )	4.2(S)	.0( )	1.5( )
		189.	177.	177.	175.	2325.	2270.	1646.	1646.	1387.	1387.
		1.9(S)	.0( )	2.8( )	10.2(S)	2.8( )	.0( )	.0( )	6.8( )	.0( )	.0( )
		1386.	1365.	1360.	1309.	1248.	1193.	1138.	1035.	1056.	1025.
		4.0( )	.0( )	5.6( )	2.5( )	2.2( )	2.9( )	.0( )	3.2( )	1.3( )	.0( )
		230.	230.	221.	216.	190.	795.	699.	673.	535.	531.
		.0( )	2.1( )	.0( )	2.0( )	.0( )	.0( )	1.7( )	4.3( )	3.2(S)	3.8( )
		513.	505.	58.	34.	448.	442.	405.	398.	370.	300.
		5.5(S)	.0( )	.0( )	.7( )	2.5( )	1.7(S)	3.1( )	1.7(S)	.0( )	2.7( )
		234.	234.	212.	160.	52.	45.	36.	624.	620.	513.
		.0( )	2.1( )	.0( )	1.1( )	.0( )	.7( )	.3(S)	.0( )	4.3( )	.0( )
		510.	479.	97.	382.	334.	297.	279.	266.	208.	166.
		3.6( )	.0( )	1.3( )	2.7( )	.0( )	2.8( )	4.3(S)	.0( )	2.0( )	.0( )
		48.	47.								
		1.0( )	5.1(S)								
2	45.	2798.	2615.	2613.	2402.	251.	237.	237.	233.	210.	203.
		7.1( )	.0( )	6.5( )	.0( )	2.9( )	.0( )	2.5( )	4.0(S)	.0( )	1.5( )

177.	166.	166.	164.	2151.	2097.	1521.	1521.	1259.	1259.
1.8(S)	.0( )	2.6( )	9.8(S)	2.6( )	.0( )	.0( )	6.6( )	.0( )	.0( )
1259.	1238.	1234.	1182.	1126.	1097.	1098.	1004.	978.	950.
3.9( )	.0( )	5.4( )	2.4( )	2.1( )	2.8( )	.0( )	3.1( )	1.2( )	.0( )
213.	213.	204.	201.	176.	738.	647.	625.	506.	503.
.0( )	2.1( )	.0( )	1.9( )	.0( )	.0( )	1.7( )	4.1( )	3.2(S)	3.7( )
492.	462.	51.	30.	411.	406.	368.	362.	337.	274.
5.4(S)	.0( )	.0( )	.7( )	2.4( )	1.4(S)	3.0( )	1.5(S)	.0( )	2.6( )
212.	212.	192.	146.	46.	40.	33.	575.	573.	474.
.0( )	2.0( )	.0( )	1.0( )	.0( )	.7( )	.3(S)	.0( )	4.2( )	.0( )
473.	445.	89.	356.	316.	284.	274.	247.	194.	155.
3.4( )	.0( )	1.2( )	2.6( )	.0( )	2.7( )	4.2(S)	.0( )	1.9( )	.0( )
47.	47.								
1.0( )	4.8(S)								

2 50.

2625.	2425.	2425.	2220.	236.	222.	222.	218.	196.	191.
7.0( )	.0( )	6.3( )	.0( )	2.8( )	.0( )	2.4( )	3.8(S)	.0( )	1.5( )
166.	155.	155.	154.	1985.	1932.	1400.	1400.	1145.	1145.
1.7(S)	.0( )	2.5( )	9.4(S)	2.5( )	.0( )	.0( )	6.4( )	.0( )	.0( )
1145.	1128.	1126.	1087.	1052.	1028.	988.	902.	910.	886.
3.7( )	.0( )	5.1( )	2.4( )	2.0( )	2.8( )	.0( )	2.9( )	1.2( )	.0( )
197.	197.	189.	187.	163.	689.	603.	585.	485.	483.
.0( )	2.0( )	.0( )	1.8( )	.0( )	.0( )	1.6( )	4.0( )	3.2(S)	3.6( )
473.	419.	45.	26.	374.	368.	334.	328.	306.	250.
5.1(S)	.0( )	.0( )	.6( )	2.3( )	1.2(S)	2.8( )	1.4(S)	.0( )	2.5( )
193.	193.	174.	134.	40.	37.	29.	532.	530.	440.
.0( )	1.9( )	.0( )	1.0( )	.0( )	.6( )	.3(S)	.0( )	4.1( )	.0( )
440.	417.	82.	335.	304.	275.	266.	229.	181.	144.

		3.3( )	.0( )	1.2( )	2.5( )	.0( )	2.7( )	3.9(S)	.0( )	1.9( )	.0( )
		47.	46.								
		1.0( )	4.5(S)								
2	55.	2373.	2249.	2249.	2052.	221.	208.	208.	205.	184.	180.
		6.7( )	.0( )	6.2( )	.0( )	2.7( )	.0( )	2.4( )	3.7(S)	.0( )	1.4( )
		158.	145.	145.	144.	1831.	1783.	1289.	1289.	1060.	1060.
		1.6(S)	.0( )	2.4( )	9.1(S)	2.4( )	.0( )	.0( )	6.1( )	.0( )	.0( )
		1060.	1048.	1046.	1016.	979.	950.	945.	866.	851.	830.
		3.6( )	.0( )	5.0( )	2.3( )	1.9( )	2.7( )	.0( )	2.8( )	1.2( )	.0( )
		182.	182.	175.	173.	152.	648.	566.	550.	462.	458.
		.0( )	1.9( )	.0( )	1.8( )	.0( )	.0( )	1.5( )	3.9( )	3.2(S)	3.5( )
		443.	368.	39.	23.	329.	322.	304.	299.	279.	228.
		4.6(S)	.0( )	.0( )	.6( )	2.1( )	1.0(S)	2.7( )	1.2(S)	.0( )	2.3( )
		175.	175.	159.	123.	36.	33.	26.	494.	493.	413.
		.0( )	1.8( )	.0( )	.9( )	.0( )	.6( )	.2(S)	.0( )	3.9( )	.0( )
		413.	393.	75.	318.	291.	266.	256.	213.	168.	134.
		3.2( )	.0( )	1.1( )	2.5( )	.0( )	2.6( )	3.7(S)	.0( )	1.8( )	.0( )
		46.	46.								
		1.0( )	4.2(S)								
3	0.	2196.	2087.	2087.	1905.	210.	203.	203.	203.	173.	170.
		6.5( )	.0( )	6.1( )	.0( )	2.6( )	.0( )	2.3( )	3.5(S)	.0( )	1.4( )
		149.	136.	136.	134.	1695.	1652.	1192.	1192.	990.	990.
		1.5(S)	.0( )	2.4( )	8.8(S)	2.3( )	.0( )	.0( )	5.9( )	.0( )	.0( )
		990.	978.	978.	949.	915.	896.	869.	797.	799.	779.
		3.5( )	.0( )	4.8( )	2.2( )	1.9( )	2.6( )	.0( )	2.7( )	1.1( )	.0( )
		168.	168.	161.	161.	141.	611.	534.	519.	430.	426.
		.0( )	1.8( )	.0( )	1.7( )	.0( )	.0( )	1.5( )	3.7( )	3.2(S)	3.4( )

407.	324.	29.	19.	295.	292.	277.	272.	254.	208.
4.1(S)	.0( )	.0( )	.5( )	2.0( )	.9(S)	2.5( )	1.1(S)	.0( )	2.2( )
160.	160.	144.	112.	32.	30.	24.	460.	460.	390.
.0( )	1.7( )	.0( )	.9( )	.0( )	.6( )	.2(S)	.0( )	3.8( )	.0( )
390.	372.	69.	303.	277.	257.	245.	198.	157.	125.
3.1( )	.0( )	1.1( )	2.4( )	.0( )	2.6( )	3.3(S)	.0( )	1.7( )	.0( )
46.	45.								
1.0( )	3.9(S)								

3	5.	2042.	1944.	1944.	1781.	205.	202.	202.	201.	163.	161.
		6.3( )	.0( )	6.0( )	.0( )	2.6( )	.0( )	2.3( )	3.3(S)	.0( )	1.3( )
		140.	127.	127.	125.	1577.	1539.	1108.	1108.	927.	927.
		1.4(S)	.0( )	2.3( )	8.5(S)	2.2( )	.0( )	.0( )	5.7( )	.0( )	.0( )
		927.	916.	916.	890.	859.	836.	826.	760.	751.	731.
		3.4( )	.0( )	4.7( )	2.2( )	1.8( )	2.5( )	.0( )	2.6( )	1.1( )	.0( )
		156.	156.	150.	150.	131.	575.	503.	487.	395.	390.
		.0( )	1.8( )	.0( )	1.7( )	.0( )	.0( )	1.5( )	3.6( )	3.1(S)	3.3( )
		370.	293.	22.	15.	271.	266.	252.	248.	232.	191.
		3.5(S)	.0( )	.0( )	.5( )	1.9( )	.8(S)	2.4( )	1.0(S)	.0( )	2.1( )
		145.	145.	130.	103.	27.	27.	21.	432.	432.	369.
		.0( )	1.6( )	.0( )	.9( )	.0( )	.5( )	.2(S)	.0( )	3.7( )	.0( )
		369.	351.	63.	288.	259.	246.	232.	184.	147.	117.
		3.1( )	.0( )	1.0( )	2.4( )	.0( )	2.5( )	3.0(S)	.0( )	1.7( )	.0( )
		45.	43.								
		1.0( )	3.6(S)								
3	10.	1906.	1819.	1819.	1675.	201.	198.	198.	198.	152.	152.
		6.1( )	.0( )	5.9( )	.0( )	2.6( )	.0( )	2.3( )	3.0(S)	.0( )	1.3( )

130.	114.	114.	111.	1473.	1439.	1033.	1033.	871.	871.
1.3(S)	.0( )	2.1( )	8.3(S)	2.2( )	.0( )	.0( )	5.5( )	.0( )	.0( )
871.	861.	861.	837.	805.	787.	766.	706.	705.	686.
3.3( )	.0( )	4.5( )	2.1( )	1.8( )	2.5( )	.0( )	2.5( )	1.0( )	.0( )
145.	145.	140.	140.	121.	540.	472.	456.	372.	355.
.0( )	1.7( )	.0( )	1.6( )	.0( )	.0( )	1.4( )	3.5( )	3.0(S)	3.1( )
336.	263.	17.	13.	246.	243.	230.	226.	212.	175.
3.0(S)	.0( )	.0( )	.4( )	1.8( )	.7(S)	2.3( )	.9(S)	.0( )	2.0( )
132.	132.	119.	94.	25.	25.	19.	406.	406.	348.
.0( )	1.5( )	.0( )	.8( )	.0( )	.5( )	.2(S)	.0( )	3.6( )	.0( )
348.	330.	58.	272.	243.	234.	219.	172.	137.	109.
3.0( )	.0( )	1.0( )	2.3( )	.0( )	2.5( )	2.7(S)	.0( )	1.6( )	.0( )
44.	42.								
.9( )	3.3(S)								

3 15.

1787.	1710.	1710.	1579.	198.	195.	195.	194.	142.	142.
6.0( )	.0( )	5.8( )	.0( )	2.6( )	.0( )	2.3( )	2.7(S)	.0( )	1.2( )
119.	101.	101.	99.	1381.	1349.	967.	967.	819.	819.
1.2(S)	.0( )	2.0( )	8.1(S)	2.1( )	.0( )	.0( )	5.4( )	.0( )	.0( )
819.	809.	809.	786.	755.	735.	723.	668.	661.	644.
3.2( )	.0( )	4.4( )	2.1( )	1.7( )	2.4( )	.0( )	2.4( )	1.0( )	.0( )
135.	135.	130.	130.	112.	509.	443.	430.	361.	322.
.0( )	1.6( )	.0( )	1.5( )	.0( )	.0( )	1.4( )	3.4( )	2.8(S)	2.9( )
304.	239.	13.	10.	225.	222.	210.	207.	193.	160.
2.6(S)	.0( )	.0( )	.4( )	1.7( )	.6(S)	2.2( )	.8(S)	.0( )	1.9( )
121.	121.	109.	86.	22.	22.	16.	382.	382.	327.
.0( )	1.5( )	.0( )	.8( )	.0( )	.5( )	.1(S)	.0( )	3.5( )	.0( )
327.	310.	54.	256.	228.	221.	207.	160.	128.	101.

		2.9( )	.0( )	1.0( )	2.2( )	.0( )	2.4( )	2.4(S)	.0( )	1.6( )	.0( )
		42.	40.								
		.9( )	3.0(S)								
3	20.	1682.	1612.	1612.	1491.	195.	191.	191.	190.	132.	132.
		5.8( )	.0( )	5.7( )	.0( )	2.6( )	.0( )	2.3( )	2.3(S)	.0( )	1.2( )
		107.	91.	91.	89.	1297.	1267.	907.	907.	770.	770.
		1.1(S)	.0( )	1.9( )	7.9(S)	2.0( )	.0( )	.0( )	5.2( )	.0( )	.0( )
		770.	762.	762.	740.	708.	692.	676.	625.	623.	607.
		3.1( )	.0( )	4.3( )	2.0( )	1.7( )	2.3( )	.0( )	2.3( )	1.0( )	.0( )
		126.	126.	121.	121.	104.	481.	419.	408.	343.	286.
		.0( )	1.6( )	.0( )	1.5( )	.0( )	.0( )	1.3( )	3.3( )	2.5(S)	2.8( )
		261.	216.	10.	8.	206.	202.	192.	189.	177.	147.
		2.2(S)	.0( )	.0( )	.3( )	1.7( )	.5(S)	2.1( )	.7(S)	.0( )	1.8( )
		110.	110.	99.	79.	19.	19.	12.	360.	360.	307.
		.0( )	1.4( )	.0( )	.7( )	.0( )	.4( )	.1(S)	.0( )	3.4( )	.0( )
		307.	291.	49.	241.	214.	209.	194.	149.	120.	94.
		2.8( )	.0( )	.9( )	2.2( )	.0( )	2.3( )	2.0(S)	.0( )	1.5( )	.0( )
		41.	38.								
		.9( )	2.8(S)								
3	25.	1588.	1523.	1523.	1409.	190.	185.	185.	182.	122.	122.
		5.7( )	.0( )	5.6( )	.0( )	2.5( )	.0( )	2.2( )	1.9(S)	.0( )	1.2( )
		97.	83.	83.	81.	1219.	1191.	852.	852.	722.	722.
		1.0(S)	.0( )	1.8( )	7.7(S)	2.0( )	.0( )	.0( )	5.1( )	.0( )	.0( )
		722.	712.	712.	686.	667.	650.	639.	592.	588.	573.
		3.1( )	.0( )	4.1( )	1.9( )	1.6( )	2.3( )	.0( )	2.2( )	.9( )	.0( )
		117.	117.	112.	112.	97.	456.	397.	386.	319.	249.
		.0( )	1.5( )	.0( )	1.4( )	.0( )	.0( )	1.3( )	3.2( )	2.1(S)	2.6( )

		229.	195.	7.	7.	188.	185.	176.	173.	162.	135.
		1.9(S)	.0( )	.0( )	.3( )	1.6( )	.5(S)	2.0( )	.6(S)	.0( )	1.7( )
		101.	101.	89.	73.	16.	16.	8.	339.	339.	288.
		.0( )	1.3( )	.0( )	.7( )	.0( )	.4( )	.1(S)	.0( )	3.3( )	.0( )
		288.	272.	45.	227.	200.	196.	179.	138.	112.	87.
		2.7( )	.0( )	.9( )	2.1( )	.0( )	2.3( )	1.7(S)	.0( )	1.5( )	.0( )
		39.	37.								
		.9( )	2.5(S)								
3	30.	1500.	1439.	1439.	1328.	182.	172.	172.	168.	112.	112.
		5.6( )	.0( )	5.6( )	.0( )	2.5( )	.0( )	2.1( )	1.5(S)	.0( )	1.1( )
		88.	76.	76.	74.	1146.	1119.	800.	800.	671.	671.
		.9(S)	.0( )	1.7( )	7.6(S)	1.9( )	.0( )	.0( )	4.9( )	.0( )	.0( )
		671.	662.	662.	639.	628.	613.	600.	557.	554.	539.
		3.0( )	.0( )	4.0( )	1.9( )	1.6( )	2.2( )	.0( )	2.1( )	.9( )	.0( )
		109.	109.	105.	105.	90.	429.	374.	361.	277.	220.
		.0( )	1.5( )	.0( )	1.4( )	.0( )	.0( )	1.2( )	3.1( )	1.6(S)	2.4( )
		204.	177.	5.	5.	172.	169.	161.	158.	148.	124.
		1.7(S)	.0( )	.0( )	.2( )	1.5( )	.4(S)	1.9( )	.5(S)	.0( )	1.7( )
		91.	91.	80.	66.	14.	14.	6.	319.	319.	270.
		.0( )	1.3( )	.0( )	.7( )	.0( )	.4( )	.1(S)	.0( )	3.2( )	.0( )
		270.	254.	42.	212.	185.	182.	164.	129.	105.	81.
		2.7( )	.0( )	.8( )	2.1( )	.0( )	2.2( )	1.5(S)	.0( )	1.5( )	.0( )
		37.	35.								
		.9( )	2.3(S)								
3	35.	1418.	1358.	1358.	1246.	171.	158.	158.	154.	103.	103.
		5.4( )	.0( )	5.5( )	.0( )	2.4( )	.0( )	2.0( )	1.1(S)	.0( )	1.1( )

80.	69.	69.	68.	1076.	1050.	750.	750.	628.	628.
.8(S)	.0( )	1.6( )	7.5(S)	1.8( )	.0( )	.0( )	4.8( )	.0( )	.0( )
628.	621.	621.	603.	590.	575.	562.	523.	519.	502.
2.9( )	.0( )	3.9( )	1.8( )	1.5( )	2.2( )	.0( )	2.0( )	.9( )	.0( )
102.	102.	98.	98.	84.	400.	348.	332.	235.	197.
.0( )	1.4( )	.0( )	1.3( )	.0( )	.0( )	1.2( )	2.9( )	1.3(S)	2.3( )
184.	162.	4.	4.	157.	155.	147.	144.	135.	113.
1.5(S)	.0( )	.0( )	.2( )	1.4( )	.4(S)	1.8( )	.5(S)	.0( )	1.6( )
82.	82.	72.	61.	11.	11.	4.	300.	300.	252.
.0( )	1.2( )	.0( )	.6( )	.0( )	.3( )	.0(S)	.0( )	3.1( )	.0( )
252.	236.	38.	198.	170.	168.	151.	120.	98.	76.
2.6( )	.0( )	.8( )	2.0( )	.0( )	2.1( )	1.3(S)	.0( )	1.4( )	.0( )
36.	34.								
.9( )	2.0(S)								

3 40.

1338.	1279.	1279.	1168.	158.	146.	146.	142.	94.	94.
5.3( )	.0( )	5.4( )	.0( )	2.3( )	.0( )	2.0( )	.8(S)	.0( )	1.0( )
73.	64.	64.	63.	1010.	986.	704.	704.	591.	591.
.8(S)	.0( )	1.6( )	7.4(S)	1.8( )	.0( )	.0( )	4.6( )	.0( )	.0( )
591.	584.	584.	565.	552.	535.	521.	485.	481.	463.
2.8( )	.0( )	3.7( )	1.7( )	1.5( )	2.1( )	.0( )	1.9( )	.8( )	.0( )
95.	95.	91.	91.	78.	368.	319.	302.	207.	178.
.0( )	1.4( )	.0( )	1.3( )	.0( )	.0( )	1.1( )	2.8( )	1.1(S)	2.2( )
167.	148.	4.	4.	144.	142.	134.	132.	123.	104.
1.4(S)	.0( )	.0( )	.2( )	1.4( )	.3(S)	1.7( )	.4(S)	.0( )	1.5( )
75.	75.	65.	56.	9.	9.	3.	282.	282.	235.
.0( )	1.1( )	.0( )	.6( )	.0( )	.3( )	.0(S)	.0( )	3.1( )	.0( )
235.	219.	35.	184.	155.	155.	140.	112.	91.	71.

		2.5( )	.0( )	.8( )	1.9( )	.0( )	2.0( )	1.0(S)	.0( )	1.4( )	.0( )
		35.	33.								
		.8( )	1.8(S)								
3	45.	1261.	1202.	1202.	1092.	144.	127.	127.	120.	87.	87.
		5.2( )	.0( )	5.3( )	.0( )	2.2( )	.0( )	1.8( )	.5(S)	.0( )	1.0( )
		68.	59.	59.	58.	949.	925.	661.	661.	554.	554.
		.7(S)	.0( )	1.5( )	7.4(S)	1.7( )	.0( )	.0( )	4.5( )	.0( )	.0( )
		554.	546.	546.	526.	512.	495.	480.	448.	443.	425.
		2.7( )	.0( )	3.6( )	1.7( )	1.4( )	2.0( )	.0( )	1.8( )	.8( )	.0( )
		89.	89.	85.	85.	72.	337.	290.	274.	185.	162.
		.0( )	1.3( )	.0( )	1.2( )	.0( )	.0( )	1.1( )	2.6( )	.9(S)	2.0( )
		152.	135.	3.	3.	132.	129.	123.	120.	112.	95.
		1.3(S)	.0( )	.0( )	.2( )	1.3( )	.3(S)	1.6( )	.3(S)	.0( )	1.4( )
		67.	67.	59.	51.	7.	7.	2.	264.	264.	218.
		.0( )	1.1( )	.0( )	.6( )	.0( )	.2( )	.0(S)	.0( )	3.0( )	.0( )
		218.	202.	32.	170.	144.	144.	129.	104.	86.	66.
		2.4( )	.0( )	.7( )	1.9( )	.0( )	1.9( )	.9(S)	.0( )	1.3( )	.0( )
		33.	31.								
		.8( )	1.6(S)								
3	50.	1185.	1128.	1128.	1017.	127.	107.	107.	102.	80.	80.
		5.0( )	.0( )	5.3( )	.0( )	2.1( )	.0( )	1.7( )	.3(S)	.0( )	.9( )
		62.	55.	55.	55.	891.	868.	620.	620.	515.	515.
		.6(S)	.0( )	1.5( )	7.3(S)	1.6( )	.0( )	.0( )	4.4( )	.0( )	.0( )
		515.	507.	507.	486.	472.	455.	441.	411.	408.	390.
		2.6( )	.0( )	3.5( )	1.6( )	1.4( )	2.0( )	.0( )	1.7( )	.7( )	.0( )
		83.	83.	79.	79.	67.	308.	263.	249.	167.	148.
		.0( )	1.3( )	.0( )	1.2( )	.0( )	.0( )	1.0( )	2.5( )	.8(S)	1.9( )

		138.	122.	3.	3.	120.	117.	110.	107.	97.	87.
		1.2(S)	.0( )	.0( )	.2( )	1.2( )	.2(S)	1.5( )	.3(S)	.0( )	1.4( )
		61.	61.	53.	47.	6.	6.	1.	247.	247.	202.
		.0( )	1.0( )	.0( )	.5( )	.0( )	.2( )	.0(S)	.0( )	2.9( )	.0( )
		202.	187.	30.	157.	131.	131.	112.	97.	80.	61.
		2.3( )	.0( )	.7( )	1.8( )	.0( )	1.8( )	.7(S)	.0( )	1.3( )	.0( )
		32.	30.								
		.8( )	1.4(S)								
3	55.	1112.	1055.	1055.	943.	109.	90.	90.	84.	74.	74.
		4.9( )	.0( )	5.2( )	.0( )	1.9( )	.0( )	1.5( )	.2(S)	.0( )	.9( )
		59.	54.	54.	54.	834.	812.	581.	581.	476.	476.
		.6(S)	.0( )	1.4( )	7.2(S)	1.6( )	.0( )	.0( )	4.2( )	.0( )	.0( )
		476.	468.	468.	448.	435.	419.	406.	378.	375.	358.
		2.5( )	.0( )	3.4( )	1.5( )	1.3( )	1.9( )	.0( )	1.6( )	.7( )	.0( )
		77.	77.	73.	73.	58.	281.	240.	226.	151.	134.
		.0( )	1.2( )	.0( )	1.1( )	.0( )	.0( )	1.0( )	2.4( )	.6(S)	1.8( )
		125.	109.	2.	2.	107.	105.	97.	94.	86.	80.
		1.0(S)	.0( )	.0( )	.1( )	1.2( )	.2(S)	1.4( )	.2(S)	.0( )	1.3( )
		55.	55.	48.	43.	5.	5.	0.	231.	231.	186.
		.0( )	.9( )	.0( )	.5( )	.0( )	.2( )	.0(S)	.0( )	2.8( )	.0( )
		186.	172.	27.	144.	117.	117.	99.	85.	75.	57.
		2.2( )	.0( )	.7( )	1.7( )	.0( )	1.7( )	.6(S)	.0( )	1.2( )	.0( )
		31.	29.								
		.8( )	1.2(S)								
4	0.	1040.	984.	984.	872.	93.	75.	75.	70.	69.	69.
		4.8( )	.0( )	5.1( )	.0( )	1.8( )	.0( )	1.4( )	.1(S)	.0( )	.9( )

		56.	54.	54.	53.	780.	758.	543.	543.	440.	440.
		.6(S)	.0( )	1.4( )	7.1(S)	1.5( )	.0( )	.0( )	4.1( )	.0( )	.0( )
		440.	432.	432.	413.	400.	385.	373.	347.	344.	328.
		2.5( )	.0( )	3.2( )	1.5( )	1.2( )	1.8( )	.0( )	1.6( )	.7( )	.0( )
		70.	70.	66.	66.	52.	258.	218.	206.	137.	122.
		.0( )	1.2( )	.0( )	1.1( )	.0( )	.0( )	.9( )	2.3( )	.5(S)	1.7( )
		112.	96.	2.	2.	94.	92.	85.	81.	77.	73.
		.9(S)	.0( )	.0( )	.1( )	1.1( )	.1(S)	1.3( )	.2(S)	.0( )	1.2( )
		50.	50.	43.	39.	4.	4.	0.	215.	215.	171.
		.0( )	.9( )	.0( )	.5( )	.0( )	.2( )	.0(S)	.0( )	2.7( )	.0( )
		171.	157.	25.	132.	104.	104.	87.	77.	70.	54.
		2.1( )	.0( )	.7( )	1.7( )	.0( )	1.6( )	.5(S)	.0( )	1.2( )	.0( )
		29.	27.								
		.8( )	1.0(S)								
4	5.	971.	916.	916.	807.	80.	67.	67.	66.	65.	65.
		4.6( )	.0( )	5.0( )	.0( )	1.7( )	.0( )	1.3( )	.1(S)	.0( )	.8( )
		55.	53.	53.	52.	727.	706.	506.	506.	405.	405.
		.6(S)	.0( )	1.4( )	7.0(S)	1.5( )	.0( )	.0( )	3.9( )	.0( )	.0( )
		405.	398.	398.	380.	368.	354.	342.	319.	316.	301.
		2.4( )	.0( )	3.1( )	1.4( )	1.2( )	1.7( )	.0( )	1.5( )	.6( )	.0( )
		64.	64.	60.	60.	47.	237.	199.	188.	124.	108.
		.0( )	1.1( )	.0( )	1.0( )	.0( )	.0( )	.9( )	2.1( )	.4(S)	1.6( )
		98.	80.	2.	2.	78.	74.	74.	72.	70.	67.
		.8(S)	.0( )	.0( )	.1( )	1.0( )	.1(S)	1.2( )	.2(S)	.0( )	1.2( )
		46.	46.	39.	36.	3.	3.	0.	200.	200.	157.
		.0( )	.8( )	.0( )	.5( )	.0( )	.1( )	.0(S)	.0( )	2.6( )	.0( )
		157.	142.	23.	119.	93.	93.	79.	71.	66.	49.

```
          2.0( )    .0( )    .6( )   1.6( )    .0( )   1.6( )    .5(S)    .0( )   1.2( )    .0( )

         27.      23.
           .7( )    .8(S)

4   10.  905.     852.     852.     748.     71.      64.      64.      63.      62.      62.
          4.5( )    .0( )   5.0( )    .0( )   1.6( )    .0( )   1.3( )    .1(S)    .0( )    .8( )

         53.      52.      52.      51.     677.     656.     471.     471.     374.     374.
           .5(S)    .0( )   1.4( )   6.9(S)   1.4( )    .0( )    .0( )   3.8( )    .0( )    .0( )

        374.     367.     367.     350.     338.     325.     314.     293.     290.     275.
          2.3( )    .0( )   3.0( )   1.3( )   1.1( )   1.7( )    .0( )   1.4( )    .6( )    .0( )

         58.      58.      54.      54.      43.     217.     182.     171.     111.      95.
           .0( )   1.0( )    .0( )   1.0( )    .0( )    .0( )    .8( )   2.0( )    .3(S)   1.5( )

         85.      70.       1.       1.      69.      69.      67.      65.      63.      61.
           .7(S)    .0( )    .0( )    .1( )    .9( )    .1(S)   1.1( )    .1(S)    .0( )   1.1( )

         42.      42.      36.      33.       3.       3.       0.     185.     185.     143.
           .0( )    .8( )    .0( )    .4( )    .0( )    .1( )    .0(S)    .0( )   2.5( )    .0( )

        143.     129.      21.     108.      84.      84.      72.      65.      61.      44.
          2.0( )    .0( )    .6( )   1.5( )    .0( )   1.5( )    .4(S)    .0( )   1.1( )    .0( )

         24.      20.
           .7( )    .6(S)

1


SOUTH CANYON - LIME CREEK                DRAINAGE DESIGN PLAN BY FMG, INC
EXISTING HYDROLOGIC CONDITIONS AND EXISTING HYDRAULIC CONDITIONS 100 YR STORM


*** PEAK FLOWS, STAGES AND STORAGES OF GUTTERS AND DETENSION DAMS ***

  CONVEYANCE   PEAK      STAGE      STORAGE     TIME
```

ELEMENT	(CFS)	(FT)	(AC-FT)	(HR/MIN)
264	202.	.1	2.1	1 5.
79	197.	1.7		1 15.
175	349.	(DIRECT FLOW)		1 5.
78	703.	2.4		1 5.
174	1052.	(DIRECT FLOW)		1 5.
77	1042.	4.6		1 5.
173	1292.	(DIRECT FLOW)		1 5.
76	1212.	5.6		1 15.
172	1657.	(DIRECT FLOW)		1 10.
263	1676.	.1	3.1	1 10.
75	1654.	6.4		1 10.
262	1695.	.1	2.6	1 10.
73	301.	2.4		1 0.
74	1674.	4.7		1 15.
171	566.	(DIRECT FLOW)		0 55.
170	2184.	(DIRECT FLOW)		1 5.
261	2165.	.1	7.2	1 10.
72	2171.	7.5		1 10.
168	711.	(DIRECT FLOW)		1 5.
260	2170.	.1	4.7	1 15.
69	692.	3.4		1 15.
71	1947.	6.4		1 25.
167	893.	(DIRECT FLOW)		1 10.
70	1940.	2.7		1 30.
68	894.	4.1		1 10.
169	2153.	(DIRECT FLOW)		1 25.
166	911.	(DIRECT FLOW)		1 10.
281	51.	.1	6.9	1 45.
165	2950.	(DIRECT FLOW)		1 25.
86	51.	1.0		1 50.
67	2948.	2.4		1 25.
185	723.	(DIRECT FLOW)		0 55.
66	2934.	5.1		1 25.
85	662.	3.2		1 15.
164	3311.	(DIRECT FLOW)		1 25.
184	910.	(DIRECT FLOW)		1 10.
65	3303.	4.5		1 25.
280	913.	.1	5.2	1 15.

64	3301.	3.4		1	30.
84	888.	4.4		1	20.
63	3302.	3.7		1	30.
252	309.	.1	14.7	1	35.
183	1156.	(DIRECT FLOW)		1	15.
62	3203.	8.2		1	35.
52	309.	4.2		1	40.
83	1124.	4.2		1	20.
82	396.	2.2		1	5.
163	3303.	(DIRECT FLOW)		1	35.
152	316.	(DIRECT FLOW)		1	40.
182	1497.	(DIRECT FLOW)		1	20.
61	3305.	5.8		1	35.
251	314.	.1	2.7	1	45.
81	1481.	5.3		1	25.
162	3358.	(DIRECT FLOW)		1	35.
51	306.	1.8		1	55.
181	1603.	(DIRECT FLOW)		1	20.
161	3370.	(DIRECT FLOW)		1	35.
151	360.	(DIRECT FLOW)		1	45.
80	1486.	6.2		1	35.
60	3275.	9.3		1	45.
250	357.	.1	5.1	1	55.
180	1592.	(DIRECT FLOW)		1	30.
160	3291.	(DIRECT FLOW)		1	45.
50	357.	3.1		1	55.
142	4829.	(DIRECT FLOW)		1	40.
150	360.	(DIRECT FLOW)		1	55.
43	4819.	4.0		1	40.
42	358.	3.4		2	0.
141	5164.	(DIRECT FLOW)		1	45.
41	5131.	7.8		1	50.
140	5178.	(DIRECT FLOW)		1	45.
40	5176.	8.1		1	50.

1

ENDPROGRAM PROGRAM CALLED

APPENDIX C - UDSWM2-PC - 500 YR

EXISTING LAND USE
AND EXISTING HYDRAULIC CONDITIONS

1

ENVIRONMENTAL PROTECTION AGENCY - STORM WATER MANAGEMENT MODEL - VERSION PC.1

DEVELOPED BY METCALF + EDDY, INC.

UNIVERSITY OF FLORIDA

WATER RESOURCES ENGINEEERS, INC. (SEPTEMBER 1970)

UPDATED BY UNIVERSITY OF FLORIDA (JUNE 1973)

HYDROLOGIC ENGINEERING CENTER, CORPS OF ENGINEERS

MISSOURI RIVER DIVISION, CORPS OF ENGINEERS (SEPTEMBER 1974)

BOYLE ENGINEERING CORPORATION (MARCH 1985, JULY 1985)

OTAPE OR DISK ASSIGNMENTS

JIN(1)	JIN(2)	JIN(3)	JIN(4)	JIN(5)	JIN(6)	JIN(7)	JIN(8)	JIN(9)	JIN(10)
2	1	0	0	0	0	0	0	0	0

JOUT(1)	JOUT(2)	JOUT(3)	JOUT(4)	JOUT(5)	JOUT(6)	JOUT(7)	JOUT(8)	JOUT(9)	JOUT(10)
1	2	0	0	0	0	0	0	0	0

NSCRAT(1)	NSCRAT(2)	NSCRAT(3)	NSCRAT(4)	NSCRAT(5)
3	4	0	0	0

1

WATERSHED PROGRAM CALLED

*** ENTRY MADE TO RUNOFF MODEL ***

SOUTH CANYON - LIME CREEK DRAINAGE DESIGN PLAN BY FMG, INC
EXISTING HYDROLOGIC EXISTING HYDRAULIC CONDITIONS 500 YR STORM - 6.6 INCH RAIN

ONUMBER OF TIME STEPS 50
OINTEGRATION TIME INTERVAL (MINUTES), 5.00

25.0 PERCENT OF IMPERVIOUS AREA HAS ZERO DETENTION DEPTH
1

SOUTH CANYON - LIME CREEK DRAINAGE DESIGN PLAN BY FMG, INC
EXISTING HYDROLOGIC EXISTING HYDRAULIC CONDITIONS 500 YR STORM - 6.6 INCH RAIN

HYDROGRAPHS FROM CUHPE/PC ARE LISTED FOR THE FOLLOWING 29 SUBCATCHMENTS

TIME(HR/MIN)	1	2	3	4	5	6	7	8	9	10
	11	12	13	14	15	16	17	18	19	20
	21	22	23	24	25	26	27	28	29	
0 0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.	0.	0.	0.	0.	
0 5.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.	0.	0.	0.	0.	
0 10.	6.	3.	1.	34.	0.	17.	13.	6.	9.	1.
	0.	1.	0.	0.	0.	0.	0.	0.	1.	0.
	1.	0.	10.	9.	1.	4.	0.	1.	0.	

0	15.	34.	18.	11.	85.	1.	65.	57.	30.	38.	4.
		1.	12.	3.	1.	1.	2.	2.	11.	36.	3.
		4.	2.	50.	47.	10.	25.	2.	10.	7.	
0	20.	122.	64.	46.	199.	21.	181.	186.	115.	116.	41.
		11.	81.	59.	32.	17.	44.	56.	69.	193.	48.
		44.	32.	154.	158.	53.	97.	26.	75.	40.	
0	25.	296.	143.	122.	359.	91.	392.	393.	291.	268.	162.
		47.	183.	213.	133.	73.	171.	211.	222.	500.	201.
		150.	119.	368.	375.	164.	253.	99.	262.	116.	
0	30.	600.	279.	259.	648.	255.	748.	747.	603.	533.	425.
		130.	355.	499.	351.	207.	422.	516.	534.	1029.	545.
		345.	294.	751.	754.	385.	539.	254.	652.	256.	
0	35.	822.	309.	387.	390.	501.	922.	777.	863.	744.	786.
		258.	340.	771.	642.	413.	701.	845.	936.	1359.	1041.
		524.	497.	1176.	1029.	677.	841.	461.	1178.	393.	
0	40.	864.	284.	445.	218.	772.	818.	657.	945.	784.	1123.
		404.	272.	897.	901.	650.	879.	1044.	1280.	1356.	1547.
		605.	639.	1372.	1069.	940.	1019.	647.	1661.	462.	
0	45.	825.	249.	451.	162.	1012.	670.	539.	923.	722.	1360.
		540.	215.	905.	1070.	872.	941.	1104.	1491.	1243.	1954.
		614.	699.	1309.	1000.	1115.	1070.	771.	1992.	473.	
0	50.	761.	216.	447.	128.	1191.	545.	439.	869.	643.	1485.
		649.	167.	871.	1145.	1052.	934.	1085.	1574.	1105.	2215.
		603.	707.	1174.	904.	1199.	1058.	829.	2157.	464.	
0	55.	688.	184.	437.	101.	1301.	441.	353.	799.	567.	1520.
		723.	126.	817.	1155.	1177.	903.	1040.	1571.	966.	2335.
		576.	695.	1032.	806.	1218.	1028.	841.	2192.	447.	
1	0.	621.	159.	419.	99.	1352.	365.	297.	731.	501.	1508.
		765.	97.	756.	1134.	1250.	860.	982.	1529.	849.	2353.
		542.	681.	901.	718.	1205.	983.	832.	2157.	423.	

1	5.	568.	138.	399.	99.	1360.	317.	260.	675.	449.	1483.
		782.	85.	703.	1106.	1280.	814.	922.	1480.	758.	2316.
		510.	660.	794.	649.	1188.	933.	820.	2102.	399.	
1	10.	504.	107.	374.	48.	1343.	256.	195.	611.	393.	1452.
		781.	59.	644.	1069.	1278.	760.	857.	1418.	650.	2253.
		473.	628.	699.	569.	1164.	874.	801.	2031.	372.	
1	15.	437.	77.	345.	45.	1311.	194.	146.	540.	333.	1400.
		770.	45.	577.	1016.	1257.	700.	783.	1336.	541.	2174.
		430.	588.	595.	486.	1122.	807.	770.	1935.	341.	
1	20.	373.	55.	315.	24.	1270.	141.	104.	470.	277.	1329.
		755.	30.	509.	951.	1223.	634.	704.	1240.	441.	2072.
		386.	543.	493.	407.	1065.	735.	729.	1815.	308.	
1	25.	314.	41.	286.	23.	1218.	102.	78.	406.	227.	1244.
		740.	21.	444.	879.	1183.	568.	625.	1139.	354.	1947.
		344.	498.	403.	337.	998.	663.	682.	1681.	276.	
1	30.	266.	32.	259.	23.	1156.	81.	62.	350.	187.	1155.
		718.	16.	386.	809.	1136.	508.	554.	1040.	288.	1812.
		305.	455.	329.	282.	928.	598.	633.	1547.	247.	
1	35.	228.	25.	235.	23.	1089.	67.	53.	305.	154.	1070.
		692.	13.	337.	743.	1082.	454.	491.	948.	236.	1678.
		272.	416.	273.	238.	863.	539.	588.	1420.	221.	
1	40.	196.	21.	214.	23.	1021.	59.	47.	267.	126.	993.
		662.	12.	295.	683.	1024.	406.	436.	865.	196.	1553.
		243.	381.	229.	203.	804.	487.	547.	1304.	198.	
1	45.	171.	18.	195.	23.	955.	54.	44.	236.	99.	922.
		632.	11.	260.	628.	966.	365.	389.	790.	163.	1439.
		217.	349.	195.	175.	750.	442.	510.	1199.	179.	
1	50.	149.	16.	179.	23.	896.	51.	41.	210.	83.	857.
		601.	11.	230.	579.	910.	328.	348.	723.	134.	1335.
		195.	320.	167.	150.	700.	402.	476.	1104.	161.	

1	55.	129.	15.	164.	23.	843.	49.	41.	188.	74.	798.
		572.	11.	204.	534.	858.	297.	312.	662.	108.	1240.
		176.	294.	141.	129.	654.	368.	444.	1018.	146.	
2	0.	111.	15.	151.	23.	793.	49.	40.	169.	67.	743.
		544.	11.	182.	494.	812.	269.	282.	608.	92.	1153.
		160.	271.	126.	107.	612.	337.	415.	940.	133.	
2	5.	85.	11.	137.	2.	746.	38.	26.	145.	56.	691.
		519.	6.	160.	455.	768.	242.	252.	557.	73.	1071.
		143.	249.	110.	86.	571.	306.	387.	866.	120.	
2	10.	64.	8.	122.	0.	700.	23.	16.	115.	43.	640.
		494.	3.	138.	418.	725.	215.	221.	507.	54.	991.
		125.	226.	88.	66.	530.	272.	359.	794.	106.	
2	15.	49.	5.	108.	0.	655.	14.	10.	84.	31.	589.
		469.	2.	117.	381.	683.	189.	193.	459.	40.	914.
		109.	204.	64.	50.	489.	240.	331.	724.	92.	
2	20.	38.	4.	95.	0.	611.	9.	6.	64.	22.	541.
		445.	0.	97.	346.	642.	166.	167.	413.	29.	839.
		95.	184.	47.	37.	449.	211.	304.	657.	78.	
2	25.	29.	2.	81.	0.	569.	5.	4.	50.	17.	495.
		421.	0.	76.	314.	602.	146.	146.	371.	21.	769.
		80.	166.	34.	28.	412.	185.	279.	595.	62.	
2	30.	22.	2.	66.	0.	529.	3.	2.	39.	12.	454.
		398.	0.	54.	285.	564.	128.	126.	333.	15.	703.
		63.	149.	25.	21.	378.	163.	255.	539.	44.	
2	35.	17.	0.	47.	0.	492.	2.	0.	30.	9.	416.
		376.	0.	40.	258.	528.	112.	110.	299.	11.	643.
		45.	134.	18.	15.	346.	143.	234.	488.	32.	
2	40.	12.	0.	35.	0.	457.	0.	0.	24.	7.	381.
		355.	0.	31.	234.	494.	98.	95.	269.	8.	588.
		33.	121.	13.	12.	318.	126.	215.	442.	25.	

2	45.	9.	0.	28.	0.	425.	0.	0.	18.	5.	349.
		336.	0.	24.	212.	462.	86.	80.	242.	6.	538.
		26.	109.	10.	9.	291.	110.	197.	400.	19.	
2	50.	7.	0.	22.	0.	395.	0.	0.	13.	4.	319.
		318.	0.	18.	193.	433.	73.	64.	217.	4.	492.
		20.	98.	7.	7.	267.	96.	180.	362.	15.	
2	55.	5.	0.	17.	0.	367.	0.	0.	10.	2.	292.
		301.	0.	14.	175.	405.	58.	45.	195.	3.	450.
		16.	88.	5.	5.	245.	81.	165.	328.	12.	
3	0.	4.	0.	14.	0.	341.	0.	0.	8.	2.	267.
		285.	0.	11.	158.	379.	41.	33.	175.	2.	412.
		12.	79.	4.	4.	224.	66.	151.	297.	9.	
3	5.	3.	0.	11.	0.	317.	0.	0.	6.	0.	245.
		269.	0.	8.	144.	355.	30.	26.	158.	2.	377.
		9.	68.	2.	3.	206.	47.	139.	269.	6.	
3	10.	2.	0.	8.	0.	295.	0.	0.	5.	0.	224.
		254.	0.	6.	130.	332.	23.	20.	142.	0.	345.
		7.	55.	2.	2.	189.	36.	127.	243.	5.	
3	15.	2.	0.	6.	0.	274.	0.	0.	4.	0.	205.
		240.	0.	4.	118.	311.	18.	15.	127.	0.	315.
		5.	38.	0.	0.	173.	28.	117.	220.	4.	
3	20.	0.	0.	5.	0.	255.	0.	0.	3.	0.	188.
		227.	0.	4.	107.	291.	14.	12.	114.	0.	288.
		4.	28.	0.	0.	159.	23.	107.	199.	3.	
3	25.	0.	0.	4.	0.	237.	0.	0.	2.	0.	172.
		215.	0.	3.	97.	272.	11.	9.	103.	0.	264.
		3.	22.	0.	0.	146.	18.	98.	181.	3.	
3	30.	0.	0.	3.	0.	220.	0.	0.	0.	0.	158.
		203.	0.	2.	88.	255.	8.	6.	92.	0.	241.
		3.	17.	0.	0.	133.	14.	90.	163.	2.	

3	35.	0.	0.	3.	0.	205.	0.	0.	0.	0.	145.
		192.	0.	2.	80.	239.	6.	5.	82.	0.	221.
		2.	14.	0.	0.	122.	11.	82.	148.	2.	
3	40.	0.	0.	2.	0.	190.	0.	0.	0.	0.	132.
		182.	0.	0.	73.	224.	5.	4.	70.	0.	202.
		2.	11.	0.	0.	112.	8.	75.	134.	0.	
3	45.	0.	0.	2.	0.	177.	0.	0.	0.	0.	121.
		172.	0.	0.	62.	209.	4.	3.	57.	0.	185.
		0.	8.	0.	0.	103.	7.	65.	121.	0.	
3	50.	0.	0.	0.	0.	165.	0.	0.	0.	0.	111.
		163.	0.	0.	51.	196.	3.	3.	39.	0.	169.
		0.	6.	0.	0.	94.	5.	54.	110.	0.	
3	55.	0.	0.	0.	0.	153.	0.	0.	0.	0.	102.
		154.	0.	0.	35.	184.	2.	2.	29.	0.	155.
		0.	5.	0.	0.	87.	4.	37.	100.	0.	
4	0.	0.	0.	0.	0.	142.	0.	0.	0.	0.	93.
		146.	0.	0.	26.	172.	2.	2.	23.	0.	142.
		0.	3.	0.	0.	79.	4.	28.	90.	0.	
4	5.	0.	0.	0.	0.	132.	0.	0.	0.	0.	85.
		138.	0.	0.	20.	161.	1.	0.	18.	0.	130.
		0.	3.	0.	0.	72.	3.	22.	82.	0.	
4	10.	0.	0.	0.	0.	123.	0.	0.	0.	0.	78.
		130.	0.	0.	16.	151.	0.	0.	14.	0.	119.
		0.	2.	0.	0.	62.	2.	17.	73.	0.	

1

SOUTH CANYON - LIME CREEK DRAINAGE DESIGN PLAN BY FMG, INC
EXISTING HYDROLOGIC EXISTING HYDRAULIC CONDITIONS 500 YR STORM - 6.6 INCH RAIN

GUTTER NUMBER	GUTTER CONNECTION	NDP	NP		WIDTH OR DIAM (FT)	LENGTH (FT)	INVERT SLOPE (FT/FT)	SIDE SLOPES HORIZ TO VERT L	R	MANNING N	OVERBANK/SURCHARGE DEPTH (FT)	JK
40	0	0	4	CHANNEL	10.0	1450.	.0100	6.0	10.0	.063	7.00	0
				OVERFLOW	280.0	1100.	.0132	10.0	10.0	.044	15.00	
140	40	0	3		.0	1.	.0010	.0	.0	.001	10.00	0
41	140	0	4	CHANNEL	10.0	3550.	.0090	2.0	2.0	.063	4.00	0
				OVERFLOW	100.0	2850.	.0112	2.0	16.0	.044	14.00	
141	41	0	3		.0	1.	.0010	.0	.0	.001	10.00	0
42	141	0	4	CHANNEL	10.0	1100.	.0082	5.0	8.0	.063	4.00	0
				OVERFLOW	.0	600.	.0150	150.0	2.0	.071	7.00	
150	42	0	3		.0	1.	.0010	.0	.0	.001	10.00	0
50	150	0	4	CHANNEL	10.0	550.	.0145	3.0	4.0	.050	5.00	0
				OVERFLOW	100.0	550.	.0145	4.0	10.0	.050	10.00	
250	50	9	2	PIPE	.1	1.	.0100	.0	.0	.016	.10	0
		RESERVOIR STORAGE IN ACRE-FEET VS SPILLWAY OUTFLOW										
		.0	.0	.0 22.0	.2	95.0	.7	140.0	2.0	187.0	3.7 205.0	
		4.4	271.0	6.4 516.0	13.0	7680.0						
151	250	0	3		.0	1.	.0010	.0	.0	.001	10.00	0
51	151	0	1	CHANNEL	20.0	3500.	.0206	7.0	12.0	.056	10.00	0
251	51	9	2	PIPE	.1	1.	.0100	.0	.0	.016	.10	0
		RESERVOIR STORAGE IN ACRE-FEET VS SPILLWAY OUTFLOW										
		.0	.0	1.7 165.0	3.1	375.0	8.0	500.0	9.4	540.0	10.8 575.0	
		11.8	1000.0	12.8 1350.0	16.5	3050.0						
152	251	0	3		.0	1.	.0010	.0	.0	.001	10.00	0
52	152	0	5	PIPE	5.0	1000.	.0203	.0	.0	.016	5.00	0
				OVERFLOW	50.0	1000.	.0203	5.0	10.0	.038	15.00	
252	52	8	2	PIPE	.1	1.	.0203	.0	.0	.016	.10	0
		RESERVOIR STORAGE IN ACRE-FEET VS SPILLWAY OUTFLOW										
		.0	.0	2.5 26.0	5.5	40.0	7.3	55.0	8.5	125.0	14.0 293.0	
		25.1	532.0	36.1 2558.0								
43	141	0	4	CHANNEL	100.0	700.	.0160	5.0	37.0	.056	6.00	0
				OVERFLOW	200.0	700.	.0160	4.0	37.0	.056	12.00	
142	43	0	3		.0	1.	.0010	.0	.0	.001	10.00	0
160	142	0	3		.0	1.	.0010	.0	.0	.001	10.00	0
60	160	0	4	CHANNEL	15.0	4750.	.0148	5.0	3.0	.081	10.00	0
				OVERFLOW	.0	4750.	.0148	100.0	13.0	.094	16.00	
161	60	0	3		.0	1.	.0010	.0	.0	.001	10.00	0
162	161	0	3		.0	1.	.0010	.0	.0	.001	10.00	0

61	162	0	4	CHANNEL	15.0	350.	.0110	7.0	17.0	.050	6.00	0
				OVERFLOW	.0	350.	.0110	60.0	10.0	.094	10.00	
163	61	0	3		.0	1.	.0010	.0	.0	.001	10.00	0
62	163	0	4	CHANNEL	15.0	1150.	.0130	3.0	4.0	.056	8.00	0
				OVERFLOW	600.0	1150.	.0130	24.0	4.0	.094	11.00	
63	62	0	4	CHANNEL	70.0	550.	.0165	19.0	3.0	.067	2.00	0
				OVERFLOW	200.0	550.	.0165	22.0	3.0	.094	9.00	
64	63	0	4	CHANNEL	50.0	700.	.0143	50.0	10.0	.044	4.00	0
				OVERFLOW	350.0	700.	.0143	3.0	10.0	.081	10.00	
65	64	0	4	CHANNEL	15.0	650.	.0148	30.0	8.0	.044	6.00	0
				OVERFLOW	170.0	650.	.0148	10.0	18.0	.081	15.00	
164	65	0	3		.0	1.	.0010	.0	.0	.001	10.00	0
66	164	0	4	CHANNEL	18.0	700.	.0173	.0	.0	.019	3.50	0
				OVERFLOW	110.0	700.	.0173	63.0	5.0	.094	13.00	
67	66	0	1	CHANNEL	150.0	850.	.0270	10.0	10.0	.056	6.00	0
165	67	0	3		.0	1.	.0010	.0	.0	.001	10.00	0
166	165	0	3		.0	1.	.0010	.0	.0	.001	10.00	0
68	166	0	1	CHANNEL	10.0	1250.	.0256	3.0	4.0	.050	10.00	0
167	68	0	3		.0	1.	.0010	.0	.0	.001	10.00	0
69	167	0	1	CHANNEL	10.0	3500.	.0351	6.0	5.0	.063	8.00	0
168	69	0	3		.0	1.	.0010	.0	.0	.001	10.00	0
169	165	0	3		.0	1.	.0010	.0	.0	.001	10.00	0
70	169	0	4	CHANNEL	60.0	900.	.0213	10.0	20.0	.056	2.00	0
				OVERFLOW	50.0	900.	.0213	10.0	2.0	.038	10.00	
71	70	0	4	CHANNEL	15.0	7300.	.0263	2.0	2.0	.075	5.00	0
				OVERFLOW	35.0	7300.	.0263	3.0	3.0	.044	15.00	
260	71	6	2	PIPE	.1	1.	.0100	.0	.0	.016	.10	0
		RESERVOIR STORAGE IN ACRE-FEET VS SPILLWAY OUTFLOW										
		.0	.0	.3 110.0	1.9	310.0	3.1	375.0	5.3	2775.0	8.3 15125.0	
72	260	0	4	CHANNEL	15.0	1100.	.0200	3.0	3.0	.075	8.00	0
				OVERFLOW	60.0	1100.	.0200	3.0	2.0	.044	18.00	
261	72	5	2	PIPE	.1	1.	.0100	.0	.0	.016	.10	0
		RESERVOIR STORAGE IN ACRE-FEET VS SPILLWAY OUTFLOW										
		.0	.0	2.5 300.0	5.5	500.0	8.0	2900.0	10.5	11300.0		
170	261	0	3		.0	1.	.0010	.0	.0	.001	10.00	0
171	170	0	3		.0	1.	.0010	.0	.0	.001	10.00	0
73	171	0	1	CHANNEL	10.0	4800.	.0521	3.0	2.0	.063	10.00	0
74	170	0	1	CHANNEL	20.0	300.	.0280	4.0	8.0	.069	10.00	0
262	74	6	2	PIPE	.1	1.	.0100	.0	.0	.016	.10	0
		RESERVOIR STORAGE IN ACRE-FEET VS SPILLWAY OUTFLOW										

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                .0      .0       .1    90.0       1.2   375.0       2.1   500.0       4.1  5100.0       5.8 13100.0
 75       262     0         4     CHANNEL        15.0     400.     .0200      3.0   2.0       .063      10.00        0
                                   OVERFLOW       60.0     400.     .0200      2.0   2.0       .044      15.00
263        75     7         2     PIPE             .1       1.     .0100       .0    .0       .016        .10        0
              RESERVOIR STORAGE IN ACRE-FEET VS SPILLWAY OUTFLOW
                .0      .0       .2    90.0       1.6   375.0       2.5   550.0       3.0  1024.0       4.0  6255.0
               6.5 11870.0
172       263     0         3                       .0       1.     .0010       .0    .0       .001      10.00        0
 76       172     0         4     CHANNEL        15.0    5150.     .0222      2.0   3.0       .069      10.00        0
                                   OVERFLOW       50.0    5150.     .0222      2.0   2.0       .044      15.00
173        76     0         3                       .0       1.     .0010       .0    .0       .001      10.00        0
 77       173     0         1     CHANNEL        15.0    2100.     .0262      2.0   4.0       .063      10.00        0
174        77     0         3                       .0       1.     .0010       .0    .0       .001      10.00        0
 78       174     0         1     CHANNEL        25.0     900.     .0333      4.0  10.0       .056      10.00        0
175       174     0         3                       .0       1.     .0010       .0    .0       .001      10.00        0
 79       175     0         1     CHANNEL        20.0    2500.     .0306      5.0   2.0       .069      10.00        0
264        79     6         2     PIPE             .1       1.     .0100       .0    .0       .028        .10        0
              RESERVOIR STORAGE IN ACRE-FEET VS SPILLWAY OUTFLOW
                .0      .0       1.0   115.0       2.1   205.0       6.3   280.0      10.5   350.0      18.0 10452.0
180       142     0         3                       .0       1.     .0010       .0    .0       .001      10.00        0
 80       180     0         4     CHANNEL        10.0    3650.     .0133      4.0   7.0       .075       6.00        0
                                   OVERFLOW      150.0    3650.     .0133     60.0  50.0       .094      14.00
181        80     0         3                       .0       1.     .0010       .0    .0       .001      10.00        0
 81       181     0         4     CHANNEL        10.0    1600.     .0138      6.0   4.0       .056       4.00        0
                                   OVERFLOW        .0    1600.     .0138     56.0   8.0       .081      14.00
182        81     0         3                       .0       1.     .0010       .0    .0       .001      10.00        0
 82       182     0         4     CHANNEL        10.0    1000.     .0160     10.0  12.0       .050       2.00        0
                                   OVERFLOW      220.0    1000.     .0160     35.0  10.0       .050       6.00
 83       182     0         4     CHANNEL        10.0    2800.     .0177     13.0   5.0       .063       6.00        0
                                   OVERFLOW      450.0    2100.     .0236     13.0  60.0       .056      12.00
183        83     0         3                       .0       1.     .0010       .0    .0       .001      10.00        0
 84       183     0         4     CHANNEL        10.0    2250.     .0136      4.0   4.0       .050       4.00        0
                                   OVERFLOW       80.0    2250.     .0136     10.0   4.0       .044      12.00
280        84     9         2     PIPE             .1       1.     .0100       .0    .0       .016        .10        0
              RESERVOIR STORAGE IN ACRE-FEET VS SPILLWAY OUTFLOW
                .0      .0       .2    35.0        .8   128.0       1.9   190.0       3.4   248.0       4.3   280.0
               5.4  1025.0      6.8  3320.0       8.6  8510.0
184       280     0         3                       .0       1.     .0010       .0    .0       .001      10.00        0
 85       184     0         1     CHANNEL        10.0    3600.     .0096     15.0   8.0       .050      10.00        0
185        85     0         3                       .0       1.     .0010       .0    .0       .001      10.00        0
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86	185	0	1	CHANNEL	8.0	1600.	.0138	9.0	8.0	.044	8.00	0
281	86	9	2	PIPE	.1	1.	.0100	.0	.0	.016	.10	0

RESERVOIR STORAGE IN ACRE-FEET VS SPILLWAY OUTFLOW

.0	.0	.0	5.0	1.0	28.0	3.9	45.0	9.2	55.0	17.7	65.0
28.0	75.0	43.0	335.0	54.0	1300.0						

OTOTAL NUMBER OF GUTTERS/PIPES, 72
1

SOUTH CANYON - LIME CREEK DRAINAGE DESIGN PLAN BY FMG, INC
EXISTING HYDROLOGIC EXISTING HYDRAULIC CONDITIONS 500 YR STORM - 6.6 INCH RAIN

ARRANGEMENT OF SUBCATCHMENTS AND GUTTERS/PIPES

GUTTER	TRIBUTARY GUTTER/PIPE										TRIBUTARY SUBAREA										D.A.(AC)
40	140	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6138.9
41	141	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6016.6
42	150	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	570.2
43	142	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5446.4
50	250	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	537.0
51	251	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	446.1
52	252	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	409.0
60	161	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3698.6
61	163	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3530.2
62	63	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3387.5
63	64	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3387.5

64	65	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3387.5
65	164	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3387.5
66	67	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2984.3
67	165	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2984.3
68	167	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	850.6
69	168	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	695.0
70	71	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1822.7
71	260	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1822.7
72	261	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1822.7
73	0	0	0	0	0	0	0	0	0	0	17	0	0	0	0	0	0	0	0	0	0	208.0
74	262	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1428.5
75	263	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1428.5
76	173	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1070.1
77	174	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	897.3
78	0	0	0	0	0	0	0	0	0	0	20	0	0	0	0	0	0	0	0	0	0	620.8
79	264	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	161.3
80	181	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1498.9
81	182	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1358.1
82	0	0	0	0	0	0	0	0	0	0	25	0	0	0	0	0	0	0	0	0	0	314.2
83	183	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1043.8

84	280	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	836.5
85	185	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	620.2
86	281	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	90.2
140	41	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	6138.9
141	42	43	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6016.6
142	160	180	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5446.4
150	50	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	570.2
151	51	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	537.0
152	52	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	446.1
160	60	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	3782.4
161	162	0	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	3698.6
162	61	0	0	0	0	0	0	0	0	0	9	0	0	0	0	0	0	0	0	0	0	3626.2
163	62	0	0	0	0	0	0	0	0	0	8	0	0	0	0	0	0	0	0	0	0	3530.2
164	66	0	0	0	0	0	0	0	0	0	10	0	0	0	0	0	0	0	0	0	0	3387.5
165	166	169	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2984.3
166	68	0	0	0	0	0	0	0	0	0	12	0	0	0	0	0	0	0	0	0	0	880.6
167	69	0	0	0	0	0	0	0	0	0	13	0	0	0	0	0	0	0	0	0	0	850.6
168	0	0	0	0	0	0	0	0	0	0	14	15	0	0	0	0	0	0	0	0	0	695.0
169	70	0	0	0	0	0	0	0	0	0	11	0	0	0	0	0	0	0	0	0	0	2103.7
170	171	74	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1822.7

171	73	0	0	0	0	0	0	0	0	0	16	0	0	0	0	0	0	0	0	0	394.2
172	76	0	0	0	0	0	0	0	0	0	18	0	0	0	0	0	0	0	0	0	1428.5
173	77	0	0	0	0	0	0	0	0	0	19	0	0	0	0	0	0	0	0	0	1070.1
174	78	175	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	897.3
175	79	0	0	0	0	0	0	0	0	0	21	0	0	0	0	0	0	0	0	0	276.5
180	80	0	0	0	0	0	0	0	0	0	23	0	0	0	0	0	0	0	0	0	1664.0
181	81	0	0	0	0	0	0	0	0	0	24	0	0	0	0	0	0	0	0	0	1498.9
182	82	83	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1358.1
183	84	0	0	0	0	0	0	0	0	0	26	0	0	0	0	0	0	0	0	0	1043.8
184	85	0	0	0	0	0	0	0	0	0	27	0	0	0	0	0	0	0	0	0	836.5
185	86	0	0	0	0	0	0	0	0	0	28	0	0	0	0	0	0	0	0	0	620.2
250	151	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	537.0
251	152	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	446.1
252	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	409.0
260	72	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1822.7
261	170	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1822.7
262	75	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1428.5
263	172	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1428.5
264	0	0	0	0	0	0	0	0	0	0	22	0	0	0	0	0	0	0	0	0	161.3
280	184	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	836.5

281 0 0 0 0 0 0 0 0 0 0 29 0 0 0 0 0 0 0 0 0 0 90.2

1

SOUTH CANYON - LIME CREEK DRAINAGE DESIGN PLAN BY FMG, INC
EXISTING HYDROLOGIC EXISTING HYDRAULIC CONDITIONS 500 YR STORM - 6.6 INCH RAIN

HYDROGRAPHS ARE LISTED FOR THE FOLLOWING 72 CONVEYANCE ELEMENTS

THE UPPER NUMBER IS DISCHARGE IN CFS
THE LOWER NUMBER IS ONE OF THE FOLLOWING CASES:
( ) DENOTES DEPTH ABOVE INVERT IN FEET
(S) DENOTES STORAGE IN AC-FT FOR DETENSION DAM. DISCHARGE INCLUDES SPILLWAY OUTFLOW.
(I) DENOTES GUTTER INFLOW IN CFS FROM SPECIFIED INFLOW HYDROGRAPH
(D) DENOTES DISCHARGE IN CFS DIVERTED FROM THIS GUTTER
(O) DENOTES STORAGE IN AC-FT FOR SURCHARGED GUTTER

TIME(HR/MIN)										
	40	140	41	141	42	150	50	250	151	51
	251	152	52	252	43	142	160	60	161	162
	61	163	62	63	64	65	164	66	67	165
	166	68	167	69	168	169	70	71	260	72
	261	170	171	73	74	262	75	263	172	76
	173	77	174	78	175	79	264	180	80	181
	81	182	82	83	183	84	280	184	85	185
	86	281								
0 5.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	.0( )	.0( )	.0( )	.0( )	.0( )	.0( )	.0( )	.0(S)	.0( )	.0( )
	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	.0(S)	.0( )	.0( )	.0(S)	.0( )	.0( )	.0( )	.0( )	.0( )	.0( )
	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	.0( )	.0( )	.0( )	.0( )	.0( )	.0( )	.0( )	.0( )	.0( )	.0( )
	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	.0( )	.0( )	.0( )	.0( )	.0( )	.0( )	.0( )	.0( )	.0(S)	.0( )

		0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
		.0(S)	.0( )	.0( )	.0( )	.0( )	.0(S)	.0( )	.0(S)	.0( )	.0( )
		0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
		.0( )	.0( )	.0( )	.0( )	.0( )	.0( )	.0(S)	.0( )	.0( )	.0( )
		0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
		.0( )	.0( )	.0( )	.0( )	.0( )	.0( )	.0(S)	.0( )	.0( )	.0( )
		0.	0.								
		.0( )	.0(S)								
0	10.	0.	6.	0.	2.	0.	3.	0.	2.	2.	0.
		.1( )	.0( )	.0( )	.0( )	.0( )	.0( )	.0( )	.0(S)	.0( )	.0( )
		9.	34.	0.	0.	2.	27.	17.	0.	23.	10.
		.1(S)	.0( )	.0( )	.0(S)	.1( )	.0( )	.0( )	.0( )	.0( )	.0( )
		1.	6.	0.	0.	0.	0.	1.	0.	0.	1.
		.1( )	.0( )	.0( )	.0( )	.0( )	.0( )	.0( )	.0( )	.0( )	.0( )
		1.	0.	0.	0.	0.	0.	0.	0.	0.	0.
		.0( )	.0( )	.0( )	.0( )	.0( )	.0( )	.0( )	.0( )	.0(S)	.0( )
		0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
		.0(S)	.0( )	.0( )	.0( )	.0( )	.0(S)	.0( )	.0(S)	.0( )	.0( )
		1.	0.	1.	0.	1.	0.	0.	10.	0.	9.
		.0( )	.0( )	.0( )	.0( )	.0( )	.0( )	.0(S)	.0( )	.0( )	.0( )
		0.	0.	0.	0.	4.	0.	0.	0.	0.	1.
		.0( )	.0( )	.0( )	.0( )	.0( )	.0( )	.0(S)	.0( )	.0( )	.0( )
		0.	0.								
		.0( )	.0(S)								
0	15.	4.	35.	1.	41.	3.	22.	4.	12.	12.	2.
		.3( )	.0( )	.2( )	.0( )	.3( )	.0( )	.3( )	.0(S)	.0( )	.1( )

		34.	85.	0.	0.	38.	121.	69.	5.	111.	54.
		.4(S)	.0( )	.0( )	.0(S)	.3( )	.0( )	.0( )	.3( )	.0( )	.0( )
		16.	30.	0.	0.	0.	1.	4.	0.	1.	13.
		.5( )	.0( )	.0( )	.0( )	.0( )	.1( )	.0( )	.0( )	.0( )	.0( )
		12.	0.	3.	0.	2.	1.	0.	0.	0.	0.
		.0( )	.0( )	.0( )	.0( )	.0( )	.0( )	.0( )	.0( )	.0(S)	.0( )
		1.	2.	2.	0.	0.	1.	2.	7.	11.	1.
		.0(S)	.0( )	.0( )	.0( )	.0( )	.0(S)	.1( )	.0(S)	.0( )	.1( )
		36.	0.	4.	0.	4.	0.	1.	52.	2.	47.
		.0( )	.0( )	.0( )	.0( )	.0( )	.0( )	.0(S)	.0( )	.2( )	.0( )
		0.	3.	1.	1.	25.	0.	1.	2.	0.	11.
		.0( )	.0( )	.1( )	.1( )	.0( )	.0( )	.0(S)	.0( )	.0( )	.0( )
		0.	3.								
		.0( )	.0(S)								
0	20.	36.	147.	25.	235.	24.	89.	25.	41.	56.	11.
		1.0( )	.0( )	1.0( )	.0( )	.9( )	.0( )	.8( )	.1(S)	.0( )	.3( )
		88.	199.	0.	1.	211.	389.	219.	37.	382.	196.
		.9(S)	.0( )	.1( )	.1(S)	.7( )	.0( )	.0( )	1.0( )	.0( )	.0( )
		80.	115.	0.	0.	2.	17.	50.	9.	22.	109.
		1.1( )	.0( )	.0( )	.0( )	.1( )	.4( )	.0( )	.2( )	.1( )	.0( )
		98.	17.	62.	3.	48.	11.	0.	0.	1.	2.
		.0( )	.5( )	.0( )	.2( )	.0( )	.0( )	.0( )	.0( )	.0(S)	.2( )
		18.	60.	47.	3.	12.	25.	32.	55.	82.	14.
		.2(S)	.0( )	.0( )	.2( )	.3( )	.0(S)	.8( )	.1(S)	.0( )	.5( )
		200.	7.	58.	13.	45.	0.	10.	171.	16.	161.
		.0( )	.3( )	.0( )	.3( )	.0( )	.0( )	.1(S)	.0( )	.7( )	.0( )
		3.	29.	16.	12.	98.	1.	14.	30.	4.	77.

		.3( )	.0( )	.5( )	.5( )	.0( )	.1( )	.1(S)	.0( )	.3( )	.0( )
		1.	8.								
		.1( )	.1(S)								
0	25.	174.	467.	171.	792.	97.	221.	78.	104.	163.	41.
		2.2( )	.0( )	3.0( )	.0( )	1.8( )	.0( )	1.4( )	.3(S)	.0( )	.6( )
		192.	361.	2.	5.	694.	995.	554.	162.	899.	506.
		1.9(S)	.0( )	.3( )	.4(S)	1.4( )	.0( )	.0( )	2.2( )	.0( )	.0( )
		238.	292.	1.	13.	59.	161.	291.	129.	172.	363.
		1.9( )	.0( )	.1( )	.2( )	.4( )	1.2( )	.0( )	.8( )	.4( )	.0( )
		316.	133.	249.	36.	206.	47.	0.	0.	20.	34.
		.0( )	1.6( )	.0( )	.8( )	.0( )	.0( )	.0( )	.0( )	.1(S)	.9( )
		110.	292.	207.	36.	85.	111.	149.	186.	319.	97.
		.9(S)	.0( )	.0( )	.8( )	1.0( )	.2(S)	1.8( )	.7(S)	.0( )	1.4( )
		579.	78.	265.	110.	155.	5.	47.	441.	73.	413.
		.0( )	1.2( )	.0( )	.9( )	.0( )	.2( )	.4(S)	.0( )	1.6( )	.0( )
		38.	140.	81.	59.	263.	10.	62.	132.	33.	267.
		1.0( )	.0( )	1.2( )	1.1( )	.0( )	.5( )	.4(S)	.0( )	.8( )	.0( )
		5.	18.								
		.3( )	.6(S)								
0	30.	585.	1155.	556.	1999.	248.	422.	144.	160.	376.	116.
		3.8( )	.0( )	4.6( )	.0( )	2.8( )	.0( )	1.9( )	1.2(S)	.0( )	1.1( )
		383.	660.	12.	16.	1751.	2236.	1243.	495.	1855.	1108.
		3.4(S)	.0( )	.7( )	1.6(S)	2.4( )	.0( )	.0( )	3.9( )	.0( )	.0( )
		575.	670.	68.	219.	425.	720.	1005.	580.	649.	956.
		2.8( )	.0( )	1.2( )	1.0( )	1.3( )	2.4( )	.0( )	2.2( )	1.0( )	.0( )
		826.	471.	672.	173.	558.	130.	0.	3.	116.	186.
		.0( )	3.1( )	.0( )	1.8( )	.0( )	.0( )	.0( )	.2( )	.3(S)	2.2( )

350.	843.	585.	163.	258.	295.	462.	539.	920.	386.
3.2(S)	.0( )	.0( )	1.8( )	1.9( )	.9(S)	3.3( )	2.4(S)	.0( )	3.1( )
1404.	375.	772.	398.	375.	30.	132.	993.	242.	945.
.0( )	2.7( )	.0( )	1.8( )	.0( )	.6( )	1.2(S)	.0( )	2.8( )	.0( )
191.	440.	245.	195.	589.	50.	160.	394.	140.	665.
2.2( )	.0( )	1.9( )	2.0( )	.0( )	1.1( )	1.4(S)	.0( )	1.7( )	.0( )
13.	32.								
.5( )	1.7(S)								

0 35.	1534.	2494.	1671.	3725.	408.	500.	191.	202.	605.	218.
	5.6( )	.0( )	5.8( )	.0( )	3.6( )	.0( )	2.2( )	3.4(S)	.0( )	1.6( )
	408.	418.	28.	33.	3317.	3788.	2020.	1098.	2756.	1979.
	4.4(S)	.0( )	1.0( )	4.0(S)	3.3( )	.0( )	.0( )	5.7( )	.0( )	.0( )
	1235.	1379.	516.	927.	1352.	1760.	2064.	1278.	1397.	1646.
	3.8( )	.0( )	3.5( )	2.2( )	2.2( )	3.5( )	.0( )	3.6( )	1.5( )	.0( )
	1384.	1043.	1263.	492.	1056.	263.	4.	31.	374.	1095.
	.0( )	4.4( )	.0( )	2.9( )	.0( )	.0( )	.1( )	.8( )	3.1(S)	5.5( )
	1836.	2402.	1118.	418.	1284.	1503.	1814.	2092.	1931.	995.
	6.9(S)	.0( )	.0( )	2.9( )	4.2( )	2.5(S)	6.7( )	3.2(S)	.0( )	5.1( )
	2353.	994.	1497.	879.	617.	93.	216.	1768.	592.	1564.
	.0( )	4.5( )	.0( )	2.7( )	.0( )	1.1( )	2.7(S)	.0( )	4.3( )	.0( )
	535.	867.	409.	458.	977.	135.	276.	854.	393.	1203.
	3.6( )	.0( )	2.2( )	2.9( )	.0( )	1.9( )	4.2(S)	.0( )	2.6( )	.0( )
	24.	44.								
	.7( )	3.7(S)								

0 40.	3017.	4320.	3457.	5392.	540.	648.	364.	441.	737.	292.
	7.2( )	.0( )	7.0( )	.0( )	4.0( )	.0( )	3.1( )	5.8(S)	.0( )	1.8( )

400.	295.	77.	93.	4852.	5207.	2732.	1914.	3730.	3073.
4.1(S)	.0( )	1.7( )	7.9(S)	4.0( )	.0( )	.0( )	7.3( )	.0( )	.0( )
2289.	2467.	1522.	2002.	2499.	2799.	2998.	1875.	2267.	2547.
5.0( )	.0( )	5.9( )	3.0( )	3.0( )	4.2( )	.0( )	4.3( )	2.0( )	.0( )
1952.	1680.	1863.	966.	1552.	595.	191.	499.	3534.	3513.
.0( )	5.5( )	.0( )	3.9( )	.0( )	.0( )	.8( )	3.7( )	5.5(S)	8.9( )
4635.	4541.	1592.	713.	2949.	3046.	2930.	2892.	3096.	1816.
8.5(S)	.0( )	.0( )	3.8( )	6.1( )	3.2(S)	8.4( )	3.4(S)	.0( )	6.8( )
3118.	1762.	2188.	1414.	774.	168.	257.	2475.	1102.	2168.
.0( )	5.9( )	.0( )	3.4( )	.0( )	1.5( )	5.0(S)	.0( )	5.6( )	.0( )
1099.	1608.	703.	905.	1669.	650.	1577.	1439.	792.	1696.
4.8( )	.0( )	2.5( )	3.9( )	.0( )	4.0( )	5.7(S)	.0( )	3.5( )	.0( )
36.	49.								
.9( )	6.3(S)								

0 45.

4964.	6161.	5336.	6909.	776.	988.	738.	823.	786.	335.
8.0( )	.0( )	7.9( )	.0( )	4.5( )	.0( )	4.3( )	6.7(S)	.0( )	1.9( )
390.	387.	225.	259.	6133.	6416.	3583.	2914.	4871.	4332.
3.7(S)	.0( )	3.2( )	12.9(S)	4.5( )	.0( )	.0( )	8.8( )	.0( )	.0( )
3610.	3785.	2862.	3354.	3732.	4104.	4474.	3114.	3682.	4140.
6.0( )	.0( )	7.9( )	3.7( )	3.6( )	4.9( )	.0( )	5.3( )	2.7( )	.0( )
2449.	2234.	2371.	1465.	1942.	1691.	1151.	1766.	5300.	5446.
.0( )	6.3( )	.0( )	4.7( )	.0( )	.0( )	2.2( )	6.2( )	5.9(S)	10.1( )
5458.	5623.	1870.	930.	3753.	3791.	4001.	4247.	4118.	2627.
8.8(S)	.0( )	.0( )	4.3( )	6.8( )	3.5(S)	9.7( )	3.6(S)	.0( )	8.1( )
3662.	2419.	2708.	1862.	846.	232.	303.	2833.	1524.	2790.
.0( )	6.9( )	.0( )	3.9( )	.0( )	1.8( )	7.7(S)	.0( )	6.3( )	.0( )
1790.	2508.	977.	1531.	2320.	1249.	1834.	2016.	1245.	2037.

		5.7( )	.0( )	2.7( )	4.8( )	.0( )	4.8( )	5.9(S)	.0( )	4.2( )	.0( )
		44.	55.								
		.9( )	9.2(S)								
0	50.	7024.	7790.	7028.	8299.	978.	1045.	830.	781.	807.	360.
		8.6( )	.0( )	8.6( )	.0( )	4.8( )	.0( )	4.6( )	6.6(S)	.0( )	2.0( )
		396.	461.	333.	384.	7321.	7600.	4476.	3931.	5463.	5025.
		3.9(S)	.0( )	5.1( )	18.2(S)	4.9( )	.0( )	.0( )	10.0( )	.0( )	.0( )
		4382.	4372.	3503.	4960.	5463.	6143.	6578.	5093.	5932.	6489.
		6.4( )	.0( )	8.4( )	4.3( )	4.2( )	5.7( )	.0( )	6.3( )	3.5( )	.0( )
		2820.	2653.	2744.	1873.	2197.	3669.	3021.	3566.	6388.	6318.
		.0( )	6.8( )	.0( )	5.3( )	.0( )	.0( )	3.3( )	7.8( )	6.2(S)	10.5( )
		6748.	6695.	1966.	1032.	4729.	4846.	4769.	4696.	4850.	3276.
		9.1(S)	.0( )	.0( )	4.5( )	7.5( )	4.0(S)	10.3( )	3.7(S)	.0( )	9.0( )
		3981.	2876.	3055.	2163.	891.	288.	347.	3123.	1949.	3516.
		.0( )	7.4( )	.0( )	4.2( )	.0( )	2.1( )	10.3(S)	.0( )	6.7( )	.0( )
		2611.	3362.	1138.	2223.	2973.	1916.	2532.	2471.	1642.	2208.
		6.4( )	.0( )	2.8( )	5.6( )	.0( )	5.4( )	6.3(S)	.0( )	4.7( )	.0( )
		51.	58.								
		1.0( )	12.0(S)								
0	55.	8623.	9179.	8492.	9520.	1007.	978.	794.	828.	816.	379.
		8.9( )	.0( )	9.2( )	.0( )	4.9( )	.0( )	4.5( )	6.7(S)	.0( )	2.0( )
		411.	517.	416.	503.	8514.	8777.	5264.	4823.	6559.	6206.
		4.5(S)	.0( )	5.5( )	23.8(S)	5.3( )	.0( )	.0( )	10.8( )	.0( )	.0( )
		5639.	5936.	5138.	7126.	7669.	8456.	9018.	7498.	8242.	8614.
		7.0( )	.0( )	9.0( )	5.1( )	4.7( )	6.4( )	.0( )	7.3( )	4.3( )	.0( )
		3042.	2916.	2963.	2146.	2332.	5572.	4849.	5164.	6993.	7105.
		.0( )	7.0( )	.0( )	5.6( )	.0( )	.0( )	4.0( )	8.9( )	6.3(S)	10.9( )

		7050.	7130.	1954.	1051.	5176.	5127.	5238.	5415.	5301.	3730.
		9.2(S)	.0( )	.0( )	4.6( )	7.8( )	4.1(S)	10.7( )	3.8(S)	.0( )	9.5( )
		4192.	3226.	3393.	2316.	1076.	500.	881.	3513.	2481.	4184.
		.0( )	7.9( )	.0( )	4.4( )	.0( )	2.8( )	10.9(S)	.0( )	7.1( )	.0( )
		3379.	3959.	1203.	2756.	3479.	2451.	2673.	2759.	1918.	2249.
		7.0( )	.0( )	2.8( )	6.1( )	.0( )	5.8( )	6.4(S)	.0( )	5.0( )	.0( )
		56.	62.								
		1.1( )	14.7(S)								
1	0.	9980.	10458.	9837.	10822.	988.	991.	832.	813.	821.	403.
		9.2( )	.0( )	9.6( )	.0( )	4.9( )	.0( )	4.6( )	6.7(S)	.0( )	2.1( )
		457.	872.	773.	1010.	9834.	10149.	6195.	5830.	8853.	8556.
		6.3(S)	.0( )	6.3( )	27.7(S)	5.6( )	.0( )	.0( )	11.5( )	.0( )	.0( )
		8055.	8344.	7613.	9525.	10028.	10563.	10868.	9360.	9775.	9978.
		8.0( )	.0( )	9.7( )	5.8( )	5.1( )	6.9( )	.0( )	7.9( )	4.7( )	.0( )
		3134.	3037.	3052.	2296.	2383.	6845.	6079.	6276.	7397.	7313.
		.0( )	7.2( )	.0( )	5.7( )	.0( )	.0( )	4.5( )	9.5( )	6.4(S)	11.0( )
		7464.	7420.	1887.	1026.	5533.	5635.	5556.	5445.	5561.	4032.
		9.4(S)	.0( )	.0( )	4.5( )	8.1( )	4.2(S)	10.8( )	3.8(S)	.0( )	9.9( )
		4325.	3476.	3551.	2354.	1197.	655.	563.	3954.	3053.	4662.
		.0( )	8.1( )	.0( )	4.4( )	.0( )	3.2( )	10.7(S)	.0( )	7.5( )	.0( )
		3943.	4315.	1211.	3104.	3722.	2740.	2941.	2901.	2070.	2217.
		7.4( )	.0( )	2.8( )	6.2( )	.0( )	6.0( )	6.5(S)	.0( )	5.2( )	.0( )
		60.	65.								
		1.1( )	17.3(S)								
1	5.	11366.	11883.	11315.	12455.	981.	968.	829.	848.	849.	450.
		9.5( )	.0( )	10.1( )	.0( )	4.9( )	.0( )	4.6( )	6.7(S)	.0( )	2.2( )

563.	1317.	1218.	1279.	11474.	11883.	7493.	7176.	11112.	10852.
10.3(S)	.0( )	6.9( )	29.2(S)	6.1( )	.0( )	.0( )	12.2( )	.0( )	.0( )
10404.	10702.	10027.	11302.	11523.	11748.	11899.	10416.	10638.	10748.
8.7( )	.0( )	10.3( )	6.3( )	5.3( )	7.1( )	.0( )	8.2( )	4.9( )	.0( )
3148.	3064.	3062.	2359.	2386.	7599.	6817.	6909.	7392.	7475.
.0( )	7.2( )	.0( )	5.8( )	.0( )	.0( )	4.7( )	9.9( )	6.4(S)	11.1( )
7398.	7436.	1794.	980.	5642.	5556.	5630.	5757.	5658.	4178.
9.3(S)	.0( )	.0( )	4.4( )	8.1( )	4.2(S)	10.9( )	3.9(S)	.0( )	10.0( )
4279.	3521.	3489.	2327.	1162.	652.	739.	4390.	3595.	4989.
.0( )	8.2( )	.0( )	4.4( )	.0( )	3.2( )	10.8(S)	.0( )	7.8( )	.0( )
4340.	4623.	1198.	3425.	3828.	2895.	2914.	2949.	2129.	2165.
7.6( )	.0( )	2.8( )	6.3( )	.0( )	6.1( )	6.5(S)	.0( )	5.2( )	.0( )
63.	67.								
1.1( )	19.7(S)								

1 10.

12967.	13538.	13034.	14269.	1022.	1090.	984.	1024.	1070.	696.
9.8( )	.0( )	10.6( )	.0( )	4.9( )	.0( )	4.9( )	6.9(S)	.0( )	2.7( )
1388.	1377.	1329.	1335.	13247.	13693.	8928.	8672.	12635.	12440.
12.9(S)	.0( )	7.0( )	29.5(S)	6.4( )	.0( )	.0( )	12.8( )	.0( )	.0( )
12047.	12163.	11553.	12110.	12207.	12315.	12375.	10923.	11003.	11024.
9.2( )	.0( )	10.6( )	6.5( )	5.4( )	7.2( )	.0( )	8.4( )	5.0( )	.0( )
3086.	3027.	3009.	2365.	2347.	7938.	7157.	7194.	7417.	7336.
.0( )	7.2( )	.0( )	5.8( )	.0( )	.0( )	4.8( )	10.0( )	6.4(S)	11.0( )
7349.	7306.	1685.	925.	5621.	5704.	5639.	5514.	5599.	4181.
9.3(S)	.0( )	.0( )	4.3( )	8.1( )	4.2(S)	10.9( )	3.9(S)	.0( )	10.0( )
4093.	3443.	3401.	2269.	1132.	658.	582.	4765.	4067.	5193.
.0( )	8.1( )	.0( )	4.3( )	.0( )	3.2( )	10.7(S)	.0( )	8.0( )	.0( )
4624.	4803.	1178.	3626.	3803.	2929.	2959.	2931.	2130.	2097.

```
          7.7( )     .0( )    2.8( )    6.4( )     .0( )    6.1( )    6.5(S)     .0( )    5.2( )     .0( )

         66.       69.
          1.1( )   21.8(S)

1   15.  14749.    15326.    14889.    16121.     1172.     1299.     1222.     1348.     1388.     1043.
         10.1( )     .0( )   11.1( )     .0( )    5.1( )     .0( )    5.3( )    7.2(S)     .0( )    3.3( )

         1375.     1377.     1333.     1329.    14949.    15260.    10225.    10031.    13182.    13036.
         12.9(S)     .0( )    7.0( )   29.4(S)    6.7( )     .0( )     .0( )   13.3( )     .0( )     .0( )

        12703.    12752.    12212.    12415.    12436.    12438.    12423.    11023.    11002.    10981.
          9.4( )     .0( )   10.8( )    6.6( )    5.5( )    7.2( )     .0( )    8.4( )    5.0( )     .0( )

         2979.     2933.     2903.     2325.     2272.     8002.     7232.     7224.     7073.     7130.
           .0( )    7.1( )     .0( )    5.8( )     .0( )     .0( )    4.8( )   10.0( )    6.3(S)   10.9( )

         7022.     7037.     1561.      861.     5476.     5372.     5416.     5496.     5410.     4074.
         9.2(S)     .0( )     .0( )    4.1( )    8.0( )    4.2(S)   10.8( )    3.9(S)     .0( )    9.9( )

         3861.     3320.     3244.     2194.     1050.      620.      625.     5035.     4440.     5262.
           .0( )    8.0( )     .0( )    4.2( )     .0( )    3.1( )   10.7(S)     .0( )    8.2( )     .0( )

         4776.     4843.     1146.     3697.     3717.     2909.     2853.     2862.     2091.     2003.
          7.8( )     .0( )    2.8( )    6.4( )     .0( )    6.1( )    6.5(S)     .0( )    5.2( )     .0( )

         68.       71.
          1.2( )   23.8(S)

1   20.  16486.    16977.    16605.    17578.     1395.     1545.     1490.     1522.     1528.     1213.
         10.4( )     .0( )   11.6( )     .0( )    5.3( )     .0( )    5.6( )    7.3(S)     .0( )    3.5( )

         1351.     1333.     1309.     1299.    16183.    16394.    11203.    11062.    13232.    13128.
         12.8(S)     .0( )    7.0( )   29.3(S)    6.9( )     .0( )     .0( )   13.7( )     .0( )     .0( )

        12852.    12840.    12370.    12346.    12298.    12231.    12169.    10840.    10753.    10686.
          9.4( )     .0( )   10.8( )    6.5( )    5.5( )    7.2( )     .0( )    8.3( )    4.9( )     .0( )

         2830.     2800.     2761.     2253.     2174.     7856.     7101.     7059.     6805.     6729.
           .0( )    6.9( )     .0( )    5.7( )     .0( )     .0( )    4.8( )    9.9( )    6.3(S)   10.7( )
```

6648.	6601.	1425.	790.	5177.	5236.	5183.	5054.	5116.	3876.
9.1(S)	.0( )	.0( )	4.0( )	7.8( )	4.1(S)	10.6( )	3.8(S)	.0( )	9.7( )
3597.	3156.	3073.	2097.	975.	589.	528.	5191.	4699.	5205.
.0( )	7.8( )	.0( )	4.2( )	.0( )	3.0( )	10.6(S)	.0( )	8.3( )	.0( )
4797.	4765.	1098.	3667.	3564.	2829.	2772.	2749.	2020.	1886.
7.8( )	.0( )	2.7( )	6.4( )	.0( )	6.0( )	6.4(S)	.0( )	5.1( )	.0( )
70.	73.								
1.2( )	25.6(S)								

1 25.

17870.	18199.	17885.	18517.	1556.	1596.	1555.	1558.	1562.	1276.
10.6( )	.0( )	11.9( )	.0( )	5.5( )	.0( )	5.6( )	7.4(S)	.0( )	3.6( )
1309.	1292.	1269.	1256.	16962.	17071.	11828.	11725.	12940.	12862.
12.7(S)	.0( )	6.9( )	29.0(S)	7.0( )	.0( )	.0( )	13.9( )	.0( )	.0( )
12635.	12593.	12187.	12003.	11917.	11801.	11702.	10458.	10318.	10229.
9.4( )	.0( )	10.8( )	6.4( )	5.4( )	7.1( )	.0( )	8.2( )	4.8( )	.0( )
2666.	2645.	2601.	2158.	2063.	7563.	6824.	6759.	6266.	6304.
.0( )	6.8( )	.0( )	5.6( )	.0( )	.0( )	4.7( )	9.8( )	6.1(S)	10.5( )
6179.	6185.	1284.	716.	4901.	4800.	4806.	4852.	4779.	3640.
9.0(S)	.0( )	.0( )	3.8( )	7.6( )	4.0(S)	10.4( )	3.7(S)	.0( )	9.4( )
3322.	2967.	2865.	1978.	886.	542.	516.	5243.	4840.	5048.
.0( )	7.6( )	.0( )	4.0( )	.0( )	2.9( )	10.6(S)	.0( )	8.4( )	.0( )
4710.	4603.	1038.	3564.	3379.	2716.	2610.	2605.	1924.	1753.
7.8( )	.0( )	2.7( )	6.4( )	.0( )	5.9( )	6.3(S)	.0( )	5.0( )	.0( )
72.	74.								
1.2( )	27.1(S)								

1 30.

18720.	18882.	18616.	18886.	1587.	1584.	1552.	1548.	1541.	1282.
10.8( )	.0( )	12.0( )	.0( )	5.5( )	.0( )	5.6( )	7.4(S)	.0( )	3.6( )

1263.	1242.	1219.	1202.	17298.	17325.	12124.	12044.	12444.	12381.
12.6(S)	.0( )	6.9( )	28.7(S)	7.0( )	.0( )	.0( )	14.0( )	.0( )	.0( )
12195.	12126.	11776.	11488.	11371.	11220.	11098.	9943.	9775.	9666.
9.3( )	.0( )	10.7( )	6.3( )	5.3( )	7.0( )	.0( )	8.1( )	4.7( )	.0( )
2496.	2480.	2435.	2049.	1944.	7170.	6451.	6371.	5881.	5816.
.0( )	6.6( )	.0( )	5.5( )	.0( )	.0( )	4.6( )	9.6( )	6.1(S)	10.3( )
5697.	5649.	1151.	643.	4498.	4537.	4498.	4378.	4424.	3384.
8.8(S)	.0( )	.0( )	3.6( )	7.4( )	3.9(S)	10.2( )	3.6(S)	.0( )	9.1( )
3047.	2759.	2652.	1845.	807.	502.	451.	5201.	4872.	4828.
.0( )	7.3( )	.0( )	3.9( )	.0( )	2.8( )	10.6(S)	.0( )	8.4( )	.0( )
4546.	4388.	971.	3416.	3168.	2571.	2465.	2445.	1811.	1622.
7.7( )	.0( )	2.7( )	6.3( )	.0( )	5.8( )	6.3(S)	.0( )	4.9( )	.0( )
75.	81.								
1.2( )	28.3(S)								

1 35.

19040.	19061.	18834.	18831.	1564.	1539.	1514.	1498.	1492.	1257.
10.8( )	.0( )	12.1( )	.0( )	5.5( )	.0( )	5.6( )	7.3(S)	.0( )	3.6( )
1208.	1183.	1160.	1140.	17267.	17227.	12139.	12072.	11813.	11760.
12.4(S)	.0( )	6.8( )	28.4(S)	7.0( )	.0( )	.0( )	14.0( )	.0( )	.0( )
11606.	11527.	11222.	10862.	10730.	10559.	10424.	9354.	9166.	9049.
9.1( )	.0( )	10.6( )	6.2( )	5.2( )	6.9( )	.0( )	7.9( )	4.5( )	.0( )
2328.	2316.	2271.	1935.	1824.	6721.	6029.	5942.	5321.	5347.
.0( )	6.4( )	.0( )	5.3( )	.0( )	.0( )	4.5( )	9.3( )	5.9(S)	10.0( )
5223.	5230.	1028.	574.	4202.	4116.	4102.	4133.	4073.	3125.
8.7(S)	.0( )	.0( )	3.4( )	7.1( )	3.7(S)	9.8( )	3.6(S)	.0( )	8.8( )
2786.	2549.	2442.	1711.	731.	459.	426.	5088.	4815.	4573.
.0( )	7.0( )	.0( )	3.8( )	.0( )	2.7( )	10.6(S)	.0( )	8.4( )	.0( )
4335.	4148.	905.	3243.	2955.	2416.	2292.	2283.	1695.	1504.

7.6( ) .0( ) 2.6( ) 6.3( ) .0( ) 5.7( ) 6.2(S) .0( ) 4.8( ) .0( )

84. 98.
1.3( ) 29.3(S)

1 40. 18938. 18859. 18662. 18455. 1512. 1475. 1454. 1437. 1427. 1213.
10.8( ) .0( ) 12.1( ) .0( ) 5.4( ) .0( ) 5.5( ) 7.2(S) .0( ) 3.5( )

1145. 1118. 1095. 1074. 16943. 16852. 11931. 11872. 11115. 11068.
12.2(S) .0( ) 6.7( ) 28.0(S) 7.0( ) .0( ) .0( ) 13.9( ) .0( ) .0( )

10942. 10855. 10587. 10189. 10048. 9867. 9725. 8733. 8540. 8420.
8.9( ) .0( ) 10.4( ) 6.0( ) 5.1( ) 6.7( ) .0( ) 7.7( ) 4.4( ) .0( )

2168. 2157. 2113. 1818. 1707. 6251. 5589. 5497. 4939. 4887.
.0( ) 6.2( ) .0( ) 5.2( ) .0( ) .0( ) 4.3( ) 9.1( ) 5.8(S) 9.8( )

4762. 4715. 919. 513. 3796. 3817. 3793. 3703. 3740. 2875.
8.6(S) .0( ) .0( ) 3.2( ) 6.8( ) 3.5(S) 9.4( ) 3.5(S) .0( ) 8.4( )

2545. 2349. 2248. 1584. 665. 422. 381. 4921. 4692. 4305.
.0( ) 6.8( ) .0( ) 3.6( ) .0( ) 2.5( ) 10.5(S) .0( ) 8.3( ) .0( )

4102. 3906. 844. 3062. 2747. 2260. 2145. 2130. 1582. 1401.
7.4( ) .0( ) 2.6( ) 6.2( ) .0( ) 5.6( ) 6.1(S) .0( ) 4.6( ) .0( )

97. 111.
1.4( ) 30.0(S)

1 45. 18530. 18376. 18205. 17850. 1446. 1404. 1385. 1364. 1354. 1159.
10.7( ) .0( ) 12.0( ) .0( ) 5.4( ) .0( ) 5.5( ) 7.2(S) .0( ) 3.5( )

1079. 1052. 1029. 1007. 16405. 16275. 11558. 11503. 10389. 10345.
12.0(S) .0( ) 6.6( ) 27.7(S) 6.9( ) .0( ) .0( ) 13.8( ) .0( ) .0( )

10246. 10158. 9922. 9505. 9362. 9177. 9036. 8113. 7921. 7803.
8.7( ) .0( ) 10.3( ) 5.8( ) 5.0( ) 6.6( ) .0( ) 7.5( ) 4.2( ) .0( )

2016. 2006. 1964. 1704. 1594. 5786. 5155. 5065. 4446. 4463.
.0( ) 6.0( ) .0( ) 5.1( ) .0( ) .0( ) 4.2( ) 8.8( ) 5.7(S) 9.5( )

4348.	4359.	823.	458.	3537.	3473.	3454.	3478.	3430.	2640.
8.4(S)	.0( )	.0( )	3.0( )	6.6( )	3.4(S)	9.0( )	3.5(S)	.0( )	8.1( )
2328.	2166.	2071.	1467.	604.	386.	354.	4717.	4522.	4043.
.0( )	6.5( )	.0( )	3.5( )	.0( )	2.4( )	10.5(S)	.0( )	8.2( )	.0( )
3868.	3674.	787.	2887.	2555.	2113.	1998.	1988.	1478.	1308.
7.3( )	.0( )	2.5( )	6.1( )	.0( )	5.5( )	6.0(S)	.0( )	4.5( )	.0( )
108.	120.								
1.4( )	30.6(S)								

1 50.	17907.	17701.	17552.	17095.	1373.	1326.	1311.	1288.	1278.	1099.
	10.6( )	.0( )	11.8( )	.0( )	5.3( )	.0( )	5.4( )	7.1(S)	.0( )	3.4( )
	1014.	988.	965.	944.	15722.	15567.	11074.	11023.	9680.	9638.
	11.8(S)	.0( )	6.6( )	27.3(S)	6.8( )	.0( )	.0( )	13.7( )	.0( )	.0( )
	9555.	9469.	9259.	8837.	8697.	8514.	8374.	7517.	7332.	7219.
	8.5( )	.0( )	10.1( )	5.6( )	4.8( )	6.4( )	.0( )	7.3( )	4.0( )	.0( )
	1875.	1864.	1824.	1594.	1489.	5344.	4743.	4656.	4130.	4090.
	.0( )	5.8( )	.0( )	4.9( )	.0( )	.0( )	4.0( )	8.6( )	5.6(S)	9.3( )
	3982.	3940.	739.	410.	3201.	3208.	3194.	3119.	3147.	2425.
	8.3(S)	.0( )	.0( )	2.9( )	6.3( )	3.3(S)	8.7( )	3.4(S)	.0( )	7.8( )
	2137.	2003.	1920.	1361.	559.	364.	348.	4493.	4327.	3795.
	.0( )	6.3( )	.0( )	3.4( )	.0( )	2.3( )	10.4(S)	.0( )	8.1( )	.0( )
	3644.	3463.	736.	2727.	2378.	1975.	1869.	1857.	1382.	1221.
	7.2( )	.0( )	2.5( )	6.1( )	.0( )	5.4( )	5.9(S)	.0( )	4.4( )	.0( )
	117.	125.								
	1.5( )	30.9(S)								

1 55.	17144.	16902.	16773.	16252.	1297.	1251.	1235.	1211.	1201.	1037.
	10.5( )	.0( )	11.6( )	.0( )	5.2( )	.0( )	5.3( )	7.0(S)	.0( )	3.3( )

949.	929.	906.	886.	14955.	14783.	10525.	10476.	9002.	8962.
11.7(S)	.0( )	6.5( )	27.0(S)	6.7( )	.0( )	.0( )	13.5( )	.0( )	.0( )
8888.	8807.	8619.	8203.	8069.	7891.	7756.	6958.	6785.	6678.
8.3( )	.0( )	10.0( )	5.4( )	4.7( )	6.3( )	.0( )	7.1( )	3.8( )	.0( )
1744.	1733.	1696.	1492.	1393.	4935.	4363.	4282.	3731.	3743.
.0( )	5.6( )	.0( )	4.8( )	.0( )	.0( )	3.9( )	8.3( )	5.5(S)	9.1( )
3632.	3644.	665.	368.	2979.	2934.	2914.	2933.	2894.	2232.
8.2(S)	.0( )	.0( )	2.7( )	6.1( )	3.2(S)	8.3( )	3.4(S)	.0( )	7.5( )
1972.	1864.	1793.	1265.	529.	352.	344.	4258.	4117.	3552.
.0( )	6.1( )	.0( )	3.2( )	.0( )	2.3( )	10.1(S)	.0( )	8.0( )	.0( )
3423.	3230.	688.	2542.	2216.	1849.	1745.	1736.	1292.	1141.
7.0( )	.0( )	2.5( )	5.9( )	.0( )	5.3( )	5.8(S)	.0( )	4.3( )	.0( )
123.	128.								
1.5( )	31.1(S)								

2 0.

16300.	16037.	15926.	15369.	1223.	1176.	1162.	1137.	1127.	977.
10.4( )	.0( )	11.4( )	.0( )	5.1( )	.0( )	5.2( )	7.0(S)	.0( )	3.2( )
893.	875.	852.	833.	14146.	13964.	9945.	9897.	8367.	8327.
11.5(S)	.0( )	6.4( )	26.7(S)	6.5( )	.0( )	.0( )	13.3( )	.0( )	.0( )
8260.	8185.	8015.	7613.	7487.	7317.	7188.	6445.	6284.	6185.
8.0( )	.0( )	9.8( )	5.2( )	4.6( )	6.1( )	.0( )	6.9( )	3.7( )	.0( )
1625.	1614.	1580.	1398.	1306.	4560.	4016.	3939.	3473.	3443.
.0( )	5.4( )	.0( )	4.6( )	.0( )	.0( )	3.7( )	8.1( )	5.5(S)	8.9( )
3355.	3318.	601.	332.	2718.	2717.	2710.	2649.	2672.	2064.
8.1(S)	.0( )	.0( )	2.6( )	5.9( )	3.1(S)	8.1( )	3.3(S)	.0( )	7.2( )
1836.	1744.	1680.	1176.	504.	345.	337.	4019.	3893.	3276.
.0( )	5.9( )	.0( )	3.1( )	.0( )	2.3( )	9.7(S)	.0( )	7.9( )	.0( )
3169.	2927.	644.	2283.	2068.	1731.	1635.	1625.	1209.	1067.

		6.9( )	.0( )	2.4( )	5.7( )	.0( )	5.2( )	5.8(S)	.0( )	4.2( )	.0( )
		127.	130.								
		1.6( )	31.1(S)								
2	5.	15408.	15126.	15041.	14455.	1149.	1101.	1090.	1064.	1054.	917.
		10.2( )	.0( )	11.2( )	.0( )	5.1( )	.0( )	5.1( )	6.9(S)	.0( )	3.1( )
		829.	803.	802.	784.	13307.	13110.	9344.	9306.	7753.	7726.
		11.4(S)	.0( )	6.3( )	26.5(S)	6.4( )	.0( )	.0( )	13.1( )	.0( )	.0( )
		7670.	7599.	7455.	7069.	6949.	6783.	6666.	5975.	5826.	5732.
		7.8( )	.0( )	9.7( )	5.1( )	4.5( )	6.0( )	.0( )	6.7( )	3.5( )	.0( )
		1510.	1504.	1471.	1311.	1223.	4222.	3703.	3633.	3164.	3172.
		.0( )	5.3( )	.0( )	4.5( )	.0( )	.0( )	3.6( )	7.9( )	5.4(S)	8.6( )
		3069.	3081.	541.	299.	2540.	2509.	2490.	2505.	2474.	1916.
		8.1(S)	.0( )	.0( )	2.4( )	5.7( )	3.0(S)	7.8( )	3.3(S)	.0( )	7.0( )
		1708.	1635.	1573.	1094.	480.	337.	329.	3766.	3655.	2997.
		.0( )	5.7( )	.0( )	3.0( )	.0( )	2.2( )	9.2(S)	.0( )	7.8( )	.0( )
		2910.	2704.	603.	2101.	1927.	1622.	1528.	1519.	1132.	995.
		6.7( )	.0( )	2.4( )	5.5( )	.0( )	5.1( )	5.7(S)	.0( )	4.0( )	.0( )
		129.	129.								
		1.6( )	31.1(S)								
2	10.	14489.	14196.	14131.	13522.	1075.	1028.	1020.	989.	979.	857.
		10.1( )	.0( )	10.9( )	.0( )	5.0( )	.0( )	5.0( )	6.8(S)	.0( )	3.0( )
		769.	754.	754.	737.	12447.	12241.	8740.	8717.	7172.	7155.
		11.3(S)	.0( )	6.2( )	26.2(S)	6.2( )	.0( )	.0( )	12.9( )	.0( )	.0( )
		7112.	7046.	6931.	6552.	6432.	6260.	6184.	5544.	5405.	5318.
		7.6( )	.0( )	9.6( )	4.9( )	4.4( )	5.8( )	.0( )	6.5( )	3.4( )	.0( )
		1402.	1399.	1366.	1228.	1143.	3916.	3422.	3356.	2956.	2933.
		.0( )	5.1( )	.0( )	4.4( )	.0( )	.0( )	3.5( )	7.7( )	5.3(S)	8.4( )

2855.	2815.	483.	268.	2332.	2326.	2321.	2270.	2289.	1782.
8.0(S)	.0( )	.0( )	2.3( )	5.5( )	2.9(S)	7.5( )	3.2(S)	.0( )	6.7( )
1583.	1529.	1468.	1014.	454.	329.	319.	3501.	3414.	2756.
.0( )	5.5( )	.0( )	2.9( )	.0( )	2.2( )	8.6(S)	.0( )	7.7( )	.0( )
2690.	2512.	563.	1948.	1790.	1518.	1426.	1417.	1058.	923.
6.5( )	.0( )	2.4( )	5.3( )	.0( )	5.0( )	5.6(S)	.0( )	3.9( )	.0( )
128.	127.								
1.6( )	31.0(S)								

2 15.

13564.	13264.	13214.	12598.	993.	931.	926.	919.	910.	802.
9.9( )	.0( )	10.7( )	.0( )	4.9( )	.0( )	4.8( )	6.8(S)	.0( )	2.9( )
724.	708.	708.	691.	11605.	11397.	8152.	8138.	6628.	6618.
11.2(S)	.0( )	6.2( )	26.0(S)	6.1( )	.0( )	.0( )	12.6( )	.0( )	.0( )
6587.	6526.	6441.	6077.	5971.	5827.	5739.	5150.	5022.	4941.
7.4( )	.0( )	9.4( )	4.7( )	4.3( )	5.6( )	.0( )	6.4( )	3.2( )	.0( )
1299.	1297.	1266.	1149.	1064.	3641.	3172.	3113.	2726.	2723.
.0( )	4.9( )	.0( )	4.3( )	.0( )	.0( )	3.4( )	7.5( )	5.3(S)	8.3( )
2628.	2599.	428.	239.	2171.	2148.	2130.	2139.	2114.	1655.
7.7(S)	.0( )	.0( )	2.2( )	5.3( )	2.8(S)	7.2( )	3.2(S)	.0( )	6.5( )
1465.	1425.	1364.	936.	428.	319.	308.	3245.	3181.	2546.
.0( )	5.3( )	.0( )	2.8( )	.0( )	2.2( )	8.0(S)	.0( )	7.5( )	.0( )
2496.	2332.	524.	1809.	1658.	1418.	1325.	1317.	985.	851.
6.4( )	.0( )	2.3( )	5.1( )	.0( )	5.0( )	5.6(S)	.0( )	3.8( )	.0( )
127.	124.								
1.6( )	30.8(S)								

2 20.

12650.	12347.	12310.	11693.	916.	873.	870.	855.	847.	752.
9.8( )	.0( )	10.4( )	.0( )	4.8( )	.0( )	4.7( )	6.7(S)	.0( )	2.8( )

679.	664.	664.	646.	10778.	10597.	7589.	7580.	6142.	6136.
11.0(S)	.0( )	6.1( )	25.7(S)	5.9( )	.0( )	.0( )	12.4( )	.0( )	.0( )
6113.	6061.	5997.	5657.	5558.	5405.	5330.	4789.	4670.	4593.
7.2( )	.0( )	9.3( )	4.6( )	4.2( )	5.5( )	.0( )	6.2( )	3.1( )	.0( )
1199.	1199.	1168.	1071.	988.	3394.	2949.	2893.	2552.	2509.
.0( )	4.7( )	.0( )	4.1( )	.0( )	.0( )	3.3( )	7.3( )	5.1(S)	8.0( )
2406.	2368.	377.	211.	1991.	1980.	1977.	1934.	1949.	1536.
7.5(S)	.0( )	.0( )	2.0( )	5.1( )	2.7(S)	6.9( )	3.2(S)	.0( )	6.3( )
1354.	1324.	1264.	861.	403.	308.	295.	3008.	2961.	2354.
.0( )	5.2( )	.0( )	2.7( )	.0( )	2.1( )	7.2(S)	.0( )	7.4( )	.0( )
2317.	2162.	484.	1677.	1531.	1321.	1227.	1219.	915.	781.
6.2( )	.0( )	2.3( )	5.0( )	.0( )	4.9( )	5.5(S)	.0( )	3.7( )	.0( )
124.	120.								
1.5( )	30.6(S)								

2 25.

11766.	11470.	11441.	10849.	852.	808.	805.	795.	787.	705.
9.6( )	.0( )	10.2( )	.0( )	4.7( )	.0( )	4.5( )	6.7(S)	.0( )	2.8( )
635.	620.	620.	602.	9997.	9847.	7058.	7053.	5711.	5707.
10.9(S)	.0( )	6.0( )	25.5(S)	5.7( )	.0( )	.0( )	12.1( )	.0( )	.0( )
5690.	5643.	5593.	5265.	5168.	5023.	4948.	4453.	4338.	4263.
7.0( )	.0( )	9.2( )	4.4( )	4.1( )	5.3( )	.0( )	6.0( )	3.0( )	.0( )
1104.	1104.	1073.	997.	916.	3159.	2738.	2681.	2298.	2273.
.0( )	4.6( )	.0( )	4.0( )	.0( )	.0( )	3.2( )	7.1( )	4.9(S)	7.7( )
2200.	2175.	332.	186.	1844.	1826.	1810.	1815.	1794.	1423.
7.3(S)	.0( )	.0( )	1.9( )	4.9( )	2.7(S)	6.7( )	3.2(S)	.0( )	6.0( )
1247.	1226.	1165.	790.	376.	296.	282.	2789.	2754.	2176.
.0( )	5.0( )	.0( )	2.6( )	.0( )	2.1( )	6.4(S)	.0( )	7.3( )	.0( )
2148.	2000.	447.	1553.	1412.	1227.	1133.	1125.	846.	715.

		6.0( )	.0( )	2.2( )	4.8( )	.0( )	4.8( )	5.5(S)	.0( )	3.6( )	.0( )
		119.	114.								
		1.5( )	30.2(S)								
2	30.	10940.	10660.	10638.	10089.	791.	749.	747.	735.	727.	661.
		9.4( )	.0( )	9.9( )	.0( )	4.6( )	.0( )	4.3( )	6.6(S)	.0( )	2.7( )
		593.	579.	579.	561.	9298.	9147.	6561.	6558.	5313.	5311.
		10.8(S)	.0( )	5.9( )	25.3(S)	5.5( )	.0( )	.0( )	11.9( )	.0( )	.0( )
		5299.	5255.	5216.	4892.	4798.	4654.	4582.	4128.	4014.	3937.
		6.9( )	.0( )	9.0( )	4.3( )	4.0( )	5.1( )	.0( )	5.9( )	2.8( )	.0( )
		1011.	1011.	980.	926.	848.	2926.	2528.	2469.	2105.	2078.
		.0( )	4.4( )	.0( )	3.9( )	.0( )	.0( )	3.0( )	6.9( )	4.7(S)	7.4( )
		2013.	1981.	291.	164.	1690.	1677.	1675.	1638.	1649.	1316.
		7.1(S)	.0( )	.0( )	1.8( )	4.7( )	2.6(S)	6.4( )	3.1(S)	.0( )	5.8( )
		1145.	1130.	1070.	723.	347.	283.	268.	2585.	2561.	2008.
		.0( )	4.8( )	.0( )	2.5( )	.0( )	2.0( )	5.6(S)	.0( )	7.2( )	.0( )
		1987.	1847.	412.	1435.	1299.	1136.	1043.	1036.	780.	653.
		5.9( )	.0( )	2.2( )	4.7( )	.0( )	4.7( )	5.4(S)	.0( )	3.5( )	.0( )
		114.	107.								
		1.5( )	29.8(S)								
2	35.	10178.	9910.	9893.	9363.	731.	689.	689.	678.	670.	624.
		9.3( )	.0( )	9.7( )	.0( )	4.4( )	.0( )	4.2( )	6.5(S)	.0( )	2.6( )
		572.	544.	544.	530.	8632.	8490.	6092.	6090.	4926.	4926.
		10.7(S)	.0( )	5.8( )	25.0(S)	5.3( )	.0( )	.0( )	11.6( )	.0( )	.0( )
		4917.	4873.	4843.	4487.	4369.	4301.	4229.	3813.	3703.	3631.
		6.7( )	.0( )	8.9( )	4.2( )	3.8( )	5.0( )	.0( )	5.7( )	2.7( )	.0( )
		927.	927.	900.	860.	786.	2704.	2328.	2273.	1921.	1899.
		.0( )	4.2( )	.0( )	3.7( )	.0( )	.0( )	2.9( )	6.8( )	4.5(S)	7.1( )

		1835.	1813.	256.	144.	1557.	1543.	1528.	1530.	1513.	1214.
		6.9(S)	.0( )	.0( )	1.6( )	4.5( )	2.6(S)	6.1( )	3.1(S)	.0( )	5.6( )
		1047.	1036.	976.	662.	314.	269.	253.	2398.	2380.	1852.
		.0( )	4.6( )	.0( )	2.3( )	.0( )	2.0( )	4.8(S)	.0( )	7.0( )	.0( )
		1837.	1705.	380.	1325.	1198.	1055.	971.	952.	718.	595.
		5.7( )	.0( )	2.2( )	4.5( )	.0( )	4.6( )	5.3(S)	.0( )	3.4( )	.0( )
		107.	100.								
		1.4( )	29.4(S)								
2	40.	9465.	9203.	9190.	8681.	677.	644.	644.	637.	633.	598.
		9.1( )	.0( )	9.4( )	.0( )	4.3( )	.0( )	4.1( )	6.5(S)	.0( )	2.6( )
		566.	526.	526.	522.	8004.	7864.	5641.	5641.	4550.	4550.
		10.5(S)	.0( )	5.8( )	24.7(S)	5.1( )	.0( )	.0( )	11.3( )	.0( )	.0( )
		4543.	4503.	4479.	4131.	4057.	3968.	3902.	3521.	3420.	3353.
		6.5( )	.0( )	8.8( )	4.0( )	3.7( )	4.8( )	.0( )	5.5( )	2.6( )	.0( )
		853.	853.	829.	798.	728.	2500.	2144.	2091.	1755.	1733.
		.0( )	4.1( )	.0( )	3.6( )	.0( )	.0( )	2.8( )	6.6( )	4.4(S)	6.8( )
		1675.	1648.	225.	126.	1424.	1410.	1408.	1377.	1386.	1117.
		6.7(S)	.0( )	.0( )	1.5( )	4.4( )	2.5(S)	5.9( )	3.1(S)	.0( )	5.4( )
		956.	948.	894.	606.	288.	255.	239.	2223.	2210.	1708.
		.0( )	4.4( )	.0( )	2.2( )	.0( )	1.9( )	4.0(S)	.0( )	6.9( )	.0( )
		1697.	1575.	351.	1224.	1104.	979.	890.	874.	660.	542.
		5.6( )	.0( )	2.1( )	4.4( )	.0( )	4.5( )	5.2(S)	.0( )	3.2( )	.0( )
		100.	92.								
		1.4( )	28.9(S)								
2	45.	8793.	8539.	8530.	8041.	638.	616.	616.	612.	609.	581.
		9.0( )	.0( )	9.2( )	.0( )	4.2( )	.0( )	4.0( )	6.5(S)	.0( )	2.5( )

559.	517.	517.	511.	7404.	7269.	5207.	5207.	4211.	4211.
10.2(S)	.0( )	5.8( )	24.1(S)	4.9( )	.0( )	.0( )	11.0( )	.0( )	.0( )
4206.	4172.	4154.	3832.	3740.	3665.	3604.	3255.	3161.	3097.
6.3( )	.0( )	8.7( )	3.9( )	3.6( )	4.7( )	.0( )	5.4( )	2.5( )	.0( )
787.	787.	765.	741.	675.	2310.	1974.	1923.	1599.	1580.
.0( )	3.9( )	.0( )	3.5( )	.0( )	.0( )	2.7( )	6.4( )	4.2(S)	6.5( )
1522.	1503.	197.	110.	1306.	1295.	1282.	1282.	1268.	1027.
6.6(S)	.0( )	.0( )	1.4( )	4.2( )	2.4(S)	5.6( )	3.0(S)	.0( )	5.1( )
877.	871.	821.	554.	267.	241.	224.	2062.	2053.	1576.
.0( )	4.2( )	.0( )	2.1( )	.0( )	1.9( )	3.2(S)	.0( )	6.8( )	.0( )
1567.	1455.	325.	1130.	1015.	905.	816.	801.	605.	492.
5.4( )	.0( )	2.1( )	4.2( )	.0( )	4.4( )	5.1(S)	.0( )	3.1( )	.0( )
92.	84.								
1.3( )	28.5(S)								

2 50.

8164.	7919.	7912.	7445.	611.	597.	597.	593.	591.	569.
8.8( )	.0( )	9.0( )	.0( )	4.2( )	.0( )	3.9( )	6.5(S)	.0( )	2.5( )
552.	504.	504.	497.	6834.	6702.	4789.	4789.	3910.	3910.
9.9(S)	.0( )	5.8( )	23.5(S)	4.7( )	.0( )	.0( )	10.7( )	.0( )	.0( )
3906.	3876.	3862.	3536.	3460.	3387.	3329.	3010.	2921.	2861.
6.2( )	.0( )	8.5( )	3.8( )	3.4( )	4.5( )	.0( )	5.2( )	2.4( )	.0( )
727.	727.	706.	688.	625.	2134.	1816.	1768.	1456.	1437.
.0( )	3.8( )	.0( )	3.4( )	.0( )	.0( )	2.7( )	6.2( )	4.1(S)	6.2( )
1384.	1362.	167.	95.	1195.	1182.	1180.	1155.	1162.	945.
6.4(S)	.0( )	.0( )	1.3( )	4.0( )	2.4(S)	5.4( )	3.0(S)	.0( )	4.9( )
805.	801.	755.	508.	247.	227.	210.	1913.	1906.	1453.
.0( )	4.0( )	.0( )	2.0( )	.0( )	1.8( )	2.4(S)	.0( )	6.6( )	.0( )
1446.	1342.	301.	1041.	932.	836.	747.	734.	554.	447.

		5.3( )	.0( )	2.1( )	4.1( )	.0( )	4.3( )	5.0(S)	.0( )	3.0( )	.0( )
		85.	76.								
		1.3( )	28.1(S)								
2	55.	7575.	7336.	7331.	6880.	592.	581.	581.	578.	576.	559.
		8.7( )	.0( )	8.8( )	.0( )	4.1( )	.0( )	3.9( )	6.5(S)	.0( )	2.5( )
		543.	489.	489.	481.	6288.	6160.	4384.	4384.	3634.	3634.
		9.5(S)	.0( )	5.7( )	22.7(S)	4.6( )	.0( )	.0( )	10.4( )	.0( )	.0( )
		3632.	3605.	3595.	3275.	3198.	3130.	3075.	2783.	2700.	2644.
		6.0( )	.0( )	8.4( )	3.6( )	3.3( )	4.4( )	.0( )	5.0( )	2.3( )	.0( )
		672.	672.	653.	639.	580.	1971.	1670.	1624.	1321.	1304.
		.0( )	3.6( )	.0( )	3.3( )	.0( )	.0( )	2.6( )	6.1( )	4.0(S)	5.9( )
		1251.	1233.	137.	79.	1096.	1087.	1077.	1075.	1064.	869.
		6.3(S)	.0( )	.0( )	1.2( )	3.9( )	2.4(S)	5.2( )	3.0(S)	.0( )	4.7( )
		737.	734.	687.	464.	222.	207.	174.	1775.	1770.	1339.
		.0( )	3.8( )	.0( )	2.0( )	.0( )	1.7( )	1.7(S)	.0( )	6.5( )	.0( )
		1334.	1238.	280.	958.	853.	772.	684.	672.	506.	407.
		5.1( )	.0( )	2.0( )	4.0( )	.0( )	4.2( )	4.9(S)	.0( )	2.9( )	.0( )
		79.	75.								
		1.3( )	27.6(S)								
3	0.	7019.	6783.	6779.	6337.	577.	567.	567.	564.	563.	549.
		8.6( )	.0( )	8.5( )	.0( )	4.1( )	.0( )	3.8( )	6.4(S)	.0( )	2.4( )
		532.	473.	473.	464.	5761.	5632.	3985.	3985.	3395.	3395.
		9.1(S)	.0( )	5.7( )	21.9(S)	4.4( )	.0( )	.0( )	10.1( )	.0( )	.0( )
		3393.	3361.	3353.	3028.	2957.	2893.	2841.	2573.	2496.	2442.
		5.9( )	.0( )	8.3( )	3.5( )	3.2( )	4.2( )	.0( )	4.9( )	2.2( )	.0( )
		622.	622.	604.	593.	538.	1820.	1535.	1490.	1196.	1180.
		.0( )	3.5( )	.0( )	3.2( )	.0( )	.0( )	2.5( )	5.9( )	3.9(S)	5.7( )

1132.	1114.	105.	64.	1009.	999.	998.	979.	973.	798.
6.2(S)	.0( )	.0( )	1.1( )	3.7( )	2.3(S)	5.0( )	3.0(S)	.0( )	4.5( )
667.	665.	614.	425.	189.	177.	134.	1648.	1644.	1230.
.0( )	3.7( )	.0( )	1.9( )	.0( )	1.6( )	1.2(S)	.0( )	6.4( )	.0( )
1227.	1134.	253.	881.	779.	714.	627.	615.	464.	373.
5.0( )	.0( )	1.9( )	3.8( )	.0( )	4.1( )	4.8(S)	.0( )	2.8( )	.0( )
76.	74.								
1.2( )	27.2(S)								

3	5.	6494.	6265.	6262.	5849.	562.	554.	554.	551.	549.	538.
		8.4( )	.0( )	8.3( )	.0( )	4.1( )	.0( )	3.8( )	6.4(S)	.0( )	2.4( )
		520.	455.	455.	445.	5286.	5179.	3651.	3651.	3169.	3169.
		8.7(S)	.0( )	5.6( )	21.1(S)	4.2( )	.0( )	.0( )	9.7( )	.0( )	.0( )
		3169.	3143.	3137.	2802.	2733.	2673.	2624.	2379.	2306.	2255.
		5.7( )	.0( )	8.2( )	3.4( )	3.1( )	4.1( )	.0( )	4.7( )	2.1( )	.0( )
		576.	576.	559.	551.	499.	1679.	1410.	1367.	1082.	1068.
		.0( )	3.4( )	.0( )	3.1( )	.0( )	.0( )	2.4( )	5.8( )	3.7(S)	5.4( )
		1023.	1008.	82.	52.	926.	917.	908.	903.	886.	728.
		6.0(S)	.0( )	.0( )	.9( )	3.6( )	2.3(S)	4.7( )	2.9(S)	.0( )	4.3( )
		597.	595.	544.	389.	155.	145.	105.	1528.	1526.	1122.
		.0( )	3.5( )	.0( )	1.8( )	.0( )	1.4( )	.9(S)	.0( )	6.3( )	.0( )
		1119.	1026.	219.	807.	710.	663.	575.	565.	426.	344.
		4.8( )	.0( )	1.8( )	3.7( )	.0( )	4.0( )	4.8(S)	.0( )	2.7( )	.0( )
		75.	74.								
		1.2( )	26.7(S)								
3	10.	6018.	5807.	5805.	5445.	548.	540.	540.	536.	535.	527.
		8.3( )	.0( )	8.1( )	.0( )	4.0( )	.0( )	3.7( )	6.4(S)	.0( )	2.4( )

507.	437.	437.	426.	4897.	4807.	3390.	3390.	2979.	2979.
8.2(S)	.0( )	5.6( )	20.2(S)	4.0( )	.0( )	.0( )	9.4( )	.0( )	.0( )
2979.	2956.	2951.	2593.	2527.	2470.	2424.	2200.	2132.	2084.
5.6( )	.0( )	8.0( )	3.3( )	3.0( )	4.0( )	.0( )	4.6( )	2.0( )	.0( )
534.	534.	518.	512.	463.	1550.	1295.	1254.	979.	965.
.0( )	3.2( )	.0( )	3.0( )	.0( )	.0( )	2.3( )	5.6( )	3.7(S)	5.1( )
922.	907.	65.	42.	842.	831.	829.	812.	802.	660.
5.9(S)	.0( )	.0( )	.8( )	3.4( )	2.2(S)	4.5( )	2.8(S)	.0( )	4.1( )
529.	529.	481.	356.	124.	118.	81.	1416.	1415.	1017.
.0( )	3.3( )	.0( )	1.7( )	.0( )	1.2( )	.7(S)	.0( )	6.1( )	.0( )
1015.	934.	200.	734.	629.	593.	529.	520.	392.	317.
4.7( )	.0( )	1.8( )	3.5( )	.0( )	3.8( )	4.7(S)	.0( )	2.6( )	.0( )
74.	73.								
1.2( )	26.3(S)								

3 15.

5597.	5403.	5401.	5062.	534.	525.	525.	522.	521.	514.
8.2( )	.0( )	7.9( )	.0( )	4.0( )	.0( )	3.7( )	6.4(S)	.0( )	2.4( )
493.	418.	418.	406.	4528.	4427.	3118.	3118.	2577.	2577.
7.7(S)	.0( )	5.5( )	19.3(S)	3.9( )	.0( )	.0( )	9.1( )	.0( )	.0( )
2577.	2491.	2488.	2399.	2337.	2283.	2240.	2035.	1972.	1926.
5.2( )	.0( )	7.4( )	3.2( )	2.9( )	3.8( )	.0( )	4.5( )	1.9( )	.0( )
495.	495.	480.	476.	429.	1431.	1191.	1151.	881.	868.
.0( )	3.1( )	.0( )	2.9( )	.0( )	.0( )	2.2( )	5.5( )	3.6(S)	4.9( )
826.	812.	52.	34.	760.	751.	743.	735.	722.	595.
5.8(S)	.0( )	.0( )	.7( )	3.2( )	2.2(S)	4.3( )	2.7(S)	.0( )	3.9( )
470.	470.	426.	326.	99.	94.	61.	1309.	1309.	919.
.0( )	3.1( )	.0( )	1.6( )	.0( )	1.1( )	.5(S)	.0( )	6.0( )	.0( )
919.	845.	183.	662.	562.	533.	487.	479.	362.	294.

		4.5( )	.0( )	1.7( )	3.4( )	.0( )	3.7( )	4.6(S)	.0( )	2.5( )	.0( )
		74.	73.								
		1.2( )	25.8(S)								
3	20.	5197.	4989.	4989.	4599.	523.	515.	515.	513.	506.	502.
		8.1( )	.0( )	7.8( )	.0( )	4.0( )	.0( )	3.7( )	6.4(S)	.0( )	2.3( )
		480.	399.	399.	387.	4076.	3938.	2817.	2817.	2280.	2280.
		7.2(S)	.0( )	5.4( )	18.4(S)	3.7( )	.0( )	.0( )	8.7( )	.0( )	.0( )
		2280.	2282.	2280.	2221.	2162.	2112.	2072.	1884.	1825.	1782.
		5.0( )	.0( )	7.2( )	3.1( )	2.8( )	3.7( )	.0( )	4.3( )	1.8( )	.0( )
		460.	460.	446.	442.	398.	1322.	1095.	1056.	790.	778.
		.0( )	3.0( )	.0( )	2.8( )	.0( )	.0( )	2.2( )	5.3( )	3.5(S)	4.6( )
		739.	726.	42.	28.	684.	674.	673.	660.	650.	535.
		5.7(S)	.0( )	.0( )	.7( )	3.1( )	2.2(S)	4.1( )	2.6(S)	.0( )	3.7( )
		417.	417.	377.	299.	79.	75.	45.	1121.	1121.	829.
		.0( )	2.9( )	.0( )	1.5( )	.0( )	1.0( )	.4(S)	.0( )	5.6( )	.0( )
		829.	766.	168.	598.	511.	488.	450.	442.	335.	272.
		4.3( )	.0( )	1.6( )	3.2( )	.0( )	3.5( )	4.6(S)	.0( )	2.4( )	.0( )
		73.	72.								
		1.2( )	25.3(S)								
3	25.	4783.	4554.	4554.	4154.	513.	507.	507.	505.	492.	488.
		7.9( )	.0( )	7.5( )	.0( )	3.9( )	.0( )	3.6( )	6.3(S)	.0( )	2.3( )
		465.	381.	381.	367.	3641.	3542.	2560.	2560.	2156.	2156.
		6.6(S)	.0( )	5.4( )	17.4(S)	3.5( )	.0( )	.0( )	8.3( )	.0( )	.0( )
		2156.	2119.	2117.	2058.	2002.	1955.	1917.	1745.	1690.	1650.
		4.9( )	.0( )	6.9( )	3.0( )	2.7( )	3.6( )	.0( )	4.2( )	1.7( )	.0( )
		427.	427.	414.	411.	370.	1223.	1008.	971.	707.	697.
		.0( )	2.9( )	.0( )	2.7( )	.0( )	.0( )	2.1( )	5.2( )	3.4(S)	4.4( )

		661.	650.	34.	23.	616.	609.	602.	594.	584.	481.
		5.7(S)	.0( )	.0( )	.6( )	2.9( )	2.1(S)	3.8( )	2.5(S)	.0( )	3.5( )
		372.	372.	336.	274.	62.	59.	34.	982.	982.	748.
		.0( )	2.7( )	.0( )	1.5( )	.0( )	.8( )	.3(S)	.0( )	5.3( )	.0( )
		748.	698.	154.	544.	468.	450.	416.	409.	311.	253.
		4.2( )	.0( )	1.6( )	3.1( )	.0( )	3.4( )	4.5(S)	.0( )	2.4( )	.0( )
		73.	72.								
		1.2( )	24.8(S)								
3	30.	4379.	4156.	4156.	3814.	504.	496.	496.	493.	478.	474.
		7.8( )	.0( )	7.3( )	.0( )	3.9( )	.0( )	3.6( )	6.2(S)	.0( )	2.3( )
		450.	363.	363.	348.	3310.	3224.	2352.	2352.	1977.	1977.
		6.0(S)	.0( )	5.3( )	16.6(S)	3.3( )	.0( )	.0( )	8.0( )	.0( )	.0( )
		1977.	1962.	1962.	1908.	1855.	1812.	1777.	1619.	1569.	1532.
		4.7( )	.0( )	6.7( )	2.9( )	2.6( )	3.5( )	.0( )	4.0( )	1.6( )	.0( )
		397.	397.	385.	383.	343.	1135.	931.	897.	635.	626.
		.0( )	2.8( )	.0( )	2.6( )	.0( )	.0( )	2.0( )	5.0( )	3.3(S)	4.1( )
		594.	585.	27.	19.	558.	549.	549.	541.	524.	432.
		5.6(S)	.0( )	.0( )	.5( )	2.8( )	2.1(S)	3.7( )	2.5(S)	.0( )	3.3( )
		332.	332.	300.	250.	49.	46.	26.	872.	872.	678.
		.0( )	2.5( )	.0( )	1.4( )	.0( )	.7( )	.2(S)	.0( )	5.0( )	.0( )
		678.	639.	142.	497.	431.	417.	385.	379.	289.	236.
		4.0( )	.0( )	1.5( )	3.0( )	.0( )	3.3( )	4.5(S)	.0( )	2.3( )	.0( )
		72.	71.								
		1.2( )	24.4(S)								
3	35.	4023.	3821.	3821.	3521.	492.	483.	483.	479.	463.	460.
		7.7( )	.0( )	7.2( )	.0( )	3.9( )	.0( )	3.5( )	6.1(S)	.0( )	2.2( )

435.	346.	346.	329.	3028.	2953.	2170.	2170.	1846.	1846.
5.4(S)	.0( )	5.2( )	15.7(S)	3.2( )	.0( )	.0( )	7.7( )	.0( )	.0( )
1846.	1821.	1821.	1770.	1719.	1678.	1643.	1499.	1446.	1404.
4.6( )	.0( )	6.5( )	2.8( )	2.5( )	3.4( )	.0( )	3.9( )	1.6( )	.0( )
369.	369.	358.	356.	319.	1035.	843.	799.	575.	568.
.0( )	2.7( )	.0( )	2.5( )	.0( )	.0( )	1.9( )	4.7( )	3.3(S)	3.9( )
544.	538.	21.	15.	517.	514.	510.	506.	471.	388.
5.5(S)	.0( )	.0( )	.5( )	2.7( )	2.1(S)	3.5( )	2.3(S)	.0( )	3.1( )
297.	297.	268.	229.	39.	37.	20.	783.	783.	623.
.0( )	2.4( )	.0( )	1.3( )	.0( )	.6( )	.2(S)	.0( )	4.8( )	.0( )
623.	587.	130.	457.	397.	386.	357.	351.	269.	220.
3.9( )	.0( )	1.4( )	2.9( )	.0( )	3.1( )	4.4(S)	.0( )	2.2( )	.0( )
72.	71.								
1.2( )	23.9(S)								

3	40.	3719.	3532.	3532.	3265.	479.	468.	468.	465.	447.	445.
		7.6( )	.0( )	7.0( )	.0( )	3.8( )	.0( )	3.5( )	6.0(S)	.0( )	2.2( )
		419.	331.	331.	311.	2787.	2720.	2009.	2009.	1706.	1706.
		4.8(S)	.0( )	5.1( )	14.8(S)	3.0( )	.0( )	.0( )	7.5( )	.0( )	.0( )
		1706.	1688.	1688.	1638.	1587.	1544.	1508.	1376.	1320.	1278.
		4.4( )	.0( )	6.2( )	2.8( )	2.4( )	3.3( )	.0( )	3.8( )	1.5( )	.0( )
		343.	343.	331.	331.	296.	935.	753.	719.	533.	529.
		.0( )	2.6( )	.0( )	2.4( )	.0( )	.0( )	1.8( )	4.5( )	3.2(S)	3.8( )
		513.	510.	17.	13.	492.	489.	467.	457.	420.	350.
		5.5(S)	.0( )	.0( )	.4( )	2.6( )	2.0(S)	3.4( )	2.0(S)	.0( )	2.9( )
		267.	267.	241.	210.	31.	30.	15.	711.	711.	575.
		.0( )	2.3( )	.0( )	1.3( )	.0( )	.6( )	.1(S)	.0( )	4.6( )	.0( )
		575.	541.	120.	421.	367.	359.	331.	326.	251.	205.

		3.8( )	.0( )	1.4( )	2.8( )	.0( )	3.0( )	4.4(S)	.0( )	2.1( )	.0( )
		71.	71.								
		1.2( )	23.4(S)								
3	45.	3455.	3280.	3280.	3038.	464.	453.	453.	450.	432.	430.
		7.4( )	.0( )	6.9( )	.0( )	3.8( )	.0( )	3.4( )	5.9(S)	.0( )	2.2( )
		404.	319.	319.	294.	2574.	2513.	1862.	1862.	1580.	1580.
		4.2(S)	.0( )	4.4( )	14.0(S)	2.9( )	.0( )	.0( )	7.2( )	.0( )	.0( )
		1580.	1559.	1559.	1509.	1456.	1414.	1380.	1259.	1208.	1173.
		4.3( )	.0( )	6.0( )	2.7( )	2.3( )	3.2( )	.0( )	3.6( )	1.4( )	.0( )
		318.	318.	307.	307.	272.	855.	683.	655.	507.	505.
		.0( )	2.5( )	.0( )	2.3( )	.0( )	.0( )	1.7( )	4.2( )	3.2(S)	3.7( )
		496.	476.	14.	11.	462.	458.	416.	408.	373.	316.
		5.4(S)	.0( )	.0( )	.4( )	2.5( )	1.8(S)	3.2( )	1.8(S)	.0( )	2.8( )
		240.	240.	216.	192.	24.	24.	12.	650.	650.	531.
		.0( )	2.1( )	.0( )	1.2( )	.0( )	.5( )	.1(S)	.0( )	4.4( )	.0( )
		531.	499.	110.	389.	339.	332.	305.	300.	234.	192.
		3.6( )	.0( )	1.3( )	2.7( )	.0( )	2.9( )	4.4(S)	.0( )	2.1( )	.0( )
		71.	70.								
		1.2( )	22.9(S)								
3	50.	3223.	3054.	3054.	2829.	449.	438.	438.	434.	415.	415.
		7.3( )	.0( )	6.7( )	.0( )	3.7( )	.0( )	3.4( )	5.7(S)	.0( )	2.1( )
		386.	265.	265.	270.	2380.	2323.	1725.	1725.	1452.	1452.
		3.5(S)	.0( )	3.6( )	13.3(S)	2.8( )	.0( )	.0( )	7.0( )	.0( )	.0( )
		1452.	1432.	1432.	1381.	1327.	1283.	1244.	1133.	1116.	1085.
		4.1( )	.0( )	5.8( )	2.6( )	2.2( )	3.0( )	.0( )	3.4( )	1.4( )	.0( )
		294.	294.	283.	284.	247.	791.	628.	606.	490.	488.
		.0( )	2.4( )	.0( )	2.3( )	.0( )	.0( )	1.6( )	4.1( )	3.2(S)	3.7( )

		481.	434.	12.	9.	422.	415.	369.	360.	325.	285.
		5.2(S)	.0( )	.0( )	.3( )	2.4( )	1.5(S)	3.0( )	1.5(S)	.0( )	2.6( )
		217.	217.	196.	176.	19.	19.	9.	598.	598.	491.
		.0( )	2.0( )	.0( )	1.2( )	.0( )	.4( )	.1(S)	.0( )	4.3( )	.0( )
		491.	461.	101.	360.	312.	307.	280.	273.	219.	180.
		3.5( )	.0( )	1.3( )	2.6( )	.0( )	2.8( )	4.3(S)	.0( )	2.0( )	.0( )
		70.	70.								
		1.2( )	22.4(S)								
3	55.	3015.	2847.	2847.	2634.	433.	420.	420.	415.	391.	391.
		7.2( )	.0( )	6.6( )	.0( )	3.6( )	.0( )	3.3( )	5.6(S)	.0( )	2.1( )
		336.	257.	257.	249.	2200.	2146.	1595.	1595.	1328.	1328.
		2.8(S)	.0( )	3.5( )	12.6(S)	2.7( )	.0( )	.0( )	6.7( )	.0( )	.0( )
		1328.	1308.	1308.	1258.	1205.	1165.	1137.	1035.	1036.	1009.
		4.0( )	.0( )	5.5( )	2.5( )	2.1( )	2.9( )	.0( )	3.2( )	1.3( )	.0( )
		270.	270.	259.	259.	218.	739.	585.	567.	471.	468.
		.0( )	2.3( )	.0( )	2.2( )	.0( )	.0( )	1.6( )	3.9( )	3.2(S)	3.6( )
		454.	385.	10.	7.	375.	368.	323.	316.	288.	259.
		4.8(S)	.0( )	.0( )	.3( )	2.3( )	1.2(S)	2.8( )	1.3(S)	.0( )	2.5( )
		196.	196.	177.	161.	16.	16.	7.	551.	551.	454.
		.0( )	1.9( )	.0( )	1.1( )	.0( )	.4( )	.1(S)	.0( )	4.1( )	.0( )
		454.	426.	93.	334.	293.	288.	275.	243.	206.	169.
		3.4( )	.0( )	1.2( )	2.5( )	.0( )	2.7( )	4.2(S)	.0( )	2.0( )	.0( )
		70.	69.								
		1.2( )	22.0(S)								
4	0.	2827.	2652.	2652.	2446.	414.	396.	396.	390.	354.	354.
		7.1( )	.0( )	6.5( )	.0( )	3.6( )	.0( )	3.2( )	5.4(S)	.0( )	2.0( )

273.	231.	231.	230.	2032.	1980.	1471.	1471.	1214.	1214.
2.4(S)	.0( )	3.3( )	11.9(S)	2.6( )	.0( )	.0( )	6.5( )	.0( )	.0( )
1214.	1197.	1197.	1154.	1112.	1087.	1070.	977.	966.	941.
3.8( )	.0( )	5.3( )	2.4( )	2.1( )	2.8( )	.0( )	3.0( )	1.2( )	.0( )
246.	246.	234.	234.	197.	695.	549.	533.	441.	436.
.0( )	2.2( )	.0( )	2.1( )	.0( )	.0( )	1.5( )	3.8( )	3.2(S)	3.5( )
417.	326.	8.	6.	318.	308.	286.	280.	257.	235.
4.3(S)	.0( )	.0( )	.3( )	2.1( )	.9(S)	2.6( )	1.1(S)	.0( )	2.4( )
178.	178.	161.	148.	13.	13.	5.	509.	509.	421.
.0( )	1.8( )	.0( )	1.0( )	.0( )	.3( )	.0(S)	.0( )	4.0( )	.0( )
421.	397.	85.	312.	281.	277.	266.	221.	193.	159.
3.3( )	.0( )	1.2( )	2.4( )	.0( )	2.7( )	3.9(S)	.0( )	1.9( )	.0( )
69.	69.								
1.2( )	21.5(S)								

4 5.

2659.	2468.	2468.	2266.	388.	365.	365.	356.	313.	313.
7.0( )	.0( )	6.4( )	.0( )	3.5( )	.0( )	3.1( )	5.1(S)	.0( )	1.9( )
239.	216.	216.	212.	1878.	1829.	1357.	1357.	1122.	1122.
2.2(S)	.0( )	3.1( )	11.4(S)	2.5( )	.0( )	.0( )	6.3( )	.0( )	.0( )
1122.	1108.	1108.	1075.	1040.	1014.	988.	903.	901.	877.
3.7( )	.0( )	5.1( )	2.4( )	2.0( )	2.7( )	.0( )	2.9( )	1.2( )	.0( )
223.	223.	213.	213.	181.	654.	516.	500.	403.	398.
.0( )	2.1( )	.0( )	2.0( )	.0( )	.0( )	1.5( )	3.7( )	3.1(S)	3.3( )
375.	283.	7.	5.	276.	273.	256.	251.	231.	214.
3.6(S)	.0( )	.0( )	.2( )	1.9( )	.8(S)	2.4( )	1.0(S)	.0( )	2.3( )
162.	162.	146.	135.	11.	11.	4.	473.	473.	394.
.0( )	1.7( )	.0( )	1.0( )	.0( )	.3( )	.0(S)	.0( )	3.9( )	.0( )
394.	373.	78.	296.	269.	266.	254.	204.	182.	150.

	3.2( )	.0( )	1.1( )	2.4( )	.0( )	2.6( )	3.6(S)	.0( )	1.9( )	.0( )
	69.	68.								
	1.2( )	21.0(S)								
4 10.	2429.	2292.	2292.	2096.	356.	329.	329.	320.	278.	278.
	6.8( )	.0( )	6.2( )	.0( )	3.3( )	.0( )	2.9( )	4.8(S)	.0( )	1.8( )
	217.	198.	198.	196.	1740.	1696.	1256.	1256.	1047.	1047.
	2.0(S)	.0( )	3.0( )	10.8(S)	2.4( )	.0( )	.0( )	6.1( )	.0( )	.0( )
	1047.	1035.	1035.	1005.	969.	943.	926.	848.	840.	817.
	3.6( )	.0( )	4.9( )	2.3( )	1.9( )	2.7( )	.0( )	2.8( )	1.1( )	.0( )
	204.	204.	195.	195.	166.	613.	483.	467.	373.	357.
	.0( )	2.0( )	.0( )	1.9( )	.0( )	.0( )	1.4( )	3.5( )	3.1(S)	3.1( )
	335.	254.	4.	4.	250.	245.	230.	225.	209.	195.
	3.0(S)	.0( )	.0( )	.2( )	1.8( )	.7(S)	2.3( )	.9(S)	.0( )	2.1( )
	147.	147.	133.	124.	9.	9.	3.	441.	441.	370.
	.0( )	1.6( )	.0( )	1.0( )	.0( )	.3( )	.0(S)	.0( )	3.7( )	.0( )
	370.	351.	70.	281.	257.	255.	241.	189.	171.	142.
	3.1( )	.0( )	1.1( )	2.3( )	.0( )	2.6( )	3.2(S)	.0( )	1.8( )	.0( )
	68.	68.								
	1.2( )	20.5(S)								

1

SOUTH CANYON - LIME CREEK DRAINAGE DESIGN PLAN BY FMG, INC
EXISTING HYDROLOGIC EXISTING HYDRAULIC CONDITIONS 500 YR STORM - 6.6 INCH RAIN

*** PEAK FLOWS, STAGES AND STORAGES OF GUTTERS AND DETENSION DAMS ***

CONVEYANCE	PEAK	STAGE	STORAGE	TIME

ELEMENT	(CFS)	(FT)	(AC-FT)	(HR/MIN)
264	881.	.1	10.9	0 55.
79	658.	3.2		1 10.
175	1197.	(DIRECT FLOW)		1 0.
78	2354.	4.4		1 0.
174	3551.	(DIRECT FLOW)		1 0.
77	3521.	8.2		1 5.
173	4325.	(DIRECT FLOW)		1 0.
76	4181.	10.0		1 10.
172	5658.	(DIRECT FLOW)		1 5.
263	5757.	.1	3.9	1 5.
75	5639.	10.9		1 10.
262	5704.	.1	4.2	1 10.
73	1051.	4.6		0 55.
74	5642.	8.1		1 5.
171	1966.	(DIRECT FLOW)		0 50.
170	7436.	(DIRECT FLOW)		1 5.
261	7464.	.1	9.4	1 0.
72	7475.	11.1		1 5.
168	2386.	(DIRECT FLOW)		1 5.
260	7417.	.1	6.4	1 10.
69	2365.	5.8		1 10.
71	7224.	10.0		1 15.
167	3062.	(DIRECT FLOW)		1 5.
70	7232.	4.8		1 15.
68	3064.	7.2		1 5.
169	8002.	(DIRECT FLOW)		1 15.
166	3148.	(DIRECT FLOW)		1 5.
281	130.	.1	31.1	2 0.
165	11024.	(DIRECT FLOW)		1 10.
86	129.	1.6		2 5.
67	11003.	5.0		1 10.
185	2249.	(DIRECT FLOW)		0 55.
66	11023.	8.4		1 15.
85	2130.	5.2		1 10.
164	12423.	(DIRECT FLOW)		1 15.
184	2949.	(DIRECT FLOW)		1 5.
65	12438.	7.2		1 15.
280	2959.	.1	6.5	1 10.

64	12436.	5.5		1	15.
84	2929.	6.1		1	10.
63	12415.	6.6		1	15.
252	1335.	.1	29.5	1	10.
183	3828.	(DIRECT FLOW)		1	5.
62	12370.	10.8		1	20.
52	1333.	7.0		1	15.
83	3697.	6.4		1	15.
82	1211.	2.8		1	0.
163	12840.	(DIRECT FLOW)		1	20.
152	1377.	(DIRECT FLOW)		1	10.
182	4843.	(DIRECT FLOW)		1	15.
61	12852.	9.4		1	20.
251	1388.	.1	12.9	1	10.
81	4797.	7.8		1	20.
162	13128.	(DIRECT FLOW)		1	20.
51	1282.	3.6		1	30.
181	5262.	(DIRECT FLOW)		1	15.
161	13232.	(DIRECT FLOW)		1	20.
151	1562.	(DIRECT FLOW)		1	25.
80	4872.	8.4		1	30.
60	12072.	14.0		1	35.
250	1558.	.1	7.4	1	25.
180	5243.	(DIRECT FLOW)		1	25.
160	12139.	(DIRECT FLOW)		1	35.
50	1555.	5.6		1	25.
142	17325.	(DIRECT FLOW)		1	30.
150	1596.	(DIRECT FLOW)		1	25.
43	17298.	7.0		1	30.
42	1587.	5.5		1	30.
141	18886.	(DIRECT FLOW)		1	30.
41	18834.	12.1		1	35.
140	19061.	(DIRECT FLOW)		1	35.
40	19040.	10.8		1	35.

1

ENDPROGRAM PROGRAM CALLED

APPENDIX D

FUTURE LAND USE
AND
EXISTING HYDRAULIC CONDITION COMPUTER PRINTOUTS

100 YEAR STORM

This appendix contains a UDSWM2-PC printout for future land use and existing hydraulic conditions. The printout for CUHPE/PC for this condition is found in APPENDIX B.

1

ENVIRONMENTAL PROTECTION AGENCY - STORM WATER MANAGEMENT MODEL - VERSION PC.1

DEVELOPED BY METCALF + EDDY, INC.

UNIVERSITY OF FLORIDA

WATER RESOURCES ENGINEEERS, INC. (SEPTEMBER 1970)

UPDATED BY UNIVERSITY OF FLORIDA (JUNE 1973)

HYDROLOGIC ENGINEERING CENTER, CORPS OF ENGINEERS

MISSOURI RIVER DIVISION, CORPS OF ENGINEERS (SEPTEMBER 1974)

BOYLE ENGINEERING CORPORATION (MARCH 1985, JULY 1985)

OTAPE OR DISK ASSIGNMENTS

JIN(1)	JIN(2)	JIN(3)	JIN(4)	JIN(5)	JIN(6)	JIN(7)	JIN(8)	JIN(9)	JIN(10)
2	1	0	0	0	0	0	0	0	0

JOUT(1)	JOUT(2)	JOUT(3)	JOUT(4)	JOUT(5)	JOUT(6)	JOUT(7)	JOUT(8)	JOUT(9)	JOUT(10)
1	2	0	0	0	0	0	0	0	0

NSCRAT(1)	NSCRAT(2)	NSCRAT(3)	NSCRAT(4)	NSCRAT(5)
3	4	0	0	0

1

WATERSHED PROGRAM CALLED

*** ENTRY MADE TO RUNOFF MODEL ***

SOUTH CANYON - LIME CREEK DRAINAGE DESIGN PLAN BY FMG, INC
FUTURE HYDROLOGIC CONDITIONS AND EXISTING HYDRAULIC CONDITIONS 100 YR STORM

ONUMBER OF TIME STEPS 50
OINTEGRATION TIME INTERVAL (MINUTES), 5.00

25.0 PERCENT OF IMPERVIOUS AREA HAS ZERO DETENTION DEPTH
1

SOUTH CANYON - LIME CREEK DRAINAGE DESIGN PLAN BY FMG, INC
FUTURE HYDROLOGIC CONDITIONS AND EXISTING HYDRAULIC CONDITIONS 100 YR STORM

HYDROGRAPHS FROM CUHPE/PC ARE LISTED FOR THE FOLLOWING 29 SUBCATCHMENTS

TIME(HR/MIN)	1	2	3	4	5	6	7	8	9	10
	11	12	13	14	15	16	17	18	19	20
	21	22	23	24	25	26	27	28	29	
0 0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.	0.	0.	0.	0.	
0 5.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	0.	0.	0.	0.	0.	0.	0.	0.	0.	
0 10.	4.	1.	1.	7.	0.	4.	3.	1.	2.	0.
	0.	1.	0.	0.	0.	0.	0.	0.	0.	0.
	0.	0.	3.	4.	2.	1.	1.	1.	3.	

0	15.	21.	5.	4.	26.	0.	17.	11.	7.	8.	1.
		0.	6.	1.	1.	1.	0.	2.	0.	1.	1.
		1.	1.	16.	15.	14.	6.	3.	5.	15.	
0	20.	55.	14.	12.	46.	1.	39.	24.	17.	20.	4.
		1.	12.	4.	3.	2.	1.	4.	1.	2.	3.
		3.	2.	48.	37.	41.	16.	9.	17.	37.	
0	25.	119.	33.	33.	111.	2.	94.	77.	44.	50.	10.
		2.	33.	8.	7.	4.	3.	9.	10.	25.	8.
		6.	5.	110.	87.	101.	46.	24.	45.	87.	
0	30.	313.	83.	106.	279.	31.	255.	259.	157.	135.	67.
		17.	133.	98.	58.	31.	61.	93.	81.	234.	74.
		62.	48.	260.	269.	288.	154.	92.	189.	232.	
0	35.	504.	126.	182.	167.	99.	355.	292.	279.	227.	185.
		53.	131.	215.	158.	94.	164.	224.	216.	414.	221.
		140.	123.	481.	421.	544.	295.	198.	431.	352.	
0	40.	479.	123.	212.	91.	188.	322.	252.	328.	268.	311.
		101.	103.	272.	257.	175.	243.	309.	351.	441.	394.
		181.	183.	595.	432.	734.	385.	283.	648.	338.	
0	45.	396.	107.	211.	66.	273.	264.	208.	328.	259.	407.
		149.	80.	278.	321.	253.	278.	334.	444.	414.	546.
		187.	212.	561.	395.	791.	412.	326.	772.	287.	
0	50.	322.	92.	201.	52.	340.	215.	169.	313.	239.	460.
		189.	62.	275.	347.	317.	280.	333.	487.	370.	649.
		188.	216.	490.	348.	755.	407.	334.	812.	239.	
0	55.	258.	78.	185.	39.	383.	172.	135.	289.	214.	476.
		218.	46.	261.	348.	359.	276.	325.	492.	323.	701.
		182.	213.	419.	300.	698.	391.	330.	802.	196.	
1	0.	210.	66.	170.	39.	405.	141.	113.	265.	192.	471.
		235.	35.	242.	344.	381.	265.	309.	480.	281.	712.
		172.	212.	356.	260.	634.	370.	326.	782.	162.	

1	5.	180.	57.	157.	39.	410.	121.	98.	245.	173.	466.
		242.	31.	225.	340.	388.	252.	291.	467.	250.	703.
		162.	207.	306.	230.	579.	347.	318.	756.	140.	
1	10.	146.	47.	141.	16.	404.	96.	71.	220.	153.	457.
		241.	19.	204.	329.	384.	234.	268.	448.	208.	687.
		149.	196.	264.	193.	523.	321.	303.	717.	114.	
1	15.	106.	32.	124.	15.	394.	69.	50.	192.	131.	439.
		235.	13.	179.	311.	375.	212.	241.	419.	165.	661.
		133.	181.	216.	155.	462.	291.	282.	664.	86.	
1	20.	74.	23.	106.	8.	380.	48.	32.	164.	110.	412.
		229.	8.	154.	287.	366.	189.	212.	383.	129.	625.
		117.	165.	171.	123.	397.	258.	259.	604.	64.	
1	25.	52.	17.	91.	7.	362.	33.	22.	139.	91.	381.
		223.	5.	133.	261.	353.	167.	186.	347.	100.	582.
		102.	149.	134.	96.	335.	227.	235.	544.	44.	
1	30.	39.	13.	78.	7.	341.	25.	16.	118.	76.	349.
		215.	4.	114.	238.	336.	147.	162.	312.	77.	535.
		89.	134.	105.	76.	283.	199.	213.	489.	32.	
1	35.	32.	10.	67.	7.	319.	20.	12.	100.	64.	320.
		205.	3.	97.	217.	317.	129.	142.	281.	60.	489.
		78.	121.	84.	61.	239.	174.	193.	439.	25.	
1	40.	27.	9.	57.	7.	296.	17.	10.	86.	54.	294.
		194.	3.	84.	197.	298.	113.	124.	253.	46.	448.
		68.	110.	68.	49.	203.	153.	175.	394.	21.	
1	45.	24.	8.	50.	7.	274.	16.	8.	73.	46.	270.
		183.	3.	72.	180.	279.	100.	108.	228.	36.	411.
		60.	99.	55.	37.	174.	135.	158.	354.	19.	
1	50.	23.	7.	43.	7.	255.	15.	7.	63.	38.	248.
		172.	3.	62.	164.	261.	88.	95.	205.	27.	376.
		53.	89.	47.	30.	151.	119.	143.	318.	17.	

1	55.	22.	7.	37.	7.	237.	14.	7.	55.	29.	227.
		162.	3.	53.	149.	244.	78.	83.	185.	17.	345.
		46.	81.	42.	26.	132.	106.	130.	287.	16.	
2	0.	22.	6.	31.	7.	221.	14.	7.	48.	24.	209.
		153.	3.	46.	136.	229.	68.	73.	167.	11.	317.
		41.	73.	39.	23.	116.	94.	118.	259.	15.	
2	5.	18.	5.	22.	0.	205.	11.	4.	40.	20.	192.
		144.	1.	40.	124.	215.	60.	64.	150.	7.	290.
		36.	66.	35.	19.	100.	83.	107.	233.	12.	
2	10.	11.	4.	16.	0.	191.	6.	3.	33.	15.	176.
		136.	0.	34.	113.	201.	53.	56.	135.	5.	266.
		31.	60.	27.	13.	85.	72.	97.	209.	8.	
2	15.	7.	2.	12.	0.	177.	4.	2.	22.	11.	161.
		128.	0.	29.	102.	189.	47.	48.	122.	3.	244.
		27.	54.	19.	9.	69.	63.	87.	186.	5.	
2	20.	4.	2.	9.	0.	165.	2.	0.	16.	8.	147.
		121.	0.	25.	93.	177.	41.	42.	110.	2.	223.
		24.	48.	13.	6.	56.	54.	78.	166.	3.	
2	25.	2.	0.	7.	0.	153.	2.	0.	12.	6.	135.
		114.	0.	21.	84.	165.	36.	37.	99.	0.	204.
		20.	43.	9.	5.	44.	47.	70.	148.	2.	
2	30.	1.	0.	5.	0.	143.	0.	0.	9.	4.	123.
		107.	0.	13.	76.	155.	32.	32.	89.	0.	187.
		18.	39.	6.	3.	31.	40.	63.	132.	1.	
2	35.	0.	0.	4.	0.	133.	0.	0.	7.	3.	113.
		101.	0.	9.	69.	145.	28.	28.	80.	0.	171.
		11.	35.	4.	2.	23.	35.	57.	117.	0.	
2	40.	0.	0.	3.	0.	124.	0.	0.	5.	3.	103.
		96.	0.	6.	63.	136.	24.	24.	72.	0.	156.
		7.	32.	3.	2.	17.	30.	51.	104.	0.	

2	45.	0.	0.	2.	0.	115.	0.	0.	4.	2.	94.
		90.	0.	4.	57.	127.	21.	21.	65.	0.	143.
		5.	28.	2.	0.	13.	24.	46.	93.	0.	
2	50.	0.	0.	1.	0.	107.	0.	0.	2.	2.	86.
		85.	0.	3.	52.	119.	19.	18.	58.	0.	131.
		4.	26.	1.	0.	10.	17.	41.	83.	0.	
2	55.	0.	0.	0.	0.	99.	0.	0.	2.	0.	79.
		80.	0.	2.	47.	112.	17.	11.	52.	0.	120.
		3.	23.	0.	0.	8.	12.	37.	73.	0.	
3	0.	0.	0.	0.	0.	93.	0.	0.	0.	0.	72.
		76.	0.	0.	43.	105.	10.	7.	47.	0.	109.
		2.	21.	0.	0.	6.	9.	33.	65.	0.	
3	5.	0.	0.	0.	0.	86.	0.	0.	0.	0.	66.
		72.	0.	0.	39.	98.	7.	5.	42.	0.	100.
		0.	19.	0.	0.	4.	7.	30.	58.	0.	
3	10.	0.	0.	0.	0.	80.	0.	0.	0.	0.	60.
		68.	0.	0.	35.	92.	5.	4.	38.	0.	92.
		0.	16.	0.	0.	3.	5.	26.	52.	0.	
3	15.	0.	0.	0.	0.	74.	0.	0.	0.	0.	55.
		64.	0.	0.	32.	86.	3.	3.	34.	0.	84.
		0.	10.	0.	0.	2.	4.	23.	46.	0.	
3	20.	0.	0.	0.	0.	69.	0.	0.	0.	0.	50.
		60.	0.	0.	29.	80.	2.	2.	31.	0.	77.
		0.	7.	0.	0.	2.	3.	20.	41.	0.	
3	25.	0.	0.	0.	0.	64.	0.	0.	0.	0.	46.
		57.	0.	0.	26.	75.	1.	0.	28.	0.	70.
		0.	5.	0.	0.	0.	2.	13.	37.	0.	
3	30.	0.	0.	0.	0.	60.	0.	0.	0.	0.	42.
		54.	0.	0.	24.	71.	0.	0.	25.	0.	64.
		0.	4.	0.	0.	0.	0.	9.	33.	0.	

3	35.	0.	0.	0.	0.	56.	0.	0.	0.	0.	39.
		51.	0.	0.	22.	66.	0.	0.	22.	0.	59.
		0.	2.	0.	0.	0.	0.	7.	29.	0.	
3	40.	0.	0.	0.	0.	52.	0.	0.	0.	0.	35.
		48.	0.	0.	20.	62.	0.	0.	20.	0.	54.
		0.	2.	0.	0.	0.	0.	5.	26.	0.	
3	45.	0.	0.	0.	0.	48.	0.	0.	0.	0.	32.
		45.	0.	0.	18.	58.	0.	0.	18.	0.	49.
		0.	0.	0.	0.	0.	0.	4.	23.	0.	
3	50.	0.	0.	0.	0.	45.	0.	0.	0.	0.	30.
		43.	0.	0.	16.	54.	0.	0.	16.	0.	45.
		0.	0.	0.	0.	0.	0.	3.	19.	0.	
3	55.	0.	0.	0.	0.	42.	0.	0.	0.	0.	27.
		40.	0.	0.	10.	51.	0.	0.	10.	0.	41.
		0.	0.	0.	0.	0.	0.	2.	12.	0.	
4	0.	0.	0.	0.	0.	39.	0.	0.	0.	0.	25.
		38.	0.	0.	7.	48.	0.	0.	6.	0.	38.
		0.	0.	0.	0.	0.	0.	0.	9.	0.	
4	5.	0.	0.	0.	0.	36.	0.	0.	0.	0.	23.
		36.	0.	0.	5.	45.	0.	0.	4.	0.	34.
		0.	0.	0.	0.	0.	0.	0.	6.	0.	
4	10.	0.	0.	0.	0.	34.	0.	0.	0.	0.	21.
		34.	0.	0.	3.	42.	0.	0.	3.	0.	31.
		0.	0.	0.	0.	0.	0.	0.	5.	0.	

1

SOUTH CANYON - LIME CREEK DRAINAGE DESIGN PLAN BY FMG, INC
FUTURE HYDROLOGIC CONDITIONS AND EXISTING HYDRAULIC CONDITIONS 100 YR STORM

GUTTER NUMBER	GUTTER CONNECTION	NDP	NP		WIDTH OR DIAM (FT)	LENGTH (FT)	INVERT SLOPE (FT/FT)	SIDE SLOPES HORIZ TO VERT L	R	MANNING N	OVERBANK/SURCHARGE DEPTH (FT)	JK
40	0	0	4	CHANNEL	10.0	1450.	.0100	6.0	10.0	.063	7.00	0
				OVERFLOW	280.0	1100.	.0132	10.0	10.0	.044	15.00	
140	40	0	3		.0	1.	.0010	.0	.0	.001	10.00	0
41	140	0	4	CHANNEL	10.0	3550.	.0090	2.0	2.0	.063	4.00	0
				OVERFLOW	100.0	2850.	.0112	2.0	16.0	.044	14.00	
141	41	0	3		.0	1.	.0010	.0	.0	.001	10.00	0
42	141	0	4	CHANNEL	10.0	1100.	.0082	5.0	8.0	.063	4.00	0
				OVERFLOW	.0	600.	.0150	150.0	2.0	.071	7.00	
150	42	0	3		.0	1.	.0010	.0	.0	.001	10.00	0
50	150	0	4	CHANNEL	10.0	550.	.0145	3.0	4.0	.050	5.00	0
				OVERFLOW	100.0	550.	.0145	4.0	10.0	.050	10.00	
250	50	9	2	PIPE	.1	1.	.0100	.0	.0	.016	.10	0
		RESERVOIR STORAGE IN ACRE-FEET VS SPILLWAY OUTFLOW										
		.0	.0	.0 22.0	.2	95.0	.7	140.0	2.0	187.0	3.7 205.0	
		4.4	271.0	6.4 516.0	13.0	7680.0						
151	250	0	3		.0	1.	.0010	.0	.0	.001	10.00	0
51	151	0	1	CHANNEL	20.0	3500.	.0206	7.0	12.0	.056	10.00	0
251	51	9	2	PIPE	.1	1.	.0100	.0	.0	.016	.10	0
		RESERVOIR STORAGE IN ACRE-FEET VS SPILLWAY OUTFLOW										
		.0	.0	1.7 165.0	3.1	375.0	8.0	500.0	9.4	540.0	10.8 575.0	
		11.8	1000.0	12.8 1350.0	16.5	3050.0						
152	251	0	3		.0	1.	.0010	.0	.0	.001	10.00	0
52	152	0	5	PIPE	5.0	1000.	.0203	.0	.0	.016	5.00	0
				OVERFLOW	50.0	1000.	.0203	5.0	10.0	.038	15.00	
252	52	8	2	PIPE	.1	1.	.0203	.0	.0	.016	.10	0
		RESERVOIR STORAGE IN ACRE-FEET VS SPILLWAY OUTFLOW										
		.0	.0	2.5 26.0	5.5	40.0	7.3	55.0	8.5	125.0	14.0 293.0	
		25.1	532.0	36.1 2558.0								
43	141	0	4	CHANNEL	100.0	700.	.0160	5.0	37.0	.056	6.00	0
				OVERFLOW	200.0	700.	.0160	4.0	37.0	.056	12.00	
142	43	0	3		.0	1.	.0010	.0	.0	.001	10.00	0
160	142	0	3		.0	1.	.0010	.0	.0	.001	10.00	0
60	160	0	4	CHANNEL	15.0	4750.	.0148	5.0	3.0	.081	10.00	0
				OVERFLOW	.0	4750.	.0148	100.0	13.0	.094	16.00	
161	60	0	3		.0	1.	.0010	.0	.0	.001	10.00	0
162	161	0	3		.0	1.	.0010	.0	.0	.001	10.00	0

61	162	0	4	CHANNEL	15.0	350.	.0110	7.0	17.0	.050	6.00	0
				OVERFLOW	.0	350.	.0110	60.0	10.0	.094	10.00	
163	61	0	3		.0	1.	.0010	.0	.0	.001	10.00	0
62	163	0	4	CHANNEL	15.0	1150.	.0130	3.0	4.0	.056	8.00	0
				OVERFLOW	600.0	1150.	.0130	24.0	4.0	.094	11.00	
63	62	0	4	CHANNEL	70.0	550.	.0165	19.0	3.0	.067	2.00	0
				OVERFLOW	200.0	550.	.0165	22.0	3.0	.094	9.00	
64	63	0	4	CHANNEL	50.0	700.	.0143	50.0	10.0	.044	4.00	0
				OVERFLOW	350.0	700.	.0143	3.0	10.0	.081	10.00	
65	64	0	4	CHANNEL	15.0	650.	.0148	30.0	8.0	.044	6.00	0
				OVERFLOW	170.0	650.	.0148	10.0	18.0	.081	15.00	
164	65	0	3		.0	1.	.0010	.0	.0	.001	10.00	0
66	164	0	4	CHANNEL	18.0	700.	.0173	.0	.0	.019	3.50	0
				OVERFLOW	110.0	700.	.0173	63.0	5.0	.094	13.00	
67	66	0	1	CHANNEL	150.0	850.	.0270	10.0	10.0	.056	6.00	0
165	67	0	3		.0	1.	.0010	.0	.0	.001	10.00	0
166	165	0	3		.0	1.	.0010	.0	.0	.001	10.00	0
68	166	0	1	CHANNEL	10.0	1250.	.0256	3.0	4.0	.050	10.00	0
167	68	0	3		.0	1.	.0010	.0	.0	.001	10.00	0
69	167	0	1	CHANNEL	10.0	3500.	.0351	6.0	5.0	.063	8.00	0
168	69	0	3		.0	1.	.0010	.0	.0	.001	10.00	0
169	165	0	3		.0	1.	.0010	.0	.0	.001	10.00	0
70	169	0	4	CHANNEL	60.0	900.	.0213	10.0	20.0	.056	2.00	0
				OVERFLOW	50.0	900.	.0213	10.0	2.0	.038	10.00	
71	70	0	4	CHANNEL	15.0	7300.	.0263	2.0	2.0	.075	5.00	0
				OVERFLOW	35.0	7300.	.0263	3.0	3.0	.044	15.00	
260	71	6	2	PIPE	.1	1.	.0100	.0	.0	.016	.10	0
		RESERVOIR STORAGE IN ACRE-FEET VS SPILLWAY OUTFLOW										
		.0	.0	.3 110.0	1.9	310.0	3.1	375.0	5.3	2775.0	8.3 15125.0	
72	260	0	4	CHANNEL	15.0	1100.	.0200	3.0	3.0	.075	8.00	0
				OVERFLOW	60.0	1100.	.0200	3.0	2.0	.044	18.00	
261	72	5	2	PIPE	.1	1.	.0100	.0	.0	.016	.10	0
		RESERVOIR STORAGE IN ACRE-FEET VS SPILLWAY OUTFLOW										
		.0	.0	2.5 300.0	5.5	500.0	8.0	2900.0	10.5	11300.0		
170	261	0	3		.0	1.	.0010	.0	.0	.001	10.00	0
171	170	0	3		.0	1.	.0010	.0	.0	.001	10.00	0
73	171	0	1	CHANNEL	10.0	4800.	.0521	3.0	2.0	.063	10.00	0
74	170	0	1	CHANNEL	20.0	300.	.0280	4.0	8.0	.069	10.00	0
262	74	6	2	PIPE	.1	1.	.0100	.0	.0	.016	.10	0
		RESERVOIR STORAGE IN ACRE-FEET VS SPILLWAY OUTFLOW										

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                .0      .0       .1    90.0       1.2   375.0       2.1   500.0       4.1  5100.0       5.8 13100.0
 75      262     0         4     CHANNEL        15.0     400.     .0200      3.0   2.0       .063      10.00        0
                                   OVERFLOW     60.0     400.     .0200      2.0   2.0       .044      15.00
263       75     7         2     PIPE            .1       1.     .0100       .0    .0       .016        .10        0
              RESERVOIR STORAGE IN ACRE-FEET VS SPILLWAY OUTFLOW
                .0      .0       .2    90.0       1.6   375.0       2.5   550.0       3.0  1024.0       4.0  6255.0
               6.5 11870.0
172      263     0         3                       .0       1.     .0010       .0    .0       .001      10.00        0
 76      172     0         4     CHANNEL        15.0    5150.     .0222      2.0   3.0       .069      10.00        0
                                   OVERFLOW     50.0    5150.     .0222      2.0   2.0       .044      15.00
173       76     0         3                       .0       1.     .0010       .0    .0       .001      10.00        0
 77      173     0         1     CHANNEL        15.0    2100.     .0262      2.0   4.0       .063      10.00        0
174       77     0         3                       .0       1.     .0010       .0    .0       .001      10.00        0
 78      174     0         1     CHANNEL        25.0     900.     .0333      4.0  10.0       .056      10.00        0
175      174     0         3                       .0       1.     .0010       .0    .0       .001      10.00        0
 79      175     0         1     CHANNEL        20.0    2500.     .0306      5.0   2.0       .069      10.00        0
264       79     6         2     PIPE            .1       1.     .0100       .0    .0       .028        .10        0
              RESERVOIR STORAGE IN ACRE-FEET VS SPILLWAY OUTFLOW
                .0      .0       1.0   115.0       2.1   205.0       6.3   280.0      10.5   350.0      18.0 10452.0
180      142     0         3                       .0       1.     .0010       .0    .0       .001      10.00        0
 80      180     0         4     CHANNEL        10.0    3650.     .0133      4.0   7.0       .075       6.00        0
                                   OVERFLOW    150.0    3650.     .0133     60.0  50.0       .094      14.00
181       80     0         3                       .0       1.     .0010       .0    .0       .001      10.00        0
 81      181     0         4     CHANNEL        10.0    1600.     .0138      6.0   4.0       .056       4.00        0
                                   OVERFLOW      .0    1600.     .0138     56.0   8.0       .081      14.00
182       81     0         3                       .0       1.     .0010       .0    .0       .001      10.00        0
 82      182     0         4     CHANNEL        10.0    1000.     .0160     10.0  12.0       .050       2.00        0
                                   OVERFLOW    220.0    1000.     .0160     35.0  10.0       .050       6.00
 83      182     0         4     CHANNEL        10.0    2800.     .0177     13.0   5.0       .063       6.00        0
                                   OVERFLOW    450.0    2100.     .0236     13.0  60.0       .056      12.00
183       83     0         3                       .0       1.     .0010       .0    .0       .001      10.00        0
 84      183     0         4     CHANNEL        10.0    2250.     .0136      4.0   4.0       .050       4.00        0
                                   OVERFLOW     80.0    2250.     .0136     10.0   4.0       .044      12.00
280       84     9         2     PIPE            .1       1.     .0100       .0    .0       .016        .10        0
              RESERVOIR STORAGE IN ACRE-FEET VS SPILLWAY OUTFLOW
                .0      .0       .2    35.0        .8   128.0       1.9   190.0       3.4   248.0       4.3   280.0
               5.4  1025.0      6.8  3320.0       8.6  8510.0
184      280     0         3                       .0       1.     .0010       .0    .0       .001      10.00        0
 85      184     0         1     CHANNEL        10.0    3600.     .0096     15.0   8.0       .050      10.00        0
185       85     0         3                       .0       1.     .0010       .0    .0       .001      10.00        0
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86	185	0	1	CHANNEL	8.0	1600.	.0138	9.0	8.0	.044	8.00	0
281	86	9	2	PIPE	.1	1.	.0100	.0	.0	.016	.10	0

RESERVOIR STORAGE IN ACRE-FEET VS SPILLWAY OUTFLOW

.0	.0	.0	5.0	1.0	28.0	3.9	45.0	9.2	55.0	17.7	65.0
28.0	75.0	43.0	335.0	54.0	1300.0						

OTOTAL NUMBER OF GUTTERS/PIPES, 72

1

SOUTH CANYON - LIME CREEK DRAINAGE DESIGN PLAN BY FMG, INC

FUTURE HYDROLOGIC CONDITIONS AND EXISTING HYDRAULIC CONDITIONS 100 YR STORM

ARRANGEMENT OF SUBCATCHMENTS AND GUTTERS/PIPES

GUTTER	TRIBUTARY GUTTER/PIPE										TRIBUTARY SUBAREA										D.A.(AC)
40	140	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6138.9
41	141	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6016.6
42	150	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	570.2
43	142	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5446.4
50	250	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	537.0
51	251	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	446.1
52	252	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	409.0
60	161	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3698.6
61	163	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3530.2
62	63	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3387.5
63	64	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3387.5

64	65	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3387.5
65	164	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3387.5
66	67	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2984.3
67	165	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2984.3
68	167	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	850.6
69	168	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	695.0
70	71	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1822.7
71	260	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1822.7
72	261	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1822.7
73	0	0	0	0	0	0	0	0	0	0	17	0	0	0	0	0	0	0	0	0	0	208.0
74	262	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1428.5
75	263	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1428.5
76	173	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1070.1
77	174	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	897.3
78	0	0	0	0	0	0	0	0	0	0	20	0	0	0	0	0	0	0	0	0	0	620.8
79	264	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	161.3
80	181	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1498.9
81	182	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1358.1
82	0	0	0	0	0	0	0	0	0	0	25	0	0	0	0	0	0	0	0	0	0	314.2
83	183	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1043.8

84	280	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	836.5
85	185	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	620.2
86	281	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	90.2
140	41	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	6138.9
141	42	43	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6016.6
142	160	180	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5446.4
150	50	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	570.2
151	51	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	537.0
152	52	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	446.1
160	60	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	3782.4
161	162	0	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	3698.6
162	61	0	0	0	0	0	0	0	0	0	9	0	0	0	0	0	0	0	0	0	0	3626.2
163	62	0	0	0	0	0	0	0	0	0	8	0	0	0	0	0	0	0	0	0	0	3530.2
164	66	0	0	0	0	0	0	0	0	0	10	0	0	0	0	0	0	0	0	0	0	3387.5
165	166	169	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2984.3
166	68	0	0	0	0	0	0	0	0	0	12	0	0	0	0	0	0	0	0	0	0	880.6
167	69	0	0	0	0	0	0	0	0	0	13	0	0	0	0	0	0	0	0	0	0	850.6
168	0	0	0	0	0	0	0	0	0	0	14	15	0	0	0	0	0	0	0	0	0	695.0
169	70	0	0	0	0	0	0	0	0	0	11	0	0	0	0	0	0	0	0	0	0	2103.7
170	171	74	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1822.7

171	73	0	0	0	0	0	0	0	0	0	16	0	0	0	0	0	0	0	0	0	394.2
172	76	0	0	0	0	0	0	0	0	0	18	0	0	0	0	0	0	0	0	0	1428.5
173	77	0	0	0	0	0	0	0	0	0	19	0	0	0	0	0	0	0	0	0	1070.1
174	78	175	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	897.3
175	79	0	0	0	0	0	0	0	0	0	21	0	0	0	0	0	0	0	0	0	276.5
180	80	0	0	0	0	0	0	0	0	0	23	0	0	0	0	0	0	0	0	0	1664.0
181	81	0	0	0	0	0	0	0	0	0	24	0	0	0	0	0	0	0	0	0	1498.9
182	82	83	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1358.1
183	84	0	0	0	0	0	0	0	0	0	26	0	0	0	0	0	0	0	0	0	1043.8
184	85	0	0	0	0	0	0	0	0	0	27	0	0	0	0	0	0	0	0	0	836.5
185	86	0	0	0	0	0	0	0	0	0	28	0	0	0	0	0	0	0	0	0	620.2
250	151	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	537.0
251	152	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	446.1
252	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	409.0
260	72	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1822.7
261	170	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1822.7
262	75	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1428.5
263	172	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1428.5
264	0	0	0	0	0	0	0	0	0	0	22	0	0	0	0	0	0	0	0	0	161.3
280	184	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	836.5

281 0 0 0 0 0 0 0 0 0 0 29 0 0 0 0 0 0 0 0 0 90.2

1

SOUTH CANYON - LIME CREEK - STEVENS HIGH DRAINAGE DESIGN PLAN BY FMG, INC
FUTURE HYDROLOGIC CONDITIONS AND EXISTING HYDRAULIC CONDITIONS 100 YR STORM

HYDROGRAPHS ARE LISTED FOR THE FOLLOWING 72 CONVEYANCE ELEMENTS

THE UPPER NUMBER IS DISCHARGE IN CFS
THE LOWER NUMBER IS ONE OF THE FOLLOWING CASES:
( ) DENOTES DEPTH ABOVE INVERT IN FEET
(S) DENOTES STORAGE IN AC-FT FOR DETENSION DAM. DISCHARGE INCLUDES SPILLWAY OUTFLOW.
(I) DENOTES GUTTER INFLOW IN CFS FROM SPECIFIED INFLOW HYDROGRAPH
(D) DENOTES DISCHARGE IN CFS DIVERTED FROM THIS GUTTER
(O) DENOTES STORAGE IN AC-FT FOR SURCHARGED GUTTER

TIME(HR/MIN)											
		40	140	41	141	42	150	50	250	151	51
		251	152	52	252	43	142	160	60	161	162
		61	163	62	63	64	65	164	66	67	165
		166	68	167	69	168	169	70	71	260	72
		261	170	171	73	74	262	75	263	172	76
		173	77	174	78	175	79	264	180	80	181
		81	182	82	83	183	84	280	184	85	185
		86	281								
0	5.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
		.0( )	.0( )	.0( )	.0( )	.0( )	.0( )	.0( )	.0(S)	.0( )	.0( )
		0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
		.0(S)	.0( )	.0( )	.0(S)	.0( )	.0( )	.0( )	.0( )	.0( )	.0( )
		0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
		.0( )	.0( )	.0( )	.0( )	.0( )	.0( )	.0( )	.0( )	.0( )	.0( )
		0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
		.0( )	.0( )	.0( )	.0( )	.0( )	.0( )	.0( )	.0( )	.0(S)	.0( )

		0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
		.0(S)	.0( )	.0( )	.0( )	.0( )	.0(S)	.0( )	.0(S)	.0( )	.0( )
		0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
		.0( )	.0( )	.0( )	.0( )	.0( )	.0( )	.0(S)	.0( )	.0( )	.0( )
		0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
		.0( )	.0( )	.0( )	.0( )	.0( )	.0( )	.0(S)	.0( )	.0( )	.0( )
		0.	0.								
		.0( )	.0(S)								
0	10.	0.	4.	0.	0.	0.	1.	0.	1.	1.	0.
		.0( )	.0( )	.0( )	.0( )	.0( )	.0( )	.0( )	.0(S)	.0( )	.0( )
		2.	7.	0.	0.	0.	7.	4.	0.	5.	2.
		.0(S)	.0( )	.0( )	.0(S)	.0( )	.0( )	.0( )	.0( )	.0( )	.0( )
		0.	1.	0.	0.	0.	0.	0.	0.	0.	1.
		.0( )	.0( )	.0( )	.0( )	.0( )	.0( )	.0( )	.0( )	.0( )	.0( )
		1.	0.	0.	0.	0.	0.	0.	0.	0.	0.
		.0( )	.0( )	.0( )	.0( )	.0( )	.0( )	.0( )	.0( )	.0(S)	.0( )
		0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
		.0(S)	.0( )	.0( )	.0( )	.0( )	.0(S)	.0( )	.0(S)	.0( )	.0( )
		0.	0.	0.	0.	0.	0.	0.	3.	0.	4.
		.0( )	.0( )	.0( )	.0( )	.0( )	.0( )	.0(S)	.0( )	.0( )	.0( )
		0.	0.	0.	0.	1.	0.	0.	1.	0.	1.
		.0( )	.0( )	.0( )	.0( )	.0( )	.0( )	.0(S)	.0( )	.0( )	.0( )
		0.	2.								
		.0( )	.0(S)								
0	15.	2.	21.	0.	6.	0.	6.	1.	5.	5.	0.
		.2( )	.0( )	.0( )	.0( )	.1( )	.0( )	.1( )	.0(S)	.0( )	.0( )

9.	26.	0.	0.	6.	34.	18.	0.	22.	10.
.1(S)	.0( )	.0( )	.0(S)	.1( )	.0( )	.0( )	.1( )	.0( )	.0( )
3.	7.	0.	0.	0.	0.	1.	0.	0.	6.
.2( )	.0( )	.0( )	.0( )	.0( )	.0( )	.0( )	.0( )	.0( )	.0( )
6.	0.	1.	0.	2.	0.	0.	0.	0.	0.
.0( )	.0( )	.0( )	.0( )	.0( )	.0( )	.0( )	.0( )	.0(S)	.0( )
0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
.0(S)	.0( )	.0( )	.0( )	.0( )	.0(S)	.0( )	.0(S)	.0( )	.0( )
1.	0.	1.	0.	1.	0.	0.	17.	0.	15.
.0( )	.0( )	.0( )	.0( )	.0( )	.0( )	.0(S)	.0( )	.1( )	.0( )
0.	3.	3.	0.	6.	0.	2.	3.	0.	6.
.0( )	.0( )	.2( )	.0( )	.0( )	.0( )	.0(S)	.0( )	.0( )	.0( )
1.	6.								
.1( )	.0(S)								

0	20.	13.	56.	2.	40.	4.	21.	7.	13.	13.	1.
		.6( )	.0( )	.2( )	.0( )	.3( )	.0( )	.4( )	.0(S)	.0( )	.1( )
		23.	46.	0.	0.	36.	92.	42.	2.	54.	31.
		.2(S)	.0( )	.0( )	.0(S)	.3( )	.0( )	.0( )	.2( )	.0( )	.0( )
		11.	17.	0.	0.	0.	1.	5.	0.	2.	13.
		.4( )	.0( )	.0( )	.0( )	.0( )	.1( )	.0( )	.0( )	.0( )	.0( )
		12.	1.	4.	0.	5.	1.	0.	0.	0.	0.
		.0( )	.1( )	.0( )	.0( )	.0( )	.0( )	.0( )	.0( )	.0(S)	.0( )
		1.	1.	1.	0.	0.	0.	0.	1.	1.	0.
		.0(S)	.0( )	.0( )	.0( )	.0( )	.0(S)	.0( )	.0(S)	.0( )	.0( )
		2.	0.	3.	0.	3.	0.	1.	51.	3.	38.
		.0( )	.0( )	.0( )	.0( )	.0( )	.0( )	.0(S)	.0( )	.3( )	.0( )
		2.	16.	15.	1.	16.	0.	6.	10.	1.	19.

		.2( )	.0( )	.5( )	.1( )	.0( )	.1( )	.0(S)	.0( )	.1( )	.0( )
		2.	9.								
		.2( )	.2(S)								
0	25.	46.	135.	16.	145.	17.	54.	21.	31.	39.	6.
		1.2( )	.0( )	.8( )	.0( )	.8( )	.0( )	.7( )	.0(S)	.0( )	.2( )
		51.	111.	0.	0.	128.	229.	108.	13.	158.	80.
		.5(S)	.0( )	.1( )	.0(S)	.5( )	.0( )	.0( )	.6( )	.0( )	.0( )
		31.	44.	0.	0.	1.	5.	14.	4.	9.	38.
		.7( )	.0( )	.0( )	.0( )	.0( )	.2( )	.0( )	.1( )	.1( )	.0( )
		36.	3.	9.	1.	12.	2.	0.	0.	0.	0.
		.0( )	.2( )	.0( )	.1( )	.0( )	.0( )	.0( )	.0( )	.0(S)	.0( )
		2.	4.	3.	1.	0.	2.	2.	7.	10.	0.
		.0(S)	.0( )	.0( )	.1( )	.0( )	.0(S)	.2( )	.0(S)	.0( )	.1( )
		26.	1.	8.	2.	6.	0.	3.	122.	11.	101.
		.0( )	.1( )	.0( )	.1( )	.0( )	.0( )	.0(S)	.0( )	.6( )	.0( )
		14.	58.	52.	6.	48.	2.	17.	28.	4.	51.
		.6( )	.0( )	.9( )	.3( )	.0( )	.2( )	.1(S)	.0( )	.3( )	.0( )
		6.	17.								
		.3( )	.5(S)								
0	30.	160.	405.	92.	468.	60.	147.	64.	89.	128.	22.
		2.1( )	.0( )	2.1( )	.0( )	1.5( )	.0( )	1.3( )	.2(S)	.0( )	.4( )
		123.	279.	0.	1.	408.	631.	320.	65.	507.	248.
		1.3(S)	.0( )	.2( )	.1(S)	1.1( )	.0( )	.0( )	1.4( )	.0( )	.0( )
		113.	157.	0.	1.	13.	50.	110.	44.	66.	190.
		1.3( )	.0( )	.0( )	.1( )	.2( )	.7( )	.0( )	.4( )	.3( )	.0( )
		173.	40.	108.	10.	90.	17.	0.	0.	2.	4.
		.0( )	.8( )	.0( )	.4( )	.0( )	.0( )	.0( )	.0( )	.0(S)	.2( )

		27.	85.	70.	9.	15.	29.	37.	64.	97.	16.
		.2(S)	.0( )	.0( )	.3( )	.4( )	.0(S)	.8( )	.1(S)	.0( )	.5( )
		249.	15.	91.	28.	63.	1.	16.	311.	52.	340.
		.0( )	.4( )	.0( )	.4( )	.0( )	.1( )	.1(S)	.0( )	1.4( )	.0( )
		71.	196.	166.	30.	165.	11.	57.	116.	24.	202.
		1.4( )	.0( )	1.6( )	.8( )	.0( )	.5( )	.3(S)	.0( )	.7( )	.0( )
		13.	31.								
		.5( )	1.5(S)								
0	35.	443.	823.	319.	1092.	145.	248.	123.	137.	238.	55.
		3.3( )	.0( )	4.1( )	.0( )	2.2( )	.0( )	1.8( )	.7(S)	.0( )	.8( )
		177.	170.	3.	6.	947.	1195.	548.	193.	774.	481.
		1.8(S)	.0( )	.4( )	.6(S)	1.7( )	.0( )	.0( )	2.4( )	.0( )	.0( )
		254.	286.	6.	41.	120.	249.	384.	199.	232.	360.
		1.9( )	.0( )	.3( )	.4( )	.7( )	1.5( )	.0( )	1.1( )	.5( )	.0( )
		308.	177.	276.	61.	252.	53.	0.	0.	27.	45.
		.0( )	1.9( )	.0( )	1.0( )	.0( )	.0( )	.0( )	.0( )	.1(S)	1.0( )
		126.	307.	216.	52.	91.	116.	156.	190.	315.	99.
		1.0(S)	.0( )	.0( )	.9( )	1.1( )	.2(S)	1.9( )	.7(S)	.0( )	1.5( )
		517.	104.	287.	139.	147.	8.	55.	647.	166.	649.
		.0( )	1.3( )	.0( )	1.0( )	.0( )	.2( )	.5(S)	.0( )	2.4( )	.0( )
		228.	435.	333.	102.	341.	46.	140.	291.	94.	455.
		2.4( )	.0( )	2.1( )	1.5( )	.0( )	1.1( )	1.1(S)	.0( )	1.4( )	.0( )
		23.	41.								
		.7( )	3.2(S)								
0	40.	831.	1157.	678.	1719.	228.	283.	160.	168.	300.	89.
		4.4( )	.0( )	4.7( )	.0( )	2.7( )	.0( )	2.1( )	1.5(S)	.0( )	1.0( )

154.	103.	12.	15.	1492.	1646.	688.	367.	916.	664.
1.6(S)	.0( )	.7( )	1.5(S)	2.2( )	.0( )	.0( )	3.4( )	.0( )	.0( )
396.	431.	103.	264.	425.	610.	742.	431.	456.	571.
2.3( )	.0( )	1.5( )	1.1( )	1.3( )	2.2( )	.0( )	1.8( )	.8( )	.0( )
470.	367.	448.	176.	431.	101.	0.	4.	117.	181.
.0( )	2.7( )	.0( )	1.8( )	.0( )	.0( )	.0( )	.2( )	.4(S)	2.2( )
312.	607.	379.	136.	228.	254.	369.	415.	614.	263.
2.7(S)	.0( )	.0( )	1.6( )	1.8( )	.7(S)	3.0( )	1.8(S)	.0( )	2.5( )
749.	309.	534.	322.	212.	32.	111.	958.	363.	936.
.0( )	2.5( )	.0( )	1.6( )	.0( )	.6( )	1.0(S)	.0( )	3.4( )	.0( )
504.	760.	534.	226.	496.	111.	216.	513.	230.	681.
3.5( )	.0( )	2.3( )	2.1( )	.0( )	1.7( )	2.6(S)	.0( )	2.1( )	.0( )
34.	48.								
.8( )	5.3(S)								

0	45.	1280.	1672.	1276.	2167.	271.	292.	185.	191.	316.	105.
		5.2( )	.0( )	5.4( )	.0( )	3.0( )	.0( )	2.2( )	2.4(S)	.0( )	1.1( )
		125.	91.	24.	28.	1897.	2015.	829.	565.	1145.	937.
		1.3(S)	.0( )	1.0( )	2.9(S)	2.5( )	.0( )	.0( )	4.2( )	.0( )	.0( )
		677.	759.	431.	682.	828.	973.	1069.	662.	685.	777.
		3.0( )	.0( )	3.2( )	1.9( )	1.8( )	2.7( )	.0( )	2.4( )	1.0( )	.0( )
		625.	545.	611.	333.	574.	152.	3.	21.	215.	380.
		.0( )	3.3( )	.0( )	2.4( )	.0( )	.0( )	.1( )	.6( )	1.1(S)	3.2( )
		486.	948.	497.	219.	451.	493.	760.	834.	924.	480.
		5.3(S)	.0( )	.0( )	2.1( )	2.5( )	2.0(S)	4.3( )	2.8(S)	.0( )	3.5( )
		979.	565.	754.	494.	260.	73.	150.	1186.	625.	1248.
		.0( )	3.4( )	.0( )	2.0( )	.0( )	1.0( )	1.4(S)	.0( )	4.4( )	.0( )
		853.	1090.	710.	380.	650.	238.	450.	727.	402.	814.

		4.4( )	.0( )	2.5( )	2.7( )	.0( )	2.5( )	4.6(S)	.0( )	2.6( )	.0( )
		42.	51.								
		.9( )	7.1(S)								
0	50.	1816.	2202.	1880.	2580.	286.	290.	198.	199.	310.	109.
		6.0( )	.0( )	5.9( )	.0( )	3.0( )	.0( )	2.3( )	3.2(S)	.0( )	1.1( )
		107.	87.	35.	37.	2294.	2429.	1023.	808.	1487.	1318.
		1.1(S)	.0( )	1.2( )	4.8(S)	2.7( )	.0( )	.0( )	4.9( )	.0( )	.0( )
		1079.	1144.	831.	976.	1167.	1269.	1344.	884.	902.	984.
		3.6( )	.0( )	4.4( )	2.3( )	2.1( )	3.0( )	.0( )	2.9( )	1.2( )	.0( )
		765.	704.	759.	484.	664.	218.	29.	93.	669.	1151.
		.0( )	3.7( )	.0( )	2.9( )	.0( )	.0( )	.3( )	1.4( )	3.4(S)	5.6( )
		1765.	1747.	554.	274.	1192.	1330.	1183.	1222.	1202.	715.
		6.8(S)	.0( )	.0( )	2.3( )	4.0( )	2.5(S)	5.4( )	3.0(S)	.0( )	4.3( )
		1160.	789.	924.	618.	306.	118.	178.	1406.	916.	1479.
		.0( )	4.0( )	.0( )	2.3( )	.0( )	1.2( )	1.8(S)	.0( )	5.1( )	.0( )
		1131.	1345.	762.	584.	952.	545.	959.	894.	560.	859.
		4.9( )	.0( )	2.5( )	3.2( )	.0( )	3.7( )	5.3(S)	.0( )	3.0( )	.0( )
		48.	54.								
		1.0( )	8.5(S)								
0	55.	2353.	2690.	2431.	3027.	288.	288.	210.	215.	292.	106.
		6.7( )	.0( )	6.3( )	.0( )	3.0( )	.0( )	2.4( )	3.8(S)	.0( )	1.1( )
		97.	88.	48.	52.	2739.	2874.	1263.	1091.	1760.	1625.
		1.0(S)	.0( )	1.4( )	7.0(S)	3.0( )	.0( )	.0( )	5.7( )	.0( )	.0( )
		1410.	1456.	1167.	1317.	1453.	1545.	1621.	1145.	1172.	1288.
		4.1( )	.0( )	5.2( )	2.5( )	2.3( )	3.3( )	.0( )	3.4( )	1.4( )	.0( )
		871.	824.	857.	596.	707.	417.	199.	406.	2025.	1904.
		.0( )	4.0( )	.0( )	3.2( )	.0( )	.0( )	.9( )	3.3( )	4.6(S)	7.1( )

		1874.	1925.	577.	301.	1348.	1244.	1380.	1390.	1420.	928.
		6.9(S)	.0( )	.0( )	2.4( )	4.2( )	2.4(S)	5.8( )	3.1(S)	.0( )	4.9( )
		1269.	946.	1023.	687.	336.	154.	194.	1611.	1192.	1667.
		.0( )	4.4( )	.0( )	2.4( )	.0( )	1.5( )	2.0(S)	.0( )	5.7( )	.0( )
		1366.	1563.	733.	831.	1162.	771.	944.	1003.	673.	853.
		5.2( )	.0( )	2.5( )	3.7( )	.0( )	4.2( )	5.3(S)	.0( )	3.3( )	.0( )
		52.	56.								
		1.0( )	9.7(S)								
1	0.	2782.	3148.	2938.	3446.	294.	305.	239.	249.	275.	105.
		7.1( )	.0( )	6.7( )	.0( )	3.1( )	.0( )	2.5( )	4.2(S)	.0( )	1.1( )
		110.	157.	119.	141.	3152.	3257.	1525.	1384.	2018.	1906.
		1.1(S)	.0( )	2.2( )	9.0(S)	3.2( )	.0( )	.0( )	6.3( )	.0( )	.0( )
		1714.	1764.	1499.	1620.	1737.	1828.	1899.	1427.	1619.	1800.
		4.4( )	.0( )	5.9( )	2.8( )	2.5( )	3.5( )	.0( )	3.8( )	1.7( )	.0( )
		927.	891.	906.	664.	724.	874.	639.	895.	1896.	1983.
		.0( )	4.1( )	.0( )	3.3( )	.0( )	.0( )	1.7( )	5.0( )	4.5(S)	7.2( )
		2071.	2079.	574.	309.	1504.	1641.	1555.	1588.	1569.	1088.
		7.1(S)	.0( )	.0( )	2.5( )	4.5( )	2.6(S)	6.2( )	3.1(S)	.0( )	5.3( )
		1311.	1029.	1061.	711.	350.	178.	202.	1732.	1377.	1824.
		.0( )	4.6( )	.0( )	2.4( )	.0( )	1.6( )	2.1(S)	.0( )	6.1( )	.0( )
		1565.	1722.	679.	1043.	1273.	903.	1082.	1067.	741.	836.
		5.4( )	.0( )	2.4( )	4.1( )	.0( )	4.4( )	5.4(S)	.0( )	3.4( )	.0( )
		54.	57.								
		1.0( )	10.5(S)								
1	5.	3200.	3570.	3390.	3816.	307.	317.	260.	261.	271.	114.
		7.3( )	.0( )	6.9( )	.0( )	3.1( )	.0( )	2.6( )	4.3(S)	.0( )	1.1( )

152.	229.	190.	192.	3509.	3606.	1802.	1681.	2302.	2203.
1.6(S)	.0( )	2.9( )	10.7(S)	3.4( )	.0( )	.0( )	6.9( )	.0( )	.0( )
2030.	2075.	1830.	1965.	2110.	2248.	2386.	1919.	2140.	2273.
4.7( )	.0( )	6.5( )	3.0( )	2.8( )	3.8( )	.0( )	4.4( )	2.0( )	.0( )
951.	920.	925.	700.	728.	1322.	1080.	1216.	2173.	2159.
.0( )	4.2( )	.0( )	3.4( )	.0( )	.0( )	2.1( )	5.6( )	4.7(S)	7.5( )
2198.	2229.	557.	305.	1672.	1569.	1646.	1635.	1656.	1189.
7.3(S)	.0( )	.0( )	2.5( )	4.7( )	2.6(S)	6.4( )	3.1(S)	.0( )	5.5( )
1307.	1057.	1061.	707.	354.	193.	205.	1804.	1498.	1942.
.0( )	4.6( )	.0( )	2.4( )	.0( )	1.6( )	2.1(S)	.0( )	6.2( )	.0( )
1712.	1819.	622.	1197.	1355.	1008.	1077.	1092.	774.	812.
5.6( )	.0( )	2.4( )	4.3( )	.0( )	4.5( )	5.4(S)	.0( )	3.5( )	.0( )
56.	57.								
1.1( )	11.2(S)								

1 10.

3656.	3944.	3798.	4180.	312.	312.	265.	267.	277.	136.
7.5( )	.0( )	7.2( )	.0( )	3.2( )	.0( )	2.7( )	4.4(S)	.0( )	1.2( )
203.	240.	223.	233.	3868.	3968.	2089.	1993.	2630.	2559.
2.0(S)	.0( )	3.2( )	12.0(S)	3.6( )	.0( )	.0( )	7.5( )	.0( )	.0( )
2406.	2469.	2249.	2422.	2595.	2740.	2835.	2377.	2520.	2601.
5.1( )	.0( )	7.1( )	3.2( )	3.0( )	4.1( )	.0( )	4.7( )	2.2( )	.0( )
940.	921.	916.	712.	713.	1661.	1420.	1548.	2187.	2204.
.0( )	4.2( )	.0( )	3.4( )	.0( )	.0( )	2.4( )	6.0( )	4.8(S)	7.6( )
2196.	2165.	527.	292.	1639.	1735.	1679.	1698.	1680.	1232.
7.3(S)	.0( )	.0( )	2.4( )	4.7( )	2.6(S)	6.4( )	3.1(S)	.0( )	5.6( )
1260.	1052.	1040.	692.	348.	199.	204.	1880.	1616.	1997.
.0( )	4.6( )	.0( )	2.4( )	.0( )	1.7( )	2.1(S)	.0( )	6.4( )	.0( )
1804.	1863.	568.	1295.	1378.	1056.	1096.	1085.	781.	774.

		5.7( )	.0( )	2.4( )	4.5( )	.0( )	4.6( )	5.4(S)	.0( )	3.5( )	.0( )
		57.	58.								
		1.1( )	11.6(S)								
1	15.	4061.	4292.	4186.	4548.	310.	306.	274.	276.	290.	166.
		7.7( )	.0( )	7.4( )	.0( )	3.1( )	.0( )	2.7( )	4.4(S)	.0( )	1.4( )
		240.	276.	261.	264.	4238.	4337.	2406.	2337.	3033.	2983.
		2.2(S)	.0( )	3.6( )	13.1(S)	3.7( )	.0( )	.0( )	8.0( )	.0( )	.0( )
		2852.	2911.	2720.	2876.	2996.	3075.	3132.	2693.	2794.	2860.
		5.5( )	.0( )	7.8( )	3.5( )	3.2( )	4.3( )	.0( )	5.0( )	2.3( )	.0( )
		909.	896.	884.	705.	686.	1951.	1715.	1790.	2192.	2177.
		.0( )	4.1( )	.0( )	3.4( )	.0( )	.0( )	2.6( )	6.3( )	4.8(S)	7.5( )
		2165.	2186.	486.	274.	1700.	1616.	1657.	1633.	1648.	1229.
		7.2(S)	.0( )	.0( )	2.3( )	4.7( )	2.6(S)	6.4( )	3.1(S)	.0( )	5.6( )
		1190.	1025.	1002.	670.	333.	200.	197.	1931.	1714.	1996.
		.0( )	4.5( )	.0( )	2.4( )	.0( )	1.7( )	2.0(S)	.0( )	6.5( )	.0( )
		1841.	1850.	512.	1337.	1357.	1066.	1047.	1050.	768.	721.
		5.7( )	.0( )	2.3( )	4.5( )	.0( )	4.6( )	5.4(S)	.0( )	3.4( )	.0( )
		57.	58.								
		1.1( )	11.9(S)								
1	20.	4430.	4636.	4562.	4900.	308.	308.	285.	289.	306.	199.
		7.8( )	.0( )	7.6( )	.0( )	3.1( )	.0( )	2.7( )	4.5(S)	.0( )	1.5( )
		270.	291.	283.	288.	4592.	4680.	2727.	2680.	3262.	3230.
		2.4(S)	.0( )	3.9( )	13.8(S)	3.9( )	.0( )	.0( )	8.5( )	.0( )	.0( )
		3120.	3132.	2968.	3171.	3232.	3281.	3316.	2904.	2962.	2985.
		5.7( )	.0( )	8.0( )	3.6( )	3.3( )	4.5( )	.0( )	5.1( )	2.4( )	.0( )
		863.	855.	839.	684.	653.	2122.	1893.	1932.	2109.	2102.
		.0( )	4.1( )	.0( )	3.4( )	.0( )	.0( )	2.7( )	6.4( )	4.7(S)	7.4( )

		2061.	2008.	440.	251.	1568.	1625.	1586.	1593.	1576.	1193.
		7.1(S)	.0( )	.0( )	2.2( )	4.6( )	2.6(S)	6.2( )	3.1(S)	.0( )	5.5( )
		1112.	982.	949.	637.	312.	195.	186.	1953.	1782.	1947.
		.0( )	4.4( )	.0( )	2.3( )	.0( )	1.7( )	1.9(S)	.0( )	6.5( )	.0( )
		1825.	1786.	454.	1332.	1301.	1043.	1010.	996.	737.	662.
		5.7( )	.0( )	2.3( )	4.5( )	.0( )	4.6( )	5.4(S)	.0( )	3.4( )	.0( )
		58.	58.								
		1.1( )	12.0(S)								
1	25.	4775.	4954.	4902.	5182.	311.	317.	300.	304.	321.	230.
		7.9( )	.0( )	7.7( )	.0( )	3.2( )	.0( )	2.8( )	4.7(S)	.0( )	1.6( )
		289.	306.	299.	301.	4870.	4926.	2979.	2945.	3325.	3303.
		2.5(S)	.0( )	4.1( )	14.4(S)	4.0( )	.0( )	.0( )	8.9( )	.0( )	.0( )
		3212.	3224.	3085.	3324.	3355.	3372.	3377.	2995.	3006.	3006.
		5.7( )	.0( )	8.1( )	3.7( )	3.4( )	4.5( )	.0( )	5.2( )	2.4( )	.0( )
		812.	806.	788.	655.	614.	2194.	1971.	1981.	1997.	1974.
		.0( )	3.9( )	.0( )	3.3( )	.0( )	.0( )	2.7( )	6.5( )	4.6(S)	7.2( )
		1923.	1934.	392.	226.	1542.	1479.	1500.	1473.	1483.	1136.
		7.0(S)	.0( )	.0( )	2.1( )	4.5( )	2.5(S)	6.1( )	3.1(S)	.0( )	5.4( )
		1026.	926.	885.	597.	289.	187.	173.	1948.	1814.	1859.
		.0( )	4.3( )	.0( )	2.2( )	.0( )	1.6( )	1.7(S)	.0( )	6.6( )	.0( )
		1763.	1689.	396.	1293.	1230.	1003.	945.	931.	696.	602.
		5.7( )	.0( )	2.2( )	4.5( )	.0( )	4.5( )	5.3(S)	.0( )	3.3( )	.0( )
		58.	58.								
		1.1( )	12.0(S)								
1	30.	5070.	5206.	5166.	5359.	319.	327.	314.	318.	334.	256.
		8.0( )	.0( )	7.8( )	.0( )	3.2( )	.0( )	2.9( )	4.8(S)	.0( )	1.7( )

303.	313.	306.	308.	5040.	5070.	3154.	3129.	3402.	3387.
2.6(S)	.0( )	4.2( )	14.7(S)	4.1( )	.0( )	.0( )	9.1( )	.0( )	.0( )
3311.	3324.	3206.	3367.	3361.	3347.	3332.	2983.	2963.	2941.
5.8( )	.0( )	8.2( )	3.7( )	3.4( )	4.5( )	.0( )	5.2( )	2.4( )	.0( )
757.	753.	734.	620.	573.	2184.	1969.	1958.	1853.	1838.
.0( )	3.8( )	.0( )	3.2( )	.0( )	.0( )	2.7( )	6.5( )	4.5(S)	7.0( )
1790.	1738.	348.	202.	1390.	1421.	1392.	1393.	1379.	1067.
6.8(S)	.0( )	.0( )	2.0( )	4.3( )	2.5(S)	5.9( )	3.1(S)	.0( )	5.2( )
939.	861.	815.	551.	265.	175.	159.	1916.	1811.	1746.
.0( )	4.2( )	.0( )	2.1( )	.0( )	1.6( )	1.5(S)	.0( )	6.6( )	.0( )
1670.	1576.	343.	1232.	1147.	947.	876.	862.	649.	547.
5.6( )	.0( )	2.1( )	4.4( )	.0( )	4.5( )	5.2(S)	.0( )	3.2( )	.0( )
58.	58.								
1.1( )	11.9(S)								

1 35.

5286.	5373.	5341.	5456.	329.	338.	327.	330.	344.	277.
8.1( )	.0( )	7.9( )	.0( )	3.2( )	.0( )	2.9( )	4.9(S)	.0( )	1.8( )
312.	318.	310.	311.	5127.	5141.	3280.	3260.	3445.	3433.
2.7(S)	.0( )	4.2( )	14.8(S)	4.1( )	.0( )	.0( )	9.3( )	.0( )	.0( )
3369.	3371.	3271.	3307.	3278.	3247.	3218.	2898.	2854.	2820.
5.8( )	.0( )	8.2( )	3.7( )	3.4( )	4.4( )	.0( )	5.1( )	2.3( )	.0( )
703.	700.	680.	582.	534.	2117.	1913.	1888.	1713.	1691.
.0( )	3.7( )	.0( )	3.1( )	.0( )	.0( )	2.7( )	6.4( )	4.3(S)	6.7( )
1629.	1633.	308.	179.	1325.	1280.	1291.	1264.	1272.	990.
6.7(S)	.0( )	.0( )	1.9( )	4.2( )	2.4(S)	5.6( )	3.0(S)	.0( )	5.0( )
853.	793.	745.	504.	241.	163.	146.	1861.	1777.	1622.
.0( )	4.0( )	.0( )	2.0( )	.0( )	1.5( )	1.4(S)	.0( )	6.5( )	.0( )
1560.	1457.	299.	1158.	1061.	886.	807.	793.	600.	497.

		5.4( )	.0( )	2.1( )	4.3( )	.0( )	4.4( )	5.1(S)	.0( )	3.1( )	.0( )
		58.	58.								
		1.1( )	11.7(S)								
1	40.	5417.	5462.	5435.	5485.	339.	346.	338.	340.	349.	292.
		8.1( )	.0( )	8.0( )	.0( )	3.3( )	.0( )	3.0( )	5.0(S)	.0( )	1.8( )
		316.	318.	311.	310.	5146.	5141.	3353.	3335.	3414.	3404.
		2.7(S)	.0( )	4.2( )	14.8(S)	4.1( )	.0( )	.0( )	9.4( )	.0( )	.0( )
		3350.	3344.	3258.	3184.	3140.	3097.	3060.	2766.	2709.	2667.
		5.8( )	.0( )	8.2( )	3.6( )	3.3( )	4.4( )	.0( )	5.0( )	2.3( )	.0( )
		650.	647.	628.	544.	495.	2017.	1823.	1790.	1565.	1547.
		.0( )	3.6( )	.0( )	3.1( )	.0( )	.0( )	2.7( )	6.3( )	4.2(S)	6.4( )
		1499.	1457.	272.	158.	1185.	1200.	1179.	1177.	1165.	912.
		6.5(S)	.0( )	.0( )	1.7( )	4.0( )	2.4(S)	5.4( )	3.0(S)	.0( )	4.8( )
		772.	726.	680.	462.	218.	150.	132.	1788.	1720.	1494.
		.0( )	3.8( )	.0( )	1.9( )	.0( )	1.4( )	1.2(S)	.0( )	6.5( )	.0( )
		1445.	1340.	261.	1079.	977.	824.	741.	727.	553.	452.
		5.3( )	.0( )	2.0( )	4.2( )	.0( )	4.3( )	5.0(S)	.0( )	3.0( )	.0( )
		58.	58.								
		1.1( )	11.4(S)								
1	45.	5470.	5478.	5453.	5435.	347.	352.	345.	346.	351.	302.
		8.1( )	.0( )	8.0( )	.0( )	3.3( )	.0( )	3.0( )	5.0(S)	.0( )	1.8( )
		316.	315.	308.	307.	5089.	5064.	3366.	3351.	3324.	3316.
		2.7(S)	.0( )	4.2( )	14.6(S)	4.1( )	.0( )	.0( )	9.4( )	.0( )	.0( )
		3270.	3256.	3183.	3024.	2970.	2920.	2878.	2609.	2545.	2499.
		5.8( )	.0( )	8.2( )	3.5( )	3.2( )	4.3( )	.0( )	4.9( )	2.2( )	.0( )
		600.	598.	579.	507.	459.	1898.	1715.	1678.	1429.	1410.
		.0( )	3.4( )	.0( )	3.0( )	.0( )	.0( )	2.6( )	6.1( )	4.1(S)	6.2( )

		1351.	1348.	240.	140.	1108.	1077.	1082.	1059.	1064.	836.
		6.4(S)	.0( )	.0( )	1.6( )	3.9( )	2.4(S)	5.2( )	3.0(S)	.0( )	4.6( )
		700.	664.	621.	424.	197.	137.	120.	1698.	1643.	1355.
		.0( )	3.7( )	.0( )	1.9( )	.0( )	1.4( )	1.1(S)	.0( )	6.4( )	.0( )
		1318.	1196.	196.	1000.	898.	763.	678.	666.	508.	412.
		5.1( )	.0( )	1.7( )	4.0( )	.0( )	4.2( )	4.9(S)	.0( )	2.9( )	.0( )
		58.	57.								
		1.1( )	11.2(S)								
1	50.	5449.	5419.	5397.	5316.	352.	355.	348.	349.	350.	307.
		8.1( )	.0( )	7.9( )	.0( )	3.3( )	.0( )	3.0( )	5.0(S)	.0( )	1.8( )
		313.	309.	302.	301.	4964.	4924.	3324.	3310.	3195.	3187.
		2.7(S)	.0( )	4.1( )	14.4(S)	4.1( )	.0( )	.0( )	9.3( )	.0( )	.0( )
		3149.	3132.	3068.	2843.	2785.	2732.	2688.	2440.	2374.	2326.
		5.7( )	.0( )	8.1( )	3.4( )	3.1( )	4.1( )	.0( )	4.8( )	2.1( )	.0( )
		554.	551.	533.	471.	424.	1773.	1600.	1561.	1298.	1282.
		.0( )	3.3( )	.0( )	2.9( )	.0( )	.0( )	2.5( )	6.0( )	3.9(S)	5.9( )
		1239.	1208.	211.	123.	997.	1004.	989.	988.	970.	764.
		6.3(S)	.0( )	.0( )	1.5( )	3.7( )	2.3(S)	4.9( )	3.0(S)	.0( )	4.4( )
		634.	607.	566.	389.	177.	125.	107.	1600.	1553.	1221.
		.0( )	3.5( )	.0( )	1.8( )	.0( )	1.3( )	.9(S)	.0( )	6.3( )	.0( )
		1191.	1091.	167.	924.	827.	707.	621.	610.	466.	376.
		4.9( )	.0( )	1.6( )	3.9( )	.0( )	4.1( )	4.8(S)	.0( )	2.8( )	.0( )
		57.	57.								
		1.1( )	10.9(S)								
1	55.	5359.	5297.	5275.	5144.	354.	355.	349.	348.	346.	309.
		8.1( )	.0( )	7.9( )	.0( )	3.3( )	.0( )	3.0( )	5.0(S)	.0( )	1.9( )

308.	302.	295.	293.	4789.	4739.	3240.	3226.	3049.	3042.
2.7(S)	.0( )	4.0( )	14.0(S)	4.0( )	.0( )	.0( )	9.2( )	.0( )	.0( )
3013.	2994.	2939.	2657.	2596.	2543.	2499.	2271.	2205.	2158.
5.6( )	.0( )	8.0( )	3.3( )	3.0( )	4.0( )	.0( )	4.7( )	2.0( )	.0( )
510.	508.	491.	438.	393.	1648.	1485.	1446.	1185.	1171.
.0( )	3.2( )	.0( )	2.8( )	.0( )	.0( )	2.4( )	5.9( )	3.8(S)	5.6( )
1122.	1118.	187.	109.	931.	909.	912.	892.	882.	697.
6.1(S)	.0( )	.0( )	1.4( )	3.6( )	2.3(S)	4.7( )	2.9(S)	.0( )	4.2( )
571.	554.	515.	357.	159.	112.	94.	1500.	1458.	1109.
.0( )	3.3( )	.0( )	1.7( )	.0( )	1.2( )	.8(S)	.0( )	6.2( )	.0( )
1083.	999.	145.	854.	763.	657.	569.	558.	428.	344.
4.8( )	.0( )	1.5( )	3.8( )	.0( )	4.0( )	4.7(S)	.0( )	2.7( )	.0( )
57.	57.								
1.1( )	10.6(S)								

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5209.	5118.	5096.	4911.	354.	352.	346.	345.	338.	307.
8.1( )	.0( )	7.8( )	.0( )	3.3( )	.0( )	3.0( )	5.0(S)	.0( )	1.8( )
300.	291.	284.	281.	4557.	4486.	3084.	3070.	2698.	2691.
2.6(S)	.0( )	3.9( )	13.6(S)	3.9( )	.0( )	.0( )	9.0( )	.0( )	.0( )
2668.	2593.	2545.	2472.	2412.	2359.	2317.	2108.	2045.	1999.
5.3( )	.0( )	7.5( )	3.2( )	2.9( )	3.9( )	.0( )	4.5( )	1.9( )	.0( )
471.	468.	453.	406.	365.	1529.	1376.	1337.	1078.	1064.
.0( )	3.0( )	.0( )	2.7( )	.0( )	.0( )	2.4( )	5.7( )	3.7(S)	5.4( )
1024.	998.	165.	97.	833.	832.	820.	814.	801.	634.
6.0(S)	.0( )	.0( )	1.3( )	3.4( )	2.2(S)	4.5( )	2.8(S)	.0( )	4.0( )
516.	505.	469.	327.	142.	101.	84.	1402.	1364.	1009.
.0( )	3.2( )	.0( )	1.6( )	.0( )	1.1( )	.7(S)	.0( )	6.1( )	.0( )
986.	909.	127.	782.	677.	583.	521.	512.	394.	316.

		4.6( )	.0( )	1.4( )	3.6( )	.0( )	3.8( )	4.7(S)	.0( )	2.6( )	.0( )
		57.	56.								
		1.1( )	10.3(S)								
2	5.	4994.	4861.	4844.	4577.	349.	344.	339.	336.	324.	301.
		8.0( )	.0( )	7.7( )	.0( )	3.3( )	.0( )	3.0( )	4.9(S)	.0( )	1.8( )
		287.	270.	270.	268.	4227.	4124.	2858.	2847.	2421.	2416.
		2.5(S)	.0( )	3.7( )	13.2(S)	3.7( )	.0( )	.0( )	8.7( )	.0( )	.0( )
		2397.	2396.	2355.	2295.	2237.	2187.	2146.	1954.	1894.	1850.
		5.1( )	.0( )	7.3( )	3.2( )	2.8( )	3.8( )	.0( )	4.4( )	1.8( )	.0( )
		433.	432.	418.	378.	339.	1416.	1272.	1234.	976.	963.
		.0( )	2.9( )	.0( )	2.6( )	.0( )	.0( )	2.3( )	5.6( )	3.7(S)	5.1( )
		917.	910.	146.	85.	764.	749.	751.	737.	727.	577.
		5.9(S)	.0( )	.0( )	1.2( )	3.2( )	2.2(S)	4.3( )	2.7(S)	.0( )	3.8( )
		468.	460.	427.	300.	126.	91.	76.	1266.	1232.	911.
		.0( )	3.0( )	.0( )	1.5( )	.0( )	1.1( )	.7(S)	.0( )	5.8( )	.0( )
		892.	820.	112.	708.	608.	525.	478.	469.	362.	290.
		4.5( )	.0( )	1.3( )	3.5( )	.0( )	3.6( )	4.6(S)	.0( )	2.5( )	.0( )
		56.	56.								
		1.1( )	10.0(S)								
2	10.	4705.	4527.	4516.	4184.	340.	331.	327.	324.	308.	292.
		7.9( )	.0( )	7.5( )	.0( )	3.3( )	.0( )	2.9( )	4.8(S)	.0( )	1.8( )
		271.	257.	257.	255.	3844.	3740.	2639.	2633.	2277.	2274.
		2.4(S)	.0( )	3.5( )	12.7(S)	3.6( )	.0( )	.0( )	8.4( )	.0( )	.0( )
		2259.	2221.	2188.	2129.	2072.	2024.	1985.	1810.	1752.	1710.
		5.0( )	.0( )	7.0( )	3.1( )	2.7( )	3.7( )	.0( )	4.2( )	1.8( )	.0( )
		399.	399.	385.	351.	314.	1311.	1175.	1138.	883.	871.
		.0( )	2.8( )	.0( )	2.5( )	.0( )	.0( )	2.2( )	5.4( )	3.6(S)	4.9( )

		837.	819.	129.	76.	691.	688.	678.	671.	661.	526.
		5.9(S)	.0( )	.0( )	1.2( )	3.1( )	2.2(S)	4.1( )	2.6(S)	.0( )	3.7( )
		425.	420.	388.	275.	113.	82.	69.	1101.	1074.	814.
		.0( )	2.9( )	.0( )	1.5( )	.0( )	1.0( )	.6(S)	.0( )	5.5( )	.0( )
		801.	738.	96.	642.	551.	479.	438.	430.	333.	265.
		4.3( )	.0( )	1.3( )	3.3( )	.0( )	3.5( )	4.6(S)	.0( )	2.4( )	.0( )
		56.	56.								
		1.1( )	9.7(S)								
2	15.	4368.	4166.	4160.	3826.	328.	316.	314.	310.	293.	281.
		7.8( )	.0( )	7.3( )	.0( )	3.2( )	.0( )	2.9( )	4.7(S)	.0( )	1.8( )
		257.	243.	243.	241.	3498.	3411.	2445.	2441.	2082.	2080.
		2.3(S)	.0( )	3.4( )	12.3(S)	3.4( )	.0( )	.0( )	8.2( )	.0( )	.0( )
		2069.	2052.	2030.	1973.	1919.	1873.	1836.	1675.	1622.	1582.
		4.8( )	.0( )	6.8( )	3.0( )	2.6( )	3.5( )	.0( )	4.1( )	1.7( )	.0( )
		368.	368.	355.	326.	291.	1214.	1086.	1050.	801.	791.
		.0( )	2.7( )	.0( )	2.4( )	.0( )	.0( )	2.2( )	5.3( )	3.5(S)	4.7( )
		753.	744.	113.	67.	631.	619.	620.	610.	601.	479.
		5.8(S)	.0( )	.0( )	1.1( )	2.9( )	2.2(S)	3.9( )	2.6(S)	.0( )	3.5( )
		386.	383.	354.	253.	101.	74.	62.	966.	947.	726.
		.0( )	2.7( )	.0( )	1.4( )	.0( )	1.0( )	.5(S)	.0( )	5.2( )	.0( )
		716.	664.	81.	583.	501.	438.	401.	394.	307.	242.
		4.1( )	.0( )	1.2( )	3.2( )	.0( )	3.3( )	4.5(S)	.0( )	2.3( )	.0( )
		56.	55.								
		1.1( )	9.4(S)								
2	20.	4029.	3827.	3823.	3512.	313.	301.	299.	295.	277.	268.
		7.7( )	.0( )	7.2( )	.0( )	3.2( )	.0( )	2.8( )	4.6(S)	.0( )	1.7( )

243.	230.	230.	228.	3199.	3117.	2262.	2260.	1933.	1933.
2.2(S)	.0( )	3.3( )	11.9(S)	3.2( )	.0( )	.0( )	7.9( )	.0( )	.0( )
1924.	1898.	1882.	1829.	1777.	1734.	1700.	1553.	1503.	1466.
4.6( )	.0( )	6.6( )	2.9( )	2.6( )	3.4( )	.0( )	4.0( )	1.6( )	.0( )
340.	340.	328.	303.	269.	1126.	1005.	971.	726.	716.
.0( )	2.6( )	.0( )	2.3( )	.0( )	.0( )	2.1( )	5.2( )	3.4(S)	4.4( )
685.	672.	100.	59.	572.	569.	562.	555.	547.	437.
5.7(S)	.0( )	.0( )	1.0( )	2.8( )	2.1(S)	3.7( )	2.5(S)	.0( )	3.3( )
351.	349.	322.	231.	91.	67.	56.	854.	841.	648.
.0( )	2.6( )	.0( )	1.3( )	.0( )	.9( )	.5(S)	.0( )	5.0( )	.0( )
642.	598.	67.	531.	456.	402.	367.	360.	282.	221.
3.9( )	.0( )	1.1( )	3.1( )	.0( )	3.2( )	4.5(S)	.0( )	2.3( )	.0( )
55.	55.								
1.1( )	9.0(S)								

2 25.

3717.	3520.	3518.	3228.	298.	284.	284.	280.	262.	256.
7.6( )	.0( )	7.0( )	.0( )	3.1( )	.0( )	2.7( )	4.5(S)	.0( )	1.7( )
230.	217.	217.	215.	2930.	2857.	2096.	2094.	1783.	1783.
2.1(S)	.0( )	3.1( )	11.4(S)	3.1( )	.0( )	.0( )	7.6( )	.0( )	.0( )
1776.	1758.	1746.	1696.	1647.	1608.	1576.	1441.	1395.	1362.
4.5( )	.0( )	6.3( )	2.8( )	2.5( )	3.3( )	.0( )	3.8( )	1.5( )	.0( )
314.	314.	302.	282.	250.	1048.	934.	903.	662.	655.
.0( )	2.5( )	.0( )	2.2( )	.0( )	.0( )	2.0( )	5.0( )	3.4(S)	4.2( )
628.	623.	88.	52.	535.	528.	529.	526.	498.	399.
5.6(S)	.0( )	.0( )	.9( )	2.7( )	2.1(S)	3.6( )	2.4(S)	.0( )	3.2( )
319.	319.	293.	212.	81.	61.	50.	761.	753.	587.
.0( )	2.5( )	.0( )	1.3( )	.0( )	.9( )	.4(S)	.0( )	4.7( )	.0( )
582.	539.	55.	484.	415.	369.	336.	330.	259.	202.

		3.8( )	.0( )	1.0( )	3.0( )	.0( )	3.1( )	4.4(S)	.0( )	2.2( )	.0( )
		55.	54.								
		1.0( )	8.7(S)								
2	30.	3435.	3244.	3242.	2975.	282.	270.	270.	266.	248.	243.
		7.4( )	.0( )	6.8( )	.0( )	3.0( )	.0( )	2.7( )	4.3(S)	.0( )	1.6( )
		217.	204.	204.	202.	2693.	2625.	1942.	1942.	1655.	1655.
		2.0(S)	.0( )	3.0( )	11.0(S)	3.0( )	.0( )	.0( )	7.4( )	.0( )	.0( )
		1650.	1630.	1621.	1575.	1527.	1490.	1459.	1336.	1288.	1249.
		4.3( )	.0( )	6.1( )	2.7( )	2.4( )	3.2( )	.0( )	3.7( )	1.5( )	.0( )
		287.	287.	275.	261.	231.	962.	854.	815.	612.	606.
		.0( )	2.4( )	.0( )	2.2( )	.0( )	.0( )	1.9( )	4.8( )	3.3(S)	4.1( )
		587.	579.	78.	46.	502.	500.	494.	486.	453.	365.
		5.6(S)	.0( )	.0( )	.9( )	2.6( )	2.1(S)	3.5( )	2.2(S)	.0( )	3.0( )
		291.	291.	267.	194.	73.	55.	45.	683.	677.	529.
		.0( )	2.4( )	.0( )	1.2( )	.0( )	.8( )	.4(S)	.0( )	4.5( )	.0( )
		526.	485.	43.	442.	378.	338.	307.	302.	239.	186.
		3.6( )	.0( )	.9( )	2.8( )	.0( )	2.9( )	4.4(S)	.0( )	2.1( )	.0( )
		54.	53.								
		1.0( )	8.3(S)								
2	35.	3182.	2994.	2994.	2748.	268.	257.	257.	254.	234.	230.
		7.3( )	.0( )	6.7( )	.0( )	3.0( )	.0( )	2.6( )	4.2(S)	.0( )	1.6( )
		204.	192.	192.	190.	2480.	2418.	1803.	1803.	1532.	1532.
		2.0(S)	.0( )	2.9( )	10.6(S)	2.8( )	.0( )	.0( )	7.1( )	.0( )	.0( )
		1529.	1511.	1504.	1459.	1412.	1373.	1341.	1228.	1176.	1137.
		4.2( )	.0( )	5.9( )	2.6( )	2.3( )	3.1( )	.0( )	3.5( )	1.4( )	.0( )
		262.	262.	252.	243.	214.	875.	773.	742.	575.	571.
		.0( )	2.3( )	.0( )	2.1( )	.0( )	.0( )	1.8( )	4.5( )	3.3(S)	4.0( )

		555.	553.	68.	41.	485.	482.	450.	444.	413.	333.
		5.6(S)	.0( )	.0( )	.8( )	2.6( )	2.0(S)	3.3( )	2.0(S)	.0( )	2.9( )
		264.	264.	239.	178.	61.	50.	41.	615.	611.	477.
		.0( )	2.3( )	.0( )	1.2( )	.0( )	.8( )	.4(S)	.0( )	4.3( )	.0( )
		474.	436.	32.	404.	345.	310.	281.	276.	220.	171.
		3.4( )	.0( )	.7( )	2.7( )	.0( )	2.8( )	4.3(S)	.0( )	2.0( )	.0( )
		53.	53.								
		1.0( )	8.0(S)								
2	40.	2958.	2771.	2771.	2542.	255.	244.	244.	241.	220.	218.
		7.2( )	.0( )	6.6( )	.0( )	2.9( )	.0( )	2.5( )	4.1(S)	.0( )	1.6( )
		192.	180.	180.	178.	2286.	2228.	1673.	1673.	1413.	1413.
		1.9(S)	.0( )	2.8( )	10.2(S)	2.7( )	.0( )	.0( )	6.9( )	.0( )	.0( )
		1411.	1391.	1386.	1336.	1278.	1226.	1177.	1074.	1077.	1046.
		4.1( )	.0( )	5.7( )	2.6( )	2.2( )	3.0( )	.0( )	3.2( )	1.3( )	.0( )
		241.	241.	232.	226.	199.	805.	709.	683.	543.	539.
		.0( )	2.2( )	.0( )	2.0( )	.0( )	.0( )	1.7( )	4.3( )	3.3(S)	3.8( )
		522.	514.	60.	36.	454.	449.	411.	404.	376.	305.
		5.5(S)	.0( )	.0( )	.8( )	2.5( )	1.7(S)	3.1( )	1.8(S)	.0( )	2.7( )
		238.	238.	215.	163.	53.	45.	37.	555.	552.	431.
		.0( )	2.1( )	.0( )	1.1( )	.0( )	.7( )	.3(S)	.0( )	4.1( )	.0( )
		429.	395.	24.	371.	320.	290.	277.	253.	203.	157.
		3.3( )	.0( )	.6( )	2.6( )	.0( )	2.7( )	4.2(S)	.0( )	2.0( )	.0( )
		53.	52.								
		1.0( )	7.6(S)								
2	45.	2760.	2566.	2566.	2349.	243.	231.	231.	227.	207.	205.
		7.1( )	.0( )	6.4( )	.0( )	2.8( )	.0( )	2.5( )	3.9(S)	.0( )	1.5( )

180.	169.	169.	167.	2106.	2051.	1548.	1548.	1287.	1287.
1.8(S)	.0( )	2.7( )	9.9(S)	2.6( )	.0( )	.0( )	6.7( )	.0( )	.0( )
1285.	1264.	1261.	1209.	1153.	1118.	1105.	1011.	997.	969.
3.9( )	.0( )	5.4( )	2.5( )	2.1( )	2.9( )	.0( )	3.1( )	1.3( )	.0( )
223.	223.	214.	210.	184.	746.	656.	634.	512.	508.
.0( )	2.1( )	.0( )	2.0( )	.0( )	.0( )	1.7( )	4.2( )	3.2(S)	3.7( )
494.	470.	53.	32.	417.	412.	374.	368.	342.	278.
5.4(S)	.0( )	.0( )	.7( )	2.4( )	1.5(S)	3.0( )	1.6(S)	.0( )	2.6( )
216.	216.	195.	149.	46.	41.	33.	503.	500.	391.
.0( )	2.0( )	.0( )	1.1( )	.0( )	.7( )	.3(S)	.0( )	3.9( )	.0( )
391.	362.	19.	344.	304.	279.	269.	233.	187.	145.
3.1( )	.0( )	.6( )	2.5( )	.0( )	2.7( )	4.0(S)	.0( )	1.9( )	.0( )
52.	51.								
1.0( )	7.3(S)								

2 50.

2564.	2376.	2376.	2167.	230.	218.	218.	215.	195.	194.
6.9( )	.0( )	6.3( )	.0( )	2.8( )	.0( )	2.4( )	3.8(S)	.0( )	1.5( )
169.	158.	158.	156.	1937.	1884.	1427.	1427.	1171.	1171.
1.7(S)	.0( )	2.6( )	9.5(S)	2.5( )	.0( )	.0( )	6.4( )	.0( )	.0( )
1169.	1152.	1149.	1108.	1068.	1044.	1014.	927.	927.	902.
3.8( )	.0( )	5.2( )	2.4( )	2.0( )	2.8( )	.0( )	2.9( )	1.2( )	.0( )
206.	206.	198.	195.	171.	696.	611.	592.	489.	486.
.0( )	2.0( )	.0( )	1.9( )	.0( )	.0( )	1.6( )	4.0( )	3.2(S)	3.6( )
477.	429.	47.	28.	382.	376.	340.	334.	312.	253.
5.2(S)	.0( )	.0( )	.7( )	2.3( )	1.2(S)	2.8( )	1.4(S)	.0( )	2.5( )
196.	196.	177.	137.	41.	37.	30.	457.	456.	360.
.0( )	1.9( )	.0( )	1.0( )	.0( )	.6( )	.3(S)	.0( )	3.8( )	.0( )
360.	336.	15.	322.	287.	270.	259.	214.	173.	134.

		3.0( )	.0( )	.5( )	2.5( )	.0( )	2.6( )	3.7(S)	.0( )	1.8( )	.0( )
		52.	51.								
		1.0( )	6.9(S)								
2	55.	2322.	2198.	2198.	1998.	218.	207.	207.	205.	183.	183.
		6.7( )	.0( )	6.2( )	.0( )	2.7( )	.0( )	2.3( )	3.7(S)	.0( )	1.4( )
		160.	148.	148.	146.	1780.	1731.	1314.	1314.	1079.	1079.
		1.6(S)	.0( )	2.5( )	9.2(S)	2.4( )	.0( )	.0( )	6.2( )	.0( )	.0( )
		1079.	1066.	1064.	1032.	996.	969.	954.	875.	867.	845.
		3.6( )	.0( )	5.0( )	2.3( )	1.9( )	2.7( )	.0( )	2.8( )	1.2( )	.0( )
		191.	191.	183.	181.	159.	654.	573.	557.	467.	464.
		.0( )	1.9( )	.0( )	1.8( )	.0( )	.0( )	1.6( )	3.9( )	3.2(S)	3.6( )
		450.	377.	41.	24.	336.	328.	309.	304.	284.	231.
		4.7(S)	.0( )	.0( )	.6( )	2.1( )	1.0(S)	2.7( )	1.3(S)	.0( )	2.4( )
		178.	178.	161.	125.	36.	34.	27.	417.	417.	334.
		.0( )	1.8( )	.0( )	1.0( )	.0( )	.6( )	.2(S)	.0( )	3.6( )	.0( )
		334.	314.	11.	303.	272.	260.	248.	197.	160.	124.
		2.9( )	.0( )	.4( )	2.4( )	.0( )	2.6( )	3.4(S)	.0( )	1.8( )	.0( )
		51.	50.								
		1.0( )	6.6(S)								
3	0.	2145.	2035.	2035.	1851.	209.	203.	203.	203.	173.	173.
		6.4( )	.0( )	6.1( )	.0( )	2.6( )	.0( )	2.3( )	3.5(S)	.0( )	1.4( )
		151.	138.	138.	137.	1642.	1598.	1214.	1214.	1006.	1006.
		1.6(S)	.0( )	2.4( )	8.9(S)	2.3( )	.0( )	.0( )	6.0( )	.0( )	.0( )
		1006.	994.	994.	964.	930.	909.	887.	815.	813.	792.
		3.5( )	.0( )	4.9( )	2.3( )	1.9( )	2.6( )	.0( )	2.7( )	1.1( )	.0( )
		176.	176.	169.	169.	147.	616.	540.	525.	437.	432.
		.0( )	1.9( )	.0( )	1.8( )	.0( )	.0( )	1.5( )	3.8( )	3.2(S)	3.4( )

		414.	330.	30.	20.	300.	297.	282.	277.	259.	212.
		4.2(S)	.0( )	.0( )	.5( )	2.0( )	.9(S)	2.6( )	1.1(S)	.0( )	2.2( )
		162.	162.	147.	114.	32.	30.	24.	385.	385.	312.
		.0( )	1.7( )	.0( )	.9( )	.0( )	.6( )	.2(S)	.0( )	3.5( )	.0( )
		312.	294.	9.	286.	257.	248.	234.	182.	149.	116.
		2.8( )	.0( )	.4( )	2.3( )	.0( )	2.5( )	3.1(S)	.0( )	1.7( )	.0( )
		50.	49.								
		1.0( )	6.2(S)								
3	5.	1990.	1891.	1891.	1726.	204.	201.	201.	200.	163.	163.
		6.2( )	.0( )	5.9( )	.0( )	2.6( )	.0( )	2.3( )	3.2(S)	.0( )	1.3( )
		142.	129.	129.	128.	1522.	1483.	1127.	1127.	941.	941.
		1.5(S)	.0( )	2.3( )	8.6(S)	2.2( )	.0( )	.0( )	5.8( )	.0( )	.0( )
		941.	930.	930.	904.	872.	850.	835.	769.	763.	743.
		3.4( )	.0( )	4.7( )	2.2( )	1.8( )	2.6( )	.0( )	2.6( )	1.1( )	.0( )
		163.	163.	157.	157.	137.	580.	509.	493.	401.	397.
		.0( )	1.8( )	.0( )	1.7( )	.0( )	.0( )	1.5( )	3.6( )	3.1(S)	3.3( )
		377.	299.	23.	16.	276.	271.	257.	253.	236.	194.
		3.7(S)	.0( )	.0( )	.5( )	1.9( )	.8(S)	2.4( )	1.0(S)	.0( )	2.1( )
		148.	148.	132.	105.	28.	28.	21.	357.	357.	293.
		.0( )	1.6( )	.0( )	.9( )	.0( )	.5( )	.2(S)	.0( )	3.4( )	.0( )
		293.	277.	7.	270.	242.	235.	220.	168.	138.	108.
		2.8( )	.0( )	.3( )	2.3( )	.0( )	2.5( )	2.7(S)	.0( )	1.6( )	.0( )
		50.	49.								
		1.0( )	5.9(S)								
3	10.	1854.	1765.	1765.	1618.	201.	198.	198.	197.	154.	154.
		6.1( )	.0( )	5.8( )	.0( )	2.6( )	.0( )	2.3( )	3.0(S)	.0( )	1.3( )

133.	117.	117.	115.	1417.	1382.	1050.	1050.	883.	883.
1.4(S)	.0( )	2.2( )	8.3(S)	2.1( )	.0( )	.0( )	5.6( )	.0( )	.0( )
883.	873.	873.	849.	817.	798.	779.	719.	716.	697.
3.3( )	.0( )	4.6( )	2.1( )	1.8( )	2.5( )	.0( )	2.5( )	1.0( )	.0( )
152.	152.	146.	146.	127.	545.	477.	462.	373.	361.
.0( )	1.7( )	.0( )	1.6( )	.0( )	.0( )	1.4( )	3.5( )	3.1(S)	3.1( )
342.	269.	18.	13.	250.	247.	234.	230.	215.	177.
3.1(S)	.0( )	.0( )	.4( )	1.8( )	.7(S)	2.3( )	.9(S)	.0( )	2.0( )
135.	135.	121.	96.	25.	25.	19.	332.	332.	275.
.0( )	1.6( )	.0( )	.8( )	.0( )	.5( )	.2(S)	.0( )	3.3( )	.0( )
275.	260.	5.	254.	227.	222.	206.	155.	129.	101.
2.7( )	.0( )	.3( )	2.2( )	.0( )	2.4( )	2.3(S)	.0( )	1.6( )	.0( )
49.	48.								
1.0( )	5.5(S)								

3 15.

1734.	1655.	1655.	1522.	198.	195.	195.	194.	144.	144.
5.9( )	.0( )	5.8( )	.0( )	2.6( )	.0( )	2.3( )	2.7(S)	.0( )	1.3( )
122.	104.	104.	102.	1324.	1293.	982.	982.	830.	830.
1.3(S)	.0( )	2.0( )	8.1(S)	2.0( )	.0( )	.0( )	5.4( )	.0( )	.0( )
830.	821.	821.	797.	766.	746.	732.	677.	672.	654.
3.2( )	.0( )	4.4( )	2.1( )	1.7( )	2.4( )	.0( )	2.4( )	1.0( )	.0( )
141.	141.	136.	136.	118.	512.	448.	435.	364.	328.
.0( )	1.7( )	.0( )	1.6( )	.0( )	.0( )	1.4( )	3.4( )	2.9(S)	3.0( )
310.	243.	14.	11.	229.	226.	214.	210.	197.	162.
2.6(S)	.0( )	.0( )	.4( )	1.8( )	.6(S)	2.2( )	.8(S)	.0( )	1.9( )
123.	123.	110.	88.	22.	22.	16.	311.	311.	258.
.0( )	1.5( )	.0( )	.8( )	.0( )	.5( )	.1(S)	.0( )	3.2( )	.0( )
258.	244.	4.	240.	212.	208.	193.	144.	120.	94.

		2.6( )	.0( )	.2( )	2.2( )	.0( )	2.3( )	2.0(S)	.0( )	1.5( )	.0( )
		48.	47.								
		1.0( )	5.2(S)								
3	20.	1628.	1557.	1557.	1435.	195.	191.	191.	190.	134.	134.
		5.8( )	.0( )	5.7( )	.0( )	2.6( )	.0( )	2.3( )	2.3(S)	.0( )	1.2( )
		110.	94.	94.	92.	1241.	1212.	921.	921.	781.	781.
		1.1(S)	.0( )	1.9( )	7.9(S)	2.0( )	.0( )	.0( )	5.2( )	.0( )	.0( )
		781.	772.	772.	750.	718.	700.	685.	635.	632.	616.
		3.2( )	.0( )	4.3( )	2.0( )	1.7( )	2.3( )	.0( )	2.3( )	1.0( )	.0( )
		132.	132.	126.	126.	109.	484.	424.	412.	347.	293.
		.0( )	1.6( )	.0( )	1.5( )	.0( )	.0( )	1.3( )	3.3( )	2.6(S)	2.8( )
		270.	220.	11.	9.	209.	206.	196.	192.	180.	149.
		2.2(S)	.0( )	.0( )	.3( )	1.7( )	.5(S)	2.1( )	.7(S)	.0( )	1.8( )
		112.	112.	100.	81.	20.	20.	12.	291.	291.	242.
		.0( )	1.4( )	.0( )	.7( )	.0( )	.4( )	.1(S)	.0( )	3.1( )	.0( )
		242.	228.	3.	225.	197.	194.	176.	133.	112.	89.
		2.5( )	.0( )	.2( )	2.1( )	.0( )	2.3( )	1.7(S)	.0( )	1.5( )	.0( )
		48.	47.								
		1.0( )	4.9(S)								
3	25.	1534.	1469.	1469.	1355.	190.	185.	185.	183.	124.	124.
		5.6( )	.0( )	5.6( )	.0( )	2.5( )	.0( )	2.2( )	1.9(S)	.0( )	1.2( )
		100.	85.	85.	84.	1164.	1137.	864.	864.	733.	733.
		1.0(S)	.0( )	1.8( )	7.8(S)	1.9( )	.0( )	.0( )	5.1( )	.0( )	.0( )
		733.	723.	723.	700.	675.	658.	646.	600.	596.	581.
		3.1( )	.0( )	4.2( )	2.0( )	1.6( )	2.3( )	.0( )	2.2( )	.9( )	.0( )
		123.	123.	118.	118.	102.	458.	401.	390.	324.	256.
		.0( )	1.5( )	.0( )	1.5( )	.0( )	.0( )	1.3( )	3.2( )	2.2(S)	2.6( )

		235.	200.	9.	7.	191.	188.	179.	176.	164.	137.
		2.0(S)	.0( )	.0( )	.3( )	1.6( )	.5(S)	2.0( )	.6(S)	.0( )	1.8( )
		102.	102.	90.	74.	17.	17.	8.	273.	273.	227.
		.0( )	1.3( )	.0( )	.7( )	.0( )	.4( )	.1(S)	.0( )	3.0( )	.0( )
		227.	212.	2.	210.	180.	179.	159.	119.	105.	84.
		2.4( )	.0( )	.2( )	2.0( )	.0( )	2.2( )	1.4(S)	.0( )	1.5( )	.0( )
		47.	46.								
		1.0( )	4.6(S)								
3	30.	1448.	1386.	1386.	1276.	183.	174.	174.	169.	114.	114.
		5.5( )	.0( )	5.5( )	.0( )	2.5( )	.0( )	2.1( )	1.5(S)	.0( )	1.1( )
		91.	78.	78.	76.	1093.	1067.	811.	811.	682.	682.
		.9(S)	.0( )	1.7( )	7.7(S)	1.8( )	.0( )	.0( )	4.9( )	.0( )	.0( )
		682.	672.	672.	646.	636.	620.	608.	565.	562.	547.
		3.0( )	.0( )	4.0( )	1.9( )	1.6( )	2.2( )	.0( )	2.1( )	.9( )	.0( )
		114.	114.	110.	110.	95.	433.	379.	366.	287.	226.
		.0( )	1.5( )	.0( )	1.4( )	.0( )	.0( )	1.2( )	3.1( )	1.7(S)	2.4( )
		209.	181.	6.	6.	175.	172.	164.	161.	150.	125.
		1.7(S)	.0( )	.0( )	.3( )	1.5( )	.4(S)	1.9( )	.5(S)	.0( )	1.7( )
		93.	93.	81.	68.	14.	14.	6.	256.	256.	211.
		.0( )	1.3( )	.0( )	.7( )	.0( )	.4( )	.1(S)	.0( )	2.9( )	.0( )
		211.	196.	1.	194.	163.	163.	144.	108.	99.	79.
		2.4( )	.0( )	.1( )	2.0( )	.0( )	2.1( )	1.1(S)	.0( )	1.4( )	.0( )
		46.	46.								
		1.0( )	4.3(S)								
3	35.	1366.	1307.	1307.	1197.	172.	160.	160.	156.	105.	105.
		5.4( )	.0( )	5.4( )	.0( )	2.4( )	.0( )	2.1( )	1.1(S)	.0( )	1.1( )

83.	71.	71.	70.	1025.	1000.	760.	760.	636.	636.
.9(S)	.0( )	1.7( )	7.6(S)	1.8( )	.0( )	.0( )	4.8( )	.0( )	.0( )
636.	628.	628.	611.	598.	583.	570.	531.	527.	511.
2.9( )	.0( )	3.9( )	1.8( )	1.5( )	2.2( )	.0( )	2.0( )	.9( )	.0( )
107.	107.	102.	102.	88.	404.	353.	338.	243.	202.
.0( )	1.4( )	.0( )	1.4( )	.0( )	.0( )	1.2( )	3.0( )	1.4(S)	2.3( )
188.	165.	5.	5.	160.	158.	150.	147.	137.	115.
1.6(S)	.0( )	.0( )	.2( )	1.4( )	.4(S)	1.8( )	.5(S)	.0( )	1.6( )
84.	84.	73.	62.	11.	11.	4.	239.	239.	195.
.0( )	1.2( )	.0( )	.6( )	.0( )	.3( )	.0(S)	.0( )	2.8( )	.0( )
195.	180.	1.	179.	149.	149.	131.	100.	93.	75.
2.3( )	.0( )	.1( )	1.9( )	.0( )	2.0( )	.9(S)	.0( )	1.4( )	.0( )
46.	45.								
1.0( )	3.9(S)								

3 40.

1288.	1230.	1230.	1120.	159.	147.	147.	144.	97.	97.
5.2( )	.0( )	5.4( )	.0( )	2.3( )	.0( )	2.0( )	.8(S)	.0( )	1.0( )
76.	66.	66.	65.	961.	936.	713.	713.	599.	599.
.8(S)	.0( )	1.6( )	7.5(S)	1.7( )	.0( )	.0( )	4.6( )	.0( )	.0( )
599.	592.	592.	573.	560.	543.	529.	494.	490.	472.
2.8( )	.0( )	3.8( )	1.8( )	1.5( )	2.1( )	.0( )	1.9( )	.8( )	.0( )
99.	99.	95.	95.	82.	373.	325.	308.	212.	182.
.0( )	1.4( )	.0( )	1.3( )	.0( )	.0( )	1.1( )	2.8( )	1.1(S)	2.2( )
170.	150.	4.	4.	146.	144.	137.	134.	125.	105.
1.4(S)	.0( )	.0( )	.2( )	1.4( )	.3(S)	1.7( )	.4(S)	.0( )	1.5( )
76.	76.	66.	57.	9.	9.	3.	223.	223.	180.
.0( )	1.1( )	.0( )	.6( )	.0( )	.3( )	.0(S)	.0( )	2.7( )	.0( )
180.	165.	1.	164.	134.	134.	112.	93.	88.	71.

		2.2( )	.0( )	.1( )	1.8( )	.0( )	1.9( )	.7(S)	.0( )	1.3( )	.0( )
		45.	43.								
		1.0( )	3.6(S)								
3	45.	1213.	1155.	1155.	1047.	146.	130.	130.	124.	89.	89.
		5.1( )	.0( )	5.3( )	.0( )	2.2( )	.0( )	1.9( )	.5(S)	.0( )	1.0( )
		69.	61.	61.	60.	901.	878.	670.	670.	562.	562.
		.7(S)	.0( )	1.5( )	7.4(S)	1.7( )	.0( )	.0( )	4.5( )	.0( )	.0( )
		562.	554.	554.	534.	520.	503.	489.	456.	452.	434.
		2.7( )	.0( )	3.6( )	1.7( )	1.4( )	2.0( )	.0( )	1.9( )	.8( )	.0( )
		93.	93.	89.	89.	76.	341.	296.	280.	189.	165.
		.0( )	1.3( )	.0( )	1.3( )	.0( )	.0( )	1.1( )	2.7( )	.9(S)	2.1( )
		155.	137.	3.	3.	134.	132.	125.	122.	114.	96.
		1.3(S)	.0( )	.0( )	.2( )	1.3( )	.3(S)	1.6( )	.4(S)	.0( )	1.4( )
		69.	69.	59.	52.	7.	7.	2.	208.	208.	165.
		.0( )	1.1( )	.0( )	.6( )	.0( )	.2( )	.0(S)	.0( )	2.7( )	.0( )
		165.	150.	0.	149.	118.	118.	98.	87.	83.	66.
		2.1( )	.0( )	.1( )	1.8( )	.0( )	1.8( )	.6(S)	.0( )	1.3( )	.0( )
		44.	42.								
		.9( )	3.3(S)								
3	50.	1139.	1083.	1083.	974.	129.	111.	111.	106.	82.	82.
		5.0( )	.0( )	5.2( )	.0( )	2.1( )	.0( )	1.7( )	.3(S)	.0( )	.9( )
		64.	56.	56.	55.	844.	822.	629.	629.	523.	523.
		.7(S)	.0( )	1.5( )	7.3(S)	1.6( )	.0( )	.0( )	4.4( )	.0( )	.0( )
		523.	515.	515.	494.	480.	463.	449.	420.	416.	398.
		2.6( )	.0( )	3.5( )	1.6( )	1.4( )	2.0( )	.0( )	1.8( )	.8( )	.0( )
		86.	86.	83.	83.	70.	311.	269.	254.	170.	151.
		.0( )	1.3( )	.0( )	1.2( )	.0( )	.0( )	1.0( )	2.5( )	.8(S)	2.0( )

		141.	125.	3.	3.	122.	120.	114.	111.	104.	88.
		1.2(S)	.0( )	.0( )	.2( )	1.3( )	.2(S)	1.6( )	.3(S)	.0( )	1.4( )
		62.	62.	54.	48.	6.	6.	1.	193.	193.	150.
		.0( )	1.0( )	.0( )	.6( )	.0( )	.2( )	.0(S)	.0( )	2.6( )	.0( )
		150.	135.	0.	135.	105.	105.	89.	81.	78.	62.
		2.0( )	.0( )	.1( )	1.7( )	.0( )	1.7( )	.6(S)	.0( )	1.3( )	.0( )
		42.	40.								
		.9( )	3.1(S)								
3	55.	1068.	1012.	1012.	902.	113.	95.	95.	90.	76.	76.
		4.8( )	.0( )	5.2( )	.0( )	2.0( )	.0( )	1.6( )	.2(S)	.0( )	.9( )
		60.	54.	54.	54.	790.	767.	589.	589.	484.	484.
		.6(S)	.0( )	1.4( )	7.2(S)	1.5( )	.0( )	.0( )	4.2( )	.0( )	.0( )
		484.	476.	476.	456.	442.	426.	413.	386.	382.	365.
		2.6( )	.0( )	3.4( )	1.5( )	1.3( )	1.9( )	.0( )	1.7( )	.7( )	.0( )
		80.	80.	76.	76.	61.	285.	244.	231.	155.	137.
		.0( )	1.2( )	.0( )	1.2( )	.0( )	.0( )	1.0( )	2.4( )	.7(S)	1.9( )
		128.	114.	2.	2.	111.	109.	103.	100.	90.	81.
		1.1(S)	.0( )	.0( )	.2( )	1.2( )	.2(S)	1.5( )	.2(S)	.0( )	1.3( )
		56.	56.	48.	44.	5.	5.	0.	178.	178.	136.
		.0( )	1.0( )	.0( )	.5( )	.0( )	.2( )	.0(S)	.0( )	2.5( )	.0( )
		136.	122.	0.	122.	95.	95.	82.	75.	73.	53.
		1.9( )	.0( )	.1( )	1.6( )	.0( )	1.6( )	.5(S)	.0( )	1.2( )	.0( )
		41.	39.								
		.9( )	2.8(S)								
4	0.	999.	943.	943.	833.	96.	78.	78.	71.	70.	70.
		4.7( )	.0( )	5.1( )	.0( )	1.8( )	.0( )	1.4( )	.1(S)	.0( )	.9( )

57.	54.	54.	54.	737.	715.	550.	550.	447.	447.
.6(S)	.0( )	1.4( )	7.1(S)	1.5( )	.0( )	.0( )	4.1( )	.0( )	.0( )
447.	439.	439.	420.	407.	391.	379.	354.	350.	334.
2.5( )	.0( )	3.2( )	1.5( )	1.3( )	1.8( )	.0( )	1.6( )	.7( )	.0( )
74.	74.	69.	69.	54.	261.	223.	210.	141.	125.
.0( )	1.2( )	.0( )	1.1( )	.0( )	.0( )	.9( )	2.3( )	.5(S)	1.8( )
116.	102.	2.	2.	99.	97.	90.	87.	80.	74.
1.0(S)	.0( )	.0( )	.1( )	1.1( )	.1(S)	1.4( )	.2(S)	.0( )	1.2( )
51.	51.	44.	40.	4.	4.	0.	164.	164.	124.
.0( )	.9( )	.0( )	.5( )	.0( )	.2( )	.0(S)	.0( )	2.4( )	.0( )
124.	111.	0.	110.	87.	87.	75.	68.	68.	48.
1.8( )	.0( )	.0( )	1.5( )	.0( )	1.5( )	.5(S)	.0( )	1.2( )	.0( )
39.	37.								
.9( )	2.5(S)								

4 5.

931.	877.	877.	768.	82.	68.	68.	68.	66.	66.
4.6( )	.0( )	5.0( )	.0( )	1.7( )	.0( )	1.3( )	.1(S)	.0( )	.8( )
55.	53.	53.	53.	686.	664.	513.	513.	412.	412.
.6(S)	.0( )	1.4( )	7.0(S)	1.4( )	.0( )	.0( )	4.0( )	.0( )	.0( )
412.	405.	405.	386.	374.	359.	347.	325.	321.	306.
2.4( )	.0( )	3.1( )	1.4( )	1.2( )	1.8( )	.0( )	1.5( )	.6( )	.0( )
67.	67.	63.	63.	49.	239.	203.	192.	127.	113.
.0( )	1.1( )	.0( )	1.1( )	.0( )	.0( )	.9( )	2.2( )	.4(S)	1.7( )
103.	86.	2.	2.	85.	81.	77.	74.	72.	68.
.9(S)	.0( )	.0( )	.1( )	1.0( )	.1(S)	1.2( )	.2(S)	.0( )	1.2( )
46.	46.	40.	37.	3.	3.	0.	151.	151.	112.
.0( )	.9( )	.0( )	.5( )	.0( )	.1( )	.0(S)	.0( )	2.3( )	.0( )
112.	101.	0.	100.	79.	79.	69.	62.	62.	44.

1.7( )	.0( )	.0( )	1.5( )	.0( )	1.4( )	.4(S)	.0( )	1.1( )	.0( )

38.	36.
.9( )	2.3(S)

4	10.	867.	814.	814.	710.	73.	66.	66.	64.	63.	63.
		4.4( )	.0( )	4.9( )	.0( )	1.6( )	.0( )	1.3( )	.1(S)	.0( )	.8( )
		54.	52.	52.	52.	637.	617.	478.	478.	379.	379.
		.6(S)	.0( )	1.4( )	6.9(S)	1.4( )	.0( )	.0( )	3.8( )	.0( )	.0( )
		379.	373.	373.	355.	344.	330.	319.	298.	295.	281.
		2.3( )	.0( )	3.0( )	1.3( )	1.2( )	1.7( )	.0( )	1.4( )	.6( )	.0( )
		61.	61.	57.	57.	45.	220.	186.	175.	115.	100.
		.0( )	1.1( )	.0( )	1.0( )	.0( )	.0( )	.8( )	2.1( )	.3(S)	1.6( )
		89.	73.	2.	2.	71.	69.	69.	67.	65.	62.
		.7(S)	.0( )	.0( )	.1( )	.9( )	.1(S)	1.2( )	.1(S)	.0( )	1.1( )
		42.	42.	36.	34.	3.	3.	0.	139.	139.	103.
		.0( )	.8( )	.0( )	.5( )	.0( )	.1( )	.0(S)	.0( )	2.2( )	.0( )
		103.	92.	0.	92.	73.	73.	63.	58.	58.	41.
		1.7( )	.0( )	.0( )	1.4( )	.0( )	1.4( )	.4(S)	.0( )	1.1( )	.0( )
		36.	34.								
		.9( )	2.0(S)								

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SOUTH CANYON - LIME CREEK DRAINAGE DESIGN PLAN BY FMG, INC
FUTURE HYDROLOGIC CONDITIONS AND EXISTING HYDRAULIC CONDITIONS 100 YR STORM

*** PEAK FLOWS, STAGES AND STORAGES OF GUTTERS AND DETENSION DAMS ***

CONVEYANCE	PEAK	STAGE	STORAGE	TIME