APPENDIX E
SUMMIT AREA DRAINAGE STUDY
DATA

HYDROLOGIC DATA SHEET FOR PIMA COUNTY FLOOD PEAK PROCEDURE

Pima County Regional Flood Control District

Client: Pima County
Prepared by: JPII
Project Name: Summit Study
Date: 5/30/2007
Concentration Point: FR23-1
Job #: 185120071

Watershed Area: 241.0 ac
Watershed Type: Undeveloped-Valley

Watercourse Data By Reach

Reach No.	Height (Hi)	Length (Li)	Slope (Si)	Basin Factor (Nb)
1	8.5	530	0.0160	.040
2	54.0	5,750	0.0094	.040

Length of Watercourse (Lc): 6,280 feet
Mean Slope: 0.0098
Length to Cen. of Gravity (Lca): 3,200 feet
Weighted Basin Fac.: 0.040
Veg. Cover Type(s): Desert Brush
Veg. Cover Density: 20 %

RETURN PERIOD: 100-years

Rainfall Depths: NOAA Atlas 14 (90% UCL) @ Latitude: 32.0564 Longitude: 110.9315

Duration:	5-min	10-min	15-min	30-min	60-min	2-hr	3-hr	6-hr	12-hr	24-hr
Point Values (in)	0.88	1.34	1.66	2.24	2.77	3.09	3.23	3.51	3.78	4.13
Areal Values (in)	0.88	1.34	1.66	2.24	2.77	3.09	3.23	3.51	3.78	4.13

Soils Data

Soil Type	Percent	Curve # (CN)	Adj. Curve # (CN*)	Runoff Coef. (C)
B	99	83.	87.28	0.564
C	0	.	.	0.000
D	1	91.	93.35	0.746
Imp.	3	99.	99.	0.958

Weighted Runoff Coef. (Cw): 0.577
Time of Concentration: 33.6 min
Rainfall Intensity (i) @ Tc: 4.11 in/hr
Runoff Supply Rate (q) @ Tc: 2.38 in/hr

PEAK DISCHARGE: 577 cfs

PC-Hydro, Ver 5.3.1

HYDROLOGIC DATA SHEET FOR PIMA COUNTY FLOOD PEAK PROCEDURE

Pima County Regional Flood Control District

Client: Pima Count

Prepared by: JPII

Project Name: Summit Study

Date: 5/30/2007

Concentration Point: FR23-2

Job #: 185120071

Watershed Area: 52.3 ac

Watershed Type: Undeveloped-Valley

Watercourse Data By Reach

Reach No.	Height (Hi)	Length (Li)	Slope (Si)	Basin Factor (Nb)
1	6.0	650	0.0092	.040
2	18.0	400	0.0450	.040
3	28.5	2,960	0.0096	.040

Length of Watercourse (Lc): 4,010 feet

Mean Slope: 0.0107

Length to Cen. of Gravity (Lca): 1,650 feet

Weighted Basin Fac.: 0.040

Veg. Cover Type(s): Desert Brush

Veg. Cover Density: 20 %

RETURN PERIOD: 100-years

Rainfall Depths: NOAA Atlas 14 (90% UCL) @ Latitude: 32.0564 Longitude: 110.9315

Duration:	5-min	10-min	15-min	30-min	60-min	2-hr	3-hr	6-hr	12-hr	24-hr
Point Values (in)	0.88	1.34	1.66	2.24	2.77	3.09	3.23	3.51	3.78	4.13
Areal Values (in)	0.88	1.34	1.66	2.24	2.77	3.09	3.23	3.51	3.78	4.13

Soils Data

Soil Type	Percent	Curve # (CN)	Adj. Curve # (CN*)	Runoff Coef. (C)
B	99	83.	87.28	0.564
C	0	.	.	0.000
D	1	91.	93.35	0.746
Imp.	3	99.	99.	0.958

Weighted Runoff Coef. (Cw): 0.576

Time of Concentration: 20.8 min

Rainfall Intensity (i) @ Tc: 5.43 in/hr

Runoff Supply Rate (q) @ Tc: 3.13 in/hr

PEAK DISCHARGE: 165 cfs

PC-Hydro, Ver 5.3.1

HYDROLOGIC DATA SHEET FOR PIMA COUNTY FLOOD PEAK PROCEDURE

Pima County Regional Flood Control District

Client: Pima County
Prepared by: JPII
Project Name: Summit Study
Date: 5/30/2007
Concentration Point: FR23-3
Job #: 185120071

Watershed Area: 320.4 ac
Watershed Type: Undeveloped-Valley

Watercourse Data By Reach

Reach No.	Height (Hi)	Length (Li)	Slope (Si)	Basin Factor (Nb)
1	8.5	530	0.0160	.040
2	54.0	5,750	0.0094	.040
3	8.0	1,000	0.0080	.038

Length of Watercourse (Lc): 7,280 feet
Mean Slope: 0.0095
Length to Cen. of Gravity (Lca): 3,640 feet
Weighted Basin Fac.: 0.040
Veg. Cover Type(s): Desert Brush
Veg. Cover Density: 20 %

RETURN PERIOD: 100-years

Rainfall Depths: NOAA Atlas 14 (90% UCL) @ Latitude: 32.0564 Longitude: 110.9315

Duration:	5-min	10-min	15-min	30-min	60-min	2-hr	3-hr	6-hr	12-hr	24-hr
Point Values (in)	0.88	1.34	1.66	2.24	2.77	3.09	3.23	3.51	3.78	4.13
Areal Values (in)	0.88	1.34	1.66	2.24	2.77	3.09	3.23	3.51	3.78	4.13

Soils Data

Soil Type	Percent	Curve # (CN)	Adj. Curve # (CN*)	Runoff Coef. (C)
B	97	83.	87.28	0.564
C	0	.	.	0.000
D	3	91.	93.35	0.746
Imp.	5	99.	99.	0.958

Weighted Runoff Coef. (Cw): 0.588
Time of Concentration: 37.6 min
Rainfall Intensity (i) @ Tc: 3.79 in/hr
Runoff Supply Rate (q) @ Tc: 2.23 in/hr

PEAK DISCHARGE: 719 cfs

PC-Hydro, Ver 5.3.1

HYDROLOGIC DATA SHEET FOR PIMA COUNTY FLOOD PEAK PROCEDURE

Pima County Regional Flood Control District

Client: Pima County
Prepared by: JPII
Project Name: Summit Study
Date: 5/30/2007
Concentration Point: FR23-4
Job #: 185120071

Watershed Area: 125.6 ac
Watershed Type: Undeveloped-Valley

Watercourse Data By Reach

Reach No.	Height (Hi)	Length (Li)	Slope (Si)	Basin Factor (Nb)
1	10.5	1,400	0.0075	.040
2	32.0	2,550	0.0125	.040
3	10.5	2,490	0.0042	.040

Length of Watercourse (Lc): 6,440 feet
Mean Slope: 0.0069
Length to Cen. of Gravity (Lca): 3,200 feet
Weighted Basin Fac.: 0.040
Veg. Cover Type(s): Desert Brush
Veg. Cover Density: 20 %

RETURN PERIOD: 100-years

Rainfall Depths: NOAA Atlas 14 (90% UCL) @ Latitude: 32.0564 Longitude: 110.9315

Duration:	5-min	10-min	15-min	30-min	60-min	2-hr	3-hr	6-hr	12-hr	24-hr
Point Values (in)	0.88	1.34	1.66	2.24	2.77	3.09	3.23	3.51	3.78	4.13
Areal Values (in)	0.88	1.34	1.66	2.24	2.77	3.09	3.23	3.51	3.78	4.13

Soils Data

Soil Type	Percent	Curve # (CN)	Adj. Curve # (CN*)	Runoff Coef. (C)
B	100	83.	87.28	0.564
C	0	.	.	0.000
D	0	.	.	0.000
Imp.	3	99.	99.	0.958

Weighted Runoff Coef. (Cw): 0.575
Time of Concentration: 41.2 min
Rainfall Intensity (i) @ Tc: 3.55 in/hr
Runoff Supply Rate (q) @ Tc: 2.04 in/hr

PEAK DISCHARGE: 259 cfs

PC-Hydro, Ver 5.3.1

HYDROLOGIC DATA SHEET FOR PIMA COUNTY FLOOD PEAK PROCEDURE

Pima County Regional Flood Control District

Client: Pima County
Prepared by: JPII
Project Name: Summit Study
Date: 5/30/2007
Concentration Point: FR23-5
Job #: 185120071

Watershed Area: 502.4 ac
Watershed Type: Undeveloped-Valley

Watercourse Data By Reach

Reach No.	Height (Hi)	Length (Li)	Slope (Si)	Basin Factor (Nb)
1	8.5	530	0.0160	.040
2	54.0	5,750	0.0094	.040
3	8.0	1,000	0.0080	.038
4	8.0	1,050	0.0076	.038

Length of Watercourse (Lc): 8,330 feet
Mean Slope: 0.0092
Length to Cen. of Gravity (Lca): 4,300 feet
Weighted Basin Fac.: 0.039
Veg. Cover Type(s): Desert Brush
Veg. Cover Density: 20 %

RETURN PERIOD: 100-years

Rainfall Depths: NOAA Atlas 14 (90% UCL) @ Latitude: 32.0564 Longitude: 110.9315

Duration:	5-min	10-min	15-min	30-min	60-min	2-hr	3-hr	6-hr	12-hr	24-hr
Point Values (in)	0.88	1.34	1.66	2.24	2.77	3.09	3.23	3.51	3.78	4.13
Areal Values (in)	0.88	1.34	1.66	2.24	2.77	3.09	3.23	3.51	3.78	4.13

Soils Data

Soil Type	Percent	Curve # (CN)	Adj. Curve # (CN*)	Runoff Coef. (C)
B	96	83.	87.28	0.564
C	0	.	.	0.000
D	4	91.	93.35	0.746
Imp.	5	99.	99.	0.958

Weighted Runoff Coef. (Cw): 0.590
Time of Concentration: 42.9 min
Rainfall Intensity (i) @ Tc: 3.45 in/hr
Runoff Supply Rate (q) @ Tc: 2.04 in/hr

PEAK DISCHARGE: 1,031 cfs

PC-Hydro, Ver 5.3.1

HYDROLOGIC DATA SHEET FOR PIMA COUNTY FLOOD PEAK PROCEDURE

Pima County Regional Flood Control District

Client: Pima County
Prepared by: JPII
Project Name: Summit Study
Date: 5/30/2007
Concentration Point: FR23-6
Job #: 185120071

Watershed Area: 552.9 ac
Watershed Type: Undeveloped-Valley

Watercourse Data By Reach

Reach No.	Height (Hi)	Length (Li)	Slope (Si)	Basin Factor (Nb)
1	8.5	530	0.0160	.040
2	54.0	5,750	0.0094	.040
3	8.0	1,000	0.0080	.038
4	8.0	1,050	0.0076	.038
5	9.3	1,200	0.0077	.038

Length of Watercourse (Lc): 9,530 feet
Mean Slope: 0.0090
Length to Cen. of Gravity (Lca): 4,800 feet
Weighted Basin Fac.: 0.039
Veg. Cover Type(s): Desert Brush
Veg. Cover Density: 20 %

RETURN PERIOD: 100-years

Rainfall Depths: NOAA Atlas 14 (90% UCL) @ Latitude: 32.0564 Longitude: 110.9315

Duration:	5-min	10-min	15-min	30-min	60-min	2-hr	3-hr	6-hr	12-hr	24-hr
Point Values (in)	0.88	1.34	1.66	2.24	2.77	3.09	3.23	3.51	3.78	4.13
Areal Values (in)	0.88	1.34	1.66	2.24	2.77	3.09	3.23	3.51	3.78	4.13

Soils Data

Soil Type	Percent	Curve # (CN)	Adj. Curve # (CN*)	Runoff Coef. (C)
B	95	83.	87.28	0.564
C	0	.	.	0.000
D	5	91.	93.35	0.746
Imp.	8	99.	99.	0.958

Weighted Runoff Coef. (Cw): 0.602
Time of Concentration: 47.2 min
Rainfall Intensity (i) @ Tc: 3.23 in/hr
Runoff Supply Rate (q) @ Tc: 1.95 in/hr

PEAK DISCHARGE: 1,084 cfs

PC-Hydro, Ver 5.3.1

HYDROLOGIC DATA SHEET FOR PIMA COUNTY FLOOD PEAK PROCEDURE

Pima County Regional Flood Control District

Client: Pima County
Prepared by: JPII
Project Name: Summit Study
Date: 5/30/2007
Concentration Point: FR23-7
Job #: 185120071

Watershed Area: 54.9 ac
Watershed Type: Undeveloped-Valley

Watercourse Data By Reach

Reach No.	Height (Hi)	Length (Li)	Slope (Si)	Basin Factor (Nb)
1	17.0	480	0.0354	.060
2	23.0	2,400	0.0096	.060

Length of Watercourse (Lc): 2,880 feet
Mean Slope: 0.0113
Length to Cen. of Gravity (Lca): 1,410 feet
Weighted Basin Fac.: 0.060
Veg. Cover Type(s): Desert Brush
Veg. Cover Density: 20 %

RETURN PERIOD: 100-years

Rainfall Depths: NOAA Atlas 14 (90% UCL) @ Latitude: 32.0564 Longitude: 110.9314

Duration:	5-min	10-min	15-min	30-min	60-min	2-hr	3-hr	6-hr	12-hr	24-hr
Point Values (in)	0.88	1.34	1.66	2.24	2.77	3.09	3.23	3.51	3.78	4.13
Areal Values (in)	0.88	1.34	1.66	2.24	2.77	3.09	3.23	3.51	3.78	4.13

Soils Data

Soil Type	Percent	Curve # (CN)	Adj. Curve # (CN*)	Runoff Coef. (C)
B	100	83.	87.28	0.564
C	0	.	.	0.000
D	0	.	.	0.000
Imp.	30	99.	99.	0.958

Weighted Runoff Coef. (Cw): 0.682
Time of Concentration: 25.8 min
Rainfall Intensity (i) @ Tc: 4.83 in/hr
Runoff Supply Rate (q) @ Tc: 3.29 in/hr

PEAK DISCHARGE: 182 cfs

PC-Hydro, Ver 5.3.1

HYDROLOGIC DATA SHEET FOR PIMA COUNTY FLOOD PEAK PROCEDURE

Pima County Regional Flood Control District

Client: Pima County
Prepared by: JPII
Project Name: Summit Study
Date: 5/30/2007
Concentration Point: FR23-8
Job #: 185120071

Watershed Area: 78.5 ac
Watershed Type: Undeveloped-Valley

Watercourse Data By Reach

Reach No.	Height (Hi)	Length (Li)	Slope (Si)	Basin Factor (Nb)
1	17.0	480	0.0354	.060
2	23.0	2,400	0.0096	.060
3	10.0	960	0.0104	.060

Length of Watercourse (Lc): 3,840 feet
Mean Slope: 0.0111
Length to Cen. of Gravity (Lca): 2,000 feet
Weighted Basin Fac.: 0.060
Veg. Cover Type(s): Desert Brush
Veg. Cover Density: 20 %

RETURN PERIOD: 100-years

Rainfall Depths: NOAA Atlas 14 (90% UCL) @ Latitude: 32.0564 Longitude: 110.9314

Duration:	5-min	10-min	15-min	30-min	60-min	2-hr	3-hr	6-hr	12-hr	24-hr
Point Values (in)	0.88	1.34	1.66	2.24	2.77	3.09	3.23	3.51	3.78	4.13
Areal Values (in)	0.88	1.34	1.66	2.24	2.77	3.09	3.23	3.51	3.78	4.13

Soils Data

Soil Type	Percent	Curve # (CN)	Adj. Curve # (CN*)	Runoff Coef. (C)
B	98	83.	87.28	0.564
C	0	.	.	0.000
D	2	91.	93.35	0.746
Imp.	27	99.	99.	0.958

Weighted Runoff Coef. (Cw): 0.671
Time of Concentration: 33.9 min
Rainfall Intensity (i) @ Tc: 4.09 in/hr
Runoff Supply Rate (q) @ Tc: 2.74 in/hr

PEAK DISCHARGE: 217 cfs

PC-Hydro, Ver 5.3.1

HYDROLOGIC DATA SHEET FOR PIMA COUNTY FLOOD PEAK PROCEDURE

Pima County Regional Flood Control District

Client: Pima County
Prepared by: JPII
Project Name: Summit Study
Date: 5/30/2007
Concentration Point: FR23-9
Job #: 185120071

Watershed Area: 663.1 ac
Watershed Type: Undeveloped-Valley

Watercourse Data By Reach

Reach No.	Height (Hi)	Length (Li)	Slope (Si)	Basin Factor (Nb)
1	8.5	530	0.0160	.040
2	54.0	5,750	0.0094	.040
3	8.0	1,000	0.0080	.038
4	8.0	1,050	0.0076	.038
5	9.3	1,200	0.0077	.038
6	15.0	1,810	0.0083	.038

Length of Watercourse (Lc): 11,340 feet
Mean Slope: 0.0089
Length to Cen. of Gravity (Lca): 6,200 feet
Weighted Basin Fac.: 0.039
Veg. Cover Type(s): Desert Brush
Veg. Cover Density: 20 %

RETURN PERIOD: 100-years

Rainfall Depths: NOAA Atlas 14 (90% UCL) @ Latitude: 32.0564 Longitude: 110.9315

Duration:	5-min	10-min	15-min	30-min	60-min	2-hr	3-hr	6-hr	12-hr	24-hr
Point Values (in)	0.88	1.34	1.66	2.24	2.77	3.09	3.23	3.51	3.78	4.13
Areal Values (in)	0.88	1.34	1.66	2.24	2.77	3.09	3.23	3.51	3.78	4.13

Soils Data

Soil Type	Percent	Curve # (CN)	Adj. Curve # (CN*)	Runoff Coef. (C)
B	93	83.	87.28	0.564
C	0	.	.	0.000
D	7	91.	93.35	0.746
Imp.	9	99.	99.	0.958

Weighted Runoff Coef. (Cw): 0.608
Time of Concentration: 55.9 min
Rainfall Intensity (i) @ Tc: 2.90 in/hr
Runoff Supply Rate (q) @ Tc: 1.76 in/hr

PEAK DISCHARGE: 1,178 cfs

PC-Hydro, Ver 5.3.1

HYDROLOGIC DATA SHEET FOR PIMA COUNTY FLOOD PEAK PROCEDURE

Pima County Regional Flood Control District

Client: Pima County
Prepared by: JLL
Project Name: Summit Study
Date: 5/30/2007
Concentration Point: FR23-10
Job #: 185120071

Watershed Area: 31.2 ac
Watershed Type: Suburban-Valley

Watercourse Data By Reach

Reach No.	Height (Hi)	Length (Li)	Slope (Si)	Basin Factor (Nb)
1	13.0	1,380	0.0094	.035
2	24.0	1,300	0.0185	.035
3	7.0	540	0.0130	.034

Length of Watercourse (Lc): 3,220 feet
Mean Slope: 0.0127
Length to Cen. of Gravity (Lca): 1,500 feet
Weighted Basin Fac.: 0.035
Veg. Cover Type(s): Desert Brush
Veg. Cover Density: 20 %

RETURN PERIOD: 100-years

Rainfall Depths: NOAA Atlas 14 (90% UCL) @ Latitude: 32.0564 Longitude: 110.9315

Duration:	5-min	10-min	15-min	30-min	60-min	2-hr	3-hr	6-hr	12-hr	24-hr
Point Values (in)	0.88	1.34	1.66	2.24	2.77	3.09	3.23	3.51	3.78	4.13
Areal Values (in)	0.88	1.34	1.66	2.24	2.77	3.09	3.23	3.51	3.78	4.13

Soils Data

Soil Type	Percent	Curve # (CN)	Adj. Curve # (CN*)	Runoff Coef. (C)
B	100	83.	87.28	0.564
C	0	.	.	0.000
D	0	.	.	0.000
Imp.	7	99.	99.	0.958

Weighted Runoff Coef. (Cw): 0.590
Time of Concentration: 13.9 min
Rainfall Intensity (i) @ Tc: 6.87 in/hr
Runoff Supply Rate (q) @ Tc: 4.05 in/hr

PEAK DISCHARGE: 127 cfs

PC-Hydro, Ver 5.3.1

HYDROLOGIC DATA SHEET FOR PIMA COUNTY FLOOD PEAK PROCEDURE

Pima County Regional Flood Control District

Client: Pima County
Prepared by: JLL
Project Name: Summit Study
Date: 5/30/2007
Concentration Point: FR23-11
Job #: 185120071

Watershed Area: 16.8 ac
Watershed Type: Suburban-Valley

Watercourse Data By Reach

Reach No.	Height (Hi)	Length (Li)	Slope (Si)	Basin Factor (Nb)
1	2.5	320	0.0078	.050
2	16.0	320	0.0500	.050
3	10.5	650	0.0162	.050

Length of Watercourse (Lc): 1,290 feet
Mean Slope: 0.0161
Length to Cen. of Gravity (Lca): 550 feet
Weighted Basin Fac.: 0.050
Veg. Cover Type(s): Desert Brush
Veg. Cover Density: 20 %

RETURN PERIOD: 100-years

Rainfall Depths: NOAA Atlas 14 (90% UCL) @ Latitude: 32.0564 Longitude: 110.9315

Duration:	5-min	10-min	15-min	30-min	60-min	2-hr	3-hr	6-hr	12-hr	24-hr
Point Values (in)	0.88	1.34	1.66	2.24	2.77	3.09	3.23	3.51	3.78	4.13
Areal Values (in)	0.88	1.34	1.66	2.24	2.77	3.09	3.23	3.51	3.78	4.13

Soils Data

Soil Type	Percent	Curve # (CN)	Adj. Curve # (CN*)	Runoff Coef. (C)
B	100	83.	87.28	0.564
C	0	.	.	0.000
D	0	.	.	0.000
Imp.	20	99.	99.	0.958

Weighted Runoff Coef. (Cw): 0.642
Time of Concentration: 9.1 min
Rainfall Intensity (i) @ Tc: 8.28 in/hr
Runoff Supply Rate (q) @ Tc: 5.32 in/hr

PEAK DISCHARGE: 90 cfs

PC-Hydro, Ver 5.3.1

HYDROLOGIC DATA SHEET FOR PIMA COUNTY FLOOD PEAK PROCEDURE

Pima County Regional Flood Control District

Client: Pima County
Prepared by: JLL
Project Name: Summit Study
Date: 5/30/2007
Concentration Point: FR23-12
Job #: 185120071

Watershed Area: 24.1 ac
Watershed Type: Suburban-Valley

Watercourse Data By Reach

Reach No.	Height (Hi)	Length (Li)	Slope (Si)	Basin Factor (Nb)
1	12.0	620	0.0194	.032
2	12.0	380	0.0316	.032
3	3.0	320	0.0094	.032

Length of Watercourse (Lc): 1,320 feet
Mean Slope: 0.0178
Length to Cen. of Gravity (Lca): 510 feet
Weighted Basin Fac.: 0.032
Veg. Cover Type(s): Desert Brush
Veg. Cover Density: 20 %

RETURN PERIOD: 100-years

Rainfall Depths: NOAA Atlas 14 (90% UCL) @ Latitude: 32.0564 Longitude: 110.9315

Duration:	5-min	10-min	15-min	30-min	60-min	2-hr	3-hr	6-hr	12-hr	24-hr
Point Values (in)	0.88	1.34	1.66	2.24	2.77	3.09	3.23	3.51	3.78	4.13
Areal Values (in)	0.88	1.34	1.66	2.24	2.77	3.09	3.23	3.51	3.78	4.13

Soils Data

Soil Type	Percent	Curve # (CN)	Adj. Curve # (CN*)	Runoff Coef. (C)
B	86	83.	87.28	0.564
C	0	.	.	0.000
D	14	91.	93.35	0.746
Imp.	30	99.	99.	0.958

Weighted Runoff Coef. (Cw): 0.700
Time of Concentration: 5.0 min
Rainfall Intensity (i) @ Tc: 10.56 in/hr
Runoff Supply Rate (q) @ Tc: 7.39 in/hr

PEAK DISCHARGE: 180 cfs

PC-Hydro, Ver 5.3.1

HYDROLOGIC DATA SHEET FOR PIMA COUNTY FLOOD PEAK PROCEDURE

Pima County Regional Flood Control District

Client: Pima County
Prepared by: JLL
Project Name: Summit Study
Date: 5/30/2007
Concentration Point: FR23-13
Job #: 185120071

Watershed Area: 31.0 ac
Watershed Type: Suburban-Valley

Watercourse Data By Reach

Reach No.	Height (Hi)	Length (Li)	Slope (Si)	Basin Factor (Nb)
1	15.0	1,100	0.0136	.040
2	24.0	1,090	0.0220	.034
3	3.0	320	0.0094	.034

Length of Watercourse (Lc): 2,510 feet
Mean Slope: 0.0156
Length to Cen. of Gravity (Lca): 1,400 feet
Weighted Basin Fac.: 0.037
Veg. Cover Type(s): Desert Brush
Veg. Cover Density: 20 %

RETURN PERIOD: 100-years

Rainfall Depths: NOAA Atlas 14 (90% UCL) @ Latitude: 32.0564 Longitude: 110.9315

Duration:	5-min	10-min	15-min	30-min	60-min	2-hr	3-hr	6-hr	12-hr	24-hr
Point Values (in)	0.88	1.34	1.66	2.24	2.77	3.09	3.23	3.51	3.78	4.13
Areal Values (in)	0.88	1.34	1.66	2.24	2.77	3.09	3.23	3.51	3.78	4.13

Soils Data

Soil Type	Percent	Curve # (CN)	Adj. Curve # (CN*)	Runoff Coef. (C)
B	66	83.	87.28	0.564
C	0	.	.	0.000
D	34	91.	93.35	0.746
Imp.	8	99.	99.	0.958

Weighted Runoff Coef. (Cw): 0.652
Time of Concentration: 11.4 min
Rainfall Intensity (i) @ Tc: 7.53 in/hr
Runoff Supply Rate (q) @ Tc: 4.92 in/hr

PEAK DISCHARGE: 154 cfs

PC-Hydro, Ver 5.3.1

HYDROLOGIC DATA SHEET FOR PIMA COUNTY FLOOD PEAK PROCEDURE

Pima County Regional Flood Control District

Client: Pima County
Prepared by: JPII
Project Name: Summit Study
Date: 5/30/2007
Concentration Point: FR23-14
Job #: 185120071

Watershed Area: 16.4 ac
Watershed Type: Medium Density Urbanized

Watercourse Data By Reach

Reach No.	Height (Hi)	Length (Li)	Slope (Si)	Basin Factor (Nb)
1	16.0	550	0.0291	.050
2	11.0	980	0.0112	.034

Length of Watercourse (Lc): 1,530 feet
Mean Slope: 0.0150
Length to Cen. of Gravity (Lca): 750 feet
Weighted Basin Fac.: 0.038
Veg. Cover Type(s): Desert Brush
Veg. Cover Density: 20 %

RETURN PERIOD: 100-years

Rainfall Depths: NOAA Atlas 14 (90% UCL) @ Latitude: 32.0564 Longitude: 110.9315

Duration:	5-min	10-min	15-min	30-min	60-min	2-hr	3-hr	6-hr	12-hr	24-hr
Point Values (in)	0.88	1.34	1.66	2.24	2.77	3.09	3.23	3.51	3.78	4.13
Areal Values (in)	0.88	1.34	1.66	2.24	2.77	3.09	3.23	3.51	3.78	4.13

Soils Data

Soil Type	Percent	Curve # (CN)	Adj. Curve # (CN*)	Runoff Coef. (C)
B	94	83.	87.28	0.564
C	0	.	.	0.000
D	6	91.	93.35	0.746
Imp.	20	99.	99.	0.958

Weighted Runoff Coef. (Cw): 0.651
Time of Concentration: 8.1 min
Rainfall Intensity (i) @ Tc: 8.63 in/hr
Runoff Supply Rate (q) @ Tc: 5.62 in/hr

PEAK DISCHARGE: 93 cfs

PC-Hydro, Ver 5.3.1

HYDROLOGIC DATA SHEET FOR PIMA COUNTY FLOOD PEAK PROCEDURE

Pima County Regional Flood Control District

Client: Pima County
Prepared by: JLL
Project Name: Summit Study
Date: 5/30/2007
Concentration Point: FR24-1
Job #: 185120071

Watershed Area: 21.1 ac
Watershed Type: Suburban-Valley

Watercourse Data By Reach

Reach No.	Height (Hi)	Length (Li)	Slope (Si)	Basin Factor (Nb)
1	24.5	1,740	0.0141	.031

Length of Watercourse (Lc): 1,740 feet
Mean Slope: 0.0141
Length to Cen. of Gravity (Lca): 800 feet
Weighted Basin Fac.: 0.031
Veg. Cover Type(s): Desert Brush
Veg. Cover Density: 20 %

RETURN PERIOD: 100-years

Rainfall Depths: NOAA Atlas 14 (90% UCL) @ Latitude: 32.0564 Longitude: 110.9315

Duration:	5-min	10-min	15-min	30-min	60-min	2-hr	3-hr	6-hr	12-hr	24-hr
Point Values (in)	0.88	1.34	1.66	2.24	2.77	3.09	3.23	3.51	3.78	4.13
Areal Values (in)	0.88	1.34	1.66	2.24	2.77	3.09	3.23	3.51	3.78	4.13

Soils Data

Soil Type	Percent	Curve # (CN)	Adj. Curve # (CN*)	Runoff Coef. (C)
B	45	83.	87.28	0.564
C	0	.	.	0.000
D	55	91.	93.35	0.746
Imp.	36	99.	99.	0.958

Weighted Runoff Coef. (Cw): 0.770
Time of Concentration: 6.5 min
Rainfall Intensity (i) @ Tc: 9.42 in/hr
Runoff Supply Rate (q) @ Tc: 7.25 in/hr

PEAK DISCHARGE: 154 cfs

PC-Hydro, Ver 5.3.1

HYDROLOGIC DATA SHEET FOR PIMA COUNTY FLOOD PEAK PROCEDURE

Pima County Regional Flood Control District

Client: Pima County
Prepared by: JLL
Project Name: Summit Study
Date: 5/30/2007
Concentration Point: FR24-2
Job #: 185120071

Watershed Area: 36.3 ac
Watershed Type: Suburban-Valley

Watercourse Data By Reach

Reach No.	Height (Hi)	Length (Li)	Slope (Si)	Basin Factor (Nb)
1	24.5	1,740	0.0141	.031
2	11.5	1,200	0.0096	.050

Length of Watercourse (Lc): 2,940 feet
Mean Slope: 0.0119
Length to Cen. of Gravity (Lca): 1,470 feet
Weighted Basin Fac.: 0.040
Veg. Cover Type(s): Desert Brush
Veg. Cover Density: 20 %

RETURN PERIOD: 100-years

Rainfall Depths: NOAA Atlas 14 (90% UCL) @ Latitude: 32.0564 Longitude: 110.9315

Duration:	5-min	10-min	15-min	30-min	60-min	2-hr	3-hr	6-hr	12-hr	24-hr
Point Values (in)	0.88	1.34	1.66	2.24	2.77	3.09	3.23	3.51	3.78	4.13
Areal Values (in)	0.88	1.34	1.66	2.24	2.77	3.09	3.23	3.51	3.78	4.13

Soils Data

Soil Type	Percent	Curve # (CN)	Adj. Curve # (CN*)	Runoff Coef. (C)
B	66	83.	87.28	0.564
C	0	.	.	0.000
D	34	91.	93.35	0.746
Imp.	28	99.	99.	0.958

Weighted Runoff Coef. (Cw): 0.718
Time of Concentration: 14.6 min
Rainfall Intensity (i) @ Tc: 6.71 in/hr
Runoff Supply Rate (q) @ Tc: 4.82 in/hr

PEAK DISCHARGE: 176 cfs

PC-Hydro, Ver 5.3.1

HYDROLOGIC DATA SHEET FOR PIMA COUNTY FLOOD PEAK PROCEDURE

Pima County Regional Flood Control District

Client: Pima County
Prepared by: JLL
Project Name: Summit Study
Date: 5/30/2007
Concentration Point: FR24-3
Job #: 185120071

Watershed Area: 53.8 ac
Watershed Type: Suburban-Valley

Watercourse Data By Reach

Reach No.	Height (Hi)	Length (Li)	Slope (Si)	Basin Factor (Nb)
1	24.5	1,740	0.0141	.031
2	11.5	1,350	0.0085	.050
3	12.5	1,295	0.0097	.038

Length of Watercourse (Lc): 4,385 feet
Mean Slope: 0.0107
Length to Cen. of Gravity (Lca): 2,000 feet
Weighted Basin Fac.: 0.040
Veg. Cover Type(s): Desert Brush
Veg. Cover Density: 20 %

RETURN PERIOD: 100-years

Rainfall Depths: NOAA Atlas 14 (90% UCL) @ Latitude: 32.0564 Longitude: 110.9315

Duration:	5-min	10-min	15-min	30-min	60-min	2-hr	3-hr	6-hr	12-hr	24-hr
Point Values (in)	0.88	1.34	1.66	2.24	2.77	3.09	3.23	3.51	3.78	4.13
Areal Values (in)	0.88	1.34	1.66	2.24	2.77	3.09	3.23	3.51	3.78	4.13

Soils Data

Soil Type	Percent	Curve # (CN)	Adj. Curve # (CN*)	Runoff Coef. (C)
B	77	83.	87.28	0.564
C	0	.	.	0.000
D	23	91.	93.35	0.746
Imp.	31	99.	99.	0.958

Weighted Runoff Coef. (Cw): 0.715
Time of Concentration: 20.6 min
Rainfall Intensity (i) @ Tc: 5.46 in/hr
Runoff Supply Rate (q) @ Tc: 3.90 in/hr

PEAK DISCHARGE: 212 cfs

PC-Hydro, Ver 5.3.1

HYDROLOGIC DATA SHEET FOR PIMA COUNTY FLOOD PEAK PROCEDURE

Pima County Regional Flood Control District

Client: Pima County
Prepared by: JLL
Project Name: Summit Study
Date: 5/30/2007
Concentration Point: FR24-4
Job #: 185120071

Watershed Area: 77.5 ac
Watershed Type: Suburban-Valley

Watercourse Data By Reach

Reach No.	Height (Hi)	Length (Li)	Slope (Si)	Basin Factor (Nb)
1	24.5	1,740	0.0141	.031
2	11.5	1,350	0.0085	.050
3	12.5	1,295	0.0097	.038
4	5.5	400	0.0137	.032
5	8.0	1,080	0.0074	.035

Length of Watercourse (Lc): 5,865 feet
Mean Slope: 0.0101
Length to Cen. of Gravity (Lca): 2,450 feet
Weighted Basin Fac.: 0.038
Veg. Cover Type(s): Desert Brush
Veg. Cover Density: 20 %

RETURN PERIOD: 100-years

Rainfall Depths: NOAA Atlas 14 (90% UCL) @ Latitude: 32.0564 Longitude: 110.9315

Duration:	5-min	10-min	15-min	30-min	60-min	2-hr	3-hr	6-hr	12-hr	24-hr
Point Values (in)	0.88	1.34	1.66	2.24	2.77	3.09	3.23	3.51	3.78	4.13
Areal Values (in)	0.88	1.34	1.66	2.24	2.77	3.09	3.23	3.51	3.78	4.13

Soils Data

Soil Type	Percent	Curve # (CN)	Adj. Curve # (CN*)	Runoff Coef. (C)
B	78	83.	87.28	0.564
C	0	.	.	0.000
D	22	91.	93.35	0.746
Imp.	31	99.	99.	0.958

Weighted Runoff Coef. (Cw): 0.713
Time of Concentration: 24.5 min
Rainfall Intensity (i) @ Tc: 4.97 in/hr
Runoff Supply Rate (q) @ Tc: 3.54 in/hr

PEAK DISCHARGE: 277 cfs

PC-Hydro, Ver 5.3.1

HYDROLOGIC DATA SHEET FOR PIMA COUNTY FLOOD PEAK PROCEDURE

Pima County Regional Flood Control District

Client: Pima County
Prepared by: JLL
Project Name: Summit Study
Date: 5/30/2007
Concentration Point: FR24-5
Job #: 185120071

Watershed Area: 103.9 ac
Watershed Type: Suburban-Valley

Watercourse Data By Reach

Reach No.	Height (Hi)	Length (Li)	Slope (Si)	Basin Factor (Nb)
1	24.5	1,740	0.0141	.031
2	11.5	1,350	0.0085	.050
3	12.5	1,295	0.0097	.038
4	5.5	400	0.0137	.032
5	8.0	1,080	0.0074	.035
6	10.0	1,300	0.0077	.050

Length of Watercourse (Lc): 7,165 feet
Mean Slope: 0.0096
Length to Cen. of Gravity (Lca): 2,520 feet
Weighted Basin Fac.: 0.041
Veg. Cover Type(s): Desert Brush
Veg. Cover Density: 20 %

RETURN PERIOD: 100-years

Rainfall Depths: NOAA Atlas 14 (90% UCL) @ Latitude: 32.0564 Longitude: 110.9315

Duration:	5-min	10-min	15-min	30-min	60-min	2-hr	3-hr	6-hr	12-hr	24-hr
Point Values (in)	0.88	1.34	1.66	2.24	2.77	3.09	3.23	3.51	3.78	4.13
Areal Values (in)	0.88	1.34	1.66	2.24	2.77	3.09	3.23	3.51	3.78	4.13

Soils Data

Soil Type	Percent	Curve # (CN)	Adj. Curve # (CN*)	Runoff Coef. (C)
B	68	83.	87.28	0.564
C	0	.	.	0.000
D	32	91.	93.35	0.746
Imp.	29	99.	99.	0.958

Weighted Runoff Coef. (Cw): 0.719
Time of Concentration: 29.4 min
Rainfall Intensity (i) @ Tc: 4.53 in/hr
Runoff Supply Rate (q) @ Tc: 3.25 in/hr

PEAK DISCHARGE: 341 cfs

PC-Hydro, Ver 5.3.1

HYDROLOGIC DATA SHEET FOR PIMA COUNTY FLOOD PEAK PROCEDURE

Pima County Regional Flood Control District

Client: Pima County
Prepared by: JLL
Project Name: Summit Study
Date: 5/30/2007
Concentration Point: FR24-6
Job #: 185120071

Watershed Area: 14.7 ac
Watershed Type: Suburban-Valley

Watercourse Data By Reach

Reach No.	Height (Hi)	Length (Li)	Slope (Si)	Basin Factor (Nb)
1	19.0	2,450	0.0078	.034

Length of Watercourse (Lc): 2,450 feet
Mean Slope: 0.0078
Length to Cen. of Gravity (Lca): 960 feet
Weighted Basin Fac.: 0.034
Veg. Cover Type(s): Desert Brush
Veg. Cover Density: 20 %

RETURN PERIOD: 100-years

Rainfall Depths: NOAA Atlas 14 (90% UCL) @ Latitude: 32.0564 Longitude: 110.9315

Duration:	5-min	10-min	15-min	30-min	60-min	2-hr	3-hr	6-hr	12-hr	24-hr
Point Values (in)	0.88	1.34	1.66	2.24	2.77	3.09	3.23	3.51	3.78	4.13
Areal Values (in)	0.88	1.34	1.66	2.24	2.77	3.09	3.23	3.51	3.78	4.13

Soils Data

Soil Type	Percent	Curve # (CN)	Adj. Curve # (CN*)	Runoff Coef. (C)
B	89	83.	87.28	0.564
C	0	.	.	0.000
D	11	91.	93.35	0.746
Imp.	25	99.	99.	0.958

Weighted Runoff Coef. (Cw): 0.677
Time of Concentration: 12.3 min
Rainfall Intensity (i) @ Tc: 7.25 in/hr
Runoff Supply Rate (q) @ Tc: 4.91 in/hr

PEAK DISCHARGE: 73 cfs

PC-Hydro, Ver 5.3.1

HYDROLOGIC DATA SHEET FOR PIMA COUNTY FLOOD PEAK PROCEDURE

Pima County Regional Flood Control District

Client: Pima County

Prepared by: JPII

Project Name: Summit Study

Date: 5/30/2007

Concentration Point: FR25-1

Job #: 185120071

Watershed Area: 32.6 ac

Watershed Type: Medium Density Urbanized

Watercourse Data By Reach

Reach No.	Height (Hi)	Length (Li)	Slope (Si)	Basin Factor (Nb)
1	4.5	370	0.0122	.050
2	24.0	980	0.0245	.036
3	10.0	890	0.0112	.036

Length of Watercourse (Lc): 2,240 feet

Mean Slope: 0.0155

Length to Cen. of Gravity (Lca): 910 feet

Weighted Basin Fac.: 0.039

Veg. Cover Type(s): Desert Brush

Veg. Cover Density: 20 %

RETURN PERIOD: 100-years

Rainfall Depths: NOAA Atlas 14 (90% UCL) @ Latitude: 32.0564 Longitude: 110.9315

Duration:	5-min	10-min	15-min	30-min	60-min	2-hr	3-hr	6-hr	12-hr	24-hr
Point Values (in)	0.88	1.34	1.66	2.24	2.77	3.09	3.23	3.51	3.78	4.13
Areal Values (in)	0.88	1.34	1.66	2.24	2.77	3.09	3.23	3.51	3.78	4.13

Soils Data

Soil Type	Percent	Curve # (CN)	Adj. Curve # (CN*)	Runoff Coef. (C)
B	76	83.	87.28	0.564
C	0	.	.	0.000
D	24	91.	93.35	0.746
Imp.	30	99.	99.	0.958

Weighted Runoff Coef. (Cw): 0.713

Time of Concentration: 9.5 min

Rainfall Intensity (i) @ Tc: 8.17 in/hr

Runoff Supply Rate (q) @ Tc: 5.83 in/hr

PEAK DISCHARGE: 191 cfs

PC-Hydro, Ver 5.3.1

HYDROLOGIC DATA SHEET FOR PIMA COUNTY FLOOD PEAK PROCEDURE

Pima County Regional Flood Control District

Client: Pima County

Prepared by: JPII

Project Name: Summit Study

Date: 5/30/2007

Concentration Point: FR25-2

Job #: 185120071

Watershed Area: 53.7 ac

Watershed Type: Medium Density Urbanized

Watercourse Data By Reach

Reach No.	Height (Hi)	Length (Li)	Slope (Si)	Basin Factor (Nb)
1	4.5	370	0.0122	.050
2	24.0	980	0.0245	.036
3	10.0	890	0.0112	.036
4	10.0	1,000	0.0100	.050

Length of Watercourse (Lc): 3,240 feet

Mean Slope: 0.0134

Length to Cen. of Gravity (Lca): 1,500 feet

Weighted Basin Fac.: 0.043

Veg. Cover Type(s): Desert Brush

Veg. Cover Density: 20 %

RETURN PERIOD: 100-years

Rainfall Depths: NOAA Atlas 14 (90% UCL) @ Latitude: 32.0564 Longitude: 110.9315

Duration:	5-min	10-min	15-min	30-min	60-min	2-hr	3-hr	6-hr	12-hr	24-hr
Point Values (in)	0.88	1.34	1.66	2.24	2.77	3.09	3.23	3.51	3.78	4.13
Areal Values (in)	0.88	1.34	1.66	2.24	2.77	3.09	3.23	3.51	3.78	4.13

Soils Data

Soil Type	Percent	Curve # (CN)	Adj. Curve # (CN*)	Runoff Coef. (C)
B	85	83.	87.28	0.564
C	0	.	.	0.000
D	15	91.	93.35	0.746
Imp.	29	99.	99.	0.958

Weighted Runoff Coef. (Cw): 0.697

Time of Concentration: 16.1 min

Rainfall Intensity (i) @ Tc: 6.34 in/hr

Runoff Supply Rate (q) @ Tc: 4.42 in/hr

PEAK DISCHARGE: 239 cfs

PC-Hydro, Ver 5.3.1

HYDROLOGIC DATA SHEET FOR PIMA COUNTY FLOOD PEAK PROCEDURE

Pima County Regional Flood Control District

Client: Pima County
Prepared by: JPII
Project Name: Summit Study
Date: 5/30/2007
Concentration Point: FR25-3
Job #: 185120071

Watershed Area: 93.0 ac
Watershed Type: Medium Density Urbanized

Watercourse Data By Reach

Reach No.	Height (Hi)	Length (Li)	Slope (Si)	Basin Factor (Nb)
1	4.5	370	0.0122	.050
2	24.0	980	0.0245	.036
3	10.0	890	0.0112	.036
4	10.0	1,000	0.0100	.050
5	6.0	650	0.0092	.050

Length of Watercourse (Lc): 3,890 feet
Mean Slope: 0.0125
Length to Cen. of Gravity (Lca): 1,650 feet
Weighted Basin Fac.: 0.044
Veg. Cover Type(s): Desert Brush
Veg. Cover Density: 20 %

RETURN PERIOD: 100-years

Rainfall Depths: NOAA Atlas 14 (90% UCL) @ Latitude: 32.0564 Longitude: 110.9315

Duration:	5-min	10-min	15-min	30-min	60-min	2-hr	3-hr	6-hr	12-hr	24-hr
Point Values (in)	0.88	1.34	1.66	2.24	2.77	3.09	3.23	3.51	3.78	4.13
Areal Values (in)	0.88	1.34	1.66	2.24	2.77	3.09	3.23	3.51	3.78	4.13

Soils Data

Soil Type	Percent	Curve # (CN)	Adj. Curve # (CN*)	Runoff Coef. (C)
B	90	83.	87.28	0.564
C	0	.	.	0.000
D	10	91.	93.35	0.746
Imp.	29	99.	99.	0.958

Weighted Runoff Coef. (Cw): 0.690
Time of Concentration: 19.6 min
Rainfall Intensity (i) @ Tc: 5.63 in/hr
Runoff Supply Rate (q) @ Tc: 3.88 in/hr

PEAK DISCHARGE: 364 cfs

PC-Hydro, Ver 5.3.1

HYDROLOGIC DATA SHEET FOR PIMA COUNTY FLOOD PEAK PROCEDURE

Pima County Regional Flood Control District

Client: Pima County
Prepared by: JPII
Project Name: Summit Study
Date: 5/30/2007
Concentration Point: FR25-4
Job #: 185120071

Watershed Area: 124.8 ac
Watershed Type: Medium Density Urbanized

Watercourse Data By Reach

Reach No.	Height (Hi)	Length (Li)	Slope (Si)	Basin Factor (Nb)
1	4.5	370	0.0122	.050
2	24.0	980	0.0245	.036
3	10.0	890	0.0112	.036
4	10.0	1,000	0.0100	.050
5	6.0	650	0.0092	.050
6	8.0	950	0.0084	.036

Length of Watercourse (Lc): 4,840 feet
Mean Slope: 0.0115
Length to Cen. of Gravity (Lca): 1,700 feet
Weighted Basin Fac.: 0.042
Veg. Cover Type(s): Desert Brush
Veg. Cover Density: 20 %

RETURN PERIOD: 100-years

Rainfall Depths: NOAA Atlas 14 (90% UCL) @ Latitude: 32.0564 Longitude: 110.9315

Duration:	5-min	10-min	15-min	30-min	60-min	2-hr	3-hr	6-hr	12-hr	24-hr
Point Values (in)	0.88	1.34	1.66	2.24	2.77	3.09	3.23	3.51	3.78	4.13
Areal Values (in)	0.88	1.34	1.66	2.24	2.77	3.09	3.23	3.51	3.78	4.13

Soils Data

Soil Type	Percent	Curve # (CN)	Adj. Curve # (CN*)	Runoff Coef. (C)
B	93	83.	87.28	0.564
C	0	.	.	0.000
D	7	91.	93.35	0.746
Imp.	27	99.	99.	0.958

Weighted Runoff Coef. (Cw): 0.680
Time of Concentration: 21.5 min
Rainfall Intensity (i) @ Tc: 5.33 in/hr
Runoff Supply Rate (q) @ Tc: 3.62 in/hr

PEAK DISCHARGE: 456 cfs

PC-Hydro, Ver 5.3.1

HYDROLOGIC DATA SHEET FOR PIMA COUNTY FLOOD PEAK PROCEDURE

Pima County Regional Flood Control District

Client: Pima County

Prepared by: JPII

Project Name: Summit Study

Date: 5/30/2007

Concentration Point: FR25-5

Job #: 185120071

Watershed Area: 138.2 ac

Watershed Type: Medium Density Urbanized

Watercourse Data By Reach

Reach No.	Height (Hi)	Length (Li)	Slope (Si)	Basin Factor (Nb)
1	4.5	370	0.0122	.050
2	24.0	980	0.0245	.036
3	10.0	890	0.0112	.036
4	10.0	1,000	0.0100	.050
5	6.0	650	0.0092	.050
6	8.0	950	0.0084	.036
7	8.0	700	0.0114	.032

Length of Watercourse (Lc): 5,540 feet

Mean Slope: 0.0115

Length to Cen. of Gravity (Lca): 2,300 feet

Weighted Basin Fac.: 0.041

Veg. Cover Type(s): Desert Brush

Veg. Cover Density: 20 %

RETURN PERIOD: 100-years

Rainfall Depths: NOAA Atlas 14 (90% UCL) @ Latitude: 32.0564 Longitude: 110.9315

Duration:	5-min	10-min	15-min	30-min	60-min	2-hr	3-hr	6-hr	12-hr	24-hr
Point Values (in)	0.88	1.34	1.66	2.24	2.77	3.09	3.23	3.51	3.78	4.13
Areal Values (in)	0.88	1.34	1.66	2.24	2.77	3.09	3.23	3.51	3.78	4.13

Soils Data

Soil Type	Percent	Curve # (CN)	Adj. Curve # (CN*)	Runoff Coef. (C)
B	93	83.	87.28	0.564
C	0	.	.	0.000
D	7	91.	93.35	0.746
Imp.	30	99.	99.	0.958

Weighted Runoff Coef. (Cw): 0.690

Time of Concentration: 24.2 min

Rainfall Intensity (i) @ Tc: 4.99 in/hr

Runoff Supply Rate (q) @ Tc: 3.45 in/hr

PEAK DISCHARGE: 480 cfs

PC-Hydro, Ver 5.3.1

HYDROLOGIC DATA SHEET FOR PIMA COUNTY FLOOD PEAK PROCEDURE

Pima County Regional Flood Control District

Client: Pima County
Project Name: Summit Study
Concentration Point: FR25-6

Prepared by: JPII
Date: 5/30/2007
Job #: 185120071

Watershed Area: 23.6 ac
Watershed Type: Medium Density Urbanized

Watercourse Data By Reach

Reach No.	Height (Hi)	Length (Li)	Slope (Si)	Basin Factor (Nb)
1	4.5	350	0.0129	.036
2	22.0	870	0.0253	.036
3	10.5	800	0.0131	.050

Length of Watercourse (Lc): 2,020 feet
Mean Slope: 0.0169
Length to Cen. of Gravity (Lca): 1,000 feet
Weighted Basin Fac.: 0.042
Veg. Cover Type(s): Desert Brush
Veg. Cover Density: 20 %

RETURN PERIOD: 100-years

Rainfall Depths: NOAA Atlas 14 (90% UCL) @ Latitude: 32.0564 Longitude: 110.9315

Duration:	5-min	10-min	15-min	30-min	60-min	2-hr	3-hr	6-hr	12-hr	24-hr
Point Values (in)	0.88	1.34	1.66	2.24	2.77	3.09	3.23	3.51	3.78	4.13
Areal Values (in)	0.88	1.34	1.66	2.24	2.77	3.09	3.23	3.51	3.78	4.13

Soils Data

Soil Type	Percent	Curve # (CN)	Adj. Curve # (CN*)	Runoff Coef. (C)
B	95	83.	87.28	0.564
C	0	.	.	0.000
D	5	91.	93.35	0.746
Imp.	25	99.	99.	0.958

Weighted Runoff Coef. (Cw): 0.668
Time of Concentration: 10.4 min
Rainfall Intensity (i) @ Tc: 7.86 in/hr
Runoff Supply Rate (q) @ Tc: 5.25 in/hr

PEAK DISCHARGE: 125 cfs

PC-Hydro, Ver 5.3.1

HYDROLOGIC DATA SHEET FOR PIMA COUNTY FLOOD PEAK PROCEDURE

Pima County Regional Flood Control District

Client: Pima County
Prepared by: JPII
Project Name: Summit Study
Date: 5/30/2007
Concentration Point: FR25-7
Job #: 185120071

Watershed Area: 27.1 ac
Watershed Type: Suburban-Valley

Watercourse Data By Reach

Reach No.	Height (Hi)	Length (Li)	Slope (Si)	Basin Factor (Nb)
1	6.0	680	0.0088	.050
2	26.0	1,530	0.0170	.034

Length of Watercourse (Lc): 2,210 feet
Mean Slope: 0.0136
Length to Cen. of Gravity (Lca): 920 feet
Weighted Basin Fac.: 0.040
Veg. Cover Type(s): Desert Brush
Veg. Cover Density: 20 %

RETURN PERIOD: 100-years

Rainfall Depths: NOAA Atlas 14 (90% UCL) @ Latitude: 32.0564 Longitude: 110.9315

Duration:	5-min	10-min	15-min	30-min	60-min	2-hr	3-hr	6-hr	12-hr	24-hr
Point Values (in)	0.88	1.34	1.66	2.24	2.77	3.09	3.23	3.51	3.78	4.13
Areal Values (in)	0.88	1.34	1.66	2.24	2.77	3.09	3.23	3.51	3.78	4.13

Soils Data

Soil Type	Percent	Curve # (CN)	Adj. Curve # (CN*)	Runoff Coef. (C)
B	29	83.	87.28	0.564
C	0	.	.	0.000
D	71	91.	93.35	0.746
Imp.	8	99.	99.	0.958

Weighted Runoff Coef. (Cw): 0.715
Time of Concentration: 10.6 min
Rainfall Intensity (i) @ Tc: 7.81 in/hr
Runoff Supply Rate (q) @ Tc: 5.59 in/hr

PEAK DISCHARGE: 153 cfs

PC-Hydro, Ver 5.3.1

HYDROLOGIC DATA SHEET FOR PIMA COUNTY FLOOD PEAK PROCEDURE

Pima County Regional Flood Control District

Client: Pima County
Prepared by: JPII
Project Name: Summit Study
Date: 5/30/2007
Concentration Point: FR25-8
Job #: 185120071

Watershed Area: 47.2 ac
Watershed Type: Suburban-Valley

Watercourse Data By Reach

Reach No.	Height (Hi)	Length (Li)	Slope (Si)	Basin Factor (Nb)
1	6.0	680	0.0088	.050
2	26.0	1,530	0.0170	.034
3	10.0	740	0.0135	.034
4	1.8	420	0.0042	.034

Length of Watercourse (Lc): 3,370 feet
Mean Slope: 0.0112
Length to Cen. of Gravity (Lca): 1,350 feet
Weighted Basin Fac.: 0.038
Veg. Cover Type(s): Desert Brush
Veg. Cover Density: 20 %

RETURN PERIOD: 100-years

Rainfall Depths: NOAA Atlas 14 (90% UCL) @ Latitude: 32.0564 Longitude: 110.9315

Duration:	5-min	10-min	15-min	30-min	60-min	2-hr	3-hr	6-hr	12-hr	24-hr
Point Values (in)	0.88	1.34	1.66	2.24	2.77	3.09	3.23	3.51	3.78	4.13
Areal Values (in)	0.88	1.34	1.66	2.24	2.77	3.09	3.23	3.51	3.78	4.13

Soils Data

Soil Type	Percent	Curve # (CN)	Adj. Curve # (CN*)	Runoff Coef. (C)
B	31	83.	87.28	0.564
C	0	.	.	0.000
D	69	91.	93.35	0.746
Imp.	11	99.	99.	0.958

Weighted Runoff Coef. (Cw): 0.718
Time of Concentration: 14.4 min
Rainfall Intensity (i) @ Tc: 6.75 in/hr
Runoff Supply Rate (q) @ Tc: 4.85 in/hr

PEAK DISCHARGE: 231 cfs

PC-Hydro, Ver 5.3.1

HYDROLOGIC DATA SHEET FOR PIMA COUNTY FLOOD PEAK PROCEDURE

Pima County Regional Flood Control District

Client: Pima County
Prepared by: JPII
Project Name: Summit Study
Date: 5/30/2007
Concentration Point: FR25-9
Job #: 185120071

Watershed Area: 72.8 ac
Watershed Type: Suburban-Valley

Watercourse Data By Reach

Reach No.	Height (Hi)	Length (Li)	Slope (Si)	Basin Factor (Nb)
1	6.0	680	0.0088	.040
2	26.0	1,530	0.0170	.034
3	10.0	740	0.0135	.034
4	1.8	420	0.0042	.034
5	9.5	1,050	0.0090	.032

Length of Watercourse (Lc): 4,420 feet
Mean Slope: 0.0106
Length to Cen. of Gravity (Lca): 1,500 feet
Weighted Basin Fac.: 0.034
Veg. Cover Type(s): Desert Brush
Veg. Cover Density: 20 %

RETURN PERIOD: 100-years

Rainfall Depths: NOAA Atlas 14 (90% UCL) @ Latitude: 32.0564 Longitude: 110.9315

Duration:	5-min	10-min	15-min	30-min	60-min	2-hr	3-hr	6-hr	12-hr	24-hr
Point Values (in)	0.88	1.34	1.66	2.24	2.77	3.09	3.23	3.51	3.78	4.13
Areal Values (in)	0.88	1.34	1.66	2.24	2.77	3.09	3.23	3.51	3.78	4.13

Soils Data

Soil Type	Percent	Curve # (CN)	Adj. Curve # (CN*)	Runoff Coef. (C)
B	49	83.	87.28	0.564
C	0	.	.	0.000
D	51	91.	93.35	0.746
Imp.	11	99.	99.	0.958

Weighted Runoff Coef. (Cw): 0.688
Time of Concentration: 15.6 min
Rainfall Intensity (i) @ Tc: 6.46 in/hr
Runoff Supply Rate (q) @ Tc: 4.45 in/hr

PEAK DISCHARGE: 326 cfs

PC-Hydro, Ver 5.3.1

HYDROLOGIC DATA SHEET FOR PIMA COUNTY FLOOD PEAK PROCEDURE

Pima County Regional Flood Control District

Client: Pima County
Prepared by: JPII
Project Name: Summit Study
Date: 5/30/2007
Concentration Point: FR25-10
Job #: 185120071

Watershed Area: 93.3 ac
Watershed Type: Suburban-Valley

Watercourse Data By Reach

Reach No.	Height (Hi)	Length (Li)	Slope (Si)	Basin Factor (Nb)
1	6.0	680	0.0088	.050
2	26.0	1,530	0.0170	.034
3	10.0	740	0.0135	.034
4	1.8	420	0.0042	.034
5	9.5	1,050	0.0090	.032
6	5.0	1,750	0.0029	.032

Length of Watercourse (Lc): 6,170 feet
Mean Slope: 0.0067
Length to Cen. of Gravity (Lca): 2,000 feet
Weighted Basin Fac.: 0.034
Veg. Cover Type(s): Desert Brush
Veg. Cover Density: 20 %

RETURN PERIOD: 100-years

Rainfall Depths: NOAA Atlas 14 (90% UCL) @ Latitude: 32.0564 Longitude: 110.9315

Duration:	5-min	10-min	15-min	30-min	60-min	2-hr	3-hr	6-hr	12-hr	24-hr
Point Values (in)	0.88	1.34	1.66	2.24	2.77	3.09	3.23	3.51	3.78	4.13
Areal Values (in)	0.88	1.34	1.66	2.24	2.77	3.09	3.23	3.51	3.78	4.13

Soils Data

Soil Type	Percent	Curve # (CN)	Adj. Curve # (CN*)	Runoff Coef. (C)
B	61	83.	87.28	0.564
C	0	.	.	0.000
D	39	91.	93.35	0.746
Imp.	14	99.	99.	0.958

Weighted Runoff Coef. (Cw): 0.681
Time of Concentration: 25.5 min
Rainfall Intensity (i) @ Tc: 4.86 in/hr
Runoff Supply Rate (q) @ Tc: 3.31 in/hr

PEAK DISCHARGE: 311 cfs

PC-Hydro, Ver 5.3.1

HYDROLOGIC DATA SHEET FOR PIMA COUNTY FLOOD PEAK PROCEDURE

Pima County Regional Flood Control District

Client: Pima County
Prepared by: JLL
Project Name: Summit Study
Date: 5/30/2007
Concentration Point: S1-5
Job #: 185120071

Watershed Area: 21.0 ac
Watershed Type: Undeveloped-Valley

Watercourse Data By Reach

Reach No.	Height (Hi)	Length (Li)	Slope (Si)	Basin Factor (Nb)
1	7.0	500	0.0140	.070
2	9.5	960	0.0099	.038

Length of Watercourse (Lc): 1,460 feet
Mean Slope: 0.0111
Length to Cen. of Gravity (Lca): 750 feet
Weighted Basin Fac.: 0.048
Veg. Cover Type(s): Desert Brush
Veg. Cover Density: 20 %

RETURN PERIOD: 100-years

Rainfall Depths: NOAA Atlas 14 (90% UCL) @ Latitude: 32.0564 Longitude: 110.9315

Duration:	5-min	10-min	15-min	30-min	60-min	2-hr	3-hr	6-hr	12-hr	24-hr
Point Values (in)	0.88	1.34	1.66	2.24	2.77	3.09	3.23	3.51	3.78	4.13
Areal Values (in)	0.88	1.34	1.66	2.24	2.77	3.09	3.23	3.51	3.78	4.13

Soils Data

Soil Type	Percent	Curve # (CN)	Adj. Curve # (CN*)	Runoff Coef. (C)
B	100	83.	87.28	0.564
C	0	.	.	0.000
D	0	.	.	0.000
Imp.	5	99.	99.	0.958

Weighted Runoff Coef. (Cw): 0.583
Time of Concentration: 12.8 min
Rainfall Intensity (i) @ Tc: 7.13 in/hr
Runoff Supply Rate (q) @ Tc: 4.16 in/hr

PEAK DISCHARGE: 88 cfs

PC-Hydro, Ver 5.3.1

HYDROLOGIC DATA SHEET FOR PIMA COUNTY FLOOD PEAK PROCEDURE

Pima County Regional Flood Control District

Client: Pima County
Prepared by: JLL
Project Name: Summit Study
Date: 5/30/2007
Concentration Point: S1-6
Job #: 185120071

Watershed Area: 21.5 ac
Watershed Type: Suburban-Valley

Watercourse Data By Reach

Reach No.	Height (Hi)	Length (Li)	Slope (Si)	Basin Factor (Nb)
1	11.0	270	0.0407	.050
2	13.8	1,580	0.0087	.038

Length of Watercourse (Lc): 1,850 feet
Mean Slope: 0.0102
Length to Cen. of Gravity (Lca): 790 feet
Weighted Basin Fac.: 0.039
Veg. Cover Type(s): Desert Brush
Veg. Cover Density: 20 %

RETURN PERIOD: 100-years

Rainfall Depths: NOAA Atlas 14 (90% UCL) @ Latitude: 32.0564 Longitude: 110.9315

Duration:	5-min	10-min	15-min	30-min	60-min	2-hr	3-hr	6-hr	12-hr	24-hr
Point Values (in)	0.88	1.34	1.66	2.24	2.77	3.09	3.23	3.51	3.78	4.13
Areal Values (in)	0.88	1.34	1.66	2.24	2.77	3.09	3.23	3.51	3.78	4.13

Soils Data

Soil Type	Percent	Curve # (CN)	Adj. Curve # (CN*)	Runoff Coef. (C)
B	100	83.	87.28	0.564
C	0	.	.	0.000
D	0	.	.	0.000
Imp.	20	99.	99.	0.958

Weighted Runoff Coef. (Cw): 0.642
Time of Concentration: 10.9 min
Rainfall Intensity (i) @ Tc: 7.69 in/hr
Runoff Supply Rate (q) @ Tc: 4.94 in/hr

PEAK DISCHARGE: 107 cfs

PC-Hydro, Ver 5.3.1

HYDROLOGIC DATA SHEET FOR PIMA COUNTY FLOOD PEAK PROCEDURE

Pima County Regional Flood Control District

Client: Pima County

Prepared by: JLL

Project Name: Summit Study

Date: 5/30/2007

Concentration Point: S1-7

Job #: 185120071

Watershed Area: 58.7 ac

Watershed Type: Suburban-Valley

Watercourse Data By Reach

Reach No.	Height (Hi)	Length (Li)	Slope (Si)	Basin Factor (Nb)
1	7.0	500	0.0140	.070
2	9.5	960	0.0099	.038
3	7.0	975	0.0072	.038

Length of Watercourse (Lc): 2,435 feet

Mean Slope: 0.0092

Length to Cen. of Gravity (Lca): 1,400 feet

Weighted Basin Fac.: 0.043

Veg. Cover Type(s): Desert Brush

Veg. Cover Density: 20 %

RETURN PERIOD: 100-years

Rainfall Depths: NOAA Atlas 14 (90% UCL) @ Latitude: 32.0564 Longitude: 110.9315

Duration:	5-min	10-min	15-min	30-min	60-min	2-hr	3-hr	6-hr	12-hr	24-hr
Point Values (in)	0.88	1.34	1.66	2.24	2.77	3.09	3.23	3.51	3.78	4.13
Areal Values (in)	0.88	1.34	1.66	2.24	2.77	3.09	3.23	3.51	3.78	4.13

Soils Data

Soil Type	Percent	Curve # (CN)	Adj. Curve # (CN*)	Runoff Coef. (C)
B	100	83.	87.28	0.564
C	0	.	.	0.000
D	0	.	.	0.000
Imp.	14	99.	99.	0.958

Weighted Runoff Coef. (Cw): 0.619

Time of Concentration: 18.6 min

Rainfall Intensity (i) @ Tc: 5.81 in/hr

Runoff Supply Rate (q) @ Tc: 3.59 in/hr

PEAK DISCHARGE: 213 cfs

PC-Hydro, Ver 5.3.1

HYDROLOGIC DATA SHEET FOR PIMA COUNTY FLOOD PEAK PROCEDURE

Pima County Regional Flood Control District

Client: Pima County
Prepared by: JLL
Project Name: Summit Study
Date: 5/30/2007
Concentration Point: S1-8
Job #: 185120071

Watershed Area: 21.9 ac
Watershed Type: Suburban-Valley

Watercourse Data By Reach

Reach No.	Height (Hi)	Length (Li)	Slope (Si)	Basin Factor (Nb)
1	14.0	300	0.0467	.060
2	13.0	1,230	0.0106	.060

Length of Watercourse (Lc): 1,530 feet
Mean Slope: 0.0131
Length to Cen. of Gravity (Lca): 710 feet
Weighted Basin Fac.: 0.060
Veg. Cover Type(s): Desert Brush
Veg. Cover Density: 20 %

RETURN PERIOD: 100-years

Rainfall Depths: NOAA Atlas 14 (90% UCL) @ Latitude: 32.0564 Longitude: 110.9315

Duration:	5-min	10-min	15-min	30-min	60-min	2-hr	3-hr	6-hr	12-hr	24-hr
Point Values (in)	0.88	1.34	1.66	2.24	2.77	3.09	3.23	3.51	3.78	4.13
Areal Values (in)	0.88	1.34	1.66	2.24	2.77	3.09	3.23	3.51	3.78	4.13

Soils Data

Soil Type	Percent	Curve # (CN)	Adj. Curve # (CN*)	Runoff Coef. (C)
B	91	83.	87.28	0.564
C	0	.	.	0.000
D	9	91.	93.35	0.746
Imp.	30	99.	99.	0.958

Weighted Runoff Coef. (Cw): 0.693
Time of Concentration: 14.2 min
Rainfall Intensity (i) @ Tc: 6.79 in/hr
Runoff Supply Rate (q) @ Tc: 4.71 in/hr

PEAK DISCHARGE: 104 cfs

PC-Hydro, Ver 5.3.1

HYDROLOGIC DATA SHEET FOR PIMA COUNTY FLOOD PEAK PROCEDURE

Pima County Regional Flood Control District

Client: Pima County
Prepared by: JLL
Project Name: Summit Study
Date: 5/30/2007
Concentration Point: S1-9
Job #: 185120071

Watershed Area: 96.1 ac
Watershed Type: Suburban-Valley

Watercourse Data By Reach

Reach No.	Height (Hi)	Length (Li)	Slope (Si)	Basin Factor (Nb)
1	7.0	500	0.0140	.070
2	9.5	960	0.0099	.038
3	7.0	975	0.0072	.038
4	8.0	970	0.0082	.050

Length of Watercourse (Lc): 3,405 feet
Mean Slope: 0.0089
Length to Cen. of Gravity (Lca): 1,700 feet
Weighted Basin Fac.: 0.045
Veg. Cover Type(s): Desert Brush
Veg. Cover Density: 20 %

RETURN PERIOD: 100-years

Rainfall Depths: NOAA Atlas 14 (90% UCL) @ Latitude: 32.0564 Longitude: 110.9315

Duration:	5-min	10-min	15-min	30-min	60-min	2-hr	3-hr	6-hr	12-hr	24-hr
Point Values (in)	0.88	1.34	1.66	2.24	2.77	3.09	3.23	3.51	3.78	4.13
Areal Values (in)	0.88	1.34	1.66	2.24	2.77	3.09	3.23	3.51	3.78	4.13

Soils Data

Soil Type	Percent	Curve # (CN)	Adj. Curve # (CN*)	Runoff Coef. (C)
B	98	83.	87.28	0.564
C	0	.	.	0.000
D	2	91.	93.35	0.746
Imp.	21	99.	99.	0.958

Weighted Runoff Coef. (Cw): 0.648
Time of Concentration: 24.0 min
Rainfall Intensity (i) @ Tc: 5.02 in/hr
Runoff Supply Rate (q) @ Tc: 3.26 in/hr

PEAK DISCHARGE: 315 cfs

PC-Hydro, Ver 5.3.1

HYDROLOGIC DATA SHEET FOR PIMA COUNTY FLOOD PEAK PROCEDURE

Pima County Regional Flood Control District

Client: Pima County
Prepared by: JLL
Project Name: Summit Study
Date: 5/30/2007
Concentration Point: S1-10
Job #: 185120071

Watershed Area: 17.1 ac
Watershed Type: Suburban-Valley

Watercourse Data By Reach

Reach No.	Height (Hi)	Length (Li)	Slope (Si)	Basin Factor (Nb)
1	3.0	200	0.0150	.070
2	18.0	300	0.0600	.070
3	20.0	1,290	0.0155	.038

Length of Watercourse (Lc): 1,790 feet
Mean Slope: 0.0183
Length to Cen. of Gravity (Lca): 780 feet
Weighted Basin Fac.: 0.045
Veg. Cover Type(s): Desert Brush
Veg. Cover Density: 20 %

RETURN PERIOD: 100-years

Rainfall Depths: NOAA Atlas 14 (90% UCL) @ Latitude: 32.0564 Longitude: 110.9315

Duration:	5-min	10-min	15-min	30-min	60-min	2-hr	3-hr	6-hr	12-hr	24-hr
Point Values (in)	0.88	1.34	1.66	2.24	2.77	3.09	3.23	3.51	3.78	4.13
Areal Values (in)	0.88	1.34	1.66	2.24	2.77	3.09	3.23	3.51	3.78	4.13

Soils Data

Soil Type	Percent	Curve # (CN)	Adj. Curve # (CN*)	Runoff Coef. (C)
B	96	83.	87.28	0.564
C	0	.	.	0.000
D	4	91.	93.35	0.746
Imp.	4	99.	99.	0.958

Weighted Runoff Coef. (Cw): 0.585
Time of Concentration: 10.1 min
Rainfall Intensity (i) @ Tc: 8.02 in/hr
Runoff Supply Rate (q) @ Tc: 4.69 in/hr

PEAK DISCHARGE: 81 cfs

PC-Hydro, Ver 5.3.1

HYDROLOGIC DATA SHEET FOR PIMA COUNTY FLOOD PEAK PROCEDURE

Pima County Regional Flood Control District

Client: Pima County
Prepared by: JLL
Project Name: Summit Study
Date: 5/30/2007
Concentration Point: S1-11
Job #: 185120071

Watershed Area: 24.5 ac
Watershed Type: Suburban-Valley

Watercourse Data By Reach

Reach No.	Height (Hi)	Length (Li)	Slope (Si)	Basin Factor (Nb)
1	8.0	480	0.0167	.070
2	28.0	890	0.0315	.035
3	7.8	600	0.0129	.034

Length of Watercourse (Lc): 1,970 feet
Mean Slope: 0.0198
Length to Cen. of Gravity (Lca): 900 feet
Weighted Basin Fac.: 0.044
Veg. Cover Type(s): Desert Brush
Veg. Cover Density: 20 %

RETURN PERIOD: 100-years

Rainfall Depths: NOAA Atlas 14 (90% UCL) @ Latitude: 32.0564 Longitude: 110.9315

Duration:	5-min	10-min	15-min	30-min	60-min	2-hr	3-hr	6-hr	12-hr	24-hr
Point Values (in)	0.88	1.34	1.66	2.24	2.77	3.09	3.23	3.51	3.78	4.13
Areal Values (in)	0.88	1.34	1.66	2.24	2.77	3.09	3.23	3.51	3.78	4.13

Soils Data

Soil Type	Percent	Curve # (CN)	Adj. Curve # (CN*)	Runoff Coef. (C)
B	56	83.	87.28	0.564
C	0	.	.	0.000
D	44	91.	93.35	0.746
Imp.	9	99.	99.	0.958

Weighted Runoff Coef. (Cw): 0.671
Time of Concentration: 9.6 min
Rainfall Intensity (i) @ Tc: 8.14 in/hr
Runoff Supply Rate (q) @ Tc: 5.46 in/hr

PEAK DISCHARGE: 135 cfs

PC-Hydro, Ver 5.3.1

HYDROLOGIC DATA SHEET FOR PIMA COUNTY FLOOD PEAK PROCEDURE

Pima County Regional Flood Control District

Client: Pima County
Prepared by: JLL
Project Name: Summit Study
Date: 5/30/2007
Concentration Point: S1-12
Job #: 185120071

Watershed Area: 15.1 ac
Watershed Type: Suburban-Valley

Watercourse Data By Reach

Reach No.	Height (Hi)	Length (Li)	Slope (Si)	Basin Factor (Nb)
1	4.5	400	0.0113	.034
2	28.0	960	0.0292	.034
3	8.0	500	0.0160	.034

Length of Watercourse (Lc): 1,860 feet
Mean Slope: 0.0194
Length to Cen. of Gravity (Lca): 830 feet
Weighted Basin Fac.: 0.034
Veg. Cover Type(s): Desert Brush
Veg. Cover Density: 20 %

RETURN PERIOD: 100-years

Rainfall Depths: NOAA Atlas 14 (90% UCL) @ Latitude: 32.0564 Longitude: 110.9315

Duration:	5-min	10-min	15-min	30-min	60-min	2-hr	3-hr	6-hr	12-hr	24-hr
Point Values (in)	0.88	1.34	1.66	2.24	2.77	3.09	3.23	3.51	3.78	4.13
Areal Values (in)	0.88	1.34	1.66	2.24	2.77	3.09	3.23	3.51	3.78	4.13

Soils Data

Soil Type	Percent	Curve # (CN)	Adj. Curve # (CN*)	Runoff Coef. (C)
B	55	83.	87.28	0.564
C	0	.	.	0.000
D	45	91.	93.35	0.746
Imp.	7	99.	99.	0.958

Weighted Runoff Coef. (Cw): 0.666
Time of Concentration: 6.9 min
Rainfall Intensity (i) @ Tc: 9.18 in/hr
Runoff Supply Rate (q) @ Tc: 6.12 in/hr

PEAK DISCHARGE: 93 cfs

PC-Hydro, Ver 5.3.1

HYDROLOGIC DATA SHEET FOR PIMA COUNTY FLOOD PEAK PROCEDURE

Pima County Regional Flood Control District

Client: Pima County
Prepared by: JLL
Project Name: Summit Study
Date: 5/30/2007
Concentration Point: S1-13
Job #: 185120071

Watershed Area: 20.7 ac
Watershed Type: Suburban-Valley

Watercourse Data By Reach

Reach No.	Height (Hi)	Length (Li)	Slope (Si)	Basin Factor (Nb)
1	3.0	230	0.0130	.020
2	22.0	590	0.0373	.034
3	10.0	655	0.0153	.034

Length of Watercourse (Lc): 1,475 feet
Mean Slope: 0.0202
Length to Cen. of Gravity (Lca): 810 feet
Weighted Basin Fac.: 0.031
Veg. Cover Type(s): Desert Brush
Veg. Cover Density: 20 %

RETURN PERIOD: 100-years

Rainfall Depths: NOAA Atlas 14 (90% UCL) @ Latitude: 32.0564 Longitude: 110.9315

Duration:	5-min	10-min	15-min	30-min	60-min	2-hr	3-hr	6-hr	12-hr	24-hr
Point Values (in)	0.88	1.34	1.66	2.24	2.77	3.09	3.23	3.51	3.78	4.13
Areal Values (in)	0.88	1.34	1.66	2.24	2.77	3.09	3.23	3.51	3.78	4.13

Soils Data

Soil Type	Percent	Curve # (CN)	Adj. Curve # (CN*)	Runoff Coef. (C)
B	41	83.	87.28	0.564
C	0	.	.	0.000
D	59	91.	93.35	0.746
Imp.	11	99.	99.	0.958

Weighted Runoff Coef. (Cw): 0.702
Time of Concentration: 5.4 min
Rainfall Intensity (i) @ Tc: 10.16 in/hr
Runoff Supply Rate (q) @ Tc: 7.14 in/hr

PEAK DISCHARGE: 149 cfs

PC-Hydro, Ver 5.3.1

HYDROLOGIC DATA SHEET FOR PIMA COUNTY FLOOD PEAK PROCEDURE

Pima County Regional Flood Control District

Client: Pima County

Prepared by: JLL

Project Name: Summit Study

Date: 5/30/2007

Concentration Point: S1-14

Job #: 185120071

Watershed Area: 20.1 ac

Watershed Type: Undeveloped-Valley

Watercourse Data By Reach

Reach No.	Height (Hi)	Length (Li)	Slope (Si)	Basin Factor (Nb)
1	16.5	220	0.0750	.040
2	10.0	400	0.0250	.040
3	10.5	870	0.0121	.040

Length of Watercourse (Lc): 1,490 feet

Mean Slope: 0.0175

Length to Cen. of Gravity (Lca): 710 feet

Weighted Basin Fac.: 0.040

Veg. Cover Type(s): Desert Brush

Veg. Cover Density: 20 %

RETURN PERIOD: 100-years

Rainfall Depths: NOAA Atlas 14 (90% UCL) @ Latitude: 32.0564 Longitude: 110.9315

Duration:	5-min	10-min	15-min	30-min	60-min	2-hr	3-hr	6-hr	12-hr	24-hr
Point Values (in)	0.88	1.34	1.66	2.24	2.77	3.09	3.23	3.51	3.78	4.13
Areal Values (in)	0.88	1.34	1.66	2.24	2.77	3.09	3.23	3.51	3.78	4.13

Soils Data

Soil Type	Percent	Curve # (CN)	Adj. Curve # (CN*)	Runoff Coef. (C)
B	100	83.	87.28	0.564
C	0	.	.	0.000
D	0	.	.	0.000
Imp.	3	99.	99.	0.958

Weighted Runoff Coef. (Cw): 0.575

Time of Concentration: 8.2 min

Rainfall Intensity (i) @ Tc: 8.59 in/hr

Runoff Supply Rate (q) @ Tc: 4.94 in/hr

PEAK DISCHARGE: 100 cfs

PC-Hydro, Ver 5.3.1

HYDROLOGIC DATA SHEET FOR PIMA COUNTY FLOOD PEAK PROCEDURE

Pima County Regional Flood Control District

Client: Pima County
Prepared by: JPII
Project Name: Summit Study
Date: 5/30/2007
Concentration Point: S3-1
Job #: 185120071

Watershed Area: 14.4 ac
Watershed Type: Medium Density Urbanized

Watercourse Data By Reach

Reach No.	Height (Hi)	Length (Li)	Slope (Si)	Basin Factor (Nb)
1	25.0	560	0.0446	.022
2	9.0	600	0.0150	.022

Length of Watercourse (Lc): 1,160 feet
Mean Slope: 0.0236
Length to Cen. of Gravity (Lca): 600 feet
Weighted Basin Fac.: 0.022
Veg. Cover Type(s): Desert Brush
Veg. Cover Density: 20 %

RETURN PERIOD: 100-years

Rainfall Depths: NOAA Atlas 14 (90% UCL) @ Latitude: 32.0564 Longitude: 110.9315

Duration:	5-min	10-min	15-min	30-min	60-min	2-hr	3-hr	6-hr	12-hr	24-hr
Point Values (in)	0.88	1.34	1.66	2.24	2.77	3.09	3.23	3.51	3.78	4.13
Areal Values (in)	0.88	1.34	1.66	2.24	2.77	3.09	3.23	3.51	3.78	4.13

Soils Data

Soil Type	Percent	Curve # (CN)	Adj. Curve # (CN*)	Runoff Coef. (C)
B	43	83.	87.28	0.564
C	0	.	.	0.000
D	57	91.	93.35	0.746
Imp.	40	99.	99.	0.958

Weighted Runoff Coef. (Cw): 0.784
Time of Concentration: 5.0 min
Rainfall Intensity (i) @ Tc: 10.56 in/hr
Runoff Supply Rate (q) @ Tc: 8.28 in/hr

PEAK DISCHARGE: 120 cfs

PC-Hydro, Ver 5.3.1

HYDROLOGIC DATA SHEET FOR PIMA COUNTY FLOOD PEAK PROCEDURE

Pima County Regional Flood Control District

Client: Pima County
Prepared by: JPII
Project Name: Summit Study
Date: 5/30/2007
Concentration Point: S3-2
Job #: 185120071

Watershed Area: 8.9 ac
Watershed Type: Medium Density Urbanized

Watercourse Data By Reach

Reach No.	Height (Hi)	Length (Li)	Slope (Si)	Basin Factor (Nb)
1	2.0	100	0.0200	.022
2	20.0	320	0.0625	.022
3	4.3	210	0.0202	.022

Length of Watercourse (Lc): 630 feet
Mean Slope: 0.0331
Length to Cen. of Gravity (Lca): 330 feet
Weighted Basin Fac.: 0.022
Veg. Cover Type(s): Desert Brush
Veg. Cover Density: 20 %

RETURN PERIOD: 100-years

Rainfall Depths: NOAA Atlas 14 (90% UCL) @ Latitude: 32.0564 Longitude: 110.9315

Duration:	5-min	10-min	15-min	30-min	60-min	2-hr	3-hr	6-hr	12-hr	24-hr
Point Values (in)	0.88	1.34	1.66	2.24	2.77	3.09	3.23	3.51	3.78	4.13
Areal Values (in)	0.88	1.34	1.66	2.24	2.77	3.09	3.23	3.51	3.78	4.13

Soils Data

Soil Type	Percent	Curve # (CN)	Adj. Curve # (CN*)	Runoff Coef. (C)
B	54	83.	87.28	0.564
C	0	.	.	0.000
D	46	91.	93.35	0.746
Imp.	40	99.	99.	0.958

Weighted Runoff Coef. (Cw): 0.772
Time of Concentration: 5.0 min
Rainfall Intensity (i) @ Tc: 10.56 in/hr
Runoff Supply Rate (q) @ Tc: 8.15 in/hr

PEAK DISCHARGE: 73 cfs

PC-Hydro, Ver 5.3.1

HYDROLOGIC DATA SHEET FOR PIMA COUNTY FLOOD PEAK PROCEDURE

Pima County Regional Flood Control District

Client: Pima County
Prepared by: JPII
Project Name: Summit Study
Date: 5/30/2007
Concentration Point: S3-3
Job #: 185120071

Watershed Area: 17.4 ac
Watershed Type: Medium Density Urbanized

Watercourse Data By Reach

Reach No.	Height (Hi)	Length (Li)	Slope (Si)	Basin Factor (Nb)
1	14.0	300	0.0467	.038
2	24.0	1,190	0.0202	.036

Length of Watercourse (Lc): 1,490 feet
Mean Slope: 0.0233
Length to Cen. of Gravity (Lca): 690 feet
Weighted Basin Fac.: 0.036
Veg. Cover Type(s): Desert Brush
Veg. Cover Density: 20 %

RETURN PERIOD: 100-years

Rainfall Depths: NOAA Atlas 14 (90% UCL) @ Latitude: 32.0564 Longitude: 110.9315

Duration:	5-min	10-min	15-min	30-min	60-min	2-hr	3-hr	6-hr	12-hr	24-hr
Point Values (in)	0.88	1.34	1.66	2.24	2.77	3.09	3.23	3.51	3.78	4.13
Areal Values (in)	0.88	1.34	1.66	2.24	2.77	3.09	3.23	3.51	3.78	4.13

Soils Data

Soil Type	Percent	Curve # (CN)	Adj. Curve # (CN*)	Runoff Coef. (C)
B	66	83.	87.28	0.564
C	0	.	.	0.000
D	34	91.	93.35	0.746
Imp.	7	99.	99.	0.958

Weighted Runoff Coef. (Cw): 0.649
Time of Concentration: 6.0 min
Rainfall Intensity (i) @ Tc: 9.74 in/hr
Runoff Supply Rate (q) @ Tc: 6.32 in/hr

PEAK DISCHARGE: 111 cfs

PC-Hydro, Ver 5.3.1

HYDROLOGIC DATA SHEET FOR PIMA COUNTY FLOOD PEAK PROCEDURE

Pima County Regional Flood Control District

Client: Pima County | Prepared by: JPII
Project Name: Summit Study | Date: 5/30/2007
Concentration Point: A1 | Job #: 185120071

Watershed Area: 20.5 ac Watershed Type: Medium Density Urbanized

Watercourse Data By Reach

Reach No.	Height (Hi)	Length (Li)	Slope (Si)	Basin Factor (Nb)
1	16.0	170	0.0941	.050
2	10.0	430	0.0233	.050
3	4.0	600	0.0067	.060

Length of Watercourse (Lc): 1,200 feet Mean Slope: 0.0125
Length to Cen. of Gravity (Lca): 600 feet Weighted Basin Fac.: 0.057
Veg. Cover Type(s): Desert Brush Veg. Cover Density: 20 %

RETURN PERIOD: 100-years

Rainfall Depths: NOAA Atlas 14 (90% UCL) @ Latitude: 32.0564 Longitude: 110.9315

Duration:	5-min	10-min	15-min	30-min	60-min	2-hr	3-hr	6-hr	12-hr	24-hr
Point Values (in)	0.88	1.34	1.66	2.24	2.77	3.09	3.23	3.51	3.78	4.13
Areal Values (in)	0.88	1.34	1.66	2.24	2.77	3.09	3.23	3.51	3.78	4.13

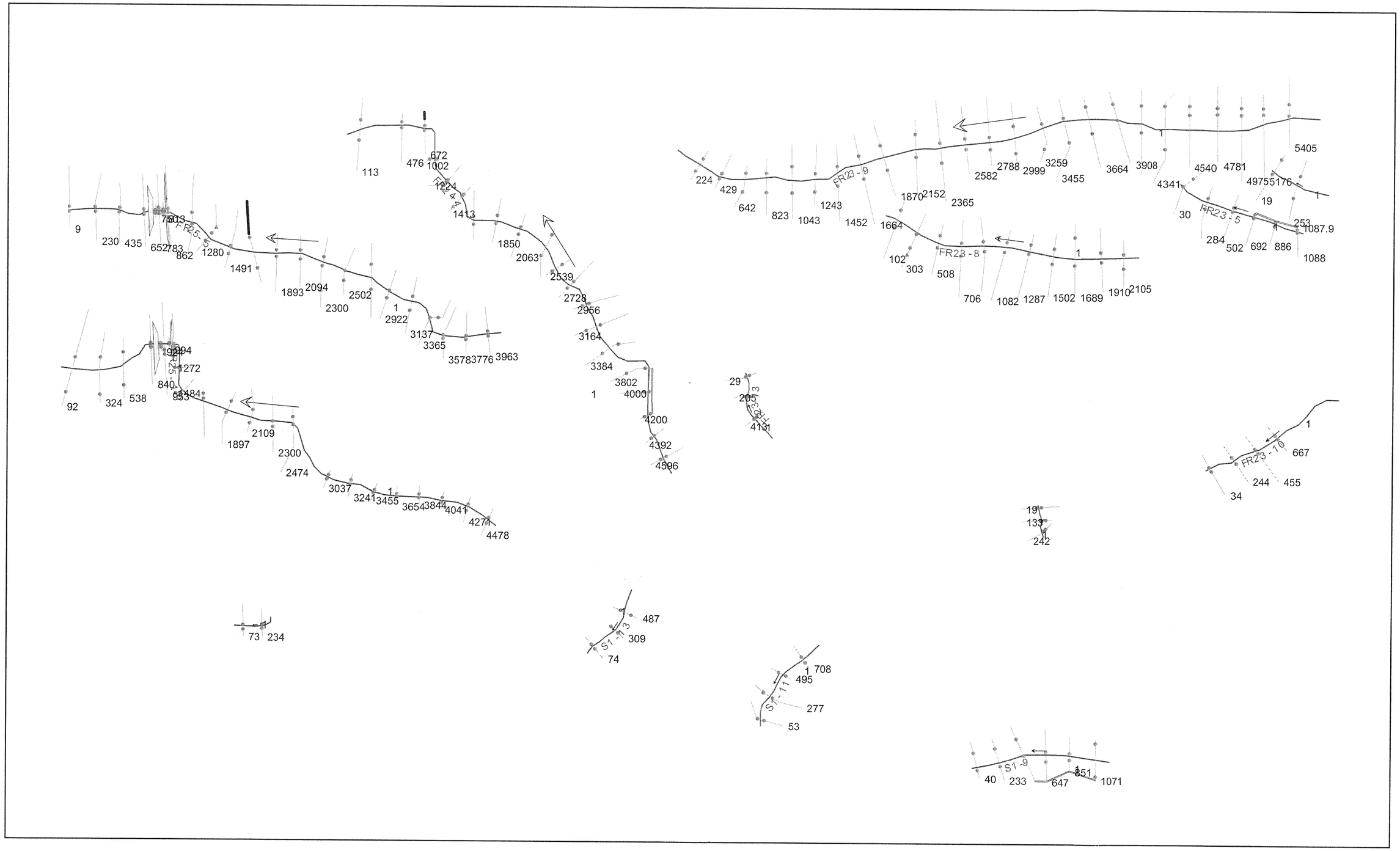
Soils Data

Soil Type	Percent	Curve # (CN)	Adj. Curve # (CN*)	Runoff Coef. (C)
B	100	83.	87.28	0.564
C	0	.	.	0.000
D	0	.	.	0.000
Imp.	40	99.	99.	0.958

Weighted Runoff Coef. (Cw): 0.721
Time of Concentration: 11.5 min
Rainfall Intensity (i) @ Tc: 7.50 in/hr
Runoff Supply Rate (q) @ Tc: 5.41 in/hr

PEAK DISCHARGE: 112 cfs

PC-Hydro, Ver 5.3.1



SUMMIT AREA STUDY
HEC-RAS SCHEMATIC

HEC-RAS Plan: Plan 03 Profile: PF 1

River	Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
				(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/ft)	(ft/s)	(sq ft)	(ft)	
FR23-5	1	1088	PF 1	260.00	2654.96	2656.22		2656.31	0.005881	2.86	115.47	149.86	0.46
FR23-5	1	1087.9		Lat Struct									
FR23-5	1	886	PF 1	59.15	2653.88	2655.11	2654.73	2655.17	0.004757	1.85	36.08	75.46	0.38
FR23-5	1	692	PF 1	28.28	2653.37	2654.01		2654.02	0.009662	1.25	29.38	121.54	0.32
FR23-5	1	502	PF 1	28.28	2651.66	2652.16	2652.05	2652.19	0.009609	1.65	23.60	107.03	0.48
FR23-5	1	284	PF 1	28.28	2649.75	2650.39	2650.21	2650.41	0.007047	1.27	22.24	71.56	0.40
FR23-5	1	30	PF 1	28.28	2647.77	2648.26	2648.08	2648.28	0.009999	1.24	23.21	107.09	0.39
FR23-2	1	253	PF 1	400.00	2653.72	2655.07	2654.88	2655.14	0.009842	2.28	194.12	418.46	0.53
FR23-2	1	19	PF 1	400.00	2651.88	2652.71	2652.52	2652.78	0.010004	2.38	197.94	395.98	0.54

SUMMIT AREA STUDY
FRANCO TRIBUTARY
REACHES 23-2, 23-5

HEC-RAS Plan: Plan 03 Profile: PF 1

River	Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
				(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/ft)	(ft/s)	(sq ft)	(ft)	
FR23-9	1	5405	PF 1	580.00	2650.02	2652.33		2652.58	0.007016	4.23	169.68	219.96	0.65
FR23-9	1	5176	PF 1	580.00	2648.43	2650.62		2650.95	0.007229	5.35	190.49	328.77	0.79
FR23-9	1	4975	PF 1	810.00	2647.30	2649.35		2649.49	0.006925	4.32	327.13	375.54	0.73
FR23-9	1	4781	PF 1	950.00	2646.21	2647.94	2647.50	2648.10	0.007472	4.77	388.89	354.08	0.77
FR23-9	1	4540	PF 1	950.00	2644.26	2646.02		2646.13	0.008795	3.79	396.64	377.05	0.69
FR23-9	1	4341	PF 1	950.00	2642.35	2643.82	2643.39	2643.92	0.014647	2.58	369.45	377.21	0.45
FR23-9	1	4120	PF 1	1030.00	2639.96	2641.90		2642.03	0.005781	3.03	392.37	391.87	0.46
FR23-9	1	3908	PF 1	1030.00	2638.30	2640.39		2640.66	0.007357	4.48	307.45	348.10	0.68
FR23-9	1	3664	PF 1	1030.00	2637.31	2638.85		2638.98	0.006046	3.02	383.24	380.69	0.47
FR23-9	1	3455	PF 1	1030.00	2635.87	2637.49		2637.60	0.007128	2.87	415.72	471.04	0.43
FR23-9	1	3259	PF 1	1030.00	2633.92	2636.21		2636.31	0.006055	2.67	430.38	351.61	0.39
FR23-9	1	2999	PF 1	1080.00	2632.43	2634.60		2634.71	0.006217	2.80	414.67	340.76	0.40
FR23-9	1	2788	PF 1	1080.00	2631.19	2633.32		2633.44	0.005793	3.46	444.56	398.91	0.48
FR23-9	1	2582	PF 1	1080.00	2629.96	2631.85		2632.01	0.008424	4.01	404.68	388.35	0.57
FR23-9	1	2365	PF 1	1080.00	2628.07	2629.72		2629.91	0.011084	3.84	359.77	418.59	0.58
FR23-9	1	2152	PF 1	1080.00	2626.23	2627.96		2628.08	0.006721	3.03	417.18	411.48	0.45
FR23-9	1	1870	PF 1	1080.00	2624.28	2625.91		2626.04	0.008249	2.99	393.20	354.96	0.45
FR23-9	1	1664	PF 1	1080.00	2622.52	2624.44		2624.56	0.006198	3.02	441.23	461.10	0.44
FR23-9	1	1452	PF 1	1180.00	2621.26	2623.12		2623.25	0.005954	3.22	473.25	415.43	0.44
FR23-9	1	1243	PF 1	1180.00	2619.90	2621.70		2621.86	0.007710	3.42	374.24	311.40	0.49
FR23-9	1	1043	PF 1	1180.00	2618.51	2620.79		2620.90	0.003212	2.73	491.68	383.79	0.36
FR23-9	1	823	PF 1	1180.00	2617.12	2619.60		2619.85	0.007626	4.09	298.81	200.94	0.55
FR23-9	1	642	PF 1	1180.00	2615.86	2618.17		2618.43	0.008001	4.15	308.33	237.97	0.57
FR23-9	1	429	PF 1	1180.00	2614.08	2616.90		2617.06	0.005171	4.12	389.98	230.10	0.48
FR23-9	1	224	PF 1	1180.00	2613.50	2615.74	2615.19	2615.92	0.006001	3.75	353.66	243.57	0.50
FR23-8	1	2105	PF 1	100.00	2647.32	2648.07		2648.10	0.008852	1.39	75.72	182.27	0.32
FR23-8	1	1910	PF 1	100.00	2645.53	2646.15	2646.00	2646.21	0.010693	2.07	52.49	134.95	0.53
FR23-8	1	1689	PF 1	100.00	2643.84	2644.42	2644.16	2644.44	0.006143	0.95	110.42	317.23	0.25
FR23-8	1	1502	PF 1	140.00	2641.85	2642.58	2642.42	2642.62	0.014847	1.61	95.28	279.14	0.40
FR23-8	1	1287	PF 1	140.00	2639.72	2640.57		2640.60	0.006452	1.66	110.44	232.10	0.36
FR23-8	1	1082	PF 1	140.00	2637.97	2638.57	2638.48	2638.63	0.015421	2.33	78.54	280.30	0.63
FR23-8	1	898	PF 1	180.00	2635.83	2636.85		2636.90	0.007371	1.97	118.03	223.30	0.39
FR23-8	1	706	PF 1	180.00	2634.00	2634.59	2634.47	2634.68	0.020053	2.49	82.61	204.45	0.61
FR23-8	1	508	PF 1	220.00	2631.44	2632.23	2631.96	2632.28	0.008492	1.80	131.55	245.82	0.40
FR23-8	1	303	PF 1	220.00	2629.24	2630.09	2629.80	2630.14	0.012539	1.87	130.81	266.31	0.39
FR23-8	1	102	PF 1	220.00	2627.21	2627.84	2627.62	2627.89	0.010002	1.90	128.78	316.57	0.44

SUMMIT AREA STUDY
FRANCO TRIBUTARY
REACHES 23-8, 23-9

HEC-RAS Plan: Plan 03 Profile: PF 1

River	Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
				(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/ft)	(ft/s)	(sq ft)	(ft)	
FR23-13	1	413	PF 1	360.00	2631.48	2633.17	2633.17	2633.68	0.021651	6.31	67.75	66.95	0.91
FR23-13	1	205	PF 1	360.00	2627.68	2629.23	2629.10	2629.55	0.015900	5.14	85.18	91.54	0.77
FR23-13	1	29	PF 1	360.00	2625.75	2627.16	2626.95	2627.31	0.010005	3.83	134.05	172.47	0.60
FR23-12	1	242	PF 1	180.00	2650.37	2651.52		2651.65	0.002449	3.84	97.59	143.08	0.66
FR23-12	1	133	PF 1	180.00	2649.66	2650.65	2650.65	2650.91	0.037288	4.36	56.40	122.72	0.88
FR23-12	1	19	PF 1	180.00	2645.91	2646.65	2646.60	2646.80	0.025020	3.77	68.07	182.63	0.85
FR23-10	1	667	PF 1	130.00	2662.28	2663.13		2663.27	0.014279	3.22	44.76	74.35	0.66
FR23-10	1	455	PF 1	130.00	2659.27	2660.08	2659.99	2660.20	0.014613	3.05	58.65	138.65	0.66
FR23-10	1	244	PF 1	130.00	2656.53	2657.13	2656.99	2657.19	0.013651	2.15	70.19	200.64	0.51
FR23-10	1	34	PF 1	130.00	2653.63	2654.42	2654.35	2654.51	0.012016	2.92	74.90	202.37	0.60

SUMMIT AREA STUDY
MINOR FRANKS TRIBUTARIES

HEC-RAS Plan: Plan 03 River: FR24-4 Reach: 1 Profile: PF 1

Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
			(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/ft)	(ft/s)	(sq ft)	(ft)	
1	4596	PF 1	155.00	2640.05	2640.92	2640.79	2641.03	0.016936	2.99	60.13	119.63	0.64
1	4392	PF 1	155.00	2636.41	2637.55		2637.74	0.015043	3.82	48.15	77.23	0.70
1	4200	PF 1	155.00	2632.97	2634.05	2634.05	2634.41	0.020529	4.77	32.50	46.74	1.01
1	4199.9		Lat Struct									
1	4000	PF 1	134.59	2629.44	2630.14	2630.14	2630.32	0.013938	4.03	51.98	140.20	0.94
1	3802	PF 1	133.84	2627.36	2628.23	2627.91	2628.25	0.004872	1.27	111.43	297.22	0.30
1	3384	PF 1	158.84	2624.74	2625.64	2625.31	2625.66	0.008511	1.40	127.76	290.62	0.32
1	3164	PF 1	158.84	2622.88	2623.79		2623.81	0.007984	1.39	126.69	248.90	0.31
1	2956	PF 1	158.84	2620.49	2621.43		2621.56	0.015788	3.10	58.15	136.16	0.68
1	2728	PF 1	158.84	2618.59	2619.10	2618.83	2619.13	0.006109	1.34	107.95	210.39	0.39
1	2539	PF 1	193.84	2616.73	2617.63		2617.70	0.010183	2.26	98.90	210.51	0.53
1	2335	PF 1	193.84	2614.65	2615.43	2615.28	2615.51	0.011106	2.18	89.07	180.09	0.55
1	2063	PF 1	193.84	2611.55	2612.63	2612.47	2612.81	0.008835	3.48	61.40	99.97	0.68
1	1850	PF 1	193.84	2609.47	2610.33	2610.26	2610.54	0.013117	3.80	63.38	122.55	0.81
1	1652	PF 1	193.84	2608.66	2609.27		2609.30	0.002997	1.15	140.64	192.25	0.34
1	1413	PF 1	193.84	2606.91	2608.30	2608.27	2608.54	0.006805	4.86	116.90	249.40	0.75
1	1224	PF 1	258.84	2604.62	2606.41	2606.41	2606.93	0.009484	6.51	93.05	185.57	0.91
1	1002	PF 1	258.84	2601.40	2602.98	2602.66	2603.13	0.003858	3.34	117.00	149.58	0.55
1	672	PF 1	258.84	2599.79	2601.04		2601.28	0.009105	4.45	128.59	288.46	0.73
1	476	PF 1	258.84	2597.90	2599.28		2599.39	0.009662	3.09	116.55	229.05	0.52
1	113	PF 1	258.84	2594.58	2595.71	2595.45	2595.81	0.010003	2.53	105.68	204.73	0.54

SUMMIT AREA STUDY
REACH 24-4

HEC-RAS Plan: Plan 03 River: FR25-5 Reach: 1 Profile: PF 1

Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
			(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/ft)	(ft/s)	(sq ft)	(ft)	
1	3963	PF 1	190.00	2614.18	2614.92	2614.63	2614.96	0.005310	2.49	146.92	285.47	0.58
1	3776	PF 1	190.00	2612.14	2613.11	2613.11	2613.35	0.017861	5.10	73.30	155.18	1.09
1	3578	PF 1	190.00	2611.45	2611.80	2611.42	2611.84	0.005924	1.34	123.04	208.38	0.52
1	3365	PF 1	190.00	2609.80	2610.43	2610.31	2610.53	0.015262	3.15	87.97	198.86	0.81
1	3137	PF 1	240.00	2607.53	2608.34		2608.44	0.006694	2.80	131.24	346.74	0.65
1	2922	PF 1	240.00	2605.49	2606.06	2605.99	2606.14	0.020019	2.70	108.53	346.24	0.78
1	2731	PF 1	240.00	2603.22	2604.64		2604.66	0.004099	1.26	193.39	257.98	0.23
1	2502	PF 1	240.00	2601.19	2601.95	2601.95	2602.16	0.074876	3.97	76.56	194.79	0.93
1	2300	PF 1	240.00	2599.06	2600.02	2599.57	2600.05	0.003342	1.60	218.54	406.47	0.30
1	2094	PF 1	365.00	2597.17	2598.00	2598.00	2598.23	0.025644	4.46	120.53	264.41	0.89
1	1893	PF 1	365.00	2593.88	2596.13		2596.18	0.002879	2.25	241.83	371.73	0.33
1	1693	PF 1	365.00	2594.16	2594.82	2594.82	2595.04	0.017034	3.78	96.66	216.50	1.00
1	1491	PF 1	365.00	2589.54	2591.38		2591.49	0.003779	2.84	155.37	127.97	0.39
1	1280	PF 1	460.00	2587.46	2588.94	2588.86	2589.28	0.044468	4.78	104.00	151.92	0.80
1	1087	PF 1	460.00	2585.98	2589.05		2589.06	0.000182	0.90	934.47	552.93	0.09
1	862	PF 1	460.00	2582.93	2589.05	2585.91	2589.05	0.000006	0.25	2437.77	725.73	0.02
1	837.5		Culvert									
1	813	PF 1	460.00	2581.90	2585.84	2585.84	2587.61	0.019532	10.68	43.06	143.00	0.99
1	783	PF 1	460.00	2581.98	2587.05	2584.16	2587.05	0.000043	0.57	1200.36	553.80	0.05
1	750	PF 1	460.00	2580.75	2587.03	2583.49	2587.05	0.000087	1.47	490.25	120.00	0.11
1	701		Culvert									
1	652	PF 1	460.00	2580.10	2583.26	2583.26	2584.73	0.009104	9.72	47.32	266.57	1.00
1	435	PF 1	480.00	2578.58	2580.76	2580.76	2581.03	0.018980	5.31	152.71	250.98	0.83
1	230	PF 1	480.00	2577.57	2579.33	2578.83	2579.37	0.003953	2.26	364.61	429.14	0.35
1	9	PF 1	480.00	2576.45	2576.86	2576.82	2577.05	0.066996	3.32	137.11	302.33	1.10

SUMMIT AREA STUDY
REACH 25-5

HEC-RAS Plan: Plan 03 River: FR25-10 Reach: 1 Profile: PF 1

Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
			(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/ft)	(ft/s)	(sq ft)	(ft)	
1	4478	PF 1	150.00	2627.85	2629.07	2628.76	2629.20	0.008116	2.86	56.26	80.66	0.52
1	4271	PF 1	150.00	2624.93	2625.81	2625.81	2626.11	0.035261	4.40	34.18	59.18	1.00
1	4041	PF 1	150.00	2621.07	2622.86		2622.95	0.003797	2.49	63.79	59.29	0.38
1	3844	PF 1	150.00	2620.25	2621.07	2621.05	2621.33	0.028393	4.51	38.07	69.01	0.93
1	3654	PF 1	150.00	2616.53	2617.86	2617.66	2618.06	0.011544	4.00	45.37	57.87	0.64
1	3455	PF 1	175.00	2613.88	2614.96	2614.96	2615.31	0.015921	5.13	41.88	64.08	0.93
1	3241	PF 1	175.00	2610.39	2612.61	2612.04	2612.76	0.005676	3.21	61.03	71.29	0.47
1	3037	PF 1	200.00	2609.19	2610.13	2610.13	2610.44	0.027515	4.89	51.88	85.86	0.94
1	2474	PF 1	230.00	2603.35	2604.29		2604.32	0.005159	1.40	175.27	288.87	0.26
1	2300	PF 1	330.00	2600.83	2601.74	2601.74	2601.91	0.039177	3.97	118.28	391.57	0.87
1	2109	PF 1	330.00	2597.01	2598.44	2597.84	2598.50	0.004561	2.10	186.42	254.75	0.33
1	1897	PF 1	330.00	2595.97	2596.88	2596.66	2596.94	0.013297	1.92	177.01	337.30	0.41
1	1678	PF 1	330.00	2592.75	2594.21		2594.41	0.011741	4.09	110.39	187.73	0.65
1	1484	PF 1	330.00	2590.54	2594.06		2594.09	0.000479	1.47	272.66	134.96	0.15
1	1272	PF 1	330.00	2589.38	2594.00		2594.02	0.000253	1.36	357.12	137.74	0.12
1	1037	PF 1	330.00	2587.36	2594.01	2591.44	2594.01	0.000004	0.25	1862.10	456.22	0.02
1	1015.5		Culvert									
1	994	PF 1	330.00	2586.74	2591.05	2591.05	2591.45	0.007834	6.36	90.47	99.22	0.58
1	953	PF 1	330.00	2586.39	2591.29	2588.50	2591.29	0.000009	0.33	1527.68	716.90	0.03
1	924	PF 1	330.00	2586.22	2591.27	2589.21	2591.28	0.000139	1.23	317.40	105.00	0.11
1	882		Culvert									
1	840	PF 1	330.00	2585.67	2589.08	2589.02	2589.29	0.012975	4.28	105.66	219.32	0.67
1	538	PF 1	330.00	2583.99	2584.89		2584.97	0.014266	2.38	149.25	389.75	0.61
1	324	PF 1	330.00	2582.23	2583.17	2582.92	2583.20	0.005440	1.59	218.45	449.34	0.39
1	92	PF 1	330.00	2581.21	2581.57	2581.45	2581.61	0.010005	1.11	204.80	682.91	0.44

SUMMIT AREA STUDY
REACH 25-10

HEC-RAS Plan: Plan 03 Profile: PF 1

River	Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
				(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/ft)	(ft/s)	(sq ft)	(ft)	
S3-1	1	234	PF 1	120.00	2593.63	2594.48		2594.55	0.004806	2.69	76.09	120.64	0.57
S3-1	1	73	PF 1	120.00	2592.45	2593.14	2593.14	2593.34	0.012312	4.03	49.04	131.11	0.90
S1-9	1	1071	PF 1	215.00	2649.22	2649.95	2649.65	2649.98	0.010033	1.41	153.72	302.54	0.34
S1-9	1	1070.9		Lat Struct									
S1-9	1	851	PF 1	196.40	2647.35	2648.35		2648.37	0.005440	1.31	175.43	294.86	0.26
S1-9	1	647	PF 1	171.89	2646.05	2646.80	2646.55	2646.83	0.012247	1.45	127.65	332.25	0.37
S1-9	1	452	PF 1	271.82	2644.49	2645.54	2645.20	2645.58	0.005886	1.79	187.68	390.32	0.35
S1-9	1	233	PF 1	271.82	2642.95	2643.81	2643.58	2643.87	0.010712	2.13	160.30	321.43	0.46
S1-9	1	40	PF 1	271.82	2641.01	2642.04	2641.74	2642.10	0.008000	2.04	151.38	248.51	0.41
S1-13	1	487	PF 1	150.00	2622.52	2623.42	2623.23	2623.55	0.014038	2.92	51.38	79.65	0.64
S1-13	1	309	PF 1	150.00	2619.79	2620.78	2620.60	2620.93	0.015377	3.17	47.37	69.58	0.68
S1-13	1	74	PF 1	150.00	2615.47	2616.67	2616.63	2616.81	0.020006	3.43	63.49	162.40	0.76
S1-11	1	708	PF 1	135.00	2634.11	2635.67	2635.28	2635.80	0.009210	2.93	46.03	51.59	0.55
S1-11	1	495	PF 1	135.00	2631.98	2632.94	2632.65	2633.03	0.019329	2.49	55.16	79.47	0.50
S1-11	1	277	PF 1	135.00	2628.62	2629.89	2629.61	2629.98	0.010565	2.44	56.83	205.63	0.55
S1-11	1	53	PF 1	135.00	2626.31	2627.16	2627.12	2627.32	0.013321	3.60	54.34	183.90	0.90

SUMMIT AREA STUDY
MINOR SUMMIT TRIBUTARIES