

CITY OF GRASS VALLEY
STORM DRAINAGE MASTER PLAN AND CRITERIA
PRIORITY LIST SUMMARY

This document to be used in conjunction
with the Storm Drainage Master Plan and
Criteria and the Priority List Maps on
file in the City Engineer's Office.

March 1986

CRANMER ENGINEERING, INC.
1188 East Main Street
Grass Valley, California
(916) 273-7284

GRASS VALLEY DRAINAGE SYSTEM MASTER PLAN PROJECT PRIORITY LISTING

PRIORITY NO.	BASIN NO.	US NODE NO.	DS NODE NO.	PLAN SHEET(S)	EXISTING SIZE (EQUIVALENT SIZE) INCHES	PROPOSED SIZE* DIA X L (IN) (FT)	ESTM COST** (06-30-86 DOLLARS)	C	Tc(MIN) TO YEAR EXISTING DEV.	I	A(AC) 100 YEAR EXISTING DEV.	Q(CFS) 100 YEAR ULTIMATE DEV.	NOTES***
✓1		1	2	8, 11	OPEN CHANNEL		1,116,000 TOTAL						WOLF CREEK, S. AUBURN ST. TO EMPIRE ST. FLOODING ALONG CREEK
✓2	G9	44	64	12	SEE FOLLOWING 7 LINES		519,000 TOTAL						COLFAX AVE. (WESTERN PORTION) EXIST. PIPE DO NOT PASS Q ₁₀ , OCCASIONAL FLOODING
	G9	44	46	12	91 X 58 (74)	96 X 50	33,000	.512 .611 .675	78.9 78.3 78.3	.74 1.01 1.01	1715 1715 1715	645 1063 1178	
	G9	46	48	12	91 X 58 (74)	96 X 80	50,000	.512 .611 .675	78.9 78.3 78.3	0.74 1.01 1.01	1716 1716 1716	646 1063 1179	
	G9	48	50	12	91 X 58 (74)	96 X 100	64,000	.512 .611 .675	79.0 78.3 78.3	0.73 1.01 1.01	1730 1730 1730	647 1065 1181	
	G9	50	62	12	91 X 58 (74)	96 X 50	33,000	.512 .611 .675	79.1 78.3 78.3	0.73 1.01 1.01	1731 1731 1731	647 1066 1181	
	G9	62	63	12	91 X 58 (74)	96 X 200	113,000	.513 .612 .676	79.2 78.4 78.4	0.73 1.01 1.01	1758 1758 1758	658 1087 1200	

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	G9	63	64	11, 12	OPEN CHANNEL	96 X 400	226,000	.513 .612 .676	79.2 78.4 78.4	0.73 1.01 1.01	1758 1758 1758	658 1087 1200	OPEN CHANNEL HENNESSY PLAY FIELD DANGEROUS PUBLIC AT HIGH FLOWS, EXIST. CHANNAL DAMAGEI BY RECENT STORMS
✓3	E1	66	68	15, 19	72 X 36 (51)	66 X 515	148,000 TOTAL	.532 .622 .744	41.3 39.8 38.7	1.00 1.39 1.41	303 303 372	161 262 391	MATSON CREEK NORTH OF HARRIS ST. TO IDAHO MARYLAND RD. FLOODS AT HARRIS ST.
✓4	C3	37	68	14	SEE FOLLOWING 15 LINES		520,000 TOTAL						CENTERVILLE FLUME EXIST. PIPES DO NOT PASS Q10
	C3	37	38	14	OPEN CHANNEL	42 X 420	77,000	.633 .746	46.0 45.7	1.30 1.31	144.9 144.9	119 141	
	C3	38	42	14	12	48 X 110	25,000	.633 .746	46.3 46.0	1.30 1.30	144.9 144.9	119 141	
	C3	41	42	14	NONE	15 X 90	12,000	.611 .791	11.5 11.5	2.49 2.49	1.4 1.4	2 3	
	C3	42	44	14	NONE	48 X 180	50,000	.643 .747	46.4 46.1	1.30 1.30	149.7 150.0	123 145	

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								10 YEAR EXISTING DEV.					
								100 YEAR EXISTING DEV.					
								100 YEAR ULTIMATE DEV.					
=====													
	C3	44	46	14	10	48 X 170	51,000	.636 .748	46.6 46.3	1.29 1.30	158 158	130 154	

	C3	46	48	14	10	48 X 50	13,000	.637 .748	46.8 46.5	1.29 1.29	159.6 159.6	131 155	

	C3	47	48	14	NONE	12 X 30	6,000	.719 .719	11.0 11.0	2.54 2.54	0.9 0.9	2 2	

	C3	48	56	14	NONE	48 X 35	11,000	.638 .748	46.8 46.5	1.29 1.29	160.6 160.6	132 156	

	C3	56	58	14	NONE	48 X 160	34,000	.644 .748	46.8 46.5	1.29 1.29	172.9 172.9	144 168	

	C3	57	58	14	NONE	12 X 25	5,000	.919 .919	16.0 16.0	2.13 2.13	0.9 0.9	2 2	

	C3	58	62	14	NONE	48 X 130	28,000	.646 .749	47.0 46.7	1.29 1.29	173.8 173.8	145 168	

Part of Civils Flowe

Phase 2 (Schedule for 5/94)

Part of Civil Flowage
Phase 2 (submitted for 5/94)

GRASS VALLEY DRAINAGE SYSTEM MASTER PLAN PROJECT PRIORITY LISTING

PRIORITY NO.	BASIN NO.	US NODE NO.	DS NODE NO.	PLAN SHEET(S)	EXISTING SIZE (EQUIVALENT SIZE) INCHES	PROPOSED SIZE* DIA X L (IN) (FT)	ESTM COST** (06-30-86 DOLLARS)	C	Tc(MIN)	I	A(AC)	Q(CFS)	NOTES***
									TO YEAR EXISTING DEV.				
									100 YEAR EXISTING DEV.				
									100 YEAR ULTIMATE DEV.				
=====													
	C3	62	65	14	40 X 48 (48)	48 X 75	22,000	.657	47.1	1.29	184.1	156	
								.754	47.0	1.29	183.1	178	
=====													
	C3	65	66	14	25 X 38 (35)	48 X 130	42,000	.660	47.2	1.29	187.7	159	
								.755	46.9	1.29	186.8	182	
=====													
	C3	66	67	14	30 X 30 (32)	48 X 225	62,000	.581	52.2	0.87	187.6	95	
								.660	49.4	1.26	187.6	155	
								.756	47.0	1.29	187.6	183	
=====													
	C3	67	68	14	30	48 X 370	82,000	.581	52.4	.87	188.7	96	
								.660	49.4	1.26	188.7	156	
								.755	47.2	1.29	188.7	184	
=====													
✓5	H1	11	12	5	48	96 X 50	50,000	.443	57.5	.87	1194	460	LITTLE WOLF CREEK
								.553	57.1	1.18	1192	778	AT SOUTH AUBURN ST.
							TOTAL	.585	57.1	1.18	1192	823	
=====													
✓6	G9	40	44	12	SEE FOLLOWING 3 LINES		175,000						WOODPECKER RAVINE
							TOTAL						EXIST. PIPES DO NOT
													PASS Q10
=====													
	G9	40	41	12	60 X 24 (37)	60 X 150	41,000	.501	41.9	1.02	251.5	129	
								.600	41.7	1.36	251.5	206	
								.637	41.7	1.36	251.5	218	
=====													

DONE
 Civils Along
 Phase 1 '93
 (But not back of road)

GRASS VALLEY DRAINAGE SYSTEM MASTER PLAN PROJECT PRIORITY LISTING

PRIORITY NO.	BASIN NO.	US NODE NO.	DS NODE NO.	PLAN SHEET(S)	EXISTING SIZE (EQUIVALENT SIZE) INCHES	PROPOSED SIZE* DIA X L (IN) (FT)	ESTM COST** (06-30-86 DOLLARS)	C	Tc(MIN) TO YEAR	I	A(AC) EXISTING DEV.	Q(CFS) 100 YEAR EXISTING DEV. 100 YEAR ULTIMATE DEV.	NOTES***
=====													
	G9	41	43	12	60 X 24 (37)	60 X 260	72,000	.502	42.0	1.02	253.1	130	
								.601	41.8	1.36	253.1	207	
								.638	41.8	1.36	253.1	220	
=====													
	G9	43	44	12	60 X 24 (37)	60 X 225	62,000	.504	42.2	1.02	257.8	132	
								.603	42.0	1.36	257.8	211	
								.641	42.0	1.36	257.8	225	
=====													
✓7	G4	2	4	11	SEE FOLLOWING 2 LINES		91,000 TOTAL						✓ EXIST. DRAINAGE FLOWS UNDER HENNESSY SCHOOL OCCAS. FLOODS BOILER ROOM. EXIST. PIPES DO NOT PASS Q10
	G4	2	3	11	12	18 X 360	44,000	.636	13.6	1.85	7.4	9	
								.702	13.5	2.31	7.4	12	
								.730	13.5	2.31	7.5	13	
=====													
	G4	3	4	11	12	30 X 310	47,000	.606	14.1	1.81	14.1	16	
								.678	13.9	2.28	14.1	22	
								.692	13.9	2.28	14.1	22	
=====													
✓8	H2	12	15	8	SEE FOLLOWING 3 LINES		75,000 TOTAL						FLOODS BACKYARD AT NODE 13
	H2	12	13	8	8	12 X 555	38,000	.620	22.0	1.43	3.7	3	
								.687	22.0	1.84	3.7	5	
								.687	22.0	1.84	3.7	5	

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									TO YEAR EXISTING DEV.				
									100 YEAR EXISTING DEV.				
									100 YEAR ULTIMATE DEV.				
=====													
	H2	13	14	8	OPEN CHANNEL	18 X 390	27,000	.618	23.0	1.39	3.7	3	
								.686	22.7	1.81	3.7	5	
								.686	22.7	1.81	3.7	5	
=====													
	H2	14	15	8	15	18 X 140	10,000	.563	24.9	1.34	17.3	13	
								.647	24.4	1.75	17.3	20	
								.738	24.4	1.75	17.3	22	
=====													
✓9	C1	12	20	11	SEE FOLLOWING 4 LINES		104,000 TOTAL						DRAINS A PORTION OF MILL ST. EXIST. PIPES DO NOT PASS Q10
=====													
	C1	12	13	11	12	24 X 435	44,000	.668	18.2	1.57	20.8	22	
								.727	17.9	2.02	20.8	31	
								.761	17.9	2.02	20.8	32	
=====													
	C1	13	19	11	14	24 X 85	18,000	.671	18.5	1.56	23.9	25	
								.730	18.1	2.01	23.9	35	
								.761	18.1	2.01	23.9	37	
=====													
	C1	18	19	11	12	18 X 200	29,000	.562	19.1	1.53	11.9	10	
								.645	18.9	1.97	11.9	15	
								.688	18.8	1.98	11.9	16	
=====													
	C1	19	20	11	14	24 X 80	13,000	.638	19.4	1.52	36.3	35	
								.704	19.1	1.96	36.3	50	
								.739	19.0	1.97	36.3	53	

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✓10	H2	1	17	8	SEE FOLLOWING 6 LINES		73,000 TOTAL						EMPIRE ST. FROM SOUTH AUBURN TO OCEAN AND DOWN OCEAN
	H2	1	2	8	8	12 X 740	31,000	.554	22.0	1.43	6.4	5	
								.635	22.0	1.84	6.4	7	
								.794	22.0	1.84	6.4	9	
	H2	2	5	8	8	15 X 30	1,000	.597	22.9	1.40	7.4	6	
								.668	22.6	1.82	7.4	9	
								.786	22.5	1.82	7.4	11	
	H2	5	6	8	8	18 X 310	13,000	.607	22.9	1.40	13.6	12	
								.677	22.6	1.82	13.6	17	
								.771	22.6	1.82	13.6	19	
	H2	6	10	8	10	18 X 350	21,000	.606	23.2	1.39	15.2	13	
								.676	22.8	1.81	15.2	19	
								.767	22.7	1.81	15.2	21	
	H2	10	11	8	10	18 X 110	5,000	.606	23.4	1.38	16.0	13	
								.676	23.0	1.80	16.0	19	
								.763	23.1	1.80	16.0	22	
	H2	11	17	8	12	18 X 35	2,000	.608	23.5	1.38	16.2	14	
								.678	23.1	1.80	16.2	20	
								.763	23.1	1.80	16.2	22	

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									TO YEAR EXISTING DEV.				
									100 YEAR EXISTING DEV.				
									100 YEAR ULTIMATE DEV.				
=====													
✓ 11	G6	3	12	11	SEE FOLLOWING 4 LINES		140,000 TOTAL						DRAINS SOUTH AUBURN FROM BERRYMAN EXIST. PIPES DO NOT PASS Q10
	G6	3	4	11	12	18 X 400	35,000	.604	22.0	1.43	11.1	10	
								.681	22.0	1.84	11.1	14	
								.799	22.0	1.84	11.1	16	
	G6	4	6	11	14	21 X 300	28,000	.604	23.6	1.38	21.5	18	
								.680	23.5	1.78	21.5	26	
								.787	23.3	1.79	21.5	30	
	G6	6	7	11	18	30 X 500	68,000	.623	23.9	1.37	32.0	27	
								.694	23.7	1.78	32.0	40	
								.786	23.5	1.78	32.0	45	
	G6	7	12	11	24	30 X 50	9,000	.625	24.4	1.35	32.3	27	
								.696	24.1	1.76	32.3	40	
								.787	23.8	1.77	32.3	45	
✓ 12	C1	5	12	11, 14	SEE FOLLOWING 5 LINES		98,000 TOTAL						SCHOOL ST., CHURCH ST. & MILL ST. AREA EXIST. PIPES DO NOT PASS Q10
	C1	5	6	11, 14	8	12 X 125	25,000	.698	17.0	1.63	3.1	4	
								.751	17.0	2.07	3.1	5	
								.758	17.0	2.07	3.1	5	

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									10 YEAR EXISTING DEV.				
									100 YEAR EXISTING DEV.				
									100 YEAR ULTIMATE DEV.				
	C1	6	7	11	10	15 X 240	23,000	.631	17.8	1.59	10.9	11	
								.698	17.6	2.04	10.9	16	
								.745	17.6	2.04	10.9	17	
	C1	7	8	11	10	21 X 50	8,000	.633	18.0	1.58	12.1	12	
								.700	17.7	2.04	12.1	17	
								.745	17.7	2.04	12.1	18	
	C1	8	11	11	10	21 X 40	10,000	.652	18.0	1.58	15.0	16	
								.715	17.7	2.04	15.0	22	
								.757	17.7	2.04	15.0	23	
	C1	11	12	11	14	21 X 230	32,000	.665	18.0	1.58	17.4	18	
								.725	17.7	2.04	17.4	26	
								.761	17.7	2.04	17.4	27	
✓13	E1	43	66	19	SEE FOLLOWING 5 LINES		290,000 TOTAL						MATSON CREEK (BERRYHILL DRIVE TO NORTH OF HARRIS ST) HYDRAULICAL ADEQUATE, BUT STRUCTURALLY QUESTIONABLE
	E1	43	44	19	OPEN CHANNEL	54 X 60	18,000	.532	40.1	1.01	228.7	123	
								.621	38.7	1.41	228.7	201	
								.733	37.8	1.43	298.1	312	
	E1	44	52	19	72 X 36 (51)	54 X 110	38,000	.532	40.2	1.01	228.7	123	
								.621	38.8	1.41	228.7	200	
								.733	37.9	1.42	298.1	312	

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	E1	52	64	19	72 X 36 (51)	60 X 190	69,000	.533 .622 .738	40.3 38.9 38.0	1.01 1.41 1.42	246.3 246.3 315	133 216 332	
	E1	64	65	19	60	60 X 240	67,000	.532 .622 .744	40.5 39.1 38.1	1.01 1.40 1.42	302.8 302.8 371.8	163 264 393	
	E1	65	66	19	72 X 72 (78)	66 X 335	98,000	.532 .622 .744	40.8 39.4 38.3	1.00 1.40 1.42	302.8 302.8 371.8	162 264 393	
✓14	C3	14	37	14, 18	SEE FOLLOWING 4 LINES		87,000 TOTAL						EXIST. PIPES DO NOT PASS Q10
	C3	14	15	18	36	42 X 125	25,000	.522 .613 .736	46.9 45.4 45.0	.93 1.31 1.31	91.3 91.3 91.3	44 73 88	
	C3	15	16	14, 18	OPEN CHANNEL	42 X 110	23,000	.522 .613 .736	47.2 45.6 45.2	.92 1.31 1.31	91.3 91.3 91.3	44 73 88	
	C3	16	17	14	28 X 26 (28)	42 X 50	14,000	.522 .613 .736	47.8 46.1 45.4	.92 1.30 1.31	91.9 91.9 91.9	44 73 89	

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									10 YEAR EXISTING DEV.				
									100 YEAR EXISTING DEV.				
									100 YEAR ULTIMATE DEV.				
=====													
	C3	17	37	14	OPEN CHANNEL	42 X 130	25,000	.522		.92	91.9	44	
								.613		1.30	91.9	73	
								.736	45.5	1.31	91.9	89	
=====													
✓15	E1	69	70	15, 19	18	30 X 440	50,000	.537	20.0	1.49	10.5	8	DOWN EAST MAIN ST. TO
							TOTAL	.627	20.0	1.92	10.5	13	WOLF CREEK. DOES NOT
								.842	20.0	1.92	10.5	17	PASS Q ₁₀ FLOODS
=====													
✓16	H1	14	18	5	SEE FOLLOWING 2 LINES		76,000						EXIST. PIPES DO NOT
							TOTAL						PASS Q ₁₀ , FLOODS
=====													
	H1	14	17	5	24	42 X 125	24,000	.472	11.4	2.01	109.1	104	
								.577	11.4	2.50	109.1	158	
								.634	11.3	2.51	109.1	174	
=====													
	H1	17	18	5	18	42 X 225	52,000	.479	11.6	1.99	115.8	111	
								.582	11.5	2.49	115.8	168	
								.646	11.5	2.49	115.8	187	
=====													
✓17	E1	31	33	24	SEE FOLLOWING 2 LINES		54,000						DRAINS NEV. CO. COUNTI
							TOTAL						CLUB & PART OF HUGHES
													ROAD, FLOODS IN GOLF
													COURSE AT NODE 31
=====													
	E1	31	32	24	12	21 X 90	15,000	.614	15.9	1.70	11.7	12	
								.684	15.4	2.17	11.7	17	
								.735	15.3	2.18	11.7	19	

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								TO YEAR EXISTING DEV.					
								100 YEAR EXISTING DEV.					
								100 YEAR ULTIMATE DEV.					
	E1	32	33	24	24	36 X 130	39,000	.508	17.5	1.61	54.2	44	
								.602	16.8	2.09	54.2	68	
								.685	31.2	1.56	70.8	76	
✓ 18	B2&3	25	28	10	SEE FOLLOWING 2 LINES		44,000 TOTAL						X DRAINS MOST OF CONDON PARK EXIST. PIPES DO NOT PASS Q ₁₀
	B2&3	25	26	10	10	24 X 370	34,000	.402	32.0	1.15	39.8	18	
								.524	32.0	1.54	39.8	32	
								.525	32.0	1.54	39.8	32	
	B2&3	27	28	10	18	30 X 65	10,000	.407	32.7	1.14	47.4	22	
								.527	32.5	1.53	47.4	38	
								.528	32.6	1.53	47.4	38	
✓ 19	G9	59	62	12	SEE FOLLOWING 3 LINES		75,000 TOTAL						DRAINS CLARK ST. FROM CONWAY TO HWY 174 DOES NOT PASS Q ₁₀
	G9	59	60	12	18	30 X 35	7,000	.573	30.4	1.21	24.1	17	
								.653	29.9	1.59	24.1	25	
								.749	29.7	1.60	24.1	28.8	
	G9	60	61	12	18	30 X 515	61,000	.576	30.5	1.20	25.3	18	
								.655	29.9	1.59	25.3	26	
								.749	29.7	1.60	25.3	30	

GRASS VALLEY DRAINAGE SYSTEM MASTER PLAN PROJECT PRIORITY LISTING

PRIORITY NO.	BASIN NO.	US NODE NO.	DS NODE NO.	PLAN SHEET(S)	EXISTING SIZE (EQUIVALENT SIZE) INCHES	PROPOSED SIZE* DIA X L (IN) (FT)	ESTM COST** (06-30-86 DOLLARS)	C	Tc(MIN)	I	A(AC)	Q(CFS)	NOTES***
									TO YEAR EXISTING DEV.				
									100 YEAR EXISTING DEV.				
									100 YEAR ULTIMATE DEV.				
	G9	61	62	12	18	30 X 35	7,000	.578	31.4	1.19	27.3	19	
								.657	30.5	1.58	27.3	28	
								.748	30.2	1.58	27.3	32	
✓ 20	A1	21	22	7	10	18 X 240	32,000	.698	12.6	1.94	10.0	14	MAIN DRAIN FROM PACKAR
							TOTAL	.747	12.5	2.40	10.0	18	DR. AREA, EXIST. PIPES
								.746	12.5	2.4	10.5	19	DO NOT PASS Q10
✓ 21	C3	23	37	14	SEE FOLLOWING 7 LINES		147,000						DRAINS ALTA ST., EXIST
							TOTAL						PIPES DO NOT PASS Q10
	C3	23	24	14	12	21 X 30	9,000	.583	16.2	1.68	5.3	5	
								.663	16.2	2.12	5.3	8	
								.736	16.2	2.12	5.3	8	
	C3	24	25	14	10	21 X 20	5,000	.608	16.3	1.68	7.7	8	
								.682	16.3	2.12	7.7	11	
								.735	16.3	2.12	7.7	12	
	C3	25	26	14	12	21 X 515	58,000	.605	23.0	1.38	12.8	11	
								.679	23.0	1.80	12.8	16	
								.738	23.0	1.80	12.8	17	
	C3	26	27	14	18	21 X 105	15,000	.58	23.6	1.36	19.8	16	
								.661	23.4	1.79	19.8	23	
								.740	23.6	1.78	19.8	26	

GRASS VALLEY DRAINAGE SYSTEM MASTER PLAN PROJECT PRIORITY LISTING

PRIORITY NO.	BASIN NO.	US NODE NO.	DS NODE NO.	PLAN SHEET(S)	EXISTING SIZE (EQUIVALENT SIZE) INCHES	PROPOSED SIZE* DIA X L (IN) (FT)	ESTM COST** (06-30-86 DOLLARS)	C	Tc(MIN)	I	A(AC)	Q(CFS)	NOTES***
								TO YEAR EXISTING DEV.					
								100 YEAR EXISTING DEV.					
								100 YEAR ULTIMATE DEV.					
	C3	27	28	14	18	21 X 220	27,000	.585	23.7	1.36	24.6	20	
								.664	23.5	1.78	24.6	30	
								.741	23.7	1.78	24.6	32	
	C3	28	30	14	18	24 X 85	12,000	.576	23.9	1.35	26.3	21	
								.657	23.7	1.78	26.3	31	
								.739	23.7	1.78	26.3	35	
	C3	30	37	14	OPEN CHANNEL	30 X 130	21,000	.659	24.0	1.76	27.4	32	
								.740	24.0	1.76	27.4	36	
22	C3	31	37	14, 18	SEE FOLLOWING 3 LINES		70,000 TOTAL						ALONG HAZEL LANE, EXIST. PIPES DO NOT PASS Q ₁₀
	C3	31	32	18	12	18 X 150	23,000	.580	22.0	1.42	12.7	10	
								.660	22.0	1.84	12.7	15	
								.787	22.0	1.84	12.7	18	
	C3	32	36	14, 18	14	21 X 170	35,000	.577	22.2	1.41	13.6	11	
								.658	22.1	1.83	13.6	17	
								.782	22.2	1.83	13.7	20	
	C3	36	37	14	OPEN CHANNEL	24 X 110	12,000	.607	24.2	1.34	24.8	20	
								.682	23.9	1.77	24.8	30	
								.792	23.6	1.78	24.8	35	

GRASS VALLEY DRAINAGE SYSTEM MASTER PLAN PROJECT PRIORITY LISTING

PRIORITY NO.	BASIN NO.	US NODE NO.	DS NODE NO.	PLAN SHEET(S)	EXISTING SIZE (EQUIVALENT SIZE) INCHES	PROPOSED SIZE* DIA X L (IN) (FT)	ESTM COST** (06-30-86 DOLLARS)	C	Tc(MIN) TO YEAR	I	A(AC) EXISTING DEV.	Q(CFS) 100 YEAR EXISTING DEV. 100 YEAR ULTIMATE DEV.	NOTES***
23	C2	11	13	11, 14	SEE FOLLOWING 2 LINES		73,000 TOTAL						* DRAINS SOUTH AUBURN ST FROM BANK TO WOLF CREEK EXIST. PIPES DO NOT PASS Q10
	C2	11	12	11, 14	12	15 X 562	55,000	.869	17.0	1.63	4.7	7	
								.882	17.0	2.07	4.7	9	
								.882	17.0	2.07	4.7	9	
	C2	12	13	11	16	24 X 145	18,000	.807	18.1	1.58	16.8	21	
								.832	17.8	2.03	16.8	28	
								.837	17.8	2.03	16.8	29	
24	D2	1	7	15	SEE FOLLOWING 4 LINES		63,000 TOTAL						DRAINS WASHINGTON TO MAIN, DOWN MAIN TO BENNETT, & BENNETT TO CREEK, MOST PIPES DO NOT PASS Q10
	D2	1	3	15	6	12 X 25	5,000	.614	18.0	1.58	3.2	3	
								.684	18.0	2.02	3.2	4	
								.736	18.0	2.02	3.2	5	
	D2	3	5	15	10	15 X 80	10,000	.624	18.4	1.56	4.9	5	
								.691	18.4	2.00	4.9	7	
								.745	18.3	2.00	4.9	7	
	D2	5	6	15	12	15 X 230	33,000	.641	18.6	1.55	9.6	10	
								.704	18.5	1.99	9.6	14	
								.742	18.4	2.00	9.6	14	

GRASS VALLEY DRAINAGE SYSTEM MASTER PLAN PROJECT PRIORITY LISTING

PRIORITY NO.	BASIN NO.	US NODE NO.	DS NODE NO.	PLAN SHEET(S)	EXISTING SIZE (EQUIVALENT SIZE) INCHES	PROPOSED SIZE* DIA X L (IN) (FT)	ESTM COST** (06-30-86 DOLLARS)	C	Tc(MIN)	I	A(AC)	Q(CFS)	NOTES***
									TO YEAR EXISTING DEV.				
									100 YEAR EXISTING DEV.				
									100 YEAR ULTIMATE DEV.				
	D2	6	7	15	14	18 X 145	15,000	.681	18.9	1.54	12.8	14	
								.735	18.7	1.98	12.8	19	
								.768	18.6	1.99	12.8	20	
✓ 25	C2	2	8	14	SEE FOLLOWING 4 LINES		55,000 TOTAL						× DRAINS NEAL ST. TO MIL ST. EXIST. PIPES DO NOT PASS Q ₁₀
	C2	2	3	14	8	12 X 250	21,000	.685	11.1	2.07	5.4	8	
								.738	11.1	2.53	5.4	10	
								.750	11.1	2.53	5.4	10	
	C2	3	5	14	12	15 X 68	9,000	.700	11.3	2.05	6.4	9	
								.750	11.3	2.52	6.4	12	
								.760	11.3	2.52	6.4	12	
	C2	5	7	14	12	15 X 95	12,000	.695	11.4	2.04	6.7	10	
								.745	11.4	2.51	6.7	13	
								.757	11.4	2.51	6.7	13	
	C2	7	8	14	12	18 X 97	13,000	.691	11.5	2.03	7.1	10	
								.742	11.5	2.50	7.1	13	
								.754	11.5	2.50	7.1	13	
✓ 26	C3	52	56	14	SEE FOLLOWING 4 LINES		56,000 TOTAL						

GRASS VALLEY DRAINAGE SYSTEM MASTER PLAN PROJECT PRIORITY LISTING

PRIORITY NO.	BASIN NO.	US NODE NO.	DS NODE NO.	PLAN SHEET(S)	EXISTING SIZE (EQUIVALENT SIZE) INCHES	PROPOSED SIZE* DIA X L (IN) (FT)	ESTM COST** (06-30-86 DOLLARS)	C	Tc(MIN)	I	A(AC)	Q(CFS)	NOTES***
									TO YEAR EXISTING DEV.				
									100 YEAR EXISTING DEV.				
									100 YEAR ULTIMATE DEV.				
=====													
	C3	52	53	14	NONE	21 X 105	14,000	.719	35.7	1.47	8.1	9	
								.734	35.7	1.47	8.1	9	
=====													
	C3	53	56	14	NONE	21 X 30	7,000	.715	36.0	1.46	9.1	10	
								.744	36.0	1.46	9.1	10	
=====													
	C3	54	55	14	8	15 X 135	29,000	.753	11.0	2.09	3.0	5	
								.793	11.0	2.54	3.0	6	
								.793	11.0	2.54	3.0	6	
=====													
	C3	55	56	14	NONE	15 x 35	6,000	.753	11.0	2.09	3.0	5	
								.793	11.0	2.54	3.0	6	
								.793	11.0	2.54	3.0	6	
=====													
✓ 27	C3	60	62	14	SEE FOLLOWING 2 LINES		63,000	.765	11.5	2.04	4.0	6	EXIST. PIPE DOES NOT
							TOTAL	.803	11.5	2.49	4.0	8	PASS Q10
								.812	11.5	2.49	4.0	8	
=====													
	C3	60	62	14	10	15 x 400	48,000	.765	11.5	2.04	4.0	6	
								.803	11.5	2.49	4.0	8	
								.812	11.5	2.49	4.0	8	
=====													
	C3	61	62	14	NONE	15 x 70	15,000	.823	11.0	2.54	3.2	7	
								.823	11.0	2.54	3.2	7	

GRASS VALLEY DRAINAGE SYSTEM MASTER PLAN PROJECT PRIORITY LISTING

PRIORITY NO.	BASIN NO.	US NODE NO.	DS NODE NO.	PLAN SHEET(S)	EXISTING SIZE (EQUIVALENT SIZE) INCHES	PROPOSED SIZE* DIA X L (IN) (FT)	ESTM COST** (06-30-86 DOLLARS)	C	Tc(MIN) TO YEAR	I	A(AC) EXISTING DEV.	Q(CFS) 100 YEAR EXISTING DEV. 100 YEAR ULTIMATE DEV.	NOTES***
28	G6	1	4	9, 11	SEE FOLLOWING 2 LINES		89,000 TOTAL						DRAINS KATE HAYES EXIST. PIPES DO NOT PASS Q10
	G6	1	2	9, 11	10	12 X 655	55,000	.616	11.0	2.05	4.9	6	
								.688	11.0	2.54	4.9	9	
								.755	11.0	2.54	4.9	10	
	G6	2	4	11	10	15 x 390	34,000	.603	12.0	1.96	6.2	7	
								.676	11.7	2.47	6.2	10	
								.752	11.6	2.48	6.2	12	
29	B2&3	35	36	11	42	60 X 70	31,000 TOTAL	.463	59.0	0.82	272.1	103	* RHODE ISLAND RAVINE CROSSING OF BRIGHTON S EXIST. PIPE PASSES Q15
								.572	55.6	1.19	272.1	185	
								.642	53.4	1.21	296.3	231	
30	B2&3	11	13	14	SEE FOLLOWING 2 LINES		97,000 TOTAL						DRAINS A PORTION OF WEST MAIN ST. EXIST PIPES DO PASS Q11
	B2&3	11	12	14	36	48 X 25	10,000	.448	48.6	0.91	118.6	48	
								.557	46.8	1.29	118.6	85	
								.638	45.6	1.31	142.3	119	
	B2&3	12	13	14	36	60 X 280	87,000	.450	48.6	.91	119	49	
								.558	46.8	1.29	119	86	
								.639	45.6	1.31	142.7	119	

GRASS VALLEY DRAINAGE SYSTEM MASTER PLAN PROJECT PRIORITY LISTING

PRIORITY NO.	BASIN NO.	US NODE NO.	DS NODE NO.	PLAN SHEET(S)	EXISTING SIZE (EQUIVALENT SIZE) INCHES	PROPOSED SIZE* DIA X L (IN) (FT)	ESTM COST** (06-30-86 DOLLARS)	C	Tc(MIN)	I	A(AC)	Q(CFS)	NOTES***
								TO YEAR EXISTING DEV.					
								100 YEAR EXISTING DEV.					
								100 YEAR ULTIMATE DEV.					
31	B2&3	31	35	11	SEE FOLLOWING 2 LINES		66,000 TOTAL						DRAINS A PORTION OF BUTLER ROAD
	B2&3	31	32	11	12	21 X 200	21,000	.450	26.0	1.29	11.6	7	
								.557	26.0	1.70	11.6	11	
								.622	26.0	1.70	11.6	12	
	B2&3	32	35	11	12	21 X 395	45,000	.479	26.5	1.28	15.8	10	
								.580	26.5	1.68	15.8	16	
								.633	26.5	1.68	15.8	17	
32	H1	7	9	6	SEE FOLLOWING 2 LINES		44,000 TOTAL						SOUTH AUBURN STREET NORTH OF MCNIGHT WAY
	H1	7	8	6	12	12 X 415	32,000	.604	11.0	2.05	3.4	4	
								.677	11.0	2.54	3.4	6	
								.631	11.0	2.54	3.4	6	
	H1	8	9	6	14	15 X 80	12,000	.585	12.1	1.95	6.3	7	
								.666	11.9	2.45	6.3	10	
								.731	12.0	2.44	6.3	11	
33	H1	1	6	6	SEE FOLLOWING 4 LINES		82,000 TOTAL						LITTLE WOLF CREEK BEHIND DIAMOND INTERT EXIST. PIPE DOES NOT PASS Q10

GRASS VALLEY DRAINAGE SYSTEM MASTER PLAN PROJECT PRIORITY LISTING

PRIORITY NO.	BASIN NO.	US NODE NO.	DS NODE NO.	PLAN SHEET(S)	EXISTING SIZE (EQUIVALENT SIZE) INCHES	PROPOSED SIZE* DIA X L (IN) (FT)	ESTM COST** (06-30-86 DOLLARS)	C	Tc(MIN)	I	A(AC)	Q(CFS)	NOTES***
								TO YEAR EXISTING DEV.					
								100 YEAR EXISTING DEV.					
								100 YEAR ULTIMATE DEV.					
	H1	1	2	6	48	78 X 1	1,000	.440	53.0	0.90	399.9	159	
								.550	53.0	1.22	399.9	268	
								.580	53.0	1.22	399.9	282	
	H1	2	3	6	48	78 X 1	1,000	.439	53.0	0.90	800	318	
								.549	53.0	1.22	800	536	
								.579	53.0	1.22	800	565	
	H1	3	5	6	48	78 X 78	48,000	.439	53.0	0.90	1172	463	
								.549	53.0	1.22	1165	780	
								.579	53.0	1.22	1176	822	
	H1	5	6	6	48	78 X 50	32,000	.441	53.5	0.90	1169	464	
								.551	53.5	1.21	1200	800	
								.580	53.5	1.21	1171	822	
34	H2	16	17	8	18	24 X 90	5,000	.561	25.4	1.32	20.5	15	OCEAN AVE,
								.645	24.8	1.74	20.5	23	EXIST. PIPE DOES NOT
							TOTAL	.739	24.8	1.74	20.5	26	PASS Q ₁₀
35	E1	63	64	19	24	36 X 170	28,000	.528	22.8	1.39	56	41	TRIBUTARY TO MATSON
								.619	21.9	1.84	56	64	CREEK. EXIST. PIPE
							TOTAL	.778	21.6	1.85	56	82	DOES NOT PASS Q ₁₀
36	G6	5	6	11	12	18 X 35	9,000	.652	16.0	1.68	10.0	11	SOUTH AUBURN ST.
								.717	16.0	2.13	10.0	15	CROSSING. EXIST. PIPE
							TOTAL	.779	16.0	2.13	10.0	17	DOES NOT PASS Q ₁₀

GRASS VALLEY DRAINAGE SYSTEM MASTER PLAN PROJECT PRIORITY LISTING

PRIORITY NO.	BASIN NO.	US NODE NO.	DS NODE NO.	PLAN SHEET(S)	EXISTING SIZE (EQUIVALENT SIZE) INCHES	PROPOSED SIZE* DIA X L (IN) (FT)	ESTM COST** (06-30-86 DOLLARS)	C	Tc(MIN)	I	A(AC)	Q(CFS)	NOTES***
									TO YEAR EXISTING DEV.				
									100 YEAR EXISTING DEV.				
									100 YEAR ULTIMATE DEV.				
=====													
37	C3	33	34	18	12	21 X 40	7,000	.636	16.0	1.69	6.7	7	EXIST. PIPE DOES NOT PASS Q10
								.707	16.0	2.13	6.7	10	
							TOTAL	.805	16.0	2.13	6.7	12	
=====													
38	G9	38	40	12	8	12 X 115	12,000	.903	10.0	2.15	1.0	2	DRAINS PORTION OF MEMORIAL ST. EXIST. PIPE DOES NOT PASS Q10
								.903	10.0	2.66	1.0	2	
							TOTAL	.728	10.0	2.66	1.0	2	
=====													
39	C5	1	2	14	12	18 X 20	6,000	.902	10.0	2.19	4.0	8	GRA-NEVA PARKING LOT EXIST. PIPE DOES NOT PASS Q10
								.905	10.0	2.66	4.0	10	
							TOTAL	.905	10.0	2.66	4.0	10	
=====													
40	C1	3	4	11	10	15 X 80	9,000	.610	17.0	1.63	5.9	6	WALSH & SCHOOL INTERSECTION DOES NOT PASS Q10
								.683	17.0	2.07	5.9	8	
							TOTAL	.738	17.0	2.07	5.9	9	
=====													
41	A1	8	9	10	12	15 X 45	7,000	.789	24.0	1.35	4.4	5	DOES NOT PASS Q10
								.822	24.0	1.76	4.4	6	
							TOTAL	.822	24.0	1.76	4.4	6	
=====													
42	D1	1	2	18	8	12 X 60	8,000	.582	15.0	1.75	4.8	5	CROSSES BROADVIEW AVE. EXIST. PIPE DOES NOT PASS Q10
								.660	15.0	2.20	4.8	7	
							TOTAL	.782	15.0	2.20	4.8	8	
=====													
43	G9	54	55	12	12	18 X 95	14,000	.549	25.0	1.34	5.9	4	RACE ST.-LUCAS LANE TO CLARK ST. EXIST. PIPE DOES NOT PASS Q10
								.633	25.0	1.73	5.9	7	
							TOTAL	.745	25.0	1.73	5.9	8	

GRASS VALLEY DRAINAGE SYSTEM MASTER PLAN PROJECT PRIORITY LISTING

PRIORITY NO.	BASIN NO.	US NODE NO.	DS NODE NO.	PLAN SHEET(S)	EXISTING SIZE (EQUIVALENT SIZE) INCHES	PROPOSED SIZE* DIA X L (IN) (FT)	ESTM COST** (06-30-86 DOLLARS)	C	Tc(MIN)	I	A(AC)	Q(CFS)	NOTES***
									10 YEAR EXISTING DEV.				
									100 YEAR EXISTING DEV.				
									100 YEAR ULTIMATE DEV.				
=====													
44	C3	64	65	14	12	18 X 95	11,000	.783	11.9	2.00	3.6	6	EXIST. PIPE DOES NOT
							TOTAL	.813	11.9	2.45	3.6	7	PASS Q10
								.824	11.9	2.45	3.6	7	
45	G9	10	14	12	SEE FOLLOWING 2 LINES		25,000						EXIST. PIPES DO NOT
							TOTAL						PASS Q10
	G9	10	11	12	12	18 X 130	14,000	.628	21.1	1.46	5.5	5	
								.696	21.0	1.88	5.5	7	
								.804	21.0	1.88	5.5	8	
	G9	11	14	12	15	18 X 75	11,000	.629	21.4	1.45	7.6	7	
								.696	21.2	1.87	7.6	10	
								.808	21.2	1.87	7.6	12	
46	E1	2	3	25	12	15 X 275	29,000	.605	25.0	1.32	8.6	7	EXIST. PIPE DOES NOT
							TOTAL	.677	25.0	1.73	8.6	10	PASS Q10
								.833	25.0	1.73	8.6	12	
47	E1	5	6	24	16	18 X 325	38,000	.760	20.0	1.49	10.4	12	EXIST. PIPE DOES NOT
							TOTAL	.795	20.0	1.92	10.4	16	PASS Q10
								.795	20.0	1.92	10.4	16	
48	C3	43	44	13	10	15 X 200	25,000	.606	16.0	1.69	8.4	9	EXIST. PIPE DOES NOT
							TOTAL	.683	16.0	2.13	8.4	12	PASS Q10
								.764	16.0	2.13	8.4	14	

GRASS VALLEY DRAINAGE SYSTEM MASTER PLAN PROJECT PRIORITY LISTING

PRIORITY NO.	BASIN NO.	US NODE NO.	DS NODE NO.	PLAN SHEET(S)	EXISTING SIZE (EQUIVALENT SIZE) INCHES	PROPOSED SIZE* DIA X L (IN) (FT)	ESTM COST** (06-30-86 DOLLARS)	C	Tc(MIN)	I	A(AC)	Q(CFS)	NOTES***
									TO YEAR EXISTING DEV.				
									100 YEAR EXISTING DEV.				
									100 YEAR ULTIMATE DEV.				
49	H2	3	5	8	SEE FOLLOWING 2 LINES		31,000 TOTAL						EMPIRE ST. FROM SOUTH AUBURN TO KECHELY CT. EXIST. PIPE DOES NOT PASS Q10
	H2	3	4	8		12 X 725	30,000	.606	14.0	1.81	5.3	6	
								.678	14.0	2.27	5.3	8	
								.750	14.0	2.27	5.3	9	
	H2	4	5	8		18 X 30	1,000	.620	14.7	1.76	6.2	7	
								.688	14.5	2.23	6.2	10	
								.756	14.5	2.23	6.2	11	
50	C1	1	2	14		15 X 90	10,000 TOTAL	.593	12.0	1.98	1.8	2	DRAINAGE ALONG LLOYD ST. EXIST. PIPE DOES NOT PASS Q10
								.670	12.0	2.44	1.8	3	
								.755	12.0	2.44	1.8	3	
51	C1	14	15	11		12 X 205	27,000 TOTAL	.524	17.0	1.63	4.0	3	EXIST. PIPE DOES NOT PASS Q10
								.615	17.0	2.07	4.0	5	
								.662	17.0	2.07	4.0	5	
52	G9	47	48	12		15 X 95	14,000 TOTAL	.912	10.0	2.15	2.1	4	EXIST. PIPE DOES NOT PASS Q10
								.912	10.0	2.66	2.1	5	
								.814	10.0	2.66	2.1	5	
53	B2&3	23	24	14		12 X 95	12,000 TOTAL	.558	17.0	1.64	1.8	2	
								.639	17.0	2.07	1.8	2	
								.731	17.0	2.07	1.8	3	

GRASS VALLEY DRAINAGE SYSTEM MASTER PLAN PROJECT PRIORITY LISTING

PRIORITY NO.	BASIN NO.	US NODE NO.	DS NODE NO.	PLAN SHEET(S)	EXISTING SIZE (EQUIVALENT SIZE) INCHES	PROPOSED SIZE* DIA X L (IN) (FT)	ESTM COST** (06-30-86 DOLLARS)	C	Tc(MIN)	I	A(AC)	Q(CFS)	NOTES***
									TO YEAR EXISTING DEV.				
									100 YEAR EXISTING DEV.				
									100 YEAR ULTIMATE DEV.				
54	H3	1	4	8	SEE FOLLOWING 3 LINES		44,000 TOTAL						EXIST. PIPES DO NOT PASS Q10
	H3	1	2	8	6	12 X 200	12,000	.569	20.0	1.50	5.3	5	
								.647	20.0	1.92	5.3	7	
								.768	20.0	1.92	5.3	8	
	H3	2	3	8	6	12 X 410	27,000	.578	20.1	1.50	5.6	5	
								.654	20.1	1.92	5.6	7	
								.766	20.1	1.92	5.6	8	
	H3	3	4	8	8	15 X 70	5,000	.578	20.4	1.48	5.6	5	
								.653	20.3	1.91	5.6	7	
								.765	20.3	1.91	5.6	8	
55	H1	21	22	5	8	12 X 65	10,000 TOTAL	.638	11.0	2.05	1.0	1	EXIST. PIPE DOES NOT PASS Q10
								.701	11.0	2.54	1.0	2	
								.862	11.0	2.54	1.0	2	
56	C3	29	30	14	4	12 X 35	6,000 TOTAL	.735	11.0	2.09	0.7	1	EXIST. PIPE DOES NOT PASS Q10
								.782	11.0	2.54	0.7	1	
								.796	11.0	2.54	0.7	2	
57	G6	8	9	11	6	12 X 100	13,000 TOTAL	.635	11.0	2.05	1.3	2	EXIST. PIPE DOES NOT PASS Q10
								.701	11.0	2.54	1.3	2	
								.739	11.0	2.54	1.3	2	

GRASS VALLEY DRAINAGE SYSTEM MASTER PLAN PROJECT PRIORITY LISTING

PRIORITY NO.	BASIN NO.	US NODE NO.	DS NODE NO.	PLAN SHEET(S)	EXISTING SIZE (EQUIVALENT SIZE) INCHES	PROPOSED SIZE* DIA X L (IN) (FT)	ESTM COST** (06-30-86 DOLLARS)	C	Tc(MIN)	I	A(AC)	Q(CFS)	NOTES***
								TO YEAR EXISTING DEV.					
								100 YEAR EXISTING DEV.					
								100 YEAR ULTIMATE DEV.					
58	C4	1	2	14	6	12 X 130	19,000	.565	10.0	2.19	1.7	2	EXIST. PIPE DOES NOT PASS Q10
							TOTAL	.645	10.0	2.66	1.7	3	
								.645	10.0	2.66	1.7	3	
59	G9	5	7	12	SEE FOLLOWING 2 LINES		26,000						ONE EXIST. PIPE DOES NOT PASS Q10
							TOTAL						
	G9	5	6	12	6	12 X 160	15,000	.687	10.0	2.15	1.0	1	
								.744	10.0	2.66	1.0	2	
								.864	10.0	2.66	1.0	2	
	G9	6	7	12	12	15 X 70	11,000	.705	10.4	2.11	2.3	4	
								.758	10.3	2.62	2.3	5	
								.852	10.2	2.63	2.3	5	
60	C1	9	11	11	SEE FOLLOWING 2 LINES		28,000						EXIST. PIPES DO NOT PASS Q10
							TOTAL						
	C1	9	10	11	8	12 X 165	21,000	.746	17.0	1.63	2.3	3	
								.788	17.0	2.07	2.3	4	
								.787	17.0	2.07	2.3	4	
	C1	10	11	11	8	12 X 45	7,000	.749	17.3	1.62	2.3	3	
								.791	17.3	2.06	2.3	4	
								.790	17.3	2.06	2.3	4	

GRASS VALLEY DRAINAGE SYSTEM MASTER PLAN PROJECT PRIORITY LISTING

PRIORITY NO.	BASIN NO.	US NODE NO.	DS NODE NO.	PLAN SHEET(S)	EXISTING SIZE (EQUIVALENT SIZE) INCHES	PROPOSED SIZE* DIA X L (IN) (FT)	ESTM COST** (06-30-86 DOLLARS)	C	Tc(MIN)	I	A(AC)	Q(CFS)	NOTES***
									TO YEAR EXISTING DEV.				
									100 YEAR EXISTING DEV.				
									100 YEAR ULTIMATE DEV.				
=====													
61	A1	10	11	10	10	15 X 290	31,000	.575	18.0	1.59	2.6	2	EXIST. PIPE DOES NOT
							TOTAL	.660	18.0	2.02	2.6	4	PASS Q10
								.736	18.0	2.02	2.6	4	
=====													
62	G9	42	43	12	12	15 X 350	43,000	.487	10.0	2.15	2.3	2	EXIST. PIPE DOES NOT
							TOTAL	.586	10.0	2.66	2.3	4	PASS Q10
								.773	10.0	2.66	2.3	5	
=====													
63	F3	7	9	20	SEE FOLLOWING		38,000						CROSSES IDAHO-MARYLANI
					2 LINES		TOTAL						EXIST. PIPES DO NOT
													PASS Q10
=====													
	F3	7	8	20	24	30 X 45	9,000	.526	17.0	1.63	43.5	37	
								.622	16.2	2.12	43.5	58	
								.709	15.8	2.15	44.3	67	
=====													
	F3	8	9	20	18	36 X 170	29,000	.526	17.1	1.63	43.5	37	
								.621	16.2	2.12	43.5	58	
								.709	15.8	2.15	44.3	67	
=====													
64	F1	4	5	20	18	21 X 185	22,000	.469	20.5	1.48	15.6	11	CROSSES IDAHO-MARYLANI
							TOTAL	.597	20.4	1.90	15.6	18	EXIST. PIPE DOES NOT
								.804	20.3	1.91	15.6	24	PASS Q10
=====													
65	E1	57	61	19	SEE FOLLOWING		17,000						ONE PIPE DOES NOT
					2 LINES		TOTAL						PASS Q10

GRASS VALLEY DRAINAGE SYSTEM MASTER PLAN PROJECT PRIORITY LISTING

PRIORITY NO.	BASIN NO.	US NODE NO.	DS NODE NO.	PLAN SHEET(S)	EXISTING SIZE (EQUIVALENT SIZE) INCHES	PROPOSED SIZE* DIA X L (IN) (FT)	ESTM COST** (06-30-86 DOLLARS)	C	Tc(MIN) TO YEAR EXISTING DEV.	I	A(AC) 100 YEAR EXISTING DEV.	Q(CFS) 100 YEAR ULTIMATE DEV.	NOTES***
	E1	57	58	19	15	24 X 50	8,000	.486	14.0	1.82	12.4	11	
								.586	13.7	2.29	12.4	17	
								.732	13.6	2.30	12.4	21	
	E1	60	61	19	24	30 X 30	9,000	.503	15.1	1.75	20.4	18	
								.601	14.7	2.22	20.4	27	
								.744	14.5	2.23	20.4	34	
66	E1	76	77	15	24	30 X 110	17,000	.605	25.0	1.32	17	14	EXIST. PIPE PASSES
							TOTAL	.678	24.5	1.75	17	20	Q11
								.802	24.1	1.76	17	24	
67	G3	3	4	11	18	18	13,000	.823	20	1.49	7.1	9	EXIST. PIPE PASSES
							TOTAL	.845	20	1.92	7.1	12	Q11
								.845	20	1.92	7.1	12	
68	F3	2	5	20, 25	24	24 X 30	6,000	.677	10.2	2.13	8.6	12	EXIST. PIPE WILL PASS
							TOTAL	.733	10.2	2.63	8.6	17	Q11
								.796	10.2	2.63	8.4	18	
69	B2&3	18	20	14	12	18 X 170	23,000	.537	23.6	1.36	7.6	6	EXIST. PIPE WILL PASS
							TOTAL	.726	23.4	1.79	7.6	10	Q11
								.757	23.4	1.79	7.7	11	
70	F3	3	4	25	18	18 X 70	14,000	.396	10.0	2.15	3.3	3	EXIST. PIPE PASSES
							TOTAL	.529	10.0	2.66	3.3	5	Q11
								.732	10.0	2.66	3.3	7	

GRASS VALLEY DRAINAGE SYSTEM MASTER PLAN PROJECT PRIORITY LISTING

PRIORITY NO.	BASIN NO.	US NODE NO.	DS NODE NO.	PLAN SHEET(S)	EXISTING SIZE (EQUIVALENT SIZE) INCHES	PROPOSED SIZE* DIA X L (IN) (FT)	ESTM COST** (06-30-86 DOLLARS)	C	Tc(MIN)	I	A(AC)	Q(CFS)	NOTES***
									TO YEAR EXISTING DEV.				
									100 YEAR EXISTING DEV.				
									100 YEAR ULTIMATE DEV.				
=====													
71	B2&3	14	15	14	14	18 X 120	19,000	.525	26.0	1.29	4.3	3	EXIST. PIPE PASSES
							TOTAL	.613	26.0	1.70	4.3	4	Q12
								.727	26.0	1.70	4.8	6	
72	H1	16	17	5	12	15 X 125	17,000	.584	11.4	2.01	6.7	8	EXIST. PIPE PASSES
							TOTAL	.659	11.4	2.50	6.7	11	Q15
								.830	11.4	2.50	6.7	14	
73	A1	32	33	7	30	36 X 120	20,000	.455	40.0	1.01	45.7	24	EXIST. PIPE PASSES
							TOTAL	.559	40.0	1.39	45.7	36	Q20
								.559	40.0	1.39	45.7	36	
74	E1	7	13	24	24	30 X 220	37,000	.653	31.7	1.16	47.7	36	EXIST. PIPE PASSES
							TOTAL	.714	31.3	1.56	47.7	53	Q30
								.792	31.2	1.56	48.7	60	
75	G9	14	44	12	SEE FOLLOWING 9 LINES		430,000						COLFAX AVENUE
							TOTAL						EXIST. PIPES PASS
													Q30
	G9	14	15	12	96 X 72 (87)	96 X 36	23,000	.511	78.1	.74	1441	544	
								.611	77.8	1.02	1441	895	
								.681	77.8	1.02	1441	998	
	G9	15	17	12	91 X 58 (74)	90 X 120	56,000	.511	78.1	.74	1441	544	
								.611	77.8	1.02	1441	895	
								.681	77.8	1.02	1441	998	

GRASS VALLEY DRAINAGE SYSTEM MASTER PLAN PROJECT PRIORITY LISTING

PRIORITY NO.	BASIN NO.	US NODE NO.	DS NODE NO.	PLAN SHEET(S)	EXISTING SIZE (EQUIVALENT SIZE) INCHES	PROPOSED SIZE* DIA X L (IN) (FT)	ESTM COST** (06-30-86 DOLLARS)	C	Tc(MIN)	I	A(AC)	Q(CFS)	NOTES***
								TO YEAR EXISTING DEV.					
								100 YEAR EXISTING DEV.					
								100 YEAR ULTIMATE DEV.					
G9	17	20	12		91 X 58 (74)	84 X 180	73,000	.511	78.2	.74	1441	544	
								.611	77.9	1.02	1441	895	
								.681	77.9	1.02	1441	998	
G9	20	22	12		91 X 58 (74)	84 X 170	70,000	.511	78.3	.74	1444	545	
								.611	78.0	1.02	1444	896	
								.681	78.0	1.02	1444	999	
G9	22	24	12		91 X 58 (74)	84 X 140	62,000	.511	78.4	.74	1444	545	
								.611	78.1	1.02	1444	896	
								.681	78.1	1.02	1444	999	
G9	24	30	12		91 X 58 (74)	84 X 40	22,000	.512	78.5	.74	1444	545	
								.611	78.2	1.01	1444	896	
								.681	78.2	1.01	1444	999	
G9	30	32	12		91 X 58 (74)	84 X 75	38,000	.513	78.5	.74	1455	550	
								.612	78.2	1.01	1455	904	
								.681	78.2	1.01	1455	1009	
G9	32	34	12		91 X 58 (74)	84 X 65	35,000	.513	78.5	.74	1456	551	
								.612	78.2	1.01	1456	905	
								.681	78.2	1.01	1456	1010	
G9	34	44	12		91 X 58 (74)	90 X 90	51,000	.513	78.5	.74	1458	551	
								.612	78.2	1.01	1458	905	
								.681	78.2	1.01	1458	1011	

GRASS VALLEY DRAINAGE SYSTEM MASTER PLAN PROJECT PRIORITY LISTING

PRIORITY NO.	BASIN NO.	US NODE NO.	DS NODE NO.	PLAN SHEET(S)	EXISTING SIZE (EQUIVALENT SIZE) INCHES	PROPOSED SIZE* DIA X L (IN) (FT)	ESTM COST** (06-30-86 DOLLARS)	C	Tc(MIN)	I	A(AC)	Q(CFS)	NOTES***
									TO YEAR EXISTING DEV.				
									100 YEAR EXISTING DEV.				
									100 YEAR ULTIMATE DEV.				
76	E1	34	43	19, 24	SEE FOLLOWING 4 LINES		482,000 TOTAL						MATSON CREEK (NORTH OF BERRYHILL DR.) EXIST. PIPES DO NOT PASS
Q100													
	E1	34	36	19, 24	48	60 X 220	113,000	.521	38.3	1.04	189.3	103	
								.612	37.2	1.44	189.3	167	
								.722	36.8	1.44	249.7	260	
	E1	36	37	19	48	54 X 535	217,000	.524	38.7	1.03	201.2	109	
								.615	37.5	1.43	201.2	177	
								.727	37.0	1.44	270.7	284	
	E1	37	38	19	OPEN	54 X 100	34,000	.524	39.5	1.02	201.2	108	
								.615	38.2	1.42	201.2	176	
								.727	37.5	1.43	270.7	282	
	E1	38	43	19	48	54 X 460	118,000	.524	39.5	1.02	201.2	108	
								.615	38.2	1.42	201.2	176	
								.727	37.5	1.43	270.7	282	
77	A1	9	14	10	SEE FOLLOWING 3 LINES		139,000 TOTAL						EXIST. PIPES PASS Q45, Q90, & Q99 RESPECTIVELY
	A1	9	12	10	27	30 X 210	54,000	.548	30.4	1.18	48.9	32	
								.633	30.1	1.59	48.9	49	
								.657	30.2	1.58	50.5	53	

- * PROPOSED SIZE SHOWN IS THE DIAMETER OF ROUND CONCRETE PIPE USED IN THE HYDRAULIC CALCULATIONS-OTHER EQUIVALENT SIZES OF BOXES OR ARCHES MAY BE USED IN DETAILED DESIGN.
- ** ESTIMATED COST INCLUDES ALLOWANCES FOR ALL OF THE FOLLOWING: ESTIMATED COSTS FOR DRAINAGE PIPE AND STRUCTURE INSTALLATION, CONFLICTING UTILITY RELOCATION, DRAINAGE EASEMENT ACQUISITION, ENGINEERING, ADMINISTRATION, AND LEGAL FEES. SINCE CRANMER ENGINEERING, INC. HAS NO CONTROL OVER COST OF LABOR, MATERIALS, EQUIPMENT, OR SERVICES FURNISHED BY CONTRACTORS, OR OVER THEIR METHODS OF DETERMINING PRICES, OR OVER COMPETITIVE BIDDING, OR MARKET CONDITIONS, THIS ENGINEER'S ESTIMATE OF CONSTRUCTION COSTS PROVIDED HEREIN REPRESENTS OUR BEST JUDGEMENT AS EXPERIENCED AND QUALIFIED PROFESSIONAL ENGINEERS, BUT CRANMER ENGINEERING, INC. CANNOT GUARANTEE THAT BIDS RECEIVED OR ACTUAL PROJECT COSTS WILL NOT DIFFER FROM THIS ENGINEER'S ESTIMATE.
- *** NOTE THAT Q₁₀, Q₁₁, Q₁₂, ETC. MENTIONED IN NOTES ARE BASED ON EXISTING DEVELOPMENT, NOT ULTIMATE DEVELOPMENT.