APPENDIX "D" - HYDRA FLOW MODEL - 1990
PART 1

Status of DEFAULTS at start of run. (* May be reset by SET)

```
|   Command file : C:\HYDRA\HEMET\LIN-EE.CMD
|   Input units are read as                : USA
|*  Output sent to display                 : Brief
|*  Output sent to printer                 : Brief
|*  Output sent to file                    : Off
|   Paper width in inches                  : 8.000
|   String to reset printer                : 27 38 108 54 68 27 40 115 49 48 72
|   String to set printer to compressed    : 17.16 27 38 107 48 56 72
|   String to set printer to 8 lines/inch  : 8 27 38 108 56 68
|   Name of printer                        : Hewlett-Packard, LaserJet/LaserJet F
|   Print heading at top of page           : True
|
|   Number of steps in hydrograph          : 96
|   Step length in minutes                 : 15
|   Significant flow in hydrograph         : 0.010
|*  Maximum plot value                     : Selected by HYDRA
|   Type of hydrographic plot              : Compact
|
|   Sanitary flow by                       : Diurnal Curve
|   Delay to start of actual storm         : 0.00
|   Rational Method computations           : Off
|   SCS computations                       : Santa Barbara
|   Continuous simulation computations     : On
|
|*  Maximum d/D for pipe design/analysis   : 0.900
|*  Match point position on pipe           : 0.00 or Invert
|*  Number of allowable diam drops         : 999
|*  Minimum drop thru manhole              : 0.000
|   Routing technique                      : Quick
|
|*  Calculate sanitary flows               : True
|*  Calculate infiltration flows           : True
|*  Calculate storm flows                  : True
|*  Calculate misc flows                   : True
|
+----------------------------------------------------------------------
```

```
 1: JOB LINE EE AT GILMORE NEAR LATHAM
 2:
 3: REM --- PIPE AND PIPE COST DATA ---
 4: PDA .013 8 8 7.5 3 .004
 5: CST 1.5 1 3/ .2 .5 .5 2.87 / .5 0 1.63 +
 6:        1.15 / .89 1.1 1.43 4.78
 7: EXC 0/.45 18/.45 30/1.12
 8: TSL 0/0 6/0 6.001/.5 30/.5
 9: PCO 8/2.78 10/4.10 18/9.16 36/18.23
10:
11: REM --- SANITARY CRITERIA ---
12: GPC 100
13:
```

LINE T AT DEVONSHIRE & GILBERT

Lateral length=   1   Upstream length=   1

*** CALHOUN PLACE   Analysis of Existing Pipes

Link	Long	Diam	Invert Up/Dn	Slope	San Inf	Sto Mis	Vel d/D	Design MGD	% Cap Q Full	Remove	Par Rep
6	328	8	598.40	0.0057	0.1	0.0	1.66	0.11	18.85		
			596.54		0.0	0.0	0.33		0.58		
7	342	8	596.54	0.0152	0.1	0.0	2.39	0.11	11.53		
			591.35		0.0	0.0	0.27		0.95		

Lateral length=   670   Upstream length=   670

*** BUENA VISTA LATERAL   Analysis of Existing Pipes

Link	Long	Diam	Invert Up/Dn	Slope	San Inf	Sto Mis	Vel d/D	Design MGD	% Cap Q Full	Remove	Par Rep
8	313	8	591.35	0.0028	0.1	0.0	1.25	0.09	22.91		
			590.46		0.0	0.0	0.37		0.41		

Lateral length=   313   Upstream length=   314

*** DEVONSHIRE LATERAL   Analysis of Existing Pipes

Link	Long	Diam	Invert Up/Dn	Slope	San Inf	Sto Mis	Vel d/D	Design MGD	% Cap Q Full	Remove	Par Rep
9	325	10	595.17	0.0118	0.2	0.0	2.39	0.15	10.12		
			591.32		0.0	0.0	0.26		1.53		
10	168	10	591.32	0.0051	0.2	0.0	1.76	0.17	16.61		
			590.46		0.0	0.0	0.31		1.01		
11	324	10	590.46	0.0021	0.3	0.0	1.50	0.27	41.77		
			589.77		0.0	0.0	0.51		0.65		
12	338	10	589.77	0.0060	0.3	0.0	2.19	0.28	25.93		
			587.75		0.0	0.0	0.39		1.09		
13	321	10	587.75	0.0089	0.3	0.0	2.54	0.29	22.19		
			584.89		0.0	0.0	0.36		1.33		
14	330	10	584.89	0.0107	0.3	0.0	2.71	0.30	20.59		
			581.36		0.0	0.0	0.35		1.45		

LINE T AT DEVONSHIRE & GILBERT

*** DEVONSHIRE LATERAL   Analysis of Existing Pipes

Link	Long	Diam	Invert Up/Dn	Slope	San Inf	Sto Mis	Vel d/D	Design MGD	% Cap Q Full	Remove	Par Rep
15	53	10	581.36	-0.0064	0.3	0.0	0.00	0.30	999.99	0.00	0
			581.70		0.0	0.0	0.00		0.00		0
16	325	10	581.70	0.0011	0.3	0.0	1.25	0.30	63.40		
			581.33		0.0	0.0	0.65		0.47		
17	334	10	581.33	0.0069	0.3	0.0	2.39	0.32	27.42		
			579.04		0.0	0.0	0.41		1.16		
18	333	10	579.04	0.0070	0.3	0.0	2.44	0.33	28.43		
			576.70		0.0	0.0	0.41		1.18		
19	330	10	576.70	0.0071	0.4	0.0	2.55	0.39	32.69		
			574.35		0.0	0.0	0.45		1.19		

```
                Lateral length=    3182      Upstream length=      3497
```

*** CENTRAL LATERAL   Diversion

Link	Invert Up/Dn		Maximum Flow Values San	Inf	Sto	Mis	Design	Cost
21	Unknown	Discharge :	0.06	0.00	0.00	0.00	0.06	0
	Unknown	Diverted :	0.00	0.00	0.00	0.00	0.00	
		Incoming :	0.06	0.00	0.00	0.00	0.06	

*** CENTRAL LATERAL   Analysis of Existing Pipes

Link	Long	Diam	Invert Up/Dn	Slope	San Inf	Sto Mis	Vel d/D	Design MGD	% Cap Q Full	Remove	Par Rep
22	331	8	601.29	0.0044	0.1	0.0	1.31	0.06	12.56		
			599.85		0.0	0.0	0.28		0.51		
23	162	8	594.52	0.0020	0.1	0.0	1.07	0.09	24.76		
			594.20		0.0	0.0	0.38		0.34		
24	169	8	594.20	0.0051	0.1	0.0	1.62	0.11	20.77		
			593.34		0.0	0.0	0.35		0.55		
25	333	8	593.32	0.0122	0.1	0.0	2.22	0.11	13.41		
			589.26		0.0	0.0	0.28		0.86		

LINE T AT DEVONSHIRE & GILBERT

*** CENTRAL LATERAL   Analysis of Existing Pipes

Link	Long	Diam	Invert Up/Dn	Slope	San Inf	Sto Mis	Vel d/D	Design MGD	% Cap Q Full	Remove	Par Rep
26	327	8	589.24	0.0092	0.1	0.0	2.00	0.11	15.41		
			586.22		0.0	0.0	0.30		0.74		
27	327	8	586.28	0.0094	0.1	0.0	2.04	0.12	16.16		
			583.21		0.0	0.0	0.31		0.75		
28	329	10	583.23	0.0088	0.2	0.0	2.12	0.15	11.45		
			580.32		0.0	0.0	0.27		1.32		

Lateral length=   1978   Upstream length=   1978

*** MAYBERRY DIVERSION   Analysis of Existing Pipes

Link	Long	Diam	Invert Up/Dn	Slope	San Inf	Sto Mis	Vel d/D	Design MGD	% Cap Q Full	Remove	Par Rep
29	311	8	601.29	0.0031	0.0	0.0	0.00	0.00	0.00		
			600.31		0.0	0.0	0.00		0.43		
30	362	8	600.31	0.0042	0.0	0.0	0.00	0.00	0.00		
			598.79		0.0	0.0	0.00		0.50		

Lateral length=   673   Upstream length=   673

*** ACACIA LATERAL   Diversion

Link	Invert Up/Dn	-------------- Maximum Flow Values ---------------------	San	Inf	Sto	Mis	Design	Cost
32	598.79	Discharge :	0.06	0.00	0.00	0.00	0.06	0
	598.79	Diverted :	0.00	0.00	0.00	0.00	0.00	
		Incoming :	0.06	0.00	0.00	0.00	0.06	

*** ACACIA LATERAL   Analysis of Existing Pipes

Link	Long	Diam	Invert Up/Dn	Slope	San Inf	Sto Mis	Vel d/D	Design MGD	% Cap Q Full	Remove	Par Rep
33	330	8	598.79	0.0057	0.1	0.0	1.42	0.06	9.80		
			596.92		0.0	0.0	0.25		0.58		

LINE T AT DEVONSHIRE & GILBERT

*** ACACIA LATERAL   Diversion

Link	Invert Up/Dn		San	Inf	Sto	Mis	Design	Cost
35	596.92	Discharge :	0.07	0.00	0.00	0.00	0.07	0
	596.92	Diverted :	0.00	0.00	0.00	0.00	0.00	
		Incoming :	0.07	0.00	0.00	0.00	0.07	

*** ACACIA LATERAL   Analysis of Existing Pipes

Link	Long	Diam	Invert Up/Dn	Slope	San Inf	Sto Mis	Vel d/D	Design MGD	% Cap Q Full	Remove	Par Rep
36	334	8	596.92	0.0041	0.1	0.0	1.28	0.07	13.38		
			595.56		0.0	0.0	0.28		0.49		
37	330	8	595.56	0.0067	0.1	0.0	1.60	0.08	11.91		—
			593.35		0.0	0.0	0.27		0.63		
38	340	8	593.35	0.0070	0.1	0.0	1.67	0.08	12.94		
			590.97		0.0	0.0	0.28		0.65		
39	329	8	590.97	0.0077	0.1	0.0	1.73	0.08	12.37	..	
			588.45		0.0	0.0	0.27		0.68		
40	329	8	588.45	0.0097	0.1	0.0	2.00	0.11	13.84		
			585.25		0.0	0.0	0.29		0.76		
41	349	8	585.25	0.0109	0.1	0.0	2.28	0.15	18.50		
			581.46		0.0	0.0	0.33		0.81		
42	279	8	581.46	0.0093	0.1	0.0	2.16	0.15	19.95		
			578.86		0.0	0.0	0.34		0.75		
43	8	8	578.86	0.0013	0.1	0.0	1.09	0.15	53.77		
			578.85		0.0	0.0	0.59		0.28		

Lateral length=   2628   Upstream length=   3301

*** JUANITA DIVERSION   Analysis of Existing Pipes

Link	Long	Diam	Invert Up/Dn	Slope	San Inf	Sto Mis	Vel d/D	Design MGD	% Cap Q Full	Remove
44	648	8	596.92	0.0037	0.0	0.0	0.00	0.00	0.00	
			594.53		0.0	0.0	0.00		0.47	

LINE T AT DEVONSHIRE & GILBERT

*** BUENAVISTA DIVERSION   Analysis of Existing Pipes

Link	Long	Diam	Invert Up/Dn	Slope	San Inf	Sto Mis	Vel d/D	Design MGD	% Cap Q Full	Remove	Par Rep
45	311	8	598.79	0.0042	0.0	0.0	0.00	0.00	0.00		
			597.49		0.0	0.0	0.00		0.50		
46	337	8	597.49	0.0034	0.0	0.0	0.00	0.00	0.00		
			596.35		0.0	0.0	0.00		0.45		
47	330	8	596.35	0.0055	0.0	0.0	1.06	0.02	3.38		
			594.53		0.0	0.0	0.15		0.58		
48	680	8	594.53	0.0063	0.0	0.0	1.35	0.04	6.70		
			590.22		0.0	0.0	0.21		0.62		

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Lateral length=  1658    Upstream length=  2306
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*** FLORIDA SOUTH LATERAL   Analysis of Existing Pipes

Link	Long	Diam	Invert Up/Dn	Slope	San Inf	Sto Mis	Vel d/D	Design MGD	% Cap Q Full	Remove	Par Rep
49	247	6	594.94	0.0100	0.0	0.0	0.80	0.00	0.94		
			592.48		0.0	0.0	0.09		0.36		
50	334	6	592.51	0.0022	0.0	0.0	0.66	0.01	6.98		
			591.78		0.0	0.0	0.21		0.17		
51	329	8	591.76	0.0047	0.0	0.0	1.01	0.02	3.98		
			590.22		0.0	0.0	0.17		0.53		
52	328	8	590.02	0.0088	0.1	0.0	1.77	0.07	9.87		
			587.13		0.0	0.0	0.25		0.73		
53	6	8	587.04	-0.0050	0.1	0.0	0.00	0.08	999.99	0.00	0
			587.07		0.0	0.0	0.00		0.00		0
54	324	8	587.01	0.0038	0.1	0.0	1.31	0.08	16.95		
			585.79		0.0	0.0	0.31		0.48		
55	315	8	585.79	0.0040	0.1	0.0	1.38	0.09	18.27		
			584.53		0.0	0.0	0.33		0.49		
56	70	8	584.53	0.0040	0.1	0.0	1.42	0.10	20.09		
			584.25		0.0	0.0	0.34		0.49		

```
Lateral length=  1952    Upstream length=  4258
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LINE T AT DEVONSHIRE & GILBERT

*** FLORIDA NORTH LATERAL   Analysis of Existing Pipes

Link	Long	Diam	Invert Up/Dn	Slope	San Inf	Sto Mis	Vel d/D	Design MGD	% Cap Q Full	Remove	Par Rep
57	12	8	605.76	0.0701	0.1	0.0	4.47	0.13	6.54		
			604.94		0.0	0.0	0.21		2.05		
58	296	8	604.70	0.0071	0.1	0.0	1.90	0.13	20.57		
			602.60		0.0	0.0	0.35		0.65		
59	339	8	602.60	0.0102	0.1	0.0	2.16	0.13	17.19		
			599.16		0.0	0.0	0.32		0.78		
60	318	8	599.16	0.0146	0.1	0.0	2.47	0.13	14.32		
			594.51		0.0	0.0	0.29		0.94		
61	333	8	594.51	0.0046	0.2	0.0	1.87	0.21	39.55		⌒
			592.98		0.0	0.0	0.50		0.52		
62	335	8	592.98	0.0046	0.2	0.0	1.87	0.21	39.52		
			591.44		0.0	0.0	0.50		0.53		
63	322	8	591.44	0.0062	0.2	0.0	2.07	0.21	34.16		
			589.46		0.0	0.0	0.46		0.61		
64	335	8	589.46	0.0071	0.2	0.0	2.17	0.21	31.89		
			587.10		0.0	0.0	0.44		0.65		
65	326	10	587.10	0.0034	0.2	0.0	1.64	0.21	25.29		
			585.99		0.0	0.0	0.39		0.82		
66	311	10	585.99	0.0027	0.2	0.0	1.52	0.21	28.18		
			585.14		0.0	0.0	0.41		0.73		
67	100	10	585.14	0.0089	0.2	0.0	2.28	0.21	15.61		
			584.25		0.0	0.0	0.30		1.33		
68	300	10	584.25	0.0053	0.3	0.0	2.14	0.31	29.94		
			582.67		0.0	0.0	0.43		1.02		
69	335	10	582.67	0.0047	0.3	0.0	2.07	0.31	31.88		
			581.08		0.0	0.0	0.44		0.97		
70	340	10	587.70	0.0241	0.3	0.0	3.69	0.32	14.50		⌒
			579.50		0.0	0.0	0.29		2.18		

Lateral length=   4002   Upstream length=   8260

LINE T AT DEVONSHIRE & GILBERT

*** MAYBERRY LATERAL   Analysis of Existing Pipes

Link	Long	Diam	Invert Up/Dn	Slope	San Inf	Sto Mis	Vel d/D	Design MGD	% Cap Q Full	Remove	Par Rep
71	330	8	610.11	0.0025	0.1	0.0	1.20	0.10	24.63		
			609.28		0.0	0.0	0.38		0.39		
72	165	8	609.22	0.0016	0.2	0.0	1.26	0.19	62.16		
			608.96		0.0	0.0	0.64		0.31		
73	165	8	608.99	0.0030	0.2	0.0	1.60	0.21	48.66		
			608.50		0.0	0.0	0.56		0.42		
74	330	8	608.42	0.0091	0.2	0.0	2.44	0.22	30.21		
			605.41		0.0	0.0	0.43		0.74		
75	330	8	605.31	0.0222	0.2	0.0	3.30	0.22	19.38		
			598.00		0.0	0.0	0.34		1.15		
76	332	8	597.97	0.0037	0.3	0.0	1.97	0.31	66.05		
			596.73		0.0	0.0	0.67		0.47		
77	328	8	596.67	0.0029	0.3	0.0	1.83	0.33	77.77		
			595.71		0.0	0.0	0.75		0.42		
78	328	8	595.73	0.0087	0.3	0.0	2.70	0.33	46.45		
			592.89		0.0	0.0	0.54		0.72		
79	331	8	592.87	0.0172	0.3	0.0	3.43	0.33	32.89		
			587.16		0.0	0.0	0.45		1.02		
80	330	8	587.23	-0.0004	0.3	0.0	0.00	0.33	999.99	0.00	0
			587.37		0.0	0.0	0.00		0.00		0
81	332	8	587.36	0.0002	0.3	0.0	0.48	0.35	334.05	0.24	18
			587.30		0.0	0.0	0.90		0.10		18
82	332	8	587.30	0.0117	0.3	0.0	3.03	0.35	41.55		
			583.43		0.0	0.0	0.51		0.84		
83	334	12	583.41	-0.0010	0.4	0.0	0.00	0.36	999.99	0.00	0
			583.73		0.0	0.0	0.00		0.00		0
84	324	12	583.70	0.0074	0.4	0.0	2.45	0.36	18.16		
			581.31		0.0	0.0	0.32		1.96		

          Lateral length=   4291   Upstream length=   4294

C:\HYDRA\HEMET\LINE-T.CMD   9:25 22-May-90

LINE T AT DEVONSHIRE & GILBERT

*** GILBERT TRUNK   Analysis of Existing Pipes

Link	Long	Diam	Invert Up/Dn	Slope	San Inf	Sto Mis	Vel d/D	Design MGD	% Cap Q Full	Remove	Par Rep
85	330	12	581.26	0.0501	0.4	0.0	5.03	0.36	6.96		
			564.73		0.0	0.0	0.21		5.11		
86	334	12	564.73	-0.0040	0.4	0.0	0.00	0.37	999.99	0.00	0
			566.05		0.0	0.0	0.00		0.00	◦	0
87	15	12	580.38	0.0007	0.5	0.0	1.19	0.53	89.98		
			580.37		0.0	0.0	0.82		0.59		
88	324	12	580.37	0.0025	0.5	0.0	1.90	0.53	45.90		
			579.55		0.0	0.0	0.54		1.15		
89	336	12	579.49	0.0015	0.5	0.0	1.57	0.53	60.38		
			579.00		0.0	0.0	0.63		0.87		
90	322	12	578.79	0.0019	0.7	0.0	1.86	0.67	67.84		
			578.18		0.0	0.0	0.68		0.99		
91	325	12	578.14	0.0018	0.7	0.0	1.81	0.67	70.42		
			577.57		0.0	0.0	0.70		0.96		
92	388	12	577.61	0.0022	0.7	0.0	2.01	0.74	70.10		
			576.77		0.0	0.0	0.70		1.06		
93	261	12	576.63	-0.0110	0.7	0.0	0.00	0.74	999.99	0.00	0
			579.50		0.0	0.0	0.00		0.00		0
94	51	12	579.50	0.0709	1.1	0.0	7.50	1.06	17.42		
			575.87		0.0	0.0	0.32		6.08		
95	171	12	575.90	0.0012	1.1	0.0	1.62	1.06	135.45	0.28	10
			575.70		0.0	0.0	0.90		0.78		18
96	270	14	575.70	0.0026	1.1	0.0	2.34	1.06	59.93		
			574.99		0.0	0.0	0.63		1.77		
97	173	14	575.08	0.0036	1.1	0.0	2.60	1.06	51.21		
			574.46		0.0	0.0	0.57		2.07		
98	331	14	574.46	0.0020	1.1	0.0	2.16	1.12	72.98		
			573.80		0.0	0.0	0.72		1.54		
99	339	14	573.80	-0.0016	1.1	0.0	0.00	1.12	999.99	0.00	0
			574.35		0.0	0.0	0.00		0.00		0

LINE T AT DEVONSHIRE & GILBERT

*** GILBERT TRUNK   **Analysis of Existing Pipes**

Link	Long	Diam	Invert Up/Dn	Slope	San Inf	Sto Mis	Vel d/D	Design MGD	% Cap Q Full	Remove	Par Rep
100	19	15	573.35	0.0691	1.5	0.0	8.07	1.49	13.69		
			572.03		0.0	0.0	0.28		10.89		

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        Lateral length=   3989      Upstream length=   25318
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```
382: PIP 330.0 619.86  617.26 610.11 609.28 -8!T-230 TO 231
383:
384: REC GHOST2
385:
386: PIP 164.91 617.26 615.63 609.22 608.96 -8!T-231 TO 232
387:
388: SAN 3.0  32.6
389:
390: PIP 164.96 615.63 613.82 608.99 608.50 -8!T-232 TO 235
391:
392: SAN 1.8  32.6
393:
394: SAN 4.9  13.4
395:
396: PIP 329.88 613.82 610.46 608.42 605.41 -8!T-235 TO 236
397:
398: PIP 329.66 610.46 607.29  605.31 598.00 -8!T-236 TO 237
399:
400: REC GHOST3
401:
402: PIP 332.09 607.29 604.03 597.97 596.73 -8!T-237 TO 239
403:
404: SAN 6.7 13.4
405: PIP 328.34 604.03 600.66 596.67 595.71 -8!T-239 TO 242
406: SAN 4.8  13.4
407:
408: PIP 327.91 600.66 597.96 595.73 592.89 -8! T-242 TO 244
409:
410: PIP 331.32  597.96  595.28  592.87  587.16  -8! T-244 TO 247
411:
412: PIP 330.24  595.28  595.26  587.23  587.37  -8!T-247 TO 248
413: SAN 7.1  13.4
414:
415: PIP 331.64  595.26  593.74  587.36  587.30  -8!T-248 TO 251
416: PIP 331.6  593.74  588.69  587.30  583.43  -8!T-251 TO 252
417:
418: SAN 4.5  13.4
419:
420: PIP 334.2  588.69 588.38  583.41  583.73  -12!252 TO 254
421: PIP 324.2  588.38  584.41  583.7 581.31 -12!254 TO 256
422:
423: REM END MAYBERRY - BEGIN GILBERT
424: HOL MAYBERRY
425:
426:
427: NEW GILBERT TRUNK
428:
429: REC MAYBERRY
430: PIP 330.0  584.41 572.64  581.26 564.73  -12!256 TO 257
431:
432:
433: SAN 4.0 13.4  3.6
434:
```

```
435: SAN 4.0  13.4
436:
437: PIP 334.0  572.8  584.99 564.73 566.05 -12:257 TO 188
438: SAN 3.4  13.4
439:
440: REC CENTRAL
441: PIP 15.2  585.1  584.99  580.38  580.37 -12:188 TO 187
442: PIP 324.4  584.99  584.99  580.37  579.55 -12:187 TO 186
443: PIP 336.0  584.99  584.23  579.49  579.0  -12:186 TO 184
444:
445: REC ACACIA
446: PIP 322.2  584.23  585.06  578.79  578.18 -12:184 TO 185
447:
448: PIP 324.9 585.06 586.06 578.14 577.57 -12:185 TO 125
449:
450:
451: SAN 4.3  32.6  9.4
452:
453: SAN 4.4  14  7.4
454:
455: SAN 4.6  32.6 5.6
456:
457: SAN 6.3  24.3
458:
 59: PIP 388.3  586.06  587.69  577.61  576.77 -12:125 TO 124
460:
461: PIP 261  587.69  587.7  576.63  579.50 -12:124 TO 118
462: REC FLORIDA_NORTH
463: PIP 51.2 587.7 586.82 579.50 575.87 -12:118 TO 117
464:
465: PIP 170.50 586.82 585.92 575.90 575.70 -12:117 TO 116
466:
467:
468: PIP 270.10  585.92  584.22  575.70  574.99 -14:116 TO 26
469:
470: PIP 172.6  584.22  582.89  575.08  574.46  -14:26 TO 12
471:
472: REM ADD LATHAM LATERAL GHOST SYSTEM,USE DIURNAL CURVE FOR M.H.4
473:
474: DIU 7.16  4.99  3.59  2.14  2.69  9.89  11.55  14.98 +
475:         18.94  19.98  21.62  22.69  19.99  19.48  18.82  19.27+
476:         20.22  18.15  19.04  16.87  13.98  13.13  10.62  8.43
477:
478: SAN 4.2  14  13.1
479:
480: SAN 3.5  14  11.1
481:
482: SAN 6.0  14  9.2
483:
484: SAN 2.0  14  5.6
 85:
486: SAN 1.8  32.6  5.6
487:
```

```
488: SAN 4.2  32.6  3.7  ! M.H.4
489:
490: SAN 1.0 32.6  1.8
491:
492: SAN 5.0  14
493:
494: PIP 330.7  582.89  581.23  574.46  573.80  -14!T-12 TO T-11
495:
496: PIP 339  581.23  581.67  573.80  574.35  -14!T-11 TO T-1
497: REC DEVONSHIRE
498:
499: PIP 19.1  581.67  579.43  573.35  572.03  -15  ! T-1  TO T
500:
501: END
```

===

------ S U M M A R Y   O F   A N A L Y S I S ------

Run number on command file :	1	
Number of links :	100	
Number of hydrographs :	245	
Total sanitary population :	10990	
Total sanitary area :	573.40	Acres
Total storm area :	0.00	Acres
Number of pumps :	0	
Number of reservoirs :	0	
Number of diversion structures :	3	
Number of inlets :	0	
Length of new pipe :	0.00	Feet
Length of existing pipe :	25988.08	Feet
Length of channel :	0.00	Feet
Length of gutter :	0.00	Feet
Length of transport units :	0.00	Feet
Length of pressure pipe :	0.00	Feet

C:\HYDRA\HEMET\LINE-T20.CMD   17:04 22-May

Status of DEFAULTS at start of run. (* May be reset by SET)

```
|   Command file : C:\HYDRA\HEMET\LINE-T20.CMD
|   Input units are read as                 : USA
|*  Output sent to display                  : Brief
|*  Output sent to printer                  : Brief
|*  Output sent to file                     : Off
|   Paper width in inches                   : 8.000
|   String to reset printer                 : 27 38 108 54 68 27 40 115 49 48 72
|   String to set printer to compressed     : 17.16 27 38 107 48 56 72
|   String to set printer to 8 lines/inch   : 8 27 38 108 56 68
|   Name of printer                         : Hewlett-Packard, LaserJet/LaserJet F
|   Print heading at top of page            : True
|
|   Number of steps in hydrograph           : 96
|   Step length in minutes                  : 15
|   Significant flow in hydrograph          : 0.010
|*  Maximum plot value                      : Selected by HYDRA
|   Type of hydrographic plot               : Compact
|
|   Sanitary flow by                        : Diurnal Curve
|   Delay to start of actual storm          : 0.00
|   Rational Method computations            : Off
|   SCS computations                        : Santa Barbara
|   Continuous simulation computations      : On
|
|*  Maximum d/D for pipe design/analysis    : 0.900
|*  Match point position on pipe            : 0.00 or Invert
|*  Number of allowable diam drops          : 999
|*  Minimum drop thru manhole               : 0.000
|   Routing technique                       : Quick
|
|*  Calculate sanitary flows                : True
|*  Calculate infiltration flows            : True
|*  Calculate storm flows                   : True
|*  Calculate misc flows                    : True
|
+----------------------------------------------------------------
```

```
 1: JOB LINE T AT DEVONSHIRE & GILBERT
 2:
 3: REM --- PIPE AND PIPE COST DATA ---
 4: PDA .013 8 8 7.5 3 .004
 5: CST 1.5 1 3 / .2 .5 .5 2.87 / .5 0 1.63 +
 6:            1.15 / .89 1.1 1.43 4.78
 7: EXC 0/.45   18/.45 30/1.12
 8: TSL 0/0 6/0 6.001/.5 30/.5
 9: PCO 8/2.78   10/4.10   18/9.16   36/18.23
10:
11: REM --- SANITARY CRITERIA ---
12: GPC 100
13:
```

```
14: REM THIS MODEL RUN IS FOR 2010 CONDITIONS
15: REM THE FOLLOWING ARE GHOST SYSTEMS UPSTREAM OF MAYBERRY
16: REM USE MH 5 DIURNAL CURVE
17: DIU 53.67 46.85 44.76 48.62 65.47 108.26 159.47 172.14 +
18:         167.55 166.67 156.81 134.83 138.13 141.07 118.64 131.29 +

19:         139.26 156.17 155.95 143.65 127.75 104.19 87.91 67.28

20:
21: NEW GHOST1  ! MAYBERRY & SANTA FE
22: SAN 8.3   15.4   2.5
23: SAN 6.6   33.0  4.4
24: SAN 3.1   15.4   1.7
25: SAN 11.6  31.1   6.1
26: PIP 1.0   100   100   150   150   -8  ! DUMMY PIPE
27: HOL GHOST1
28:
29: NEW GHOST2  ! MAYBERRY & TAYLOR
30: SAN 7.9   15.4
31: SAN 14.9  37.4   13.3
32: SAN 6.0   15.4  9.4
33: PIP 1.0   100   100   150   150   -8  ! DUMMNY PIPE
34:
35: HOL GHOST2
36:
37: NEW GHOST3   ! MAYBERRY & BUENA VISTA
38: SAN 16.4  15.4   15.8
39: SAN 5.1   15.4  17.5
40: SAN 7.2   15.4   13.3
41: SAN 8.2   15.4   9.2
42: SAN 4.4   15.4   3.1
43: SAN 2.9   15.4   4.7
44: SAN 5.4   15.4   7.5
45: SAN 6.4   7.5   ! CHURCH - ASSUME EQ TO 40 PEOPLE
46: PIP 1.0   100   100   150   150   -8   !  DUMMY PIPE
47: HOL GHOST3
48:
49: NEW GHOST4   ! DEVONSHIRE NEAR HEMET JR HIGH
50: SAN 3.4   37.4   0.0
51: SAN 1.9   37.4   4.6
52: SAN 4.0   37.4   6.4
53: SAN 30.4  16.28  8.3  ! HEMET JR HIGH PER M&E <---
54: SAN 10.1  28.1   11.4
55: PIP 1.0   100   100   150   150   -8  ! DUMMY PIPE
56: HOL GHOST4
57:
58: NEW GHOST5
59: SAN 3.3   14   13.1  ! ALL COMMERCIAL - 100% DEVELOPED
60: SAN 2.7   14   10
61:
62: SAN 13.2  14   16.6
63:
```

```
 64: SAN 5.4   14   3.5
 65:
 66: PIP 1.0   100   100   150   150   -8   !   DUMMNY PIP
 67: HOL GHOST5
 68:
 69: REM BEGIN ANALYSIS  * * * * * * * *
 70:
 71: NEW CALHOUN PLACE
 72:
 73: REM THE FOLLOWING IS ACTUAL DIURNAL CURVE OF M.H. 1
 74:
 75: DIU 21.76   17.93   16.57   17.52   21.63   29.33   36.80   37.28 +
 76:
 77:          56.26   71.05   55.59   43.79   43.08   70.31   67.55   44.92 +

 78:
 79:          36.08   34.03   49.95   63.80   43.19   33.58   30.93   25.53

 80:
 81: SAN 8.2   107.8   8.6   ! P.E. OF 734 BEDS -- SEE CALC'S
 82: SAN 5.5 14 3.6   ! COMM - 100% DEVELOPED
 83:
 84: SAN 3.4   14   ! ZONED R-P
 85: PIP 328.15   603.28   600.50   598.40   596.54   -8   ! T-66 TO t-67
 86: PIP 342.17   600.50   599.25   596.54   591.35   -8   ! T-67 TO T-22
 87:
 88: HOL CALHOUN DRIVE
 89:
 90: NEW BUENA VISTA LATERAL
 91: SAN 2.4   14   1.7
 92:
 93: SAN 5.9   37.4
 94: REC GHOST5
 95: PIP 312.7   599.25   598.9   591.35   590.46   -8   !   T-22 TO T-21
 96: HOL BUENA VISTA
 97:
 98: NEW DEVONSHIRE LATERAL
 99: SAN 1.8   14   8.3
100: REC GHOST4
101: PIP 325.44   601.75   599.49   595.17   591.32   -10   ! T-34 TO T-31
102:
103: SAN 2.6   37.4
104:
105: PIP 167.67   599.49   597.87   591.32   590.46   -10   ! T-31 TO T-21
106:
107: SAN 1.6   37.4
108: REC BUENA VISTA
109: PIP 324.4   597.87   596.34   590.46   589.77   -10   ! T-21 TO T-20
110:
111: SAN 6.1   11.6
112: PIP 338.45   596.34   593.56   589.77   587.75   -10   ! T-20 TO T-19
113:
```

```
114: SAN 5.2  14
115: PIP 321.0  593.56  591.06  587.75  584.89  -10  ! T-19 TO T-17
116:
117: SAN 2.0  14
118:
119: PIP 329.84  591.06  588.09  584.89  581.36  -10  ! T-17 TO T-6
120:
121: SAN 1.7  11.2
122:
123: PIP 53  588.09  588.70  581.36  581.70  -10  ! T-6 TO T-5
124:
125: PIP 325  588.70  588.33  581.70  581.33  -10  ! T-5 TO T-4
126:
127: SAN 4.6  26
128:
129: PIP 334  588.33  586.14  581.33 579.04  -10  ! T-4 TO T-3
130:
131: SAN 4.6  22.8
132:
133: PIP 333  586.14  584.0  579.04  576.70  -10  ! T-3 TO T-2
134:
135: SAN 9.2  35.7
136:
 37: PIP 330  584.0  581.67  576.7  574.35  -10  ! T-2 TO T-1
138:
139: HOL DEVONSHIRE
140:
141: NEW CENTRAL LATERAL
142:
143: REM USE M.H.5 DIUNRAL CURVE (R-1)
144:
145: DIU 53.67  46.85 44.76  48.62  65.47  108.26  159.47  172.14 +
146:
147:        167.55 166.67 156.81 134.83 138.13 141.07 118.64 131.29+
148:
149:        139.26  156.17  155.95  143.65  127.75  104.19  87.91  67.28

150: SAN 3.0  37.4  6.7
151:
152: SAN 11.7  29.3
153:
154: DIV OVERFLOW 0 0.67 0/0 0.52/0 1.52/1
155:
156: PIP 331 608.79 605.58 601.29 599.85  -8  ! T-211 TO T-210
157: SAN 3.4  15.4  3.65
158:
159: SAN 2.8  15.4  2.74
160:
161: SAN 2.7  15.4  0.93
 62:
163: SAN 1.9  15.4
164:
```

```
165:  PIP 162 600.8 599.17 594.52 594.20 -8!T-210,207,204,202,201
166:
167:  SAN 1.9  15.4  3.2
168:
169:  SAN 4.4  37.4  1.83
170:
171:  SAN 2.4  14  1.83
172:
173:  PIP 169.2 599.17  598.47  594.2 593.34  -8  ! T-201 TO 198
174:
175:  PIP 332.7  598.47  595.19  593.32 589.26 -8!T-198,197,194
176:
177:  PIP 326.9  595.19  592.15 589.24 586.22 -8!T-194 TO 191
178:
179:  SAN 3.4  15.4
180:
181:  PIP 326.7  592.15  589.11 586.28  583.21 -8!191 TO 189
182:
183:  SAN 6.3  37.4
184:
185:  PIP 329  589.11 585.1 583.23 580.32 -10!189 TO 188
186:
187:  HOL CENTRAL
188:
189:  NEW MAYBERRY DIVERSION
190:
191:
192:  REC OVERFLOW
193:
194:  PIP 311.48 608.79 607.30 601.29 600.31 -8!T-211 TO 212
195:  PIP 361.75 607.3 605.35  600.31 598.79 -8!T-212 TO 168
196:
197:  HOL MAYBERRY_DIV
198:
199:  NEW ACACIA LATERAL
200:
201:  REM SAME DIURNAL CURVE M.H.5
202:
203:  SAN 3.7  30.9  5.56
204:
205:  SAN 1.7  33.5  5.56
206:
207:  SAN 1.7  33.5  3.72
208:
209:  SAN 1.7  33.5  3.72
210:
211:  SAN 1.7  33.5  1.78
212:
213:  SAN 1.7  29.1  1.78
214:
215:  SAN 3.4  15.4
216:
```

```
217: REC MAYBERRY_DIV
218:
219:
220: DIV BUENAVISTA 0 0.67 0/0 0.59/0 1.59/1
221:
222:
223: PIP 330 605.35 603.23 598.79 596.92 -8!T-168 TO 170
224:
225: SAN 4.6  15.4
226:
227: DIV JUANITA 0 0.67 0/0 0.49/0 1.49/1
228:
229:
230: PIP 334   603.23   600.45   596.92   595.56   -8  ! T-170   TO 200
231:
232: SAN 4.8   15.4
233:
234: PIP 330   600.45   598.26   595.56   593.35   -8  !   T-200 TO 172
235:
236: SAN 4.3   15.4
237:
238: PIP 340   598.26   594.95   593.35   590.97   -8  ! T-172 TO 174
 39: 
 40: PIP 329   594.95 592.75   590.97   588.45   -8  ! T-174 TO 176
241: SAN 4.6 37.4
242: PIP 329 592.75 590.37 588.45 585.25 -8! 176 TO 179
243:
244: SAN 9.2   37.4
245:
246: PIP 349   590.37   586.83   585.25   581.46   -8  ! T-179   TO 181
247:
248: PIP 279 586.83 584.35   581.46   578.86   -8  ! T-181 TO 183
249:
250: PIP 7.8   584.35   584.23   578.86   578.85   -8  ! T-183 TO 184
251: HOL ACACIA
252:
253: NEW JUANITA DIVERSION
254:
255: REC JUANITA
256:
257: PIP 648   603.23   600.43   596.92   594.53   -8  ! T-170 TO T-993
258: HOL JUANITA_DIV
259:
260:
261: NEW BUENAVISTA DIVERSION
262:
263: REC BUENAVISTA
264:
 55: PIP 310.55   605.35 604.09   598.79   597.49   -8  ! T-168 TO 991
 56: PIP 337.33   604.09   601.72 597.49   596.35 -8  ! T-991 TO 992
267: SAN 4.1   37.4
268:
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```
269: PIP 330   601.72   600.43   596.35   594.53   -8  ! T-992 TO 993
270:
271: SAN 4.6   37.4
272:
273: REC JUANITA_DIV
274:
275: PIP 680 600.43 595.52 594.53 590.22 -8!T-993,994 TO T-94<---
276: HOL BUENAVIS_DIV
277:
278: NEW FLORIDA SOUTH LATERAL
279:
280: SAN 2.0   13.3
281:
282: PIP 247   601.98   598.88   594.94 592.48   -6! T-501 TO T-82
283:
284: SAN 4.1 14
285:
286: PIP 334.2  598.88   597.56   592.51   591.78   -6  ! T-82 TO T-89
287:
288:
289: SAN 4.6 14
290:
291: PIP 328.5  597.56   595.52   591.76   590.22   -8  ! T-89 TO T-94
292:
293:
294: SAN 4.6   14
295:
296: REC BUENAVIS_DIV
297:
298: PIP 327.5  595.52   594.13   590.02   587.13   -8  ! T-94 TO T-100
299:
300: SAN 4.3   14
301:
302: PIP 6.0   594.13   594.10   587.04 587.07   -8  ! T-100 TO T-103
303: PIP 324   594.10 592.72   587.01   585.79   -8  ! T-103 TO T-101
304:
305: SAN 4.4   14
306:
307: PIP 315 592.72 591.5 585.79 584.53 -8!T-101 TO 107*(ASSUMED)<---
308:
309:
310: SAN 4.4   14
311:
312: PIP 70 591.5 591.2 584.53 584.25 -8!T-107 TO 106*(ASSUMED)<---
313: HOL FLORIDA_SOUTH
314:
315: NEW FLORIDA NORTH LATERAL
316:
317: REM CONTINUE R-1 DIURNAL CURVE (M.H.5)
318:
319: SAN 5.8   15.4   12.1
320:
```

```
321: SAN 5.3  15.4  17.7
322:
323: SAN 5.2 15.4 10.0
324:
325: SAN 7.1 15.4  8.3
326:
327: SAN 24.0  15   6.1  ! ACACIA ELEM. SCH. PER M&E <----
328:
329: SAN 7.7 14  1.8
330:
331: SAN 5.2  14   3.6
332:
333: SAN 4.8  14
334:
335: PIP 11.7  611.16  610.94  605.76  604.94 -8  ! T-87 TO 77
336:
337: PIP 296.30  610.94  608.8  604.7  602.6  -8  !  T-77 TO 78
338:
339: PIP 338.7  608.8  605.9 602.6  599.16  -8  ! T-78 TO 79
340:
341: PIP 317.8  605.9  603.0  599.16  594.51  -8  ! T-79 TO 80
342:
343: SAN 4.4   24.6 3.9
 44:
345: SAN 4.8   23.4  1.9
346:
347: SAN 2.0   13.3
348:
349: SAN 2.0   14
350:
351: SAN 2.0   37.4  6.7
352:
353: SAN 13.0 15   5.8  !  HEMET EL. SCH. PER M&E <----
354:
355: PIP 333.3  603.0  600.8  594.51  592.98  -8  ! T-80 TO 81
356:
357: PIP 335.1  600.8  598.0  592.98  591.44  -8  ! T-81 TO 90
358:
359: PIP 321.9 598.0  595.9  591.44  589.46  -8  ! T-90 TO 93
360:
361: PIP 334.7  595.9  594.5  589.46  587.10  -8  ! T-93 TO 99
362:
363: PIP 326  594.5  593.0  587.10  585.99  -10  ! T-99 TO 102
364:
365: PIP 311  593.0  592.0  585.99  585.14  -10  ! T-102  TO 104
366:
367: PIP 100 592.0 591.2 585.14 584.25 -10!T-104 TO 106*<---
368:
369: REC FLORIDA_SOUTH
 70:
371: PIP 300 591.2 589.85 584.25 582.67 -10!T-106* TO 112<---
372:
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373: SAN 4.6  5.8
374:
375: PIP 335.0  589.85  588.66 582.67 581.08  -10!T-112 TO 115
376:
377: SAN 6.3 10.4
378:
379: PIP 340.0  588.66  587.7 587.7 579.5 -10!T-115 TO 118
380:
381: HOL FLORIDA_NORTH
382:
383:
384: NEW MAYBERRY LATERAL
385:
386: REM BEGIN AT MAYBERRY & SANTA FE W/GHOST SYSTEMS
387:
388: REC GHOST1
389: PIP 330.0 619.86  617.26 610.11 609.28 -8!T-230 TO 231
390:
391: REC GHOST2
392:
393: PIP 164.91 617.26 615.63 609.22 608.96 -8!T-231 TO 232
394:
395: SAN 3.0  37.4
396:
397: PIP 164.96 615.63 613.82 608.99 608.50 -8!T-232 TO 235
398:
399: SAN 1.8  37.4
400:
401: SAN 4.9  15.4
402:
403: PIP 329.88 613.82 610.46 608.42 605.41 -8!T-235 TO 236
404:
405: PIP 329.66 610.46 607.29  605.31 598.00 -8!T-236 TO 237
406:
407: REC GHOST3
408:
409: PIP 332.09 607.29 604.03 597.97 596.73 -8!T-237 TO 239
410:
411: SAN 6.7 15.4
412: PIP 328.34 604.03 600.66 596.67 595.71 -8!T-239 TO 242
413: SAN 4.8  15.4
414:
415: PIP 327.91 600.66 597.96 595.73 592.89 -8! T-242 TO 244
416:
417: PIP 331.32  597.96  595.28  592.87  587.16  -8! T-244 TO 247
418:
419: PIP 330.24  595.28  595.26  587.23  587.37  -8!T-247 TO 248
420: SAN 7.1  15.4
421:
422: PIP 331.64  595.26  593.74  587.36  587.30  -8!T-248 TO 251
423: PIP 331.6  593.74  588.69  587.30  583.43  -8!T-251 TO 252
424:
```

425: SAN 4.5 15.4
426:
427: PIP 334.2 588.69 588.38 583.41 583.73 -121252 TO 254
428: PIP 324.2 588.38 584.41 583.7 581.31 -121254 TO 256
429:
430:
431: REM END MAYBERRY - BEGIN GILBERT
432:
433: HOL MAYBERRY
434:
435:
436: NEW GILBERT TRUNK
437:
438:
439: REC MAYBERRY
440: PIP 330.0 584.41 572.64 581.26 564.73 -121256 TO 257
441: SAN 4.0 15.4 3.6
442:
443: SAN 4.0 15.4
444:
445: PIP 334.0 572.8 584.99 564.73 566.05 -121257 TO 188
446: SAN 3.4 15.4
447:
 48: REC CENTRAL
449: PIP 15.2 585.1 584.99 580.38 580.37 -121188 TO 187
450: PIP 324.4 584.99 584.99 580.37 579.55 -121187 TO 186
451: PIP 336.0 584.99 584.23 579.49 579.0 -121186 TO 184
452:
453: REC ACACIA
454: PIP 322.2 584.23 585.06 578.79 578.18 -121184 TO 185
455:
456: PIP 324.9 585.06 586.06 578.14 577.57 -121185 TO 125
457:
458:
459: SAN 4.3 37.4 9.4
460:
461: SAN 4.4 14 7.4
462:
463: SAN 4.6 37.4 5.6
464:
465: SAN 6.3 27.9
466:
467: PIP 388.3 586.06 587.69 577.61 576.77 -121125 TO 124
468:
469: PIP 261 587.69 587.7 576.63 579.50 -121124 TO 118
470: REC FLORIDA_NORTH
471: PIP 51.2 587.7 586.82 579.50 575.87 -121118 TO 117
472:
473: PIP 170.50 586.82 585.92 575.90 575.70 -121117 TO 116
 74:
475:
476: PIP 270.10 585.92 584.22 575.70 574.99 -141116 TO 26
477:

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478: PIP 172.6 584.22 582.89 575.08 574.46 -14I26 TO 12
479:
480: REM ADD LATHAM LATERAL GHOST SYSTEM,USE DIURNAL CURVE FOR M.H.4
481:
482:
483: DIU 7.16 4.99 3.59 2.14 2.69 9.89 11.55 14.98 +
484:          18.94 19.98 21.62 22.69 19.99 19.48 18.82 19.27+

485:          20.22 18.15 19.04 16.87 13.98 13.13 10.62 8.43

486:
487: SAN 4.2 14 13.1
488:
489: SAN 3.5 14 11.1
490:
491: SAN 6.0 14 9.2
492:
493: SAN 2.0 14 5.6
494:
495: SAN 1.8 37.4 5.6
496:
497: SAN 4.2 37.4 3.7 I M.H.4
498:
499: SAN 1.0 37.4 1.8
500:
501: SAN 5.0 14
502:
503: PIP 330.7 582.89 581.23 574.46 573.80 -14IT-12 TO T-11
504:
505: PIP 339 581.23 581.67 573.80 573.35 -14IT-11 TO T-1
506: REC DEVONSHIRE
507:
508: PIP 19.1 581.67 579.43 573.35 572.03 -15 I T-1 TO T
509:
510: END

------ S U M M A R Y   O F   A N A L Y S I S ------

```
                    Run number on command file :       1
                             Number of links :     100
                        Number of hydrographs :     245
                     Total sanitary population :   12540
                          Total sanitary area :    573.40 Acres
                            Total storm area :      0.00 Acres
                              Number of pumps :     0
                         Number of reservoirs :     0
           Number of diversion structures :     3
                            Number of inlets :     0
                          Length of new pipe :      0.00 Feet
                     Length of existing pipe : 25988.08 Feet
                           Length of channel :      0.00 Feet
                            Length of gutter :      0.00 Feet
                  Length of transport units :      0.00 Feet
                   Length of pressure pipe :      0.00 Feet
```

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LINE T AT DEVONSHIRE & GILBERT

*** GHOST1   Analysis of Existing Pipes

Link	Long	Diam	Invert Up/Dn	Slope	San Inf	Sto Mis	Vel d/D	Design MGD	% Cap Q Full	Remove	Par Rep
1	1	8	150.00	0.0000	0.1	0.0	0.00	0.11	999.99	0.00	0
			150.00		0.0	0.0	0.00		0.00		0

Lateral length=   1   Upstream length=   1

*** GHOST2   Analysis of Existing Pipes

Link	Long	Diam	Invert Up/Dn	Slope	San Inf	Sto Mis	Vel d/D	Design MGD	% Cap Q Full	Remove	Par Rep
2	1	8	150.00	0.0000	0.1	0.0	0.00	0.11	999.99	0.00	0
			150.00		0.0	0.0	0.00		0.00		0

Lateral length=   1   Upstream length=   1

*** GHOST3   Analysis of Existing Pipes

Link	Long	Diam	Invert Up/Dn	Slope	San Inf	Sto Mis	Vel d/D	Design MGD	% Cap Q Full	Remove	Par Rep
3	1	8	150.00	0.0000	0.1	0.0	0.00	0.12	999.99	0.00	0
			150.00		0.0	0.0	0.00		0.00		0

Lateral length=   1   Upstream length=   1

*** GHOST4   Analysis of Existing Pipes

Link	Long	Diam	Invert Up/Dn	Slope	San Inf	Sto Mis	Vel d/D	Design MGD	% Cap Q Full	Remove	Par Rep
4	1	8	150.00	0.0000	0.2	0.0	0.00	0.16	999.99	0.00	0
			150.00		0.0	0.0	0.00		0.00		0

Lateral length=   1   Upstream length=   1

*** GHOST5   Analysis of Existing Pip

Link	Long	Diam	Invert Up/Dn	Slope	San Inf	Sto Mis	Vel d/D	Design MGD	% Cap Q Full	Remove	Par Rep
5	1	8	150.00	0.0000	0.1	0.0	0.00	0.05	999.99	0.00	0

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LINE T AT DEVONSHIRE & GILBERT

Lateral length=   1   Upstream length=   1

*** CALHOUN PLACE   Analysis of Existing Pipes

Link	Long	Diam	Invert Up/Dn	Slope	San Inf	Sto Mis	Vel d/D	Design MGD	% Cap Q Full	Remove	Par Rep
6	328	8	598.40	0.0057	0.2	0.0	1.92	0.18	30.44		
			596.54		0.0	0.0	0.43		0.58		
7	342	8	596.54	0.0152	0.2	0.0	2.70	0.18	18.61		
			591.35		0.0	0.0	0.33		0.95		

Lateral length=   670   Upstream length=   670

*** BUENA VISTA LATERAL   Analysis of Existing Pipes

Link	Long	Diam	Invert Up/Dn	Slope	San Inf	Sto Mis	Vel d/D	Design MGD	% Cap Q Full	Remove	Rep
8	313	8	591.35	0.0028	0.1	0.0	1.24	0.09	22.63		
			590.46		0.0	0.0	0.36		0.41		

Lateral length=   313   Upstream length=   314

*** DEVONSHIRE LATERAL   Analysis of Existing Pipes

Link	Long	Diam	Invert Up/Dn	Slope	San Inf	Sto Mis	Vel d/D	Design MGD	% Cap Q Full	Remove	Par Rep
9	325	10	595.17	0.0118	0.2	0.0	2.43	0.17	10.89		
			591.32		0.0	0.0	0.26		1.53		
10	168	10	591.32	0.0051	0.2	0.0	1.80	0.18	17.92		
			590.46		0.0	0.0	0.32		1.01		
11	324	10	590.46	0.0021	0.3	0.0	1.52	0.28	43.85		
			589.77		0.0	0.0	0.52		0.65		
12	338	10	589.77	0.0060	0.3	0.0	2.23	0.30	27.32		
			587.75		0.0	0.0	0.41		1.09		
13	321	10	587.75	0.0089	0.3	0.0	2.58	0.31	23.33		
			584.89		0.0	0.0	0.37		1.33		
14	330	10	584.89	0.0107	0.3	0.0	2.76	0.31	21.62		
			581.36		0.0	0.0	0.36		1.45		

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LINE T AT DEVONSHIRE & GILBERT

*** DEVONSHIRE LATERAL   Analysis of Existing Pipes

Link	Long	Diam	Invert Up/Dn	Slope	San Inf	Sto Mis	Vel d/D	Design MGD	% Cap Q Full	Remove	Par Rep
15	53	10	581.36	-0.0064	0.3	0.0	0.00	0.32	999.99	0.00	0
			581.70		0.0	0.0	0.00		0.00		0
16	325	10	581.70	0.0011	0.3	0.0	1.27	0.32	67.01		
			581.33		0.0	0.0	0.68		0.47		
17	334	10	581.33	0.0069	0.3	0.0	2.43	0.34	29.12		
			579.04		0.0	0.0	0.42		1.16		
18	333	10	579.04	0.0070	0.4	0.0	2.48	0.36	30.31		
			576.70		0.0	0.0	0.43		1.18		
19	330	10	576.70	0.0071	0.4	0.0	2.61	0.41	34.97		
			574.35		0.0	0.0	0.46		1.19		

```
             Lateral length=   3182     Upstream length=    3497
```

*** CENTRAL LATERAL   Diversion

Link	Invert Up/Dn		San	Inf	Sto	Mis	Design	Cost
21	Unknown	Discharge :	0.07	0.00	0.00	0.00	0.07	0
	Unknown	Diverted :	0.00	0.00	0.00	0.00	0.00	
		Incoming :	0.07	0.00	0.00	0.00	0.07	

*** CENTRAL LATERAL   Analysis of Existing Pipes

Link	Long	Diam	Invert Up/Dn	Slope	San Inf	Sto Mis	Vel d/D	Design MGD	% Cap Q Full	Remove	Par Rep
22	331	8	601.29	0.0044	0.1	0.0	1.31	0.07	12.97		
			599.85		0.0	0.0	0.28		0.51		
23	162	8	594.52	0.0020	0.1	0.0	1.09	0.09	26.28		
			594.20		0.0	0.0	0.40		0.34		
24	169	8	594.20	0.0051	0.1	0.0	1.66	0.12	22.38		
			593.34		0.0	0.0	0.36		0.55		
25	333	8	593.32	0.0122	0.1	0.0	2.26	0.12	14.44		
			589.26		0.0	0.0	0.29		0.86		

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================================================================================
```

LINE T AT DEVONSHIRE & GILBERT

*** CENTRAL LATERAL   Analysis of Existing Pipes

Link	Long	Diam	Invert Up/Dn	Slope	San Inf	Sto Mis	Vel d/D	Design MGD	% Cap Q Full	Remove	Par Rep
26	327	8	589.24	0.0092	0.1	0.0	2.04	0.12	16.60		
			586.22		0.0	0.0	0.31		0.74		
27	327	8	586.28	0.0094	0.1	0.0	2.08	0.13	17.47		
			583.21		0.0	0.0	0.32		0.75		
28	329	10	583.23	0.0088	0.2	0.0	2.16	0.17	12.53		
			580.32		0.0	0.0	0.28		1.32		

```
                Lateral length=   1978      Upstream length=    1978
```

*** MAYBERRY DIVERSION   Analysis of Existing Pipes

Link	Long	Diam	Invert Up/Dn	Slope	San Inf	Sto Mis	Vel d/D	Design MGD	% Cap Q Full	Remove	Rep
29	311	8	601.29	0.0031	0.0	0.0	0.00	0.00	0.00		
			600.31		0.0	0.0	0.00		0.43		
30	362	8	600.31	0.0042	0.0	0.0	0.00	0.00	0.00		
			598.79		0.0	0.0	0.00		0.50		

```
                Lateral length=    673      Upstream length=     673
```

*** ACACIA LATERAL   Diversion

Link	Invert Up/Dn		San	Inf	Sto	Mis	Design	Cost
32	598.79	Discharge :	0.06	0.00	0.00	0.00	0.06	0
	598.79	Diverted :	0.00	0.00	0.00	0.00	0.00	
		Incoming :	0.06	0.00	0.00	0.00	0.06	

*** ACACIA LATERAL   Analysis of Existing Pipes

Link	Long	Diam	Invert Up/Dn	Slope	San Inf	Sto Mis	Vel d/D	Design MGD	% Cap Q Full	Remove	Par Rep
33	330	8	598.79	0.0057	0.1	0.0	1.45	0.06	11.09		
			596.92		0.0	0.0	0.26		0.58		

LINE T AT DEVONSHIRE & GILBERT

*** ACACIA LATERAL   Diversion

Link	Invert Up/Dn		San	Inf	Sto	Mis	Design	Cost
35	596.92	Discharge :	0.07	0.00	0.00	0.00	0.07	0
	596.92	Diverted :	0.00	0.00	0.00	0.00	0.00	
		Incoming :	0.07	0.00	0.00	0.00	0.07	

*** ACACIA LATERAL   Analysis of Existing Pipes

Link	Long	Diam	Invert Up/Dn	Slope	San Inf	Sto Mis	Vel d/D	Design MGD	% Cap Q Full	Remove	Par Rep
36	334	8	596.92	0.0041	0.1	0.0	1.32	0.07	15.17		
			595.56		0.0	0.0	0.30		0.49		
37	330	8	595.56	0.0067	0.1	0.0	1.65	0.09	13.52		
			593.35		0.0	0.0	0.28		0.63		
38	340	8	593.35	0.0070	0.1	0.0	1.72	0.10	14.72		
			590.97		0.0	0.0	0.29		0.65		
39	329	8	590.97	0.0077	0.1	0.0	1.78	0.10	14.07		
			588.45		0.0	0.0	0.29		0.68		
40	329	8	588.45	0.0097	0.1	0.0	2.06	0.12	15.76		
			585.25		0.0	0.0	0.30		0.76		
41	349	8	585.25	0.0109	0.2	0.0	2.37	0.17	21.11		
			581.46		0.0	0.0	0.35		0.81		
42	279	8	581.46	0.0093	0.2	0.0	2.26	0.17	22.78		
			578.86		0.0	0.0	0.37		0.75		
43	8	8	578.86	0.0013	0.2	0.0	1.13	0.17	61.38		
			578.85		0.0	0.0	0.64		0.28		

                    Lateral length=   2628   Upstream length=   3301

*** JUANITA DIVERSION   Analysis of Existing Pipes

Link	Long	Diam	Invert Up/Dn	Slope	San Inf	Sto Mis	Vel d/D	Design MGD	% Cap Q Full	Remove	Par Rep
44	648	8	596.92	0.0037	0.0	0.0	0.00	0.00	0.00		
			594.53		0.0	0.0	0.00		0.47		

Lateral length=   648   Upstream length=   648

Lateral length=   648   Upstream length=   648

```
223: SAN 4.6   13.4
224:
225: DIV JUANITA 0 0.67 0/0 0.49/0 1.49/1
226:
227:
228: PIP 334   603.23   600.45   596.92   595.56   -8   I T-170   TO 200
229:
230: SAN 4.8   13.4
231:
232: PIP 330   600.45   598.26   595.56   593.35   -8   I  T-200 TO 172
233:
234: SAN 4.3   13.4
235:
236: PIP 340   598.26   594.95   593.35   590.97   -8   I T-172 TO 174
237:
238: PIP 329   594.95 592.75   590.97   588.45   -8   I T-174 TO 176
239: SAN 4.6 32.6
240: PIP 329 592.75 590.37 588.45 585.25 -8I 176 TO 179
241:
242: SAN 9.2   32.6
243:
244: PIP 349   590.37   586.83   585.25   581.46   -8   I T-179   TO 181
245:
246: PIP 279 586.83 584.35   581.46   578.86   -8   I T-181 TO 183
247:
248: PIP 7.8   584.35   584.23   578.86   578.85   -8   I T-183 TO 184
249: HOL ACACIA
250:
251: NEW JUANITA DIVERSION
252:
253: REC JUANITA
254:
255: PIP 648   603.23   600.43   596.92   594.53   -8   I T-170 TO T-993
256: HOL JUANITA_DIV
257:
258:
259: NEW BUENAVISTA DIVERSION
260:
261: REC BUENAVISTA
262:
263: PIP 310.55   605.35 604.09   598.79   597.49   -8   I T-168 TO 991
264: PIP 337.33   604.09   601.72 597.49   596.35 -8   I T-991 TO 992
265: SAN 4.1   32.6
266:
267: PIP 330   601.72   600.43   596.35   594.53   -8   I T-992 TO 993
268:
269: SAN 4.6   32.6
270:
271: REC JUANITA_DIV
272:
273: PIP 680 600.43 595.52 594.53 590.22 -8IT-993,994 TO T-94<---
274: HOL BUENAVIS_DIV
275:
```

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276: NEW FLORIDA SOUTH LATERAL
277:
278: SAN 2.0   11.6
279:
280: PIP 247   601.98   598.88   594.94 592.48  -6! T-501 TO T-82
281:
282: SAN 4.1 14
283:
284: PIP 334.2   598.88   597.56   592.51   591.78  -6  ! T-82 TO T-89
285: SAN 4.6 14
286: PIP 328.5   597.56   595.52   591.76   590.22  -8  ! T-89 TO T-94
287:
288: SAN 4.6   14
289: REC BUENAVIS_DIV
290:
291: PIP 327.5   595.52   594.13   590.02   587.13  -8  ! T-94 TO T-100
292:
293: SAN 4.3   14
294:
295: PIP 6.0   594.13   594.10   587.04 587.07  -8  ! T-100 TO T-103
296: PIP 324   594.10 592.72   587.01   585.79  -8  ! T-103 TO T-101
297:
298: SAN 4.4   14
299:
300: PIP 315 592.72 591.5 585.79 584.53 -8!T-101 TO 107*(ASSUMED)<---
301:
302: SAN 4.4   14
303:
304: PIP 70 591.5 591.2 584.53 584.25 -8!T-107 TO 106*(ASSUMED)<---
305: HOL FLORIDA_SOUTH
306:
307: NEW FLORIDA NORTH LATERAL
308:
309: REM CONTINUE R-1 DIURNAL CURVE (M.H.5)
310:
311: SAN 5.8   13.4   12.1
312:
313: SAN 5.3   13.4   17.7
314:
315: SAN 5.2 13.4 10.0
316:
317: SAN 7.1 13.4   8.3
318:
319: SAN 24.0   15   6.1   ! ACACIA ELEM. SCH. PER M&E <----
320:
321: SAN 7.7 14   1.8
322:
323: SAN 5.2   14   3.6
324:
325: SAN 4.8   14
326:
327: PIP 11.7   611.16   610.94   605.76   604.94 -8  ! T-87 TO 77
328:
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329: PIP 296.30   610.94   608.8   604.7   602.6   -8  !  T-77 TO 78
330:
331: PIP 338.7   608.8   605.9 602.6   599.16   -8  !  T-78 TO 79
332:
333: PIP 317.8   605.9   603.0   599.16   594.51   -8  !  T-79 TO 80
334:
335: SAN 4.4   21.5 3.9
336:
337: SAN 4.8   20.4   1.9
338:
339: SAN 2.0   11.6
340:
341: SAN 2.0   14
342:
343: SAN 2.0   32.6   6.7
344:
345: SAN 13.0 15   5.8   !   HEMET EL. SCH. PER M&E <----
346:
347: PIP 333.3   603.0   600.8   594.51   592.98   -8  !  T-80 TO 81
348:
349: PIP 335.1   600.8   598.0   592.98   591.44   -8  !  T-81 TO 90
350:
351: PIP 321.9 598.0   595.9   591.44   589.46   -8  !  T-90 TO 93
352:
353: PIP 334.7   595.9   594.5   589.46   587.10   -8  !  T-93 TO 99
354:
355: PIP 326   594.5   593.0   587.10   585.99   -10  !  T-99 TO 102
356:
357: PIP 311   593.0   592.0   585.99   585.14   -10  !  T-102   TO 104
358:
359: PIP 100 592.0 591.2 585.14 584.25 -10!T-104 TO 106*<---
360:
361: REC FLORIDA_SOUTH
362:
363: PIP 300 591.2 589.85 584.25 582.67 -10!T-106* TO 112<---
364:
365: SAN 4.6   5.1
366:
367: PIP 335.0   589.85   588.66 582.67 581.08   -10!T-112 TO 115
368:
369: SAN 6.3 8.8
370:
371: PIP 340.0   588.66   587.7 587.7 579.5 -10!T-115 TO 118
372:
373: HOL FLORIDA_NORTH
374:
375:
376: NEW MAYBERRY LATERAL
377:
378: REM BEGIN AT MAYBERRY & SANTA FE W/GHOST SYSTEMS
379:
380: REC GHOST1
381:
```

LINE T AT DEVONSHIRE & GILBERT

*** BUENAVISTA DIVERSION   Analysis of Existing Pipes

Link	Long	Diam	Invert Up/Dn	Slope	San Inf	Sto Mis	Vel d/D	Design MGD	% Cap Q Full	Remove	Par Rep
45	311	8	598.79	0.0042	0.0	0.0	0.00	0.00	0.00		
			597.49		0.0	0.0	0.00		0.50		
46	337	8	597.49	0.0034	0.0	0.0	0.00	0.00	0.00		
			596.35		0.0	0.0	0.00		0.45		
47	330	8	596.35	0.0055	0.0	0.0	1.09	0.02	3.88		
			594.53		0.0	0.0	0.16		0.58		
48	680	8	594.53	0.0063	0.0	0.0	1.40	0.05	7.68		
			590.22		0.0	0.0	0.22		0.62		

```
            Lateral length=   1658     Upstream length=    2306
```

*** FLORIDA SOUTH LATERAL   Analysis of Existing Pipes

Link	Long	Diam	Invert Up/Dn	Slope	San Inf	Sto Mis	Vel d/D	Design MGD	% Cap Q Full	Remove	Par Rep
49	247	6	594.94	0.0100	0.0	0.0	0.84	0.00	1.08		
			592.48		0.0	0.0	0.09		0.36		
50	334	6	592.51	0.0022	0.0	0.0	0.67	0.01	7.28		
			591.78		0.0	0.0	0.22		0.17		
51	329	8	591.76	0.0047	0.0	0.0	1.02	0.02	4.07		
			590.22		0.0	0.0	0.17		0.53		
52	328	8	590.02	0.0088	0.1	0.0	1.80	0.08	10.77		
			587.13		0.0	0.0	0.26		0.73		
53	6	8	587.04	-0.0050	0.1	0.0	0.00	0.09	999.99	0.00	0
			587.07		0.0	0.0	0.00		0.00		0
54	324	8	587.01	0.0038	0.1	0.0	1.34	0.09	18.33		
			585.79		0.0	0.0	0.33		0.48		
55	315	8	585.79	0.0040	0.1	0.0	1.41	0.10	19.62		
			584.53		0.0	0.0	0.34		0.49		
56	70	8	584.53	0.0040	0.1	0.0	1.45	0.11	21.43		
			584.25		0.0	0.0	0.35		0.49		

```
            Lateral length=   1952     Upstream length=    4258
```

LINE T AT DEVONSHIRE & GILBERT

*** FLORIDA NORTH LATERAL   Analysis of Existing Pipes

Link	Long	Diam	Invert Up/Dn	Slope	San Inf	Sto Mis	Vel d/D	Design MGD	% Cap Q Full	Remove	Par Rep
57	12	8	605.76	0.0701	0.1	0.0	4.53	0.14	6.87		
			604.94		0.0	0.0	0.21		2.05		
58	296	8	604.70	0.0071	0.1	0.0	1.93	0.14	21.62		
			602.60		0.0	0.0	0.36		0.65		
59	339	8	602.60	0.0102	0.1	0.0	2.19	0.14	18.06		
			599.16		0.0	0.0	0.32		0.78		
60	318	8	599.16	0.0146	0.1	0.0	2.50	0.14	15.05		
			594.51		0.0	0.0	0.30		0.94		
61	333	8	594.51	0.0046	0.2	0.0	1.91	0.22	41.98		
			592.98		0.0	0.0	0.51		0.52		
62	335	8	592.98	0.0046	0.2	0.0	1.91	0.22	41.96		
			591.44		0.0	0.0	0.51		0.53		
63	322	8	591.44	0.0062	0.2	0.0	2.11	0.22	36.27		
			589.46		0.0	0.0	0.47		0.61		
64	335	8	589.46	0.0071	0.2	0.0	2.21	0.22	33.85		
			587.10		0.0	0.0	0.45		0.65		
65	326	10	587.10	0.0034	0.2	0.0	1.68	0.22	26.85		
			585.99		0.0	0.0	0.40		0.82		
66	311	10	585.99	0.0027	0.2	0.0	1.54	0.22	29.92		
			585.14		0.0	0.0	0.43		0.73		
67	100	10	585.14	0.0089	0.2	0.0	2.32	0.22	16.58		
			584.25		0.0	0.0	0.31		1.33		
68	300	10	584.25	0.0053	0.3	0.0	2.18	0.32	31.83		
			582.67		0.0	0.0	0.44		1.02		
69	335	10	582.67	0.0047	0.3	0.0	2.11	0.33	33.92		
			581.08		0.0	0.0	0.45		0.97		
70	340	10	587.70	0.0241	0.3	0.0	3.75	0.34	15.47		
			579.50		0.0	0.0	0.30		2.18		

```
         -----------------------------------------------------
         Lateral length=   4002      Upstream length=   8260
```

LINE T AT DEVONSHIRE & GILBERT

*** MAYBERRY LATERAL   Analysis of Existing Pipes

Link	Long	Diam	Invert Up/Dn	Slope	San Inf	Sto Mis	Vel d/D	Design MGD	% Cap Q Full	Remove	Par Rep
71	330	8	610.11	0.0025	0.1	0.0	1.26	0.11	28.27		
			609.28		0.0	0.0	0.41		0.39		
72	165	8	609.22	0.0016	0.2	0.0	1.32	0.22	72.22		
			608.96		0.0	0.0	0.71		0.31		
73	165	8	608.99	0.0030	0.2	0.0	1.68	0.24	56.48		
			608.50		0.0	0.0	0.61		0.42		
74	330	8	608.42	0.0091	0.3	0.0	2.54	0.26	35.04		
			605.41		0.0	0.0	0.46		0.74		
75	330	8	605.31	0.0222	0.3	0.0	3.46	0.26	22.48		
			598.00		0.0	0.0	0.36		1.15		
76	332	8	597.97	0.0037	0.4	0.0	2.09	0.38	79.75		
			596.73		0.0	0.0	0.76		0.47		
77	328	8	596.67	0.0029	0.4	0.0	1.92	0.39	93.71		
			595.71		0.0	0.0	0.85		0.42		
78	328	8	595.73	0.0087	0.4	0.0	2.86	0.40	55.90		
			592.89		0.0	0.0	0.60		0.72		
79	331	8	592.87	0.0172	0.4	0.0	3.63	0.40	39.59		
			587.16		0.0	0.0	0.50		1.02		
80	330	8	587.23	-0.0004	0.4	0.0	0.00	0.40	999.99	0.00	0
			587.37		0.0	0.0	0.00		0.00		0
81	332	8	587.36	0.0002	0.4	0.0	0.48	0.42	401.35	0.31	18
			587.30		0.0	0.0	0.90		0.10		18
82	332	8	587.30	0.0117	0.4	0.0	3.20	0.42	49.92		
			583.43		0.0	0.0	0.56		0.84		
83	334	12	583.41	-0.0010	0.4	0.0	0.00	0.43	999.99	0.00	0
			583.73		0.0	0.0	0.00		0.00		0
84	324	12	583.70	0.0074	0.4	0.0	2.59	0.43	21.79		
			581.31		0.0	0.0	0.36		1.96		

```
            Lateral length=   4291      Upstream length=    4294
```

LINE T AT DEVONSHIRE & GILBERT

*** GILBERT TRUNK   Analysis of Existing Pipes

Link	Long	Diam	Invert Up/Dn	Slope	San Inf	Sto Mis	Vel d/D	Design MGD	% Cap Q Full	Remove	Par Rep
85	330	12	581.26 564.73	0.0501	0.4 0.0	0.0 0.0	5.29 0.23	0.43	8.36 5.11		
86	334	12	564.73 566.05	-0.0040	0.4 0.0	0.0 0.0	0.00 0.00	0.44	999.99 0.00	0.00	0 0
87	15	12	580.38 580.37	0.0007	0.6 0.0	0.0 0.0	1.21 0.90	0.62	105.10 0.59	0.03	8 18
88	324	12	580.37 579.55	0.0025	0.6 0.0	0.0 0.0	2.00 0.59	0.62	53.61 1.15		
89	336	12	579.49 579.00	0.0015	0.6 0.0	0.0 0.0	1.65 0.70	0.62	70.54 0.87		
90	322	12	578.79 578.18	0.0019	0.8 0.0	0.0 0.0	1.94 0.75	0.78	78.85 0.99		
91	325	12	578.14 577.57	0.0018	0.8 0.0	0.0 0.0	1.89 0.77	0.78	81.85 0.96		
92	388	12	577.61 576.77	0.0022	0.9 0.0	0.0 0.0	2.09 0.77	0.86	81.26 1.06		
93	261	12	576.63 579.50	-0.0110	0.9 0.0	0.0 0.0	0.00 0.00	0.86	999.99 0.00	0.00	0 0
94	51	12	579.50 575.87	0.0709	1.2 0.0	0.0 0.0	7.78 0.34	1.20	19.72 6.08		
95	171	12	575.90 575.70	0.0012	1.2 0.0	0.0 0.0	1.62 0.90	1.20	153.32 0.78	0.42	10 18
96	270	14	575.70 574.99	0.0026	1.2 0.0	0.0 0.0	2.43 0.68	1.20	67.83 1.77		
97	173	14	575.08 574.46	0.0036	1.2 0.0	0.0 0.0	2.71 0.62	1.20	57.97 2.07		
98	331	14	574.46 573.80	0.0020	1.3 0.0	0.0 0.0	2.24 0.77	1.27	82.30 1.54		
99	339	14	573.80 573.35	0.0013	1.3 0.0	0.0 0.0	1.91 0.90	1.27	100.92 1.26	0.01	8 18

LINE T AT DEVONSHIRE & GILBERT

*** GILBERT TRUNK   Analysis of Existing Pipes

Link	Long	Diam	Invert Up/Dn	Slope	San Inf	Sto Mis	Vel d/D	Design MGD	% Cap Q Full	Remove	Par Rep
100	19	15	573.35	0.0691	1.7	0.0	8.29	1.66	15.25		
			572.03		0.0	0.0	0.30		10.89		

Lateral length=   3989   Upstream length=   25318

Status of DEFAULTS at start of run. (* May be reset by SET)

```
|   Command file : C:\HYDRA\HEMET\LINE-Y.CMD
|   Input units are read as             : USA
|*  Output sent to display              : Brief
|*  Output sent to printer              : Brief
|*  Output sent to file                 : Off
|   Paper width in inches               : 8.000
|   String to reset printer             : 27 38 108 54 68 27 40 115 49 48 72
|   String to set printer to compressed : 17.16 27 38 107 48 56 72
|   String to set printer to 8 lines/inch : 8 27 38 108 56 68
|   Name of printer                     : Hewlett-Packard, LaserJet/LaserJet I
|   Print heading at top of page        : True
|
|   Number of steps in hydrograph       : 96
|   Step length in minutes              : 15
|   Significant flow in hydrograph      : 0.010
|*  Maximum plot value                  : Selected by HYDRA
|   Type of hydrographic plot           : Compact
|
|   Sanitary flow by                    : Diurnal Curve
|   Delay to start of actual storm      : 0.00
|   Rational Method computations        : Off
|   SCS computations                    : Santa Barbara
|   Continuous simulation computations  : On
|
|*  Maximum d/D for pipe design/analysis : 0.900
|*  Match point position on pipe        : 0.00 or Invert
|*  Number of allowable diam drops      : 999
|*  Mimimum drop thru manhole           : 0.000
|   Routing technique                   : Quick
|
|*  Calculate sanitary flows            : True
|*  Calculate infiltration flows        : True
|*  Calculate storm flows               : True
|*  Calculate misc flows                : True
|
+----------------------------------------------------------------------
```

```
  1:  JOB LINE Y AT STETSON & PALM
  2:
  3:  REM --- PIPE AND PIPE COST DATA ---
  4:  PDA .013 8 8 7.5 3 .004
  5:  CST 1.5 1 3/ .2 .5 .5 2.87 / .5 0 1.63+
  6:        1.15/ .89 1.1 1.43 4.78
  7:  EXC 0/ .45 18/.45 30/1.12
  8:  TSL 0/0 6/0 6.001/.5 30/.5
  9:  PCO 8/ 2.78 10/4.10 18/9.16 36/18.23
 10:  REM --- SANITARY CRITERIA ---
 11:  GPC 100 ! AVERAGE DAILY FLOW PER CAPITA
 12:  REM THIS MODEL RUN IS FOR 1990 CONDITIONS
 13:
```

```
14: REM USE M.H.4 DIURNAL CURVE
15: DIU 7.16 4.99 3.59 2.14 2.69 9.89 11.55 14.98+
16:         18.94 19.98 21.62 22.69 19.99 19.48 18.82 19.27+
17:         20.22 18.15 19.04 16.87 13.98 13.13 10.62 8.43
18:
19: NEW THORNTON LATERAL
20: SAN 10.8 10.8 4.3
21: SAN 8.5 10.8 5.8
22: SAN 2.5 14 8.6
23: SAN 8.7 15.5
24: SAN 9.2 32.6 1.4
25: SAN 8.6 10.8 3.1
26: SAN 18.9 32.6 4.7
27: SAN 2.5 10.8 8.8
28: SAN 5.5 14 12.4
29: SAN 2.8 0.0 12.4
30: SAN 7.4 10.8 16.0
31: SAN 2.5 14 16.0
32: SAN 8.0 19.6 16.0
33: SAN 4.3 10.8 17.8
34: SAN 1.5 14 17.8
35: SAN 4.8 19.6 17.8
36: SAN 10.0 14 20.1
37: SAN 4.0 19.6 20.1
38: PIP 335 570.56 567.52 560.07 559.03 -10! Y42 TO Y12
39: PIP 225 567.52 566.03 559.03 558.44 -10! 12 TO 11
40: SAN 9.2 10.8
41: SAN 8.1 10.8 1.4
42: SAN 8.7 10.8 4.3
43: PIP 100 566.03 565.18 558.44 558.12 -10! 11 TO 10
44: PIP 321 565.18 563.80 558.12 557.21 -10! 10 TO 9
45: PIP 335 563.80 562.24 557.21 556.28 -10! 9 TO 8
46: SAN 8.5 10.8
47: SAN 11.7 10.8 3.3
48: SAN 11.7 10.8 6.1
49: SAN 10.0 0.0 10.3
50: SAN 8.0 0.0 14.6
51: SAN 15.2 0.0 19.6
52: PIP 346 562.24 563.23 556.28 555.50 -10! 8 TO 7
53: SAN 5.2 10.8 1.8
54: PIP 90.97 563.23 563.60 555.50 555.21 -10! 7 TO 6
55: PIP 155.03 563.60 564.0 555.21 554.75 -10! 6 TO 5
56: SAN 4.0 10.8
57: PIP 216.06 564.0 564.5 554.75 554.23 -10! 5 TO 4
58: PIP 68 564.5 564.75 554.23 554.04 -10! 4 TO 3
59: SAN 4.5 10.8
60: PIP 200 564.75 564.0 554.04 553.48 -10! 3 TO 2
61: SAN 4.2 10.8
62: SAN 5.1 5.1
63: PIP 224 564.0 567.26 553.48 551.26 -10! Y-2 TO Y-1
 4: END
```

------- S U M M A R Y   O F   A N A L Y S I S -------

```
                 Run number on command file :      1
                          Number of links :     12
                     Number of hydrographs :     50
                  Total sanitary population :   2988
                       Total sanitary area :   234.60 Acres
                          Total storm area :     0.00 Acres
                          Number of pumps :      0
                      Number of reservoirs :      0
         Number of diversion structures :      0
                         Number of inlets :      0
                        Length of new pipe :     0.00 Feet
                   Length of existing pipe :  2616.06 Feet
                         Length of channel :     0.00 Feet
                          Length of gutter :     0.00 Feet
               Length of transport units :     0.00 Feet
                  Length of pressure pipe :     0.00 Feet
```

URS Consultants Inc.
San Bernardino, California

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===

C:\HYDRA\HEMET\LINE-Y.CMD

17:09 22-May-90

LINE Y AT STETSON & PALM

*** THORNTON LATERAL   Analysis of Existing Pipes

Link	Long	Diam	Invert Up/Dn	Slope	San Inf	Sto Mis	Vel d/D	Design MGD	% Cap Q Full	Remove	Par Rep
1	335	10	560.07	0.0031	0.3	0.0	1.84	0.35	44.07		
			559.03		0.0	0.0	0.53		0.78		
2	225	10	559.03	0.0026	0.3	0.0	1.74	0.35	47.96		
			558.44		0.0	0.0	0.55		0.72		
3	100	10	558.44	0.0032	0.4	0.0	1.94	0.39	49.10		
			558.12		0.0	0.0	0.56		0.79		
4	321	10	558.12	0.0028	0.4	0.0	1.86	0.39	52.17		
			557.21		0.0	0.0	0.58		0.75		
5	335	10	557.21	0.0028	0.4	0.0	1.84	0.39	52.72		
			556.28		0.0	0.0	0.58		0.74		
6	346	10	556.28	0.0023	0.4	0.0	1.79	0.45	66.81		
			555.50		0.0	0.0	0.68		0.67		
7	91	10	555.50	0.0032	0.5	0.0	2.03	0.45	57.28		
			555.21		0.0	0.0	0.61		0.79		
8	155	10	555.21	0.0030	0.5	0.0	1.98	0.45	59.36		
			554.75		0.0	0.0	0.63		0.77		
9	216	10	554.75	0.0024	0.5	0.0	1.85	0.46	66.90		
			554.23		0.0	0.0	0.68		0.69		
10	68	10	554.23	0.0028	0.5	0.0	1.95	0.46	62.05		
			554.04		0.0	0.0	0.64		0.74		
11	200	10	554.04	0.0028	0.5	0.0	1.96	0.47	63.03		
			553.48		0.0	0.0	0.65		0.74		
12	224	10	553.48	0.0099	0.5	0.0	3.06	0.48	34.31		
			551.26		0.0	0.0	0.46		1.40		

Lateral length=   2616   Upstream length=   2616

Status of DEFAULTS at start of run. (* May be reset by SET)

```
    |
    |   Command file : C:\HYDRA\HEMET\LINE-Y20.CMD
    |   Input units are read as                 : USA
    |*  Output sent to display                  : Brief
    |*  Output sent to printer                  : Brief
    |*  Output sent to file                     : Off
    |   Paper width in inches                   : 8.000
    |   String to reset printer                 : 27 38 108 54 68 27 40 115 49 48 72
    |   String to set printer to compressed     : 17.16 27 38 107 48 56 72
    |   String to set printer to 8 lines/inch   : 8 27 38 108 56 68
    |   Name of printer                         : Hewlett-Packard, LaserJet/LaserJet I
    |   Print heading at top of page            : True
    |
    |   Number of steps in hydrograph           : 96
    |   Step length in minutes                  : 15
    |   Significant flow in hydrograph          : 0.010
    |*  Maximum plot value                      : Selected by HYDRA
    |   Type of hydrographic plot               : Compact
    |
    |   Sanitary flow by                        : Diurnal Curve
    |   Delay to start of actual storm          : 0.00
    |   Rational Method computations            : Off
    |   SCS computations                        : Santa Barbara
    |   Continuous simulation computations      : On
    |
    |*  Maximum d/D for pipe design/analysis    : 0.900
    |*  Match point position on pipe            : 0.00 or Invert
    |*  Number of allowable diam drops          : 999
    |*  Mimimum drop thru manhole               : 0.000
    |   Routing technique                       : Quick
    |
    |*  Calculate sanitary flows                : True
    |*  Calculate infiltration flows            : True
    |*  Calculate storm flows                   : True
    |*  Calculate misc flows                    : True
    |
    +--------------------------------------------------------------------
```

```
    1:  JOB LINE Y AT STETSON & PALM
    2:
    3:  REM --- PIPE AND PIPE COST DATA ---
    4:  PDA .013 8 8 7.5 3 .004
    5:  CST 1.5 1 3/ .2 .5 .5 2.87 / .5 0 1.63+
    6:          1.15/ .89 1.1 1.43 4.78
    7:  EXC 0/ .45 18/.45 30/1.12
    8:  TSL 0/0 6/0 6.001/.5 30/.5
    9:  PCO 8/ 2.78 10/4.10 18/9.16 36/18.23
   10:  REM --- SANITARY CRITERIA ---
   11:  GPC 100 ! AVERAGE DAILY FLOW PER CAPITA
   12:  REM THIS MODEL RUN IS FOR 2010 CONDITIONS
   13:
```

```
14: REM USE M.H.4 DIURNAL CURVE
15: DIU 7.16 4.99 3.59 2.14 2.69 9.89 11.55 14.98+
16:         18.94 19.98 21.62 22.69 19.99 19.48 18.82 19.27+
17:         20.22 18.15 19.04 16.87 13.98 13.13 10.62 8.43
18:
19: NEW THORNTON LATERAL
20: SAN 10.8 15.4 4.3
21: SAN 8.5 15.4 5.8
22: SAN 2.5 14 8.6
23: SAN 8.7 20.0
24: SAN 9.2 37.4 1.4
25: SAN 8.6 15.4 3.1
26: SAN 18.9 37.4 4.7
27: SAN 2.5 15.4 8.8
28: SAN 5.5 14 12.4
29: SAN 2.8 19.6 12.4
30: SAN 7.4 15.4 16.0
31: SAN 2.5 14 16.0
32: SAN 8.0 37.4 16.0
33: SAN 4.3 15.4 17.8
34: SAN 1.5 14 17.8
35: SAN 4.8 37.4 17.8
36: SAN 10.0 14 20.1
37: SAN 4.0 37.4 20.1
38: PIP 335 570.56 567.52 560.07 559.03 -10! Y42- TO Y12
39: PIP 225 567.52 566.03 559.03 558.44 -10! 12 TO 11
40: SAN 9.2 15.4
41: SAN 8.1 15.4 1.4
42: SAN 8.7 15.4 4.3
43: PIP 100 566.03 565.18 558.44 558.12 -10! 11 TO 10
44: PIP 321 565.18 563.80 558.12 557.21 -10! 10 TO 9
45: PIP 335 563.80 562.24 557.21 556.28 -10! 9 TO 8
46: SAN 8.5 15.4
47: SAN 11.7 15.4 3.3
48: SAN 11.7 15.4 6.1
49: SAN 10.0 19.6 10.3
50: SAN 8.0 19.6 14.6
51: SAN 15.2 19.6 19.6
52: PIP 346 562.24 563.23 556.28 555.50 -10! 8 TO 7
53: SAN 5.2 15.4 1.8
54: PIP 90.97 563.23 563.60 555.50 555.21 -10! 7 TO 6
55: PIP 155.03 563.60 564.0 555.21 554.75 -10! 6 TO 5
56: SAN 4.0 15.4
57: PIP 216.06 564.0 564.5 554.75 554.23 -10! 5 TO 4
58: PIP 68 564.5 564.75 554.23 554.04 -10! 4 TO 3
59: SAN 4.5 15.4
60: PIP 200 564.75 564.0 554.04 553.48 -10! 3 TO 2
61: SAN 4.2 15.4
62: SAN 5.1 32.8
63: PIP 224 564.0 567.26 553.48 551.26 -10! Y-2 TO Y-1
64: END
```

------ S U M M A R Y   O F   A N A L Y S I S ------

```
                Run number on command file :        1
                        Number of links :       12
                   Number of hydrographs :       50
               Total sanitary population :     4850
                     Total sanitary area :   234.60 Acres
                       Total storm area :     0.00 Acres
                        Number of pumps :        0
                    Number of reservoirs :        0
         Number of diversion structures :        0
                       Number of inlets :        0
                    Length of new pipe :      0.00 Feet
               Length of existing pipe :   2616.06 Feet
                     Length of channel :      0.00 Feet
                      Length of gutter :      0.00 Feet
           Length of transport units :      0.00 Feet
               Length of pressure pipe :      0.00 Feet
```

LINE Y AT STETSON & PALM

*** THORNTON LATERAL   Analysis of Existing Pipes

Link	Long	Diam	Invert Up/Dn	Slope	San Inf	Sto Mis	Vel d/D	Design MGD	% Cap Q Full	Remove	Par Rep
1	335	10	560.07 559.03	0.0031	0.5 0.0	0.0 0.0	2.02 0.62	0.46	58.92 0.78		
2	225	10	559.03 558.44	0.0026	0.5 0.0	0.0 0.0	1.90 0.66	0.46	64.11 0.72		
3	100	10	558.44 558.12	0.0032	0.5 0.0	0.0 0.0	2.12 0.67	0.53	66.14 0.79		
4	321	10	558.12 557.21	0.0028	0.5 0.0	0.0 0.0	2.03 0.70	0.53	70.27 0.75		
5	335	10	557.21 556.28	0.0028	0.5 0.0	0.0 0.0	2.02 0.70	0.53	71.01 0.74		
6	346	10	556.28 555.50	0.0023	0.7 0.0	0.0 0.0	1.99 0.90	0.71	106.37 0.67	0.04	8 18
7	91	10	555.50 555.21	0.0032	0.7 0.0	0.0 0.0	2.32 0.83	0.72	91.07 0.79		
8	155	10	555.21 554.75	0.0030	0.7 0.0	0.0 0.0	2.25 0.86	0.72	94.40 0.77		
9	216	10	554.75 554.23	0.0024	0.7 0.0	0.0 0.0	2.05 0.90	0.73	106.25 0.69	0.04	8 18
10	68	10	554.23 554.04	0.0028	0.7 0.0	0.0 0.0	2.21 0.90	0.73	98.61 0.74		
11	200	10	554.04 553.48	0.0028	0.7 0.0	0.0 0.0	2.21 0.90	0.74	100.01 0.74	0.00	8 18
12	224	10	553.48 551.26	0.0099	0.8 0.0	0.0 0.0	3.55 0.60	0.78	55.83 1.40		

Lateral length= 2616   Upstream length=   2616

Status of DEFAULTS at start of run. (* May be reset by SET)

|
| Command file : C:\HYDRA\HEMET\LINEBB20.CMD
| Input units are read as   : USA
|*   Output sent to display   : Brief
|*   Output sent to printer   : Brief
|*   Output sent to file   : Off
| Paper width in inches   : 8.000
| String to reset printer   : 27 38 108 54 68 27 40 115 49 48 72
| String to set printer to compressed   : 17.16 27 38 107 48 56 72
| String to set printer to 8 lines/inch   : 8 27 38 108 56 68
| Name of printer   : Hewlett-Packard, LaserJet/LaserJet P
| Print heading at top of page   : True
|
| Number of steps in hydrograph   : 96
| Step length in minutes   : 15
| Significant flow in hydrograph   : 0.010
|*   Maximum plot value   : Selected by HYDRA
| Type of hydrographic plot   : Compact
|
| Sanitary flow by   : Diurnal Curve
| Delay to start of actual storm   : 0.00
| Rational Method computations   : Off
| SCS computations   : Santa Barbara
| Continuous simulation computations   : On
|
|*   Maximum d/D for pipe design/analysis   : 0.900
|*   Match point position on pipe   : 0.00 or Invert
|*   Number of allowable diam drops   : 999
|*   Mimimum drop thru manhole   : 0.000
| Routing technique   : Quick
|
|*   Calculate sanitary flows   : True
|*   Calculate infiltration flows   : True
|*   Calculate storm flows   : True
|*   Calculate misc flows   : True
|
+---

  1: JOB LINE BB AT MENLO & LYON
  2: REM --- PIPE AND PIPE COST DATA ---
  3: PDA .013 8 8 7.5 3 .004
  4: CST 1.5 1 3 / .2 .5 .5 2.87 / .5 0 1.63 +
  5:       1.15 / .89 1.1 1.43 4.78
  6: EXC 0/.45 18/.45 30/1.12
  7: TSL 0/0 6/0 6.001/.5 30/.5
  8: PCO 8/2.78 10/4.10 18/9.16 36/18.23
  9: REM --- SANITARY CRITERIA ---
 10: GPC 100   ! AVERAGE DAILY FLOW PER CAPITA
 11: REM THIS MODEL RUN IS FOR 2010 CONDITIONS
 12: REM THE FOLLOWING IS GHOST SYSTEM UPSTREAM OF M.H. BB-2
 13: NEW SAN VICENTE DRIVE

```
14: REM THE FOLLOWING IS BASED ON DIURNAL CURVE OF M.H.2 (R-A)
15: DIU 77.49 64.76 57.03 54.49 60.76 85.05 156.93 223.39 +
16:         233.46 238.6 224.07 204.05 182.09 172.48 170.59 158.67 +
17:         172 187.58 199.57 195.87 179.75 155.25 129.62 108.13
18: SAN 3.8  8.8  9.4! AREA TAKES 9.4 MIN. TO REACH OUR PIPE
19: SAN 5.7  8.8  6.1
20: SAN 2.0  8.8  2.8
21: PIP 1.0  551.05  551.05  543.68  543.68  -8! THIS IS A DUMMY PIPE
22: HOL SAN VICENTE
23: REM THE FOLLOWING IS GHOST UPSTREAM OF BB-1
24: NEW SONORA DRIVE
25: REM USE SAME DIURNAL CURVE
26: SAN 3.8  8.8
27: SAN 4.1  8.8
28: SAN 2.2  8.8
29: SAN 3.0  8.8
30: SAN 4.3  8.8
31: SAN 2.0  8.8
32: SAN 3.9  8.8
33: PIP 1.0  549.98  549.98  542.20  542.20  -8 ! THIS IS DUMMY ALSO
34: HOL SONORA
35: NEW OAKLAND AVE
36: REM THE FOLLOWING IS BASED ON DIURNAL CURVE OF M.H.5 (R-1)
37: DIU 53.67 46.85 44.76 48.62 65.47 108.26 159.47 172.14 167.55 +
38:          166.67 156.81 134.83 138.13 141.07 118.64 131.29 139.26 +
39:          156.17 155.95 143.65 127.75 104.19 87.91 67.28
40: REM THE FOLLOWING ARE GHOST UPSTREAM SYSTEMS
41: SAN 6.9  19.6   9.0! AREA TAKES 9 MIN. TO REACH OUR PIPE
42: SAN 3.4  37.4   5.6
43: SAN 4.6  20.8   2.2
44: SAN 6.6  15.4  12.8
45: SAN 7.3  37.4   8.3
46: SAN 5.9  37.4   4.7
47: SAN 7.7  37.4   5.0
48: PIP 330  558.90  557.36  551.58  550.26  -8!
49: REM THE REST IS BASED ON DIURNAL CURVE OF M.H.2 (R-A)
50: DIU 77.49 64.76 57.03 54.49 60.76 85.05 156.93 223.39 +
51:          233.46 238.6 224.07 204.05 182.09 172.48 170.59 158.67 +
52:          172 187.58 199.57 195.87 179.75 155.25 129.62 108.13
53: PIP 325  557.36  555.99  550.26  548.96  -8 ! BB-7 TO BB-6
54: SAN 12.1  20.7
55: PIP 325  555.99  554.63  548.96  547.66  -8 ! BB-6 TO BB-5
56: PIP 344  554.63  553.25  547.66  546.28  -8 ! BB-5 TO BB-4
57: SAN 11.9  8.8 ! INTERSECTION OF LYON AVE
58: PIP 331  553.25  552.10  546.28  544.95  -8 ! BB-4 TO BB-3
59: SAN 2.0  8.8
60: PIP 318  552.10  5551.05  544.95  543.68  -8 ! BB-3 TO BB-2
61: SAN 2.0  8.8
62: REC SAN VICENTE
63: PIP 368.4  551.05  549.98  543.63  542.20  -8 ! BB-2 TO BB-1
64: SAN 4.0  8.8
65: REC SONORA
```

------ S U M M A R Y   O F   A N A L Y S I S ------

```
            Run number on command file :        1
                       Number of links :       10
                 Number of hydrographs :       46
              Total sanitary population :     1973
                  Total sanitary area :    109.20 Acres
                     Total storm area :      0.00 Acres
                      Number of pumps :        0
                  Number of reservoirs :        0
          Number of diversion structures :      0
                     Number of inlets :        0
                   Length of new pipe :      0.00 Feet
              Length of existing pipe :   2638.00 Feet
                   Length of channel :      0.00 Feet
                    Length of gutter :      0.00 Feet
           Length of transport units :      0.00 Feet
               Length of pressure pipe :      0.00 Feet
```

LINE BB AT MENLO & LYON

*** SAN VICENTE DRIVE   Analysis of Existing Pipes

Link	Long	Diam	Invert Up/Dn	Slope	San Inf	Sto Mis	Vel d/D	Design MGD	% Cap Q Full	Remove	Par Rep
1	1	8	543.68	0.0000	0.0	0.0	0.00	0.02	999.99	0.00	0
			543.68		0.0	0.0	0.00		0.00		0

Lateral length=   1   Upstream length=   1

*** SONORA DRIVE   Analysis of Existing Pipes

Link	Long	Diam	Invert Up/Dn	Slope	San Inf	Sto Mis	Vel d/D	Design MGD	% Cap Q Full	Remove	Par Rep
2	1	8	542.20	0.0000	0.0	0.0	0.00	0.03	999.99	0.00	0
			542.20		0.0	0.0	0.00		0.00		0

Lateral length=   1   Upstream length=   1

*** OAKLAND AVE   Analysis of Existing Pipes

Link	Long	Diam	Invert Up/Dn	Slope	San Inf	Sto Mis	Vel d/D	Design MGD	% Cap Q Full	Remove	Par Rep
3	330	8	551.58	0.0040	0.2	0.0	1.71	0.18	36.90		
			550.26		0.0	0.0	0.48		0.49		
4	325	8	550.26	0.0040	0.2	0.0	1.71	0.18	36.90		
			548.96		0.0	0.0	0.48		0.49		
5	325	8	548.96	0.0040	0.2	0.0	1.81	0.22	44.32		
			547.66		0.0	0.0	0.53		0.49		
6	344	8	547.66	0.0040	0.2	0.0	1.81	0.22	44.26		
			546.28		0.0	0.0	0.53		0.49		
7	331	8	546.28	0.0040	0.2	0.0	1.85	0.23	47.46		
			544.95		0.0	0.0	0.55		0.49		
8	318	8	544.95	0.0040	0.2	0.0	1.85	0.24	48.11		
			543.68		0.0	0.0	0.55		0.49		
9	368	8	543.63	0.0039	0.3	0.0	1.88	0.25	52.45		
			542.20		0.0	0.0	0.58		0.48		

LINE BB AT MENLO & LYON

*** OAKLAND AVE   Analysis of Existing Pipes

Link	Long	Diam	Invert Up/Dn	Slope	San Inf	Sto Mis	Vel d/D	Design MGD	% Cap Q Full	Remove	Par Rep
10	295	8	542.20	0.0040	0.3	0.0	1.97	0.29	59.34		
			541.03		0.0	0.0	0.63		0.49		

Lateral length=   2636   Upstream length=   2638

Status of DEFAULTS at start of run. (* May be reset by SET)

```
|     Command file : C:\HYDRA\HEMET\LINE_BB.CMD
|     Input units are read as                    : USA
|*    Output sent to display                     : Brief
|*    Output sent to printer                     : Brief
|*    Output sent to file                        : Off
|     Paper width in inches                      : 8.000
|     String to reset printer                    : 27 38 108 54 68 27 40 115 49 48 72
|     String to set printer to compressed        : 17.16 27 38 107 48 56 72
|     String to set printer to 8 lines/inch      : 8 27 38 108 56 68
|     Name of printer                            : Hewlett-Packard, LaserJet/LaserJet
|     Print heading at top of page               : True
|
|     Number of steps in hydrograph              : 96
|     Step length in minutes                     : 15
|     Significant flow in hydrograph             : 0.010
|*    Maximum plot value                         : Selected by HYDRA
|     Type of hydrographic plot                  : Compact
|
|     Sanitary flow by                           : Diurnal Curve
|     Delay to start of actual storm             : 0.00
|     Rational Method computations               : Off
|     SCS computations                           : Santa Barbara
|     Continuous simulation computations         : On
|
|*    Maximum d/D for pipe design/analysis       : 0.900
|*    Match point position on pipe               : 0.00 or Invert
|*    Number of allowable diam drops             : 999
|*    Mimimum drop thru manhole                  : 0.000
|     Routing technique                          : Quick
|
|*    Calculate sanitary flows                   : True
|*    Calculate infiltration flows               : True
|*    Calculate storm flows                      : True
|*    Calculate misc flows                       : True
|
+---------------------------------------------------------------------------
```

```
 1: JOB LINE BB AT MENLO & LYON
 2: REM --- PIPE AND PIPE COST DATA ---
 3: PDA .013 8 8 7.5 3 .004
 4: CST 1.5 1 3 / .2 .5 .5 2.87 / .5 0 1.63 +
 5:         1.15 / .89 1.1 1.43 4.78
 6: EXC 0/.45  18/.45  30/1.12
 7: TSL 0/0  6/0  6.001/.5  30/.5
 8: PCO 8/2.78  10/4.10  18/9.16  36/18.23
 9: REM --- SANITARY CRITERIA ---
10: GPC 100            ! AVERAGE DAILY FLOW PER CAPITA
11: REM THIS MODEL RUN IS FOR 1990 CONDITIONS
12: REM THE FOLLOWING IS GHOST SYSTEM UPSTREAM OF M.H. BB-2
13: NEW SAN VICENTE DRIVE
```

```
14: REM THE FOLLOWING IS BASED ON DIURNAL CURVE OF M.H.2 (R-A)
15: DIU 77.49 64.76 57.03 54.49 60.76 85.05 156.93 223.39 +
16:         233.46 238.6 224.07 204.05 182.09 172.48 170.59 158.67 +
17:         172 187.58 199.57 195.87 179.75 155.25 129.62 108.13
18: SAN 3.8   7.7   9.4! AREA TAKES 9.4 MIN. TO REACH OUR PIPE
19: SAN 5.7   7.7   6.1
20: SAN 2.0   7.7   2.8
21: PIP 1.0   551.05   551.05   543.68   543.68   -8! THIS IS A DUMMY PIPE
22: HOL SAN VICENTE
23: REM THE FOLLOWING IS GHOST UPSTREAM OF BB-1
24: NEW SONORA DRIVE
25: REM USE SAME DIURNAL CURVE
26: SAN 3.8   7.7
27: SAN 4.1   7.7
28: SAN 2.2   7.7
29: SAN 3.0   7.7
30: SAN 4.3   7.7
31: SAN 2.0   7.7
32: SAN 3.9   7.7
33: PIP 1.0   549.98   549.98   542.20   542.20   -8 ! THIS IS DUMMY ALSO
34: HOL SONORA
35: NEW OAKLAND AVE
36: REM THE FOLLOWING IS BASED ON DIURNAL CURVE OF M.H.5 (R-1)
37: DIU 53.67 46.85 44.76 48.62 65.47 108.26 159.47 172.14 167.55 +
38:         166.67 156.81 134.83 138.13 141.07 118.64 131.29 139.26 +
39:         156.17 155.95 143.65 127.75 104.19 87.91 67.28
40: REM THE FOLLOWING ARE GHOST UPSTREAM SYSTEMS
41: SAN 6.9   16.5     9.0! AREA TAKES 9 MIN. TO REACH OUR PIPE
42: SAN 3.4   27.4     5.6
43: SAN 4.6   16.9     2.2
44: SAN 6.6   13.4    12.8
45: SAN 7.3   27.7     8.3
46: SAN 5.9   27.4     4.7
47: SAN 7.7   27.4     5.0
48: PIP 330   558.90   557.36   551.58   550.26   -8!
49: REM THE REST IS BASED ON DIURNAL CURVE OF M.H.2 (R-A)
50: DIU 77.49 64.76 57.03 54.49 60.76 85.05 156.93 223.39 +
51:         233.46 238.6 224.07 204.05 182.09 172.48 170.59 158.67 +
52:         172 187.58 199.57 195.87 179.75 155.25 129.62 108.13
53: PIP 325   557.36   555.99   550.26   548.96   -8 ! BB-7 TO BB-6
54: SAN 12.1   16.8
55: PIP 325   555.99   554.63   548.96   547.66   -8 ! BB-6 TO BB-5
56: PIP 344   554.63   553.25   547.66   546.28   -8 ! BB-5 TO BB-4
57: SAN 11.9   7.7 ! INTERSECTION OF LYON AVE
58: PIP 331   553.25   552.10   546.28   544.95   -8 ! BB-4 TO BB-3
59: SAN 2.0   7.7
60: PIP 318   552.10   5551.05   544.95   543.68   -8 ! BB-3 TO BB-2
61: SAN 2.0   7.7
62: REC SAN VICENTE
63: PIP 368.4   551.05   549.98   543.63   542.20   -8 ! BB-2 TO BB-1
64: SAN 4.0   7.7
65: REC SONORA
```

```
66: PIP 294.6  549.98  549.00  542.20  541.03  -8 ! BB-1 TO BB
67: END
```

```
66: PIP 294.6  549.98  549.00  542.20  541.03  -8 ! BB-1 TO BB
67: END
```

------- S U M M A R Y   O F   A N A L Y S I S ------

```
                Run number on command file :         1
                           Number of links :        10
                    Number of hydrographs :         46
                 Total sanitary population :       1573
                      Total sanitary area :       109.20 Acres
                         Total storm area :         0.00 Acres
                          Number of pumps :         0
                      Number of reservoirs :        0
            Number of diversion structures :        0
                         Number of inlets :         0
                      Length of new pipe :          0.00 Feet
                  Length of existing pipe :       2638.00 Feet
                        Length of channel :         0.00 Feet
                         Length of gutter :         0.00 Feet
                Length of transport units :         0.00 Feet
                  Length of pressure pipe :         0.00 Feet
```

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San Bernardino, California   Page   1
==
C:\HYDRA\HEMET\LINE_BB.CMD   17:13 22-May

LINE BB AT MENLO & LYON

*** SAN VICENTE DRIVE   Analysis of Existing Pipes

Link	Long	Diam	Invert Up/Dn	Slope	San Inf	Sto Mis	Vel d/D	Design MGD	% Cap Q Full	Remove	Par Rep
1	1	8	543.68	0.0000	0.0	0.0	0.00	0.01	999.99	0.00	0
			543.68		0.0	0.0	0.00		0.00		0

Lateral length=   1   Upstream length=   1

*** SONORA DRIVE   Analysis of Existing Pipes

Link	Long	Diam	Invert Up/Dn	Slope	San Inf	Sto Mis	Vel d/D	Design MGD	% Cap Q Full	Remove	Par Rep
2	1	8	542.20	0.0000	0.0	0.0	0.00	0.03	999.99	0.00	0
			542.20		0.0	0.0	0.00		0.00		0

Lateral length=   1   Upstream length=   1

*** OAKLAND AVE   Analysis of Existing Pipes

Link	Long	Diam	Invert Up/Dn	Slope	San Inf	Sto Mis	Vel d/D	Design MGD	% Cap Q Full	Remove	Par Rep
3	330	8	551.58	0.0040	0.1	0.0	1.58	0.14	28.18		
			550.26		0.0	0.0	0.41		0.49		
4	325	8	550.26	0.0040	0.1	0.0	1.58	0.14	28.18		
			548.96		0.0	0.0	0.41		0.49		
5	325	8	548.96	0.0040	0.2	0.0	1.67	0.17	34.22		
			547.66		0.0	0.0	0.46		0.49		
6	344	8	547.66	0.0040	0.2	0.0	1.67	0.17	34.17		
			546.28		0.0	0.0	0.46		0.49		
7	331	8	546.28	0.0040	0.2	0.0	1.72	0.18	36.97		
			544.95		0.0	0.0	0.48		0.49		
8	318	8	544.95	0.0040	0.2	0.0	1.72	0.18	37.53		
			543.68		0.0	0.0	0.48		0.49		
9	368	8	543.63	0.0039	0.2	0.0	1.74	0.20	41.27		
			542.20		0.0	0.0	0.51		0.48		

LINE BB AT MENLO & LYON

*** OAKLAND AVE   Analysis of Existing Pipes

Link	Long	Diam	Invert Up/Dn	Slope	San Inf	Sto Mis	Vel d/D	Design MGD	% Cap Q Full	Remove	Par Rep
10	295	8	542.20	0.0040	0.2	0.0	1.84	0.23	47.34		
			541.03		0.0	0.0	0.55		0.49		

Lateral length=   2636   Upstream length=   2638

```
14: REM MODEL RUN FOR 1990 CONDITIONS
15:
16: NEW ACACIA/RAYMOND LATERAL
17: REM USE DIURNAL CURVE FOR M.H.4
18: DIU 7.16 4.99 3.59 2.14 2.69 9.89 11.55 14.98+
19:         18.94 19.98 21.62 22.69 19.99 19.48 18.82 19.27+
20:         20.22 18.15 19.04 16.87 13.98 13.13 10.62 8.43
21: SAN 18.5 14
22: PIP 331.4 569.51 567.28 560.91 558.95 -10! EE-21 TO 20
23: PIP 331.6 567.28 564.12 558.95 556.52 -10! 20 TO 19
24: SAN 12.2 32.6
25: PIP 663.46 564.12 559.76 556.52 549.33 -10! 19,18,17
26: SAN 10.4 14
27: PIP 331.3 559.76 558.06 549.33 546.86 -10! 17 TO 16
28: SAN 6.9 14
29: PIP 331.1 558.06 555.0 546.86 544.37 -10! 16 TO 12
30: SAN 33.7 14 1.9
31: SAN 24.1 14 4.8
32: SAN 6.5 14
33: SAN 13.7 14 5.3
34: PIP 659.85 555.0 548.71 544.37 543.90 -12! 12 TO 11
35: REM BEGIN RAYMOND
36: PIP 335.5 548.71 550.33 543.86 543.30 -12! 11 TO 10
37: SAN 12.2 14
38: SAN 6.2 32.6
39: PIP 301.3 550.33 551.06 543.30 543.10 -12! 10 TO 9
40: PIP 346.4 551.06 551.79 543.09 542.72 -12 ! 9 TO 8
41: SAN 12.1 14
42: PIP 340 551.79 551.99 542.69 542.17 -12! 8 TO 7
43: HOL RAYMOND
44:
45: NEW FLORIDA/GILMORE LATERAL
46: SAN 11.2 14 3.6
47: SAN 18.0 14
48: PIP 168.8 576.28 575.05 569.52 568.32 -12! EE-32 TO 31
49: PIP 332.4 575.05 572.41 568.31 566.45 -12! 31 TO 30
50: SAN 9.9 14
51: PIP 330.7 572.41 571.28 566.46 564.66 -12! 30 TO 29
52: PIP 335.0 571.28 570.14 564.65 562.65 -12! 29 TO 28
53: PIP 328.1 570.14 568.11 562.65 560.66 -12! 28 TO 27
54: SAN 14.5 14
55: PIP 332.10 568.11 564.43 560.64 557.91 -12! 27 TO 26
56: PIP 330.07 564.43 561.44 557.86 555.0 -12! 26 TO 25
57: PIP 332.2 561.44 557.73 554.94 551.98 -12! 25 TO 24
58: SAN 10.7 14
59: SAN 12.4 14 2.5
60: PIP 327.3 557.73 555.48 551.97 548.88 -12! 24 TO 22
61: PIP 334.6 555.48 551.99 548.89 542.27 -12! 22 TO 7
62: SAN 9.5 14
63:
64: REC RAYMOND
65: PIP 341.1 551.99 549.27 542.22 541.81 -12! 7 TO 6
```

```
66: PIP 317.8 549.27 547.0 541.79 541.33 -15! 6 TO 5
67:
68: REM BEGIN GILMORE
69: PIP 400 547.0 548.0 541.24 541.06 -15! 5 TO 4
70: SAN 10.2 14
71: PIP 126.4 548.0 549.56 541.06 540.76 -15! 4 TO 3
72: PIP 69.4 549.56 550.01 540.70 540.58 -15! 3 TO 2
73: SAN 10.5 14
74: PIP 280.10 550.01 551.50 540.52 540.44 -15! 2 TO 1
75: PIP 14.5 551.50 551.33 540.38 540.14 -15! EE-1 TO E
76: END
```

------ S U M M A R Y   O F   A N A L Y S I S ------

```
                    Run number on command file :      2
                            Number of links :     27
                      Number of hydrographs :     80
                  Total sanitary population :    4030
                        Total sanitary area :    263.40 Acres
                           Total storm area :      0.00 Acres
                            Number of pumps :      0
                       Number of reservoirs :      0
            Number of diversion structures :      0
                           Number of inlets :      0
                          Length of new pipe :      0.00 Feet
                     Length of existing pipe :   8672.48 Feet
                           Length of channel :      0.00 Feet
                            Length of gutter :      0.00 Feet
                   Length of transport units :      0.00 Feet
                    Length of pressure pipe :      0.00 Feet
```

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===
C:\HYDRA\HEMET\LIN-EE.CMD   8:46 22-May-90

LINE EE AT GILMORE NEAR LATHAM

*** ACACIA/RAYMOND LATERAL   Analysis of Existing Pipes

Link	Long	Diam	Invert Up/Dn	Slope	San Inf	Sto Mis	Vel d/D	Design MGD	% Cap Q Full	Remove	Par Rep
1	331	10	560.91	0.0059	0.0	0.0	1.31	0.04	3.86		
			558.95		0.0	0.0	0.16		1.08		
2	332	10	558.95	0.0073	0.0	0.0	1.43	0.04	3.47		
			556.52		0.0	0.0	0.16		1.20		
3	663	10	556.52	0.0108	0.1	0.0	2.09	0.11	7.23		
			549.33		0.0	0.0	0.22		1.46		
4	331	10	549.33	0.0075	0.1	0.0	1.92	0.13	10.65		
			546.86		0.0	0.0	0.26		1.21		
5	331	10	546.86	0.0075	0.1	0.0	1.97	0.14	11.88		
			544.37		0.0	0.0	0.27		1.22		
6	660	12	544.37	0.0007	0.3	0.0	1.05	0.32	52.57		
			543.90		0.0	0.0	0.58		0.61		
7	336	12	543.86	0.0017	0.3	0.0	1.42	0.32	34.34		
			543.30		0.0	0.0	0.46		0.93		
8	301	12	543.30	0.0007	0.4	0.0	1.08	0.38	64.60		
			543.10		0.0	0.0	0.66		0.59		
9	346	12	543.09	0.0011	0.4	0.0	1.28	0.38	50.86		
			542.72		0.0	0.0	0.57		0.75		
10	340	12	542.69	0.0015	0.4	0.0	1.48	0.41	45.51		
			542.17		0.0	0.0	0.54		0.89		

Lateral length=   3972   Upstream length=   3972

*** FLORIDA/GILMORE LATERAL   Analysis of Existing Pipes

Link	Long	Diam	Invert Up/Dn	Slope	San Inf	Sto Mis	Vel d/D	Design MGD	% Cap Q Full	Remove	Par Rep
11	169	12	569.52	0.0071	0.1	0.0	1.58	0.07	3.42		
			568.32		0.0	0.0	0.16		1.93		
12	332	12	568.31	0.0056	0.1	0.0	1.44	0.07	3.85		
			566.45		0.0	0.0	0.16		1.71		

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C:\HYDRA\HEMET\LIN-EE.CMD

8:47 22-May-90

LINE EE AT GILMORE NEAR LATHAM

*** FLORIDA/GILMORE LATERAL

Analysis of Existing Pipes

Link	Long	Diam	Invert Up/Dn	Slope	San Inf	Sto Mis	Vel d/D	Design MGD	% Cap Q Full	Remove	Par Rep
13	331	12	566.46	0.0054	0.1	0.0	1.54	0.09	5.23		
			564.66		0.0	0.0	0.19		1.69		
14	335	12	564.65	0.0060	0.1	0.0	1.59	0.09	4.99		
			562.65		0.0	0.0	0.18		1.77		
15	328	12	562.65	0.0061	0.1	0.0	1.60	0.09	4.95		
			560.66		0.0	0.0	0.18		1.78		
16	332	12	560.64	0.0082	0.1	0.0	1.95	0.12	5.83		
			557.91		0.0	0.0	0.20		2.07		
17	330	12	557.86	0.0087	0.1	0.0	1.99	0.12	5.68		
			555.00		0.0	0.0	0.19		2.13		
18	332	12	554.94	0.0089	0.1	0.0	2.00	0.12	5.60		
			551.98		0.0	0.0	0.19		2.16		
19	327	12	551.97	0.0094	0.2	0.0	2.25	0.17	7.78		
			548.88		0.0	0.0	0.23		2.22		
20	335	12	548.89	0.0198	0.2	0.0	2.95	0.17	5.37		
			542.27		0.0	0.0	0.19		3.21		
21	341	12	542.22	0.0012	0.6	0.0	1.53	0.60	75.78		
			541.81		0.0	0.0	0.73		0.79		
22	318	15	541.79	0.0014	0.6	0.0	1.58	0.60	38.01		
			541.33		0.0	0.0	0.49		1.58		
23	400	15	541.24	0.0005	0.6	0.0	1.05	0.60	68.05		
			541.06		0.0	0.0	0.68		0.88		
24	126	15	541.06	0.0024	0.6	0.0	1.90	0.62	30.67		
			540.76		0.0	0.0	0.43		2.02		
25	69	15	540.70	0.0017	0.6	0.0	1.70	0.62	35.90		
			540.58		0.0	0.0	0.47		1.72		
26	280	15	540.52	0.0003	0.6	0.0	0.91	0.64	91.67		
			540.44		0.0	0.0	0.84		0.70		
27	15	15	540.38	0.0166	0.6	0.0	3.83	0.64	11.99		
			540.14		0.0	0.0	0.27		5.33		

Status of DEFAULTS at start of run. (* May be reset by SET)

```
|    Command file : C:\HYDRA\HEMET\LIN-EE20.CMD
|    Input units are read as             : USA
|*   Output sent to display              : Brief
|*   Output sent to printer              : Brief
|*   Output sent to file                 : Off
|    Paper width in inches               : 8.000
|    String to reset printer             : 27 38 108 54 68 27 40 115 49 48 72
|    String to set printer to compressed : 17.16 27 38 107 48 56 72
|    String to set printer to 8 lines/inch : 8 27 38 108 56 68
|    Name of printer                     : Hewlett-Packard, LaserJet/LaserJet P
|    Print heading at top of page        : True
|
|    Number of steps in hydrograph       : 96
|    Step length in minutes              : 15
|    Significant flow in hydrograph      : 0.010
|*   Maximum plot value                  : Selected by HYDRA
|    Type of hydrographic plot           : Compact
|
|    Sanitary flow by                    : Diurnal Curve
|    Delay to start of actual storm      : 0.00
|    Rational Method computations        : Off
|    SCS computations                    : Santa Barbara
|    Continuous simulation computations  : On
|
|*   Maximum d/D for pipe design/analysis : 0.900
|*   Match point position on pipe        : 0.00 or Invert
|*   Number of allowable diam drops      : 999
|*   Mimimum drop thru manhole           : 0.000
|    Routing technique                   : Quick
|
|*   Calculate sanitary flows            : True
|*   Calculate infiltration flows        : True
|*   Calculate storm flows               : True
|*   Calculate misc flows                : True
|
+-----------------------------------------------------------------
```

```
 1: JOB LINE EE AT GILMORE NEAR LATHAM
 2:
 3: REM --- PIPE AND PIPE COST DATA ---
 4: PDA .013 8 8 7.5 3 .004
 5: CST 1.5 1 3/ .2 .5 .5 2.87 / .5 0 1.63 +
 6:        1.15 / .89 1.1 1.43 4.78
 7: EXC 0/.45 18/.45 30/1.12
 8: TSL 0/0 6/0 6.001/.5 30/.5
 9: PCO 8/2.78 10/4.10 18/9.16 36/18.23
10:
11: REM --- SANITARY CRITERIA ---
12: GPC 100
13:
```

```
14: REM MODEL RUN FOR 2010 CONDITIONS
15:
16: NEW ACACIA/RAYMOND LATERAL
17: REM USE DIURNAL CURVE FOR M.H.4
18: DIU 7.16 4.99 3.59 2.14 2.69 9.89 11.55 14.98+
19:         18.94 19.98 21.62 22.69 19.99 19.48 18.82 19.27+
20:         20.22 18.15 19.04 16.87 13.98 13.13 10.62 8.43
21: SAN 18.5 14
22: PIP 331.4 569.51 567.28 560.91 558.95 -10! EE-21 TO 20
23: PIP 331.6 567.28 564.12 558.95 556.52 -10! 20 TO 19
24: SAN 12.2 37.4
25: PIP 663.46 564.12 559.76 556.52 549.33 -10! 19,18,17
26: SAN 10.4 14
27: PIP 331.3 559.76 558.06 549.33 546.86 -10! 17 TO 16
28: SAN 6.9 14
29: PIP 331.1 558.06 555.0 546.86 544.37 -10! 16 TO 12
30: SAN 33.7 14 1.9
31: SAN 24.1 14 4.8
32: SAN 6.5 14
33: SAN 13.7 14 5.3
34: PIP 659.85 555.0 548.71 544.37 543.90 -12! 12 TO 11
35: REM BEGIN RAYMOND
36: PIP 335.5 548.71 550.33 543.86 543.30 -12! 11 TO 10
37: SAN 12.2 14
38: SAN 6.2 37.4
39: PIP 301.3 550.33 551.06 543.30 543.10 -12! 10 TO 9
40: PIP 346.4 551.06 551.79 543.09 542.72 -12 ! 9 TO 8
41: SAN 12.1 14
42: PIP 340 551.79 551.99 542.69 542.17 -12! 8 TO 7
43: HOL RAYMOND
44:
45: NEW FLORIDA/GILMORE LATERAL
46: SAN 11.2 14 3.6
47: SAN 18.0 14
48: PIP 168.8 576.28 575.05 569.52 568.32 -12! EE-32 TO 31
49: PIP 332.4 575.05 572.41 568.31 566.45 -12! 31 TO 30
50: SAN 9.9 14
51: PIP 330.7 572.41 571.28 566.46 564.66 -12! 30 TO 29
52: PIP 335.0 571.28 570.14 564.65 562.65 -12! 29 TO 28
53: PIP 328.1 570.14 568.11 562.65 560.66 -12! 28 TO 27
54: SAN 14.5 14
55: PIP 332.10 568.11 564.43 560.64 557.91 -12! 27 TO 26
56: PIP 330.07 564.43 561.44 557.86 555.0 -12! 26 TO 25
57: PIP 332.2 561.44 557.73 554.94 551.98 -12! 25 TO 24
58: SAN 10.7 14
59: SAN 12.4 14 2.5
60: PIP 327.3 557.73 555.48 551.97 548.88 -12! 24 TO 22
61: PIP 334.6 555.48 551.99 548.89 542.27 -12! 22 TO 7
62: SAN 9.5 14
63:
64: REC RAYMOND
65: PIP 341.1 551.99 549.27 542.22 541.81 -12! 7 TO 6
```

```
66: PIP 317.8 549.27 547.0 541.79 541.33 -15! 6 TO 5
67:
68: REM BEGIN GILMORE
69: PIP 400 547.0 548.0 541.24 541.06 -15! 5 TO 4
70: SAN 10.2 14
71: PIP 126.4 548.0 549.56 541.06 540.76 -15! 4 TO 3
72: PIP 69.4 549.56 550.01 540.70 540.58 -15! 3 TO 2
73: SAN 10.5 14
74: PIP 280.10 550.01 551.50 540.52 540.44 -15! 2 TO 1
75: PIP 14.5 551.50 551.33 540.38 540.14 -15! EE-1 TO E
76: END
```

------ S U M M A R Y   O F   A N A L Y S I S ------

                    Run number on command file :   1
                             Number of links :   27
                         Number of hydrographs :   80
                    Total sanitary population :   4118
                         Total sanitary area :   263.40 Acres
                           Total storm area :   0.00 Acres
                           Number of pumps :   0
                        Number of reservoirs :   0
          Number of diversion structures :   0
                          Number of inlets :   0
                        Length of new pipe :   0.00 Feet
                    Length of existing pipe :   8672.48 Feet
                         Length of channel :   0.00 Feet
                          Length of gutter :   0.00 Feet
                  Length of transport units :   0.00 Feet
                    Length of pressure pipe :   0.00 Feet

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San Bernardino, California

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C:\HYDRA\HEMET\LIN-EE20.CMD

8:57 22-May-

LINE EE AT GILMORE NEAR LATHAM

*** ACACIA/RAYMOND LATERAL   Analysis of Existing Pipes

Link	Long	Diam	Invert Up/Dn	Slope	San Inf	Sto Mis	Vel d/D	Design MGD	% Cap Q Full	Remove	Par Rep
1	331	10	560.91	0.0059	0.0	0.0	1.31	0.04	3.86		
			558.95		0.0	0.0	0.16		1.08		
2	332	10	558.95	0.0073	0.0	0.0	1.43	0.04	3.47		
			556.52		0.0	0.0	0.16		1.20		
3	663	10	556.52	0.0108	0.1	0.0	2.14	0.12	7.87		
			549.33		0.0	0.0	0.23		1.46		
4	331	10	549.33	0.0075	0.1	0.0	1.94	0.14	11.43		
			546.86		0.0	0.0	0.27		1.21		
5	331	10	546.86	0.0075	0.2	0.0	2.00	0.15	12.65		
			544.37		0.0	0.0	0.28		1.22		
6	660	12	544.37	0.0007	0.3	0.0	1.06	0.33	54.12		
			543.90		0.0	0.0	0.59		0.61		
7	336	12	543.86	0.0017	0.3	0.0	1.43	0.33	35.35		
			543.30		0.0	0.0	0.47		0.93		
8	301	12	543.30	0.0007	0.4	0.0	1.10	0.39	67.01		
			543.10		0.0	0.0	0.68		0.59		
9	346	12	543.09	0.0011	0.4	0.0	1.29	0.39	52.77		
			542.72		0.0	0.0	0.58		0.75		
10	340	12	542.69	0.0015	0.4	0.0	1.49	0.42	47.10		
			542.17		0.0	0.0	0.55		0.89		

Lateral length=   3972   Upstream length=   3972

*** FLORIDA/GILMORE LATERAL   Analysis of Existing Pipes

Link	Long	Diam	Invert Up/Dn	Slope	San Inf	Sto Mis	Vel d/D	Design MGD	% Cap Q Full	Remove	Par Rep
11	169	12	569.52	0.0071	0.1	0.0	1.58	0.07	3.42		
			568.32		0.0	0.0	0.16		1.93		
12	332	12	568.31	0.0056	0.1	0.0	1.44	0.07	3.85		
			566.45		0.0	0.0	0.16		1.71		

LINE EE AT GILMORE NEAR LATHAM

*** FLORIDA/GILMORE LATERAL   Analysis of Existing Pipes

Link	Long	Diam	Invert Up/Dn	Slope	San Inf	Sto Mis	Vel d/D	Design MGD	% Cap Q Full	Remove	Par Rep
13	331	12	566.46	0.0054	0.1	0.0	1.54	0.09	5.23		
			564.66		0.0	0.0	0.19		1.69		
14	335	12	564.65	0.0060	0.1	0.0	1.59	0.09	4.99		
			562.65		0.0	0.0	0.18		1.77		
15	328	12	562.65	0.0061	0.1	0.0	1.60	0.09	4.95		
			560.66		0.0	0.0	0.18		1.78		
16	332	12	560.64	0.0082	0.1	0.0	1.95	0.12	5.83		
			557.91		0.0	0.0	0.20		2.07		
17	330	12	557.86	0.0087	0.1	0.0	1.99	0.12	5.68		
			555.00		0.0	0.0	0.19		2.13		
18	332	12	554.94	0.0089	0.1	0.0	2.00	0.12	5.60		
			551.98		0.0	0.0	0.19		2.16		
19	327	12	551.97	0.0094	0.2	0.0	2.25	0.17	7.78		
			548.88		0.0	0.0	0.23		2.22		
20	335	12	548.89	0.0198	0.2	0.0	2.95	0.17	5.37		
			542.27		0.0	0.0	0.19		3.21		
21	341	12	542.22	0.0012	0.6	0.0	1.54	0.61	77.57		
			541.81		0.0	0.0	0.74		0.79		
22	318	15	541.79	0.0014	0.6	0.0	1.59	0.61	38.91		
			541.33		0.0	0.0	0.49		1.58		
23	400	15	541.24	0.0005	0.6	0.0	1.06	0.61	69.66		
			541.06		0.0	0.0	0.69		0.88		
24	126	15	541.06	0.0024	0.6	0.0	1.91	0.63	31.37		
			540.76		0.0	0.0	0.44		2.02		
25	69	15	540.70	0.0017	0.6	0.0	1.71	0.63	36.72		
			540.58		0.0	0.0	0.48		1.72		
26	280	15	540.52	0.0003	0.7	0.0	0.91	0.66	93.69		
			540.44		0.0	0.0	0.85		0.70		
27	15	15	540.38	0.0166	0.7	0.0	3.85	0.65	12.26		
			540.14		0.0	0.0	0.27		5.33		

Status of DEFAULTS at start of run. (* May be reset by SET)

```
|   Command file : C:\HYDRA\HEMET\LIN-K120.CMD
|   Input units are read as              : USA
|*  Output sent to display               : Brief
|*  Output sent to printer               : Brief
|*  Output sent to file                  : Off
|   Paper width in inches                : 8.000
|   String to reset printer              : 27 38 108 54 68 27 40 115 49 48 72
|   String to set printer to compressed  : 17.16 27 38 107 48 56 72
|   String to set printer to 8 lines/inch : 8 27 38 108 56 68
|   Name of printer                      : Hewlett-Packard, LaserJet/LaserJet P
|   Print heading at top of page         : True
|
|   Number of steps in hydrograph        : 96
|   Step length in minutes               : 15
|   Significant flow in hydrograph       : 0.010
|*  Maximum plot value                   : Selected by HYDRA
|   Type of hydrographic plot            : Compact
|
|   Sanitary flow by                     : Diurnal Curve
|   Delay to start of actual storm       : 0.00
|   Rational Method computations         : Off
|   SCS computations                     : Santa Barbara
|   Continuous simulation computations   : On
|
|*  Maximum d/D for pipe design/analysis : 0.900
|*  Match point position on pipe         : 0.00 or Invert
|*  Number of allowable diam drops       : 999
|*  Mimimum drop thru manhole            : 0.000
|   Routing technique                    : Quick
|
|*  Calculate sanitary flows             : True
|*  Calculate infiltration flows         : True
|*  Calculate storm flows                : True
|*  Calculate misc flows                 : True
|
+----------------------------------------------------------------

   1: JOB LINE K1 AT STETSON & SEVEN HILLS DRIVE
   2:
   3: REM --- PIPE AND PIPE COST DATA ---
   4: PDA .013 8 8 7.5 3 .004
   5: CST 1.5 1 3 / .2 .5 .5 2.87 / .5 0 1.63+
   6:         1.15 / .89 1.1 1.43 4.78
   7: EXC 0/.45 18/.45 30/1.12
   8: TSL 0/0 6/0 6.001/.5 30/.5
   9: PCO 8/2.78 10/4.10 18/9.16 36/18.23
  10: REM --- SANITARY CRITERIA ---
  11: GPC 100
  12: REM THIS MODEL RUN FOR 2010 CONDITIONS
  13: REM THE FOLLOWING IS BASED ON DIURNAL CURVE OF M.H.5 (R-1)
```

```
14: NEW SEVEN HILLS DRIVE SEWER
15: DIU 53.67 46.85 44.76 48.62 65.47 108.26 159.47 172.14 +
16:     167.55 166.67 156.81 134.83 138.13 141.07 118.64 131.29 +
17:     139.26 156.17 155.95 143.65 127.75 104.19 87.91 67.28
18: REM BEGIN AT SEVEN HILLS DRIVE & BEECH TREE ST.
19: SAN 9.6 37.4 3.9
20: SAN 19.8 15.4
21: SAN 19.2 37.4 4.4
22: PIP 335.4 536.0 535.23 530.17 528.88 -10! K1-55 TO 54
23: PIP 336 535.23 535.67 528.88 527.59 -10! K1-54 TO 53
24: SAN 20.8 0.0 ! ZONED OS (OPEN SPACE)
25: PIP 246 535.67 535.7 527.59 526.22 -10! 53 TO 45
26: PIP 246 535.7 538.0 526.22 525.13 -10! 45 TO 44
27:
28: SAN 3.4 15.4
29: PIP 345 538.0 538.0 525.13 523.57 -10! 44 TO 43
30: PIP 250 538.0 538.1 523.57 522.57 -12! 43 TO 34
31: SAN 10.7 37.4
32: SAN 5.0 15.4 1.4
33: SAN 4.0 15.4 3.6
34: PIP 270 538.11 537.27 522.57 521.48 -12! 34 TO 27
35:
36: SAN 10.2 15.4 6.1
37: PIP 173.5 537.27 536.0 521.48 520.29 -12! 27 TO 26
38: PIP 301.0 536.0 535.2 520.29 519.08 -12! 26 TO 25
39:
40: SAN 6.5 37.4
41: PIP 230.6 535.2 534.34 519.08 518.16 -12! 25 TO 3
42:
43: REM BELOW TRIBUTARY AREAS WEST OF 7-HILLS DRIVE
44:
45: SAN 6.6 28.0 !TR-20
46: SAN 13.4 28.0 5.0! TR-20
47: SAN 12.5 28.0 7.2! TR-20
48:
49: REM TRIBUTARY AREAS EAST OF 7-HILLS DRIVE
50: SAN 7.9 15.4 1.5
51: SAN 6.8 15.4 6.2
52: SAN 5.1 15.4 11.0
53: SAN 10.9 15.4 3.3
54: SAN 8.2 15.4 9.4
55: SAN 8.1 15.4 15.3
56: SAN 3.8 15.4 10.7
57: SAN 2.7 15.4 14.9
58: SAN 4.4 15.4 13.4
59: SAN 4.9 15.4 15.6
60: SAN 3.4 15.4 22.0
61: PIP 276.2 534.34 533.89 518.16 517.06 -12! K1-3 TO K1-2
62: PIP 260.1 533.89 534.0 517.06 516.02 -15! K1-2 TO K1-1
63: SAN 2.5 37.4
64: PIP 105.4 534.0 535.0 516.02 515.05 -15! K1-1 TO K1
65: END
```

------ S U M M A R Y   O F   A N A L Y S I S ------

Run number on command file :	1
Number of links :	13
Number of hydrographs :	52
Total sanitary population :	4396
Total sanitary area :	210.40 Acres
Total storm area :	0.00 Acres
Number of pumps :	0
Number of reservoirs :	0
Number of diversion structures :	0
Number of inlets :	0
Length of new pipe :	0.00 Feet
Length of existing pipe :	3375.20 Feet
Length of channel :	0.00 Feet
Length of gutter :	0.00 Feet
Length of transport units :	0.00 Feet
Length of pressure pipe :	0.00 Feet

LINE K1 AT STETSON & SEVEN HILLS DRIVE

*** SEVEN HILLS DRIVE SEWER   Analysis of Existing Pipes

Link	Long	Diam	Invert Up/Dn	Slope	San Inf	Sto Mis	Vel d/D	Design MGD	% Cap Q Full	Remove	Par Rep
1	335	10	530.17	0.0038	0.2	0.0	1.69	0.20	23.10		
			528.88		0.0	0.0	0.37		0.87		
2	336	10	528.88	0.0038	0.2	0.0	1.69	0.20	23.12		
			527.59		0.0	0.0	0.37		0.87		
3	246	10	527.59	0.0056	0.2	0.0	1.91	0.20	19.20		
			526.22		0.0	0.0	0.33		1.05		
4	246	10	526.22	0.0044	0.2	0.0	1.77	0.20	21.52		
			525.13		0.0	0.0	0.35		0.94		
5	345	10	525.13	0.0045	0.2	0.0	1.80	0.21	22.11		
			523.57		0.0	0.0	0.36		0.94		
6	250	12	523.57	0.0040	0.2	0.0	1.70	0.21	14.46		
			522.57		0.0	0.0	0.29		1.45		
7	270	12	522.57	0.0040	0.3	0.0	1.86	0.29	19.79		
			521.48		0.0	0.0	0.34		1.45		
8	174	12	521.48	0.0069	0.3	0.0	2.29	0.31	16.38		
			520.29		0.0	0.0	0.31		1.89		
9	301	12	520.29	0.0040	0.3	0.0	1.90	0.31	21.39		
			519.08		0.0	0.0	0.35		1.45		
10	231	12	519.08	0.0040	0.3	0.0	1.97	0.35	23.91		
			518.16		0.0	0.0	0.38		1.44		
11	276	12	518.16	0.0040	0.6	0.0	2.35	0.63	43.41		
			517.06		0.0	0.0	0.52		1.44		
12	260	15	517.06	0.0040	0.6	0.0	2.28	0.63	23.88		
			516.02		0.0	0.0	0.38		2.62		
13	105	15	516.02	0.0092	0.6	0.0	3.07	0.64	16.08		
			515.05		0.0	0.0	0.31		3.97		

```
        Lateral length=  3375      Upstream length=   3375
```

==
:\HYDRA\HEMET\LINE-G.CMD   9:03 22-May-90

Status of DEFAULTS at start of run. (* May be reset by SET)

```
|   Command file : C:\HYDRA\HEMET\LINE-G.CMD
|   Input units are read as            : USA
|*  Output sent to display             : Brief
|*  Output sent to printer             : Brief
|*  Output sent to file                : Off
|   Paper width in inches              : 8.000
|   String to reset printer            : 27 38 108 54 68 27 40 115 49 48 72
|   String to set printer to compressed : 17.16 27 38 107 48 56 72
|   String to set printer to 8 lines/inch : 8 27 38 108 56 68
|   Name of printer                    : Hewlett-Packard, LaserJet/LaserJet F
|   Print heading at top of page       : True
|
|   Number of steps in hydrograph      : 96
|   Step length in minutes             : 15
|   Significant flow in hydrograph     : 0.010
|*  Maximum plot value                 : Selected by HYDRA
|   Type of hydrographic plot          : Compact
|
|   Sanitary flow by                   : Diurnal Curve
|   Delay to start of actual storm     : 0.00
|   Rational Method computations       : Off
|   SCS computations                   : Santa Barbara
|   Continuous simulation computations : On
|
|*  Maximum d/D for pipe design/analysis : 0.900
|*  Match point position on pipe       : 0.00 or Invert
|*  Number of allowable diam drops     : 999
|*  Mimimum drop thru manhole          : 0.000
|   Routing technique                  : Quick
|
|*  Calculate sanitary flows           : True
|*  Calculate infiltration flows       : True
|*  Calculate storm flows              : True
|*  Calculate misc flows               : True
|
+-----------------------------------------------------------------------

   1: JOB LINE G AT DEVONSHIRE & GILMORE
   2:
   3: REM --- PIPE AND PIPE COST DATA ---
   4: PDA .013 8 8 7.5 3 .004
   5: CST 1.5 1 3/.2 .5 .5 2.87 / .5 0 1.63+
   6:       1.15 / .89 1.1 1.43 4.78
   7: EXC 0/.45 18/ .45 30/1.12
   8: TSL 0/0 6/0 6.001/.5 30/.5
   9: PCO 8/2.78 10/4.10 18/9.16 36/18.23
  10:
  11: REM --- SANITARY CRITERIA ---
  12: GPC 100
  13:
```

```
14: REM MODEL RUN FOR 1990 CONDITIONS
15:
16: NEW DEVONSHIRE TRUNK
17: REM THE FOLLOWING IS BASED ON DIURNAL CURVE OF M.H.5 (R-1)
18: DIU 53.67 46.85 44.76 48.62 65.47 108.26 159.47 172.14 167.55+
19:         166.67 156.81 134.83 138.13 141.07 118.64 131.29 139.26+
20:         156.17 155.95 143.65 127.75 104.19 87.91 67.28
21: SAN 9.0 13.4 1.8
22: SAN 6.4 27.4 1.8
23: SAN 7.3 23.7
24: SAN 9.7 32.6 4.3
25: SAN 7.4 32.6 4.3
26: PIP 314 573.8 572.0 566.46 564.69 -8! G20 TO G19
27: SAN 7.3 23.7
28: PIP 195 572.0 569.5 564.69 561.87 -8! 19 TO 18
29: SAN 3.96 32.6
30: PIP 149 569.5 568.58 561.87 559.71 -8! 18 TO 17
31: SAN 3.96 32.6
32: PIP 14.9 568.58 568.2 559.71 559.61 -8! 17 TO 16
33: SAN 8.0 30.3
34: PIP 332 568.2 565.2 559.61 557.49 -8! 16 TO 15
35: SAN 5.9 31.1
36: PIP 346 565.2 563.5 557.49 555.27 -8! 15 TO 14
37: SAN 7.2 32.6
38: SAN 10.5 32.6 3.5
39: PIP 338 563.50 562.25 555.27 553.92 -8! 14 TO 13
40: SAN 10.9 31.6
41: PIP 322.5 562.25 561.58 553.92 552.63 -8! 13 TO 12
42: PIP 322.5 561.58 560 552.63 551.34 -8! 12 TO 11
43: SAN 2.9 7.7
44: PIP 335 560 559 551.34 550 -8! 11 TO 10
45: PIP 286 559 558.73 550 547.29 -8! 10 TO 9
46: SAN 7.2 7.7
47: PIP 251 558.73 557.42 547.16 546.28 -8! 9 TO 8
48: SAN 1.6 12.8
49: PIP 351 557.42 555.18 546.25 544.75 -8! 8 TO 7
50: SAN 1.6 12.8
51: PIP 349 555.18 552.9 544.74 543.37 -8! 7 TO 6
52: SAN 1.6 12.8
53: PIP 310.7 552.9 550.8 543.35 541.44 -8! 6 TO 2
54: SAN 3.8 12.8
55: PIP 36.1 550.8 550.49 541.41 541.11 -8! 2 TO 1
56: PIP 83.5 550.49 549.83 541.1 539.41 -8! G-1 TO G
57: END
```

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==
_:\HYDRA\HEMET\LINE-G.CMD   9:04 22-May-90

------ S U M M A R Y   O F   A N A L Y S I S ------

Run number on command file :	1	
Number of links :	17	
Number of hydrographs :	60	
Total sanitary population :	2993	
Total sanitary area :	116.22	Acres
Total storm area :	0.00	Acres
Number of pumps :	0	
Number of reservoirs :	0	
Number of diversion structures :	0	
Number of inlets :	0	
Length of new pipe :	0.00	Feet
Length of existing pipe :	4336.20	Feet
Length of channel :	0.00	Feet
Length of gutter :	0.00	Feet
Length of transport units :	0.00	Feet
Length of pressure pipe :	0.00	Feet

URS Consultants Inc.
San Bernardino, California

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==
C:\HYDRA\HEMET\LINE-G.CMD

9:04 22-May-.

LINE G AT DEVONSHIRE & GILMORE

*** DEVONSHIRE TRUNK   Analysis of Existing Pipes

Link	Long	Diam	Invert Up/Dn	Slope	San Inf	Sto Mis	Vel d/D	Design MGD	% Cap Q Full	Remove	Par Rep
1	314	8	566.46 564.69	0.0056	0.1 0.0	0.0 0.0	1.83 0.39	0.15	25.70 0.58		
2	195	8	564.69 561.87	0.0145	0.2 0.0	0.0 0.0	2.64 0.33	0.17	18.75 0.93		
3	149	8	561.87 559.71	0.0145	0.2 0.0	0.0 0.0	2.73 0.35	0.19	20.74 0.93		
4	15	8	559.71 559.61	0.0067	0.2 0.0	0.0 0.0	2.15 0.45	0.21	33.45 0.63		
5	332	8	559.61 557.49	0.0064	0.2 0.0	0.0 0.0	2.22 0.50	0.25	39.99 0.62		
6	346	8	557.49 555.27	0.0064	0.3 0.0	0.0 0.0	2.29 0.53	0.27	44.20 0.62		
7	338	8	555.27 553.92	0.0040	0.4 0.0	0.0 0.0	2.11 0.72	0.36	73.19 0.49		
8	323	8	553.92 552.63	0.0040	0.4 0.0	0.0 0.0	2.19 0.78	0.41	83.37 0.49		
9	323	8	552.63 551.34	0.0040	0.4 0.0	0.0 0.0	2.19 0.78	0.41	83.37 0.49		
10	335	8	551.34 550.00	0.0040	0.4 0.0	0.0 0.0	2.19 0.78	0.41	84.04 0.49		
11	286	8	550.00 547.29	0.0095	0.4 0.0	0.0 0.0	2.97 0.59	0.41	54.60 0.75		
12	251	8	547.16 546.28	0.0035	0.4 0.0	0.0 0.0	2.10 0.84	0.42	91.48 0.46		
13	351	8	546.25 544.75	0.0043	0.4 0.0	0.0 0.0	2.26 0.78	0.42	83.41 0.51		
14	349	8	544.74 543.37	0.0039	0.4 0.0	0.0 0.0	2.20 0.81	0.42	87.52 0.49		
15	311	8	543.35 541.44	0.0061	0.4 0.0	0.0 0.0	2.58 0.70	0.43	70.29 0.61		

LINE G AT DEVONSHIRE & GILMORE

*** DEVONSHIRE TRUNK   **Analysis of Existing Pipes**

Link	Long	Diam	Invert Up/Dn	Slope	San Inf	Sto Mis	Vel d/D	Design MGD	% Cap Q Full	Remove	Par Rep
16	36	8	541.41	0.0083	0.4	0.0	2.88	0.43	61.43		
			541.11		0.0	0.0	0.64		0.71		
17	84	8	541.10	0.0202	0.4	0.0	3.93	0.43	39.36		
			539.41		0.0	0.0	0.50		1.10		

Lateral length=   4336   Upstream length=   4336

Status of DEFAULTS at start of run. (* May be reset by SET)

```
    Command file : C:\HYDRA\HEMET\LINE-G20.CMD
    Input units are read as               : USA
  * Output sent to display                : Brief
  * Output sent to printer                : Brief
  * Output sent to file                   : Off
    Paper width in inches                 : 8.000
    String to reset printer               : 27 38 108 54 68 27 40 115 49 48 72
    String to set printer to compressed   : 17.16 27 38 107 48 56 72
    String to set printer to 8 lines/inch : 8 27 38 108 56 68
    Name of printer                       : Hewlett-Packard, LaserJet/LaserJet P
    Print heading at top of page          : True

    Number of steps in hydrograph         : 96
    Step length in minutes                : 15
    Significant flow in hydrograph        : 0.010
  * Maximum plot value                    : Selected by HYDRA
    Type of hydrographic plot             : Compact

    Sanitary flow by                      : Diurnal Curve
    Delay to start of actual storm        : 0.00
    Rational Method computations          : Off
    SCS computations                      : Santa Barbara
    Continuous simulation computations    : On

  * Maximum d/D for pipe design/analysis  : 0.900
  * Match point position on pipe          : 0.00 or Invert
  * Number of allowable diam drops        : 999
  * Mimimum drop thru manhole             : 0.000
    Routing technique                     : Quick

  * Calculate sanitary flows             : True
  * Calculate infiltration flows         : True
  * Calculate storm flows                : True
  * Calculate misc flows                 : True
+-----------------------------------------------------------------------

   1: JOB LINE G AT DEVONSHIRE & GILMORE
   2:
   3: REM --- PIPE AND PIPE COST DATA ---
   4: PDA .013 8 8 7.5 3 .004
   5: CST 1.5 1 3/.2 .5 .5 2.87 / .5 0 1.63+
   6:         1.15 / .89 1.1 1.43 4.78
   7: EXC 0/.45 18/ .45 30/1.12
   8: TSL 0/0 6/0 6.001/.5 30/.5
   9: PCO 8/2.78 10/4.10 18/9.16 36/18.23
  10:
  11: REM --- SANITARY CRITERIA ---
  12: GPC 100
  13:
```

```
  14: REM MODEL RUN FOR 2010 CONDITIONS
  15:
  16: NEW DEVONSHIRE TRUNK
  17: REM THE FOLLOWING IS BASED ON DIURNAL CURVE OF M.H.5 (R-1)
  18: DIU 53.67 46.85 44.76 48.62 65.47 108.26 159.47 172.14 167.55+
  19:         166.67 156.81 134.83 138.13 141.07 118.64 131.29 139.26+
  20:         156.17 155.95 143.65 127.75 104.19 87.91 67.28
  21: SAN 9.0 15.4 1.8
  22: SAN 6.4 31.4 1.8
  23: SAN 7.3 31.5
  24: SAN 9.7 37.4 4.3
  25: SAN 7.4 37.4 4.3
  26: PIP 314 573.8 572.0 566.46 564.69 -8! G20 TO G19
  27: SAN 7.3 31.5
  28: PIP 195 572.0 569.5 564.69 561.87 -8! 19 TO 18
  29: SAN 3.96 37.4
  30: PIP 149 569.5 568.58 561.87 559.71 -8! 18 TO 17
  31: SAN 3.96 37.4
  32: PIP 14.9 568.58 568.2 559.71 559.61 -8! 17 TO 16
  33: SAN 8.0 37.4
  34: PIP 332 568.2 565.2 559.61 557.49 -8! 16 TO 15
  35: SAN 5.9 37.4
  36: PIP 346 565.2 563.5 557.49 555.27 -8! 15 TO 14
  37: SAN 7.2 37.4
  38: SAN 10.5 37.4 3.5
  39: PIP 338 563.50 562.25 555.27 553.92 -8! 14 TO 13
  40: SAN 10.9 37.4
  41: PIP 322.5 562.25 561.58 553.92 552.63 -8! 13 TO 12
  42: PIP 322.5 561.58 560 552.63 551.34 -8! 12 TO 11
  43: SAN 2.9 8.8
  44: PIP 335 560 559 551.34 550 -8! 11 TO 10
  45: PIP 286 559 558.73 550 547.29 -8! 10 TO 9
  46: SAN 7.2 8.8
  47: PIP 251 558.73 557.42 547.16 546.28 -8! 9 TO 8
  48: SAN 1.6 15.4
  49: PIP 351 557.42 555.18 546.25 544.75 -8! 8 TO 7
  50: SAN 1.6 15.4
  51: PIP 349 555.18 552.9 544.74 543.37 -8! 7 TO 6
  52: SAN 1.6 15.4
  53: PIP 310.7 552.9 550.8 543.35 541.44 -8! 6 TO 2
  54: SAN 3.8 15.4
  55: PIP 36.1 550.8 550.49 541.41 541.11 -8! 2 TO 1
  56: PIP 83.5 550.49 549.83 541.1 539.41 -8! G-1 TO G
  57: END
```

------- S U M M A R Y   O F   A N A L Y S I S -------

Run number on command file :	1
Number of links :	17
Number of hydrographs :	60
Total sanitary population :	3546
Total sanitary area :	116.22 Acres
Total storm area :	0.00 Acres
Number of pumps :	0
Number of reservoirs :	0
Number of diversion structures :	0
Number of inlets :	0
Length of new pipe :	0.00 Feet
Length of existing pipe :	4336.20 Feet
Length of channel :	0.00 Feet
Length of gutter :	0.00 Feet
Length of transport units :	0.00 Feet
Length of pressure pipe :	0.00 Feet

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San Bernardino, California

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9:06 22-May-90

LINE G AT DEVONSHIRE & GILMORE

*** DEVONSHIRE TRUNK   Analysis of Existing Pipes

Link	Long	Diam	Invert Up/Dn	Slope	San Inf	Sto Mis	Vel d/D	Design MGD	% Cap Q Full	Remove	Par Rep
1	314	8	566.46 564.69	0.0056	0.2 0.0	0.0 0.0	1.92 0.43	0.18	30.27 0.58		
2	195	8	564.69 561.87	0.0145	0.2 0.0	0.0 0.0	2.80 0.36	0.21	22.49 0.93		
3	149	8	561.87 559.71	0.0145	0.2 0.0	0.0 0.0	2.90 0.38	0.23	24.78 0.93		
4	15	8	559.71 559.61	0.0067	0.3 0.0	0.0 0.0	2.27 0.50	0.25	39.82 0.63		
5	332	8	559.61 557.49	0.0064	0.3 0.0	0.0 0.0	2.34 0.55	0.30	47.86 0.62		
6	346	8	557.49 555.27	0.0064	0.3 0.0	0.0 0.0	2.42 0.58	0.33	52.92 0.62		
7	338	8	555.27 553.92	0.0040	0.4 0.0	0.0 0.0	2.21 0.80	0.42	86.77 0.49		
8	323	8	553.92 552.63	0.0040	0.5 0.0	0.0 0.0	2.28 0.90	0.48	98.82 0.49		
9	323	8	552.63 551.34	0.0040	0.5 0.0	0.0 0.0	2.28 0.90	0.48	98.82 0.49		
10	335	8	551.34 550.00	0.0040	0.5 0.0	0.0 0.0	2.28 0.91	0.49	99.58 0.49		
11	286	8	550.00 547.29	0.0095	0.5 0.0	0.0 0.0	3.13 0.66	0.49	64.70 0.75		
12	251	8	547.16 546.28	0.0035	0.5 0.0	0.0 0.0	2.13 0.90	0.50	108.33 0.46	0.04	8 10
13	351	8	546.25 544.75	0.0043	0.5 0.0	0.0 0.0	2.35 0.90	0.50	98.78 0.51		
14	349	8	544.74 543.37	0.0039	0.5 0.0	0.0 0.0	2.26 0.90	0.50	103.74 0.49	0.02	8 10
15	311	8	543.35 541.44	0.0061	0.5 0.0	0.0 0.0	2.71 0.78	0.51	83.38 0.61		

LINE G AT DEVONSHIRE & GILMORE

*** DEVONSHIRE TRUNK   Analysis of Existing Pipes

Link	Long	Diam	Invert Up/Dn	Slope	San Inf	Sto Mis	Vel d/D	Design MGD	% Cap Q Full	Remove	Par Rep
16	36	8	541.41	0.0083	0.5	0.0	3.03	0.51	72.81		
			541.11		0.0	0.0	0.71		0.71		
17	84	8	541.10	0.0202	0.5	0.0	4.13	0.51	46.65		
			539.41		0.0	0.0	0.54		1.10		

Lateral length=   4336   Upstream length=   4336

==

\HYDRA\HEMET\LINE-K.CMD   9:07 22-May-90

Status of DEFAULTS at start of run. (* May be reset by SET)

    Command file : C:\HYDRA\HEMET\LINE-K.CMD
    Input units are read as   : USA
  * Output sent to display   : Brief
  * Output sent to printer   : Brief
  * Output sent to file   : Off
    Paper width in inches   : 8.000
    String to reset printer   : 27 38 108 54 68 27 40 115 49 48 72
    String to set printer to compressed   : 17.16 27 38 107 48 56 72
    String to set printer to 8 lines/inch : 8 27 38 108 56 68
    Name of printer   : Hewlett-Packard, LaserJet/LaserJet P
    Print heading at top of page   : True

    Number of steps in hydrograph   : 96
    Step length in minutes   : 15
    Significant flow in hydrograph   : 0.010
  * Maximum plot value   : Selected by HYDRA
    Type of hydrographic plot   : Compact

    Sanitary flow by   : Diurnal Curve
    Delay to start of actual storm   : 0.00
    Rational Method computations   : Off
    SCS computations   : Santa Barbara
    Continuous simulation computations   : On

  * Maximum d/D for pipe design/analysis   : 0.900
  * Match point position on pipe   : 0.00 or Invert
  * Number of allowable diam drops   : 999
  * Mimimum drop thru manhole   : 0.000
    Routing technique   : Quick

  * Calculate sanitary flows   : True
  * Calculate infiltration flows   : True
  * Calculate storm flows   : True
  * Calculate misc flows   : True

+--

    1: JOB LINE K AT STETSON AND KIRBY
    2: REM --- PIPE AND PIPE COST DATA ---
    3: PDA .013 8 8 7.5 3 .004
    4: CST 1.5 1 3 / .2 .5 .5 2.87 / .5 0 1.63 +
    5:     1.15 / .89 1.1 1.43 4.78
    6: EXC 0/.45 18/.45 30/1.12
    7: TSL 0/0 6/0 6.001/.5 30/.5
    8: PCO 8/2.78 10/4.10 18/9.16 36/18.23
    9: REM --- SANITARY CRITERIA ---
   10: GPC 100
   11: REM THIS MODEL RUN FOR 1990 CONDITIONS
   12: REM BEGIN AT JOHNSTON & SANTA FE
   13: REM USE M.H.5 DIURNAL CURVE

```
14: DIU 53.67 46.85 44.76 48.62 65.47 108.26 159.47 172.14 167.55 +
15:       166.67 156.81 134.83 138.13 141.07 118.64 131.29 139.26 +
16:       156.17 155.95 143.65 127.75 104.19 87.91 67.28
17: NEW JOHNSTON LATERAL
18: SAN 9.9 13.4 3.3
19: SAN 9.8 13.4 5.6
20: PIP 264 612.65 610.08 605.59 604.36 -8! K-381 TO 430
21: SAN 3.9 13.4
22: PIP 280 610.08 608.96 604.36 603.45 -8! 430 TO 429
23: PIP 100 608.96 607.59 603.45 602.39 -8! 429 TO 428
24: SAN 11.1 10.8
25: PIP 300 607.59 605.60 602.39 599.36 -8! 428 TO 426
26: SAN 10.1 10.8
27: PIP 412 605.60 603.96 599.36 592.55 -8! 426 TO 348
28: SAN 8.9 10.8
29: SAN 4.5 14
30: SAN 4.7 14 4.4
31: SAN 8.6 10.8 5.6
32: PIP 326.7 603.96 600.98 592.55 590.63 -10! 348 TO 341
33: SAN 2.3 32.3
34: PIP 652.0 600.98 595.00 590.63 586.8 -10! 341 TO 339
35: SAN 18.7 10.8
36: PIP 487.62 595.0 592.6 586.8 584.76 -10! 339 TO 332
37: SAN 7.1 14
38: PIP 543 592.6 587.50 584.76 580.63 -10! 332 TO 335
39: SAN 2.3 13.3
40: SAN 2.3 32.3
41: PIP 543 587.50 582.90 580.63 576.47 -10! 335 TO 338
42: SAN 2.2 13.3
43: SAN 2.2 32.3
44: PIP 193.63 582.9 581.6 576.47 574.82 -10! 338 TO 278
45: PIP 318.47 581.6 582.1 574.82 574.01 -12! 278 TO 281
46: HOL JOHNSTON
47: NEW GILBERT LATERAL SEWER
48: SAN 2.9 13.3 ! M.H.#5
49: REC JOHNSTON
50: PIP 318.47 582.1 582.72 574.01 573.21 -12! 281 TO 291
51:
52: SAN 16.5 13.4 3.9
53: PIP 333.47 582.72 582.5 573.21 572.36 -12! 291 TO 286
54: SAN 2.9 13.3
55: PIP 333.46 582.5 582.2 572.36 571.29 -12! 286 TO 287
56: HOL GILBERT
57:
58: NEW WHITTIER LATERAL
59: SAN 4.4 13.4
60: PIP 58.84 603.32 602.50 596.17 595.70 -8! 436 TO 437
61: SAN 6.6 10.8
62: PIP 271.13 602.50 599.38 602.50 593.04 -8! 437 TO 438
63: SAN 4.4 13.4
64: PIP 636.39 599.38 594.81 592.85 586.54 -8! 438 TO 440
65: SAN 8.8 5.7 ! CHURCH - ASSUME EQUIV. TO 50 PEOPLE
```

```
 66: SAN 11.6 13.4
 67: PIP 48.65 594.81 594.48 586.37 586.22 -8! 440 TO 442
 68: SAN 3.8 13.4
 69: PIP 675.3 594.48 587.56 586.22 580.52 -8! 442 TO 312
 70: SAN 6.7 13.4
 71: SAN 10.0 13.1 ! WHITTIER ELEM SCH - FROM M&E
 72: PIP 326 587.56 584.85 580.52 577.57 -8! 312 TO 311
 73: PIP 326 584.85 582.35 577.57 571.73 -8! 311 TO 287
 74: REC GILBERT
 75: PIP 329.4 582.35 578.32 571.73 568.69 -12! 287 TO 288
 76: PIP 220 578.32 576.46 568.69 567.02 -12! 288 TO 290
 77: SAN 10.5 13.4
 78: PIP 109 576.46 575.40 567.02 566.09 -12! 290 TO 292
 79: SAN 9.0 13.4
 80: PIP 329 575.40 572.89 566.09 563.49 -12! 292 TO 309
 81: PIP 329 572.89 569.0 563.49 560.93 -12! 309 TO 308
 82: SAN 22.5 17.9
 83: SAN 6.9 13.3 11.9
 84: PIP 111 569.0 567.82 560.93 560.0 -12! 308 TO 136
 85: SAN 5.4 19.2
 86: PIP 250 567.82 564.0 560.0 556.45 -12! 136 TO 135
 87: SAN 5.3 19.2
 88: PIP 70 564.0 562.96 556.45 555.45 -12! 135 TO 134
 89: SAN 4.7 32.6
 90: REM THE FOLLOWING IS BASED ON DIURNAL CURVE OF M.H.2 (R-A)
 91: DIU 77.49 64.76 57.03 54.49 60.76 85.05 156.93 223.39 +
 92:     233.45 238.6 224.07 204.05 182.09 172.48 170.59 158.67 +
 93:     172 187.58 199.57 195.87 179.75 155.25 129.62 108.13
 94: PIP 550 562.96 561.4 555.45 553.77 -12! 134 TO 133
 95: PIP 268 561.4 559.52 553.77 551.75 -12! 133 TO 127 (M.H.2)
 96: SAN 10.4 19.2
 97: SAN 9.2 19.2 4.4
 98: SAN 8.0 19.2 5.6
 99: PIP 213 559.52 558.71 551.75 550.84 -12! 127 TO 114
100: PIP 331.2 558.71 556.62 550.84 549.78 -12! 114 TO 113
101: PIP 326 556.62 553.89 549.78 548.69 -12! 113 TO 112
102: PIP 326 553.89 551.56 548.69 547.60 -12! 112 TO 111
103: PIP 326 551.56 549.62 547.60 546.50 -12! 111 TO 105
104: HOL WHITTIER
105: NEW LYON EAST LATERAL
106: REC WHITTIER
107: PIP 326 549.62 549.60 546.50 545.97 -15! 105 TO 569
108: SAN 7.0 7.7
109: SAN 9.2 7.7 3.9
110: PIP 326 549.6 549.35 545.97 545.44 -15! 569 TO 532
111: SAN 4.7 7.7
112: SAN 6.2 7.7 3.2
113: SAN 6.4 7.7 6.6
114: SAN 6.3 7.7 7.7
115: SAN 10.1 7.7 10.4
 16: SAN 13.6 7.7 11.6
 17: SAN 16.6 32.6 16.0
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118: PIP 326 549.35 549.89 545.44 544.91 -15! 532 TO 534
119: PIP 328 549.89 552.25 544.91 544.37 -15! 534 TO 525
120: HOL LYON_EAST
121:
122: NEW MAYBERRY LATERAL
123: REM THE FOLLOWING IS BASED ON DIURNAL CURVE OF M.H.5 (R-1)
124: DIU 53.67 46.85 44.76 48.62 65.47 108.26 159.47 172.14 167.55 +
125:      166.67 156.81 134.83 138.13 141.07 118.64 131.29 139.26 +
126:      156.17 155.95 143.65 127.75 104.19 87.91 67.28
127: SAN 2.0 13.4
128: PIP 168 582.62 581.11 576.58 573.09 -8! 464 TO 465
129: SAN 3.4 13.4
130: PIP 162 581.1 579.8 573.09 568.81 -8! 465 TO 466
131: SAN 9.8 13.4
132: SAN 9.1 13.4 3.9
133: PIP 125 579.8 579.80 568.81 568.81 -8! 466 TO 467
134: SAN 5.5 13.4
135: PIP 250 579.8 577.28 568.81 567.93 -8! 467 TO 470
136: SAN 5.5 13.4
137: PIP 213.9 577.28 573.94 567.93 566.59 -8! 470 TO 471
138: REM INDUSTRIAL AREA (M.H.3) CONTRIBUTION HERE
139: DIU 3.83 3.99 4.21 3.60 3.13 3.13 5.96 7.27 +
140:      8.24 8.38 9.73 8.00 9.10 8.94 8.44 5.69 +
141:      5.40 4.51 4.59 4.92 4.60 4.11 3.89 4.32
142: SAN 7.6 14 7.2
143: SAN 11.3 32.6 5.3
144: SAN 3.4 32.6
145: PIP 333.2 573.94 571.49 566.59 563.16 -8! 471 TO 472
146: SAN 4.7 14
147: PIP 334.88 571.49 565.05 563.16 557.80 -8! 472 TO 491
148: SAN 4.6 14
149: PIP 325.64 565.05 562.91 557.80 556.11 -8! 491 TO 555
150: SAN 6.8 13.4
151: PIP 503 562.91 560.37 556.11 553.52 -8! 555 TO 557
152: SAN 3.0 13.4
153: PIP 368 560.37 558.46 553.52 551.09 -8! 557 TO 519
154: SAN 13.2 13.4
155: SAN 3.9 10.6
156: PIP 750 558.46 552.98 551.09 546.61 -8! 519 TO 524
157: SAN 6.9 13.4
158: SAN 3.8 10.6
159: PIP 192 552.98 552.07 546.61 554.20 -8! 524 TO 525
160: HOL MAYBERRY
161: NEW LYON/ARBOR/ROSE/ORCHID TRUNK
162: REM CONNECT TO LYON EAST LATERAL
163: REC LYON_EAST
164: REC MAYBERRY
165: SAN 2.2 21.5
166: PIP 251.2 552.25 552.0 544.37 543.98 -15! 525 TO 537
167: PIP 12.0 552.0 552.8 543.98 542.92 -15! 537 TO 536
168: PIP 376.36 552.8 552.0 542.92 540.10 -24! 536 TO 535
169: PIP 380 552.0 551.25 540.10 537.25 -24! 535 TO 533
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170: SAN 2.9 20.2
171: PIP 760 551.25 549.9 537.25 531.16 -24! 533 TO 103
172: SAN 1.8 20.2
173: REM BELOW INCLUDES TRIBUTARY AREA EAST OF LYON
174: SAN 9.4 19.2 5.0
175: SAN 13.3 19.2 5.0
176: SAN 3.6 19.2 6.7
177: SAN 5.8 19.2 7.5
178: SAN 3.0 19.2 8.9
179: SAN 5.7 19.2 11.9
180: SAN 6.7 19.2 15.3
181: SAN 9.1 19.2 17.2
182: SAN 9.3 19.2 10.1
183: REM BELOW INCLUDES TRIB. AREA WEST OF LYON
184: SAN 1.6 9.0
185: SAN 18.4 9.0 6.9
186: SAN 5.6 9.0 12.5
187: SAN 17.8 19.2 18.9
188: SAN 6.7 19.2 28.3
189: SAN 16.7 19.2 31.1
190: SAN 19.2 32.3 38.3
191: REM THE FOLLOWING IS BASED ON DIURNAL CURVE OF M.H.2 (R-A)
192: DIU 77.49 64.76 57.03 54.49 60.76 85.05 156.93 223.39 +
 73:     233.46 238.6 224.07 204.05 182.09 172.48 170.59 158.67 +
_94:     172 187.58 199.57 195.87 179.75 155.25 129.62 108.13
195: PIP 77.0 549.9 549.49 531.16 532.18 -24! 103 TO 109
196: PIP 145.34 549.47 547.50 532.18 530.49 -24! 109 TO 108
197: SAN 2.7 20.8
198: PIP 350 547.5 545.02 530.49 530.04 -24! 108 TO 358
199: REM BEGIN ARBOR PARKWAY
200: PIP 278.93 545.02 544.08 528.95 527.99 -24! 358 TO 357
201: PIP 134.75 544.08 543.80 527.99 527.57 -24! 357 TO 356
202: PIP 170.34 543.80 543.0 527.57 527.04 -24! 356 TO 355
203: SAN 3.6 9.0
204: PIP 140 543.0 542.5 527.04 526.61 -24! 355 TO 354
205: PIP 315 542.5 540.9 526.61 525.63 -24! 354 TO 353
206: PIP 232.46 540.90 539.7 525.63 524.91 -24! 353 TO 352
207: SAN 2.7 9.0
208: PIP 177.07 539.7 539.0 524.91 524.36 -24! 352 TO 351
209: PIP 177.07 539.0 538.2 524.36 523.81 -24! 351 TO 350
210: SAN 2.3 9.0
211: SAN 6.0 9.0 0.7
212: SAN 5.5 9.0 3.2
213: PIP 352.48 538.2 537.0 523.81 522.62 -24! 350 TO 30
214: PIP 127.43 537.0 537.5 522.62 522.13 -24! 30 TO 29
215: PIP 555.06 537.5 539.5 522.13 520.31 -24! 29, 28, 11
216: SAN 4.6 9.0
217: SAN 6.6 9.0 1.4
218: PIP 340.83 539.5 537.0 520.31 519.27 -24! 11 TO 10
 19: PIP 340 537.0 535.0 519.27 518.22 -24! 10 TO 9
_20: PIP 176.18 535.0 534.5 518.22 517.57 -24! 9 TO 8
221: SAN 4.3 9.0
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222: PIP 307.15 534.5 535.4 517.57 516.62 -24! 8 TO 7
223: PIP 297.37 535.4 536.4 516.62 515.6 -24! 7 TO 3
224: SAN 11.3 9.0
225: SAN 11.3 9.0 5.3
226: SAN 2.7 9.0
227: PIP 202.25 536.4 533.9 515.6 514.97 -24! 3 TO 2
228: HOL ORCHID
229:
230: NEW KIRBY TRUNK SEWER
231: SAN 2.4 32.6! R-3
232: SAN 2.1 14! COMMERCIAL
233: PIP 319.36 545.82 545.1 535.73 534.61 -8! 889 TO 899
234: PIP 670 545.1 539.0 534.61 532.26 -8! 899, 102, 101
235: SAN 4.0 14! INDUSTRIAL
236: SAN 5.1 32.6! R-2
237: PIP 649.7 539.0 534.4 532.26 530.07 -8! 101, 100, 99
238: SAN 3.16 14! INDUSTRIAL
239: SAN 3.16 16.3! R-3
240: SAN 1.6 14! COMMERCIAL
241: PIP 10.0 534.4 534.0 530.07 530.07 -8! 99 TO 98
242: SAN 2.14 14! COMMERCIAL
243: PIP 359.52 534.0 535.6 530.07 529.14 -10! 98 TO 94
244: PIP 313.02 535.6 535.7 529.14 528.51 -10! 94 TO 93
245: SAN 3.13 14
246: PIP 182 535.7 536.26 528.51 528.32 -10! 93 TO 95
247: PIP 85.58 536.26 536.06 528.32 528.02 -10! 95 TO 91
248: SAN 7.2 32.6
249: PIP 272 536.06 535.38 528.02 527.58 -10! 91 TO 89
250: SAN 3.0 14
251: SAN 7.2 32.6
252: PIP 272 535.38 534.70 527.58 527.15 -10! 89 TO 87
253: PIP 272 534.7 534.02 527.15 526.71 -10! 87 TO 85
254: SAN 3.0 14
255: SAN 7.2 32.6
256: PIP 226.81 534.02 533.45 526.71 526.35 -10! 85 TO 84
257: PIP 100 533.45 533.4 526.35 526.19 -10! 84 TO 83
258: SAN 5.4 32.6
259: SAN 1.8 14
260: PIP 280 533.4 534.0 526.19 524.81 -10! 83 TO 583
261: PIP 300 534.0 534.2 524.81 524.09 -10! 583 TO 65
262: SAN 13.9 6.7
263: SAN 5.2 6.7 5.3
264: SAN 0.6 14
265: SAN 0.5 0.0
266: PIP 425.0 534.2 530.56 524.09 523.07 -10! 65 TO 57
267: SAN 10.5 9.0
268: SAN 2.8 9.0
269: PIP 460.0 530.56 531.97 523.07 521.27 -10! 57 TO 582
270: PIP 460 531.97 533.4 521.27 519.48 -10! 582 TO 581
271: PIP 390 533.4 534.6 519.48 517.96 -10! 581 TO 32
272: SAN 16.9 9.0
273: PIP 590 534.6 536.4 517.96 515.6 -10! 32 TO 584
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274: PIP 340 536.4 533.9 515.6 514.97 -10! 584 TO 2
275: REC ORCHID
276: PIP 16.85 533.9 533.5 514.97 514.82 -24! 2 TO 1
277: PIP 67.76 533.5 533.5 514.82 514.51 -24! 1 TO K
278: END

------ S U M M A R Y   O F   A N A L Y S I S ------

Run number on command file :	1
Number of links :	101
Number of hydrographs :	228
Total sanitary population :	12327
Total sanitary area :	798.09 Acres
Total storm area :	0.00 Acres
Number of pumps :	0
Number of reservoirs :	0
Number of diversion structures :	0
Number of inlets :	0
Length of new pipe :	0.00 Feet
Length of existing pipe :	30605.22 Feet
Length of channel :	0.00 Feet
Length of gutter :	0.00 Feet
Length of transport units :	0.00 Feet
Length of pressure pipe :	0.00 Feet

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14: DIU 53.67 46.85 44.76 48.62 65.47 108.26 159.47 172.14 167.55 +
15:        166.67 156.81 134.83 138.13 141.07 118.64 131.29 139.26 +
16:        156.17 155.95 143.65 127.75 104.19 87.91 67.28
17: NEW JOHNSTON LATERAL
18: SAN 9.9 15.4 3.3
19: SAN 9.8 15.4 5.6
20: PIP 264 612.65 610.08 605.59 604.36 -8! K-381 TO 430
21: SAN 3.9 15.4
22: PIP 280 610.08 608.96 604.36 603.45 -8! 430 TO 429
23: PIP 100 608.96 607.59 603.45 602.39 -8! 429 TO 428
24: SAN 11.1 15.8
25: PIP 300 607.59 605.60 602.39 599.36 -8! 428 TO 426
26: SAN 10.1 15.4
27: PIP 412 605.60 603.96 599.36 592.55 -8! 426 TO 348
28: SAN 8.9 15.4
29: SAN 4.5 14
30: SAN 4.7 14 4.4
31: SAN 8.6 15.4 5.6
32: PIP 326.7 603.96 600.98 592.55 590.63 -10! 348 TO 341
33: SAN 2.3 37.4
34: PIP 652.0 600.98 595.00 590.63 586.8 -10! 341 TO 339
35: SAN 18.7 15.4
36: PIP 487.62 595.0 592.6 586.8 584.76 -10! 339 TO 332
37: SAN 7.1 14
38: PIP 543 592.6 587.50 584.76 580.63 -10! 332 TO 335
39: SAN 2.3 15.4
40: SAN 2.3 37.4
41: PIP 543 587.50 582.90 580.63 576.47 -10! 335 TO 338
42: SAN 2.2 15.4
43: SAN 2.2 37.4
44: PIP 193.63 582.9 581.6 576.47 574.82 -10! 338 TO 278
45: PIP 318.47 581.6 582.1 574.82 574.01 -12! 278 TO 281
46: HOL JOHNSTON
47: NEW GILBERT LATERAL SEWER
48: SAN 2.9 15.4 ! M.H.#5
49: REC JOHNSTON
50: PIP 318.47 582.1 582.72 574.01 573.21 -12! 281 TO 291
51: SAN 16.5 15.4 3.9
52: PIP 333.47 582.72 582.5 573.21 572.36 -12! 291 TO 286
53: SAN 2.9 15.4
54: PIP 333.46 582.5 582.2 572.36 571.29 -12! 286 TO 287
55: HOL GILBERT
56:
57: NEW WHITTIER LATERAL
58: SAN 4.4 15.4
59: PIP 58.84 603.32 602.50 596.17 595.70 -8! 436 TO 437
60: SAN 6.6 15.4
61: PIP 271.13 602.50 599.38 602.50 593.04 -8! 437 TO 438
62: SAN 4.4 15.4
63: PIP 636.39 599.38 594.81 592.85 586.54 -8! 438 TO 440
64: SAN 8.8 5.7 ! CHURCH - ASSUME EQUIV. TO 50 PEOPLE
65: SAN 11.6 15.4
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 66: PIP 48.65 594.81 594.48 586.37 586.22 -8! 440 TO 442
 67: SAN 3.8 15.4
 68: PIP 675.3 594.48 587.56 586.22 580.52 -8! 442 TO 312
 69: SAN 6.7 15.4
 70: SAN 10.0 13.1 ! WHITTIER ELEM SCH - FROM M&E
 71: PIP 326 587.56 584.85 580.52 577.57 -8! 312 TO 311
 72: PIP 326 584.85 582.35 577.57 571.73 -8! 311 TO 287
 73: REC GILBERT
 74: PIP 329.4 582.35 578.32 571.73 568.69 -12! 287 TO 288
 75: PIP 220 578.32 576.46 568.69 567.02 -12! 288 TO 290
 76: SAN 10.5 15.4
 77: PIP 109 576.46 575.40 567.02 566.09 -12! 290 TO 292
 78: SAN 9.0 15.4
 79: PIP 329 575.40 572.89 566.09 563.49 -12! 292 TO 309
 80: PIP 329 572.89 569.0 563.49 560.93 -12! 309 TO 308
 81: SAN 22.5 20.5
 82: SAN 6.9 15.4 11.9
 83: PIP 111 569.0 567.82 560.93 560.0 -12! 308 TO 136
 84: SAN 5.4 22.0
 85: PIP 250 567.82 564.0 560.0 556.45 -12! 136 TO 135
 86: SAN 5.3 22.0
 87: PIP 70 564.0 562.96 556.45 555.45 -12! 135 TO 134
 88: SAN 4.7 37.4
 89: REM THE FOLLOWING IS BASED ON DIURNAL CURVE OF M.H.2 (R-A)
 90: DIU 77.49 64.76 57.03 54.49 60.76 85.05 156.93 223.39 +
 91:     233.45 238.6 224.07 204.05 182.09 172.48 170.59 158.67 +
 92:     172 187.58 199.57 195.87 179.75 155.25 129.62 108.13
 93: PIP 550 562.96 561.4 555.45 553.77 -12! 134 TO 133
 94: PIP 268 561.4 559.52 553.77 551.75 -12! 133 TO 127 (M.H.2)
 95: SAN 10.4 22.0
 96: SAN 9.2 22.0 4.4
 97: SAN 8.0 22.0 5.6
 98: PIP 213 559.52 558.71 551.75 550.84 -12! 127 TO 114
 99: PIP 331.2 558.71 556.62 550.84 549.78 -12! 114 TO 113
100: PIP 326 556.62 553.89 549.78 548.69 -12! 113 TO 112
101: PIP 326 553.89 551.56 548.69 547.60 -12! 112 TO 111
102: PIP 326 551.56 549.62 547.60 546.50 -12! 111 TO 105
103: HOL WHITTIER
104: NEW LYON EAST LATERAL
105: REC WHITTIER
106: PIP 326 549.62 549.60 546.50 545.97 -15! 105 TO 569
107: SAN 7.0 8.8
108: SAN 9.2 8.8 3.9
109: PIP 326 549.6 549.35 545.97 545.44 -15! 569 TO 532
110: SAN 4.7 8.8
111: SAN 6.2 8.8 3.2
112: SAN 6.4 8.8 6.6
113: SAN 6.3 8.8 7.7
114: SAN 10.1 8.8 10.4
115: SAN 13.6 8.8 11.6
116: SAN 16.6 37.4 16.0
117: PIP 326 549.35 549.89 545.44 544.91 -15! 532 TO 534
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118: PIP 328 549.89 552.25 544.91 544.37 -15! 534 TO 525
119: HOL LYON_EAST
120:
121: NEW MAYBERRY LATERAL
122: REM THE FOLLOWING IS BASED ON DIURNAL CURVE OF M.H.5 (R-1)
123: DIU 53.67 46.85 44.76 48.62 65.47 108.26 159.47 172.14 167.55 +
124:      166.67 156.81 134.83 138.13 141.07 118.64 131.29 139.26 +
125:      156.17 155.95 143.65 127.75 104.19 87.91 67.28
126: SAN 2.0 15.4
127: PIP 168 582.62 581.11 576.58 573.09 -8! 464 TO 465
128: SAN 3.4 15.4
129: PIP 162 581.1 579.8 573.09 568.81 -8! 465 TO 466
130: SAN 9.8 15.4
131: SAN 9.1 15.4 3.9
132: PIP 125 579.8 579.80 568.81 568.81 -8! 466 TO 467
133: SAN 5.5 15.4
134: PIP 250 579.8 577.28 568.81 567.93 -8! 467 TO 470
135: SAN 5.5 15.4
136: PIP 213.9 577.28 573.94 567.93 566.59 -8! 470 TO 471
137: REM INDUSTRIAL AREA (M.H.3) CONTRIBUTION HERE
138: DIU 3.83 3.99 4.21 3.60 3.13 3.13 5.96 7.27 +
139:      8.24 8.38 9.73 8.00 9.10 8.94 8.44 5.69 +
140:      5.40 4.51 4.59 4.92 4.60 4.11 3.89 4.32
 41: SAN 7.6 30 7.2
 42: SAN 11.3 32.6 5.3
143: SAN 3.4 37.4
144: PIP 333.2 573.94 571.49 566.59 563.16 -8! 471 TO 472
145: SAN 4.7 14
146: PIP 334.88 571.49 565.05 563.16 557.80 -8! 472 TO 491
147: SAN 4.6 14
148: PIP 325.64 565.05 562.91 557.80 556.11 -8! 491 TO 555
149: SAN 6.8 15.4
150: PIP 503 562.91 560.37 556.11 553.52 -8! 555 TO 557
151: SAN 3.0 15.4
152: PIP 368 560.37 558.46 553.52 551.09 -8! 557 TO 519
153: SAN 13.2 15.4
154: SAN 3.9 12.1
155: PIP 750 558.46 552.98 551.09 546.61 -8! 519 TO 524
156: SAN 6.9 15.4
157: SAN 3.8 12.1
158: PIP 192 552.98 552.07 546.61 554.20 -8! 524 TO 525
159: HOL MAYBERRY
160: NEW LYON/ARBOR/ROSE/ORCHID TRUNK
161: REM CONNECT TO LYON EAST LATERAL
162: REC LYON_EAST
163: REC MAYBERRY
164: SAN 2.2 24.6
165: PIP 251.2 552.25 552.0 544.37 543.98 -15! 525 TO 537
166: PIP 12.0 552.0 552.8 543.98 542.92 -15! 537 TO 536
 67: PIP 376.36 552.8 552.0 542.92 540.10 -24! 536 TO 535
 68: PIP 380 552.0 551.25 540.10 537.25 -24! 535 TO 533
169: SAN 2.9 23.1
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170: PIP 760 551.25 549.9 537.25 531.16 -24! 533 TO 103
171: SAN 1.8 23.1
172: REM BELOW INCLUDES TRIBUTARY AREA EAST OF LYON
173: SAN 9.4 22.0 5.0
174: SAN 13.3 22.0 5.0
175: SAN 3.6 22.9 6.7
176: SAN 5.8 22.0 7.5
177: SAN 3.0 22.0 8.9
178: SAN 5.7 22.0 11.9
179: SAN 6.7 22.0 15.3
180: SAN 9.1 22.0 17.2
181: SAN 9.3 22.0 10.1
182: REM BELOW INCLUDES TRIB. AREA WEST OF LYON
183: SAN 1.6 15.4
184: SAN 18.4 15.4 6.9
185: SAN 5.6 15.4 2.5
186: SAN 17.8 22.0 18.9
187: SAN 6.7 22.0 28.3
188: SAN 16.7 22.0 31.1
189: SAN 19.2 37.4 38.3
190: REM THE FOLLOWING IS BASED ON DIURNAL CURVE OF M.H.2 (R-A)
191: DIU 77.49 64.76 57.03 54.49 60.76 85.05 156.93 223.39 +
192:     233.46 238.6 224.07 204.05 182.09 172.48 170.59 158.67 +
193:      172 187.58 199.57 195.87 179.75 155.25 129.62 108.13
194: PIP 77.0 549.9 549.49 531.16 532.18 -24! 103 TO 109
195: PIP 145.34 549.47 547.50 532.18 530.49 -24! 109 TO 108
196: SAN 2.7 26.4
197: PIP 350 547.5 545.02 530.49 530.04 -24! 108 TO 358
198: REM BEGIN ARBOR PARKWAY
199: PIP 278.93 545.02 544.08 528.95 527.99 -24! 358 TO 357
200: PIP 134.75 544.08 543.80 527.99 527.57 -24! 357 TO 356
201: PIP 170.34 543.80 543.0 527.57 527.04 -24! 356 TO 355
202: SAN 3.6 15.4
203: PIP 140 543.0 542.5 527.04 526.61 -24! 355 TO 354
204: PIP 315 542.5 540.9 526.61 525.63 -24! 354 TO 353
205: PIP 232.46 540.90 539.7 525.63 524.91 -24! 353 TO 352
206: SAN 2.7 15.4
207: PIP 177.07 539.7 539.0 524.91 524.36 -24! 352 TO 351
208: PIP 177.07 539.0 538.2 524.36 523.81 -24! 351 TO 350
209: SAN 2.3 15.4
210: SAN 6.0 15.4 0.7
211: SAN 5.5 15.4 3.2
212: PIP 352.48 538.2 537.0 523.81 522.62 -24! 350 TO 30
213: PIP 127.43 537.0 537.5 522.62 522.13 -24! 30 TO 29
214: PIP 555.06 537.5 539.5 522.13 520.31 -24! 29, 28, 11
215: SAN 4.6 15.4
216: SAN 6.6 15.4 1.4
217: PIP 340.83 539.5 537.0 520.31 519.27 -24! 11 TO 10
218: PIP 340 537.0 535.0 519.27 518.22 -24! 10 TO 9
219: PIP 176.18 535.0 534.5 518.22 517.57 -24! 9 TO 8
220: SAN 4.3 15.4
221: PIP 307.15 534.5 535.4 517.57 516.62 -24! 8 TO 7
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222:  PIP 297.37 535.4 536.4 516.62 515.6 -24! 7 TO 3
223:  SAN 11.3 15.4
224:  SAN 11.3 15.4 5.3
225:  SAN 2.7 15.4
226:  PIP 202.25 536.4 533.9 515.6 514.97 -24! 3 TO 2
227:  HOL ORCHID
228:
229:  NEW KIRBY TRUNK SEWER
230:  SAN 2.4 37.4! R-3
231:  SAN 2.1 14! COMMERCIAL
232:  PIP 319.36 545.82 545.1 535.73 534.61 -8! 889 TO 899
233:  PIP 670 545.1 539.0 534.61 532.26 -8! 899, 102, 101
234:  SAN 4.0 14! INDUSTRIAL
235:  SAN 5.1 37.4! R-2
236:  PIP 649.7 539.0 534.4 532.26 530.07 -8! 101, 100, 99
237:  SAN 3.16 14! INDUSTRIAL
238:  SAN 3.16 37.4! R-3
239:  SAN 1.6 14! COMMERCIAL
240:  PIP 10.0 534.4 534.0 530.07 530.07 -8! 99 TO 98
241:  SAN 2.14 14! COMMERCIAL
242:  PIP 359.52 534.0 535.6 530.07 529.14 -10! 98 TO 94
243:  PIP 313.02 535.6 535.7 529.14 528.51 -10! 94 TO 93
244:  SAN 3.13 14
 45:  PIP 182 535.7 536.26 528.51 528.32 -10! 93 TO 95
 46:  PIP 85.58 536.26 536.06 528.32 528.02 -10! 95 TO 91
247:  SAN 7.2 32.6
248:  PIP 272 536.06 535.38 528.02 527.58 -10! 91 TO 89
249:  SAN 3.0 14
250:  SAN 7.2 37.4
251:  PIP 272 535.38 534.70 527.58 527.15 -10! 89 TO 87
252:  PIP 272 534.7 534.02 527.15 526.71 -10! 87 TO 85
253:  SAN 3.0 14
254:  SAN 7.2 37.4
255:  PIP 226.81 534.02 533.45 526.71 526.35 -10! 85 TO 84
256:  PIP 100 533.45 533.4 526.35 526.19 -10! 84 TO 83
257:  SAN 5.4 37.4
258:  SAN 1.8 14
259:  PIP 280 533.4 534.0 526.19 524.81 -10! 83 TO 583
260:  PIP 300 534.0 534.2 524.81 524.09 -10! 583 TO 65
261:  SAN 13.9 15.4
262:  SAN 5.2 15.4 5.3
263:  SAN 0.6 14
264:  SAN 0.5 19.6
265:  PIP 425.0 534.2 530.56 524.09 523.07 -10! 65 TO 57
266:  SAN 10.5 15.4
267:  SAN 2.8 15.4
268:  PIP 460.0 530.56 531.97 523.07 521.27 -10! 57 TO 582
269:  PIP 460 531.97 533.4 521.27 519.48 -10! 582 TO 581
270:  PIP 390 533.4 534.6 519.48 517.96 -10! 581 TO 32
 71:  SAN 16.9 15.4
272:  PIP 590 534.6 536.4 517.96 515.6 -10! 32 TO 584
273:  PIP 340 536.4 533.9 515.6 514.97 -10! 584 TO 2
```

274: REC ORCHID
275: PIP 16.85 533.9 533.5 514.97 514.82 -24! 2 TO 1
276: PIP 67.76 533.5 533.5 514.82 514.51 -24! 1 TO K
277: END

------ S U M M A R Y   O F   A N A L Y S I S ------

```
                Run number on command file :       1
                        Number of links :       101
                   Number of hydrographs :       228
              Total sanitary population :      15053
                    Total sanitary area :       798.09 Acres
                       Total storm area :         0.00 Acres
                        Number of pumps :       0
                    Number of reservoirs :       0
         Number of diversion structures :       0
                       Number of inlets :       0
                     Length of new pipe :         0.00 Feet
                Length of existing pipe :     30605.22 Feet
                      Length of channel :         0.00 Feet
                       Length of gutter :         0.00 Feet
               Length of transport units :         0.00 Feet
                Length of pressure pipe :         0.00 Feet
```

LINE K AT STETSON AND KIRBY

*** JOHNSTON LATERAL   Analysis of Existing Pipes

Link	Long	Diam	Invert Up/Dn	Slope	San Inf	Sto Mis	Vel d/D	Design MGD	% Cap Q Full	Remove	Par Rep
1	264	8	605.59	0.0047	0.0	0.0	1.18	0.04	7.27		
			604.36		0.0	0.0	0.22		0.53		
2	280	8	604.36	0.0033	0.0	0.0	1.09	0.05	10.43		
			603.45		0.0	0.0	0.26		0.44		
3	100	8	603.45	0.0106	0.0	0.0	1.68	0.05	5.77		
			602.39		0.0	0.0	0.20		0.80		
4	300	8	602.39	0.0101	0.1	0.0	1.80	0.06	8.16		
			599.36		0.0	0.0	0.23		0.78		
5	412	8	599.36	0.0165	0.1	0.0	2.29	0.08	7.97		
			592.55		0.0	0.0	0.23		1.00		
6	327	10	592.55	0.0059	0.1	0.0	1.73	0.13	11.67		
			590.63		0.0	0.0	0.27		1.08		
7	652	10	590.63	0.0059	0.1	0.0	1.76	0.14	12.68		
			586.80		0.0	0.0	0.28		1.08		
8	488	10	586.80	0.0042	0.2	0.0	1.63	0.17	18.26		
			584.76		0.0	0.0	0.33		0.91		
9	543	10	584.76	0.0076	0.2	0.0	2.08	0.18	14.71		
			580.63		0.0	0.0	0.29		1.23		
10	543	10	580.63	0.0077	0.2	0.0	2.13	0.20	15.86		
			576.47		0.0	0.0	0.30		1.23		
11	194	10	576.47	0.0085	0.2	0.0	2.25	0.21	16.13		
			574.82		0.0	0.0	0.31		1.30		
12	318	12	574.82	0.0025	0.2	0.0	1.44	0.21	18.15		
			574.01		0.0	0.0	0.32		1.15		

                Lateral length=   4420   Upstream length=   4420

*** GILBERT LATERAL SEWER   Analysis of Existing Pipes

Link	Long	Diam	Invert Up/Dn	Slope	San Inf	Sto Mis	Vel d/D	Design MGD	% Cap Q Full	Remove	l Rep
13	318	12	574.01	0.0025	0.2	0.0	1.44	0.21	18.71		

LINE K AT STETSON AND KIRBY

*** GILBERT LATERAL SEWER   Analysis of Existing Pipes

Link	Long	Diam	Invert Up/Dn	Slope	San Inf	Sto Mis	Vel d/D	Design MGD	% Cap Q Full	Remove	Par Rep
14	333	12	573.21	0.0025	0.2	0.0	1.51	0.25	21.32		
			572.36		0.0	0.0	0.35		1.15		
15	333	12	572.36	0.0032	0.3	0.0	1.65	0.25	19.42		
			571.29		0.0	0.0	0.34		1.29		

```
            Lateral length=    985    Upstream length=    5406
```

*** WHITTIER LATERAL   Analysis of Existing Pipes

Link	Long	Diam	Invert Up/Dn	Slope	San Inf	Sto Mis	Vel d/D	Design MGD	% Cap Q Full	Remove	Par Rep
16	59	8	596.17	0.0080	0.0	0.0	0.96	0.01	1.24		
			595.70		0.0	0.0	0.10		0.69		
17	271	8	602.50	0.0349	0.0	0.0	2.04	0.02	1.31		
			593.04		0.0	0.0	0.10		1.45		
18	636	8	592.85	0.0099	0.0	0.0	1.44	0.03	3.57		
			586.54		0.0	0.0	0.16		0.77		
19	49	8	586.37	0.0031	0.1	0.0	1.11	0.06	13.37		
			586.22		0.0	0.0	0.28		0.43		
20	675	8	586.22	0.0084	0.1	0.0	1.70	0.06	9.12		
			580.52		0.0	0.0	0.24		0.71		
21	326	8	580.52	0.0090	0.1	0.0	1.90	0.10	13.17		
			577.57		0.0	0.0	0.28		0.74		
22	326	8	577.57	0.0179	0.1	0.0	2.50	0.10	9.36		
			571.73		0.0	0.0	0.25		1.04		
23	329	12	571.73	0.0092	0.3	0.0	2.63	0.35	15.82		
			568.69		0.0	0.0	0.30		2.19		
24	220	12	568.69	0.0076	0.3	0.0	2.45	0.35	17.44		
			567.02		0.0	0.0	0.32		1.99		
25	109	12	567.02	0.0085	0.4	0.0	2.60	0.37	17.40		
			566.09		0.0	0.0	0.32		2.11		

LINE K AT STETSON AND KIRBY

*** MAYBERRY LATERAL   **Analysis of Existing Pipes**

Link	Long	Diam	Invert Up/Dn	Slope	San Inf	Sto Mis	Vel d/D	Design MGD	% Cap Q Full	Remove	Par Rep
51	368	8	553.52	0.0066	0.2	0.0	2.12	0.21	32.80		
			551.09		0.0	0.0	0.45		0.63		
52	750	8	551.09	0.0060	0.2	0.0	2.15	0.24	40.65		
			546.61		0.0	0.0	0.50		0.60		
53	192	8	546.61	-0.0395	0.3	0.0	0.00`	0.27	999.99	0.00	0
			554.20		0.0	0.0	0.00		0.00		0

Lateral length=   3726   Upstream length=   3726

*** LYON/ARBOR/ROSE/ORCHID TRUNK   **Analysis of Existing Pipes**

Link	Long	Diam	Invert Up/Dn	Slope	San Inf	Sto Mis	Vel d/D	Design MGD	% Cap Q Full	Remove	P R
54	251	15	544.37	0.0016	1.0	0.0	1.89	1.00	61.03		
			543.98		0.0	0.0	0.64		1.63		
55	12	15	543.98	0.0883	1.0	0.0	8.07	1.00	8.09		
			542.92		0.0	0.0	0.23		12.31		
56	376	24	542.92	0.0075	1.0	0.0	3.20	1.00	7.93		
			540.10		0.0	0.0	0.23		12.56		
57	380	24	540.10	0.0075	1.0	0.0	3.20	1.00	7.93		
			537.25		0.0	0.0	0.23		12.57		
58	760	24	537.25	0.0080	1.0	0.0	3.29	1.01	7.75		
			531.16		0.0	0.0	0.22		12.99		
59	77	24	531.16	-0.0132	1.5	0.0	0.00	1.49	999.99	0.00	0
			532.18		0.0	0.0	0.00		0.00		0
60	145	24	532.18	0.0116	1.5	0.0	4.21	1.49	9.55		
			530.49		0.0	0.0	0.25		15.65		
61	350	24	530.49	0.0013	1.5	0.0	1.88	1.50	28.87		
			530.04		0.0	0.0	0.42		5.20		
62	279	24	528.95	0.0034	1.5	0.0	2.63	1.50	17.63		
			527.99		0.0	0.0	0.32		8.51		

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LINE K AT STETSON AND KIRBY

*** LYON/ARBOR/ROSE/ORCHID TRUNK   Analysis of Existing Pipes

Link	Long	Diam	Invert Up/Dn	Slope	San Inf	Sto Mis	Vel d/D	Design MGD	% Cap Q Full	Remove	Par Rep
78	202	24	515.60	0.0031	1.6	0.0	2.58	1.57	19.39		
			514.97		0.0	0.0	0.34		8.10		

Lateral length=   6676   Upstream length=   23544

*** KIRBY TRUNK SEWER   Analysis of Existing Pipes

Link	Long	Diam	Invert Up/Dn	Slope	San Inf	Sto Mis	Vel d/D	Design MGD	% Cap Q Full	Remove	Par Rep
79	319	8	535.73	0.0035	0.0	0.0	0.86	0.02	3.64		
			534.61		0.0	0.0	0.16		0.46		
80	670	8	534.61	0.0035	0.0	0.0	0.86	0.02	3.64		
			532.26		0.0	0.0	0.16		0.46		
81	650	8	532.26	0.0034	0.1	0.0	1.13	0.05	11.38		
			530.07		0.0	0.0	0.27		0.45		
82	10	8	530.07	0.0000	0.1	0.0	0.00	0.07	999.99	0.00	0
			530.07		0.0	0.0	0.00		0.00		0
83	360	10	530.07	0.0026	0.1	0.0	1.12	0.07	10.38		
			529.14		0.0	0.0	0.26		0.71		
84	313	10	529.14	0.0020	0.1	0.0	1.02	0.07	11.76		
			528.51		0.0	0.0	0.27		0.63		
85	182	10	528.51	0.0010	0.1	0.0	0.81	0.08	17.83		
			528.32		0.0	0.0	0.32		0.45		
86	86	10	528.32	0.0035	0.1	0.0	1.29	0.08	9.72		
			528.02		0.0	0.0	0.25		0.83		
87	272	10	528.02	0.0016	0.1	0.0	1.06	0.12	20.75		
			527.58		0.0	0.0	0.35		0.57		
88	272	10	527.58	0.0016	0.2	0.0	1.16	0.16	28.65		
			527.15		0.0	0.0	0.42		0.56		
89	272	10	527.15	0.0016	0.2	0.0	1.17	0.16	28.29		
			526.71		0.0	0.0	0.41		0.57		

LINE K AT STETSON AND KIRBY

*** KIRBY TRUNK SEWER   **Analysis of Existing Pipes**

Link	Long	Diam	Invert Up/Dn	Slope	San Inf	Sto Mis	Vel d/D	Design MGD	% Cap Q Full	Remove	Par Rep
90	227	10	526.71	0.0016	0.2	0.0	1.24	0.20	36.20		
			526.35		0.0	0.0	0.47		0.56		
91	100	10	526.35	0.0016	0.2	0.0	1.25	0.20	36.03		
			526.19		0.0	0.0	0.47		0.56		
92	280	10	526.19	0.0049	0.2	0.0	1.93	0.23	23.69		
			524.81		0.0	0.0	0.37		0.99		
93	300	10	524.81	0.0024	0.2	0.0	1.50	0.23	33.92		
			524.09		0.0	0.0	0.45		0.69		
94	425	10	524.09	0.0024	0.3	0.0	1.54	0.25	36.97		
			523.07		0.0	0.0	0.48		0.69		
95	460	10	523.07	0.0039	0.3	0.0	1.87	0.27	31.03		
			521.27		0.0	0.0	0.43		0.88		
96	460	10	521.27	0.0039	0.3	0.0	1.86	0.27	31.08		
			519.48		0.0	0.0	0.43		0.88		
97	390	10	519.48	0.0039	0.3	0.0	1.86	0.27	31.02		
			517.96		0.0	0.0	0.43		0.88		
98	590	10	517.96	0.0040	0.3	0.0	1.92	0.30	33.25		
			515.60		0.0	0.0	0.45		0.89		
99	340	10	515.60	0.0019	0.3	0.0	1.47	0.30	48.79		
			514.97		0.0	0.0	0.56		0.60		
100	17	24	514.97	0.0089	1.9	0.0	3.95	1.86	13.55		
			514.82		0.0	0.0	0.28		13.69		
101	68	24	514.82	0.0046	1.9	0.0	3.10	1.86	18.90		
			514.51		0.0	0.0	0.33		9.81		

        Lateral length=   7062   Upstream length=   30605

===
C:\HYDRA\HEMET\LINE-K1.CMD   9:12 22-May-

Status of DEFAULTS at start of run. (* May be reset by SET)

```
|     Command file : C:\HYDRA\HEMET\LINE-K1.CMD
|     Input units are read as              : USA
|*    Output sent to display               : Brief
|*    Output sent to printer               : Brief
|*    Output sent to file                  : Off
|     Paper width in inches                : 8.000
|     String to reset printer              : 27 38 108 54 68 27 40 115 49 48 72
|     String to set printer to compressed  : 17.16 27 38 107 48 56 72
|     String to set printer to 8 lines/inch : 8 27 38 108 56 68
|     Name of printer                      : Hewlett-Packard, LaserJet/LaserJet P
|     Print heading at top of page         : True
|
|     Number of steps in hydrograph        : 96
|     Step length in minutes               : 15
|     Significant flow in hydrograph       : 0.010
|*    Maximum plot value                   : Selected by HYDRA
|     Type of hydrographic plot            : Compact
|
|     Sanitary flow by                     : Diurnal Curve
|     Delay to start of actual storm       : 0.00
|     Rational Method computations         : Off
|     SCS computations                     : Santa Barbara
|     Continuous simulation computations   : On
|
|*    Maximum d/D for pipe design/analysis : 0.900
|*    Match point position on pipe         : 0.00 or Invert
|*    Number of allowable diam drops       : 999
|*    Mimimum drop thru manhole            : 0.000
|     Routing technique                    : Quick
|
|*    Calculate sanitary flows             : True
|*    Calculate infiltration flows         : True
|*    Calculate storm flows                : True
|*    Calculate misc flows                 : True
|
+-----------------------------------------------------------------

   1: JOB LINE K1 AT STETSON & SEVEN HILLS DRIVE
   2:
   3: REM --- PIPE AND PIPE COST DATA ---
   4: PDA .013 8 8 7.5 3 .004
   5: CST 1.5 1 3 / .2 .5 .5 2.87 / .5 0 1.63+
   6:         1.15 / .89 1.1 1.43 4.78
   7: EXC 0/.45 18/.45 30/1.12
   8: TSL 0/0 6/0 6.001/.5 30/.5
   9: PCO 8/2.78 10/4.10 18/9.16 36/18.23
  10: REM --- SANITARY CRITERIA ---
  11: GPC 100
  12:
  13: REM THIS MODEL RUN FOR 1990 CONDITIONS
  14:
```

```
15: REM THE FOLLOWING IS BASED ON DIURNAL CURVE OF M.H.5 (R-1)
16: DIU 53.67 46.85 44.76 48.62 65.47 108.26 159.47 172.14 167.55+
17:         166.67 156.81 134.83 138.13 141.07 118.64 131.29 139.26+
18:         156.17 155.95 143.65 127.75 104.19 87.91 67.28
19:
20: NEW SEVEN HILLS DRIVE TRUNK SEWER
21: REM BEGIN AT SEVEN HILLS DRIVE & BEECH TREE ST.
22: SAN 9.6 0.0 3.9
23: SAN 19.8 0.0
24: SAN 19.2 0.0 4.4
25: PIP 335.4 536.0 535.23 530.17 528.88 -10! K1-55 TO 54
26: PIP 336 535.23 535.67 528.88 527.59 -10! K1-54 TO 53
27: SAN 20.8 0.0 ! ZONED OS (OPEN SPACE)
28: PIP 246 535.67 535.7 527.59 526.22 -10! 53 TO 45
29: PIP 246 535.7 538.0 526.22 525.13 -10! 45 TO 44
30: SAN 3.4 0.0
31: PIP 345 538.0 538.0 525.13 523.57 -10! 44 TO 43
32: PIP 250 538.0 538.1 523.57 522.57 -12! 43 TO 34
33: SAN 10.7 32.6
34: SAN 5.0 0.0 1.4
35: SAN 4.0 0.0 3.6
36: PIP 270 538.11 537.27 522.57 521.48 -12! 34 TO 27
37:
38: SAN 10.2 13.4 6.1
39: PIP 173.5 537.27 536.0 521.48 520.29 -12! 27 TO 26
40: PIP 301.0 536.0 535.2 520.29 519.08 -12! 26 TO 25
41:
42: SAN 6.5 32.6
43: PIP 230.6 535.2 534.34 519.08 518.16 -12! 25 TO 3
44:
45: REM BELOW TRIBUTARY AREAS WEST OF 7-HILLS DRIVE
46:
47: SAN 6.6 11.0 !TR-20
48: SAN 13.4 11.0 5.0! TR-20
49: SAN 12.5 11.0 7.2! TR-20
50:
51: REM TRIBUTARY AREAS EAST OF 7-HILLS DRIVE
52: SAN 7.9 13.4 1.5
53: SAN 6.8 13.4 6.2
54: SAN 5.1 13.4 11.0
55: SAN 10.9 0.0 3.3
56: SAN 8.2 13.4 9.4
57: SAN 8.1 13.4 15.3
58: SAN 3.8 13.4 10.7
59: SAN 2.7 13.4 14.9
60: SAN 4.4 13.4 13.4
61: SAN 4.9 13.4 15.6
62: SAN 3.4 13.4 22.0
63: PIP 276.2 534.34 533.89 518.16 517.06 -12! K1-3 TO K1-2
64: PIP 260.1 533.89 534.0 517.06 516.02 -15! K1-2 TO K1-1
65: SAN 2.5 32.6
66: PIP 105.4 534.0 535.0 516.02 515.05 -15! K1-1 TO K1
```

67: END

------ S U M M A R Y   O F   A N A L Y S I S ------

```
                Run number on command file :         1
                          Number of links :        13
                    Number of hydrographs :        46
                 Total sanitary population :      1877
                      Total sanitary area :    210.40 Acres
                        Total storm area :      0.00 Acres
                         Number of pumps :         0
                     Number of reservoirs :         0
           Number of diversion structures :         0
                        Number of inlets :         0
                      Length of new pipe :      0.00 Feet
                 Length of existing pipe :   3375.20 Feet
                       Length of channel :      0.00 Feet
                        Length of gutter :      0.00 Feet
               Length of transport units :      0.00 Feet
                Length of pressure pipe :      0.00 Feet
```

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LINE K1 AT STETSON & SEVEN HILLS DRIVE

*** SEVEN HILLS DRIVE TRUNK SEWER   Analysis of Existing Pipes

Link	Long	Diam	Invert Up/Dn	Slope	San Inf	Sto Mis	Vel d/D	Design MGD	% Cap Q Full	Remove	Par Rep
1	335	10	530.17	0.0038	0.0	0.0	0.00	0.00	0.00		
			528.88		0.0	0.0	0.00		0.87		
2	336	10	528.88	0.0038	0.0	0.0	0.00	0.00	0.00		
			527.59		0.0	0.0	0.00		0.87		
3	246	10	527.59	0.0056	0.0	0.0	0.00	0.00	0.00		
			526.22		0.0	0.0	0.00		1.05		
4	246	10	526.22	0.0044	0.0	0.0	0.00	0.00	0.00		
			525.13		0.0	0.0	0.00		0.94		
5	345	10	525.13	0.0045	0.0	0.0	0.00	0.00	0.00		
			523.57		0.0	0.0	0.00		0.94		
6	250	12	523.57	0.0040	0.0	0.0	0.00	0.00	0.00		
			522.57		0.0	0.0	0.00		1.45		
7	270	12	522.57	0.0040	0.1	0.0	1.20	0.05	3.50		
			521.48		0.0	0.0	0.16		1.45		
8	174	12	521.48	0.0069	0.1	0.0	1.58	0.07	3.74		
			520.29		0.0	0.0	0.16		1.89		
9	301	12	520.29	0.0040	0.1	0.0	1.29	0.07	4.88		
			519.08		0.0	0.0	0.18		1.45		
10	231	12	519.08	0.0040	0.1	0.0	1.42	0.10	7.04		
			518.16		0.0	0.0	0.21		1.44		
11	276	12	518.16	0.0040	0.3	0.0	1.80	0.26	18.14		
			517.06		0.0	0.0	0.32		1.44		
12	260	15	517.06	0.0040	0.3	0.0	1.82	0.26	9.99		
			516.02		0.0	0.0	0.25		2.62		
13	105	15	516.02	0.0092	0.3	0.0	2.49	0.27	6.88		
			515.05		0.0	0.0	0.21		3.97		

Lateral length=   3375   Upstream length=   3375

Status of DEFAULTS at start of run. (* May be reset by SET)

    Command file : C:\HYDRA\HEMET\LINE-K20.CMD
    Input units are read as   : USA
  * Output sent to display   : Brief
  * Output sent to printer   : Brief
  * Output sent to file   : Off
    Paper width in inches   : 8.000
    String to reset printer   : 27 38 108 54 68 27 40 115 49 48 72
    String to set printer to compressed   : 17.16 27 38 107 48 56 72
    String to set printer to 8 lines/inch   : 8 27 38 108 56 68
    Name of printer   : Hewlett-Packard, LaserJet/LaserJet P
    Print heading at top of page   : True

    Number of steps in hydrograph   : 96
    Step length in minutes   : 15
    Significant flow in hydrograph   : 0.010
  * Maximum plot value   : Selected by HYDRA
    Type of hydrographic plot   : Compact

    Sanitary flow by   : Diurnal Curve
    Delay to start of actual storm   : 0.00
    Rational Method computations   : Off
    SCS computations   : Santa Barbara
    Continuous simulation computations   : On

  * Maximum d/D for pipe design/analysis   : 0.900
  * Match point position on pipe   : 0.00 or Invert
  * Number of allowable diam drops   : 999
  * Minimum drop thru manhole   : 0.000
    Routing technique   : Quick

  * Calculate sanitary flows   : True
  * Calculate infiltration flows   : True
  * Calculate storm flows   : True
  * Calculate misc flows   : True

 1: JOB LINE K AT STETSON AND KIRBY
 2: REM --- PIPE AND PIPE COST DATA ---
 3: PDA .013 8 8 7.5 3 .004
 4: CST 1.5 1 3 / .2 .5 .5 2.87 / .5 0 1.63 +
 5:      1.15 / .89 1.1 1.43 4.78
 6: EXC 0/.45 18/.45 30/1.12
 7: TSL 0/0 6/0 6.001/.5 30/.5
 8: PCO 8/2.78 10/4.10 18/9.16 36/18.23
 9: REM --- SANITARY CRITERIA ---
10: GPC 100
11: REM THIS MODEL RUN FOR 1990 CONDITIONS
12: REM BEGIN AT JOHNSTON & SANTA FE
13: REM USE M.H.5 DIURNAL CURVE

LINE K AT STETSON AND KIRBY

*** JOHNSTON LATERAL   **Analysis of Existing Pipes**

Link	Long	Diam	Invert Up/Dn	Slope	San Inf	Sto Mis	Vel d/D	Design MGD	% Cap Q Full	Remove	Par Rep
1	264	8	605.59 604.36	0.0047	0.0 0.0	0.0 0.0	1.23 0.23	0.04	8.36 0.53		
2	280	8	604.36 603.45	0.0033	0.1 0.0	0.0 0.0	1.12 0.27	0.05	11.98 0.44		
3	100	8	603.45 602.39	0.0106	0.1 0.0	0.0 0.0	1.74 0.21	0.05	6.64 0.80		
4	300	8	602.39 599.36	0.0101	0.1 0.0	0.0 0.0	1.90 0.25	0.08	10.08 0.78		
5	412	8	599.36 592.55	0.0165	0.1 0.0	0.0 0.0	2.44 0.26	0.10	10.15 1.00		
6	327	10	592.55 590.63	0.0059	0.2 0.0	0.0 0.0	1.83 0.29	0.16	14.78 1.08		
7	652	10	590.63 586.80	0.0059	0.2 0.0	0.0 0.0	1.87 0.30	0.17	15.94 1.08		
8	488	10	586.80 584.76	0.0042	0.2 0.0	0.0 0.0	1.77 0.37	0.21	23.51 0.91		
9	543	10	584.76 580.63	0.0076	0.2 0.0	0.0 0.0	2.22 0.33	0.23	18.60 1.23		
10	543	10	580.63 576.47	0.0077	0.2 0.0	0.0 0.0	2.27 0.34	0.25	19.95 1.23		
11	194	10	576.47 574.82	0.0085	0.3 0.0	0.0 0.0	2.41 0.34	0.26	20.20 1.30		
12	318	12	574.82 574.01	0.0025	0.3 0.0	0.0 0.0	1.54 0.37	0.26	22.72 1.15		

```
                Lateral length=    4420      Upstream length=    4420
```

*** GILBERT LATERAL SEWER   **Analysis of Existing Pip**

Link	Long	Diam	Invert Up/Dn	Slope	San Inf	Sto Mis	Vel d/D	Design MGD	% Cap Q Full	Remove	Par Rep
13	318	12	574.01	0.0025	0.3	0.0	1.55	0.27	23.39		

LINE K AT STETSON AND KIRBY

*** GILBERT LATERAL SEWER   Analysis of Existing Pipes

Link	Long	Diam	Invert Up/Dn	Slope	San Inf	Sto Mis	Vel d/D	Design MGD	% Cap Q Full	Remove	Par Rep
14	333	12	573.21	0.0025	0.3	0.0	1.63	0.30	26.38		
			572.36		0.0	0.0	0.40		1.15		
15	333	12	572.36	0.0032	0.3	0.0	1.77	0.31	23.98		
			571.29		0.0	0.0	0.38		1.29		

```
              Lateral length=     985     Upstream length=     5406
```

*** WHITTIER LATERAL   Analysis of Existing Pipes

Link	Long	Diam	Invert Up/Dn	Slope	San Inf	Sto Mis	Vel d/D	Design MGD	% Cap Q Full	Remove	Par Rep
16	59	8	596.17	0.0080	0.0	0.0	1.00	0.01	1.43		
			595.70		0.0	0.0	0.10		0.69		
17	271	8	602.50	0.0349	0.0	0.0	2.18	0.02	1.70		
			593.04		0.0	0.0	0.11		1.45		
18	636	8	592.85	0.0099	0.0	0.0	1.52	0.03	4.48		
			586.54		0.0	0.0	0.17		0.77		
19	49	8	586.37	0.0031	0.1	0.0	1.16	0.07	15.77		
			586.22		0.0	0.0	0.30		0.43		
20	675	8	586.22	0.0084	0.1	0.0	1.76	0.08	10.73		
			580.52		0.0	0.0	0.26		0.71		
21	326	8	580.52	0.0090	0.1	0.0	1.96	0.11	14.99		
			577.57		0.0	0.0	0.30		0.74		
22	326	8	577.57	0.0179	0.1	0.0	2.56	0.11	10.66		
			571.73		0.0	0.0	0.26		1.04		
23	329	12	571.73	0.0092	0.4	0.0	2.78	0.42	19.14		
			568.69		0.0	0.0	0.33		2.19		
24	220	12	568.69	0.0076	0.4	0.0	2.60	0.42	21.10		
			567.02		0.0	0.0	0.35		1.99		
25	109	12	567.02	0.0085	0.4	0.0	2.75	0.44	20.99		
			566.09		0.0	0.0	0.35		2.11		

LINE K AT STETSON AND KIRBY

*** WHITTIER LATERAL   Analysis of Existing Pipes

Link	Long	Diam	Invert Up/Dn	Slope	San Inf	Sto Mis	Vel d/D	Design MGD	% Cap Q Full	Remove	Par Rep
26	329	12	566.09	0.0079	0.5	0.0	2.72	0.46	22.79		
			563.49		0.0	0.0	0.37		2.03		
27	329	12	563.49	0.0078	0.5	0.0	2.71	0.46	22.97		
			560.93		0.0	0.0	0.37		2.02		
28	111	12	560.93	0.0084	0.5	0.0	2.94	0.54	25.99		
			560.00		0.0	0.0	0.40		2.09		
29	250	12	560.00	0.0142	0.6	0.0	3.53	0.56	20.58		
			556.45		0.0	0.0	0.35		2.72		
30	70	12	556.45	0.0143	0.6	0.0	3.57	0.58	21.13		
			555.45		0.0	0.0	0.35		2.73		
31	550	12	555.45	0.0031	0.6	0.0	2.12	0.60	47.70		
			553.77		0.0	0.0	0.55		1.26		
32	268	12	553.77	0.0075	0.6	0.0	2.91	0.60	30.37		
			551.75		0.0	0.0	0.43		1.98		
33	213	12	551.75	0.0043	0.7	0.0	2.48	0.69	46.49		
			550.84		0.0	0.0	0.54		1.49		
34	331	12	550.84	0.0032	0.7	0.0	2.25	0.69	53.65		
			549.78		0.0	0.0	0.59		1.29		
35	326	12	549.78	0.0033	0.7	0.0	2.28	0.69	52.39		
			548.69		0.0	0.0	0.58		1.32		
36	326	12	548.69	0.0033	0.7	0.0	2.28	0.69	52.39		
			547.60		0.0	0.0	0.58		1.32		
37	326	12	547.60	0.0034	0.7	0.0	2.29	0.69	52.15		
			546.50		0.0	0.0	0.58		1.33		

```
        Lateral length=   6430        Upstream length=   11836
```

*** LYON EAST LATERAL   Analysis of Existing Pipes

Link	Long	Diam	Invert Up/Dn	Slope	San Inf	Sto Mis	Vel d/D	Design MGD	% Cap Q Full	Remove	Par Rep
38	326	15	546.50	0.0016	0.7	0.0	1.72	0.69	41.44		

URS Consultants Inc.
San Bernardino, California

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C:\HYDRA\HEMET\LINE-K20.CMD

9:18 22-May-90

LINE K AT STETSON AND KIRBY

*** LYON EAST LATERAL — Analysis of Existing Pipes

Link	Long	Diam	Invert Up/Dn	Slope	San Inf	Sto Mis	Vel d/D	Design MGD	% Cap Q Full	Remove	Par Rep
39	326	15	545.97	0.0016	0.7	0.0	1.73	0.71	42.70		
			545.44		0.0	0.0	0.52		1.67		
40	326	15	545.44	0.0016	0.9	0.0	1.84	0.87	52.05		
			544.91		0.0	0.0	0.58		1.67		
41	328	15	544.91	0.0016	0.9	0.0	1.85	0.87	51.72		
			544.37		0.0	0.0	0.58		1.68		

Lateral length=   1306   Upstream length=   13142

*** MAYBERRY LATERAL — Analysis of Existing Pipes

Link	Long	Diam	Invert Up/Dn	Slope	San Inf	Sto Mis	Vel d/D	Design MGD	% Cap Q Full	Remove	Par Rep
42	168	8	576.58	0.0208	0.0	0.0	0.93	0.00	0.40		
			573.09		0.0	0.0	0.05		1.12		
43	162	8	573.09	0.0264	0.0	0.0	1.58	0.01	0.96		
			568.81		0.0	0.0	0.09		1.26		
44	125	8	568.81	0.0000	0.1	0.0	0.00	0.05	999.99	0.00	0
			568.81		0.0	0.0	0.00		0.00		0
45	250	8	568.81	0.0035	0.1	0.0	1.22	0.07	14.54		
			567.93		0.0	0.0	0.29		0.46		
46	214	8	567.93	0.0063	0.1	0.0	1.58	0.08	12.91		
			566.59		0.0	0.0	0.28		0.61		
47	333	8	566.59	0.0103	0.2	0.0	2.45	0.20	24.96		
			563.16		0.0	0.0	0.39		0.79		
48	335	8	563.16	0.0160	0.2	0.0	2.88	0.21	21.02		
			557.80		0.0	0.0	0.35		0.98		
49	326	8	557.80	0.0052	0.2	0.0	1.98	0.22	38.87		
			556.11		0.0	0.0	0.49		0.56		
50	503	8	556.11	0.0051	0.2	0.0	2.02	0.23	42.21		
			553.52		0.0	0.0	0.51		0.56		

LINE K AT STETSON AND KIRBY

*** MAYBERRY LATERAL   **Analysis of Existing Pipes**

Link	Long	Diam	Invert Up/Dn	Slope	San Inf	Sto Mis	Vel d/D	Design MGD	% Cap Q Full	Remove	Par Rep
51	368	8	553.52	0.0066	0.2	0.0	2.23	0.24	38.52		
			551.09		0.0	0.0	0.49		0.63		
52	750	8	551.09	0.0060	0.3	0.0	2.26	0.28	47.58		
			546.61		0.0	0.0	0.55		0.60		
53	192	8	546.61	-0.0395	0.3	0.0	0.00	0.31	999.99	0.00	0
			554.20		0.0	0.0	0.00		0.00		0

Lateral length= 3726   Upstream length= 3726

*** LYON/ARBOR/ROSE/ORCHID TRUNK   **Analysis of Existing Pipes**

Link	Long	Diam	Invert Up/Dn	Slope	San Inf	Sto Mis	Vel d/D	Design MGD	% Cap Q Full	Remove	Par Rep
54	251	15	544.37	0.0016	1.2	0.0	1.98	1.16	71.34		
			543.98		0.0	0.0	0.71		1.63		
55	12	15	543.98	0.0883	1.2	0.0	8.45	1.16	9.45		
			542.92		0.0	0.0	0.25		12.31		
56	376	24	542.92	0.0075	1.2	0.0	3.35	1.16	9.26		
			540.10		0.0	0.0	0.25		12.56		
57	380	24	540.10	0.0075	1.2	0.0	3.35	1.16	9.25		
			537.25		0.0	0.0	0.25		12.57		
58	760	24	537.25	0.0080	1.2	0.0	3.43	1.17	9.03		
			531.16		0.0	0.0	0.24		12.99		
59	77	24	531.16	-0.0132	1.8	0.0	0.00	1.75	999.99	0.00	0
			532.18		0.0	0.0	0.00		0.00		0
60	145	24	532.18	0.0116	1.8	0.0	4.34	1.75	11.21		
			530.49		0.0	0.0	0.26		15.65		
61	350	24	530.49	0.0013	1.8	0.0	1.97	1.76	33.91		
			530.04		0.0	0.0	0.45		5.20		
62	279	24	528.95	0.0034	1.8	0.0	2.76	1.76	20.69		
			527.99		0.0	0.0	0.35		8.51		

LINE K AT STETSON AND KIRBY

*** LYON/ARBOR/ROSE/ORCHID TRUNK   Analysis of Existing Pipes

Link	Long	Diam	Invert Up/Dn	Slope	San Inf	Sto Mis	Vel d/D	Design MGD	% Cap Q Full	Remove	Par Rep
63	135	24	527.99	0.0031	1.8	0.0	2.67	1.76	21.72		
			527.57		0.0	0.0	0.36		8.10		
64	170	24	527.57	0.0031	1.8	0.0	2.67	1.76	21.73		
			527.04		0.0	0.0	0.36		8.09		
65	140	24	527.04	0.0031	1.8	0.0	2.66	1.77	21.96		
			526.61		0.0	0.0	0.36		8.04		
66	315	24	526.61	0.0031	1.8	0.0	2.67	1.77	21.81		
			525.63		0.0	0.0	0.36		8.09		
67	232	24	525.63	0.0031	1.8	0.0	2.67	1.76	21.84		
			524.91		0.0	0.0	0.36		8.08		
68	177	24	524.91	0.0031	1.8	0.0	2.67	1.77	21.86		
			524.36		0.0	0.0	0.36		8.09		
69	177	24	524.36	0.0031	1.8	0.0	2.67	1.77	21.85		
			523.81		0.0	0.0	0.36		8.09		
70	352	24	523.81	0.0034	1.8	0.0	2.76	1.80	21.32		
			522.62		0.0	0.0	0.35		8.43		
71	127	24	522.62	0.0038	1.8	0.0	2.89	1.80	19.95		
			522.13		0.0	0.0	0.34		9.00		
72	555	24	522.13	0.0033	1.8	0.0	2.73	1.79	21.60		
			520.31		0.0	0.0	0.36		8.31		
73	341	24	520.31	0.0031	1.8	0.0	2.68	1.82	22.66		
			519.27		0.0	0.0	0.37		8.02		
74	340	24	519.27	0.0031	1.8	0.0	2.69	1.81	22.50		
			518.22		0.0	0.0	0.36		8.06		
75	176	24	518.22	0.0037	1.8	0.0	2.85	1.81	20.56		
			517.57		0.0	0.0	0.35		8.81		
76	307	24	517.57	0.0031	1.8	0.0	2.70	1.82	22.57		
			516.62		0.0	0.0	0.36		8.07		
77	297	24	516.62	0.0034	1.8	0.0	2.79	1.82	21.41		
			515.60		0.0	0.0	0.35		8.50		

LINE K AT STETSON AND KIRBY

*** LYON/ARBOR/ROSE/ORCHID TRUNK   Analysis of Existing Pipes

Link	Long	Diam	Invert Up/Dn	Slope	San Inf	Sto Mis	Vel d/D	Design MGD	% Cap Q Full	Remove	Par Rep
78	202	24	515.60	0.0031	1.9	0.0	2.73	1.87	23.14		
			514.97		0.0	0.0	0.37		8.10		

Lateral length= 6676   Upstream length= 23544

*** KIRBY TRUNK SEWER   Analysis of Existing Pipes

Link	Long	Diam	Invert Up/Dn	Slope	San Inf	Sto Mis	Vel d/D	Design MGD	% Cap Q Full	Remove	Par Rep
79	319	8	535.73	0.0035	0.0	0.0	0.88	0.02	4.03		
			534.61		0.0	0.0	0.17		0.46		
80	670	8	534.61	0.0035	0.0	0.0	0.88	0.02	4.03		
			532.26		0.0	0.0	0.17		0.46		
81	650	8	532.26	0.0034	0.1	0.0	1.15	0.06	12.62		
			530.07		0.0	0.0	0.28		0.45		
82	10	8	530.07	0.0000	0.1	0.0	0.00	0.09	999.99	0.00	0
			530.07		0.0	0.0	0.00		0.00		0
83	360	10	530.07	0.0026	0.1	0.0	1.17	0.09	12.61		
			529.14		0.0	0.0	0.28		0.71		
84	313	10	529.14	0.0020	0.1	0.0	1.06	0.09	14.29		
			528.51		0.0	0.0	0.29		0.63		
85	182	10	528.51	0.0010	0.1	0.0	0.86	0.10	21.34		
			528.32		0.0	0.0	0.35		0.45		
86	86	10	528.32	0.0035	0.1	0.0	1.34	0.10	11.65		
			528.02		0.0	0.0	0.27		0.83		
87	272	10	528.02	0.0016	0.1	0.0	1.10	0.13	23.59		
			527.58		0.0	0.0	0.37		0.57		
88	272	10	527.58	0.0016	0.2	0.0	1.20	0.18	32.50		
			527.15		0.0	0.0	0.44		0.56		
89	272	10	527.15	0.0016	0.2	0.0	1.21	0.18	32.13		
			526.71		0.0	0.0	0.44		0.57		

LINE K AT STETSON AND KIRBY

*** KIRBY TRUNK SEWER   Analysis of Existing Pipes

Link	Long	Diam	Invert Up/Dn	Slope	San Inf	Sto Mis	Vel d/D	Design MGD	% Cap Q Full	Remove	Par Rep
90	227	10	526.71	0.0016	0.2	0.0	1.29	0.23	41.06		
			526.35		0.0	0.0	0.51		0.56		
91	100	10	526.35	0.0016	0.2	0.0	1.30	0.23	40.90		
			526.19		0.0	0.0	0.51		0.56		
92	280	10	526.19	0.0049	0.3	0.0	2.02	0.27	26.88		
			524.81		0.0	0.0	0.40		0.99		
93	300	10	524.81	0.0024	0.3	0.0	1.56	0.27	38.51		
			524.09		0.0	0.0	0.49		0.69		
94	425	10	524.09	0.0024	0.3	0.0	1.64	0.31	45.55		
			523.07		0.0	0.0	0.54		0.69		
95	460	10	523.07	0.0039	0.3	0.0	2.00	0.35	39.29		
			521.27		0.0	0.0	0.49		0.88		
96	460	10	521.27	0.0039	0.3	0.0	2.00	0.35	39.40		
			519.48		0.0	0.0	0.50		0.88		
97	390	10	519.48	0.0039	0.3	0.0	2.00	0.34	39.33		
			517.96		0.0	0.0	0.50		0.88		
98	590	10	517.96	0.0040	0.4	0.0	2.08	0.39	43.33		
			515.60		0.0	0.0	0.52		0.89		
99	340	10	515.60	0.0019	0.4	0.0	1.60	0.38	63.59		
			514.97		0.0	0.0	0.65		0.60		
100	17	24	514.97	0.0089	2.2	0.0	4.15	2.24	16.37		
			514.82		0.0	0.0	0.31		13.69		
101	68	24	514.82	0.0046	2.2	0.0	3.29	2.24	22.84		
			514.51		0.0	0.0	0.37		9.81		

```
            Lateral length=   7062      Upstream length=   30605
```

Status of DEFAULTS at start of run. (* May be reset by SET)

```
    Command file : C:\HYDRA\HEMET\LINE-L.CMD
    Input units are read as                 : USA
*   Output sent to display                  : Brief
*   Output sent to printer                  : Brief
*   Output sent to file                     : Off
    Paper width in inches                   : 8.000
    String to reset printer                 : 27 38 108 54 68 27 40 115 49 48 72
    String to set printer to compressed     : 17.16 27 38 107 48 56 72
    String to set printer to 8 lines/inch   : 8 27 38 108 56 68
    Name of printer                         : Hewlett-Packard, LaserJet/LaserJet I
    Print heading at top of page            : True

    Number of steps in hydrograph           : 96
    Step length in minutes                  : 15
    Significant flow in hydrograph          : 0.010
*   Maximum plot value                      : Selected by HYDRA
    Type of hydrographic plot               : Compact

    Sanitary flow by                        : Diurnal Curve
    Delay to start of actual storm          : 0.00
    Rational Method computations            : Off
    SCS computations                        : Santa Barbara
    Continuous simulation computations      : On

*   Maximum d/D for pipe design/analysis    : 0.900
*   Match point position on pipe            : 0.00 or Invert
*   Number of allowable diam drops          : 999
*   Minimum drop thru manhole               : 0.000
    Routing technique                       : Quick

*   Calculate sanitary flows                : True
*   Calculate infiltration flows            : True
*   Calculate storm flows                   : True
*   Calculate misc flows                    : True
+-------------------------------------------------------------------------
```

```
   1: JOB LINE L AT STETSON & RIBBONWOOD CT.
   2:
   3: REM --- PIPE AND PIPE COST DATA ---
   4: PDA .013 8 8 7.5 3 .004
   5: CST 1.5 1 3/.2 .5 .5 2.87 /.5 0 1.63+
   6:        1.15/ .89 1.1 1.43 4.78
   7: EXC 0/.45 18/.45 30/1.12
   8: TSL 0/0 6/0 6.001/.5 30/.5
   9: PCO 8/2.78 10/4.10 18/9.16 36/18.23
  10: REM --- SANITARY CRITERIA ---
  11: GPC 100
  12: REM MODEL RUN FOR 1990 CONDITIONS
  13:
```

```
14: NEW BRENTWOOD WAY TRUNK
15: REM THE FOLLOWING IS BASED ON DIURNAL CURVE OF M.H.5 (R-1)
16: DIU 53.67 46.85 44.76 48.62 65.47 108.26 159.47 172.14 167.55+
17:         166.67 156.81 134.83 138.13 141.07 118.64 131.29 139.26+
18:         156.17 155.95 143.65 127.75 104.19 87.91 67.28
19: SAN 5.2 2.7
20: SAN 8.4 11.0 4.0
21: SAN 23.6 4.0 6.7
22: SAN 8.5 7.1 7.1
23: SAN 26.2 0.0 10.4
24: SAN 15.8 11.0 11.5
25: SAN 19.2 8.6 15.9
26: PIP 400 535.0 533.71 524.19 522.79 -10! L-45 TO 35
27: SAN 11.3 3.8
28: SAN 18.9 11.0 7.2
29: PIP 51 533.71 532.16 522.79 522.46 -10! 35 TO 34
30: PIP 300 532.16 530.51 522.46 521.56 -10! 34 TO 33
31: PIP 206.12 530.51 529.21 521.56 520.81 -10! 33 TO 29
32: SAN 11.4 3.7
33: SAN 6.2 11.0
34: PIP 157.33 529.21 529.21 520.81 520.31 -10! 29 TO 28
35:
36: HOL BRENTWOOD
37:
38: NEW BASSWOOD WAY TRUNK
39: REC BRENTWOOD
40: PIP 291.48 529.21 528.47 520.31 519.38 -10! 28 TO 26
41: SAN 1.4 11.0
42: SAN 4.6 2.5
43: PIP 250 528.47 527.73 519.38 518.58 -10! 26 TO 23
44: SAN 2.0 11.0
45: SAN 4.6 2.5
46: PIP 259.92 527.73 526.85 518.58 517.74 -10! 23 TO 20
47: SAN 2.0 11.0
48: SAN 4.5 2.6
49: PIP 251.19 526.85 526.10 517.74 516.94 -10! 20 TO 17
50: SAN 2.0 11.0
51: SAN 4.5 2.6
52: PIP 369 526.10 526.57 516.94 515.76 -10! 17 TO 14
53: SAN 3.5 2.6
54: SAN 2.7 11.0
55: PIP 259.86 526.57 525.79 515.76 514.93 -10! 14 TO 12
56: SAN 3.5 2.6
57: SAN 2.7 11.0
58: PIP 260 525.79 524.97 514.93 514.0 -10 ! 12 TO 11
59: SAN 6.8 14
60: PIP 253.4 524.97 525.63 514.0 513.09 -10 ! 11 TO 2
61: SAN 9.1 11.0 3.3
62: PIP 288 525.63 526.5 513.09 512.17 -10 ! 2 TO 1
63: PIP 62.04 526.5 526.73 512.17 511.8 -10 ! L-1 TO L
64: END
```

------ S U M M A R Y   O F   A N A L Y S I S ------

```
                 Run number on command file :       1
                           Number of links :      15
                     Number of hydrographs :      56
                  Total sanitary population :    1362
                        Total sanitary area :    208.60 Acres
                          Total storm area :      0.00 Acres
                           Number of pumps :       0
                      Number of reservoirs :       0
            Number of diversion structures :       0
                          Number of inlets :       0
                        Length of new pipe :      0.00 Feet
                   Length of existing pipe :   3659.34 Feet
                         Length of channel :      0.00 Feet
                          Length of gutter :      0.00 Feet
                  Length of transport units :      0.00 Feet
                   Length of pressure pipe :      0.00 Feet
```

LINE L AT STETSON & RIBBONWOOD CT.

*** BASSWOOD WAY TRUNK   Analysis of Existing Pipes

Link	Long	Diam	Invert Up/Dn	Slope	San Inf	Sto Mis	Vel d/D	Design MGD	% Cap Q Full	Remove	Par Rep
13	253	10	514.00	0.0036	0.2	0.0	1.60	0.18	21.61		
			513.09		0.0	0.0	0.36		0.84		
14	288	10	513.09	0.0032	0.2	0.0	1.58	0.20	24.68		
			512.17		0.0	0.0	0.38		0.79		
15	62	10	512.17	0.0060	0.2	0.0	1.95	0.20	18.05		
			511.80		0.0	0.0	0.32		1.08		

Lateral length=   2545   Upstream length=   3659

Status of DEFAULTS at start of run. (* May be reset by SET)

```
    Command file : C:\HYDRA\HEMET\LINE-L20.CMD
    Input units are read as             : USA
  * Output sent to display              : Brief
  * Output sent to printer              : Brief
  * Output sent to file                 : Off
    Paper width in inches               : 8.000
    String to reset printer             : 27 38 108 54 68 27 40 115 49 48 72
    String to set printer to compressed : 17.16 27 38 107 48 56 72
    String to set printer to 8 lines/inch : 8 27 38 108 56 68
    Name of printer                     : Hewlett-Packard, LaserJet/LaserJet P
    Print heading at top of page        : True

    Number of steps in hydrograph       : 96
    Step length in minutes              : 15
    Significant flow in hydrograph      : 0.010
  * Maximum plot value                  : Selected by HYDRA
    Type of hydrographic plot           : Compact

    Sanitary flow by                    : Diurnal Curve
    Delay to start of actual storm      : 0.00
    Rational Method computations        : Off
    SCS computations                    : Santa Barbara
    Continuous simulation computations  : On

  * Maximum d/D for pipe design/analysis : 0.900
  * Match point position on pipe        : 0.00 or Invert
  * Number of allowable diam drops      : 999
  * Mimimum drop thru manhole           : 0.000
    Routing technique                   : Quick

  * Calculate sanitary flows            : True
  * Calculate infiltration flows        : True
  * Calculate storm flows               : True
  * Calculate misc flows                : True

+------------------------------------------------------------------------

  1: JOB LINE L AT STETSON & RIBBONWOOD CT.
  2:
  3: REM --- PIPE AND PIPE COST DATA ---
  4: PDA .013 8 8 7.5 3 .004
  5: CST 1.5 1 3/.2 .5 .5 2.87 /.5 0 1.63+
  6:       1.15/ .89 1.1 1.43 4.78
  7: EXC 0/.45 18/.45 30/1.12
  8: TSL 0/0 6/0 6.001/.5 30/.5
  9: PCO 8/2.78 10/4.10 18/9.16 36/18.23
 10: REM --- SANITARY CRITERIA ---
 11: GPC 100
 12: REM MODEL RUN FOR 2010 CONDITIONS
 13:
```

```
14: NEW BRENTWOOD WAY TRUNK
15: REM THE FOLLOWING IS BASED ON DIURNAL CURVE OF M.H.5 (R-1)
16: DIU 53.67 46.85 44.76 48.62 65.47 108.26 159.47 172.14 167.55+
17:         166.67 156.81 134.83 138.13 141.07 118.64 131.29 139.26+
18:         156.17 155.95 143.65 127.75 104.19 87.91 67.28
19: SAN 5.2 21.5
20: SAN 8.4 28.0 4.0
21: SAN 23.6 10.2 6.7
22: SAN 8.5 18.1 7.1
23: SAN 26.2 22.0 10.4
24: SAN 15.8 28.0 11.5
25: SAN 19.2 21.8 15.9
26: PIP 400 535.0 533.71 524.19 522.79 -10! L-45 TO 35
27: SAN 11.3 40.8
28: SAN 18.9 28.0 7.2
29: PIP 51 533.71 532.16 522.79 522.46 -10! 35 TO 34
30: PIP 300 532.16 530.51 522.46 521.56 -10! 34 TO 33
31: PIP 206.12 530.51 529.21 521.56 520.81 -10! 33 TO 29
32: SAN 11.4 40.9
33: SAN 6.2 28.0
34: PIP 157.33 529.21 529.21 520.81 520.31 -10! 29 TO 28
35:
36: HOL BRENTWOOD
37:
38: NEW BASSWOOD WAY TRUNK
39: REC BRENTWOOD
40: PIP 291.48 529.21 528.47 520.31 519.38 -10! 28 TO 26
41: SAN 1.4 28.0
42: SAN 4.6 43.2
43: PIP 250 528.47 527.73 519.38 518.58 -10! 26 TO 23
44: SAN 2.0 28.0
45: SAN 4.6 43.2
46: PIP 259.92 527.73 526.85 518.58 517.74 -10! 23 TO 20
47: SAN 2.0 28.0
48: SAN 4.5 53.3
49: PIP 251.19 526.85 526.10 517.74 516.94 -10! 20 TO 17
50: SAN 2.0 28.0
51: SAN 4.5 53.3
52: PIP 369 526.10 526.57 516.94 515.76 -10! 17 TO 14
53: SAN 3.5 53.3
54: SAN 2.7 28.0
55: PIP 259.86 526.57 525.79 515.76 514.93 -10! 14 TO 12
56: SAN 3.5 53.3
57: SAN 2.7 28.0
58: PIP 260 525.79 524.97 514.93 514.0 -10 ! 12 TO 11
59: SAN 6.8 14
60: PIP 253.4 524.97 525.63 514.0 513.09 -10 ! 11 TO 2
61: SAN 9.1 28.0 3.3
62: PIP 288 525.63 526.5 513.09 512.17 -10 ! 2 TO 1
63: PIP 62.04 526.5 526.73 512.17 511.8 -10 ! L-1 TO L
64: END
```

------ S U M M A R Y   O F   A N A L Y S I S ------

Run number on command file :	1	
Number of links :	15	
Number of hydrographs :	56	
Total sanitary population :	5768	
Total sanitary area :	208.60	Acres
Total storm area :	0.00	Acres
Number of pumps :	0	
Number of reservoirs :	0	
Number of diversion structures :	0	
Number of inlets :	0	
Length of new pipe :	0.00	Feet
Length of existing pipe :	3659.34	Feet
Length of channel :	0.00	Feet
Length of gutter :	0.00	Feet
Length of transport units :	0.00	Feet
Length of pressure pipe :	0.00	Feet

URS Consultants Inc.
San Bernardino, California

HYDRA   Version 4.17
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C:\HYDRA\HEMET\LINE-L20.CMD

9:21 22-May-90

LINE L AT STETSON & RIBBONWOOD CT.

*** BRENTWOOD WAY TRUNK   Analysis of Existing Pipes

Link	Long	Diam	Invert Up/Dn	Slope	San Inf	Sto Mis	Vel d/D	Design MGD	% Cap Q Full	Remove	Par Rep
1	400	10	524.19	0.0035	0.3	0.0	1.88	0.32	38.18		
			522.79		0.0	0.0	0.49		0.83		
2	51	10	522.79	0.0065	0.5	0.0	2.61	0.46	40.84		
			522.46		0.0	0.0	0.51		1.13		
3	300	10	522.46	0.0030	0.5	0.0	2.00	0.46	59.99		
			521.56		0.0	0.0	0.63		0.77		
4	206	10	521.56	0.0036	0.5	0.0	2.14	0.46	54.47		
			520.81		0.0	0.0	0.59		0.85		
5	157	10	520.81	0.0032	0.6	0.0	2.15	0.55	70.05	—	
			520.31		0.0	0.0	0.70		0.79		

Lateral length=   1114   Upstream length=   1114

*** BASSWOOD WAY TRUNK   Analysis of Existing Pipes

Link	Long	Diam	Invert Up/Dn	Slope	San Inf	Sto Mis	Vel d/D	Design MGD	% Cap Q Full	Remove	Par Rep
6	291	10	520.31	0.0032	0.6	0.0	2.15	0.55	69.91		
			519.38		0.0	0.0	0.70		0.79		
7	250	10	519.38	0.0032	0.6	0.0	2.20	0.59	74.17		
			518.58		0.0	0.0	0.72		0.79		
8	260	10	518.58	0.0032	0.6	0.0	2.24	0.63	78.41		
			517.74		0.0	0.0	0.75		0.80		
9	251	10	517.74	0.0032	0.7	0.0	2.27	0.67	84.38		
			516.94		0.0	0.0	0.79		0.79		
10	369	10	516.94	0.0032	0.7	0.0	2.31	0.71	89.59		
			515.76		0.0	0.0	0.82		0.79		
11	260	10	515.76	0.0032	0.7	0.0	2.34	0.75	94.39	—	
			514.93		0.0	0.0	0.86		0.79		
12	260	10	514.93	0.0036	0.8	0.0	2.47	0.79	93.70		
			514.00		0.0	0.0	0.85		0.84		

LINE L AT STETSON & RIBBONWOOD CT.

*** BASSWOOD WAY TRUNK   **Analysis of Existing Pipes**

Link	Long	Diam	Invert Up/Dn	Slope	San Inf	Sto Mis	Vel d/D	Design MGD	% Cap Q Full	Remove	Par Rep
13	253	10	514.00	0.0036	0.8	0.0	2.48	0.80	95.12		
			513.09		0.0	0.0	0.86		0.84		
14	288	10	513.09	0.0032	0.8	0.0	2.36	0.84	105.48	0.04	8
			512.17		0.0	0.0	0.90		0.79		18
15	62	10	512.17	0.0060	0.8	0.0	3.03	0.84	77.16		
			511.80		0.0	0.0	0.74		1.08		

```
          Lateral length=   2545      Upstream length=    3659
```

.

Status of DEFAULTS at start of run. (* May be reset by SET)

```
|     Command file : C:\HYDRA\HEMET\LINE-T.CMD
|     Input units are read as              : USA
|*    Output sent to display               : Brief
|*    Output sent to printer               : Brief
|*    Output sent to file                  : Off
|     Paper width in inches                : 8.000
|     String to reset printer              : 27 38 108 54 68 27 40 115 49 48 72
|     String to set printer to compressed  : 17.16 27 38 107 48 56 72
|     String to set printer to 8 lines/inch : 8 27 38 108 56 68
|     Name of printer                      : Hewlett-Packard, LaserJet/LaserJet I
|     Print heading at top of page         : True
|
|     Number of steps in hydrograph        : 96
|     Step length in minutes               : 15
|     Significant flow in hydrograph       : 0.010
|*    Maximum plot value                   : Selected by HYDRA
|     Type of hydrographic plot            : Compact
|
|     Sanitary flow by                     : Diurnal Curve
|     Delay to start of actual storm       : 0.00
|     Rational Method computations         : Off
|     SCS computations                     : Santa Barbara
|     Continuous simulation computations   : On
|
|*    Maximum d/D for pipe design/analysis : 0.900
|*    Match point position on pipe         : 0.00 or Invert
|*    Number of allowable diam drops       : 999
|*    Mimimum drop thru manhole            : 0.000
|     Routing technique                    : Quick
|
|*    Calculate sanitary flows             : True
|*    Calculate infiltration flows         : True
|*    Calculate storm flows                : True
|*    Calculate misc flows                 : True
|
+-----------------------------------------------------------------------
```

```
  1: JOB LINE T AT DEVONSHIRE & GILBERT
  2:
  3: REM --- PIPE AND PIPE COST DATA ---
  4: PDA .013 8 8 7.5 3 .004
  5: CST 1.5 1 3 / .2 .5 .5 2.87 / .5 0 1.63 +
  6:             1.15 / .89 1.1 1.43 4.78
  7: EXC 0/.45  18/.45 30/1.12
  8: TSL 0/0 6/0 6.001/.5 30/.5
  9: PCO 8/2.78  10/4.10  18/9.16  36/18.23
 10:
 11: REM --- SANITARY CRITERIA ---
 12: GPC 100
 13: REM <------ INDICATES ADDITIONAL INFO REQUIRED
```

```
14: REM THIS MODEL RUN IS FOR 1990 CONDITIONS
15: REM THE FOLLOWING ARE GHOST SYSTEMS UPSTREAM OF MAYBERRY
16: REM USE MH 5 DIURNAL CURVE
17: DIU 53.67 46.85 44.76 48.62 65.47 108.26 159.47 172.14 +
18:         167.55 166.67 156.81 134.83 138.13 141.07 118.64 131.29 +
19:         139.26 156.17 155.95 143.65 127.75 104.19 87.91 67.28
20:
21: NEW GHOST1  ! MAYBERRY & SANTA FE
22: SAN 8.3  13.4  2.5
23: SAN 6.6  28.8  4.4
24: SAN 3.1  13.4  1.7
25: SAN 11.6  27.1  6.1
26: PIP 1.0  100  100  150  150  -8  ! DUMMY PIPE
27: HOL GHOST1
28:
29: NEW GHOST2  ! MAYBERRY & TAYLOR
30: SAN 7.9  13.4
31: SAN 14.9  32.6  13.3
32: SAN 6.0  10.7  9.4
33: PIP 1.0  100  100  150  150  -8  ! DUMMNY PIPE
34: HOL GHOST2
35:
36: NEW GHOST3   ! MAYBERRY & BUENA VISTA
37: SAN 16.4  10.7  15.8
38: SAN 5.1  12.0  17.5
39: SAN 7.2  10.7  13.3
40: SAN 8.2  10.7  9.2
41: SAN 4.4  13.4  3.1
42: SAN 2.9  13.4  4.7
43: SAN 5.4  13.4  7.5
44: SAN 6.4  6.3   ! CHURCH - ASSUME EQ TO 40 PEOPLE
45: PIP 1.0  100  100  150  150  -8   ! DUMMY PIPE
46: HOL GHOST3
47:
48: NEW GHOST4   ! DEVONSHIRE NEAR HEMET JR HIGH
49: SAN 3.4  32.6  0.0
50: SAN 1.9  32.6  4.6
51: SAN 4.0  32.6  6.4
52: SAN 30.4  16.28  8.3  ! HEMET JR HIGH PER M&E-REVISE LATER <---
53: SAN 10.1  24.5  11.4
54: PIP 1.0  100  100  150  150  -8  ! DUMMY PIPE
55: HOL GHOST4
56:
57: NEW GHOST5
58: SAN 3.3  14  13.1  ! ALL COMMERCIAL - 100% DEVELOPED
59: SAN 2.7  30  10
60:
61: SAN 13.2  14  16.6
62:
63: SAN 5.4  14  3.5
64:
65: PIP 1.0  100  100  150  150  -8  !  DUMMNY PIP
```

```
 66: HOL GHOST5
 67:
 68: REM BEGIN ANALYSIS   * * * * * * * *
 69:
 70: NEW CALHOUN PLACE
 71:
 72: REM THE FOLLOWING IS ACTUAL DIURNAL CURVE OF M.H. 1
 73:
 74: DIU 21.76   17.93   16.57   17.52   21.63   29.33   36.80   37.28 +
 75:
 76:          56.26   71.05   55.59   43.79   43.08   70.31   67.55   44.92 +
 77:
 78:          36.08   34.03   49.95   63.80   43.19   33.58   30.93   25.53
 79:
 80: SAN 8.2   60.98   8.6  ! P.E. OF 434 BEDS -- SEE CALC'S
 81: SAN 5.5 14 3.6   ! COMM - 100% DEVELOPED
 82:
 83: SAN 3.4   14   ! ZONED R-P
 84: PIP 328.15   603.28   600.50   598.40   596.54   -8  ! T-66 TO t-67
 85: PIP 342.17   600.50   599.25   596.54   591.35   -8  ! T-67 TO T-22
 86:
 87: HOL CALHOUN DRIVE
 88:
 89: NEW BUENA VISTA LATERAL
 90: SAN 2.4 14 1.7
 91:
 92: SAN 5.9   32.6
 93: REC GHOST5
 94: PIP 312.7   599.25   598.9   591.35   590.46   -8  !  T-22 TO T-21
 95: HOL BUENA VISTA
 96:
 97: NEW DEVONSHIRE LATERAL
 98: SAN 1.8   14   8.3
 99: REC GHOST4
100: PIP 325.44   601.75   599.49   595.17   591.32   -10  ! T-34 TO T-31
101:
102: SAN 2.6   32.6
103:
104: PIP 167.67   599.49   597.87   591.32   590.46   -10  ! T-31 TO T-21
105:
106: SAN 1.6   32.6
107: REC BUENA VISTA
108: PIP 324.4   597.87   596.34   590.46   589.77   -10  ! T-21 TO T-20
109:
110: SAN 6.1   10.1
111: PIP 338.45   596.34   593.56   589.77   587.75   -10  ! T-20 TO T-19
112:
113: SAN 5.2   14
114: PIP 321.0   593.56   591.06   587.75   584.89   -10  ! T-19 TO T-17
115:
116: SAN 2.0   14
117:
```

```
118: PIP 329.84  591.06   588.09   584.89   581.36   -10  ! T-17 TO T-6
119:
120: SAN 1.7    4.4
121:
122: PIP 53    588.09   588.70   581.36   581.70   -10  ! T-6 TO T-5
123: PIP 325   588.70   588.33   581.70   581.33   -10  ! T-5 TO T-4
124:
125: SAN 4.6   22.7
126:
127: PIP 334   588.33   586.14   581.33  579.04   -10  ! T-4 TO T-3
128:
129: SAN 4.6   19.8
130:
131: PIP 333   586.14   584.0    579.04   576.70   -10  ! T-3 TO T-2
132:
133: SAN 9.2   32.7
134:
135: PIP 330   584.0    581.67   576.7    574.35   -10  ! T-2 TO T-1
136:
137: HOL DEVONSHIRE
138:
139: NEW CENTRAL LATERAL
140:
141: REM USE M.H.5 DIUNRAL CURVE (R-1)
142:
143: DIU 53.67   46.85 44.76  48.62   65.47  100.26  150.47   172.14 +
144:
145:        167.55 166.67 156.81 134.83 138.13 141.07 118.64 131.29+
146:
147:
148:        130.26  156.17  155.95  143.65  127.75  104.19  87.91  67.28
149: SAN 3.0   32.6   6.7
150:
151: SAN 11.7  29.3
152:
153: DIV OVERFLOW 0 0.67 0/0 0.52/0 1.52/1
154:
155: PIP 331 608.79 605.58 601.29 599.85  -8  ! T-211 TO T-210
156: SAN 3.4   13.4   3.65
157:
158: SAN 2.8   13.4   2.74
159:
160: SAN 2.7   13.4   0.93
161:
162: SAN 1.9   13.4
163:
164: PIP 162 600.8 599.17 594.52 594.20 -8!T-210,207,204,202,201
165:
166: SAN 1.9   13.4   3.2
167:
168: SAN 4.4   32.6   1.83
169:
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170: SAN 2.4   14   1.83
171:
172: PIP 169.2 599.17   598.47   594.2 593.34   -8  ! T-201 TO 198
173:
174: PIP 332.7   598.47   595.19   593.32 589.26 -8!T-198,197,194
175:
176: PIP 326.9   595.19   592.15 589.24 586.22 -8!T-194 TO 191
177:
178: SAN 3.4   13.4
179:
180: PIP 326.7   592.15   589.11 586.28   583.21 -8!191 TO 189
181:
182: SAN 6.3   32.6
183:
184: PIP 329   589.11 585.1 583.23 580.32 -10!189 TO 188
185:
186: HOL CENTRAL
187:
188: NEW MAYBERRY DIVERSION
189:
190:
191: REC OVERFLOW
192:
193: PIP 311.48 608.79 607.30 601.29 600.31 -8!T-211 TO 212
194: PIP 361.75 607.3 605.35   600.31 598.79 -8!T-212 TO 168
195: HOL MAYBERRY_DIV
196:
197: NEW ACACIA LATERAL
198:
199: REM SAME DIURNAL CURVE M.H.5
200:
201: SAN 3.7   26.9   5.56
202:
203: SAN 1.7   29.1   5.56
204:
205: SAN 1.7   29.1   3.72
206:
207: SAN 1.7   29.1   3.72
208:
209: SAN 1.7   29.1   1.78
210:
211: SAN 1.7   29.1   1.78
212:
213: SAN 3.4   13.4
214:
215: REC MAYBERRY_DIV
216:
217:
218: DIV BUENAVISTA 0 0.67 0/0 0.59/0 1.59/1
219:
220:
221: PIP 330 605.35 603.23 598.79 596.92 -8!T-168 TO 170
222:
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LINE T AT DEVONSHIRE & GILBERT

*** GHOST1   Analysis of Existing Pipes

Link	Long	Diam	Invert Up/Dn	Slope	San Inf	Sto Mis	Vel d/D	Design MGD	% Cap Q Full	Remove	Par Rep
1	1	8	150.00	0.0000	0.1	0.0	0.00	0.10	999.99	0.00	0
			150.00		0.0	0.0	0.00			0.00	0

Lateral length=   1   Upstream length=   1

*** GHOST2   Analysis of Existing Pipes

Link	Long	Diam	Invert Up/Dn	Slope	San Inf	Sto Mis	Vel d/D	Design MGD	% Cap Q Full	Remove	Par Rep
2	1	8	150.00	0.0000	0.1	0.0	0.00	0.10	999.99	0.00	0
			150.00		0.0	0.0	0.00			0.00	0

Lateral length=   1   Upstream length=   1

*** GHOST3   Analysis of Existing Pipes

Link	Long	Diam	Invert Up/Dn	Slope	San Inf	Sto Mis	Vel d/D	Design MGD	% Cap Q Full	Remove	Par Rep
3	1	8	150.00	0.0000	0.1	0.0	0.00	0.09	999.99	0.00	0
			150.00		0.0	0.0	0.00			0.00	0

Lateral length=   1   Upstream length=   1

*** GHOST4   Analysis of Existing Pipes

Link	Long	Diam	Invert Up/Dn	Slope	San Inf	Sto Mis	Vel d/D	Design MGD	% Cap Q Full	Remove	Par Rep
4	1	8	150.00	0.0000	0.2	0.0	0.00	0.15	999.99	0.00	0
			150.00		0.0	0.0	0.00			0.00	0

Lateral length=   1   Upstream length=   1

*** GHOST5   Analysis of Existing Pipes

Link	Long	Diam	Invert Up/Dn	Slope	San Inf	Sto Mis	Vel d/D	Design MGD	% Cap Q Full	Remove	Par Rep
5	1	8	150.00	0.0000	0.1	0.0	0.00	0.06	999.99	0.00	0