ESTIMATED VOLUME (CU METRES*10**3) = 8.457
ESTIMATED PEAK FLOW (CUMECS) = 3.60
ESTIMATED TIME TO PEAK (MINS) = 43.00

LINK E 5.000

ESTIMATED VOLUME (CU METRES*10**3) = 0.2419E-01
ESTIMATED PEAK FLOW (CUMECS) = 0.02
ESTIMATED TIME TO PEAK (MINS) = 41.00

LINK C 6.000

ESTIMATED VOLUME (CU METRES*10**3) = 4.203
ESTIMATED PEAK FLOW (CUMECS) = 2.13
ESTIMATED TIME TO PEAK (MINS) = 35.00

LINK S3 1.002

ESTIMATED VOLUME (CU METRES*10**3) = 15.18
ESTIMATED PEAK FLOW (CUMECS) = 5.99
ESTIMATED TIME TO PEAK (MINS) = 40.00

LINK OUTLET 1.003

ESTIMATED VOLUME (CU METRES*10**3) = 15.18
ESTIMATED PEAK FLOW (CUMECS) = 5.99
ESTIMATED TIME TO PEAK (MINS) = 40.00

##
Coastal Grove - Proposed Conditions

Results for period from 0: 0.0 1/ 1/1995
to 1: 0.0 2/ 1/1995
##

ROUTING INCREMENT (MINS) = 1.00
STORM DURATION (MINS) = 120.
RETURN PERIOD (YRS) = 1.
BX = 1.0000
TOTAL OF FIRST SUB-AREAS (km2) = 16.81
TOTAL OF SECOND SUB-AREAS (km2) = 23.90
TOTAL OF ALL SUB-AREAS (km2) = 40.71

SUMMARY OF CATCHMENT AND RAINFALL DATA

Link Label	Catch. Area #1 (ha)	Catch. Area #2 (ha)	Slope #1 (%)	Slope #2 (%)	% Impervious #1 (%)	% Impervious #2 (%)	Pern #1	Pern #2	B #1	B #2	Link No.
A	2.550	1.700	12.00	12.00	99.00	1.000	.015	.035	.0007	.0120	1.000
D	1.030	9.230	11.00	11.00	99.00	1.000	.015	.035	.0005	.0302	2.000
S1	0.2600	0.2600	13.00	13.00	99.00	1.000	.015	.040	.0002	.0048	3.000
B	2.000	1.340	7.000	7.000	99.00	1.000	.015	.035	.0008	.0139	4.000
S2	2.060	3.100	17.00	17.00	99.00	1.000	.015	.040	.0005	.0152	1.001
E	.00001	0.0800	3.000	3.000	99.00	1.000	.015	.035	0.000	.0049	5.000
C	6.220	4.150	12.00	12.00	99.00	1.000	.015	.035	.0011	.0191	6.000
S3	2.690	4.040	13.00	13.00	99.00	1.000	.015	.040	.0007	.0200	1.002
OUTLET	.00001	0.000	.0010	0.000	0.000	0.000	.025	0.00	.0021	0.000	1.003

Link Label	Average Intensity (mm/h)	Init. Loss #1 (mm)	Init. Loss #2 (mm)	Cont. Loss #1 (mm/h)	Cont. Loss #2 (mm/h)	Excess Rain #1 (mm)	Excess Rain #2 (mm)	Peak Inflow (m^3/s)	Time to Peak	Link Lag mins
A	24.473	1.500	15.00	0.000	2.500	47.446	30.196	0.9293	35.00	3.000
D	24.473	1.500	15.00	0.000	2.500	47.446	30.196	1.374	43.00	3.000
S1	24.473	1.500	15.00	0.000	2.500	47.446	30.196	0.1096	38.00	3.300
B	24.473	1.500	15.00	0.000	2.500	47.446	30.196	0.6984	35.00	2.500
S2	24.473	1.500	15.00	0.000	2.500	47.446	30.196	3.599	43.00	5.000
E	24.473	1.500	15.00	0.000	2.500	47.446	30.196	0.0152	41.00	5.000
C	24.473	1.500	15.00	0.000	2.500	47.446	30.196	2.134	35.00	1.000
S3	24.473	1.500	15.00	0.000	2.500	47.446	30.196	5.993	40.00	0.000
OUTLET	24.473	1.500	0.000	0.000	0.000	47.446	0.000	5.993	40.00	0.000

LINK A 1.000

ESTIMATED VOLUME (CU METRES*10**3) = 2.677

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ESTIMATED PEAK FLOW          (CUMECS) =      1.94
ESTIMATED TIME TO PEAK          (MINS) =     30.00

LINK D                  2.000

ESTIMATED VOLUME (CU METRES*10**3) =          5.603
ESTIMATED PEAK FLOW          (CUMECS) =      3.27
ESTIMATED TIME TO PEAK          (MINS) =     30.00

LINK S1                 3.000

ESTIMATED VOLUME (CU METRES*10**3) =          0.3188
ESTIMATED PEAK FLOW          (CUMECS) =      0.25
ESTIMATED TIME TO PEAK          (MINS) =     30.00

LINK B                  4.000

ESTIMATED VOLUME (CU METRES*10**3) =          2.104
ESTIMATED PEAK FLOW          (CUMECS) =      1.48
ESTIMATED TIME TO PEAK          (MINS) =     30.00

LINK S2                 1.001

ESTIMATED VOLUME (CU METRES*10**3) =          13.78
ESTIMATED PEAK FLOW          (CUMECS) =      8.22
ESTIMATED TIME TO PEAK          (MINS) =     33.00

LINK E                  5.000

ESTIMATED VOLUME (CU METRES*10**3) =          0.4242E-01
ESTIMATED PEAK FLOW          (CUMECS) =      0.03
ESTIMATED TIME TO PEAK          (MINS) =     31.00

LINK C                  6.000

ESTIMATED VOLUME (CU METRES*10**3) =          6.528
ESTIMATED PEAK FLOW          (CUMECS) =      4.60
ESTIMATED TIME TO PEAK          (MINS) =     30.00

LINK S3                 1.002

ESTIMATED VOLUME (CU METRES*10**3) =          24.36
ESTIMATED PEAK FLOW          (CUMECS) =     11.52
ESTIMATED TIME TO PEAK          (MINS) =     35.00

LINK OUTLET             1.003

ESTIMATED VOLUME (CU METRES*10**3) =          24.36
ESTIMATED PEAK FLOW          (CUMECS) =     11.52
ESTIMATED TIME TO PEAK          (MINS) =     35.00
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################################################################################
Coastal Grove - Proposed Conditions

Results for period from  0: 0.0  1/ 1/1995
                    to  1: 0.0  2/ 1/1995
################################################################################
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ROUTING INCREMENT (MINS) =       1.00
STORM DURATION (MINS)    =        90.
RETURN PERIOD (YRS)      =         5.
BX                       =     1.0000
TOTAL OF FIRST SUB-AREAS  (km2) =      16.81
TOTAL OF SECOND SUB-AREAS (km2) =      23.90
TOTAL OF ALL SUB-AREAS (km2)    =      40.71
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SUMMARY OF CATCHMENT AND RAINFALL DATA

Link Label	Catch. Area #1 (ha)	Catch. Area #2 (ha)	Slope #1 (%)	Slope #2 (%)	% Impervious #1	% Impervious #2	Pern #1	Pern #2	B #1	B #2	Link No.
A	2.550	1.700	12.00	12.00	99.00	1.000	.015	.035	.0007	.0120	1.000
D	1.030	9.230	11.00	11.00	99.00	1.000	.015	.035	.0005	.0302	2.000
S1	0.2600	0.2600	13.00	13.00	99.00	1.000	.015	.040	.0002	.0048	3.000
B	2.000	1.340	7.000	7.000	99.00	1.000	.015	.035	.0008	.0139	4.000
S2	2.060	3.100	17.00	17.00	99.00	1.000	.015	.040	.0005	.0152	1.001

E	.00001	0.0800	3.000	3.000	99.00	1.000	.015	.035	0.000	.0049	5.000
C	6.220	4.150	12.00	12.00	99.00	1.000	.015	.035	.0011	.0191	6.000
S3	2.690	4.040	13.00	13.00	99.00	1.000	.015	.040	.0007	.0200	1.002
OUTLET	.00001	0.000	.0010	0.000	0.000	0.000	.025	0.00	.0021	0.000	1.003

Link Label	Average Intensity (mm/h)	Init. Loss #1 (mm)	Init. Loss #2 (mm)	Cont. Loss #1 (mm/h)	Cont. Loss #2 (mm/h)	Excess Rain #1 (mm)	Excess Rain #2 (mm)	Peak Inflow (m^3/s)	Time to Peak	Link Lag mins
A	47.435	1.500	15.00	0.000	2.500	69.653	52.986	1.938	30.00	3.000
D	47.435	1.500	15.00	0.000	2.500	69.653	52.986	3.268	30.00	3.000
S1	47.435	1.500	15.00	0.000	2.500	69.653	52.986	0.2467	30.00	3.300
B	47.435	1.500	15.00	0.000	2.500	69.653	52.986	1.479	30.00	2.500
S2	47.435	1.500	15.00	0.000	2.500	69.653	52.986	8.223	33.00	5.000
E	47.435	1.500	15.00	0.000	2.500	69.653	52.986	0.0298	31.00	5.000
C	47.435	1.500	15.00	0.000	2.500	69.653	52.986	4.597	30.00	1.000
S3	47.435	1.500	15.00	0.000	2.500	69.653	52.986	11.523	35.00	0.000
OUTLET	47.435	1.500	0.000	0.000	0.000	69.653	0.000	11.523	35.00	0.000

LINK A 1.000

ESTIMATED VOLUME (CU METRES*10**3) = 3.001
ESTIMATED PEAK FLOW (CUMECS) = 1.77
ESTIMATED TIME TO PEAK (MINS) = 35.00

LINK D 2.000

ESTIMATED VOLUME (CU METRES*10**3) = 6.336
ESTIMATED PEAK FLOW (CUMECS) = 3.27
ESTIMATED TIME TO PEAK (MINS) = 40.00

LINK S1 3.000

ESTIMATED VOLUME (CU METRES*10**3) = 0.3583
ESTIMATED PEAK FLOW (CUMECS) = 0.23
ESTIMATED TIME TO PEAK (MINS) = 35.00

LINK B 4.000

ESTIMATED VOLUME (CU METRES*10**3) = 2.360
ESTIMATED PEAK FLOW (CUMECS) = 1.32
ESTIMATED TIME TO PEAK (MINS) = 35.00

LINK S2 1.001

ESTIMATED VOLUME (CU METRES*10**3) = 15.52
ESTIMATED PEAK FLOW (CUMECS) = 7.73
ESTIMATED TIME TO PEAK (MINS) = 38.00

LINK E 5.000

ESTIMATED VOLUME (CU METRES*10**3) = 0.4820E-01
ESTIMATED PEAK FLOW (CUMECS) = 0.03
ESTIMATED TIME TO PEAK (MINS) = 39.00

LINK C 6.000

ESTIMATED VOLUME (CU METRES*10**3) = 7.332
ESTIMATED PEAK FLOW (CUMECS) = 4.18
ESTIMATED TIME TO PEAK (MINS) = 35.00

LINK S3 1.002

ESTIMATED VOLUME (CU METRES*10**3) = 27.43
ESTIMATED PEAK FLOW (CUMECS) = 12.44
ESTIMATED TIME TO PEAK (MINS) = 40.00

LINK OUTLET 1.003

ESTIMATED VOLUME (CU METRES*10**3) = 27.43
ESTIMATED PEAK FLOW (CUMECS) = 12.44
ESTIMATED TIME TO PEAK (MINS) = 40.00

Results for period from 0: 0.0 1/ 1/1995
to 1: 0.0 2/ 1/1995

##

ROUTING INCREMENT (MINS) = 1.00
STORM DURATION (MINS) = 120.
RETURN PERIOD (YRS) = 5.
BX = 1.0000
TOTAL OF FIRST SUB-AREAS (km2) = 16.81
TOTAL OF SECOND SUB-AREAS (km2) = 23.90
TOTAL OF ALL SUB-AREAS (km2) = 40.71

SUMMARY OF CATCHMENT AND RAINFALL DATA

Link Label	Catch. Area #1 (ha)	Catch. Area #2 (ha)	Slope #1 (%)	Slope #2 (%)	% Impervious #1 (%)	% Impervious #2 (%)	Pern #1	Pern #2	B #1	B #2	Link No.
A	2.550	1.700	12.00	12.00	99.00	1.000	.015	.035	.0007	.0120	1.000
D	1.030	9.230	11.00	11.00	99.00	1.000	.015	.035	.0005	.0302	2.000
S1	0.2600	0.2600	13.00	13.00	99.00	1.000	.015	.040	.0002	.0048	3.000
B	2.000	1.340	7.000	7.000	99.00	1.000	.015	.035	.0008	.0139	4.000
S2	2.060	3.100	17.00	17.00	99.00	1.000	.015	.040	.0005	.0152	1.001
E	.00001	0.0800	3.000	3.000	99.00	1.000	.015	.035	0.000	.0049	5.000
C	6.220	4.150	12.00	12.00	99.00	1.000	.015	.035	.0011	.0191	6.000
S3	2.690	4.040	13.00	13.00	99.00	1.000	.015	.040	.0007	.0200	1.002
OUTLET	.00001	0.000	.0010	0.000	0.000	0.000	.025	0.00	.0021	0.000	1.003

Link Label	Average Intensity (mm/h)	Init. Loss #1 (mm)	Init. Loss #2 (mm)	Cont. Loss #1 (mm/h)	Cont. Loss #2 (mm/h)	Excess Rain #1 (mm)	Excess Rain #2 (mm)	Peak Inflow (m^3/s)	Time to Peak	Link Lag mins
A	39.612	1.500	15.00	0.000	2.500	77.724	60.099	1.773	35.00	3.000
D	39.612	1.500	15.00	0.000	2.500	77.724	60.099	3.266	40.00	3.000
S1	39.612	1.500	15.00	0.000	2.500	77.724	60.099	0.2284	35.00	3.300
B	39.612	1.500	15.00	0.000	2.500	77.724	60.099	1.322	35.00	2.500
S2	39.612	1.500	15.00	0.000	2.500	77.724	60.099	7.726	38.00	5.000
E	39.612	1.500	15.00	0.000	2.500	77.724	60.099	0.0290	39.00	5.000
C	39.612	1.500	15.00	0.000	2.500	77.724	60.099	4.181	35.00	1.000
S3	39.612	1.500	15.00	0.000	2.500	77.724	60.099	12.444	40.00	0.000
OUTLET	39.612	1.500	0.000	0.000	0.000	77.724	0.000	12.444	40.00	0.000

LINK A 1.000

ESTIMATED VOLUME (CU METRES*10**3) = 3.469
ESTIMATED PEAK FLOW (CUMECS) = 2.47
ESTIMATED TIME TO PEAK (MINS) = 30.00

LINK D 2.000

ESTIMATED VOLUME (CU METRES*10**3) = 7.511
ESTIMATED PEAK FLOW (CUMECS) = 4.49
ESTIMATED TIME TO PEAK (MINS) = 30.00

LINK S1 3.000

ESTIMATED VOLUME (CU METRES*10**3) = 0.4157
ESTIMATED PEAK FLOW (CUMECS) = 0.31
ESTIMATED TIME TO PEAK (MINS) = 30.00

LINK B 4.000

ESTIMATED VOLUME (CU METRES*10**3) = 2.728
ESTIMATED PEAK FLOW (CUMECS) = 1.90
ESTIMATED TIME TO PEAK (MINS) = 30.00

LINK S2 1.001

ESTIMATED VOLUME (CU METRES*10**3) = 18.17
ESTIMATED PEAK FLOW (CUMECS) = 10.81
ESTIMATED TIME TO PEAK (MINS) = 33.00

LINK E 5.000

ESTIMATED VOLUME (CU METRES*10**3) = 0.5730E-01
ESTIMATED PEAK FLOW (CUMECS) = 0.04
ESTIMATED TIME TO PEAK (MINS) = 31.00

LINK C 6.000

ESTIMATED VOLUME (CU METRES*10**3) = 8.470
ESTIMATED PEAK FLOW (CUMECS) = 5.91
ESTIMATED TIME TO PEAK (MINS) = 30.00

LINK S3 1.002

ESTIMATED VOLUME (CU METRES*10**3) = 31.97
ESTIMATED PEAK FLOW (CUMECS) = 15.12
ESTIMATED TIME TO PEAK (MINS) = 35.00

LINK OUTLET 1.003

ESTIMATED VOLUME (CU METRES*10**3) = 31.97
ESTIMATED PEAK FLOW (CUMECS) = 15.12
ESTIMATED TIME TO PEAK (MINS) = 35.00

##
Coastal Grove - Proposed Conditions

Results for period from 0: 0.0 1/ 1/1995
to 1: 0.0 2/ 1/1995
##

ROUTING INCREMENT (MINS) = 1.00
STORM DURATION (MINS) = 90.
RETURN PERIOD (YRS) = 20.
BX = 1.0000
TOTAL OF FIRST SUB-AREAS (km2) = 16.81
TOTAL OF SECOND SUB-AREAS (km2) = 23.90
TOTAL OF ALL SUB-AREAS (km2) = 40.71

SUMMARY OF CATCHMENT AND RAINFALL DATA

Link Label	Catch. Area #1 (ha)	Catch. Area #2 (ha)	Slope #1 (%)	Slope #2 (%)	% Impervious #1	% Impervious #2	Perm #1	Perm #2	B #1	B #2	Link No.
A	2.550	1.700	12.00	12.00	99.00	1.000	.015	.035	.0007	.0120	1.000
D	1.030	9.230	11.00	11.00	99.00	1.000	.015	.035	.0005	.0302	2.000
S1	0.2600	0.2600	13.00	13.00	99.00	1.000	.015	.040	.0002	.0048	3.000
B	2.000	1.340	7.000	7.000	99.00	1.000	.015	.035	.0008	.0139	4.000
S2	2.060	3.100	17.00	17.00	99.00	1.000	.015	.040	.0005	.0152	1.001
E	.00001	0.0800	3.000	3.000	99.00	1.000	.015	.035	0.000	.0049	5.000
C	6.220	4.150	12.00	12.00	99.00	1.000	.015	.035	.0011	.0191	6.000
S3	2.690	4.040	13.00	13.00	99.00	1.000	.015	.040	.0007	.0200	1.002
OUTLET	.00001	0.000	.0010	0.000	0.000	0.000	.025	0.00	.0021	0.000	1.003

Link Label	Average Intensity (mm/h)	Init. Loss #1 (mm)	Init. Loss #2 (mm)	Cont. Loss #1 (mm/h)	Cont. Loss #2 (mm/h)	Excess Rain #1 (mm)	Excess Rain #2 (mm)	Peak Inflow (m^3/s)	Time to Peak	Link Lag mins
A	59.905	1.500	15.00	0.000	2.500	88.357	71.607	2.467	30.00	3.000
D	59.905	1.500	15.00	0.000	2.500	88.357	71.607	4.488	30.00	3.000
S1	59.905	1.500	15.00	0.000	2.500	88.357	71.607	0.3112	30.00	3.300
B	59.905	1.500	15.00	0.000	2.500	88.357	71.607	1.896	30.00	2.500
S2	59.905	1.500	15.00	0.000	2.500	88.357	71.607	10.811	33.00	5.000
E	59.905	1.500	15.00	0.000	2.500	88.357	71.607	0.0384	31.00	5.000
C	59.905	1.500	15.00	0.000	2.500	88.357	71.607	5.910	30.00	1.000
S3	59.905	1.500	15.00	0.000	2.500	88.357	71.607	15.122	35.00	0.000
OUTLET	59.905	1.500	0.000	0.000	0.000	88.357	0.000	15.122	35.00	0.000

LINK A 1.000

ESTIMATED VOLUME (CU METRES*10**3) = 3.901
ESTIMATED PEAK FLOW (CUMECS) = 2.28
ESTIMATED TIME TO PEAK (MINS) = 35.00

LINK D 2.000

ESTIMATED VOLUME (CU METRES*10**3) = 8.521
ESTIMATED PEAK FLOW (CUMECS) = 4.37
ESTIMATED TIME TO PEAK (MINS) = 40.00

LINK S1 3.000

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ESTIMATED VOLUME (CU METRES*10**3) =          0.4683
ESTIMATED PEAK FLOW          (CUMECS) =      0.29
ESTIMATED TIME TO PEAK          (MINS) =     35.00

LINK B                  4.000

ESTIMATED VOLUME (CU METRES*10**3) =           3.066
ESTIMATED PEAK FLOW          (CUMECS) =      1.75
ESTIMATED TIME TO PEAK          (MINS) =     35.00

LINK S2                 1.001

ESTIMATED VOLUME (CU METRES*10**3) =           20.51
ESTIMATED PEAK FLOW          (CUMECS) =     10.41
ESTIMATED TIME TO PEAK          (MINS) =     38.00

LINK E                  5.000

ESTIMATED VOLUME (CU METRES*10**3) =          0.6496E-01
ESTIMATED PEAK FLOW          (CUMECS) =      0.04
ESTIMATED TIME TO PEAK          (MINS) =     39.00

LINK C                  6.000

ESTIMATED VOLUME (CU METRES*10**3) =           9.516
ESTIMATED PEAK FLOW          (CUMECS) =      5.43
ESTIMATED TIME TO PEAK          (MINS) =     35.00

LINK S3                 1.002

ESTIMATED VOLUME (CU METRES*10**3) =           36.04
ESTIMATED PEAK FLOW          (CUMECS) =     16.82
ESTIMATED TIME TO PEAK          (MINS) =     40.00

LINK OUTLET             1.003

ESTIMATED VOLUME (CU METRES*10**3) =           36.04
ESTIMATED PEAK FLOW          (CUMECS) =     16.82
ESTIMATED TIME TO PEAK          (MINS) =     40.00
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##

Coastal Grove - Proposed Conditions

Results for period from 0: 0.0 1/ 1/1995
                     to 1: 0.0 2/ 1/1995

##

```
ROUTING INCREMENT (MINS) =       1.00
STORM DURATION (MINS)    =       120.
RETURN PERIOD (YRS)      =        20.
BX                       =     1.0000
TOTAL OF FIRST SUB-AREAS  (km2) =      16.81
TOTAL OF SECOND SUB-AREAS (km2) =      23.90
TOTAL OF ALL SUB-AREAS (km2)    =      40.71
```

SUMMARY OF CATCHMENT AND RAINFALL DATA

Link Label	Catch. Area #1 (ha)	Catch. Area #2 (ha)	Slope #1 (%)	Slope #2 (%)	% Impervious #1	% Impervious #2	Pern #1	Pern #2	B #1	B #2	Link No.
A	2.550	1.700	12.00	12.00	99.00	1.000	.015	.035	.0007	.0120	1.000
D	1.030	9.230	11.00	11.00	99.00	1.000	.015	.035	.0005	.0302	2.000
S1	0.2600	0.2600	13.00	13.00	99.00	1.000	.015	.040	.0002	.0048	3.000
B	2.000	1.340	7.000	7.000	99.00	1.000	.015	.035	.0008	.0139	4.000
S2	2.060	3.100	17.00	17.00	99.00	1.000	.015	.040	.0005	.0152	1.001
E	.00001	0.0800	3.000	3.000	99.00	1.000	.015	.035	0.000	.0049	5.000
C	6.220	4.150	12.00	12.00	99.00	1.000	.015	.035	.0011	.0191	6.000
S3	2.690	4.040	13.00	13.00	99.00	1.000	.015	.040	.0007	.0200	1.002
OUTLET	.00001	0.000	.0010	0.000	0.000	0.000	.025	0.00	.0021	0.000	1.003

Link Label	Average Intensity (mm/h)	Init. Loss #1 (mm)	Init. Loss #2 (mm)	Cont. Loss #1 (mm/h)	Cont. Loss #2 (mm/h)	Excess Rain #1 (mm)	Excess Rain #2 (mm)	Peak Inflow (m^3/s)	Time to Peak mins	Link Lag mins
A	50.208	1.500	15.00	0.000	2.500	98.917	81.208	2.276	35.00	3.000
D	50.208	1.500	15.00	0.000	2.500	98.917	81.208	4.370	40.00	3.000

S1	50.208	1.500	15.00	0.000	2.500	98.917	81.208	0.2915	35.00	3.300
B	50.208	1.500	15.00	0.000	2.500	98.917	81.208	1.752	35.00	2.500
S2	50.208	1.500	15.00	0.000	2.500	98.917	81.208	10.412	38.00	5.000
E	50.208	1.500	15.00	0.000	2.500	98.917	81.208	0.0372	39.00	5.000
C	50.208	1.500	15.00	0.000	2.500	98.917	81.208	5.432	35.00	1.000
S3	50.208	1.500	15.00	0.000	2.500	98.917	81.208	16.821	40.00	0.000
OUTLET	50.208	1.500	0.000	0.000	0.000	98.917	0.000	16.821	40.00	0.000

LINK A 1.000

ESTIMATED VOLUME (CU METRES*10**3) = 4.529
ESTIMATED PEAK FLOW (CUMECS) = 2.95
ESTIMATED TIME TO PEAK (MINS) = 30.00

LINK D 2.000

ESTIMATED VOLUME (CU METRES*10**3) = 10.08
ESTIMATED PEAK FLOW (CUMECS) = 5.69
ESTIMATED TIME TO PEAK (MINS) = 30.00

LINK S1 3.000

ESTIMATED VOLUME (CU METRES*10**3) = 0.5454
ESTIMATED PEAK FLOW (CUMECS) = 0.37
ESTIMATED TIME TO PEAK (MINS) = 30.00

LINK B 4.000

ESTIMATED VOLUME (CU METRES*10**3) = 3.559
ESTIMATED PEAK FLOW (CUMECS) = 2.27
ESTIMATED TIME TO PEAK (MINS) = 30.00

LINK S2 1.001

ESTIMATED VOLUME (CU METRES*10**3) = 24.03
ESTIMATED PEAK FLOW (CUMECS) = 13.30
ESTIMATED TIME TO PEAK (MINS) = 33.00

LINK E 5.000

ESTIMATED VOLUME (CU METRES*10**3) = 0.7738E-01
ESTIMATED PEAK FLOW (CUMECS) = 0.05
ESTIMATED TIME TO PEAK (MINS) = 31.00

LINK C 6.000

ESTIMATED VOLUME (CU METRES*10**3) = 11.05
ESTIMATED PEAK FLOW (CUMECS) = 7.03
ESTIMATED TIME TO PEAK (MINS) = 30.00

LINK S3 1.002

ESTIMATED VOLUME (CU METRES*10**3) = 42.09
ESTIMATED PEAK FLOW (CUMECS) = 19.01
ESTIMATED TIME TO PEAK (MINS) = 30.00

LINK OUTLET 1.003

ESTIMATED VOLUME (CU METRES*10**3) = 42.09
ESTIMATED PEAK FLOW (CUMECS) = 19.01
ESTIMATED TIME TO PEAK (MINS) = 30.00

##
Coastal Grove - Proposed Conditions

Results for period from 0: 0.0 1/ 1/1995
to 1: 0.0 2/ 1/1995
##

ROUTING INCREMENT (MINS) = 1.00
STORM DURATION (MINS) = 90.
RETURN PERIOD (YRS) = 100.
BX = 1.0000
TOTAL OF FIRST SUB-AREAS (km2) = 16.81
TOTAL OF SECOND SUB-AREAS (km2) = 23.90

TOTAL OF ALL SUB-AREAS (km2) = 40.71

SUMMARY OF CATCHMENT AND RAINFALL DATA

Link Label	Catch. Area #1 (ha)	Catch. Area #2 (ha)	Slope #1 (%)	Slope #2 (%)	% Impervious #1	% Impervious #2	Pern #1	Pern #2	B #1	B #2	Link No.
A	2.550	1.700	12.00	12.00	99.00	1.000	.015	.035	.0007	.0120	1.000
D	1.030	9.230	11.00	11.00	99.00	1.000	.015	.035	.0005	.0302	2.000
S1	0.2600	0.2600	13.00	13.00	99.00	1.000	.015	.040	.0002	.0048	3.000
B	2.000	1.340	7.000	7.000	99.00	1.000	.015	.035	.0008	.0139	4.000
S2	2.060	3.100	17.00	17.00	99.00	1.000	.015	.040	.0005	.0152	1.001
E	.00001	0.0800	3.000	3.000	99.00	1.000	.015	.035	0.000	.0049	5.000
C	6.220	4.150	12.00	12.00	99.00	1.000	.015	.035	.0011	.0191	6.000
S3	2.690	4.040	13.00	13.00	99.00	1.000	.015	.040	.0007	.0200	1.002
OUTLET	.00001	0.000	.0010	0.000	0.000	0.000	.025	0.00	.0021	0.000	1.003

Link Label	Average Intensity (mm/h)	Init. Loss #1 (mm)	Init. Loss #2 (mm)	Cont. Loss #1 (mm/h)	Cont. Loss #2 (mm/h)	Excess Rain #1 (mm)	Excess Rain #2 (mm)	Peak Inflow (m^3/s)	Time to Peak	Link Lag mins
A	76.524	1.500	15.00	0.000	2.500	113.29	96.494	2.951	30.00	3.000
D	76.524	1.500	15.00	0.000	2.500	113.29	96.494	5.693	30.00	3.000
S1	76.524	1.500	15.00	0.000	2.500	113.29	96.494	0.3715	30.00	3.300
B	76.524	1.500	15.00	0.000	2.500	113.29	96.494	2.272	30.00	2.500
S2	76.524	1.500	15.00	0.000	2.500	113.29	96.494	13.296	33.00	5.000
E	76.524	1.500	15.00	0.000	2.500	113.29	96.494	0.0469	31.00	5.000
C	76.524	1.500	15.00	0.000	2.500	113.29	96.494	7.030	30.00	1.000
S3	76.524	1.500	15.00	0.000	2.500	113.29	96.494	19.005	30.00	0.000
OUTLET	76.524	1.500	0.000	0.000	0.000	113.29	0.000	19.005	30.00	0.000

LINK A 1.000

ESTIMATED VOLUME (CU METRES*10**3) = 5.102
ESTIMATED PEAK FLOW (CUMECS) = 2.74
ESTIMATED TIME TO PEAK (MINS) = 35.00

LINK D 2.000

ESTIMATED VOLUME (CU METRES*10**3) = 11.40
ESTIMATED PEAK FLOW (CUMECS) = 5.45
ESTIMATED TIME TO PEAK (MINS) = 40.00

LINK S1 3.000

ESTIMATED VOLUME (CU METRES*10**3) = 0.6149
ESTIMATED PEAK FLOW (CUMECS) = 0.35
ESTIMATED TIME TO PEAK (MINS) = 35.00

LINK B 4.000

ESTIMATED VOLUME (CU METRES*10**3) = 4.010
ESTIMATED PEAK FLOW (CUMECS) = 2.11
ESTIMATED TIME TO PEAK (MINS) = 35.00

LINK S2 1.001

ESTIMATED VOLUME (CU METRES*10**3) = 27.14
ESTIMATED PEAK FLOW (CUMECS) = 12.95
ESTIMATED TIME TO PEAK (MINS) = 38.00

LINK E 5.000

ESTIMATED VOLUME (CU METRES*10**3) = 0.8750E-01
ESTIMATED PEAK FLOW (CUMECS) = 0.05
ESTIMATED TIME TO PEAK (MINS) = 38.00

LINK C 6.000

ESTIMATED VOLUME (CU METRES*10**3) = 12.44
ESTIMATED PEAK FLOW (CUMECS) = 6.55
ESTIMATED TIME TO PEAK (MINS) = 35.00

LINK S3 1.002

ESTIMATED VOLUME (CU METRES*10**3) = 47.50
ESTIMATED PEAK FLOW (CUMECS) = 20.88
ESTIMATED TIME TO PEAK (MINS) = 40.00

LINK OUTLET 1.003

ESTIMATED VOLUME (CU METRES*10**3) = 47.50
ESTIMATED PEAK FLOW (CUMECS) = 20.88
ESTIMATED TIME TO PEAK (MINS) = 40.00

##
Coastal Grove - Proposed Conditions

Results for period from 0: 0.0 1/ 1/1995
to 1: 0.0 2/ 1/1995
##

ROUTING INCREMENT (MINS) = 1.00
STORM DURATION (MINS) = 120.
RETURN PERIOD (YRS) = 100.
BX = 1.0000
TOTAL OF FIRST SUB-AREAS (km2) = 16.81
TOTAL OF SECOND SUB-AREAS (km2) = 23.90
TOTAL OF ALL SUB-AREAS (km2) = 40.71

SUMMARY OF CATCHMENT AND RAINFALL DATA

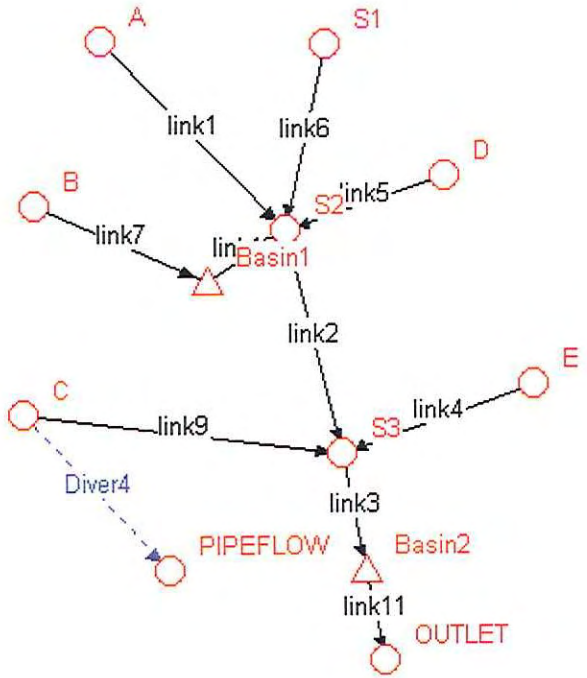
Link Label	Catch. Area #1 (ha)	Catch. Area #2 (ha)	Slope #1 (%)	Slope #2 (%)	% Impervious #1 (%)	% Impervious #2 (%)	Pern #1	Pern #2	B #1	B #2	Link No.
A	2.550	1.700	12.00	12.00	99.00	1.000	.015	.035	.0007	.0120	1.000
D	1.030	9.230	11.00	11.00	99.00	1.000	.015	.035	.0005	.0302	2.000
S1	0.2600	0.2600	13.00	13.00	99.00	1.000	.015	.040	.0002	.0048	3.000
B	2.000	1.340	7.000	7.000	99.00	1.000	.015	.035	.0008	.0139	4.000
S2	2.060	3.100	17.00	17.00	99.00	1.000	.015	.040	.0005	.0152	1.001
E	.00001	0.0800	3.000	3.000	99.00	1.000	.015	.035	0.000	.0049	5.000
C	6.220	4.150	12.00	12.00	99.00	1.000	.015	.035	.0011	.0191	6.000
S3	2.690	4.040	13.00	13.00	99.00	1.000	.015	.040	.0007	.0200	1.002
OUTLET	.00001	0.000	.0010	0.000	0.000	0.000	.025	0.00	.0021	0.000	1.003

Link Label	Average Intensity (mm/h)	Init. Loss #1 (mm)	Init. Loss #2 (mm)	Cont. Loss #1 (mm/h)	Cont. Loss #2 (mm/h)	Excess Rain #1 (mm)	Excess Rain #2 (mm)	Peak Inflow (m^3/s)	Time to Peak	Link Lag mins
A	64.337	1.500	15.00	0.000	2.500	127.17	109.30	2.744	35.00	3.000
D	64.337	1.500	15.00	0.000	2.500	127.17	109.30	5.446	40.00	3.000
S1	64.337	1.500	15.00	0.000	2.500	127.17	109.30	0.3513	35.00	3.300
B	64.337	1.500	15.00	0.000	2.500	127.17	109.30	2.109	35.00	2.500
S2	64.337	1.500	15.00	0.000	2.500	127.17	109.30	12.953	38.00	5.000
E	64.337	1.500	15.00	0.000	2.500	127.17	109.30	0.0455	38.00	5.000
C	64.337	1.500	15.00	0.000	2.500	127.17	109.30	6.554	35.00	1.000
S3	64.337	1.500	15.00	0.000	2.500	127.17	109.30	20.882	40.00	0.000
OUTLET	64.337	1.500	0.000	0.000	0.000	127.17	0.000	20.882	40.00	0.000

Run completed at: 31st August 2006 10:18:31

XP-RAFTS2000 - [6324 Prop with storage.xp]

File Edit Project View Configuration Tools Analyze Results Window Help



Ready

X=319.024, Y=415.847 NUM OVR

Start Desktop 10:13 AM

Thursday, Aug 31, 2006 10:13 AM

Proposed Detention + Wetland

Run started at: 31st August 2006 10:24:05

##
Coastal Grove - Proposed Conditions + Detention

Results for period from 0: 0.0 1/ 1/1995
to 1: 0.0 2/ 1/1995
##

ROUTING INCREMENT (MINS) = 1.00
STORM DURATION (MINS) = 90.
RETURN PERIOD (YRS) = 1.
BX = 1.0000
TOTAL OF FIRST SUB-AREAS (km2) = 16.81
TOTAL OF SECOND SUB-AREAS (km2) = 23.90
TOTAL OF ALL SUB-AREAS (km2) = 40.71

SUMMARY OF CATCHMENT AND RAINFALL DATA

Link Label	Catch. Area #1 (ha)	Catch. Area #2 (ha)	Slope #1 (%)	Slope #2 (%)	% Impervious #1 (%)	% Impervious #2 (%)	Perm #1	Perm #2	B #1	B #2	Link No.
A	2.550	1.700	12.00	12.00	99.00	1.000	.015	.035	.0007	.0120	1.000
D	1.030	9.230	11.00	11.00	99.00	1.000	.015	.035	.0005	.0302	2.000
S1	0.2600	0.2600	13.00	13.00	99.00	1.000	.015	.040	.0002	.0048	3.000
B	2.000	1.340	7.000	7.000	99.00	1.000	.015	.035	.0008	.0139	4.000
Basin1	.00001	0.000	.0010	0.000	0.000	0.000	.025	0.00	.0021	0.000	4.001
S2	2.060	3.100	17.00	17.00	99.00	1.000	.015	.040	.0005	.0152	1.001
E	.00001	0.0800	3.000	3.000	99.00	1.000	.015	.035	0.000	.0049	5.000
C	6.220	4.150	12.00	12.00	99.00	1.000	.015	.035	.0011	.0191	6.000
S3	2.690	4.040	13.00	13.00	99.00	1.000	.015	.040	.0007	.0200	1.002
Basin2	.00001	0.000	.0010	0.000	0.000	0.000	.025	0.00	.0021	0.000	1.003
OUTLET	.00001	0.000	.0010	0.000	0.000	0.000	.025	0.00	.0021	0.000	1.004

Link Label	Average Intensity (mm/h)	Init. Loss #1 (mm)	Init. Loss #2 (mm)	Cont. Loss #1 (mm/h)	Cont. Loss #2 (mm/h)	Excess Rain #1 (mm)	Excess Rain #2 (mm)	Peak Inflow (m^3/s)	Time to Peak	Link Lag mins
A	29.461	1.500	15.00	0.000	2.500	42.692	26.300	1.088	30.00	3.000
D	29.461	1.500	15.00	0.000	2.500	42.692	26.300	1.275	35.00	3.000
S1	29.461	1.500	15.00	0.000	2.500	42.692	26.300	0.1376	30.00	3.300
B	29.461	1.500	15.00	0.000	2.500	42.692	26.300	0.8092	30.00	2.500
Basin1	29.461	1.500	0.000	0.000	0.000	42.692	0.000	0.8092	33.00	0.000
S2	29.461	1.500	15.00	0.000	2.500	42.692	26.300	3.739	33.00	5.000
E	29.461	1.500	15.00	0.000	2.500	42.692	26.300	0.0156	31.00	5.000
C	29.461	1.500	15.00	0.000	2.500	42.692	26.300	2.514	30.00	1.000
S3	29.461	1.500	15.00	0.000	2.500	42.692	26.300	5.506	38.00	0.000
Basin2	29.461	1.500	0.000	0.000	0.000	42.692	0.000	5.506	38.00	0.000
OUTLET	29.461	1.500	0.000	0.000	0.000	42.692	0.000	5.213	39.00	0.000

SUMMARY OF BASIN RESULTS

Link Label	Time to Peak	Peak Inflow (m^3/s)	Time to Peak	Peak Outflow (m^3/s)	Total Inflow (m^3)	Basin Vol. Avail	Basin Vol. Used	Basin Stage Used
Basin1	33.00	.8092	34.00	.5585	1207.9	0.0000	179.51	0.3590
Basin2	38.00	5.506	39.00	5.212	13482.2	0.0000	551.92	0.2760

SUMMARY OF BASIN OUTLET RESULTS

Link Label	No. of	S/D Factor (m)	Dia (m)	Width (m)	Pipe Length (m)	Pipe Slope (%)
Basin1	1.0	1.000		0.000	0.5000	0.2000
Basin2	1.0	1.000		0.000	0.5000	0.2000

LINK A 1.000

ESTIMATED VOLUME (CU METRES*10**3) = 1.725
ESTIMATED PEAK FLOW (CUMECS) = 0.93
ESTIMATED TIME TO PEAK (MINS) = 35.00

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LINK D                  2.000

ESTIMATED VOLUME (CU METRES*10**3) =          3.264
ESTIMATED PEAK FLOW          (CUMECS) =      1.37
ESTIMATED TIME TO PEAK          (MINS) =     43.00

LINK S1                 3.000

ESTIMATED VOLUME (CU METRES*10**3) =         0.2019
ESTIMATED PEAK FLOW          (CUMECS) =      0.11
ESTIMATED TIME TO PEAK          (MINS) =     38.00

LINK B                  4.000

ESTIMATED VOLUME (CU METRES*10**3) =          1.353
ESTIMATED PEAK FLOW          (CUMECS) =      0.70
ESTIMATED TIME TO PEAK          (MINS) =     35.00

LINK Basin1             4.001

ESTIMATED VOLUME (CU METRES*10**3) =          1.353
ESTIMATED PEAK FLOW          (CUMECS) =      0.70
ESTIMATED TIME TO PEAK          (MINS) =     38.00

LINK S2                 1.001

ESTIMATED VOLUME (CU METRES*10**3) =          8.457
ESTIMATED PEAK FLOW          (CUMECS) =      3.52
ESTIMATED TIME TO PEAK          (MINS) =     43.00

LINK E                  5.000

ESTIMATED VOLUME (CU METRES*10**3) =       0.2419E-01
ESTIMATED PEAK FLOW          (CUMECS) =      0.02
ESTIMATED TIME TO PEAK          (MINS) =     41.00

LINK C                  6.000

ESTIMATED VOLUME (CU METRES*10**3) =          4.203
ESTIMATED PEAK FLOW          (CUMECS) =      2.13
ESTIMATED TIME TO PEAK          (MINS) =     35.00

LINK S3                 1.002

ESTIMATED VOLUME (CU METRES*10**3) =         15.18
ESTIMATED PEAK FLOW          (CUMECS) =      5.59
ESTIMATED TIME TO PEAK          (MINS) =     40.00

LINK Basin2             1.003

ESTIMATED VOLUME (CU METRES*10**3) =         15.18
ESTIMATED PEAK FLOW          (CUMECS) =      5.59
ESTIMATED TIME TO PEAK          (MINS) =     40.00

LINK OUTLET             1.004

ESTIMATED VOLUME (CU METRES*10**3) =         15.18
ESTIMATED PEAK FLOW          (CUMECS) =      5.28
ESTIMATED TIME TO PEAK          (MINS) =     46.00


################################################################################
Coastal Grove - Proposed Conditions + Detention

Results for period from  0: 0.0  1/ 1/1995
                    to  1: 0.0  2/ 1/1995
################################################################################

                          ROUTING INCREMENT (MINS) =       1.00
                          STORM DURATION (MINS)    =       120.
                          RETURN PERIOD (YRS)      =         1.
                          BX                       =    1.0000
                          TOTAL OF FIRST SUB-AREAS  (km2) =      16.81
                          TOTAL OF SECOND SUB-AREAS (km2) =      23.90
                          TOTAL OF ALL SUB-AREAS (km2)    =      40.71
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