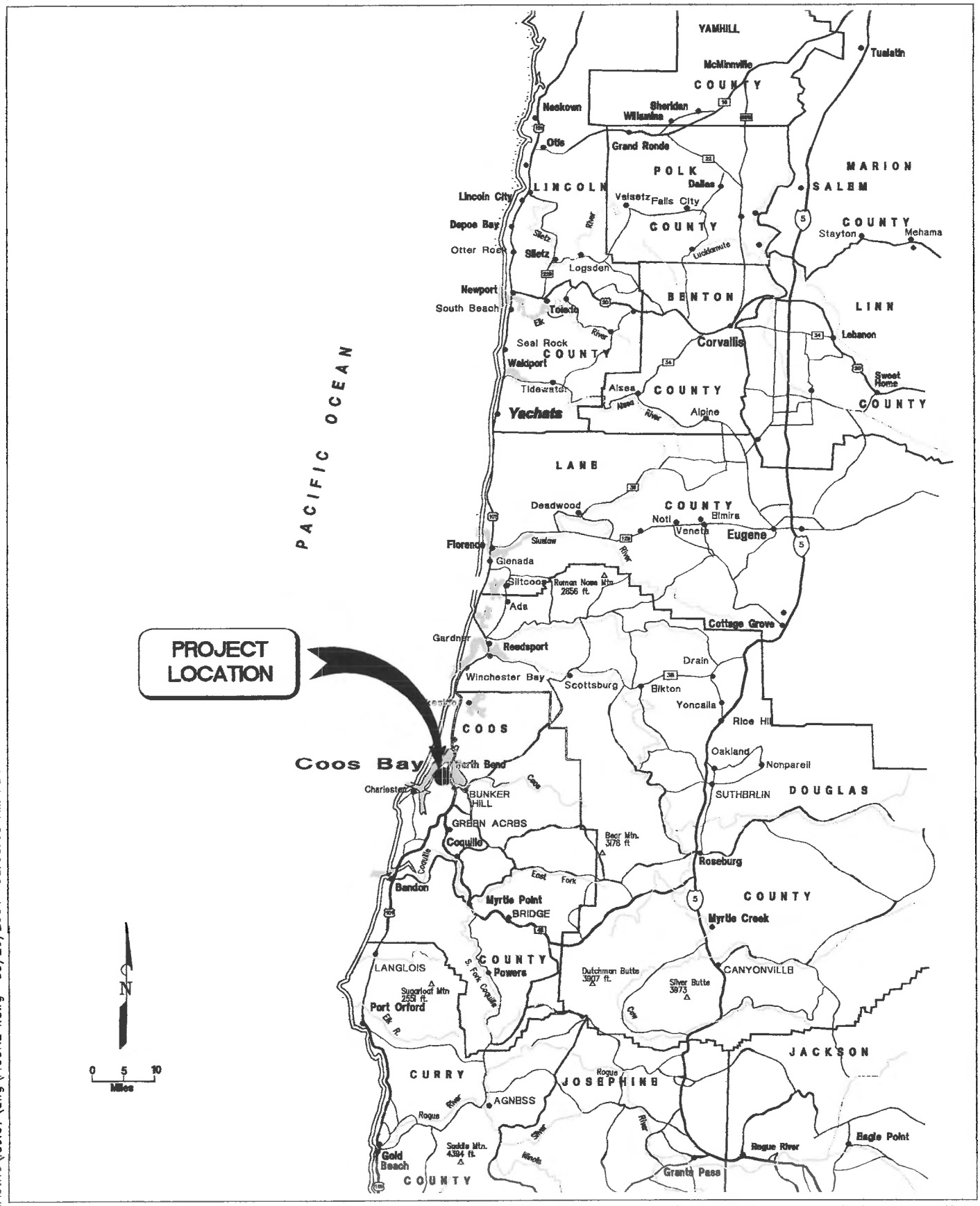
Appendix

A

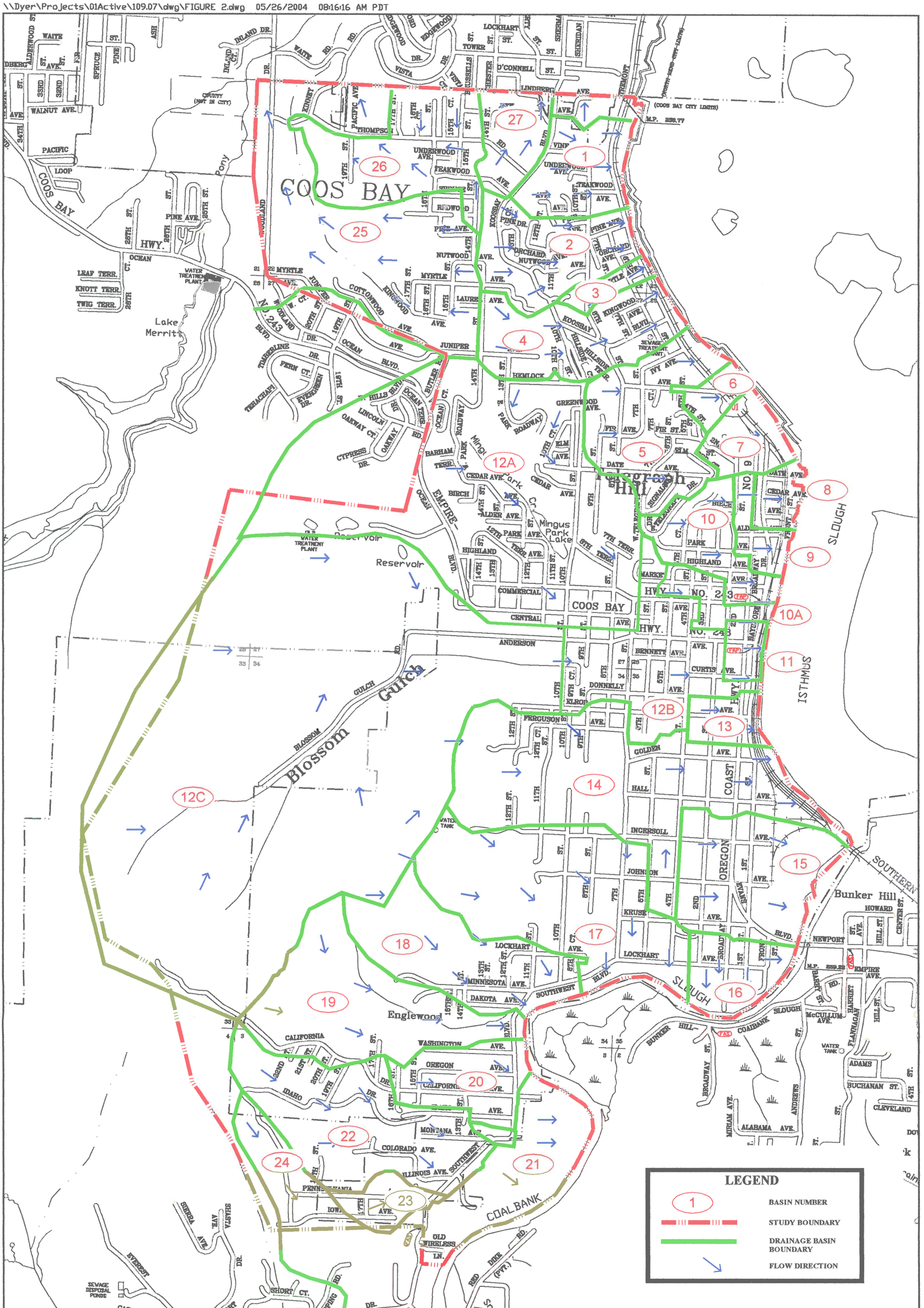
Maps & Figures



THE DYER PARTNERSHIP ENGINEERS & PLANNERS, INC.	**COOS BAY STORM WATER MASTER PLAN**	FIGURE NO. A-1
DATE: SEPT., 2004 PROJECT NO.: 109.07	**PROJECT LOCATION MAP**	

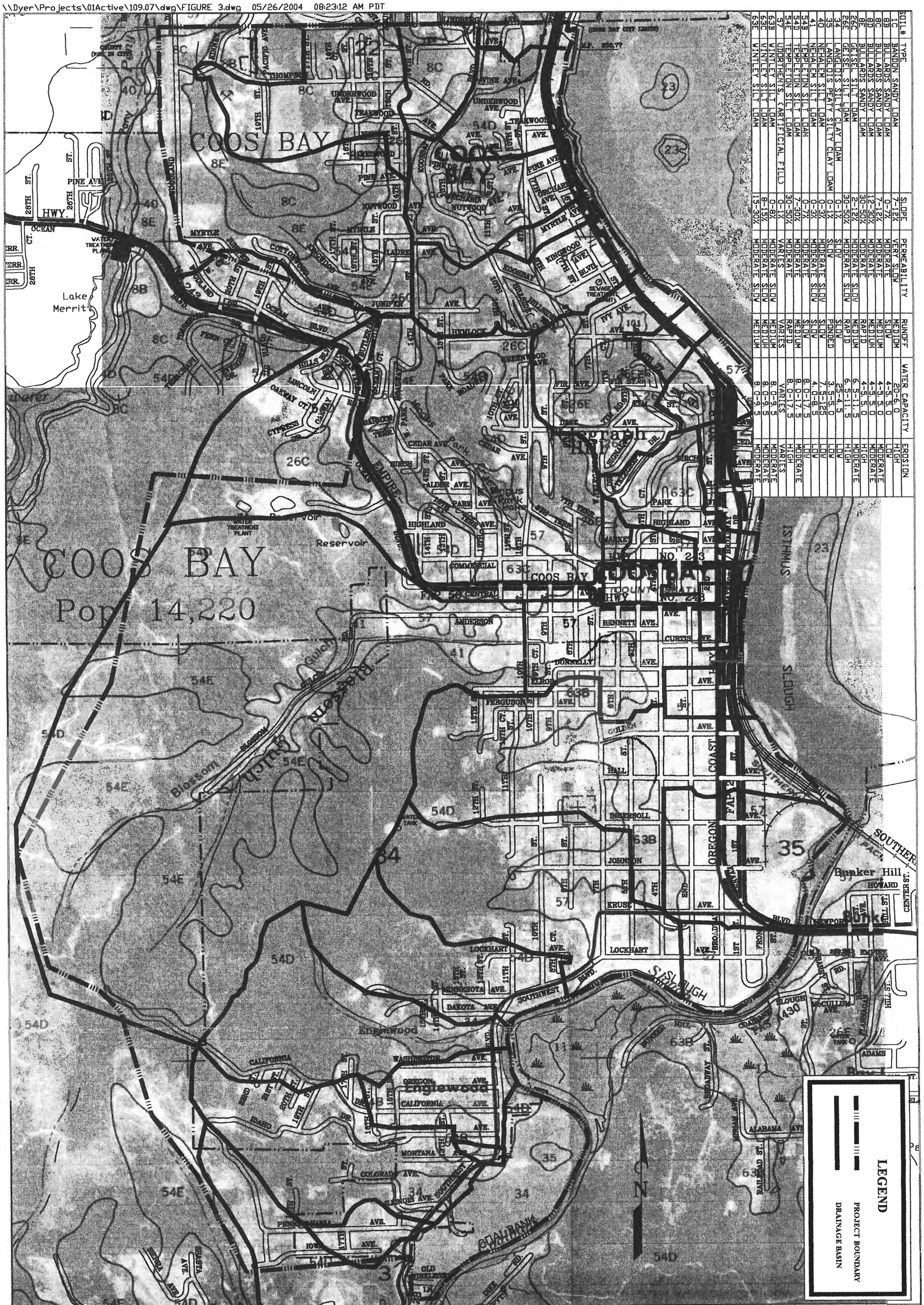
\\Dyer\Projects\01Active\109.07\dwg\FIGURE 1.dwg 05/26/2004 08:09:09 AM PDT

\\Dyer\Projects\01Active\109.07\dwg\FIGURE 2.dwg 05/26/2004 08:16:16 AM PDT



THE DYER PARTNERSHIP ENGINEERS & PLANNERS	COOS BAY STORM WATER MASTER PLAN	FIGURE NO.
DATE: SEPT., 2004	STUDY AREA BOUNDARY & BASIN MAP	A-2
PROJECT NO.: 109.07		

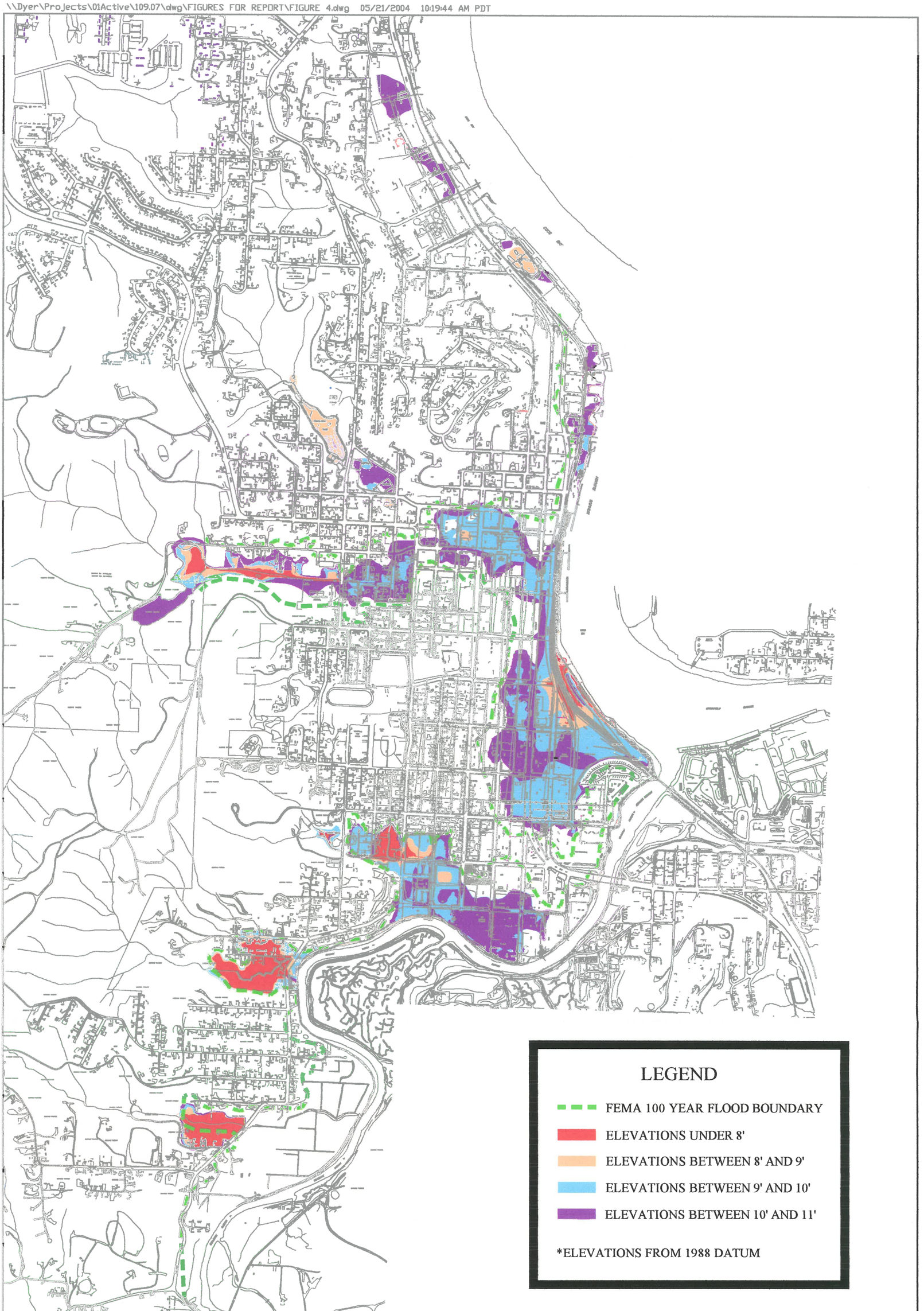
\\Dyer\Projects\01Active\109.07\dwg\FIGURE 3.dwg 05/26/2004 08:23:12 AM PDT



SOIL#	TYPE	SLOPE	PERMEABILITY	RUNOFF	WATER CAPACITY	EROSION
1C	BANDON SANDY LOAM	7-12%	VERY SLOW	MEDIUM	20-6.0	HIGH
8B	BULLARDS SANDY LOAM	0-7%	MODERATE	SLOW	4-5.5.0	LOW
8C	BULLARDS SANDY LOAM	7-12%	MODERATE	MEDIUM	4-5.5.0	MODERATE
8D	BULLARDS SANDY LOAM	12-30%	MODERATE	MEDIUM	4-5.5.0	MODERATE
8E	BULLARDS SANDY LOAM	30-50%	MODERATE	RAPID	4-5.5.0	HIGH
26C	GETSEL SILT LOAM	7-12%	MODERATE	MEDIUM	6.5-11.5	MODERATE
26E	GETSEL SILT LOAM	30-50%	MODERATE	RAPID	6.5-11.5	HIGH
34	LANGLOIS PEATY SILTY CLAY LOAM	0-1%	SLOW	SLOW	25-4.5	LOW
40	NEHALEM SILT LOAM	0-3%	MODERATE	SLOW	3.5-5.0	LOW
41	NEHALEM SILT LOAM	0-3%	MODERATE	SLOW	7.5-12.5	LOW
54B	TEMPLETON SILT LOAM	0-7%	MODERATE	SLOW	4.0-8.5	LOW
54D	TEMPLETON SILT LOAM	7-30%	MODERATE	MEDIUM	8.0-17.5	LOW
54E	TEMPLETON SILT LOAM	30-50%	MODERATE	RAPID	8.0-17.5	MODERATE
57	UDORTHENTS, (ARTIFICIAL FILL)	0-1%	VARIES	VARIES	VARIES	VARIES
63B	WINTLEY SILT LOAM	0-8%	MODERATE	MEDIUM	8.0-9.5	MODERATE
63C	WINTLEY SILT LOAM	8-15%	MODERATE	MEDIUM	8.0-9.5	MODERATE
63E	WINTLEY SILT LOAM	15-30%	MODERATE	MEDIUM	8.0-9.5	MODERATE

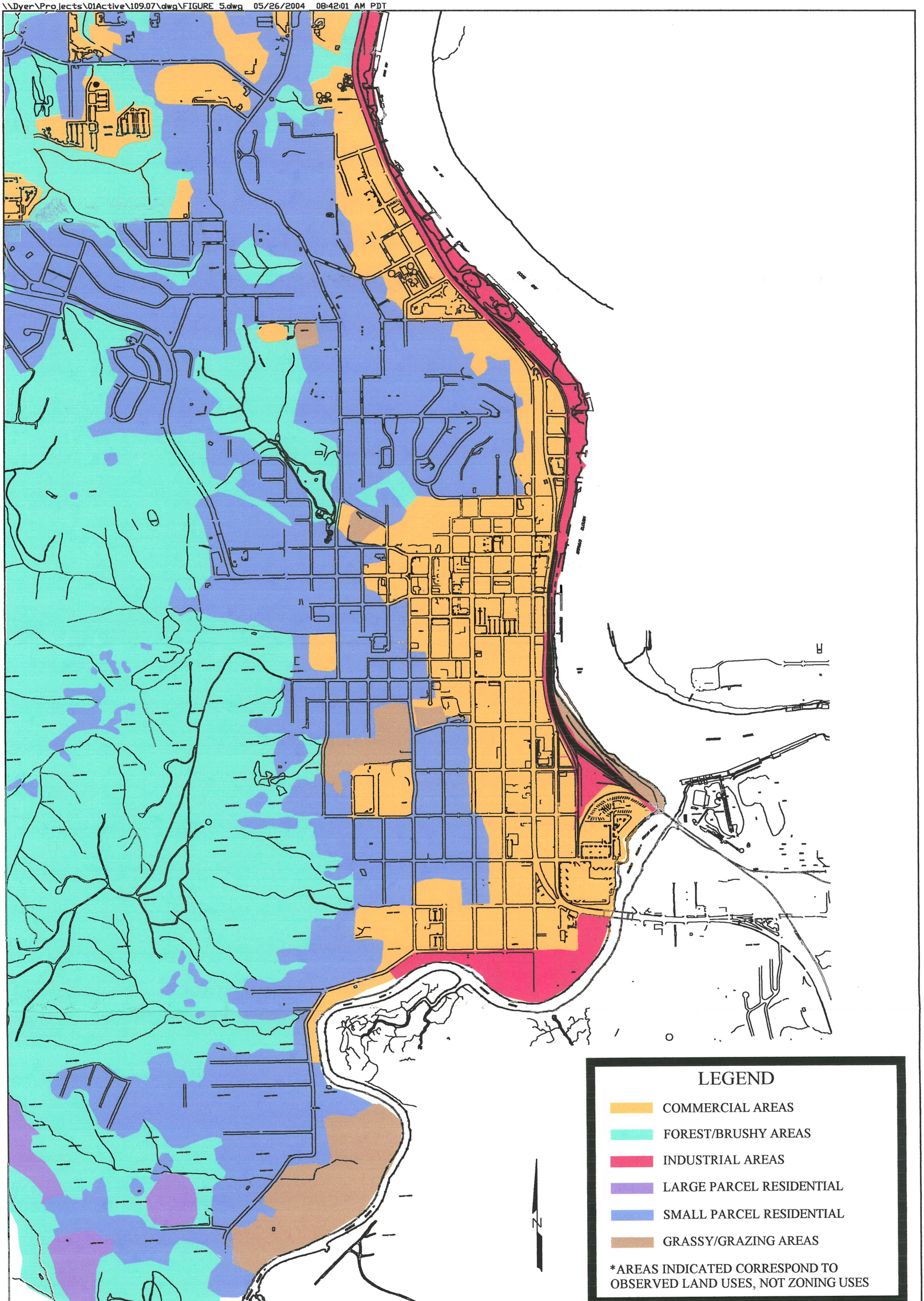
THE DYER PARTNERSHIP ENGINEERS & PLANNERS	COOS BAY STORM WATER MASTER PLAN	FIGURE NO.
DATE: SEPT, 2004	SOILS MAP	A-3
PROJECT NO.: 109.07		

\\Dyer\Projects\01Active\109.07\dwg\FIGURES FOR REPORT\FIGURE 4.dwg 05/21/2004 10:19:44 AM PDT



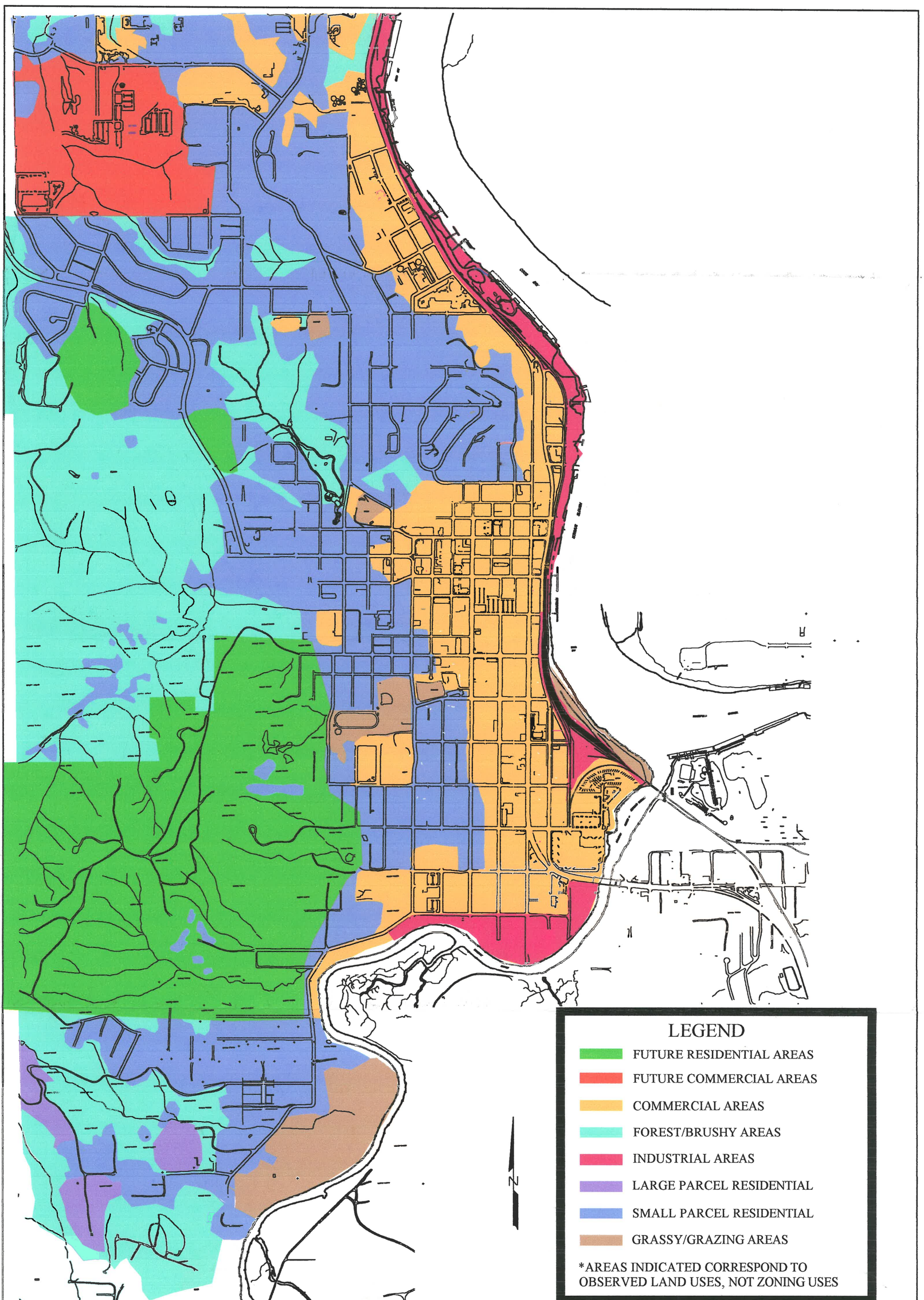
THE DYER PARTNERSHIP ENGINEERS & PLANNERS DATE: SEPT., 2004 PROJECT NO.: 109.07	COOS BAY STORM WATER MASTER PLAN FLOOD HAZARD MAP	FIGURE NO. A-4

\\Dyer\Projects\01Active\109.07\dwg\FIGURE 5.dwg 05/26/2004 08:42:01 AM PDT

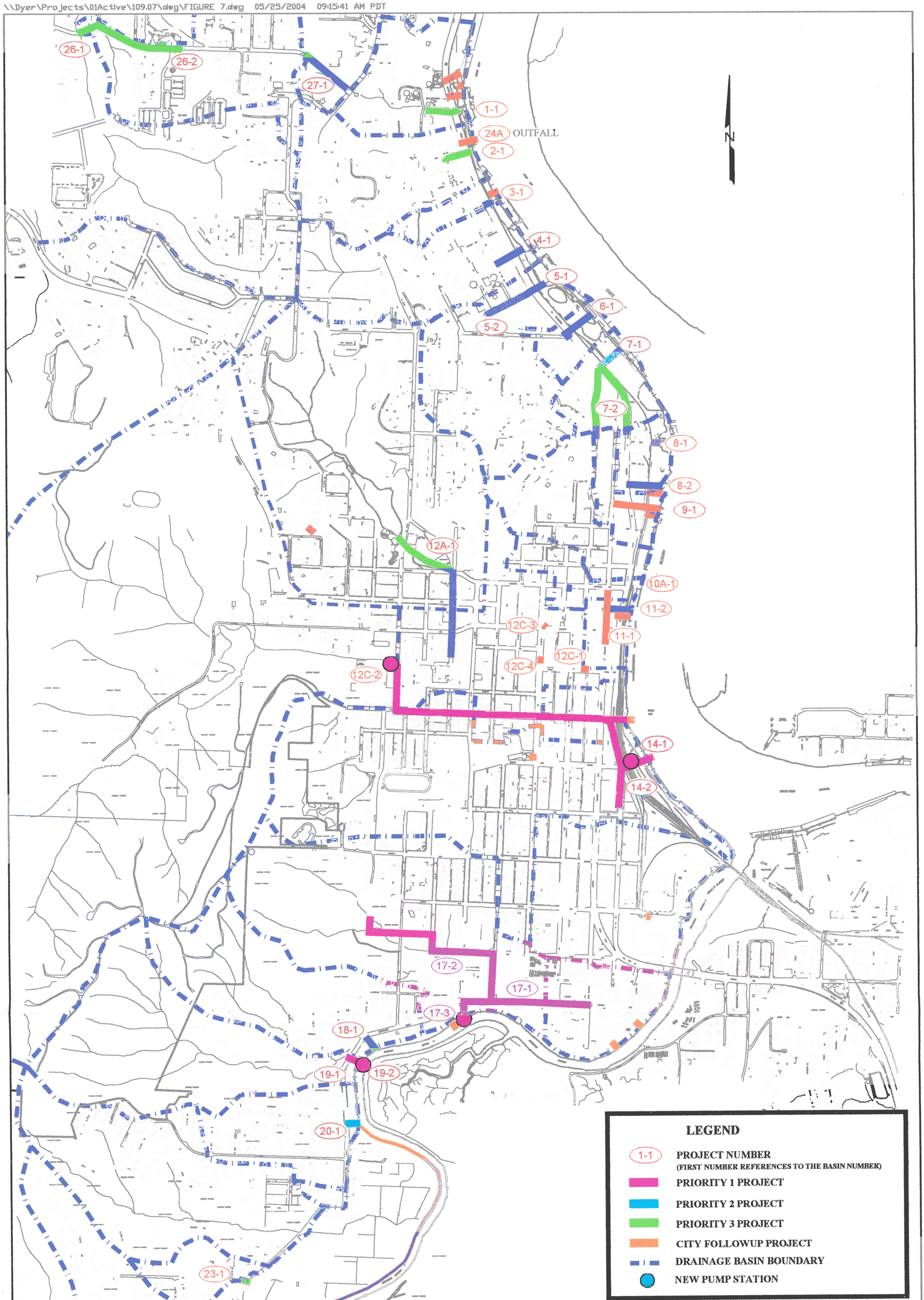


THE DYER PARTNERSHIP ENGINEERS & PLANNERS	COOS BAY STORM WATER MASTER PLAN	FIGURE NO.
DATE: SEPT, 2004	EXISTING LAND USE MAP	A-5
PROJECT NO.: 109.07		

\\Dyer\Projects\01Active\109.07\dwg\FIGURE 6.dwg 05/26/2004 08:49:04 AM PDT

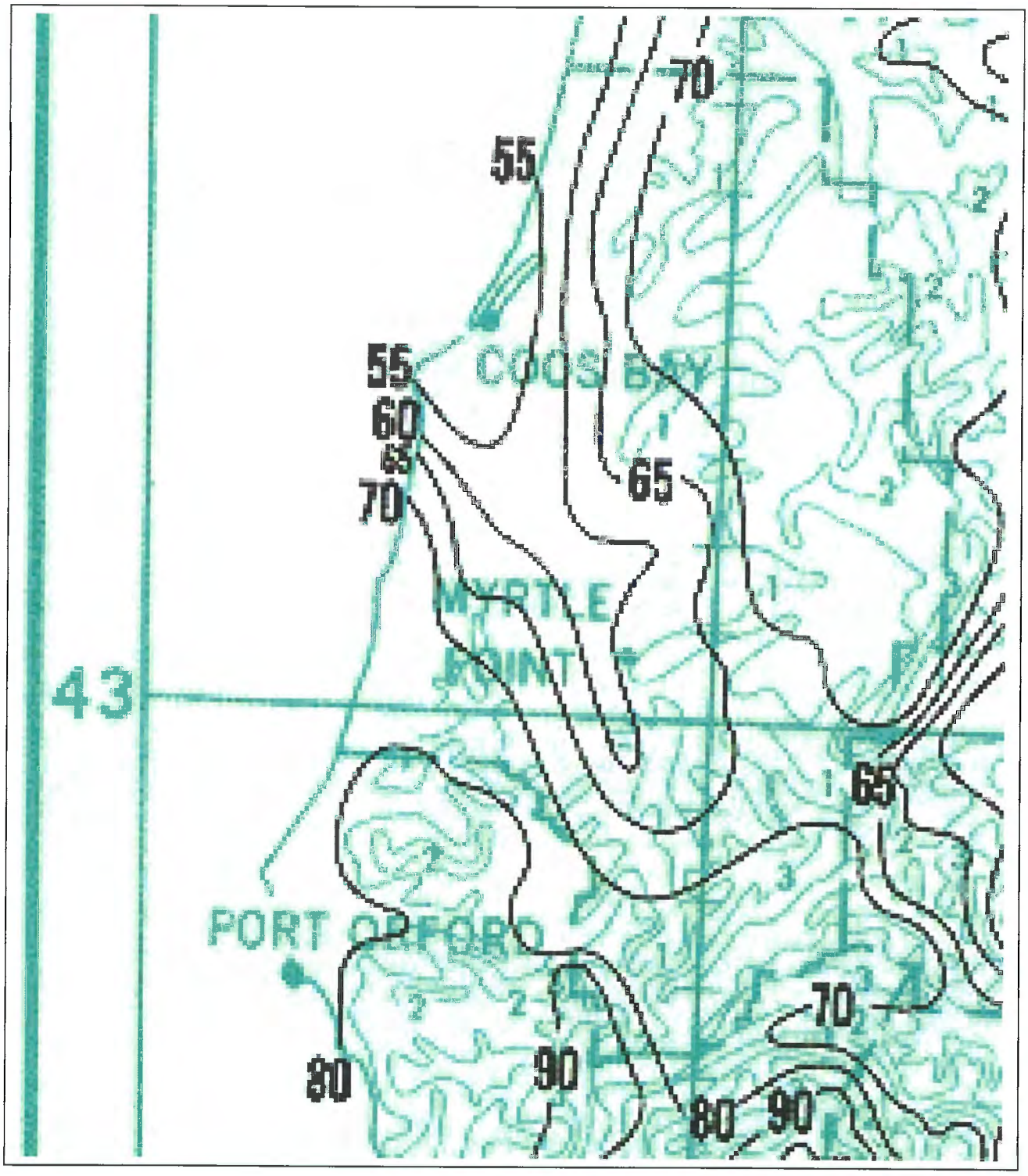


THE DYER PARTNERSHIP ENGINEERS & PLANNERS DATE: SEPT, 2004 PROJECT NO.: 109.07	**COOS BAY STORM WATER MASTER PLAN** **FULLY DEVELOPED LAND USE MAP**	FIGURE NO. **A-6**

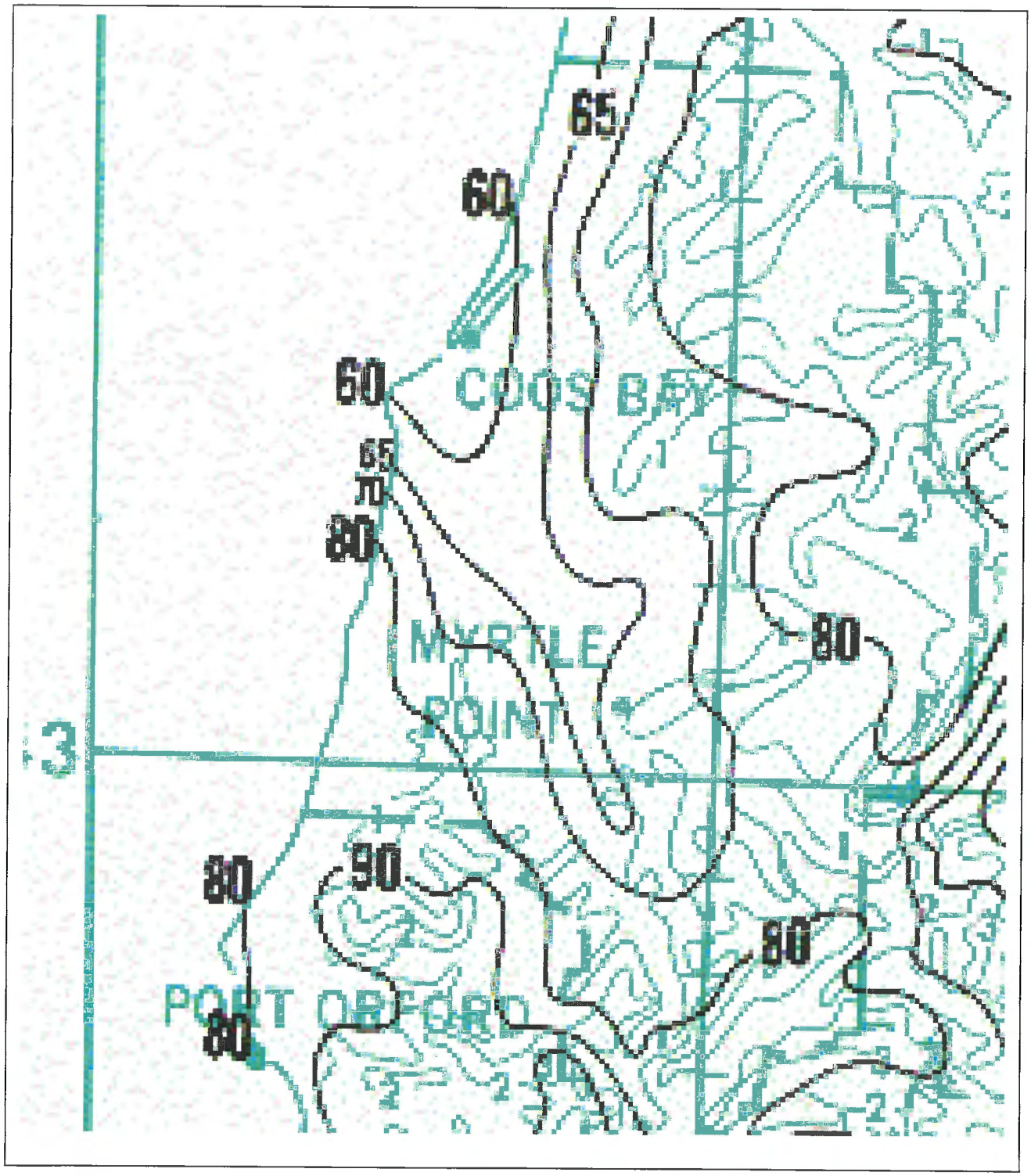


THE DYER PARTNERSHIP ENGINEERS & PLANNERS DATE: SEPT, 2004 PROJECT NO.: 109.07	COOS BAY STORM WATER MASTER PLAN STORMWATER PROJECT PRIORITY MAP	FIGURE NO. A-7

Coos Bay Isopluvial lines 25 Year – 24 Hour



Coos Bay Isopluvial lines 50 Year – 24 Hour



Appendix

B

Existing System Maps

Photos

Appendix

C

TIDEGATE 1

TIDEGATE 2

TIDEGATE 3A

TIDEGATE 3B

TIDEGATE 3C

TIDEGATE 4

TIDEGATE 5

TIDEGATE 6

TIDEGATE 7

SEDIMENT BASIN 7

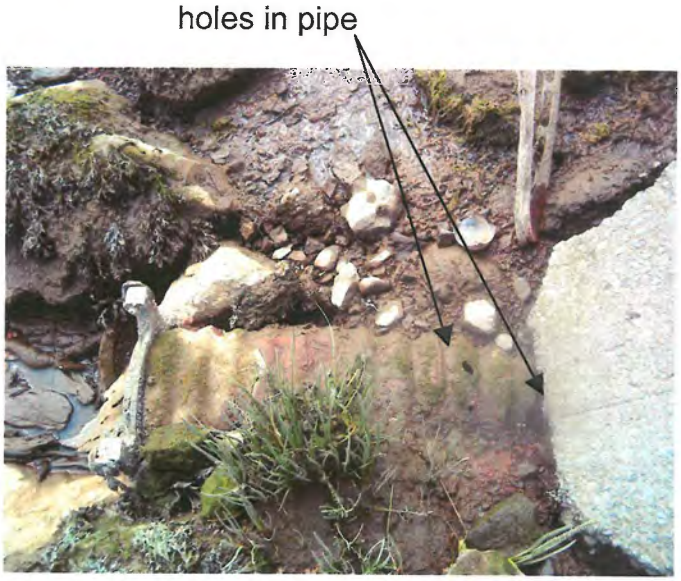
TIDEGATE 7A

Sediment basin side of outfall 7A. tidegate was not accessible at time of study due to fences and brambles.

TIDEGATE 8

TIDEGATE 9

TIDEGATE 10



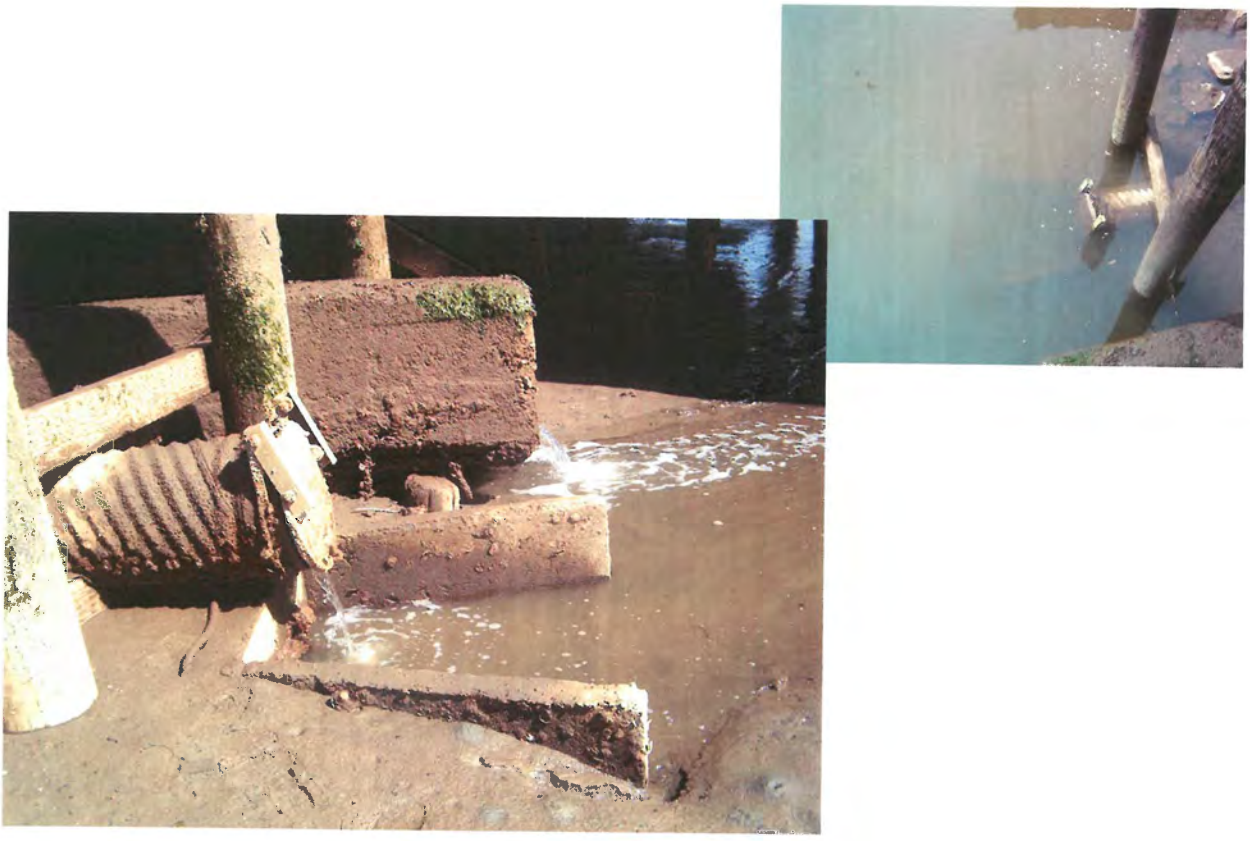
TIDEGATE 11

TIDEGATE 12 (Mill Slough Box)

TIDEGATE 12 (Mill Slough Box)

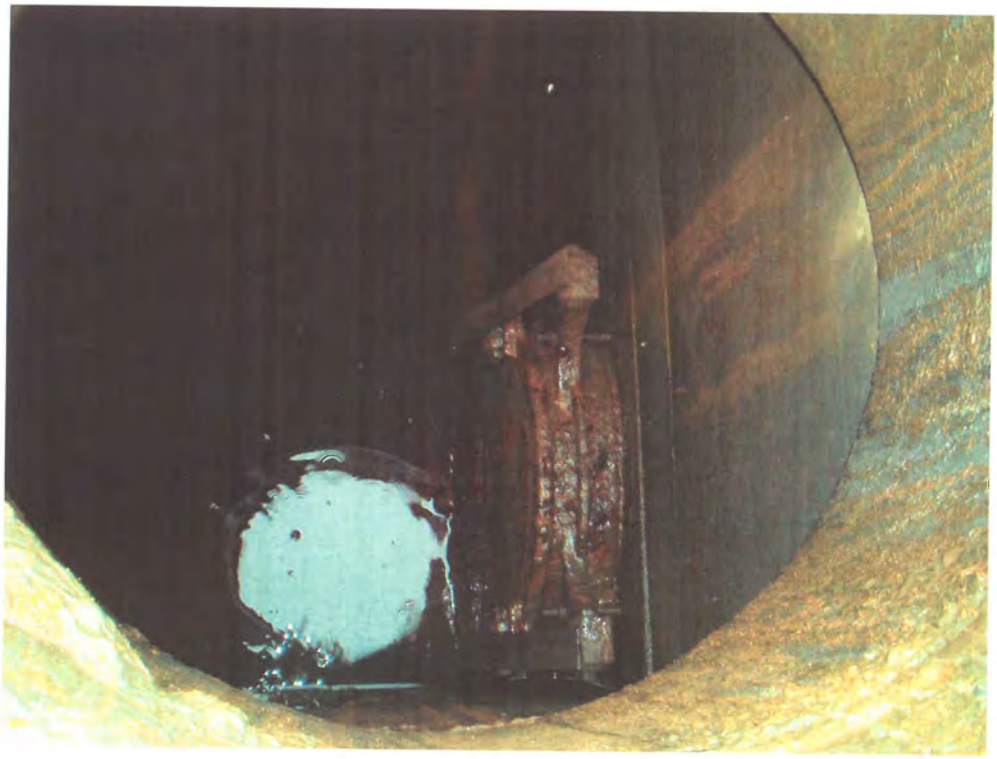
TIDEGATE 13

TIDEGATE 14 WITH TIDEGATE 14A UNDER IN HEADWALL

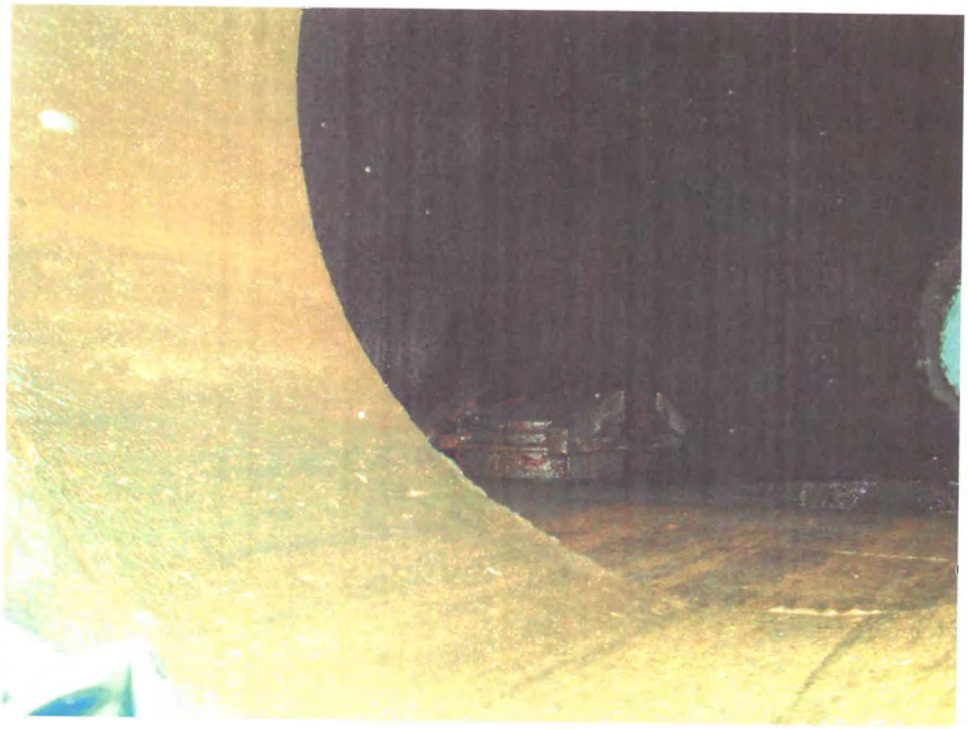


OUTFALL 14B

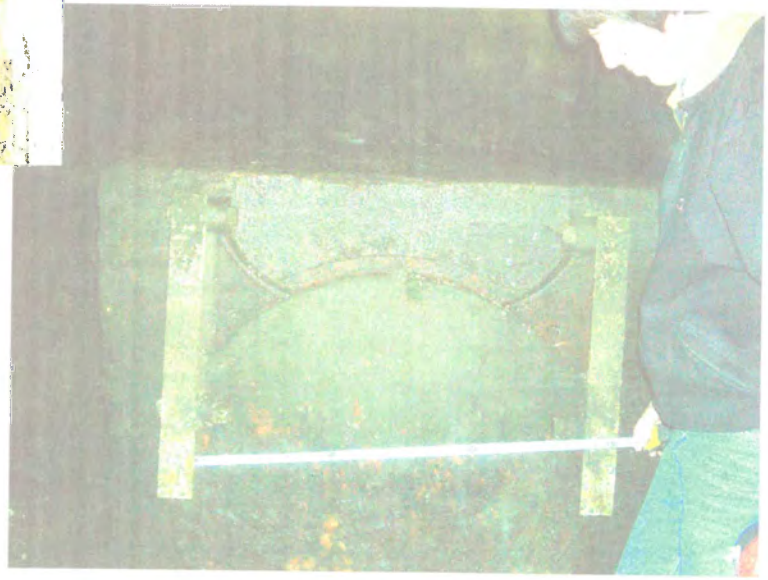
TIDEGATE 15A



TIDEGATE 15B



TIDEGATE 16

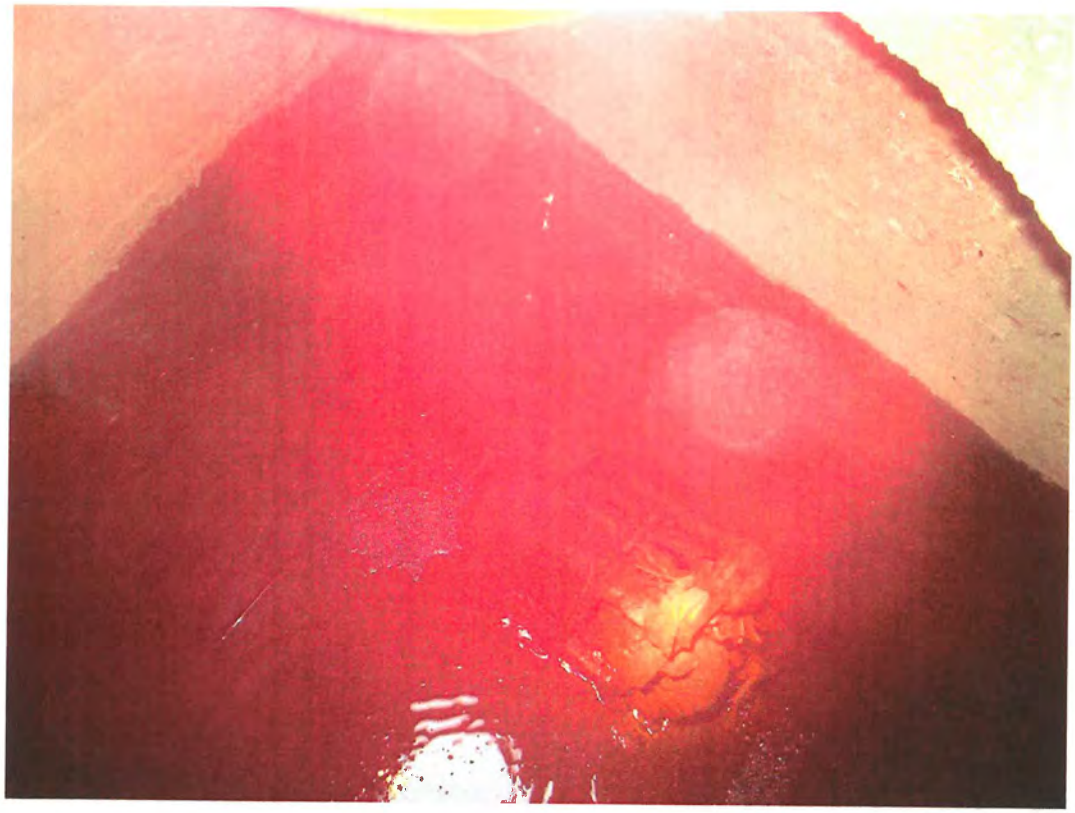


TIDEGATE 17

TIDEGATE 18

Tidegate no longer exists

TIDEGATE 19



TIDEGATE 20

PRIOR TIDEGATE 21 VAULT & OUTFALL

TIDEGATE 22

TIDEGATE 23

TIDEGATE 24

OUTFALL 26

OUTFALL 26A

TIDEGATE 27

Computer Model

Appendix

D

SUBCATCHMENT 1 Basin 1

PEAK= 23.04 CFS @ 8.39 HRS, VOLUME= 10.28 AF

ACRES	CN	
9.20	92	Commercial
8.00	88	Industrial
14.20	75	Small Res.
8.60	60	Forest/Brushy
40.00	78	

SCS TR-20 METHOD
TYPE IA 24-HOUR
RAINFALL= 5.5 IN
SPAN= 0-24 HRS, dt=.1 HRS

Method	Comment	Tc (min)
CURVE NUMBER (LAG) METHOD L=950' s=.164 '/'	Upper Area	8.0
CURVE NUMBER (LAG) METHOD L=555' s=.0032 '/'	Lower Area	37.3
	Total Length= 1505 ft Total Tc=	45.3

SUBCATCHMENT 2 Basin 2

PEAK= 20.58 CFS @ 8.60 HRS, VOLUME= 9.93 AF

ACRES	CN	
11.27	92	Commercial
2.10	88	Industrial
21.86	75	Small Lot Res.
.35	60	Forest/Brushy
35.58	81	

SCS TR-20 METHOD
TYPE IA 24-HOUR
RAINFALL= 5.5 IN
SPAN= 0-24 HRS, dt=.1 HRS

Method	Comment	Tc (min)
CURVE NUMBER (LAG) METHOD L=1400' s=.148 '/'	Upper Area	10.5
CURVE NUMBER (LAG) METHOD L=790' s=.0025 '/'	Lower Area	51.0
	Total Length= 2190 ft Total Tc=	61.5

SUBCATCHMENT 3 Basin 3

PEAK= 3.34 CFS @ 8.46 HRS, VOLUME= 1.51 AF

ACRES	CN	
2.00	92	Commercial
3.40	75	SMALL LOT RES.
5.40	81	

SCS TR-20 METHOD
TYPE IA 24-HOUR
RAINFALL= 5.5 IN
SPAN= 0-24 HRS, dt=.1 HRS

Method	Comment	Tc (min)
CURVE NUMBER (LAG) METHOD L=591' s=.168 '/'	Upper Area	4.9
CURVE NUMBER (LAG) METHOD L=745' s=.0027 '/'	Lower Area	46.8
	Total Length= 1336 ft Total Tc=	51.7

SUBCATCHMENT 4 Basin 4

PEAK= 50.41 CFS @ 8.32 HRS, VOLUME= 21.52 AF

ACRES	CN	
20.61	92	Commercial
2.30	88	Ind
52.13	75	Small Lot Res
6.00	60	Forest/Brushy
81.04	79	

SCS TR-20 METHOD
TYPE IA 24-HOUR
RAINFALL= 5.5 IN
SPAN= 0-24 HRS, dt=.1 HRS

Method	Comment	Tc (min)
CURVE NUMBER (LAG) METHOD L=1170' s=.112 '/'	Top	11.1
CURVE NUMBER (LAG) METHOD L=670' s=.075 '/'	Middle	8.7
CURVE NUMBER (LAG) METHOD L=1080' s=.027 '/'	Lower	21.2
	Total Length= 2920 ft Total Tc=	41.0

SUBCATCHMENT 5 Basin 5

PEAK= 34.88 CFS @ 8.54 HRS, VOLUME= 16.80 AF

ACRES	CN	
10.30	92	Comm
0.00	88	Ind
55.40	75	Small Res
65.70	78	

SCS TR-20 METHOD
TYPE IA 24-HOUR
RAINFALL= 5.5 IN
SPAN= 0-24 HRS, dt=.1 HRS

Method	Comment	Tc (min)
CURVE NUMBER (LAG) METHOD L=1520' s=.137 '/'	Upper	12.8
CURVE NUMBER (LAG) METHOD L=670' s=.025 '/'	Middle	15.5
CURVE NUMBER (LAG) METHOD L=450' s=.004 '/'	Lower	28.2
	Total Length= 2640 ft Total Tc=	56.5

SUBCATCHMENT 6 Basin 6

PEAK= 4.43 CFS @ 8.12 HRS, VOLUME= 1.59 AF

ACRES	CN	
.61	92	Comm
3.92	88	Ind
4.53	89	

SCS TR-20 METHOD
TYPE IA 24-HOUR
RAINFALL= 5.5 IN
SPAN= 0-24 HRS, dt=.1 HRS

Method	Comment	Tc (min)
CURVE NUMBER (LAG) METHOD L=150' s=.51 '/'	Upper	.7
CURVE NUMBER (LAG) METHOD L=670' s=.004 '/'	Lower	26.7
	Total Length= 820 ft Total Tc=	27.4

SUBCATCHMENT 7 Basin 7

PEAK= 19.80 CFS @ 8.05 HRS, VOLUME= 6.87 AF

ACRES	CN	
5.96	92	Commercial
8.05	88	Ind
8.20	75	Small Res
22.21	84	

SCS TR-20 METHOD
TYPE IA 24-HOUR
RAINFALL= 5.5 IN
SPAN= 0-24 HRS, dt=.1 HRS

Method	Comment	Tc (min)
CURVE NUMBER (LAG) METHOD L=525' s=.49 '/'	Upper	2.4
CURVE NUMBER (LAG) METHOD L=540' s=.009 '/'	Lower	18.0
	Total Length= 1065 ft Total Tc=	20.4

SUBCATCHMENT 8 Basin 8 (Report Basin 9)

PEAK= 15.13 CFS @ 7.97 HRS, VOLUME= 4.96 AF

ACRES	CN	
2.40	92	Comm
11.00	88	Ind
1.00	75	Small Res
14.40	88	

SCS TR-20 METHOD
TYPE IA 24-HOUR
RAINFALL= 5.5 IN
SPAN= 0-24 HRS, dt=.1 HRS

Method	Comment	Tc (min)
CURVE NUMBER (LAG) METHOD L=963' s=.088 '/'	Upper	7.9
CURVE NUMBER (LAG) METHOD L=445' s=.031 '/'	Lower	7.2
	Total Length= 1408 ft Total Tc=	15.1

SUBCATCHMENT 9 Basin 9 (Report Basin 8)

PEAK= 14.08 CFS @ 7.84 HRS, VOLUME= 4.47 AF

ACRES	CN	
7.29	92	Comm
5.02	88	Ind
12.31	90	

SCS TR-20 METHOD
TYPE IA 24-HOUR
RAINFALL= 5.5 IN
SPAN= 0-24 HRS, dt=.1 HRS

Method	Comment	Tc (min)
CURVE NUMBER (LAG) METHOD L=420' s=.045 '/'	Total	5.3

SUBCATCHMENT 10 Basin 10

PEAK= 24.28 CFS @ 8.16 HRS, VOLUME= 9.27 AF

ACRES	CN	
9.60	92	Comm
.70	88	Ind
23.40	75	Small REs
33.70	80	

SCS TR-20 METHOD
TYPE IA 24-HOUR
RAINFALL= 5.5 IN
SPAN= 0-24 HRS, dt=.1 HRS

Method	Comment	Tc (min)
CURVE NUMBER (LAG) METHOD L=725' s=.31 '/'	Upper	4.4
CURVE NUMBER (LAG) METHOD L=761' s=.024 '/'	Middle	16.5
CURVE NUMBER (LAG) METHOD L=300' s=.027 '/'	Lower	7.4
	Total Length= 1786 ft	Total Tc= 28.3

SUBCATCHMENT 11 Basin 11 (Report Basin-DELETED)

PEAK= 4.25 CFS @ 8.01 HRS, VOLUME= 1.43 AF

ACRES	CN	
3.00	92	Commercial
.85	88	Ind
3.85	91	

SCS TR-20 METHOD
TYPE IA 24-HOUR
RAINFALL= 5.5 IN
SPAN= 0-24 HRS, dt=.1 HRS

Method	Comment	Tc (min)
CURVE NUMBER (LAG) METHOD L=480' s=.004 '/'	Length	18.8

SUBCATCHMENT 13 Basin 13 (Report Basin 11)

PEAK= 7.44 CFS @ 8.22 HRS, VOLUME= 2.84 AF

ACRES	CN	
1.51	88	Industrial
6.19	92	Commercial
7.70	91	

SCS TR-20 METHOD
TYPE IA 24-HOUR
RAINFALL= 5.5 IN
SPAN= 0-24 HRS, dt=.1 HRS

Method	Comment	Tc (min)
CURVE NUMBER (LAG) METHOD L=440' s=.001 '/'	Length	35.1

SUBCATCHMENT 14 Bason 14 (Report Basin 13)

PEAK= 17.28 CFS @ 8.03 HRS, VOLUME= 5.86 AF

ACRES	CN	
13.60	92	Comm
2.00	88	Ind
.20	61	Brushy Fields
15.80	91	

SCS TR-20 METHOD
TYPE IA 24-HOUR
RAINFALL= 5.5 IN
SPAN= 0-24 HRS, dt=.1 HRS

Method	Comment	Tc (min)
CURVE NUMBER (LAG) METHOD L=867' s=.009 '/'	Length	20.1

SUBCATCHMENT 15 Basin 15 (Report Basin 14)

PEAK= 59.26 CFS @ 8.78 HRS, VOLUME= 31.41 AF

ACRES	CN	
36.00	92	Comm
7.00	88	Industrial
20.80	61	Grassy Fields
27.00	75	Future Res.
33.00	75	Res
123.80	78	

SCS TR-20 METHOD
TYPE IA 24-HOUR
RAINFALL= 5.5 IN
SPAN= 0-24 HRS, dt=.1 HRS

Method	Comment	Tc (min)
CURVE NUMBER (LAG) METHOD L=2030' s=.118 '/'	Upper	17.3
CURVE NUMBER (LAG) METHOD L=1280' s=.0187 '/'	Middle	30.1
CURVE NUMBER (LAG) METHOD L=1100' s=.021 '/'	Lower	25.2
	Total Length= 4410 ft	Total Tc= 72.6

SUBCATCHMENT 16 Basin 16 (Report Basin 15)

PEAK= 68.27 CFS @ 8.29 HRS, VOLUME= 27.22 AF

ACRES	CN	
68.10	92	Comm
2.40	88	Industrial
3.52	75	Small Res
74.02	91	

SCS TR-20 METHOD
TYPE IA 24-HOUR
RAINFALL= 5.5 IN
SPAN= 0-24 HRS, dt=.1 HRS

Method	Comment	Tc (min)
CURVE NUMBER (LAG) METHOD L=1800' s=.007 '/'	Length	40.9

SUBCATCHMENT 17 Basin 17 (Report Basin 16)

PEAK= 24.14 CFS @ 8.43 HRS, VOLUME= 10.36 AF

ACRES	CN	
11.75	92	Commercial
17.25	88	Industrial
29.00	90	

SCS TR-20 METHOD
TYPE IA 24-HOUR
RAINFALL= 5.5 IN
SPAN= 0-24 HRS, dt=.1 HRS

Method	Comment	Tc (min)
CURVE NUMBER (LAG) METHOD L=1025' s=.002 '/'	Length	50.9

SUBCATCHMENT 18 Basin 18 (Report Basin 17)

PEAK= 122.4 CFS @ 8.17 HRS, VOLUME= 45.27 AF

ACRES	CN	
31.00	92	Commercial
6.25	90	Industrial
44.00	87	Small Lot Res.
51.00	87	Future Res.
132.25	88	

SCS TR-20 METHOD
TYPE IA 24-HOUR
RAINFALL= 5.5 IN
SPAN= 0-24 HRS, dt=.1 HRS

Method	Comment	Tc (min)
CURVE NUMBER (LAG) METHOD L=2160' s=.12 '/'	Upper	12.9
CURVE NUMBER (LAG) METHOD L=1400' s=.032 '/'	Lower	17.7
	Total Length= 3560 ft Total Tc=	30.6

SUBCATCHMENT 1 Blossom-Into Blossum Gulch Inlet

PEAK= 158.8 CFS @ 8.71 HRS, VOLUME=101.87 AF

ACRES	CN	
491.00	60	Brushy/Forest
28.00	75	Residential
141.00	75	Future Residential
660.00	64	

SCS TR-20 METHOD
TYPE IA 24-HOUR
RAINFALL= 5.5 IN
SPAN= 0-24 HRS, dt=.1 HRS

Method	Comment	Tc (min)
CURVE NUMBER (LAG) METHOD L=8050' s=.187 '/'	Length	60.9

SUBCATCHMENT 2 Mingus Drainage

PEAK= 66.86 CFS @ 11.70 HRS, VOLUME= 57.94 AF

ACRES	CN	
84.00	60	Brushy Forest
180.00	75	Small Res
36.00	92	Commercial
300.00	73	

SCS TR-20 METHOD
TYPE IA 24-HOUR
RAINFALL= 5.5 IN
SPAN= 0-24 HRS, dt=.1 HRS

Method	Comment	Tc (min)
CURVE NUMBER (LAG) METHOD L=3631' s=.05 '/'	Upper	49.0
CURVE NUMBER (LAG) METHOD L=1800' s=.001 '/'	lower	197.6
	Total Length= 5431 ft	Total Tc= 246.6

SUBCATCHMENT 3 Down town Blossom

PEAK= 53.32 CFS @ 8.40 HRS, VOLUME= 22.55 AF

ACRES	CN	
60.00	92	Commercial Downtown

SCS TR-20 METHOD
TYPE IA 24-HOUR
RAINFALL= 5.5 IN
SPAN= 0-24 HRS, dt=.1 HRS

Method	Comment	Tc (min)
CURVE NUMBER (LAG) METHOD L=2775' s=.009 '/'	Segment ID:	48.9

SUBCATCHMENT 19 Basin 19 (Report Basin 18)

PEAK= 71.19 CFS @ 8.10 HRS, VOLUME= 25.24 AF

ACRES	CN	
3.50	92	COMMERCIAL
21.00	87	RESIDENTIAL
51.00	87	Future Res.
75.50	87	

SCS TR-20 METHOD
TYPE IA 24-HOUR
RAINFALL= 5.5 IN
SPAN= 0-24 HRS, dt=.1 HRS

Method	Comment	Tc (min)
CURVE NUMBER (LAG) METHOD L=2130' s=.14 '/'	UPPER AREA	12.3
CURVE NUMBER (LAG) METHOD L=610' s=.017 '/'	LOWER AREA	12.9
	Total Length= 2740 ft Total Tc=	25.2

SUBCATCHMENT 21 Basin 21 (Report Basin 20)

PEAK= 35.77 CFS @ 7.98 HRS, VOLUME= 11.75 AF

ACRES	CN	
35.00	87	Res

SCS TR-20 METHOD
TYPE IA 24-HOUR
RAINFALL= 5.5 IN
SPAN= 0-24 HRS, dt=.1 HRS

Method	Comment	Tc (min)
CURVE NUMBER (LAG) METHOD L=2130' s=.094 '/'	Segment ID:	15.0

SUBCATCHMENT 22 Basin 22 (Report Basin 21)

PEAK= 1.81 CFS @ 7.89 HRS, VOLUME= .62 AF

ACRES	CN	
2.53	76	Res

SCS TR-20 METHOD
TYPE IA 24-HOUR
RAINFALL= 5.5 IN
SPAN= 0-24 HRS, dt=.1 HRS

Method	Comment	Tc (min)
CURVE NUMBER (LAG) METHOD L=570' s=.126 '/'	Segment ID:	6.4

SUBCATCHMENT 23 Basin 23 (Report Basin 22)

PEAK= 36.51 CFS @ 8.34 HRS, VOLUME= 18.55 AF

ACRES	CN	
50.00	75	Res
55.00	60	Forest
105.00	67	

SCS TR-20 METHOD
TYPE IA 24-HOUR
RAINFALL= 5.5 IN
SPAN= 0-24 HRS, dt=.1 HRS

Method	Comment	Tc (min)
CURVE NUMBER (LAG) METHOD	Segment ID:	38.9

L=3840' s=.12 '/'

SUBCATCHMENT 24 Basin 24 (Report Basin 23)

PEAK= 7.04 CFS @ 8.09 HRS, VOLUME= 2.97 AF

ACRES	CN	
8.00	75	Res
8.00	60	Forest
16.00	68	

SCS TR-20 METHOD
TYPE IA 24-HOUR
RAINFALL= 5.5 IN
SPAN= 0-24 HRS, dt=.1 HRS

Method	Comment	Tc (min)
CURVE NUMBER (LAG) METHOD	Segment ID:	20.1

L=1450' s=.09 '/'

SUBCATCHMENT 25 Basin 25 (Report Basin 24)

PEAK= 12.97 CFS @ 8.14 HRS, VOLUME= 5.57 AF

ACRES	CN	
11.78	68	Large Lot Residential
6.00	60	Forest
11.22	75	Small Lot Res.
29.00	69	

SCS TR-20 METHOD
TYPE IA 24-HOUR
RAINFALL= 5.5 IN
SPAN= 0-24 HRS, dt=.1 HRS

Method	Comment	Tc (min)
CURVE NUMBER (LAG) METHOD	Segment ID:	24.5

L=2175' s=.11 '/'

SUBCATCHMENT 27 Basin 27 (Report Basin 25)

PEAK= 102.2 CFS @ 8.21 HRS, VOLUME= 39.36 AF

ACRES	CN	
26.00	92	COMMERCIAL
30.00	75	RES
16.00	60	FOREST
56.00	92	Future COmmercial
128.00	84	

SCS TR-20 METHOD
TYPE IA 24-HOUR
RAINFALL= 5.5 IN
SPAN= 0-24 HRS, dt=.1 HRS

Method	Comment	Tc (min)
CURVE NUMBER (LAG) METHOD	Segment ID:	33.2
L=3530' s=.053 '/'		

SUBCATCHMENT 28 Basin 28 (Report Basin 26)

PEAK= 51.42 CFS @ 8.16 HRS, VOLUME= 19.54 AF

ACRES	CN	
11.50	92	Comm
43.00	75	Res
14.50	92	Future Commercial
69.00	81	

SCS TR-20 METHOD
TYPE IA 24-HOUR
RAINFALL= 5.5 IN
SPAN= 0-24 HRS, dt=.1 HRS

Method	Comment	Tc (min)
CURVE NUMBER (LAG) METHOD	Segment ID:	28.7
L=2500' s=.05 '/'		

SUBCATCHMENT 29 Basin 29 (Report Basin 27)

PEAK= 6.15 CFS @ 7.88 HRS, VOLUME= 1.99 AF

ACRES	CN	
6.40	84	Res/Comm

SCS TR-20 METHOD
TYPE IA 24-HOUR
RAINFALL= 5.5 IN
SPAN= 0-24 HRS, dt=.1 HRS

Method	Comment	Tc (min)
CURVE NUMBER (LAG) METHOD	Segment ID:	7.2
L=500' s=.05 '/'		

SUBCATCHMENT 1 Basin 1

PEAK= 26.66 CFS @ 8.38 HRS, VOLUME= 11.72 AF

ACRES	CN	
9.20	92	Commercial
8.00	88	Industrial
14.20	75	Small Res.
8.60	60	Forest/Brushy
40.00	78	

SCS TR-20 METHOD
TYPE IA 24-HOUR
RAINFALL= 6.0 IN
SPAN= 0-24 HRS, dt=.1 HRS

Method	Comment	Tc (min)
CURVE NUMBER (LAG) METHOD L=950' s=.164 '/'	Upper Area	8.0
CURVE NUMBER (LAG) METHOD L=555' s=.0032 '/'	Lower Area	37.3
	Total Length= 1505 ft Total Tc=	45.3

SUBCATCHMENT 2 Basin 2

PEAK= 23.56 CFS @ 8.60 HRS, VOLUME= 11.24 AF

ACRES	CN	
11.27	92	Commercial
2.10	88	Industrial
21.86	75	Small Lot Res.
.35	60	Forest/Brushy
35.58	81	

SCS TR-20 METHOD
TYPE IA 24-HOUR
RAINFALL= 6.0 IN
SPAN= 0-24 HRS, dt=.1 HRS

Method	Comment	Tc (min)
CURVE NUMBER (LAG) METHOD L=1400' s=.148 '/'	Upper Area	10.5
CURVE NUMBER (LAG) METHOD L=790' s=.0025 '/'	Lower Area	51.0
	Total Length= 2190 ft Total Tc=	61.5

SUBCATCHMENT 3 Basin 3

PEAK= 3.82 CFS @ 8.46 HRS, VOLUME= 1.71 AF

ACRES	CN	
2.00	92	Commercial
3.40	75	SMALL LOT RES.
5.40	81	

SCS TR-20 METHOD
TYPE IA 24-HOUR
RAINFALL= 6.0 IN
SPAN= 0-24 HRS, dt=.1 HRS

Method	Comment	Tc (min)
CURVE NUMBER (LAG) METHOD L=591' s=.168 '/'	Upper Area	4.9
CURVE NUMBER (LAG) METHOD L=745' s=.0027 '/'	Lower Area	46.8
	Total Length= 1336 ft Total Tc=	51.7

SUBCATCHMENT 4 Basin 4

PEAK= 58.11 CFS @ 8.32 HRS, VOLUME= 24.48 AF

ACRES	CN	
20.61	92	Commercial
2.30	88	Ind
52.13	75	Small Lot Res
6.00	60	Forest/Brushy
81.04	79	

SCS TR-20 METHOD
TYPE IA 24-HOUR
RAINFALL= 6.0 IN
SPAN= 0-24 HRS, dt=.1 HRS

Method	Comment	Tc (min)
CURVE NUMBER (LAG) METHOD L=1170' s=.112 '/'	Top	11.1
CURVE NUMBER (LAG) METHOD L=670' s=.075 '/'	Middle	8.7
CURVE NUMBER (LAG) METHOD L=1080' s=.027 '/'	Lower	21.2
	Total Length= 2920 ft Total Tc=	41.0

SUBCATCHMENT 5 Basin 5

PEAK= 40.37 CFS @ 8.53 HRS, VOLUME= 19.16 AF

ACRES	CN	
10.30	92	Comm
0.00	88	Ind
55.40	75	Small Res
65.70	78	

SCS TR-20 METHOD
TYPE IA 24-HOUR
RAINFALL= 6.0 IN
SPAN= 0-24 HRS, dt=.1 HRS

Method	Comment	Tc (min)
CURVE NUMBER (LAG) METHOD L=1520' s=.137 '/'	Upper	12.8
CURVE NUMBER (LAG) METHOD L=670' s=.025 '/'	Middle	15.5
CURVE NUMBER (LAG) METHOD L=450' s=.004 '/'	Lower	28.2
	Total Length= 2640 ft	Total Tc= 56.5

SUBCATCHMENT 6 Basin 6

PEAK= 4.95 CFS @ 8.12 HRS, VOLUME= 1.77 AF

ACRES	CN	
.61	92	Comm
3.92	88	Ind
4.53	89	

SCS TR-20 METHOD
TYPE IA 24-HOUR
RAINFALL= 6.0 IN
SPAN= 0-24 HRS, dt=.1 HRS

Method	Comment	Tc (min)
CURVE NUMBER (LAG) METHOD L=150' s=.51 '/'	Upper	.7
CURVE NUMBER (LAG) METHOD L=670' s=.004 '/'	Lower	26.7
	Total Length= 820 ft	Total Tc= 27.4

SUBCATCHMENT 7 Basin 7

PEAK= 22.37 CFS @ 8.05 HRS, VOLUME= 7.72 AF

ACRES	CN	
5.96	92	Commercial
8.05	88	Ind
8.20	75	Small Res
22.21	84	

SCS TR-20 METHOD
TYPE IA 24-HOUR
RAINFALL= 6.0 IN
SPAN= 0-24 HRS, dt=.1 HRS

Method	Comment	Tc (min)
CURVE NUMBER (LAG) METHOD L=525' s=.49 '/'	Upper	2.4
CURVE NUMBER (LAG) METHOD L=540' s=.009 '/'	Lower	18.0
	Total Length= 1065 ft	Total Tc= 20.4

SUBCATCHMENT 8 Basin 8 (Report Basin 9)

PEAK= 16.91 CFS @ 7.97 HRS, VOLUME= 5.53 AF

ACRES	CN	
2.40	92	Comm
11.00	88	Ind
1.00	75	Small Res
14.40	88	

SCS TR-20 METHOD
TYPE IA 24-HOUR
RAINFALL= 6.0 IN
SPAN= 0-24 HRS, dt=.1 HRS

Method	Comment	Tc (min)
CURVE NUMBER (LAG) METHOD L=963' s=.088 '/'	Upper	7.9
CURVE NUMBER (LAG) METHOD L=445' s=.031 '/'	Lower	7.2
	Total Length= 1408 ft	Total Tc= 15.1

SUBCATCHMENT 9 Basin 9 (Report Basin 8)

PEAK= 15.65 CFS @ 7.83 HRS, VOLUME= 4.97 AF

ACRES	CN	
7.29	92	Comm
5.02	88	Ind
12.31	90	

SCS TR-20 METHOD
TYPE IA 24-HOUR
RAINFALL= 6.0 IN
SPAN= 0-24 HRS, dt=.1 HRS

Method	Comment	Tc (min)
CURVE NUMBER (LAG) METHOD L=420' s=.045 '/'	Total	5.3

SUBCATCHMENT 10 Basin 10

PEAK= 27.88 CFS @ 8.15 HRS, VOLUME= 10.52 AF

ACRES	CN	
9.60	92	Comm
.70	88	Ind
23.40	75	Small REs
33.70	80	

SCS TR-20 METHOD
TYPE IA 24-HOUR
RAINFALL= 6.0 IN
SPAN= 0-24 HRS, dt=.1 HRS

Method	Comment	Tc (min)
CURVE NUMBER (LAG) METHOD L=725' s=.31 '/'	Upper	4.4
CURVE NUMBER (LAG) METHOD L=761' s=.024 '/'	Middle	16.5
CURVE NUMBER (LAG) METHOD L=300' s=.027 '/'	Lower	7.4
	Total Length= 1786 ft Total Tc=	28.3

SUBCATCHMENT 11 Basin 11 (Report Basin-DELETED)

PEAK= 4.71 CFS @ 8.01 HRS, VOLUME= 1.58 AF

ACRES	CN	
3.00	92	Commercial
.85	88	Ind
3.85	91	

SCS TR-20 METHOD
TYPE IA 24-HOUR
RAINFALL= 6.0 IN
SPAN= 0-24 HRS, dt=.1 HRS

Method	Comment	Tc (min)
CURVE NUMBER (LAG) METHOD L=480' s=.004 '/'	Length	18.8

SUBCATCHMENT 13 Basin 13 (Report Basin 11)

PEAK= 8.25 CFS @ 8.22 HRS, VOLUME= 3.15 AF

ACRES	CN	
1.51	88	Industrial
6.19	92	Commercial
7.70	91	

SCS TR-20 METHOD
TYPE IA 24-HOUR
RAINFALL= 6.0 IN
SPAN= 0-24 HRS, dt=.1 HRS

Method	Comment	Tc (min)
CURVE NUMBER (LAG) METHOD L=440' s=.001 '/'	Length	35.1

SUBCATCHMENT 14 Basin 14 (Report Basin 13)

PEAK= 19.16 CFS @ 8.03 HRS, VOLUME= 6.50 AF

ACRES	CN	
13.60	92	Comm
2.00	88	Ind
.20	61	Brushy Fields
15.80	91	

SCS TR-20 METHOD
TYPE IA 24-HOUR
RAINFALL= 6.0 IN
SPAN= 0-24 HRS, dt=.1 HRS

Method	Comment	Tc (min)
CURVE NUMBER (LAG) METHOD L=867' s=.009 '/'	Length	20.1

SUBCATCHMENT 15 Basin 15 (Report Basin 14)

PEAK= 58.69 CFS @ 8.89 HRS, VOLUME= 32.68 AF

ACRES	CN	
36.00	92	Comm
7.00	88	Industrial
20.80	61	Grassy Fields
27.00	60	Forest
33.00	75	Res
123.80	75	

SCS TR-20 METHOD
TYPE IA 24-HOUR
RAINFALL= 6.0 IN
SPAN= 0-24 HRS, dt=.1 HRS

Method	Comment	Tc (min)
CURVE NUMBER (LAG) METHOD L=2030' s=.118 '/'	Upper	18.9
CURVE NUMBER (LAG) METHOD L=1280' s=.0187 '/'	Middle	32.9
CURVE NUMBER (LAG) METHOD L=1100' s=.021 '/'	Lower	27.5
	Total Length= 4410 ft	Total Tc= 79.3

SUBCATCHMENT 16 Basin 16 (Report Basin 15)

PEAK= 75.73 CFS @ 8.29 HRS, VOLUME= 30.20 AF

ACRES	CN	
68.10	92	Comm
2.40	88	Industrial
3.52	75	Small Res
74.02	91	

SCS TR-20 METHOD
TYPE IA 24-HOUR
RAINFALL= 6.0 IN
SPAN= 0-24 HRS, dt=.1 HRS

Method	Comment	Tc (min)
CURVE NUMBER (LAG) METHOD L=1800' s=.007 '/'	Length	40.9

SUBCATCHMENT 17 Basin 17 (Report Basin 16)

PEAK= 26.85 CFS @ 8.42 HRS, VOLUME= 11.52 AF

ACRES	CN	
11.75	92	Commercial
17.25	88	Industrial
29.00	90	

SCS TR-20 METHOD
TYPE IA 24-HOUR
RAINFALL= 6.0 IN
SPAN= 0-24 HRS, dt=.1 HRS

Method	Comment	Tc (min)
CURVE NUMBER (LAG) METHOD L=1025' s=.002 '/'	Length	50.9

SUBCATCHMENT 18 Basin 18 (Report Basin 17)

PEAK= 90.15 CFS @ 8.34 HRS, VOLUME= 38.81 AF

ACRES	CN	
31.00	92	Commercial
6.25	90	Industrial
44.00	87	Small Lot Res.
51.00	60	Forest
132.25	78	

SCS TR-20 METHOD
TYPE IA 24-HOUR
RAINFALL= 6.0 IN
SPAN= 0-24 HRS, dt=.1 HRS

Method	Comment	Tc (min)
CURVE NUMBER (LAG) METHOD L=2160' s=.12 '/'	Upper	18.1
CURVE NUMBER (LAG) METHOD L=1400' s=.032 '/'	Lower	24.7
	Total Length= 3560 ft	Total Tc= 42.8

SUBCATCHMENT 1 Blossom-Into Blossum Gulch Inlet

PEAK= 156.7 CFS @ 8.80 HRS, VOLUME=106.34 AF

ACRES	CN	
491.00	60	Brushy/Forest
28.00	75	Residential
141.00	60	Brushy Forest
660.00	61	

SCS TR-20 METHOD
TYPE IA 24-HOUR
RAINFALL= 6.0 IN
SPAN= 0-24 HRS, dt=.1 HRS

Method	Comment	Tc (min)
CURVE NUMBER (LAG) METHOD L=8050' s=.187 '/'	Length	65.8

SUBCATCHMENT 2 Mingus Drainage

PEAK= 78.59 CFS @ 11.67 HRS, VOLUME= 67.09 AF

ACRES	CN	
84.00	60	Brushy Forest
180.00	75	Small Res
36.00	92	Commercial
300.00	73	

SCS TR-20 METHOD
TYPE IA 24-HOUR
RAINFALL= 6.0 IN
SPAN= 0-24 HRS, dt=.1 HRS

Method	Comment	Tc (min)
CURVE NUMBER (LAG) METHOD L=3631' s=.05 '/'	Upper	49.0
CURVE NUMBER (LAG) METHOD L=1800' s=.001 '/'	lower	197.6
	Total Length= 5431 ft	Total Tc= 246.6

SUBCATCHMENT 3 Down town Blossom

PEAK= 58.99 CFS @ 8.39 HRS, VOLUME= 24.97 AF

ACRES	CN	
60.00	92	Commercial Downtown

SCS TR-20 METHOD
TYPE IA 24-HOUR
RAINFALL= 6.0 IN
SPAN= 0-24 HRS, dt=.1 HRS

Method	Comment	Tc (min)
CURVE NUMBER (LAG) METHOD L=2775' s=.009 '/'	Segment ID:	48.9

SUBCATCHMENT 19 Basin 19 (Report Basin 18)

PEAK= 34.30 CFS @ 8.39 HRS, VOLUME= 16.74 AF

ACRES	CN	
3.50	92	COMMERCIAL
21.00	87	RESIDENTIAL
51.00	60	Forest/Brushy
75.50	69	

SCS TR-20 METHOD
TYPE IA 24-HOUR
RAINFALL= 6.0 IN
SPAN= 0-24 HRS, dt=.1 HRS

Method	Comment	Tc (min)
CURVE NUMBER (LAG) METHOD L=2130' s=.14 '/'	UPPER AREA	21.3
CURVE NUMBER (LAG) METHOD L=610' s=.017 '/'	LOWER AREA	22.5
	Total Length= 2740 ft Total Tc=	43.8

SUBCATCHMENT 21 Basin 21 (Report Basin 20)

PEAK= 40.12 CFS @ 7.97 HRS, VOLUME= 13.13 AF

ACRES	CN	
35.00	87	Res

SCS TR-20 METHOD
TYPE IA 24-HOUR
RAINFALL= 6.0 IN
SPAN= 0-24 HRS, dt=.1 HRS

Method	Comment	Tc (min)
CURVE NUMBER (LAG) METHOD L=2130' s=.094 '/'	Segment ID:	15.0

SUBCATCHMENT 22 Basin 22 (Report Basin 21)

PEAK= 2.10 CFS @ 7.88 HRS, VOLUME= .71 AF

ACRES	CN	
2.53	76	Res

SCS TR-20 METHOD
TYPE IA 24-HOUR
RAINFALL= 6.0 IN
SPAN= 0-24 HRS, dt=.1 HRS

Method	Comment	Tc (min)
CURVE NUMBER (LAG) METHOD L=570' s=.126 '/'	Segment ID:	6.4

SUBCATCHMENT 23 Basin 23 (Report Basin 22)

PEAK= 44.63 CFS @ 8.33 HRS, VOLUME= 21.75 AF

ACRES	CN	
50.00	75	Res
55.00	60	Forest
105.00	67	

SCS TR-20 METHOD
TYPE IA 24-HOUR
RAINFALL= 6.0 IN
SPAN= 0-24 HRS, dt=.1 HRS

Method	Comment	Tc (min)
CURVE NUMBER (LAG) METHOD	Segment ID:	38.9

L=3840' s=.12 '/'

SUBCATCHMENT 24 Basin 24 (Report Basin 23)

PEAK= 8.54 CFS @ 8.08 HRS, VOLUME= 3.47 AF

ACRES	CN	
8.00	75	Res
8.00	60	Forest
16.00	68	

SCS TR-20 METHOD
TYPE IA 24-HOUR
RAINFALL= 6.0 IN
SPAN= 0-24 HRS, dt=.1 HRS

Method	Comment	Tc (min)
CURVE NUMBER (LAG) METHOD	Segment ID:	20.1

L=1450' s=.09 '/'

SUBCATCHMENT 25 Basin 25 (Report Basin 24)

PEAK= 15.64 CFS @ 8.13 HRS, VOLUME= 6.49 AF

ACRES	CN	
11.78	68	Large Lot Residential
6.00	60	Forest
11.22	75	Small Lot Res.
29.00	69	

SCS TR-20 METHOD
TYPE IA 24-HOUR
RAINFALL= 6.0 IN
SPAN= 0-24 HRS, dt=.1 HRS

Method	Comment	Tc (min)
CURVE NUMBER (LAG) METHOD	Segment ID:	24.5

L=2175' s=.11 '/'

SUBCATCHMENT 27 Basin 27 (Report Basin 25)

PEAK= 58.04 CFS @ 8.48 HRS, VOLUME= 29.25 AF

ACRES	CN	
26.00	92	COMMERCIAL
30.00	75	RES
72.00	60	FOREST
128.00	70	

SCS TR-20 METHOD
TYPE IA 24-HOUR
RAINFALL= 6.0 IN
SPAN= 0-24 HRS, dt=.1 HRS

Method	Comment	Tc (min)
CURVE NUMBER (LAG) METHOD L=3530' s=.053 '/'	Segment ID:	50.5

SUBCATCHMENT 28 Basin 28 (Report Basin 26)

PEAK= 44.85 CFS @ 8.24 HRS, VOLUME= 18.63 AF

ACRES	CN	
11.50	92	Comm
43.00	75	Res
14.50	60	Forest/Brushy
69.00	75	

SCS TR-20 METHOD
TYPE IA 24-HOUR
RAINFALL= 6.0 IN
SPAN= 0-24 HRS, dt=.1 HRS

Method	Comment	Tc (min)
CURVE NUMBER (LAG) METHOD L=2500' s=.05 '/'	Segment ID:	34.3

SUBCATCHMENT 29 Basin 29 (Report Basin 27)

PEAK= 12.81 CFS @ 7.98 HRS, VOLUME= 5.07 AF

ACRES	CN	
6.40	84	Res/Comm
18.60	60	
25.00	66	

SCS TR-20 METHOD
TYPE IA 24-HOUR
RAINFALL= 6.0 IN
SPAN= 0-24 HRS, dt=.1 HRS

Method	Comment	Tc (min)
CURVE NUMBER (LAG) METHOD L=500' s=.05 '/'	Segment ID:	12.1

SUBCATCHMENT 1 Basin 1

PEAK= 23.04 CFS @ 8.39 HRS, VOLUME= 10.28 AF

ACRES	CN	
9.20	92	Commercial
8.00	88	Industrial
14.20	75	Small Res.
8.60	60	Forest/Brushy
40.00	78	

SCS TR-20 METHOD
TYPE IA 24-HOUR
RAINFALL= 5.5 IN
SPAN= 0-24 HRS, dt=.1 HRS

Method	Comment	Tc (min)
CURVE NUMBER (LAG) METHOD L=950' s=.164 '/'	Upper Area	8.0
CURVE NUMBER (LAG) METHOD L=555' s=.0032 '/'	Lower Area	37.3
	Total Length= 1505 ft Total Tc=	45.3

SUBCATCHMENT 2 Basin 2

PEAK= 20.58 CFS @ 8.60 HRS, VOLUME= 9.93 AF

ACRES	CN	
11.27	92	Commercial
2.10	88	Industrial
21.86	75	Small Lot Res.
.35	60	Forest/Brushy
35.58	81	

SCS TR-20 METHOD
TYPE IA 24-HOUR
RAINFALL= 5.5 IN
SPAN= 0-24 HRS, dt=.1 HRS

Method	Comment	Tc (min)
CURVE NUMBER (LAG) METHOD L=1400' s=.148 '/'	Upper Area	10.5
CURVE NUMBER (LAG) METHOD L=790' s=.0025 '/'	Lower Area	51.0
	Total Length= 2190 ft Total Tc=	61.5

SUBCATCHMENT 3 Basin 3

PEAK= 3.34 CFS @ 8.46 HRS, VOLUME= 1.51 AF

ACRES	CN	
2.00	92	Commercial
3.40	75	SMALL LOT RES.
5.40	81	

SCS TR-20 METHOD
TYPE IA 24-HOUR
RAINFALL= 5.5 IN
SPAN= 0-24 HRS, dt=.1 HRS

Method	Comment	Tc (min)
CURVE NUMBER (LAG) METHOD L=591' s=.168 '/'	Upper Area	4.9
CURVE NUMBER (LAG) METHOD L=745' s=.0027 '/'	Lower Area	46.8
	Total Length= 1336 ft Total Tc=	51.7

SUBCATCHMENT 4 Basin 4

PEAK= 50.41 CFS @ 8.32 HRS, VOLUME= 21.52 AF

ACRES	CN	
20.61	92	Commercial
2.30	88	Ind
52.13	75	Small Lot Res
6.00	60	Forest/Brushy
81.04	79	

SCS TR-20 METHOD
TYPE IA 24-HOUR
RAINFALL= 5.5 IN
SPAN= 0-24 HRS, dt=.1 HRS

Method	Comment	Tc (min)
CURVE NUMBER (LAG) METHOD L=1170' s=.112 '/'	Top	11.1
CURVE NUMBER (LAG) METHOD L=670' s=.075 '/'	Middle	8.7
CURVE NUMBER (LAG) METHOD L=1080' s=.027 '/'	Lower	21.2
	Total Length= 2920 ft Total Tc=	41.0

SUBCATCHMENT 5 Basin 5

PEAK= 34.88 CFS @ 8.54 HRS, VOLUME= 16.80 AF

ACRES	CN	
10.30	92	Comm
0.00	88	Ind
55.40	75	Small Res
65.70	78	

SCS TR-20 METHOD
TYPE IA 24-HOUR
RAINFALL= 5.5 IN
SPAN= 0-24 HRS, dt=.1 HRS

Method	Comment	Tc (min)
CURVE NUMBER (LAG) METHOD L=1520' s=.137 '/'	Upper	12.8
CURVE NUMBER (LAG) METHOD L=670' s=.025 '/'	Middle	15.5
CURVE NUMBER (LAG) METHOD L=450' s=.004 '/'	Lower	28.2
	Total Length= 2640 ft	Total Tc= 56.5

SUBCATCHMENT 6 Basin 6

PEAK= 4.43 CFS @ 8.12 HRS, VOLUME= 1.59 AF

ACRES	CN	
.61	92	Comm
3.92	88	Ind
4.53	89	

SCS TR-20 METHOD
TYPE IA 24-HOUR
RAINFALL= 5.5 IN
SPAN= 0-24 HRS, dt=.1 HRS

Method	Comment	Tc (min)
CURVE NUMBER (LAG) METHOD L=150' s=.51 '/'	Upper	.7
CURVE NUMBER (LAG) METHOD L=670' s=.004 '/'	Lower	26.7
	Total Length= 820 ft	Total Tc= 27.4

SUBCATCHMENT 7 Basin 7

PEAK= 19.80 CFS @ 8.05 HRS, VOLUME= 6.87 AF

ACRES	CN	
5.96	92	Commercial
8.05	88	Ind
8.20	75	Small Res
22.21	84	

SCS TR-20 METHOD
TYPE IA 24-HOUR
RAINFALL= 5.5 IN
SPAN= 0-24 HRS, dt=.1 HRS

Method	Comment	Tc (min)
CURVE NUMBER (LAG) METHOD L=525' s=.49 '/'	Upper	2.4
CURVE NUMBER (LAG) METHOD L=540' s=.009 '/'	Lower	18.0
	Total Length= 1065 ft	Total Tc= 20.4

SUBCATCHMENT 8 Basin 8 (Report Basin 9)

PEAK= 15.13 CFS @ 7.97 HRS, VOLUME= 4.96 AF

ACRES	CN	
2.40	92	Comm
11.00	88	Ind
1.00	75	Small Res
14.40	88	

SCS TR-20 METHOD
TYPE IA 24-HOUR
RAINFALL= 5.5 IN
SPAN= 0-24 HRS, dt=.1 HRS

Method	Comment	Tc (min)
CURVE NUMBER (LAG) METHOD L=963' s=.088 '/'	Upper	7.9
CURVE NUMBER (LAG) METHOD L=445' s=.031 '/'	Lower	7.2
	Total Length= 1408 ft	Total Tc= 15.1

SUBCATCHMENT 9 Basin 9 (Report Basin 8)

PEAK= 14.08 CFS @ 7.84 HRS, VOLUME= 4.47 AF

ACRES	CN	
7.29	92	Comm
5.02	88	Ind
12.31	90	

SCS TR-20 METHOD
TYPE IA 24-HOUR
RAINFALL= 5.5 IN
SPAN= 0-24 HRS, dt=.1 HRS

Method	Comment	Tc (min)
CURVE NUMBER (LAG) METHOD L=420' s=.045 '/'	Total	5.3

SUBCATCHMENT 10 Basin 10

PEAK= 24.28 CFS @ 8.16 HRS, VOLUME= 9.27 AF

ACRES	CN	
9.60	92	Comm
.70	88	Ind
23.40	75	Small REs
33.70	80	

SCS TR-20 METHOD
TYPE IA 24-HOUR
RAINFALL= 5.5 IN
SPAN= 0-24 HRS, dt=.1 HRS

Method	Comment	Tc (min)
CURVE NUMBER (LAG) METHOD L=725' s=.31 '/'	Upper	4.4
CURVE NUMBER (LAG) METHOD L=761' s=.024 '/'	Middle	16.5
CURVE NUMBER (LAG) METHOD L=300' s=.027 '/'	Lower	7.4
	Total Length= 1786 ft Total Tc=	28.3

SUBCATCHMENT 11 Basin 11 (Report Basin-DELETED)

PEAK= 4.25 CFS @ 8.01 HRS, VOLUME= 1.43 AF

ACRES	CN	
3.00	92	Commercial
.85	88	Ind
3.85	91	

SCS TR-20 METHOD
TYPE IA 24-HOUR
RAINFALL= 5.5 IN
SPAN= 0-24 HRS, dt=.1 HRS

Method	Comment	Tc (min)
CURVE NUMBER (LAG) METHOD L=480' s=.004 '/'	Length	18.8

SUBCATCHMENT 13 Basin 13 (Report Basin 11)

PEAK= 7.44 CFS @ 8.22 HRS, VOLUME= 2.84 AF

ACRES	CN	
1.51	88	Industrial
6.19	92	Commercial
7.70	91	

SCS TR-20 METHOD
TYPE IA 24-HOUR
RAINFALL= 5.5 IN
SPAN= 0-24 HRS, dt=.1 HRS

Method	Comment	Tc (min)
CURVE NUMBER (LAG) METHOD L=440' s=.001 '/'	Length	35.1

SUBCATCHMENT 14 Basin 14 (Report Basin 13)

PEAK= 17.28 CFS @ 8.03 HRS, VOLUME= 5.86 AF

ACRES	CN	
13.60	92	Comm
2.00	88	Ind
.20	61	Brushy Fields
15.80	91	

SCS TR-20 METHOD
TYPE IA 24-HOUR
RAINFALL= 5.5 IN
SPAN= 0-24 HRS, dt=.1 HRS

Method	Comment	Tc (min)
CURVE NUMBER (LAG) METHOD L=867' s=.009 '/'	Length	20.1

SUBCATCHMENT 15 Basin 15 (Report Basin 14)

PEAK= 50.11 CFS @ 8.90 HRS, VOLUME= 28.46 AF

ACRES	CN	
36.00	92	Comm
7.00	88	Industrial
20.80	61	Grassy Fields
27.00	60	Forest
33.00	75	Res
123.80	75	

SCS TR-20 METHOD
TYPE IA 24-HOUR
RAINFALL= 5.5 IN
SPAN= 0-24 HRS, dt=.1 HRS

Method	Comment	Tc (min)
CURVE NUMBER (LAG) METHOD L=2030' s=.118 '/'	Upper	18.9
CURVE NUMBER (LAG) METHOD L=1280' s=.0187 '/'	Middle	32.9
CURVE NUMBER (LAG) METHOD L=1100' s=.021 '/'	Lower	27.5
	Total Length= 4410 ft	Total Tc= 79.3

SUBCATCHMENT 16 Basin 16 (Report Basin 15)

PEAK= 68.27 CFS @ 8.29 HRS, VOLUME= 27.22 AF

ACRES	CN	
68.10	92	Comm
2.40	88	Industrial
3.52	75	Small Res
74.02	91	

SCS TR-20 METHOD
TYPE IA 24-HOUR
RAINFALL= 5.5 IN
SPAN= 0-24 HRS, dt=.1 HRS

Method	Comment	Tc (min)
CURVE NUMBER (LAG) METHOD L=1800' s=.007 '/'	Length	40.9

SUBCATCHMENT 17 Basin 17 (Report Basin 16)

PEAK= 24.14 CFS @ 8.43 HRS, VOLUME= 10.36 AF

ACRES	CN	
11.75	92	Commercial
17.25	88	Industrial
29.00	90	

SCS TR-20 METHOD
TYPE IA 24-HOUR
RAINFALL= 5.5 IN
SPAN= 0-24 HRS, dt=.1 HRS

Method	Comment	Tc (min)
CURVE NUMBER (LAG) METHOD L=1025' s=.002 '/'	Length	50.9

SUBCATCHMENT 18 Basin 18 (Report Basin 17)

PEAK= 77.89 CFS @ 8.35 HRS, VOLUME= 34.04 AF

ACRES	CN	
31.00	92	Commercial
6.25	90	Industrial
44.00	87	Small Lot Res.
51.00	60	Forest
132.25	78	

SCS TR-20 METHOD
TYPE IA 24-HOUR
RAINFALL= 5.5 IN
SPAN= 0-24 HRS, dt=.1 HRS

Method	Comment	Tc (min)
CURVE NUMBER (LAG) METHOD L=2160' s=.12 '/'	Upper	18.1
CURVE NUMBER (LAG) METHOD L=1400' s=.032 '/'	Lower	24.7
	Total Length= 3560 ft Total Tc=	42.8

SUBCATCHMENT 1 Blossom-Into Blossum Gulch Inlet

PEAK= 121.9 CFS @ 8.84 HRS, VOLUME= 88.87 AF

ACRES	CN	
491.00	60	Brushy/Forest
28.00	75	Residential
141.00	60	Brushy Forest
660.00	61	

SCS TR-20 METHOD
TYPE IA 24-HOUR
RAINFALL= 5.5 IN
SPAN= 0-24 HRS, dt=.1 HRS

Method	Comment	Tc (min)
CURVE NUMBER (LAG) METHOD L=8050' s=.187 '/'	Length	65.8

SUBCATCHMENT 2 Mingus Drainage

PEAK= 66.86 CFS @ 11.70 HRS, VOLUME= 57.94 AF

ACRES	CN	
84.00	60	Brushy Forest
180.00	75	Small Res
36.00	92	Commercial
300.00	73	

SCS TR-20 METHOD
TYPE IA 24-HOUR
RAINFALL= 5.5 IN
SPAN= 0-24 HRS, dt=.1 HRS

Method	Comment	Tc (min)
CURVE NUMBER (LAG) METHOD L=3631' s=.05 '/'	Upper	49.0
CURVE NUMBER (LAG) METHOD L=1800' s=.001 '/'	lower	197.6
	Total Length= 5431 ft Total Tc=	246.6

SUBCATCHMENT 3 Down town Blossom

PEAK= 53.32 CFS @ 8.40 HRS, VOLUME= 22.55 AF

ACRES	CN	
60.00	92	Commercial Downtown

SCS TR-20 METHOD
TYPE IA 24-HOUR
RAINFALL= 5.5 IN
SPAN= 0-24 HRS, dt=.1 HRS

Method	Comment	Tc (min)
CURVE NUMBER (LAG) METHOD L=2775' s=.009 '/'	Segment ID:	48.9

SUBCATCHMENT 19 Basin 19 (Report Basin 18)

PEAK= 28.41 CFS @ 8.40 HRS, VOLUME= 14.36 AF

ACRES	CN	
3.50	92	COMMERCIAL
21.00	87	RESIDENTIAL
51.00	60	Forest/Brushy
75.50	69	

SCS TR-20 METHOD
TYPE IA 24-HOUR
RAINFALL= 5.5 IN
SPAN= 0-24 HRS, dt=.1 HRS

Method	Comment	Tc (min)
CURVE NUMBER (LAG) METHOD L=2130' s=.14 '/'	UPPER AREA	21.3
CURVE NUMBER (LAG) METHOD L=610' s=.017 '/'	LOWER AREA	22.5
	Total Length= 2740 ft Total Tc=	43.8

SUBCATCHMENT 21 Basin 21 (Report Basin 20)

PEAK= 35.77 CFS @ 7.98 HRS, VOLUME= 11.75 AF

ACRES	CN	
35.00	87	Rēs

SCS TR-20 METHOD
TYPE IA 24-HOUR
RAINFALL= 5.5 IN
SPAN= 0-24 HRS, dt=.1 HRS

Method	Comment	Tc (min)
CURVE NUMBER (LAG) METHOD L=2130' s=.094 '/'	Segment ID:	15.0

SUBCATCHMENT 22 Basin 22 (Report Basin 21)

PEAK= 1.81 CFS @ 7.89 HRS, VOLUME= .62 AF

ACRES	CN	
2.53	76	Rēs

SCS TR-20 METHOD
TYPE IA 24-HOUR
RAINFALL= 5.5 IN
SPAN= 0-24 HRS, dt=.1 HRS

Method	Comment	Tc (min)
CURVE NUMBER (LAG) METHOD L=570' s=.126 '/'	Segment ID:	6.4

SUBCATCHMENT 23 Basin 23 (Report Basin 22)

PEAK= 36.51 CFS @ 8.34 HRS, VOLUME= 18.55 AF

ACRES	CN	
50.00	75	Rēš
55.00	60	Forest
105.00	67	

SCS TR-20 METHOD
TYPE IA 24-HOUR
RAINFALL= 5.5 IN
SPAN= 0-24 HRS, dt=.1 HRS

Method	Comment	Tc (min)
CURVE NUMBER (LAG) METHOD	Segment ID:	38.9
L=3840' s=.12 '/'		

SUBCATCHMENT 24 Basin 24 (Report Basin 23)

PEAK= 7.04 CFS @ 8.09 HRS, VOLUME= 2.97 AF

ACRES	CN	
8.00	75	Rēš
8.00	60	Forest
16.00	68	

SCS TR-20 METHOD
TYPE IA 24-HOUR
RAINFALL= 5.5 IN
SPAN= 0-24 HRS, dt=.1 HRS

Method	Comment	Tc (min)
CURVE NUMBER (LAG) METHOD	Segment ID:	20.1
L=1450' s=.09 '/'		

SUBCATCHMENT 25 Basin 25 (Report Basin 24)

PEAK= 12.97 CFS @ 8.14 HRS, VOLUME= 5.57 AF

ACRES	CN	
11.78	68	Lārgē Lōt Rēsidential
6.00	60	Forest
11.22	75	Small Lot Res.
29.00	69	

SCS TR-20 METHOD
TYPE IA 24-HOUR
RAINFALL= 5.5 IN
SPAN= 0-24 HRS, dt=.1 HRS

Method	Comment	Tc (min)
CURVE NUMBER (LAG) METHOD	Segment ID:	24.5
L=2175' s=.11 '/'		

SUBCATCHMENT 27 Basin 27 (Report Basin 25)

PEAK= 48.36 CFS @ 8.49 HRS, VOLUME= 25.15 AF

ACRES	CN	
26.00	92	COMMERCIAL
30.00	75	RES
72.00	60	FOREST
128.00	70	

SCS TR-20 METHOD
TYPE IA 24-HOUR
RAINFALL= 5.5 IN
SPAN= 0-24 HRS, dt=.1 HRS

Method	Comment	Tc (min)
CURVE NUMBER (LAG) METHOD	Segment ID:	50.5
L=3530' s=.053 '/'		

SUBCATCHMENT 28 Basin 28 (Report Basin 26)

PEAK= 38.29 CFS @ 8.24 HRS, VOLUME= 16.23 AF

ACRES	CN	
11.50	92	Comm
43.00	75	Res
14.50	60	Forest/Brushy
69.00	75	

SCS TR-20 METHOD
TYPE IA 24-HOUR
RAINFALL= 5.5 IN
SPAN= 0-24 HRS, dt=.1 HRS

Method	Comment	Tc (min)
CURVE NUMBER (LAG) METHOD	Segment ID:	34.3
L=2500' s=.05 '/'		

SUBCATCHMENT 29 Basin 29 (Report Basin 27)

PEAK= 6.15 CFS @ 7.88 HRS, VOLUME= 1.99 AF

ACRES	CN	
6.40	84	Res/Comm

SCS TR-20 METHOD
TYPE IA 24-HOUR
RAINFALL= 5.5 IN
SPAN= 0-24 HRS, dt=.1 HRS

Method	Comment	Tc (min)
CURVE NUMBER (LAG) METHOD	Segment ID:	7.2
L=500' s=.05 '/'		

SUBCATCHMENT 1 Basin 1

PEAK= 26.66 CFS @ 8.38 HRS, VOLUME= 11.72 AF

ACRES	CN	
9.20	92	Commercial
8.00	88	Industrial
14.20	75	Small Res.
8.60	60	Forest/Brushy
40.00	78	

SCS TR-20 METHOD
TYPE IA 24-HOUR
RAINFALL= 6.0 IN
SPAN= 0-24 HRS, dt=.1 HRS

Method	Comment	Tc (min)
CURVE NUMBER (LAG) METHOD L=950' s=.164 '/'	Upper Area	8.0
CURVE NUMBER (LAG) METHOD L=555' s=.0032 '/'	Lower Area	37.3
	Total Length= 1505 ft Total Tc=	45.3

SUBCATCHMENT 2 Basin 2

PEAK= 23.56 CFS @ 8.60 HRS, VOLUME= 11.24 AF

ACRES	CN	
11.27	92	Commercial
2.10	88	Industrial
21.86	75	Small Lot Res.
.35	60	Forest/Brushy
35.58	81	

SCS TR-20 METHOD
TYPE IA 24-HOUR
RAINFALL= 6.0 IN
SPAN= 0-24 HRS, dt=.1 HRS

Method	Comment	Tc (min)
CURVE NUMBER (LAG) METHOD L=1400' s=.148 '/'	Upper Area	10.5
CURVE NUMBER (LAG) METHOD L=790' s=.0025 '/'	Lower Area	51.0
	Total Length= 2190 ft Total Tc=	61.5

SUBCATCHMENT 3 Basin 3

PEAK= 3.82 CFS @ 8.46 HRS, VOLUME= 1.71 AF

ACRES	CN	
2.00	92	Commercial
3.40	75	SMALL LOT RES.
5.40	81	

SCS TR-20 METHOD
TYPE IA 24-HOUR
RAINFALL= 6.0 IN
SPAN= 0-24 HRS, dt=.1 HRS

Method	Comment	Tc (min)
CURVE NUMBER (LAG) METHOD L=591' s=.168 '/'	Upper Area	4.9
CURVE NUMBER (LAG) METHOD L=745' s=.0027 '/'	Lower Area	46.8
	Total Length= 1336 ft Total Tc=	51.7

SUBCATCHMENT 4 Basin 4

PEAK= 58.11 CFS @ 8.32 HRS, VOLUME= 24.48 AF

ACRES	CN	
20.61	92	Commercial
2.30	88	Ind
52.13	75	Small Lot Res
6.00	60	Forest/Brushy
81.04	79	

SCS TR-20 METHOD
TYPE IA 24-HOUR
RAINFALL= 6.0 IN
SPAN= 0-24 HRS, dt=.1 HRS

Method	Comment	Tc (min)
CURVE NUMBER (LAG) METHOD L=1170' s=.112 '/'	Top	11.1
CURVE NUMBER (LAG) METHOD L=670' s=.075 '/'	Middle	8.7
CURVE NUMBER (LAG) METHOD L=1080' s=.027 '/'	Lower	21.2
	Total Length= 2920 ft Total Tc=	41.0

SUBCATCHMENT 5 Basin 5

PEAK= 40.37 CFS @ 8.53 HRS, VOLUME= 19.16 AF

ACRES	CN	
10.30	92	Comm
0.00	88	Ind
55.40	75	Small Res
65.70	78	

SCS TR-20 METHOD
TYPE IA 24-HOUR
RAINFALL= 6.0 IN
SPAN= 0-24 HRS, dt=.1 HRS

Method	Comment	Tc (min)
CURVE NUMBER (LAG) METHOD L=1520' s=.137 '/'	Upper	12.8
CURVE NUMBER (LAG) METHOD L=670' s=.025 '/'	Middle	15.5
CURVE NUMBER (LAG) METHOD L=450' s=.004 '/'	Lower	28.2
	Total Length= 2640 ft Total Tc=	56.5

SUBCATCHMENT 6 Basin 6

PEAK= 4.95 CFS @ 8.12 HRS, VOLUME= 1.77 AF

ACRES	CN	
.61	92	Comm
3.92	88	Ind
4.53	89	

SCS TR-20 METHOD
TYPE IA 24-HOUR
RAINFALL= 6.0 IN
SPAN= 0-24 HRS, dt=.1 HRS

Method	Comment	Tc (min)
CURVE NUMBER (LAG) METHOD L=150' s=.51 '/'	Upper	.7
CURVE NUMBER (LAG) METHOD L=670' s=.004 '/'	Lower	26.7
	Total Length= 820 ft Total Tc=	27.4

SUBCATCHMENT 7 Basin 7

PEAK= 22.37 CFS @ 8.05 HRS, VOLUME= 7.72 AF

ACRES	CN	
5.96	92	Commercial
8.05	88	Ind
8.20	75	Small Res
22.21	84	

SCS TR-20 METHOD
TYPE IA 24-HOUR
RAINFALL= 6.0 IN
SPAN= 0-24 HRS, dt=.1 HRS

Method	Comment	Tc (min)
CURVE NUMBER (LAG) METHOD L=525' s=.49 '/'	Upper	2.4
CURVE NUMBER (LAG) METHOD L=540' s=.009 '/'	Lower	18.0
	Total Length= 1065 ft Total Tc=	20.4

SUBCATCHMENT 8 Basin 8 (Report Basin 9)

PEAK= 16.91 CFS @ 7.97 HRS, VOLUME= 5.53 AF

ACRES	CN	
2.40	92	Comm
11.00	88	Ind
1.00	75	Small Res
14.40	88	

SCS TR-20 METHOD
TYPE IA 24-HOUR
RAINFALL= 6.0 IN
SPAN= 0-24 HRS, dt=.1 HRS

Method	Comment	Tc (min)
CURVE NUMBER (LAG) METHOD L=963' s=.088 '/'	Upper	7.9
CURVE NUMBER (LAG) METHOD L=445' s=.031 '/'	Lower	7.2
	Total Length= 1408 ft Total Tc=	15.1

SUBCATCHMENT 9 Basin 9 (Report Basin 8)

PEAK= 15.65 CFS @ 7.83 HRS, VOLUME= 4.97 AF

ACRES	CN	
7.29	92	Comm
5.02	88	Ind
12.31	90	

SCS TR-20 METHOD
TYPE IA 24-HOUR
RAINFALL= 6.0 IN
SPAN= 0-24 HRS, dt=.1 HRS

Method	Comment	Tc (min)
CURVE NUMBER (LAG) METHOD L=420' s=.045 '/'	Total	5.3

SUBCATCHMENT 10 Basin 10

PEAK= 27.88 CFS @ 8.15 HRS, VOLUME= 10.52 AF

ACRES	CN	
9.60	92	Comm
.70	88	Ind
23.40	75	Small REs
33.70	80	

SCS TR-20 METHOD
TYPE IA 24-HOUR
RAINFALL= 6.0 IN
SPAN= 0-24 HRS, dt=.1 HRS

Method	Comment	Tc (min)
CURVE NUMBER (LAG) METHOD L=725' s=.31 '/'	Upper	4.4
CURVE NUMBER (LAG) METHOD L=761' s=.024 '/'	Middle	16.5
CURVE NUMBER (LAG) METHOD L=300' s=.027 '/'	Lower	7.4
	Total Length= 1786 ft	Total Tc= 28.3

SUBCATCHMENT 11 Basin 11 (Report Basin-DELETED)

PEAK= 4.71 CFS @ 8.01 HRS, VOLUME= 1.58 AF

ACRES	CN	
3.00	92	Commercial
.85	88	Ind
3.85	91	

SCS TR-20 METHOD
TYPE IA 24-HOUR
RAINFALL= 6.0 IN
SPAN= 0-24 HRS, dt=.1 HRS

Method	Comment	Tc (min)
CURVE NUMBER (LAG) METHOD L=480' s=.004 '/'	Length	18.8

SUBCATCHMENT 13 Basin 13 (Report Basin 11)

PEAK= 8.25 CFS @ 8.22 HRS, VOLUME= 3.15 AF

ACRES	CN	
1.51	88	Industrial
6.19	92	Commercial
7.70	91	

SCS TR-20 METHOD
TYPE IA 24-HOUR
RAINFALL= 6.0 IN
SPAN= 0-24 HRS, dt=.1 HRS

Method	Comment	Tc (min)
CURVE NUMBER (LAG) METHOD L=440' s=.001 '/'	Length	35.1

SUBCATCHMENT 14 Bason 14 (Report Basin 13)

PEAK= 19.16 CFS @ 8.03 HRS, VOLUME= 6.50 AF

ACRES	CN	
13.60	92	Comm
2.00	88	Ind
.20	61	Brushy Fields
15.80	91	

SCS TR-20 METHOD
TYPE IA 24-HOUR
RAINFALL= 6.0 IN
SPAN= 0-24 HRS, dt=.1 HRS

Method	Comment	Tc (min)
CURVE NUMBER (LAG) METHOD L=867' s=.009 '/'	Length	20.1

SUBCATCHMENT 15 Basin 15 (Report Basin 14)

PEAK= 68.58 CFS @ 8.77 HRS, VOLUME= 35.82 AF

ACRES	CN	
36.00	92	Comm
7.00	88	Industrial
20.80	61	Grassy Fields
27.00	75	Future Res.
33.00	75	Res
123.80	78	

SCS TR-20 METHOD
TYPE IA 24-HOUR
RAINFALL= 6.0 IN
SPAN= 0-24 HRS, dt=.1 HRS

Method	Comment	Tc (min)
CURVE NUMBER (LAG) METHOD L=2030' s=.118 '/'	Upper	17.3
CURVE NUMBER (LAG) METHOD L=1280' s=.0187 '/'	Middle	30.1
CURVE NUMBER (LAG) METHOD L=1100' s=.021 '/'	Lower	25.2
	Total Length= 4410 ft	Total Tc= 72.6

SUBCATCHMENT 16 Basin 16 (Report Basin 15)

PEAK= 75.73 CFS @ 8.29 HRS, VOLUME= 30.20 AF

ACRES	CN	
68.10	92	Comm
2.40	88	Industrial
3.52	75	Small Res
74.02	91	

SCS TR-20 METHOD
TYPE IA 24-HOUR
RAINFALL= 6.0 IN
SPAN= 0-24 HRS, dt=.1 HRS

Method	Comment	Tc (min)
CURVE NUMBER (LAG) METHOD L=1800' s=.007 '/'	Length	40.9

SUBCATCHMENT 17 Basin 17 (Report Basin 16)

PEAK= 26.85 CFS @ 8.42 HRS, VOLUME= 11.52 AF

ACRES	CN	
11.75	92	Commercial
17.25	88	Industrial
29.00	90	

SCS TR-20 METHOD
TYPE IA 24-HOUR
RAINFALL= 6.0 IN
SPAN= 0-24 HRS, dt=.1 HRS

Method	Comment	Tc (min)
CURVE NUMBER (LAG) METHOD L=1025' s=.002 '/'	Length	50.9

SUBCATCHMENT 18 Basin 18 (Report Basin 17)

PEAK= 136.9 CFS @ 8.17 HRS, VOLUME= 50.52 AF

ACRES	CN	
31.00	92	Commercial
6.25	90	Industrial
44.00	87	Small Lot Res.
51.00	87	Future Res.
132.25	88	

SCS TR-20 METHOD
TYPE IA 24-HOUR
RAINFALL= 6.0 IN
SPAN= 0-24 HRS, dt=.1 HRS

Method	Comment	Tc (min)
CURVE NUMBER (LAG) METHOD L=2160' s=.12 '/'	Upper	12.9
CURVE NUMBER (LAG) METHOD L=1400' s=.032 '/'	Lower	17.7
	Total Length= 3560 ft	Total Tc= 30.6

SUBCATCHMENT 1 Blossom-Into Blossum Gulch Inlet

PEAK= 131.6 CFS @ 8.58 HRS, VOLUME= 72.63 AF

ACRES	CN	
185.00	60	Brushy/Forest
28.00	75	Residential
141.00	75	Future Residential
354.00	67	

SCS TR-20 METHOD
TYPE IA 24-HOUR
RAINFALL= 6.0 IN
SPAN= 0-24 HRS, dt=.1 HRS

Method	Comment	Tc (min)
CURVE NUMBER (LAG) METHOD L=8050' s=.187 '/'	Length	56.3

SUBCATCHMENT 2 Mingus Drainage

PEAK= 78.59 CFS @ 11.67 HRS, VOLUME= 67.09 AF

ACRES	CN	
84.00	60	Brushy Forest
180.00	75	Small Res
36.00	92	Commercial
300.00	73	

SCS TR-20 METHOD
TYPE IA 24-HOUR
RAINFALL= 6.0 IN
SPAN= 0-24 HRS, dt=.1 HRS

Method	Comment	Tc (min)
CURVE NUMBER (LAG) METHOD L=3631' s=.05 '/'	Upper	49.0
CURVE NUMBER (LAG) METHOD L=1800' s=.001 '/'	lower	197.6
	Total Length= 5431 ft	Total Tc= 246.6

SUBCATCHMENT 3 Down town Blossom

PEAK= 58.99 CFS @ 8.39 HRS, VOLUME= 24.97 AF

ACRES	CN	
60.00	92	Commercial Downtown

SCS TR-20 METHOD
TYPE IA 24-HOUR
RAINFALL= 6.0 IN
SPAN= 0-24 HRS, dt=.1 HRS

Method	Comment	Tc (min)
CURVE NUMBER (LAG) METHOD L=2775' s=.009 '/'	Segment ID:	48.9

SUBCATCHMENT 19 Basin 19 (Report Basin 18)

PEAK= 79.86 CFS @ 8.10 HRS, VOLUME= 28.22 AF

ACRES	CN	
3.50	92	COMMERCIAL
21.00	87	RESIDENTIAL
51.00	87	Future Res.
75.50	87	

SCS TR-20 METHOD
TYPE IA 24-HOUR
RAINFALL= 6.0 IN
SPAN= 0-24 HRS, dt=.1 HRS

Method	Comment	Tc (min)
CURVE NUMBER (LAG) METHOD L=2130' s=.14 '/'	UPPER AREA	12.3
CURVE NUMBER (LAG) METHOD L=610' s=.017 '/'	LOWER AREA	12.9
	Total Length= 2740 ft Total Tc=	25.2

SUBCATCHMENT 21 Basin 21 (Report Basin 20)

PEAK= 40.12 CFS @ 7.97 HRS, VOLUME= 13.13 AF

ACRES	CN	
35.00	87	Res

SCS TR-20 METHOD
TYPE IA 24-HOUR
RAINFALL= 6.0 IN
SPAN= 0-24 HRS, dt=.1 HRS

Method	Comment	Tc (min)
CURVE NUMBER (LAG) METHOD L=2130' s=.094 '/'	Segment ID:	15.0

SUBCATCHMENT 22 Basin 22 (Report Basin 21)

PEAK= 2.10 CFS @ 7.88 HRS, VOLUME= .71 AF

ACRES	CN	
2.53	76	Res

SCS TR-20 METHOD
TYPE IA 24-HOUR
RAINFALL= 6.0 IN
SPAN= 0-24 HRS, dt=.1 HRS

Method	Comment	Tc (min)
CURVE NUMBER (LAG) METHOD L=570' s=.126 '/'	Segment ID:	6.4

SUBCATCHMENT 27 Basin 27 (Report Basin 25)

PEAK= 58.04 CFS @ 8.48 HRS, VOLUME= 29.25 AF

ACRES	CN	
26.00	92	COMMERCIAL
30.00	75	RES
72.00	60	FOREST
128.00	70	

SCS TR-20 METHOD
TYPE IA 24-HOUR
RAINFALL= 6.0 IN
SPAN= 0-24 HRS, dt=.1 HRS

Method	Comment	Tc (min)
CURVE NUMBER (LAG) METHOD	Segment ID:	50.5
L=3530' s=.053 '/'		

SUBCATCHMENT 28 Basin 28 (Report Basin 26)

PEAK= 58.83 CFS @ 8.16 HRS, VOLUME= 22.12 AF

ACRES	CN	
11.50	92	Comm
43.00	75	Res
14.50	92	Future Commercial
69.00	81	

SCS TR-20 METHOD
TYPE IA 24-HOUR
RAINFALL= 6.0 IN
SPAN= 0-24 HRS, dt=.1 HRS

Method	Comment	Tc (min)
CURVE NUMBER (LAG) METHOD	Segment ID:	28.7
L=2500' s=.05 '/'		

SUBCATCHMENT 29 Basin 29 (Report Basin 27)

PEAK= 6.96 CFS @ 7.87 HRS, VOLUME= 2.24 AF

ACRES	CN	
6.40	84	Res/Comm

SCS TR-20 METHOD
TYPE IA 24-HOUR
RAINFALL= 6.0 IN
SPAN= 0-24 HRS, dt=.1 HRS

Method	Comment	Tc (min)
CURVE NUMBER (LAG) METHOD	Segment ID:	7.2
L=500' s=.05 '/'		

Cost Estimates

Appendix

E

Project 12C-1

Widening of Blossom Box Culvert at 2nd Court

Description	*Quantity*	*Unit*	*Unit Price*	*Total Cost*
Constr. Fac. & Temp. Controls	All	LS	$15,000	$15,000
Dewatering	All	LS	$10,000	$10,000
Bypass Pumping	All	LS	$5,000	$5,000
Piling				
Furnish Pile Driving Equipment	All	LS	$15,000	$15,000
Furnish Concrete Piles	600	LF	$30	$18,000
Drive Concrete Piles	6	Each	$1,200	$7,200
Sheet Piling	1000	SF	$30	$30,000
Site Excavation	All	LS	$15,000	$15,000
Pump Station Backfilling				
- Material	50	CY	$30	$1,500
Widening of Exisitng Box Culvert				
- Reinforced Concrete	10	CY	$550	$5,500
- Structural Beams	1	LS	$10,000	$10,000
Sitework				
- Site Restoration	All	LS	$8,000	$8,000
- Sidewalks	300	SF	$5	$1,500
- Curbs	30	LF	$15	$450
Total Construction Cost				$142,150
Contingency				$21,400
Administration, Legal				$2,900
Land Acquisition				n/a
Environmental Study / Permits				$15,000
Engineering				$28,500
Total Cost				$209,800

Project 12C-2

Blossom Pump Station

Description	*Quantity*	*Unit*	*Unit Price*	*Total Cost*
Constr. Fac. & Temp. Controls	All	LS	$210,000	$210,000
Dewatering	All	LS	$25,000	$25,000
Bypass Pumping	All	LS	$25,000	$25,000
Demolition	All	LS	$90,000	$90,000
Storm Drain Piping				
4x6 Box Culvert	70	LF	$600	$42,000
New 48" Force Main	3300	LF	$150	$495,000
Piling				
Furnish Pile Driving Equipment	All	LS	$25,000	$25,000
Furnish Concrete Piles	1600	LF	$30	$48,000
Drive Concrete Piles	16	Each	$1,200	$19,200
Sheet Piling	5000	SF	$30	$150,000
Site Excavation	All	LS	$40,000	$40,000
Pump Station Piping				
- Force Main Piping	All	LS	$5,000	$5,000
- Connections, Fittings	All	LS	$10,000	$10,000
- Supports	All	LS	$5,000	$5,000
Pump Station Backfilling				
- Material	400	CY	$25	$10,000
Top Deck / Walls / Etc.				
- Reinforced Concrete	200	CY	$550	$110,000
- Grating	All	LS	$5,000	$5,000
- Fencing	200	LF	$25	$5,000
- Slide Gate	1	Each	$5,000	$5,000
- Slide Gate Installation	1	Each	$1,500	$1,500
Building				
- Split face block building	500	SF	$150	$75,000
- Mechanical Louvers	2	Each	$5,000	$10,000
Electrical				
- Materials	All	LS	$15,000	$15,000
- Telemetry / Controls	All	LS	$12,000	$12,000
- Standby Generator	All	LS	$60,000	$60,000
Equipment				
- Pump	2	Each	$80,000	$160,000
- Pump Installation	2	Each	$9,000	$18,000
- Wetwell Level Monitor	1	Each	$5,000	$5,000
- 48" Tide Gate	1	Each	$20,000	$20,000
- Tide Gate Installation	1	Each	$4,000	$4,000

Sitework				
- Site Restoration	All	LS	$17,000	$17,000
- Rip Rap	100	CY	$50	$5,000
- Trash Rack / Screens	1	Each	$60,000	$60,000

Total Construction Cost	$1,786,700
Contingency	$268,000
Administration, Legal	$35,730
Land Acquisition	$100,000
Environmental Study / Permits	$75,000
Pre-Engineering Evaluation	$40,000
Engineering	$357,340
Total Cost	$2,662,770

Project 14-1

Golden Pump Station

Description	*Quantity*	*Unit*	*Unit Price*	*Total Cost*
Constr. Fac. & Temp. Controls	All	LS	$40,000	$40,000
Dewatering	All	LS	$15,000	$15,000
Storm Drain Piping				
AC Pavement R & R	40	LF	$50	$2,000
36" Storm Drain Pipe, Dike Xing	50	LF	$200	$10,000
36" Storm Drain Pipe, Class B	100	LF	$110	$11,000
Piling				
Furnish Pile Driving Equipment	All	LS	$25,000	$25,000
Furnish Concrete Piles	800	LF	$30	$24,000
Drive Concrete Piles	8	Each	$1,200	$9,600
Sheet Piling	5000	SF	$30	$150,000
Site Excavation	All	LS	$30,000	$30,000
Manholes	2	Each	$8,000	$16,000
Interior Manhole Work				
- Trash Rack / Screens	1	Each	$10,000	$10,000
- Grouting	1	Each	$4,000	$4,000
Pump Station Piping				
- Force Main Piping	All	LS	$5,000	$5,000
- Connections, Fittings	All	LS	$10,000	$10,000
- Supports	All	LS	$5,000	$5,000
Pump Station Backfilling				
- Material	500	CY	$25	$12,500
Top Deck / Walls / Etc.				
- Reinforced Concrete	200	CY	$550	$110,000
- Grating	All	LS	$5,000	$5,000
- Fencing	200	LF	$25	$5,000
- Slide Gate	1	Each	$5,000	$5,000
- Slide Gate Installation	1	Each	$1,500	$1,500
Building				
- Split face block building	400	SF	$150	$60,000
- Mechanical Louvers	2	Each	$5,000	$10,000
Electrical				
- Materials	All	LS	$14,000	$14,000
- Telemetry / Controls	All	LS	$12,000	$12,000
- Standby Generator	All	LS	$60,000	$60,000

Equipment				
- Pump	2	Each	$85,000	$170,000
- Pump Installation	2	Each	$8,000	$16,000
- Wetwell Level Monitor	1	Each	$5,000	$5,000
- 36" Tide Gate	1	Each	$10,000	$10,000
- Tide Gate Installation	1	Each	$2,000	$2,000
Sitework				
- Site Restoration	All	LS	$12,200	$12,200
- Access Road	All	LS	$30,000	$30,000
- AC Pavement	20	Ton	$60	$1,200
- Rip Rap	100	CY	$50	$5,000

Total Construction Cost	$913,000
Contingency	$136,950
Administration, Legal	$18,260
Environmental Study / Permits	$30,000
Land Acquisition	$100,000
Engineering	$182,600
Total Cost	$1,380,810

Project 17-3

7th / Lockhart Pump Station

Description	*Quantity*	*Unit*	*Unit Price*	*Total Cost*
Constr. Fac. & Temp. Controls	All	LS	$50,000	$50,000
Dewatering	All	LS	$15,000	$15,000
Storm Drain Piping				
AC Pavement R & R	420	LF	$50	$21,000
48" Storm Drain Pipe, Dike Xing	50	LF	$250	$12,500
48" Storm Drain Pipe, Class C	400	LF	$150	$60,000
48" Storm Drain Pipe, Class B	150	LF	$120	$18,000
Piling				
Furnish Pile Driving Equipment	All	LS	$25,000	$25,000
Furnish Concrete Piles	800	LF	$30	$24,000
Drive Concrete Piles	8	Each	$1,200	$9,600
Sheet Piling	4000	SF	$30	$120,000
Site Excavation	All	LS	$30,000	$30,000
Manholes	3	Each	$12,000	$36,000
Interior Manhole Work				
- Trash Rack / Screens	1	Each	$10,000	$10,000
- Grouting	1	Each	$4,000	$4,000
Pump Station Piping				
- Force Main Piping	All	LS	$5,000	$5,000
- Connections, Fittings	All	LS	$10,000	$10,000
- Supports	All	LS	$5,000	$5,000
Pump Station Backfilling				
- Material	400	CY	$25	$10,000
Top Deck / Walls / Etc.				
- Reinforced Concrete	200	CY	$550	$110,000
- Grating	All	LS	$5,000	$5,000
- Fencing	200	LF	$25	$5,000
- Slide Gate	1	Each	$5,000	$5,000
- Slide Gate Installation	1	Each	$1,500	$1,500
Building				
- Split face block building	500	SF	$150	$75,000
- Mechanical Louvers	2	Each	$5,000	$10,000
Electrical				
- Materials	All	LS	$15,000	$15,000
- Telemetry / Controls	All	LS	$12,000	$12,000
- Standby Generator	All	LS	$60,000	$60,000

Equipment				
- Pump	2	Each	$90,000	$180,000
- Pump Installation	2	Each	$9,000	$18,000
- Wetwell Level Monitor	1	Each	$5,000	$5,000
- 48" Tide Gate	1	Each	$20,000	$20,000
- Tide Gate Installation	1	Each	$4,000	$4,000
Sitework				
- Site Restoration	All	LS	$8,900	$8,900
- Rip Rap	50	CY	$50	$2,500

Total Construction Cost	$1,002,000
Contingency	$150,300
Administration, Legal	$20,040
Environmental Study / Permits	$30,000
Land Acquisition	n/a
Engineering	$200,400
Total Cost	$1,402,740

Project 19-2

Englewood Pump Station

Description	*Quantity*	*Unit*	*Unit Price*	*Total Cost*
Constr. Fac. & Temp. Controls	All	LS	$40,000	$40,000
Dewatering	All	LS	$15,000	$15,000
Storm Drain Piping				
AC Pavement R & R	40	LF	$30	$1,200
36" Storm Drain Pipe, Class C	40	LF	$130	$5,200
Piling				
Furnish Pile Driving Equipment	All	LS	$25,000	$25,000
Furnish Concrete Piles	800	LF	$30	$24,000
Drive Concrete Piles	8	Each	$1,200	$9,600
Sheet Piling	4000	SF	$30	$120,000
Site Excavation	All	LS	$30,000	$30,000
Manholes	2	Each	$8,000	$16,000
Interior Manhole Work				
- Trash Rack / Screens	1	Each	$10,000	$10,000
- Grouting	1	Each	$4,000	$4,000
Pump Station Piping				
- Force Main Piping	All	LS	$5,000	$5,000
- Connections, Fittings	All	LS	$10,000	$10,000
- Supports	All	LS	$5,000	$5,000
Pump Station Backfilling				
- Material	500	CY	$25	$12,500
Top Deck / Walls / Etc.				
- Reinforced Concrete	200	CY	$550	$110,000
- Grating	All	LS	$5,000	$5,000
- Fencing	40	LF	$25	$1,000
- Slide Gate	1	Each	$4,000	$4,000
- Slide Gate Installation	1	Each	$1,500	$1,500
Building				
- Split face block building	400	SF	$150	$60,000
- Mechanical Louvers	2	Each	$5,000	$10,000
Electrical				
- Materials	All	LS	$15,000	$15,000
- Telemetry / Controls	All	LS	$12,000	$12,000
- Standby Generator	All	LS	$60,000	$60,000

Equipment				
- Pump	2	Each	$85,000	$170,000
- Pump Installation	2	Each	$8,000	$16,000
- Wetwell Level Monitor	1	Each	$5,000	$5,000
- 36" Tide Gate	1	Each	$10,000	$10,000
- Tide Gate Installation	1	Each	$3,000	$3,000
Sitework				
- Site Restoration	All	LS	$10,000	$10,000
Total Construction Cost				$825,000
Contingency				$123,750
Administration, Legal				$16,500
Environmental Study / Permits				$30,000
Land Acquisition				n/a
Engineering				$165,000
Total Cost				$1,160,250