

Appendix B

CIP Cost Estimates

City of Canby

Stormwater CIP #1

N Baker Dr.

Item	Diameter	Unit	Unit cost	Quantity	Total
<i>Storm Pipes</i>					
4-inch diameter	4	LF	\$79		\$0
6-inch diameter	6	LF	\$85		\$0
8-inch diameter	8	LF	\$102		\$0
10-inch diameter	10	LF	\$108		\$0
12-inch diameter	12	LF	\$115	800	\$92,000
15-inch diameter	15	LF	\$123		\$0
18-inch diameter	18	LF	\$136		\$0
24-inch diameter	24	LF	\$167		\$0
30-inch diameter	30	LF	\$233		\$0
36-inch diameter	36	LF	\$249		\$0
42-inch diameter	42	LF	\$273		\$0
48-inch diameter	48	LF	\$288		\$0
54-inch diameter	54	LF	\$343		\$0
Subtotal, Storm Pipe					\$92,000

<i>Infiltration</i>					
Pervious Pavement		SF	\$3		\$0
Swales		SF	\$26		\$0
Subtotal, Infiltration					\$0

<i>Infrastructure</i>					
Catchbasins		EA	\$1,000	8	\$8,000
Manholes		EA	\$3,850	3	\$12,000
UIC Decommission		EA	\$10,000		\$0
In-Line Treatment		EA	\$10,000		\$0
Subtotal, Infrastructure					\$20,000

Grand SubTotal					\$112,000
Contractor O&P	10%				\$11,200
			Subtotal		\$123,200
Contingency	20%				\$24,640
Engineering and Admin	25%				\$30,800
Estimated Project Cost					\$180,000

City of Canby

Stormwater CIP #2

NW 10th Ave. from N Locust St. to N Pine St.

Item	Diameter	Unit	Unit cost	Quantity	Total
<i>Storm Pipes</i>					
4-inch diameter	4	LF	\$79		\$0
6-inch diameter	6	LF	\$85		\$0
8-inch diameter	8	LF	\$102		\$0
10-inch diameter	10	LF	\$108		\$0
12-inch diameter	12	LF	\$115	1,650	\$190,000
15-inch diameter	15	LF	\$123		\$0
18-inch diameter	18	LF	\$136	370	\$50,000
24-inch diameter	24	LF	\$167	2,900	\$484,000
30-inch diameter	30	LF	\$233		\$0
36-inch diameter	36	LF	\$249		\$0
42-inch diameter	42	LF	\$273		\$0
48-inch diameter	48	LF	\$288		\$0
54-inch diameter	54	LF	\$343		\$0
Subtotal, Storm Pipe					\$724,000

<i>Infiltration</i>					
Pervious Pavement		SF	\$3		\$0
Swales		SF	\$26		\$0
Subtotal, Infiltration					\$0

<i>Infrastructure</i>					
Catchbasins		EA	\$1,000		\$0
Manholes		EA	\$3,850	14	\$54,000
UIC Decommission		EA	\$10,000	5	\$50,000
In-Line Treatment		EA	\$10,000		\$0
Subtotal, Infrastructure					\$104,000

Grand SubTotal					\$828,000
Contractor O&P	10%				\$82,800
				Subtotal	\$910,800
Contingency	20%				\$182,160
Engineering and Admin	25%				\$227,700
Estimated Project Cost					\$1,330,000

City of Canby
 Stormwater CIP #3
 SE Hazeldell Way

Item	Diameter	Unit	Unit cost	Quantity	Total
<i>Storm Pipes</i>					
4-inch diameter	4	LF	\$79		\$0
6-inch diameter	6	LF	\$85		\$0
8-inch diameter	8	LF	\$102		\$0
10-inch diameter	10	LF	\$108		\$0
12-inch diameter	12	LF	\$115		\$0
15-inch diameter	15	LF	\$123		\$0
18-inch diameter	18	LF	\$136		\$0
24-inch diameter	24	LF	\$167		\$0
30-inch diameter	30	LF	\$233		\$0
36-inch diameter	36	LF	\$249		\$0
42-inch diameter	42	LF	\$273		\$0
48-inch diameter	48	LF	\$288		\$0
54-inch diameter	54	LF	\$343		\$0
Subtotal, Storm Pipe					\$0

<i>Infiltration</i>					
Pervious Pavement		SF	\$3		\$0
Swales		SF	\$26	2,000	\$52,000
Subtotal, Infiltration					\$52,000

<i>Infrastructure</i>					
Catchbasins		EA	\$1,000		\$0
Manholes		EA	\$3,850		\$0
UIC Decommission		EA	\$10,000		\$0
In-Line Treatment		EA	\$10,000		\$0
Subtotal, Infrastrucutre					\$0

Grand SubTotal					\$52,000
Contractor O&P		10%			\$5,200
				Subtotal	\$57,200
Contingency		20%			\$11,440
Engineering and Admin		25%			\$14,300
Estimated Project Cost					\$90,000

City of Canby

Stormwater CIP #4

SW 13th Ave Near Canby High School

Item	Diameter	Unit	Unit cost	Quantity	Total
<i>Storm Pipes</i>					
4-inch diameter	4	LF	\$79		\$0
6-inch diameter	6	LF	\$85		\$0
8-inch diameter	8	LF	\$102		\$0
10-inch diameter	10	LF	\$108		\$0
12-inch diameter	12	LF	\$115		\$0
15-inch diameter	15	LF	\$123		\$0
18-inch diameter	18	LF	\$136		\$0
24-inch diameter	24	LF	\$167		\$0
30-inch diameter	30	LF	\$233		\$0
36-inch diameter	36	LF	\$249		\$0
42-inch diameter	42	LF	\$273		\$0
48-inch diameter	48	LF	\$288		\$0
54-inch diameter	54	LF	\$343		\$0
Subtotal, Storm Pipe					\$0

<i>Infiltration</i>					
Pervious Pavement		SF	\$3		\$0
Swales		SF	\$26	500	\$13,000
Subtotal, Infiltration					\$13,000

<i>Infrastructure</i>					
Catchbasins		EA	\$1,000		\$0
Manholes		EA	\$0		\$0
UIC Decommission		EA	\$10,000		\$0
In-Line Treatment		EA	\$10,000		\$0
Subtotal, Infrastructure					\$0

Grand SubTotal					\$13,000
Contractor O&P	10%				\$1,300
			Subtotal		\$14,300
Contingency	20%				\$2,860
Engineering and Admin	25%				\$3,575
Estimated Project Cost					\$30,000

City of Canby

Stormwater CIP #5

UIC E-8 and E-11 Decommission

Item	Diameter	Unit	Unit cost	Quantity	Total
<i>Storm Pipes</i>					
4-inch diameter	4	LF	\$79		\$0
6-inch diameter	6	LF	\$85		\$0
8-inch diameter	8	LF	\$102		\$0
10-inch diameter	10	LF	\$108		\$0
12-inch diameter	12	LF	\$115		\$0
15-inch diameter	15	LF	\$123		\$0
18-inch diameter	18	LF	\$136		\$0
24-inch diameter	24	LF	\$167		\$0
30-inch diameter	30	LF	\$233		\$0
36-inch diameter	36	LF	\$249		\$0
42-inch diameter	42	LF	\$273		\$0
48-inch diameter	48	LF	\$288		\$0
54-inch diameter	54	LF	\$343		\$0
Subtotal, Storm Pipe					\$0

<i>Infiltration</i>					
Pervious Pavement		SF	\$3		\$0
Swales		SF	\$26	300	\$7,800
Subtotal, Infiltration					\$7,800

<i>Infrastructure</i>					
Catchbasins		EA	\$1,000		\$0
Manholes		EA	\$3,850		\$0
UIC Decommission		EA	\$10,000	2	\$20,000
In-Line Treatment		EA	\$10,000		\$0
Subtotal, Infrastrucutre					\$20,000

Grand SubTotal					\$27,800
Contractor O&P		10%			\$2,780
				Subtotal	\$30,580
Contingency		20%			\$6,116
Engineering and Admin		25%			\$7,645
Estimated Project Cost					\$50,000

City of Canby

Stormwater CIP #6

NW 2nd Ave and N Ivy St. UIC Decommission

Item	Diameter	Unit	Unit cost	Quantity	Total
<i>Storm Pipes</i>					
4-inch diameter	4	LF	\$79		\$0
6-inch diameter	6	LF	\$85		\$0
8-inch diameter	8	LF	\$102		\$0
10-inch diameter	10	LF	\$108		\$0
12-inch diameter	12	LF	\$115		\$0
15-inch diameter	15	LF	\$123		\$0
18-inch diameter	18	LF	\$136		\$0
24-inch diameter	24	LF	\$167		\$0
30-inch diameter	30	LF	\$233		\$0
36-inch diameter	36	LF	\$249		\$0
42-inch diameter	42	LF	\$273		\$0
48-inch diameter	48	LF	\$288		\$0
54-inch diameter	54	LF	\$343		\$0
Subtotal, Storm Pipe					\$0

<i>Infiltration</i>					
Pervious Pavement		SF	\$3		\$0
Swales		SF	\$26		\$0
Subtotal, Infiltration					\$0

<i>Infrastructure</i>					
Catchbasins		EA	\$1,000		\$0
Manholes		EA	\$3,850		\$0
UIC Decommission		EA	\$10,000	2	\$20,000
In-Line Treatment		EA	\$10,000		\$0
Subtotal, Infrastrucutre					\$20,000

Grand SubTotal					\$20,000
Contractor O&P	10%				\$2,000
			Subtotal		\$22,000
Contingency	20%				\$4,400
Engineering and Admin	25%				\$5,500
Estimated Project Cost					\$40,000

City of Canby

Stormwater CIP #7

Cinema Parking Lot Decommission

Item	Diameter	Unit	Unit cost	Quantity	Total
<i>Storm Pipes</i>					
4-inch diameter	4	LF	\$79		\$0
6-inch diameter	6	LF	\$85		\$0
8-inch diameter	8	LF	\$102		\$0
10-inch diameter	10	LF	\$108		\$0
12-inch diameter	12	LF	\$115		\$0
15-inch diameter	15	LF	\$123		\$0
18-inch diameter	18	LF	\$136		\$0
24-inch diameter	24	LF	\$167		\$0
30-inch diameter	30	LF	\$233		\$0
36-inch diameter	36	LF	\$249		\$0
42-inch diameter	42	LF	\$273		\$0
48-inch diameter	48	LF	\$288		\$0
54-inch diameter	54	LF	\$343		\$0
Subtotal, Storm Pipe					\$0

<i>Infiltration</i>					
Pervious Pavement		SF	\$3		\$0
Swales		SF	\$26		\$0
Subtotal, Infiltration					\$0

<i>Infrastructure</i>					
Catchbasins		EA	\$1,000		\$0
Manholes		EA	\$3,850		\$0
UIC Decommission		EA	\$10,000	2	\$20,000
In-Line Treatment		EA	\$10,000		\$0
Subtotal, Infrastrucutre					\$20,000

Grand SubTotal					\$20,000
Contractor O&P	10%				\$2,000
			Subtotal		\$22,000
Contingency	20%				\$4,400
Engineering and Admin	25%				\$5,500
Estimated Project Cost					\$40,000

City of Canby
 Stormwater CIP #8
 S Ivy St

Item	Diameter	Unit	Unit cost	Quantity	Total
<i>Storm Pipes</i>					
4-inch diameter	4	LF	\$79		\$0
6-inch diameter	6	LF	\$85		\$0
8-inch diameter	8	LF	\$102		\$0
10-inch diameter	10	LF	\$108		\$0
12-inch diameter	12	LF	\$115		\$0
15-inch diameter	15	LF	\$123		\$0
18-inch diameter	18	LF	\$136	3,000	\$407,000
24-inch diameter	24	LF	\$167		\$0
30-inch diameter	30	LF	\$233		\$0
36-inch diameter	36	LF	\$249		\$0
42-inch diameter	42	LF	\$273		\$0
48-inch diameter	48	LF	\$288		\$0
54-inch diameter	54	LF	\$343		\$0
Subtotal, Storm Pipe					\$407,000

<i>Infiltration</i>					
Pervious Pavement		SF	\$3		\$0
Swales		SF	\$26		\$0
Subtotal, Infiltration					\$0

<i>Infrastructure</i>					
Catchbasins		EA	\$1,000	16	\$16,000
Manholes		EA	\$3,850	8	\$31,000
UIC Decommission		EA	\$10,000		\$0
In-Line Treatment		EA	\$10,000		\$0
Subtotal, Infrastrucutre					\$47,000

Grand SubTotal					\$454,000
Contractor O&P		10%			\$45,400
				Subtotal	\$499,400
Contingency		20%			\$99,880
Engineering and Admin		25%			\$124,850
Estimated Project Cost					\$730,000

City of Canby
 Stormwater CIP #19
 Maple St Park

Item	Diameter	Unit	Unit cost	Quantity	Total
<i>Storm Pipes</i>					
4-inch diameter	4	LF	\$79		\$0
6-inch diameter	6	LF	\$85		\$0
8-inch diameter	8	LF	\$102		\$0
10-inch diameter	10	LF	\$108		\$0
12-inch diameter	12	LF	\$115		\$0
15-inch diameter	15	LF	\$123		\$0
18-inch diameter	18	LF	\$136		\$0
24-inch diameter	24	LF	\$167		\$0
30-inch diameter	30	LF	\$233		\$0
36-inch diameter	36	LF	\$249		\$0
42-inch diameter	42	LF	\$273		\$0
48-inch diameter	48	LF	\$288		\$0
54-inch diameter	54	LF	\$343		\$0
Subtotal, Storm Pipe					\$0

<i>Infiltration</i>					
Pervious Pavement		SF	\$3	4,800	\$14,400
Swales		SF	\$26		\$0
Subtotal, Infiltration					\$14,400

<i>Infrastructure</i>					
Catchbasins		EA	\$1,000		\$0
Manholes		EA	\$3,850		\$0
UIC Decommission		EA	\$10,000		\$0
In-Line Treatment		EA	\$10,000		\$0
Subtotal, Infrastrucutre					\$0

Grand SubTotal					\$14,400
Contractor O&P	10%				\$1,440
			Subtotal		\$15,840
Contingency	20%				\$3,168
Engineering and Admin	25%				\$3,960
Estimated Project Cost					\$30,000

City of Canby

Stormwater CIP #10

N Maple St. and NW 34th Pl.

Item	Diameter	Unit	Unit cost	Quantity	Total
<i>Storm Pipes</i>					
4-inch diameter	4	LF	\$79		\$0
6-inch diameter	6	LF	\$85		\$0
8-inch diameter	8	LF	\$102		\$0
10-inch diameter	10	LF	\$108		\$0
12-inch diameter	12	LF	\$115		\$0
15-inch diameter	15	LF	\$123		\$0
18-inch diameter	18	LF	\$136	20	\$3,000
24-inch diameter	24	LF	\$167		\$0
30-inch diameter	30	LF	\$233		\$0
36-inch diameter	36	LF	\$249		\$0
42-inch diameter	42	LF	\$273		\$0
48-inch diameter	48	LF	\$288		\$0
54-inch diameter	54	LF	\$343		\$0
Subtotal, Storm Pipe					\$3,000

<i>Infiltration</i>					
Pervious Pavement		SF	\$3		\$0
Swales		SF	\$26		\$0
Subtotal, Infiltration					\$0

<i>Infrastructure</i>					
Catchbasins		EA	\$1,000		\$0
Manholes		EA	\$3,850	1	\$4,000
UIC Decommission		EA	\$10,000		\$0
In-Line Treatment		EA	\$10,000	1	\$10,000
Subtotal, Infrastrucutre					\$14,000

Grand SubTotal					\$17,000
Contractor O&P		10%			\$1,700
				Subtotal	\$18,700
Contingency		20%			\$3,740
Engineering and Admin		25%			\$4,675
Estimated Project Cost					\$30,000

City of Canby

Stormwater CIP #11

NW 13th Ave from N Ash St. to N Birch St.

Item	Diameter	Unit	Unit cost	Quantity	Total
<i>Storm Pipes</i>					
4-inch diameter	4	LF	\$79		\$0
6-inch diameter	6	LF	\$85		\$0
8-inch diameter	8	LF	\$102		\$0
10-inch diameter	10	LF	\$108		\$0
12-inch diameter	12	LF	\$115		\$0
15-inch diameter	15	LF	\$123		\$0
18-inch diameter	18	LF	\$136		\$0
24-inch diameter	24	LF	\$167		\$0
30-inch diameter	30	LF	\$233		\$0
36-inch diameter	36	LF	\$249		\$0
42-inch diameter	42	LF	\$273		\$0
48-inch diameter	48	LF	\$288		\$0
54-inch diameter	54	LF	\$343		\$0
Subtotal, Storm Pipe					\$0

<i>Infiltration</i>					
Pervious Pavement		SF	\$3	4,800	\$14,400
Swales		SF	\$26		\$0
Subtotal, Infiltration					\$14,400

<i>Infrastructure</i>					
Catchbasins		EA	\$1,000		\$0
Manholes		EA	\$3,850		\$0
UIC Decommission		EA	\$10,000		\$0
In-Line Treatment		EA	\$10,000		\$0
Subtotal, Infrastrucutre					\$0

Grand SubTotal					\$14,400
Contractor O&P	10%				\$1,440
				Subtotal	\$15,840
Contingency	20%				\$3,168
Engineering and Admin	25%				\$3,960
Estimated Project Cost					\$30,000

City of Canby

Stormwater CIP #12

NW 9th Ave from N Ash St. to N Cedar St.

Item	Diameter	Unit	Unit cost	Quantity	Total
<i>Storm Pipes</i>					
4-inch diameter	4	LF	\$79		\$0
6-inch diameter	6	LF	\$85		\$0
8-inch diameter	8	LF	\$102		\$0
10-inch diameter	10	LF	\$108		\$0
12-inch diameter	12	LF	\$115	500	\$58,000
15-inch diameter	15	LF	\$123		\$0
18-inch diameter	18	LF	\$136	1,500	\$203,000
24-inch diameter	24	LF	\$167		\$0
30-inch diameter	30	LF	\$233		\$0
36-inch diameter	36	LF	\$249		\$0
42-inch diameter	42	LF	\$273		\$0
48-inch diameter	48	LF	\$288		\$0
54-inch diameter	54	LF	\$343		\$0
Subtotal, Storm Pipe					\$261,000

<i>Infiltration</i>					
Pervious Pavement		SF	\$3		\$0
Swales		SF	\$26		\$0
Subtotal, Infiltration					\$0

<i>Infrastructure</i>					
Catchbasins		EA	\$1,000		\$0
Manholes		EA	\$3,850		\$0
UIC Decommission		EA	\$10,000		\$0
In-Line Treatment		EA	\$10,000		\$0
Subtotal, Infrastrucutre					\$0

Grand SubTotal					\$261,000
Contractor O&P	10%				\$26,100
			Subtotal		\$287,100
Contingency	20%				\$57,420
Engineering and Admin	25%				\$71,775
Estimated Project Cost					\$420,000

City of Canby
 Stormwater CIP #13
 N Knights Bridge Road

Item	Diameter	Unit	Unit cost	Quantity	Total
<i>Storm Pipes</i>					
4-inch diameter	4	LF	\$79		\$0
6-inch diameter	6	LF	\$85		\$0
8-inch diameter	8	LF	\$102	750	\$77,000
10-inch diameter	10	LF	\$108		\$0
12-inch diameter	12	LF	\$115		\$0
15-inch diameter	15	LF	\$123		\$0
18-inch diameter	18	LF	\$136		\$0
24-inch diameter	24	LF	\$167		\$0
30-inch diameter	30	LF	\$233		\$0
36-inch diameter	36	LF	\$249		\$0
42-inch diameter	42	LF	\$273		\$0
48-inch diameter	48	LF	\$288		\$0
54-inch diameter	54	LF	\$343		\$0
Subtotal, Storm Pipe					\$77,000

<i>Infiltration</i>					
Pervious Pavement		SF	\$3		\$0
Swales		SF	\$26		\$0
Subtotal, Infiltration					\$0

<i>Infrastructure</i>					
Catchbasins		EA	\$1,000		\$0
Manholes		EA	\$3,850		\$0
UIC Decommission		EA	\$10,000		\$0
In-Line Treatment		EA	\$10,000		\$0
Subtotal, Infrastrucutre					\$0

Grand SubTotal					\$77,000
Contractor O&P	10%				\$7,700
			Subtotal		\$84,700
Contingency	20%				\$16,940
Engineering and Admin	25%				\$21,175
Estimated Project Cost					\$130,000

City of Canby

Stormwater CIP #14

NW 2nd Ave from N Grant St. to NW Baker Dr.

Item	Diameter	Unit	Unit cost	Quantity	Total
<i>Storm Pipes</i>					
4-inch diameter	4	LF	\$79		\$0
6-inch diameter	6	LF	\$85		\$0
8-inch diameter	8	LF	\$102		\$0
10-inch diameter	10	LF	\$108		\$0
12-inch diameter	12	LF	\$115		\$0
15-inch diameter	15	LF	\$123		\$0
18-inch diameter	18	LF	\$136		\$0
24-inch diameter	24	LF	\$167		\$0
30-inch diameter	30	LF	\$233	400	\$93,000
36-inch diameter	36	LF	\$249	1,350	\$337,000
42-inch diameter	42	LF	\$273		\$0
48-inch diameter	48	LF	\$288		\$0
54-inch diameter	54	LF	\$343		\$0
Subtotal, Storm Pipe					\$430,000

<i>Infiltration</i>					
Pervious Pavement		SF	\$3		\$0
Swales		SF	\$26		\$0
Subtotal, Infiltration					\$0

<i>Infrastructure</i>					
Catchbasins		EA	\$1,000		\$0
Manholes		EA	\$3,850		\$0
UIC Decommission		EA	\$10,000		\$0
In-Line Treatment		EA	\$10,000		\$0
Subtotal, Storm Pipe					\$0

Grand SubTotal					\$430,000
Contractor O&P	10%				\$43,000
			Subtotal		\$473,000
Contingency	20%				\$94,600
Engineering and Admin	25%				\$118,250
Estimated Project Cost					\$690,000

City of Canby

Stormwater CIP #15

NW 3rd Ave from N Cedar St. to N Holly St.

Item	Diameter	Unit	Unit cost	Quantity	Total
<i>Storm Pipes</i>					
4-inch diameter	4	LF	\$79		\$0
6-inch diameter	6	LF	\$85		\$0
8-inch diameter	8	LF	\$102		\$0
10-inch diameter	10	LF	\$108		\$0
12-inch diameter	12	LF	\$115		\$0
15-inch diameter	15	LF	\$123		\$0
18-inch diameter	18	LF	\$136	140	\$19,000
24-inch diameter	24	LF	\$167	400	\$67,000
30-inch diameter	30	LF	\$233	1,200	\$280,000
36-inch diameter	36	LF	\$249		\$0
42-inch diameter	42	LF	\$273		\$0
48-inch diameter	48	LF	\$288		\$0
54-inch diameter	54	LF	\$343		\$0
Subtotal, Storm Pipe					\$366,000

<i>Infiltration</i>					
Pervious Pavement		SF	\$3		\$0
Swales		SF	\$26		\$0
Subtotal, Infiltration					\$0

<i>Infrastructure</i>					
Catchbasins		EA	\$1,000	2	\$2,000
Manholes		EA	\$3,850	8	\$31,000
UIC Decommission		EA	\$10,000	2	\$20,000
In-Line Treatment		EA	\$10,000		\$0
Subtotal, Infrastrucutre					\$53,000

Grand SubTotal					\$419,000
Contractor O&P	10%				\$41,900
			Subtotal		\$460,900
Contingency	20%				\$92,180
Engineering and Admin	25%				\$115,225
Estimated Project Cost					\$670,000

City of Canby
 Stormwater CIP #16
 N Holly St.

Item	Diameter	Unit	Unit cost	Quantity	Total
<i>Storm Pipes</i>					
4-inch diameter	4	LF	\$79		\$0
6-inch diameter	6	LF	\$85		\$0
8-inch diameter	8	LF	\$102		\$0
10-inch diameter	10	LF	\$108		\$0
12-inch diameter	12	LF	\$115	1,650	\$190,000
15-inch diameter	15	LF	\$123		\$0
18-inch diameter	18	LF	\$136		\$0
24-inch diameter	24	LF	\$167		\$0
30-inch diameter	30	LF	\$233		\$0
36-inch diameter	36	LF	\$249		\$0
42-inch diameter	42	LF	\$273		\$0
48-inch diameter	48	LF	\$288		\$0
54-inch diameter	54	LF	\$343		\$0
Subtotal, Storm Pipe					\$190,000

<i>Infiltration</i>					
Pervious Pavement		SF	\$3		\$0
Swales		SF	\$26		\$0
Subtotal, Infiltration					\$0

<i>Infrastructure</i>					
Catchbasins		EA	\$1,000		\$0
Manholes		EA	\$3,850		\$0
UIC Decommission		EA	\$10,000		\$0
In-Line Treatment		EA	\$10,000		\$0
Subtotal, Storm Pipe					\$0

Grand SubTotal					\$190,000
Contractor O&P	10%				\$19,000
			Subtotal		\$209,000
Contingency	20%				\$41,800
Engineering and Admin	25%				\$52,250
Estimated Project Cost					\$310,000

City of Canby

Stormwater CIP #17

N Juniper St. and NE 5th Ave

Item	Diameter	Unit	Unit cost	Quantity	Total
<i>Storm Pipes</i>					
4-inch diameter	4	LF	\$79		\$0
6-inch diameter	6	LF	\$85		\$0
8-inch diameter	8	LF	\$102		\$0
10-inch diameter	10	LF	\$108		\$0
12-inch diameter	12	LF	\$115		\$0
15-inch diameter	15	LF	\$123		\$0
18-inch diameter	18	LF	\$136		\$0
24-inch diameter	24	LF	\$167		\$0
30-inch diameter	30	LF	\$233		\$0
36-inch diameter	36	LF	\$249		\$0
42-inch diameter	42	LF	\$273		\$0
48-inch diameter	48	LF	\$288		\$0
54-inch diameter	54	LF	\$343		\$0
Subtotal, Storm Pipe					\$0

<i>Infiltration</i>					
Pervious Pavement		SF	\$3	4,800	\$14,400
Swales		SF	\$26		\$0
Subtotal, Infiltration					\$14,400

<i>Infrastructure</i>					
Catchbasins		EA	\$1,000		\$0
Manholes		EA	\$3,850		\$0
UIC Decommission		EA	\$10,000		\$0
In-Line Treatment		EA	\$10,000		\$0
Subtotal, Storm Pipe					\$0

Grand SubTotal					\$14,400
Contractor O&P	10%				\$1,440
				Subtotal	\$15,840
Contingency	20%				\$3,168
Engineering and Admin	25%				\$3,960
Estimated Project Cost					\$30,000

City of Canby

Stormwater CIP #18

N Baker St. and N Alder St.

Item	Diameter	Unit	Unit cost	Quantity	Total
<i>Storm Pipes</i>					
4-inch diameter	4	LF	\$79		\$0
6-inch diameter	6	LF	\$85		\$0
8-inch diameter	8	LF	\$102		\$0
10-inch diameter	10	LF	\$108		\$0
12-inch diameter	12	LF	\$115		\$0
15-inch diameter	15	LF	\$123		\$0
18-inch diameter	18	LF	\$136		\$0
24-inch diameter	24	LF	\$167		\$0
30-inch diameter	30	LF	\$233		\$0
36-inch diameter	36	LF	\$249		\$0
42-inch diameter	42	LF	\$273		\$0
48-inch diameter	48	LF	\$288		\$0
54-inch diameter	54	LF	\$343		\$0
Subtotal, Storm Pipe					\$0

<i>Infiltration</i>					
Pervious Pavement		SF	\$3	4,800	\$14,400
Swales		SF	\$26		\$0
Subtotal, Infiltration					\$14,400

<i>Infrastructure</i>					
Catchbasins		EA	\$1,000		\$0
Manholes		EA	\$3,850		\$0
UIC Decommission		EA	\$10,000		\$0
In-Line Treatment		EA	\$10,000		\$0
Subtotal, Storm Pipe					\$0

Grand SubTotal					\$14,400
Contractor O&P	10%				\$1,440
				Subtotal	\$15,840
Contingency	20%				\$3,168
Engineering and Admin	25%				\$3,960
Estimated Project Cost					\$30,000

City of Canby

Stormwater CIP #19

N Cedar St.

Item	Diameter	Unit	Unit cost	Quantity	Total
<i>Storm Pipes</i>					
4-inch diameter	4	LF	\$79		\$0
6-inch diameter	6	LF	\$85		\$0
8-inch diameter	8	LF	\$102		\$0
10-inch diameter	10	LF	\$108		\$0
12-inch diameter	12	LF	\$115	20	\$2,000
15-inch diameter	15	LF	\$123		\$0
18-inch diameter	18	LF	\$136		\$0
24-inch diameter	24	LF	\$167		\$0
30-inch diameter	30	LF	\$233		\$0
36-inch diameter	36	LF	\$249		\$0
42-inch diameter	42	LF	\$273		\$0
48-inch diameter	48	LF	\$288		\$0
54-inch diameter	54	LF	\$343		\$0
Subtotal, Storm Pipe					\$2,000

<i>Infiltration</i>					
Pervious Pavement		SF	\$3		\$0
Swales		SF	\$26		\$0
Subtotal, Infiltration					\$0

<i>Infrastructure</i>					
Catchbasins		EA	\$1,000		\$0
Manholes		EA	\$3,850	1	\$4,000
UIC Decommission		EA	\$10,000		\$0
In-Line Treatment		EA	\$10,000		\$0
Subtotal, Storm Pipe					\$4,000

Grand SubTotal					\$6,000
Contractor O&P	10%				\$600
			Subtotal		\$6,600
Contingency	20%				\$1,320
Engineering and Admin	25%				\$1,650
Estimated Project Cost					\$10,000

City of Canby

Stormwater CIP #20

S Pine St. and SE 2nd Ave

Item	Diameter	Unit	Unit cost	Quantity	Total
<i>Storm Pipes</i>					
4-inch diameter	4	LF	\$79		\$0
6-inch diameter	6	LF	\$85		\$0
8-inch diameter	8	LF	\$102		\$0
10-inch diameter	10	LF	\$108		\$0
12-inch diameter	12	LF	\$115		\$0
15-inch diameter	15	LF	\$123		\$0
18-inch diameter	18	LF	\$136		\$0
24-inch diameter	24	LF	\$167		\$0
30-inch diameter	30	LF	\$233		\$0
36-inch diameter	36	LF	\$249		\$0
42-inch diameter	42	LF	\$273		\$0
48-inch diameter	48	LF	\$288		\$0
54-inch diameter	54	LF	\$343		\$0
Subtotal, Storm Pipe					\$0

<i>Infiltration</i>					
Pervious Pavement		SF	\$3	4,800	\$14,400
Swales		SF	\$26		\$0
Subtotal, Infiltration					\$14,400

<i>Infrastructure</i>					
Catchbasins		EA	\$1,000		\$0
Manholes		EA	\$3,850		\$0
UIC Decommission		EA	\$10,000		\$0
In-Line Treatment		EA	\$10,000		\$0
Subtotal, Infrastrucutre					\$0

Grand SubTotal					\$14,400
Contractor O&P	10%				\$1,440
				Subtotal	\$15,840
Contingency	20%				\$3,168
Engineering and Admin	25%				\$3,960
Estimated Project Cost					\$30,000

City of Canby

Stormwater CIP #20

Police Station/NW 3rd Ave Pond Flow Monitoring

Item	Diameter	Unit	Unit cost	Quantity	Total
<i>Storm Pipes</i>					
4-inch diameter	4	LF	\$79	20	\$2,000
6-inch diameter	6	LF	\$85		\$0
8-inch diameter	8	LF	\$102		\$0
10-inch diameter	10	LF	\$108		\$0
12-inch diameter	12	LF	\$115		\$0
15-inch diameter	15	LF	\$123		\$0
18-inch diameter	18	LF	\$136		\$0
24-inch diameter	24	LF	\$167		\$0
30-inch diameter	30	LF	\$233		\$0
36-inch diameter	36	LF	\$249		\$0
42-inch diameter	42	LF	\$273		\$0
48-inch diameter	48	LF	\$288		\$0
54-inch diameter	54	LF	\$343		\$0
Subtotal, Storm Pipe					\$2,000

<i>Infiltration</i>					
Pervious Pavement		SF	\$3		\$0
Swales		SF	\$26		\$0
Subtotal, Infiltration					\$0

<i>Infrastructure</i>					
Catchbasins		EA	\$1,000	1	\$1,000
Concrete Channel	1	EA	\$10,000	1	\$10,000
UIC Decommission		EA	\$10,000		\$0
Data Logger		EA	\$2,000	1	\$2,000
Subtotal, Storm Pipe					\$13,000

Grand SubTotal					\$15,000
Contractor O&P	10%				\$1,500
			Subtotal		\$16,500
Contingency	20%				\$3,300
Engineering and Admin	25%				\$4,125
Estimated Project Cost					\$30,000

City of Canby

Stormwater CIP #21

Fish Eddy Wetland Flow Monitoring

Item	Diameter	Unit	Unit cost	Quantity	Total
<i>Storm Pipes</i>					
4-inch diameter	4	LF	\$79	20	\$2,000
6-inch diameter	6	LF	\$85		\$0
"Conventional" Treatment	8	LF	\$102		\$0
10-inch diameter	10	LF	\$108		\$0
12-inch diameter	12	LF	\$115		\$0
15-inch diameter	15	LF	\$123		\$0
18-inch diameter	18	LF	\$136		\$0
24-inch diameter	24	LF	\$167		\$0
30-inch diameter	30	LF	\$233		\$0
36-inch diameter					
-inch diameter					
-inch diameter					36
54-inch diameter	54	LF	\$343		\$0
Subtotal, Storm Pipe					\$2,000

<i>Infiltration</i>					
Pervious Pavement		SF	\$3		\$0
Swales		SF	\$26		\$0
Subtotal, Infiltration					\$0

<i>Infrastructure</i>					
Catchbasins		EA	\$1,000	1	\$1,000
Concrete Channel	1	EA	\$10,000	1	\$10,000
UIC Decommission		EA	\$10,000		\$0
Data Logger		EA	\$2,000	1	\$2,000
Subtotal, Storm Pipe					\$13,000

Grand SubTotal					\$15,000
Contractor O&P	10%				\$1,500
			Subtotal		\$16,500
Contingency	20%				\$3,300
Engineering and Admin	25%				\$4,125
Estimated Project Cost					\$30,000

City of Canby

Stormwater CIP #22

Fish Eddy Wetland

Drainage Area	393 Acres	Approx. 25% impervious
WQ Flow Rate	6.7 cfs	3,007 gpm
Facility Volume (WQ Vol)	814,000 cu-ft	
<u>"Conventional" Treatment Wetland</u>		
Area required = WQ Vol / 3-foot average depth:		
	271,333 sq-ft	
	6.23 ac	
	2.5 hectares surface area	
	\$485,058 Total Present Cost Estimate Weiss et. al. 2007 (2005 dollars, US Zone 1 Rainfall -adjusted to 2013 dollars, US Zone 7 Rainfall)	
	\$575,049 Cost Estimate Kadlec & Wallace Treatment Wetlands (1996 dollars - adjusted to 2013 dollars using ENR CCI)	

Subtotal \$530,054
(Average Estimated Cost for Construction Overhead and Contingency)

Grand SubTotal		\$530,054
Contractor O&P	included in estimates	-
	Subtotal	\$530,054
Contingency	included in estimates	-
Engineering and Admin	25%	\$132,513
Estimated Project Cost		\$670,000

City of Canby

Stormwater CIP #23

Knight's Bridge Runoff Treatment

Item	Diameter	Unit	Unit cost	Quantity	Total
<i>Storm Pipes</i>					
4-inch diameter	4	LF	\$79		\$0
6-inch diameter	6	LF	\$85		\$0
"Conventional" Treatment	8	LF	\$102		\$0
10-inch diameter	10	LF	\$108		\$0
12-inch diameter	12	LF	\$115		\$0
15-inch diameter	15	LF	\$123		\$0
18-inch diameter	18	LF	\$136		\$0
24-inch diameter	24	LF	\$167		\$0
30-inch diameter	30	LF	\$233		\$0
36-inch diameter					
-inch diameter					
-inch diameter					36
54-inch diameter	54	LF	\$343		\$0
Subtotal, Storm Pipe					\$0

<i>Infiltration</i>					
Pervious Pavement		SF	\$3		\$0
Swales		SF	\$26	1,000	\$26,000
Subtotal, Infiltration					\$26,000

<i>Infrastructure</i>					
Catchbasins		EA	\$1,000		\$0
Manholes		EA	\$0		\$0
UIC Decommission		EA	\$10,000		\$0
In-Line Treatment		EA	\$10,000		\$0
Subtotal, Infrastructure					\$0

Grand SubTotal					\$26,000
Contractor O&P	10%				\$2,600
			Subtotal		\$28,600
Contingency	20%				\$5,720
Engineering and Admin	25%				\$7,150
Estimated Project Cost					\$50,000