

Appendix B: CM Breadth Cost Analysis

				Ex	isting Equipr	nent for DF	P-RP				
Panelboard	Feeder length per wire in ft	Conductor	Price per wire LF	Total price of wire	Conduit	Price LF	Total conduit price	Circuit breaker	Price each	Transformer	Price each
		4#2, 1#2									
Kitchen	220	ground 4#2, 1#2	\$198.00	\$2,178.00	1 1/4"	\$5.35	\$1,177.00	100A	\$281.00	n/a	n/a
RP-1A	316	ground 4#2, 1#2	\$198.00	\$3,128.40	1 1/4"	\$5.35	\$1,690.60	100A	\$281.00	n/a	n/a
RP-1B	542	ground 4#2, 1#2	\$198.00	\$5,365.80	1 1/4"	\$5.35	\$2,899.70	100A	\$281.00	n/a	n/a
RP-1C	954	ground 4#2, 1#2	\$198.00	\$9,444.60	1 1/4"	\$5.35	\$5,103.90	100A	\$281.00	n/a	n/a
RP-1D	888	ground 4#2, 1#2	\$198.00	\$8,791.20	1 1/4"	\$5.35	\$4,750.80	100A	\$281.00	n/a	n/a
RP-2A	868	ground	\$198.00	\$8,593.20	1 1/4"	\$5.35	\$4,643.80	100A	\$281.00	n/a	n/a
		4#3/0, 1#3/0									
MDP-1	327	ground	\$380.00	\$6,213.00	2"	\$7.80	\$2,550.60	200A	\$900.00	n/a	n/a
										300 KVA	\$13,000.00
Subtotals				\$43,714.20			\$22,816.40		\$2,586.00		\$13,000.00
										Total Price	\$82,116.60

				Red	design Equip	ment for D	P-RP				
Panelboard	Feeder length per wire in ft	Conductor	Price per wire LF	Total price of wire	Conduit	Price LF	Total conduit price	Circuit breaker	Price each	Transformer	Price each
Kitchen	220	4#8, 1#8 ground 4#8, 1#8	\$84.00	\$924.00	3/4"	\$2.86	\$629.20	40A	\$181.00	45 KVA	\$3,575.00
RP-1A	316	ground 4#8, 1#8	\$84.00	\$1,327.20	3/4"	\$2.86	\$903.76	40A	\$181.00	45 KVA	\$3,575.00
RP-1B	542	ground 4#8, 1#8	\$84.00	\$2,276.40	3/4"	\$2.86	\$1,550.12	40A	\$181.00	45 KVA	\$3,575.00
RP-1C	954	ground 4#8, 1#8	\$84.00	\$4,006.80	3/4"	\$2.86	\$2,728.44	40A	\$181.00	45 KVA	\$3,575.00
RP-1D	888	ground 4#8, 1#8	\$84.00	\$3,729.60	3/4"	\$2.86	\$2,539.68	40A	\$181.00	45 KVA	\$3,575.00
RP-2A	868	ground 4#3, 1#3	\$84.00	\$3,645.60	3/4"	\$2.86	\$2,482.48	40A	\$181.00	45 KVA	\$3,575.00
MDP-1	327	ground	\$169.00	\$2,763.15	1 1/4"	\$5.35	\$1,749.45	70A	\$225.00	75 KVA	\$4,950.00
Subtotals				\$18,672.75			\$12,583.13		\$1,311.00)	\$26,400.00
_										Total Price	\$58,966.88

Existing Equipment for DP-EC												
eeder length	Conductor	Price per wire	Total price	Conduit	Price	Total conduit	Circuit	Price	Transformer	Price	Distribution	Price
per wire in ft		CLF	of wire		LF	price	breaker	each		each	Board	
	4#2, 1#2											
395	ground, 1#2ig	\$198.00	\$4,692.60	1 1/2"	\$6.45	\$2,547.75	100A	\$281.00	n/a	n/a	n/a	n/a
	4#2, 1#2											
224	ground, 1#2ig	\$198.00	\$2,661.12	1 1/2"	\$6.45	\$1,444.80	100A	\$281.00	n/a	n/a	n/a	n/a
	4#2, 1#2											
542		\$198.00	\$6,438.96	1 1/2"	\$6.45	\$3,495.90	100A	\$281.00	n/a	n/a	n/a	n/a
	,											
934		\$198.00	\$11,095.92	1 1/2"	\$6.45	\$6,024.30	100A	\$281.00	n/a	n/a	n/a	n/a
	,				_	_						
870		\$198.00	\$10,335.60	1 1/2"	\$6.45	\$5,611.50	100A	\$281.00	n/a	n/a	n/a	n/a
	,		_		_	_						
758		\$113.00	\$5,139.24	1 1/2"	\$6.45	\$4,889.10	70A	\$225.00	n/a	n/a	n/a	n/a
	,											
417	0 , 0	\$198.00	\$4,953.96	1 1/2"	\$6.45	\$2,689.65	100A	\$281.00	n/a	n/a	n/a	n/a
									,	,	,	,
546	ground, 1#2ig	\$198.00	\$6,486.48	1 1/2"	\$6.45	\$3,521.70	100A	\$281.00				n/a
									300 KVA	\$13,000.00		0 0 005 00
			654 000 00			600 004 70		******			3p, 4w 800A	\$3,225.00
			\$51,803.88			\$30,224.70		\$2,192.00		\$13,000.00		\$3,225.0
											Total Price	\$100,445.58
	er wire in ft	98 wire in ft 4#2, 1#2 395 ground, 1#2ig 4#2, 1#2 224 ground, 1#2ig 4#2, 1#2 542 ground, 1#2ig 4#2, 1#2 934 ground, 1#2ig 4#2, 1#2 870 ground, 1#2ig 4#6, 1#6 758 ground, 1#6 417 ground, 1#2ig 442, 1#2 417 ground, 1#2ig 4#2, 1#2 417 ground, 1#2ig 4#2, 1#2	er wire in ft CLF 4#2, 1#2 \$198.00 4#2, 1#2 \$198.00 4#2, 1#2 \$198.00 224 ground, 1#2ig \$198.00 4#2, 1#2 \$198.00 4#2, 1#2 \$198.00 4#2, 1#2 \$198.00 4#2, 1#2 \$198.00 4#6, 1#6 \$198.00 758 ground, 1#6ig \$113.00 4#2, 1#2 417 ground, 1#2ig \$198.00 4#2, 1#2	Geder length er wire in ft Conductor Price per wire CLF Total price of wire 4#2, 1#2 395 ground, 1#2ig 4#2, 1#2 \$198.00 \$4,692.60 224 ground, 1#2ig 4#2, 1#2 \$198.00 \$2,661.12 542 ground, 1#2ig 4#2, 1#2 \$198.00 \$6,438.96 4#2, 1#2 \$198.00 \$11,095.92 4#2, 1#2 \$198.00 \$10,335.60 4#6, 1#6 \$113.00 \$5,139.24 4#2, 1#2 \$198.00 \$4,953.96 417 ground, 1#2ig 4#2, 1#2 \$198.00 \$4,953.96	Geder length er wire in ft Conductor Price per wire CLF Total price of wire Conduit 395 ground, 1#2ig 4#2, 1#2 \$198.00 \$4,692.60 \$1 1/2" \$1/2" 224 ground, 1#2ig 4#2, 1#2 \$198.00 \$2,661.12 \$1 1/2" \$1/2" 542 ground, 1#2ig 4#2, 1#2 \$198.00 \$6,438.96 \$1 1/2" \$1/2" 934 ground, 1#2ig 4#2, 1#2 \$198.00 \$11,095.92 \$1 1/2" \$1/2" 870 ground, 1#2ig 4#6, 1#6 \$198.00 \$10,335.60 \$1 1/2" \$1/2" 758 ground, 1#6ig 4#2, 1#2 \$113.00 \$5,139.24 \$1 1/2" \$1/2" 417 ground, 1#2ig \$198.00 \$4,953.96 \$1 1/2" \$1/2" 4#2, 1#2 \$198.00 \$4,953.96 \$1 1/2" \$1/2" 546 ground, 1#2ig \$198.00 \$6,486.48 \$1 1/2"	Geder length er wire in ft Conductor Price per wire CLF Total price of wire Conduit Price LF 4#2, 1#2 395 ground, 1#2ig 4#2; \$198.00 \$4,692.60 1 1/2" \$6.45 224 ground, 1#2ig 4#2, 1#2 \$198.00 \$2,661.12 1 1/2" \$6.45 542 ground, 1#2ig 4#2, 1#2 \$198.00 \$6,438.96 1 1/2" \$6.45 934 ground, 1#2ig 5198.00 \$11,095.92 1 1/2" \$6.45 4#2, 1#2 \$70 ground, 1#2ig 5198.00 \$10,335.60 1 1/2" \$6.45 4#6, 1#6 758 ground, 1#6ig 4#2; \$113.00 \$5,139.24 1 1/2" \$6.45 4#2, 1#2 \$198.00 \$4,953.96 1 1/2" \$6.45 4#2, 1#2 \$198.00 \$6,486.48 1 1/2" \$6.45 546 ground, 1#2ig \$198.00 \$6,486.48 1 1/2" \$6.45	Geder length er wire in ft Conductor CLF Price per wire of wire Total price of wire Conduit Drice Conduit Price LF Total conduit Total conduit Price CLF Total Cnde CLF \$2,547.75 \$4,444.80 \$4,444.80 \$4,444.80 \$4,444.80 \$4,444.80 \$4,444.80 \$4,444.80 \$4,444.80 \$4,444.80 \$4,444.80 \$4,444.80 \$4,444.80 \$4,444.80 \$4,444.80 \$4,444.80 \$4,445.80 \$4,445.80 \$4,445.80 \$4,445.80 \$4,445.80 \$4,445.80 \$4,445.80 \$4,445.8	Geder length er wire in ft Conductor CLF Price of wire Conduit LF Price price Total conduit Dreaker Circuit Dreaker 395 ground, 1#2ig ground, 1#2ig stype. \$198.00 \$4,692.60 1 1/2" \$6.45 \$2,547.75 100A 4#2, 1#2 \$198.00 \$2,661.12 1 1/2" \$6.45 \$1,444.80 100A 542 ground, 1#2ig ground, 1#2ig stype. \$198.00 \$6,438.96 1 1/2" \$6.45 \$3,495.90 100A 4#2, 1#2 \$198.00 \$11,095.92 1 1/2" \$6.45 \$6,024.30 100A 4#2, 1#2 \$198.00 \$10,335.60 1 1/2" \$6.45 \$5,611.50 100A 4#6, 1#6 \$6.45 \$13.00 \$5,139.24 1 1/2" \$6.45 \$4,889.10 70A 4#2, 1#2 \$198.00 \$4,953.96 1 1/2" \$6.45 \$2,689.65 100A 4#2, 1#2 \$198.00 \$6,486.48 1 1/2" \$6.45 \$3,521.70 100A	Geder length er wire in ft Conductor CLF Price pof wire Conduit LF Price price Total conduit Dreaker Circuit breaker Price each 395 ground, 1#2ig yard \$198.00 \$4,692.60 1 1/2" \$6.45 \$2,547.75 100A \$281.00 4#2, 1#2 224 ground, 1#2ig yard \$198.00 \$2,661.12 1 1/2" \$6.45 \$1,444.80 100A \$281.00 542 ground, 1#2ig yard \$198.00 \$6,438.96 1 1/2" \$6.45 \$3,495.90 100A \$281.00 4#2, 1#2 \$198.00 \$11,095.92 1 1/2" \$6.45 \$6,024.30 100A \$281.00 4#2, 1#2 \$70 ground, 1#2ig yard \$198.00 \$10,335.60 1 1/2" \$6.45 \$5,611.50 100A \$281.00 4#6, 1#6 758 ground, 1#6ig yard \$113.00 \$5,139.24 1 1/2" \$6.45 \$4,889.10 70A \$225.00 417 ground, 1#2ig yard \$198.00 \$4,953.96 1 1/2" \$6.45 \$2,689.65 100A	Geder length er wire in ft Conductor Price per wire of wire Total price of wire Conduit LF Price LF Total conduit Dreaker Circuit Dreaker Price each Transformer each 395 ground, 1#2ig 4#2, 1#2 \$198.00 \$4,692.60 1 1/2" \$6.45 \$2,547.75 100A \$281.00 n/a 224 ground, 1#2ig 4#2, 1#2 \$198.00 \$2,661.12 1 1/2" \$6.45 \$1,444.80 100A \$281.00 n/a 542 ground, 1#2ig 4#2, 1#2 \$198.00 \$6,438.96 1 1/2" \$6.45 \$3,495.90 100A \$281.00 n/a 934 ground, 1#2ig 5 \$198.00 \$11,095.92 1 1/2" \$6.45 \$6,024.30 100A \$281.00 n/a 4#2, 1#2 870 ground, 1#2ig 5 \$198.00 \$10,335.60 1 1/2" \$6.45 \$5,611.50 100A \$281.00 n/a 758 ground, 1#2ig 5 \$113.00 \$5,139.24 1 1/2" \$6.45 \$4,889.10 70A \$225.00 n/a 417 ground, 1#2ig	Price Pric	Conductor Price per wire Total price of wire LF Price Total conduit LF Price Total conduit Price CIF C

Redesign Equipment for DP-EC													
Panelboard	Feeder length per wire in ft	Conductor	Price per wire LF	Total price of wire	Conduit	Price LF	Total conduit price	Circuit breaker	Price each	Transformer	Price each	Distribution Board	Price
EC-CA	395	4#8, 1#8 ground, 1#8ig 4#8, 1#8	\$84.00	\$1,990.80	1"	\$3.97	\$1,568.15	40A	\$181.00	45 KVA	\$3,575.00	n/a	n/a
EC-1A	224	ground, 1#8ig 4#8, 1#8	\$84.00	\$1,128.96	1"	\$3.97	\$889.28	40A	\$181.00	45 KVA	\$3,575.00	n/a	n/a
EC-1B	542	ground, 1#8ig 4#8, 1#8	\$84.00	\$2,731.68	1"	\$3.97	\$2,151.74	40A	\$181.00	45 KVA	\$3,575.00	n/a	n/a
EC-1C	934	ground, 1#8ig 4#8, 1#8	\$84.00	\$4,707.36	1"	\$3.97	\$3,707.98	40A	\$181.00	45 KVA	\$3,575.00	n/a	n/a
EC-1D	870	ground, 1#8ig 4#10, 1#10	\$84.00	\$4,384.80	1"	\$3.97	\$3,453.90	40A	\$181.00	45 KVA	\$3,575.00	n/a	n/a
EC-1D1	758	ground, 1#10ig 4#8, 1#8	\$62.00	\$2,819.76	3/4"	\$2.86	\$2,167.88	30A	\$181.00	30 KVA	\$3,075.00	n/a	n/a
EC-2A	417	ground, 1#8ig 4#8, 1#8	\$84.00	\$2,101.68	1"	\$3.97	\$1,655.49	40A	\$181.00	45 KVA	\$3,575.00	n/a	n/a
EC-2B	546	ground, 1#8ig	\$84.00	\$2,751.84	1"	\$3.97	\$2,167.62	40A	\$181.00	45 KVA	\$3,575.00	n/a 480/208	n/a
												3p, 4w, 400A	\$2,475.00
Subtotals				\$22,616.88	•		\$17,762.04		\$1,448.00		\$28,100.00		\$2,475.00
												Total Price	\$72,401.92

Total Cost of Systems										
	Existing System	Redesign								
Conductor	\$95,518.08	\$41,289.63								
Conduit	\$53,041.10	\$30,345.17								
Circuit breakers	\$4,778.00	\$2,759.00								
Transformers	\$26,000.00	\$54,500.00								
Resized distribution panel EC	\$3,225.00	\$2,475.00								
Total Cost	\$182,562.18	\$131,368.80								