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INFRASTRUCTURE COSTS COVERED IN THE DC CALCULATION

Niagara Region

Service: Services Related to a Highway - Roads

						Less:					Less:	Potent	ial DC Recovera	able Cost
Prj .No	Increased Service Needs Attributable to Anticipated Development 2017-2041	Corridor	Section	Timing (year)	Gross Capital Cost Estimate (2017\$)	Prior Funding	Adjusted Gross Capital Cost Estimate (2017\$)	Post Period Benefit	Net Capital Cost	Benefit to Existing Development	Grants, Subsidies and Other Contributions Attributable to New Development	Total	Residential Share 76%	Non-Residential Share 24%
lready	Constructed													
aready		Fourth Ave	Third St to Vancsickle		2,669,751		2,669,751	T	2,669,751			2.669.751	2.029.011	640.740
		Thorold Stone Rd	Stanley Ave to Victoria		2,173,491		2,173,491		2,173,491			2,173,491	1.651.853	
		Old Hwy 20	Station St to Hwy 406		3.805.169		3.805.169		3.805.169			3.805.169	2.891.929	
		Woodlawn Rd	Gram Rd to Rice Rd.		1,150,930		1,150,930		1,150,930			1,150,930	874,707	276,223
		Hwy 406	New Interchange at First/Third		172,953		172,953		172,953			172,953	131,445	41,509
Sub-tota	Already Constructed				<mark>9,972,296</mark>		<mark>9,972,296</mark>	-	<mark>9,972,296</mark>	-	-	9,972,296	7,578,945	5 2,393,351
Projects	in Capital Budget													
		Casablanca Blvd	QEW to Livingston Ave	2017-2021	7.448.000	850.000	6.598.000	-	6.598.000	989.700	-	5.608.300	4.262.308	1,345,992
		East Main St	Hwy 140 to Moyer Rd	2022-2031	2,970,000	-	2,970,000	-	2,970,000	445,500	-	2,524,500	1,918,620	
3	New Road & Capacity Improvement	Merritt Rd	Rice Rd to Niagara St & Niagara St to Hwy 406	2017-2021	8,610,000	-	8,610,000	-	8,610,000	1,291,500	-	7,318,500	5,562,060	1,756,440
4	Capacity Improvement	Martindale Rd	QEW to Vansickle Rd, Vansickle Rd to Fourth Ave & Bridge widening over Hwy 406	2017-2021	31,461,000	3,210,000	28,251,000	-	28,251,000	3,922,650	2,100,000	22,228,350	16,893,546	5,334,804
5	Capacity Improvement	McLeod Rd	Phone 1 Montroce Rd Bin Oak Dr	2017-2021	14,392,000	9,650,000	4,742,000	-	4,742,000	711,300	-	4,030,700	3,063,332	967,368
6	Capacity Improvement	McLeod Rd	Phase 2 - Hydro Canal to Wilson Cr	2017-2021	4,312,000	350,000	3,962,000	-	3,962,000	564,300	200,000	3,197,700	2,430,252	2 767,448
7	Capacity Improvement	McLeod Rd	Phase 3 - Wilson Cr to Stanley Ave	2022-2031	3,640,000	-	3,640,000	-	3,640,000	501,000	300,000	2,839,000	2,157,640	681,360
8	Capacity Improvement	Rice Rd	. , .	2017-2021	9,828,000	900,000	8,928,000	-	8,928,000	1,264,200	500,000	7,163,800	5,444,488	1,719,312
9	Capacity Improvement	Rice Rd	Merritt Rd to Quaker Rd & Quaker Rd to Thorold Rd	2017-2021	16,200,000	-	16,200,000	-	16,200,000	2,430,000	-	13,770,000	10,465,200	3,304,800
10	Capacity Improvement	Niagara Stone Rd	Concession 6 Rd to Line 2 Rd & Penner St (Line 1 Rd) to East and West Line	2017-2021	12,528,000	1,600,000	10,928,000	-	10,928,000	1,526,700	750,000	8,651,300	6,574,988	2,076,312
11	Capacity Improvement	Collier Rd	Hwy 58 to Beaverdams Rd	2022-2031	5,616,000	-	5,616,000	-	5,616,000	842,400	-	4,773,600	3,627,936	1,145,664
12	New Road	Thorold Stone Rd	Extension east of Stanley Ave to Gale Centre	2017-2021	11,088,000	8,300,000	2,788,000	-	2,788,000	418,200	-	2,369,800	1,801,048	568,752
13	New Road	Thorold Stone Rd	Phase 2 - Gale Centre to Victoria Ave	2022-2031	11,200,000	-	11,200,000	-	11,200,000	1,680,000	-	9,520,000	7,235,200	2,284,800
14	Capacity Improvement	Glendale Ave	Interchange at QEW (1/3 contribution)	2022-2031	3,333,000	1,000,000	2,333,000	-	2,333,000	349,950	-	1,983,050	1,507,118	475,932
15	Capacity improvement	Montrose Road	Charnwood to McLeod	2017-2021	1,904,000	-	1,904,000	-	1,904,000	285,600	-	1,618,400	1,229,984	388,416
16	Highway Improvement	Hwy 406 Interchange	At Third Ave Louth (1/3 contribution)	2022-2031	13,333,000	1,450,000	11,883,000	-	11,883,000	1,782,450	-	10,100,550	7,676,418	3 2,424,132
17	New Road	Livingston Ave	Main St to Casablanca Blvd	2022-2031	8,456,000	250,000	8,206,000	-	8,206,000	1,200,900	200,000	6,805,100	5,171,876	1,633,224
18	New Road	South Niagara East-West Arterial	South Niagara East-West Arterial (1/3 contribution)	2022-2031	16,275,000	500,000	15,775,000	-	15,775,000	2,366,250	-	13,408,750	10,190,650	3,218,100
19		Canadian Motor Speedway Infrastructure Improvements		2017-2021	2,625,000	-	2,625,000	-	2,625,000	393,750	-	2,231,250	1,695,750	535,500
Subtotal	- Projects in Capital Budget	÷			185,219,000	28,060,000	157,159,000	-	157,159,000	22,966,350	4,050,000	130,142,650	98,908,414	31,234,236

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INFRASTRUCTURE COSTS COVERED IN THE DC CALCULATION

SERVICE:

Water - Growth Related Component of Works Previously Completed

Region of Niagara

				1			Less:		Potential	le Cost	
Prj. No.	System	n Type Description Tim		Timing	Gross Capital Cost Est. (2017 \$)	Benefit to Existing Development		Post Period Benefit	Net Costs Benefiting New Development	Residential Share	Non- Residential Share
						\$	%	\$			
			Already Constructed								
ZCW0405		Recovery of PPC	New Watermains Decew System	<2012	1,424,375	-		-	1,424,375		
	Decew Falls	Recovery of PPC	DeCew WTP Phase 3 Upgrade	<2008	196,320	-		-	196,320		
ZCW0405	Decew Falls	Recovery of PPC	Loop trunk system from Eastchester to Roehampton (1.3	<2012	105,509	-		-	105,509		
ZCW0205	Decew Falls(# 11)	Recovery of PPC	Consolidated Storage in Vineland	<2008	799,177	-		-	799,177		
	Decew Falls	Recovery of PPC	Decew Falls WTP Upgrade	<2004	165,587			-	165,587		
	Decew Falls	Recovery of PPC	Water Supply Reinforcement, Niagara Falls/NOTL	<2004	131,908			-	131,908	Residential Share Reside Share 24,375	
	Subtotal				2,822,877				2,822,877	1,745,229	1,077,648
ZCW0504	Fort Erie (#12, 13, 14)	Recovery of PPC	Eagle Street Watermain - From Stevensville to Bridge/Pettit	<2012	1,986,388	-		-	1,986,388		
	Fort Erie	Recovery of PPC	Treated Water Reservoir in Stevensville	<2004	954,230			-	954,230		
	Fort Erie	Recovery of PPC	Trunk Watermain - Barnard St. from Dominion to Garrison	<2004	404,145			-	404,145		
	Fort Erie	Recovery of PPC	10 ML/d expansion to the water plant and upgrades	<2004	352,724			-	352,724		
	Subtotal				3,697,486				3,697,486	2,497,780	1,199,706
	Grimsby (# 7)	Recovery of PPC	London Road Booster Station and reservoir	<2008	4,417,509	-		-	4,417,509		
ZCW0303	Grimsby (#9)	Recovery of PPC	Watermain from Park Road Booster Station to new London	<2008	3,589,702	-		-	3,589,702		
	Grimsby	Recovery of PPC	Grimsby WTP Expansion	<2004	1,403,280			-	1,403,280		
	Subtotal				9,410,491				9,410,491	6,999,606	2,410,885
ZCW9504	Niagara Falls (#7)	Recovery of PPC	Niagara Falls WTP Upgrade and reservoir expansion	<2008	208.151	-		-	208.151		
	Niagara Falls	Recovery of PPC	Water Supply Reinforcement, Niagara Falls/NOTL	<2004	131,908				131.908		
	Niagara Falls	Recovery of PPC	Trunk Watermain - St. Paul St. from Thorold Stone to	<2004	420,984			+	420,984		
	Niagara Falls	Recovery of PPC	400mm WM across Welland River at Niagara Pkwy (water	<2004	16,453						
	Niagara Falls	Recovery of PPC	400mm WM on Church's Lane from St. Paul Ave to Stanley	<2004	225,738				225,738		
	Niagara Falls	Recovery of PPC	26 ML additional system storage	<2004	428.002				428.002		
	Subtotal				1,431,235				1,431,235	976,049	455,186
	Port Colborne	Recovery of PPC	Install a 500mm x 1km watermain on King Street from the	<2012	51,218				51 040		
7010/0400	Port Colborne (# 3)	Recovery of PPC Recovery of PPC	Fielden Avenue Pumping Station	<2012	85,393	-				ļ	
	Port Colborne (# 3) Port Colborne (#1)	Recovery of PPC	Elizabeth Street watermain Killally Street East to Main	<2008	30,549	-					
	Port Colborne (#1) Port Colborne (#4)	Recovery of PPC	Fielden Reservoir expansion (10ML) in lieu of tank	<2008	165,754	-					
	Port Colborne (#4) Port Colborne (#5)	Recovery of PPC Recovery of PPC	Port Colborne WTP Upgrades	<2012	16,309	-				ļ	
2011 2021	Port Colborne (#3)	Recovery of PPC	Bell-Elizabeth Trunk Watermain (part of)	<2008	58,470	-					
	Subtotal	Recovery of PPC		<2004	407,693			-	407,693	297,808	109,885
									·		
	Welland (# 8)	Recovery of PPC	Hwy 406 and Towpath Road watermain	<2008	1,853,012	-		-	1,853,012		
ZCW0204	Welland (#1, #4)	Recovery of PPC	Welland WTP Upgrade including new inground reservoir and	<2012	136,582	-		-			
	Welland	Recovery of PPC	Welland WTP Improvement	<2004	56,131			-			
	Welland Subtotal	Recovery of PPC	400mm WM on Ridge Rd from Southworth to Moore	<2004	181,092 2,226,817			-	181,092 2,226,817	1 775 950	450,867
<u> </u>	Gabiotai				2,220,017				2,220,017	1,110,950	+00,007
		Total Estimat	ted Capital Cost		\$ 19,996,600	<mark>\$</mark> -		\$ -	\$ 19,996,600	\$ 14,292,422	\$ 5,704,178

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INFRASTRUCTURE COSTS COVERED IN THE DC CALCULATION

SEDVICE		

Wastewater - Growth Related Co

omponent of Works Previously Completed

Region of Niagara

		Less:							Potential DC Recoverable Cost				
Prj. No.	System	Туре	Description	Timing	Gross Capital Cost Est. (2017 \$)	Benefit to Existing Development		Post Period Benefit	Net Costs Benefiting New Development	Residential Share	Non-Residential Share		
						\$	%	\$					
	System	Туре	Already Constructed		1								
ZSW0716	Anger Avenue	Recovery of PPC	Anger Avenue WWTP - P2 Project	<2012	234,465	-		-	234,465	-	-		
	Anger Avenue (#5)	Recovery of PPC	Frenchman's Creek Trunk Sewer - PH2	<2012	334,113	-		-	334,113	-	-		
	Anger Avenue	Recovery of PPC	Parkway PS Replacement (Fort Erie)	<2004	928,036			-	928,036				
	Anger Subtotal				1,496,613				1,496,613	854,107 57.	642,506 4	42.9%	
ZSW0006	Baker Road	Recovery of PPC	Smithville PS Expansion (for growth in Smithville)	<2012	897.673	-		-	897,673	-	-		
	Baker Road	Recovery of PPC	Baker Road WWTP Capacity Expansion Stage 1	<2012	4,829,981	-		-	4,829,981	-	-		
	Baker Road (#1)	Recovery of PPC	Replace existing Smithville pumping station	<2008	158,525	-		-	158,525	-	-		
	Baker Road	Recovery of PPC	Smithville PS & Sewer (West Lincoln)	<2004	44,905			-	44,905				
	Baker Road	Recovery of PPC	Install Forcemain on North Service - Biggar PS to Roberts	<2004	105,411			-	105,411				
	Baker Road	Recovery of PPC	Gravity Trunk Sewer Along Ontario St. @ QEW Crossing	<2004	577,927			-	577,927				
	Baker Road Subtotal				6,614,421			-	6,614,421	4,893,099 74.	1,721,322 2	26.0%	
ZSW0721	Crystal Beach Subtotal	Recovery of PPC	Crystal Beach WWTP - P2 Project	<2012	234,465	-		-	234,465	226,335 96.	5% 8,130	3.5%	
ZSW0115	Stephensville/Douglastown	Recovery of PPC	Douglastown Forcemain	<2012	799,233	-		-	799,233				
ZSW0607	Stephensville/Douglastown	Recovery of PPC	Stevensville PS capacity upgrade	<2012	175,849	-		-	175,849				
-	Stephensville/Douglastown	Subtotal			975,082			-	975,082	596,096 61.	% 378,986 3	38.9%	
ZSW0302	Niagara Falls	Recovery of PPC	Alternative biosolids management program	<2008	749,407	-		-	749.407	-	-	=	
	Niagara Falls	Recovery of PPC	Niagara Falls WWTP - P2 project	<2012	213,832				213,832				
20110111	Niagara Falls	Recovery of PPC	HRT facility at NF High Lift Pumping Station	<2012	375,144	-		-	375,144				
ZSW9305	Niagara Falls (#2)	Recovery of PPC	Central Avenue Pumping Station and forcemain	<2008	492,745	-		-	492,745				
20110000	Niagara Falls	Recovery of PPC	Upgrade Niagara Falls WPCP	<2004	1,010,361			-	1,010,361				
	Niagara Falls	Recovery of PPC	Upgrade NF WPCP	<2004	4,319,262			-	4,319,262				
	Niagara Falls Subtotal				7,160,751			-	7,160,751	4,767,263 66.	% 2,393,488 3	33.4%	
7014/0007	-	December of DDC	Niegene en the Leke WW/TD Conseits Llegende from 5.7	<2012					1,965,999	.,,	2,000,100 0		
2510007	Niagara-on-the-Lake Niagara-on-the-Lake	Recovery of PPC Recovery of PPC	Niagara-on-the-Lake WWTP Capacity Upgrade from 5.7 NOTL Sewage Treatment Facility Upgrade	<2012	1,965,999	-		-	1,965,999				
	Niagara-on-the-Lake	Recovery of PPC	William St PS and Forcemain (NOTL)	<2004	190,846 62,867			-	62,867				
	Niagara-on-the-Lake Subto		William St FS and Forcemain (NOTE)	~ 2004	2,219,712				2,219,712	1,674,580 75.4	545,132 2	24.0%	
	Nagara-on-the-Lake Subto				2,219,712	-		-	2,219,712	1,074,500 /5.4	545,132 2	24.0%	
701/0016	Port Dalhousie	Recovery of PPC	Port Dalhousie WPCP optimization study and upgrades	<2008	317,645				317,645	-	-		
	Port Dalhousie	Recovery of PPC	Port Dalhousie WWTP - P2 Project	<2008	410,314	-		-	410,314	-	-		
25110712	Port Dalhousie	Recovery of PPC	Port Dalhousie WPCP Upgrading	<2012	110,391			_	110,391	-	-		
	Port Dalhousie Subtotal	Recovery of the		~2004	838,350			_	838,350	445,349 53.	393,001 4	46.9%	
	Fort Damousle Subtotal				030,350			-	030,350	443,343 53.	353,001 4	40.970	
	Port Weller	Recovery of PPC	Upgrade Black Horse PS	<2004	358,995				358,995				
	Port Weller	Recovery of PPC	Peel St PS	<2004	2,163,175				2,163,175				
	Port Weller Subtotal	Recovery of the		-2004	2,103,173				2,522,170	1,615,016 64.0	907,154 3	36.0%	
	i on wener oubtour				2,322,170			_	2,522,170	1,010,010 04.	507,154 5	30.078	
	Seaway	Recovery of PPC	Seaway WPCP Upgrading (Port Colborne)	<2004	855,439			-	855,439				
	Seaway	Recovery of PPC	Elm Street PS Upgrading (Port Colborne)	<2004	276,614			1 -	276,614				
	Seaway	Recovery of PPC	Industrial PS Upgrade	<2004	142,908			1 -	142,908				
	Seaway Subtotal			-2007	1,274,961	<u> </u>		-	1,274,961	931,364 73.	% 343.597 2	26.9%	
		1			.,214,001	<u> </u>		-	.,214,301	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	040,007 2	/0	
	Welland	Recovery of PPC	Sanitary Sewer Service to East Industrial Lands (Welland)	<2004	175,578			-	175,578			-+	
	Welland	Recovery of PPC	North East Welland Trunk Sewer	<2004	1,717,614			-	1,717,614			-+	
	Welland	Recovery of PPC	Dain City PS upgrade	<2004	254,058			-	254,058				
ZSW0609		Recovery of PPC	Welland WWTP - P2 Project	<2012	24,150	-		-	24,150	-	-		
ZSW9815,		Recovery of PPC	South Thorold PS, forcemains, sewers	<2008	11,213,742	-		-	11,213,742	-	-		
	Welland Subtotal	,	, ,		13,385,143		1	1	13,385,143	10,675,416 79.		20.2%	
	Grand Total				36,721,668	_	1		36,721,668	26,678,625	10.043.043		

Watson & Associates Economists Ltd.

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