## Attachment 1

## 2007-2008 Capital Works Programme Details of Expected Changes

## **Savings**

Te Marua WTP Replace Equipment	Projects where scope has been reduced	December					
Upgrade Distribution System for future demand TMPS hydro generation         45,000         0           TMPS hydro generation         30,000         40,000           Minor Work         4,000         0           Hazard Protection         57,000         49,500           Projects deferred         \$\$ Total \$\$ \$\$ \$\$ Total \$\$\$           CBD Reservoir         90,000         0           Waterloo WTP PF Correction         55,000           Detailed investigation of preferred source         100,000         118,000           Projects delayed to be re-budgeted         \$\$ Total \$\$ \$\$ \$\$ Total \$\$\$           Emergency PS Whitehead Road (Birdwood St pipeline)         182,000         207,000           Replace air valves on Kaitoke - Karori main         100,000         207,000           CBD Reservoir         \$\$ Total \$\$ \$\$ \$\$ Total \$\$           Projects where costs are expected to be reduced         \$\$ Total \$\$\$         \$\$ Total \$\$\$           Projects where costs are expected to be reduced         \$\$ Total \$\$\$ \$\$ \$\$ Total \$\$\$         \$\$ Total \$\$\$           Projects where costs are expected to be reduced         \$\$ \$\$ Total \$\$\$         \$\$ \$\$ Total \$\$\$           Sentinel Wells Petone Foreshore         \$0,000         30,000           Te Marua WTP Security Upgrade         30,000         30,000           Wairui WT	Waterloo WTP Replace Equipment Wainui WTP Replace Equipment Gear Island WTP Replace Equipment	50,000 70,000 30,000	Total \$s	80,000 2,000 40,000	Total \$s		
Telemetry System Renewal   30,000   40,000   Minor Work   4,000   0   0   0   0   0   0   0   0   0							
Minor Work         4,000 b         49,500 d         49,500 d         364,500           Projects deferred           \$ Total \$\$ \$\$ Total \$\$ \$\$ Total \$\$\$           CBD Reservoir         \$0,000         0         0           Waterloo WTP PF Correction         55,000         118,000         1173,000           Detailed investigation of preferred source         100,000         118,000         1773,000           Projects delayed to be re-budgeted         \$\$ Total \$\$\$ \$\$ Total \$\$\$         \$\$ Total \$\$\$           Emergency PS Whitehead Road (Birdwood St pipeline)         182,000         207,000         407,000           Replace air valves on Kaitoke - Karori main         100,000         100,000         407,000           Projects where costs are expected to be reduced         \$\$ Total \$\$\$         \$\$ Total \$\$\$         \$\$ Total \$\$\$           Sentinel Wells Petone Foreshore         30,000         30,000         407,000           Projects where costs are expected to be reduced         \$\$ Total \$\$\$         \$\$ Total \$\$\$         \$\$ Total \$\$\$         \$\$         \$\$ Total \$\$\$         \$\$         \$\$         \$\$         \$\$         \$\$         \$\$         \$\$         \$\$         \$\$         \$\$         \$\$         \$\$				_			
Hazard Protection				_			
Projects deferred           CBD Reservoir         90,000         0         0           Waterloo WTP PF Correction Detailed investigation of preferred source         100,000         118,000         173,000           Projects delayed to be re-budgeted           Emergency PS Whitehead Road (Birdwood St pipeline)         182,000         207,000         182,000         207,000         407,000         407,000         407,000         407,000         407,000         182,000         407,000         407,000         407,000         182,000         407,000         407,000         407,000         182,000         407,000         40,000         407,000         407,000         407,000         407,000         407,000         407,000         407,000         407,000         407,000         407,000         407,000         407,000         407,000         407,000         407,000		•		_			
Projects deferred         \$s         Total \$s         \$s         Total \$s           CBD Reservoir         90,000         0         0           Waterloo WTP PF Correction         55,000         118,000           Detailed investigation of preferred source         100,000         190,000         173,000           Projects delayed to be re-budgeted           Emergency PS Whitehead Road (Birdwood St pipeline)         182,000         207,000         207,000           Replace air valves on Kaitoke - Karori main         100,000         207,000         407,000           CBD Reservoir         182,000         407,000         407,000           Projects where costs are expected to be reduced         5         Total \$s         5           Total \$s         \$s         Total \$s         5           Sentinel Wells Petone Foreshore         30,000         26,000         26,000           Te Marua WTP Security Upgrade         30,000         30,000         30,000           Te Marua Sodium Hypochlorite generation         35,000         35,000           Waterloo WTP PF Correction         40,000         0           Wainui WTP Filter to Waste         45,000         50,000           Wainui WTP W	Hazard Protection	57,000	475 000	49,500	364 500		
Section   Sect		_	473,000	-	304,500		
Section   Sect	Projects deferred						
CBD Reservoir   90,000   55,000   Detailed investigation of preferred source   100,000   118,000   118,000   173,0	Trojecto deferred	\$s	Total \$s	\$s	Total \$s		
Detailed investigation of preferred source   100,000   190,000   173,000   173,000   173,000   173,000   190,000   173,000   190,000   173,000   173,000   190,000   182,000   100,000	CBD Reservoir	•			7		
Projects delayed to be re-budgeted         \$ Total \$\$         \$ Total \$\$         \$ Total \$\$           Emergency PS Whitehead Road (Birdwood St pipeline)         182,000         207,000         207,000         207,000         207,000         4	Waterloo WTP PF Correction			55,000			
Projects delayed to be re-budgeted   \$\$ Total \$\$ \$\$ Total \$\$ \$\$ Emergency PS Whitehead Road (Birdwood St pipeline)   182,000   100,000	Detailed investigation of preferred source	100,000		118,000			
Semergency PS Whitehead Road (Birdwood St pipeline)   182,000   207,000   100,000   100,000   100,000   100,000   100,000   182,000   100,000		-	190,000	-	173,000		
Semergency PS Whitehead Road (Birdwood St pipeline)   182,000   207,000   100,000   100,000   100,000   100,000   100,000   182,000   100,000							
Emergency PS Whitehead Road (Birdwood St pipeline)	Projects delayed to be re-budgeted	_					
Replace air valves on Kaitoke - Karori main       100,000       407,000         CBD Reservoir       100,000       407,000         Projects where costs are expected to be reduced         \$s       Total \$s       \$s       Total \$s         Sentinel Wells Petone Foreshore       30,000       26,000       26,000         Te Marua WTP Security Upgrade       30,000       30,000       35,000         Te Marua Sodium Hypochlorite generation       35,000       35,000       0         Waterloo WTP PF Correction       40,000       0       0         Wainui Centrate Sewer       2,000       3,000       0         Wainui WTP Filter to Waste       45,000       50,000         Wainui WTP Low Flow Operation       29,000       29,000         Wainui WTP Waste lime recovery       20,000       20,000         Wainui WTP Float off handling modifications       20,000       15,000         Monitoring Wells Waiwhetu aquifer (upstream)       20,000       50,000         TM Fault movement mitigation       50,000       301,000       313,000         Wainui WTP DAF recycle VSDs       301,000       313,000		•	Total \$s		Total \$s		
CBD Reservoir         100,000         407,000           Projects where costs are expected to be reduced           \$s Total \$s         \$s Total \$s           Sentinel Wells Petone Foreshore         30,000         26,000           Te Marua WTP Security Upgrade         30,000         30,000         35,000           Te Marua Sodium Hypochlorite generation         35,000         35,000         35,000         9         30,000         0         Waterloo WTP PF Correction         40,000         0         0         Wainui WTP Filter to Waste         45,000         50,000         Wainui WTP Low Flow Operation         29,000         29,000         29,000         Wainui WTP Waste lime recovery         20,000         20,000         Marianui WTP Float off handling modifications         20,000         15,000         Marianui WTP Baut movement mitigation         50,000         50,000         50,000         50,000         Marianui WTP Baut movement mitigation         50,000         301,000 <t< td=""><td></td><td>182,000</td><td></td><td></td><td></td></t<>		182,000					
Projects where costs are expected to be reduced   Ss   Total \$\$   Sentinel Wells Petone Foreshore   30,000   26,000   30,000	·						
Projects where costs are expected to be reduced  \$\$ Total \$\$\$  Sentinel Wells Petone Foreshore 30,000 26,000  Te Marua WTP Security Upgrade 30,000 30,000  Te Marua Sodium Hypochlorite generation 35,000 35,000  Waterloo WTP PF Correction 40,000 0  Wainui Centrate Sewer 2,000 3,000  Wainui WTP Filter to Waste 45,000 50,000  Wainui WTP Low Flow Operation 29,000 29,000  Wainui WTP Waste lime recovery 20,000 20,000  Wainui WTP Float off handling modifications 20,000  Monitoring Wells Waiwhetu aquifer (upstream) 50,000  TM Fault movement mitigation 50,000  Wainui WTP DAF recycle VSDs  301,000 313,000	CDD Keselvoli		182 000	100,000	407 000		
Sentinel Wells Petone Foreshore         30,000         26,000           Te Marua WTP Security Upgrade         30,000         30,000           Te Marua Sodium Hypochlorite generation         35,000         35,000           Waterloo WTP PF Correction         40,000         0           Wainui Centrate Sewer         2,000         3,000           Wainui WTP Filter to Waste         45,000         50,000           Wainui WTP Low Flow Operation         29,000         29,000           Wainui WTP Waste lime recovery         20,000         20,000           Wainui WTP Float off handling modifications         20,000         15,000           Monitoring Wells Waiwhetu aquifer (upstream)         50,000         50,000           TM Fault movement mitigation         50,000         35,000           Wainui WTP DAF recycle VSDs         301,000         313,000		_	102,000	-	107,000		
Sentinel Wells Petone Foreshore         30,000         26,000           Te Marua WTP Security Upgrade         30,000         30,000           Te Marua Sodium Hypochlorite generation         35,000         35,000           Waterloo WTP PF Correction         40,000         0           Wainui Centrate Sewer         2,000         3,000           Wainui WTP Filter to Waste         45,000         50,000           Wainui WTP Low Flow Operation         29,000         29,000           Wainui WTP Waste lime recovery         20,000         20,000           Wainui WTP Float off handling modifications         20,000         15,000           Monitoring Wells Waiwhetu aquifer (upstream)         50,000         50,000           TM Fault movement mitigation         50,000         35,000           Wainui WTP DAF recycle VSDs         301,000         313,000	Projects where costs are expected to be reduced						
Te Marua WTP Security Upgrade       30,000       30,000         Te Marua Sodium Hypochlorite generation       35,000       35,000         Waterloo WTP PF Correction       40,000       0         Wainui Centrate Sewer       2,000       3,000         Wainui WTP Filter to Waste       45,000       50,000         Wainui WTP Low Flow Operation       29,000       29,000         Wainui WTP Waste lime recovery       20,000       20,000         Wainui WTP Float off handling modifications       20,000       15,000         Monitoring Wells Waiwhetu aquifer (upstream)       50,000       50,000         TM Fault movement mitigation       50,000       35,000         Wainui WTP DAF recycle VSDs       301,000       313,000	.,		Total \$s	\$s	Total \$s		
Te Marua Sodium Hypochlorite generation       35,000       35,000         Waterloo WTP PF Correction       40,000       0         Wainui Centrate Sewer       2,000       3,000         Wainui WTP Filter to Waste       45,000       50,000         Wainui WTP Low Flow Operation       29,000       29,000         Wainui WTP Waste lime recovery       20,000       20,000         Wainui WTP Float off handling modifications       20,000       15,000         Monitoring Wells Waiwhetu aquifer (upstream)       20,000       50,000         TM Fault movement mitigation       50,000       50,000         Wainui WTP DAF recycle VSDs       301,000       313,000	Sentinel Wells Petone Foreshore	30,000		26,000			
Waterloo WTP PF Correction       40,000       0         Wainui Centrate Sewer       2,000       3,000         Wainui WTP Filter to Waste       45,000       50,000         Wainui WTP Low Flow Operation       29,000       29,000         Wainui WTP Waste lime recovery       20,000       20,000         Wainui WTP Float off handling modifications       20,000       15,000         Monitoring Wells Waiwhetu aquifer (upstream)       20,000       50,000         TM Fault movement mitigation       50,000       50,000         Wainui WTP DAF recycle VSDs       301,000       313,000		30,000					
Wainui Centrate Sewer       2,000       3,000         Wainui WTP Filter to Waste       45,000       50,000         Wainui WTP Low Flow Operation       29,000       29,000         Wainui WTP Waste lime recovery       20,000       20,000         Wainui WTP Float off handling modifications       20,000       15,000         Monitoring Wells Waiwhetu aquifer (upstream)       20,000       50,000         TM Fault movement mitigation       50,000       50,000         Wainui WTP DAF recycle VSDs       35,000       313,000	· · · · · · · · · · · · · · · · · · ·	•					
Wainui WTP Filter to Waste       45,000       50,000         Wainui WTP Low Flow Operation       29,000       29,000         Wainui WTP Waste lime recovery       20,000       20,000         Wainui WTP Float off handling modifications       20,000       15,000         Monitoring Wells Waiwhetu aquifer (upstream)       20,000       50,000         TM Fault movement mitigation       50,000       50,000         Wainui WTP DAF recycle VSDs       301,000       313,000				_			
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Wainui WTP Waste lime recovery       20,000       20,000         Wainui WTP Float off handling modifications       20,000       15,000         Monitoring Wells Waiwhetu aquifer (upstream)       20,000         TM Fault movement mitigation       50,000       50,000         Wainui WTP DAF recycle VSDs       35,000         301,000       313,000							
Wainui WTP Float off handling modifications 20,000 15,000  Monitoring Wells Waiwhetu aquifer (upstream) 20,000  TM Fault movement mitigation 50,000  Wainui WTP DAF recycle VSDs 35,000  301,000 313,000	•						
Monitoring Wells Waiwhetu aquifer (upstream)  TM Fault movement mitigation  Wainui WTP DAF recycle VSDs  50,000  301,000  313,000							
TM Fault movement mitigation       50,000       50,000         Wainui WTP DAF recycle VSDs       35,000         301,000       313,000		20,000					
Wainui WTP DAF recycle VSDs       35,000         301,000       313,000		50,000					
		,					
Total Expected Savings <u>1,148,000</u> <u>1,257,500</u>		_					
	Total Expected Savings	=	1,148,000	=	1,257,500		

## **Additional Costs**

Projects where scope has increased	Decembe	r forecast	March	forecast
	\$s	Total \$s	\$s	Total \$s
Valve Replacements 2007/2008	10,000		17,000	
Meter Replacement/Additions	19,000		19,000	
Control System Upgrade	60,434		65,505	
Minor Work			168,825	
	-	89,434	_	270,330
		_		
Projects where additional costs are expected				
	\$s	Total \$s	\$s	Total \$s
Te Marua WTP Replace DCS Control System	20,000		260,000	
Waterloo WTP Lime System Upgrade	49,000		49,000	
Emergency supply points	31,292		34,549	
Waterloo WTP Diesel pump and bowser			25,000	
		100,292		368,549
	-	100,292	-	300,349
Completion of 2006/2007 projects		66,603		85,155
Completion of 2000/2007 projects	-	00,000	-	00,100
Total Additional Costs		256,329	_	724,034
		_	_	_
Summary				
Total 2007/08 project savings		1,148,000		1,257,500
Total 2007/08 additional costs	<u>.</u>	256,329	_	724,034
Total 2007/08 net savings	<u>-</u>	891,671	_	533,466
	•		_	
Funding to be re-budgeted		182,000		407,000
Net saving against 20007/08 capital works budget		709,671		126,466