

WAITOHU FLOOD HAZARD ASSESSMENT : TASK SCHEDULE, COST ESTIMATE AND PROGRAMME

ITEM	COST ESTIMATE	PROGRAMME																							
		2002/2003												2003/2004											
		Aug-02	Sep-02	Oct-02	Nov-02	Dec-02	Jan-03	Feb-03	Mar-03	Apr-03	May-03	Jun-03	Jul-03	Aug-03	Sep-03	Oct-03	Nov-03	Dec-03	Jan-04	Feb-04	Mar-04	Apr-04	May-04	Jun-04	
Project Management																									
Scope Project	\$7,606																								
Ongoing	\$4,384																								
Total	\$11,990																								
Cross-section survey																									
Prepare brief and manage contract	\$2,216																								
Liaise with landowners	\$1,080																								
Clear sight lines	\$2,820																								
Survey	\$11,000																								
Establish permanent markers	\$2,080																								
Detailed survey of gravel beach	\$1,160																								
Total	\$20,356																								
Hydraulics																									
Manage	\$896																								
Data review and collation	\$1,736																								
Extra survey as required	\$420																								
Reconfigure model	\$2,792																								
Bridge modelling	\$1,696																								
Calibration	\$848																								
Design runs	\$1,048																								
Mapping	\$2,038																								
Reporting	\$2,116																								
Total	\$13,590																								
Hydrology																									
Management	\$896																								
Frequency analysis of Waitohu site	\$780																								
Revise Waitohu frequency in light of regional data	\$260																								
Prepare & run rainfall-runoff model	\$2,080																								
Prepare report	\$780																								
Total	\$4,796																								
Sedimentation and River Morphology																									
Manage Project	\$448																								
Collate extraction records (included in "history")	\$0																								
Sediment budget	\$848																								
Overlay and compare river alignments	\$1,108																								
Assess river alignment changes	\$5,632																								
Review files for erosion complaints, map (included in "history")	\$0																								
Identify land at risk, define erosion hazard zone	\$4,164																								
Report	\$3,280																								
Total	\$15,480																								
Land ownership																									
Prepare maps	\$490																								
Total	\$490																								
History of stream management and flood events																									
Search records	\$6,636																								
Summarise and map	\$5,360																								
Total	\$11,996																								
Damages																									
Manage Project	\$224																								
Collate historical damages/losses (included in "history")	\$0																								
Identify and map land uses	\$920																								
Prepare damages model	\$1,696																								
Calibrate damages model	\$848																								
Run model for design scenarios	\$624																								
Report	\$1,096																								
Total	\$5,408																								
Community aspirations/Environmental Issues																									
Manage Project	\$698																								
Prelim. discussions with various agencies etc	\$4,488																								
Review relevant plans and identify links	\$1,048																								
Review baseline studies & determine outstanding issues	\$1,198																								
Review Otaki/Waikanae env. investigations briefs	\$150																								
Questionnaire	\$1,696																								
Scope & prepare the preliminary issues report	\$5,200																								
Consult community	\$3,844																								
Amend issues report, add any social aspects	\$900																								
Total	\$19,222																								
Summary Report																									
Prepare	\$5,800																								
Present	\$948																								
Total	\$6,748																								
Subtotal	\$110,076																								
Contingency	\$10,000																								
TOTAL	\$120,076																								