

RJ Hall MIPENZ
Civil and Environmental Consulting Ltd

21 June 2007

Robson Garland Ltd

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Attention: Mike Garland

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Dear Mike

Re: Beattie : Hamner Springs

I can confirm that John Beatties proposed extension of the Argelin Road Development Stopbank on the true left bank of the Chatterton River upstream of Woodbank Road will provide protection to the area he intends to be included in the Residential Urban Management Area (as shown on your plan attached to letter 28 May 2007) to a 1 in 500 year standard provided it is constructed in accordance with the design requirements specified in resource consent CRC 030532. Please note that that consent made provision for the Beattie extension so no further land use consents are required in respect of the proposed extension from Environment Canterbury.

Please note also that the extension will have the effect of providing protection to both the low berm area on which the extension is to be founded and to higher terrace land adjoining the berm area and lying eastward of it. In times of heavy and prolonged rainfall and particularly when the Chatterton River is in high flood, seepage inflow and runoff surface water must be anticipated to accumulate in the low berm area between the stopbank per se and the higher terrace land adjacent to it as described above. If building works for dwellings are to encroach into this area then clearly provision will need to be made to ensure floor levels are elevated to avoid such water entering these dwellings under these conditions and that any building platforms constructed for that purpose do not prevent the down plain movement of such water as it passes

over this land. It is common practice today to provide a set back behind stopbanks in order to minimize the risk of damage when stopbanks fail under flood conditions and also to ensure access is available if needed for stopbank repair. I would recommend in this particular case that a 10m minimum setback should be observed measured from the stopbank toe on the landward side of the stopbank. No building work including the construction of building platforms should encroach into this setback zone.

Alternatively restricted discretionary status would ensure that the Council is able to control the potential effects of the emergent of seepage water on building work and of building work on the down plane movement of surface water of the kind described above and could also control floor levels of buildings.

I trust that this statement is satisfactory for your immediate needs. If you require more or for example clarification please feel free to contact me at your earliest convenience. Thank you.

Yours faithfully



R.J.Hall

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