Change to Proposal	Application As Notified	Updated Application
Land Disturbance	Pond volumes: Coley Pond - 9,000m^3 Pond 2 – 2,200m^3 Pond 3 – 5,000m^3 Pond 4 – 1,500m^3 ESCPs provided.	Pond volumes: Coley Pond – 13,430m^3 Pond 2 – no longer required Pond 3 – 12,500m^3 Pond 4 – 5,700m^3 Updated ESCP provided.
Ponds to be constructed	Coley Pond now. Ponds 2, 3 and 4 at a later stage as not required to attenuate peak.	Coley Pond, and Ponds 3 and 4 all required to be constructed to attenuate peak.
Catchment area	131 hectares	168 hectares. Applicant advises no change to catchment area and increase is due to more accurate modelling.
Area contributing to piped network	62 hectares	75 hectares. Applicant advises increase due to more accurate mapping and including of land that currently drains to the tributary via overland and other flow paths.
Peak Flows	Pre-development – 2.23m^3/s Post-development – 2.94m^3 Post Coley Pond – 0.87m^3/s	Pre-development – 3.4m^3/s Post development – 8.25m^3/s Post development Coley Pond – 4.2m^3/s Post development pond 4 – 3.3m^3/s
Volume of stormwater	3,700m^3 in a 100 year event	76,000m^3 in a 100 year event
Attenuation of peak flow	Achieved at discharge from Coley Pond	Achieved at discharge from Pond 4 (subject to detailed design of outlet from pond 4). Increase in velocity between Coley Pond to Pond 4 by 5-7% in a 2 and 5 year flood event, and less than 5% in 10-100 year events. Change in depth of flooding in this reach by less than 6cm. Flood waters considered to be contained in channel. Potential for additional erosion effects given increase in time of peak flows. Conditions proposed to manage erosion (if required). NZTA culvert at SH57 considered a location for potential erosion.
Downstream flows	Application did not include a comprehensive assessment of flooding downstream at the confluence of the Koputaroa with the Manawatu. Depth of water from stormwater contribution	Updated application has assessed the potential downstream flooding effects based off a maximum area of 2,000 hectares at risk of flooding in general due to land levels below existing stop bank levels. Application has assessed anticipated flood depths of entire volume over varying areas as:

	considered negligible compared to flooding from wider catchment given the total volume to be discharged and the conservatism included in the modelling.	

Estimated Flooded Area	Incremental Flood Depth 100-yr ARI (mm)
50 ha	154
100 ha	77
200 ha	38
300 ha	26
400 ha	19
500 ha	15
1000 ha	8
2000 ha	4