

DUCK CREEK NORTH HEARING

Thursday 7 April 2016

Helen Smith Room, Pataka, Porirua

Commissioners: McArthur, Sweetman, Mark-Brown, Paine

Thursday Appearances

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9.25AM HEARING RECONVENES

Sweetman Housekeeping. No matters to raise.

9.00AM PCC: PHILLIP RHODES - MANAGER LAND USE AND SUBDIVISION ENGINEERING

Jones Issues raised by submitters (Mr Johnstone) - road design standards, stormwater design and treatments.

Rhodes PCC take approach that roads be fit for purpose, no more than necessary. Refers to Table from Code of Urban Subdivision. 11m carriageway= two lanes + two parking lanes - provides many more times onstreet parking than necessary. Brookside philosophy is 2 lanes for moving traffic and parking as needed. 7m carriageway allows bit of room for cycling. Parking is one bay per front lot. Not strict compliance with table but complies with intent.

6m carriageways - refers to standard that allows up to 200 houses off 6m carriageway.

Mark-Brown Road 1 with 7m carriageway - overall proposed legal width of road reserve?

Rhodes Width of about 16m? Start with 2 lanes, berm wide enough for trees, footpath and offstreet parking. End up with a width but does not matter exactly as long as fits elements.

McArthur Parking widths - amount of road surface? What are reasons for reducing that?

Rhodes Traffic calming. Narrower road slows vehicle speeds. Asset managers have to look after roads so financial implications. This site linear, elongated, so road customised for good lot and good road development.

Sweetman Similar developments within wider Porirua/Whitby?

Rhodes Aotea - widest road 7m for collector road. 6m is minimum width for minor roads. Don't build roads wider than that. Banks subdivision main road 9m carriageway, others 6-7m.

Sweetman All required resource consents?

Rhodes Taken into account in consent assessment. Work with developers at design stage to reach optimum solution.

Sweetman Table from Code of Urban Subdivision? Date of code?

Rhodes 2010

Sweetman NZS454?

Rhodes 2014

Sweetman Why reference NZS454?

Rhodes Code is guide as much as 454 is a guide.

Sweetman Strict District Plan requirements?

Rhodes Code is duplication of Part H of District Plan.

Sweetman Traffic matters - any further advice for safety, impact of traffic movements from James Cook Drive?

Marshall Right-turn bay condition. Easy to do - change road markings. For traffic turning right into subdivision from James Cook Drive. James Cook Drive wide enough to allow this.

Sweetman Submitters concerns about onstreet parking on James Cook Drive - would right-turn bay impact that?

Marshall No. Church and retirement home further south than subdivision.

Sweetman In your opinion, satisfied for safety turning on and off SH58 from James Cook Drive?

Marshall Yes

Sweetman Transmission Gully likely changes?

Marshall SH58 will have reduced traffic. James Cook Drive will have changes in direction of traffic flow. Some traffic heading south rather than north to link road, so will reduce traffic on northern part.

Sweetman Operational 2020?

Marshall I have heard that.

McArthur Footpath access crossing where Brookside entrance intersects James Cook Drive. Likely during peak traffic impacts on pedestrians ability to cross?

Marshall Haven't considered. Don't think pedestrian volumes high. Probably wouldn't coincide with morning peak.

Sweetman Outline your qualifications?

Marshall Certificates in mechanical and civil engineering, chartered engineer, masters in business administration. Experience in traffic engineering since mid 1980s - 25 years.

Rhodes Registered professional surveyor. Over 35 years experience in land development. Couple of decades designing subdivisions.

Stormwater - higher site coverage in subdivision is not material matter that concerned about. Stormwater design takes that into account. When get detailed design will consider that at appropriate time. C-factor might change. Stormwater system for Brookside - all water from stage 1 and 2 will go through vegetated buffer zone and most water won't reach stream. Subsoil pipes allow most to infiltrate to ground. Subsoils are silts, sands, gravel layer. Good infiltration rates probable. Amount of water entering stream from sub comparatively low.

Banks sub - high infiltration rates but very little enters during high rainfall. Conditions for silt & sediment removal very favourable with stormwater design proposed. Conditions to comply with standards will be exceeded.

Mark-Brown Some of other stages, stormwater treatment relies on rain gardens? Any advantage to them to have limit on impermeable area?

Rhodes Until get to detailed design stage, need to be reviewed at time. Stormwater plans will be close to final design but need to be reviewed at that stage. Rain gardens proposed so far take into account high site coverage.

Mark-Brown **Problem fitting rain gardens in?**

Rhodes Tight. May have to massage a few items here and there. TP10 compliance.

MB **Experience dealing with similar developments?**

Rhodes Yes. Treatment methods in Banks were largely his suggestions.

McArthur **Sheet flow areas - effectiveness once subdivision completed? Increased velocity at lower-end rainfall events. What parts of stormwater design have risks for increasing stream velocities?**

Rhodes Design philosophy spreading water around. Bubble up sump. Stormwater contribution from subdivision probably has no effect on velocity of water in stream. Gradient of stream vertical fall about 7m. Low energy environment compared to Banks subdivision.

McArthur **Velocity issues seen on site visit. Scenario where water table is quite full?**

Rhodes First flush effect. When ground fully saturated, we would consider first flush effect to have occurred with sediment captured in swale. Should be clean water by then. Overland flow paths should be getting largely clean water discharging. All pass through filtration zones beside road. Sediment should be minimal.

McArthur **Water quantity?**

Rhodes Velocity shouldn't be too great. Most roads in subdivision flat so velocities modest.

McArthur **Salt marsh and DOC reserve - potential for increased erosion of stream banks as a result of faster water travelling?**

Rhodes This subdivision not changing gradient of the stream so velocities & quantities of water entering salt marsh from Brookside won't change much. If changes further up in catchment will have much greater effect. But don't know. Changes will be result of factors external to Brookside.

McArthur **Cumulative effects of increased impermeable surfaces in wider catchment? GW to address.**

Rhodes Flood study is quite conservative. 1000ha catchment. 400ha urbanised. C-factor for modelling based on complete denudation of all rural area, but much is forested at top of catchment. Conservative estimate.

Sweetman **Pump station?**

Rhodes Money allocated for several years. WW keen to upgrade it. Lids, doors and ventilation system to be replaced, which should reduce noise. Lids replaced as first priority, then

odour beds, then construction of underground storage tank. That will reduce odours. Will help manage flows better. WW have promised to have doors and lids done by middle of next year.

Sweetman **Can't advise timeframe of wider upgrades?**

Rhodes Is a priority but not an urgent one.

Sweetman **Support Mr Jones' recommended condition of consent notices on adjacent titles?**

Rhodes Probably not required if we trust WW to do the work. Thinks WW do understand need to upgrade. Have assurances that it is on the list.

Mark-Brown **If pump station not upgraded and lots developed, will be problems for neighbours?**

Rhodes Yes. Noise and smells quite easy to detect.

Sweetman **Alternative to consent notice to ensure no one lives there or no adverse effects?**

Rhodes Cannot think of alternatives.

Mark-Brown **What about consent condition not allowing s224 to be done for lots around pump station until done?**

Jones Think applicant would have to offer that condition.

Rhodes s224 for Stage 1 will affect more properties than just the pump station ones. Unfair on developer. Developer could agree not to build houses within 50m of pump station until upgraded? 50-60m. Early on, desirable to plant fast growing vegetation around perimeter of pump station site. Screening and air mixing.

End of questions for Mr Rhodes

Sweetman **[to Julia Bates] Has council ever considered purchase of this vacant site for reserve?**

Bates Not to my knowledge. Long history with this piece of land; would have toll ok at records.

Jones Not to my knowledge.

Rhodes know PCC has been pressured by residents from time to time to buy it, but has rejected it. No wish to take on liability of that size.

Sweetman **CDP - what weight should Panel place on that?**

Jones Some weight. Waiving esplanade reserves - led to CDP. Actual concept should be given some weight but not a lot of weight: concept of development as opposed to finer detail. Objectives should be given some weight in CDP.

Sweetman **Waiver of esplanade reserves - in your view are those purposes met?**

Jones Happy with pathway network in terms of public access. As long as other outstanding matters relating to ecology and flood protection resolved.

Sweetman **Submitters have raised concerns about what could otherwise be taken?**

Jones Thinks it's key that riparian planting can be achieved, to achieve [CDP] objectives.

Sweetman **Mr Johnstone - security concerns? Additional comment?**

Jones Nothing further than in s42A report. Satisfied not increased risk to security. Recommended condition stream barrier on sewer pipe.

Sweetman **Density - advice around "medium" and "high" density?**

Jones This is not high density. High density is apartments, greater concentration of living. This is single lots, layouts not relying on comprehensive design. In high density may have to have shared parking. Proposal is at most medium density or an increase on what is permitted. There is an increase in density, and have carefully assessed design of subdivision: onstreet parking, roading. Sites still capable of providing onsite parking and amenity. Certain parts of development on fringes of "medium density" but whole development not "medium density".

Mark-Brown **Riparian planting - consent conditions to ensure that?**

Jones Think they relate to GWRC consents. Will be handover aspect to PCC.

MB **3 years initial planting with flax to provide basis before larger growing natives? What if after 3 years initial planting not working and developer goes bust? Opinion on bond or other mechanism to make sure established after 6 years?**

Jones Council in discussions over agreement on that. GWRC conditions relate to 5 year period of maintenance by applicant. But I am not an expert on planting.

MB **That's likely to be done through separate agreement between PCC and developer and doesn't need to be in consent conditions?**

Jones Certainly a condition would be helpful.

McArthur **Some weight to CDP? Note that it mentions bond arrangement in relation to riparian corridor. Didn't include diversion and reclamation. Is that double dipping that we are doing riparian management in order to offset reclamation and diversion when that was already anticipated to waiver esplanade requirements?**

Jones Key element is have to have condition to determine when handover is. Repeat question?

McArthur CDP says Duck Creek North intended to have riparian margin [reads wording of CDP].
Now we have a proposal to divert and reclaim stream and as compensation for that we are going to do that exact thing. Is that double dipping?

Jones Think waiving esplanade reserves would still be reasonable to have bond condition if those conditions aren't achieved.

McArthur **More worried about double dipping?**

Jones No, I don't think it is.

McArthur **If we didn't have reclamation and just had stream in original profile, would council want same level of riparian management under CDP?**

Jones I think this is an outstanding issue. Still looking to see if riparian planting is meeting objectives of the CDP. In terms of waiving esplanade reserve, key thing is looking to see that corridor would be planted. Level of mitigation works for actual stream may go above and beyond what is required in CDP but that was a concept. [Will come back to that after GWRC comment].

10.28 End of questions for PCC. Dr Oliver's evidence now available. Adjourn.

10.57 Reconvene. Mr Jones advised will address issue of double dipping.

Jones Introduces Matt Trilin, PCC Policy Manager to answer questions on CDP was a concept proposal

McArthur **If we didn't have the diversion and weren't doing ecological compensation, in your opinion would there still be need for riparian corridor through the site?**

Trilin Council's position on Duck Creek has been that it is eligible for esplanade reserves and that it is flexible in looking at what extent of that should be, specifically having a reserve appropriate for ecological functions, flood protection, access. CDP work with Coastal Estates - that reserve width was always largely going to be determined by flood conveyance function. Generally felt that ecological services would be accommodated within whatever footprint required for flood conveyance and that access to and along the stream could also be largely accommodated within same area. Had discussions with developer looking at flood corridor. In raw form, flood corridor very extensive so always accepted modification needed to reduce flood corridor to accommodate development.

CDP exercise to achieve balance between good urban form and ensuring Duck Creek values reasonably accommodated within overall development layout. Planting concepts for CDP - Duck Creek South in original CDP has highly engineered form & detailed concept planting plan. More explicitly unpacked. Duck Creek North in original CDP concept largely had stream staying within current bed corridor. Current proposal

modifies that. Idea behind CDP was always to get a balance between good urban form and stream management. So council not opposed to stream being modified or moved if it worked from urban form perspective and accommodated functions stream needed to serve.

Planting concept driven by retention of existing bush and as part of narrowing there was going to have to be planting but that detail would be worked out during subdivision and consenting process.

McArthur **So yes it was going to happen anyway and the quantum of that would have been for flood protection function?**

Trilin Again balancing act around flood conveyance and ensuring didn't end up with hard built channel structure. Green engineered outcome.

McArthur **If the riparian corridor was going to occur anyway for flood protection and erosion, to use it as compensation for a stream diversion - is that double dipping?**

Trilin No, I don't think so. In Duck Creek South where stream corridor significantly modified, significant riparian planting built in where extensive stream modification. Always accepted stream in Duck Creek North might be modified. Additional planting might be required as part of mitigation.

Always envisaged there would be planting down the corridor. With greater interference with stream corridor there would be a corresponding increase in the amount of planting to compensate for interference with the stream. So yes you would have some mitigation to compensate for stream being moved because that's greater than what was proposed so don't see it as a 'double-dip'.

11.09 End of PCC evidence.

11.10AM GREATER WELLINGTON REGIONAL COUNCIL EVIDENCE

Michelle Conland introduces GWRC officers.

Tom Joseph of Mott McDonald. Circulates statement of evidence. Peer review submitted as part of s42A report included recommendations. Worked through many of these earlier in the week. Three remaining issues:

(1) potential impact of loss of storage in terms of encroachment on the flood plain. Has not been able to check that.

Mark-Brown Mr Christensen said your peer review said the modelling was adequate so he didn't see any need to respond to that question. Can you talk about the implications of that? Are you happy with the results of the modelling and flood level that has been set?

Joseph In general the model and construction model fits best practice. In general principles, what comes in = storage + what goes out. Only comparison point he has is at SH58. At SH58 volume and peak flows are the same, which is questionable to him as does not satisfy his mass balance equation. Asked to look at other flow points along the stream. It might be right but it was a red flag.

Mark-Brown The brief for your peer review, is that shown in your report?

Joseph It is discussed with the scope.

Mark-Brown The bit to do with your results of the modelling - it seems to me you haven't said you're happy with the flood level predictions of the model because you're not satisfied the storage levels have been taken into account?

Joseph Yes. They may be right; they seem appropriate apart from that one specific issue. In my opinion it is important to satisfy because increase over SH58 could be a large issue. The proposal is a significant reduction in the flood plain, in the storage, and the water has to go somewhere.

MB Concerned with flooding over SH58 rather than flood levels in the site?

Joseph Yes, although could have implications upstream.

MB So applicant has not provided sufficient information?

Joseph That is how I see it.

MB Did not see review of Manning's n?

Joseph Were within typical ranges. Felt they were appropriate.

MB Climate change assumptions - 0.5m sea level rise was used. If a 1m sea level rise was used, how much difference that would make to flood levels?

Joseph In major events everything larger than 2-year storm event control point is SH58. If a sea level rise of 1m went over SH58 - don't think it would - then it would have an impact. If it's below SH58 then it wouldn't and you probably wouldn't see any great effect in larger events. Can't answer quantitatively.

MB Possible to look at info on that road level and how that relates to increase in sea level? [Joseph agrees to come back on this point]

MB **Freeboard - 300mm used above the 100-year event for finished floor levels. Appropriate?**

Joseph Yes. Building Act only discusses 50-year event. In other parts of country do sometimes look at 500mm, but given conservative nature of rainfall, 300mm appropriate. All bridges designed with 300-500mm above freeboard.

MB **Roads might have shallow depth over them?**

Joseph Doesn't recall any new roads being inundated.

Two outstanding points:

- No consideration for local drainage and overland flow management. Quite a lot of overland flow paths through development. Answer to that was that they would be dealt with in detailed design but would want to be sure of this.

- concentration parameters through the model. May not affect anything but think may be worthwhile to double-check. Tend to Mr Christensen's opinion that may not overtop SH58.

Sweetman **When would recommend dealt with?**

Joseph Given limited time to prepare review, I would expect could resolve these issues now. Not large issues.

MB **My reading was that you didn't get a copy of the model? Have you done peer review of models where you've been given whole model to look at?**

Joseph It was a little awkward reviewing inside Cardno's office but those were the terms.

MB **Can do adequate review without having access to model itself?**

Joseph Pretty happy with review been completed. Would I like to have the model? Of course. But satisfied with where we're at.

Sweetman **Directs Conland to give thought to how these issues could be addressed.**

Conland Wonders if could be done at some time as conferencing on conditions?

Gardner-Hopkins **Question of clarification: what does witness think needs to be done to satisfy him on the issue?**

Joseph Essentially would like to see flow hydrographs across floodplain at multiple locations upstream of SH58. More mass-balance points upstream of SH58.

GH **Idea of how long that might take?**

Joseph Software package they've used I'm not familiar with but with other packages it would be less than a day to get that information out.

Mark-Brown **Looking at hydrographs of before and after? [Directs Joseph to put something in writing].**

End of questions for Mr Joseph

11.31AM GREGOR MCLEAN - SOUTHERN SKIES

[Provides photos of Banks subdivision stream channel with silt fences].

McArthur **Boulder cascade - grade control or habitat structure?**

McLean Bit of both.

McArthur **Gradient in photo?**

McLean Could be 5%.

McArthur **Mr Miller provided supplementary statement -read it?**

McLean No.

McArthur **Is it your opinion that on this site they are doing everything they can to reduce sediment?**

McLean Yes. There is one additional thing they're doing over and above what you're normally see - that's the use of baffles.

Sweetman **Use of baffles should improve situation?**

McLean Should do. If doesn't would pick it up in water quality monitoring.

McArthur **Larger scale events - ceiling of what you can achieve?**

McLean Generally ponds treat 2-5 year event to a good standard. Monitoring he has seen over the country would suggest maybe up to 95% efficiency. Over that you still get some treatment but not at that level. A larger sized pond doesn't necessarily mean a greater level of treatment. Flipside is if you make it too big get wind and wave action resuspending sediment.

McArthur **Super-silt fence and silt fence difference?**

McLean Can put steeper and longer slopes to super-silt fence. Essentially the same thing but more robust. See them used under bridge abutments. Not a huge difference in efficiency.

McArthur **Comment on staging and amount of bare land exposed at any particular time? Risks associated with earthworks?**

McLean Risks: next to sensitive environment. Staging fully supported but has to be practical. Rapid and progressive stabilisation committed to. Staging critical to minimising effects.

McArthur **Satisfied with proposed staging?**

McLean Yes. They have provided commitment to rapid and progressive stabilisation. Other key thing is slope is low.

Mark-Brown **Para 31 - acknowledged applicant proposes oversize ponds. Need to include over sizing requirement in erosion and sediment control plan?**

McLean No need to include as condition if commitment is in draft management plan.

Mark-Brown **Is there sufficient expertise in GWRC to adequately certify detailed plans and do ongoing monitoring and modifying controls?**

McLean Generally is my job. Yes. Am monitoring other projects in Porirua Harbour catchment.

11.45AM DAMIAN YOUNG - MORPHUM

Document provided: "Supplementary Statement of Evidence of Damian Young On Behalf Of Local Council".

Young Environmental Engineer with heavy focus on ecology in career. Experience broad. Involved with stream assessments for last 14 years. Presenting Mark Lowe's evidence.

Speaking to supplementary statement.

Bank profiling and erosion treatments: Main concern is changing relationship between stream bank and waterway: shading, interaction with terrestrial vegetation etc. Advocate looking for bioengineering solutions within constraints of erosion protection velocities.

Mark-Brown **Conversant with three types of protection proposed by Mr Christensen? [Young is shown picture]. Two types of rock protection - one type that goes down into permanent channel**

Young I think what's presented will function for erosion control. It's really about treatment meeting objectives.

Mark-Brown **Guidance on consent conditions? You're saying rock going down into the stream is not advisable?**

Young Could stipulate particular techniques to be used as opposed to rock in all circumstances. E.g. mass-stabilised planted earth walls.

Mark-Brown In the management plan?

Young The management plan can deliver those things: here are a suite of tools/treatments you can use. If it's an objective think it would suffice.

Point 2: correction to 20m figure at end of paragraph. Not clear how much footprint available for planting. Would give more confidence can be fitted in. Mr Lowe concerned could not fit all these in such a tight area. From engineering perspective, management footprint is always bigger than size on a plan. Compensation plan needs to say there's a hard line. Needs to be provided for.

Sweetman Recommendation on how to ensure that?

Young Would like to see detailed design footprint to see what could be fitted in. From council's perspective: minimum distance from top of bank? If plan has to be provided as condition of consent and certified by council? Gives some certainty.

Mark-Brown Do you think parts of corridor are too narrow to allow appropriate design?

Young Can't answer. It is tight.

Point 3: Policies 32 & 41 of PNRP. There is an adverse effect caused by moving a stream. In terms of best practice, avoid is important to look at.

Point 4: boulder cascades. Landscape design element to create aural node but not necessary for grade control. Natural substrate not indicative of that size of material. Would recommend not necessary.

Point 5: Ecological Compensation Plan.

Point 6: Rip-rap topping up - particularly on upper banks should be robust enough to withstand what they are designed for. Shouldn't be maintenance required on regular basis. Would advocate manual access would be appropriate.

Point 7: Cumulative erosion effects - ongoing effects on channel from upstream changes in imperviousness. More water in a channel does increase erosion but there will be mitigation.

Point 8: Impervious cover percentages. Can get incremental coverage where 35% ends up being 45%. Having no on-lot treatment does reduce treatment train.

Mark-Brown Stream erosion - justification for limit on total impervious surfaces in the subdivision?

Young In general terms in the top of a catchment the effects from increased impervious are locally significant. Towards bottom end of catchment there is less proportional input and therefore less proportional effect. If the mitigation proposed functions then erosion effects on wider stream channel limited. But difficult to measure.

Mark-Brown Difficult to implement impervious cover limits?

Young In terms of monitoring that kind of activity, could be investigated by council. Aerial mapping, new techniques of survey.

Mark-Brown Your comment is that there is not sufficient justification to limit impervious because of indeterminate or marginal benefit?

Young The temperature at which stormwater is discharged at is of concern. If increased concrete cover would be challenging.

McArthur Given that current erosion is largely effect of what is happening upstream, will it eventually get to an equilibrium state? Should it be directly managed?

Young If no subdivision, we would just try and find a reference site and design towards that. Would take a long time so some sort of bank shaping and replanting to meet reference site geometry would be best practice in erosion and ecological management. Those sorts of features will provide outcome of no net loss. Argument between Mr Miller and Mr Lowe is quality of restorative engineering works.

McArthur How do we measure quality and success?

Young The SEV tool. Should include most of the elements. Post-works, SEV evaluation would be informative for council to understand outcomes achieved. Before and after quantitative assessment.

McArthur Riparian margin width. Is quantum and quality and function adequate? SEV tool will not tell us that as width will not meet 20m assumptions. Comment?

Young SEV not perfect but will see quality reflected in score. Channel morphology reflected in part of it.

McArthur Is there value in measuring the quantum and quality of biodiversity before and after?

Young Do we not do that through the SEV scores? [Mentions aquatic animal assessments]. If design treatments and principles are clearly laid out and demonstrated to be implementable that can achieve mitigation goals.

McArthur Adaptive management plan - what do we do if measurements are not up to scratch? Should there be some form of recourse to remediation?

Young We all react to financial stimuli.

Sweetman A bond?

Young Yes. It's not unheard of. It's something that Hamilton City is needing to do some of in terms of ensuring works they presume will happen do.

Sweetman What sort of quantum?

Young I have the methods and numbers but it depends on what is built. Can answer it but not at this moment. [Conland suggests she can help with this]. Relates to what is proposed to be done.

McArthur Familiar with inanga spawning? [Confirms he is]. Mr Miller has proposed there is value in inanga enhancement between Bridge 1 and 2. Suggested bank cutting - any experience of that and your opinion of doing it?

Young Think that intertidal boundary is dynamic and even more with sea level rise. Management of those reaches between aquatic and marine important - allowing wider area laterally and upwards that is resilient. In terms of providing inanga habitat need flatter bank profile. Thinks it is of higher ecological benefit than leaving banks as they are and would occur naturally over time if left alone. Sea level rise will mean eventual deposition in those zones.

Sweetman [direction to Conland for advice on how to achieve this]

McArthur Ecological compensation philosophies - comment?

Young Can comment on best practice from an environment science perspective. I think values and metrics by which calculate compensation are still not determined. Re-creation of natural systems is very complicated. From a philosophical perspective have to be cautious and do best you can where you are.

McArthur Preference to on-set on-site if you can do it?

Young Yes.

McArthur Double-dipping question. Principles of offsetting: should it be an additional component above and beyond what is normally required for the site?

Young Grey area but not confident to state either way.

McArthur Mr Lowe's point was it was important quantum of compensation was adequate. You share that opinion?

Young Yes. Comes down to implementation. Concern around knee-jerk to offset off-site if not implemented appropriately.

Paine Improving inanga spawning habitat and complexity of natural systems - concern that might interfere with rather than improve?

Young If provide more area wouldn't necessarily improve, but difficult to say without going on site.

Mark-Brown Mr Lowe's evidence really disagreed with applicants in terms of adequacy of quantum of compensation?

Young Yes. It's close.

Mark-Brown Suggestions to resolve that?

Young If focus and concentrate on doing best work in this location, outcome will be better than focusing off-site. Very concerned about implementation. In this instance already got ecological values that if left alone would get more towards reference site.

Mark-Brown Is the width available as shown on development plans going to be adequate, particularly in upper reaches where it's 7-8m on each side?

Young Can't have much confidence in that. Doesn't mean that wouldn't be the case. Really about saying what's required and figure out how you put the roading configurations around it if it's important.

Sweetman Look forward to advice from planners on this point.

12.37 End of Mr Young's evidence. Circulation of additional document: "Statement of Evidence - Michelle Conland Planning"

12.42PM MICHELLE CONLAND - PLANNING

Reading from Statement of Evidence as not pre-circulated

Sweetman Have officer's report prepared by Mr Doug Fletcher - you agree with his findings?

Conland In terms of ultimate conclusion, that is correct. Some minor changes provided in Addendum to s42A Report. That is document to refer to in terms of my final conclusion at that stage.

[Reads starting from point 7]. Additional comments: quantum of residual adverse effects to be redressed through biodiversity offsets is still to be resolved. Ideally would have detailed design information now - in absence of that, an Ecological Compensation Plan.

Mark-Brown [question to clarify condition on over sizing SRPs - this is in the conditions provided in document]

1.08 Adjourn

2pm Reconvene

[Distribution of answers from Mr Joseph. Document: "Questions from the commissioners for Thomas Joseph"]

Mark-Brown **Water Permit 33621 Condition 12. Full flow is meaningless technical term - talk to experts and get something quantitative.**

Conland Agreed with Mr Young that it could do with refinement.

Mark-Brown **Condition 38 of same consent: Fine sediments where and over what reach?**

Conland May be mentioned in Dr Oliver's evidence. My understanding is standard methodology for deposited sediment monitoring that uses plates.

Mark-Brown **Add reference to standard method that clarifies. Condition 51: Table line 1. Too onerous to do report within 5 days of sampling?.**

Mark-Brown **Sediment consent 33622 Condition 15: flocculant person should be person with suitable expertise in flocculant management? Condition 28 of same consent: sample of dissolved aluminium - wording needs tightening up?**

Conland Obtain a sample and analyse for?

Mark-Brown **Land Use Consent 33623 Condition 14 "Prior to placing the pipes..." That still the wording? Needs qualification of which pipes. Condition 25: following a 1 in 10 year rain event. Something more like rainfall event greater than or equal to 10 year occurrence issue.**

Conland Annual exceedance probability?

MB **Following an event that is as big as or greater than.**

Sweetman **Would it be useful for Panel to provide council officers with a comments versions of conditions. Can we be provided with word versions? [This is agreed to]**

Paine **At Para 41 - acknowledge intent about Ngati Toa and kaitiaki. Asked Ms Barriball to be included in adaptive management plans, so wasn't only about the provision of the monitoring reports.**

Conland Applicant should be providing management plans to Ngati Toa? Involved in formulation of the plans?

Paine Para 41 - structure of how what was to be included?

Conland [clarification around cultural health monitoring]

Paine How do you measure that? Already have an index to say what it looks like?

Conland Still a work in progress. Water quality would be one indicator that is used at the moment.

Sweetman Interested in proposed policies 41 & 42 of the PNRP. With those policies, is there a requirement for no net loss? Does there have to be 100% compensation? What's your advice? Do we need to ensure the ECR is 100% or do we consider outcomes?

Conland I don't think the ECR directly determines whether there is no net loss. I think it provides 1 tool for that to be assessed. This policy relates to rivers, lakes and wetlands. SEV can only be used on rivers of a certain size. That's just one tool that can be used to quantify environmental compensations. Would view it as one of a variety of things that go into the mix. Determining no net loss: quantitative and qualitative aspects.

Sweetman In context of recommended condition xx in the ecological compensation plan - which does refer specifically to the SEV and environmental compensation providing x metres etc.

Conland My thought was the creation of inanga spawning habitat but also the construction of the stream diversion itself, how that is undertaken. That goes back to those design elements.

McArthur Talking about mix of things to consider, the SEV being one of them. Non-SEV measures - where are we to take our advice from?

Conland The advice of Mr Lowe, Mr Young and Mr Miller

McArthur You've told us proposal is consistent with Schedule G subject to - we don't have those subject to matters before us?

Conland This is partly why this environmental compensation plan condition was not provided in the original report because ideally this would have been sorted before now. Ideally we would have a comprehensive compensation package provided. Having it as a condition of consent is not ideal for best practice.

McArthur Mr Young said implementation and quality is overriding concern. How do you propose to resolve that?

Conland My understanding is that quality he was talking about was more to do with construction of works on site - compliance monitoring. Actual design features, how much planting can

be done - that ideally will be more certainty around so a condition such as this would really be required.

McArthur **Struggling to understand GWRC's position in relation into what needs to be required and is measureable because your analysis has said it's consistent subject to that being determined but to my mind that means it's currently not consistent.**

Conland I guess I was taking it from the point of view that there is an intent from the applicant to compensate. Mr Young has provided details as to appropriate length that is required. Being inanga spawning habitat does alter things, which makes it more difficult to design.

Sweetman **Are you saying you need more time to refine this condition and consider the evidence of your experts?**

Conland Based on info received to date from the applicant, this condition is required because we don't have this info currently.

Sweetman **Can you insert numbers into the hashes for us?**

Conland Ideally, for GWRC, we would use the numbers in Mr Lowe's evidence. I think the advice can either come from the applicant in what they propose to do. If mitigation is limited to being on-site there are potentially some problems. Advice from ideally Mr Lowe but also Mr Young in terms of what they consider to be suitable length should be recommended.

McArthur **Mr Young said we should focus on this site and getting it right. The number of 1010. That number cannot fit in the site. Mr Young has told us his best recommendation is that we do the best in terms of ecological outcomes within this site.**

Conland The other structures that impact on that length: we don't have the information on what those impacting structures, how that affects the length of possible riparian planting: stormwater, plants, vehicle access. Which is why it is difficult to put a number in that is practically able to be achieved.

McArthur **How do you propose we resolve that? What needs to happen for us to get there?**

Conland I think some further detail from the applicant on that.

Sweetman **If you don't feel 100% happy around the mitigation, what is your recommendation then?**

Conland It is a difficult situation. We've progressed on good faith that this matter would be resolved. Prior to s42A reports was discussion on how that could be resolved. Despite Mr Miller's additional information yesterday I think there are still some uncertainties. But Mr Miller's evidence provides more information than we had, which is useful.

[Mr Rhodes seeks permission to make a comment]

Rhodes Suspect length is done in CAD, which is very accurate, and then exported to PDF. When you create a PDF is dangerous to scale - so difficult to take a PDF measurement as accurate. To clarify things there get an independent assessment of [the measurement?]

McArthur Schedule G - issue of double-dipping. In the PNRP there's quite a lot of direction. If we take Mr Young's view that we should work with what we've got and do the best with what we've got. 3a additional conservation outcomes - can you explain to me how this proposal fits that 3a principle without being double-dipping?

Conland I hadn't quite understood the details in the CDP in relation to planting when I wrote this. The key matters comes down to how the level of planting was proposed or the normal level of planting proposed by PCC for a subdivision of this nature vs. What is proposed through the compensation plan. There is obviously going to be some overlap. I suspect that the development plan never anticipated the amount of planting that an SEV evaluation proposes. Having said that it is difficult to know - we're looking at 7-8m as opposed to 20m. Suspect element of double-dipping but difficult to put exact figure on it

McArthur If set CDP to one side and just think about what PCC's normal requirements for subdivision of this nature [reads policy about additional to]. PCC would have required something under an esplanade reserve consistent with that environment but is being asked to waive that because this compensation is happening. Double-dipping? Some? A lot? None?

Conland Inclined to think there is at least some. There are additional conservation outcomes from what has been proposed and if stream was not going to be diverted. The diversion of the stream is what triggered the SEV requirement and that quantum of compensation, which if they hadn't been doing that GWRC wouldn't have been saying you need to plant out the whole 1km of stream. Have written from GWRC perspective rather than what PCC would normally do.

McArthur So if it was just GWRC and a regionally significant fishery, would there be some quantity of riparian management if there was no stream diversion? Trying to work out if there are additional conservation outcomes.

Conland Three scenarios. 1 if site was left exactly as it has been: no requirement to plant. If there were stream works proposed but not extent of diverting, the applicant could offer some planting as mitigation for those works but an SEV assessment wouldn't normally be done. The amount and intensity of planting wouldn't be at that same sale and would normally be offered by applicant rather than by GWRC.

McArthur So no standard or otherwise requirement for any kind of mitigation?

Conland Not for minor works. For significant effects, they need to be avoided, remedied, offset. Minor things like bridge that doesn't physically affect stream: no planting requirement.

McArthur Policy 32 - adverse effects on aquatic ecosystem health and mahinga kai. Ms Barriball did identify desire for Ngāti Toa to have ability to collect mahinga kai in the stream - does that mean we go down this policy road in considering that also?

Conland Potentially, yes.

McArthur Two streams of evaluation there?

Conland There are but they are linked because if you provide for aquatic ecosystem health then [also relates to mahinga kai; definition in chapter 2].

McArthur Perpetuity issue and need for perpetuity condition - still to come?

Conland Not in s42A report but included in updated conditions on Reclamation Permit p58 after condition 25.

Sweetman Obviously intent is areas of planting to vest in city council. Right in understanding that generally land use consents granted under s13 and permits sit with consent holder rather than the land?

Conland Yes that is correct

Sweetman What's the mechanism for these conditions to sit with city council on vesting of that land.

Conland My thoughts would be that at the time PCC is to take over those matters, the resource consents would also be transferred to PCC. Obviously by that stage a lot of conditions would no longer apply and would be appropriate the consents be transferred to PCC if that is the ultimate way that things are managed into future.

Sweetman Process for that?

Conland Simple process. Application to GWRC with a form with details and signatures of the two parties agreeing to the transferral. No fee. Consents get re-issued in name of PCC.

Sweetman Can rely on that happening?

Conland There's little risk for GWRC because either Jagger NZ remains the consent holder or PCC becomes the consent holder. Until transfer occurs, Jagger NZ would be responsible.

McArthur Principle 5. Long term outcomes. Talked yesterday to Ms Bates about capacity within PCC to maintain aspects of ecological offset. Do need measures of success and failure built into compensation plan. Don't have that info.

Conland Draws attention to conditions in relation to annual monitoring, riparian monitoring, SEV. In Reclamation and also within Water Permit Condition 46, 47, 48, 49 of both. Reason for 2 year and 5 year points there is the theory is that after 5 years planting should be self-sustaining and able to continue thriving and maintaining SEV principles. Checks at 2 and 5 years to determine whether planting is progressing as it should be. Given good conditions for planting etc. You would expect a reasonable amount of riparian planting achieved after 5 year period. If not working at those points definitely needs to be further work.

McArthur Principle 5(a) in perpetuity - is there a risk of the whole shebang being transferred that it falls off the LTP process, does not get funded, and fails to meet the ecological success?

Conland Within that 5 year period either from planting being undertaken or stream diversion being constructed, whichever is later period. After that 5 year period, so long as everything is all right then no reason to expect things won't continue to be all right unless something happens. Would need to be catastrophic event essentially.

McArthur Big flood?

Conland I am not sure if you could require it to be replanted in that case.

Sweetman Would GWRC take action against PCC if conditions of consent weren't being complied with?

Conland GWRC has taken action against other TAs in the past but would hope it would not get to that point.

McArthur Your advice is if we can put some legal protections in terms of transfer to PCC we should consider the long term outcomes are adequately met in terms of Schedule G.

Conland Yes. Perhaps other conditions to tighten that but can't think of it off top of my head.

Baker [with permission to comment] Wonder if it would be helpful if PCC could comment on nature of their reserves and process they go through when take over ownership of an area with intention to look after plantings within reserves and maintenance program? That's our expectation: that new reserve included in maintenance program.

Sweetman Have you read through recommended GWRC conditions of consent? Are those conditions that the council parks department would be satisfied in becoming the holders of?

Bates Most of them. Obviously there would be increase in maintenance for PCC. This site has long history of various development proposals and PCC has accepted that at some point would become owner of stream and riparian margins. Reserves Act process including

classifying reserves which would include setting up outcomes. Obviously ecological elements would come through in reserve outcomes and that forms basis of day to day management of reserve land. Publicly notified process to change reserve management plan. Would expect that these matters would become part of those outcomes given it is a significant stream.

PCC does not have a biodiversity officer currently. Use GWRC to some extent to assist with that expertise. My understanding is that at that 5 year mark should be self sustaining so would expect maintenance at that point would reduce.

Sweetman **So in it becoming a reserve, doesn't negate RMA conditions of consent?**

Bates No. Have a question about the conditions about legal perpetuity. Does the Reserves Act fit that definition of perpetuity? May need discussion. Not sure whether Reserves Act covers that.

Sweetman **Happy for you to be involved in the planner discussions in terms of those conditions.**

Sweetman **In terms of Ngāti Toa's desire to fulfil their role of kaitiaki - are there other ways of Ngāti Toa potentially having a greater role or a different role in the development of the site? E.g. being given opportunity to comment on management plans before submitted to GWRC?**

Conland That type of practice usually offered by applicant as condition can't direct that we require Ngāti Toa to do that. For other consent conditions, iwi have been involved in seeing how the monitoring is done, involved with commenting on the management plans, viewing the results of the monitoring. Those would be the main areas where iwi have been involved to date. The work that is being undertaken regarding the cultural health indicators - which I am not involve with - would provide more on this.

Sweetman **Is it ultra vires to put in condition for consent holder to provide info to another party whether or not they approve it?**

Conland Not ultra vires. Also if applicant agrees to something that would otherwise be ultra vires is allowed to be included.

Mark-Brown **One of the submitter comments was concern about encroachment on riparian area and suggestion on local residents group and that applicant provide some funding to that. Comment?**

Conland There are number of instances for various consents where there's been community liaison group set up or something of that nature. There is standard wording around that which I could provide.

Mark-Brown **Value in that?**

Conland Depends on the community. The sort of liaison groups I am aware of in past more to do with keeping an eye on adverse effects of proposal as opposed to ensuring residents didn't encroach on planting.

MB But getting local community buy-in?

Conland Can see that.

McArthur Provision of educational signage, materials to residents - who does that kind of thing?

Bates I think that would become PCC's responsibility.

Paine Talking with Mr Holmes. Involvement and engagement of iwi - four matters that still 'sit on the table'. Look forward to that continuing.

Mark-Brown In terms of evidence from a submitter about sawmill waste at lower end of stream. Featured in possible NES locations? Need a condition about that possibility?

Jones If it was found, contaminated site, would need a consent at that time. Advice note that they would need consent under the NES.

MB So would be good to include?

[Jones to include advice note info to Panel]

3.05 End of questions to GWRC. Adjourn

3.13 Reconvene

3.15PM APPLICANT'S RIGHT OF REPLY

Document: Closing Legal Submissions

James Gardner-Hopkins. Seeks leave to table mass-balance equations later. Not at point where thinks necessary to reconvene. Speaking to written document.

GH [Reads written document] Additional comments: Consent holder must be presumed to comply with conditions of consent. Bond only usual where risk around perceived ability to comply or works require post- end of consent e.g. quarries. Risks here that works will not be undertaken is sufficiently low that bond not required. Developer intends to be there for implementation of consents.

Applicant hasn't relied on permitted baseline. Is seeking to use that 35%, 2-stories as basis of comparison.

Ecology [from Para 10]. "Have regard to" vs. "give effect to" NZCPS is resource consent vs. plan change approach from Supreme Court case. Evaluative framework is different.

Policy 41 - trigger is stream diversion/reclamation. Diversion is more than minor, more than transient effect. Policy directive is to "consider" biodiversity offsets. Not "required". "No net loss" not required. But Schedule G does suggest "no net loss" should be a required outcome - tension with P41 wording.

Legal perspective: effects are remedied and so no trigger to require offset. Site is improved post-works.

Weight given to P41 - has been draft NPS on biodiversity in the works for some time. Still area of significant debate.

Submit that even if applicant had made no effort to offset should not be fatal to this proposal.

No issue with committing to spacial extent of riparian planting. Important obligations are clear and enforceable.

Commercial concern that consent notices with advice notes re: potential for liquefaction can have impacts on value.

Understands land held under the Reserves Act has to be subject to a Reserves Management Plan. Anticipated that will confirm and reinforce conditions of consent going forward.

Applicant has sought to avoid debate on whether esplanade reserve requirements apply by seeking waiver and focussing on outcomes. Acknowledges text in Schedule G does seek to shift from conclusion in Para 31 in written statement.

McArthur **We've used SEV and ECR as a tool to drive an outcome and you're suggesting now we've got to that point we put the tool aside and consider it as a remediation package?**

GH Useful comparison. If it were a true offset, what would it look like? Comfort that whether it's legally remediation or legally an offset doesn't make too much difference to outcome. Possibly if we'd started as treating it as remediation so let's not go down compensation offset route then what might have been developed might have been less. Urges Panel to focus on outcome.

McArthur **Para 21c about weight given to P41. Thoughts on whether principles outlined in Schedule G represent good practice approach?**

GH Thinks they are relevant matters of consideration. Has difficulty with "no net loss" outcome. Issues are all current issues. Not sure could say it was good practice. Resource Legislation Amendment Bill introduces concept of offsets but does not define it.

Sweetman Panel hears and appreciates applicant's position on preferring not to reconvene. [Discussion of process].

Mark-Brown Directs Conland to consider changes to conditions to take into account Mr Young's comments, in particular recommendations to consider strongly material other than rocks for erosion protection and to address issues of habitat and refuge for fish which at the moment aren't really coming through.

Conland Are you referring to the constructed section of stream or where the bank stabilisation works are to occur?

MB Both.

Conland There are some conditions in relation to the bank stabilisation work that have already been suggested.

Sweetman Would also like to see in the conditions what has been outcome of further discussions between Mr Joseph and Mr Christensen.

Sweetman Guidance to planners preparing conditions: give particular consideration to counsel's closing submission including the need or not for plans.

Roberts As far as timeframe is concerned - 5 working days is too tight. Bear in mind do not have resources of time and technology available to councils and applicant. Add another 5 days.

Legal matters - Para 28. There is a High Court decision, about 6 years old, specifically referring to Duck Creek that ruled Duck Creek was a river. Needs to be taken into account.

Sweetman Mr Jones, you'll make available council's record in that regard?

GH Happy to change submission if applicable once I have read that.

4.16 Hearing adjourned (not closed). Panel to give further direction.