STAFF REPORT

TO: Environment and Planning Committee

FROM: Grant Russell, (MWH Consultant Consent Planner)

REFERENCE: RM040807

SUBJECT: **VALENTINE SUBDIVISION – REPORT EP05/05/06** Report prepared for 23 May 2005 Hearing

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1. APPLICATION BRIEF

A subdivision and land use application and supporting information has been lodged by Staig & Smith Limited (Lisa Gibellini) on behalf of Mr Ken Valentine.

The applicant sought to subdivide the vacant lot into five fee simple allotments, with a right of way, to seek a reduction in the setback for dwellings on a Residential zone from the adjoining Rural 1 zone and to reduce the minimum allotment width between the rural zone boundary and the farthest boundary of the allotment.

1.1 Proposal

The application is for a subdivision consent and land use consent for the following:

To subdivide Part Lot 4 DP 1267 into five fee simple allotments with a right of way to provide access. The right of way access is off State highway 60.

To reduce, from 25 metres, the building setback required for Lots 2, 3 and 4 between rural and residential land use on the eastern boundary to 3 metres.

To reduce the minimum allotment width for Lots 2, 3 and 4 to below the 30 metres required between the rural zone boundary and the farthest boundary of the allotment.

1.2 Location and Legal Description

The property is located at 453 Main Road Riwaka (referred to as 510 Main Road, Riwaka on application drawing 7920 (dated 28/6/2004)).

The legal description is Part Lot 4 DP 1267 (CT NL9A/126).

1.3 Zoning and Consent Requirements

The land is zoned Residential under the proposed Tasman Resource Management Plan (TRMP). This is considered to be an operative zoning so no analysis is given of the Transitional Plan provisions.

The subdivision is considered to be a Discretionary Activity as the Controlled Activity standards and terms under Rule 16.3.3 cannot be met.

The lot width, being at least 30 metres between the rural zone boundary and the farthest boundary of the allotment, as set out under Rule 16.3.3. (h) cannot be met.

The land use is considered to be a Discretionary Activity under the relevant rules of the proposed Tasman Resource Management Plan in that the 25 metre setback provisions under Rule 17.1.4. (v) is requested to be reduced to 3 metres.

2. INTRODUCTION

2.1 The Setting

The applicant land is 5627m^2 zoned Residential.

It is located on the eastern side of Main Road, Riwaka, approximately 150 metres south of School Road.

The site is flat in topography and low lying. It was observed on the site visit (5 May 2005) that the site appeared to have had clean fill placed on the low lying site. It is unclear when this was completed.

There is a timber shed located at the southern end of the site with stored material stacked next to it.

A temporary rock material accessway has been layed which provides a general layout of the proposed right of way.

An open drain traverses the site, offset from the western boundary by approximately 7 metres. The open drain is approximately 66 metres long, 1 metre wide in the invert, 2 metre wide at the top and approximately 1.1 metre deep.

On the north-eastern boundary is a panelled wooden fence, approximately 30 metres in length. This boundary continues to the south boundary with shelter belt trees located between the applicant site and the Riwaka School playing fields.

Land located to the north and west of the subject site is Residentially zoned land, while land located to the east is zoned Rural 1. This is the location of Riwaka School and playing fields. Land directly south of the site, also zoned Residential is currently planted in fruit trees.

3. NOTIFICATION PROCESS and SUBMISSIONS

Application RM040807 was notified on 15 September 2004. The call for submissions closed on 13 October 2004.

A total of nine submissions were received. All submitters opposed the application. Six expressed a desire to be heard at the Hearing, two did not wish to be heard and one submitter did not state whether they wish to be heard or not.

One submission (Mr Reginald Dysart) was received outside of the closing period for submission, by one day. That late submission also opposed the application. That submission was received outside the formal submission period. It may be accepted under section 37(2) of the Resource Management Act 1991 at the discretion of the Hearing Committee.

3.1 Pre-Application Consultation

Written evidence of consultation occurred with four parties prior to lodgement of the application. The parties were Transit New Zealand, through their agents Opus International Consultants, the New Zealand Archaeological Association, the New Zealand Historic Places Trust and Riwaka School (Board of Trustees). The discussion below notes the respective outcomes.

Transit considered the proposal and considered that the proposal will not adversely affect the safe and efficient operation of State Highway 60 in this vicinity. They also noted their section 94 written approval pursuant to the Resource Management Act 1991 formed a part of that correspondence. Advice was also given to the applicant that the required Section 93 Ministers Notice will not be processed until section 223 approval of the survey plan is completed under the Resource Management Act.

Correspondence received from the New Zealand Archaeological Association noted some known archaeological evidence had been recorded. This information was sent through to the New Zealand Historic Places Trust for further comment. The outcome from the NZ Historic Places Trust was no Authority was required with the proviso that if any archaeological material is uncovered during minor land disturbance then work is to cease immediately and the NZ Historic Places Trust is contacted for advice. This has been annotated as an Advice Note to the conditions.

It is also noted that the Applicant raised the proposal with the Riwaka School (Board of Trustees) with respect to reducing the dwelling setback in relation to the rural boundary. Their written approval requesting this reduced setback was unsuccessful. Following public notification, the Riwaka School (Board of Trustees) lodged a submission opposing the application. The submissions are discussed below.

3.2 Submissions

Terrence Phillip Bradley

Opposed the application in particular:

A reference to the drain being shifted and the need to construct a retaining wall.

Reginald Dysart (Late by one day)

Opposed the application in particular:

Concerned about reverse sensitivity issues between the school and the proposal (ie. proposed dwellings being located adjacent to the school grounds).

Sought to retain the buffer zone.

Elizabeth Semmens

Opposed the application in particular:

That the extra dwelling will 'overtax' the already flood prone open drain.

The movement of the open drain will impact on neighbours.

Concerned about reverse sensitivity issues between the existing orchard and the proposal.

Taylor Family Trust (c/- RM Taylor)

Opposed the application in particular:

That the extra dwellings will create excess stormwater runoff.

The shifting of open drain and the need for a retaining wall.

The effects of traffic, and the impacts on pedestrians and noise generated from the proposal.

Loss of semi-rural amenity values.

John Turnock

Opposed the application in particular:

Raised issues with respect to the potential flooding as a result of the proposal.

Concerns about the capacity of the open drain.

Brent Cheyne

Opposed the application in particular:

Drainage issues – considered that applicants 'Drainage Report' is not a fair reflection of what the actual flooding situation is.

Right-of-way – concerned about dust and noise; wants an assurance it is sealed and fences constructed for privacy.

Considered consultation was not carried out in good faith with local residents.

Traffic safety issues with vehicles entering and leaving the applicant's property.

Margaret Reed

Opposed the application in particular:

Concerns about the capacity of the existing open drain.

Increased number of dwellings will see further flooding of neighbouring properties.

The shifting of open drain and the need for a retaining wall.

Safety to children in and around the open drain.

Riwaka School Board of Trustees (Kathryn Hendren (Chair))

Opposed the application in particular:

The reduced setback between the proposal and the Rural 1 zone.

The setting of a precedent for other potential development around the other boundaries of the school.

The potential loss of native shelter belt trees.

Trevor Fry on behalf of AL Fry Limited

Opposed the application in particular

The reduced setback from 25 metres to 3 metres with respect to the Rural 1 boundary and the potential cross boundary effects to the Fry Orchard.

The need to comply with a 25 metre setback should consent be granted.

Ensuring adequate stormwater provisions are in place.

4. STATUTORY CONSIDERATIONS

4.1 Resource Management Act 1991

Part II Matters

In considering an application for resource consent, Council must ensure that if granted, the proposal is consistent with the purpose and principles set out in Part II of the Act. Part II of the Act comprises Sections 5,6,7 and 8.

These principles underpin all relevant Plans and Policy Statements, which provide more specific guidance for assessing this application.

If consent is granted, the proposed subdivision must be deemed to represent the sustainable use and development of the urban land resource. The critical issue of this consent is the potential effect of that subdivision and development on residential land subject to flooding and areas of reverse sensitivity with respect to the adjoining Rural 1 zone.

Section 104

Subject to Part II matters, Council is required to have regard to those matters set out in Section 104. Of relevance to the assessment of this application, Council must have regard to:

- Any actual and potential effects of allowing the subdivision to go ahead (Section 104 (1) (a));

- Any relevant objectives and policies in the Tasman Regional Policy Statement and the Proposed Tasman Resource Management Plan (Section 104 (1) (b));

- Any other relevant and reasonably necessary matter(s) to determine the consent (Section 104 (1) (c)).

In respect of Section 104(1)(b), the Proposed Tasman Resource Management Plan is now considered to be the dominant planning document, given its progress through the public submission and decision-making process.

Section 104B sets out the framework for granting or declining consent based on the status of an activity as set out in the relevant Plan.

4.2 Tasman Regional Policy Statement

Relevant to this application, the Tasman Regional Policy Statement seeks to achieve the sustainable management of urban development and environmental hazards. Objectives and policies of the Policy Statement clearly states the importance of protecting land resources from inappropriate land use and development in areas prone to natural flooding hazards.

Because the proposed Tasman Resource Management Plan was developed to be consistent with the Tasman Regional Policy Statement, it is considered that an assessment under the proposed Plan will satisfy an assessment against Policy Statement principles.

4.3 Tasman Resource Management Plan

The most relevant Objectives and Policies are contained in: Chapter 5 'Site Amenity Effects', Chapter 6 'Urban Environment Effects' and Chapter 13 'Natural Hazards'. These chapters state Council's key objectives and policies:

Objective: Site Amenity Effects

Objective 5.1
To avoid, remedy or mitigate adverse effects from the use of land on the use and enjoyment of other land and on the qualities of natural and physical resources.

A relevant policy directive under this objective states:

Policy 5.1.9A
To avoid, remedy or mitigate adverse effects of urban use and development on rural activities at the interface between urban and rural areas.

Objectives: Urban Environment Effects

Objective 6.1
Urban growth that avoids or mitigates the loss of land of high productive value and the risks of extending onto land subject to natural hazards.

Objective 6.2
Sustainable urban growth that is consistent with the capacity of services and has access to the necessary infrastructure such as water supply, roading, wastewater and stormwater systems.

Relevant policy directives under these objectives state:

Policy 6.1.4
To avoid extending urban development onto natural floodplains with a moderate to high risk of flooding or areas that have a moderate to high risk or river or coastal erosion or inundation or land instability. (emphasis added)

Policy 6.1.5
To require new areas of residential development to be adequately buffered from the effects of rural activities on the urban-rural interface.

Policy 6.8.10
To control land use in areas subject to risk of flooding. (emphasis added)

Objective: Natural Hazards

Objective 13.1
Management of areas subject to natural hazards, particularly flooding, instability, coastal and river erosion, inundation and earthquake hazard, to ensure that development is avoided or mitigated, depending on the degree of risk.

A relevant policy directive under this objective states:

Policy 13.1.2A
To avoid or mitigate adverse effects of the interactions between natural hazards and the subdivision, use and development of the land.

The most relevant Rules which follow from the objective and policy framework set out in the Plan are contained in Chapter 16.3 'Subdivision' and Chapter 17.1 'Residential Zone'. The assessment criteria set out in Schedule 16.3A, are provided to guide Council in evaluating the proposed subdivision.

Details of the assessment of the proposed subdivision consents in terms of these matters is set out in the chapters following.

5. ASSESSMENT

In accordance with Section 104 of the Resource Management Act, Council must consider the actual and potential effects on the environment of allowing the activity, have regard for any relevant objectives, policies, rules, and consider any other matters relevant and reasonably necessary to determine the application.

5.1 Assessment of Environmental Effects

Pursuant to Section 104 (1)(a) of the Resource Management Act, the following effects assessment has been set out.

The application identified six key environmental effects based on the scale and nature of the proposal. These were:

1. Impacts on Productive Values
2. Impacts on Character and Amenity
3. Impacts on Landscape Issues
4. Potential for Cross Boundary Effects
5. Traffic and Access Impacts
6. Servicing Impacts
7. Potential Cumulative Effects
8. Consultation

These are discussed below. Where appropriate, measures to mitigate any effects offered by the applicant have been adopted as suggested conditions of the consent should the Hearing Panel grant the consent.

Impacts on Productive Values

In the past, the site offered small scale productive value in the way of produce generated from market gardening. It is agreed that the loss of this land to residential development is not a significant adverse environmental effect on productive values. Moreover the land is zoned residential for which this application is deemed appropriate.

Impacts on Character and Amenity

The applicant notes that the development is 'appropriate' for the site and that it will 'positively add to the existing character and amenity of the Riwaka settlement.'

This was questioned by a number of submitters particularly with respect to the suggested reduction in setbacks from the Rural 1 boundary.

Impacts on Landscape Issues

The applicant noted that the subject site is 'located on a low-lying section of land'. The applicant has no reference to the effects on the environment as a result of flooding/inundation. However a reference to 'low lying' provides a means to enter into a discussion on both flooding and stormwater issues.

Flooding and Stormwater

Flooding and the use of the open drain as a flowpath is a significant resource management issue. There is written evidence[1] provided by the applicant's Engineer (Mr John McCartin) of the significant flood event in April 1976. Moreover it was acknowledged by a few of the submitters about additional flooding events, albeit not as significant as the 1976 event, but nonetheless significant enough to cause localised flooding on their properties.

[1] Lodged with Application: Summary Report on Drainage Matters for Property at 510 Main Road Riwaka, Pt Lot 4 DP1267 (June 2004).
Lodged as Further Information: Addendum to Drainage Report Valentine Subdivision Application RM040807 (February 2005).

This is a major issue with respect to potential flooding effects and although it is agreed that the recommendations in Mr McCartins report are valid, it may be prudent to adopt a precautionary approach and explore other ways to avoid or mitigate the potential risk of flooding to any new dwellings and to offset the concerns noted by other in their submissions.

To that end it is suggested that a modified application be adopted. The main points would be:

1. A reduction from five allotments to three allotments. This would result in the deletion of Lots 1 and 5.

2. The right of way would be re-aligned to move closer to the open drain.

3. Between the right of way and the open drain a drain/detention area would be created. A consent note or similar legal instrument would ensure the integrity of this area. The owners of Lot 2, 3 and 4 may equally share ownership of the drain/detention area.

4. Lots 2, 3 and 4 would be reconfigured to maximise the remaining area.

5. A buffer zone between the residential and rural boundaries would be created. If possible the 25 metre setback would be adhered too. There is also the need to consider the rural emanation easement volunteered by the applicant in favour of AL Fry Limited (Fry Orchard).

6. Confirmation of the minimum 30 metre width from the rural boundary to the farthest allotment would then be able to be ascertained.

An indicative drawing of the modified application is attached as Appendix One.

Should the Hearing Panel grant the application it will be necessary to obtain 'levels' for building platform on the subject site, which may differ from those recommended by Mr McCartin. This would ensure a reasonable and enforceable condition is adopted for final floor levels (FFL's).

Stormwater

Following a site visit on 5 May 2005, a technical stormwater report was prepared to examine the issues in relation to stormwater that may be generated from the site. A copy is attached as Appendix Two.

In summary, as noted by Mr Eric Verstappen, the proposed development of the site will increase both the speed and volume of stormwater runoff from the site to the drain adjacent. This drain already causes localised flooding of neighbouring properties during intense or prolonged heavy rainfall events.

The additional stormwater input from the development can, however, be detained in the drain if its capacity is locally increased by some 400m^3 over the length of the western boundary of the property.

Potential for Cross Boundary Effects

It was noted by the applicant that cross boundary effects (ie. reserve sensitivity issues) were not considered to be an issue with respect to rural type activities. This conclusion reached by the applicant is attributed to the school activities currently occurring on the adjoining Rural 1 land which prompts the applicants report to state; '….there is no potential for cross boundary effects associated with typical rural land use such as spraying, machinery noise, odour of other rural type effects.' No mention of the orchard located diagonally from the subject site was provided. However this point was highlighted by Mr Trevor Fry (for AL Fry Limited) who pointed out that their rural activity (namely productive fruit trees) are grown within 8 metres of the boundary of proposed Lot 4. It is likely that should the setback be reduced to 3 metres in relation to the rural boundary, bearing in mind the adjoining property to the south of proposed Lot 4 is zoned Residential, then cross boundary effects associated with rural type activities, for example spraying, will occur.

Traffic and Access Impacts

All traffic and access effects are minor in nature and would comply with the access, parking and traffic provision of the Plan. Transit New Zealand has not expressed any issues with this proposal. Issues of dust and noise associated with the right of way are minor and are a normal part of every day movement of traffic and people into and out of a right of way located at the rear of residential properties.

Access standards will be subject to specific engineering design and approval by the Council's engineering manager prior to construction.

Servicing Impacts

The property can be serviced for reticulated water and wastewater. This will be subject to specific engineering design and approval by the Council's engineering manager prior to construction.

Potential Cumulative Effects

The land is zoned for residential purposes. However, the 'expectation' of the community needs to be balanced against the potential environmental effects associated with natural hazards (ie. flooding), the expectation of the buffer zone remaining in place between urban environment (ie. dwellings) and the rural environment, albeit a school, and the orchard owned by AL Fry limited.

Consultation

Consultation is not considered an environmental effect. Matters on pre-application consultation were discussed under Chapter 3.1.

Utility Services - TDC Engineering Services

Comments by Council Officers, Mr Eric Verstappen are discussed below and provide further guidance on proposed conditions should Council grant consent to the application.

Appropriate conditions have been suggested and are at the end of the report.

Water Supply and Wastewater
All water supply and wastewater services are adequately served by existing reticulated services as noted by the applicant and will be connected into the appropriate reticulated scheme. This will be via the proposed easement afforded by the right of way.

Stormwater
Stormwater from the dwellings shall discharge directly to the open drain that traverses the property. Refer also the Flooding and Stormwater Report by Mr Eric Verstappen.

Access
Access to the site is directly off State Highway 60 via a right of way. The applicant states that a right of way ROW "A" on the attached Plan to the application, will comply with the current Tasman District Council Engineering Standards.

Flooding
As summarised by Mr Eric Verstappen, the subject property has, in the past, been significantly affected by flooding hazard. While infilling of the property has occurred to a significant extent, it is uncertain whether the property can still be affected by flooding, due to the lack of ground level information on the site and adjacent land. Some residual flood hazard may still remain on the property, depending on relative land levels of the site and neighbouring land. (Note: It is inevitable that infilling of the site will exacerbate to some degree the flooding hazard on adjacent land, in a flood event similar to that which occurred in 1976. This point may now be immaterial to the application, as infilling work on site does not form part of the proposal.)

A copy of this report is attached as Appendix Three.

Earthworks
The applicant stated earthworks would be minor in nature. It is considered earthworks effects associated with contouring building platforms and for providing an all weather surface driveway would be minimal and result in no more than minor effects.

5.1 Relevant Plans and Policy Statements

The subdivision and any resulting land use activities must be deemed to be consistent with relevant objectives and policies pursuant to Section 104 (1) (c) and (d) of the Act. The most relevant Plan is considered to be the proposed Tasman Resource Management Plan and will be used in this assessment. Because this was developed to be consistent with the Regional Policy Statement, the assessment would also be considered satisfy an assessment under the Policy Statement.

The following summarises the most relevant plan matters and provides brief assessment commentary:

Chapter 5 - Site Amenity Effects	Council must ensure that the character and amenity values of the site and surrounding environment are protected, and any actual or potential effects of the proposed subdivision must be avoided remedied or mitigated, including cross boundary effects.
Objectives: 5.1, 5.2, and 5.3 *Policies: 5.1.1, 5.1.4, 5.1.9A, 5.2.2, 5.2.8,*	As detailed in the assessment of effects (Chapter 5.1), there will be an effect of the proposed activity on character and amenity values. There is also a need to avoid or mitigate natural hazard risks.
Chapter 6 – Urban Environment Effects	The productive potential of urban (residential) land resources must be managed with respect to land subject to flooding/inundation.
Objectives: 6.1, 6.2	Recognising the need to avoid or mitigate the risks of natural hazards, with respect to flooding and the necessary access infrastructure services.
Policies: 6.1.4, 6.1.5	Policy direction highlights the importance of natural hazard risk management and appropriate buffers between the urban-rural interface.
Chapter 11 - Land Transport Effects	The potential effects of the proposed subdivision on traffic safety must be avoided, remedied or mitigated.
Objectives 11.1, 11.2 *Policies: 11.1.2B, 11.1.3.*	This matter is discussed in more detail in the assessment of effects (Chapter 5.1).
Chapter 13 Natural Hazards	The potential effects of natural hazards on the proposed subdivision must be avoided or mitigated.
Objectives13.1 *Policies 13.1.11, 13.1.2A, 13.1.10*	A precautionary approach is appropriate when dealing with a natural hazard such as flooding. Records and comments from local residents show that flooding is a real issue in this area.
Chapter 16.2 – Transport	Permitted activity performance conditions that manage vehicle access, parking and road standards are contained in this rule.

Chapter 16.3 – Subdivision	Requires Discretionary Activity resource consent for Residential Zone subdivision and land use, namely because the allotments are seeking reduced setbacks.
Assessment Criteria: Schedule 16.3A	Assessment criteria set out in Schedule 16.3A provide guidance in the assessment of the application for determining appropriate conditions. Key matters such as servicing, amenity values, natural hazards and the effect of the proposal on key resources must be addressed when assessing any application for subdivision consent. Matters most relevant to this application have been covered in the assessment of effects of this report.
Chapter 17.1.5 Residential Zone Rules	Any activity on the proposed lots is subject to permitted activity performance standards and conditions set out in Rule 17.1.5, Residential Zone rules.

It is considered that this proposal, subject to the recommended conditions and amendments will not be contrary to the majority of these objectives and policies, apart from those related to urban environmental effects (flooding/inundation) and natural hazards (flooding).

In conclusion it is considered that the proposed subdivision subject to the recommended conditions and in this particular location, is not generally contrary to the policies and objectives of the Proposed Plan.

5.2 Part II matters

The proposed subdivision is considered to be consistent with the purpose and principles contained in Part II of the Resource Management Act.

5.3 Other Matters

Relevant interests to Iwi

None have been identified. Information received by the New Zealand Archaeological Association and the New Zealand Historic Places Trust note that should any artefacts be discovered, then appropriate measures to protect them should be carried out. The recommended Advice Note requires that the earthworks cease until the New Zealand Historic Places Trust can assess the site.

Written Approvals

The applicant considered that the directly affected parties were restricted to Transit New Zealand and the Riwaka School. The applicant was able to obtain the written approval of one of the parties, Transit New Zealand but was unable to obtain the written approval of the Riwaka School. The outcomes of the pre-application consultation were discussed earlier.

No other approvals were sought from the adjoining property owners and occupiers.

6. CONCLUSION

This subdivision and land use application was assessed as a Discretionary Activity under the Tasman Resource Management Plan. It has been processed as a notified application and attracted nine opposing submissions.

The applicant sought subdivision and land use consents to subdivide Part Lot 4 DP 1267 into five fee simple allotments with a right of way off State Highway 60 to provide access to the lots.

The applicant also sought to reduce the building setback required for Lots 2, 3 and 4 between rural and residential land use on the eastern boundary to 3 metres, as opposed to the TRMP 25 metre setback, and to reduce the minimum allotment width for Lots 2, 3 and 4 to below the 30 metres required between the rural zone boundary and the farthest boundary of the allotment.

This information provided by the applicant was assessed against the subdivision criteria (Schedule 16.3A). An analysis of the actual and potential effects of allowing the activity, relevant objectives, policies, rules or other provisions of the Tasman Resource Management Plan, the submissions received and any other matters considered relevant and reasonably necessary to determine the application.

The written approvals from Transit New Zealand is acknowledged and it is considered that that section 94 approval is likely to be still appropriate for whatever the final lay out of the proposal is agreed upon.

I consider the potential environmental effects associated with this application, namely flooding and setback provisions between the urban-rural interface, taking into account the nature and scale of the proposal, are more than minor.

Furthermore, given the extent of the potential flooding issues as noted in Mr Verstappen's report and the written submissions received by local residents it is considered that the application as notified be should declined.

However, modification of the allotment layout to meet a three lot subdivision, to allow for the open drain flowpath (drain/detention area), to re-align the right of way to a closer position to the open drain and to have in place an appropriate urban-rural interface setback is more in keeping with the intent of the objectives and policies of the Tasman Resource Management Plan.

Granting the application in its current form would be contrary to the criteria set down for subdivision application, in particular, for criteria (2) and (3);

Assessment criteria (2) states;

'The potential effects of the subdivision on the amenity values and natural and physical character of the area.'

and assessment criteria (3) states;

'The extent to which the effects of natural hazards will be avoided or mitigated.'

On assessment criteria (2), the reduced setback from the Rural 1 zone from 25 metres to 3 metres is contrary to the policy direction set out in the Tasman Resource Management Plan, with respect to the urban-rural interface. A number of submitter noted this issue, particularly from Riwaka School (Board of Trustees) and Trevor Fry (on behalf of AL Fry Limited).

It is contended that existing land use activities carried out by the operators on AL Fry Limited orchard will, in all likelihood, create reserve sensitivity issues and will result in potential adverse cross boundary effects coming to fruition.

On assessment criteria (3), the flood and secondary floodway area in the vicinity of proposed Lots 1 and 5 are significant resource management issues that cannot be disregarded. Even though the applicant has identified an 11 metre setback, it is considered that the potential impacts on the proposed Lots 1 and 5 cannot be adequately mitigated through:

(i) an 11 metre setback;

(ii) a recommended raised building floor levels; and

(iii) a consent notice (or similar) that prohibits any structures to be built in the flood pathway.

It was also interesting to note that the applicant noted in the subdivision assessment criteria (21) [that] 'the site is not known to be subject to any natural hazards.' (refer page 7 of the application). I disagree with that statement. Given the photographic evidence provided on the 1976 flood event and the written submissions by local residents, clearly the subject site is subject to natural hazards. This is further underpinned by the meaning of 'natural hazards' as set out under section 2 of the Resource Management Act;

"Natural hazard" means any atmospheric or earth or water related occurrence (including earthquake, tsunami, erosion, volcanic and geothermal activity, landslip, subsidence, sedimentation, wind, drought, fire or flooding) the action of which adversely affects or may adversely affect human life, property, or other aspects of the environment.'

In summary, the application is deemed a Discretionary Activity. This provides the means for the Hearing Panel to apply its full discretion to the decision-making role on this application.

It is considered granting the application, as notified, would be contrary to the relevant objectives and polices of the proposed Tasman Resource Management Plan with respect to Chapter 6 'Urban Environmental Effects (flooding/inundation) and Chapter 13 Natural Hazards (flooding).

7. RECOMMENDATION

That providing the application can be amended to three lots, instead of five and the recommend conditions can be imposed, then it is recommended that pursuant to Section 104B of the Resource Management Act 1991, that Ken Valentine subdivision and land use consent RM040807 be approved.

8. CONDITIONS

Refer Appendix Four for suggested consent conditions based on suggested three allotments.

Grant Russell
(MWH Consultant Consent Planner)

Appendix One
Indicative drawing of modified application

E-mailed to Eric Verstappen (Tasman District Council)

I've carried out some stormwater calculations in relation to stormwater detention from the above subdivision in the location of the existing drain area with some improvements. Currently the drain is 66m long, 1m wide in the invert, 2m wide at the top and approximately 1.1m deep. This provides an existing volume of 109m^3. Additional storage would be limited to the 11m wide drainage strip proposed along the side of the existing residential properties. I think practically you would only increase the drain for storage purposes to about 9m wide at the top (1m in from each boundary), 1 to 2 batters slopes which results in a 5m width in the invert, and remain with the current depth at 1.1m deep. This provides a storage volume of 508m^3 less the current drain area of 109m^3 resulting in a difference of 399m^3.

For all subdivisions the Engineering Standards require that the internal stormwater reticulation be design to cater for a 1 in 5 year return period storm. On this basis and with a proposed storage volume of approximately 399m^3 there would be capacity to accommodate storm events from 10min at an intensity of 80mm/hr to a 6hr event at 18mm/hr. Any event longer than this would not be able to be accommodated on site. Note that this does not take into consideration the contribute that the site would had made prior to the development. If the open paddock area prior to development is considered and taken away from the new subdivision this would provided capacity to accommodate 5 year storm events up to 12hrs at 18mm/hr. There is little difference between the development having 3 and 5 lots accept for 1 to 2 hours additional storage for the 3 lots. See attached spreadsheet for details.

Any storm events with intensities greater than 20mm/hr over 8 hours will exceed the detention area proposed. This would include the typical heavy rainfall events that effect the region the worst which are steady rainfall intensities of 20 to 30mm/hr over 2 to 3 days, with a heavy 60 to 80mm/hr for 2 to 3 hrs at the end.

At a guess the storage area of flood water displace by the filling over the site would be very roughly be 0.45m x 4,352m^2 = 1,958.4 m^3. This is a lot more than the storage area provided on site for on site stormwater storage.

Other key issues that come to mind for the site include the need to have the sections suitably elevated to avoid flooding. I suspect the housing will be of modern construction with concrete floor slabs placed 150mm above ground level. From memory the flooding photos indicated that the only area not under water in the location of the development was the adjoining road. Minimum floor levels would therefore have to be above this height. Further a significant secondary flow path over the proposed R.O.W and through the old drain location would need to accommodate future flood flows.

As you noted with out additional level information across the site it would be difficult to determine where flood water will be directed now that the land has been fill.

James Tomkinson
Civil Engineer
MWH New Zealand Limited

Tasman District Council **Memorandum**

Environment and Planning Department

To: Environment and Planning Consents Committee

From: Eric Verstappen **File:** RM040807

Subject: Flooding and Stormwater Impacts on Proposed Subdivision

Introduction

Mr Valentine proposes to subdivide Pt lot 4 DP 1267 into 5 lots, with access to Main Rd Riwaka. The purpose of this report is to comment on the flood hazards that this property, and its potential residential subdivision thereof, is exposed to. In addition, the impacts of an incremental increase in stormwater discharge from the proposed subdivision on the receiving environment, and how any adverse effects may be able to be mitigated, are assessed.

Flooding Hazard

The Riwaka-Little Sydney-Brooklyn floodplains are exposed to variable flooding hazards, depending on both the nature of the rainfall event and the capacity of drainage and river networks to contain this rainfall. The Little Sydney, for example, breaks its banks from time to time, and more frequently than the Brooklyn and Riwaka rivers, causing localised flooding of adjacent low lying areas. However, the most severe flood event to have affected the Riwaka plains area in recent times was the flood event that occurred on 9 April 1976. This caused widespread surface flooding over much of the plain, including major flooding of the Riwaka township.

The subject property was entirely inundated by floodwater for at least several hours during this event, from as judged from photographic records taken some 2 hours after the flood peak. The depth of flooding is not precisely known, as land levels existing at the time have since been altered, but a depth of 0.5m or more is likely to have been reached.

Since the 1976 flood event, the property has been significantly raised by infilling. While the applicant has not provided any contour or level information with the application, visual inspection of the site suggests that the land level of the property is very similar to, and perhaps even slightly higher than, adjacent land levels. Land surrounding this property was also affected by widespread ponded and surface water flow to varying degrees and durations during the April 1976 flood event.

Whether sufficient infill has been placed to now make this property flood free in a similar event to that experienced in April 1976 is uncertain. Ground levels of the property in relation to surrounding land levels are unknown. Infill of the property will alter flooding patterns and flow paths in the immediate area, and will exacerbate overland flow adjacent to the property. Again, the degree that property infill has altered and exacerbated flooding

on neighbouring land is unknown, as ground contour information in the general area is unavailable.

It is reasonable to suggest that unless the ground level of the property is now at or above level of the crown of the Main Rd adjacent, and to some extent, the level of School Rd to the north, some flooding hazard may well remain in an event similar to that experienced in 1976. This event is likely to have a return period of the order of 50 years on average. As a consequence, to ensure appropriate clearance above a Q50 floodwater level, it would be prudent to set minimum floor levels of any dwellings built on this property, should subdivision be approved, to at least 500mm above the crown of the adjacent Main Rd, in accordance with the Council Engineering Standards 2004.

Stormwater disposal

Construction of an additional 5 houses, along with hardstand areas that inevitably accompany housing development, will slightly increase the volume and speed of rainfall runoff from the property over that which would occur from the undeveloped site. It is my understanding that local residents currently experience localised flooding on their properties during intense rainfall periods. Additional stormwater from the proposed subdivision is logically discharged to this drainage channel rather than to ground. This will exacerbate, to some degree, the capacity of the drain and flooding effects on neighbouring land during periods of intense or prolonged heavy rainfall.

This adverse effect can be mitigated, potentially to a sufficient degree to result in any potential adverse effects of additional stormwater to this drain being no more than minor. This can potentially be achieved by at least 2 methods. The storage capacity of the drain along the western boundary of the property can be increased, to provide for the additional stormwater input to the system that for the period of the rain event cannot effectively escape downstream due to capacity limitation of the downstream drainage network. Alternatively, the local drainage network may have a variable ability to discharge stormwater downstream, due to the presence of undersized culverts or poorly maintained sections of open drain, that individually or collectively locally restrict water flow.

The applicant can more readily address stormwater capacity concerns in the adjacent drainage network by potentially providing such “detention storage” on his land, by widening the existing drain adjacent to his property, to offset the effects of his additional stormwater contribution to the drain.

Extreme short term rainfall intensities of 55mm/hr for a period of 1 hour produces, conservatively, an additional volume of water from the proposed subdivision, over and above that from the undeveloped site, of approximately 92 cu.m. At the other extreme, rainfall over a 6-8 hour period of 25mm/hr intensity can also be experienced. This would produce an additional 336 cu.m of runoff. The later is the more severe case to mitigate. If it is assumed that all additional runoff is stored rather than can escape to some extent downstream throughthe drainage network, then approx 350 cu.m. additional detention capacity needs to be provided in the drain, to completely mitigate the effects of additional development on the property.

If the drain adjacent to the property is widened over its full 66m length along a proposed 11m wide drainage easement, to be some 9m wide at the top, 5m wide at the bottom, have a similar depth of 1.1m to existing and have 2H:1V batter slopes, approximately 400 cu.m. of additional capacity/storage can be provided. This more than sufficiently offsets requirements for storage of additional stormwater runoff from the proposed development. How such storage requirements affect whether 5 lots can be provided. This may require the subdivision layout to be reconfigured, as the proposed Lot 1 may become unacceptable as a residential lot, due to the presence of the drain over the site.

Summary

The subject property has, in the past, been significantly affected by flooding hazard. While infilling of the property has occurred to a significant extent, it is uncertain whether the property can still be affected by flooding, due to the lack of ground level information on the site and adjacent land. Some residual flood hazard may still remain on the property, depending on relative land levels of the site and neighbouring land. (Note: It is inevitable that infilling of the site will exacerbate to some degree the flooding hazard on adjacent land, in a flood event similar to that which occurred in 1976. This point may now be immaterial to the application, as infilling work on site does not form part of the proposal.)

Proposed development of the site will increase both the speed and volume of stormwater runoff from the site to the drain adjacent. This drain already causes localised flooding of neighbouring properties during intense or prolonged heavy rainfall events. The additional stormwater input from the development can, however, be detained in the drain if its capacity is locally increased by some 400 cu.m over the length of the western boundary of the property.