

STAFF REPORT

TO: Environment & Planning Subcommittee

FROM: Pauline Webby, Consent Planner

REFERENCE: RM080990 (Subdivision), RM080991 (Land use)

SUBJECT: **P J and WAKEFIELD - REPORT EP09/05/02** - Report prepared for hearing of 22 May 2009

1. INTRODUCTION

1.1 Purpose of this Report

The following report is my assessment of the applications RM080990 and RM080991.

1.2 Site, Application and Background

The property is situated in the Mapua locality with a frontage on to Seaton Valley Road and is legally described as Lot 1 DP6975 comprised in CT 2B/348.

The site is a gently sloping site that is generally elevated above the adjoining low lying Rural 1 land. An area of the proposed Lot 2 in the northern corner is low lying and generally at the same level as the adjoining Rural 1 land. The land has views of Seaton Valley in a north westerly direction.

The existing home and associated buildings are surrounded by well established gardens, plantings and mature trees which obscure views of the dwelling from adjoining properties.

There appears to be four existing access points onto the property from Seaton Valley Road, all have limited sightlines, but not all appear utilised regularly.

1.3 Tasman Resource Management Plan, Zoning and Consent Requirements

Due to the advanced stage of the Tasman Resource Management Plan (The Plan/TRMP) through the planning process, having become partially operative on 1 November 2008, pursuant to Section 19 of the Resource Management Act 1991, the Tasman Resource Management Plan is the dominant Plan for these applications to be assessed under, and no weight needs to be attributed to the Transitional District Plan.

The land is zoned Rural 1 and is within Land Disturbance Area 1 according to the Tasman Resource Management Plan (TRMP). The Seaton Valley Road is a Collector Road in the TRMP hierarchy. There are no archaeological sites known to Council on the site but there are identified sites within the wider area.

The subdivision is considered to be a Discretionary Activity under Rule 16.3.5.2 of the Tasman Resource Management Plan in that the minimum lot size is less than the 12 hectares specified under controlled activity Rule 16.3.5.1 for Rural 1 zoned land.

The construction of one dwelling on Lot 2 would constitute a controlled activity if all controlled activity standards were complied with. However the controlled activity standard in Rule 17.5.3.2 specifying a minimum area of 12 hectares for a single dwelling is not met. Therefore the construction of a dwelling is a restricted discretionary activity pursuant to Rule 17.5.3.3 of the TRMP.

Overall, under the Proposed Tasman Resource Management Plan the suite of applications is considered to be of discretionary activity status due to the status of the associated subdivision application.

An aerial photograph showing the location of the Seaton Valley Road, in relation to the application site is attached as **Appendix 1** of this report.

Subdivision Consent (RM080990)

To subdivide Lot 1 DP6975 comprised in CT 2B/348 into two allotments with proposed Lot 2 having 9000 square metres and no buildings and proposed Lot 1 having an area of 6760 square metres and containing the existing dwellings and other buildings. Each allotment would have a vehicle access that does not meet the minimum permitted sight distances specified in the Tasman Resource Management Plan.

Land Use Consent (RM080991)

To undertake the construction of a a single dwelling on the proposed Lot 2 which is zoned Rural 1.

2. NOTIFICATION, SUBMISSIONS AND AFFECTED PARTIES APPROVAL

Pursuant to Section 93 (1) of the Resource Management Act, the application was publicly notified as the adverse environmental effects were considered to be more than minor. Five submissions were received with two stating their neutral position and one opposing the applications and two in support.

2.1 Submissions

Disclaimer:

The readers of this report are advised that given both the number of the submissions and their detailed nature, the submission content has been summarised rather than repeated verbatim. The submissions should be read in full to understand the individual content and context of each submission.

Submission 1: Melanie Jane Drewery, 6 Stafford Drive, Mapua 7005.

Support for the following reasons:

- The application as a whole.

Preferred Council decision: Grant. The submitter does not want to be heard.

Submission 2: Ivan Maurice Wells, 59 Seaton Valley Road, Mapua 7005.

Support for the following reasons:

- The application as a whole.

Preferred Council decision: Grant. The submitter does not want to be heard.

Submission 3: Richmond Sherwood Johns, 2 Desford Close, Shelly, Perth Western Australia 6148.

Neutral position:

- Submitter has added the comment that the road should be fixed and that he has significant concerns over the timing of any upgrade of the Seaton Valley Road and has various concerns with the safety of this road and sight lines in the area of the proposed subdivision.

Preferred Council decision: Grant. The submitter does not want to be heard.

Submission 4: Andrew Christopher David Palmer, PO Box 48, Mapua 7005.

Oppose for the following reasons:

- The vertical geometry of the road and the traffic safety issues relating to this.

Preferred Council decision: Decline. The submitter wishes to be heard.

Submission 5: New Zealand Historic Places Trust, PO Box 19173, Wellington.

Neutral position:

- Requests the advice note provided be included on any consent decision to ensure applicants are aware of their responsibilities under the historic places Act 1993.

Preferred Council decision:None Stated. The submitter does not want to be heard.

Submission 5: New Zealand Fire Service Commission, C/- Beca Carter Hollings & Ferner Ltd, PO Box 3942 Wellington 6140.

Neutral, making the following points:

- The water supply for fire fighting purposes will be sourced from a dedicated 23,000 litre water collection tank. This is less than the 45,000 litres capacity recommended by the NZFC Fire Fighting Water Supplies Code of Practice SNZ PAS 4509:2003.
- The Commission seeks that should consent be granted, a condition be imposed requiring compliance with the NZFC Fire Fighting Water Supplies Code of Practice SNZ PAS 4509:2003.

Preferred Council decision:None stated. The submitter reserves the right to be heard.

3. PRINCIPAL ISSUES

The principal issues associated with the applications are:

- a) Will the development be able to maintain the level of rural character and amenity that is anticipated by its Rural 1 zoning?
- b) Is the application consistent with the objectives and policies?
- c) Will the development be able to provide safe access to and from the additional allotment from the Seaton Valley Road?
- d) Will the development affect productive use of the land in a manner that is contemplated by the Rural 1 zoning?

4. STATUTORY PROVISIONS

The Council must consider the application pursuant to Section 104 of the Resource Management Act 1991.

The matters for the Council to address in Section 104 are:

- Part II matters;
- the actual and potential effects on the environment of allowing the activity (Section 104 (1)(a));
- relevant provisions of the Tasman Regional Policy Statement and the Proposed Tasman Resource Management Plan (Section 104 (1) (b));
- any other matter the Council considers relevant and reasonably necessary to determine the application (Section 104 (1)(c)).

5. RESOURCE MANAGEMENT ACT PART II MATTERS

5.1 Application for Resource Consent

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.

Section 5 sets out the **purpose** of the Act which is to promote the sustainable management of natural and physical resources. "Sustainable management" means:

"Managing the use, development and protection of natural and physical resources in a way, or at a rate, which enables people and communities to provide for their social, economic, and cultural well-being and for their health and safety while -

- *sustaining the potential of natural and physical resources (excluding minerals) to meet the reasonably foreseeable needs of future generations; and*
- *safeguarding the life-supporting capacity of air, water, soil, and ecosystems; and*
- *avoiding, remedying, or mitigating any adverse effects of activities on the environment*

Sections 6, 7 and 8 set out the **principles** of the Act:

Section 6 of the Act refers to matters of national importance that the Council shall recognise and provide for in achieving the purpose of the Act. There are no matters of particular relevance to this application.

Section 7 of the Act identifies other matters that the Council shall have particular regard to in achieving the purpose of the Act. Relevant matters to this application are:

- 7(b) the efficient use and development of natural and physical resources
- 7(c) the maintenance and enhancement of amenity values
- 7(f) maintenance and enhancement of the quality of the environment, and
- 7(g) any finite characteristics of natural and physical resources

These matters are addressed in section 6 of this report where it is considered that the above matters are met by this development.

Section 8 of the Act shall take into account the principles of the Treaty of Waitangi (Te Tiriti o Waitangi). I do not anticipate that there are any relevant issues for this application in respect of Section 8.

If consent is granted, the proposed activity must be deemed to represent the sustainable use and development of a physical resource and any adverse effects of the activity on the environment are avoided, remedied or mitigated.

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

5.2 Tasman Regional Policy Statement

The Regional Policy Statement seeks to achieve the sustainable management of land and coastal environment resources. The objectives and policies of the Policy Statement clearly articulate the importance of protecting land resources from inappropriate land use and development.

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

5.3 Tasman Resource Management Plan

The most relevant Objectives and Policies to this application are contained in:

- Chapter 5 “Site Amenity Effects”;
- Chapter 7 “Rural Environment Effects”;
- Chapter 11 “Land Transport Effects”;

The most relevant Rules which follow from these imperatives are contained in:

- Chapter 16.3. “Subdivision”;
- Chapter 17.8 “Rural 1 Zone”;
- Chapter 16.2 “Transport”.

6. ASSESSMENT

6.1 This section sets out the consideration of the land use and subdivision applications and the submissions received, subject to Part 2, pursuant to Section 104(1) (a), (b), and (c) of the Resource Management Act.

The matters for assessment of discretionary subdivision, Rural 1 zone are contained within Rules 16.3.5.2 and 17.5.3.3 of the Plan, the objectives and policies and related Plan provisions, and the environmental effects of the proposal are assessed.

I have identified the following environmental effects in terms of Section 104(1) (a) of the Resource Management Act as relevant to this application. These relate to the relevant matters applicable to this application in the TRMP.

These include:

- Schedule 16.3A Assessment Criteria for Subdivision;
- Schedule 16.3B Transport Standards;
- Matters of discretion

6.2 Rural Land Productive Value Assessment

Objectives and Policies relating to Rural Land Productive Values
(The underlined terms are defined below).

Objective 7.1.2 *"Avoid the loss of potential for all land of existing and potential productive value to meet the needs of future generations, particularly land of high productive value".*

"High Productive Value" is defined in Chapter 2 of the PTRMP as:

"in relation to land, means land which has the following features:

- (a) flat to gently rolling topography;*
- (b) free-draining, moderately deep to deep soils;*
- (c) moderate to good inherent soil fertility and structure;*
- (d) a climate with sufficient ground temperate, sunshine, available moisture, and calmness to make the land favourable for producing a wide range of types of plants."*

Policy 7.1.3.3 seeks to *"avoid, remedy or mitigate adverse actual, potential, and cumulative effects on the rural land resource."*

Policy 7.1.3.4 *"requires land parcels upon subdivision to be of a size and shape that "retains the land's productive potential, having regard to the actual and potential productive values, the versatility of the land, ecosystem values, the management of cross-boundary effects, access, and the availability of servicing.*

Objective 7.2.0 *"Provision of opportunities to use rural land for activities other than soil-based production, including papakainga, tourist services, rural residential and rural industrial activities in restricted locations, while avoiding the loss of land of high productive value."*

Policy 7.2.3.5 *"to ensure that activities which are not involved or associated with soil based production do not locate where they may adversely affect or be adversely affected by such activities"*

Subdivision Schedule matter 16.3A (1) *The productive value of the land in Rural 1, 2 and 3 zones and the extent to which the proposed subdivision will adversely affect it and its potential availability.*

6.2.1 Rural Land Productive Values Assessment

Council's Resource Scientist-Land has advised that productive value of the original property's land is limited by the small area.

However the separation into two allotments could further decrease the availability of any productive capacity over and above the current situation.

The land has in the past, been used for growing berry crops (boysenberry), and that up to one hectare of land could be available for productive use under the present site layout. The potential for any future small scale productive uses would be effectively eliminated by this subdivision proposal which will contribute to the cumulative loss of Class B land available for productive use. Policy 7.1.3.4 is not achieved by this proposal.

Sections 7.1.30 and 7.4.30 of the Plan contain principal reasons and explanations for these objectives and policies as they relate to fragmentation of Rural 1 land; the following two statements are drawn from these sections and are pertinent to this

application as they illustrate how the proposed subdivision fails to achieve these outcomes in terms of Rural 1 land..

“The Rural 1 zone comprises the most inherently productive land in the district and includes about five percent of the total land area. Threshold subdivision standards in this area provide flexibility for a range of productive uses to be made of the soil and land resource while sustaining its long term availability. Subdivision below the threshold will be limited to that which supports the objective.”

“As a result of zoning and decision making on specific applications, all parts of both the Rural 1 and 2 zones are expected to largely retain their current rural character and amenity landscape values.”

6.3 Rural Character, and Amenity Values

Objectives and Policies - Rural Character and Amenity Values

(The underlined terms are defined below).

Objective 5.1.2 *“Avoidance, remedying or mitigation of adverse effects from the use of land on the use and enjoyment of other land and on the qualities of natural and physical resources”.*

Policy 5.1.3.1 *“To ensure that any adverse effects of subdivision and development on site amenity, natural and built heritage and landscape values, and contamination and natural hazard risks are avoided, remedied, or mitigated.”*

Policy 5.1.3.5 *“To ensure that the characteristics, including size, soil type and topography of each lot of any proposed subdivision or built development are suitable for sustainable on-site treatment of domestic waste in unreticulated areas, particularly in areas where higher risks of adverse effects from on-site disposal of domestic wastewater exist.”*

Objective 5.2.2 *“Maintenance and enhancement of the amenity values on site and within communities throughout the District.”*

Policy 5.2.3.1 *“To maintain privacy in residential properties, and for rural dwelling sites.”*

Objective 7.4.2 *“Avoidance, remedying or mitigation of the adverse effects of a wide range of existing and potential future activities, including effects on rural character and amenity values.”*

Subdivision Schedule matter 16.3A (2) *“The potential effects of the subdivision on the amenity values and natural and physical character of the area.”*

Subdivision Schedule matter 16.3A (28) *“The ability of any existing or proposed building to comply with this Plan, including avoiding adverse effects on ridgelines shown on the planning maps.”*

“Rural character” is defined in the TRMP (Chapter 2) as:

"the character of the land as shown by the predominance of rural productive activities and includes:

- (a) a high ratio of open space to built features;*
- (b) large areas of pasture, crops, forestry, and land used for productive end;*
- (c) built features associated with productive rural land uses;*
- (d) low population density;*
- (e) predominant form of residential activity directly associated with a productive land use;*
- (f) social and economic activity associated with productive land use;*
- (g) cultural values associated with farming and living on the land."*

"Amenity values", as defined in Section 2 of the Resource Management Act 1991, is set out below:

"Amenity values means those natural or physical qualities and characteristics of an area that contribute to people's appreciation of its pleasantness, aesthetic coherence, and cultural and recreational attributes."

6.3.1 Assessment of the Proposed Amenity and Rural Character

The current landscape of the immediate area around the application site comprises these aspects of "*rural character*", with the provision of open space, and pastoral activities surrounding the site. The subdivision of this small lifestyle property and an additional dwelling is considered to be inconsistent with the amenity and rural character anticipated by Rural 1 zone.

Council has provided for smaller rural residential allotment in areas with specified zoning (Rural Residential and Rural 3) in order to avoid further fragmentation of Rural 1 land.

It is noted that this site has a relationship to the adjoining rural residential zone, because of its proximity, size, lifestyle use and landscape which is of the same hillside the forms the Seaton Valley rural residential zone. However the proposal will create allotments that are even smaller than the adjoining un-serviced rural residential zone minimum lot size of 2 hectares.

This application proposes allotment sizes that are less than either 12 hectares (Rural 1 minimum Lot size) or 2 hectares (rural residential Lot size).

The proposed density of the site is not consistent with the definition of "*Rural character*" as defined by the Plan and set out above and it is considered that the small allotment size proposed does not achieve the amenity and rural character outcomes anticipated for this Rural 1 land in Seaton Valley nor does it support the adjoining rural residential zone's anticipated rural character and amenity.

There were no submissions in opposition from adjoining properties opposing the development in terms of rural character and amenity.

6.4 Transport Effects

Objectives and Policies relating to transport

Objective 11.1.2 *“A safe and efficient transport system, where any adverse effects of the subdivision, use or development of land on the transport system are avoided, remedied or mitigated.”*

Policies 11.1.3.4 *“To avoid, remedy or mitigate adverse effects of traffic on amenity values.”*

Policies 11.1.3.5 *“To ensure that all subdivision design, including the position of site boundaries, has the ability to provide each allotment with vehicle access and a vehicle crossing sited to avoid adverse effects on the safety and efficiency of the road network.”*

Subdivision Schedule matter 16.3A 34) *“The degree of compliance with provisions of the current Tasman District Council District Engineering Standards, or the ability to achieve acceptable standards by alternative means.”*

Subdivision Schedule matter 16.3A 38) *“The ability to comply with the site access and vehicle crossing requirements of Rule 16.2.2.1.”*

6.4.1 Assessment of Transport Matters

Council’s Development Engineer, Mr Dugald Ley has provided comment on the traffic effects arising from the proposed subdivision. These indicate that the proposed access to Lot 2 cannot meet the required sight line distances specified in the TRMP until the vertical alignment of the road in this area is improved.

The 2009 LTCCP indicates that this upgrade work, improving the vertical alignment, will not occur in the next ten year period. Two submissions (Johns and Palmer) also cite concerns with the vertical alignment of the road and traffic safety issues in the area of the proposed subdivision.

Council’s Development Engineer considered that there are safety concerns with the access that cannot be easily mitigated.

Should consent be granted, he has advised that the following conditions may mitigate some of the adverse effects, these include limiting access to a single vehicle crossing in the location closest to proposed Lot 1, relocation of the 60/80 km sign, trimming back of bank and shrubs on the north side of the road such that a car vehicle sitting 2m back from the edge of seal has good visibility; all of which would be subject to the Council’s Engineering Manager’s approval. Conditions of consent are included.

6.5 Servicing Matters

Objectives and Policies relating to servicing

Policy 5.1.3.5 *“To ensure that the characteristics, including size, soil type and topography of each lot of any proposed subdivision or built development are suitable for sustainable on-site treatment of domestic waste in unreticulated areas, particularly*

in areas where higher risks of adverse effects from on-site disposal of domestic wastewater exist.”

Policy 7.4.3.9 *“To avoid, remedy or mitigate servicing effects of rural subdivision and development, including road access, water availability and wastewater disposal*

Subdivision Schedule matters 16.3A relating to servicing.

8A) *“For water supply, the extent of compliance with the “Drinking Water Standards for New Zealand 1995” or any subsequent replacement of this standard.”*

(10) *“Where wastewater disposal will occur within the net area of the allotment, the extent to which the site and soil assessment, design and construction of the system complies with the AS/NZS 1547; 2000, taking into account the requirements of rules in Chapter 36 regulating the discharge of wastewater.”*

(11) *“The adequate provision of potable water and water for fire fighting.”*

6.5.1 Water Supply Assessment

No reticulated water supply is available to the site; therefore a rainwater supply is required.

The Fire Service requested in its submission that the applicant achieves compliance with the NZ Fire Service Code of Practice.

The TRMP permitted standards require a minimum of 23,000 litres available for water supply. Should consent be granted, conditions requiring a minimum of 23,000 litre capacity storage tank to be provided at for the dwelling on Lot 2, with a connection suitable for fire fighting purposes are included.

6.5.2 Waste Water Discharge Assessment

No additional consents for stormwater or wastewater discharges have been applied for and the application, in conjunction with the Tasman Consulting Engineers-Ron O’Hara wastewater report attached as **Appendix 2**, indicates that both stormwater and wastewater can be managed on site in accordance with Chapter 36 of the TRMP permitted standards. Should this consent be granted the Tasman Consulting Engineers-Ron O’Hara recommendations shall be included as conditions of consent.

6.5.3 Servicing-Power and Telephone Assessment

All allotments will be provided with underground telecommunication and power connections. Should consent be granted conditions of consent to this effect are included? The adverse effects of servicing are considered to be minor.

6.6 Other Matters (Section 104(c) RMA 1991)

6.6.1 Precedent

Case law has established that the granting of consent for one application may well have an influence on how another application should be dealt with.

This application is not considered consistent with the purpose of the Resource Management Act 1991 and the relevant provisions of the Plan. While there is a low level of environmental effects generated, the proposed land use activity and subdivision is inconsistent with the Rural 1 minimum lot size rule which requires a minimum allotment size of 12 hectares for a single dwelling.

In addition to this, neighbouring land across Seaton Valley Road, is predominantly zoned Rural Residential with a minimum lot size of 2 hectares for un-serviced allotments. The minimum allotment size gives certainty in terms of the anticipated amenity that could be expected in this area and while this particular allotment could be considered to be more aligned with the nearby rural residential zoning it does not meet the minimum allotment size for either zoning.

Therefore it is considered that the creation of two allotments at 0.6 and 0.8 hectares respectively, smaller than two hectare minimum expected in the adjoining Rural Residential zoning and significantly less than the 12 hectares anticipated within a Rural 1 zoning, will create an issue of precedent arising from the grant of consent.

6.6.2 Permitted Baseline

Under Section 104 (2) of the Resource Management Act the Council may use the “permitted baseline” test to assess the proposal. Under this principle the Committee may disregard and adverse effect of the activity on the environment if the Plan permits an activity with that effect.

Subdivision Permitted Baseline

In terms of the subdivision there is no permitted activity rule in the Rural 1 zone so the permitted baseline test is not considered relevant for subdivision.

Building Construction Permitted Baseline

In terms of the construction of a dwelling on proposed Lot 2, there is no permitted activity rule in the Rural 1 zone so the permitted baseline test is not considered relevant for subdivision.

6.6.3 Written Approvals and assessment of effects

In accordance with Section 104(3) (b) of the Resource Management Act 1991 when considering an application the Council must not have regard to any effect on a person who has given written approval to the application unless before the date of the hearing, that person gives notice in writing that the approval is withdrawn. Written approvals were provided as part of these applications and the effects on these parties were not considered.

6.7 Cross Boundary and Reverse Sensitivity Effects

Subdivision Schedule matter 16.3A (9) *“The relationship of the proposed allotments with the pattern of adjoining subdivision, land use activities and access arrangements, in terms of future potential cross-boundary effects.”*

6.7.1 Cross Boundary and Reverse Sensitivity Assessment

The creation of an additional small rural lifestyle allotment in a productive rural environment has potential to create cross-boundary effects. There appears to be no specific potential cross boundary effects from adjoining properties other those generated by continued rural land uses. It is considered that the site landform, the road location and the existing mature vegetation providing buffers from adjoining properties reduces the potential for cross boundary and reverse sensitivity effects to minor.

7. SUMMARY AND CONCLUSIONS

- 7.1 The existing site is 1.58 hectares in size, with the existing dwelling and associated lifestyle development being located towards the southern end of this property.
- 7.2 The proposal seeks to create one additional rural title and to construct a dwelling on the new allotment.
- 7.3 The existing site's topography, small size and lifestyle developments (buildings/gardens) does not exclude future small scale productive potential.
- 7.4 The property is zoned Rural 1 under the Tasman Resource Management Plan and this development is not considered to be consistent with the relevant policies and objectives of the Plan.
- 7.5 The proposed access cannot comply with the TRMP sight line distances and the traffic safety issues are not easily mitigated.

8. RECOMMENDATION

Subdivision Consent (RM080990)

That pursuant to Section 104B of the Resource Management Act 1991 the Tasman District Council **DECLINES** consent to the application by P and J Wakefield to subdivide Lot 1 DP6975 comprised in CT 2B/348 into 2 allotments.

Landuse Consent (RM080991)

That pursuant to Section 104B of the Resource Management Act 1991 the Tasman District Council **DECLINES** consent to the application by P and J Wakefield to construct a dwelling on Lot 2.

9. RECOMMENDED CONDITIONS

If the Committee grants the consents, I would recommend that approval include the following conditions:



Pauline Webby
Consent Planner

RESOURCE CONSENT NUMBER: RM080990

John Leslie Wakefield and Phillip Jeffrey Wakefield
(hereinafter referred to as "the Consent Holder")

ACTIVITY AUTHORISED BY THIS CONSENT:

Subdivision Consent (080990)

To subdivide Lot 1 DP6975 comprised in CT 2B/348 into two allotments with proposed Lot 2 having 9000 square metres and no buildings and proposed Lot 1 having an area of 6760 square metres and containing the existing dwellings and other buildings. Each allotment would have a vehicle access that does not meet the minimum permitted activity sight distances specified in the Tasman Resource Management Plan.

CONDITIONS

General

1. The subdivision shall be undertaken in general accordance with the information submitted with the application for consent and in particular with the plan entitled *Location Plan-On-Site Wastewater disposal system,* File No. 07301, dated 08/08/2007, prepared by Tasman Consulting Engineers and attached to this consent as Plan A; *"P & J Wakefield - Proposed Boundaries,"* attached to this consent as Plan B and the report titled, *"Onsite-wastewater Management-P&J Wakefield subdivision-Seaton Valley Road, Mapua"* and dated 20/09/09 and attached to this consent as Appendix 2. If there is any conflict between the information submitted with the consent application and any conditions of this consent, then the conditions of this consent shall prevail.

Easements

2. Easements are to be created over any services located outside the boundary of the allotment that they serve. Reference to easements is to be included in the Council resolution on the title plan and endorsed as a Memorandum of Easements.
3. The survey plan that is submitted for the purposes of Section 223 of the Act shall include reference to easements.

Financial Contributions

4. The Consent Holder shall pay a financial contribution for reserves and community services in accordance with following:
 - a) The amount of the contribution shall be 5.5 per cent of the total market value (at the time subdivision consent is granted) of a notional 2,500 square metre building site within Lot 2.
 - b) The Consent Holder shall request in writing to the Council's Consent Administration Officer (Subdivision) that the valuation be undertaken. Upon receipt of the written request the valuation shall be undertaken by the Council's valuation provider at the Council's cost.

- c) If payment of the financial contribution is not made within two years of the granting of the resource consent, a new valuation shall be obtained in accordance with (b) above, with the exception that the cost of the new valuation shall be paid by the Consent Holder, and the 5.5 per cent contribution shall be recalculated on the current market valuation. Payment shall be made within two years of any new valuation.

Advice Note:

A copy of the valuation together with an assessment of the financial contribution will be provided by the Council to the Consent Holder.

Advice Note:

Council will not issue a completion certificate pursuant to Section 224(c) of the Act in relation to this subdivision until all development contributions have been paid in accordance with Council's Development Contributions Policy under the Local Government Act 2002.

The Development Contributions Policy is found in the Long Term Council Community Plan (LTCCP) and the amount to be paid will be in accordance with the requirements that are current at the time the relevant development contribution is paid in full.

This consent will attract a development contribution on one allotment in respect of roading.

Vehicle Crossing to Lot 2

5. The vehicle crossing to Lot 2 shall be formed to meet the following standards:
- a) is between 3.5 metres and 6.0 metres in width at the property boundary; and
 - b) has an extension of the road carriageway surface standard from the edge of the road carriageway for a minimum of 10.0 metres into the legal site.

Upgrade of Road Margin

6. Prior to the issue of s.224 the following works shall be completed:
- a) Relocate the 60/80 km sign to a site to be confirmed by Council's Engineering Manager.
 - b) Trim back bank and shrubs on the north side of the road such that a car vehicle sitting 2 metres back from the edge of seal has good visibility and these works shall be undertaken to the satisfaction of Council's Engineering Manager.
 - c) Placement of a convex mirror on Seaton Valley Road, to improve traffic visibility coming from the east, in a location subject to the approval of Council's Engineering Manager.

Power and Telephone

7. Full servicing for underground power and telephone cables shall be provided to the boundary of Lot 2. The Consent Holder shall provide written confirmation to the

Council's Engineering Manager from the relevant utility provider that live power and telephone connections have been made to the boundaries of the allotment. The written confirmation shall be provided prior to a completion certificate being issued pursuant to Section 224(c) of the Act.

Commencement of Works and Inspection

8. No works shall begin on-site until the Engineering Plans have been approved pursuant to Condition 9.

Advice Note

Prior to the commencement of work the Consent Holder and its representatives may be invited to meet with Council staff to discuss the work to be undertaken including (but not limited to) roles and responsibilities, timing of the works and reporting.

Engineering Works and Plans

9. All engineering works, shall be constructed in accordance with the Council's Engineering Standards and Policies 2008 **and** to the satisfaction of Council's Engineering Manager.

Engineering Certification

10. At the completion of works, a suitably experienced chartered professional engineer or registered professional surveyor shall provide the Council's Engineering Manager with written certification that all works, have been constructed in accordance with the approved Engineering Plans and the conditions of this consent.
11. Certification from a chartered professional engineer or geotechnical engineer experienced in the field of soils engineering (and more particularly land slope and foundation stability) that all building platforms and nominated building sites on Lot 2 are suitable for the erection of residential buildings shall be submitted to the Council's Engineering Manager. The certificate shall define on Lot 2 within the building location area, the area suitable for the erection of residential buildings and shall be in accordance with Schedule 2A of NZS 4404:2004 Land Development and Subdivision Engineering.

Advice Note

Any limitations identified in Schedule 2A may, at the discretion of the Council, be the subject of a consent notice pursuant to Section 221 of the Resource Management Act 1991 prior to the issue of the Section 224(c) certificate. This consent notice shall be prepared by the Consent Holder's solicitor at the Consent Holder's expense and shall be complied with by the Consent Holder and subsequent owners on an ongoing basis.

Building Location Areas

12. The building location area shall be as shown on plans, titled "*Location Plan-On-Site Wastewater disposal system*," File No. 07301, dated 08/08/2007, prepared by Tasman Consulting Engineers and attached to this consent as Plan A and "*P & J Wakefield - Proposed Boundaries*," and attached to this consent as Plan B. The

building location areas shall be shown on the survey plan which is submitted for the purposes of Section 223 of the Act.

Water Storage

13. Proposed Lot 2 shall be subject to a requirement to store on site a minimum of 23,000 litres to be provided at the building consent stage for any dwelling on the property. The tank is to be fitted with an accessible 50 millimetre camlock coupling to enable connection with firefighting equipment.

Consent Notices

14. The following consent notices shall be registered on the certificate of title for Lots 1 and 2 pursuant to Section 221 of the Resource Management Act. The consent notices shall be prepared by the Consent Holder's solicitor and submitted to the Council for approval and signing. All costs associated with approval and registration of the consent notices shall be paid by the Consent Holder.

Building Location Areas

- a) The location of any buildings shall be restricted to the building location area shown on the Survey Plan for Lot 2 DP XXX.
- b) Proposed Lot 2 shall be subject to a requirement to store on site a minimum of 23,000 litres to be provided at the building consent stage for any dwelling on the property. The tank is to be fitted with an accessible 50 millimetre camlock coupling to enable connection with firefighting equipment.

ADVICE NOTES

The consent notice should also advise that the landowner will need to comply with the requirements of RM080991.

GENERAL ADVICE NOTES

Council Regulations

1. This resource consent is not a building consent and the Consent Holder shall meet the requirements of Council with regard to all Building and Health Bylaws, Regulations and Acts.

Other Proposed Tasman Resource Management Plan Provisions

2. Any activity not covered in this consent shall either comply with:
 1. the provisions of a relevant permitted activity rule in the Proposed Tasman Resource Management Plan; or
 2. the conditions of separate resource consent for such an activity.
3. In respect of stormwater and wastewater discharges on Lot 2, the criteria of Tasman Resource Management Plan Permitted Activity Rule 36.4.2 must be complied with or,

alternatively, resource consent (discharge permit) is obtained for the stormwater discharge.

4. Access by the Council's Officers or its Agents to the property is reserved pursuant to Section 332 of the Resource Management Act 1991.
5. Council draws your attention to the provisions of the Historic Places Act 1993. In the event of discovering an archaeological find during the earthworks (e.g. shell, midden, hangi or ovens, garden soils, pit depressions, occupation evidence, burials, taonga, etc) you are required under the Historic Places Act, 1993 to cease the works immediately until, or unless, authority is obtained from the New Zealand Historic Places Trust under Section 14 of the Historic Places Act 1993.

RESOURCE CONSENT NUMBER: RM080991

John Leslie Wakefield and Phillip Jeffrey Wakefield
(hereinafter referred to as “the Consent Holder”)

ACTIVITY AUTHORISED BY THIS CONSENT:

Land Use Consent (Application RM080991)

To undertake the construction of a single dwelling on the proposed Lot 2 which has a Rural 1 zoning.

CONDITIONS

Development

1. The location of any building site and construction of any access shall be undertaken in general accordance with the information submitted with the application for consent and in particular with the plan *Location Plan-On-Site Wastewater disposal system,* File No. 07301, dated 08/08/2007, prepared by Tasman Consulting Engineers and attached to this consent as Plan A; *“P & J Wakefield - Proposed Boundaries,”* I attached to this consent as Plan B. If there is any conflict between the information submitted with the consent application and any conditions of this consent, then the conditions of this consent shall prevail.

Commencement Date and Lapsing of Consent

2. The commencement date for this land use consent shall be the issue date of the certificate of title for Lot 2.
3. This consent will lapse five years after the issue of the certificate of title for the respective allotments unless given effect to or otherwise extended pursuant to section 125 of the Resource Management Act 1991.

Building Location Areas

4. The location of any buildings shall be restricted to the building location area shown on the Survey Plan for Lot 2 DPXXX.

Waste Water Disposal

5. Onsite waste water disposal shall be in accordance with the Tasman Engineering report attached to this consent as Appendix 3.

Advice Note:

Further consents could be required if the wastewater discharge does not meet the permitted standards in Chapter 36 of the TRMP for the Rural 1 zone.

GENERAL ADVICE NOTES

Council Regulations

1. The applicant shall meet the requirements of Council with respect to all Building Bylaws, Regulations and Acts.

Other Proposed Tasman Resource Management Plan Provisions

2. This resource consent only authorises the activity described above. Any matters or activities not referred to in this consent or covered by the conditions must either: 1) comply with all the criteria of a relevant permitted activity rule in the Proposed Tasman Resource Management Plan (PTRMP); 2) be allowed by the Resource Management Act; or 3) be authorised by separate resource consent.

Consent Holder

3. This consent is granted to the abovementioned consent holder but Section 134 of the Act states that such land use consents "attach to the land" and accordingly may be enjoyed by any subsequent owners and occupiers of the land. Therefore, any reference to "consent holder" in the conditions shall mean the current owners and occupiers of the subject land. Any new owners or occupiers should therefore familiarise themselves with the conditions of this consent as there may be conditions which are required to be complied with on an ongoing basis.

Development Contributions

4. The Consent Holder is liable to pay a development contribution in accordance with the Development Contributions Policy found in the Long Term Council Community Plan (LTCCP). The amount to be paid will be in accordance with the requirements that are current at the time the relevant development contribution is paid.

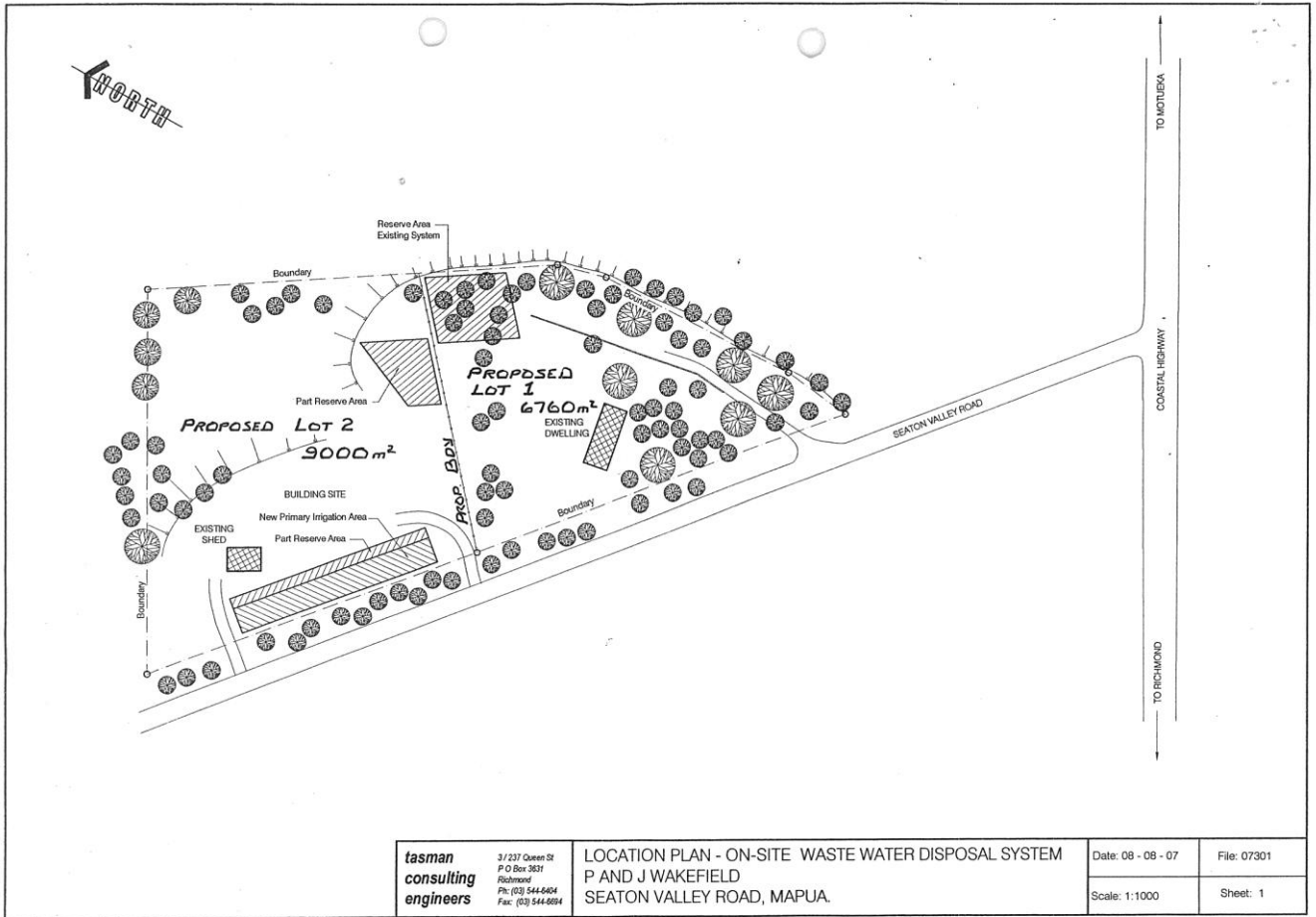
Council will not issue a Code Compliance Certificate until all development contributions have been paid in accordance with Council's Development Contributions Policy under the Local Government Act 2002.

Cultural Heritage

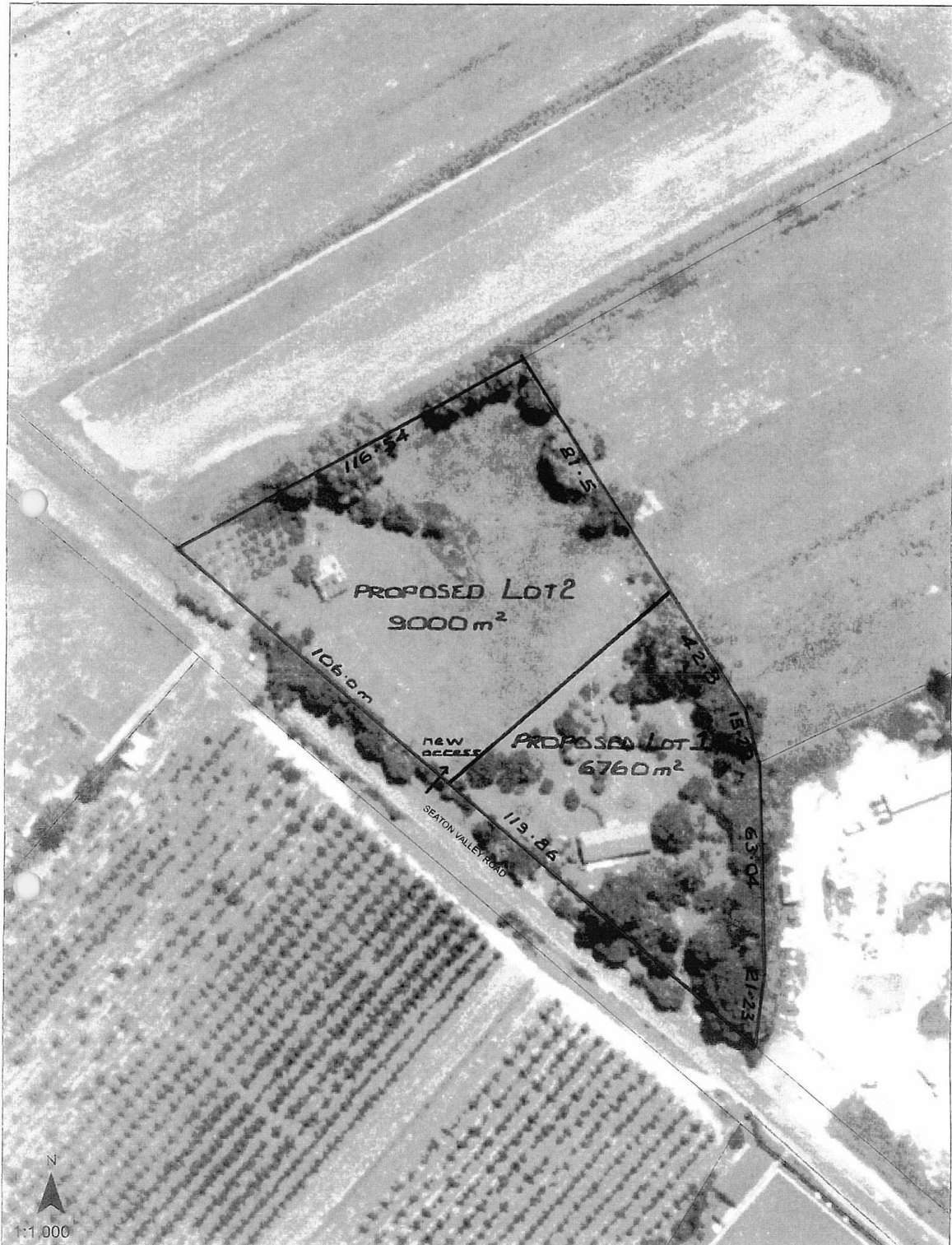
5. Council draws your attention to the provisions of the Historic Places Act 1993. In the event of discovering an archaeological find during the earthworks (e.g. shell, midden, hangi or ovens, garden soils, pit depressions, occupation evidence, burials, taonga, etc) you are required under the Historic Places Act, 1993 to cease the works immediately until, or unless, authority is obtained from the New Zealand Historic Places Trust under Section 14 of the Historic Places Act 1993.

PLAN A

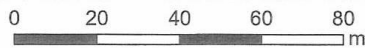
Location Plan-On-Site Wastewater disposal system, File No. 07301, dated 08/08/2007, prepared by Tasman Consulting Engineers



PLAN B
P and J Wakefield - Proposed Boundaries



P & J Wakefield
PROPOSED BOUNDARIES



R.M 080990





APPENDIX 2
“Onsite-wastewater Management-P&J Wakefield subdivision- Seaton Valley Road, Mapua” and dated 20/09/09

*tasman
consulting
engineers*

S3/237 Queen St
P.O Box 3631
Richmond
NELSON
ph: (03) 544-6404
fax: (03) 544-6403

20th September 2007

The Consents Officer
Tasman District Council
Private Bag
Richmond
NELSON

Dear Sir,

**REPORT INTO ON-SITE WASTEWATER MANAGEMENT – P & J WAKEFIELD
SUBDIVISION – SEATON VALLEY RD, MAPUA**

Tasman Consulting Engineers Limited (TCEL) were engaged by Graeme Thomas (Resource Management Consultants Ltd) on behalf of P & J Wakefield to assess the suitability for On-Site disposal of Wastewater of a proposed new lot which will result from subdivision of Lot 1 DP 6975 located at 12 Seaton Valley Road, Mapua.

General

The Subdivision is located within the R1 zone and as such the wastewater system is required to comply with the discharge conditions for that zone, *Rule 36.1.4- Discharge of Domestic Wastewater*.

The subdivision site is located at Coordinates **5995490N, 2517143E** (NZ Mapping Grid). The grid reference is the location of the approximate centre of the proposed primary disposal area.

This report will consider the following:-

- The suitability for on-site wastewater disposal within the new lot to be created in the north-west part of the existing lot. Note that for the purposes of this report the existing fence line (as shown on the attached site plan) is taken to be the boundary between the two proposed new lots.
- The availability of a suitable reserve wastewater disposal area for the existing house (located in the south-east corner of the lot) will be assessed. This is to ensure that in the event of failure of the disposal trenches for the existing septic tank, a new system complying with the requirements of NZS 1547:2000 (and with the currently applicable TDC rules for the R2 zone) may be constructed within the newly established lot containing the existing house.

Ron O'Hara BE(Civil), MIPENZ

David King BE(Civil) Hons, MIPENZ (Structural) CPEng IntPE

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Site & Soil Assessment

Geology & Soil Mapping

Geological Mapping: The GNS Geological Mapping places the lot at the approximate junction between the following soil types:-

- Lower lying area to the north-east - **Q1a** which is described as being *Well sorted gravel forming modern flood plains and young fan gravels*
- Raised area close to Seaton Valley Road - **Ptm** which is described as being *Moutere Hills Gravel - poorly to moderately well sorted clay-bound gravel dominated by predominantly quartzofeldsparhic sandstone clasts*

(Mapping taken from: Geology of the Nelson Area - GNS).

Soil Mapping: The Soil mapping is places the lot at the approximate junction between the following two soil types:-

- Lower lying area to the north-east - Braeburn Clay Loam (**Bn**) which is described as... *200mm of brownish grey clay loam, firm, strongly developed coarse blocky structure OVER 100mm dull yellowish brown clay, very firm, moderately developed coarse blocky structure OVER 225mm pale yellowish brown clay with bright brown mottles and small iron concretions, moderately developed coarse blocky structure OVER gravels and clay.*
- Raised area close to Seaton Valley Road - Mapua Sandy Loam (**Mp**) which is described as *100mm dark grey sandy loam, firm weakly developed medium blocky structure OVER 450mm pale yellowish brown clay, very firm, strongly developed very coarse prismatic structure with dark brown clay coatings on vertical cracks.*

The soil mapping information has been obtained from 'Soils and Agriculture of Waimea County New Zealand by the DSIR dated 1966. (More recent soil mapping was not available).

From an assessment of the test holes in the proposed primary irrigation area the Geological mapping and the Soil mapping are confirmed. The proposed irrigation fields are located within the Moutere Hills Gravel (Ptm) / Mapua Sandy Loam (Mp) zone, on the raised parts of the lot.

Climate

The annual rainfall for the site is approximately **0.95m** based on interpolation of rainfall data supplied by the TDC.

The annual 'raised pan' evaporation rate for the Nelson region is approximately **1.25m**, based on information supplied by Matheson. An approximate conversion to the Evaporation/Transpiration potential based on the raised pan evaporation rate using a factor of 0.7 provides a figure of 0.85m per year. While a water balance calculation has not been carried out for this site, the rainfall depth and the likely evapo-transpiration rates have been taken into account when selecting a Daily Irrigation Rate.

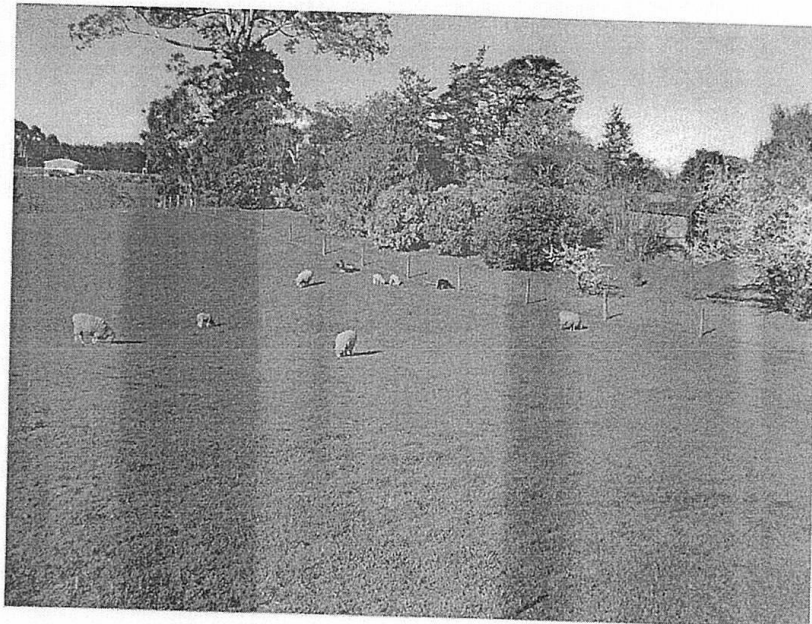
Existing Wastewater Systems in the Area

Two houses are located adjacent to the proposed new lot, both being approximately 50m away from the proposed primary irrigation area.

The existing systems are primary treatment systems (septic tank) with in-ground disposal trenches. As such they both offer significantly lower standards of wastewater treatment and disposal than will be provided for the new lot.

Topography of Site

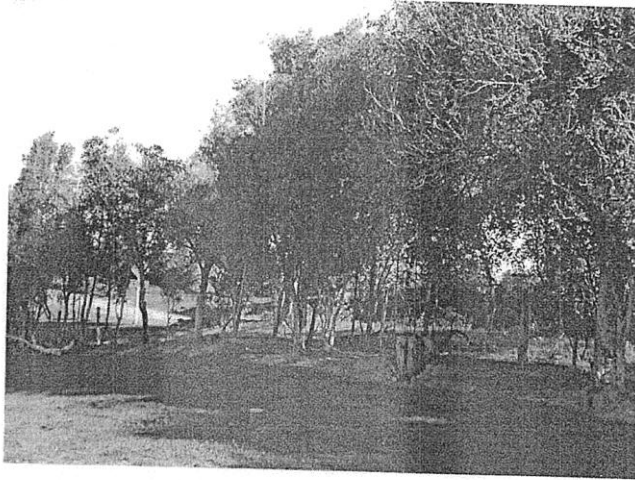
The site varies from a dry elevated gentle ridge (approx 7° slope) at the south-west boundary to low lying damp flats (2.5° slope) at the northern corner. A smaller elevated ridge is located to the on the south-east boundary at the existing fence line. The gentle ridge appears to be the optimum location for wastewater disposal, having the advantage of favourable slope configuration and elevation in its favour. The smaller elevated area on the south-east boundary provides a partial reserve area. The low lying flat areas to the north are not suitable for wastewater disposal.



View from centre of primary irrigation area looking east. Raised area in the upper left of the photo is the proposed partial reserve irrigation area

A shelterbelt of native trees approx 4m to 5m in height is located along the south-west boundary. A number of large willow trees are located along the boundaries at the low lying area to the north. The rest of the site is grass pasture.

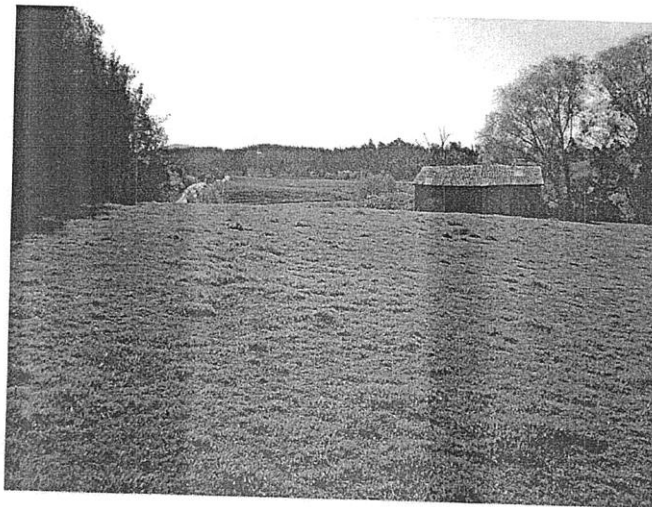
8



*Native tree shelterbelt along the Seaton Valley Road boundary.
Primary irrigation area in the foreground*

There are no water bores in the area around the lot, though the surrounding low lying area to the east of Seaton Valley Road is poorly drained with numerous deep drains constructed to assist in the removal of surface water. The area is known to be prone to flooding. Locating the primary irrigation area at the highest point in the lot will ensure that wastewater irrigated into the subsoil area will have the longest possible path to reach the low lying flood prone area and associated drains.

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View of proposed primary irrigation area looking to north-west

Site Exposure

The shelterbelt of native trees along the south-west boundary, as well as landscape planting around the existing house on the lot will shelter the irrigation area from winds from the south and south-west direction. The irrigation areas are fully exposed to winds from the north and east

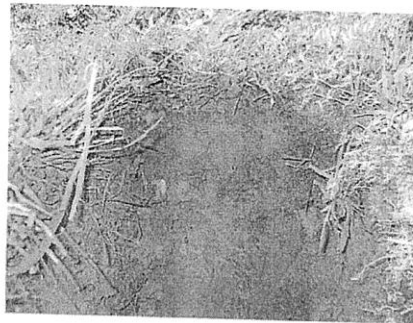
The primary irrigation area will be partially shaded from late afternoon sun but well exposed during the majority of the day. It was noted during the site investigation that the areas selected for the primary and reserve irrigation areas are the driest parts of the lot.

Site exposure is therefore expected to have a slightly positive effect upon the disposal area in that wind & sun will aid in evaporation and transpiration of surplus ground water, improving the percolation rate for treated effluent.

Soil Investigation

Three test holes were hand dug at the approximate extents of the primary disposal area, and in the area proposed for a reserve area for the existing house. The test pit logs are attached.

The test logs indicate that the soil category for the upper 450mm of the soil horizon is Cat 5 (surface topsoil) and Cat 6 (underlying soil). The category 6 soil is considered to be the limiting soil horizon as it is located at a depth of 50mm to 240mm below ground level.



Greyish black staining on vertical cracks is visible in the clay soils immediately underlying the topsoil layer. This is typical for Moutere Hills Gravel derived soils.

No groundwater was observed in the test holes.

It is therefore considered that the appropriate soil category is Category 6 (Clay Loam). The recommended Daily Irrigation Rate (DIR) for Category 6 = $2.14 \text{ mm} / \text{m}^2 / \text{day}$ (15mm per week).

Reserve Disposal Area

Provision for a reserve irrigation area of 100% of the primary disposal area is possible on the proposed new site. The reserve field is not however able to be placed within one contiguous area and is split between two physically separated areas. This is not however considered to be a significant problem as the need to run separate distribution main supply lines is easily achieved, and the use of pressure compensated emitter on the dripline in the irrigation fields means that variations in line pressure will not lead to irregular distribution of effluent within the reserve field.

It should be noted that the reserve area is not likely to be required since the use of a secondary treatment system such as an Aerated Wastewater Treatment System (AWTS) produces high quality effluent and significantly reduces the likelihood of clogging of the soil around the irrigator emitters due to formation of a bacterial biomat layer.

Consideration has also been given to provision of a reserve area which will allow the existing house on the lot to be upgraded to allow the use of an AWTS as is proposed for the new lot. This would require an irrigation area of up to 500 m².

An area suitable for wastewater irrigation has been identified in the northern corner of the lot close to the existing fence line across the lot. This area has similar features to the primary area for the new lot, in that it is raised well above the surrounding valley base, has relatively dry soil, and good exposure to sun & wind. The reserve area is shown on the attached plan.

Treatment System.

Since the soil category in the proposed disposal area is Cat 6, it will be necessary to use a *Secondary Treatment* system to ensure compliance with the requirements of NZS 1547:2000. The most common treatment systems, capable of complying with the secondary treatment standards are Aerated Wastewater Treatment Systems (AWTS). These may be further subdivided into *suspended growth* (air is bubbled through a chamber containing filtered wastewater prior to pumping out to the irrigation field) or *attached growth* (air is bubbled through filtered wastewater in a chamber containing a media with a high surface area to volume ratio prior to pumping out to the irrigation field). Such systems are typically certified by their manufacturer to achieve the following standards:-

- 5 day Biochemical Oxygen Demand (BOD₅) not exceeding 20g per m³
- Total Suspended Solids (SS) not exceeding 30g per m³

Compliance With TDC Conditions Applying to the Lot

The property is located in the Rural 1 zone and is subject to restrictions relating to the disposal of wastewater. The provisions in Rule 36.1.4 include:

- *Any new discharge first commencing after 19 September 1998 is not within any Special Domestic Wastewater Disposal Area.*

The lot is not within a Special Wastewater Disposal Area. (Complies)

- *Any new discharge first commencing after 20 December 2003 is not within Wastewater Management Area.*

The lot is not within a Wastewater Management Area. (Complies)

- *The volume of effluent discharged is not more than a weekly averaged daily flow of 2000 litres per day.*

The likely wastewater daily flow allowance for a typical 3 to 4 bedroom house is in the range of 900 to 1100 litres per day. (Complies)

- *There is no discharge or run-off of effluent into surface water.*

Careful design of the irrigation system will ensure that no surface ponding or direct run-off will occur. The primary irrigation areas have been located to provide the maximum possible separation to the low lying flood prone valley base. (Complies)

- *The disposal field is located not less than:-*
 - a) *20m from any surface water body or the coastal marine area.*
 - b) *20m from any bore used for domestic water supply.*
 - c) *1.5m from any adjoining property.*

The proposed area has been designed to fully comply with the separation distances listed above. (Complies)

- *The design and operation of the system must result in the depth of unsaturated soil between the effluent disposal field and the average winter level of groundwater or the basement rock being no less than 500mm or sufficient to ensure that the discharge does not result in any bacterial contamination of groundwater beyond the property boundary.*

There are no known bores in the vicinity and slow infiltration of treated wastewater will ensure adequate in-ground retention time to ensure treatment of pathogens. The soil profile is such that a standing winter ground water level is unlikely to occur due to the slow draining characteristics of the underlying clay soils. (Complies)

- *There is no discharge of effluent from the disposal field to the ground surface.*

Careful design of the irrigation system will ensure that no surface ponding or direct run-off will occur. (Complies)

- *The septic tank must be regularly de-sludged so that the liquid level (excluding sludge and scum) is maintained at not less than on-third of the tank volume.*

The wastewater treatment system to be used will require regular inspection and servicing (3 - 6 monthly) by a suitably qualified technician to ensure adequate performance. Checking of scum & sludge levels in the primary chamber to the system will form a part of the regular inspection program. (Complies)

- *The discharge does not create an offensive or objectionable odour discernable beyond the property boundary.*

The use of a secondary treatment system utilising aeration of the wastewater to reduce BOD & suspended solids ensures that the by products of treatment do not include CH₄, H₂S NH₃ and PH₃ which are the typical products of anaerobic treatment in a septic tank system. Instead the typical products created during the treatment tend to be CO₂, SO₂, PO₄, NO₃, and H₂O which are not associated with strong odours. In addition the conservative application rate should ensure that treated wastewater does not emit from the ground surface. (Complies).

- *An access point to allow sampling of the effluent being discharged must be provided with any on-site wastewater disposal system installed after 19 September 1998.*

The output effluent may be sampled at the pump-out chamber of the system tank. (Complies)

- *The quality of the effluent being discharged into or onto land meets the following standards.*

- 5 day Biochemical Oxygen Demand (BOD₅) not exceeding 150g per m³*
- Total Suspended Solids (SS) not exceeding 150g per m³*

Design of an on-site wastewater system capable of discharging effluent into a Category 6 soil will require the use of a Secondary Treatment System. NZS 1547:2000 secondary treatment systems are required to meet treatment standards as follows:-

- 5 day Biochemical Oxygen Demand (BOD₅) not exceeding 20g per m³
- Total Suspended Solids (SS) not exceeding 30g per m³.

Manufacturers of treatment systems designed for Secondary Treatment levels will be able to adequately meet the above limits. (complies)

Summary of On-Site Disposal of Wastewater - New Lot.

The soil classification for the disposal area on the proposed new lot is Category 6. While this is the lowest soil infiltration classification, the use of a secondary treatment system with an associated sub-surface drip-line irrigation system means that on-site disposal is suitable for this lot.

The wastewater system for the site will require specific engineering design to suit the house size and proposed usage. However this is essentially a matter of matching the Daily Wastewater Flow volume with the required irrigation area, using the specified Daily Irrigation Rate provided in this report (2.14 mm / m² / day).

The site is located within the R1 zone for which rule 36.1.4 applies. Use of a Secondary Treatment System such as an AWTS will enable full compliance with the TDC requirements for this zone.

It is recommended that the wastewater system for the new lot include the following :-

- A Secondary Treatment system shall be used to treat the wastewater from any new house on the newly created lot, prior to disposal on-site through an appropriately designed sub-surface irrigation system. The system used shall be certified in writing by its manufacturer to be capable of meeting Secondary Treatment standards under normal domestic operating conditions.
- The required area of the sub-surface irrigation field shall be calculated using the Daily Flow Rate for the proposed new house *and* a Daily Irrigation Rate of 15 mm / m² / week or 2.14 mm / m² / day.

Summary of Future Provision for On-Site Disposal of Wastewater – Existing House.

A suitable area (500m²) has been identified in the northern corner of the part of the existing lot that will remain with the existing house, suitable for future use as an irrigation area. This would allow conversion of the wastewater system from the existing septic tank to a Secondary Treatment system such as an Aerated Wastewater treatment System.

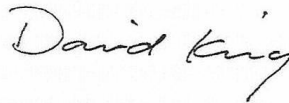

This report is furnished to the Tasman District Council alone. It is acknowledged that the council is entitled to provide information contained in this certificate pursuant to section 31 of the Building Act 1992 and section 44A of the Local Government Official Information and Meetings Act 1987.

Yours faithfully

Tasman Consulting Engineers Limited

per:

Reviewed:



Ron O'Hara
BE (Civil), MIPENZ
Senior Engineer

David King
ME(Civil) MIPENZ (Structural) CPEng IntPE
Senior Engineer

Attached: Plan Showing location of proposed irrigation area and Test Pits
Soil test hole logs (three test holes)

(File: Wakefield_Wastewater_Report_18-09-07.DOC)