

Fonterra Limited

Plan Change Application to the Selwyn District Council



Fonterra Co-operative Limited

Statutory Analysis and Section 32 Evaluation Report

July 2016

Planz Consultants

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Request for Private Plan Change

Resource Management Act 1991

1 Introduction

Clause 21 of the First Schedule of the Resource Management Act (RMA) states that any person may request a change to a district plan or regional plan. Clause 22 of the same schedule requires that a request under cl21 for a plan change be made in writing and explain:

- the purpose of the plan change; and
- the reasons for the plan change

In addition, the request must contain:

- an evaluation report in accordance with section 32 of the RMA; and
- where environmental effects are anticipated, a description of those effects taking into account the provisions of Schedule 4, and in such detail as corresponds with the scale and significance of the actual or potential environmental effects anticipated from the implementation of the change.

This report is intended to address all of the above matters, providing a comprehensive and informative basis for consideration of the request by Fonterra Limited (Fonterra) to establish a Dairy Processing Management Area (DPMA).

2 Plan Change 43 Background

On 16 May 2014, Synlait Milk Limited (Synlait) submitted a request for a private Plan Change (PC43) to introduce a Dairy Processing Management Area (DPMA) within the Rural (Outer Plains) Zone of the District Plan. The boundary of this DPMA surrounded their existing Dunsandel Milk Processing site.

The Synlait Plan Change introduced a new policy which described the purpose of the DPMA and a new Appendix containing a specific set of rules for activities and buildings related to dairy processing. The DPMA was also introduced as an Outline Development Plan (ODP) which acted as an overlay within the Rural (Outer Plains) Zone. It therefore did not completely replace the underlying Rural Zone which remained in place enabling rural activities to continue on a permitted basis should dairy processing activities and development not achieve the development envelope specified in the ODP and associated DPMA rules.

Fonterra worked closely with Synlait throughout the drafting and preparation of this Plan Change to ensure that the framework that was progressed would be equally applicable and flexible for both the Fonterra and Synlait sites with the key points of difference being the ODP layouts and associated development parameters for each site.

The decision to accept the Commissioner's recommendation on the Synlait Plan Change was made by Selwyn District Council on 25 March 2015. No appeals were forthcoming on this decision and it has subsequently become operative.

The basis of this plan change is to enable continued growth of the site in both the volume and/or value of milk product by providing an appropriate planning framework and reducing the continued reliance on the resource consent process for variations or changes in the future, no matter how small these may be. The Plan Change has therefore been prepared to provide for a maximum envisaged and optimal scale of development that is likely to occur within the foreseeable future. This will provide Fonterra with both the flexibility to operate and the ability to expand the site, while also providing both Council and the surrounding community realistic expectations for the site in the long term.

5 Reasons for the Plan Change

The dairy plant is a 'rural-based industrial activity' as defined in the Selwyn District Plan (Rural Volume) and while it is recognised as a legitimate activity that could be anticipated in the Rural Outer Plains, prior to PC43, there were no applicable rules enabling development or activities without a resource consent and there was limited policy guidance. PC43 has addressed the above matters in so far as they relate to the Synlait site at Dunsandel. However, the provisions do not currently relate to the Fonterra Darfield site or any other site within Selwyn District. However, PC43 was designed to enable Fonterra to broadly utilise the framework of PC43 with minor adjustments specific to their site only.

Due to the Fonterra Darfield site being reliant on resource consents for almost any development or changes on-site, the development and up-grading of any plant therefore requires considerable lead-in-time and finance to prepare applications, with the accompanying uncertainty as to whether or not the application will be successful. This continuous and ad hoc consenting creates uncertainty for the community, Council and stakeholders as to the maximum development envelope of the site. The proposed Plan Change seeks to address this and provide an indication of the maximum development potential within the site. This approach will assist the Council as administrator of the District Plan, the community and stakeholders who are similarly required to expend time and money in on-going reviews of land use consents.

As noted above, the use and on-going development of the Fonterra Darfield site has been subject to a rolling sequence of resource consents since the first consent was approved for the initial construction of the milk processing facility in December 2010. At least 12 resource consents have been lodged and granted since the original substantive application. In addition to the time and costs involved in processing consents, the conditions on each consent can quite quickly become superseded by variations (Section 127 of the RMA), creating uncertainties for monitoring by both Fonterra and Council staff.

Given the scale and economic importance of the dairy industry within the Rural Outer Plains environment, a primary reason for this plan change is to reduce the time, cost and uncertainties associated with consenting for what is largely the consolidation of an established dairy plant.

It is further recognised that milk processing plants are typically large and of industrial appearance. They also represent a substantial capital investment, and are typically located on sites where buildings and activities are expected to be concentrated to provide efficiencies in operational systems.

The District Plan rules that apply to the Fonterra Darfield site were created with a focus on controlling building development on individual farms, where dwellings, milking and farm sheds are regularly located across the Plains. As a consequence many of the District Plan standards for building density, coverage and height do not provide for milk processing plants and can unduly penalise these types of activities, particularly in situations where the activity has already been lawfully established. PC43 has recently addressed the controls on building development, but only in the context of the Synlait site at present. PC43 was prepared in anticipation of the Fonterra Darfield site also utilising the same framework which is now proposed and will similarly address the same issues.

6 Plan Change Provisions and Amendments

6.1 The DPMA site

The proposed Plan Change applies to the area surrounding the existing Fonterra Darfield milk processing site located at Racecourse Hill approximately 3.5 kilometres to the north-west of Darfield and six kilometres to the south of Waddington. The site is generally located centrally between a triangular road network made up of SH73 (southern boundary), Auchenflower Road (north-western boundary) and Loes Road (north-eastern boundary). The Midland Railway Line also runs along the southern boundary of the site.

The proposed DPMA includes all of Lot 1 DP 456083 (CT588217) which is 131.11ha in area, as well as Lot 2 DP 456083 (CT588218) which is a small block of land located central to the site. The area of land concerned represents a sufficient area to encompass all existing and future development potential of the Plant (see Section 7.1 which describes the factors and assumptions underpinning future development). Lot 1 DP 456083 is in the ownership of Fonterra Limited. Lot 2 DP 456083 is owned by Orion New Zealand Limited and contains the substation that was constructed for the Fonterra Darfield site. Copies of the Certificates of Title for these land parcels are attached as **Appendix 1**.

The site and land surrounding the Plan Change site is zoned Rural (Outer Plains), with the majority currently utilised for agricultural purposes. The current uses are predominantly pastoral, utilised by the landowners for grazing and cropping. The predominant vegetation is a combination of exotic pasture grass, with a number of shelterbelts delineating paddocks.

6.2 Proposed Amendments

The proposed changes to the Plan are summarised below. These changes only seek to amend the existing rules within the Plan and to introduce a specific ODP as a new Appendix. No changes are proposed to the existing Objectives or Policies of the Plan. A full text change version of the proposed amendments is contained within **Appendix 2** and the proposed ODP for the Fonterra Darfield site is contained within **Appendix 3**.

6.2.1 ODP Appendix

It is proposed to introduce a new ODP which will be known as Appendix 26B (The Synlait ODP is presently referenced with Appendix 26A). The Fonterra Darfield ODP has been prepared with the same format as Appendix 26A including the use of building height limits shown for the central part of the site, primary and secondary access point locations, landscaping locations, and a noise control boundary. All rules that presently reference the ODP within Appendix 26A have been amended to also refer to Appendix 26B to ensure that they are equally applicable to the Fonterra Darfield site.

6.2.2 Landscape Planting

The most notable amendment sought affects the permitted rule regarding the provision of landscaping. There is some confusion over the applicability of the permitted rule as it only applies where new buildings are to be erected that will increase the capacity for milk processing or storage within the DPMA. This requirement also seeks that landscaping be undertaken in accordance with the ODP and also in accordance with the staging and removal specified within Appendix 26A. However, the following rule E26.1.6 then states that landscape planting is a controlled activity under Rule 26.2.1 and 26.2.2.

Rule E26.1.6 is shown in full below:

Requirements and Conditions for Permitted Activities

...

Landscape Planting

E26.1.5 When new buildings are to be erected that will increase the capacity for milk processing or storage within the Dairy Processing Management Area-landscape planting as shown on the Outline Development Plans in Appendix 26A shall be located in general accordance with the landscape provisions of the Outline Development Plan and is to be completed in accordance with the provisions for Staging and Removal of Exotic Planting specified in Appendix 26A.

E26.1.6 Landscape planting required by Rule 26.1.5 is a controlled activity for which consent is required in accordance with Rules 26.2.1 and 26.2.2

Note: Neither Rule 26.1.5 nor Rule 26.1.6 apply to any planting within the Dairy Processing Management Area for the purposes of amenity or enhancement and which is additional to that envisaged by the Outline Development Plan.

Therefore, while landscaping is listed as a permitted activity, it is in effect only applicable where the processing capacity is increased and therefore can only be a controlled activity. It is understood that the intent of the permitted landscape rule was to recognise the existing landscape mitigation that was required to be put in place for the existing site (which was established in accordance with earlier resource consents) and to ensure that this is required to be retained and maintained. The only exception to this rule is for the Darfield site which requires a strip of shelterbelt screen planting to be established only once the Central Plains Water (CPW) canal is constructed through the site. This strip of landscaping will screen the gap in existing perimeter planting that will be created by the Canal. As this landscaping cannot practicably be established until CPW has finished construction to ensure any access and construction requirements they may have is not obstructed by this landscaping, a permitted rule has been inserted to address this scenario.

Where any increase in processing capacity of a site was proposed that would introduce new buildings or storage areas, then in the case of the Synlait site, a controlled status was applied to ensure that staged landscaping was undertaken to provide an appropriate level of mitigation. The operative controlled activity rule is listed below:

Controlled Activities

Landscape Planting required by Rule 26.1.6

- E26.2.1** An application for controlled activity consent under rule 26.1.6 shall contain information showing the location of proposed planting, the proposed plant species, the proposed timing of planting, the height and spacing of plants at the time of planting and the proposed maintenance regime of the landscape planting including soil and moisture retention, irrigation, access and the replacement of any dead, diseased or dying plants and the methodology for removal of exotic planting.
- E26.2.2** Under Rule 26.2.1 the Council shall restrict its control to the following matters:
- (a) The matters in respect of which information is required by Rule 26.2.1;
 - (b) The extent to which the proposal meets the objectives of and outcomes intended by the landscape elements of Appendix 26A.
 - (c) The effectiveness of the proposed landscape planting to mitigate the adverse effects of proposed buildings and activities on landscape values in the locality of the Dairy Processing Management Area;
 - (d) The use of landform to assist in mitigation of landscape effects; and
 - (e) The effect of not removing exotic species which have achieved a uniform height of 10m on cultural values.

Due to the confusion over the existing landscape provisions, amendments were initially proposed to clarify that the permitted rule was to apply to existing landscaping only whereas the controlled status was to apply where additional landscaping mitigation is required in stages as outlined on ODPs in conjunction with increased processing capacity being created on the DPMA sites. However after consultation with Synlait specific amendments are now proposed for Fonterra Darfield only. The proposed amendments are shown below:

PROPOSED AMENDMENTS

Requirements and Conditions for Permitted Activities

...

Landscape Planting

E26.1.5B Existing landscape planting as shown on the Outline Development Plan in Appendix 26B shall be maintained in general accordance with the landscape provisions of the that Outline Development Plan. 'Future screen planting' as shown on the Outline Development Plan in Appendix 26B shall be implemented within 12 months of the Central Plains Water Canal becoming operational through the site.

Note: Neither rule 26.1.5A or B nor Rule 26.1.6 apply to any planting within a the Dairy Processing Management Area for the purposes of amenity or enhancement and which is additional to that envisaged by the Outline Development Plan.

It is noted that the Controlled Activity rule only applies to the Synlait site as the Fonterra site does not require additional landscape planting as it expands. This matter is assessed and discussed in more detail within Section 7.2 of this Plan Change report. Both sites default to a restricted discretionary status where the permitted or controlled standards are not met.

6.2.3 Noise

Minor changes are made to the wording of Rule E26.1.17 to reflect both the proposed noise control boundary for the Fonterra Darfield site via Appendix 26B and to add in a cross reference to Rural Rule 3.13.1.6 which controls the acoustic insulation requirements for any sensitive activity that seeks to locate inside the noise control boundary. This cross reference is to aid

readers of this section of the Plan to ensure that they are aware of the existence of this rule which is located within a different part of the Plan.

6.2.4 Matters of Discretion

Within the matters of discretion that apply to restricted discretionary activities for the DPMA, reference has been added to a number of provisions to include the ODP within Appendix 26B. This includes reference to the specific rule contained on the Fonterra Darfield ODP that relates to car parking.

Under the 'Location of Buildings and Activities' section, it is sought to remove the reference to 'those matters specified for inclusion in Management Plans for Noise and Hazardous Substances'. This matter of discretion was made largely redundant following the decision on PC43 for the Synlait site and as the discretion of Rule 26.1.4 relates to the location of buildings and activities i.e. setbacks and height, its deletion is recommended to reduce confusion and improve Plan clarity.

6.2.5 Reasons for Rules

The reasons for rules section provides background and explanation to the various rules within this section of the Plan and what these provisions are seeking to achieve. A number of small amendments are proposed to this section to add in specific context around the Fonterra Darfield site. With regard to landscaping, amendments are also proposed to clarify that no additional landscaping is required for the Fonterra site as it is developed, whereas for the Synlait site, staged landscaping is required to be provided. Any reference to management plans for noise are also removed as the decision on PC43 removed the requirement to provide such management plans. Again, this is sought to provide for greater clarity and continuity throughout the DPMA provisions as they would apply to both the Synlait and Fonterra sites.

7 Assessment of Environmental Effects

An AEE is required to accompany any request for a private plan change in accordance with clause 22 of the First Schedule of the RMA. This AEE has been prepared in accordance with the Fourth Schedule of the RMA. Additional detail of environmental values, features and effects is provided in technical reports attached as appendices.

7.1 Assessment Assumptions

The area of land within the DPMA is intended to provide sufficient space for the future development of the milk processing plant at the Fonterra Darfield site. This growth is not anticipated to occur immediately but more likely over the coming decades and will progress in response to a variable range of factors. These include the supply of milk from Shareholder farmers, market demand for dairy products, developments in the dairy industry, the operational requirements for a dairy plant and the size of the catchment area serviced by the dairy plant, including travel distances from farms to plant.

The DPMA has been generically based upon a scenario which is informed by the existing plant layout and activities. Accordingly, the development scenario which has been used to inform the AEE cannot be treated as a site specific development proposal, but it is broadly indicative in terms of anticipated, maximum building scale and location.

The primary assumptions for the purpose of informing these assessments include:

- Up to 2 additional dryers (total 4 dryers) and 2 additional boilers (total 4 boilers) with associated reception, drystores, roading, infrastructure etc.
- All major buildings and activities required for processing are located in accordance with the ODP i.e. within the Height Control Zone in the ODP and with the tallest structures concentrated to the centre of that Zone adjacent to the existing dryers.
- The maintenance of open space, predominantly in pastoral activities, in the area identified as a Rural Buffer Area in the ODP. This buffer area surrounds the height control zones on all sides.
- An anticipated total of 235 additional operational staff (total 435 staff).
- Increased vehicle generation managed within a threshold of up to 170 vehicles exiting the site within 30 minutes.
- Industry best practice for noise control is applied to all new plant.
- An extended rail siding in the position identified on the ODP.
- The primary vehicular access is maintained in the current configuration from SH1.
- Use of the DPMA is limited to the processing of milk into a range of dairy based products and activities associated with this.
- Landscape planting is established around the perimeter of the site and will be maintained to a high standard.

7.2 Visual and landscape effects

Andrew Craig Landscape Architect has completed a Landscape and Visual Assessment of the proposed DPMA on landscape values at the site, within the immediate locality and the wider environment. A copy of the Assessment can be found in **Appendix 4A** (along with a graphic attachment) with the key findings of this assessment summarised below.

Existing landscape values of the DPMA site and surrounds

Since its construction the existing dairy plant is now part of the environment in which it is located and its presence is one of a number of elements that contribute to the landscape character of the existing environment.

Within the area encompassing the extent of visual effects the dairy plant is clearly the largest physical element. Consequently it is quite prominent. This however is diminished to quite a significant degree due to its setback from the nearby roads, particularly State Highway 73 (SH73), and the presence of intervening trees. Many of the trees were planted as a condition of consent and are now reaching a size where screening of the dairy plant is starting to become effective. As they mature this screening will become increasingly effective. As a result prominence of the dairy plant will lessen over time.

Other existing significant physical elements include SH73, the Midland railway and transmission lines. In due course the CPW irrigation canal may also form one of the major physical features with an agreed revised alignment navigating around the periphery of the Fonterra Darfield site. Less significant physical features include farm dwellings and accessory buildings.

The nearest significant natural features are the Hawkins River and comparatively the much larger Waimakariri River. The presence of these features is not appreciable from the dairy plant.

There are no important recreational destinations within the existing environment. Running through it however is SH73 linking Canterbury and the West Coast. This road and nearby railway is considered a premier scenic route. These routes pass through the Canterbury Plains that for the most part are the same as or resemble that described above. This includes the presence in rural Canterbury of similar dairy plants as that existing at Darfield, such as Synlait at Dunsandel, and in South Canterbury Clondeboy, Oceania and Studholme.

The wider rural land use is largely devoted to pastoral activity and cropping. Some woodlots and forestry is present, but are not extensive. Activity allied to land use including pivot irrigation, accessory buildings, fencing, shelterbelts and such like are also common features.

Landscape features

Within the proposed DPMA, the location and extent of which is shown on the ODP, there are no significant landscape features e.g. geological features, significant indigenous vegetation, natural water bodies, ecological sites, heritage or archaeological sites that would impede development.

Landscape and visual amenity effects

As the plan change will enable the expansion and/or alteration of the existing dairy plant within the parameters of the DPMA and ODP provisions, there will be landscape effects on its setting. These effects will principally arise from an increase in overall building bulk and are therefore cumulative.

As intimated, most of the above effects currently exist so essentially the current landscape and visual amenity effects will be much the same as they are now, except the magnitude or scale of them may be greater. In summary, the current effects and mitigation includes:

- From SH73 there is no view intrusion of the Southern Alps, although there is some intrusion as viewed from Loes Road.
- For the most part the existing dairy plant is either screened or on the verge of being screened by vegetation.
- The setback from surrounding roads and especially SH73 is generous resulting in diminished building domination.
- The dairy plant does not shade adjoining roads or nearest residential dwellings.
- No significant landscape features are affected.
- As viewed from surrounding roads and properties the dairy plant is foregrounded by rural activity.
- For travellers views of the dairy plant are glimpsed via occasional openings in foreground vegetation and are therefore largely transient.
- While prominent from many vantage points, the dairy plant is not dominant in that appreciation of all other features in the surrounding landscape is not excluded.
- There may be partial views of the dairy plant from nearby dwellings or from vantage points in their immediate vicinity.
- There are no vantage points from which the dairy plant can be appreciated in its entirety – all views are interrupted to some extent at least by intervening vegetation.

While the above advantages are favourable to future growth there will be effects greater than those existing. Chief among them is that buildings and allied structures will become comparatively more prominent due to an overall increase in visual bulk. Future buildings will however be visually absorbed by existing ones to some extent. This will enable future changes to appear incremental rather than abrupt and isolated. This is particularly so for the taller buildings as the shorter ones are less appreciable due to their low height in combination with effective existing screen vegetation and earth bunding.

Shelterbelt planting has been implemented for the current dairy plant as part of earlier consents, which has now reached a height where it is starting to effectively screen the dairy plant. This screening will become increasingly effective as this vegetation matures. As this screening will continue to be in place as further development occurs within the plan change site it will become more dominant over time. In addition, it will continue to become the dominating feature irrespective of future development within the dairy plant.

Finally, views of the dairy plant, where they occur, are not necessarily adverse. Aesthetically the dairy plant, while highly visible, is not unpleasant to look at. It is evidently clean in appearance and static with no kinetic parts that catch the eye. The plant is compositionally well balanced with regard to the proportions between vertical and horizontal elements. Further, the plant is for the most part framed by abovementioned existing vegetation and therefore sits quite comfortably within its landscape setting.

Effects on residents

There are five dwellings located within 1 kilometre of the Height Control Area shown on the ODP within the DPMA and are shown in the Graphic Attachment in **Appendix 4B**. These dwellings and those just beyond the 1 kilometre distance are generally surrounded by vegetation, typically in the form of ornamental amenity plantings and shelter belts. Consequently views of the existing dairy plant are screened at least to some extent by this and other intervening vegetation. Those most affected, relative to other residents, are the dwellings on Loes Road. Even from these properties garden vegetation combined with the maturing perimeter planting on the Fonterra Darfield site will largely screen and soften views of the plant.

Effects on road users

The proposed DPMA site is encircled by four roads being Auchenflower, Homebush, Loes Roads and SH73 with the latter being by far the most significant as the premier tourist route linking the west and east coasts. The other roads are mostly used by local people who live and work in the area.

All roads have a maximum speed of 100km/h, although in reality such operating speeds are unlikely on the unsealed side roads. However, road users will be by-passing the dairy plant at speed. Given that and the presence of intervening vegetation, views to the dairy plant will continue to be sporadic or glimpsed and usually encountered over a matter of seconds. In time most of these gaps will close as vegetation matures further reducing any effects in this regard.

Effects on other parties

The existing plant is not visible from Porters Pass. Nor is visible from the bed of the Waimakariri River. The dairy plant is visible from certain vantage points further afield. These include the Mt Hutt and Porter Heights ski fields where certain light conditions reflected off the plant can render it visible in the distance. Visibility of the plant from these vantage points is not expected to diminish ski field amenity in any way or scenic appreciation of the Canterbury Plains, of which dairy plants are an anticipated feature.

The plant is visible from certain points in Darfield Township – namely the Landsborough Subdivision located on the northern outskirts. The plant at some 3km from this subdivision distant appears quite diminutive within the broader expanse of its landscape setting. Apart from this subdivision the plant is not visible from other parts of Darfield.

Allied to associative effects are those arising from matters addressed in the Cultural Impact Assessment presented by Te Taumutu Runanga and Te Ngāi Tuahuriri (contained in **Appendix 7A** and addressed specifically under Section 7.7). Of relevance to landscape is a request to provide indigenous vegetation within the Dairy Processing Management Area and other land in the vicinity owned by Fonterra. It is understood the CIA does not rule out potential expansion of the dairy processing plant, but prefers that in so doing indigenous vegetation is provided for. This will facilitate the establishment of a vegetation regime that provides for the restoration of taonga species and habitat and linkages for mahinga kai. Implicit in this outcome is reinforced connection of the dairy processing plant with the landscape of its setting.

Mitigation measures

Virtually all of the desired landscape character and amenity outcomes within the District Plan will be achieved via implementation of the ODP which in turn reflects many of the mitigation measures implemented under the consents for the established plant.

The ODP provides a comprehensive strategic plan for development on the site, defines maximum scale and is complemented by rules which:

- Control building location, colour and height within the DPMA; and
- Ensures the retention of open rural land surrounding the built development.

The ODP approach will therefore help achieve:

- The maintenance of rural character by clustering or spatially concentrating buildings, structures and activities around the core of the existing site; and
- The management of building bulk and location – setbacks, height and site coverage – so as to avoid excessive building domination.

A further key mitigation outcome concerns landscaping, or more precisely, planting retention and its ongoing maintenance. Landscaping was required as a condition of consent for the existing dairy plant and all of the planting required has now been implemented (following Stage 1 of the Fonterra Darfield site development) and is well established. It is therefore not considered necessary to provide for additional planting provisions as part of the plan change. The existing planting is considered sufficient to achieve the screening purpose for any future development arising from implementation of the ODP, particularly as this planting continues to mature. The only exception to this is the requirement for a strip of shelterbelt screen planting to be established if the CPW canal is constructed through the site. This additional landscaping will be required to screen the gap that will be created by the Canal. This landscaping cannot practicably be established until CPW has finished construction to ensure any access requirements they may have are not obstructed.

It is further noted that there is scope to include native vegetation at various locations in and around the site in accordance with a landscape management plan developed in conjunction with Te Taumutu Rūnanga and Te Ngāi Tūāhuriri, rather than via District Plan provisions.

Additional measures that will assist with landscape and visual mitigation include controls over building colour which will continue to assist in reducing apparent building dominance and contributes to overall stylistic consistency and coherence.

Conclusions on Landscape and visual amenity

Dairy processing plants are a somewhat exceptional but necessary rural based activities due to their unique operational requirements. Consequently they feature within the rural landscape and where this occurs they inform character and amenity. They are not common however and so they will by virtue of their rarity, size, colour and location appear as landmarks.

The introduction of the ODP and DPMA plan provisions for the Fonterra Darfield site will result in a strategic approach to expansion while achieving a similar level of visual effect, albeit potentially to a greater extent compared to what currently exists. This is because stylistically the dairy plant will maintain a similar appearance, notwithstanding that it may well be larger. Further, the site will continue to be adequately managed by the existing levels of landscaping and the controls set out in the Plan Change e.g. height, building colours, signage etc.

Overall, the recognition and continued development of the existing dairy plant is consistent with the expectations of the Plan. Further, the plan change will provide certainty regarding the strategic location and extent of effects, which from a landscape perspective will be appropriate and acceptable.

7.3 Transportation

Carriageway Consulting has completed a Transport Assessment taking into account the proposed DPMA provisions and the implications of this on traffic volumes, particularly at the SH73 access to the site. A copy of the Assessment can be found in **Appendix 5** with the key findings of this assessment summarised below.

The existing primary vehicle access configuration for the site onto SH73 that was produced and agreed with NZTA (as the road controlling authority for the highway) and ultimately implemented was a large priority intersection on the highway, with auxiliary left-turn-out, left turn-in and right-turn-in traffic lanes. The auxiliary right turn lane was constructed to be 52m in length, sufficient for two tanker and trailer units to wait clear of the northbound through-traffic lane.

Traffic growth on SH73 in the vicinity of the site is consistent with the historic rate of growth used in the earlier analyses for the site noting that there have been two steps in traffic growth coinciding with Stage 1 and 2 of the Fonterra Darfield development.

With regard to the accident history within the vicinity of the site, it is not considered that there is a particular issue or concern on the highway with no accidents have been recorded in this location for the past 4.5 years.

Overall, the traffic flows are anticipated to remain within the expected parameters and therefore the current intersection is able to continue to operate with a high level of service provided that the plan change does not give rise to cumulative volumes of more than 170 vehicles emerging from the site in any 30-minute period. Additional benefits in reducing vehicle loads onto the road network can also be gained through the continued and potentially expanded use of rail to the site in the future.

Given the ability to manage shift patterns to contain the use of the vehicle access within the 170veh/30min threshold for the expansion scenario, and the need (under the proposed Plan Change provisions) to gain road controlling approval should there be any increase in processing capacity on the site, it is considered that the traffic operation of the site can be managed appropriately so that it does not significantly affect the safe and efficient operation of the road network. The adoption of the proposed Plan Change provisions with regard to transport are therefore considered acceptable from a traffic perspective.

7.4 Noise

Marshall Day Acoustics have prepared an Acoustic Assessment taking into account the proposed DPMA provisions. A copy of the Assessment can be found in **Appendix 6** with the key findings of this assessment summarised below.

Current Plan Noise Limits

The District Plan presently provides for activities within the Rural Zone to be conducted so as to comply with the following noise limits assessed at the notional boundary of any dwelling, rest home, hospital, or classroom in any educational facility:

- Daytime (7.30am – 8.00pm) 60 dB L_{A10} & 85 dB L_{AFmax}
- Night-time (8.01pm – 7.29am) 45 dB L_{A10} & 70 dB L_{AFmax}

The site is presently controlled in terms of noise by conditions of consent requiring that all activities on-site (other than construction) shall not exceed the following limits (note the change from L_{10} to $L_{eq\ 15\ min}$) at the notional boundary of any non-Fonterra owned dwelling:

- Daytime (7.30am – 8.00pm) 60 dB $L_{Aeq\ 15\ min}$ & 85 dB L_{AFmax}
- Night-time (8.00pm – 7.30am) 45 dB $L_{Aeq\ 15\ min}$ & 70 dB L_{AFmax}

These noise limits ensure that an acceptable level of amenity is maintained at all existing nearby dwellings while still enabling Fonterra the ability to not only operate the existing dairy factory, but also to expand the site in the future as had been indicated during the earlier consent hearings.

Noise Sources

The dominant noise sources at dairy factories are:

- Major production facilities (WMP dryers etc);
- Boilers;
- Other fixed mechanical plant (cooling towers, workshops, cleaning and sanitising facilities etc);
- Product load out, coal and milk reception facilities;
- Tanker routes on-site; and
- Rail spurs.

The Darfield factory has been designed to accommodate future expansion. Rail spurs and tanker routes are already in place, as is the milk reception facility (which is designed to accommodate expansion as required). Similarly, there are logical locations at which to construct new production facilities, boilers and mechanical services all of which are closely situated with existing facilities of similar nature.

No change is envisioned to the seasonal or daily operations of this site. However, future expansion of the site would lead to both an increase in tanker numbers/movements and an increase in rail movements carrying finished goods away from the site.

The Darfield factory is served by the Midland rail line. It is likely that any future expansion of the site would result in some rail operations occurring at night for network scheduling reasons. While the noise generated per rail event on-site would not change compared to the current consented scenario, some of these events may well occur at night, rather than the early morning and daytime as currently occurs.

For traffic management reasons the preferred solution to tanker movements is to stagger work shifts at the site so that they can be maintained within the design thresholds of the access. This will therefore result in no increase in peak hour noise generation (as the number of tanker movements over that time will not change), but instead extends the duration of time over which the peak occurs.

Predicted Noise Levels

Noise arising from the proposed expansion scenario includes the following:

1. Peak hour noise with all dryers, boilers and other mechanical plant running, on-site movement of coal from stockpile to boilers, product load out, milk reception and peak hour tanker movements all occurring.
2. Peak 15-minute noise during a rail movement with all dryers, boilers and other mechanical plant running, on-site movement of coal from stockpile to boilers, no product load out, milk reception and normal hour tanker movements all occurring.

The predicted noise contours for the peak hour scenario are contained within the Noise report within **Appendix 6** and are entirely consistent with the requirements of the existing consent meaning that no non-Fonterra owned dwelling would receive noise levels greater than 45 dB $L_{Aeq\ 15min}$. The predicted noise contours for the factory during rail movements also demonstrate compliance with the current consent.

Proposed Noise Limits

In order to control a range of effects that may arise from any future expansion an ODP has been prepared for the site. As a part of the ODP, a Noise Control Boundary (NCB) will be established. It is proposed that this NCB will replace the existing consented noise limits. Additional controls will also be placed upon any new dwelling that seeks to establish within the NCB to ensure that they achieve specified internal acoustic criteria.

The following noise limits are proposed at the NCB:

- Night-time (2000 – 0700) 45 dB $L_{Aeq\ 15\ min}$ and 70 dB L_{AFmax}
- Daytime (0700 – 2000) 55 dB $L_{Aeq\ 15\ min}$ and 85 dB L_{AFmax}

These limits would apply to all activities within the DPMA, except for construction noise and rail movements. Construction and demolition would be subject to New Zealand Standard NZS 6803: 1999 “*Acoustics - Construction Noise*”.

Noise from rail is also excluded as this has been adequately assessed and no adverse noise effects will arise at nearby dwellings that are minor or more than minor. The scale of any adverse effect that may arise is out of proportion to the cost and difficulty in adequately measuring and assessing rail movements further. Rail movements have therefore been restricted in the proposed Text Amendments to the noise provisions applicable to this site to no more than two night-time events (within a 24 hour period) and an unlimited number of daytime rail events.

Effect on potential third party land from Proposed Noise Control Boundary

There are some areas of non-Fonterra owned land within the proposed noise control boundary. While there are no dwellings currently in these areas, it is feasible that new houses could be constructed within this area in the future. The NCB is proposed to cover around 32ha of third party land. Within the Outer Plains Rural Zone, it is possible to construct residential dwellings at a density of one per 20 hectares as a permitted activity.

This Plan Change application includes proposed alterations to Part C3, Rule 3.13.1.6 that will result in a requirement for any new dwelling within the NCB to be designed to achieve a minimum outdoor to indoor sound level difference of 20 dB Dtr, 2m, nTw to any bedroom to protect against potential sleep disturbance effects.

Based on the peak hour noise contour, the highest night-time noise level any dwelling within the NCB could be exposed to is 50 dB L_{Aeq} . Therefore, internal noise levels inside bedrooms at night-time for new dwellings within the NCB will be around 30 dB L_{Aeq} , which is an appropriate level for sleep. Therefore, any potential reverse sensitivity effects associated with night-time noise emissions will be less than minor. As any standard new dwelling will be able to achieve 20 dB Dtr, 2m, nTw with windows closed, the only potential additional costs will be those potentially associated with providing sufficient fresh air to bedrooms.

It is noted however that the adjoining third party land within the NCB is part of a larger land area. It is considered that any increase in residential dwellings on the adjoining land are more likely to avoid the proposed NCB given its proximity to the existing milk processing site, while also being located further from Homebush Road and Loes Road where access and services are likely to be taken. However, should dwellings be proposed within the NCB, the proposed acoustic attenuation measures will not prevent them from being established as a permitted activity.

Summary of Noise Effects

Based on the proposed expansion scenario any adverse noise effects are considered to be less than minor, with the following noise outcomes predicted:

- The planned maximum expansion scenario can be undertaken while still complying with the existing consent limit;
- No existing non-Fonterra owned dwellings would suffer a decrease in amenity not already foreseen by the existing conditions of consent, with any new dwellings within the NCB being a permitted activity subject to meeting internal acoustic design criteria, much of which will largely be achieved through compliance with the New Zealand Building Code;
- The proposed NCB would result in certainty for all parties; and would also ensure that no neighbours received noise levels in excess of those already foreseen and allowed under the existing consent while a number would be assured of a lesser noise level;
- Noise effects arising from night-time train movements will be less than minor at all dwellings (any adverse noise effect can be controlled by restricting the number of night-time train movements, rather than by applying a noise limit to train movements);
- The NCB requires compliance with noise standards at closer proximity to the milk processing plant, compared to the District Plan noise standards that only apply at the notional boundary of any dwelling or other sensitive activity.

7.5 Lighting

The existing Darfield site was designed with the use of a number of light suppression measures to assist with reducing light spill, glare and to maintain the sky appearance at night. These measures included directing all lighting away from neighbouring properties and roads. As a result no significant glare effects to the surrounding environment have occurred. In addition, headlight glare from vehicles within the site are expected to be continually screened by the maturing landscaping planting along the site boundaries.

The existing DPMA (introduced under PC43) provides for a maximum permitted light spill of 3 Lux (vertical or horizontal) at the site boundary which is the same limit as the existing Rural Zone. This also reflects the light spill limit placed on the site through its existing consents.

Overall, the controls over glare and light spill will continue to reduce any effects on night sky appearance from the proposed artificial lighting which will be contained by the necessary optical control of luminaires, lamp characteristics, and downward aim orientation to meet the glare and spill requirements. Therefore, it is considered that adoption of the existing rule provisions for lighting is appropriate for the Fonterra Darfield site.

7.6 Signage

The existing site provides for signage through a company logo on each dryer and a free-standing site identification sign at the primary vehicle access. In providing for signage, the key considerations are the effects on traffic safety and the character of the rural area or special areas such as outstanding landscapes, particularly if a proliferation of large signs were to occur. The existing signs on site are covered via conditions on the associated resource consents for the site.

The signage provisions that were introduced via PC43 are essentially the same as the Fonterra Darfield consent conditions. They are also very similar to the existing rural zone provisions, except for a larger signage area allowance to recognise the size and scale provided for under the existing consents and the proportion of signage appropriate to the scale of a DPMA site. It is also noted that all signage where visible from a State Highway is required to be approved by the New Zealand Transport Agency (NZTA), which will also apply to the Fonterra Darfield site to ensure traffic safety is maintained.

Overall, it is considered that the adoption of the existing PC43 rule provisions for signage, with a minor amendment to extend the requirement for NZTA approval to include the Fonterra Darfield site, is appropriate and will avoid significant effects on rural character and traffic safety.

7.7 Cultural and Heritage Values

Te Rūnanga o Ngāi Tahu represents Ngāi Tahu as an iwi authority for the purposes of the RMA, and Te Taumutu Rūnanga along with Te Ngāi Tūāhuriri Rūnanga are the kaitiaki Rūnanga for subject area. There are no statutory acknowledgement areas, silent file areas or Waahi Taonga areas identified in the District Plan that could be directly affected by this plan change, however Fonterra have commissioned the preparation of a cultural impact assessment (CIA), prepared by Tipa & Associates. A copy of the CIA and Fonterra's subsequent response to the CIA is contained in **Appendix 7B**.

In the first instance, it is noted that during the Stage 1 and 2 consent process for the Darfield site, Fonterra consulted with Ngāi Tahu and Tūāhuriri Rūnanga. To ensure that any potential adverse effects of the Milk Powder Plant on the archaeological or cultural values of the area were minimised, an 'accidental discovery protocol' (ADP) condition was proposed and included as a consent condition requiring the involvement of Tūāhuriri Rūnanga should any remains or items of interest be found during the construction of the Milk Powder Plant.

These conditions are considered an appropriate level of mitigation and have been retained as a matter of control within the proposed Plan Change in the event that any earthworks that exceed the set limits and construction that will increase the capacity for milk processing is proposed. The construction control is in the form of a controlled activity consent requirement, while any exceedance of the earthworks limits will require a restricted discretionary activity consent. Both the earthworks and construction matters of control or discretion specifically refer to adherence to an ADP.

Matters regarding the protection and sustainable use of freshwater are discussed under Section 7.9 and will continue to be considered under any future Regional Council consenting requirements, noting that there are a range of options available to minimise both the use of freshwater and impacts upon air and freshwater from increased development on this site.

Further consultation with Taumutu Rūnanga and Tūāhuriri Rūnanga has occurred through the preparation of the CIA. Overall, the CIA advises that the runanga have few concerns with the proposal and support (in principle) the type of plan change proposed. Those areas of concern that have been identified relate to Te Taumutu Rūnanga and Te Ngāi Tūāhuriri Rūnanga seeking:

1. to form a long term relationship with Fonterra to deliver cultural, environmental and economic outcomes;
2. for Fonterra to prepare or make available to the runanga a range of information relating to the operation of the Darfield Milk Factory. Once the two runanga receive this information they may make recommendations to Fonterra on how they would like Fonterra to address concerns raised within this information;
3. for Fonterra to show how they will integrate the recommendations from the CIA prepared by Jolly in 2014 for Plan Change 43. Currently, Fonterra have provided some information in relation to how they will address these recommendations but not all areas;
4. a site visit by a group from Te Ngāi Tūāhuriri Rūnanga and Te Taumutu Rūnanga to the Fonterra Darfield Milk Factory in the short term so representatives from the two runanga can see what Fonterra have planned at the factory in relation to the plan change and what future expansion they have planned.

It is noted that Fonterra has responded to these matters in their letter to the runanga dated 2 February 2016, a copy of which is also contained in Appendix 7B. In essence, Fonterra has welcomed the opportunity to build a strong relationship with Te Taumutu Rūnanga and Te Ngāi Tūāhuriri Rūnanga. Fonterra will therefore seek to provide all information outlined in the CIA, organise a site visit and hold regular hui to discuss issues, share information and give updates on any future expansion at the Darfield Milk Factory.

Overall, the proposed plan change request is not considered to significantly impact upon any cultural values, provided that the ODP controls are maintained, as sought within this Plan Change. The CIA has also outlined opportunities for Taumutu Rūnanga and Tūāhuriri Rūnanga to express kaitiakitanga toward the environment through the establishment of a long-term relationship with Fonterra.

7.8 Economic Impact

Brown, Copeland and Co Limited has completed an Economic Assessment taking into account the economic context of the dairy industry within Selwyn District and the impacts of Fonterra's activities on the economy including the impacts of the proposed expansion that will be provided for via the Plan Change. A copy of the Assessment can be found in **Appendix 8** with the key findings of this assessment summarised below.

Before Fonterra developed the Darfield milk processing plant, milk from the Selwyn District and the surrounding North and Mid-Canterbury catchment areas was processed at Fonterra's Clandeboye plant near Timaru, and when this plant had capacity constraints, at Fonterra's Edendale plant in Southland. The opening of the Darfield plant not only led to a significant reduction in truck and tanker kilometres (reduction of up to 30,000 truck and tanker kilometres per day) but also spread capacity risk across the two largest Fonterra plants within Canterbury and the three largest Fonterra plants in the South Island.

There are a number of economic advantages in maintaining production capacity at the Darfield site as compared to relocating production capacity to potential new sites and/or the expansion of other existing plants.

The Darfield milk processing plant currently employs 200 permanent full time equivalent (FTE) staff, as well as a significant number of contractors and temporary staff. It is estimated that at least 50% of the staff directly employed at the plant reside permanently within the Selwyn District, whilst a number of contractor staff will also be local residents. For the 100 staff residing in the Selwyn District, their estimated wages and salaries are \$7.5 million per annum.

In addition to these direct economic impacts there are indirect impacts arising from the effects on suppliers of goods and services provided to the site from within the District and the supply of goods and services to employees at the site and to those engaged in supplying goods and services to the site.

Conservative estimates for the direct and indirect effects of Fonterra's Darfield plant's existing operations for the Canterbury region (principally in the Selwyn District and Christchurch City) are the creation of 400 jobs and incomes of \$30 million per annum.

Consequently restrictions or unnecessary regulation placed on Fonterra's milk processing plant's current operations will impact negatively not just on Fonterra shareholder suppliers but also businesses and residents within the Selwyn District, Christchurch City and the wider Canterbury region.

After the expansion of processing capacity, the site will require additional inputs of materials and services. These are likely to be largely drawn from the Canterbury region, with some of these goods and services provided by local Selwyn businesses. For the Canterbury region, the total increase in employment from the proposed expansion potential is 470 jobs and the total increase in household income is \$35.2 million per annum.

Overall, the proposed Plan Change will continue to contribute to the economic well-being of the Selwyn District and broader Canterbury communities by:

- Providing employment and incomes for local residents and businesses;
- Providing the local economy with greater diversity and resilience;

The proposed Plan Change will also maintain and improve resource use efficiency by:

- Retaining and increasing economic activity and population in the Selwyn District, enabling increased economies of scale in the local provision of goods and services;
- Reducing transport costs for the collection of milk and the export of finished products; and
- Reducing externality costs associated with road transport including road accident costs, road transport pollution costs and travel time costs for other road users.

7.9 Regional Council matters

The established activities on the Fonterra Darfield site have existing consents for water take and use. The future needs for fresh water are not known however, any additional water required beyond the volumes already consented, would require either a variation or new consent to be obtained. This would be considered in the appropriate manner at that point in time, in the context of the relevant statutory plans and their objectives and policies. It is also noted that the use of improving technologies is providing for increased efficiencies in water harvesting and use such as being able to collect stormwater from roofing areas and recycling this back into the building for use in toilets. This technology already exists at the Darfield site.

Fonterra also holds consents for matters related to air discharge, and the discharge of stormwater, domestic wastewater and treated wastewater. There are a number of options to effectively manage these discharges in relation to potential expansion in the future. These include the potential use of alternative fuel sources e.g. biofuel, and the increased storage of treated wastewater and condensate and managed discharges to land during periods where ground permeability is suitable to avoid ponding and surface runoff. It is also noted that the site is well located in that it is not in the vicinity of any nearby surface freshwater sources and is situated a considerable distance above groundwater level i.e. approx. 50 metres in some instances. The above matters are also better considered in at the point of any expansion in the context of the relevant statutory plans and their objectives and policies.

7.10 Summary of Effects

The above assessment has considered those effects with the potential to affect land at the interface of, and beyond the DPMA boundary, including:

- Landscape and visual amenity effects from increased building dominance, signage and lighting;
- Traffic safety and efficiency from increased vehicles and rail use;
- Noise and reverse sensitivity;
- Cultural and heritage values; and
- Economic impacts from further expansion.

Each of these elements has been appropriately assessed in a manner relative to the scale and significance of the potential effect.

In summary, where potential adverse environmental effects have been identified, these have been adopted or incorporated into appropriate provisions in the DPMA that will apply to the Darfield site to ensure effective mitigation at an appropriate level. In addition to environmental effects, this Assessment has identified substantial positive effects with regard to employment and to the wider district and regional economy.

8 Section 32 Evaluation

Before a proposed plan change is publicly notified, Section 32 of the Resource Management Act requires an evaluation that must examine:

- The extent to which the objectives (purpose) of the proposal are the most appropriate way to achieve the purpose of the Act.
- Whether the provisions in the proposal are the most appropriate to achieve the objective (purpose) of the proposal by:
 - Consideration of other reasonably practicable options for achieving recognition of the existing dairy plant and its continuing efficient use and expansion.
 - Assessment of the efficiency and effectiveness of the provisions in achieving the objective of the proposal. This assessment should identify the benefits and costs of environmental, economic, social and cultural effects, including opportunities for economic growth and employment.
- Whether the provisions in the proposal are the most appropriate to achieve the objectives of the existing District Plan, to the extent that those are relevant.
- Assessment of the risks of acting or not acting.

8.1 Are the objectives of the proposal the most appropriate way to achieve the purpose of the Act? (s32(1)(a))

The proposed Plan Change does not seek to alter any existing objectives (or policies) of the Plan. In circumstances where objectives are not sought to be altered, s32(6)(b) states that references to 'objectives' means the 'purpose' of the proposal.

The purpose of this Plan Change (as set out on Section 4 above) is to recognise the existing Fonterra Darfield dairy plant and to provide for its continuing efficient use and future expansion/development. Accordingly, the evaluation must consider the extent to which recognition of the existing dairy plant and its continuing efficient use and expansion best achieves the purpose of the Act.

The purpose of the Act is to promote sustainable management of natural and physical resources.

This 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:

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

In summary, the proposal achieves the purpose of the Act for the following reasons (a full assessment of Part 2 of the RMA is provided in Section 9.10):

- It pro-actively and specifically manages the use and development of land for dairy processing activities at an existing established site. The District Plan (following PC43) anticipates that specific provision be made for this industry, particularly where significant infrastructure has been established at existing sites. It is also anticipated that significant infrastructure be protected from the potential for reverse sensitivity through the use of mechanisms such as noise control boundaries.
- Optimises transport links through efficiencies gained by locating buildings and activities close to the product source.
- The concentration of processing buildings and activities on one larger site enables operational efficiencies to be optimised as opposed to numerous smaller sites.
- The proposed DPMA provides a mechanism for the management of environmental effects of dairy processing to be considered comprehensively with a strategic overview of the anticipated level of development of the site.
- Enabling the community to provide for its economic wellbeing, and thereby contributing to its social wellbeing.
- Providing for existing dairy processing activities in a more efficient manner will reduce uncertainty and time/cost delays for the applicant. This will assist in achievement of employment and economic benefits to the district, region and nation.
- The proposed DPMA will effectively provide for integrated management of effects at the boundary of the DPMA with the rural environment. Effects, including potential reverse sensitivity effects, can all be effectively avoided or mitigated through compliance with the ODP and associated standards.
- The life-supporting capacity of water and soil is addressed through requirements for earthworks and construction management with additional controls through Regional Council requirements.

8.2 Examine whether the provisions in the proposal are the most appropriate to achieve the objective of the proposal by identifying:

8.2.1 *If there are other reasonably practicable options for achieving the proposal (s32(1)(b)(i)).*

The provisions of the proposal are summarised in Section 6.0 above and a full copy of the proposed text changes are contained in **Appendix 2** and the proposed ODP for the Fonterra Darfield site is contained within **Appendix 3**.

In addition to this request for a plan change, other reasonably practicable options for achieving the proposal include:

- Maintaining the status quo i.e. maintain the current Rural Outer Plains zoning and continuing to apply for resource consents as required;
- Developing new plant at an alternative location whereby the activity is more permissive e.g. an Industrial Zone; or
- Waiting for the Selwyn District Plan Review and seek the introduction of a DPMA for the Fonterra Darfield site either through a request to Council to implement or adopt a new zone as part of the Notified Plan or through a submission.

These options are discussed as follows:

Maintain the Status Quo

Continuation of the process of applying for resource consents as and when required will still potentially deliver the outcome of additional development and activity on the land concerned in the same manner as it has to date. However, this approach will continue to involve a high degree of uncertainty for the applicant, Council and surrounding community including landowners.

Further, the preparing of applications involves considerable cost and time delays. In particular, it is recognised that due to rural-based industrial activities at the scale proposed always requiring a resource consent, this invokes a repetitive process that will continue to incur on-going costs and administrative time from Council. Similar repetition in time and cost associated with reviewing each application is experienced by other parties with potential to include neighbours, and statutory organisations.

It is also noted that a continual ad hoc process provides no strategic overview of site development, and over time conditions on subsequent resource consents will supersede or cancel each other out which can lead to administrative uncertainty and complexity.

Policy B3.4.5 has been inserted into the District Plan via PC43 which seeks to:

Enable the continued and enhanced operation, innovation and development of established dairy plant sites for the purposes of administration, processing, testing, storage, handling, packaging and distribution of milk and dairy products, related by-products and ancillary activities within specifically identified Dairy Processing Management Areas within the Rural (Outer Plains) Zone, whilst ensuring the integrated management of effects on the environment at the boundary of the Management Areas through ODPs. The establishment of non-dairy processing related industrial activities shall be avoided.

It is noted however that while this Policy provides a strong direction to enable the continued development of established dairy plant sites, it is only applicable where a DPMA applies. Therefore in a status quo situation this policy could not be relied upon.

Alternative Location

A location of further development within an industrial zone, such as the 'IZone' at Rolleston, is unlikely due to the land area required, the demands the activity that would place on urban services such as wastewater treatment and disposal, and the compatibility with other activities.

In addition, and perhaps of more relevance, there are significant costs and inefficiencies created by replicating the existing plant with a new plant close by including those associated with transport and on-site infrastructure and facilities.

District Plan Review

It is understood that Council has not yet formulated a definitive timeframe for notification and delivery of its District Plan Review. However, based on discussions with Council staff, this is unlikely to be within the next 18 months. Even if notification of the District Plan review commenced in 2017, a full District Plan review is typically a lengthy and time consuming process with timeframes stretching over a period of years to accommodate consultation, notification, submissions, further submissions, hearings, decisions, and appeals before provisions are deemed operative.

Accordingly, seeking to incorporate the content of this request for a plan change into a District Plan review may result in a waiting period of years for a decision. As well as uncertainty around time frames, there is also uncertainty in respect of process. There is no guarantee that Council would incorporate a DPMA into their new second generation District Plan. The alternative is for Fonterra to lodge a submission seeking a DPMA.

The time delay and uncertainty involved with a Review process presents no distinct advantage over making this Plan Change request. Given that the District Plan review is likely to occur at some point in the medium term, it does mean that the contents of this Plan Change, if approved, would in theory be part of a re-notified Plan Review however as the Plan Change would be recent, few if any changes would be anticipated, aside from likely formatting to fit the stylistic framework of the Plan Review.

Conclusion on Alternatives

This Plan Change request has been prepared based on sound information about the nature of existing dairy processing activities and buildings that could be anticipated.

Detailed assessments of the landscape, noise and traffic effects of these activities and buildings have also been completed. No changes are proposed to the policy framework while only minor amendments to the existing rule package are proposed to enable the existing Plan DPMA provisions to work effectively for both the Synlait and Fonterra sites and to manage the identified potential effects in response to the particular characteristics of each site. This combination of providing a strategic approach to the Fonterra Darfield site and specificity in management of effects is not considered to be replicated or improved upon in any of the above alternative options.

It is therefore considered that this Plan Change request is the most reasonably practicable option to achieve the objective of the proposal.

8.2.2 Assessing the efficiency and effectiveness of the provisions in achieving the objective of the proposal (s32(1)(ii) and s32(2)).

Section 32 of the Act requires consideration of the benefits and costs of the proposal when assessing efficiency and effectiveness. These benefits and costs apply to the proposed provisions in respect of their environmental, social, cultural, and economic effects. Economic effects in particular are required to consider opportunities for economic growth (s32(2)(a)(i) and employment (s32(2)(a)(ii). All effects are required to be quantified where practicable (s32(2)(b)).

Environmental	
Benefits	Costs
<ul style="list-style-type: none"> Concentration of built development within defined areas based around existing built area and activity which avoids dispersal of development. Provides a strategic approach to site development with integration of mitigation relating to traffic, noise and visual effects. Long term traffic effects can be effectively managed through the use of existing access and rail points and potentially with minimal upgrading required. Long term landscape mitigation through the maintenance and retention of existing perimeter landscape planting. Proactive management of potential reverse sensitivity effects through the use of a noise control boundary and internal insulation requirements for any new sensitive activity that may wish to establish within this area. 	<ul style="list-style-type: none"> Loss of open rural land within the immediate vicinity of the site. Loss of potentially productive potential of soils within buildable area. Reduced rural character and amenity values in proximity of DPMA. Increase in traffic volumes including heavy traffic numbers and rail movements to and from site. Associated cost of ventilation for new houses within Noise Control Boundary.
<p>Efficiency and Effectiveness of Provisions</p> <p>The proposed provisions have been informed by knowledge of the existing operational plant, conditions on previous consents and additional environmental assessments based on anticipated expansion parameters.</p> <p>Provisions are therefore specific to well understood effects, demonstrated practice from established activity and incorporate appropriate mitigation mechanisms within the existing Plan that require only minor amendments to recognise and accommodate the proposed ODP for the Darfield site.</p> <p>Overall, the provisions are assessed as being both the most efficient and effective at recognising and protecting the environment, acknowledging that there will be an increase in the physical and visual change in the site albeit with similar characteristics and effects to the existing site.</p>	

Social	
Benefits	Costs
<ul style="list-style-type: none"> Increased opportunities for economic, and thereby social wellbeing, to be achieved through the ability to gain direct or indirect employment within the local area. Increased employment can have flow on effects with increased numbers of people consequently choosing to live or invest within the District and engage with the existing communities. 	<ul style="list-style-type: none"> Visual change to the locality. Increase in the intensity of rural-based industrial activities in the existing locality with effects such as the expansion in noise and lighting effects at night. Increased traffic in proximity of plant and along some roads throughout the District, most notably State Highway 73.
<p>Efficiency and Effectiveness of Provisions</p> <p>The change in the nature and intensity of land use within the DPMA will be significant should the DPMA develop to its fullest capacity. The provisions will be efficient and effective in limiting the associated social costs to a defined geographic area while the potential benefits for the wider community will be substantial.</p>	

Cultural	
Benefits	Costs
<ul style="list-style-type: none"> Provides certainty as to future development envelope on site and controls around earthworks and construction to ensure that any potential effects on water resources are minimised. Reduces on-going administrative role on local Runanga reviewing ad hoc applications. No loss or significant impact on any existing heritage buildings (noting that there are none within the proposed DPMA and that those in the surrounding environment are protected and controlled by separate provisions within the District Plan). 	<ul style="list-style-type: none"> Some uncertainty as to the exact nature and extent of future infrastructure and methods for discharges to air, stormwater and treated wastewater (noting that Regional Council consents will be required for an expansion of these matters).
Efficiency and Effectiveness of Provisions <p>The provisions will be efficient and effective in managing potential effects on heritage and cultural values within the DPMA in respect of earthworks, and avoidance of sedimentation of waterways.</p> <p>Costs in respect of discharges can only be addressed once the nature of any future expansion and processing is known. At this time, detailed design of discharge methods will be prepared for regional consents noting that there are a number of options available to approach these matters at that time e.g. biofuel, on-site storage, controlled discharges to suitable land including third party land.</p>	

Economic	
Benefits	Costs
<ul style="list-style-type: none"> Enables development of DPMA with reduced regulation costs for applicant, and reduced costs for the Council in terms of processing applications and the community from their continual involvement. Investment of around \$390 million per stage of expansion. Provides for up to 270 additional jobs within DPMA (total 470 jobs overall). Up to 700 jobs associated with construction of the anticipated development with wage and salary estimated to average \$18.75 million per annum. Conservative estimates for the direct and indirect effects for the Canterbury Region are the creation of 600 jobs and incomes of \$37.5 million per annum. Increased economies of scale. Increased productivity generated by the increased irrigation of third party farms. 	<ul style="list-style-type: none"> Administrative cost to the Council in terms of processing the plan change (noting that costs can be recovered from applicant). Potential for additional costs for ventilation for any new dwellings located within the NCB. Some impact on infrastructure through increased road and rail movements although the transport assessment has concluded that provided milk deliveries are managed within the specified threshold, no further upgrades to the existing access are required.
Efficiency and Effectiveness of Provisions <p>The proposal will provide for both considerable economic growth and employment and with greater certainty, efficiency and effectiveness through the proposed provisions.</p>	

The provisions of the plan change have been developed to build upon those introduced through Plan Change 43. This includes consideration of actual known effects of a dairy processing plant in this location, robust assessments of the effects of the possible expansion of the existing plant as indicated in the ODP, and the development of rules and mitigation measures specific to the Fonterra Darfield site. Consequently, the provisions of the plan change are more effective in providing for dairy processing activities and mitigating the effects of those activities than the operative provisions of the District Plan that apply to this site, noting that the provisions introduced by PC43 do not currently apply to the Fonterra Darfield site. However, PC43 was prepared on the basis that other existing dairy factory sites could seek to adopt the same provisions (with minor amendments to the rules) subject to a Plan Change to insert an ODP for each respective site.

With respect to efficiency, it is considered that the provisions would result in a high degree of benefits (economic/social) while maintaining a relatively low level of costs (environmental/cultural). In summary, the provisions of the Plan Change would be efficient and effective in achieving the objective of the proposal i.e. recognition of the existing dairy plant and its continuing efficient use and expansion.

8.2.3 Summarising the reasons for deciding on the provisions (s32(1)(b)(iii)).

The provisions are considered the most appropriate for the following reasons:

- The proposal has been informed by assessments of the environmental effects anticipated by the nature and scale of development and activity.
- The proposal is relevant to the scale and characteristics of the existing and future needs of a dairy processing plant.
- The proposal is in direct accordance with Policy B3.4.5 which specifically seeks to recognise and provide for existing dairy factory sites via use of an ODP. Recognising this site in accordance with this specific Policy will reduce the potential for inconsistencies between more generic policies within the Plan that apply to this site at present.
- The proposal provides a comprehensive and integrated approach to development and use of the land and management of environmental effects.
- The proposal will enable an activity which provides significant employment and economic benefits.
- The proposal is relevant to an existing significant land use/rural industry within the Selwyn District.

8.2.4 Risk of acting or not acting (s32(2)(c))

The Act requires assessment of the risk of acting or not acting if there is uncertain or insufficient information. In relation to this request for plan change there is no reason for not acting on the basis of insufficient or uncertain information. Sufficient information is available regarding the characteristics and values of the site and surrounding area, and analysis has been undertaken into any actual or potential effects of future development under the proposed DPMA. Whilst the exact nature and form of future development is not prescribed, the provisions of the proposed zone provide appropriate parameters to future activity and development.

8.3 Examine whether the provisions in the proposal are the most appropriate to achieve the objectives of the existing District Plan to the extent that those are relevant (s32(3))

In respect of each objective an assessment is provided which discusses the provisions of the plan change request and the manner in which they achieve the relevant objective. These are assessed in Table 1 below.

Table 1 – Assessment of Fonterra Darfield DPMA Plan Change against District Plan Objectives	
B1 Natural Resources	
Relevant Plan Provisions	Assessment
<p>LAND AND SOIL</p> <p>Objective B1.1.1 <i>Adverse effects of activities on the District's land and soil resources are avoided, remedied or mitigated.</i></p> <p>Objective B1.1.3 <i>Promote the sustainable management of the soil resources of the District.</i></p>	<p>The District Plan seeks to manage land and soil issues within the Rural environment. These primarily concern contaminated and unstable land, erosion and the irreversible use of otherwise versatile soils.</p> <p>The proposed DPMA at Fonterra Darfield does not involve land that is contaminated, unstable or erosion prone. The provisions of the plan change therefore rely upon the mechanisms in place to ensure that earthworks are managed in accordance with best practice. The predominant mechanisms are the limits placed in respect of earthworks and the controlled activity status for all larger scale construction.</p> <p>The concentration of DPMA facilities at an existing Milk Processing site also meets the overall objective to preserve good quality soils through the concentration and further development of such activities in one location thereby maintaining the wider soil resource.</p>
<p>WATER</p> <p>Objective B1.3.1 <i>Contamination of ground water or surface water is avoided and/or mitigated and water quality improved in degraded waterbodies through changes in land management practices and controls on land uses likely to cause waterbody contamination.</i></p> <p>Objective B1.3.6 <i>Land use activities, and particularly earthworks, forestry, vegetation clearance and modification, and agricultural activities, are managed within catchments and riparian areas to protect water quantity and quality, aquatic habitat, and natural character.</i></p>	<p>Of relevance to this plan change is the objective that land use activity does not cause contamination of water resources. Objective B1.3.6 particularly mentions earthworks and Policy B1.3.4 identifies surface run-off as activities that may affect water quality. These are the primary potential effects arising from activity within the Fonterra Darfield DPMA in respect of effects on water quality.</p> <p>The Fonterra Darfield DPMA does not contain, nor is it close to, any naturally occurring waterbodies. The yet to be constructed Central Plains Water (CPW) canal route is designated to run through part of the site, however this alignment has subsequently been agreed to be altered by the parties as part of the earlier consent process. The agreed realigned position of the canal avoids the existing building areas and is outside of the building height areas as shown on the proposed ODP.</p> <p>Additional measures are also in place to protect water quality including limits on earthworks and a controlled activity status for any larger scale construction activities. These measures will serve to ensure that any adverse effects with regard to dust, earthworks, stockpiles and final landforms/land cover.</p> <p>These provisions provide assurance that the water resource will not be contaminated by on site activities noting that Regional Council consents will be required for any further discharges from the site to land including for stormwater, treated wastewater, and domestic wastewater.</p>

Plan Section - B2 Physical Resources	
Relevant Plan Provisions	Assessment
<p>TRANSPORT NETWORKS ROAD, PATHWAYS, RAIL AND AIRFIELDS</p> <p>Objective B2.1.1 <i>An integrated approach to land use and transport planning to ensure the safe and efficient operation of the District's roads, pathways, railway lines and airfields is not compromised by adverse effects from activities on surrounding land or by residential growth.</i></p> <p>Policy B2.1.2 <i>Manage effects of activities on the safe and efficient operation of the District's existing and planned road network, considering the classification and function of each road in the hierarchy.</i></p> <p>Policy B2.1.3 <i>Recognise and protect the primary function of roads classified as State Highways or Arterial Roads in Appendix 9, to ensure the safe and efficient flow of through traffic en-route to its destination.</i></p> <p>Policy B2.1.4 (a) <i>Ensure all sites, allotments or properties have legal access to a legal road which is formed to the standard necessary to meet the needs of the activity considering:</i> – the number and type of vehicle movements generated by the activity; – the road classification and function; and – any pedestrian, cycle, public transport or other access required by the activity.</p> <p>Policy B2.1.4(b) <i>Avoid or mitigate adverse effects on the safe flow of traffic along State Highways and Arterial Roads from new property access or new/expanded activities which generate a high level of traffic movements.</i></p> <p>Policy B2.1.19 <i>Encourage viable alternatives to road transport such as the movement of freight via rail.</i></p>	<p>The relevant transport objectives (and their associated policies) relate to the integration of land use and transport and the safe and efficient use of roads. The proposed DPMA for Fonterra Darfield is accessed via State Highway 73. In addition, the Midland Railway Line runs to east-west past the southern end of the DPMA with an existing siding into the site.</p> <p>Access to the proposed DPMA will therefore involve the continuation of vehicles crossing an existing rail crossing when accessing the site. This rail crossing is controlled via bells and barrier arms and is the highest level of threshold treatment available.</p> <p>The provisions contain a number of mechanisms to ensure that the relevant transport objectives are achieved. These include a requirement for the proponent of any building which may increase the capacity for processing or storage within the DPMA to ensure that the design of both the site access points remains appropriate relative to the anticipated increase in traffic. Written approval must be obtained from the road and/or rail controlling authorities prior to any increase being permitted. Accordingly, a process is triggered whereby the building proponent must consult, where applicable, with NZTA, KiwiRail and the District Council and obtain approval for any up-grade in design at either access to the site.</p> <p>The ODP contains several relevant transport controls. These include a requirement that any access into the DPMA is limited to the existing access points being the primary vehicle access from State Highway 73 and a secondary emergency access from Auchenflower road. The existing and potential future rail siding areas are also indicated within the site. Specific provision also requires that all parking and manoeuvring areas within the DPMA meet the existing requirements of the District Plan in respect of design and layout.</p> <p>These measures all demonstrate how the proposed plan change provisions will achieve those objectives and policies concerned with safe flow of traffic on the State Highway, safe access into and circulation within the DPMA; the provision and encouragement for movement of freight via rail, and how access to the DPMA will be reviewed and managed to meet the traffic demands of any future growth.</p> <p>The Transportation Assessment in Appendix 5 provides further analysis in respect of these matters and the ability for the existing access and rail provision to accommodate future growth in traffic volumes.</p>

B3 People's Health, Safety and Values	
Relevant Plan Provisions	Assessment
<p>Quality of the Environment</p> <p>Objective B3.4.1 <i>The District's rural area is a pleasant place to live and work in.</i></p> <p>Objective B3.4.2 <i>A variety of activities are provided for in the rural area, while maintaining rural character and avoiding reverse sensitivity effects.</i></p> <p>Rural Character</p> <p>Policy B3.4.1 <i>Recognise the Rural zone as an area where a variety of activities occur and maintain environmental standards that allows for primary production and other business activities to operate.</i></p> <p>Policy B3.4.3 <i>Avoid, remedy or mitigate significant adverse effects of activities on the amenity values of the rural area.</i></p> <p>Policy B3.4.4 <i>Ensure that any adverse effects arising from "rural based" industrial activities in the Rural (Inner Plains) Zone of a size and scale beyond what is permitted by the District Plan and "other" types of industrial activities in all Rural zones are avoided, remedied or mitigated to the extent that the adverse effects are no more than minor.</i></p> <p>Policy B3.4.5 <i>Enable the continued and enhanced operation, innovation and development of established dairy plant sites for the purposes of administration, processing, testing, storage, handling, packaging and distribution of milk and dairy products, related by-products and ancillary activities within specifically identified Dairy Processing Management Areas within the Rural (Outer Plains) Zone, whilst ensuring the integrated management of effects on the environment at the boundary of the Management Areas through ODPs. The establishment of non-dairy processing related industrial activities shall be avoided.</i></p> <p>Policy B3.4.6 <i>Maintain low levels of building density in the Rural zone and the predominance of vegetation cover.</i></p> <p>Policy B3.4.7 <i>Avoid high rise buildings or highly reflective utility structures.</i></p>	<p>The DPMA actively supports achievement of Objective B3.4.2 to provide for a variety of activities within the rural environment, and in particular an activity which is concerned with primary production. The District Plan specifically identifies a dairy plant as being an appropriate activity.</p> <p>To ensure the rural area is maintained as a pleasant place to live and work in, the DPMA establishes parameters or limits around those effects which have the potential to extend beyond the DPMA boundary. These primarily concern noise, transport and landscape effects and have been assessed in the attached reports.</p> <p>Additional controls are proposed to manage effects such as lighting, construction and earthworks. The combined effect of these provisions is to avoid and mitigate those effects beyond the site boundaries.</p> <p>Prior to PC43, there was some tension between recognising and providing for rural based business, and protecting rural character and limiting building density. This saw the inclusion of new Policy 3.4.5 which specifically recognises existing dairy plant sites and operations and enables their continued operation and development while ensuring the integrated management of effects on the environment at the boundary of the Management Areas through ODPs.</p> <p>The proposed Plan Change actively achieves Policy 3.4.5 through increased recognition and enabling continued development through the use of an ODP and DPMA provisions. Suitable controls are also provided to manage the effects of the activity and any potential expansion at the boundary.</p> <p>In achieving Policy 3.4.5 it is also necessary to enable increased built form that is greater than that expected from typical farming activity. Within the DPMA itself, there is certainty as to where buildings will be located, and in particular buildings with greater height. Providing for this intensity of development within an established site, gives certainty to the community that this type of development is not dispersed and ensures that the balance of the wider rural area will maintains its existing level of openness and amenity.</p>

<p>GLARE AND NIGHTGLOW</p> <p>Policy B3.4.10</p> <p><i>Avoid night lighting shining directly into houses, other than a house located on the same site as the activity, or from vehicles using roads in the District.</i></p>	<p>PC43 introduced a specific rule imposing limits on lighting within the DPMA. This rule limits all light spill to 3 lux and requires all lighting to be directed away from adjoining properties and roads. The Fonterra Darfield plan change will utilise the identical provision which will enable this site to achieve the intent of Policy 3.4.10.</p>
<p>NOISE AND VIBRATION</p> <p>Policy B3.4.12</p> <p><i>Recognise temporary noise associated with short-term, seasonal activities as part of the rural environment, but ensure continuous or regular noise is at a level which does not disturb people indoors on adjoining properties.</i></p>	<p>PC 43 introduced a specific rule imposing limits on noise from activities within the DPMA. The operative rule that is now within the Plan required specific day-time and night time noise limits to be met at a Noise Control Boundary identified on an ODP. This provision will remain the same for the Fonterra Darfield site which also proposed to utilise a NCB.</p> <p>No existing dwellings will be within the NCB proposed and the ability to establish a dwelling within the NCB area is not prevented, but internal acoustic criteria is required to ensure that reverse sensitivity matters are managed and that regular noise does not disturb people indoors on adjoining properties to ensure consistency with Policy 3.4.12.</p>
<p>DUST</p> <p>Policy B3.4.15</p> <p><i>Mitigate nuisance effects on adjoining dwellings caused by dust from earthworks, or stockpiled material.</i></p>	<p>The management of dust is controlled through limits on earthworks volumes, cut and fill depths and stockpile heights. Similarly, no excavated material is permitted to be taken off-site without consent. These limits will ensure that should large scale earthworks be required, then there will be consent requirements in place to ensure measures with regard to dust suppression and transportation of material are controlled. Additional requirements are also provided for all large scale construction activities i.e. where buildings are proposed that will increase capacity for milk processing, through a controlled activity status including the ability to address dust and sediment management. These provisions will therefore achieve the intent of Policy 3.4.15.</p>
<p>REVERSE SENSITIVITY EFFECTS</p> <p>Policy B3.4.19</p> <p><i>Ensure new or upgraded road infrastructure and new or expanding activities, which may have adverse effects on surrounding properties, are located and managed to mitigate these potential effects.</i></p> <p>Policy B3.4.20</p> <p><i>Protect existing lawfully established activities in the Rural zone from potential for reverse sensitivity effects with other activities which propose to establish in close proximity.</i></p>	<p>The proposed Fonterra Darfield DPMA will incorporate an existing activity, as well as provide for its future expansion.</p> <p>The provisions that are proposed to be utilised have been primarily developed and established (via PC43) to avoid, or mitigate effects beyond the boundary. Minor amendments to these are proposed to ensure that they equally apply to the Fonterra Darfield site. This includes the use of a Noise Control Boundary that has been identified on the proposed ODP. The NCB imposes a requirement on those neighbours who may wish to build a new house within this area to include appropriate noise insulation as part of the building construction and a ventilation system that avoids the need to open windows. This approach does not seek to prevent dwellings from being constructed but wishes to ensure that potential reverse sensitivity effects are mitigated in accordance with the direction of these policies.</p>

In summary the proposed plan change is considered to be consistent with the intent of the relevant strategic objectives and policies for the District. In particular it is aligned with those objectives and policies that seek to recognise and provide for existing Dairy Processing sites, provide for rural based business in the rural zones and impose methods which avoid or mitigate environmental effects to enable these activities to integrate with their rural surrounds.

9 Statutory Considerations

9.1 Sections 74 & 75 of the RMA

Section 74 of the RMA prescribes that the District Council must prepare and change a district plan in accordance with its functions under s31 and the provisions of Part 2.

The District Council must also have regard to an evaluation report prepared in accordance with s32.

Section 74(2) requires the District Council to also have regard to proposed regional plans, management plans, the Historic Places Register, regulations or the Plans of adjoining territorial authorities to the extent that these may be relevant.

It is noted that the proposal does not involve any cross territorial issues, any matters of historical reference or matters addressed by management plans or strategies prepared under other Acts. With respect to Regional Plans, these are identified and addressed further below.

Section 74(2A) also requires the Council to take into account relevant planning documents recognised by an iwi authority, to the extent that its content has a bearing on resource management issues.

9.2 Section 31 – Functions of Council

Any plan change must assist the Council to carry out its functions so as to achieve the purpose of the Act. The functions of a territorial authority are set out in s31 of the Act and include:

- establishing, implementing and reviewing objectives, policies, and methods to achieve integrated management of the effects of the use and development of land; and
- controlling actual or potential effects of the use and development of land.

The request for plan change clearly accords with these stated functions. The proposal provides for the use and development of land for dairy processing activities. The proposed ODP and its use of largely existing rules (with minor amendments) provide the methods for Council to manage potential effects of this activity and demonstrates an integrated management approach. The ODP provides a high level overview of the parameters to development and sets in place those matters which must be implemented and maintained as mitigation measures e.g. access locations, landscape treatment, and noise control.

9.3 Section 75 – Contents of District Plans

Section 75 requires a District Plan to state objectives for the District, policies to implement the objectives and rules to then implement the policies.

The proposal does not introduce any new, or alter any existing, objectives or policies, but does introduce minor amendments to existing rules. The reasons for the amendments to the rules is provided in this Plan Change and is consistent with s75(2) and the current format of the Selwyn District Plan (Rural Volume).

Section 75 requires a District Plan to not be inconsistent with Regional Plans. These are identified and discussed in paragraphs further below.

Section 75(3)(a), (b) and (c) also requires a District Plan to give effect to any National Policy Statement, the New Zealand Coastal Policy Statement and the Regional Policy Statement. These are discussed as follows:

9.4 National Policy Statements (NPS) and New Zealand Coastal Policy Statement

There are three NPS to which consideration must be given. These are:

- NPS for Renewable Electricity Generation
- NPS for Electricity Transmission
- NPS for Freshwater Management

There is no direct connection or geographic proximity to renewable electricity generation activities. The proposed DPMA has no impact on Electricity Transmission, being some distance from any main transmission lines. The site is served by an existing electricity supply that extends from a substation that was constructed near the site specifically to serve the Fonterra Milk Processing facility. This substation is not within Fonterra's ownership and has been maintained within the Rural Buffer Zone area of the proposed DPMA. This means that the existing Rural (Outer Plains) zone provisions including maximum height and setbacks remain applicable as are the Plan provisions relating to Utilities. The proposed DPMA does not propose practices or effects that are inconsistent with the NPS for Freshwater Management noting that there are a range of options available for the recycling and discharge of stormwater from the site and discharge of treated wastewater to land.

With respect to the Coastal Policy Statement, the proposed DPMA is not part of the Coastal environment.

9.5 Canterbury Regional Policy Statement (RPS)

The RPS provides an overview of the Resource Management issues in the Canterbury region, and the objectives, policies and methods to achieve integrated management of the natural and physical resources of the Region. The methods include directions for provisions in district and regional plans.

The chapters of primary relevance of the Regional Policy Statement are listed as follows:

- Chapter 5 Land Use and Infrastructure
- Chapter 7 Fresh Water
- Chapter 11 Natural Hazards
- Chapter 14 Air
- Chapter 16 Energy

The request for Plan Change gives effect to the key provisions of these chapters, as assessed in Table 2 below:

Table 2: Regional Policy Statement Assessment

<p>Objective 5.2.1 – Location, design and function of development (Entire Region)</p> <p><i>Development is located and designed so that it functions in a way that:</i></p> <ul style="list-style-type: none"> <i>1) achieves consolidated, well designed and sustainable growth in and around existing urban areas as the primary focus for accommodating the region's growth; and</i> <i>2) enables people and communities, including future generations, to provide for their social, economic and cultural well-being and health and safety; and which:</i> <ul style="list-style-type: none"> <i>a) maintains, and where appropriate, enhances the overall quality of the natural environment of the Canterbury region, including its coastal environment, outstanding natural features and landscapes, and natural values;</i> <i>b) provides sufficient housing choice to meet the region's housing needs;</i> <i>c) encourages sustainable economic development by enabling business activities in appropriate locations;</i> <i>d) minimises energy use and/or improves energy efficiency;</i> <i>e) enables rural activities that support the rural environment including primary production;</i> <i>f) is compatible with, and will result in the continued safe, efficient and effective use of regionally significant infrastructure;</i> <i>g) avoids adverse effects on significant natural and physical resources including regionally significant infrastructure, and where avoidance is impracticable, remedies or mitigates those effects on those resources and infrastructure;</i> <i>h) facilitates the establishment of papakāinga and marae; and</i> <i>i) avoids conflicts between incompatible activities.</i> 	<p>Objective 5.2.1 is concerned with the location, design and function of development across the entire region. The objective is in two parts. The first part (1) is concerned with growth in and around existing urban areas and is not relevant to this request for plan change. The second part (2) is concerned that people and communities are enabled to provide for their wellbeing, health and safety. This objective is qualified by a series of sub-clauses (a) to (i) with those of primary relevance being (2)(a), (c), (e), (f), (g), and (i).</p> <p>The Fonterra Darfield site already exists in this location and provides an appropriate node for future concentration and growth of dairy processing activities. The proposed DPMA for this site is part of a continuum of rural production and is appropriately located where it is accessible to the farms it services.</p> <p>The effects of the existing and future potential traffic on regionally important infrastructure has been assessed and provisions have been incorporated into the plan change to ensure that effects on the efficiency and safety of both State Highway 1 and the Main Trunk Railway line are addressed on an on-going basis as part of any building consent processes which increase milk processing or storage capacity.</p> <p>The provisions of the plan change include rules which, whilst enabling of dairy processing activities, set limits in respect of environmental effects on adjoining activities and property e.g. noise limits, landscape retention and maintenance, lighting, signage etc. As such, the provisions avoid and/or mitigate conflicts between activities in the DPMA and those on adjoining properties.</p> <p>The proposal also represents significant economic and social wellbeing benefits to the community. The proposed DPMA reflects the significance of the dairy industry in this context.</p>
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<p>Objective 5.2.2 – Integration of land-use and regionally significant infrastructure (Wider Region)</p> <p><i>In relation to the integration of land use and regionally significant infrastructure:</i></p> <p>1) <i>To recognise the benefits of enabling people and communities to provide for their social, economic and cultural well-being and health and safety and to provide for infrastructure that is regionally significant to the extent that it promotes sustainable management in accordance with the RMA.</i></p> <p>2) <i>To achieve patterns and sequencing of land-use with regionally significant infrastructure in the wider region so that:</i></p> <p>a) <i>development does not result in adverse effects on the operation, use and development of regionally significant infrastructure.</i></p> <p>b) <i>adverse effects resulting from the development or operation of regionally significant infrastructure are avoided, remedied or mitigated as fully as practicable.</i></p> <p>c) <i>there is increased sustainability, efficiency and liveability.</i></p>	<p>Objective 5.2.2 is concerned with integration of land use and significant infrastructure. The provisions of the request for the plan change include specific rules in respect of the vehicle accesses to the site including the primary state highway access. This includes a control mechanism for on-going review of its efficiency and safety as development and processing capacity increases within the DPMA. Similarly, the ODP provides opportunity to continue to utilise the Midland Railway Line for transporting freight via the existing siding thereby promoting increased sustainability and transport efficiency.</p>
<p>Policy 5.3.2 – Development conditions (Wider Region)</p> <p><i>To enable development including regionally significant infrastructure which:</i></p> <p>1) <i>ensure that adverse effects are avoided, remedied or mitigated, including where these would compromise or foreclose:</i></p> <p>a) <i>existing or consented regionally significant infrastructure;</i></p> <p>b) <i>options for accommodating the consolidated growth and development of existing urban areas;</i></p> <p>c) <i>the productivity of the region’s soil resources, without regard to the need to make appropriate use of soil which is valued for existing or foreseeable future primary production, or through further fragmentation of rural land;</i></p> <p>d) <i>the protection of sources of water for community supplies;</i></p> <p>e) <i>significant natural and physical resources;</i></p>	<p>The proposal provides mechanisms to mitigate any potential reverse sensitivity effects and conflicts with transport networks along with integrating with transport networks and modes so as to provide for the sustainable and efficient movement of goods.</p> <p>Whilst some further hardstand and built development will result in a loss of available soil, the area of soil lost is very small relative to the expansive area of the wider plains. These soils are not actively farmed or utilised productively at present.</p>

<p>2) avoid or mitigate:</p> <p>a) natural and other hazards, or land uses that would likely result in increases in the frequency and / or severity of hazards;</p> <p>b) reverse sensitivity effects and conflicts between incompatible activities, including identified mineral extraction areas; and</p> <p>3) integrate with:</p> <p>(a) the efficient and effective provision, maintenance or upgrade of infrastructure; and</p> <p>(b) transport networks, connections and modes so as to provide for the sustainable and efficient movement of people, goods and services, and a logical, permeable and safe transport system.</p>	
<p>Policy 5.3.3 – Management of development (Wider Region)</p> <p><i>To ensure that substantial developments are designed and built to be of a high-quality, and are robust and resilient:</i></p> <p>1) through promoting, where appropriate, a diversity of residential, employment and recreational choices, for individuals and communities associated with the substantial development; and</p> <p>2) where amenity values, the quality of the environment, and the character of an area are maintained, or appropriately enhanced.</p>	<p>This proposal will provide certainty in respect of dairy processing activities, which in turn will generate and offers employment opportunities as detailed in the Economic Impact Report contained within Appendix 8.</p>
<p>Policy 5.3.5 – Servicing development for potable water, and sewage and stormwater disposal (Wider Region)</p> <p><i>Within the wider region, ensure development is appropriately and efficiently served for the collection, treatment, disposal or re-use of sewage and stormwater, and the provision of potable water, by:</i></p> <p>1) avoiding development which will not be served in a timely manner to avoid or mitigate adverse effects on the environment and human health; and</p> <p>2) requiring these services to be designed, built, managed or upgraded to maximise their ongoing effectiveness.</p>	<p>The DPMA will be self-sufficient in terms of servicing i.e. it is not required to be part of a reticulated, urban system.</p> <p>The existing site holds its own consents for water take and discharges to air and land.</p> <p>Matters related to future air discharge, water requirements and the recycling and discharge of stormwater can be effectively managed through a number of options and via resource consents from the Regional Council as required in the future.</p>

<p>Policy 5.3.12 – Rural production (Wider Region) <i>Maintain and enhance natural and physical resources contributing to Canterbury’s overall rural productive economy in areas which are valued for existing or foreseeable future primary production, by...</i> 2) <i>enabling tourism, employment and recreational development in rural areas, provided that it:</i> a) <i>is consistent and compatible with rural character, activities, and an open rural environment;</i> b) <i>has a direct relationship with or is dependent upon rural activities, rural resources or raw material inputs sourced from within the rural area;</i> c) <i>is not likely to result in proliferation of employment (including that associated with industrial activities) that is not linked to activities or raw material inputs sourced from within the rural area; and</i> d) <i>is of a scale that would not compromise the primary focus for accommodating growth in consolidated, well designed and more sustainable development patterns, and;</i></p>	<p>The request for plan change has a direct relationship to rural production, will concentrate growth to the core of the existing site, and will generate additional employment directly and indirectly linked to the core activities undertaken on the site.</p>
<p>Objective 7.2.1 – Sustainable management of fresh water. <i>The region’s fresh water resources are sustainably managed to enable people and communities to provide for their economic and social well-being through abstracting and/or using water for irrigation, hydro-electricity generation and other economic activities, and for recreational and amenity values, and any economic and social activities associated with those values, providing:</i> (1) <i>the life-supporting capacity ecosystem processes, and indigenous species and their associated freshwater ecosystems and mauri of the fresh water is safe-guarded...</i> Objective 7.2.4 – Integrated management of fresh water resources <i>Fresh water is sustainably managed in an integrated way within and across catchments, between activities, and between agencies and people with interest in water management in the community, considering:</i> (1) <i>the Ngai Tahu ethic of Ki Uta Ki Tai (from the mountains to the sea);</i> (2) <i>the interconnectivity of surface water and groundwater;</i> (3) <i>the effects of land uses and intensification of land uses on demand for water and water quality; and</i> (4) <i>kaitiakitanga and the ethic of stewardship; and</i> (5) <i>any net benefits of using water, and water infrastructure, and the significance of those benefits to the Canterbury region.</i></p>	<p>The established activities have existing consents for water take. The future needs for fresh water are not known however, any additional water required beyond the volumes already consented, would require either a variation or new consent to be obtained. This would be considered in the appropriate manner at that point in time, in the context of the relevant statutory plans and their objectives and policies.</p> <p>Matters related to air discharge, water requirements and the recycling and discharge of stormwater can be effectively managed through a number of options and via resource consents as required in the future to ensure that freshwater is managed sustainably.</p>

<p>Chapter 11 - Natural Hazards Objective 11.2.1 – <i>Avoid new subdivision, use and development of land that increases risks associated with natural hazards</i></p>	<p>The existing Fonterra Darfield site is located on land that is understood to be close to the Hororata fault line. Following the Canterbury earthquake sequence, all existing buildings on-site (Stage 1 of consented development) received little damage due to being designed to a high standard of engineering. Similarly, any new buildings will be required to meet the appropriate geotechnical and engineering requirements to avoid increase risks associated with natural hazards.</p>
<p>Objective 14.2.2 – Localised adverse effects of discharges on air quality <i>Enable the discharges of contaminants into air provided there are no significant localised adverse effects on social, cultural and amenity values, flora and fauna, and other natural and physical resources.</i></p>	<p>Fonterra holds consents for discharge of contaminants to air from its established plant. As development occurs within the DPMA over time, variations or additional consents may be required, depending on the nature of the activities and processes proposed. There are a number of alternatives to how this may be achieved to minimise the potential for localised effects.</p>
<p>Objective 16.2.1 – Efficient use of energy <i>Development is located and designed to enable the efficient use of energy, including:</i> 2) <i>planning for efficient transport, including freight</i></p>	<p>The proposed DPMA is located adjacent to State Highway 73 and the Midland Rail Line. This proximity will assist in efficient use of energy in transport of freight. The location of the DPMA within the Outer Plains, close to farms, also assists in reduction of transportation of milk to the plant.</p>

9.6 Natural Resources Regional Plan, Proposed Land and Water Regional Plan and Proposed Canterbury Air Regional Plan

Relevant regional plans include the operative Natural Resources Regional Plan (NRRP) in terms of air discharges and the partially operative Canterbury Land and Water Regional Plan (LWRP).

The NRRP is now only concerned with the sustainable management of air discharges across the Canterbury Region. The Plan manages and controls a range of air discharge activities for the purpose of maintenance and enhancement of air quality. The operative Air chapter (Chapter 3) seeks to protect and maintain air quality by managing air discharges. For this plan change the relevant objectives and policies relate to protection of localised air quality, and avoidance or mitigation of effects such as dust nuisance (e.g. during construction activities) or discharge of contaminants to avoid significant effects on the environment including adverse effects on health and safety and offensive or objectionable odours.

The Proposed Canterbury Air Regional Plan (pCARP) was notified on 28 February 2015 and all rules within the Plan took legal effect at this time. The hearing on the pCARP has been held, however it remains adjourned at the time of writing. Through the hearing process it is likely that some changes will occur to the notified version of the Plan. However, the notified objectives and policies of this Plan broadly seek (for industrial and large scale discharges to air) to:

- Enable discharges of contaminants into air associated with industrial activities in locations where the discharge is compatible with the surrounding land use pattern;
- Apply the best practicable option to all large scale and industrial activities discharging contaminants into air so that degradation of ambient air quality is minimised;

- Avoid the discharge of contaminants into air where the discharge will result in the exceedance, or exacerbation of an existing exceedance, of the guideline values set out in the Ambient Air Quality Guidelines; and
- Offset, within Clean Air Zones, significant increases of PM₁₀ concentrations from discharges of contaminants in accordance with the Resource Management (National Environmental Standards for Air Quality) Regulations 2004.

The partially operative LWRP is a new planning framework for the management of land and water within Canterbury. In particular, it is concerned with the setting of water quality and quantity limits and meeting the requirements of the NPS for Freshwater Management and principles and targets in the Canterbury Water Management Strategy.

The LWRP is now partially operative, with the exception of those rules pertaining to the taking and use of surface water and dams released. Accordingly, the majority of the LWRP provisions are now beyond appeal. The LWRP has subsequently been subject to six variations/plan changes, one of which (Variation 1) affects the catchment that contains the Darfield site and specifically focuses on reducing water takes and reducing nitrate loading where areas are over allocated in terms of these uses. The provisions of Variation 1 have now been made operative.

Fonterra holds a number of consents for its existing plant in respect of earthworks, discharges to air, discharges to land for stormwater, treated wastewater and sewage as well as the storage of hazardous substances. It is acknowledged that these consents may need to be varied or new consents obtained as the DPMA develops over the coming decades. These consents will require detailed design of the particular systems involved to demonstrate compliance with the relevant Plans and over time can be expected to incorporate improved technologies and practices.

Additionally, it is noted that the nature of future activities within the DPMA is not defined and these may change in response to changes in the industry and markets. Accordingly, it is appropriate that the integration of matters relating to wastewater, air discharge and water takes are addressed through subsequent resource consent processes noting that there are a range of options available to Fonterra that can enable their ability to achieve this criteria as discussed earlier within this report.

As noted above, any new activities within the DPMA over time, will require existing consents to be varied or new consents to be obtained. On this basis, the integrated management of activities within the DPMA will be achieved on the consideration of those specific detailed proposals, again noting that there are a number of options available to Fonterra to manage discharges from its site should it expand.

In summary, the proposed DPMA is not considered to be inconsistent with the relevant Regional Plans.

9.7 Canterbury Regional Land Transport Strategy 2012-2042 (RLTS)

The Canterbury Regional Land Transport Strategy (RLTS) sets the strategic direction for land transport within the Canterbury region over a 30 year period. The RLTS identifies the region's transport needs, the roles of land transport modes along with the planning, engineering, education, encouragement and enforcement methods that will be applied in the achievement of objectives.

The provisions of the DPMA accord with this Strategy, specifically controlling the use of all access points in the event that new buildings are proposed that will increase milk processing capacity for the site. In the event that such changes are proposed the design of access must be approved by the relevant road controlling authority. Accordingly, the safety and efficiency of local roads and the State Highway will be protected and can respond, as necessary, to any changes to the RLTS.

9.8 Iwi Documents

Te Rūnanga o Ngāi Tahu represents Ngāi Tahu as an iwi authority for the purposes of the RMA, and Te Taumutu Rūnanga along with Te Ngāi Tūāhuriri Rūnanga are the kaitiaki Rūnanga for subject area. There are no statutory acknowledgement areas, silent file areas or Waahi Taonga areas identified in the District Plan that could be directly affected by this plan change, however Fonterra have commissioned the preparation of a cultural impact assessment (CIA), prepared by Tipa & Associates. A copy of the CIA and Fonterra's subsequent response to the CIA is contained in **Appendices 7A and 7B**.

The relevant iwi document for the area is the Mahaanui Iwi Management Plan 2013 (IMP). This document provides a values-based policy framework for the protection and enhancement of Ngāi Tahu values, and for achieving outcomes that provide for the relationship of Ngāi Tahu with natural resources, for the hapu who hold manawhenua rights over lands and waters within the takiwa from the Hurunui River to the Hakatere River and inland to Ka Tiritiri o Te Moana.

During the Stage 1 and 2 consent process for the Darfield site, Fonterra consulted with Ngāi Tahu and Tūāhuriri Rūnanga. To ensure that any potential adverse effects of the Milk Powder Plant on the archaeological or cultural values of the area were minimised, an 'accidental discovery protocol' condition was proposed and included as a consent condition requiring the involvement of Tūāhuriri Rūnanga should any remains or items of interest be found during the construction of the Milk Powder Plant. These conditions are considered an appropriate level of mitigation and have been retained as a matter of control within the proposed Plan Change in the event that any earthworks that exceeds the set limits and construction that will increase the capacity for milk processing is proposed. This control is in the form of a controlled activity consent requirement. Both the earthworks and construction controls specifically refer to an ADP as specified within the Mahaanui Iwi Management Plan in particular Policy P4.1 which seeks to work with local authorities to ensure a consistent approach to the identification and consideration of Ngāi Tahu interests in subdivision and development activities.

Matters regarding the protection and sustainable use of freshwater will continue to be considered under future consenting requirements, noting that there are a range of options available to minimise both the use of freshwater and impacts upon air and freshwater from increased development on this site. This includes the capture and recycling of stormwater on-site which has already been implemented on the existing site to assist with reducing future demands pressure on water take requirements.

As referred to in Section 7.7, further consultation with Taumutu Rūnanga and Tūāhuriri Rūnanga has occurred through the preparation of the CIA. Overall, the CIA advises that the runanga have few concerns with the proposal and support (in principle) the type of plan change proposed. Those areas of concern that have been identified relate to Te Taumutu Rūnanga and Te Ngāi Tūāhuriri Rūnanga seeking:

1. to form a long term relationship with Fonterra to deliver cultural, environmental and economic outcomes;

2. for Fonterra to prepare or make available to the runanga a range of information relating to the operation of the Darfield Milk Factory. Once the two runanga receive this information they may make recommendations to Fonterra on how they would like Fonterra to address concerns raised within this information;
3. for Fonterra to show how they will integrate the recommendations from the CIA prepared by Jolly 2014 in Plan Change 43. Currently, Fonterra have provided some information in relation to how they will address these recommendations but not all areas;
4. a site visit by a group from Te Ngāi Tūāhuriri Rūnanga and Te Taumutu Rūnanga to the Fonterra Darfield Milk Factory in the short term so Fonterra so representatives from the two runanga can see what Fonterra have planned at the factory in relation to the plan change and what future expansion they have planned.

Fonterra responded to these matters in their letter to the runanga dated 2 February 2016, a copy of which is also contained in Appendix 7B. In essence, Fonterra has welcomed the opportunity to build a strong relationship with Te Taumutu Rūnanga and Te Ngāi Tūāhuriri Rūnanga. Fonterra will therefore seek to provide all information outlined in the CIA, organise a site visit and hold regular hui to discuss issues, share information and give updates on any future expansion at the Darfield Milk Factory. These outcomes are considered to be consistent with the 'collaboration' Policy K4.1 of the IMP, the primary purpose of which is to enhance the exercise of kaitiakitanga.

In summary, the request for a plan change is not considered to significantly impact upon any cultural values and provided the ADP controls are maintained, it is considered to be consistent with the intent of the Mahaanui Iwi Management Plan.

9.9 Part 2

Part 2 sets out the purpose and principles of the RMA. The purpose of the Act is to promote sustainable management of natural and physical resources. This is defined to mean:

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:

(a) sustaining the potential of natural and physical resources (excluding minerals) to meet the reasonably foreseeable needs of future generations; and

(b) safeguarding the life-supporting capacity of air, water, soil, and ecosystems; and

(c) avoiding, remedying, or mitigating any adverse effects of activities on the environment.

The key matters for this assessment therefore are:

- Will the proposed Plan Change (in terms of the management of use, development and protection of natural and physical resources) enable people to provide for their wellbeing, health and safety?
 - Will the potential of natural and physical resources to meet the reasonably foreseeable needs of future generations be sustained?
 - Will the life-supporting capacity of air, water, soil, and ecosystems be safeguarded?
- and

- Are the adverse effects of this enablement capable of being avoided, remedied or mitigated?

In order to achieve the purpose of the Act, it is necessary to:

- recognise and provide for the matters of national importance in section 6;
- have particular regard to the other matters in section 7;
- take into account the principles of the Treaty of Waitangi (section 8);

The proposal is considered able to achieve the purpose of the Act. The Economics report appended to this Statutory Analysis and Evaluation describes the scale and significance of dairying within the Selwyn District and Canterbury Region. It is not only a reasonable anticipation, but also economically appropriate that the processing of milk is provided for within the District. This will optimise the efficiency of the milk processing industry, as well as provide employment and ensure that the benefits or value of production are realised within the district in terms of household expenditure and contribution to the economy.

Section 8.2.1 in this Report clearly set out the reasons why the status quo in terms of the District Plan provisions is not efficient. The absence of a DPMA being applied to the Fonterra Darfield site continues to result in considerable time delays to the operation and development of the established milk plant, the costs of which are replicated by all parties, including the Council, in considering and processing those consents.

The provisions of the plan change clearly enable the ongoing use and development of physical resources for existing dairy processing sites. This will assist the community to provide for its economic and social wellbeing.

The proposed amendments to rules are particular to the DPMA for the Fonterra site only and to address small areas of ambiguity that were present in the operative provisions that arose from the decision on PC43. In this respect the proposed provisions better provide for the health and safety of the community than the current operative provisions.

Adverse effects are able to be avoided, remedied or mitigated. There will be no significant change in the landscape values of the locality noting the considerable perimeter landscaping that has been established through the Stage 1 and 2 consent processes for this site. This Plan Change also recognises the context of the existing site and the expectation that milk processing is an anticipated activity in rural areas.

No significant adverse noise effects will be experienced at any existing house surrounding the site. The use of a noise control boundary will also allow for noise associated with future expansion to be managed to avoid reverse sensitivity effects should any sensitive activity seek to locate within this NCB area. This control does not seek to prohibit sensitive activities from establishing in these areas, particularly where they are on third party land but will ensure that a suitably appropriate acoustic environment is provided for such activities. The potential adverse effects of utilising a NCB control over some third party land is considered to be outweighed by the significant benefits that are otherwise gained through the DPMA.

There are a number of options to provide for discharges to air and land from activities on the site. These options include using different alternatives of boiler fuel e.g. biofuel, low sulphur coal (air discharge) and recycling collected stormwater from roofs back into the buildings in a similar manner to the existing buildings. In addition, there is the ability to store excess stormwater or treated wastewater in ponds on-site (again similar to what occurs on site at present) before discharging to land during periods that avoid ponding and surface runoff. In addition, matters related to air discharge can be appropriately managed through future resource consent applications which are particular to the nature and scale of future activities, detailed design and adoption of best practice at that time.

There are no matters of national importance considered relevant to this application. The area of land subject to the plan change does not include an outstanding natural landscape or feature and there are no impacts on the margins of a river or stream.

The “Other Matters” of relevance to this Plan Change are:

- s7(b) the efficient use of natural and physical resources
- s7(c) the maintenance and enhancement of amenity values
- s7(f) the maintenance and enhancement of the quality of the environment.

The formulation of this specific Plan Change (and earlier involvement in the formulation of PC43) has had regard to these matters. The ODP and accompanying rules provide an overview of how the site will be developed over time and will achieve the integrated management of effects at the DPMA boundary with the Rural Zone.

The DPMA makes efficient use of infrastructure related to the existing dairy plant, and the area is highly accessible to the State Highway and midland rail line. In this context the proposal represents a very efficient use of the natural and physical resources of the land providing a range of benefits for the wellbeing of the community, most notably direct and indirect employment.

The DPMA will result in development which contrasts with the wider, open rural plains, however this is not out of context with the existing site and the anticipation of rural processing facilities within some parts of the Rural environment due to the efficiencies gained in locating rural industry near the rural environment. Provisions relating to the location of buildings and activities, control of noise emissions and retention of mitigating factors such as landscaping, will maintain existing amenity values.

With respect to s8, it is recognised that an accidental discovery protocol is now required for any further construction works on-site in accordance with the specifications of the Mahaanui Iwi Management Plan. The CIA has also outlined opportunities for Taumutu Rūnanga and Tūāhuriri Rūnanga to express kaitiakitanga toward the environment through the establishment of a long-term relationship with Fonterra.

In summary, having regard to the content and analysis contained within this report, it is concluded that the proposal achieves Part 2 of the RMA and is a more efficient and effective mechanism for managing the long-term operation of the Fonterra Darfield site than the existing provisions of the Operative District Plan.

10 Consultation

The request for a plan change has been discussed with the following groups and individuals. Consultation involved dialogue early in the plan change development process with sufficient time for feedback before finalising. On the basis that Fonterra were actively engaged with Synlait during the preparation of PC43 to ensure that the provisions would be effective and applicable to both sites, only limited changes are required for the proposed Plan Change.

It is also noted that consultation in accordance with the 1st Schedule of the RMA will be undertaken by Selwyn District Council prior to public notification of the Plan Change and that any other interested parties are able to put forward their views through the statutory public notification process.

A short summary on consultation undertaken to date is provided below:

Selwyn District Council

Meetings were held with Council staff during the preparation of Plan Change 43 during which Fonterra was working closely with Synlait. It was clearly indicated that the policy framework, ODP approach and DPMA rules were designed so that they could effectively apply to both the existing Synlait Dunsandel site and Fonterra Darfield sites with minimal specific provisions required for each site. For simplicity, it was considered appropriate for the Synlait site to be included within Plan Change 43 while the Fonterra site would follow shortly after and primarily only need to make minor amendments and insert a new ODP.

More recently, the draft ODP and proposed text amendments of the Plan Change were provided to Council for initial feedback. No specific concerns were raised by Council staff, although it was advised that consultation should also occur with Synlait to ensure consistency in approach.

Environment Canterbury (ECan)

Ecan staff attending the same meeting as Selwyn District Council regarding PC43 were informed of Fonterra's intention to also insert an ODP into the Plan in relation their Darfield milk processing site.

A draft ODP and outline of the draft text amendments and Plan Change was supplied to Ecan on the 22nd March 2016 and a letter in response received on the 2nd May 2016. Matters identified in letter were:

1. Air quality – no concerns;
2. Transport – support consultation with NZTA re: SH73 intersection; advice re: update of Regional Land Transport Plan (2015); potential upgrade of Waimakariri River Bridge – deferred to SDC; seeks further discussion re: use of rail and other forms of transport;
3. Consents – no concerns, except to note requirement for earthworks consents (and new discharge to air and land consents) from ECan;
4. Section 32 – update to recognise that LWRP is now operative.

In response to these comments consultation has been undertaken with both NZTA and Selwyn District Council, the requirement for earthworks consents is acknowledged and the section 32 assessment has been updated.

Synlait

Fonterra have maintained good lines of communication with Synlait throughout the preparation of PC43 to ensure that the now operative DPMA can effectively work for both sites, albeit with minor amendments to allow for specific references between each site e.g. landscaping.

A draft of this Plan Change was sent to Synlait for comment prior to lodgement. Feedback from Synlait was received from Shoshona Galbreath of Duncan Cotterill and requested that the operative landscaping provisions be retained as they relate to the Synlait DPMA.

Synlait are concerned that the draft amendments are moving any 'new building that increases the capacity or storage' from a permitted activity status to a controlled activity status. They agree that the existing permitted activity rule standard is confusing in that it effectively requires landscaping to be consented as a controlled activity regardless, however they would rather leave it that way than risk any new buildings not being listed as a permitted activity in the first instance.

Fonterra has and will continue to maintain an open dialogue with Synlait on the provisions of this Plan Change.

Adjoining Property Owners

Fonterra contacted its immediate and adjoining neighbours to the proposed DPMA and held a community meeting on 4 February 2016 to discuss the private plan change request. No substantial feedback was received. A follow-up meeting was subsequently held with Mr Buttle to ensure that all neighbours had an opportunity to review the information supporting the proposal and to seek clarification on any matters of specific concern.

NZTA

A draft ODP and outline of the draft text amendments and Plan Change was supplied to NZTA on 29 March 2016 and meeting with NZTA representatives held on the 30th March. Initial response was that NZTA were supportive of the draft plan change.

Further details were provided to NZTA in the form of the Transport Assessment by Mr Carr of Carriageway Consultants. Jon Richards of NZTA responded on the 7th July that having reviewed the implications of the proposal in relation to the safe and efficient use of State Highway 73, NZTA agreed with the Transport Assessment of Mr Carr regarding the potential traffic growth and the impact on the SH73 intersection. Therefore NZTA had no objection to the proposal.

Orion

A draft ODP and outline of the draft text amendments and Plan Change was supplied to Orion on 29th March 2016. Orion responded on the 15 April 2016 requesting:

1. the insertion of a 'Build Free Area' on the ODP around the substation on the site (5m buffer protection) and over the underground cables/overhead lines as per the registered easement areas; and
2. the addition of a general note in Appendix 26 to reference compliance with the NZ Electrical Code Practice for Electrical Safe Distances 34:2001 for any buildings, structures and earthworks.

Fonterra agreed with these amendments and the plan change has been amended accordingly.

Central Plains Water

A draft ODP and outline of the draft text amendments and Plan Change has been supplied to CPW Limited and a subsequent meeting was held on 29 February 2016. As outlined in the letter from CPW (dated 1 March 2016 and contained in **Appendix 9**), CPW confirms that it has agreed to alter the current designation through Fonterra's property to the amended corridor shown on the attached plan, should CPW decide to give effect to the designation in this location.

11 Conclusion

This Statutory Analysis and Evaluation Report with accompanying AEE and appendices presents all of the relevant information required by the Selwyn District Council to process the request for a private Plan Change. The information provided is at a level of detail that is appropriate to the scale and significance of the issues concerned. Potential environmental effects have been identified and appropriately avoided, remedied or mitigated through the proposed provisions.

Although no changes are proposed to any Objectives or Policies of the District Plan, all of the matters of policy and statutory consideration have been identified and addressed, including for all relevant higher order documents. Consultation with stakeholders has also been initiated and will be on-going as required.

Overall, it is considered that the inclusion of the ODP for the Fonterra Darfield site and associated amendments will more appropriately give effect to the established objective and policy framework of the District Plan, thereby ensuring that the overriding purpose of the RMA to promote the sustainable management of natural and physical resources continues to be achieved. On this basis, it is concluded that the purpose of the Act under this Section 5 would be better achieved by the Plan Change proceeding.

APPENDIX 1:

Certificate(s) of Title



COMPUTER FREEHOLD REGISTER UNDER LAND TRANSFER ACT 1952



**Guaranteed Search Copy issued under Section 172A
of the Land Transfer Act 1952**


R. W. Muir
Registrar-General
of Land

Identifier **588218**
Land Registration District **Canterbury**
Date Issued 20 June 2013

Prior References

CB40A/348

Estate	Fee Simple
Area	3617 square metres more or less
Legal Description	Lot 2 Deposited Plan 456083

Proprietors

Orion New Zealand Limited

Interests

Appurtenant hereto is a right of way, right to convey water and telephonic communications specified in Easement Certificate A241.6 - 22.6.1992 at 11:51 am

The easements specified in Easement Certificate A241.6 are subject to Section 243(a) Resource Management Act 1991

Land Covenant in Easement Instrument 8748984.1 - 23.6.2011 at 2:36 pm

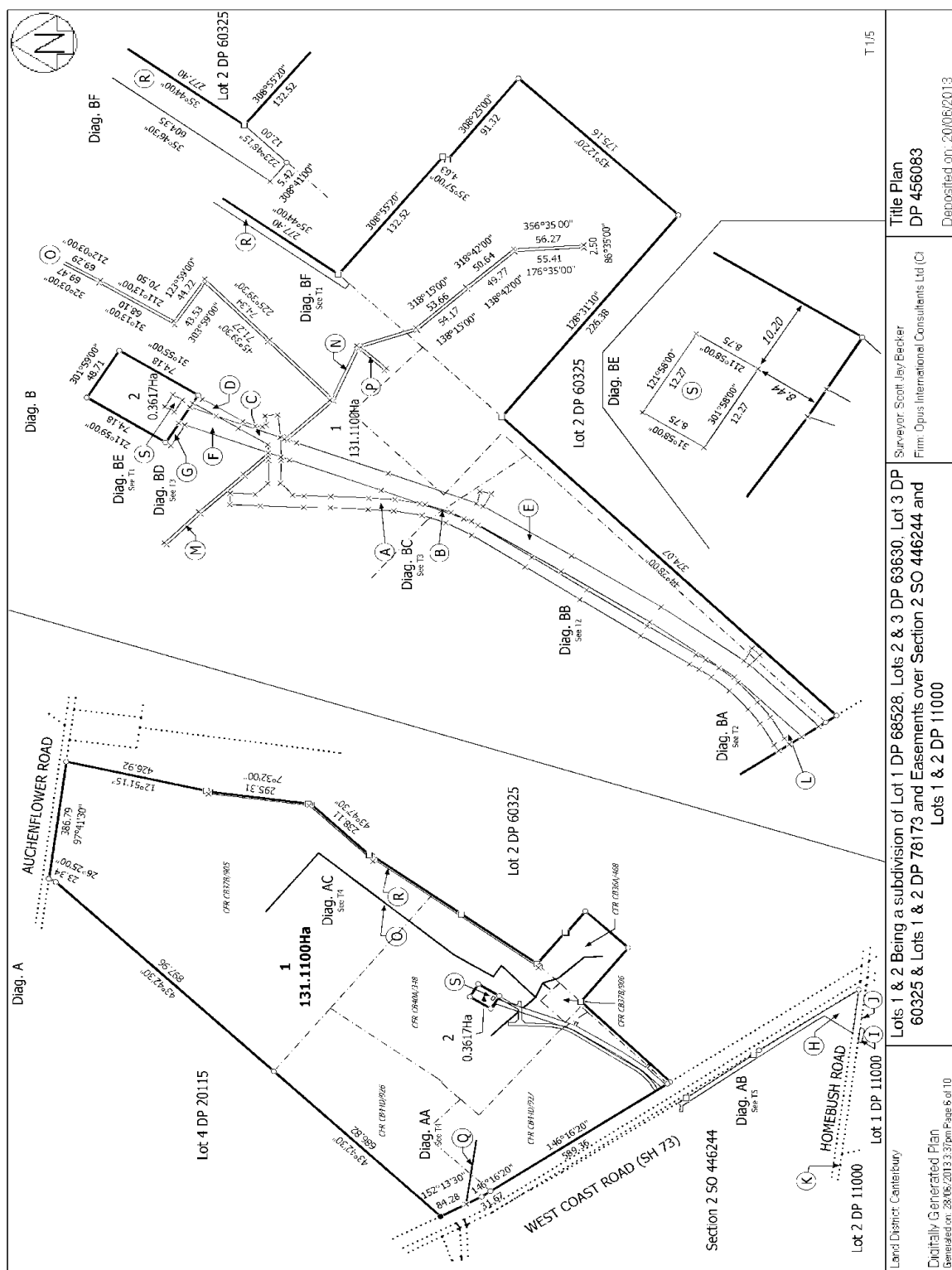
Land Covenant in Easement Instrument 8748984.2 - 23.6.2011 at 2:36 pm

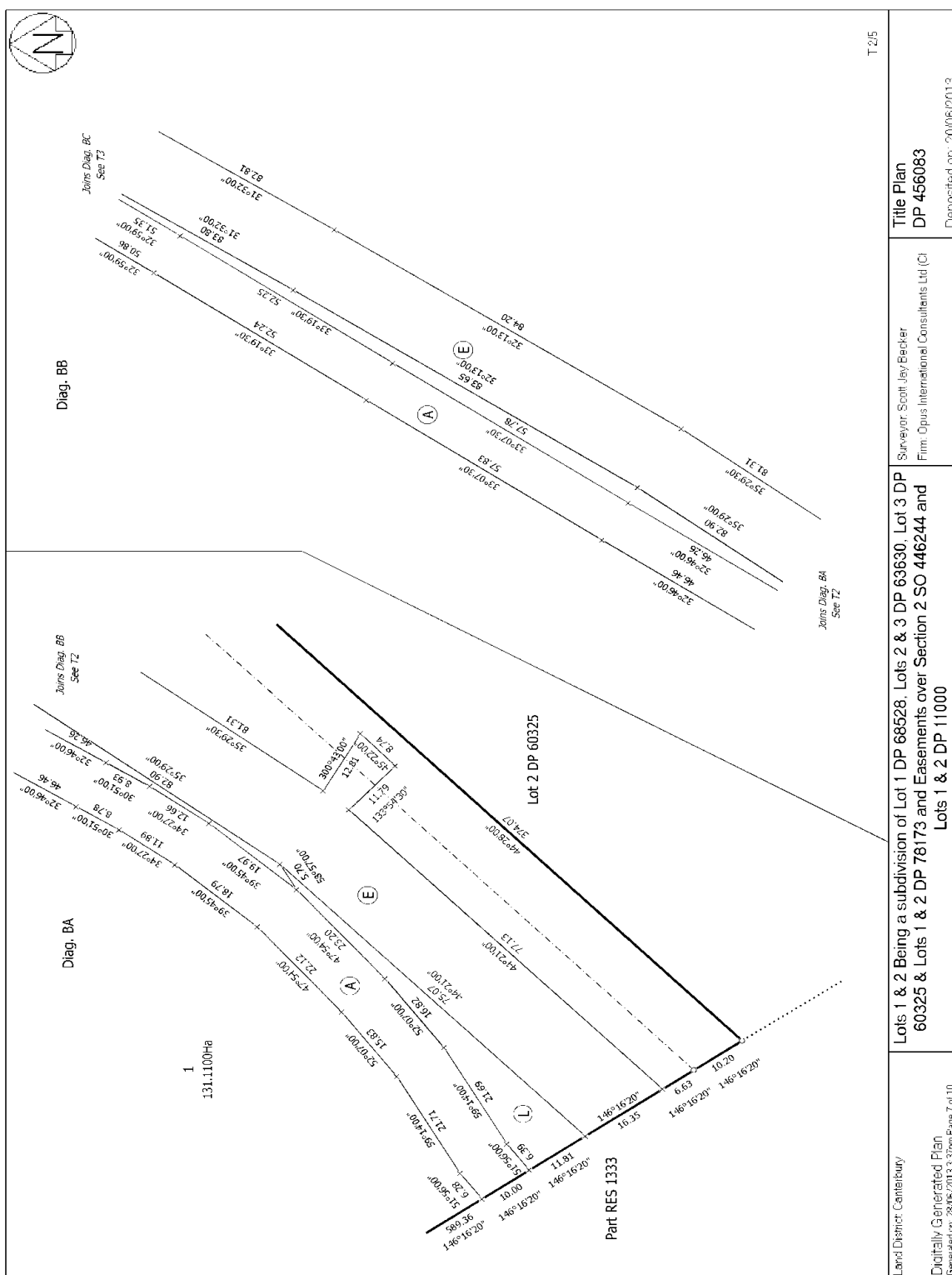
9430435.7 Consent Notice pursuant to Section 221 Resource Management Act 1991 - 20.6.2013 at 2:34 pm

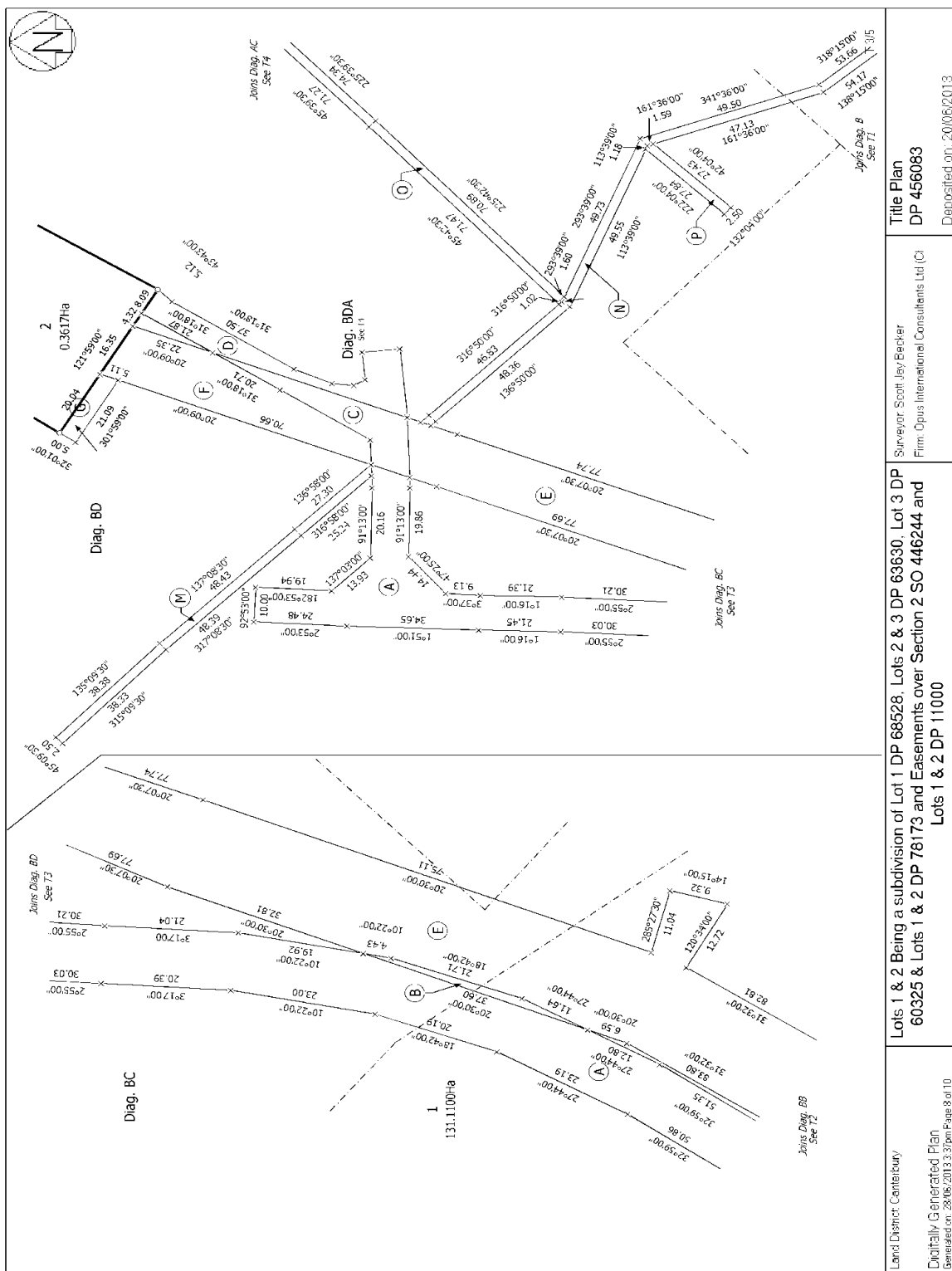
Appurtenant hereto is a right of way created by Easement Instrument 9430435.14 - 20.6.2013 at 2:34 pm

The easements created by Easement Instrument 9430435.14 are subject to Section 243 (a) Resource Management Act 1991

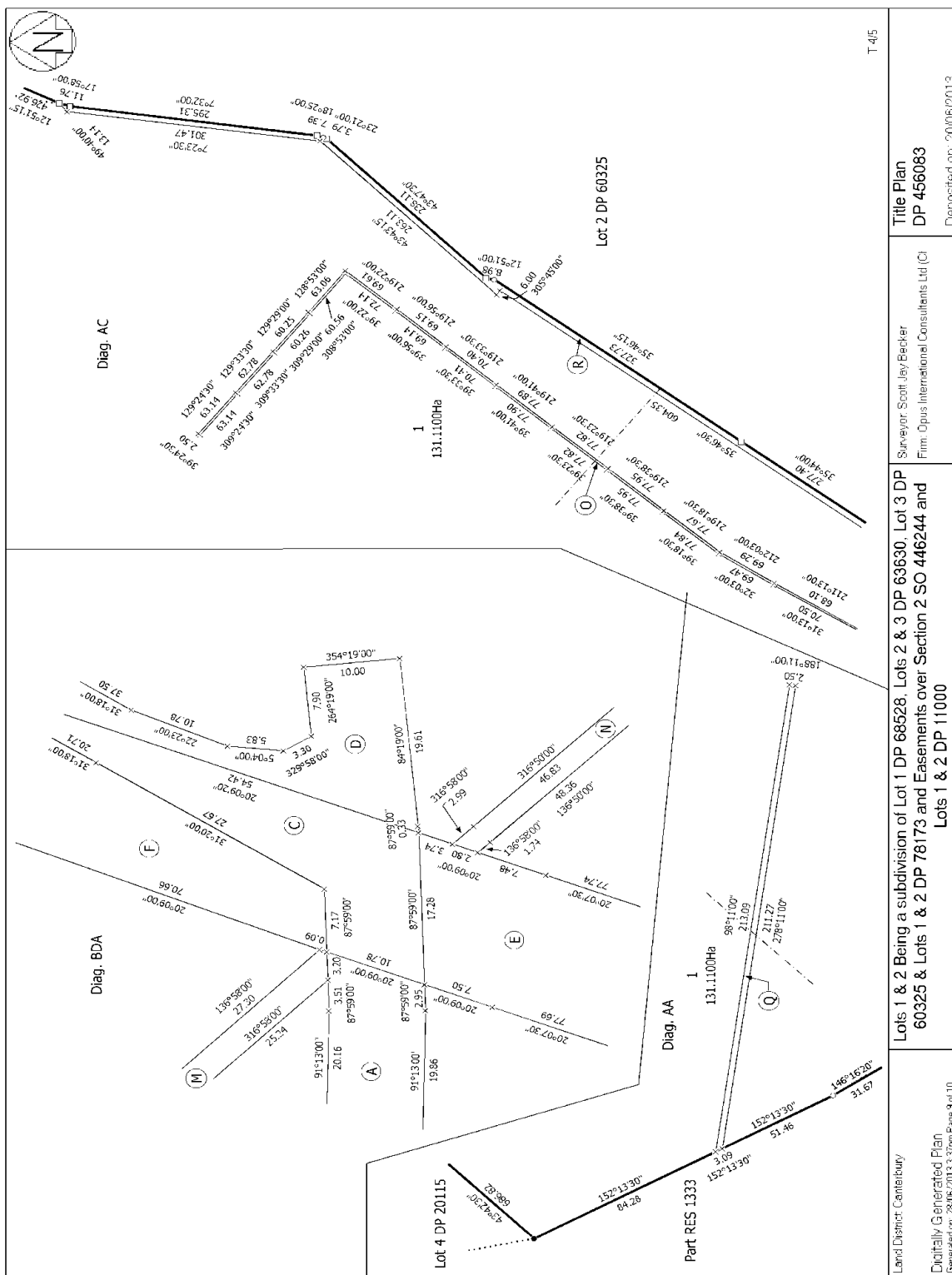
Subject to a right (in gross) to convey electricity and telecommunications over part marked S on DP 456083 in favour of Transpower New Zealand Limited created by Easement Instrument 9430435.16 - 20.6.2013 at 2:34 pm







Land District: Canterbury	Surveyor: Scott Jay Becker Firm: Opus International Consultants Ltd (Ct)	Title Plan DP 456083
Lots 1 & 2 Being a subdivision of Lot 1 DP 68528, Lots 2 & 3 DP 63630, Lot 3 DP 60325 & Lots 1 & 2 DP 78173 and Easements over Section 2 SO 446244 and Lots 1 & 2 DP 11000		
Digitally Generated Plan Generated on: 28/06/2013 3:31pm Page 8 of 10		
Deposited on: 20/06/2013		

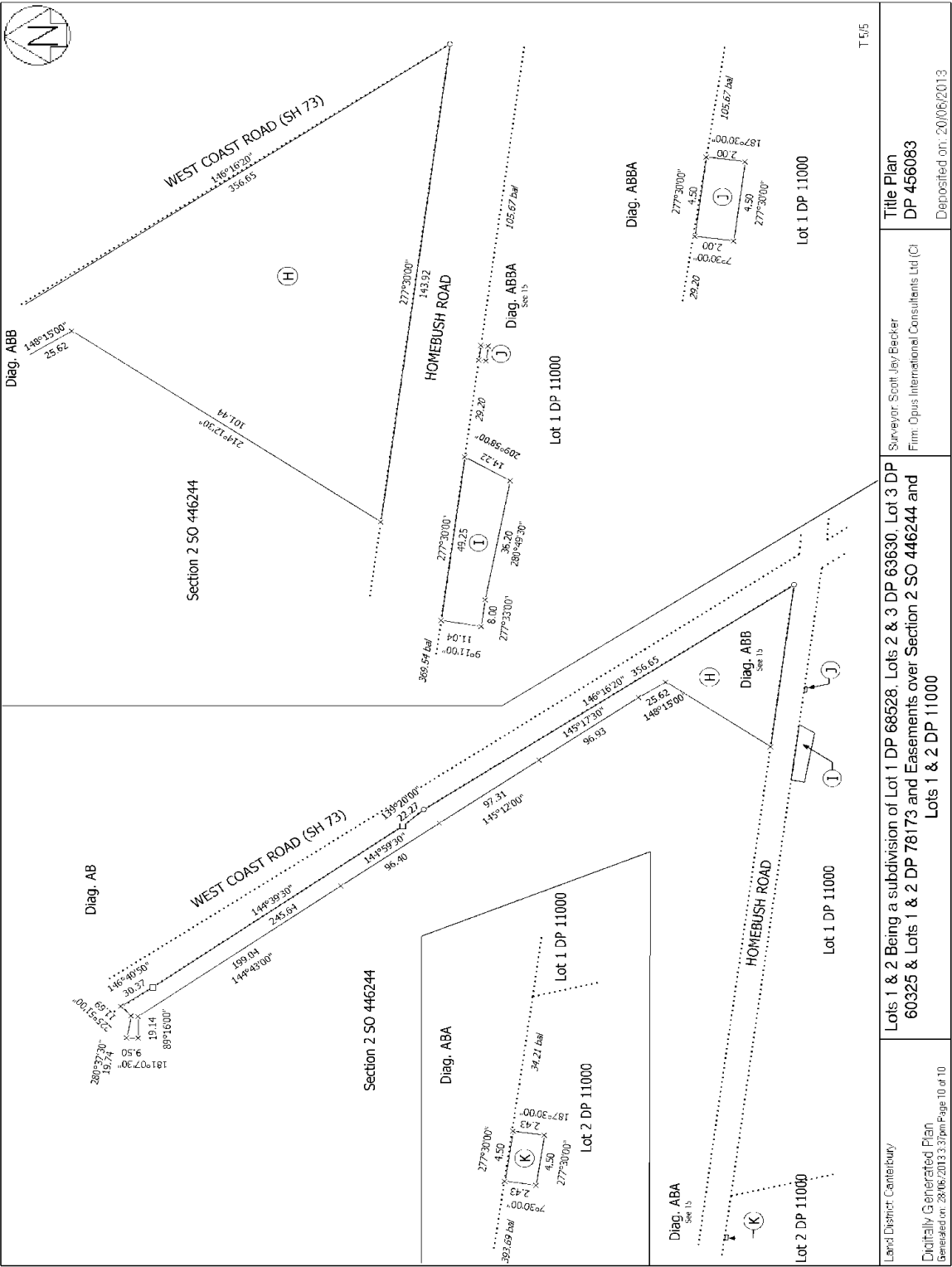


T 4/5

Surveyor Scott Jay Becker
Firm Opus International Consultants Ltd (C)

Title Plan
DP 456083

Land District Canterbury
Digitally Generated Plan
Generated on: 28/06/2013 3:30pm Page 9 of 10



Land District: Canterbury	Lots 1 & 2 Being a subdivision of Lot 1 DP 68528, Lots 2 & 3 DP 63630, Lot 3 DP 60325 & Lots 1 & 2 DP 78173 and Easements over Section 2 SO 446244 and Lots 1 & 2 DP 11000	Surveyor: Scott Jay Becker Firm: Opus International Consultants Ltd (Ct)	Title Plan DP 456083	T 5/5
Digitally Generated Plan Generated on: 28/06/2013 3:37pm Page 10 of 10			Deposited on: 20/06/2013	

Lots 1 & 2 Being a subdivision of Lot 1 DP 68528, Lots 2 & 3 DP 63630, Lot 3 DP 60325 & Lots 1 & 2 DP 78173 and Easements over Section 2 SO 446244 and Lots 1 & 2 DP 11000



COMPUTER FREEHOLD REGISTER UNDER LAND TRANSFER ACT 1952



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R. W. Muir
Registrar-General
of Land

Identifier **588217**
Land Registration District **Canterbury**
Date Issued 20 June 2013

Prior References

CB36A/468	CB37B/905	CB37B/906
CB40A/348	CB44D/926	CB44D/927

Estate Fee Simple
Area 131.1100 hectares more or less
Legal Description Lot 1 Deposited Plan 456083

Proprietors
Fonterra Limited

Interests

Subject to a right to convey water over part marked R on DP 456083 specified in Easement Certificate A241.6 - 22.6.1992 at 11:51 am

Appurtenant hereto is a right of way, right to convey water and telephonic communications specified in Easement Certificate A241.6 - 22.6.1992 at 11:51 am

The easements specified in Easement Certificate A241.6 are subject to Section 243(a) Resource Management Act 1991

A362157.2 Consent Notice under Section 221(1) Resource Management Act 1991 by The Selwyn District Council - 28.7.1998 at 3.00 pm (affects part formerly Lot 1 DP 78173)

Land Covenant in Easement Instrument 8748984.1 - 23.6.2011 at 2:36 pm (affects parts formerly Lot 1 DP 68528 and Lot 1 - 2 DP 78173)

Land Covenant in Easement Instrument 8748984.2 - 23.6.2011 at 2:36 pm (affects parts formerly Lot 1 DP 68528 and Lot 1 - 2 DP 78173)

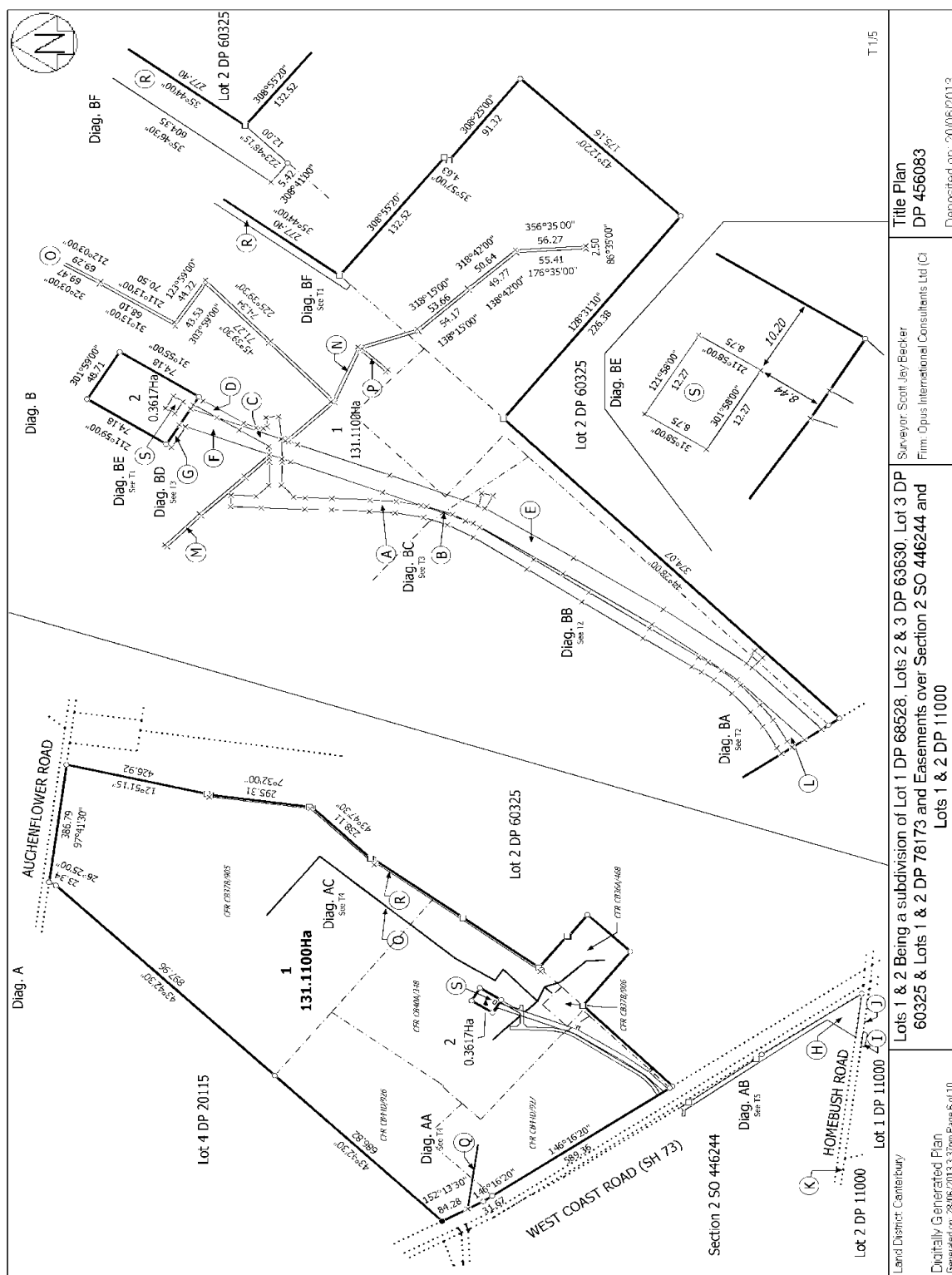
Subject to a right (in gross) to convey electricity and telecommunications over parts marked E, B, C, F, G, L, M, N O, P and Q on DP 456083 in favour of Orion New Zealand Limited created by Easement Instrument 9430435.11 - 20.6.2013 at 2:34 pm

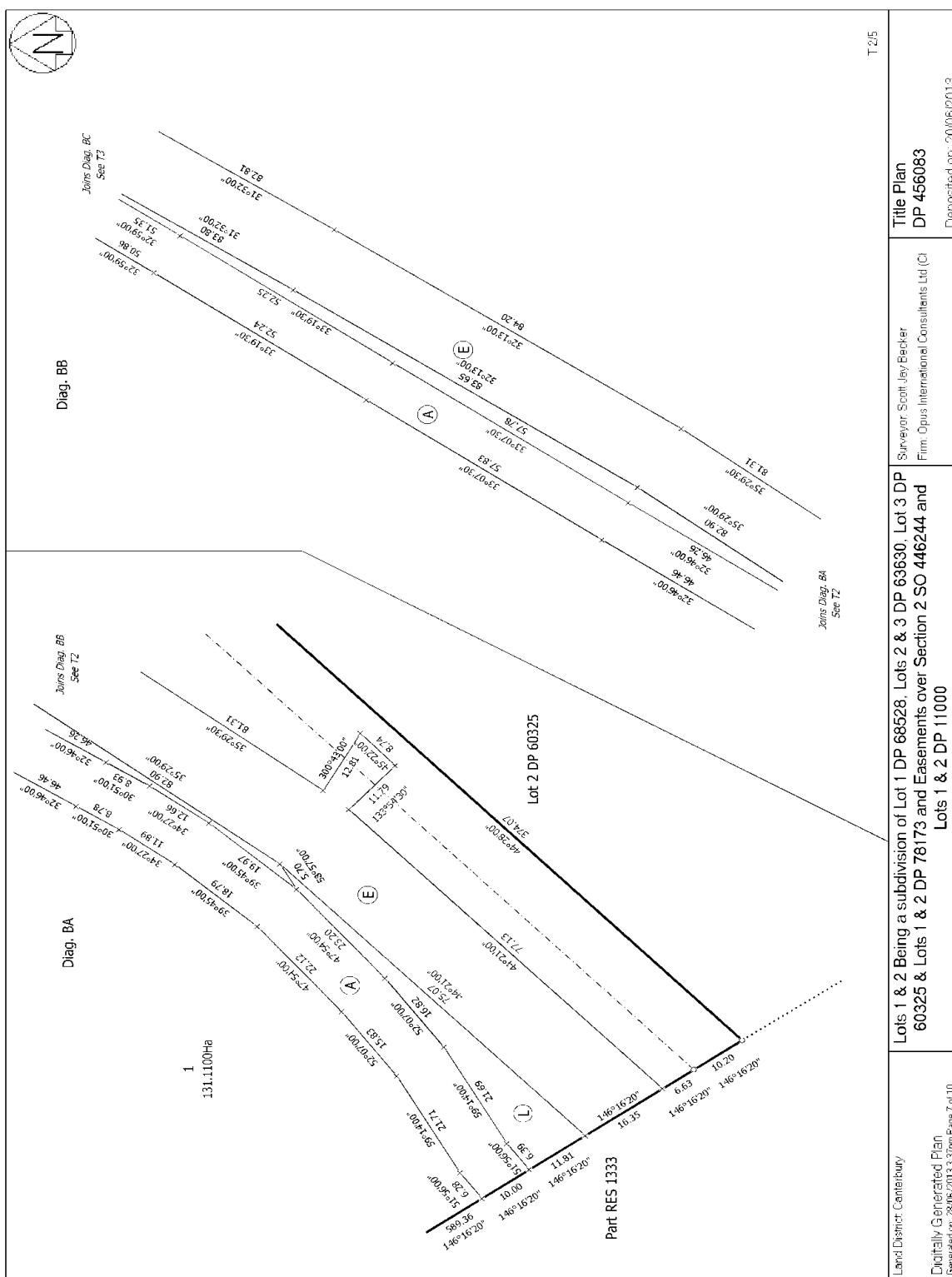
Subject to a right of way (in gross) over parts marked A, B, C and D on DP 456083 in favour of Transpower New Zealand Limited created by Easement Instrument 9430435.12 - 20.6.2013 at 2:34 pm

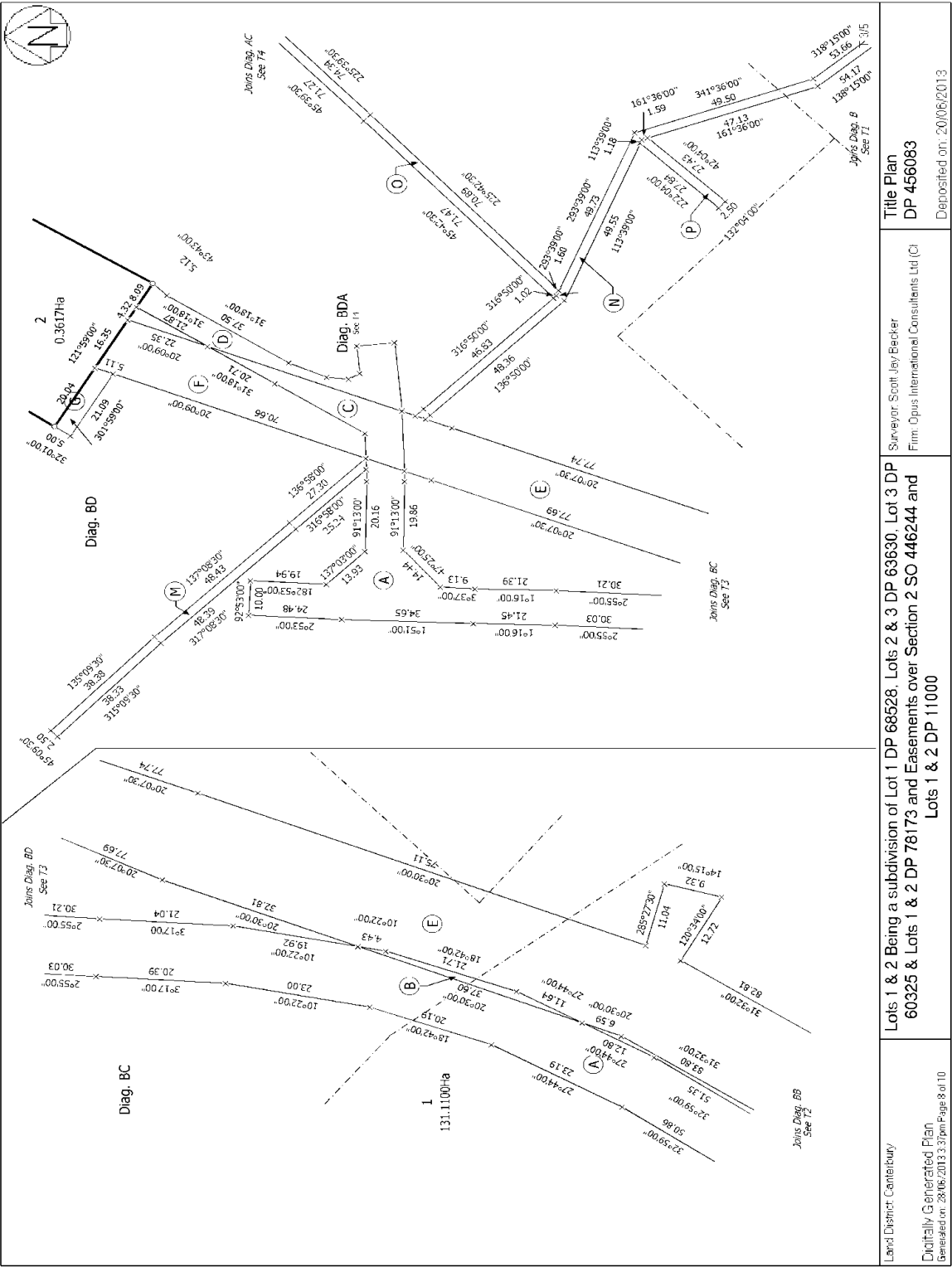
Subject to a right (in gross) to convey electricity and telecommunications over parts marked E, B, C and F on DP 456083 in favour of Transpower New Zealand Limited created by Easement Instrument 9430435.13 - 20.6.2013 at 2:34 pm

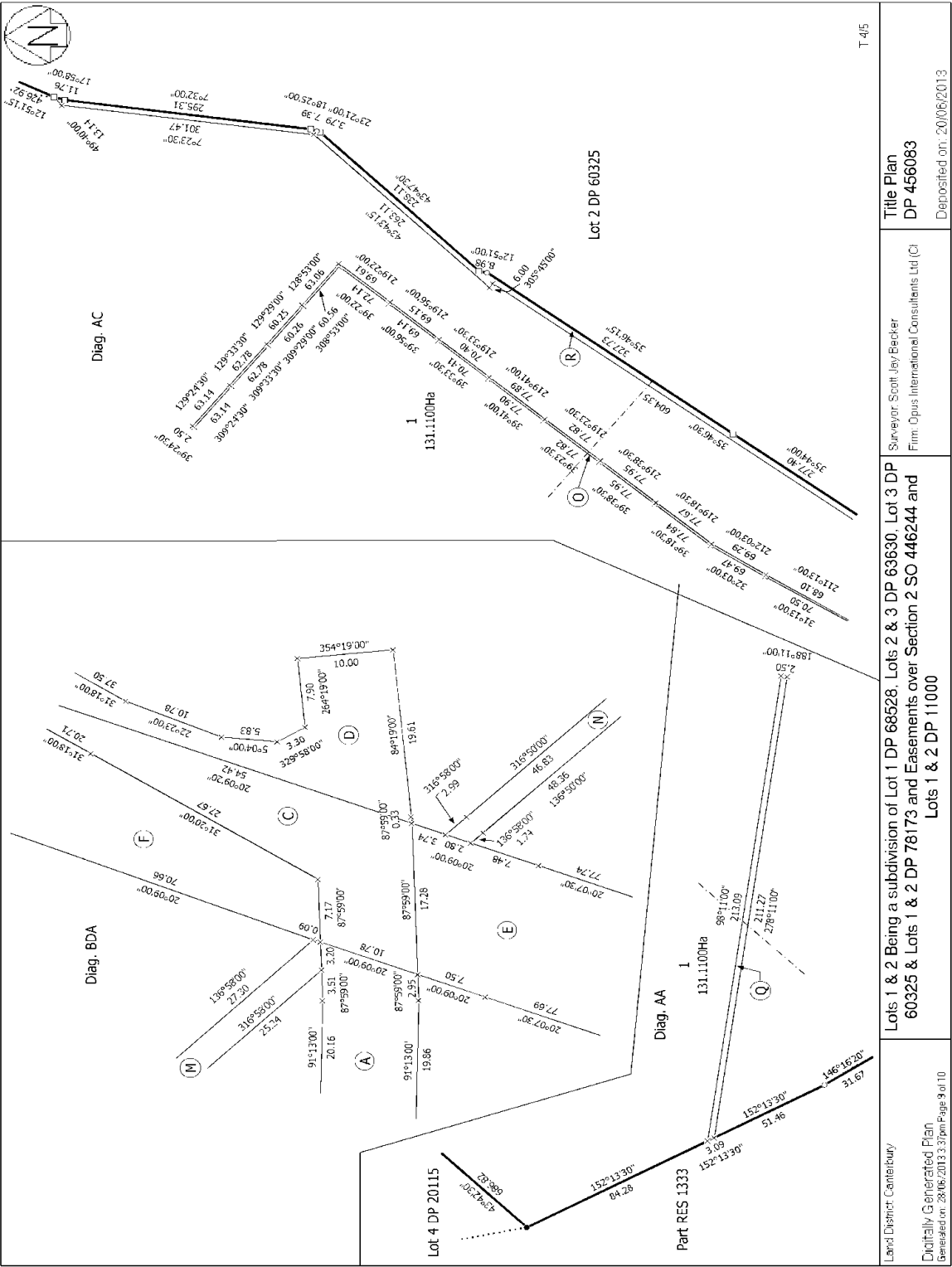
Subject to a right of way over parts marked A, B, C and D on DP 456083 created by Easement Instrument 9430435.14 - 20.6.2013 at 2:34 pm

The easements created by Easement Instrument 9430435.14 are subject to Section 243 (a) Resource Management Act 1991



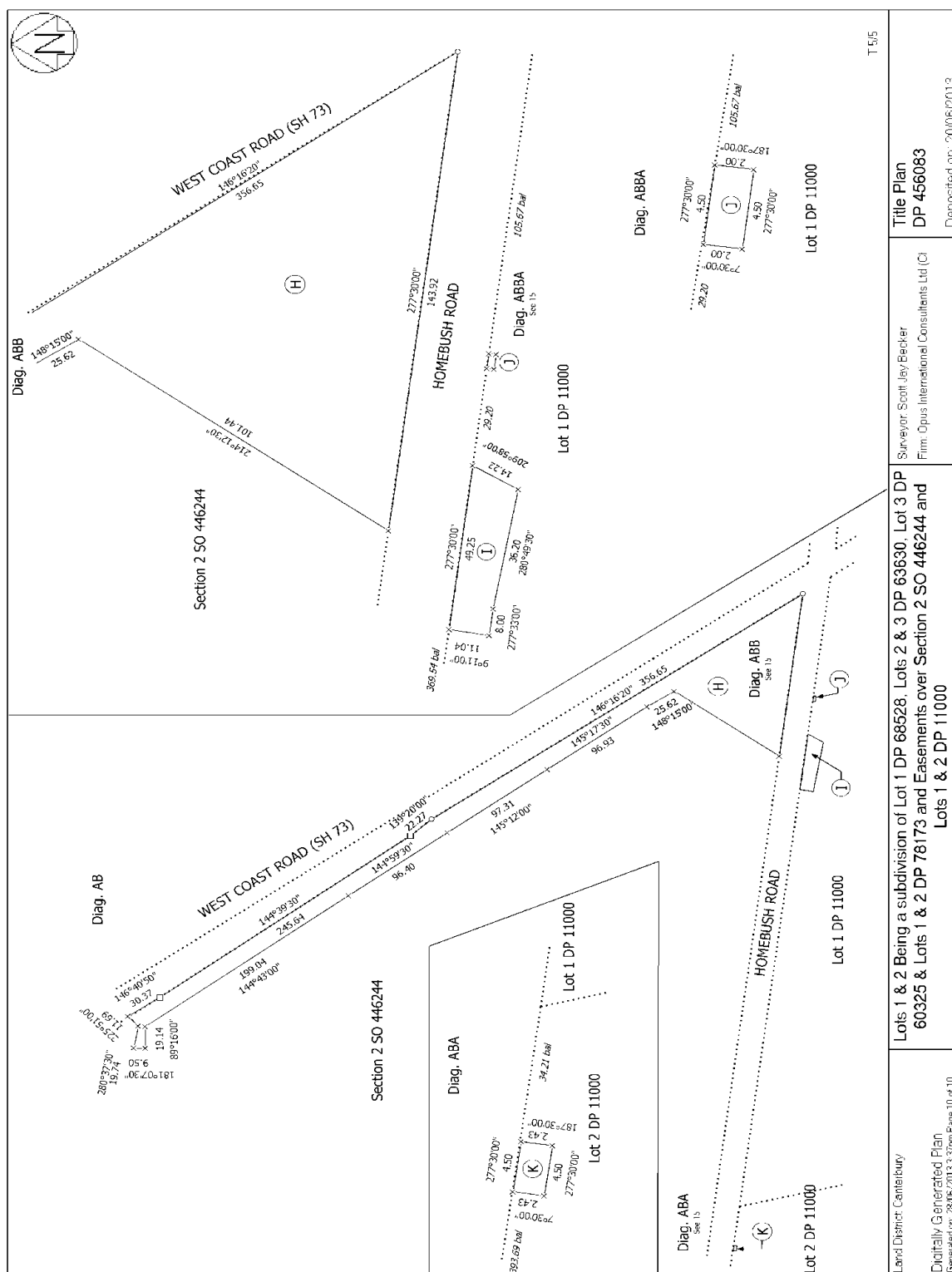






T 4/5

Land District: Canterbury	Title Plan DP 456083	
Digitally Generated Plan Generated on: 28/06/2013 3:30pm Page 9 of 10	Surveyor: Scott Jay Becker Firm: Opus International Consultants Ltd (Ct)	Deposited on: 20/06/2013
Lots 1 & 2 Being a subdivision of Lot 1 DP 68528, Lots 2 & 3 DP 63630, Lot 3 DP 60325 & Lots 1 & 2 DP 78173 and Easements over Section 2 SO 446244 and Lots 1 & 2 DP 11000		





COMPUTER FREEHOLD REGISTER UNDER LAND TRANSFER ACT 1952



**Guaranteed Search Copy issued under Section 172A
of the Land Transfer Act 1952**


R. W. Muir
Registrar-General
of Land

Identifier **CB17F/160**
Land Registration District **Canterbury**
Date Issued 14 July 1977

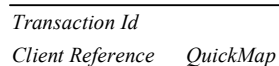
Prior References

CB3C/912 CB3C/914

Estate	Fee Simple
Area	121.8660 hectares more or less
Legal Description	Lot 4 Deposited Plan 20115

Proprietors
Fonterra Limited

Interests



APPENDIX 2:

Proposed Text Changes to the Selwyn District Plan (Rural Volume)

APPENDIX 26

E26.1 DAIRY PROCESSING MANAGEMENT AREA

Note:

All activities within the Dairy Processing Management Area shall comply with the Rules in Appendix 26.

Rules in Part C, 1 to 10 of the Rural Volume of the District Plan shall not apply to activities within the Dairy Processing Management Area, except where expressly advised in the following Rules.

All activities, including buildings, structures and earthworks, must comply with the New Zealand Electrical Code of Practice for Electrical Safe Distances (NZECP 34:2001).

Permitted Activities – Land Use

E26.1.1 The following activities shall be a permitted activity if all of the standards in Rules 26.1.2 to 26.1.27 are met:

- 26.1.1.1 The processing, testing, storage, handling, packaging and distribution of milk and dairy products, dairy processing related by-products, and ancillary activities, including but not limited to:
- a) Rail infrastructure, and rail activities limited to those required for the transportation of milk, dairy products and associated ingredient and package products.
 - b) Infrastructure for roading, rail, the management of wastewater, stormwater and the supply of water.
 - c) Laboratories and facilities for research and development related to the processing of milk and development of dairy products.
 - d) Offices and facilities required for the administration and management of the Dairy Processing Management Area, and the marketing, sales and distribution of milk and dairy products.
 - e) Activities which can comply as a permitted activity with the rules of the Rural (Outer Plains) Zone, except that any calculation of density or site coverage shall exclude the land within the Height Control Zone.

Note:

For the purpose of interpreting Rule 26.1.1:

The processing and use of milk is the purpose of, and principal use within, the Dairy Processing Management Area.

Ancillary activities means any activity that is incidental to servicing and supporting a permitted activity on the same site and which forms an inseparable part of the permitted activity.

Requirements and Conditions for Permitted Activities

Outline Development Plan

- E26.1.2 The location of all buildings, activities, and vehicle access points to the Dairy Processing Management Area, shall be in general accordance with the Outline Development Plans in Appendix 26A **and 26B**.

Location of Buildings and Activities

- E26.1.3 All permitted activities shall be located within the Height Control Zone identified on the Outline Development Plans in Appendix 26A **and 26B**, with the exception of:
- (a) Any directional signage under 1.2m height;
 - (b) Signage providing information at the Primary Access points;
 - (c) Infrastructure for roading, rail, the management of wastewater, stormwater and the supply of water associated with a permitted activity; and
 - (d) Permitted activities provided for in Rule 26.1.1.1(e)
- E26.1.4 Where located within the Rural Buffer Area buildings and activities provided for in Rule 26.1.3(b) and (c) shall comply with the height rules of the Rural (Outer Plains) Zone and either the setback rules of the Rural (Outer Plains) Zone or any setback shown on the Outline Development Plans in Appendix 26A **and 26B**, whichever is the greater setback from the boundary.

Landscape Planting

- E26.1.5A When new buildings are to be erected that will increase the capacity for milk processing or storage within the Dairy Processing Management Area landscape planting as shown on the Outline Development Plan in Appendix 26A shall be located in general accordance with the landscape provisions of the Outline Development Plan and is to be completed in accordance with the provisions for Staging and Removal of Exotic Planting specified in Appendix 26A.

E26.1.5B Existing landscape planting as shown on the Outline Development Plan in Appendix 26B shall be maintained in general accordance with the landscape provisions of the that Outline Development Plan. Future screen planting' as shown on the Outline Development Plan in Appendix 26B shall be implemented within 12 months of the Central Plains Water Canal becoming operational through the site.

- E26.1.6 Landscape planting required by Rule 26.1.5A is a controlled activity for which consent is required in accordance with Rules 26.2.1 and 26.2.2

Note: Neither rule 26.1.5A or B nor Rule 26.1.6 apply to any planting within **a the** Dairy Processing Management Area for the purposes of amenity or enhancement and which is additional to that envisaged by the Outline Development Plan.

Building Height

- E26.1.7 Buildings within the Height Control Zone shall comply with the height limits shown in the Outline Development Plans in Appendix 26A **and 26B**. Up to 2 Boiler stacks and 4 exhaust vents per dryer shall be exempt from height limits.

Building Colour

- E26.1.8 Any building that has a finished height above 12 metres shall be finished in the following colours or equivalent colours, excluding trim, fittings, guttering, detailing and signage:
- (a) Colorcote “Kestrel” [specification: 174(R),165(G), 165(B), RV34.51]
 - (b) Colorcote Titania [specification: 213(R), 211(G);199(B), RV64.57]
 - (c) Colorcote Ironsand [specification:84(R), 81(G),79(B), RV14.72]
 - (d) Colorcote Grey Friars [specification:87(R), 87(G).88(B),RV 16.55]

Earthworks

- E26.1.9 A maximum volume of 5000m³ of earthworks for each stage of development.
- E26.1.10 The maximum cut/excavation depth of the earthworks from existing ground level shall be 5 metres and no closer than 1 metre to groundwater, whichever is the lesser.
- E26.1.11 The maximum height of temporary stockpiles or final landforms shall be no greater than 4m above ground level.
- E26.1.12 All cut material shall be reused within the Dairy Processing Management Area.

Access

- E26.1.13 Prior to the issue of a building consent for a new building which will increase capacity for milk processing or storage within the Dairy Processing Management Area:
- (a) The design of any access from the State Highway or the design of any State Highway/local road intersection, as shown on the Outline Development Plans in Appendix 26A **and 26B**, shall be approved in writing by the relevant Road and Rail (where applicable) controlling authorities. A copy of this approval shall be forwarded to the Council Planning Manager for Council’s records.
 - (b) All access from a local road shall comply with the design requirements of Appendix 10.
- E26.1.14 Secondary access points shown on the Outline Development Plans in Appendix 26A **and 26B** shall only be used for farm activities, emergency access and situations where the primary access is made temporarily unavailable by emergency services, the road or rail controlling authorities.

Parking

- E26.1.15 All vehicle parking and manoeuvring areas shall be located as shown on the Outline Development Plans in Appendix 26A **and 26B** and comply with Appendix 10 as to layout and design.
- E26.1.16 Vehicle parking and manoeuvring associated with new buildings which will increase the capacity for milk processing or storage within the Dairy Processing Management Area shall be constructed, formed and sealed (with drainage) prior to use for operational activities.

Noise

- E26.1.17 Noise arising as a result of any activity within a Dairy Processing Management Area shall not exceed the following limits at the Noise Control Boundary shown on the Outline Development Plans in Appendix 26A **and 26B**.

Daytime (7.30am – 8.00pm) 55dB L_{Aeq} and 80 dB L_{Afmax}

Night-time (8.00pm – 7.30am) 45 dB L_{Aeq} and 70 dB L_{Afmax}

Noise shall be measured in accordance with NZS6801:2008 "Acoustics-Measurement of Environmental Sound", and assessed in accordance with NZS6802:2008 "Acoustics-Environmental Noise".

- E26.1.18 Rail movements into, within and out of the Dairy Processing Management Area are excluded from compliance with the above rules **provided that for the Outline Development Plan in Appendix 26B, the number of night time rail movements do not exceed 2 per 24 hour period.**

Note: Rule 26.1.18 does not apply to the loading or unloading of goods.

Note: Part C3, Rural Rules – Buildings, Rule 3.13.1.6 also applies for the establishment of any new sensitive activity within the Noise Control Boundary.

Lighting

- E26.1.19 Any lighting within the Dairy Processing Management Area shall be a permitted activity provided that:
- (a) Light spill from any activity does not exceed 3 lux on any adjoining property or any road reserve; and
 - (b) All exterior lighting is directed away from adjacent properties and roads.

Signage

- E26.1.20 All signage must be related to permitted activities undertaken on the site and be restricted to corporate logos or colours only.
- E26.1.21 The sign, unless it is a temporary sign, is located entirely within the Dairy Processing Management Area and is not located on, or overhangs onto, any road reserve. (See Rule 26.1.3 for limitations on signs located outside the Height Control Area as shown on the Outline Development Plans in Appendix 26A **and 26B**).
- E26.1.22 The sign is positioned so that it:
- (a) does not obstruct or impair the view for any motorist of any intersection or vehicle crossing; and
 - (b) is at right angles to the road frontage of the site but angled off the direction of traffic by 5 degrees.
- E26.1.23 The sign does not:
- (a) have flashing or revolving lights, sound effects, balloons or blimps or moving parts;
 - (b) resemble a traffic sign
- E26.1.24 The height of the sign is not more than the height of the building and does not protrude beyond the framework of the building, to which it is attached; or 6m above the ground if the sign is not attached to a building.
- E26.1.25 The size of any freestanding sign is not more than 6m² and any sign attached to a building is not more than 50m².
- E26.1.26 The content of the sign shall be limited to the name of the dairy processing plant, wayfinding and compliance with statutory requirements.
- E26.1.27 The content of any sign within the Dairy Processing Management Area fronting a local road shall comply with the following:

- (a) The sign has a maximum number of 5 words or a maximum combined number of 6 words and symbols;
- (b) There is a minimum separation distance between any 2 outdoor signs of:
 - (i) 70m, where the speed limit is 80km/hr; or
 - (ii) 80m, where the speed limit is 100km/hr;
- (c) The sign is visible from a distance of:
 - (i) 175m, where the speed limit is 80km/hr; or
 - (ii) 250m where the speed limit is 100km/hr;
- (d) The sign has a minimum height for any letter which complies with the following values:

Speed Limit	Main Message	Secondary Message
80km/hr	250mm	125mm
100km/hr	300mm	150mm

Note: The above rules do not apply to any directional, warning or other required safety or information signs required for the Dairy Processing Management Area.

- E26.1.28 The position, dimensions and content of any new sign within the Dairy Processing Management Area directed at traffic on a State Highway~~1~~ shall be approved in writing by the NZ Transport Agency.

E26.2 CONTROLLED ACTIVITIES

Landscape Planting required by Rule 26.1.6

- E26.2.1 An application for controlled activity consent under rule 26.1.6 shall contain information showing the location of proposed planting, the proposed plant species, the proposed timing of planting, the height and spacing of plants at the time of planting and the proposed maintenance regime of the landscape planting including soil and moisture retention, irrigation, access and the replacement of any dead, diseased or dying plants and the methodology for removal of exotic planting.
- E26.2.2 Under Rule 26.2.1 the Council shall restrict its control to the following matters:
- (a) The matters in respect of which information is required by Rule 26.2.1;
 - (b) The extent to which the proposal meets the objectives of and outcomes intended by the landscape elements of Appendix 26A.
 - (c) The effectiveness of the proposed landscape planting to mitigate the adverse effects of proposed buildings and activities on landscape values in the locality of the Dairy Processing Management Area;
 - (d) The use of landform to assist in mitigation of landscape effects; and
 - (e) The effect of not removing exotic species which have achieved a uniform height of 10m on cultural values.

Earthworks

- E26.2.3 Any earthworks exceeding 5000m³ (for any stage of development), or a cut/excavation depth from existing ground level of more than 5 metres, or a maximum height of temporary stockpiles or final landforms of 4m above ground level, shall be a controlled activity. Any application for earthworks shall not require the written approval of third parties and shall be non-notified.
- E26.2.4 Under Rule 26.2.3 Council shall restrict its control to the following matters:

- (a) Management of excavations in the proximity of surface waterways to avoid sedimentation, discharges and run-off entering waterbodies.
- (b) Management of dust emissions.
- (c) The location, size and dimensions of any temporarily stock-piled material and final landform features created by fill.
- (d) Re-vegetation of final surfaces.
- (e) An Accidental Discovery Protocol as specified in the Mahaanui Iwi Management Plan.

Construction Activities

- E26.2.5 Construction activities for a new building which will increase capacity for milk processing or storage within the Dairy Processing Management Area shall be a controlled activity. Any application for construction activities shall not require the written approval of third parties and shall be non-notified.
- E26.2.6 Under Rule 26.2.5 Council shall restrict its control to the following matters:
- (a) Ensuring that the effects of construction traffic minimises disruption, delay or inconvenience on the adjoining road network.
 - (b) Best practicable measures to avoid or mitigate the dispersal and deposition of dust and sediment.
 - (c) Best practicable measures to avoid the accidental discharge of any fuel or other hazardous substances, including measures for dealing with accidental spills.
 - (d) Compliance with NZS6803:1999 Acoustics – Construction Noise;
 - (e) Compliance with NZS2631:1985-1989 Part 1-3 or equivalent standard;
 - (f) An Accidental Discovery Protocol as specified in the Mahaanui Iwi Management Plan.

E26.3 RESTRICTED DISCRETIONARY ACTIVITIES

- E26.3.1 Any activities which do not comply with the standards for Permitted Activities, and which are not listed as a controlled, discretionary or non-complying activity, shall be a restricted discretionary activity. The Council shall restrict its discretion to consideration of those matters as specified in respect of each rule:

Matters of Discretion

- E26.3.2 Outline Development Plan
- Any building or activity which does not comply with the following rules as shown on the Outline Development Plans contained within Appendix 26A and 26B shall be a restricted discretionary activity and the Council shall restrict its discretion to consideration of those matters identified:
- (a) Rule 26A.1 Heslerton Road Access
 - (i) The number and type of vehicle movements.
 - (ii) The surface, width and condition of the road.
 - (b) Rule 26A.2 Parking and Rule 26B.2 Parking
 - (i) Any effects of vehicle movements associated with parking provided for within the Rural Buffer Area on rural amenity values and the reasonable use of adjoining land.
 - (c) Rule 26A.3 Building Free Area

- (i) The necessity and purpose of any structures to be located within the building free area.
- (ii) The scale and construction materials proposed for any building.
- (iii) The extent to which the proposed structure may affect the potential options for re-design and up-grading of the State Highway 1/Old South Road intersection.

Location of Buildings and Activities

E26.3.3 Any building or activity which does not comply with Rule 26.1.4 shall be a restricted discretionary activity and the Council shall restrict its discretion to consideration of:

- (a) Any effects of an increase in building height or a reduced setback from internal and road boundaries on the rural amenity values in the locality and the reasonable use of adjoining land
- (b) Any effects of an oversized or non-directional sign on traffic safety or efficiency or on rural amenity values.
- ~~(c) Those matters specified for inclusion in Management Plans for Noise and Hazardous Substances.~~

Note: Non-compliance with Rules 26.1.2 and/or 26.1.3 is a full discretionary activity. See Rule 26.4 below.

Building Height

E26.3.4 Any building which does not comply with Rule 26.1.7 shall be a restricted discretionary activity and the Council shall restrict its discretion to consideration of:

- (a) The individual and cumulative effect of additional building height on the landscape values in the locality of the Dairy Processing Management Area.
- (b) The form and function of the over-height structure.
- (c) The material and colour finish of the over-height structure.
- (d) The effectiveness of any mitigation.

Colour

E26.3.5 Any building which does not comply with Rule 26.1.8 shall be a restricted discretionary activity and the Council shall restrict its discretion to consideration of:

- Alternative colour finishes and their effectiveness to address the visibility of the proposed structure individually and cumulatively within the Height Control Zone within the Dairy Processing Management Area.

Earthworks

E26.3.6 Any earthwork which does not comply with one Rule 26.1.12 shall be a restricted discretionary activity and the Council shall restrict its discretion to consideration of:

- The management of traffic effects created by the haulage activity.

Access

- E26.3.7 Any access which does not comply with Rules 26.1.13 or 26.1.14 shall be a restricted discretionary activity and the Council shall restrict its discretion to consideration of:
- (a) The effects of any access not shown on the Outline Development Plans in Appendix 26A **and 26B**, on the safety and efficiency of traffic on the road network.
 - (b) The safety of access to and from the State Highway, including the combined effect of the State Highway intersection and the site access where applicable.
 - (c) Intersection and road design.

Parking

- E26.3.8 Any parking which does not comply with Rules 26.1.15 or 26.1.16 shall be a restricted discretionary activity and the Council shall restrict its discretion to consideration of:
- (a) The effects of vehicle parking and maneuvering not in accordance with the Outline Development Plans in Appendix 26A **and 26B** on rural landscape and amenity values.
 - (b) The effects of parking not designed to meet the standards of Appendix 10 on safety and efficiency of movement for vehicles and pedestrians within the DPMA.

Noise

- E26.3.9 Any activity which does not comply with one or more of Rules 26.1.17 to 26.1.18 shall be a restricted discretionary activity and the Council shall restrict its discretion to consideration of:
- (a) Effects on rural amenity values in the immediate proximity of the Dairy Processing Management Area.
 - (b) Effects on the livability of any dwelling subject to increased noise effects.
 - (c) Measures for mitigation of noise effects.

Lighting

- E26.3.10 Any activity which does not comply with Rule 26.1.19 shall be a restricted discretionary activity and the Council shall restrict its discretion to consideration of the effects of any additional light spill on:
- (a) rural amenity values;
 - (b) the reasonable use of adjoining land or dwellings; and
 - (c) traffic safety on adjoining roads.

Signage

- E26.3.11 Any activity which does not comply with one or more of Rules 26.1.20 to 26.1.21 shall be a restricted discretionary activity and the Council shall restrict its discretion to consideration of the effects of any oversized or non-complying sign on:
- (a) Traffic safety and efficiency; and
 - (b) Rural amenity values.

E26.4 DISCRETIONARY ACTIVITIES

Buildings and activities not located in accordance with Rule 26.1.2 and/or 26.1.3 shall be a discretionary activity.

E26.5 NON-COMPLYING ACTIVITIES

Any activity not provided for as a permitted, controlled, restricted discretionary or discretionary activity shall be a non-complying activity.

E26.6 REASONS FOR RULES

The activities already undertaken at the established dairy plants in the Dairy Processing Management Areas and those which would typically be anticipated or associated with the processing of milk. Dairy processing activities can be anticipated to further develop as value is added to the range of dairy products and from processing of by-products. The list of permitted activities is intentionally limited to activities which are inseparably connected to dairy processing, including testing, storage, handling, packaging, distribution, and innovation.

Outline Development Plan, Buildings and Activities – Location and Height

The location of buildings and parking areas within the DPMA sites and in relation to the site boundaries is controlled through compliance with an Outline Development Plan (ODP). This concentrates built development and dairy processing activities in one part of the site and in the south west corner of the Management Area, reflecting the position of plant established through earlier resource consent processes and around which future buildings and activity are intended to grow.

Activities and buildings provided for in the Rural Buffer Area include those normally anticipated in the Rural Outer Plains Zone. In addition, low directional signage, signs located adjacent to primary access points and infrastructure servicing the DPMA such as road, rail, wastewater and stormwater utilities are enabled in the Rural Buffer Area. These are not activities involving significant built structures or intensive clustering of buildings, and are therefore considered appropriate in the Rural Buffer Area.

The setback of buildings from the state highway frontage has, in the case of Synlait, been influenced by the need to allow for a potential rail siding for trains to load/unload immediately adjacent to the drystores and to provide area for some landscape planting. To the north and south east built development is kept away from boundaries with a large area of rural open space providing an appropriate transition or buffer to the wider rural plains. The Fonterra Darfield site is provided with considerable setbacks from all boundaries to allow for landscaping and to minimise visual dominance from surrounding vantage points while also providing an appropriate transition or buffer to the wider rural plains.

The use of ODPs therefore effectively manages the extent of dairy processing activities within the DPMA. ~~It is~~They are based upon what could be anticipated as a reasonable and optimal future development scenario and an assessment of the environmental effects of that development scenario.

The visual effects of full built development have been considered for the Management Areas as a whole and addressed through ~~a~~landscape plans. The scale and density of future development is integrated with this landscape treatment via the ODP providing a full overview of site development achievable over time.

Building heights are similarly controlled through the ODPs. The rules acknowledge that dairy processing activities necessitate very tall built structures e.g., dryers and boiler stacks as well as very large, single span industrial buildings. Accordingly, there is provision for variable building heights, with the tallest elements purposefully located in a more central position within the area of building development.

Where activities are proposed which are compliant with the Rural Outer Plains rules, these are provided for throughout the DPMA (whereas dairy processing activities and buildings are more constrained). The rule requires that for the purpose of site coverage and density calculations, the area of land used for the basis of the calculation is limited to the Rural Buffer Area, ensuring that the Buffer retains a density of development consistent with the wider Rural Zone.

A Noise Control Boundary is shown on the ODPs. This is complemented by a rule in Part C, 3 Rural Rules – Buildings which requires noise insulation to be incorporated within new buildings for sensitive activities. This provision is discussed further under Noise below.

A specific rule on the ODP contained within Appendix 26A requires the up-grading of Heslerton Road prior to the commissioning of a second access. The rule ensures that the access to the plant is safe, efficient and fit for purpose. Further up-grading of the Old South Road and State Highway 1 intersection is similarly to be evaluated with substantive construction projects that increase the production and/or storage capability of the plant, to ensure that it remains safe. An area of land in the north west corner of the ODP is shown as building-free. This requirement is to avoid any capital development in an area that ultimately could be required for accommodating an up-graded State Highway/Old South Road intersection. This is discussed further under Access below. ~~Similarly, t~~The ODP's contained within both Appendix 26A and 26B requires all vehicle parking to be provided within the Height Control Area. This is described further under Parking below.

Landscape Planting

Rule 26.1.5A requires all landscape planting to be generally in accordance with the landscape plan which forms part of the ODP and in accordance with the staging specified in Appendix 26A.

Rule 26.1.6 (requiring controlled activity consent to 'landscape planting' but not otherwise affecting planting for amenity or enhancement purposes) is intended to ensure general compliance with the staging of landscape establishment on the Synlait site identified in Appendix 26A and to control details of the plant species, location, timing of planting, height, spacing and maintenance. The purpose of this rule is to ensure that the Synlait Dairy Processing Management Area has a consistent landscape theme and that planting is appropriately established and cared for, ensuring its longevity and effectiveness. In addition, a rule requires exotic species planted on the DPMA boundaries within Appendix 26A to be removed once identified indigenous tree species, planted in accordance with the rules on the ODP, have reached a minimum height of 10m. This requirement to allow indigenous plants to dominate has been agreed with Te Taumutu Rūnanga as a way of expressing cultural values on the site.

No additional landscaping is required on the Fonterra site as it expands due to the comprehensive perimeter landscaping already established on the existing site as identified on the ODP contained within Appendix 26B. This landscaping is required to be maintained in accordance with Rule 26.1.5B. The only exception to this is if the Central Plains Water Canal is constructed through the site which will create a break in the perimeter planting. Should this occur, additional screen planting is required to be implemented in accordance with Rule 26.1.5B.

Building Colour

All buildings over 12m in height are required to comply with a prescribed colour palette. This is to assist with addressing the visual effects of what are potentially substantive buildings with high visibility for a period of years. The intention is to maintain a consistency in the visual qualities of

the site. The colour range is informed by the finish of buildings established through resource consents prior to the DPMA.

Earthworks

The rules provide for some small scaled earthworks (<5000m³) and stockpiling to be carried out as a permitted activity. These standards are consistent with those applied to earthworks in the wider Rural Outer Plains Zone. Where these standards are exceeded within the DPMA Rule 26.2.3 requires the activity to be considered as a controlled activity with Council's control reserved to dust, proximity to waterways, re-vegetation and accidental discovery of archaeological items. A resource consent process ensures appropriate management and environmental outcomes which can be effectively achieved and monitored through a controlled activity consent process without the need for notification or third party approvals. It is acknowledged that earthworks, even at a larger scale, can be appropriately managed in accordance with best practice. In addition, the DPMA is an established and defined site which is well understood in terms of effective management from previous construction activity.

Where material is to be transported off site however, a resource consent is required. This is specifically limited to the effects of haulage on the safety and efficiency of the road network, which may vary in effect depending on the volume of material to be transported and the particular route to be followed. This traffic effect is distinguishable from the earthwork activity itself where effects can be contained within the boundaries of the DPMA.

Access

The DPMA is a potentially significant traffic generator with a high proportion of heavy vehicles. Accordingly, it is appropriate that the access provision into and out of the sites contained within Appendix 26A and 26B is controlled to avoid multiple entrance points which may potentially affect traffic safety and efficiency on the surrounding road network. Similarly, there is a requirement that with any significant new buildings which may increase processing or storage capacity, there must be consultation with the relevant road and/or rail authority. This provides a check point for assessing if a further up-grade of existing access points onto the State Highway or any State Highway/local road intersections servicing the DPMA are required.

In respect of Synlait, the State Highway 1/Old South Road intersection is the primary point of access to the DPMA. Requiring the approval of the road and rail authorities will trigger a review of the safety of the intersection over time as traffic patterns change and the DPMA develops. The ODP requires that land between the plant and Heslerton Road is to be kept free of buildings to ensure that sufficient land is retained to accommodate any future State Highway intersection up-grades that may be required.

Identifying access points into the DPMA on the ODPs provides certainty to road and rail controlling authorities as well as local road users. The access points identified on the ODP which are not already formed and operational will be required to comply with the District Plan standards for design. In the case of Synlait, pPrior to the commissioning of the second access on Heslerton Road, the ODP requires that a further length of road is up-graded to a standard for the anticipated traffic.

Parking

All vehicle parking (tankers, employees, visitors, suppliers and contractors) is required to be provided within the Building Height Control Area of the DPMA, where an intensification of built development and activity is anticipated. Directing parking to this location ensures that the dispersal or encroachment of car parking does not occur within the Rural Buffer Area which is intended to wrap around or buffer that part of the DPMA which is to be intensively used. The layout of the parking area is to comply with Appendix 10 of the Rural Volume of the District Plan,

which sets out standard dimensions for car parks and best practice guidance on the relationship between parking, pedestrian and vehicle circulation areas.

Noise

The primary noise control for the DPMA requires compliance with a Noise Control Boundary. This is defined on the Outline Development Plan and Rule 26.1.17 specifies the daytime and night-time noise standards that will apply at this boundary. The Noise Control Boundary is derived from conditions imposed on resource consents that established the plant and represents a more strict noise standard than has been applied to the Rural Outer Plains. A Noise Control Boundary is commonly used around sites such as ports, airports and large, stand-alone plant. They provide a simple method for all parties to visualise the extent of noise effects.

The Noise Control Boundary also triggers requirements for acoustic insulation to be built into new buildings for sensitive activities (see Part C, Rural Rules – Buildings, Rule 3.13.1.56). This requirement acknowledges and responds to the importance of the plant to the community and the economy. Once a company has made a significant investment in plant, it is in the districts and the community's interests that this plant is able to operate with efficiency. Accordingly, it is appropriate to ensure that encroachment of sensitive activities does not curb the plant's operations.

The Noise Control Boundary and its associated noise standards are not intended to apply to rail movements into and out of the DPMA. The measurement of rail noise as a train moves from designated land onto a rail siding within the DPMA may be extremely difficult to differentiate and measure. Unexpected noises such as wheel squeal have therefore been considered in the setting of the noise limits and layout of each site. ~~are maintenance issues and best addressed through a Management Plan approach.~~ The activity of loading and unloading trains is required to comply with the Noise Control Boundary.

Lighting

The Height Control Area within the DPMA is potentially an area of intensive activity and concentrated built development. The plant operates on a 24 hour basis requiring lighting to be provided for illumination of access points, outdoor work spaces and for security. The limitations imposed on the measurement of lux and the direction of lighting are the primary mechanisms to avoid light spill and to minimise night-lighting effects.

Signage

The rules relating to sign size are intended to provide for signs to be established which are scaled relative to the size of the plant and its function as a resource servicing a large catchment within the District. A requirement to ensure that signs visible from, even if not physically or legally fronting the State Highway, are considered by the New Zealand Transport Agency, ensures that signage does not adversely affect traffic safety and efficiency and accords with current Government guidance applicable at that time. Further to the size of the sign, the balance of the rules are the same as those applied in the wider Rural Outer Plains Zone.

Construction Activities

Rule 26.2.5 provides a mechanism for further control over the management of large scaled construction works through a resource consent for a controlled activity. The rule only applies to construction activities for buildings which increase milk processing or storage capacity within the DPMA, and is intended to apply to proposals of the scale of a new dryer or drystore.

Due to the number of variables associated with construction and the desire to adopt industry best practice, a rule based on a standard measure or numerical threshold for management of construction effects is not applicable. A controlled activity consent ensures that there is a

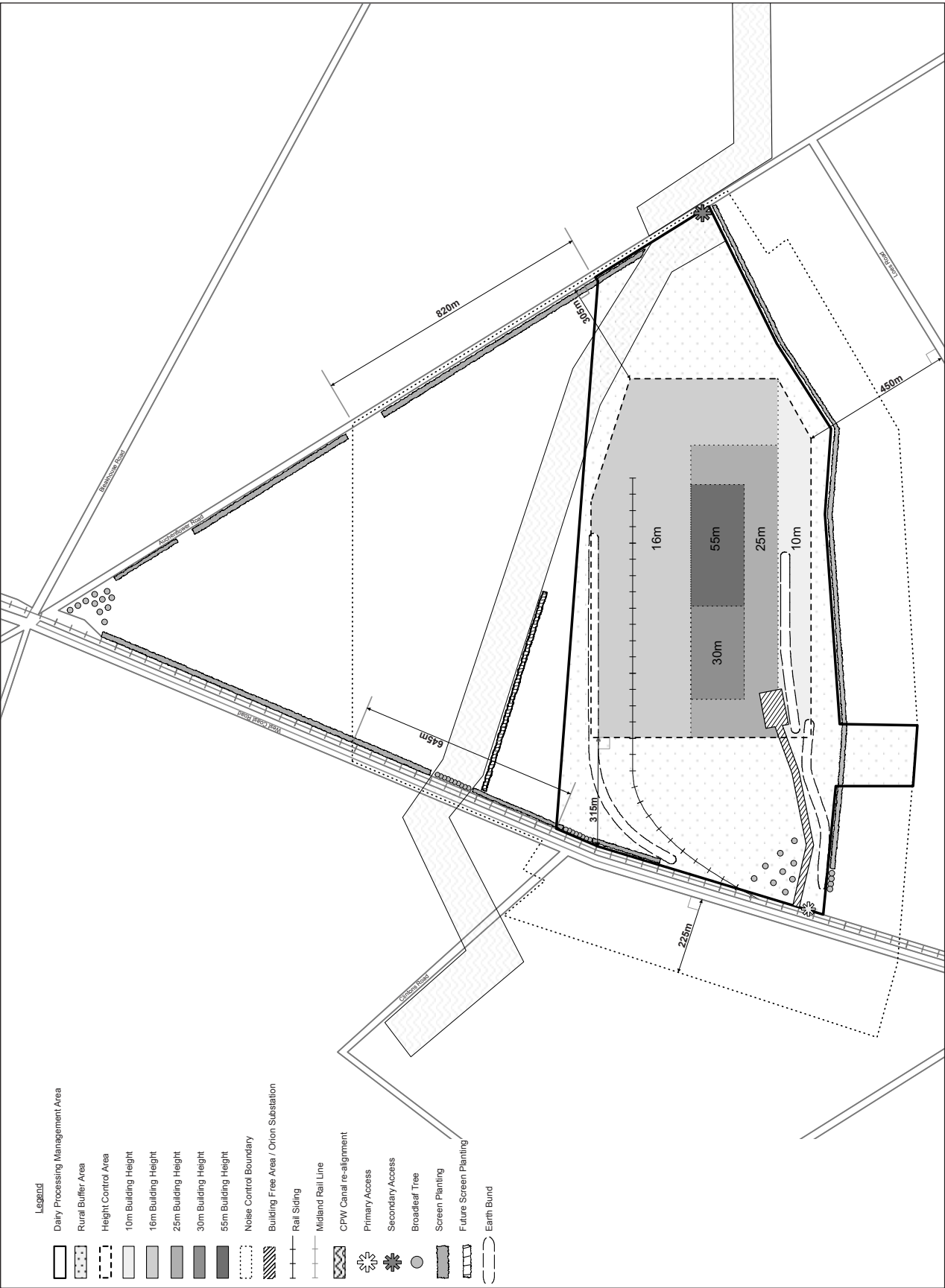
comprehensive and integrated plan for matters such as traffic management, dust control, compliance with the NZS standard for construction noise and vibration along with protocols for accidental discovery. This approach provides certainty and the flexibility to deal with construction projects which are of larger scale and potential environmental effect. The majority of the matters of control are however subject to other regulatory processes for building consent and health and safety. Accordingly, there is no requirement for third party approvals or notification of an application.

APPENDIX 3:

Proposed Outline Development Plan – Fonterra Darfield

APPENDIX 26B

FONTERRA DARFIELD PROCESSING MANAGEMENT AREA - ODP



Appendix 26B
Outline Development Plan
6 July 2016

APPENDIX 4A and 4B:

**Landscape and Visual Assessment and
Graphic Attachment**

Andrew Craig Landscape Architect

Assessment of Environmental Effects Landscape

Prepared with regard to a plan change request concerning
the Fonterra Dairy Plant at Darfield

Prepared for

Fonterra Limited

February 2016

1 INTRODUCTION

The purpose of this report is to assess the effects of development on the landscape arising from the proposed plan change. Essentially the aim is to determine whether there is any landscape or visual amenity matters that impede implementation of the plan change. If there are any, then ways of managing these will be explored.

In any event management techniques are proposed via the Outline Development Plan (ODP) and existing and proposed District Plan provisions as part of the plan change whose purpose is to guarantee the best possible amenity outcomes while enabling further development of the site. These are in place to ensure further development does not result in more than minor adverse effects on amenity, particularly for those living nearby or travelling past the site.

Determination of what constitutes adverse effects rests on the character and amenity of the existing environment and what is anticipated to occur there through implementation of the District Plan provisions. Or to put it another way, the environmental and statutory context of the plan change site informs what landscape and visual effects¹ are acceptable.

While it is understood that the Plan Change will put in place a permitted baseline envelope, development beyond this cannot be ruled out. Should this arise, the potential effects on landscape character and amenity will be assessed on its merits with regard to the relevant sections of the Resource Management Act.

In this landscape assessment the following matters are addressed:

- The proposed plan change.
- The character and amenity of the existing environment
- The statutory landscape
- The potential landscape and visual effects arising from the plan change.
- Identification of those whose amenity might be affected by implementation of the plan change.
- Alternative uses and their effects
- Proposed statutory provisions affecting landscape and amenity outcomes

2 EXECUTIVE SUMMARY

- 1 The landscape character of the existing environment in which the site is located is informed by the presence of the existing plant.
- 2 There are no landscape features within the site that would constrain implementation of the proposed plan change.

¹ Landscape effects are those caused by changes to the landscape irrespective of whether they are visible or not. Visual effects are those which are visible to affected parties.

- 3 In terms of its visual character, future development arising from the plan change will be the same as the existing plant – or to put it colloquially ‘more of the same’.
- 4 The proposed plan change and effects on landscape character and amenity arising from it align with the outcomes promoted by the Selwyn District Plan.
- 5 The location and extent of dairy plant will remain much the same as it is currently and because of this landscape and amenity effects will be more or less contained to much the same degree.
- 6 That for the foregoing reason, there is no need to provide landscaping additional to that already implemented as a condition of consent for the existing dairy plant.

3 THE PROPOSED PLAN CHANGE

The proposed plan change is described in more detail by others.

In summary it is understood that on becoming operative the plan change will enable further development and alterations within the application site. This will be subject to the parameters set out in the Outline Development Plan (ODP) and relevant existing and proposed District Plan provisions. Some of these affect landscape amenity. They will be discussed in more detail later.

Implementation of the plan change will essentially permit an increase of what currently exists; or to put it colloquially - ‘more of the same’. Alterations to existing development may result in visible changes due to upgrades or maintenance. Otherwise changes may be more substantial involving the addition of buildings and associated structures. The potential landscape and visual effects of these will be discussed shortly.

Regarding potential landscape and visual effects a key component of the plan change is the ODP. This defines the location and extent of buildings and accessory structures. Within prescribed areas it further identifies maximum heights of these. The height limits are generally pyramidal in form where the tallest buildings and structures are centrally located. Thereafter they descend toward the site periphery. This effect is shown in the **Figure 1** elevations.

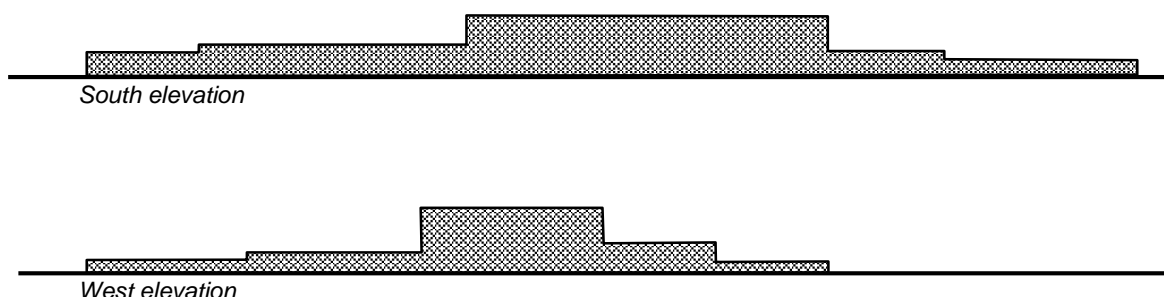


Figure 1 *South and West elevations of the ODP envelope. The north and east elevations will be the same, but reversed.*

4 THE LANDSCAPE OF THE EXISTING ENVIRONMENT

The reason for describing the landscape of the existing environment is twofold.

Firstly, the existing character informs peoples' expectations of what might acceptably occur in the landscape. The central question here is; would people be surprised to see such a feature in the landscape of its setting? In landscape terms these are referred to as associative effects.

Secondly, the degree of derogation or change occurring in the landscape resulting from implementation of the proposal - in this case a potentially expanded dairy plant - is able to be determined. These are landscape effects that may or may not be visible from surrounding vantage points.

Since its construction the existing dairy plant is now part and parcel of the environment in which it is located – see **Graphic Attachment photograph 1**. Or to put it another way, its presence is one of a number of elements that contribute to the landscape character of the existing environment.

Within the area encompassing the extent of visual effects the dairy plant is clearly the largest physical element present. Consequently it is quite prominent. This however is diminished to quite a significant degree due to its setback from the nearby roads, particularly SH73, and the presence of intervening trees. Many of the trees were planted as a condition of consent and are now reaching a size where screening of the dairy plant is starting to become effective – see **Graphic Attachment photograph 2**. As they mature this screening will become increasingly effective. As a result prominence of the dairy plant will lessen over time.

Other significant physical elements include State Highway 73 (SH73), the rail way, transmission lines and in due course the CPW² irrigation canal. Less significant physical features include farm dwellings and accessory buildings. Their presence is relatively sparse typifying the kind of building density found in the rural outer plains³.

Despite the presence of these physical features, the landscape of the setting is unmistakably rural. This is due to the very high proportion of vegetated open space in proportion to built form. The existing dairy plant itself is entirely surrounded by rural activity – **Graphic Attachment photograph 3**. In contrast and by definition an urban environment is one where buildings surround space where rural is the opposite – space surrounds buildings. With regard to the dairy plant this is very much the case presently.

Overall, the existing environment is entirely modified for the most part by farming practises. Consequently land cover or vegetation is almost fully exotic comprising mostly pasture, shelter belts and tree copses. Patterning as defined by boundaries is largely geometric and formal – see **Graphic Attachment aerial photograph 4**. As a result the landscape is modified to a reasonably significant extent. The most natural component of it is landform and vegetation, even though the latter is mostly exotic.

As the entire environment is devoted to rural activity, there are no pristine natural landscape features in the vicinity of the dairy plant. The nearest significant natural

² CPW – Central Plains Water

³ The Selwyn District Plan sets the dwelling density at 1 per 20ha for the Rural Outer Plains zone.

features however, are the Hawkins and comparatively much larger Waimakariri Rivers. The presence of these features is not appreciable from the dairy plant, or to put it another way, they are not experienced as part of the same environment.

There are no important recreational destinations within the existing environment. Running through it however is SH73 linking Canterbury and the West Coast. This road and nearby railway is considered a premier scenic route. These routes pass through the Canterbury Plains that for the most part are the same as or resemble that described above. This includes the presence in rural Canterbury of similar dairy plants as that existing at Darfield – Synlait at Dunsandel, and in south Canterbury Clandeboye, Oceania and Studholme.

Land use is largely devoted to pastoral activity with cropping – both activities being interchanged seasonally. Some woodlots and forestry is present, but is not extensive. Activity allied to land use – pivot irrigation, accessory buildings, fencing, shelterbelts and such like are common features also.

In summary, the existing environment exhibits the following:

- Characteristically rural
- Modified to a moderately high degree
- Geometrically patterned
- Land use is mostly devoted to pastoral and cropping activity
- Devoid of significant natural features within appreciable range of the dairy plant
- Arising from the above listed characteristics the environment is clearly a 'working' or productive one
- The environment has an important scenic road and rail passing through it.

4.1 Landscape constraints – are there any?

One of the foremost questions concerning plan changes is whether any landscape features are present that might constrain anticipated use of the subject site. These would be features or characteristics of the landscape that are significant in any way.

Within the 'Dairy Processing Management Area' (DPMA), the location and extent of which is shown on the ODP, there are no significant landscape features that would impede development. If they existed, such features might include:

- Significant indigenous vegetation
- Salient geological features such as rock outcrops, cliffs and terraces
- Water bodies or courses
- Ecological sites

- Heritage items including buildings and structures (the nearest being the 'Oaks' historic homestead – a property owned by the applicant)
- Archaeological sites
- Significant or protected trees
- Important landforms
- Scenically significant sites

As none of the above features exist within the site there is no impediment to re-zoning and the development this enables.

As alluded however, some of these features exist in proximity to the site; the aforementioned 'Oaks' being a recognised heritage feature for example – see **Graphic Attachment Map 1**. Also nearby are the natural features of the Waimakariri and Hawkins Rivers. Neither will be affected by the proposed plan change. The same will apply to other heritage features in the area such as 'Racecourse Hill' and the 'Railway Long-drop'. As is evident from the existing activity, the plan change will have no effect on these features or appreciation of them.

As shown in the **Graphic Attachment photograph 5** views to the Southern Alps from SH73 will not be affected. From other nearby roads essentially there is just one vantage point from which views to the Alps are intruded – that being opposite 'The Gums' dwelling on Loes Road - **Graphic Attachment photograph 6**. Loes Road is little used other than by local land holders and cannot be regarded as an important scenic route.

Further afield it is evident that the existing plant has an insignificant impact on views toward the Alps. As **Graphic Attachment photograph 7** demonstrates, prominence of the dairy plant diminishes with distance. Correspondingly, view intrusion also diminishes. As a counterpoint, the open expansiveness of the rural landscape and its constituent elements – the plains and Alps - increasingly overwhelms the dairy plant as one moves further from it.

The only other potential constraint concerns the potential loss of rural open space whose presence contributes to rural amenity. As the ODP indicates, most future building activity will be confined to an area that is currently developed as a consequence of existing activity. **Graphic Attachment photograph 4** indicates the full extent of existing and future building development. It is apparent from this that the extent of rural land lost to future buildings is small relative to those existing. Further, the extent of future buildings will be constrained by the CPW canal and DPMA boundary. Consequently all buildings will be concentrated and centred on the existing ones. As a result collective site coverage and subsequent loss of rural open space is confined to the one area within the site rather than dispersed across it.

In summary, it is evident that there are no landscape features or characteristics of the plan change site that would constrain or preclude the kind of activity envisaged. While there are some nearby features of significance, it is apparent that appreciation of these will not be adversely affected by consequent activity arising from the plan change.

5 EFFECTS OF THE PLAN CHANGE ON THE LANDSCAPE

Under this heading the landscape and visual effects arising from the proposed plan change are discussed. Landscape effects are those caused by enduring changes to the environment, irrespective of whether they are visible or not. Generally these effects are understood to exist, even though they may not be visible. Visual effects are those able to be seen from key vantage points such as nearby roads and dwellings.

5.1 What are the potential adverse landscape and visual amenity effects?

Currently amenity – or that which makes the setting pleasant - is largely derived from high levels of open space dominated by vegetation. Other contributing factors include the scenic backdrop of the Southern Alps and foothills.

The Selwyn District Plan (SDP) identifies rural amenity⁴ as that derived from the following rural character attributes:

- *Predominance of vegetation cover.*
- *Dominant land uses (but not all land uses) are associated with primary production: agriculture, horticulture, forestry, pastoralism.*
- *Views of mountains, basins and river valleys which are not modified by structures.*
- *Being able to see, hear and smell animals and birds.*

In this regard, the SDP also observes:

People who live in the rural area as an alternative to living in a town may value a sense of open space, panoramic views and their perception of a rural outlook.

The SDP goes on to note that [people] ... *perceive the rural area as a business area and expect to be able to carry out existing activities.* Dairy processing is one such activity that the SDP specifically identifies as one expected to occur in the rural outer plains, where it states:

In addition, the policies and rules acknowledge sites established for dairy processing activities and provides for the continued development of these sites in the Rural Outer Plains for the processing, testing, storage, handling and packaging and distribution of milk and dairy products, related by-products and ancillary activities.

Such activity is therefore clearly anticipated to occur in the environment in which the existing plant operates and by extension further like activity arising from the plan change. Or to put it another way, the presence of a dairy processing plant within the

⁴ Selwyn District Plan: Rural Volume: Part B: B3.4 Introduction

rural environment is an expected landscape element. The effects arising from such an element must also be expected, although the District Plan does seek to mitigate those which are adverse to a more than minor degree.

Further expectation or 'associative landscape effect' is informed by what is occurring in the existing environment. In this case the existing environment includes the dairy processing plant located in a farm setting.

Allied to associative effects are those arising from matters addressed in the Cultural Impact Assessment presented by Te Taumutu Runanga and Te Ngai Tuahuriri⁵. Of relevance to landscape is a request to provide indigenous vegetation within the Dairy Processing Management Area and other land in the vicinity owned by Fonterra⁶. It is understood the CIA does not rule out potential expansion of the dairy processing plant, but prefers that in so doing indigenous vegetation is provided for. This will facilitate the establishment of a vegetation regime that provides for the restoration of taonga species and habitat and linkages for mahinga kai. Implicit in this outcome is reinforced connection of the dairy processing plant with the landscape of its setting.

As the plan change will enable the expansion and / or alteration of the dairy plant there will be effects on the landscape of its setting. These effects will principally arise from an increase in overall building bulk and are therefore cumulative. Possible effects will be:

- Increased visual dominance arising from the presence of additional buildings
- Diminished naturalness of the rural environment through the introduction of physical elements
- View intrusion – of significant landscape features such as the Southern Alps
- Diminished view quality affecting outlook, especially that of nearby residents
- Increased incidental effects such as that from lighting and reflected glare
- Reduced rural open space and greenery
- General change in site character

As intimated, most of the above effects currently exist, or to put it another way, there will be more of the same effects. So essentially the current landscape and visual amenity effects will be much the same as they are now, except the magnitude or scale of them may be greater.

5.2 What are the actual landscape and visual amenity effects?

Given that the plan change will enable potential expansion of the existing dairy plant, the actual effects will remain centred on it, as demonstrated by the ODP. What this means is that the existing effects will closely reflect those arising from

⁵ Prepared by Tipa & Associates October 2015

⁶ CIA paragraph 5.3 page 44

implementation of the plan change. We can therefore rely on the existing effects to give a reasonably good indication of those which may occur in the future.

These effects are apparent in the foregoing discussion concerning the landscape character of the existing environment. The graphic attachment photographs illustrate current effects also. To reiterate in summary, these effects include:

- From SH73 there is no view intrusion of the Southern Alps, although there is intrusion as viewed from Loes Road.
- For the most part the existing dairy plant is either screened or on the verge of being screened by vegetation.
- The setback from surrounding roads and especially SH73 is generous resulting in diminished building domination.
- The dairy plant does not shade adjoining roads or nearest residential dwellings.
- No significant landscape features are affected.
- As viewed from surrounding roads and properties the dairy plant is foregrounded by rural activity.
- For travellers views of the dairy plant are glimpsed via occasional openings in foreground vegetation and are therefore largely transient.
- While prominent from many vantage points, the dairy plant is not dominant in that appreciation of all other features in the surrounding landscape is not excluded.
- It appears there may be partial views of the dairy plant from nearby dwellings or from vantage points in their immediate vicinity – see **Graphic Attachment Photograph 8**.
- There are no vantage points from which the dairy plant can be appreciated in its entirety – all views are interrupted to some extent at least by intervening vegetation.

Implementation of the plan change will result in much the same effects as those summarised above. This will certainly be the case with regard to the location and extent of effects because future activity will be more or less confined to the existing site. The advantages of this are:

- Activity and consequent effects will be concentrated in and around the existing dairy plant.
- Existing screen planting implemented as a consent condition will continue to be effective regarding future activity.
- Existing setbacks are more or less maintained.

- As shown on the ODP, there exists a hierarchy of building height culminating at an apex central to the site in a pyramid like form – see again **Figure 1** elevations.
- The areal extent of the plan change site is little more than the existing activity.
- Future building height as indicated on the ODP will not exceed that of existing buildings.
- As all activity is concentrated to the one area it will appear as a contiguous and visually coherent whole rather than be dispersed across the site as disparate unrelated elements.
- Stylistically future development is likely to be similar or the same as existing activity.
- Because the dairy plant is contained within a defined envelope, it will maintain a high level of contrast with surrounding rural activity – see again **Graphic Attachment Photograph 3**.
- There is certainty regarding future landscape and visual effects.
- No discernible landscape effect will occur as landscape character of the site is already informed by the existing dairy plant.

While the above advantages are favourable to future growth there will be effects greater than those existing. Chief among them is that buildings and allied structures will become comparatively more prominent due to an overall increase in visual bulk.

There are however, conditions that help to counteract these effects. Future buildings will be to some extent be visually absorbed by existing ones; an effect which is evident in **Graphic Attachment photograph 5** where the two dryers appear as one. That is, the change will appear incremental rather than one that is abrupt, as was the case when the existing dairy plant was constructed. When this occurred the site transformed from a flat featureless paddock to one accommodating a very large structure. Now that this has happened, further change will be far less radical. This is particularly so for the taller buildings as the shorter ones are less appreciable due to their low height in combination with effective screen vegetation and earth bunding.

The actual effects will include those brought about shelterbelt type planting implemented as a condition of consent for the current dairy plant. As **Graphic Attachment photograph 2** shows this planting is reaching a height where it is starting to effectively screen the dairy plant. Screening will become increasingly effective as this vegetation matures. Because of this, screening will be in place in the event that further development occurs within the plan change site. So while such development has the potential to increase prominence; what in fact will happen from the point of view of onlookers is that screening vegetation will become more dominant over time. Or to put it another way, it will become the dominating feature irrespective of future development within the dairy plant.

Finally, it is nonetheless considered that views of the dairy plant, where they occur, are not necessarily adverse. Aesthetically the dairy plant is not unpleasant to look at. It is evidently clean in appearance. It is static with no kinetic parts that catch the eye.

And the plant is compositionally well balanced with regard to the proportions between vertical and horizontal elements. Further, as the various aforementioned photographs show, the plant is for the most part framed by foreground vegetation. That is, in aesthetic terms the plant sits quite comfortably within its landscape setting.

5.3 Whose landscape amenity will potentially be affected?

Potentially affected parties will be road users and nearby residents. **Graphic Attachment aerial photograph 8** shows the location of nearest dwellings and roads.

Residents

Five dwellings are within 1 kilometre of the height control area within the site – see proposed ODP and **Graphic Attachment photograph 8**. The reason for identifying the height control area is that it relates to the buildings from which visual effects emanate. As photograph 8 shows, three dwellings are located just beyond the 1 kilometre boundary.

One of the dwellings within the 1 kilometre envelope is 'The Oaks', which is owned by the applicant. Consequently the effects on that dwelling are discounted.

Representative views from the other dwellings are shown on **Graphic Attachment photographs 9, 10, 11, 12, 13 & 14**. From observation it is clear that all nearby dwellings are surrounded by vegetation – typically in the form of ornamental amenity plantings and shelter belts. Consequently it would appear that views of the existing dairy plant are screened at least to some extent by this and other intervening vegetation.

For most residents current visual amenity effects are negligible. Those most affected, relative to other residents, are the dwellings on Loes Road. Even from these properties garden vegetation largely screens the plant from view.

Road users

As shown on **Graphic Attachment aerial photograph 8** the site is encircled by four roads – Auchenflower, Homebush, Loes Roads and SH73. As mentioned, the latter is by far the most significant being the premier tourist route linking the west and east coasts. The other roads are mostly used by local people who live and work in the area.

The plant is glimpsed from the Old West Coast Road, but is not especially prominent from this vantage point.

All roads have a maximum speed of 100km/h, although in reality such speeds are unlikely on the unsealed side roads. Still, what this means is that road users will be by passing the dairy plant at speed. Given that and the presence of intervening vegetation, views to the dairy plant are sporadic or glimpsed – and as a result are very short term – usually encountered over a matter of seconds.

As mentioned the most significant road in terms of numbers of users and type is SH73. As **Graphic Attachment photographs 2,3,5,9 & 10** show and as just indicated, views from the highway are glimpsed via gaps in the shelter belt vegetation surrounding the site. In time most of these gaps will close as vegetation matures and becomes increasingly dominant.

Other parties

The dairy plant is visible from certain vantage points further afield. Among them are the Mt Hutt and Porter Heights ski fields where in certain light conditions reflected off the plant will render it visible in the distance – see **Graphic Attachment photograph 15**. Visibility of the plant from this vantage point is not expected to diminish ski field amenity in any way or scenic appreciation of the Canterbury Plains.

The plant is not visible from Porters Pass. Nor is visible from the bed of the Waimakariri River and so will not affect users of this resource.

The plant is visible from certain points in Darfield Township – namely the Landsborough Subdivision located on the northern outskirts. As **Graphic Attachment photograph 16** shows, the plant at some 3km distant appears quite diminutive within the broader expanse of its landscape setting. Apart from this subdivision the plant is not visible from other parts of Darfield.

As mentioned, Te Taumutu Runanga and Tuahuriri Runanga identify matters relevant to the cultural landscape – namely concerning the introduction of indigenous vegetation. This will be discussed in more detail shortly.

Summary

Parties most affected in any enduring way are residents closest to the plant that has views toward it. As mentioned all have some form of vegetation associated with their dwelling that appears to, at the very least, partially screen the plant. Line of sight observation however, indicates that for most dwellings screening is entire or very close to it.

6 LANDSCAPE TREATMENT

The following discussion focusses on methods for achieving and maintaining desired landscape outcomes. Fundamentally this is achieved in two ways; one being landscaping and the other the control of building bulk and location.

In large part, landscaping for the dairy plant has already been implemented as a condition of the original land use consent. This landscaping is considered sufficient for future development arising from the plan change. Consequently further landscaping is not required. It will however need to be maintained.

As further landscaping is not considered necessary, the focus is on building bulk and location. The details of this are described shortly.

6.1 What are the desired landscape amenity outcomes?

Regarding landscape amenity the overall aim is to ensure the dairy plant sits harmoniously within its setting. What this means is:

- Large trees will be dominant.
- Rural character will be maintained through the provision of open space and ample greenery, including pasture.

- The full extent of the dairy plant is not appreciable from any one vantage point.
- Although prominent, the dairy plant will not appear to dominate its setting.
- The dairy plant design appears coherent and free of any visually discordant elements, including colours.
- The dairy plant is compact where activity is confined to that area shown on the ODP and not otherwise dispersed into the surrounding environment.

While screening with vegetation is extensive, it is not considered necessary to fully screen the dairy plant from all vantage points. As mentioned, its appearance is not considered aesthetically adverse for the reasons identified earlier. The critical adverse effect to be avoided, remedied or mitigated is building domination.

How the desired outcomes just listed are achieved is described next.

6.2 How will landscape and amenity outcomes be achieved?

Vegetative dominance

As mentioned, landscaping has already been carried out for the existing dairy plant and it is not considered necessary to add to this. This landscaping comprises pine shelter belt type planting around the perimeter of the then application site, the location and extent of which is shown on the Landscape Plans that now form a condition of consent for the existing dairy plant. Being pines, the trees are evergreen and densely foliated. Further, they are planted in a double row. As a result they will effectively and fully screen the dairy plant from those vantage points located alongside or within line of sight of the pines – see again **Graphic Attachment photographs 2 & 17**.

Broadleaf deciduous trees were also planted in copses in the vicinity of the dairy plant entry and at certain points alongside SH73 – namely opposite ‘The Oaks’. These trees are English oaks (*Quercus robur*). One reason for planting these is to reflect existing planting regimes in the vicinity of the site where English Oak is quite common. A second reason is that these trees are capable of reaching considerable size. Being planted in groups or copses means eventually these trees will appear collectively as a very significant plantation. Given also that they are located between the highway and dairy plant, the mass plantings will appear to dominate views.

Existing trees – namely pines – have also been retained as a condition of consent – see again **Graphic Attachment photographs 3 & 5** where the pines are shown left of the dairy plant. These photographs show the pines appearing to match the height the dryers resulting from their location between the buildings and highway. Because of their extent the visual bulk of these pines exceed that of the dairy plant by some considerable degree.

Although not planted as part of the existing dairy plant development, there is scope to include native vegetation at various locations in and around the site. This could occur in areas not otherwise compromised by operations, including surrounding farming activity. Potentially suitable sites would be in the vicinity of the CPW canal,

particularly where its route results in un-usable land. The same could apply to other areas, such as around roading, the administration offices and associated car park.

The type of native plants used would be those that would have grown on the Canterbury plains naturally prior to the arrival of Europeans⁷. These would include species such as totara, kowhai, kanuka and cabbage tree. The overall aim with native planting is to provide simple, bold outcomes using potentially large trees. Such planting would help maintain visual coherence and a scale that is similar to surrounding exotic vegetation. Further, larger trees help counteract potential visual dominance of buildings and vehicle manoeuvring areas. Potentially they would also provide habitat for native birds and the invertebrate fauna they feed on.

If native planting were to be implemented it would be done in accordance with a landscape management plan developed in conjunction with Te Taumutu Rūnanga and Te Ngāi Tūāhuriri rather than via District Plan provisions. The process for this is outlined in the Cultural Impact Assessment⁸ and Fonterra's response⁹

In summary, as they mature trees will increasingly dominate the dairy plant environment – in fact much more so than what they do now. As a result the visual bulk of the dairy plant will appear diminished where it will become increasingly subservient to its setting. And because most of the trees are located alongside vantage points – namely next to roads – they will not only appear as the dominant feature but will also effectively screen the dairy plant where they occur.

Rural character

Essentially rural character results from a high proportion of open space to built form. Put simply, in rural areas space surrounds buildings and in urban areas buildings surround space. Vegetation is also a dominant feature of rural environments.

While the dairy plant comprises very large buildings and associated structures it is very compact. That is, the entire complex is confined and concentrated within a relatively small area rather than dispersed widely over a large area. Consequently the dairy plant is entirely surrounded by rural open space as is evident in **Graphic Attachment photograph 1**. It presence therefore maintains rural character and the green open space amenity that is derived from it.

Arising from this compactness is a high level of contrast between the open pasture land and the built complexity of the dairy plant. This too is evident in **Graphic Attachment photograph 1**.

The generous setback from surrounding roads also contributes to the appearance of rural character. This is because onlookers will appreciate the presence of intervening pasture land between them and the dairy plant as is apparent in **Graphic Attachment photographs 3 & 7**.

This will continue where:

- Future development will be contained within the confines of the development envelope shown on the ODP.

⁷ Listed in 'Native plant communities of the Canterbury Plains'; Department of Conservation (2005)

⁸ Dated October 2015

⁹ In a letter addressed to Te Taumutu Rūnanga and Te Ngāi Tūāhuriri; Dated 2 February 2016

- The current setbacks will be maintained.
- Rural land use will continue on land surrounding the dairy plant within land owned by the applicant.

Avoiding full extent appreciation

From no one vantage point can the full extent of the dairy plant be appreciated. This happens for the following reasons:

- Relative to the dairy plant the flat and low elevation of vantage points which means that it is not possible to overlook it.
- The presence of intervening vegetation.
- Structures and buildings within the dairy plant complex obscure each other.
- Variation in the height of buildings and structures.
- Significant setbacks from surrounding vantage points.
- The presence of earth bunds

Of the above characteristics, setbacks, intervening vegetation and earth bunding will be maintained. Building height variation and visual obstruction will occur in any event, and will continue to do so resulting from future development arising from the plan change.

Dominance avoidance

For much the same reasons listed above, particularly regarding setbacks and intervening vegetation, visual dominance arising from the presence of the dairy plant is avoided. It is nonetheless visually prominent resulting from its size, form and reflective colours. Visual dominance occurs where views of an object are such that appreciation of surrounding environment is negated or peripheral. This can apply to any object - a tree or group of trees, a lake, a building, pylons, hills, mountains and so on. Visual prominence is where an object is clearly visible due to it contrasting with the surrounding environment. The dairy plant does this.

The aim of the plan change and its provisions is to avoid dominance. As indicated, controls on setbacks, building height and the provision of large scale vegetation will all contribute to the avoidance of dominance.

Coherent appearance

This arises from stylistic consistency, proportions and compactness. As is evident from the various photographs the existing dairy plant is visually coherent. The buildings and allied structures are all similar or evidently related in appearance. The vertical to horizontal proportions are well balanced – see again **Figure 1 diagram**. Regarding compactness the tallest buildings (the dryers) are clustered, although the equally tall boiler stack is somewhat remote from them. This however is countered by its very narrow proportions and low visual bulk.

Future coherence will be achieved and maintained via the hierarchy of building heights and sizes reflected in the ODP. The **Figure 1 diagram** also illustrates this effect. Essentially the overall form of the dairy plant is a shallow pyramid, which visually appears very stable and grounded.

It is also anticipated that future design will be the same as or similar to that existing. This is entirely determined by the dairy plant's function – a classic example of 'form following function'. In these generic terms, it is not expected that there will be much variation between what currently exists and future development. As a result it is expected that the dairy plant will appear stylistically consistent and therefore visually coherent into the future.

7 STATUTORY LANDSCAPE MATTERS

As mentioned, one of the activities the District Plan (the Plan) anticipates occurring in the rural environment is dairy processing. Recently incorporated into the Plan is a policy that is specific to dairy processing plants located in the rural environment. Potentially such activity can result in adverse effects on rural character and amenity. As identified, chief among them is building dominance. In this regard one policy is concerned with the effects of building height; but also goes on to exempt dairy processing plants. This will be discussed in more detail shortly. Widely dispersed activity impinging on open space can also diminish rural character. Other potential adverse effects include view intrusion, diminished view quality, over-shadowing of neighbouring residences, and allied to that loss of privacy. Peripheral adverse effects can also arise from signage, lighting and reflectivity. All of these matters are addressed in the following discussion regarding the relevant objectives and policies; all of which are derived from the Plan's Rural Volume, Part B concerning '*people's Health, Safety and Values their economic, social and cultural wellbeing*'.

Objective B3.4.1 *The District's rural area is a pleasant place to live and work in.*

Objective B3.4.2 *A variety of activities are provided for in the rural area, while maintaining rural character and avoiding reverse sensitivity effects.*

The explanation and reasons to the above objectives suggest that a balance is to be struck between ensuring the rural environment is pleasant while enabling rural business activity, which includes dairy processing. The aim, the explanation and reasons state, is to ensure '*The policies and rules allow for day to day farming and other activities which have effects typical of a rural area, but manage activities that have potentially stronger effects.*' With this in mind it recognises the rural zone as being '*... principally as a business area rather than a residential area.*' Concerning landscape outcomes this means that the rural zone, in this case the Outer Plains, will appear to be devoted to rural based business activity. This includes dairy processing plants which the Plan identifies as being appropriate within the rural zone.

Consequently, the Plan is instilling an expectation that such activity will exist in the Outer Plains rural landscape. In landscape terms these are termed 'associative effects'. Because of the existing dairy plant and the Plan's recognition they can exist, then it follows that there are no adverse associative effects. Or to put it another way, people would not be surprised to find a dairy plant in the setting in which it is located.

Policy B3.4.1 *Recognise the Rural zone as an area where a variety of activities occur and maintain environmental standards that allows for primary production and other business activities to operate.*

This rural character policy essentially enables rural business to operate while ensuring that the environment is pleasant for those living in the rural zones. To this end the explanation and reasons state; *'The Plan provisions, coupled with the distance between houses and activities in the Rural zone, should combine to maintain a pleasant living environment.'* Regarding the provision of landscape amenity the focus of these provisions is on building bulk and location – that is, controls on height, set back, site density, recession planes and site coverage. All of these matters are manifest on the proposed ODP.

Policy B3.4.3 *Avoid, remedy or mitigate significant adverse effects of activities on the amenity values of the rural area.*

Importantly the explanation and reasons to this policy recognise that the rural areas *'...can be sought after locations for activities that need large sites and to be separated from people.'*

They then go on to say that;

Some of these activities can make [rural] areas less pleasant – they can affect their amenity values. Policy B3.4.3 requires adverse effects from activities on the amenity values of rural areas generally be mitigated. This may be achieved through compliance with rules, conditions on resource consents or through an ODP controlling further development on established sites such as those applied to the existing sites of milk processing. Where an activity will detract from the amenity values of an area, Policy B3.4.3 requires those effects be mitigated.

As is evident, the explanation and reasons specifically recognise the presence of dairy processing in the rural environment, whose potential adverse effects on amenity are controlled via ODPs and other relevant Plan rules. As discussed, the chief mechanism as expressed on the ODP involves controls on building bulk, extent and location. Landscaping, including the presence of earth bunding is another important means of ensuring any adverse effects on amenity are avoided and mitigated.

Policy B3.4.5 *Enable the continued and enhanced operation, innovation and development of established dairy plant sites for the purposes of administration, processing, testing, storage, handling, packaging and distribution of milk and dairy products, related by-products and ancillary activities within specifically identified Dairy Processing Management Areas within the Rural (Outer Plains) Zone, whilst ensuring the integrated management of effects on the environment at the boundary of the Management Areas through ODPs. The establishment of non-dairy processing related industrial activities shall be avoided.*

Firstly the explanation and reasons to this policy recognise the large size of buildings and structures associated with dairy processing plants. It further observes that these exceed what might otherwise be expected to occur on working farms. They then note that the policy only applies to established dairy processing plants, whose existence informs the landscape character of the subject site. This suggests there is little opportunity for cumulative effects arising from the establishment of new dairy

processing plants. Consequently integrity of rural character and amenity is maintained with no likelihood of it being eroded through the establishment of new dairy plants.

This outcome is reinforced by the observation in the explanation and reasons that the policy provides '*...for a concentration of buildings*'. To this end the policy seeks to confine dairy processing to within Dairy Processing Management Area (DPMA) whose location and extent is shown on the ODP.

So overall, the policy recognises that the effects on landscape amenity resulting from the presence of a dairy processing plant exist and that they are to be contained within the confines of the DPMA. What is proposed, as discussed, is that future buildings and structures will continue to be concentrated, and so too are the effects where they will maintain current rural character and amenity.

Policy B3.4.6 Maintain low levels of building density in the Rural zone and the predominance of vegetation cover.

While the existing buildings are very large compared to most in the rural area, building density is, as mentioned, concentrated rather than dispersed. To reiterate, the important landscape consideration is to ensure space surrounds buildings irrespective of their size. So with buildings concentrated, this means that their collective bulk or mass appears as one related cluster entirely surrounded by open space – which is apparent in the various graphic attachment photographs showing the existing dairy plant. Additionally, the explanation and reasons note that rules governing site coverage do '*...not apply to buildings in the Dairy Processing Management Areas which provide for a concentration of large buildings for processing, packaging and distribution of milk and dairy products only*'. That is, the absence of such a rule enables building concentration. As a result, the open space integrity of the surrounding rural landscape is maintained. This further enables the dominance of vegetation to be maintained which the explanation and reasons state as being '*...characteristic of rural areas*.'

Policy B3.4.7 Avoid high rise buildings or highly reflective utility structures.

The intent of this policy is clear and is perhaps the least achievable concerning dairy processing plants on account of the building heights involved – up to around 50 metres. Permitted height in the rural zones is 8m for dwellings, 12m for other buildings and for grain silos 25m¹⁰. Dairy processing plants are exempt however, where in the explanation and reasons it states;

An exemption is also made for buildings essential for the processing, packaging and distribution of milk and dairy products, related by-products and waste materials. The scale of dairy production requires large facilities and a Dairy Processing Management Area has been created to recognise sites already established as dairy factories and to enable efficiencies in the dairy industry to be achieved.

From this it is evident that an exception has to be made for dairy processing plants so their purpose can be fulfilled. The Plan then anticipates the effects arising from tall buildings and structures, but in combination with the other policies does not expect

¹⁰ SDP; Rural Volume; Part C; Rural Rules; rule 3.12.1.1 (a) (b)

these to be cumulative regarding the establishment of new dairy plants. Consequently dairy plants might be considered rare and as a result the effects arising from their height on rural character and amenity is constrained and localised.

A further effect is that, by de fault, they become landmarks of which building height is chief contributor. Regarding the plant at Darfield, the landmark function is diminished somewhat due to its significant setback from adjoining roads and the presence of screening vegetation – see again the Graphic Attachment photographs. As discussed, height is in any event largely countered by the presence of this vegetation.

Policy B3.4.10 *Ensure signs and noticeboards are designed and positioned to avoid:*

- Restricting people’s visibility along roads;*
- Impeding access to or past sites;*
- Nuisance effects from sound effects, moving parts, glare or reflectivity;*
- Large structures protruding above rooftops.*

Currently there is one modest sized sign located on SH73 opposite the main entrance to the dairy plant. Another is located alongside the entry road beyond the railway track. There is no signage on the building that is visible from publically accessible vantage points.

Although it is unlikely any significant signage will be installed, if in the event it is and it complies with the Plan standards, it follows that the outcomes anticipated by the above policy will be achieved.

Policy B3.4.17 *Ensure buildings and trees do not excessively shade adjoining properties.*

Regarding the above policy, the explanation and reasons appear to be most concerned with the effects of shading on private dwellings and associated outdoor living areas. The nearest dwellings to the DPMA are more than 700m distant – well outside the recession plane boundaries and therefore beyond any adverse shading effects caused by either buildings or vegetation. The **Figure 2** diagram below shows the tallest buildings – the dryers – are well within the recession plane at the closest boundary; south of the plant.

39° recession plane off south boundary

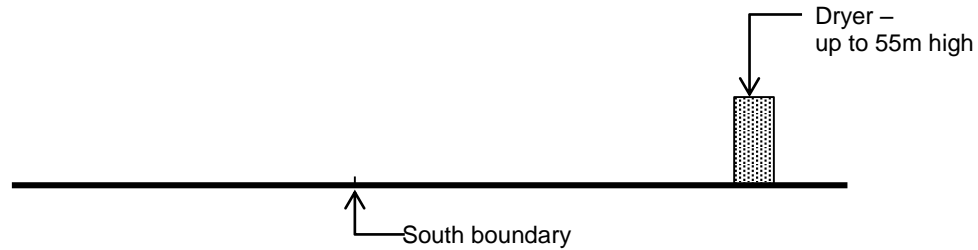


Figure 2 *Showing the recession plane off the southern boundary closest to the potentially tallest buildings – the dryers. This demonstrates that there is no prospect that the dryers will shade neighbouring properties beyond what is anticipated by the District Plan.*

Policy B3.4.18 *Ensure buildings are setback a sufficient distance from property boundaries to:*

- (a) Enable boundary trees and hedges to be maintained;*
- (b) Maintain privacy and outlook for houses on small allotments; and*
- (c) Encourage a sense of distance between buildings and between buildings and road boundaries where practical.*

At its closest point to nearest roads the building envelope is 340m from SH73, 345m from Auchenflower Road and 415m from Loes Road – see **Graphic Attachment photograph 18**. And as show on **Graphic Attachment photograph 8** dwellings (excluding ‘The Oaks’¹¹) are significantly further. The permitted setback for any building in the rural zone is 30m from all boundaries including arterial / strategic and other roads¹². Consequently all of the outcomes listed in the above policy are achievable. The setbacks determined by the building envelope also achieve those outcomes listed in the ‘explanation and reasons’ to the policy which include a ‘...sense of open space between buildings and the unrestricted views from roadsides.’

8 RECOMMENDATIONS

Virtually all of the desired landscape character and amenity outcomes will be achieved via implementation of the ODP. In this regard there are two fundamental outcomes the ODP sets out to achieve, which are, to reiterate:

- The maintenance of rural character by clustering or spatially concentrating buildings, structures and activities.
- The management of building bulk and location – setbacks, height and site coverage – so as to avoid building domination

¹¹ Owned by the applicant

¹² Selwyn District Plan Rural Volume Part C Rural Rules Buildings Rule 3.13.1

Allied to building effects is colour, which was also subject to a condition of consent (Condition 25). Controlling colour not only assists in reducing apparent building dominance, it also contributes to overall stylistic consistency and coherence.

A further outcome concerns landscaping, or more precisely, planting and its management. This was required as a condition of consent for the existing dairy plant. All of the planting required as a condition has been implemented.

It is not considered necessary to provide additional planting. The reason is that it is considered the existing planting will be sufficient to achieve its purpose regarding any future development arising from implementation of the ODP. The purpose of this planting is:

- To screen the dairy plant to a large extent, but not necessarily fully.
- To provide and maintain vegetative dominance.
- To reflect existing planting patterns in the area and so maintain specific character.
- To contribute general amenity.
- To counterbalance visual bulk of the dairy plant with vegetation.
- To facilitate harmonisation of the dairy plant with its rural setting.
- To maintain visual coherence achieved via simple planting patterns and limited species.

Recommendations

- 1 That the existing planting shown on the landscape plans required as a condition of consent (referred to as L1 and L2 in landscape conditions 23 – 24¹³) be adopted as part of the plan change and incorporated into the Selwyn District Plan.
- 2 That the wording or intent of Conditions 23 – 24 referred to above are incorporated into the Selwyn District Plan.

¹³ Condition:

(23) The consent holder shall undertake shelter belt planting and landscaping within the first available planting season after commencement of this consent. All shelter belts and landscaping shall be planted and maintained in accordance with Landscape Plans L1 to L2; and

(24) All landscaping required for this consent shall:

- (a) Be maintained, with any dead, diseased, or dying landscaping and being replaced within the next available growing season with plants of a similar species and at the minimum height at time of planting as specified on Landscape Plans L1 to L2; and
- (b) For any shelter belt adjacent to SH73, the maximum height shall be 6 metres to avoid any shading on SH73 during the period of 10am -2pm on the shortest day of the year.

- 3 That the colour of exterior building surfaces of the dairy processing plant be limited to *Grey Friars* (Resene N35 -004-253) and *Titania* (Resene G84 – 012-095).

9 CONCLUSION

It is clearly apparent from the provisions in the District Plan that it regards dairy processing plants as somewhat exceptional but necessarily rural based due to their unique operational requirements. Consequently they will feature in the rural landscape and where this occurs they inform character and amenity. They are not common however and so they will by virtue of their rarity, size, colour and location appear as landmarks. They are among the largest physical structures to be found in rural settings.

As a result dairy processing plants cannot be easily absorbed into the landscape. Their presence however can be subdued via various measures, all of which were described earlier. The aim of these measures – essentially controlling bulk and location in addition to landscaping – is not necessarily to conceal the dairy plant; but to ensure it avoids domination of its setting. This is particularly so where it potentially affects the public or nearby residents.

A further aim is to ensure dairy plants appear coherent, and sit harmoniously in the landscape in which they are located. To achieve this they need to reflect existing rural patterns and adopt prevailing motifs – for example the layout and species of tree planting. To this end they need to further reflect the bold simplicity of rural landscapes.

With such outcomes in mind, the ODP and accompanying District Plan provisions also need to avoid the fussiness or complexity of activity that is usually associated with urban or more diverse settings. So in these more generic terms – namely pragmatic bold simplicity – dairy processing plants are not out of keeping with these same qualities that prevail throughout the rural outer plains.

As mentioned at the outset, implementation of the ODP and plan provisions will result in 'more of the same', albeit potentially to a greater extent compared to what currently exists. Stylistically the dairy plant will maintain a similar appearance, notwithstanding that it may well be larger. The ODP will however ensure that exacerbation of adverse effects – namely building dominance – will be more or less contained to the extent of current effects. Further, these will be adequately managed with existing levels of landscaping in addition to the parameters set out in the ODP and existing and proposed District Plan provisions.

The presence of the dairy plant is not contrary to peoples' expectations and nor will it be following further development. Further, the plan change will provide certainty regarding the location and extent of effects, which to some degree are currently appreciable.

With existing and proposed measures in place the effects on landscape character and amenity of the rural outer plains will be appropriate and acceptable.

Landscape Architect

February 2016

Graphic Attachment



ANDREW CRAIG
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June 2015



PROPOSED PLAN CHANGE

DARFIELD DAIRY PLANT

Waimakariri River →

Auchenflower Road →

SH73 →



Photograph taken: 6.7.2015

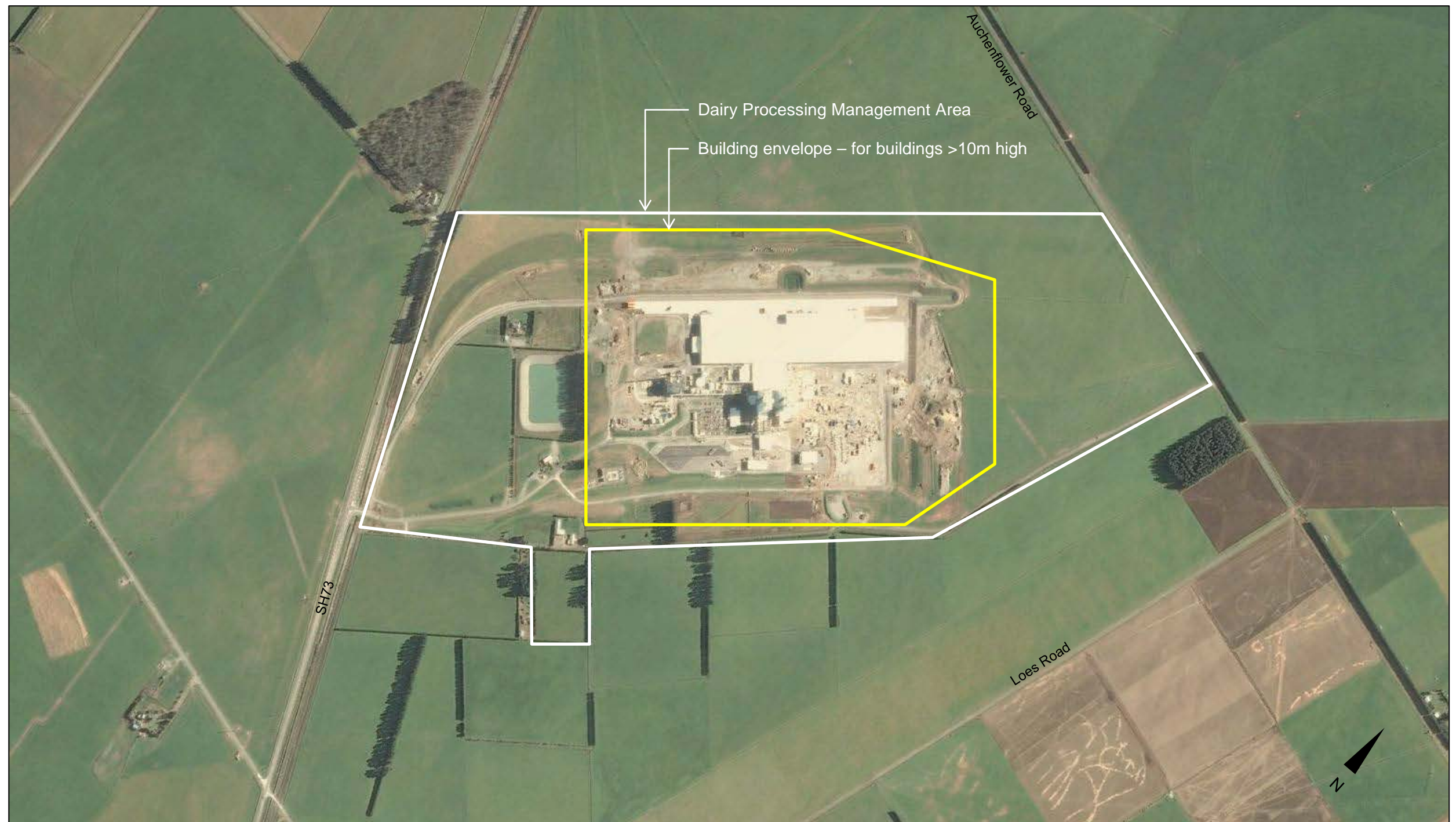
Photograph 1 *Looking east the existing dairy plant at Darfield showing the open expanse of its rural setting*



Photograph 2 *As seen in this photograph, pines planted as a condition of consent are now reaching a height where they are starting to screen the existing plant - view from SH73. Note the presence of earth bunding in the middle distance and screening effect it has of the lower portions of the dairy plant.*



Photograph 3 *Rural activity prevails around the dairy plant, as does abundant open space and greenery. Note the screening effect of the pine trees in the middle distance.*



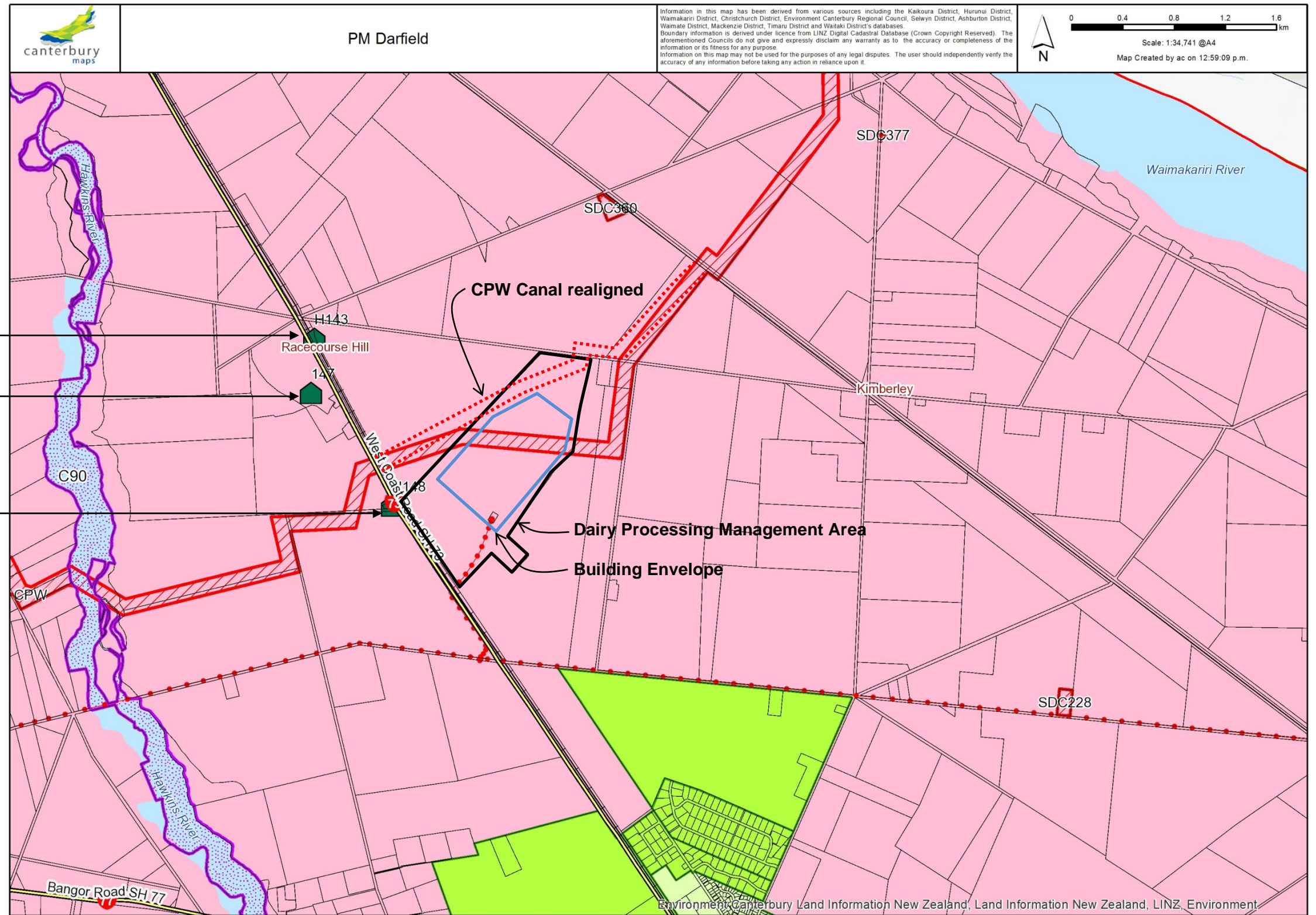
Photograph 4 Showing the existing plant and character of the surrounding rural environment



Photograph 5 *As viewed from SH73 the existing dairy plant does not interrupt views of the Southern Alps. Distance to the dryers is around 1km.*



Photograph 6 *As viewed from Loes Road opposite the vehicle entry at 'The Gums' views of the Southern Alps are interrupted by the dairy plant. Views from the dwelling however are blocked by vegetation. Distance to the dryers is approximately 1.1km*



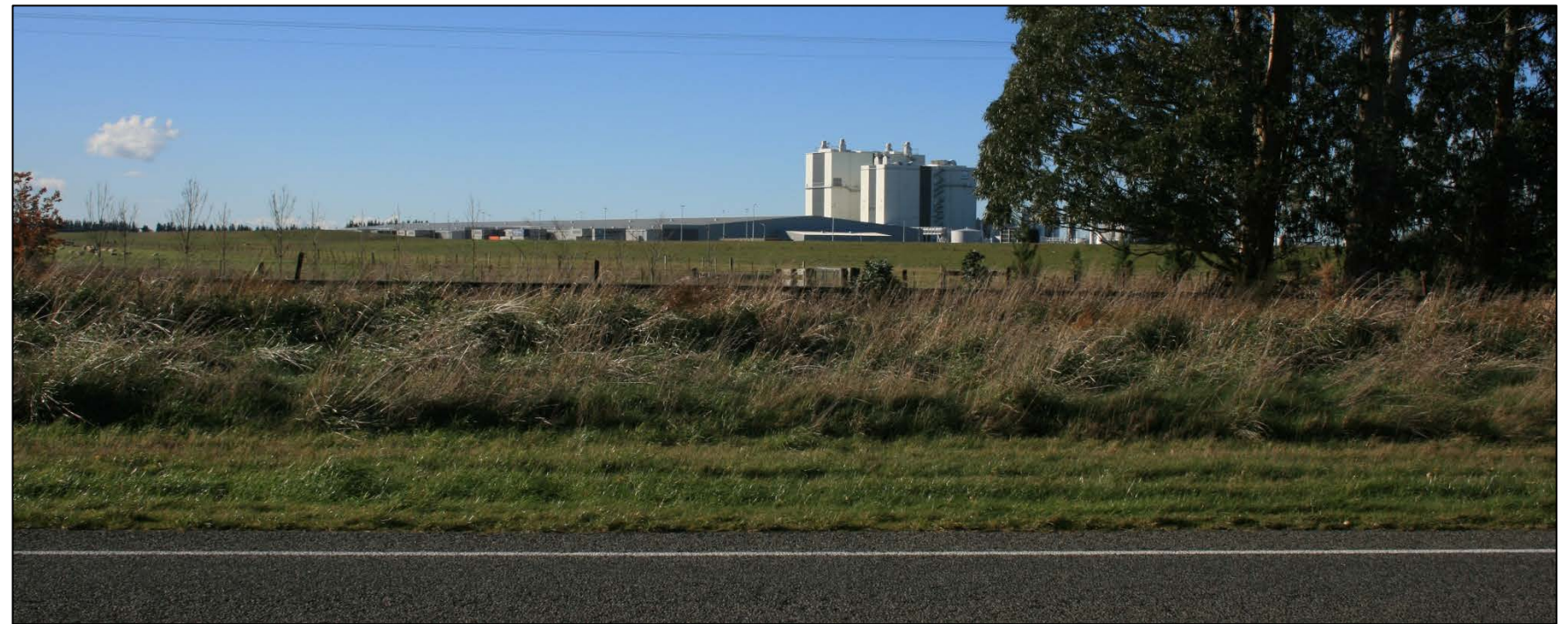


Photograph 7 *The dairy plant as viewed from Kimberley Road, approximately 3km distant. It is evident here that the dairy plant appears much diminished in the greater expanse of the landscape in which it is located*



Photograph 8

Showing locations of dwellings and roads nearest the existing dairy plant and plan change site. The yellow dashed square is 1km from the 'Height Control Area' – blue dashed line - within which the buildings are potentially dominant.



Photograph 9 *View toward the existing dairy plant from 'The Oaks'*



Photograph 10 *The view from SH73 from opposite the driveway and upholsterer's dwelling at Racecourse Hill*



Photograph 11 *The view from SH73 at the Auchenflower Road junction in line of sight from dwelling.*



Photograph 12 *The view in line of sight from dwelling on Bleak House Road.*



Photograph 13 *The view from Loes Road opposite 'Aigen Farm'*

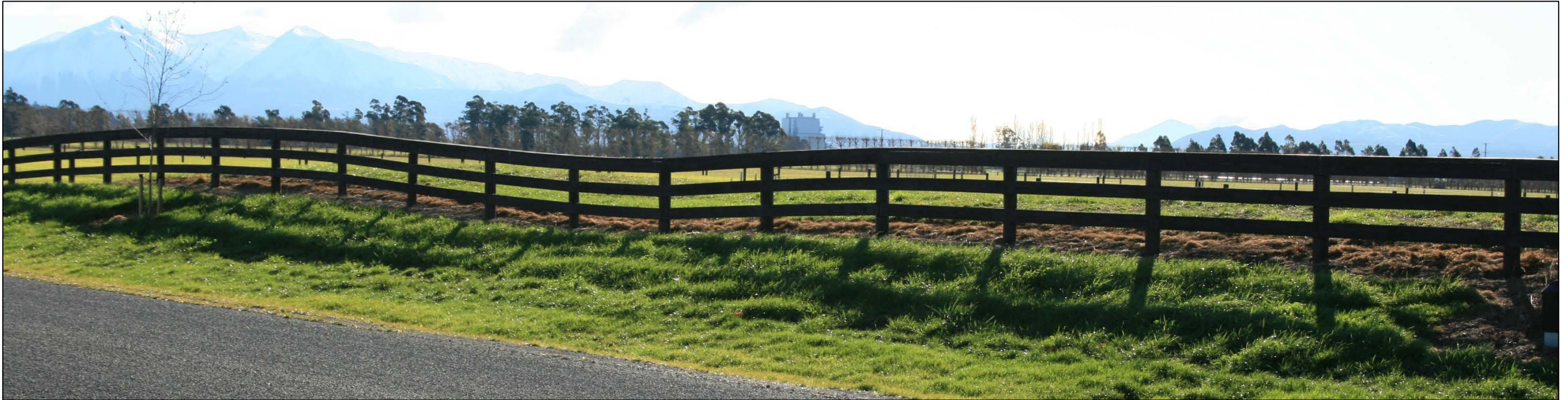


Photograph 14 *The view from Homebush Road showing the Buxton dwelling with the dairy plant beyond*

Dairy Plant



Photograph 15 *The dairy plant as viewed from the summit ridge at Porter Heights ski field.*



Photograph 16 *The dairy plant 3km away as viewed from Whitcombe Road within the Landsborough Subdivision at Darfield. Note that it does not intrude the skyline from this vantage point.*



Photograph 17 *The effectiveness of pine shelter belt screen planting is evident here where the trees are not yet 3m high. The screening will become increasingly effective as the trees mature.*



Photograph 18 *An aerial photograph showing the relationship of the proposed building envelope to surrounding roads and the applicant's property boundary (blue line) where it occurs within these.*



Photograph 19 Showing location of photo-points
Yellow circles indicate dwellings

APPENDIX 5:

Transport Assessment Carriageway Consultants

30 May 2016

Justine Ashley
Planz Consultants Limited

By e-mail only: justine@planzconsultants.co.nz

Dear Justine

Proposed Plan Change: Dairy Processing Management Area, Darfield

Further to our various emails and correspondence, we have reviewed the potential traffic and transportation aspects of a proposed plan change for a Dairy Processing Management Area ("DPMA") at Darfield.

We understand that the sole access to the proposed DPMA will be via the existing access to the Fonterra milk processing plant on State Highway 73, and our assessment is based on this arrangement.

Background

Several years ago, resource consents were granted for the construction and operation of a milk processing plant approximately 4km northwest of Darfield and on the eastern side of State Highway 73. As part of those consent applications, detailed evaluations of the (then) proposed site access arrangements were undertaken. The analyses that were produced, agreed with NZTA (as the road controlling authority for the highway) and accepted by the independent commissioner hearing the resource consent application culminated in the construction of a large priority intersection on the highway, with auxiliary left-turn-out, left-turn-in and right-turn-in traffic lanes. The auxiliary right-turn lane was constructed to be 52m in length, sufficient for two tanker+trailer units to wait clear of the northbound through-traffic lane.



Figure 1: Current Site Access to Fonterra Darfield Plant

Based on the traffic flows prevailing at the time and expected rates of growth up to the year 2020, this arrangement was considered to be appropriate for volumes of up to 170 vehicles emerging from the site access within a (peak) 30-minute period. A sensitivity test was carried out which



showed that if these volumes were to emerge over a shorter 15-minute period, then this would result in extensive queuing within the site.

Review of Previous Assumptions

Traffic Growth

The initial traffic-related work noted that historic growth on the highway in the vicinity of the site between 1999 and 2008 was in the order of 4% to 5% per annum, and this value was extrapolated to a nominal 'design year' for the access intersection of 2020.

We have reviewed the traffic growth rate between 2008 and 2015 (the most recent year for which data is available), and our assessment is set out below.

Location	1999-2008 Annual Growth	2009-2015 Annual Growth
SH73 west of Springfield	2%	1.1%
SH73 south of Homebush Road	4%	13.7%
SH73 in Darfield (East of Clinton St)	5%	7.6%
SH73 west of Aylesbury	4%	7.8%

Table 1: Comparison of Annual Growth Rates on State Highway 73

The data shows that the growth rate on SH73 south of Homebush Road has dramatically increased since 2009, and that there has also been an increase on the highway west of Aylesbury. Further assessment of the data however shows that these are both attributable to 'step changes' in traffic flows which occurred between 2011 and 2012, and 2014 to 2015. In particular, total traffic volumes south of Homebush Road increased by up to a quarter at this time, with the number of heavy vehicles increasing by up to 125%. In our view, these increases reflect changes in development patterns, including the plant commencing operation, rather than ambient traffic growth on the network.

Road Safety

The road safety history for the past 10 years was reviewed for the area surrounding the plant as part of the previous assessments. This showed that there had been no reported crashes on the section of SH73 fronting the site between Bleak House Road and Homebush Road, and it was concluded that the lack of reported crashes indicated that the surrounding transport network did not have any identifiable road safety issues.

The same area has been reviewed for any accidents occurring between 2011 to the current date. This showed that two accidents have been recorded on this section of road. One occurred in 2011 at the site access itself, when a driver turned right into the site and collided with another vehicle that was travelling southbound on the highway. The other accident took place just south of Bleak House Road, when a driver lost control on part of the highway which had been shingled just prior to resealing. This also occurred in 2011.

Although two accidents have been recorded, we do not consider that this indicates a particular issue or concern on the highway. One driver lost control on a loose road surface, but the timing of this indicates that it was associated with the construction of the site access itself, which is now complete and thus a contributing factor to the accident has been eliminated. The accident involving a turning vehicle is not unexpected given that the presence of the access necessarily introduces the potential for conflict between vehicles. In this regard, we note that no accidents have been recorded in this location since 2011.



Consequently we consider that the previous assumptions regarding the road safety record of the highway remain valid.

Summary and Conclusions

Since the traffic flows remain within the expected parameters, we consider that the intersection will continue to operate with a high level of service provided that the plan change does not give rise to cumulative volumes of more than 170 vehicles emerging from the site in any 30-minute period.

The road safety record does not indicate that there are any existing deficiencies in the immediate area that would be likely to be exacerbated by increased traffic volumes.

On this basis, the proposed plan change can be supported from a traffic and transportation perspective.

I trust that this is of assistance, but please do not hesitate to contact me if you require any further information or clarification of any matter.

Kind regards

Carriageway Consulting Limited

Andy Carr

Traffic Engineer | Director

Mobile 027 561 1967

Email andy.carr@carriageway.co.nz



APPENDIX 6:

Acoustic Assessment Marshall Day Acoustics

Project: **FONTERRA DARFIELD DAIRY MANAGEMENT AREA**

Prepared for: **Fonterra Co-operative Group Ltd**
 PO Box 459
 Hamilton 3240

Attention: **Ian Goldschmidt**

Report No.: **Rp 001 R01 2013648C**

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Document control					
Status:	Rev:	Comments	Date:	Author:	Reviewer:
DRAFT			11/9/2015	Rob Hay	
Approved	01		17/9/2015	Rob Hay	Robbie Blakelock

EXECUTIVE SUMMARY

Fonterra seek the establishment of a Dairy Processing Management Area (DPMA) at their Darfield factory. Marshall Day Acoustics (MDA) has been engaged to perform a noise assessment and to assist in the development of an appropriate Noise Control Boundary (NCB) for the site.

Currently the factory consists of two whole milk powder (WMP) dryers, two boilers, a fleet of 37 milk tankers and the associated plant equipment and facilities that go with this. The site currently produces approximately 46 tonnes of WMP per hour, with an annual production of 220,000 tonnes. Coal, packaging and finished product are largely transported by rail, with a small amount being handled by heavy goods vehicles. Under the expansion scenario all activity on-site would approximately double.

We propose the following noise limits at the NCB:

- Night-time (2000 – 0700) 45 dB LAeq (15 min) and 70 dB LAFmax
- Daytime (0700 – 2000) 55 dB LAeq (15 min) and 85 dB LAFmax

These limits would apply to all activities within the DPMA, except for construction noise and rail movements.

Construction and demolition would be subject to New Zealand Standard NZS 6803: 1999 “Acoustics - Construction Noise”.

Noise from rail movements has been assessed and any adverse noise effects that would arise at nearby dwellings are predicted to be less than minor in nature. Any adverse noise effect that may arise would be adequately controlled by restricting the number of rail events, rather than through the application of a noise limit. For the purpose of this application we suggest that an appropriate restriction would be no more than two night-time events and an unlimited number of daytime rail events.

Based on the proposal we conclude that the proposed NCB would result in certainty for all parties; and would also ensure that no dwellings received noise levels in excess of those already foreseen and allowed under the existing consent while a number would be assured of lower noise levels.

Overall, any adverse noise effects arising from this application would be less than minor.

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1.0 INTRODUCTION

Fonterra seek the establishment of a Dairy Processing Management Area (DPMA) at their Darfield factory. Marshall Day Acoustics (MDA) has been engaged to perform a noise assessment based on an assumed future expansion scenario and to assist in the development of an appropriate Noise Control Boundary (NCB) for the site.

This report addresses:

- The existing noise compliance framework;
- The major noise sources;
- The assumed expansion scenario; and
- The proposed noise compliance framework.

A glossary of acoustic terminology is provided in Appendix A.

2.0 SITE, ACTIVITY & CONTEXT

The Fonterra Dairy Factory near Darfield is described in greater detail by others. The relevant aspects of the site and surroundings when considering noise are the scale of the activity and its location relative to surrounding noise sensitive receivers.

Currently the site consists of two whole milk powder (WMP) dryers, two boilers, a fleet of 37 milk tankers and the associated plant equipment and facilities that go with this. We understand that the site currently employs around 230 staff and produces approximately 46 tonnes of WMP per hour, with an annual production of 220,000 tonnes of milk powder. Coal, packaging and finished product are largely transported by rail, with a small amount being handled by heavy goods vehicles.

MDA was involved in the design, consenting and commissioning of both dryer 1 (16 tonne/hr) and dryer 2 (30 tonne/hr). While having input into the design and location of the site a significant consideration for MDA was to allow for at least four dryers (or equivalent sound power level plants) to operate at the site without breaching the District Plan noise limits. As the operation of the bulk of the plant produces a fixed noise level regardless of the time of day, it is the night-time noise level that ultimately controls the acoustical design.

The production site lies within extensive landholdings owned or under contract to Fonterra (totalling approximately 680 Ha), all of which carry Rural Zoning in the Selwyn District. At the time of the dryer 1 gaining consent the nearest non-Fonterra dwelling was 'the Oaks B&B'. This property was subsequently purchased by Fonterra prior to dryer 2 being consented. Despite owning the Oaks, Fonterra has opted to keep compliance at the Oaks as a design goal, thus ensuring that noise effects at other non-Fonterra properties would be consistent with previous statements.

A map showing the Fonterra-owned properties is provided in Appendix B.

3.0 APPLICABLE NOISE LIMITS

3.1 District Plan

The District Plan noise limits applying generally in the area are set out in Rule 9.16.1 Table C9.3 of the Selwyn District Plan dated 29 May 2009.

The District Plan provides that any activity shall be conducted so as to comply with the following noise limits assessed at the notional boundary of any dwelling, rest home, hospital, or classroom in any educational facility except where that dwelling, rest home, hospital or classroom is located within a Living zone.

- Daytime (7.30am – 8.00pm) 60 dB L_{A10} & 85 dB L_{AFmax}
- Night-time (8.01pm – 7.29am) 45 dB L_{A10} & 70 dB L_{AFmax}

3.2 Consent Conditions

The site as it currently exists is subject to a number of noise related consent conditions as detailed in the commissioners' decision dated 31 January 2012 (RC115199).

Condition 42 controls noise emissions from the plant. In summary this condition requires that all activities on-site (other than construction) shall not exceed the following limits at the notional boundary of any non-Fonterra owned dwelling:

- Daytime (7.30am – 8.00pm) 60 dB $L_{Aeq\ 15\ min}$ & 85 dB L_{AFmax}
- Night-time (8.00pm – 7.30am) 45 dB $L_{Aeq\ 15\ min}$ & 70 dB L_{AFmax}

Condition 43 b (iv) specifies that noise measurements are undertaken using NZS 6801:2008 and noise assessment is undertaken according to NZS 6802:2008.

The Resource Consent noise limits ensure that an acceptable level of amenity is maintained at nearby dwellings consistent with the nature of the surroundings, while still enabling Fonterra the ability to not only operate the existing dairy factory, but also to expand the site in the future as had been indicated during the consent hearings.

3.3 Demonstration of Compliance

As a matter of record MDA has performed compliance monitoring at the site as required under condition 43. The most recent assessment undertaken is summarised in our report (Rp 006 2014521C) dated 10 November 2014. The key noise assessment locations are shown in Figure 1.

Figure 1: Key noise assessment locations



The calculated noise levels at the assessment positions (derived from measurement locations close to the site as detailed in our November 2014 report) are provided in Table 1. Table 1 also summarises the noise level predicted at these locations during the consenting of dryer 2.

Table 1: Noise levels at nearby dwellings

No	Dwelling	Calculated Noise Level at Notional Boundary (dB L _{Aeq} (15 minute))	
		At Dryer 2 Consent	November 2014
1	Buttle	28	27
6	Francis – House	25	31
7	Francis – Cottage	25	31
8	The Oaks ¹	33	38
11	Seaward	24	29
12	Haselden	29	28
14	Nieuwenhuize	29	30

1. Property owned by Fonterra.

The noise levels at the Buttle, Nieuwenhuize and Haselden properties are within 1dB of the noise levels that were predicted during the dryer 2 consent. Noise levels at the Oaks and the Seaward and Francis properties are around 5dB higher than was predicted during the dryer 2 consent. This is due to the unidentified noise source in the vicinity of dry store/Dryer 1. This noise source was not present in previous two boundary noise surveys or our multiple detailed site commissioning visits. Based on all of our observations we have a high level of confidence in the modelled noise contours for the site and regard that single event as an aberration.

4.0 EXPANSION SCENARIO & RESULTING NOISE LEVELS

Fonterra seek to establish a Dairy Processing Management Area (DPMA) around the Darfield factory. The DPMA will permit modification and/or expansion of the site as needed from time to time without the requirement for a resource consent for each project. In order to control a range of effects that may arise from any future expansion, an Outline Development Plan (ODP) has been prepared for the site.

The assumed expansion scenario we have used as a basis for our consideration is an approximate doubling of the capacity of the plant. This would entail:

- The construction of two additional WMP dryers of the same design and capacity as dryer 2;
- Two additional boilers of the same design and capacity as boiler 2;
- A doubling of all ancillary mechanical services;
- A doubling of dry store space; and
- A doubling of the number of tanker and rail movements.

We have selected WMP dryers as the likely expansion scenario partly as a result of advice from Fonterra that this would be a likely option, and partially because it has been MDA’s experience that the noise footprint created by this type of plant is also likely to encompass any other type of dairy processing plant that might be considered.

As a part of the ODP, a Noise Control Boundary (NCB) will be established. The intention is that the NCB would replace the existing consented noise limits relating to compliance at the notional boundary of any residential dwelling.

When considering potential future noise effects it is important to understand the likely noise sources, their location and the duration and time of day of operation.

4.1 Dominant Noise Sources

The dominant noise sources at dairy factories are:

- Major production facilities (WMP dryers etc);
- Boilers;
- Other fixed mechanical plant (cooling towers, workshops, cleaning and sanitising facilities etc);
- Product load out, coal and milk reception facilities;
- Tanker routes on-site; and
- Rail spurs.

4.2 Location of Future Noise Sources

Fortunately, the Darfield factory has been designed with future expansion in mind. Rail spurs and tanker routes are already in place, as is the milk reception facility (which is designed to accommodate expansion as required). Similarly, there are logical locations at which to construct new production facilities, boilers and mechanical services all of which are closely situated with existing facilities of similar nature.

While these future facilities are described in greater detail by others, the general locality of both existing and new facilities can be understood by reference to the draft ODP discussed below.

4.3 Timing & Duration of Activity

No change is envisioned to the seasonal or daily operations of this site. As a result no new assessment of effects arises from this matter. However, future expansion of the site would lead to both an increase in tanker numbers/movements and an increase in rail movements carrying finished goods away from the site. This increase in tanker and rail movements does have the potential to increase noise emissions from the site.

The Darfield factory is served by the Midland rail line which is the busiest rail line in the country. It is likely that any future expansion of the site would result in some night-time rail operations for network scheduling reasons. Therefore, while the noise generated during a single rail event on-site would not change compared to the current scenario, the activity would now occur outside the current the early morning and daytime periods.

Doubling the number of milk tankers on-site has the potential to double the peak hour noise level generated by the tankers, should the existing shift arrangement continue. This would impact the size of the noise contour in close proximity to the main site access (as the contour here is dominated by tanker movements at peak hour). We are advised by Fonterra that for traffic management reasons the preferred solution is to stagger work shifts at the site. This results in no increase in peak hour noise generation (as the maximum number of tanker movements in any one hour will not change), but instead extends the duration of time over which the peak occurs. However, as the noise effects of the current tanker peak hour have been assessed and the extension of peak remains in the daytime, we have not considered this point further.

4.4 Predicted Noise Levels

We have predicted noise levels arising from two aspects of the proposed expansion scenario:

1. Noise level during the peak period of tanker activity and all dryers, boilers and other mechanical plant running, on-site movement of coal from stockpile to boilers, product load out occurring and milk reception in operation.
2. Noise level during a rail movement with all dryers, boilers and other mechanical plant running, on-site movement of coal from stockpile to boilers, no product load out, milk reception and normal hour tanker movements all occurring.

Rail movements cannot practically occur at the same time as product load out and peak hour tanker movements because the train crosses the site access road.

Predicted noise levels for these scenarios are provided in Figure 2 and Figure 3 respectively. Larger versions of these figures are provided in Appendix D.

Figure 2: Full Expansion – Peak Hour (No Rail)

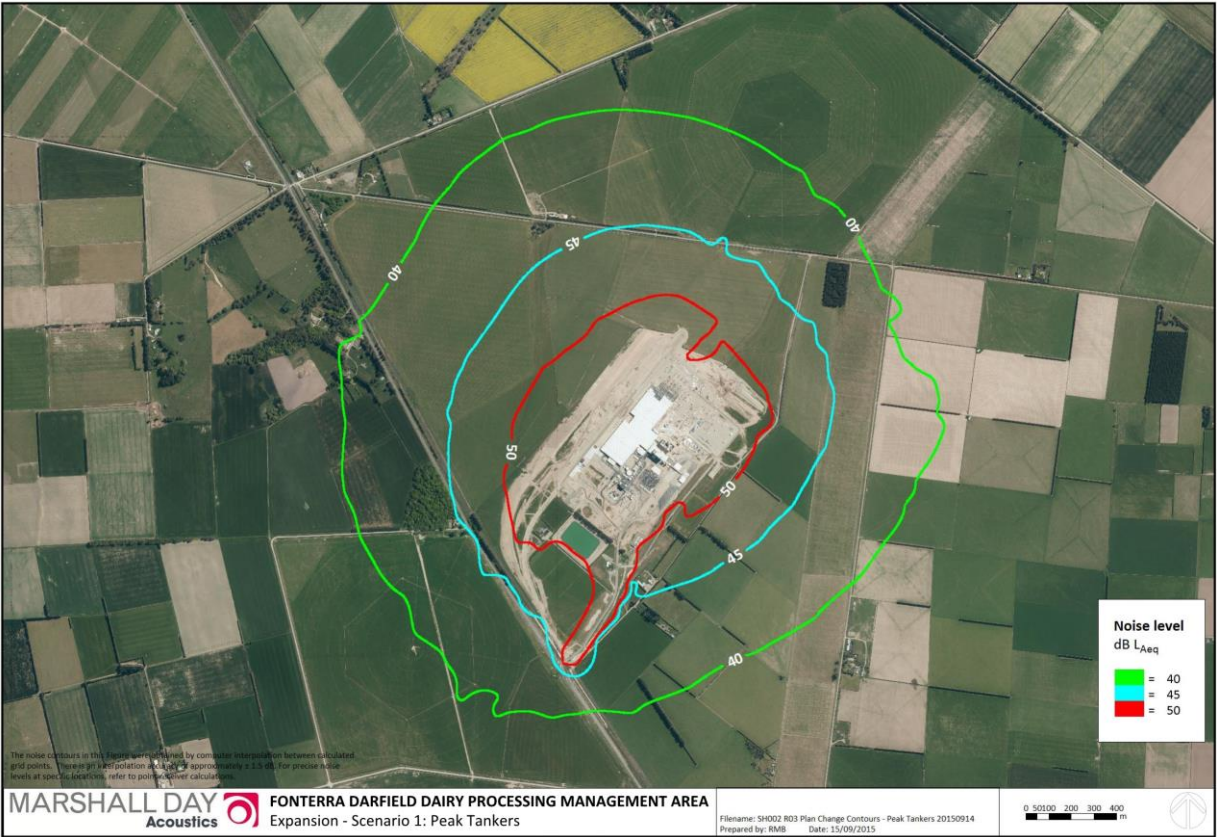
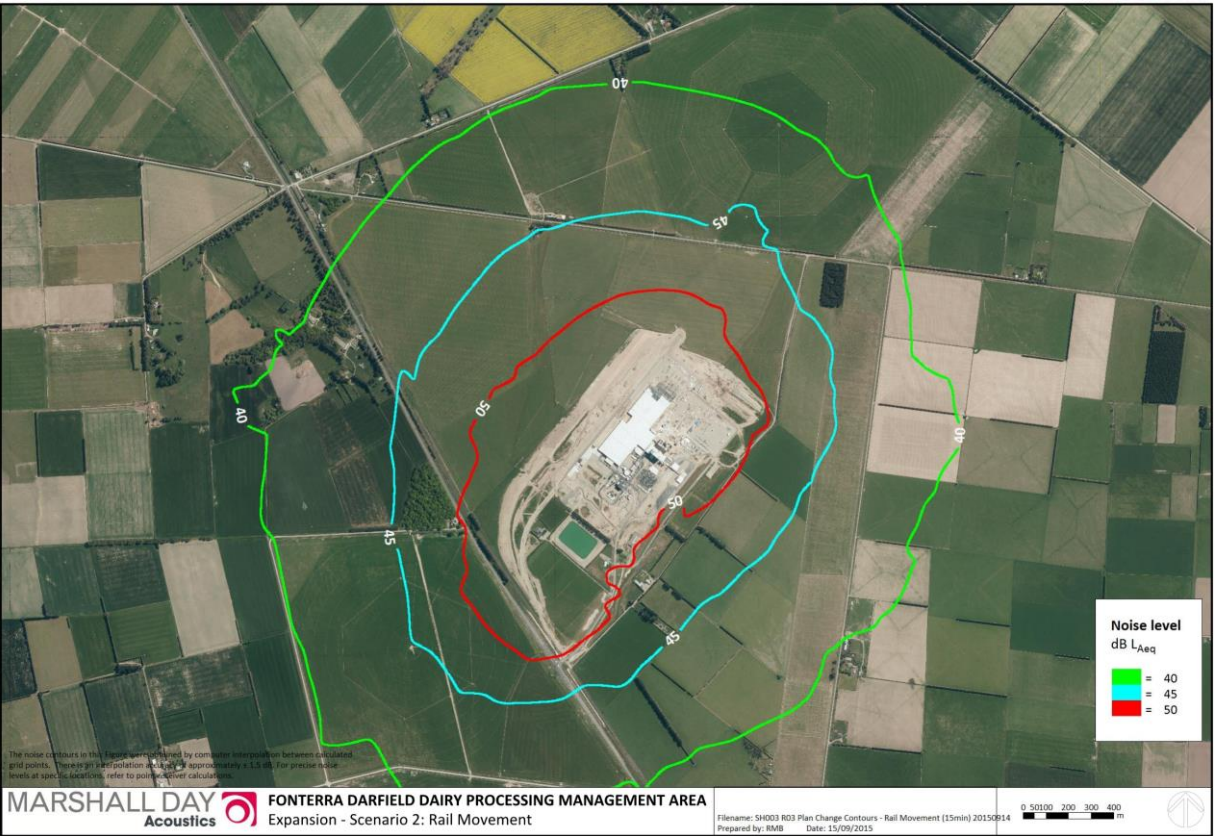


Figure 3: Full Expansion – Rail Movement



4.5 Resulting Noise Effects - Operational Noise

These predicted noise contours for the peak hour scenario is entirely consistent with the requirements of the existing land use consent (RC115199), specifically condition 42. No non-Fonterra owned dwelling would receive noise levels greater than 45 dB $L_{Aeq, 15 \text{ min}}$ and the activity would therefore comply with the consented noise limits during both the daytime and night-time.

As expansion of the factory was mooted during the dryer 2 consent hearing; and the assessment of noise effects was based on a night-time limit of 45 dB $L_{Aeq, 15 \text{ min}}$ at non-Fonterra dwellings being acceptable for the protection of sleep amenity, we see no need to consider any potential operational noise effects further.

We note that should Fonterra sell the Oaks B&B in the future, the highest operational noise level at this location is still consistent with condition 42.

4.6 Resulting Noise Effects - Rail Noise

Again the predicted noise contours for the factory during rail movements demonstrate compliance with consent condition 42.

Should Fonterra sell the Oaks B&B, in the future the predicted noise level during a rail movement would be 50 dB $L_{Aeq, 15 \text{ min}}$. This would exceed the night-time limit in condition 42 by 5 dB. Even if this were to occur, the resulting noise levels would not be unreasonable or lead to a significant reduction in sleep amenity. With windows ajar for ventilation an external noise level of 50 dB will result in a noise level inside bedrooms of 35 dB. This still provides a satisfactory level of sleep amenity, particularly when the location of the Oaks close to the State Highway and main rail line, and the short duration and sporadic nature of the rail activity is considered.

In our view the proposal to add night-time rail movements would result in noise effects that are less than minor at all properties including the Oaks B&B.

5.0 PROPOSED NOISE CONTROL BOUNDARY

Based on these predicted noise levels and the lack of any new or significantly enhanced adverse noise effects, we consider it appropriate to propose an NCB that would apply to the Darfield factory. The purpose of an NCB is to:

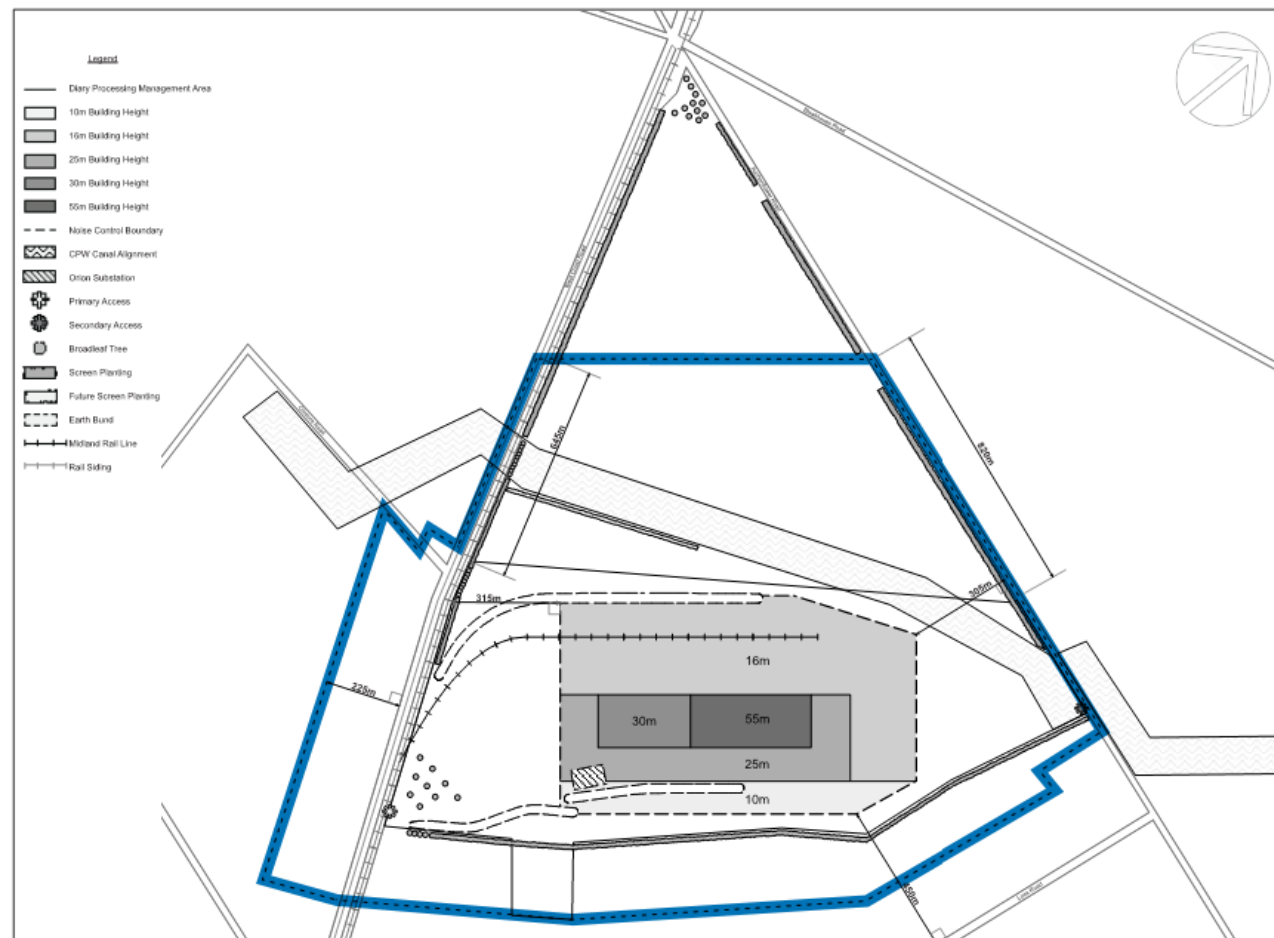
1. Provide certainty to Fonterra as to how far any noise effects may extend, while also providing flexibility to modify and develop the site without having to gain a resource consent for every change.
2. Provide certainty for neighbours and Council as to exactly where Fonterra shall comply with noise limits.
3. Provide an easily found line for the purpose of future noise monitoring and assessment, even when such monitoring may be occurring in the dark.

While noise contours, such as those provided in Figures 2 & 3 are useful for understanding the noise level at specific locations (and thus fulfil points 1 and 2 above), they are very difficult to pinpoint in the field, particularly at night. Even for third parties seeking to establish these locations, the only practical way to do so would be to have access to a co-ordinate file describing the contour.

Our preference is for an NCB to follow, to the greatest extent possible, easily defined and recognised features such as cadastral boundaries, roads, geographic features or permanent fence lines that reasonably closely match the general shape of the modelled/measured noise contour. Where this is not practical, or where this would lead to very large deviations from the noise contours, our preference is to have the NCB follow simple offsets from a defined boundary or other feature, or to directly join two known and easily defined points via a straight line.

We have followed this policy when drawing our proposed Darfield Dairy factory NCB as shown in Figure 4. A complete version of the ODP figure is provided in Appendix E.

Figure 4: Proposed Darfield Dairy Factory Noise Control Boundary.



In general the proposed NCB follows Fonterra owned land boundaries where possible, while cutting across Fonterra owned land at locations that will ensure that no non-Fonterra owned dwelling will receive a greater noise level that envisioned under consent condition 42, and that a significant number will be assured of significantly less.

Other features shown on the proposed ODP relevant to noise include the DPMA outline and the location at which buildings have a stipulated maximum height. These are of relevance because, although Fonterra has significant land holdings around the factory the DPMA line restricts Fonterra to only permitted rural activities outside the DPMA. Similarly, the existing site layout when combined with the height restriction areas ensure that dryer buildings can only be practically built in the 55m building height area, boilers in the 30m building height area, silos and associated mechanical services in the 25m building height areas, dry stores in the 16m building height area and ancillary buildings or activities in the 10m building height areas.

The combination of the building height restrictions and the proposed NCB provide Fonterra with significant scope to expand the site, while at the same time ensuring that existing neighbours have their amenity protected.

6.0 PROPOSED NOISE LIMITS

We propose the following noise limits at the NCB:

Night-time (2000 – 0700)	45 dB $L_{Aeq\ 15\ min}$ and 70 dB L_{AFmax}
Daytime (0700 – 2000)	55 dB $L_{Aeq\ 15\ min}$ and 85 dB L_{AFmax}

These limits would apply to all activities within the DPMA, except for construction noise and rail movements.

Construction and demolition would be subject to New Zealand Standard NZS 6803: 1999 “Acoustics - Construction Noise”.

In our view the noise from rail movements has been adequately assessed and any adverse noise effects that could arise at nearby dwellings would be less than minor in nature.

Any adverse effect that may arise is adequately controlled by restricting the number of rail events, rather than measuring the noise level generated. For the purpose of this application we suggest that an appropriate restriction would be no more than two night-time events and an unlimited number of daytime rail events.

7.0 PROPOSED SOUND INSULATION RULE

There are some areas of non-Fonterra owned land within the NCB. While there are no dwellings currently in these areas, new houses could be constructed in the future. This Plan Change application includes proposed alterations to Rule 3.13.1.6, Part C3 that will result in a requirement for new dwellings within the Darfield NCB to be designed to achieve a minimum outdoor to indoor sound level difference of 20 dB $D_{tr,2m,nTw}$ to any bedroom to protect against potential sleep disturbance effects.

Based on the peak hour noise contour in Figure 2, the highest night-time noise level any dwelling within the NCB could be exposed to is 50 dB L_{Aeq} . Therefore, internal noise levels inside bedrooms at night-time new dwellings within the NCB will be around 30 dB L_{Aeq} , which is an appropriate level for sleep. Therefore, any potential reverse sensitivity effects associated with night-time noise emissions will be less than minor.

9.0 COST OF ENHANCED COMPLIANCE

Others are better placed to comment in detail on the additional costs incurred in replicating the noise control, sound insulation and general mitigation by management already provided on-site across the proposed expansion. It is our estimate that buildings and noise control measures similar to those already constructed at Darfield cost significantly more than the typical minimum-cost constructions often observed in other dairy processing developments that take a shorter term view. These additional costs would add into the millions of dollars at a site such as Darfield.

Primarily these increased costs include:

- Buildings constructed from thick concrete or concrete-composite materials;
- Enhanced use of attenuators and acoustic louvres;
- Selection of quieter (more expensive) fans and motors;
- Increased use of flexible connections and vibration isolating mounts; and
- Enhanced electronic control equipment to control induced tonality.

In order for Fonterra to internalise noise effects completely (for the proposed NCB not to extend beyond Fonterra land), all of these noise control measures would require significant additional performance. In addition the following significant mitigation would be required:

- An enclosed rail tunnel (steel cladding) extending perhaps 500 metres from the site entrance;
- An enclosed tunnel on the main site road access, again covered with steel cladding and extending 400-500 metres into the site;
- A concrete-composite milk reception fully enclosed with acoustically rated rapid action doors at each end of each bay and acoustically treated mechanical ventilation;
- Major reductions to noise from cooling towers (we are not sure if this is in fact practicable); and
- Future boilers to be constructed in heavy concrete rather than concrete composite cladding.

Even with the above mitigation measures implemented, as the existing 45 dB L_{Aeq} crosses the proposed DPMA, complete internalisation would not be achieved.

The likely costs of such treatment would extend into the tens of millions of dollars in our estimation.

There are also potential costs for new dwellings constructed within the NCB in order to achieve the required outdoor to indoor sound level difference. As any standard new dwelling will be able to achieve 20 dB $D_{tr,2m,nTw}$ with windows closed, any additional costs would be associated with providing sufficient fresh air to bedrooms. The design of ventilation systems is outside our area of expertise, but we understand that passive ventilation options are available that add very minimal cost to the overall construction. The most expensive solution is likely to be a full mechanical ventilation system, which we understand to be in the order of \$5,000 to \$10,000¹.

10.0 CONCLUSIONS

The Fonterra Darfield factory has been designed with future expansion in mind. Based on the proposed expansion scenario and layout guidance provided by Fonterra we reach the following conclusions:

- The planned maximum expansion scenario can be undertaken while still complying with the noise limits in condition 42 of the existing consent;
- No existing non-Fonterra dwellings would suffer a decrease in amenity as a result of such expansion that is not already foreseen by the existing conditions of consent;
- Constructing new dwellings within the Noise Control Boundary will still be a permitted activity subject to meeting a minimum outdoor to indoor noise reduction for bedrooms, much of which will largely be achieved through compliance with the New Zealand Building Code;
- The proposed Noise Control Boundary would result in certainty for all parties; and would also ensure that no neighbours receive noise levels in excess of those already foreseen and allowed under the existing consent while a number would be assured of lower noise levels;
- Noise effects arising from night-time train movements will be less than minor at all dwellings, including the Oaks B&B (currently Fonterra owned). Any adverse noise effect can be controlled by restricting the number of night-time train movements, rather than by applying a noise limit to train movements. The number of train movements is also easily and cheaply verified; and
- Overall, any adverse noise effects arising from this application are less than minor.

¹ NZTA State Highway Guide to Acoustic Treatment of Buildings Version 1.0, June 2015

APPENDIX A GLOSSARY OF TERMINOLOGY

Noise	A sound that is unwanted by, or distracting to, the receiver.
Ambient	The ambient noise level is the noise level measured in the absence of the intrusive noise or the noise requiring control. Ambient noise levels are frequently measured to determine the situation prior to the addition of a new noise source.
SPL or L _p	<u>Sound Pressure Level</u> A logarithmic ratio of a sound pressure measured at distance, relative to the threshold of hearing (20 µPa RMS) and expressed in decibels.
SWL or L _w	<u>Sound Power Level</u> A logarithmic ratio of the acoustic power output of a source relative to 10 ⁻¹² watts and expressed in decibels. Sound power level is calculated from measured sound pressure levels and represents the level of total sound power radiated by a sound source.
dB	<u>Decibel</u> The unit of sound level. Expressed as a logarithmic ratio of sound pressure P relative to a reference pressure of Pr=20 µPa i.e. dB = 20 x log(P/Pr)
A-weighting	The process by which noise levels are corrected to account for the non-linear frequency response of the human ear.
L _{Aeq} (t)	The equivalent continuous (time-averaged) A-weighted sound level. This is commonly referred to as the average noise level. The suffix "t" represents the time period to which the noise level relates, e.g. (8 h) would represent a period of 8 hours, (15 min) would represent a period of 15 minutes and (2200-0700) would represent a measurement time between 10 pm and 7 am.
L _{Amax}	The A-weighted maximum noise level. The highest noise level which occurs during the measurement period.
NZS 6801:2008	New Zealand Standard NZS 6801:2008 <i>“Acoustics – Measurement of environmental sound”</i>
NZS 6802:2008	New Zealand Standard NZS 6802:2008 <i>“Acoustics – Environmental Noise”</i>
NZS 6803:1999	New Zealand Standard NZS 6803: 1999 <i>“Acoustics - Construction Noise”</i>
Sound Insulation	When sound hits a surface, some of the sound energy travels through the material. ‘Sound insulation’ refers to ability of a material to stop sound travelling through it.
Transmission Loss	The attenuation of sound pressure brought about by a building construction.
D _{nT,w}	<u>Weighted Standardised Level Difference</u> A single number rating of the sound level difference between two rooms. DnT,w is typically used to measure the on-site sound insulation performance of a building element such as a wall, floor or ceiling

APPENDIX B FONTERRA PROPERTY MAP

APPENDIX C NOISE MODELLING METHODOLOGY

The predicted noise contours in this report were calculated using the SoundPLAN v7.3 suite of noise modelling software. This software calculates noise propagation through 3-dimensional geometric ray tracing, implementing algorithms given in International Standard ISO 9613-2:1996 *“Acoustics – Attenuation of sound during propagation outdoors – Part 2: General method of calculation”*.

This method has the scope to take into account a range of factors affecting the sound propagation including:

- The magnitude of the noise source in terms of sound power level;
- The distance between source and receiver;
- The presence of obstacles such as bunds, buildings and fences in the propagation path;
- The presence of reflecting surfaces;
- The hardness of the ground between the source and receiver;
- Attenuation due to atmospheric absorption; and
- Meteorological effects such as wind gradient, temperature gradient and humidity.

The effect of meteorological conditions is significantly simplified in ISO 9613-2:1996 by calculating the average downwind sound pressure level. The Standard adopts the conservative approach of assuming that wind is always blowing from the noise sources to the receiver locations. The equations and calculations for downwind propagation also hold for average propagation under a well-developed moderate-ground based temperature inversion, such as commonly occurs on clear, calm nights.

Source sound power levels in the noise model are predominantly based on noise level measurements of the existing equipment at Fonterra Darfield, supplemented by manufacturer’s data and measurements at other similar industrial facilities around New Zealand.

APPENDIX D NOISE CONTOURS FOR EXPANSION SCENARIO

Figure 2: Full Expansion – Peak Hour (No Rail).

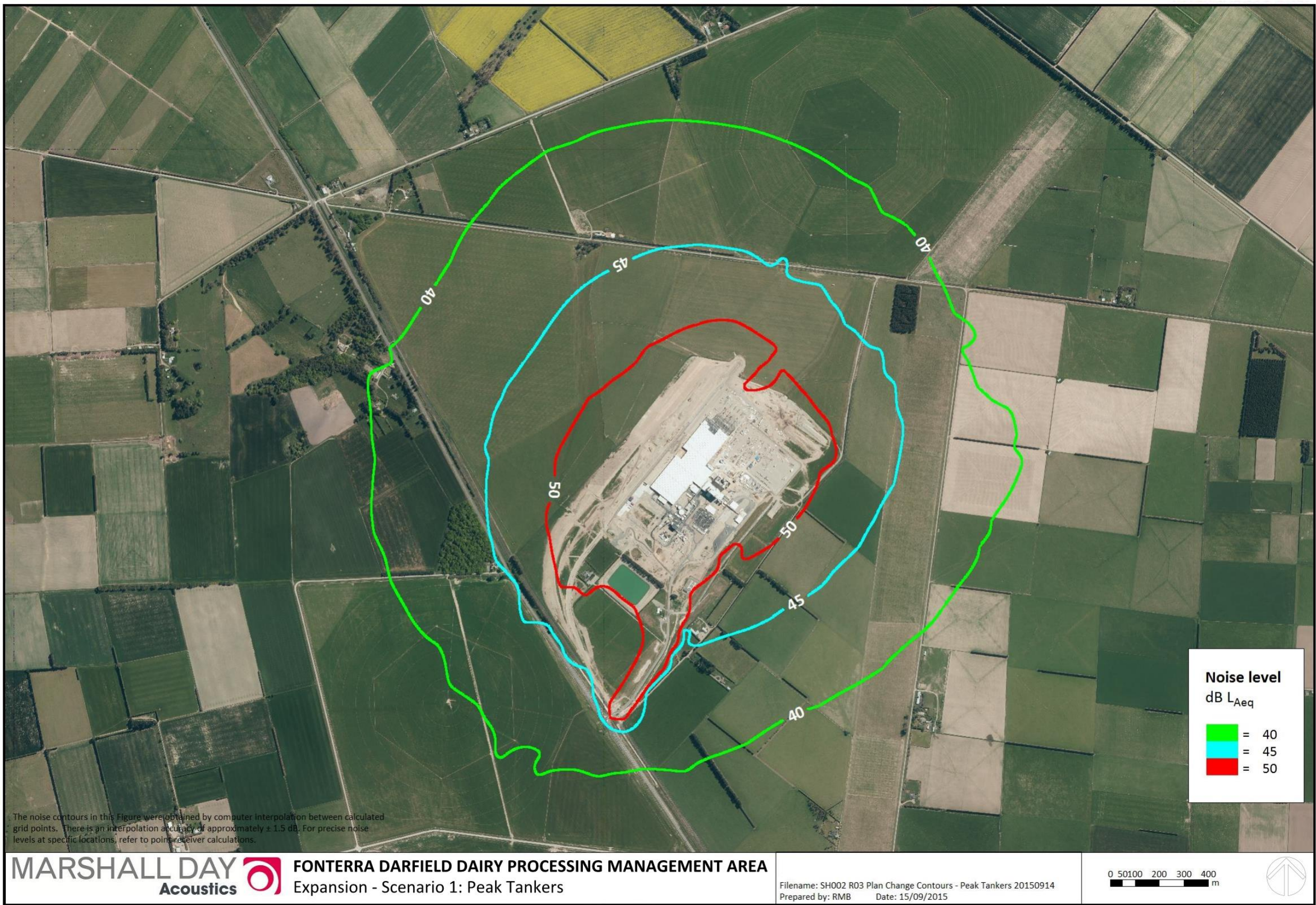
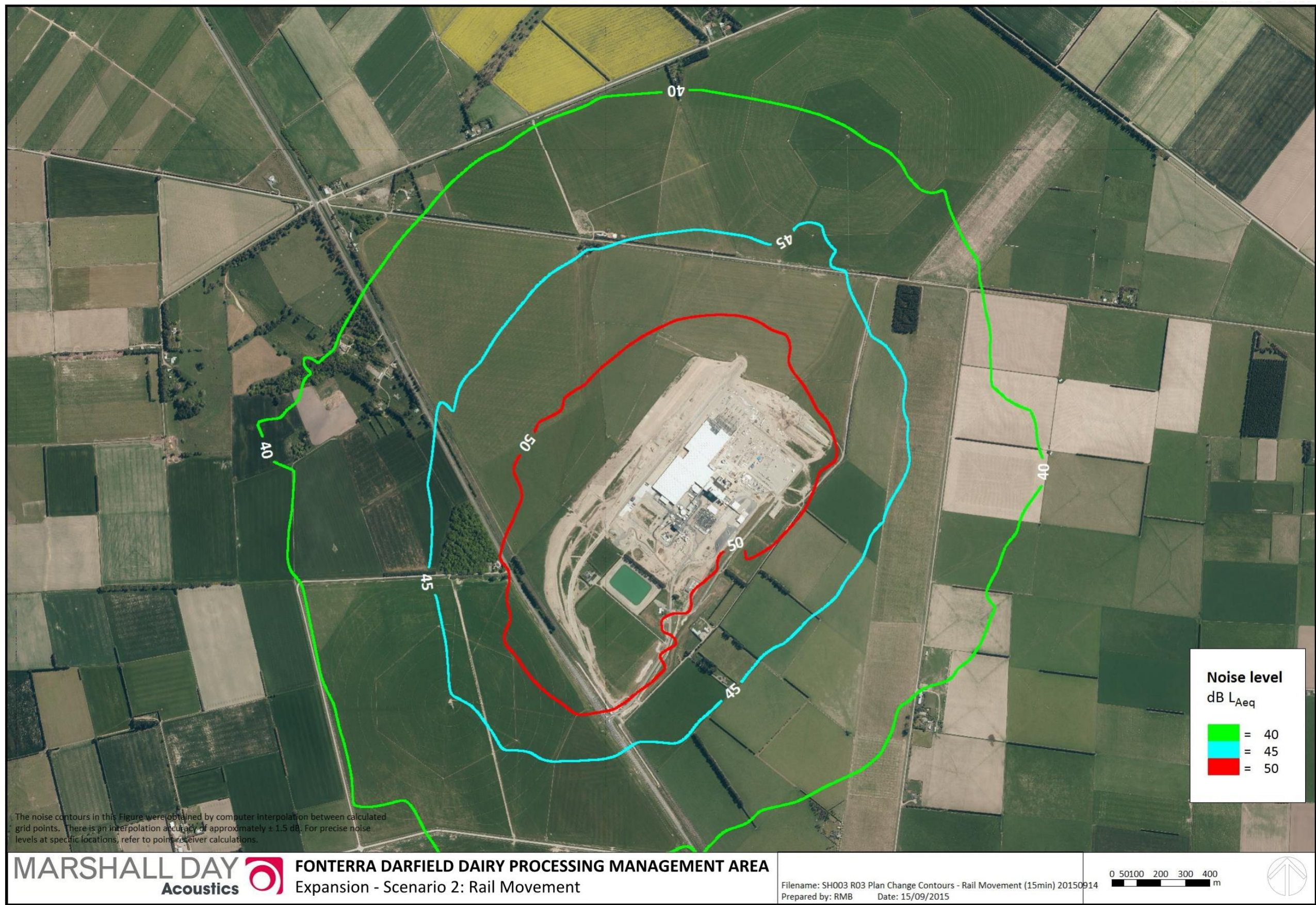
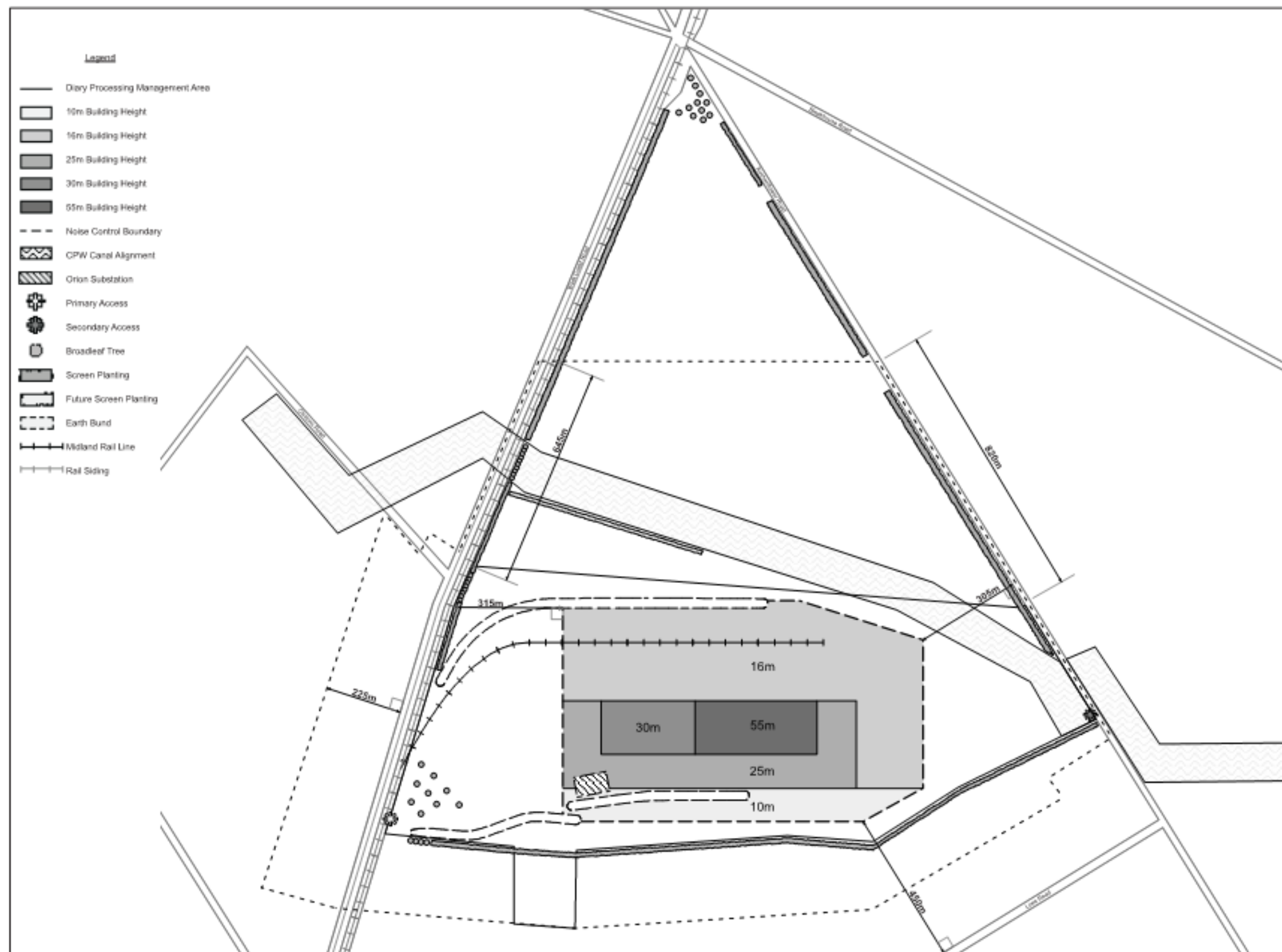


Figure 3: Full Expansion – Rail Movement



APPENDIX E PROPOSED ODP SHOWING NOISE CONTROL BOUNDARY (NCB)



FONTERRA DARFIELD PROCESSING MANAGEMENT AREA - ODP

Appendix 26B
Outline Development Plan
31 August 2015 / Revision 01

APPENDIX 7A and 7B:

Cultural Impact Assessment

Tipa & Associates

and

Fonterra's response to the CIA

CULTURAL IMPACT ASSESSMENT FOR FONTERRA'S PROPOSED PRIVATE PLAN CHANGE TO CREATE A DAIRY PROCESSING MANAGEMENT AREA AT THE FONTERRA DARFIELD MILK FACTORY



**Prepared by Tipa & Associates on behalf of Te Ngāi Tūāhuriri
Rūnanga and Te Taumutu Rūnanga**

October 2015

Left side title photo source: Selwyn River at Coesford

Right side title photo source: Ngai Tahu website. Whakaora Te Waihora - Te Waihora at Kaituna section.

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EXECUTIVE SUMMARY

Te Taumutu Rūnanga and Te Ngāi Tūāhuriri Rūnanga have a responsibility as kaitiaki to assess how any activity in their takiwa will impact upon their cultural values. Therefore Fonterra are to acknowledge the kaitiaki responsibilities of Te Ngāi Tūāhuriri Rūnanga and Te Taumutu Rūnanga in undertaking any activities within their takiwa.

Potential impacts

Te Taumutu Rūnanga and Te Ngāi Tūāhuriri Rūnanga has few concerns with the application by Fonterra for a private plan change to create a DPMA at their Darfield Milk Factory.

These concerns relate to how Fonterra will take into consideration all the recommendations which had were raised by Te Taumutu Rūnanga within the CIA (Jolly, 2014), prepared for a similar private plan change done by Synlait Milk Limited, and other concerns raised into this CIA. Although some of these concerns were addressed by Selwyn District Council within the Synlait Milk Limited plan change there are still some recommendations that were not addressed fully.

Te Taumutu Rūnanga and Te Ngāi Tūāhuriri Rūnanga support in principle this type of plan change by Fonterra at their Darfield Milk Factory but would like to consult with Fonterra directly, through a method decided by Te Taumutu Rūnanga and Te Ngāi Tūāhuriri Rūnanga. The purpose of the consultation to clarify their concerns and to get more information from Fonterra.

General issues

- The creation of a DPMA at the Fonterra Darfield Milk Factory could allow future expansion at the site to be streamlined which could limit the amount of future consultation required with Te Taumutu Rūnanga and Te Ngāi Tūāhuriri Rūnanga.
- Any future expansion i.e. stormwater or wastewater management within the DPMA could have an effect on the cultural values and the environment outside of the DPMA including on waterways and taonga species.
- The plan change, if based solely on Synlait Milk Limited plan change, may not address or intergrate Te Taumutu Rūnanga recommendations, based in Maahanui Iwi Management Plan, in relation to lighting and sustainable design as it has limited rules around these issues
- The sensitivity and importance of the Te Waihora Catchment mean Te Taumutu Rūnanga and Te Ngāi Tūāhuriri Rūnanga would like more information from Fonterra on future works or potential issues at the Darfield Milk Factory i.e. Report on potential impacts on groundwater from Earthworks
- Any future expansion at Fonterra Darfield Milk factory relating to storm water or wastewater management could be an issue for Taumutu as it may have a long term impact on the environment and its associated cultural values.

Overall assessment

From the interviews there were four issues that need to be resolved.

1. Te Taumutu Rūnanga and Te Ngāi Tūāhuriri Rūnanga would like to have a long term relationship with Fonterra to deliver cultural, environmental and economic outcomes
 - a. The two runanga would like to discuss with Fonterra how they would like to establish a long term relationship in relation to the operation of the Darfield Milk factory. This discussion would include
 - i. how this relationship would be facilitated i.e. regular meetings with runanga, establishment of a Cultural advisory group or both

- b. In the long term, the two runanga would like to work with Fonterra on expanding or advocating for restoration on their land, their shareholders land and the wider Te Waihora Catchment
 - i. In the two runanga would like Fonterra to expand, or continue, the restoration and native landscape planting at the Darfield Milk factory and surrounding Fonterra owned land.
 - ii. Part of this long term relationship could include working together, or continuing to, throughout the Te Waihora Catchment on a variety of restoration initiatives
 - c. As part of this relationship the two runanga would like Fonterra to advocate for the uptake of “best management practice” to their shareholders and in general within the Te Waihora Catchment. For the two runanga “best management practice” may need to be defined by working with the runanga.
- 2. Te Taumutu Rūnanga and Te Ngāi Tūāhuriri Rūnanga would like Fonterra to prepare or make available to the runanga a range of information relating to the operation of the Darfield Milk Factory. Once the two runanga receive this information they may make recommendations to Fonterra on how they would like Fonterra to address concerns raised within this information. This information includes:
 - a. Environmental monitoring or reports carried out by Fonterra within Te Waihora Catchment
 - b. Monitoring carried out at Darfield Milk Factory
 - c. Preparing or providing the following management plans
 - i. Stormwater management plan;
 - ii. Earthworks Management plan;
 - iii. Landscape planting plan;
 - iv. Wastewater management plan; and
 - v. Any others the runanga require or would like to provide input
 - d. All new information Fonterra have prepared for their private plan change not provided at the time of writing this CIA
- 3. Te Taumutu Rūnanga and Te Ngāi Tūāhuriri Rūnanga would like Fonterra to show how they will integrate the recommendations from the CIA prepared by Jolly 2014. Currently, Fonterra have provided some information in relation to how they will address these recommendations but not all areas. The areas covered in this CIA include:
 - a. Landscape planting
 - b. Earthworks
 - c. Lighting
 - d. Stormwater management
 - e. Low impact and sustainability design principles;and
 - f. Managing discharges in a integrated manner
- 4. A site visit by a group from Te Ngāi Tūāhuriri Rūnanga and Te Taumutu Rūnanga to the Fonterra Darfield Milk Factory is recommended in the short term so Fonterra so representatives from the two runanga can see what Fonterra have planned at the factory in relation to the plan change and what future expansion they have planned.

Te Taumutu Rūnanga and Te Ngāi Tūāhuriri Rūnanga support in principle the private plan change proposed by Fonterra at their Darfield Milk Factory although they would like to have direct consultation with Fonterra to discuss some of their concerns.

Te Ngāi Tūāhuriri Rūnanga and Te Taumutu Rūnanga see this initial consultation as a way to establish a long term relationship with Fonterra through regular Hui.

INTRODUCTION

Ngāi Tahu have a historical relationship and pattern of use with the catchments of the South Canterbury. The Crown formally recognised this significance recently with the enactment of the Te Rūnanga o Ngāi Tahu Act 1996 and the Ngāi Tahu Claims Settlement Act 1998. Te Taumutu Rūnanga along with Te Ngāi Tūāhuriri Rūnanga are the kaitiaki Rūnanga for this area. They are responsible for assessing how any activity in their takiwā impacts upon their cultural values, beliefs and practices.

Fonterra are expected to acknowledge the kaitiaki responsibilities of Te Taumutu Rūnanga and Te Ngāi Tūāhuriri Rūnanga in undertaking this development. Fonterra commissioned this CIA to document the concerns of Te Taumutu Rūnanga and Te Ngāi Tūāhuriri Rūnanga with respect to the request for a private plan change for a Dairy Processing Management Area for the Fonterra Darfield Dairy Factory.

1.1. Project Objectives

The objectives of this report are:

- To provide information on the nature and extent of cultural interests, in the area with respect to their proposed private plan change to create an Dairy Processing Management Area at the Fonterra Darfield Milk Factory which is located within the Te Waihora catchment.
- To provide for the relationship of Ngāi Tahu with the Te Waihora catchment, as protected by the provisions of the Resource Management Act 1991, in particular sections 6(e), 7(a) and 8;
- To identify the impacts associated with the proposal that are of concern to Te Taumutu Rūnanga and Te Ngāi Tūāhuriri Rūnanga; and
- To identify mitigation for impacts identified by Te Taumutu Rūnanga and Te Ngāi Tūāhuriri Rūnanga.

1.2 Format of the report

This report has been divided into a number of chapters:

Chapter 1 - sets out the objectives and scope of the report.

Chapter 2 - describes the proposal.

Chapter 3 - provides the statutory, planning and policy frameworks within which the cultural impacts will be assessed.

Chapter 4 - provides a general discussion of the issues of concern to Te Taumutu Rūnanga and Te Ngāi Tūāhuriri Rūnanga that are specific to the proposal.

Chapter 5 - concludes the report, highlighting the key issues that need to be addressed from the perspective of the Te Taumutu Rūnanga and Te Ngāi Tūāhuriri Rūnanga.

1.3 The areas considered in this report

We have included, as Figure 1, the major catchments that we are considering in this assessment. However, we acknowledge that whānau value cultural landscapes at multiple levels including the entirety of the riverscape from the mountains to the sea.

Figure 1 – Fonterra Darfield Milk Factory and surrounding waterways



1.4 Understanding the Cultural Context

The discussion of the cultural values of Taumutu Rūnanga and Tūāhuriri Rūnanga that is included in **Appendix 1** of this report is a summary of the cultural values within Mid Canterbury. This summary seeks to provide a conceptual framework for the assessment of impacts in Chapter 4. This framework, we believe, is essential to understanding the depth and complexity of Tūāhuriri Rūnanga relationship with Mid Canterbury, and the impacts of the activity on this relationship.

1.5 Terminology used in this report

In this document, the use of the term ‘Ngāi Tahu’ should be considered to include the constituent indigenous iwi, being Ngāi Tahu, Ngāti Mamoe, Waitaha. The term ‘iwi’ (tribe) is used in the same context.

We have also used the term “Taumutu and Tūāhuriri” which is to be read as Tūāhuriri Rūnanga and Te Taumutu Rūnanga.

The terms “Canterbury Regional Council (CRC)” and “Environment Canterbury (ECAN)” are also used interchangeably throughout this report.

1.6 Limitation of this Report

This CIA represents best endeavours by Te Taumutu Rūnanga and Tūāhuriri Rūnanga to identify cultural effects of concern. They reserve the right, however, to oppose the proposal or pursue avoidance or mitigation of any subsequent impacts that are identified as a result of further site visits or further discussions with Tūāhuriri Rūnanga and Te Taumutu Rūnanga.

1.7 Consultation with Tūāhuriri Rūnanga and Te Taumutu Rūnanga

Te Rūnanga o Ngāi Tahu (TRONT) is the tribal representative body of Ngāi Tahu Whānui (the tribal collective), and is a body corporate duly established on 24 April 1996.¹ The Te Rūnanga o Ngāi Tahu Act 1996 (the Act) provides a detailed description of the takiwā (area) of Ngāi Tahu Whānui, which confirms that the proposal is within the rohe of Ngāi Tahu.²

The Act states:

- *Te Rūnanga o Ngāi Tahu shall be recognised for all purposes as the representative of Ngāi Tahu Whānui.*
- *Where any enactment requires consultation with any iwi or with any iwi authority, that consultation shall, with respect to matters affecting Ngāi Tahu Whānui, be held with Te Rūnanga o Ngāi Tahu.*
- *Te Rūnanga o Ngāi Tahu in carrying out consultation under subsection 2 of this section shall seek the views of such papatipu Rūnanga of Ngāi Tahu whānui and such hapu as in the opinion of Te Rūnanga o Ngāi Tahu may have views that they wish to express in relation to the matter ...*³

The Act therefore confirms TRONT's status as the legal representative of the tangata whenua, and the right of the Papatipu Rūnanga to express their own views on this development.

The First Schedule of the Act lists the eighteen Papatipu Rūnanga that represent the members of Te Taumutu Rūnanga and Tūāhuriri Rūnanga whom are identified as constituent Papatipu Rūnanga and are therefore recognised by TRONT as the kaitiaki Rūnanga for the area affected by the proposal. It is common practice today for the interests of Ngāi Tahu whānui to be represented by both TRONT and the kaitiaki Rūnanga of the area involved.

Whānau from the Taumutu Rūnanga were interviewed in preparing this assessment with Tūāhuriri Rūnanga being provided with a draft to provide their input to. This method was used as Taumutu Rūnanga has already provided input to a CIA prepared for a similar plan change by Synlait Milk Limited and which used the Maahanui Iwi Management plan (MIWP) which is the iwi management plan for both runanga.

The location of the marae that is at the centre of each of the Rūnanga is shown in Figure 2.

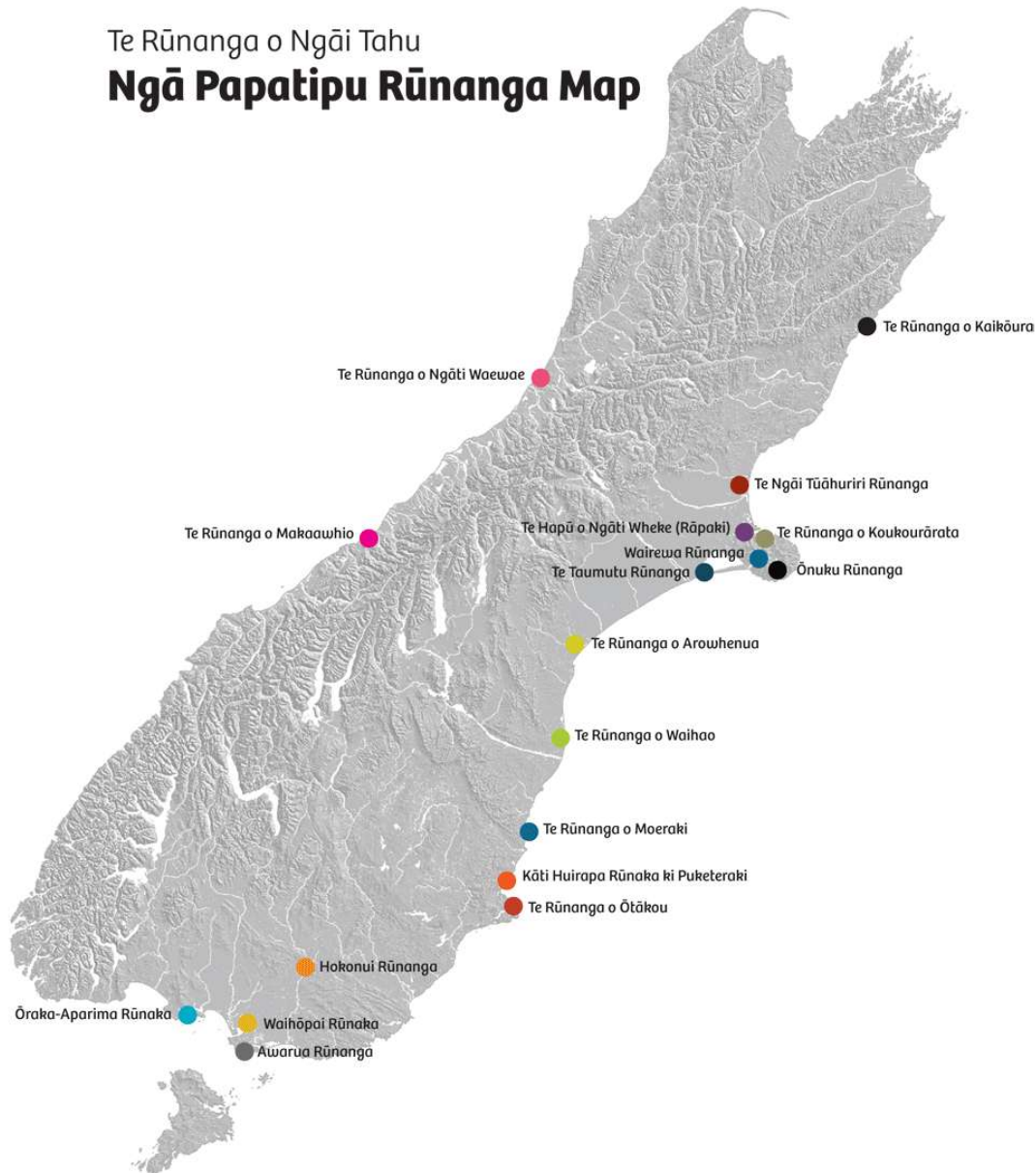
Te Taumutu Rūnanga and Tūāhuriri Rūnanga are the papatipu runanga of kaitaki runanga of area where the Fonterra Darfield Milk Factory is located. As the kaitaki runanga Te Taumutu Rūnanga and Tūāhuriri Rūnanga have a responsibility to assess the impacts of any activity within their takiwa and therefore were consulted for this CIA. This consultation included whānau from the Te Taumutu Rūnanga being interviewed and Tūāhuriri Rūnanga providing feedback to the draft CIA. Their comments and feedback informed the preparation of this assessment.

¹ Te Rūnanga o Ngai Tahu Act 1996, Section 6

² Te Rūnanga o Ngai Tahu Act 1996, Section 5

³ Te Rūnanga o Ngai Tahu Act 1996, Sections 15(1) – 15(3)

Figure 2 – Ngāi Tahu Papatipu Runanga



1.8 The relationship between this and previous CIAs prepared for the project area

Various organisations have commissioned TRONT or Papatipu Rūnanga to prepare Cultural Impact Assessments of development projects. CIAs previously prepared that were specific to Te Waihora Catchment have been accessed to ensure consistency in the information that is being supplied.

1.9 Release of this CIA

Te Taumutu Rūnanga and Tūāhuriri Rūnanga have received a draft of this CIA for comment but have yet to approve the release of this CIA.

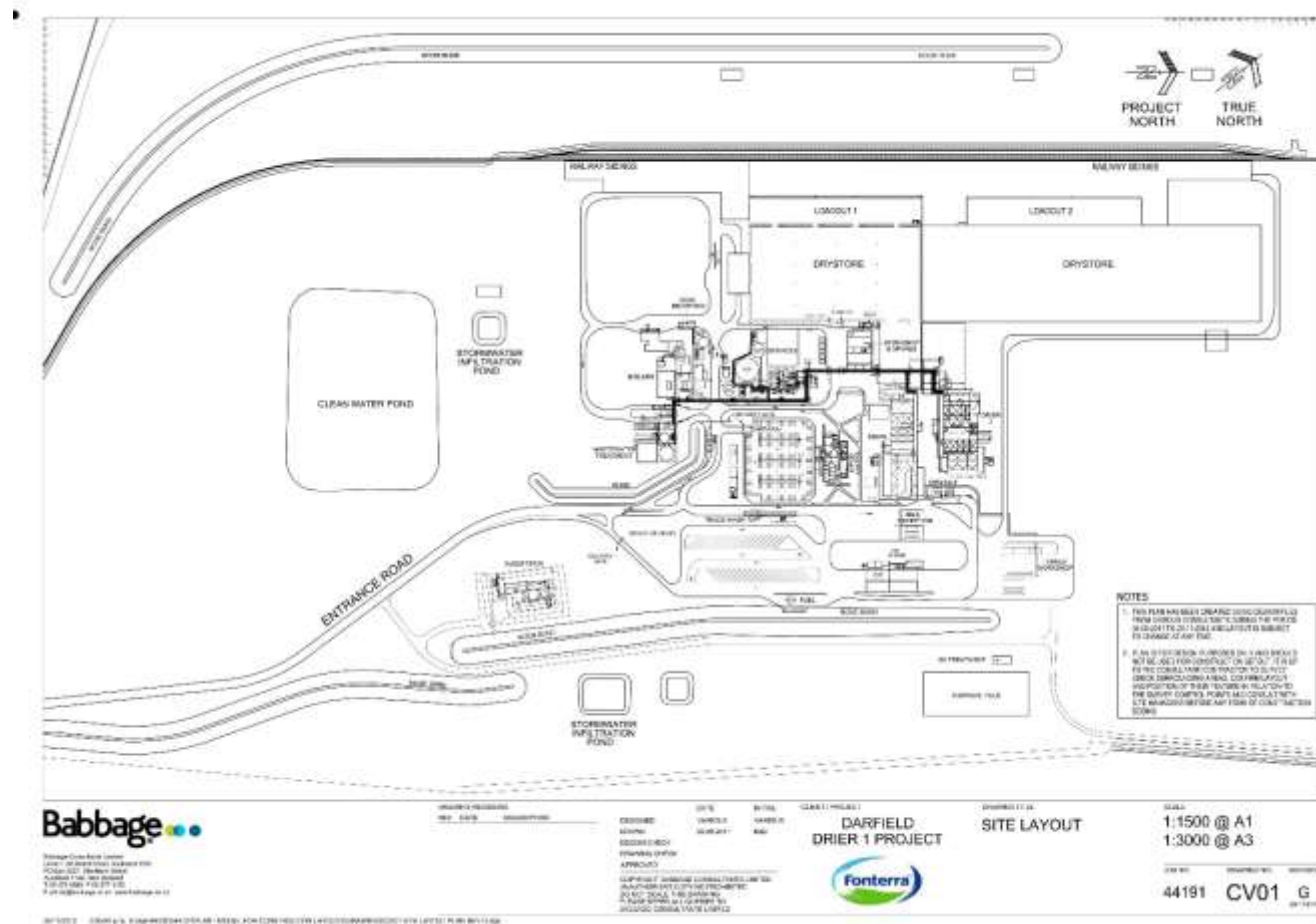
2. THE PROPOSAL⁴

The proposal will include:

An application by Fonterra to create a Dairy Processing Management Processing Area (DPMA) at the Fonterra Darfield Milk Factory via a private plan change.

- This DPMA and plan change is based on the Synlait Milk Limited plan change which modified district the plan to create a DPMA within the Rural (Outer plains) zone of district plan.
- An outline development plan (ODP) for the Fonterra Darfield Milk Factory summarises some of the key components of Fonterra's proposal (see Figure 6).

Figure 4 – Fonterra Darfield Dairy Factory site layout



⁴ This information was supplied by Fonterra, from Synlait Milk Limited application for a similar private plan change (see References) and from information produced by Selwyn District Council in response to Synlait Milk Limited application (see References). We have not interpreted or modified the majority of information supplied.

Figure 5 – Fonterra Darfield Dairy Factory and surrounding land owned by Fonterra



2.1 Reasons for this type of plan change

The purpose of this type of plan change is to recognise the current Fonterra Darfield dairy factory and to enable potential future expansion at this site as well as maintaining its efficient use.

Synlait Milk Limited listed the following reasons for this type of plan change. They included:

- Continuous and ad hoc consenting creates uncertainty for the community, Council and stakeholders as to the maximum development envelope of the site. The Plan Change seeks to address this uncertainty by providing an indication of the maximum development potential with a site.
- As an activity reliant on resource consents, the development and up-grading of a plant therefore requires considerable lead-in-time and finance to prepare applications, with the accompanying uncertainty as to whether or not the application will be successful.
- A resource consent led process for the on-going development of milk processing activities, with its inherent costs and uncertainties, undermines the potential efficiency of the rural production continuum. Given the scale and economic importance of the dairy industry within the Rural Outer Plains environment, a primary reason for this plan change is to reduce the time, cost and uncertainties associated with consenting for what is consolidation of an established dairy plant.
- The District Plan rules have been created with a focus on controlling building development on individual farms, where dwellings, milking and farm sheds are replicated

2.2 Proposal

The ODP consists of the following components:

- Figure 6 – Fonterra Darfield Factory Outline Development plan (ODP)**



2.21 Proposed rule changes⁵

Fonterra have proposed a plan change similar to Synlait Milk Limited application to create a DPMA at their Darfield Dairy factory. This proposal by Synlait Milk Limited was put to the Selwyn District Council (SDC) whom passed it with amendments. Below is a summary of what Synlait Milk Limited proposed to SDC, the decision by SDC in relation to Synlait Milk Limited plan change and the Fonterra's proposal relating to aspects of this type plan change.

- SDC decision on **Dairy Processing Management Area** - Permitted activities (Land use)
 - 26.1 – The following activities shall be permitted activity if all of the standards in Rule 26.2 to 26.32 are met:
 - The processing, testing, storage, handling, packaging and distribution of milk and dairy products, dairy processing related by-products, and ancillary activities, including but not limited to:
 - i) Rail infrastructure, and rail activities limited to those required for the transportation of mil, dairy products and associated ingredient and package products
 - ii) Infrastructure for roading, rail, the management of wastewater, stormwater and the supply of water
 - iii) Laboratories and facilities for research and development related to the processing of milk and development of dairy products
 - iv) Offices and facilities required for the administration and management of Dairy Processing Management Area, and the marking, sales and distribution of milk and dairy products
 - v) Activities which can comply as a permitted activity with rules of the Rural (Outer Plains) Zone, expect that any calculation of density or site coverage shall exclude the land within the Height Control Zone.
- Synlait Milk Limited had proposed compliance with the **Outline Development Plan**
 - SDC decision – Outline Development Plan (Permitted Activities)
 - 26.2 – The location of all building, activities and vehicle access points to the Dairy Processing Management Area, shall be in general accordance with the Outline Development Plan in Appendix 26A.
 - SDC decision - Outline Development Plan (Matters of control)
 - See Appendix 3 - Part (a) pg. 29
 - SDC decision – Location of buildings and activities (Permitted Activities)
 - 26.3 – All permitted activities shall be located within the Height Control Zone identified on the Outline Development Plan in Appendix 26A, with the exception of:

⁵ This information was supplied by the Fonterra (via email), Synlait Milk Limited (see references – Boffa Miskell, 2014) and Selwyn District Council (see Appendix 3 and 4).

- a) 26.3 – All permitted activities shall be located within the Height Control Zone identified on the Outline Development Plan in Appendix 26A, with the exception of:
 - b) An directional signage under 1.2m height;
 - c) Signage providing information at the Primary Access points;
 - d) Infrastructure for roading, rail, the management of wastewater, storm water and supply of water associated with a permitted activity; and
 - e) Permitted activities provided for in Rule 26.1(a) v.
- SDC decision - Location of buildings and activities (Matters of control)
 - See Appendix 3 – Part (b) pg. 29
- Fonterra proposal -
 - *Shown in Figure 6 with the characteristics described in this chapter*
- Synlait Milk Limited had proposed a **setback requirement**
- Synlait Milk Limited had proposed conformity with **landscape strategy** specified within the ODP
 - SDC decision – Landscape planting (Permitted Activities)
 - 26.5 – When new buildings are to be erected that will increase the capacity for milk processing or storage within the Dairy Processing Management Area landscape planting as shown on the Outline Development Plan in Appendix 26A shall be located in general accordance with the landscape provisions of the Outline Development Plan and is to be completed in accordance with the provisions for Staging and Removal of Exotic Planting specified in Appendix 26A.
 - 26.6 – Landscape planting required by Rule 26.5 is a controlled activity for which consent is required in accordance with Rule XX and XY.
 - SDC decision – Landscape planting required by Rule 26.6 (Controlled activities)
 - XX – An application for controlled activity consent under rule 26.6 shall contain information showing the location of proposed planting, the proposed plant species, the proposed timing of planting, the height and spacing of plant at the time of planting and the proposed maintenance regime of the landscape planting including soil and moisture retention, irrigation, access and the replacement of any dead, diseased or dying plants and the methodology for removal of exotic planting.
 - XY – Under Rule XX the Council shall restrict its control to the following matters:
 - e) The effect of not removing exotic species which have achieved a uniform height of 10m cultural values
 - See Appendix 3 – Landscape Planting required by Rule 26.6, pg27 for full detail
- Fonterra proposal –

- Prepare draft visual/landscape assessment based on expansion potential and discuss landscape Rules 26.5 and 26.6 of the Synlait decision (Note: all landscaping is required and stated as a controlled activity despite its listing under the permitted performance standards heading. This is an error that SDC have asked us to correct. In short, if an expansion occurs, a landscape plan consent will be sought as a controlled activity although little if any additional landscaping is likely to be required going forward)
- Synlait Milk Limited had proposed **building height** conditions
 - SDC decision – Building heights (Permitted Activities)
 - Buildings within the Height Control Zone shall comply with the height limits shown in the Outline Development Plan in Appendix 26A. Up to 2 Boiler stacks and 4 exhaust vents per dryer shall be exempt from height limits.
 - SDC decision – Building heights (Matters of control)
 - See Appendix 3 – Part (d) pg. 30
 - Fonterra proposal – See Figure 6 – Fonterra Darfield Milk Factory ODP
- Synlait Milk Limited proposed **colour and signage** conditions
 - SDC decision – See Appendix 3 – Colour, pg. 23 and Signage pg. 25 and 26 and Appendix 4
 - SDC decision – See Appendix 3 – Part (e) pg. 30 for Colour and Part (k) pg. 32 for Signage and Appendix 4
- Synlait Milk Limited had proposed **Lighting** conditions
 - SDC decision – Lighting (Permitted Activities)
 - 26.22 – Any lighting within the Dairy Processing Management Area shall be permitted activity provided that:
 - Light spill from any activity does not exceed 3 lux on any adjoining property or any road reserve; and
 - All exterior lighting is directed away from adjacent properties and roads
 - SDC decision – Lighting (Matters of Control)
 - See Appendix 3 – Part (j) pg. 30
- Synlait Milk Limited had proposed **Earthworks conditions**–
 - Synlait Milk Limited proposed –
 - Are carried out if comply with standards of maximum height/depth, height of temporary stockpiles and total volume of 5000m³. If exceeded an Earthworks Management plan is prepared which includes waterways, revegetation and accidental discovery.
 - SDC decision – Earthworks (Permitted activities)
 - 26.9 -A maximum volume of 5000m³ of earthworks for each stage of development
 - 26.10 -The maximum cut/excavation depth of the earthworks from existing ground level shall be 5 metres and no closer than 1 metre to groundwater, whichever is the lesser.

- 26.11 – The maximum height of temporary stockpiles or final landforms shall be no greater than 4m above ground level
 - 26.12- All cut material shall be reused within the Dairy Processing Management Area
- SDC decision – Earthworks (Controlled activities)
 - 26.34 – Any earthworks exceeding 5000m³ (for any stage of development), or a cut/excavation depth from existing ground level of more than 5 metres, or a maximum height of temporary stockpiles or final landforms of 4m above ground level, shall be controlled activity. An application for earthworks shall not require the written approval of third parties and shall be non-notified.
 - 26.45 – Under Rule 26.34 Council shall restrict its control to the following matters:
 - a) Management of excavations in the proximity of surface waterways to avoid sedimentation, discharges and run-off entering waterbodies
 - b) Management of dust emissions
 - c) The location, size and dimensions of any temporarily stock-piled material and final landform features created by fill
 - d) Re-vegetation of final surfaces
 - e) The Accidental Discovery Protocol as specified in the Mahaanui Iwi Management Plan
- SDC decision – Earthworks (Matters of Control)
 - See Appendix 3 – Part (f) pg. 30
- Synlait Milk Limited proposed **access** conditions–
 - Synlait Milk Limited proposal –
 - If new large buildings including increasing milk capacity or storage are proposed then applicant to have proactively discussed safety and efficient of traffic flows.
 - SDC decision – Access (Permitted Activities)
 - 26.13 – Prior to the issues of a building consent for a new building which will increase capacity for milk procession or storage within the Dairy Processing Management Area:
 - The design of any access from the State highway or the design of any State highway/local road intersection, as shown on the Outline Development plan in Appendix 26A, shall be approved in writing by the relevant Road and Rail (where applicable) controlling activities. A Copy of this approval shall be forwarded to the Council Planning Manager for Councils records.
 - All access from a local road shall comply with the design requirements of Appendix 10.
 - 26.14 – See Appendix 3 – pg. 23
 - SDC decision – Access (Matters of Control)

- See Appendix 3 – pg30
- Fonterra proposal –
 - Preparing draft transport assessment based on Synlait Limited decision to consult with NZTA
 - On ODP (Figure 6-) two entrances are shown
- Synlait Milk Limited proposed **parking** conditions –
 - Synlait Limited proposal –
 - Parking and maneuvering to comply with ODP and District plan requirements in terms of design and layout. Parking and maneuvering associated with buildings which increase storage and processing capacity must be constructed and sealed prior to use of the buildings.
 - SDC decision – Parking (Permitted Activities)
 - Parking and maneuvering to comply with ODP and District plan requirements in terms of design and layout. Parking and maneuvering associated with buildings which increase storage and processing capacity must be constructed and sealed prior to use of the buildings.
 - SDC decision – Parking (Permitted Activities)
 - 26.15 – All vehicle parking and maneuvering areas shall be located as shown on the Outline Development Plan in Appendix 26A and comply with Appendix 10 as to layout and design.
 - 26.16 – See Appendix 3 – pg24
 - SDC decision – Parking (Matters of Control)
 - See Appendix 3 – Part (h) pg. 30
- Synlait Milk Limited proposed the **Noise** conditions –
 - Synlait Milk Limited proposal –
 - Noise is required to meet specified noise limits. These are lower than the limits that otherwise apply in the Rural Outer Plains Zone and have been derived from the limits applied through earlier resource consents.
 - To give further assurance of on-going compliance with the noise standards, the rules require that prior to the construction of any new building which will increase processing or storage capacity, a report from an acoustic engineer is submitted to Council confirming that all activities will cumulatively meet the noise standard. Additionally, a Noise Management Plan (NMP) is to be submitted to Council each year outlining the management practices that will be applied to noise from new activities and include provision for noise monitoring. This provision captures activities which may generate noise but do not involve buildings.
 - SDC decision – Noise (Permitted activities)
 - 26.17 – Noise arising as a result of any activity within a Dairy Processing Management Area shall not exceed the following limits at the Noise Control

Boundary shown on the Outline Development Plan in Appendix 26A. (see Appendix ?? – pg24 for full details)

- SDC decision – Noise (Matters of Control)
 - See Appendix 3 – Part (i) pg. 30.
- Fonterra proposal –
 - General contour line based on logical land features has been provided to make compliance monitoring straightforward. This contour is slightly larger than the 45 dBA LAeq contour and is shown on the draft ODP. (see Figure 6 – Noise Control boundary)
 - Prepare noise assessment based on agreed parameters and Synlait wording. Note the decision excludes rail movements but the Darfield movements will need to be assessed to make sure this stacks up. Also, any NMP requirements have been removed in the decision so no need to promote these.
 - Noise assessment to be prepared including brief discussion around what type of additional noise insulation may be required if a dwelling were to construct within the NCB and what sort of cost this may add noting Rule 3.13.1.6 which outlines the requirements for any dwelling within the NCB i.e. Buttle's land.
- Synlait Milk Limited proposed **Hazardous substances** conditions –
 - Synlait Milk Limited proposal –
 - The proposed rules require a Hazardous Substances Management Plan to be prepared for the DPMA confirming compliance with relevant legislation, maintenance of a schedule of substances stored and used, emergency and accidental spill responses and annual reporting. The Management Plan is to be up-dated prior to any increase in the volume or type of substances stored.
 - SDC decision – Hazardous substances conditions
 - These were removed within plan change by SDC
 - Fonterra proposal -
 - Fonterra have stated that a Hazardous substances plan was proposed by Synlait Limited but removed in final plan change by SDC.
- Synlait Milk Limited proposed the following **construction activities** –
 - Synlait Milk Limited proposal –
 - This rule requires that prior to the commencement of any construction works that increase the capacity of milk processing or storage, a Construction Management Plan is prepared. This Plan is to detail the management of traffic, dust, sediment, noise and vibration, as well as the implementation of an Accidental Discovery Protocol.
 - SDC decision – Construction activities (Controlled Activities)
 - 26.36 – Construction activities for a new building which will increase capacity for milk procession or storage within the Dairy Processing Management Area shall be a controlled activity. Any application for construction activities shall not require the written approval of third parties and shall be non-notified.

- 26.37 – Under Rule 26.36 Council shall restrict its control to the following matters:
 - A) Ensuring that the effects of construction traffic minimizes disruption, delay or inconvenience on the adjoining road network
 - B) Best practicable measures to avoid or mitigate the dispersal and deposition of dust and sediment
 - C) Best practicable measures to avoid the accidental discharge of any fuel or other hazardous substances, including measures for dealing with accidental spills
 - D) Compliance with NZS6803:1999 Acoustics – Construction noise
 - E) Compliance with NZS2631:1985-1989 Part 1-3 or equivalent standard
 - F) An Accidental Discovery Protocol as specified in the Mahaanui Iwi Management Plan.
- Fonterra will be preparing **air discharge** models as well
 - Fonterra proposal
 - Prepared some air discharge models based on the parameters which have been shown to ECAN to demonstrate that air discharge can be managed. These won't be advanced in the Plan Change but will be kept aside in case they are needed.
- Fonterra have not included details on options for **storm water or wastewater discharge**
 - Fonterra proposal
 - There are a number of options available for discharge of wastewater and storm water so no specific approach to these will be discussed in detail within the Plan Change. Note: Synlait provided a storm water disposal feasibility study in their PC but did not look at wastewater or air discharges.
- Fonterra have also noted in the information they provided the following statement in relation to parameters and timing.
 - 2 additional dryers, 2 additional boilers based on DD2

3. THE STATUTORY CONTEXT: RECOGNISING AND PROVIDING FOR CULTURAL VALUES

3.1 Te Tiriti O Waitangi

In 1840, Te Tiriti o Waitangi (Treaty of Waitangi) was signed between the Chiefs of Aotearoa and Her Majesty the Queen of England formalising an agreement to allow British subjects to settle in areas such as Te Wai Pounamu, under formal British colonial rule, and which guaranteed to Maori the protection of their taonga (possessions) for so long as they wished. Such taonga included their waters⁶, lands, fisheries and mahinga kai.

Te Tiriti o Waitangi reaffirmed these rights thus:-

Maori Text:

“Ko te Kuini o Ingarani ka whakarite ka whakaae ki nga Rangatira, ki nga Hapu, ki nga tangata katoa o Nu Tirani, te tino rangatiratanga o ratou whenua o ratou kainga me o ratou taonga katoa. Otiia ko nga Rangatira o te Whakaminenga me nga Rangatira katoa atu, ka tuku ki te Kuini te hokonga o era wahi whenua e pai ai te tangata nona te whenua, ki te ritenga o te utu e whakarite ai e ratou ko te kai hoko e meatia nei i te Kuini hei kai hoko mona”.

English Text:

“Her Majesty the Queen of England confirms and guarantees to the Chiefs and Tribes of New Zealand to the respective families and individuals thereof the full exclusive and undisturbed possession of their Lands and Estates, Forests, Fisheries and other properties which they may collectively or individually possess so long as it is their wish and desire to retain the same in their possession....”.

The words “their lands and estates, forests, fisheries...” in the Treaty of Waitangi encapsulates the right to mahinga kai, to places where the resources are harvested, the activity and business of gathering kai and includes the type of resources that were caught or gathered. It was upheld by the Waitangi Tribunal that Maori fishing rights have endured to the present day.

⁶ The Waitangi Tribunal has defined taonga value as including the value of the water itself, the resources living in the water and the resources sustained by the water.

3.2 Cultural and Traditional Principles for Sustainable Management⁷

Traditional management was founded on a set of cultural values that arose from the Ngāi Tahu worldview. These cultural values include a set of principles upon which the relationship between people and the environment must be based in order to sustain the balance between the needs and demands of humans and the health of the natural world that sustains them. The following principles are significant elements of the Ngāi Tahu worldview which, when understood together, approximate the non-Maori concept of “sustainable management”.

Te Ao Maori: The principle of holism: Sustainable management must consider the environment and its component parts as a whole and assess effects from actions across all dimensions, spiritual, mental, biophysical, and social [te taha wairua, te taha hinekaro, the taha tinana, te taha whanau].

Whanaungatanga: The principle of kinship, connectedness, and inter-dependence between all things within the natural world including people: sustainable management must be based on ethics of Whanaungatanga reflecting and giving life to the inter-relationship between all things. Sustainable management should seek to sustain the health, wealth and well-being of the natural environment while sustaining the communities of people dependent upon them.

Whakapapa: The principle of cause and effect, descent and transmission: Sustainable management must be predicated on an understanding that all actions cause effects which in turn cause other effects. Eventually the cycle of effects returns in kind to the original actor. Sustainable management decisions must consider all immediate and downstream effects in the present and, as far as possible, into the future.

Taonga Tuku Iho: The principle of generational continuity and responsibility: Present generations are one with those who have gone before us and those yet to be born. This applies to people and to generations or successive cycles of other species or natural phenomenon. Present generations have an overriding obligation to control the effects of their actions so as to ensure that resources are passed on to future generations in at least as healthy and productive a condition as they were inherited from the ancestors.

In the Ngāi Tahu worldview, all elements within the world are linked by mutual descent from the atua (dieties) and the primeval parents, Rakinui and Papatuanuku. Thus all parts of the environment are related to one another and exist within a mutually inter-dependent whole.⁸

The paragraphs that follow summarise (via a series of dot points) key cultural values as understood and approved by Ngāi Tahu.

⁷ This section draws on the work of Hana Crengle (2002) in Tipa et al (2002). Crengle has written extensively about cultural values, Treaty values and the Resource Management Act 1991. She has previously worked for Ngai Tahu Maori Trust Board and Te Runanga o Ngai Tahu as the Natural Resource Manager.

⁸ “Maori developed a system of resource management in which people were no more than another living part of the whole ecosystem, capable of a care-taking role alongside other creatures...People lived within and as a part of a whole to which they were intimately and genealogically related.” Love (1992)

Whakapapa incorporating:

Traditional knowledge and scientific classification of relationships between parts of the ecology (e.g. the relationship between water and fisheries, or between individual ecological functions);

- Ancestral descent rights that define authority as between individuals and groups of people to control, manage and act as kaitiaki guardians, for the benefit of present and future generations;⁹ and
- Approval from the Gods and non-human kaitiaki guardians conferred on certain individuals, whanau, and hapu who are designated by mana Atua expressed through whakapapa ancestral right and obligation, to be the rightful people entitled to benefit from the resources and to carry the associated mandate to protect the environment and to speak on its behalf.

Whanaungatanga incorporating:

Inter-relationship between all parts of the ecology;

Inter-relationship between the ecology and the well-being of mana whenua; and

Obligations on decision-makers to ensure that all parts of the ecosystem including people and their communities are cared for.

Mauri incorporating:

The life force¹⁰; and

The “Environmental Benchmark” by which Ngā Rūnanga measure the present health of the environment, the inter-linked well-being of mana whenua, and the actual and likely effects, positive or adverse, of the proposed mine development

Mana (Rangatiratanga) incorporating:

Tribal areas of land and waters which are the exclusive territories of Ngāi Tahu, the holders of exclusive rights of authority over those areas as against other tribes.

Chiefly authority conferring and defining rights to control and manage and the activities of people affecting the environment; and

The Article II guarantee of the Treaty of Waitangi.

Mana Whenua incorporating:

Spiritual power and authority that creates rights and obligations flowing from the lands that sustain and are cared for by an iwi, hapu, or whanau;

The people holding traditional rights of exclusive authority as Tangata whenua of their tribal territories; and

The concept of allocation of use and management rights to the “right” people on the basis of ancestry i.e. whakapapa descent.

⁹ “In addition to the interconnection between all things, whakapapa defines ancestral rights as between people. Rights flowing from whakapapa include rank and status in society, mana to belong to a specific group or a number of hapu or whanau kinship groups, and authority to exercise rakatirataka or chieftainship.” Lifeforms Focus Group, Ministry of Commerce Maori and the Patenting of Lifeform Inventions (1999)

¹⁰ “Mauri is the life-force which generates, regenerates, and upholds creation. It is the bonding element that knits all the diverse elements within the Universal Process giving creation its unity in diversity. It is the bonding element that holds the fabric of the universe together”. Rev Maori Marsden The Holistic World View of the Maori (1992)

Taonga incorporating:

All things prized, tangible and intangible, animate and inanimate;
The concept of a resource, its utility, and notions of sustainability, the wise use of resources, and the obligation to maintain the mauri;
Respect for the past and the obligation to preserve resources and cultural wealth and well-being for future generations;
Intrinsic values; and
Cultural use, heritage, and amenity values.

Kaitiaki incorporating:

Guardian spirits who communicate with the living world to warn of danger and herald the times and limits of harvest seasons, sometimes manifested through guardian animals, birds, fish, insects or taniwha;¹¹
Intergenerational responsibilities as resource caretakers (i.e. responsibilities to protect the interests of future generations including the ecology, species, and people);
The obligation to guard, foster, and protect resources and people, including the obligation to consent to or refuse access to resources to protect sustainability;
The power to assess effects and to allocate responsibility or liability for actions that harm the environment;
Tohunga and whanau kaitiaki people with the matauraka (training and knowledge) to interpret signs in the environment (such as environmental indicator species or natural events) that were utilized to understand the changing ecology, who act as monitors of resource health and well-being

Wahi Tapu and Wahi Taonga incorporating¹²:

Sites that are or have been made tapu in nature to protect their intrinsic values and/or because of their association with the Gods, the tupuna, or important historic and cultural events and activities; and
Other sites particularly valued for their utilitarian significance as places from which resources are customarily sourced, that are ecologically significant (for e.g. as breeding or migratory habitats) or that were particularly significant species or taonga resources are located.

Mahinga kai incorporating:

The bounty given by Papatuanuku to its people;
Places and resources (e.g. species) important for sustaining the cultural, social, and economic well-being of mana whenua; and

¹¹ “Kaitiaki or guardian spirits are left behind by deceased ancestors to watch over their descendants and to protect sacred places. Kaitiaki are also messengers and a means of communication between the spirit realm and the human world. There are many representations of guardian spirits, but the most common are animals, birds, insects, and fish.” Cleve Barlow Tikaka Whakaaro: Key Concepts in Maori Culture

¹² “All the lands of Papatuanuku are sacred. Any time you want to disturb the surface of that land and do something with it, certain protocols and procedures need to be carried out in order to make it noa (non-sacred). This would usually involve a tapu lifting ceremony and karakia to appease the essence of the earth.”

Huirangi Waikerepuru of Taranaki, quoted in Solomon and Schofield [The Resource Management Act and the Treaty of Waitangi: A Starting Point and Framework](#) (1992)

The activities associated with gathering and use of the resources, including cultural harvest, whanau experience and knowledge, and transmission of cultural values and tikanga practices between generations.

Tikanga incorporating:

Rules and regulations controlling the actions of people and the practices associated with these rules and regulations;

Sustainable management kawa (protocols, use controls, and culturally-sound techniques) designed to ensure the results of human action are consistent with the cultural values and desired environmental, social, and economic outcomes sought by Ngā Rūnanga;

Environmental standards for measuring the effects of people's behaviour on the environment; and

Traditional biophysical and cultural indicators that are used to monitor ecological states and effects from human activity.

The descriptions in this section inform the structure of the impact assessment in Chapter 4.

3.3 Resource Management Act 1991 (RMA)

The Resource Management Act 1991 is the principal legislation under which the natural and physical resources of New Zealand are to be sustainably managed.

Section 5. Purpose –

- (1) *The purpose of this Act is to promote the sustainable management of natural and physical resources.*
- (2) *In this Act, “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 wellbeing and for their health and safety while -*
 - (a) *Sustaining the potential of natural and physical resources to meet the reasonably foreseeable needs of future generations;*
 - (b) *Safeguarding the life-supporting capacity of air, water, soil, and ecosystems; and*
 - (c) *Avoiding, remedying, or mitigating any adverse effects of activities on the environment.*

The duties and the obligations that Part 2 of the RMA imposes for all people who exercise functions or powers under the Act in relation to the use of natural resources are detailed below.

Section 6 sets out the matters that are of national importance

Matters of national importance – In achieving the purpose of this Act, all persons exercising functions and powers under it, in relation to managing the use, development, and protection of natural and physical resources, shall recognise and provide for the following matters of national importance:

....

- (e) *The relationship of Maori and their culture and traditions with their ancestral lands, water, sites waahi tapu, and other taonga.*

Section 7 sets out other matters that regard is to be had to

Other matters - In achieving the purpose of this Act, all persons exercising functions and powers under it, in relation to managing the use, development, and protection of natural and physical resources, shall have particular regard to –

(a) Kaitiakitanga

Section 8 states that the principles of the Treaty of Waitangi need to be taken into account.

Treaty of Waitangi - In achieving the purpose of this Act, all persons exercising functions and powers under it, in relation to managing the use, development, and protection of natural and physical resources, shall take into account the principles of the Treaty of Waitangi (Te Tiriti o Waitangi).

Court of Appeal in *Court of Appeal v Attorney General 1987 CA 54/87* has defined the principles of the Treaty as including:

- (i) The principle of partnership.*
- (ii) The principle of active protection of Maori people in the use of their lands and waters to the fullest extent practicable.*
- (iii) The principle of utmost good faith in dealings with the other Treaty partner.*

The Environment Court has noted that active protection of Maori interests requires positive action, which will at times oblige both the decision making authority and the applicant to consult. Consultation must be conducted in a spirit of good will and open mindedness, and over a reasonable span of time, and to a degree sufficient for the local authority to be informed on the matters in issue.

3.4 Iwi Plans

Te Taumutu Rūnanga and Tūāhuriri Rūnanga who are the kaitiaki rūnanga for this area. There are iwi management plans which apply to the area, respectively:

- Ngāi Tūāhuriri Rūnanga, Te Hapū o Ngāti Wheke (Rāpaki), Te Rūnanga o Koukourārata, Ōnuku Rūnanga, Wairewa Rūnanga, Te Taumutu Rūnanga. (2013). *Mahaanui Iwi Management Plan*.
- Department of Conservation, Te Runanga o Ngai Tahu. (2005). *Te Waihora Management Joint Plan*.

3.5 The Ngāi Tahu Claims Settlement Act 1998

The Ngāi Tahu Claims Settlement Act includes a number of provisions that are relevance to the management of the freshwater resources of Waimakariri and Te Waihora catchments, including

- Inclusion of Statutory Acknowledgements where the Crown recognises the significance of certain areas to Ngāi Tahu
- Recognition as Statutory adviser to Minister of Fisheries;
- Development of protocols and a closer working relationship with Department of Conservation;
- Identification of taonga species (in schedule 97 of the Act)
- Provision for nohoanga (campsites).

4. CULTURAL IMPACT ASSESSMENT

4.0 COMPARISON BETWEEN RECOMMENDATIONS RAISED IN SYNLAIT LIMITED PLAN CHANGE CIA, SDC PLAN CHANGE AND FONTERRA PROPOSAL

The table below summarises and compares the recommendations put forward within the:

- CIA prepared for Synlait Milk Limited by Jolly (2014) - See **Appendix 2**
- Final plan change agreed upon by Selwyn District Council (SDC) - See **Appendix 3**
- Fonterra proposal general information

Table 1 – Recommendations from Jolly (2014) compared to the final decision by SDC on Synlait Milk Limited plan change to create an Dairy Processing Management Area (DPMA)

Recommendations from Jolly (2014)	SDC decision on Synlait Milk Limited plan change (see chapter 2, Appendix 3 and 4)	The extent to which the recommendations in Jolly (2014) have been integrated into SDC decision on Synlait Milk Limited plan change
<p>Landscape planting – The ODP and new rules for the DPMA provide an opportunity to enhance the landscape through planting. This CIA provides an opportunity for the Rūnanga to contribute to this plan. Consistent with IMP policy, the Landscape Plan for the DPMA should reflect:</p> <p>a) A commitment to re-instate indigenous biodiversity values on the landscape as part of the development, including purpose screening and also to improve amenity values on site (e.g. planting around roads, buildings, car parks).</p> <p>b) The use of native species that were originally found in this part of the Canterbury Plains.</p> <p>c) Planting as part of storm water management (see below).</p>	<p>Landscape planting (Permitted Activities)</p> <p>26.5 - When new buildings are to be erected that will increase the capacity for milk processing or storage within the Dairy Processing Management Area landscape planting as shown on the Outline Development Plan in Appendix 26A shall be located in general accordance with the landscape provisions of the Outline Development Plan and is to be completed in accordance with the provisions for Staging and Removal of Exotic Planting specified in Appendix 26A.</p> <p>26.6 - Landscape planting required by Rule 26.5 is a controlled activity for which consent is required in accordance with Rule XX and XY</p> <p>Landscape planting required by Rule 26.6 (Controlled activities)</p> <p>XX - An application for controlled activity consent under rule 26.6 shall contain information showing the location of proposed planting, the proposed plant species, the proposed timing of planting, the height and spacing of plant at the time of planting and the proposed maintenance regime of the landscape planting including soil and moisture retention, irrigation, access and the replacement of any dead, diseased or dying plants and the methodology for removal of exotic planting.</p> <p>XY - Under Rule XX the Council shall restrict its control to the following matters:</p> <p>e) The effect of not removing exotic species which have achieved a uniform height of 10m on cultural values</p> <p>Reasons for Rule – Landscape Planting</p> <p>In addition, a rule requires exotic species planted on the DPMA boundaries to be removed once identified indigenous tree species, planted in accordance with the rules on the ODP, have reached a</p>	<p>The SDC decision on Synlait Milk Limited's plan change has potentially integrated some of the recommendations raised in Jolly (2014).</p> <p>Landscape planting is a controlled activity with a range of rules associated with it. These could capture some of the requirements by the runanga. Although the exact detail is missing in relation to "proposed plant species" it does include a clause for removal of exotic planting once indigenous plants have reached a height greater than 10m. This is consistent with recommendations from Jolly (2014).</p> <p>The ODP also has specific reference to landscape planting and refers to the rules listed under Rule 26.6 (Controlled activity). This again reinforces the need for consultation with council or compliance with council guidelines on landscape planting.</p> <p>There is no requirement for runanga consultation.</p>

	minimum height of 10m. This requirement to allow indigenous plants to dominate has been agreed with Te Taumutu Runanga as a way of expressing cultural values on the site.	
<p>Earthworks – Recommend that volumes exceeding 5000m³ are classified as a controlled activity (preferred), or that Rule 26.11 includes explicit provisions stipulating that the Earthworks Management Plan is to include:</p> <p>a) Clear and effective measures to avoid sedimentation, and other discharges (e.g. fuel from machinery) to drains or other waterbodies.</p> <p>b) Clear and effective measures to manage stormwater and run off during earthworks activities to prevent run off, including minimising the extent of land cleared at any time.</p> <p>c) Requirement to use the ADP provided in the Mahaanui IMP (Appendix 3).</p>	<p>Earthworks (Permitted activities)</p> <p>26.9 - A maximum volume of 5000m³ of earthworks for each stage of development</p> <p>26.10 - The maximum cut/excavation depth of the earthworks from existing ground level shall be 5 metres and no closer than 1 metre to groundwater, whichever is the lesser.</p> <p>26.11 - The maximum height of temporary stockpiles or final landforms shall be no greater than 4m above ground level</p> <p>26.12- All cut material shall be reused within the Dairy Processing Management Area</p> <p>Earthworks (Controlled activities)</p> <p>26.34 - Any earthworks exceeding 5000m³ (for any stage of development), or a cut/excavation depth from existing ground level of more than 5 metres, or a maximum height of temporary stockpiles of final landforms of 4m above ground level, shall be controlled activity. An application for earthworks shall not require the written approval of third parties and shall be non-notified.</p> <p>26.45 - Under Rule 26.34 Council shall restrict its control to the following matters:</p> <p>a) Management of excavations in the proximity of surface waterways to avoid sedimentation, discharges and run-off entering waterbodies</p> <p>b) Management of dust emissions</p> <p>c) The location, size and dimensions of any temporarily stock-piled material and final landform features created by fill</p> <p>d) Re-vegetation of final surfaces</p> <p>e) The Accidental Discovery Protocol as specified in the Mahaanui Iwi Management Plan</p> <p>Earthworks (Matters of Control)</p> <p>See Appendix 3 - Part (f) pg 30</p>	<p>The SDC final decision on Synlait Limited's plan change has Earthworks over 5000m³ being classified as a controlled activity which was recommended in Jolly (2014).</p> <p>It also has integrated the other recommendations in Jolly (2014) into rule 26.45. It goes on to add on additional clause relating to re-vegetation on the final surfaces.</p> <p>Of note is the direct inclusion of a rule integrating the ADP as specified by the MIMP.</p> <p>Overall the SDC decision on Synlait Milk Limited's plan change is consistent with the recommendations by Jolly (2014).</p>

<p>Lighting - Ensure that Rule 26.21 is written to identify and enable light suppression techniques to minimize impact on landscape and views.</p>	<p>Lighting (Permitted Activities)</p> <p>26.22 - Any lighting within the Dairy Processing Management Area shall be permitted activity provided that:</p> <p>Light spill from any activity does not exceed 3 lux on any adjoining property or any road reserve; and</p> <p>All exterior lighting is directed away from adjacent properties and roads</p> <p>Lighting (Matters of Control)</p> <p>See Appendix 3 and 4 - Part (j) pg. 30</p>	<p>The SDC decision on Synlait Milk Limited's plan change does reflect the recommendations by Jolly (2014).</p>
<p>Low impact and sustainability based design principles -</p> <p>Investigate opportunities to incorporate low impact design and sustainability options into the new rules setting out standards for permitted activities, to reduce the impact of the development on the environment, and demonstrate Synlait's commitment to the best practice in the district. A key policy message in the Mahaanui IMP is that developments should have 'light footprints' with regard to building design, water, waste and energy, and that this is consistent with achieving the values based outcomes set out in the IMP.</p> <p>Options include:</p> <ul style="list-style-type: none"> a) Low energy and water use appliances, and low flush toilets b) Rainwater collection and greywater recycling c) Recycling and composting opportunities(supporting zero waste) d) Position of buildings to maximize passive solar gain e) Insulation and double glazing 	<p>Dairy Processing Management Area - Permitted activities (Land use)</p> <p>26.1 – The following activities shall be permitted activity if all of the standards in Rule 26.2 to 26.32 are met:</p> <p>The processing, testing, storage, handling, packaging and distribution of milk and dairy products, dairy processing related by-products, and ancillary activities, including but not limited to:</p> <ul style="list-style-type: none"> i) Rail infrastructure, and rail activities limited to those required for the transportation of milk, dairy products and associated ingredient and package products ii) Infrastructure for roading, rail, the management of wastewater, storm water and the supply of water iii) Laboratories and facilities for research and development related to the processing of milk and development of dairy products iv) Offices and facilities required for the administration and management of Dairy Processing Management Area, and the marking, sales and distribution of milk and dairy products v) Activities which can comply as a permitted activity with rules of the Rural (Outer Plains) Zone, expect that any calculation of density or site coverage shall exclude the land within the Height Control Zone. <p>Outline Development Plan (Permitted Activities)</p> <p>26.2 - The location of all building, activities and vehicle access points to the Dairy Processing Management Area, shall be in general accordance with the Outline Development Plan in Appendix 26A.</p>	<p>The SDC decision on Synlait Milk Limited's plan change has a wide range of rules relating to design, construction and layout but no specific rules that address the concerns raised in Jolly (2014).</p> <p>In most cases as long as you comply with the ODP and general rules listed as "permitted activities" and "controlled activities" development can occur.</p> <p>Only when new buildings are to be constructed to expand milk production or storage do the specific rules come into effect.</p>

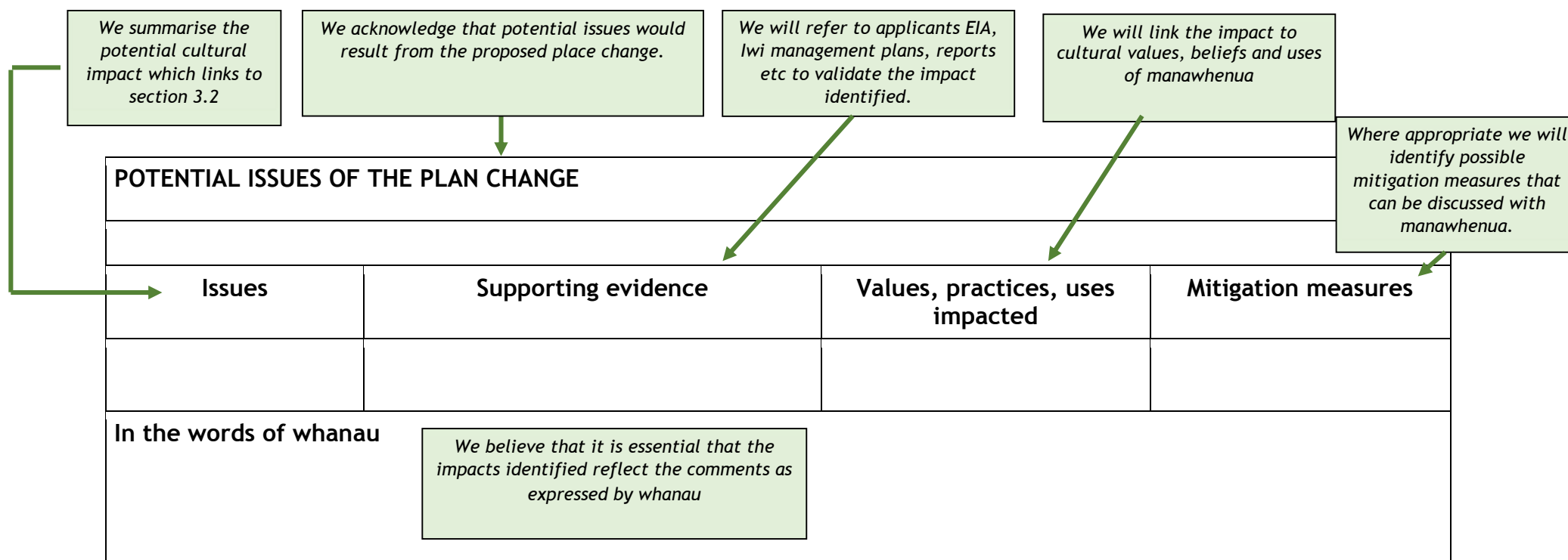
f) Use of solar energy for hot water heating	<p>Location of buildings and activities (Permitted Activities)</p> <p>26.3 - All permitted activities shall be located within the Height Control Zone identified on the Outline Development Plan in Appendix 26A, with the exception of:</p> <p>a) An directional signage under 1.2m height;</p> <p>b) Signage providing information at the Primary Access points;</p> <p>c) Infrastructure for roading, rail, the management of wastewater, storm water and supply of water associated with a permitted activity; and</p> <p>d) Permitted activities provided for in Rule 26.1(a) v.</p> <p>Construction activities (Controlled Activities)</p> <p>26.36 - Construction activities for a new building which will increase capacity for milk procession or storage within the Dairy Processing Management Area shall be a controlled activity. Any application for construction activities shall not require the written approval of third parties and shall be non-notified.</p> <p>26.37 - Under Rule 26.36 Council shall restrict its control to the following matters:</p> <p>A) Ensuring that the effects of construction traffic minimizes disruption, delay or inconvenience on the adjoining road network</p> <p>B) Best practicable measures to avoid or mitigate the dispersal and deposition of dust and sediment</p> <p>C) Best practicable measures to avoid the accidental discharge of any fuel or other hazardous substances, including measures for dealing with accidental spills</p> <p>D) Compliance with NZS6803:1999 Acoustics – Construction noise</p> <p>E) Compliance with NZS2631:1985-1989 Part 1-3 or equivalent standard</p> <p>F) An Accidental Discovery Protocol as specified in the Mahaanui Iwi Management Plan</p>	
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<p>A stormwater management plan – should be included as part of, or sit alongside the ODP, showing the design concept for storm water collection, treatment and disposal, and reflecting the need to manage storm water in an integrated and comprehensive manner as the plant develops and expands. This would also enable the existing system to be upgraded, and align storm water management more closely with IMP policies, which set out a five step approach to storm water management. Key features to consider including in the plan are:</p> <ul style="list-style-type: none"> a) Measures to reduce the volume of storm water requiring treatment e.g. rainwater collection tanks, permeable paving, rainwater gardens, vegetated swales around buildings and b) Ensuring that the scale and design of storm water basins is appropriate to manage the volume of storm water received. c) Planting of existing and any new storm water basins to improve function and provide amenity values roadways. 	<p>See Dairy Processing Management Area - Permitted activities (Land use) above</p> <p>See Outline Development Plan (Permitted Activities) above</p> <p>See Landscape planting above</p> <p>See Location of buildings and activities (Permitted Activities) above</p> <p>See Construction activities (Controlled Activities) above</p>	<p>The SDC decision on Synlait Milk Limited's plan change refers to storm water management within the permitted activities as long as it complies with Rule 26.1 to Rule 26.3 and is consistent with the ODP.</p> <p>In terms of new buildings this would fall under the Rule for Construction Activities (Controlled activities) but there is no specific reference to storm water management.</p> <p>These plan changes are not fully consistent with the recommendations put forward in Jolly (2014). The plan change does integrate the storm water management into the ODP and does stress the need for Landscape planting but doesn't stress the need to be more efficient in terms of design or resource use i.e. water usage.</p>
<p>Integration between district and regional planning matters</p> <p>Managing discharges in an integrated manner - While the Rūnanga supports the plan change as a means to manage district planning issues in an integrated manner, there are concerns about how discharges associated with the DPMA can also be managed in an integrated and comprehensive manner. Given that the footprint of the development is larger than the physical boundaries of the DPMA (i.e. waste is discharged off site), is there a need for a long term Consideration and analysis of any potential future development of the plant and how discharges to</p>	<p>See Dairy Processing Management Area - Permitted activities (Land use) above</p> <p>See Outline Development Plan (Permitted Activities) above</p> <p>See Location of buildings and activities (Permitted Activities) above</p> <p>See Construction activities (Controlled Activities) above</p>	<p>The SDC decision on Synlait Milk Limited's plan change covers discharges primarily within the rules within Dairy Processing Management Area - Permitted activities (Land use) section.</p> <p>These rules cover the management of both storm water, and wastewater within the ODP. These rules are specifically focused on development within the ODP not areas outside of it.</p>

<p>land and air (and potentially water) will be managed?</p> <p>This is particularly important given the proposed nitrogen limit set for the Selwyn Waihora catchment.</p> <p>A long term plan to manage and minimize the plant's nitrogen footprint is consistent with avoiding adverse effects on, or limiting future growth of, the plant or farm suppliers within the catchment.</p>		<p>As identified by Jolly (2014) much future impacts on development may have an impact outside the ODP.</p> <p>Any new construction is covered under the rule Construction activities (Controlled Activities). This focuses on the impacts from construction and not the operational impacts of the new development. This would be covered within the ODP.</p> <p>These rules capture some of the recommendations within Jolly (2014) related to the ODP but avoid addressing impacts outside the ODP or within the Te Waihora catchment.</p>
<p>Consistent approaches to zoning and rules</p> <p>Te Taumutu Rūnanga encourages a consistent approach to managing the continuing development and any potential expansion of the Fonterra plant at Darfield. It would be beneficial to have both dairy processing plants managed under the same zoning and rules.</p> <p>The plan change should not facilitate the establishment of new processing plants without a rigorous impact assessment process.</p>		<p>Fonterra are planning a similar plan change using the Synlait Milk Limited's plan change as a guide.</p> <p>This is the focus of this CIA.</p>
<p>Relationships and catchment goals</p> <p>Te Taumutu Rūnanga is actively working to improve land use and water management in the Te Waihora catchment, as part of a larger effort to restore the lake a mahinga kai.</p> <p>Strategic relationships with key organisations, industry and councils in the takiwā, and contributing to planning processes that determine how and where specific activities can occur, are critical to achieving this goal.</p>		<p>This is not addressed in the SDC decision on the Synlait Milk Limited's plan change.</p>

4.1 IMPACT AND ISSUES ASSESSMENT METHODOLOGY

The impacts of the proposed plan change have been evaluated using a qualitative assessment of the potential direct and indirect impacts of the plan change through a literature review and interviews with whanau from the affected kaitiaki Rūnanga. Interviews were carried out, with a summary being provided to whanau. The results of the interviews are reflected in this assessment. We have also chosen to present the data within a standard format.



It needs to be noted that, although whanau have identified how some of the impacts could be mitigated, this is not to be interpreted as whanau accepting that the impact is to occur. Whanau reserve the right to oppose and/or change their position in respect of the impacts.

4.1 IDENTIFICATION & MANAGEMENT OF CULTURAL ISSUES – PLAN CHANGE

POTENTIAL ISSUES OF THE PLAN CHANGE – LANDSCAPE PLANTING [RAISED IN JOLLY (2014)]			
Impact	Supporting evidence	Description of values impacted	Mitigation measures
Mahinga kai Mauri	<p>See Table 1 for the SDC decision relating to Landscape planting for Synlait Milk Limited's plan change and issues raised within Jolly (2014).</p> <p>Fonterra have proposed preparing a landscape / visual assessment based on the rules within the SDC decision. They have noted that if this expansion is to occur a landscape plan would be required but little if any additional landscape planting would be required.</p>	<p>Taumutu and Tūāhuriri want to see the expansion of native planting within the Te Waihora catchment to enhance or increase habitat for taonga species.</p> <p>They would also like to see native planting used in storm water management if possible as it can increase habitat for taonga species.</p> <p>The native species to be used should be based upon what was traditionally found in the area and should seek to hide as much of the artificial infrastructure as possible.</p>	<p>The Synlait Milk Limited plan change as shown in Table 1 and Appendix 3 doesn't fully comply with the recommendations made in Jolly (2014).</p> <p>Taumutu and Tūāhuriri would like Fonterra to firstly integrate all the recommendations within Jolly (2014) and within the Synlait Milk Limited's plan change into their proposed plan change.</p> <p>In addition Taumutu and Tūāhuriri would like to be consulted by Fonterra on the development of their landscape assessment or any future landscape planting at the Fonterra Darfield Milk Factory.</p> <p>This consultation would be required to make sure the rules relating to landscape planting as a "controlled activity" which include "proposed plant species" are consistent with Taumutu and Tūāhuriri expectations. An example of these expectations could include the use of fast growing natives with a focus on biodiversity and providing habitat for taonga species.</p> <p>This direct consultation would be required with Taumutu and Tūāhuriri as the rules relating to landscape planting within Synlait Milk Limited plan change state that it's non-notified with no written approval required from third parties.</p> <p>In general, Taumutu and Tūāhuriri support Fonterra advocating to their shareholders in the catchment, at their Darfield Dairy Factory and on farms directly owned by Fonterra (adjacent to Darfield Dairy factory) to carry out more landscape planting (natives only). Taumutu and Tūāhuriri see this a way to increase biodiversity and habitat for taonga species and could offset potential habitat impacts or loss from the Darfield Dairy factory operation. Again this would be discussed directly with Taumutu and Tūāhuriri whom may be able to assist Fonterra.</p>
In the words of whanau			
<p><i>"We usually advocate for natives ... we had this debate and you can fine fast growing natives and then you can put the slow growing ones behind them. Then the application doesn't have to go remove them [Pine trees]"</i></p> <p><i>"Biodiversity is a big thing... to put biodiversity back on the plain"</i></p> <p><i>"Put in some good biodiversity, not just one row {Native planting}"</i></p> <p><i>"Biodiversity... the planting around the sides {Boundaries and waterways} is to offset the effects"</i></p>			

POTENTIAL ISSUES OF THE PLAN CHANGE – EARTHWORKS [RAISED IN JOLLY (2014)]			
Impact	Supporting evidence	Description of values impacted	Mitigation measures
<p>Mahinga kai</p> <p>Wahi taonga</p> <p>Cultural Landscape</p>	<p>See Table 1 for the SDC decision relating to Earthworks for the Synlait Milk Limited's plan change and issues raised within Jolly (2014).</p> <p>Fonterra have not mentioned within the information they have provided. It is assumed they will comply with the rules put forward within Synlait Milk Limited's plan change.</p>	<p>Taumutu and Tūāhuriri have a role as kaitaki of the area to make sure any development protects the cultural landscape and artifacts found when disturbing the land.</p> <p>In terms of short term impacts earthworks can effect taonga species found with the surrounding area especially in waterways through sediment and discharges from equipment entering them.</p>	<p>Synlait Milk Limited's plan change as shown in Table 1 captures most of the recommendations made in Jolly (2014).</p> <p>Taumutu and Tūāhuriri would like Fonterra to firstly integrate all the recommendations within Jolly (2014) and within the Synlait Milk Limited plan change into their proposed plan change.</p> <p>Taumutu and Tūāhuriri would also like to be consulted by Fonterra if Earthworks over 5000m³ are to be carried out at the site and would like to be consulted when or if an Earthworks Management Plan is developed. This consultation may include discussion around future revegetation of the area post earthworks or any other issues raised by Taumutu and Tūāhuriri.</p> <p>This could be part of an annual hui between the two runanga and Fonterra where they can give Taumutu and Tūāhuriri an update on future developments at the site.</p> <p>Taumutu and Tūāhuriri would also like Fonterra to carry out assessment, or provide relevant information, to see if there would be any potential groundwater issues from construction activities within the DPMA. This information would help Taumutu and Tūāhuriri be confident Fonterra are taken this into consideration with their future development.</p>
In the words of whanau			
<p><i>"I'm just concerned with only one metre from groundwater, especially up there [Darfield]. One metre sounds really close"</i></p> <p><i>"Groundwater is an issue in Darfield"</i></p>			

POTENTIAL ISSUES OF THE PLAN CHANGE – LIGHTING [RAISED IN JOLLY (2014)]			
Impact	Supporting evidence	Description of values impacted	Mitigation measures
Cultural Landscape	<p>See Table 1 for the SDC decision relating to lighting within the Synlait Milk Limited's plan change and issues raised within Jolly (2014).</p> <p>Synlait Milk Limited's plan change captures all the recommendations put forward in Jolly (2014).</p> <p>Fonterra have not stated within the information they have provided if any lighting provisions will be made with their plan change. It is assumed that they will be consistent with the Synlait Milk Limited plan change.</p>	<p>To protect the cultural landscape and the view of the night sky Taumutu and Tūāhuriri want lighting of artificial structures to be minimized or done in way to mitigate their impact on the surrounding cultural landscape.</p>	<p>The Synlait Milk Limited plan change as shown in Table 1 captures all the recommendations made in Jolly (2014).</p> <p>Taumutu and Tūāhuriri would like Fonterra to be consistent with the Synlait Milk Limited plan change and the recommendations within Jolly (2014).</p> <p>Within the MIWP there are specific rules relating to minimising the impact of lighting on the night sky and the surrounding cultural landscape. Taumutu and Tūāhuriri would like to be consulted on future upgrades to lighting within the ODP or if lighting is to be used within new construction on site.</p> <p>Fonterra could prepare or provide information relating to lighting at the Darfield Dairy Factory site or general policies relating to lighting considerations for all their dairy factories so that Taumutu and Tūāhuriri can review this and give feedback.</p>
In the words of whanau			
<p><i>"We want the lowest impact in terms of lighting because it effects our landscape"</i></p>			

POTENTIAL ISSUES OF THE PLAN CHANGE – LOW IMPACT AND SUSTAINABILITY DESIGN PRINCIPLES [Jolly(2014)]			
Impact	Supporting evidence	Description of values impacted	Mitigation measures
Kaitiaki Mahinga kai Cultural Landscape	<p>See Table 1 for the SDC decision relating to low impact and sustainability design principles for the Synlait Milk Limited plan change and issues raised within Jolly (2014).</p> <p>The Synlait Milk Limited plan change has a wide range of rules relating to design and site layout but as long as they comply with the ODP and general rules they are considered a permitted activity.</p> <p>Fonterra have not provided any information relating to low impact and sustainable design principles.</p>	<p>Taumutu and Tūāhuriri recognize the optimal use of resources to minimize footprints on the environment is important to protect taonga species.</p> <p>With any future construction on site the use of sustainable building practices is important to Taumutu and Tūāhuriri. This is because it can reduce the impact a development on the wider environment which is linked to many cultural values.</p>	<p>The Synlait Milk Limited plan change doesn't address the concerns expressed within Jolly (2014) in relation to low impact and sustainable design principles.</p> <p>Taumutu and Tūāhuriri would like to be consulted when new construction or when buildings with the ODP / DPMA are to be upgraded. This consultation would include discussion on possible integration of low impact and sustainable design principles into future development.</p> <p>Again this consultation could be included in discussions with Taumutu and Tūāhuriri annually or may require a specific hui to discuss this.</p>

POTENTIAL ISSUES OF THE PLAN CHANGE – STORMWATER MANAGEMENT [Jolly (2014)]			
Impact	Supporting evidence	Description of values impacted	Mitigation measures
<p>Kaitiaki</p> <p>Mahinga kai</p>	<p>See Table 1 for the SDC decision relating to storm water management for the Synlait Milk Limited plan change and issues raised within Jolly (2014).</p> <p>The Synlait Milk Limited plan change considers storm water management as a permitted activity as long as it is part of the ODP and consistent with Rule 26.1. There is also no requirement for a storm water management plan.</p> <p>In terms of landscape planting relating to storm water management this is mentioned but the use of sustainable and efficient systems is not mentioned.</p> <p>Fonterra within their proposal noted there is a wide range of storm water management options but they haven't provided any specific details on this for the plan change.</p>	<p>Taumutu and Tūāhuriri want to reduce and/or eliminate the potential impacts of storm water, including the containments it can contain, on surrounding waterways. This is because they as they contain many taonga species. They support initiatives to reduce the volume and improve quality of the storm water before it's discharged.</p> <p>The design and creation of the storm water system should also integrate habitat creation for taonga species into its design and assist is hiding its structure so to lessen its impact on the cultural landscape.</p>	<p>The Synlait Milk Limited plan change doesn't address all the concerns expressed in relation to storm water management raised within Jolly (2014). It doesn't mention specifically the need for a storm water management plan but does mention the need for storm water management to be part of the DPMA and landscape planting as well.</p> <p>The management of discharges is a priority for Taumutu and Tūāhuriri because of potential downstream impacts including potential impacts on Te Waihora. Therefore Taumutu and Tūāhuriri would like Fonterra to have a storm water management plan to sit alongside the ODP which would take into consideration MIMP policies.</p> <p>This storm water management plan, as recommended in Jolly (2014), would include measures to reduce storm water, storm water infrastructure sufficient and native planting integrated into design of storm water management system.</p>
In the words of whanau			
<p><i>"You could do medium to high [Native planting,] to pick up nutrients in storm water and wastewater"</i></p> <p><i>"We {Taumutu} have always advocated for going {Storm water and Wastewater} to land"</i></p>			

POTENTIAL ISSUES OF THE PLAN CHANGE – MANAGING DISCHARGES IN AN INTEGRATED MANNER			
Impact	Supporting evidence	Description of values impacted	Mitigation measures
<p>Kaitiaki</p> <p>Mahinga kai</p>	<p>See Table 1 for the SDC decision on managing discharges in an integrated manner for the Synlait Milk Limited plan change and issues raised within Jolly (2014).</p> <p>The rules within the Synlait Milk Limited plan change focus upon managing impacts within the DPMA, shown in the ODP, rather than the wider catchment. These impacts could have an effect on the wider catchment so addressing this within the DPMA does address some potential concerns.</p> <p>In terms of new construction within the DPMA this is and specific rules apply. Although many of these rules address impacts relating to the construction itself and not the potential operational impacts of the new development. This would again be covered in the ODP.</p> <p>See “Storm water management plan” above for Fonterra’s response.</p>	<p>Taumutu and Tūāhuriri have concerns relating to land use intensification and land use change, with their usual associated discharges, within the Te Waihora catchment. This is because it can have impact water quality and quantity. This in turn could have an impact on taonga species in the wider Te Waihora catchment.</p>	<p>The Synlait Milk Limited plan change doesn’t address fully the concerns relating managing discharges in an integrated manner expressed within Jolly (2014).</p> <p>Taumutu and Tūāhuriri support the use of an similar plan change by Fonterra as a way to have a consistent approach but see the need for impacts outside of the DPMA needing the be addressed.</p> <p>Taumutu and Tūāhuriri recommend Fonterra work with them in supporting consistent approaches which address concerns Taumutu and Tūāhuriri have in relation to the impacts of discharges outside of the DPMA. These discharges would include those by the Fonterra Darfield Milk Factory and by other Fonterra shareholders within the Te Waihora catchment.</p> <p>For Taumutu and Tūāhuriri integration and consistency is not just a way to streamline the development process. It can create an understanding and establish a commitment between all parties to have a long term plan to address impacts of all developments i.e. nitrogen leaching within Te Waihora Catchment.</p>

4.1 IDENTIFICATION & MANAGEMENT OF CULTURAL ISSUES – POTENTIAL FUTURE DEVELOPMENT

POTENTIAL ISSUES OF THE PLAN CHANGE – FUTURE WASTEWATER AND STORMWATER MANAGEMENT			
Impact	Supporting evidence	Description of values impacted	Mitigation measures
<p>Mahinga kai</p> <p>Wahi taonga</p> <p>Cultural Landscape</p>	<p>See Table 1 for the SDC decision on storm water management for the Synlait Milk Limited plan change, issues raised within Jolly (2014) and the discussion above on storm water and wastewater management plan.</p> <p>Fonterra have stated in the information they provided that a wide range of options exist to manage both storm water and waste water. They don't go into detail on these options.</p>	<p>See “Storm water management plan” above</p>	<p>With any future expansion at the Fonterra Darfield Dairy Factory Taumutu and Tūāhuriri should be consulted directly in the development of storm water and wastewater management plans. Alongside this if any new or an increase in the discharge amount is planned in the near future Taumutu and Tūāhuriri should be consulted.</p> <p>It is noted in the information provided by Fonterra that they have a wide range of options for storm water and wastewater. Taumutu and Tūāhuriri would like Fonterra to provide details to them on the current storm water and wastewater systems they have in place and if any future upgrades are planned. Within this management plan Taumutu and Tūāhuriri would also like to get information on the other storm water and wastewater systems they operate at their other factories and details on how well each system treats storm water and wastewater.</p> <p>This discussion with Taumutu and Tūāhuriri on a storm water and wastewater management plan would give both parties time to discuss standard of treatment Taumutu and Tūāhuriri would like to see at Darfield Milk Factory if upgrades, expansion or a new storm water and wastewater system is put in place. If any new expansion at the Darfield Milk factory is planned which will create a new discharge or increase the discharge greater than current consent Taumutu and Tūāhuriri would like to be consulted as soon as possible to address any potential issues.</p> <p>This discussion between the parties could help streamline future development as Fonterra, Taumutu and Tūāhuriri could have agree on systems and standards.</p> <p>In principle Taumutu and Tūāhuriri would recommended that Fonterra have in place or have planned in the future to have both their storm water and wastewater treatment systems at a level which delivers the highest level of treatment. One example could be using a biological treatment system for wastewater and storm water along with dense native planting. This system may already in place at Darfield.</p> <p>The need for this standard of treatment is because of the potential downstream impacts on Te Waihora. The cultural significance and the sensitivity of the catchment which is already under pressure means any way possible to reduce the stress on Te Waihora</p>

POTENTIAL ISSUES OF THE PLAN CHANGE – RELATIONSHIP WITH FONTERRA			
Impact	Supporting evidence	Description of values impacted	Mitigation measures
Mahinga kai Wahi taonga Kaitiakitanga	<p>Fonterra has major interests within the Te Waihora Catchment through both their Darfield Dairy Factory and the numerous Fonterra shareholders / suppliers within the catchment.</p> <p>Fonterra (and their shareholders) are active in the community through their participation in various the resource management forums and their role within the restoration of Te Waihora through their “Living water” programme.</p> <p>These factors have meant Fonterra have participated in many forums with Taumutu and Tūāhuriri as well as Taumutu and Tūāhuriri resource management groups.</p>	<p>Relationships with other organisations this is because are important to Taumutu and Tūāhuriri as it can assist in their role as kaitaki.</p> <p>As kaitaki Taumutu and Tūāhuriri have a responsibility to protect cultural values of their takiwa which they have in the past, they will continue to and which future generations from Taumutu and Tūāhuriri will.</p> <p>In some cases relationships with other organisations and groups can assist Taumutu and Tūāhuriri in their role as kaitaki through working towards similar desired outcomes or by minimising impacts on the environment. These organisations in many cases can have an influence over both policy and the environment itself.</p>	<p>Taumutu and Tūāhuriri want to have regular hui with Fonterra to discuss current and future issues. An example of how to facilitate this could be through the establishment of a Cultural Advisory group (CAG) where representatives from Taumutu and Tūāhuriri would meet regularly with representatives from Fonterra.</p> <p>If a CAG was established Taumutu and Tūāhuriri representatives would be selected by the two runanga. A terms of reference would likely be drawn up so all parties know how this group would function. For Fonterra the establishment of a CAG could assist in streamlining future expansions or more importantly enhance the relationship they have with the two runanga.</p> <p>As mentioned throughout this document consultation directly with Taumutu and Tūāhuriri is required. Taumutu and Tūāhuriri would determine how they want this carried out. This may occur directly with runanga with the runanga and the CAG. Ultimately who and how this would be done would be determined by the runanga.</p> <p>To establish this relationship Taumutu recommended a site visit to the Darfield Milk factory so Fonterra can discuss the plan change, potential future expansion, Fonterra monitoring / information sharing and any other issues that Taumutu and Tūāhuriri or Fonterra may want to discuss.</p>
In the words of whanau			
<p><i>“You [Fonterra] set your work programme one year or two years ahead of time... let’s say they are building another storm water pond...if you have a work programme and you give it to us and this is what you propose in six months’ time we {Taumutu} can work towards this”</i></p>			

5. CONCLUDING COMMENTS

This section:

1. Identifies the priorities of Taumutu Rūnanga and Tūāhuriri Rūnanga.
2. It outline the issues and potential issues Te Taumutu Rūnanga have in relation to Fonterra proposed private plan change to create a Dairy Processing Management Area (DPMA) at the Darfield Milk Factory.
3. It describes the effects Taumutu Rūnanga and Tūāhuriri Rūnanga would like to see avoided if the plan change by Fonterra goes ahead and development is carried out at the Darfield Dairy Factory
4. It describes the expectations of Taumutu Rūnanga and Tūāhuriri Rūnanga.

5.1 Priorities of Taumutu Rūnanga and Tūāhuriri Rūnanga:

Priorities of Taumutu Rūnanga and Tūāhuriri Rūnanga include the following:

- Protecting the quality of the waters of the both freshwater environments
- Protecting the quality of the springs, small tributaries, ephemeral streams and areas of significance which flow into Te Waihora at the bottom of the catchment
- Protecting the use of reserves and easements.
- Restoration of lands and waters within the Te Waihora catchment which could be impacted
- Establishing or restoring native habitats of taonga species, including mahinga kai; and
- Protecting indigenous biodiversity, in particular taonga species – restoring or enhancing native biodiversity leads to cultural outcomes.

5.2 Adverse effects to be avoided

When assessing the impacts associated with the proposal Tūāhuriri Rūnanga and Te Taumutu Rūnanga want to see the following adverse effects avoided:

- Any loss or impact on habitats for taonga species, especially mahinga kai species;
- Any impact on wahi tapu and wahi taonga.

As is noted above, some of these issues can be addressed by consent conditions and monitoring. Others require ongoing discussions with Taumutu Rūnanga and Tūāhuriri Rūnanga.

5.3 Ongoing Discussions

Tūāhuriri Rūnanga and Te Taumutu Rūnanga request the following:

- Regular Hui with Tūāhuriri Rūnanga and Te Taumutu Rūnanga to discuss issues, share information or give updates on future expansion at the Darfield Milk Factory.
 - How this would done requires discussion between Fonterra and the two runanga
- Agreement by Fonterra to continue or carryout landscape planting at the Darfield Dairy Factory and the surrounding land owned by Fonterra

- Provision of all technical reports Fonterra have prepared for this plan change
- Involvement in the development of the following documents (or relevant documents or policy) or provided with these documents so feedback can be provided to Fonterra
 - Environmental monitoring data or reports relating to the environment prepared by Fonterra within the Te Waihora catchment
 - Final version of the Outline development plan with all details on it
 - Monitoring carried out at Darfield Dairy Factory
 - Storm water management plan
 - Earthworks management plan
 - Landscape planting plan / assessment
 - Wastewater management plan
 - Any addition technical reports the two runanga may require
- Response from Fonterra on how they will integrate the recommendations from Jolly (2014) into their proposed plan change Taumutu Rūnanga and Tūāhuriri Rūnanga
- Information on any proposed future upgrades or expansion planned at the Fonterra Darfield Dairy Factory to the storm water or wastewater treatment systems.
- A site visit by a group from Taumutu Rūnanga and Tūāhuriri Rūnanga to the Darfield Dairy Factory in the so Fonterra can show them the factory, the potential changes if plan change goes through and any future expansion which will occur in the short term
 - The representatives may also want to visit the surrounding land owned by Fonterra
 - The representatives will likely want to see the storm water and wastewater system. This could include the discharge area as well.
 - The representatives will likely want to see the landscape planting Fonterra have carried out and any area where future landscape planning is planned.

5.4 Going forward – Taumutu Rūnanga and Tūāhuriri Rūnanga expectations

It is expected that the impacts specific to Fonterra proposed private plan change to create a Dairy Management Processing Area (DPMA) at the Darfield Dairy Factory which are raised in this CIA will become the focus of discussions between Tūāhuriri Rūnanga, Te Taumutu Rūnanga and Fonterra.

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APPENDICES

Appendix 1 – Tipa and Associates. (2013). Cultural Values, flow and water management issues for the Waikirikiri / Selwyn – Te Waihora Catchments: Part 4 – Tangata Whenua: The people of the land. Prepared for Environmental Canterbury.

PART 4: TANGATA WHENUA – THE PEOPLE OF THE LAND

The Waikirikiri - Te Waihora catchments have a wide variety and abundance of wildlife and it is understandable why people were, and continue to be, attracted to the catchment. In this part of the report we provide an overview of the cultural association with the Waikirikiri - Te Waihora catchments³. We focus in particular on how it relates to the kaitiaki targets of the CWMS.

4.1 Background

Within the CWMS specific kaitiakitanga targets are prescribed. Those relevant to this report are listed below:

From 2010:

- *Prevent further loss or degradation of Ngai Tahu nominated wahi taonga*
- Increase understanding in each zone of the customary values and uses associated with specific waterbodies or parts of waterbodies

By 2015:

- *All degraded wahi taonga and mahinga kai waterways nominated by Ngai Tahu have an active restoration programme in place that responds to cultural priorities*
- A report on the health of all Ngai Tahu nominated waterbodies using Ngai Tahu Cultural Health Monitoring Tool
- Identified customary uses (current and potentially restored) for all waterways

By 2020:

- *Increased the abundance of, access to and use of mahinga kai.*
- All marae and associated papakāinga have access to high quality drinking water

By 2040:

- *Protection, in accordance with Ngai Tahu values and practises, of wahi taonga and mahinga kai waterways*

There are wahi taonga and wahi tapu (including wai tapu) found throughout the Waikirikiri - Te Waihora catchments. Many of these were included in Te Whakatau Kaupapa (Tau et al 1990).

4.2 Land ownership.

As noted above, Ngai Tahu is the owner of Te Waihora lakebed (as shown in Figure 2).

³ Please note that the information contained in this report is information that is already in the public domain and is therefore publicly available. It has been collated and discussed in the context of flow management.

4.3 Wahi Tapu / Taonga⁴

With this history of settlement, occupation and resource use, places of importance to the iwi, local hapu and whanau were shaped. For Ngai Tahu, the term wāhi taonga refers to places that hold the respect of the people in accordance with kawa and tikanga. O'Connell (undated) explains that some sites are of tribal significance while others are important to the hapu and whanau who visited, lived at, or had special affiliations to that area. Prominent hills, landforms, springs, remaining areas of indigenous vegetation and archaeological sites are examples of physical taonga. Recorded Maori archaeological sites around Te Waihora include pā sites (fortified settlements), kainga (undefended settlements), urupa (burial grounds and single burial sites), borrow pits (small quarries from which sand or gravel was removed and added to gardens to improve the soil for kumara growing), shell middens, cooking ovens, storage pits and isolated artefact find spots.

The focus of this report is water. For Ngai Tahu, water is a taonga left by the ancestors to provide and sustain life. The ability to gather and share food which is a cornerstone of Ngai Tahu society, tradition and mana is reliant on healthy ecosystems and especially water that is fit for human consumption and that is able to support mahinga kai species. Significant cultural sites include: Te Waihora/Lake Ellesmere, Muriwai/Coopers Lagoon, Waikirikiri, the Kaituna River, the Rakaia and Waimakariri braided rivers and their upper catchment wetlands and lakes, and the Rakaia river mouth. More generally, all spring-fed streams, lowland streams and wetlands are of cultural significance, as are areas of mahinga kai and any remaining indigenous biodiversity.

Other taonga can include pūrākau (stories), wāhi ingoa (place names) or other associations that those living today have with the tupuna (ancestors) who have gone before. Since 1999 Ngai Tahu has identified a range of wahi tapu / wahi taonga. Those found in Waikirikiri - Te Waihora catchments include:

- Ara tawhito (ancient trails)
- Umu ti (earth ovens associated with preparation of kauru)
- Kaika Nohoanga (occupation, settlement sites)
- Ikoa Tawhito (place names)
- Mahinga Kai (places where resources including food were/are procured)
- Wāhi kaitiaki (resource indicators from the environment)
- Mauka (important Mountains)
- Wahi kohatu (rock formations)
- Pa Tawhito (ancient pā sites)
- Wahi paripari (cliff areas)

⁴ The information in this section comes from the Cultural Impact Report for Central Plains Water Enhancement Phase 11 (O'Connell, undated), Te Waihora Joint Management Plan, and the evidence of Ngai Tahu whanui to the hearings for the Central Plains resource consents and the amendment to the Lake Ellesmere - Te Waihora WCO.

- Tauranga Waka (canoe mooring sites)
- Wahi raranga (sources of weaving material)
- Tuahu (sites of importance to identity)
- Tuhituhi nehera (rock art)
- Urupa (human burial sites)
- Wahi tohu (locators and their names within the landscape)
- Repo Raupo (wetlands and swamps) and Wai Maori (important freshwater areas)
- Wai tapu (sacred waters)
- Marae
- Reserves, easements, entitlements, private lands
- Wahi pakanga

WITH RESPECT TO FLOWS:

Ngai Tahu whanui want to ensure that there is no further loss of wahi taonga because of inappropriate water management.

In the paragraphs that follow we describe many of these wahi taonga. A diagram illustrates the interrelationships between these taonga and how they are dependent on a healthy functioning ecological system is included as [Appendix 1](#). The tables that follow in [Appendix 2](#) summarise how these taonga may be impacted by water management and flows in particular.

Place names

Place names and histories provide cultural context. The naming of places by Ngai Tahu is testament to the long history of occupation and travel within the catchment. Important places include camping places enabling food gathering, those associated with creation traditions or tupuna, settlements, and sites renowned for the different foods that could be obtained. Places and their names formed vast oral 'maps' that were an integral part of the culture of Ngai Tahu. Many of the place names describe the characteristics of the waterbodies or the adjacent riparian and terrestrial environs.

Figure 4 shows the wealth of Ngai Tahu place names as recorded by Riki Ellison, a Ngai Tahu elder, in 1979⁵.

Ingoa Tawhito (place names) associated with Waikirikiri - Te Waihora catchments that are in the public domain are included in the table where we also try to identify other taonga values associated with the area/site; and identify the location - if known.

⁵ This map can be found in the Te Waihora Joint Management Plan.

- Te Kete Ika a Tutekawa
- Kaituna – a place where eels were plentiful/eaten.
- Waikākahi (Pā of Tutekawa) - place of the freshwater mussel.
- Orariki - the place of life-giving creatures/a reference to biodiversity.
- Motukarara - the 'island of lizards' later called Rabbit Island
- Te Waihora – spread-out waters.
- Te Koraha - open area of shallow water covering extensive mud flats.
- Taumutu - the high ridge of land.
- Whakamātakiuru - the lookout/ to look outwards; later received the European name Fishermans Point as a name for the fishing settlement.
- Taitapu/Tai Tapu - impenetrable place, or sacred tide.
- Ahuriri – A prominent eel fishing lagoon; the name of a funnel shaped fishing net of great size, used like a hīnaki in tidal rivers (Williams, 1991).

Other place names specific to Te Waihora include the following

Kapukeriki	Food Production Site Kauru, Aruhe, Kiore
Karokaro	
Kua o whiti	in vicinity of Harts Creek
Kereru	
Mimi o Taua	Permanent Settlement Aruhe, Kauru, Tuna, Kiore, Ngā Manu, Turnip
Motukiore	Food Gathering Site Kiore Weka
Mairaki	Food Production Site Kāuru Aruhe
Mautohe	Kainga in the Kaituna Valley
Matakanae	
Niho Makuru	Tuna
Okakea	Springs
Otanehakau	Food Production Site Kāuru, Aruhe, Kiore, Tuna, Ngā manu
Ohapuku	Food Production Site Kāuru, Aruhe, Kiore, Tuna, Ngā manu
Otuteihoka	A Habitation Tuna An Eel Weir
Ohinekakaraiti	Permanent Settlement & Food Production
Ōtūpara	Food Production Site Aruhe Kauru
Ōtūraparapa	Food Production Site Kauru, Aruhe, Kiore, Tuna, Ngā manu
Orehu	Gully towards Jollie Brook

Omuku	Waterway
Pauri	River
Pukeāhua	Permanent Settlement & Food Production
Puaka	A Habitation Tuna An Eel Weir
Pakihi Maroke	
Rikarika	Tuna An Eel Weir
Rangi hauku	A ridge in Kaituna Valley
Taramata	A Settlement with permanent stockade that belonged to Tū Te Wāimate of Rapuwai and Ngāti Māmoē. Weka, Aruhe, Tuna
Taumatarua	Production Site Kauru Aruhe
Te Awaakeake	Food Production Site Kauru, Aruhe, Kotukutuku, Tutu,
Te Notī	Food Production Site Kāuru, Aruhe, Kotukutuku, Tutu,
Te Awatutu	Food Production Site Kāuru, Aruhe, Kotukutuku, Tutu,
Tararoa	Tuna An Eel Weir
Tamanui	A Habitation & Eel Weir
Tāheke	Tuna
Te Kauaka	Permanent Settlement & Food Production
Te Awapunapuna	Between two waterways
Te Wai Tamapua	A swamp
Tamata kuri	Up the Irwell
Te Parapara	Up the Irwell
Te Raki	A stream bed
Te Awakokomuka	
Waikohuwai	Food Production Site Kāuru, Aruhe, Kiorē, Tuna, Ngā manu
Whakarewa	Food Gathering Site Tuna An Eel Pond
Whakaepa	Permanent Settlement & Food Production
Waianiwaniwa	Food Production Site Tuna, Pipiki, Weka, Koreke,
Whenua a Kura	Food Gathering Site Pond Whenua a Kura Food Gathering Site Pond
Waipakurakura	Up the Irwell
Ruapuna	Springs



WITH RESPECT TO FLOWS:

In addition to the taonga value of the place name itself, value also stems from knowing, being able to see the meaning of the place name when viewing the characteristics of the landscape, and being able to use sites as tupuna did.

Wai⁶

Without water no living thing, plant, fish or animal can survive. Water is taonga and this taonga value refers to values associated with the water itself, the resources living in the water and the resources in the wider environs that are sustained by the water. Further, water is a holistic resource and needs to be managed as such

Awa of the Waikirikiri Catchment include:

- Hororata – Hororata River
- Waianiwaniwa – Waianiwaniwa/Waireka River
- Pauri – Hawkins River
- Te Mimi o Taua – Glendore Creek
- Otāneākau – Tributary of Upper Waikirikiri
- Te Awatutu – Tributary of Upper Hawkins River
- Waikohuwai – Blacks Stream
- Te Awaakeake – Tributary of Hawkins River (near Waddington)

Other awa feeding Te Waihora include

- Selwyn iRiver - Waikirikiri
- Irwell River - Waiwhio,
- LII - Ararira,
- Halswell River - Huritini
- Harts Creek – Waitatari
- Waikekewai
- Te Raki
- Boggy Creek
- Kaituna
- Prices

Wai tapu

Specific freshwater sources are valued because of their status or usage. Values (both tangible and intangible) associated with specific freshwater resources include: the role of particular freshwater resources in creation stories; the role of those freshwater resources in historical accounts; the proximity of settlements and/or historical sites in or adjacent to specific freshwater resources; the value of freshwater resources as a source of tribal identity; mahinga kai; the use of freshwater resources as access routes or transport courses; and the continued capacity for future generations to access, use and treasure the resource (Ministry for Environment, 1998). Waters could be classed as Wai Tapu (sacred waters) or Wai Taonga (treasured waters). Expanding on this, traditional water classifications, which draw on the classifications proposed by Douglas (1984, 1), Palmer and Goodall (1989) Rochford (2003), and Williams (2006), offer another understanding the distinctive characteristics and values associated with different waterbodies. The classifications, as summarised in Table 3, denote saltwater and freshwater categories, distinguish other waters on the basis of physical character or levels of degradation, and identify specific cultural uses of different types of water.

⁶ The information is from O'Connell (undated)

Table 3: Summary of Traditional Water Classifications

Classifications by geographic location <i>Ki uta ki tai</i>	Classifications by spiritual description	Classification by physical description	Classification by special uses
Waimaori freshwater	Waimaori <ul style="list-style-type: none"> becomes waimaori when it comes into unprotected contact with humans. has a mauri (which is generally benevolent) and which can be controlled by ritual. 	Waimaori - is the term used to describe water that is running freely or unrestrained, or to describe water which is clear or lucid	Waimaori - is normal, usual and ordinary
	Waiora <ul style="list-style-type: none"> Pure water is termed Te Waiora a Tane, and to the Maori it contains the source of life and wellbeing. is the spiritual and physical expression of Rakinui the sky father, shedding tears at the loss of Papatūānuku, the earth. The rain is waiora 	Waiora - The purest form of water	Waiora <ul style="list-style-type: none"> is used to purify and heal. can remain pure, as waiora, only if its contact with humans is protected by appropriate ritual prayers. has the potential to give life, to sustain wellbeing, and to counteract evil
	Wai whakahahe tupapaku - Classed as wai tapu		Wai whakahahe tupapaku <ul style="list-style-type: none"> are water burial sites
	Wai tohi - Classed as wai tapu		Wai tohi <ul style="list-style-type: none"> used by a tohunga during initiation and baptism ceremonies.
	Waikino - is water, which has been polluted or debased, spoilt or corrupted. In waikino, the mauri has been altered so that the supernatural forces are non-selective and can cause harm to anyone	Waikino - describes water, which is rushing rapidly through a gorge, or water where there are large boulders or submerged snags which give the potential to cause harm to humans.	
	Waimate <ul style="list-style-type: none"> has lost its mauri or life force has the potential to cause ill fortune, contamination or distress to the mauri of other living things, including people, their kai moana or their agriculture. The subtle differences between waikino and waimate seem to be based on the continued existence of a mauri (albeit damaged) in the former, and its total loss in the latter 	Waimate <ul style="list-style-type: none"> is dead, damaged or polluted water which has lost its power to rejuvenate either itself or other living things has a geographical meaning, to denote sluggish water, a backwater to a main stream or tide, but in this sense the waimate retains its mauri. 	
Waimatairi - brackish water; the interface of freshwater & sea			
Waiata - the sea, the surf or the tide, sea water	Waiata - has returned to Tangaroa in the natural process of generation, degradation and rejuvenation.	Waiata - Rough, angry or boisterous like the surf, or the surge of the tide.	
		Waiapuna, or springs had various uses including mahinga kai, tūāhu, waiwhakahaheketūpāpaku	
Waihapua - refer to coastal estuaries and lagoons. Te Waihora is a waihapua			

WITH RESPECT TO FLOWS:

Wai tapu include Wai whakaheke tupapaku (water burials)⁷. In the context of this report, manawhenua are seeking the absolute protection of freshwater resources that are considered tapu, and seek the protection of the sufficient quantities of high quality waters of taonga value.

Maunga⁸

Maunga (Mountains) play an important role in spiritual and cultural beliefs of Ngai firstly as gateways to the atua (gods), and secondly as the gatherers of the tears of Rakinui (Sky Father), which in turn nourish Papatuanuku (Earth Mother). The maunga of the Waikirikiri hold a mixture of tupuna names, appearance names and use names. They generally act as reference points that guide people to a particular food gathering site. As they approach the maunga, they then refer to other icons such as waterways, trees or rocks to guide them.

Maunga of the Waikirikiri:

- Motukiore – Woolshed Hill
- Tarauri – Mount Misery
- Ruahine – Cairn Hill
- Pukeāhua – Abners Head
- Pukemārama – Racecourse Hill
- Kākāpōtahi – Malvern Hills

Kainga Noho/Pa Tawhito

Ngai Tahu lived an itinerant lifestyle and constantly moved following the seasonal variances of their mahinga kai. During the warmer months, a larger amount of time was spent in the higher altitudes, and during winter they generally retreated to their permanent coastal villages. In a contemporary sense, although there are provisions for papakainga housing in the District Plan, there is a need to ensure that there are sufficient quantities of drinking water to enable lands to be developed for papakainga housing.

WITH RESPECT TO FLOWS:

Ngai Tahu whanui want to ensure that flows in the rivers and the quality are conducive to

1) a range of cultural uses e.g. mahinga kai, swimming, camping being undertaken at the nohoanga.

2) Papakainga housing being established as envisaged in the District Plan

Urupa

Urupa are burial sites. Generally larger urupa are associated with the more permanent living settlements in the area. It must be noted though that there have been many accidental discoveries of urupa which have gone unrecorded, or have been desecrated or destroyed. Known Urupa in the Waikirikiri Catchment include:

- Whakaepa Pa – Coalgate
- Ohinekakaraiti – Junction of Kōwai & Waimakariri Rivers

⁷ See Tau et al (1990) Te Whakatau Kaupapa.

⁸ The information is from O'Connell (undated)

Wāhi pakanga¹⁰

Wāhi pakanga are places where historical battles took place between iwi, hapū or whānau. The sites automatically inherit a wāhi tapu (sacred site) status given the blood that has been shed upon it. Equally, those killed on the battle field were often buried in close proximity to the site and thus wāhi pakanga also have associated urupā. In absence of a known burial site, the wāhi pakanga is treated in the same reverence as if it were an urupā and those killed are in fact buried there. Prior to the attacks of Te Rauparaha in the early 1830's, Ngāi Tahu had been engaged in a large inter whānau feud aptly named Te Kaihuaka (Eat Relations). During this feud the Pa on Ripapa Island, whose chief was Taununu, was attacked by a Kaiapoi taua (war party). In utu (revenge), Taununu and his people travelled without detection to the pa of Whakaepa, near Coalgate and lay siege on the outpost killing all of its occupants. The site of the Whakaepa Pa remains a wāhi pakanga and holds special significance for Ngāi Tahu whānau whose tupuna (ancestors) were killed there.

WITH RESPECT TO FLOWS:

Burial sites of tupuna are wāhi tapu and their modification or destruction is prohibited. Ngai Tahu whanui want to ensure that 1) flows in the river do not increase the scale or extent of erosion (through benching, undercutting, erosive force) and 2) quality of water does give cultural offence

Marae



As noted earlier, Te Pā o Moki, was established as an outpost for the son of Te Ruahikihiki. The current whare, Ngāti Moki, was built on native reserve at Taumutu as a rūnanga hall in 1893.

WITH RESPECT TO FLOWS

Providing sufficient safe drinking water is fundamental for the whanau of Taumutu Marae.

Ara Tawhito (Ancient Trails)¹¹

Ngai Tahu whanui advised that tupuna would have travelled throughout the catchment when harvesting mahinga kai from the river valleys. Further to the fact that this catchment contained large numbers of birds, such as ducks and weka, kiore, and fish, it must also be noted that this valley was an important stopover for parties journeying through to Whakamātau (Lake Coleridge) and further to Noti Raureka (Brownings Pass) to gather pounamu from the Arahura River. It was also a stopover for parties travelling northwest over Ōtāneuru (Porters Pass) and into the Waimakariri basin.

¹⁰ The information is from O'Connell (undated)

¹¹ The information is from O'Connell (undated)

WITH RESPECT TO MANAGEMENT:

Ngai Tahu whanui want to ensure that access is provided throughout the catchment, especially to sites that are used by Tangata whenua. Linkages between sites of significance is also vitally important to whanau.

Mahinga kai

Ko nga hau ki etahi waahi, ko nga kai ki Orariki

No matter from which way the wind blows one can procure food at Te Waihora

Te Waihora Joint Management Plan has adopted a vision based on mahinga kai. This vision reflects the unique cultural values associated with Te Waihora and emphasizes the ecological processes and services that they contend are undervalued by contemporary resource management strategies.

The mahinga kai vision prioritizes efforts to re-naturalize processes that sustain mahinga kai and provides a direct and culturally appropriate means for monitoring and reporting restoration progress to whanau, hapu, and iwi. The mahinga kai sourced from the catchment is listed in Table 4.



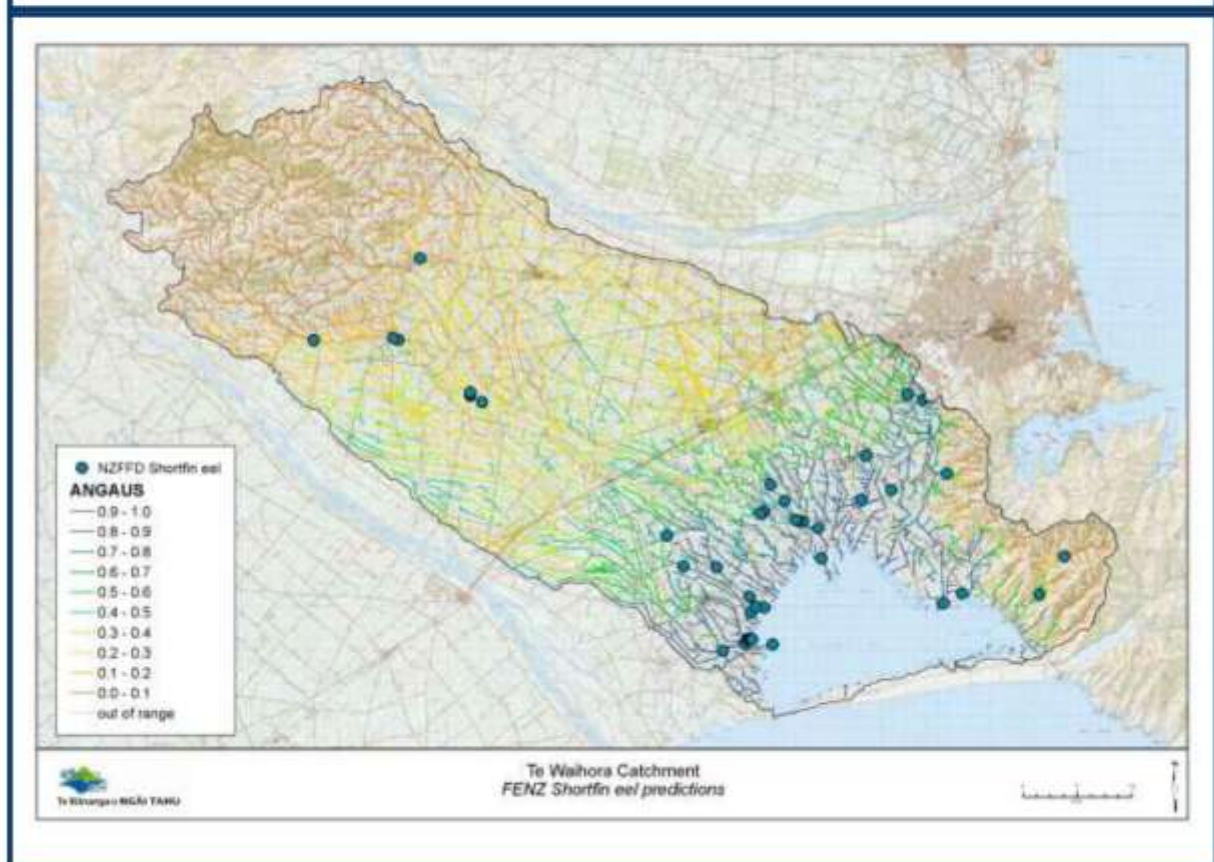
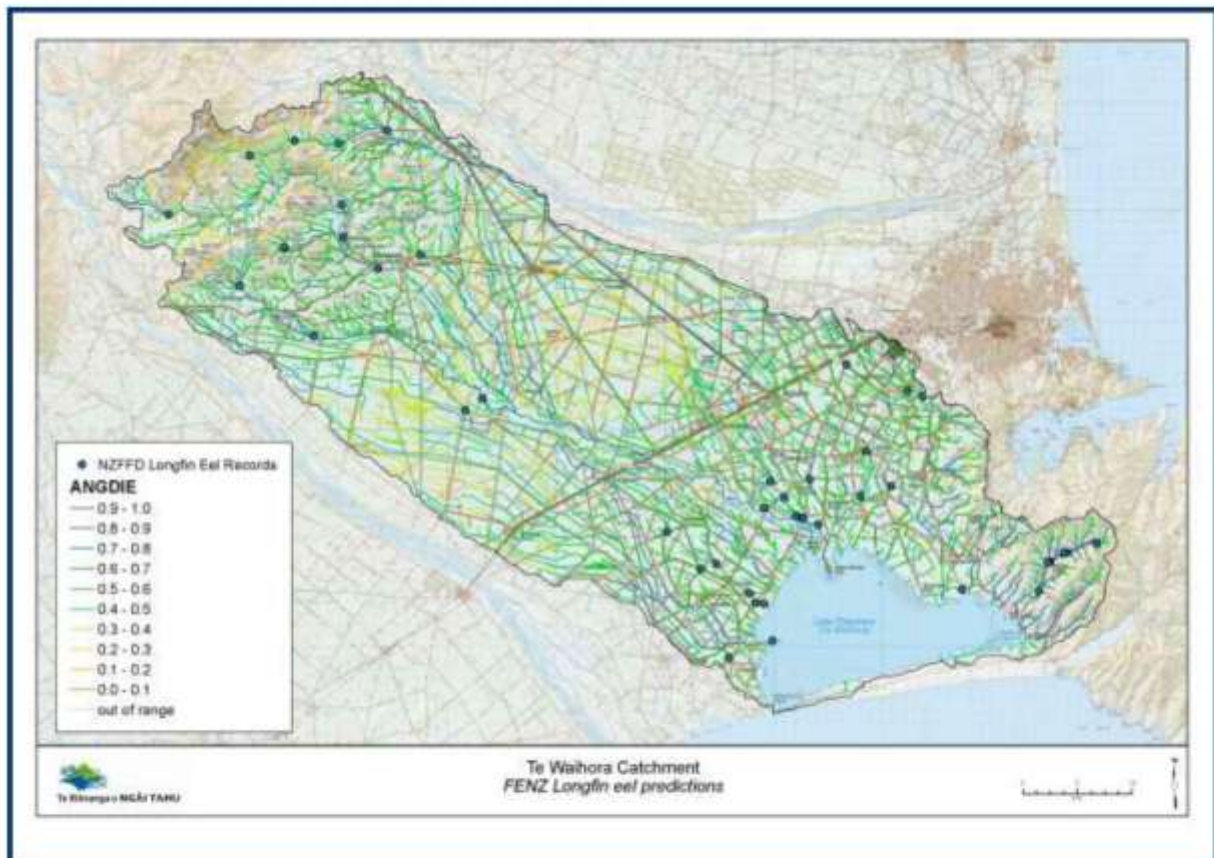
Table 4: Mahinga kai species in the Waikirikiri – Te Waihora system¹²

Kai whenua (from the land)	
Māori name	English name
aruhe/tauhinu	fern root*
harakeke	flax*
kākaho	reeds
kioie	rat ^o
kōwhiriwhiri	watercress (introduced)
kūmara	kumara
mānia	sedge*
paru	mud
pingao	sand sedge*
pūhā	sour thistle
raupō	bullrush/raupo*
rongoā	medicinal plants
tī kouka	cabbage tree*
tororaro	wiggy wig
wīwī/whiwhi/ wewe	rushes*
Ika (fish)	
aua	yellow-eyed mullet
inanga, mata/ua	whitebait
kanakana/ piharau	lamprey
kōkopu	kōkopu
mohoa	black/common flounder
pāraki	smelt
pātiki	3-corner flounder/ whitebelly
pātiki totara	yellow-belly flounder
tuna	eel
ōpokororo	grayling
kākahi	freshwater mussels
waikōura	freshwater crayfish
tuaki	cockles*
A number of other marine fish species also intermittently inhabit Te Waihora and are sourced as mahinga kai.	

Manu (birds)	
Māori name	English name
hua kaki ānau	black swan eggs ^o
hua manu	other bird eggs
kaki ānau	black swan ^o
karoro	black-backed gull*
kererū	wood pigeon**
kōau	black**, pied*, little shag*
kōtuku	white heron**
kuruwhengi/ pāteke	New Zealand shoveller*
matuku	Australasian bittern ⁺
pākura/pūkeke	pūkeke* ^o
pāpango/ raipo	New Zealand scaup/ black teal ⁺
pateke/ tarawhatu	brown teal**
pārera /māunu	grey duck* ^o
pūtakitaki	paradise shelduck**
ririwaka	bar-tailed godwit ⁺
ruru koukou	morepork**
tarāpuka	Red-billed gull ⁺
tete	grey teal*
whiowhio	blue duck ⁺

Mahinga kai is the ultimate indicator of the cultural health of an ecosystem (Goodall, 2003). Using the Freshwater Ecosystems of NZ (FENZ) geo-database we are able to map the distribution of habitats for valued mahinga kai species in the Waikirikiri - Te Waihora system. For example, we have overlaid on the maps sites from the New Zealand Freshwater database where long fin eels (top map) and short fin eels (bottom map) have been recorded. Other species maps are in [Appendix 3](#).

¹² This table can be found the Te Waihora Joint Management Plan



WITH RESPECT TO MANAGEMENT:

Ngai Tahu whanui want to restore the distribution of species to their historic range – ki uta ki tai. Protecting long fin tuna is a priority. Abundance and condition of species is also to be enhanced.

Water quality and water quantity are essential to sustaining mahinga kai within the Waikirikiri - Te Waihora catchments. The ecological function and health of the catchment become a holistic measure of water management, and provide a pathway toward the restoration and maintenance of mahinga kai.

To provide context for realising a mahinga kai vision, in Part 6 we begin by describing changes to ecosystem processes observed by Ngai Tahu resulting in a shift from a mahinga kai based economy historically. We then highlight attributes of the hydrology, geomorphology, habitat and network connectivity, riverine biotic community, and riparian vegetation that are considered by whanau to be essential in the sustained production of mahinga kai.

Wahi raranga

This site is similar to a mahinga kai but differs in that it is specifically valued for the weaving resources that are found there. A wahi raranga is more often a stand of harakeke (flax) but can also include species such as taramea (spaniard), ti kouka (cabbage tree), neinei (shrub), raupō (bulrush), and toetoe. In many cases wahi raranga were planted specifically to supply a food preparation or habitation site. This is a well-known fact for such plants as harakeke that, depending on the variety, can be used for different purposes.

WITH RESPECT TO MANAGEMENT:

Ngai Tahu whanui want to protect existing remnants of native vegetation and encourage the replanting on indigenous species valued for their cultural uses.



Ngahere

The location and distribution of remaining areas of native vegetation perform an important function as ecological corridors for toanga bird species seeking, for example food sources and nesting sites both within the forest blocks and in adjoining areas of native vegetation. Plants found in the catchments are summarised in Table 5¹³.

Common Name	Māori Name	Botanical Name	Significance
akeake	akeake	<i>Dodonea viscosa</i>	at its distribution limit
bog rush		<i>Schoenus pauciflorus</i>	important to Ngai Tahu
bullrush	raupō	<i>Typha angustifolia</i>	taonga species
cabbage tree	tī rākau/ tī kōuka	<i>Cordyline australis</i>	taonga species
club rush	wīwī	<i>Bolboschoenus caldwellii</i>	important to Ngai Tahu
common rush	wīwī	<i>Juncus gregiflorus</i>	taonga species
coprosma	karamū	<i>Coprosma robusta, coprosma lucida, coprosma foetidissima</i>	taonga species
fermroot (bracken)	aruhe	<i>Pteridium aquilinum var. esculentum</i>	taonga species
giant umbrella sedge	toetoe	<i>Cyperus ustulatus</i>	rare in Canterbury
jointed wire rush	oiol	<i>Leptocarpus similis</i>	important to Ngai Tahu
knobby clubrush	wīwī	<i>Isolepis nodosa</i>	important to Ngai Tahu
kōwhai	kōwhai /kōhai	<i>Sophora microphylla</i>	taonga species
lake clubrush / tall sedge	kuta	<i>Schoenoplectus validus</i>	important to Ngai Tahu
NZ flax	harakeke	<i>Phormium tenax</i>	taonga species
ngāio	ngāio	<i>Myoporum laetum</i>	taonga species
NZ broom	maukoro	<i>Carmichaelia appressa</i>	important to Ngai Tahu
orchid	māikaika	<i>Spiranthes sinensis</i>	rare native
pīngao	pīngao	<i>Desmoschoenus spiralis</i>	taonga species
pukio	pukio	<i>Carex secta</i>	important to Ngai Tahu
purple mimulus		<i>Mimulus repens</i>	uncommon (Sparse)
ruatahi	toetoe/ ruatahi	<i>Carex coriacea</i>	important to Ngai Tahu
saltmarsh ribbonwood		<i>Plagianthus divaricatus</i>	
sea rush	wīwī	<i>Juncus maritimus</i>	taonga species

WITH RESPECT TO MANAGEMENT:

Ngai Tahu whanui want to protect existing remnants of native vegetation and encourage the replanting on indigenous species, especially in the headwaters and on riparian margins.

¹³ This table can be found the Te Waihora Joint Management Plan

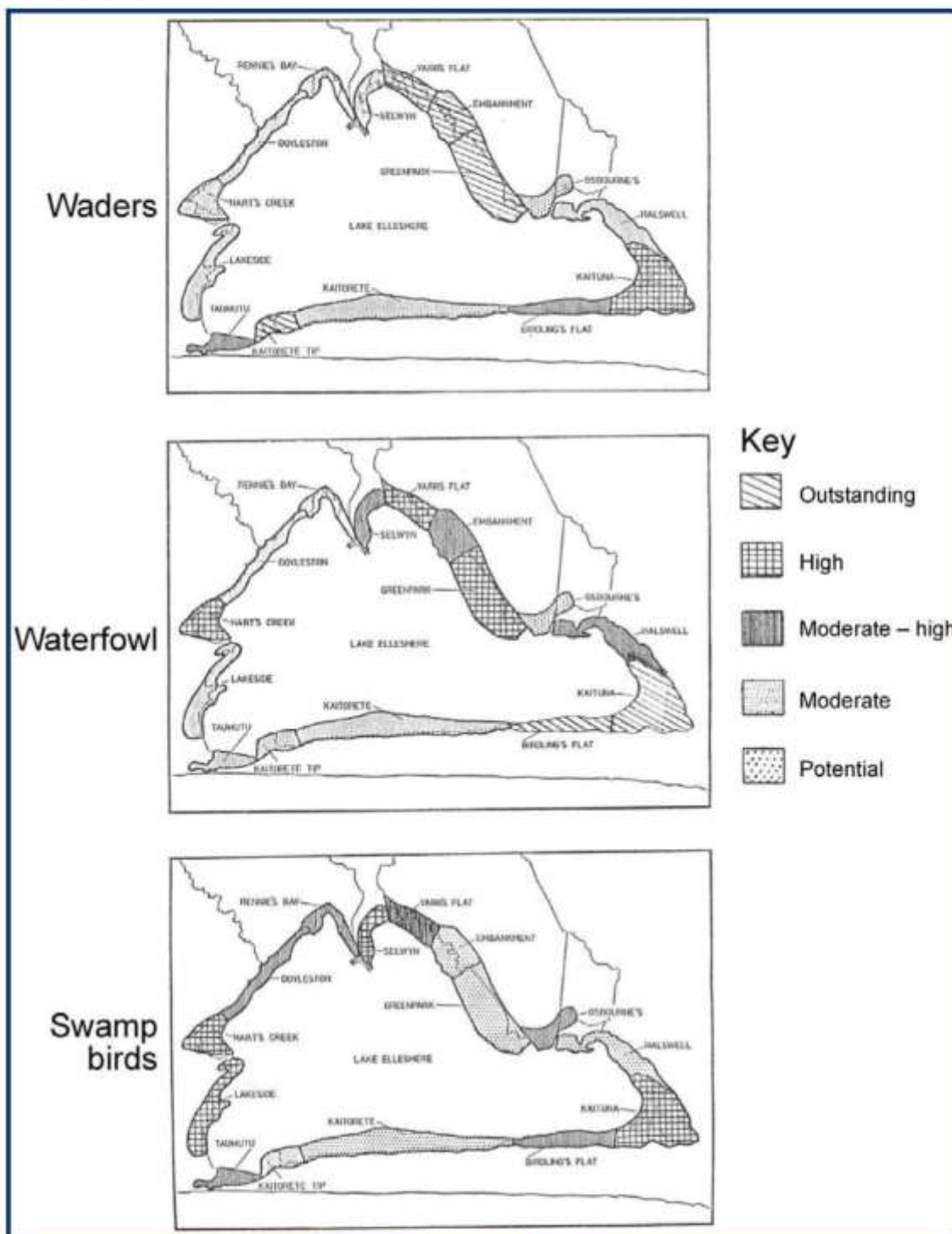
Taonga species

There are numerous bird species within the catchment, many of which are classed as taonga species in the Ngai Tahu Claims Settlement Act 1998 as detailed in the Table that follows¹⁴.

Common Name	Māori Name	Scientific Name	Significance
Australasian bittern	matukuhurepo	<i>Botaurus poiciloptilus</i>	nationally endangered
Australasian/New Zealand shoveler	kuruwhengi	<i>Anas rhynchos</i>	game bird taonga species
banded dotterel	powhera, tuturiwhatu	<i>Charadrius bicinctus bicinctus</i>	gradual decline taonga species
bar-tailed godwit	kuaka	<i>Limosa lapponica</i>	migrant
black shag	kōau	<i>Phalacrocorax carbo novaezelandiae</i>	sparse taonga species
black stilt	kakī	<i>Himantopus novaezelandiae</i>	nationally critical taonga species
black swan	kakī anu	<i>Cygnus atratus</i>	game bird important to Ngāi Tahu
black-billed gull	akiaki, katatā	<i>Larus bulleri</i>	serious decline
black-fronted tern	tara	<i>Sterna albobristata</i>	serious decline taonga species
black-tailed godwit	kuaka, rakakao	<i>Limosa limosa</i>	migrant
broad-billed sandpiper		<i>Limicola falcinellus</i>	migrant
brown teal	pateke/ tarawhatu	<i>Anas aucklandica chlorotis</i>	taonga species
Canada goose		<i>Branta canadensis</i>	game bird
caspian tern	taranui	<i>Sterna caspia</i>	nationally vulnerable taonga species
curlew sandpiper		<i>Calidris ferruginea</i>	migrant
great knot		<i>Calidris tenuirostris</i>	migrant
grey duck	pārera	<i>Anas superciliosa superciliosa</i>	taonga species game bird
grey phalarope		<i>Phalaropus fulicaria</i>	migrant
grey teal	tete	<i>Anas gracilis</i>	taonga species
kingfisher	kōtare	<i>Todiramphus sanctus</i>	taonga species
little shag	kawaupaka kōau	<i>Phalacrocorax melanoleucos brevirostris</i>	taonga species
little stint		<i>Calidris minuta</i>	migrant
little tern	tara	<i>Sterna albitrons</i>	taonga species
mallard duck		<i>Anas platyrhynchos</i>	game bird
marsh crane	koitareke	<i>Porzana pusilla affinis</i>	sparse
marsh sandpiper		<i>Tringa stagnatilis</i>	migrant
paradise shelduck	pūtakitaki	<i>Tadorna variegata</i>	taonga species game bird
pied stilt	poaka	<i>Himantopus himantopus leucocephalus</i>	taonga species

Habitats used by the various bird species are shown over the page in Figure 4¹⁵.

¹⁴ This table can be found in the Te Waihora Joint Management Plan



WITH RESPECT TO MANAGEMENT:

Inflows to Te Waihora need to enhance the quantity and quality of habitat for taonga bird species at all life stages.

¹⁵ This figure can be found the Te Waihora Joint Management Plan

There are also a number of fish species within the catchment: again many of these are classed as taonga species in the Ngāi Tahu Claims Settlement Act 1998 as shown in the following table¹⁶.

Common Name	Māori Name	Scientific name	Present in Lake	Present in Tributaries	Significance ¹⁵
banded kōkōpu		<i>Galaxias fasciatus</i>	✓	✓	important to Ngāi Tahu recreational catch not threatened
black flounder	mohao	<i>Rhombosolea retiana</i>	✓	✓	important to Ngāi Tahu commercial not threatened
brook char		<i>Salvelinus fontinalis</i>		✓	introduced
brown trout		<i>Salmo trutta</i>	✓	✓	introduced recreational sports fish
Canterbury galaxias		<i>Galaxias vulgaris</i>		✓	not threatened
Canterbury mudfish	kōwaro	<i>Neochanna burrowsius</i>		✓	taonga fish species nationally endangered
catfish		<i>Ameiurus nebulosus</i>	✓	✓	introduced pest fish
common bully	kokopara	<i>Gobiomorphus cobidianus</i>	✓	✓	not threatened
common shrimp			✓	✓	taonga fish species
common smelt	paraki/ ngāiore	<i>Retropinna retropinna</i>	✓	✓	taonga fish species not threatened
common sole	pātiki rori	<i>Peltorhamphus novaezeelandiae</i>	✓		occasional visitor
freshwater crayfish	wāikōura	<i>Paraneoprops</i>		✓	possibly locally threatened
freshwater mussels	kākahi	<i>Hyridella</i>		✓	possibly locally threatened important to Ngāi Tahu
giant bully	kokopara	<i>Gobiomorphus gobioides</i>		✓	taonga fish species not threatened
goldfish		<i>Carassius auratus</i>	✓	✓	introduced
greenback flounder	pātiki	<i>Rhombosolea tapirina</i>	✓		important to Ngāi Tahu commercial occasional visitor
hake		<i>Merluccius australis</i>	✓		introduced occasional visitor
inanga	inanga	<i>Galaxias maculatus</i>	✓	✓	important to Ngāi Tahu recreational catch not threatened
kahawai		<i>Ampelis trutta</i>	✓		not threatened

¹⁵ Including threat extinction rankings from Molloy, J (et al.) 2001.

¹⁶ This table can be found the Te Waihora Joint Management Plan

Common Name	Māori Name	Scientific name	Present in Lake	Present in Tributaries	Significance ¹⁵
koaro		<i>Galaxias brevipinnis</i>	✓	✓	important to Ngāi Tahu recreational catch not threatened
lamprey	kanakana	<i>Geotria australis</i>	✓	✓	important to Ngāi Tahu transitory not threatened
long-finned eel	tuna	<i>Anguilla dieffenbachia</i> and <i>A. dieffenbachii</i>	✓	✓	important to Ngāi Tahu commercial nationally threatened (gradual decline)
perch		<i>Perca fluviatilis</i>	✓	✓	coarse fish recreational sports fish
quinnat/ chinook salmon		<i>Oncorhynchus tshawytscha</i>	✓	✓	introduced recreational sports fish occasional visitor
rudd		<i>Scardinius erythrophthalmus</i>	✓	✓	introduced noxious pest fish
sand flounder	pātiki	<i>Rhombosolea plebeia</i>	✓		important to Ngāi Tahu commercial
short-finned eel	tuna	<i>Anguilla australis</i>	✓	✓	important to Ngāi Tahu commercial not threatened
sprat		<i>Sprattus antipidum</i>	✓		introduced occasional visitor
tench		<i>Tinca tinca</i>	✓	✓	coarse fish Recreational sports fish ¹⁶
torrentfish	piripiripōhatu	<i>Cheimarrichthys fosteri</i>	✓	✓	taonga fish species
upland bully		<i>Gobiomorphus breviceps</i>		✓	not threatened
yellowbelly flounder	pātiki tōtara	<i>Rhombosolea leporina</i>	✓		important to Ngāi Tahu commercial
yellow-eyed mullet	aua	<i>Aldrichetta forsteri</i>	✓		important to Ngāi Tahu commercial not threatened

WITH RESPECT TO MANAGEMENT:

Flows need to ensure the protection of habitats used by all taonga species at all life stages.

Wāhi Kohātu (Rock Formations)

Ngai Tahu whanui advised that there are a number of interesting rock formations in the Waikirikiri - Te Waihora catchments. They do not want to see such sites impacted by inundation or micro-climates (which can be created from changes in the extent of irrigated land area), or changing groundwater levels.

WITH RESPECT TO MANAGEMENT:

Ngai Tahu whanui wants to protect valued cultural landscapes that comprise waterway, geological features and evidence of cultural use (e.g. rock shelter, campsite, marae etc).

Reserves, easements

There are a number of reserves, easements and entitlements in the Waikirikiri - Te Waihora catchments. Ngai Tahu surrendered title to significant tracts of lands in the nineteenth century however small tracts of land were identified as reserves for Ngai Tahu. Many of the reserves and fishing easements can be traced back to Crown Grants to Ngai Tahu whanui which stem from the Southern Purchase Deeds negotiated between 1844 and 1857. For lands that were granted to enable the continuation of a food gathering lifestyle, certain guarantees were provided with respect to the nature of natural resources that were to sustain this lifestyle.

Table 2: A list of some of the native reserves in the province of Canterbury¹⁷

Reserve Name	Size (acres)	Interest
Section 232 Lyttelton	1	
Section 12,373 Waikawa	150	
Old Kaiapoi pa	5	An implied trust reserved by Mantell
Little River	4	An old urupa
Kaiapoi	2640	Reserved in 1848 by Mantell in terms of Kemps Purchase
Kaikanui	4	Reserved in 1848 by Mantell in terms of Kemps Purchase
Rapaki	850	Reserved in 1849 by Mantell in terms of the Port Cooper Purchase
Purau	9	Reserved in 1849 by Mantell in terms of the Port Cooper purchase
Koukourarata	1361	Reserved in 1849 by Mantell in terms of the Port Levy purchase
Opukutahi	432	Reserved by Mr Hamilton in 1856
Onuku	426	Reserved by Mr Hamilton in 1856
Wairewa	440	Reserved by Mr Hamilton in 1856
Taumutu	76	Reserved in 1848 by Mantell in terms of Kemps Purchase
Taumutu	42	Reserved in 1848 by Mantell in terms of Kemps Purchase
Arowhenua	376	Reserved in 1848 by Mantell in terms of Kemps Purchase
Waipopo	187	Reserved in 1848 by Mantell in terms of Kemps Purchase
Te Upoko o Rakaitaweka	20	Reserved in 1848 by Mantell in terms of Kemps Purchase
Tauhinu	23	Reserved in 1848 by Mantell in terms of Kemps Purchase
Waimatamate	40	Reserved by the Canterbury Association
Waikawa	138	Selected in lieu of reserve at Hakataramea
Rakipaua	20	Reserved in 1848 by Mantell in terms of Kemps Purchase

¹⁷ Alexander Mackay (1872) A Compendium of Official Documents relative to Native Affairs in the South Island, Memorandum on the origination and management of native reserves in the Southern Island Pages 338 and 339 of Volume 2.

Kaiapoi	72	Reserved by the Governor General to supplement land at Kaiapoi
Kaiapoi	200	Award of the Native Land Court in 1868 in fulfillment of the terms of Kemps Deed of June 1848
Kaiapoi	350	Award of the NLC ¹⁸ , 1868 in fulfillment of Kemps Deed June 1848
Kaiapoi	450	Award of the NLC, 1868, in fulfillment of Kemps Deed of June 1848
Kaiapoi	15	Award of the NLC, 1868, in fulfillment of Kemps Deed of June 1848
Kaiapoi	10	Award of the NLC, 1868, in fulfillment of Kemps Deed of June 1848
Kaiapoi	20	Award of the NLC, 1868, in fulfillment of Kemps Deed of June 1848
Kaiapoi	10	Award of the NLC, 1868, in fulfillment of Kemps Deed of June 1848
Kaiapoi	10	Award of the NLC, 1868, in fulfillment of Kemps Deed of June 1848
Taumutu	128	Award of the NLC, 1868, in fulfillment of Kemps Deed of June 1848
Little River	100	Award of the NLC, 1868, in fulfillment of Kemps Deed of June 1848
Arowhenua	2	Award of the NLC, 1868, in fulfillment of Kemps Deed of June 1848
Arowhenua	150	Award of the NLC, 1868, in fulfillment of Kemps Deed of June 1848
Arowhenua	30	Award of the NLC, 1868, in fulfillment of Kemps Deed of June 1848
Arowhenua	20	Award of the NLC, 1868, in fulfillment of Kemps Deed of June 1848

WITH RESPECT TO FLOWS:

Manawhenua want to ensure that the health of the river-lake system enables them to occupy and use the reserves to which they are entitled – right that has been acknowledged by the Crown as early as 1868 and as recently as The Ngai Tahu Claims Settlement.

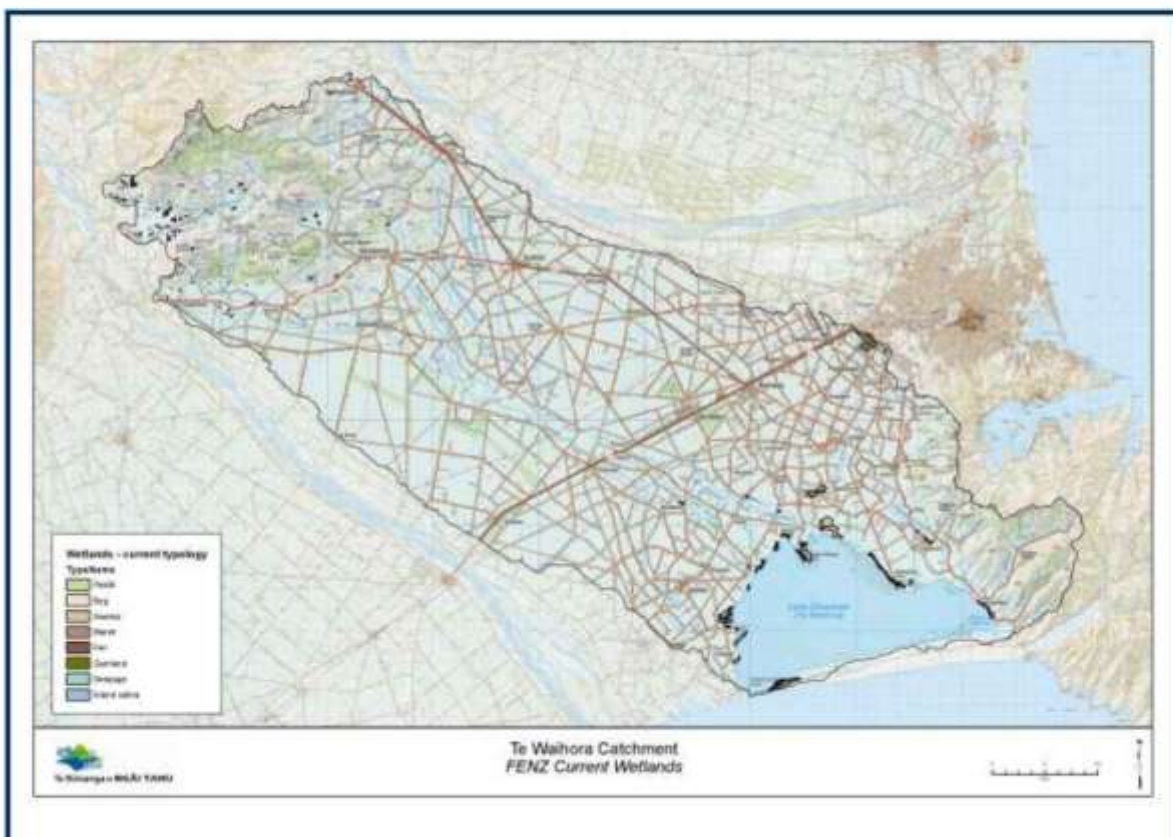
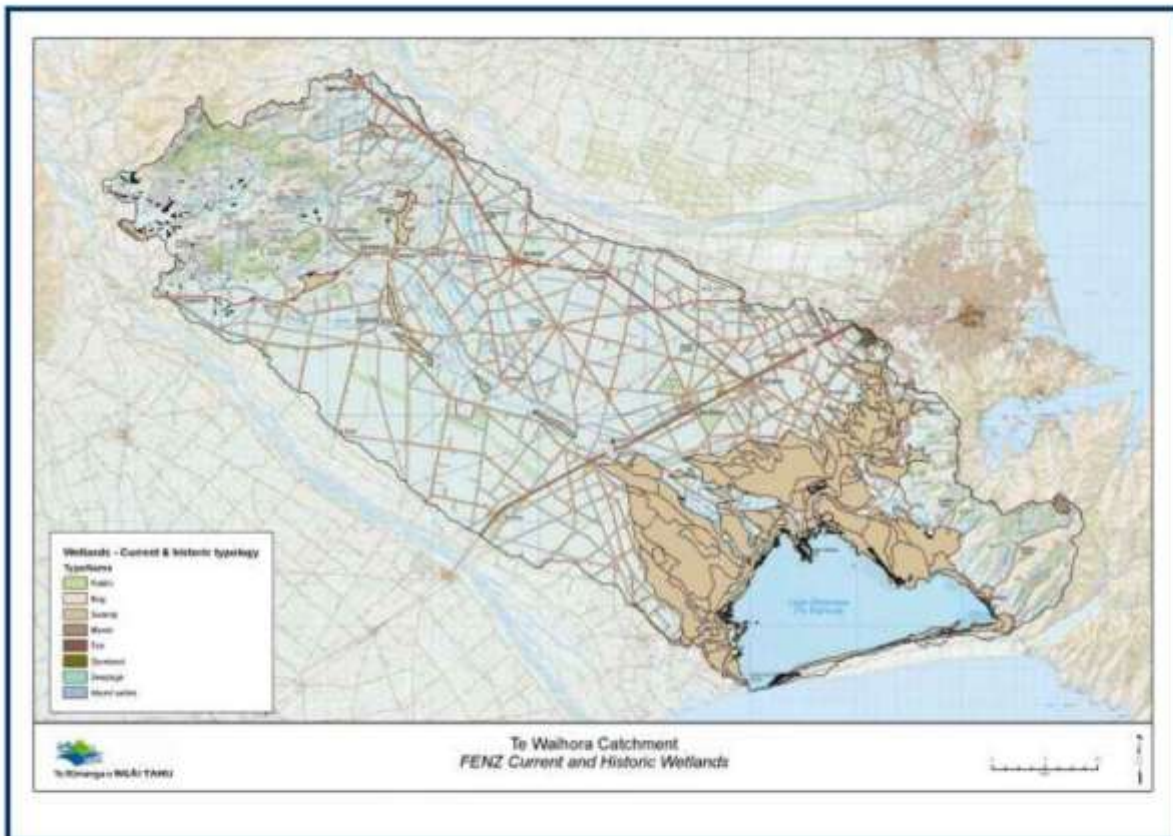
Repo raupo

"Repo Raupō" is the general term applied to wetlands. These areas were important sources of mahinga kai or were rich in biodiversity that supported species that were considered important mahinga kai. These areas were also valued for such things as paru (mud for dye).



Using FENZ we are able to identify the extent of wetlands historically and compare that to the range and distribution of wetlands today.

¹⁸ NLC refers to the Native Land Court



WITH RESPECT TO FLOWS:

Whanau want to ensure the protection of existing wetlands but would prefer to see opportunities created to restore wetlands to their historic range. A programme of reinstatement should be investigated. This could include the lake being raised.

4.4 Spiritual significance of intergenerational links

People have inhabited Waikirikiri - Te Waihora catchments because they could find food season by season, access water and building materials, and collect plants for food, medicine, and crafts. Whanau continue to live in the catchment because of the resources the rivers and lake afford. However, there is a unique relationship that exists between Tangata whenua and the Waikirikiri - Te Waihora catchments. A spiritual relationship enables them to understand their role in the world, to respect the rivers and lake, to interact with these as their tupuna did, to value their intrinsic worth as an integral ecosystem that sits at the core of their identity and wellbeing.

WITH RESPECT TO FLOWS:

Ngai Tahu whanui want to restore the associations with the Waikirikiri - Te Waihora catchments by restoring significant cultural landscapes that are dependent on sufficient quantities of high quality water. This will in turn enable the re-establishment of cultural practices and uses essential to the cultural wellbeing of whanau, hapu and iwi.



Harts Creek



Selwyn River



Cultural Impact assessment:

For a private plan change to the Selwyn District Plan, to establish a Dairy Process Management Area (DPMA)

Prepared for: Synlait Milk Ltd.

Prepared by: Dyanna Jolly (Witaskēwin), on behalf of Te Taumutu Rūnanga

March 2014

Cover image:

Artwork provided by the late Aunty Catherine Brown (Taumutu) for the Te Taumutu Rūnanga Natural Resource Management Plan (2002).

Report prepared by:

Dyanna Jolly (Witaskēwin). PO Box 69211 Lincoln 7640



Report signed off by Te Taumutu Rūnanga on: March 18, 2014.

Use of the information in this report:

The information in this report is to be used only for the purposes of the Synlait Milk Ltd. private plan change application to the Selwyn District Council.

Summary of Findings

Synlait Milk Limited (Synlait) is initiating a private plan change to the Selwyn District Plan. The plan change introduces provisions for a specific *Dairy Processing Management Area* (DPMA) within the Rural (Outer Plains) Zone of the district plan. The DPMA will cover an area of land containing and immediately surrounding the existing Synlait dairy plant at Dunsandel, and put in place policies and rules which specifically provide for dairy processing related activities and buildings on this land.

Synlait has commissioned a Cultural Impact Assessment (CIA) report to identify and understand effects on tangata whenua values, interests and associations, and how the proposed plan change aligns with key policy messages in the Mahaanui Iwi Management Plan 2013.

The findings of the CIA indicate that Te Taumutu Rūnanga is supportive of the creation of a specific Dairy Processing Management Area (DPMA). The proposal provides certainty for all parties as to what future development can occur on-site, and under what conditions, and therefore offers a consistent approach to planning and decision-making.

The findings of the CIA also indicate that there are some reservations about the risk to cultural values and the ability to manage effects in an integrated and comprehensive manner. The assessment makes comment on some standards for permitted activities, notes concern about what the plan change may mean with regard to managing discharges to avoid adverse effects on land, water and air, and raises the issue of whether Synlait can do more to reduce the impact of the dairy processing plant on the environment and set an high standard for development on the landscape. Seven recommendations are provided to address these issues and provide opportunities to align the plan change with policies in the Mahaanui IMP.

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1 Introduction

Synlait Milk Limited (Synlait) is initiating a private plan change to the Selwyn District Plan. The plan change introduces provisions for a specific *Dairy Processing Management Area* (DPMA) within the Rural (Outer Plains) Zone of the district plan. The DPMA will cover an area of land containing and immediately surrounding the existing Synlait dairy plant at Dunsandel.

The purpose of the DPMA is to recognise the distinctive density and scale of a dairy processing plant, compared to other rural activities in the Rural Zone, by putting in place policies and rules which specifically provide for dairy processing related activities and buildings on an identified area of land. The new rules, alongside compliance with an Outline Development Plan (ODP) will enable integrated management of the DPMA. This will lessen consent requirements by enabling development to occur subject to certain conditions, and provide certainty for all parties as to what future development can occur on-site and under what conditions.¹

The proposal reflects the approach taken in other District Plans in New Zealand, which recognise the particular requirements of dairy factories (e.g. Edendale Dairy Plant Industrial Area in the Southland District Plan).

Synlait is seeking to engage with Te Taumutu Rūnanga to identify and understand any cultural effects as a result of the proposed private plan change. Te Taumutu Rūnanga is the representative body of the hapū Ngāi Te Ruahikihiki. The takiwā of Te Taumutu Rūnanga centres on Te Waihora and extends across Ngā Pākihi Whakatekata o Waitaha (Canterbury Plains) to Kā Tiritiri o Te Moana (The Southern Alps).

Both parties have identified a Cultural Impact Assessment (CIA) as the appropriate basis for engagement. A CIA provides an assessment of effects on tangata whenua values, interests and associations, and gives effect to key issues and policy messages in the *Mahaanui Iwi Management Plan 2013*, the principal manawhenua planning document for the six Papatipu Rūnanga of Canterbury and Banks Peninsula.

2 Purpose of this CIA

The purpose of this CIA is to:

- a) Identify any specific cultural impacts or cultural concerns with the proposed plan change, consistent with the *Mahaanui Iwi Management Plan 2013*.
- b) Provide recommendations for how actual or potential impacts can be avoided, remedied or mitigated.

¹ Noting that consents will still be required for regional matters such as discharges to land, water and air. The proposed plan change covers district planning matters only.

In meeting these objectives, the report will:

- a) Provide all parties with a level of confidence and understanding related to the proposed plan change.
- b) Provide a basis for further engagement between Synlait and Te Taumutu Rūnanga.
- c) Providing information to enable appropriate consideration of the relevant Resource Management Act (RMA) 1991 Part 2 matters.
- d) Provide information to assist with the preparation of an Assessment of Environmental Effects (AEE) in accordance with RMA s88 (2)(b) and Schedule 4.
- e) Provide information required by Selwyn District Council to take into account Iwi Management Plans. Section 74 (2A) of the RMA requires territorial authorities to take into account any relevant planning document recognised by an iwi authority and lodged with the council when preparing or changing a district plan.

3 Methods

The following methods were used to prepare this CIA report:

- a) Review of the *Mahaanui Iwi Management Plan 2013* to identify relevant policies. To avoid repetition, the review draws on a policy analysis prepared by Boffa Miskell in November 2013, on the advice of Te Taumutu Rūnanga, for a proposal to expand the existing factory to establish additional drier capacity.
- b) Review of draft plan change application (provided by Boffa Miskell), and the identification of where and how cultural issues are and can be addressed.
- c) Engagement with representatives of the Te Taumutu Rūnanga Kaitiakitanga Portfolio (Natural Resources) to identify potential cultural issues and how these may be addressed.
- d) Identification of other issues of importance to Te Rūnanga Rūnanga with regards to the continued operation and potential expansion of the Synlait plant at Dunsandel, and relationships with Synlait.
- e) Communications with Te Rūnanga o Ngāi Tahu (Toitū Te Whenua) and Mahaanui Kurataiao Ltd. with regard to the issues and recommendations in the report.
- f) Review and endorsement of the draft CIA by Te Taumutu Rūnanga.

4 Description of activity

The proposed plan change introduces provisions for a specific *Dairy Processing Management Area* (DPMA) within the Rural (Outer Plains) Zone of the Selwyn District Plan. The DPMA will cover an area of land containing and immediately surrounding the existing Synlait dairy plant at Dunsandel.

The plan change application includes:

- Minor amendments to existing District Plan (Rural Zone) Issues and Policies along with accompanying explanations, to recognise the DPMA;
- A new policy added which specifically provides for the DPMA and identifies the standards that will apply to the development;
- A new set of rules specific to the DPMA, contained in an Appendix to the Rural Volume of the District Plan, setting out those activities that will be permitted activities and the standards for permitted activities, and the matters of control for those activities that do not comply with the standards for Permitted activities.
- A requirement for compliance with an Outline Development Plan (ODP), showing the extent of the DPMA, the position of existing and proposed access points, the extent of the built footprint area, including any minimum setback requirements, locations for higher build developments, and the proposed landscape treatment.

The plan change applies to district planning matters only:

- | | |
|---|-----------|
| • Layout, scale and finish of buildings | • Access |
| • Earthworks | • Parking |
| • Landscaping | • Noise |
| • Storage of hazardous substances | • Signage |
| • Lighting/Glare | |

All regional matters, such as discharges to land, water and air, will still require consent from regional council.

5 Iwi planning framework – Mahaanui IMP 2013



The *Mahaanui Iwi Management Plan 2013* is a collaborative manawhenua planning document prepared by Te Taumutu Runanga, along with 5 other Rūnanga, covering the region from the Hurunui to the Hakatere. The plan is a written expression of kaitiakitanga and rangatiratanga.

The IMP identifies natural resource management issues of significance for Manawhenua, provides a values-based policy framework to resolve those issues.

A full report of policies relevant to this plan change application is not provided as part of this CIA. Rather, the assessment acknowledges the comprehensive review of relevant policies undertaken by Boffa Miskell in November 2013, on the advice of Te Taumutu Rūnanga, for Synlait's Stage 4 expansion application.² The Boffa Miskell report reviewed relevant policies pertaining to both district and regional planning matters.

What is provided is a summary of key policy messages that inform this CIA. These policy messages are primarily drawn from Section 6.11 (Te Waihora and its catchment) and Section 5.4 Papatūānuku (Land), including the *Ngāi Tahu Subdivision and Development Guidelines* in Section 5.4, as these guidelines cover land use issues such as landscaping, earthworks, and building design.

Key policy messages from the IMP relevant to this cultural impact assessment are:

- Early and effective involvement of Papatipu Rūnanga in the preparation of Outline Development Plans is important. Outline Development Plans should give effect to the Mahaanui IMP and recognise and provide for the relationship of Ngāi Tahu and their culture and traditions with ancestral land, water and sites (Policies P3.2 and P3.3).
- Land use activities in the catchment to be considered with regard to potential effects on Te Waihora, and the relationship of Ngāi Tahu to the lake, and for consistency with Ngāi Tahu objectives to restore the lake as mahinga kai.
- Land use should reflect the assimilative capacity of the catchment, the availability and limits of freshwater and soil resources, and the need to protect resources for future generations.
- District and regional planning issues should be considered together, consistent with the principle of Ki Uta Ki Tai and integrated management.

² Policy Review of Mahaanui Iwi Management Plan. Synlait Milk Limited – Stage 4 Expansion. 5 November 2013.

- Developments should have 'light footprints' with regard to building design, water, waste and energy. This includes incorporating low impact urban design principles and sustainability options.
- Developments should have on site solutions to stormwater management (i.e. zero discharge off site), based on a multi-tiered approach to stormwater management that utilises the natural ability of Papatūānuku to filter and cleanse, and avoids the discharge of contaminants to water.
- Earthworks must be managed to avoid damage or destruction to sites of significance, indigenous biodiversity, and to avoid or minimise erosion and sedimentation (and therefore impacts on water quality).
- Indigenous biodiversity objectives should be incorporated into development plans, consistent with the restoration and enhancement of indigenous biodiversity on the landscape.

6 Assessment of cultural effects

A cultural impact assessment identifies the sites, areas and values of significance to tangata whenua in a given area, and the potential and actual impacts on these.

What is important to Ngāi Tahu in this area?

There are no identified sites of significance in the proposed DPMA. However, Ngāi Tahu travelled, used and lived throughout the Selwyn District, and the history and identity of the iwi is tied to this landscape. Further, as kaitiaki, Ngāi Tahu have a responsibility to maintain and protect land, water and air for current and future generations. Healthy land, water and air are integral to the relationship of Ngāi Tahu to the environment, and cultural well-being. Of particular importance is the special nature of the Te Waihora and its catchment. The lake is a tribal taonga that, at the bottom of a catchment, is a receiving environment for pollutants from catchment land use.

6.1 Benefits / positive effects

Based on the information provided for this assessment, Te Taumutu Rūnanga is generally supportive of the creation of a specific Dairy Processing Management Area (DPMA) within the Rural (Outer Plains) Zone of the Selwyn District. There are a number of key benefits:

- Specific rules and a requirement for compliance with an ODP provides certainty for all parties as to what future development can occur on-site, and under what conditions.
- Early engagement for this plan change application is consistent with giving effect to Kaitiakitanga and continuing to build a strategic relationship between Synlait and Te Taumutu Rūnanga

- A plan change setting out a vision for future development offers a consistent approach to planning and decision making, and is therefore more consistent with the protection of cultural values than a piecemeal or ad hoc approach with consents applied for in isolation. For example, the proposed new landscaping rule will mean that the DPMA has a consistent landscaping theme, rather than having landscaping issues addressed on a consent-by-consent basis.

6.1 Cultural effects/risks to cultural values

While the concept of a DPMA is supported, there are some reservations, issues and questions with regard to potential risk to cultural values. These are listed below, and relate to the ability to manage effects in an integrated and comprehensive manner, and potential gaps between the draft plan change application and the key policy messages in the Mahaanui IMP.

Section 7 provides recommendations to address these cultural issues.

1. **Earthworks.** The Rūnanga is comfortable with earthworks as a permitted activity where the volume of earthworks is less than 5000m³ (as per existing provisions in the district plan). However, there is some reservation with proposed Rule 26.11, enabling earthworks that exceed 5000m³ to operate as a permitted activity when works are undertaken in accordance with an Earthworks Management Plan. The focus on Rūnanga policy is on managing earthworks to avoid or minimise erosion and sedimentation, effects on water quality, and damage or destruction of sites of significance (IMP Policies P11.1 to P11.9). For volumes exceeding 5000m³, these potential effects may be better managed via the consent process.
2. **Landscaping.** Rule 26.5 requires that landscape planting for the DPMA be in compliance with a Landscape Plan integrated into the Outline Development Plan (Rule 26.5). The purpose of the rule is to ensure the DPMA has a consistent landscaping theme.

A Landscape Plan was not available at the time of preparing this CIA and therefore the Rūnanga cannot provide comment on effects associated with a particular plan. However, the Rūnanga has clear policy positions on landscape planting that are consistent with recognising the long standing relationship of Ngāi Tahu and their culture and traditions with native species, and aspirations to restore indigenous biodiversity on the Canterbury landscape (Policies TM2.1 to TM2.11). These policies can provide direction to ensure that the Landscape Plan and OPD recognise and provide for cultural issues around appropriate landscape planting.

3. **Lighting.** Celestial darkness and views to and from culturally important landforms and landmarks are identified in the Mahaanui IMP as important cultural amenity values. Light pollution from the city, towns and industrial areas are progressively affecting the natural darkness at Taumutu. The hapū rely on natural darkness for customary activities such as tuna harvesting, and for teaching tamariki (children) about star knowledge associated with mahinga kai activities (IMP Issue R2). For example, Te Taumutu Rūnanga note that the lights of the Darfield Fonterra plant are clearly visible from the Port Hills.

While lighting is unavoidable, Rūnanga policy is to support the use of light suppression or limitation measures as a means to reduce light pollution and the impact of development on cultural amenity values and landscape in general (Policy R2.1). A specific concern is that if the plan change facilitated additional plants closer to Te Waihora, there would be a significant risk of adverse effects on cultural values as a consequence of light pollution.

4. **Stormwater.** The plan change will enable the intensification of built development to occur as a permitted activity as long as the layout, scale and finish of the buildings complies with the standards set out in the new rules. The construction of new buildings or the expansion of existing buildings may also include requirements for additional stormwater facilities, and these may not trigger the need for new consents.

Stormwater management is an issue of significance for Te Taumutu Rūnanga (IMP Issue P6). The discharge of stormwater in industrial environments can have adverse effects on water quality and associated cultural values. From a Rūnanga policy perspective, the plan change provides an opportunity for an integrated and comprehensive approach to stormwater management (in addition or as part of the ODP), including improving existing stormwater infrastructure.³

5. **Managing discharges to air, land and water.** Any increase in built environment will likely result in an increase in discharges such as process wastewater, human sewage, emissions from coal fired boilers, and sludge. It is the effects of these discharges on the environment that are of primary concern for the Rūnanga, as dairy processing waste is high volume, largely discharged off site, and is high in nitrogen and phosphorus. While discharges to land, water and air will still require consent from regional council, there is concern that:

- The DPMA designation and new rules for permitted activities, alongside the existing investment in infrastructure, may be assessed as outweighing the cultural and environmental effects of any additional discharges to air or discharges of wastewater and sludge.
- In some cases, an activity may not trigger the need for a new consent, yet there is still potential for cultural and cumulative effects.
- From a cultural perspective, it is difficult to assess views on a reasonable and optimal future development of the site and an assessment of cultural effects of that development, without considering both district and regional planning matters. How can we ensure an integrated and comprehensive approach to the managing district and regional matters?

6. **Establishment of additional DPMA in the catchment.** The information provided for this impact assessment indicates that the proposed plan change will apply to the existing Synlait plant at Dunsandel, and potentially the Fonterra plant in Darfield. The plan change is not intended to facilitate the establishment of additional dairy processing plants in the district. The Rūnanga supports a designated DPMA for the existing Synlait plant, and would

³ The Mahaanui IMP Policy Analysis prepared by Boffa Miskell (November 2013) noted that existing stormwater infrastructure could be improved to align with IMP policy.

encourage the same zoning and rules to be applied to the Fonterra plant. However, there is significant risk to cultural values if dairy processing plants were established in additional locations, particularly closer to Te Waihora.

7. **Opportunities to incorporate low impact design and sustainability options into the ODP and rules.** A gap between the rules in the proposed plan change application and the policies in the Mahaanui IMP is that the ODP and new rules do little to promote sustainability and low impact design principles. As part of mapping out the future development vision for the DPMA, there is an opportunity to incorporate low impact building design and sustainability measures that reduce the impact of the plant on the environment. This is a key message in the Ngāi Tahu Subdivision and Development Guidelines (IMP Policy P4.3), and is consistent with Synlait's "Lead with Pride" vision and brand.

7 Recommendations

The results of the assessment of cultural effects indicate that Te Taumutu Runanga is supportive of the creation of a specific DPMA within the Rural (Outer Plains) Zone to recognise the distinctive land use requirements of the Synlait Dairy Processing Plant. The proposal provides certainty for all parties as to what future development can occur on-site, and under what conditions, and therefore offers a consistent approach to planning and decision-making.

However, there are reservations about some standards for permitted activities and what the plan change may mean with regard to managing discharges to avoid adverse effects on land, water and air, and some questions as to whether Synlait can do more to reduce the impact of the dairy processing plant on the environment and set an high standard for development on the landscape.

The 8 recommendations below address these issues, and highlight opportunities to align the plan change with the policies in the Mahaanui IMP.

Standards for permitted activities

1. **Landscape planting.** The ODP and new rules for the DPMA provide an opportunity to enhance the landscape through planting. This CIA provides an opportunity for the Rūnanga to contribute to this plan. Consistent with IMP policy, the Landscape Plan for the DPMA should reflect:
 - a) A commitment to re-instate indigenous biodiversity values on the landscape as part of the development, including purpose screening and also to improve amenity values on site (e.g. planting around roads, buildings, car parks).
 - b) The use of native species that were originally found in this part of the Canterbury Plains.
 - c) Planting as part of stormwater management (see below).

2. **Earthworks** – Recommend that volumes exceeding 5000m³ are classified as a controlled activity (preferred), or that Rule 26.11 includes explicit provisions stipulating that the Earthworks Management Plan is to include:
 - a) Clear and effective measures to avoid sedimentation, and other discharges (e.g. fuel from machinery) to drains or other waterbodies.
 - b) Clear and effective measures to manage stormwater and run off during earthworks activities to prevent run off, including minimising the extent of land cleared at any time.
 - c) Requirement to use the ADP provided in the Mahaanui IMP (Appendix 3).
3. **Lighting** - Ensure that Rule 26.21 is written to identify and enable light suppression techniques to minimise impact on landscape and views.
4. **Low impact and sustainability based design principles.** Investigate opportunities to incorporate low impact design and sustainability options into the new rules setting out standards for permitted activities, to reduce the impact of the development on the environment, and demonstrate Synlait's commitment to the best practice in the district. A key policy message in the Mahaanui IMP is that developments should have 'light footprints' with regard to building design, water, waste and energy, and that this is consistent with achieving the values-based outcomes set out in the IMP. Options include:
 - a) Low energy and water use appliances, and low flush toilets
 - b) Rainwater collection and greywater recycling
 - c) Recycling and composting opportunities (supporting zero waste)
 - d) Position of buildings to maximise passive solar gain
 - e) Insulation and double glazing
 - f) Use of solar energy for hot water heating

Outline Development Plan

5. **A stormwater management plan** should be included as part of, or sit alongside the ODP, showing the design concept for stormwater collection, treatment and disposal, and reflecting the need to manage stormwater in an integrated and comprehensive manner as the plant develops and expands. This would also enable the existing system to be upgraded, and align stormwater management more closely with IMP policies, which set out a five-step approach to stormwater management.⁴ Key features to consider including in the plan are:
 - a) Measures to reduce the volume of stormwater requiring treatment e.g. rainwater collection tanks, permeable paving, rainwater gardens, vegetated swales around buildings and roadways.

⁴ Policies P6.1 to P6.6 and the Ngāi Tahu Subdivision and Development Guidelines.

- b) Ensuring that the scale and design of stormwater basins is appropriate to manage the volume of stormwater received.
- c) Planting of existing and any new stormwater basins to improve function and provide amenity values.

Integration between district and regional planning matters

6. **Managing discharges in an integrated manner.** While the Rūnanga supports the plan change as a means to manage district-planning issues in an integrated manner, there are concerns about how discharges associated with the DPMA can also be managed in an integrated and comprehensive manner. Given that the footprint of the development is larger than the physical boundaries of the DPMA (i.e. waste is discharged off site), is there a need for a long-term consideration and analysis of any potential future development of the plant and how discharges to land and air (and potentially water) will be managed?

This is particularly important given the proposed nitrogen limit set for the Selwyn Waihora catchment.⁵ A long-term plan to manage and minimise the plant's nitrogen footprint is consistent with avoiding adverse effects on, or limiting future growth of, the plant or farm suppliers within the catchment.

Consistent approaches to zoning and rules

7. Te Taumutu Rūnanga encourages a consistent approach to managing the continuing development and any potential expansion of the Fonterra plant at Darfield. It would be beneficial to have both dairy processing plants managed under the same zoning and rules.
8. The plan change should not facilitate the establishment of new processing plants without a rigorous impact assessment process.

⁵ Variation 1 of the Land and Water Regional Plan.

8 Where to from here?

Te Taumutu Rūnanga is actively working to improve land use and water management in the Te Waihora catchment, as part of a larger effort to restore the lake a mahinga kai. Strategic relationships with key organisations, industry and councils in the takiwā, and contributing to planning processes that determine how and where specific activities can occur, are critical to achieving this goal.

This CIA report provides information to assist Synlait to identify and understand Rūnanga views on the proposed plan change. The report will enable Synlait to ensure the plan change application recognises and provides for Ngāi Tahu values. Some of the issues raised in the CIA may be considered outside of the scope of the plan change application. However, these issues are included in the interest of continuing to progress the relationship between Te Taumutu Rūnanga and Synlait.

Importantly, this CIA report provides the information required by Selwyn District Council to meet requirements under Section 74 (2A) of the RMA 1991 to take into account the Mahaanui IMP when considering a change to the district plan. It standard Rūnanga policy to require that CIA reports are included in full with the plan change application, in addition to any summaries that may be included in the Assessment of Environmental Effects (AEE).

References

Ngāi Tūāhuriri Rūnanga, Te Hapū o Ngāti Wheke (Rāpaki), Te Rūnanga o Koukourārata, Ōnuku Rūnanga, Wairewa Rūnanga and Te Taumutu Rūnanga. 2013. *Mahaanui Iwi Management Plan*.

Boffa Miskell. 2014. *Draft Plan Change Application – Proposed Dairy Processing Management Area*.

Boffa Miskell. 2013. *Addendum – Policy Review of Mahaanui Iwi Management Plan*. Synlait Milk Limited – Stage 4 Expansion.

THE RESOURCE MANAGEMENT ACT 1991

CHABGE PROPONENT:	SYNLAIT MILK LTD
LOCAL AUTHORITY:	SELWYN DISTRICT COUNCIL
SUBJECT MATTER:	A privately-initiated request for plan change to create a 'Dairy Processing Management Area'
SITE DESCRIPTION:	Lots 1 and 2 DP 414579, CFR Identifiers 454867 and 454868
REFERENCE:	Proposed Change 43 to the Selwyn District Plan
HEARING DATE:	3 rd December 2014

Appearances:

- Ewan Chapman and Shoshona Galbreath for the Change Proponent, **Synlait Milk Ltd**

Melanie Foote to present a s42A report

Summary of Recommendation: that the Change be adopted by the Council, in an amended form

RECOMMENDATION OF THE COMMISSIONER

PRELIMINARY¹

(1) On 16th May 2014, and pursuant to Clause 22 of the Second Schedule to the Resource Management Act 1991, **Synlait Milk Limited** sought a change to the Operative District Plan of the Selwyn District Council. The purpose of the Change was expressed to be that of recognising “the existing dairy plant established by Synlait at Dunsandel in 2006 [by] providing for its continuing use and its future expansion.” In brief, Synlait proposes that provision should be made in the Plan for a ‘Dairy Processing Management Area’ (DPMA) having “a specific set of rules for activities and buildings relating to dairy processing” operating effectively as a sub-zone within the existing Rural (Outer Plains) zone of the Plan, the rules of which would underlie the provisions that Synlait seeks to insert. As is required by the Act the request for plan change identified the purpose of and reasons for the change sought, and contained a s32 ‘evaluation report’ and a description of (anticipated) environmental effects.

(2) This proposal² was publicly notified on 5th July 2014, attracting 6 submissions. Of these, one provided conditional support, one support in part and three were in opposition. No ‘further submissions’ were received. By letter of 16th October 2014 (from Andrew Mactier, a Selwyn District Council Strategy and Policy Planner) I was advised that I had been appointed “as commissioner ... to hear, decide and write the recommendation on the private plan change application ‘Plan Change 43’ from Synlait Milk Ltd, PC130043.”

(3) By the time of hearing the concerns of submitters had largely dissolved, Synlait proceeding on the basis of further amendments which, it appeared, had been agreed following discussion with Council Officers and relevant submitters. Evidence and submissions were heard on the 3rd December and I viewed the area on the 4th. Further information – requested by me and provided by Synlait – arrived on the 15th December, essentially as part of Mr Chapman’s reply.

(4) As the holder of delegated authority pursuant to s34A (1) my powers do not extend to the approval (or otherwise) of the proposed Change; I have recommendatory power only. In the course of the exercise of that, however, I must traverse the matters required in the ultimate decision – a matter for the Council itself – including:

- (a) ... the reasons for accepting or rejecting the submissions...; and
- (ab) ... a further evaluation of the proposed policy statement or plan undertaken in accordance with section 32AA;

That decision may also include (clause (b)) :

- (i) matters relating to any consequential alterations necessary to the proposed statement or plan arising from the submissions; and

¹ In this section and in those to follow, quoted passages are either shown within quotation marks or shown in-set and in a font smaller than the rest of the text

² As amended following the supply of further information and review by the Council.

- (ii) any other matter relevant to the proposed statement or plan arising from the submissions.³

BACKGROUND

(5) The Synlait plant at Dunsandel (in fact, some distance south-west of that township and near the intersection of SH1 and Heslerton Road) was constructed in 2007 following the grant of resource consent and has been extended since – again as authorised by successive resource consents. Mr Chapman, in opening, put the position in the following way:

The dairy plant is a “rural based industrial activity” as defined under the Selwyn District Plan, and while it is recognised as a legitimate activity that could be anticipated in the Rural Outer Plains, there are no applicable rules enabling development or activities without a resource consent and there is limited policy guidance ...

... through the consenting process Synlait has been “shoe-horning” itself into being benchmarked against the matters listed in the plan for consideration, when it is plain, that the current plan never intended a development of that magnitude.⁴

With the substitution of ‘contemplated’ for “intended” I accept that statement.

(6) According to Mr Betteridge – the General Manager of Synlait – the plant now processes “500 million litres of milk a year from around 160 farms and employ[s] over 200 staff.” Quite clearly, the 18 or so resource consents granted in respect of the plant since 2006 have imposed significant delays, uncertainties and ‘transaction costs’ on Synlait, something that it wishes to reduce for the future.

AN OVERVIEW

(7) The resource consents held by Synlait have an indefinite life.⁵ Accordingly the structures authorised by them are (i) in their own right some of the natural and physical resources that the Act requires sustainably to be managed and (ii) part of the existing environment. While conceivably it might be argued that removal of those structures (and of the activity) would ‘enhance’ the environment, nothing to that effect was advanced in submissions. As to the present activities (as well as the structures themselves): I must assume that in each of the resource consents thus far granted it has been determined that, individually and in sum, the purpose of the Act has been advanced thereby – in particular, that their grant enables relevant people and communities to provide for their own wellbeing (of the kinds indicated in s5). For those reasons I consider that the continued existence of a milk processing plant on the subject land is not a question open in the present proceedings.

(8) The present issue is thus one of technique; the question being whether, when viewed from the standpoint of Part 2, it is *more* in accordance with the purpose of the Act for the

³ Clause 10, First Schedule

⁴ Opening submissions, paragraphs 4 and 5

⁵

continuing 'life' of the plan to be controlled by plan rules of the kind now proposed or by the result of successive resource consent applications. I think that it can now be said – following amendments to the Act permitting the 'private' initiation of plan changes – that there is now no 'in principle' answer; in particular, the old presumption against 'spot zoning' may now give way in the case of what may be called 'project-oriented changes'.

(9) None of the submitters to Change 43 appeared in support of their (formal) submissions).⁶ According to Mr Chapman that was because discussions between Synlait and each of the submitters had led to amendments to the Change which satisfied the concerns of each. The relevant amendments are, in effect, now adopted by Synlait as its own. Subject to compliance with s32AA I take it as uncontroversial that the proponent of a *privately initiated* plan change proponent may amend its proposal either to reduce the scope of the alteration proposed or in ways otherwise open to the decision-maker⁷ – always assuming that the alterations are not such as would require further notification. The alterations now put forward by Synlait meet these criteria. I note that the s42A reports raised an issue with regard to the proposed technique of 'management plans' – a matter to be discussed later. Reports of this kind are not submissions⁸ and cannot found alterations to the proposed change of the kind contemplated by Clause 10(2)(b) (i) of the First Schedule.

(10) As is required by clause 22 of the 1st Schedule to the Act, the request for plan change contained a s32A 'evaluation report' prepared on behalf of the proponent. That report concluded that:

- (a) The objectives of the proposal were the most appropriate way of achieving the objectives of the Act; and
- (b) The provisions in the proposal were the most effective and efficient way of achieving (i) the objectives of the proposal and (ii) the objectives of the Plan, to the extent that they are relevant.

As I read them, none of the submissions challenged the first of these conclusions⁹ – certainly no argument was advanced at the hearing to this effect. Given that the s42A reports recommended the adoption of Change 43 (albeit with amendments) as an appropriate means of controlling the activities under consideration, neither issue appears to remain open, at least in practical terms. To the extent that the second conclusion was put in issue – largely by focusing upon elements of detail within the proposed rules – resolution seems to have been reached. The one submission in respect of which this seems not to have occurred – that of Dairy Holdings Ltd, a local landowner – sought a dedicated alternative route for vehicles and appropriate road safety changes to the wider network. Even had the nature of these changes and the need for them been established in evidence it seems likely that the "relief sought" could not have been obtained on these

⁶ A representative of the submitter IZONE was present throughout but declined to enter an appearance

⁷ Including those open in terms of Clauses 10 and 16 of the First Schedule

⁸ The Council has an independent power to submit on a plan change, but in this case did not do so

⁹ The IZONE submission argued that the *provisions* went beyond appropriate objectives, particularly by including more land within the DPMA than was justifiable. This submission seems to have rested on a concern that, the area might come to include a wider range of activities than those currently carried out, thus undermining the development of industrial zones elsewhere in the Selwyn District. This argument may perhaps have been directed at both conclusions but was not pursued.

proceedings. In that regard the only open question is whether the *absence* of provisions of this sort fatally undermines the proposal. On the information available to me I am satisfied that it does not. This recommendation will focus, therefore, on particular and unresolved issues canvassed in the course of the hearing.

‘MANAGEMENT PLANS’

(11) In both its notified and amended forms proposed Change 43 makes use of a somewhat controversial technique – provisions requiring the later preparation (and, at times, later approval) of documents having determinative effect – here called ‘management plans’.¹⁰ In the amended form of the proposal these purport to require, as “Standards for Permitted Activities”:

- (a) The provision, to the Selwyn District Council prior to the issue of a building consent for new buildings, of a “landscape plan” detailing specified matters (proposed Rule 26.6);
- (b) A requirement that “earthworks [which] exceed 5000m³ ... be undertaken in accordance with an Earthworks Management Plan approved by the Selwyn District Council prior to the commencement of Earthworks ...” Such a plan is to include (but is not limited to) specified matters (proposed Rule 26.11);
- (c) A “Noise Management Plan” to be submitted to the Council at least annually, which is to “include best practice procedures to ensure compliance with noise standards ...” (proposed Rule 26.19);
- (d) A “Hazardous Substances Management Plan” to be submitted to the Selwyn District council (and updated periodically) confirming “compliance with the requirements of the Hazardous Substances and New Organisms Act ...” (proposed Rules 26.23 and 26.24); and
- (e) A “Construction Management Plan [to be] submitted for approval to the Selwyn District Council at least “20 working days prior to the commencement of construction works that will increase the capacity of milk processing or storage on site ...” (proposed Rule 26.43)

Additionally, and where the required plans are not provided and/or approved, the relevant ‘activities’ fall to be considered as limited discretionary activities (unless otherwise of a lower status).

(12) As was known to Mr Chapman, I have on other occasions expressed reservations as to the lawfulness of provisions of this kind.¹¹ In order to overcome these concerns he cited decisions of the Environment Court which, he submitted, legitimised the approach, and referred to other plans in which the ‘management plan’ technique had been employed. The authorities cited were:

Wood v West Coast Regional Council DC127/99;
Road Metals Co Ltd v Selwyn District Council [2012] NZEnvC 214; and
West Coast Environmental Network v West Coast Regional Council [2013] NZEnvC 178 and 253.

¹⁰ To be distinguished from the ‘Outline Development Plan’ contained within the change itself. The term itself is not one of art – what is important is not what the document is called but what it is designed to do. For that reason I have, in this recommendation, contained the term within single quotation marks.

¹¹ See, for example, my recommendation to the Selwyn District Council in relation to proposed Change 24.

Notably, each of these decisions was on an application for resource consent. Relevantly, the issue in each was whether the consent conditions then under consideration amounted to an illegitimate delegation of the consent authority's judicial function – a determination as to whether consent should be granted and if so upon what conditions.

(13) On my analysis these decisions are authority for the following propositions:

- (a) A 'management plan' may lawfully be required as a condition of a resource consent when its purpose is to identify the means by which the consent-holder intends to comply with other (and otherwise lawful) conditions of consent;
- (b) A condition of consent may lawfully require certification, by an appropriate person, that the *purpose* of another condition has been met, where either that purpose or the parameters (or criteria of judgment) have sufficiently been specified – a 'certifier condition';
- (c) Conditions that call for later approvals *not* meeting these criteria are unlawful (in the absence of specific legislative authorisation); and
- (d) Whether there is a sufficient specification for the purpose of (b) above is itself a matter of judgment.

(14) At first sight these propositions may seem appropriate to the current issue – that of the lawfulness of rules proposed for a plan. The context is, however, somewhat different. Firstly, and while there are undoubtedly 'judicial' elements in the consideration of proposed RMA documents and submissions in respect of them, that exercise is at heart one of delegated legislation taking place in the context of public participation through the medium of 'submissions'. More importantly, the imposition of *conditions of consent* is governed by s108, whereas the 'conditions' appropriate to plan provisions must accord with sections 76 and 87A. Section 108 is both wide in apparent scope and accompanied by specific – and, apparently additional – authorisations. Thus conditions attached to a resource consent may require the provision of information about its exercise (ss3) and the carrying out, by the consent holder, of a general monitoring role (ss4). The clear implication of ss5, however, is that absent the express authorisations in ss3 and ss4, conditions of that kind would have been unlawful.

(15) The present issue has to do (in substantial part) with the classification of activities; in particular with the boundary between activities that may be undertaken 'as of right' and those for which consent is required.¹² By definition, an activity is 'permitted' only "if it complies with the requirements, conditions, and permissions, if any, *specified* in the ... plan ..." (s87A (1), my emphases). Notably, and in this context, compliance with plan 'requirements' and the like is to be demonstrated within the *activity as performed*, rather than through the imposition of some additional requirement falling on those responsible for its occurrence. Inferentially, therefore, a condition of the kind identified in (13) (a) above cannot lawfully be included in a District Plan as a means by which 'permitted' and other activities are to be separated. This point is additional to, but reinforces, that made in the preceding paragraph.

¹² That this is so is clear from the identification of relevant provisions as 'Standards for Permitted Activities' and from the wording of proposed Rule 26.38.

(16) A further question is whether the provisions under consideration qualify as a *specification* of the ‘conditions’ (etc.) to which a relevant activity is subject. As a matter of principle, and in ‘boundary’ questions, a purported ‘standard’, ‘requirement’ or ‘condition’ should be such as will enable (reasonably literate and informed) people reading the plan to decide *for themselves* whether any of the types of consent envisaged by s87A is required (or, perhaps, is available at all). One which calls for future assessment in order that the status of ‘permitted activity’ be attained fails (in my view) to meet that criterion.¹³

(17) Section 76(1), which authorises the inclusion of rules in a District Plan, limits the ability of the Council in this respect to rules that are for the purpose of:

- (a) Carrying out its functions *under this Act*; (my emphasis) and
- (b) Achieving the objectives and policies of the plan.

There can, of course, be overlaps between RMA functions and those conferred upon territorial authorities by other legislation. The ‘overlap’ presently in issue is with the purpose and provisions of the Hazardous Substances and New Organisms Act 1996. Proposed Rules 26.3 and 26.4 – paragraph (11) (d) above – are plainly intended to enable the Council better to perform its functions under HSNO ‘96 and seek to provide a mechanism through which those carrying out activities in the proposed Dairy Processing Management Area can demonstrate compliance with that Act. That does not seem to me to be authorised by s76 (a) (1).

(18) **Whichever way this question is viewed it seems to me that none of the provisions identified in paragraph 11 above meet the necessary criteria of lawfulness for plan provisions of the kind to which s87A (1) applies.** A further matter relevant to this conclusion is the existence within the Act of a consent structure designed to enable matters of limited significance to be considered quickly, often without public notification and in a way that limits ‘transaction costs’. Given that to be the legislative intent of those provisions, it would be surprising if the ‘formal’ consent structures that they enable – applications for controlled and limited discretionary activities – could be subverted by informal processes of the kind identified in (11) above..

WHAT, THEN, IS TO BE DONE?

(19) As arranged, and after the hearing, the Synlait provided two versions of the text of its proposed change. The first – containing alterations that it now adopts – continues the proposals discussed at (11) above. The second, as well as containing those alterations, also suggests some re-drafted ‘management plan’ provisions – this against the possibility that I might come to a conclusion similar to that reached in earlier ‘change’ proceedings. Importantly, Synlait neither adopts nor consents to those re-drawn provisions and, with the exception of that relating to the

¹³ As I recollect it, there is authority supporting the view expressed here – *Fifth City Estates v Christchurch City*, a case decided under the Planning Acts by Casey J in the (then) Supreme Court. That decision, again as I recall it, establishes that whether a provision is sufficiently certain depends, in this context, on the nature of the subject matter.

Earthworks Management Plan, none could be said to arise from an acceptance of submissions.¹⁴ The question which arises, therefore, is as to the decision-maker's ability to make alterations to the proposal so as to provide a lawful means of achieving its apparent purposes. Mr Chapman concedes that the decision-maker (in cases such as the present) has that power. Nevertheless, and considering that the issue is at heart one of jurisdiction, I do not think it sufficient to rely on a concession.

(20) This is also an issue with which I have grappled in other 'plan change' recommendations, each of which fell to be considered under an earlier form of s32. I then concluded that:

- (a) The general rule (in the case of 1st Schedule matters and at the present level of consideration)¹⁵ is that a proposed change may only be amended in a way that arises from submissions (or falls within the ambit of Clause 16 to the first Schedule to the Act);
- (b) In the case of privately initiated changes (at least of the 'project oriented' kind) a proponent may amend its proposal so as to narrow its scope, so long as the alterations sought are not such as to indicate the need for further opportunities for public participation. There seems to be no 'in principle' reason why a change proponent should not be able to settle for less than it had originally sought;
- (c) In terms of the then relevant provisions, the 's32 analysis' was part of the decision-maker's statutory function;
- (d) An unlawful provision could never be an efficient or effective means of achieving anything, let alone relevant objectives;
- (e) By implication, decision-makers could correct a legally deficient provision so as to achieve the purpose for which it was proposed.

(21) The argument turns on (c) above, with the implication at (e) arising by necessity from the nature of the function. Initially, and as discussed at the hearing, recent amendments to s32-related provisions raised (in my mind) the possibility that the current requirement to "have particular regard to [an] evaluation report" which it is the function of *proponents* to prepare might defeat that implication. I note, however, that *further* s32 evaluations are required "for any changes that have been made to, or are proposed for, the proposal since the evaluation report for the proposal was completed".¹⁶ I take the view that "changes" in this section should be read in a broad sense – as 'alterations' rather than in the formal sense of changes undertaken pursuant to the 1st Schedule to the Act. So understood, 'further evaluations' remain part of the function of decision-makers and the implication in (c) above can survive (assuming it to be correct in the first place). Thus, and if I conclude that this proposed change should proceed, I will recommend that the 'management plan' provisions referred to in (15) above be either deleted or recast in a form authorised by the Act.

(22) I accept the general justification suggested by the form of Synlait's proposal – that the matters there referred to *are* matters to which consideration should be given at some later stage and *are not* (in themselves) of such significance as to require further opportunities for public

¹⁴ The submission from Mahaanui Kurataiao Ltd (made on behalf of Te Taumutu Runanga) seeks, *inter alia*, that "volumes exceeding 5000m² [be] classified as a controlled activity ..."

¹⁵ The environment Court has expanded powers in this respect.

¹⁶ S32AA (1) (a)

involvement (or significant formality). Whether or not public notification is to occur – in the case of most applications for resource consent – is in part at the discretion of the local authority. In the second ‘re-drafted’ version of Rule 26.6 however (Synlait’s ‘controlled activity version’), the alterations put forward do not go so far as to require approval of the Council, ‘formal’ or otherwise, to a Landscape Management Plan. The currently proposed structure is:

- (a) Landscape planting is to take place in “general accordance” with (new) Appendix 26A – the ‘Outline Development Plan’ – this as a condition to which land use activities are subject (Rule 26.5);
- (b) That Appendix indicates areas for landscape treatment, provides rules for landscape staging and contains “cross-sections for further detail on width of planting and *indicative* landscape outcomes” (Note 1, Sheet 1; my emphasis);
- (c) Proposed Rule 26.6 provides that:
 Prior to the issue of a building consent for new buildings which will increase capacity for milk processing or storage within the Dairy Processing Management Area, a landscape plan shall be submitted to Council which shall detail the planting to give effect to Rule 26.5. This landscape plan shall include the location of the planting, the plant species, the proposed timing of planting, the height and spacing of plants at the time of planting, and the maintenance regime of the landscape planting including soil and moisture retention, irrigation, access and the replacement of any dead, diseased or dying plants and the methodology for removal of exotic planting.
- (d) Neither that rule nor Rule 26.5 requires the *approval* of anything; but
- (e) Rule 26.38(c) says that “[a]ny landscape planting which does not comply with rules 26.5 or 26.6 shall be a discretionary activity” and goes on to specify the matters in respect of which discretion is restricted;

(23) I confess to some difficulty with this. Rule 26.5 (when read in combination with the ‘staging’ rule in appendix 26A) comes in to play in two circumstances, one of which is also identified in Rule 26.6. The second of these rules is clearly intended as part of the mechanism by which permitted and controlled activities are to be distinguished but, in my view, does not meet the requirements of s87A. Even if within the functions of a territorial authority – so as to found a rule authorised by s76 – the contemplated compliance seems merely to consist in the *submission* of a plan (admittedly one which contains specified details). Accordingly it is difficult to see relevant objectives and policies that Rule 26.6 might *achieve*. As proposed, the form of the rule suggests an underlying intention of enabling the Council to determine *whether* what is indicated in its ‘Landscape Management Plan’ will amount to compliance with 26.5, and of enabling some Council input to that issue. If that is the case then (i) the rule does not provide for involvement of that kind and (ii) if it did, there is no requirement that landscape planting be undertaken *in accordance with* a plan submitted as required by rule 26.6. It is thus difficult to see how the ‘matters of control’ specified in Rule 26.38(c) can ever gain traction so far as the detail provided in any additional plan is concerned.

(24) This situation presents something of a dilemma – a choice between (i) removing rule 26.6 in its entirety (as an invalid attempt to fulfil the s76 and s87A(1) requirements) or (ii) re-drafting it to require the provision of ‘landscape planting’ before the erection of new buildings which will increase capacity for milk processing or storage within the DPMA, and constituting *that planting* a controlled activity, control being limited to the matters set out in the last sentence of (proposed)

rule 26.6 (repeated in 26.38(c)). The first of these possibilities – removing the rule – would, I think, be seen as removing the *apparent* opportunity for Council review (and, perhaps, refinement) originally a feature of the change and upon which potential submitters may have relied.¹⁷ Additionally, such a move would leave Rule 26.5 in its proposed form; one of dubious enforceability. Accordingly, and if the change is to proceed, I will recommend the second.

(25) For similar reasons, and in the case of ‘Earthworks’ and ‘Construction Activities’ which in the document as notified were proposed to be constituted permitted activities subject to the *approval* of ‘management plans’, I think it necessary for the relevant provisions to be re-cast as rules for controlled activities. The second of Synlait’s most recent re-drafts (para. (18) above) provides for that.

(26) On the other hand, the parts of the proposed ‘standards’ which require plans for noise management (26.19 and 26.20) and hazardous substances (26.23 and 26.24) are of the kind identified at (13) (a) above – that is, they are intended to indicate the means by which Plan noise limits and the statutory requirements of the Hazardous Substances and New Organisms Act 1996 are to be complied with. As such they add nothing to those requirements and could never have been seen as providing an opportunity for refinement or review. In my view they are both unlawful and otiose.

A TECHNICAL DIFFICULTY

(27) The position reached at (24) above – that is, that ‘landscape planting should be constituted a controlled activity – presents something of a problem. As currently worded, s76 appears of wide scope. While it may be an open question as to whether this section authorises what might be described as ‘free standing’ rules – those that are unrelated to the classification of activities authorised by s87A¹⁸ – proposed Change 43 does not attempt to go down that path. Instead a traditional approach is adopted; rules attach to identified activities and, in the case of specified permitted activities, either (i) form part of the activity description or (ii) constitute the “requirements, conditions or permissions” to which described activities must comply so as to attain that status. Within this approach rules operate to control (e.g.) the erection of buildings where that is what a user desires to do, but cannot require the user to engage in building erection. Even if ‘free standing’ rules are lawful (and that I doubt) the constraints to amendment discussed earlier lead me to the view that it would be improper for such a technique to be adopted at this stage in the present proceedings.

(28) It follows, I think, that use of the ‘controlled activity’ technique as a means of giving effect to the underlying intent of the relevant part of Change 43 requires a two-step process;

- (a) The insertion, as a ‘requirement’ of the permitted activity “new buildings which will increase ... capacity ...”, of an obligation to provide appropriate landscape planting – something that, of necessity, must be part of the activity specification; and
- (b) A proper mechanism for determining what ‘appropriate landscape planting’ amounts to.

¹⁷ Mr Chapman opened on the basis that input from one submitter, Mahaanui Kurataiao Ltd, had led to alterations to provisions relating to native planting.

¹⁸ As, to take an absurd example, a requirement that all existing letterboxes be painted yellow.

Additionally, the two must be linked in a way that enables readers of the Plan (as changed) to realise that there are, indeed, two steps to the process.

(29) My earlier conclusion – that the “indicative outcomes” illustrated in Appendix 26A are insufficiently certain for the purposes of s87A (paragraphs (15) and (16) above) seems to have been shared by those responsible for the drafting of Rules 26.5 and 26.6 in their original form – otherwise, which should a *further* specification of both planting proposals and a maintenance regime be required? The mere removal of the words quoted will not suffice. The conclusion to which I have now come is that, in order to maintain the underling intent of this part of the proposed Change, it will be necessary to require that issue (b) above be addressed through the medium of an application for controlled activity consent.

A FURTHER EVALUATION (Section 32AA)

(30) Thus far I have:

- (a) Accepted that Synlait may amend its proposal ‘within scope’; amendments that may include those agreed with submitters as an appropriate way of dealing with concerns raised in submissions;
- (b) Concluded that the ‘management plan’ provisions of the proposed change lack statutory authorisation;
- (c) In the case of the activities ‘Landscape Planting’, ‘Earthworks’ and ‘Construction Activities’, foreshadowed an intention to recommend a re-casting of the relevant rules as rules for controlled activities; and
- (d) Expressed the view that the proposed ‘management plan’ rules relating to noise and HAZNO compliance should be deleted.

Of the matters in (c) and (d) above, the only alteration that flows from a (formal) submission is that relating to earthworks, the relevant submission being that of Mahaanui Kurataiao Ltd.

(31) As indicated, I regard each of these alterations as ‘changes’ for the purposes of s32AA (1). The ‘further evaluation’ required by that section must conform to the requirements of s32 (1) and (2), but

- is confined in its scope by ss(3) and
- need only be at “a level of detail that corresponds to the scale and significance of the environmental, economic, social, and cultural effects that are anticipated from the implementation of the proposal.”

In combination, these requirements focus attention on the purposes *of the alterations* – ss (6).

(32) Matters relevant to *this* evaluation have already been discussed in the body of this recommendation. Having regard to those I have no hesitation in concluding that the statutory requirements are met.

AN OVERALL CONCLUSION

(33) The purpose of a district plan is “to assist territorial authorities to carry out their functions in order to achieve the purpose of [the] Act” (s72). Ultimately, therefore, whether Change 43 is

to proceed will depend upon whether *its* provisions better achieve that purpose (and the purpose of Part 2 as a whole) than do the provisions that it is intended to replace. Given the way this Change has proceeded there seems little point in canvassing that question within this recommendation – the s42A report prepared by Ms Foote does so at paragraphs 124 to 130. I adopt that discussion and the conclusion at 131; that, with amendments, Plan Change 43 “will achieve the purpose of the RMA.”

(34) At paragraphs 33 to 58 of her s42A report Ms Foote discusses the various statutory documents to which the decision-maker must either have regard or to which a district plan must give effect. She there concludes that nothing in those documents is relevant to the proposed change. I adopt that conclusion. She also canvasses the expected environmental effects of development in terms of the proposed suite of plan controls, as compared with those to be expected from perseverance with the present regime (paragraphs 59 to 114. The discussion in those paragraphs, together with evidence presented by the proponent, leads me to conclude, on balance, that the proposal as amended can proceed.

(35) I have given “particular regard” to the evaluation report provided as part of the application documents. I note that the matters there discussed were essentially unchallenged throughout. Apart from the matters discussed above I have no reason to depart from the conclusions there reached.

(36) As required by s32AA I have conducted a ‘further evaluation’ of the amendments to the change as advertised and adopted by Synlait both in opening and in the course of the hearing. None of these alterations impact in any significant way on the issues with which s32 is concerned and, with the exception of matters discussed in the body of this recommendation, I have concluded that the purpose of that section is fulfilled.

(37) As to the ‘management plan’ provisions discussed above, I have concluded that:

- (a) In their originally proposed form they fail to meet the requirements of the Act;
- (b) In some cases, notably those relating to construction activities and earthworks, those deficiencies are supplied in the ‘Version B’ redraft undertaken by Synlait after the hearing, the relevant parts of which it does *not* adopt;
- (c) Decision-makers in proceedings of the present kind may amend technically deficient provisions of a proposed change.

(38) Once amended in the ways discussed above, Plan Change 43 will better meet the purpose of the Act than does the present regime.

RECOMMENDATION

For these reasons *I recommend* that the Selwyn District Council:

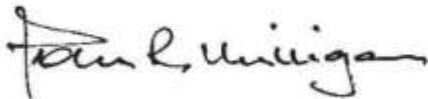
1. Adopt this document as its decision and reasons, and as the ‘further evaluation’ required by s32AA;
2. Accept or reject the submissions to Proposed Plan Change 43 as shown in Appendix A to this recommendation;
3. Adopt Proposed Change 43 in an amended form, which;
 - (a) Is to take as its starting point the forms of the proposed change presented on behalf of the proponent at the commencement of the hearing;
 - (b) As further amended by the ‘Synlait Amended Rule Package At Commencement of Hearing’, Version B;
 - (i) from which provisions relating to the requirement for a ‘Noise Management Plan’ (proposed Rule 26.19) and a ‘Hazardous Substances Management Plan’ (proposed Rules 26.23 and 26.24) have been removed; and
 - (ii) within which the provisions relating to ‘landscape planting’ (including proposed Rules 26.5 and 26.6) have been altered so that, in an event to which Rule 26.5 applies, landscape planting is a controlled activity; and
 - (iii) which contains all necessary and consequential amendments.

The amendments referred to in (ii) and (iii) above should include:

- (iv) changing the heading “Standards for Permitted Activities” so that it reads ‘Requirements and conditions for Permitted Activities’, thus adopting the wording of s87A;
- (v) deletion of the words “landscape treatment” from rule 26.2;
- (vi) recasting Rule 26.5 so that it:
 - refers specifically to the ‘Landscape’ provisions of Appendix 26A; and
 - relegates the second sentence to a ‘note’ showing that the ambit of the rule does not include extend to planting additional to that required.
- (vii) re-casting Rule 26.6 so as to constitute the activity required by 26.5 a controlled activity and linking to the rule recommended in (c) below;
- (viii) the insertion of a new rule under the heading ‘Controlled Activities’ (Rule 26.34ff) linking to rule 26.6 and limiting control to the extent to which the proposed planting meets the purposes of, and is likely to meet the results contemplated by, the ‘Landscape’ provisions of

Appendix 26A and to the matters presently contained in Rule 26.38(c)
– with the consequent deletion of that rule.

Attached as Appendix B is a re-drafted version of Version B of the text of Proposed Change 43 (as provided by Synlait following conclusion of the hearing) amended so as to give effect to the above recommendations. Further consideration by Council Officers may reveal the need for other minor or consequential amendments to this draft so as to ensure coherent incorporation within the Plan. These may be made in terms of Clause 16 of the Second Schedule to the Act.

A handwritten signature in black ink, appearing to read 'John L. Milligan', with a stylized, cursive script.

John Milligan
Commissioner
February 27, 2015

RECOMMENDED RESPONSE TO SUBMISSIONS

1. New Zealand Transport Authority:	Accept
2. Philip Hindin and Yuying Wan:	Accept in part
3. Fonterra Co-operative Group Ltd:	Accept
4. Makaanui Kurataiao Ltd:	Accept in part
5. iZone (Hughes Developments):	Accept in part
6. Dairy Holdings Ltd:	Reject

DRAFT OF TEXT OF PROPOSE CHANGE 43 SHOWING EFFECT OF RECOMMENDED ALTERATIONS

[NOTE: This version of Proposed Change 43 to the Operative Plan for the Selwyn District takes as its starting point a version of the change provided by the Change Proponent after the conclusion of the hearing of submissions – its ‘Version B’. That version included alterations to the proposal then agreed to by Synlait and adopted as its own. Also included in that version, but *not* adopted by Synlait, were alterations to the proposal designed to provide for ‘Earthworks’ and ‘Construction Activities’ as controlled activities. In that regard the Change Proponent maintained that its original proposals were both lawful and to be preferred as a matter of merit. Both kinds of alteration were shown in that version, and are shown in this, highlighted in yellow.

In the draft recommendation, and for the reasons there set out, both kinds of alteration are adopted. Additionally, the draft recommendation would alter rules relating to ‘Landscape Planting’. This ‘track change’ version of ‘Version B’ deals with these additional alterations so as to provide, in draft form, a single recommended version of the Change. Some formatting alterations have been made. Both recommended and consequential alterations are shown but re-numbering has not been undertaken. Appendix 26A (in the form tabled at the commencement of the hearing) remains unaltered]

AMENDMENTS – ISSUES, OBJECTIVES AND POLICIES

- 1 Amend A4.5 **The Rural Area and Zones, The Plains** by adding the following new paragraphs as shown in bold and underlined to the end of the section:
A further resource management issue in the Outer Plains is related to the growth in the dairy industry and the need to provide for the efficient processing of milk and its by-products. Milk processing facilities have been established and these are at a scale that is economic and optimal relative to the level of milk production within the district and region. Accordingly the density of built development at these sites is much greater than occurs on individual farms and the nature of the processing activity means they are industrial in character. Without appropriate mitigation this may affect rural amenity and landscape as well as traffic efficiency and safety. These issues are addressed in Part B, Section 3.4 of the Plan.
- 2 Amend A4.5 **The Rural Area and Zones, Use of Zones** by adding the following new wording into the first sentence as shown in bold and underlined:
 “There is only one zone in the rural area, though the zone is split into areas to manage specific activities, for example subdivision and residential density, **dairy processing activities and buildings**, plantations and outstanding landscapes.”

- 3 Amend **B3.4 Quality of the Environment – Issues, Amenity Values/Rural Character** by adding the following new text to the second bullet point in the fourth paragraph as shown in bold and underlined below:
 “- People carrying out farming and other business activities may share some of these values. They also perceive the rural area as a business area and expect to be able to carry out existing activities, adopt new technology and practices; and to diversify activities as markets change. **The rural economy is dependent on facilities and businesses that process and add value to rural products. Established dairy processing facilities, while servicing the wider district or region also enable on-farm growth and diversification in respect of dairy products.**”

- 4 Amend **B3.4 Quality of the Environment – Issues, Amenity Values/Rural Character** by adding the following new text to the end of the last paragraph as shown in bold and underlined below:
 “The Council believes these effects.....The Rural zone is principally a business area and the policies and rules are designed to allow people to undertake farming and other business activities relatively freely. **In addition, the policies and rules acknowledge sites established for dairy processing activities and provides for the continued development of these sites in the Rural Outer Plains for the processing, testing, storage, handling and packaging and distribution of milk and dairy products, related by-products and ancillary activities.**”

- 5 Amend **B3.4 Quality of the Environment – Objectives, Explanation and Reasons** by adding the following new text to the second paragraph, third bullet point as shown in bold and underlined below:
 “Objective B3.4.2 recognises the Rural zone as an area where a variety of activities take place:
 - All sorts of primary production
 - Outdoor recreation
 - A variety of business activities
 - **Processing of milk to dairy products on established plant sites**”

- 6 Amend **Policy B3.4.3** by adding the following new wording to the second paragraph and also adding new wording to the **Method** for **Policy B3.4.3** as shown in bold and underlined:
 “Policy B3.4.3 requires adverse effects from activities on the amenity values of rural areas generally be mitigated. **This may be achieved through compliance with rules, conditions on resource consents or through an ODP controlling further development on established sites such as those applied to the existing sites of milk processing.....**”
 “**Method**
 - District Plan Rules
 - Discretionary activities
 - **Dairy Processing Management Area**”

- 7 Amend **Policy B3.4.4, Explanation and Reasons** by adding the following new wording to the third paragraph as shown in bold and underlined:
“However, the potential adverse effects of rural-based industrial activities that are of a size and scale beyond that which is permitted by the District Plan may be avoided by locating in a Business 2 Zone or in the Rural (Outer Plains) Zone where larger allotment sizes and lower population densities provide greater opportunity for internalising adverse effects.

Provision is also made for Dairy Processing Management Areas. This is an overlay within the Rural Outer Plains that is limited to sites of existing and established dairy processing facilities. Dairy processing facilities can be anticipated within, and form part of a cohesive rural character in the Rural Outer Plains and the Management Area limits activities to those associated with a dairy processing plant and manages the scale of development through the use of an Outline Development Plan (ODP) and a specific set of rules. Accordingly, the DPMA enables economic efficiency to be achieved whilst ensuring the integrated management of effects at the boundary with the rural area, avoiding effects on the rural character and amenity values of the Outer Plains. The smaller allotment size and higher population density of the Rural”.

- 8 Add a new **Policy B3.4.5, Explanation and Reasons and Methods** as follows and renumber all subsequent policies and references to Policy B3.4.5 accordingly.

Policy B3.4.5

Enable the continued and enhanced operation, innovation and development of established dairy plant sites for the purposes of administration, processing, testing, storage, handling, packaging and distribution of milk and dairy products, related by-products and ancillary activities within specifically identified Dairy Processing Management Areas within the Rural (Outer Plains) Zone, whilst ensuring the integrated management of effects on the environment at the boundary of the Management Areas through ODPs. The establishment of non-dairy processing related industrial activities shall be avoided.

Explanation and reasons

Policy B3.4.5 provides the basis for the rules controlling the use and development of land within Dairy Processing Management Areas. The buildings associated with the processing of milk and dairy products, along with the buildings required for storage and distribution, are very large and industrial in appearance. The scale and concentration of this built development exceeds that anticipated on a working farm however the processing of milk and dairy products is directly related to rural production and there are significant economic and operational benefits from enabling milk and dairy processing facilities within the Rural Area. Whilst the Policy is providing for a concentration of buildings, including very tall buildings, and activities, it is appropriate that the District Plan sets development standards beyond which new development will require a resource consent.

This policy is intentionally limited to sites of established Dairy Processing facilities as at 2013 and is not intended to provide a policy basis for new sites, or other types of rural industrial activities to be established in the Rural Outer Plains. Further this policy seeks to enable only activities that are directly associated with a dairy

processing plant, so as to prevent other types of rural industries or business activities being established within the Dairy Processing Management Area. This policy is also limited to enabling the establishment of dairy processing related activities only within the DPMA. Other non-dairy processing related industrial activities shall be avoided as these activities are more appropriately located in other zoned areas within the district.

Underpinning Dairy Processing Management Areas is a requirement to comply with an ODP. The ODP represents a comprehensive approach to landuse and development, controlling the overall layout of development. The proposed rules specific to the Dairy Processing Management Area are to be read in conjunction with the ODP. While the scale and density of development is greater than elsewhere in the Rural Area, this reflects the already established scale of dairying within the District and the ODP provides certainty for the community and the landowner on the pattern of future development for the processing of milk and dairy products.

Methods

- District Plan Rules
- Dairy Processing Management Area
- Outline Development Plan

- 9 Amend (the now re-numbered) **Policy B3.4.5** (now **Policy B3.4.6**) by adding the following new wording, as shown in bold and underlined (deletions in track change) to the following paragraphs under the **Explanation and Reasons**:

(a) The end of the first paragraph:

“One of the most predominant characteristics of the Rural zone is the low level of building density compared with townships; and the land uses which this allows. The density of buildings, generally and houses in particular, varies throughout the Rural zone. In most areas, it is much lower than the density in townships, although there are specific locations such as the Dairy Processing Management Areas which recognise the existing higher density of development.”

(b) The end of the third paragraph:

“Policy B3.4.6 and the District plan rules manage the ratio.....Similarly, the rule does not apply to buildings in the Dairy Processing Management Areas which provide for a concentration of large buildings for processing, packaging and distribution of milk and dairy products only.”

- 10 Amend (the now re-numbered) **Policy B3.4.6** (now **Policy B3.4.7**) by adding the following new wording, as shown in bold and underlined (deletions in track change) to the end of the first paragraph under the **Explanation and Reasons**.

“Policy B3.4.7 addresses two potential adverse effects of buildings.....Some multi-storey development is anticipated as capable of being absorbed within the dominating mountain landscape. An exemption is also made for buildings essential for the processing, packaging and distribution of milk and dairy products, related by-products and waste materials. The scale of dairy production requires large facilities and a Dairy Processing Management Area has been created to recognise sites already established as dairy factories and to enable efficiencies in the dairy industry to be achieved.”

- 11 Add the following new matter under **Part B Quality of the Environment – Anticipated Environmental Results** as shown below:
- Existing sites for processing, packaging and distribution of milk and dairy by-products are specifically identified and managed.

AMENDMENTS – RULES

- 12 Amend **Part C, 3 Rural Rules – Buildings** by adding a new rule as shown in bold and underlined:
- 3.13.1.6 **In respect of the Dairy Processing Management Area, any sensitive activity within the Noise Control Boundary as shown in the Outline Development Plan in Appendix 26A shall be designed to achieve an outside to inside noise level difference of not less than 20 dB $D_{tr, 2m, nTw}$ to any bedroom. The design shall include a ventilation system that enables bedroom windows to remain closed. The building design for a new sensitive activity shall be accompanied by a report (including calculations) from a suitably qualified acoustic consultant and submitted with the application for building consent.**
- Note:**
- This requirement can be achieved through adoption of modern residential construction materials in a building combined with the use of an alternative ventilation system that enables bedroom windows to remain closed.**
- 13 Amend **Part C, 3 Rural Rules – Buildings, Restricted Discretionary Activities – Buildings and Building Position** by adding the following 2 new clauses (and renumber the following clauses):
- 3.13.4 Any sensitive activity which does not comply with Rule 3.13.1.6 shall be a restricted discretionary activity.**
- 3.13.5 Under Rule 3.13.4 the Council shall restrict its discretion to consideration of:**
- 3.13.5.1 The ability to occupy and use a building for a sensitive activity with no mitigation and the potential effects on health and wellbeing.**
- 3.13.5.2 The nature of alternative of measures to avoid reverse sensitivity effects on the 24 hour operation of the DPMA.**
- 14 Insert the following new Appendix within Part E as Appendix 26.
- 15 Amend Planning Map 007, Sheets 1 and 2 by identifying the Dairy Processing Management Area as shown.

26 DAIRY PROCESSING MANAGEMENT AREA

Note:

All activities within the Dairy Processing Management Area shall comply with the Rules in Appendix 26.

Rules in Part C, 1 to 10 of the Rural Volume of the District Plan shall not apply to activities within the Dairy Processing Management Area, except where expressly advised in the following Rules.

Permitted Activities – Land Use

26.1 The following activities shall be a permitted activity if all of the standards in Rules 26.2 to 26.32 are met:

- (a) The processing, testing, storage, handling, packaging and distribution of milk and dairy products, dairy processing related by-products, and ancillary activities, including but not limited to:
 - i. Rail infrastructure, and rail activities limited to those required for the transportation of milk, dairy products and associated ingredient and package products.
 - ii. Infrastructure for roading, rail, the management of wastewater, stormwater and the supply of water.
 - iii. Laboratories and facilities for research and development related to the processing of milk and development of dairy products.
 - iv. Offices and facilities required for the administration and management of the Dairy Processing Management Area, and the marketing, sales and distribution of milk and dairy products.
 - v. Activities which can comply as a permitted activity with the rules of the Rural (Outer Plains) Zone, except that any calculation of density or site coverage shall exclude the land within the Height Control Zone.

Note: For the purpose of interpreting Rule 26.1:

The processing and use of milk is the purpose of, and principal use within, the Dairy Processing Management Area.

Ancillary activities means any activity that is incidental to servicing and supporting a permitted activity on the same site and which forms an inseparable part of the that permitted activity.

Standards-Requirements and Conditions for Permitted Activities

Outline Development Plan

- 26.2 The location of all buildings, activities, ~~landscape treatment~~, and vehicle access points to the Dairy Processing Management Area, shall be in general accordance with the Outline Development Plan in Appendix 26A.

Location of Buildings and Activities

- 26.3 All permitted activities shall be located within the Height Control Zone identified on the Outline Development Plan in Appendix 26A, with the exception of:
- (a) Any **directional** signage under **1.2m** height;
 - (b) **Signage providing information at the Primary Access points;**
 - (c) Infrastructure for roading, rail, the management of wastewater, stormwater and the supply of water associated with a permitted activity; and
 - (d) Permitted activities provided for in Rule 26.1(a) v.
- 26.4 Where located within the Rural Buffer Area buildings and activities provided for in Rule 26.3(b) and (c) shall comply with the height rules of the Rural (Outer Plains) Zone and either the setback rules of the Rural (Outer Plains) Zone or any setback shown on the Outline Development Plan in Appendix 26A, whichever is the greater setback from the boundary.

Landscape Planting

- 26.5 ~~When new buildings are to be erected that will increase the capacity for milk processing or storage within the Dairy Processing Management Area~~ **Landscape planting as shown on the Outline Development Plan in Appendix 26A shall be located in general accordance with the landscape provisions of the Outline Development Plan and is to be completed in accordance with the rules provisions for Staging and Removal of Exotic Planting specified in Appendix 26A. Rule 26.5 shall not apply to any planting for the purposes of amenity or enhancement within the Dairy Processing Management Area which is additional to the planting shown on the Outline Development Plan.**
- 26.6 ~~Prior to the issue of a building consent for new buildings which will increase capacity for milk processing or storage within the Dairy Processing Management Area, a landscape plan shall be submitted to Council which shall detail the planting to give effect to Rule 26.5. This landscape plan shall include the location of the planting, the plant species, the proposed timing of planting, the height and spacing of plants at the time of planting, and the maintenance regime of the landscape planting including soil and moisture retention, irrigation, access and the replacement of any dead, diseased or dying plants and the methodology for removal of exotic planting. Landscape planting required by Rule 26.5 is a controlled activity for which consent is required in accordance with Rules XX and XY~~

[Note: Neither rule 26.5 nor Rule 26.6 apply to any planting within the Dairy Processing Management area for the purposes of amenity or enhancement and which is additional to that envisaged by the Outline Development Plan.]

Building Height

- 26.7 Buildings within the Height Control Zone shall comply with the height limits shown in the Outline Development Plan in Appendix 26A. Up to 2 Boiler stacks and 4 exhaust vents per dryer shall be exempt from height limits.

Building Colour

- 26.8 Any building that has a finished height above 12 metres shall be finished in the following colours or equivalent colours, excluding trim, fittings, guttering, detailing and signage:
- (a) Colorcote “Kestrel” [specification: 174(R),165(G), 165(B), RV34.51]
 - (b) Colorcote Titania [specification: 213(R), 211(G);199(B), RV64.57]
 - (c) Colorcote Ironsand [specification:84(R), 81(G),79(B), RV14.72]
 - (d) Colorcote Grey Friars [specification:87(R), 87(G),88(B),RV 16.55]

Earthworks

- 26.9 A maximum volume of 5000m³ of earthworks for each stage of development.
- 26.10 The maximum cut/excavation depth of the earthworks from existing ground level shall be 5 metres and no closer than 1 metre to groundwater, whichever is the lesser.
- 26.11 The maximum height of temporary stockpiles or final landforms shall be no greater than 4m above ground level.
- 26.12 All cut material shall be reused within the Dairy Processing Management Area.

Access

- 26.13 Prior to the issue of a building consent for a new building which will increase capacity for milk processing or storage within the Dairy Processing Management Area:
- (a) The design of any access from the State Highway or the design of any State Highway/local road intersection, as shown on the Outline Development Plan in Appendix 26A, shall be approved in writing by the relevant Road and Rail (where applicable) controlling authorities. A copy of this approval shall be forwarded to the Council Planning Manager for Council's records.
 - (b) All access from a local road shall comply with the design requirements of Appendix 10.
- 26.14 Secondary access points shown on the Outline Development Plan in Appendix 26E shall only be used for farm activities, emergency access and situations where the primary access is made temporarily unavailable by emergency services, the road or rail controlling authorities.

Parking

- 26.15 All vehicle parking and manoeuvring areas shall be located as shown on the Outline Development Plan in Appendix 26A and comply with Appendix 10 as to layout and design.
- 26.16 Vehicle parking and manoeuvring associated with new buildings which will increase the capacity for milk processing or storage within the Dairy Processing Management Area shall be constructed, formed and sealed (with drainage) prior to use for operational activities.

Noise

- 26.17 Noise arising as a result of any activity within a Dairy Processing Management Area shall not exceed the following limits at the Noise Control Boundary shown on the Outline Development Plan in Appendix 26A.

- Daytime (7.30am – 8.00pm) 55dB L_{Aeq} and 80 dB L_{Amax}
- Night-time (8.00pm – 7.30am) 45 dB L_{Aeq} and 70 dB L_{Amax}

Noise shall be measured in accordance with NZS6801:2008 "Acoustics-Measurement of Environmental Sound", and assessed in accordance with NZS6802:2008 "Acoustics-Environmental Noise".

- 26.18 ~~Prior to the issue of a building consent for new buildings and associated outdoor loading and goods handling areas, which will increase capacity for milk processing or storage within the Dairy Processing Management Area, a report from an acoustic engineer shall be received by council confirming all activities within the Dairy Processing Management Area will, cumulatively, meet the noise standards.~~
- 26.19 ~~A Noise Management Plan for the Dairy Processing Management Area shall be submitted to the Selwyn District Council at least every 12 months and shall be up-dated to include any new activities or increase in milk processing or storage capacity within the Dairy Processing Management Area. The Noise Management Plan shall include best practice procedures to ensure compliance with noise standards, including noise monitoring requirements, annual reporting to the Selwyn District Council and a noise complaints procedure.~~
- 26.20 ~~Noise monitoring shall be undertaken within 3 months of the commissioning of any new buildings which will increase the capacity for milk processing or storage within the Dairy Processing Management Area, becoming operational and shall be submitted as part of the Noise Management Plan.~~
- 26.21 Rail movements into, within and out of the Dairy Processing Management Area are excluded from compliance with the above rules.
- Note: Rule 26.21 does not apply to the loading or unloading of goods.

Lighting

- 26.22 Any lighting within the Dairy Processing Management Area shall be a permitted activity provided that:
- a) Light spill from any activity does not exceed 3 lux on any adjoining property or any road reserve; and
 - b) All exterior lighting is directed away from adjacent properties and roads.

Hazardous Substances

- ~~26.23 A Hazardous Substances Management Plan for the Dairy Processing Management Area shall be submitted to the Selwyn District Council. The Hazardous Substances Management Plan shall confirm compliance with the requirements of the Hazardous Substances and New Organisms Act 1996, include an inventory of all hazardous substances stored on the site, emergency response and accidental spill procedures and annual reporting to the Selwyn District Council.~~
- ~~26.24 The Hazardous Substances Management Plan shall be updated and submitted to the Selwyn District Council at least 10 working days prior to the installation of the storage where there is:~~
- ~~(a) An increase the volume of hazardous substance to be stored within the Dairy Processing Management Area from that provided for in the Management Plan previously submitted to the Selwyn District Council under Rule 26.23; and/or~~
 - ~~(b) A new hazardous substance to be stored within the Dairy Processing Management Area not already identified in the Management Plan previously submitted to the Selwyn District Council under Rule 26.22.~~

Signage

- 26.25 All signage must be related to permitted activities undertaken on the site and be restricted to corporate logos or colours only.
- 26.26 The sign, unless it is a temporary sign, is located entirely within the Dairy Processing Management Area and is not located on, or overhangs onto, any road reserve. (See Rule 26.3 for limitations on signs located outside the Height Control Area as shown on the Outline Development Plan in Appendix 26A).
- 26.27 The sign is positioned so that it:
- (a) does not obstruct or impair the view for any motorist of any intersection or vehicle crossing; and
 - (b) is at right angles to the road frontage of the site but angled off the direction of traffic by 5 degrees.
- 26.28 The sign does not:
- (a) have flashing or revolving lights, sound effects, balloons or blimps or moving parts;
 - (b) resemble a traffic sign.
- 26.29 The height of the sign is not more than the height of the building and does not protrude beyond the framework of the building, to which it is attached; or 6m above the ground if the sign is not attached to a building.
- 26.30 The size of any freestanding sign is not more than 6m² and any sign attached to a building is not more than 50m².

- 26.31 The content of the sign shall be limited to the name of the dairy processing plant, wayfinding and compliance with statutory requirements.
- 26.32 The content of any sign within the Dairy Processing Management Area fronting a local road shall comply with the following:
- (a) The sign has a maximum number of 5 words or a maximum combined number of 6 words and symbols;
 - (b) There is a minimum separation distance between any 2 outdoor signs of:
 - (i) 70m, where the speed limit is 80km/hr; or
 - (ii) 80m, where the speed limit is 100km/hr;
 - (c) The sign is visible from a distance of:
 - (i) 175m, where the speed limit is 80km/hr; or
 - (ii) 250m where the speed limit is 100km/hr;
 - (d) The sign has a minimum height for any letter which complies with the following values:

Speed Limit	Main Message	Secondary Message
80km/hr	250mm	125mm
100km/hr	300mm	150mm

Note: The above rules do not apply to any directional, warning or other required safety or information signs required for the Dairy Processing Management Area.

- 26.33 The position, dimensions and content of any new sign within the Dairy Processing Management Area directed at traffic on State Highway 1 shall be approved in writing by the NZ Transport Agency.

CONTROLLED ACTIVITIES

Landscape Planting required by Rule 26.6

- XX An application for controlled activity consent under rule 26.6 shall contain information showing the location of proposed planting, the proposed plant species, the proposed timing of planting, the height and spacing of plants at the time of planting and the proposed maintenance regime of the landscape planting including soil and moisture retention, irrigation, access and the replacement of any dead, diseased or dying plants and the methodology for removal of exotic planting.
- XY Under Rule XX the Council shall restrict its control to the following matters:
- (a) The matters in respect of which information is required by Rule XX;
 - (b) The extent to which the proposal meets the objectives of and outcomes intended by the landscape elements of Appendix 26A
 - (c) The effectiveness of the proposed landscape planting to mitigate the adverse effects of proposed buildings and activities on landscape values in the locality of the Dairy Processing Management Area;
 - (d) The use of landform to assist in mitigation of landscape effects; and
 - (e) The effect of not removing exotic species which have achieved a uniform height of 10m on cultural values.

Earthworks

- 26.34 Any earthworks exceeding 5000m³ (for any stage of development), or a cut/excavation depth from existing ground level of more than 5 metres, or a maximum height of temporary stockpiles or final landforms of 4m above ground level, shall be a controlled activity. Any application for earthworks shall not require the written approval of third parties and shall be non-notified.
- 26.35 Under Rule 26.34 Council shall restrict its control to the following matters:
- (a) Management of excavations in the proximity of surface waterways to avoid sedimentation, discharges and run-off entering waterbodies.
 - (b) Management of dust emissions.
 - (c) The location, size and dimensions of any temporarily stock-piled material and final landform features created by fill.
 - (d) Re-vegetation of final surfaces.
 - (e) An Accidental Discovery Protocol as specified in the Mahaanui Iwi Management Plan.

Construction Activities

- 26.36 Construction activities for a new building which will increase capacity for milk processing or storage within the Dairy Processing Management Area shall be a controlled activity. Any application for construction activities shall not require the written approval of third parties and shall be non-notified.
- 26.37 Under Rule 26.36 Council shall restrict its control to the following matters:

- a) Ensuring that the effects of construction traffic minimises disruption, delay or inconvenience on the adjoining road network.
- b) Best practicable measures to avoid or mitigate the dispersal and deposition of dust and sediment.
- c) Best practicable measures to avoid the accidental discharge of any fuel or other hazardous substances, including measures for dealing with accidental spills.
- d) Compliance with NZS6803:1999 Acoustics – Construction Noise;
- e) Compliance with NZS2631:1985-1989 Part 1-3 or equivalent standard;
- f) An Accidental Discovery Protocol as specified in the Mahaanui Iwi Management Plan.

RESTRICTED DISCRETIONARY ACTIVITIES

26.38 Any activities which do not comply with the standards for Permitted Activities, and which are not listed as a **controlled**, discretionary or non-complying activity, shall be a restricted discretionary activity. The Council shall restrict its discretion to consideration of those matters as specified in respect of each rule:

MATTERS OF CONTROL

(a) Outline Development Plan

Any building or activity which does not comply with the following rules as shown on the Outline Development Plan shall be a restricted discretionary activity and the Council shall restrict its discretion to consideration of those matters identified:

Rule 26A.1 Heslerton Road Access

- The number and type of vehicle movements.
- The surface, width and condition of the road.

Rule 26A.2 Parking

- Any effects of vehicle movements associated with parking provided for within the Rural Buffer Area on rural amenity values and the reasonable use of adjoining land.

Rule 26A.3 Building Free Area

- The necessity and purpose of any structures to be located within the building free area.
- The scale and construction materials proposed for any building.
- The extent to which the proposed structure may affect the potential options for re-design and up-grading of the State Highway 1/Old South Road intersection.

(b) Location of Buildings and Activities

Any building or activity which does not comply with Rule 26.4 shall be a restricted discretionary activity and the Council shall restrict its discretion to consideration of:

- Any effects of an increase in building height or a reduced setback from internal and road boundaries on the rural amenity values in the locality and the reasonable use of adjoining land.
- Any effects of an oversized or non-directional sign on traffic safety or efficiency or on rural amenity values.
- Those matters specified for inclusion in Management Plans for Noise and Hazardous Substances.
- Note: Non-compliance with Rules 26.2 and/or 26.3 is a full discretionary activity. See Rule 26.39 below.

(e) ~~Landsc~~ape

~~Any landscape planting which does not comply with Rules 26.5 or 26.6 shall be a restricted discretionary activity and the Council shall restrict its discretion to consideration of:~~

- ~~• The species, density and height of plants at the time of planting;~~
- ~~• The effectiveness of the proposed landscape planting to mitigate the adverse effects of proposed buildings and activities on landscape values in the locality of the Dairy Processing Management Area;~~
- ~~• Maintenance and ability of planting to establish and grow, including provision for access, methods of soil retention and irrigation;~~
- ~~• The use of landform to assist in mitigation of landscape effects;~~
- The effect of not removing exotic species which have achieved a uniform height of 10m on cultural values;

~~Note: Amenity and enhancement planting within the DPMA is excluded from Rules 26.5 and 26.6.~~

(d) Building Height

Any building which does not comply with Rule 26.7 shall be a restricted discretionary activity and the Council shall restrict its discretion to consideration of:

- The individual and cumulative effect of additional building height on the landscape values in the locality of the Dairy Processing Management Area.
- The form and function of the over-height structure.
- The material and colour finish of the over-height structure.
- The effectiveness of any mitigation.

(e) Colour

Any building which does not comply with Rule 26.8 shall be a restricted discretionary activity and the Council shall restrict its discretion to consideration of:

- Alternative colour finishes and their effectiveness to address the visibility of the proposed structure individually and cumulatively within the Height Control Zone within the Dairy Processing Management Area.

(f) Earthworks

Any earthwork which does not comply with one Rule 26.12 shall be a restricted discretionary activity and the Council shall restrict its discretion to consideration of:

- The management of traffic effects created by the haulage activity.

(g) Access

Any access which does not comply with Rules 26.13 or 26.14 shall be a restricted discretionary activity and the Council shall restrict its discretion to consideration of:

- The effects of any access not shown on the Outline Development Plan in Appendix 26A, on the safety and efficiency of traffic on the road network.
- The safety of access to and from the State Highway, including the combined effect of the State Highway intersection and the site access where applicable.
- Intersection and road design.

(h) Parking

Any parking which does not comply with Rules 26.15 or 26.16 shall be a restricted discretionary activity and the Council shall restrict its discretion to consideration of:

- The effects of vehicle parking and manoeuvring not in accordance with the Outline Development Plan in Appendix 26A on rural landscape and amenity values.
- The effects of parking not designed to meet the standards of Appendix 10 on safety and efficiency of movement for vehicles and pedestrians within the DPMA.

(i) Noise

Any activity which does not comply with one or more of Rules 26.17 to 26.21 shall be a restricted discretionary activity and the Council shall restrict its discretion to consideration of:

- Effects on rural amenity values in the immediate proximity of the Dairy Processing Management Area.
- Effects on the liveability of any dwelling subject to increased noise effects.
- Measures for mitigation of noise effects.

(j) Lighting

Any activity which does not comply with Rule 26.22 shall be a restricted discretionary activity and the Council shall restrict its discretion to consideration of the effects of any additional light spill on:

- rural amenity values;
- the reasonable use of adjoining land or dwellings; and
- traffic safety on adjoining roads.

~~**(k) Hazardous Substances**~~

~~Any activity which does not comply with Rules 26.23 or 26.24 shall be a restricted discretionary activity and the Council shall restrict its discretion to consideration of:~~

- ~~— The volume of hazardous substance;~~
- ~~— Design of the storage facility.~~

- ~~—Emergency response and spill requirements.~~
- ~~—Monitoring and reporting.~~

(k) Signage

Any activity which does not comply with one or more of Rules 26.25 to 26.33 shall be a restricted discretionary activity and the Council shall restrict its discretion to consideration of the effects of any oversized or non-complying sign on:

- Traffic safety and efficiency; and
- Rural amenity values.

DISCRETIONARY ACTIVITIES

26.39 Buildings and activities not located in accordance with Rule 26.2 and/or 26.3 shall be a discretionary activity.

NON-COMPLYING ACTIVITIES

26.40 Any activity not provided for as a permitted, **controlled**, restricted discretionary or discretionary activity shall be a non-complying activity.

REASONS FOR RULES

The activities already undertaken at the established dairy plants in the Dairy Processing Management Areas and those which would typically be anticipated or associated with the processing of milk. Dairy processing activities can be anticipated to further develop as value is added to the range of dairy products and from processing of by-products. The list of permitted activities is intentionally limited to activities which are inseparably connected to dairy processing, including testing, storage, handling, packaging, distribution, and innovation.

Outline Development Plan, Buildings and Activities – Location and Height

The location of buildings and parking areas within the site and in relation to the site boundaries is controlled through compliance with an Outline Development Plan (ODP). This concentrates built development and dairy processing activities in the south west corner of the Management Area, reflecting the position of plant established through earlier resource consent processes and around which future buildings and activity are intended to grow.

Activities and buildings provided for in the Rural Buffer Area include those normally anticipated in the Rural Outer Plains Zone. In addition, low directional signage, signs located adjacent to primary access points and infrastructure servicing the DPMA such as road, rail, wastewater and stormwater utilities are enabled in the Rural Buffer Area. These are not activities involving significant built structures or intensive clustering of buildings, and are therefore considered appropriate in the Rural Buffer Area.

The setback of buildings from the state highway frontage has been influenced by the need to allow for a potential rail siding for trains to load/unload immediately adjacent to the drystores and to provide area for some landscape planting. To the north and south east built development is kept away from boundaries with a large area of rural open space providing an appropriate transition or buffer to the wider rural plains.

The ODP therefore effectively manages the extent of dairy processing activities within the DPMA. It is based upon what could be anticipated as a reasonable and optimal future development scenario and an assessment of the environmental effects of that development scenario.

The visual effects of full built development have been considered for the Management Area as a whole and addressed through a landscape plan. The scale and density of future development is integrated with this landscape treatment via the ODP providing a full overview of site development achievable over time.

Building heights are similarly controlled through the ODP. The rules acknowledge that dairy processing activities necessitate very tall built structures e.g., dryers and boiler stacks as well as very large, single span industrial buildings. Accordingly, there is provision for variable building heights, with the tallest elements purposefully located in a more central position within the area of building development.

Where activities are proposed which are compliant with the Rural Outer Plains rules, these are provided for throughout the DPMA (whereas dairy processing activities and buildings are more

constrained). The rule requires that for the purpose of site coverage and density calculations, the area of land used for the basis of the calculation is limited to the Rural Buffer Area, ensuring that the Buffer retains a density of development consistent with the wider Rural Zone.

A Noise Control Boundary is shown on the ODP. This is complemented by a rule in Part C, 3 Rural Rules – Buildings which requires noise insulation to be incorporated within new buildings for sensitive activities. This provision is discussed further under Noise below.

A specific rule on the ODP requires the up-grading of Heslerton Road prior to the commissioning of a second access. The rule ensures that the access to the plant is safe, efficient and fit for purpose. Further up-grading of the Old South Road and State Highway 1 intersection is similarly to be evaluated with substantive construction projects that increase the production and/or storage capability of the plant, to ensure that it remains safe. An area of land in the north west corner of the ODP is shown as building-free. This requirement is to avoid any capital development in an area that ultimately could be required for accommodating an up-graded State Highway/Old South Road intersection. This is discussed further under Access below. Similarly, the ODP requires all vehicle parking to be provided within the Height Control Area. This is described further under Parking below.

Landscape Planting

Rule 26.5 requires all landscape planting to be generally in accordance with the landscape plan which forms part of the ODP and in accordance with the staging specified in Appendix 26A. ~~This plan must demonstrate Rule 26.6 (requiring controlled activity consent to 'landscape planting' but not otherwise affecting planting for amenity or enhancement purposes) is intended to ensure~~ general compliance with the staging of landscape establishment ~~along-with-and to control~~ details of the plant species, location, timing of planting, height, spacing and maintenance. The purpose of this rule is to ensure that the Dairy Processing Management Area has a consistent landscape theme and that planting is appropriately established and cared for, ensuring its longevity and effectiveness.

In addition, a rule requires exotic species planted on the DPMA boundaries to be removed once identified indigenous tree species, planted in accordance with the rules on the ODP, have reached a minimum height of 10m. This requirement to allow indigenous plants to dominate has been agreed with Te Taumutu Runanga as a way of expressing cultural values on the site.

Building Colour

All buildings over 12m in height are required to comply with a prescribed colour palette. This is to assist with addressing the visual effects of what are potentially substantive buildings with high visibility for a period of years. The intention is to maintain a consistency in the visual qualities of the site. The colour range is informed by the finish of buildings established through resource consents prior to the DPMA.

Earthworks

The rules provide for some small scaled earthworks (<5000m³) and stockpiling to be carried out as a permitted activity. These standards are consistent with those applied to earthworks in the wider Rural Outer Plains Zone. Where these standards are exceeded within the DPMA Rule

26.34 requires the activity to be considered as a controlled activity with Council's control reserved to dust, proximity to waterways, re-vegetation and accidental discovery of archaeological items. A resource consent process ensures appropriate management and environmental outcomes which can be effectively achieved and monitored through a controlled activity consent process without the need for notification or third party approvals. It is acknowledged that earthworks, even at a larger scale, can be appropriately managed in accordance with best practice. In addition, the DPMA is an established and defined site which is well understood in terms of effective management from previous construction activity. Where material is to be transported off site however, a resource consent is required. This is specifically limited to the effects of haulage on the safety and efficiency of the road network, which may vary in effect depending on the volume of material to be transported and the particular route to be followed. This traffic effect is distinguishable from the earthwork activity itself where effects can be contained within the boundaries of the DPMA.

Access

The DPMA is a potentially significant traffic generator with a high proportion of heavy vehicles. Accordingly, it is appropriate that the access provision into and out of the site is controlled to avoid multiple entrance points which may potentially affect traffic safety and efficiency on the surrounding road network. Similarly, there is a requirement that with any significant new buildings which may increase processing or storage capacity, there must be consultation with the relevant road and/or rail authority. This provides a check point for assessing if a further up-grade of existing access points onto the State Highway or any State Highway/local road intersections servicing the DPMA are required. In respect of Synlait, the State Highway 1/Old South Road intersection is the primary point of access to the DPMA. Requiring the approval of the road and rail authorities will trigger a review of the safety of the intersection over time as traffic patterns change and the DPMA develops. The ODP requires that land between the plant and Heslerton Road is to be kept free of buildings to ensure that sufficient land is retained to accommodate any future State Highway intersection up-grades that may be required.

Identifying access points into the DPMA on the ODP provides certainty to road and rail controlling authorities as well as local road users. The access points identified on the ODP which are not already formed and operational will be required to comply with the District Plan standards for design. Prior to the commissioning of the second access on Heslerton Road, the ODP requires that a further length of road is up-graded to a standard for the anticipated traffic.

Parking

All vehicle parking (tankers, employees, visitors, suppliers and contractors) is required to be provided within the Building Height Control Area of the DPMA, where an intensification of built development and activity is anticipated. Directing parking to this location ensures that the dispersal or encroachment of car parking does not occur within the Rural Buffer Area which is intended to wrap around or buffer that part of the DPMA which is to be intensively used. The layout of the parking area is to comply with Appendix 10 of the Rural Volume of the District Plan, which sets out standard dimensions for car parks and best practice guidance on the relationship between parking, pedestrian and vehicle circulation areas.

Noise

The primary noise control for the DPMA requires compliance with a Noise Control Boundary. This is defined on the Outline Development Plan and Rule 26.17 specifies the daytime and night-time noise standards that will apply at this boundary. The Noise Control Boundary is derived from conditions imposed on resource consents that established the plant and represents a more strict noise standard than has been applied to the Rural Outer Plains. A Noise Control Boundary is commonly used around sites such as ports, airports and large, stand-alone plant. They provide a simple method for all parties to visualise the extent of noise effects.

~~To ensure that new development within the DPMA complies with the Noise Control Boundary, Rule 26.18 requires a report from an acoustic engineer to be submitted to Council prior to construction. This report is to confirm that the new development, in combination with all existing activities within the DPMA will continue to meet the prescribed standards. In addition, a Noise Management Plan is required to be submitted annually to incorporate new development and to demonstrate on-going commitment to the best practice management and monitoring of noise from the plant.~~

The Noise Control Boundary also triggers requirements for acoustic insulation to be built into new buildings for sensitive activities (see Part C, Rural Rules – Buildings, Rule 3.13.1.5). This requirement acknowledges and responds to the importance of the plant to the community and the economy. Once a company has made a significant investment in plant, it is in the district's and the community's interests that this plant is able to operate with efficiency. Accordingly, it is appropriate to ensure that encroachment of sensitive activities does not curb the plant's operations.

The Noise Control Boundary and its associated noise standards are not intended to apply to rail movements into and out of the DPMA. The measurement of rail noise as a train moves from designated land onto a rail siding within the DPMA may be extremely difficult to differentiate and measure. Unexpected noises such as wheel squeal are maintenance issues and best addressed through a Management Plan approach. The activity of loading and unloading trains is required to comply with the Noise Control Boundary.

Lighting

The Height Control Area within the DPMA is potentially an area of intensive activity and concentrated built development. The plant operates on a 24 hour basis requiring lighting to be provided for illumination of access points, outdoor work spaces and for security. The limitations imposed on the measurement of lux and the direction of lighting are the primary mechanisms to avoid light spill and to minimise night-lighting effects.

Hazardous Substances

~~The DPMA involves the storage and use of a range of hazardous substances essential to dairy processing activities. Accordingly, the appropriate storage and use of hazardous substances is a fundamental activity within the management area and compliance with statutory and industry requirements is essential to the success of the dairy industry. In this context the strict regulatory controls which are imposed through mechanisms outside the District Plan result in the effective management of hazardous substances in accord with best practice and industry standards. Accordingly, the potential risk to surrounding landuses is effectively managed and~~

environmental effects considered addressed appropriate management methods are implemented avoided, remedied or mitigated through the adoption of those standards.
Rules 26.22 and 26.23 put in place a process whereby the storage and use of hazardous substances in the DPMA is documented and Council is informed through a management plan. The plan is required to detail the range and volume of all hazardous substances stored and the emergency response and accidental spill procedures.

Signage

The rules relating to sign size are intended to provide for signs to be established which are scaled relative to the size of the plant and its function as a resource servicing a large catchment within the District. A requirement to ensure that signs visible from, even if not physically or legally fronting the State Highway, are considered by the New Zealand Transport Agency, ensures that signage does not adversely affect traffic safety and efficiency and accords with current Government guidance applicable at that time. Further to the size of the sign, the balance of the rules are the same as those applied in the wider Rural Outer Plains Zone.

Construction Activities

Rule 26.36 provides a mechanism for further control over the management of large scaled construction works through a resource consent for a controlled activity. The rule only applies to construction activities for buildings which increase milk processing or storage capacity within the DPMA, and is intended to apply to proposals of the scale of a new dryer or drystore. Due to the number of variables associated with construction and the desire to adopt industry best practice, a rule based on a standard measure or numerical threshold for management of construction effects is not applicable. A controlled activity consent ensures that there is a comprehensive and integrated plan for matters such as traffic management, dust control, compliance with the NZS standard for construction noise and vibration along with protocols for accidental discovery. This approach provides certainty and the flexibility to deal with construction projects which are of larger scale and potential environmental effect. The majority of the matters of control are however subject to other regulatory processes for building consent and health and safety. Accordingly, there is no requirement for third party approvals or notification of an application.

2 February 2016

Te Taumutu Rūnanga and Te Ngāi Tūāhuriri
Rūnanga
By E-mail
C/O Kyle Nelson
Tipa & Associates

Fonterra Co-operative Group Limited
3792 West Coast Road, RD1 Darfield 7510
t +64 3 317 98909
www.fonterra.com

Attention: Kyle Nelson

Dear Sir,

Re: Fonterra Darfield's Proposed Private Plan Change Cultural Impact Assessment

Thank you for the collation and presentation of the Cultural Impact Assessment (CIA) relating to Fonterra's proposed private Plan change development relating to the Darfield Site. We appreciate the time and effort that went into collating this assessment and the associated report.

Please find attached a table which covers the main areas of interest addressed in the CIA and Fonterra's response to those requests and recommendations. If either party would like to meet to discuss further concerns or elements within the CIA report not addressed by the summary of responses below, Fonterra welcomes the opportunity to meet and discuss directly.

Fonterra is looking to commencement engagement with the community stakeholders and immediate neighbours in February 2016, with the intention of lodging the Plan change application in March/April 2016.

We look forward to building a strong relationship with Te Taumutu Rūnanga and Te Ngāi Tūāhuriri.

Yours faithfully,

Fiona Walker

Fiona Walker

SI Environmental Risk and Compliance Manager

Fonterra Co-operative Group Limited

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Area of Focus	CIA Issue/Request	Fonterra Response
Landscaping	Agreement by Fonterra to continue or carryout landscape planting at the Darfield Dairy Factory and the surrounding land owned by Fonterra	<p>With the Site's recent establishment (2012) and expansion (2013), Fonterra have planted in excess of 12,000 trees including decorative planting on site and hedgerows around the Fonterra-owned farmland and site. Exotic species were utilised for this initial planting in order to complement existing plantings, to assist the site in blending with the current landscape and to ensure that visual mitigation was established as soon as possible. Maps displaying each respective stage of planting are attached for reference.</p> <p>As these plants are still establishing there are no further plantings planned, however we will consider additional native planting if there is a specific area of concern and recognising the importance of utilising native species for future planting projects, which is further commented on below.</p>
On-going relationship and regular Huis with Te Taumutu Rūnanga and Te Ngāi Tūāhuriri	Regular Hui with Tūāhuriri Rūnanga and Te Taumutu Rūnanga to discuss issues, share information or give updates on future expansion at the Darfield Milk Factory. How this would done requires discussion between Fonterra and the two runanga	Fonterra supports regular Hui with and/or updates to both Rūnanga and welcomes ideas on an approach which is most suitable for the two Rūnanga. As a starting point, Fonterra suggests a combined annual meeting at the Darfield Site in each dairy processing off-season (June/July).
	<p>A site visit by a group from Taumutu Rūnanga and Tūāhuriri Rūnanga to the Darfield Dairy Factory so Fonterra can show them the factory, the potential changes if plan change goes through and any future expansion which will occur in the short term</p> <ul style="list-style-type: none"> o The representatives may also want to visit the surrounding land owned by Fonterra o The representatives will likely want to see the storm water and wastewater system. This could include the discharge area as well. o The representatives will likely want to see the landscape planting Fonterra have carried out and any area where future landscape planning is planned. 	Fonterra welcomes the opportunity for Taumutu Rūnanga and Tūāhuriri Rūnanga to visit the Darfield Site and can facilitate this visit when it is convenient for Rūnanga representatives. Suggest that this site visit occurs prior to the annual off-season mentioned above in order to observe the storm water and wastewater systems while they are operational rather than in off-season shut-down mode. Please provide a date for March 2016 which is convenient and we will liaise to finalise visit details and times.
Supply of technical reports and monitoring data	Provision of all technical reports Fonterra have prepared for this plan change	At present, technical reports relating to Noise, Economic, Transport and Landscape Assessments are being completed by respective consultants to support this Plan change application. Copies of these reports can be supplied prior to lodgment.

		Fonterra supports an open relationship and can supply any further technical reports prepared in support of the Plan change application if required. Additionally, we welcome feedback on the above reports once finalised and supplied.
	<p>Involvement in the development of the following documents (or relevant documents or policy) or provided with these documents so feedback can be provided to Fonterra</p> <ul style="list-style-type: none"> o Environmental monitoring data or reports relating to the environment prepared by Fonterra within the Te Waihora catchment o Final version of the Outline Development Plan with all details on it o Monitoring carried out at Darfield Dairy Factory o Stormwater management plan o Earthworks management plan o Landscape planting plan / assessment o Wastewater management plan o Any additional technical reports the two runanga may require 	<p>Please find attached the current stormwater and wastewater management plans, original site development construction/earthworks management plan and the original two landscaping plans.</p> <p>With regard to monitoring data, the Darfield Site collates, monitors and manages a vast amount of environmental monitoring data. As such, Fonterra proposes to provide an annual summary at the aforementioned meeting and can provide further specific data from there depending on the areas of interest.</p>
	Response from Fonterra on how they will integrate the recommendations from Jolly (2014) into their proposed plan change Taumutu Rūnanga and Tūāhuriri Rūnanga	<p>a. <u>Landscape planting</u> As outlined above, Fonterra has undertaken considerable planting on the Darfield Site and currently does not have further planting projects plans. However, Fonterra recognises the value of reinstating indigenous vegetation as part of future developments for screening and amenity purposes, as outlined in the Jolly CIA Report (2014 – pg. 8). As such, we suggest that this is added to the annual meeting standing agenda in order to discuss any upcoming planting projects and/or recommendations the Rūnanga may have for planting projects on the Darfield Site and surrounding Fonterra-owned land.</p> <p>b. <u>Earthworks</u> Fonterra supports the good practice controls for earthwork sedimentation control management and run-off control provisions, as referenced in the Jolly CIA Report (2014 – pg. 9). However, as Fonterra is not requesting a change to this Rule through our Plan Change application there are not formal</p>

		<p>requests regarding controls or trigger values within our application.</p> <p>c. <u>Lighting</u> As demonstrated by the 2012 and 2013 Darfield Site expansions, Fonterra is acutely aware of the potential effect light emissions can have on the local community and landscape amenity values. Active measures were taken during these developments to ensure light emissions were either eliminate or managed light emissions (e.g. absence of windows in the Drier Plant building, stairwells with emergency lighting on sensors/timers rather than constant operation and use of low lux exterior lighting). As such, Fonterra supports that the Plan Rules are written to require light suppressions techniques in order to minimise impact on landscape and views.</p> <p>d. <u>Stormwater management</u> Fonterra presently operates under the attached Stormwater Management Plan and proposes that any future operations or expansions would be consistent with this approach.</p> <p>e. <u>Low impact and sustainability design principles; and</u> Fonterra's Environmental Policy is largely consistent with the Low impact and sustainability design principles detailed within the Jolly CIA Report (2014 – p9). Accordingly, there is synergy with a number of the elements listed including energy efficiency and water use minimisation.</p> <p>f. <u>Managing discharges in an integrated manner</u> As detailed in the Jolly Report (2014 – pg. 10), the plan change does not facilitate the establishment of new processing plants without rigorous impact assessment processes. It is via these processes and the corresponding Regional Council consent application process that discharges are managed in an integrated and controlled fashion. The previously suggested annual meeting with -Rūnanga and Fonterra will also provide a forum to discuss potential changes to discharge management in order to ensure all elements,</p>
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		including cultural, are considered prior to change being implemented.
	Information on any proposed future upgrades or expansion planned at the Fonterra Darfield Dairy Factory to the storm water or wastewater treatment systems.	At present there are no significant upgrades or expansions planned at the Fonterra Darfield Site, aside from the currently occurring addition of a mineral dosing plant which will operate within the existing footprint of the site's operations and consents. As such, there are no planned changes to stormwater or wastewater treatment systems, discharges or consents.

APPENDIX 8:

Economic Report

Copeland Brown

**APPLICATION FOR A PLAN CHANGE TO INTRODUCE A DAIRY PROCESSING
MANAGEMENT AREA COVERING FONTERRA'S DARFIELD MILK PROCESSING SITE**

ASSESSMENT OF ECONOMIC BENEFITS

**Mike Copeland
Brown, Copeland & Co Ltd**

14 September, 2015

1. INTRODUCTION

Background

- 1.1** Fonterra's Darfield milk processing plant is located on a 680 hectare site on State Highway 73, just north of the township of Darfield. It was opened in 2012 when the first milk powder dryer was commissioned and a second milk powder dryer was commissioned in August 2013. When operating at full capacity, the plant processes 8.6% of New Zealand's peak milk production. It is one of five milk processing operations in the Canterbury region¹ and was developed in response to increasing milk volumes and a shortage of processing capacity in the region. Currently the plant produces 220,000 tonnes of regular and instant whole milk powder per annum, with 7.2 million litres/day of milk processed at the peak of the season. The milk powder produced is exported through the Port of Lyttelton to markets in South East Asia, the Middle East and the People's Republic of China. The Darfield plant is estimated by Fonterra to account for approximately 15% by value of New Zealand's dairy exports.
- 1.2** In May 2014, Synlait Milk Limited (Synlait) submitted a request to the Selwyn District Council for a private Plan Change to introduce a Dairy Processing Management Area (DPMA) within the Rural (Outer Plains) Zone of the District Plan. The boundary of this DPMA surrounds Synlait's existing Dunsandel milk processing site. The decision to accept the Synlait Plan Change was made by the Council on 25 March, 2015.
- 1.3** Fonterra now wishes to seek a Plan Change enabling a DPMA to cover its Darfield site to recognise and better reflect the existing dairy plant established on the site and to provide for its efficient continued use and expansion. The Plan Change sought will reduce the ongoing reliance on the resource consent process for variations or changes in the future use of the site. It has therefore been prepared to provide for the maximum envisaged scale of milk processing development that is likely to occur in the foreseeable future. This will reduce the time, costs and uncertainties associated with seeking future consents for what is largely the consolidation of an existing established dairy plant.

¹ The others are at Kaikoura, Culverden, Clandeboye and Studholme.

Report Objective

- 1.4** The objective of this report is to assess the economic effects of Fonterra's proposed Plan Change enabling a DPMA to cover its Darfield site. The report will form part of the Assessment of Environmental Effects (AEE) to be lodged in relation to the application for the Plan Change.

Report Format

- 1.5** This report is divided into 7 parts (in addition to this introductory section). These are:

- (a) The background to Fonterra's existing and future use of its Darfield milk processing site;
- (b) A consideration of the relevance of economic effects under the RMA;
- (c) A description of the Selwyn District, and Canterbury regional economies;
- (d) The economic benefits from the continued operation of Fonterra's existing milk processing activities at Fonterra's Darfield site;
- (e) The economic benefits from future expansion of milk processing activities at Fonterra's Darfield site;
- (f) A discussion of some potential economic costs of the continued operation and future expansion of milk processing activities at Fonterra's Darfield site; and
- (g) Some overall conclusions.

2. BACKGROUND TO FONTERRA'S EXISTING AND FUTURE USE OF ITS DARFIELD MILK PROCESSING SITE²

- 2.1** New Zealand is the world's largest exporter of milk products and Fonterra, which processes 92% of New Zealand's total milk production, is the largest dairy exporter to the global open market. Fonterra is New Zealand's biggest company and is responsible for 25% of New Zealand's total exports by value. Last dairy

²Material in this section provided by Fonterra.

season Fonterra exported 2.2 million tonnes of dairy products to customers and consumers in over 140 countries.

- 2.2** Each year Fonterra processes more than 15 billion litres of milk at 26 processing sites in New Zealand, employing 6,250 people and provides \$525 million in wages and salaries. Fonterra has an annual turnover of approximately \$20 billion. The company is co-operatively owned by over 10,500 shareholders, who are a mix of family owned farms and corporate entities.
- 2.3** Fonterra's Darfield plant farmer suppliers are largely located in the Canterbury region. Unlike in the North Island's more mature dairy areas, milk supply growth in South Island dairy areas is averaging around 4-5% per annum and this rate of growth is expected to continue in the future. Also, under section 73 of the Dairy Industry Restructuring Act (DIRA), Fonterra is required to accept all new applications to become Fonterra shareholder farmers and all applications to increase the volume of milk supplied by shareholding farmers.³ Therefore Fonterra is required to maintain and expand processing capacity to meet future growth in the supply of milk from existing and new Fonterra farmer suppliers.

3. ECONOMICS AND THE RMA

Community Economic Wellbeing

- 3.1** Economic considerations are intertwined with the concept of the sustainable management of natural and physical resources, which is embodied in the RMA. In particular, Part II section 5(2) refers to enabling "*people and communities to provide for their ... economic ... well being*" as a part of the meaning of "*sustainable management*", the promotion of which is the purpose of the RMA.
- 3.2** As well as indicating the relevance of economic effects in considerations under the RMA, this section also refers to "*people and communities*" (emphasis added), which highlights that in assessing the impacts of a proposal it is the impacts on the community and not just the applicant or particular individuals or organisations, that

³ In some exceptional circumstances, Fonterra can refuse to accept additional volumes of milk for processing. These circumstances relate to minimum volumes of milk solids and where transport costs for a new applicant exceed those of its highest transport cost existing supplier.

must be taken into account. This is underpinned by the definition of “*environment*” which also extends to include people and communities.

- 3.3** The continued operation and expansion of Fonterra’s dairy product manufacturing capacity at the Darfield site will enable the residents and businesses of the Selwyn District, Christchurch City and the Canterbury region to provide for their social and economic wellbeing.

Economic Efficiency

- 3.4** Part II section 7(b) of the RMA notes that in achieving the purpose of the Act, all persons “*shall have particular regard to ... the efficient use and development of natural and physical resources*” which include the economic concept of efficiency⁴. Economic efficiency can be defined as:

“the effectiveness of resource allocation in the economy as a whole such that outputs of goods and services fully reflect consumer preferences for these goods and services as well as individual goods and services being produced at minimum cost through appropriate mixes of factor inputs”⁵.

- 3.5** More generally economic efficiency can be considered in terms of:
- Maximising the value of outputs divided by the cost of inputs;
 - Maximising the value of outputs for a given cost of inputs;
 - Minimising the cost of inputs for a given value of outputs;
 - Improving the utilisation of existing assets; and
 - Minimising waste.
- 3.6** The proposed Plan Change to enable at least cost the continuation and expansion of dairy product manufacturing capacity at the Darfield site is consistent with the efficient use of resources, especially in regard to reducing consenting costs, minimising milk collection transport costs, continued utilisation of substantial

⁴ See, for example, in *Marlborough Ridge Ltd v Marlborough District Council* [1998] NZRMA 73, the Court noted that all aspects of efficiency are “*economic*” by definition because economics is about the use of resources generally.

⁵ Pass, Christopher and Lowes, Bryan, 1993, *Collins Dictionary of Economics* (2nd edition), Harper Collins, page 148.

assets with remaining economic life and enabling economies of scale in production that can be achieved at the site.

Viewpoint

- 3.7** An essential first step in carrying out an evaluation of the positive and negative economic effects of a development project is to define the appropriate viewpoint that is to be adopted. This helps to define which economic effects are relevant to the analysis. Typically a district (or city) and wider regional viewpoint is adopted and sometimes even a nationwide viewpoint might be considered appropriate.
- 3.8** The Darfield dairy manufacturing site is located in the Selwyn District, which is part of the Canterbury region. However Christchurch City is also part of the local economy which significantly benefits from the continuation and expansion of milk processing capacity at the site since firstly, many of the staff reside in Christchurch (as well as Selwyn), and secondly, Christchurch businesses as well as Selwyn based businesses provide goods and services to the plant. Also there will be increased employment and expenditure in the local Selwyn and Christchurch economies during any expansion of the plant at the site. Therefore in this report the economic effects are considered in relation to the local Selwyn District economy and also in relation to the broader Canterbury region (incorporating Christchurch City effects).
- 3.9** There are also private or financial benefits associated with the continuation and any expansion of Fonterra's operations at the Darfield site. Generally these benefits are not relevant under the RMA and the main focus of this report is therefore on the wider economic effects on parties other than Fonterra and its customers. Economists refer to such effects as "externalities"⁶.
- 3.10** However, Fonterra is owned by its farmer shareholders and financial benefits to Fonterra impact on the *"economic (and social) well being"* of these farmer shareholders including those within the local community – i.e. the Selwyn District and wider Canterbury region. Also financial benefits to Fonterra are relevant with respect to the *"efficient use and development of natural and physical resources"*

⁶ Defined as the side effects of the production or use of a good or service, which affects third parties, other than just the buyer and seller.

and New Zealand's export competitiveness, given the importance of dairy product exports to the New Zealand economy.

4. BACKGROUND TO SELWYN DISTRICT AND CANTERBURY REGION'S ECONOMIES⁷

Population

4.1 Statistics New Zealand's June 2014 population estimate for the Selwyn District is 49,500 or 1.0% of New Zealand's population. In 2009 population in the District was estimated to be 39,600, implying an increase of 15.9% over the period 2009 to 2014, as compared to only 4.8% for New Zealand as whole. Statistics New Zealand's 'medium' population projections⁸ have the Selwyn District's population increasing to 89,400 in 2043 – i.e. an average rate of increase of 2.0% per annum over the period 2014-43, compared to an average rate of growth for New Zealand of 0.7% per annum.

4.2 Statistics New Zealand's June 2014 population estimate for the Canterbury region is 574,300 or 12.7% of New Zealand's total population. It is the second largest region in New Zealand in terms of population. The Canterbury region's population is estimated to have declined between June 2010 and June 2012 by 11,700 (2.1%) due to Christchurch City's population falling by 21,200 (5.6%) after the earthquakes and only some of the consequent out-migration relocating to neighbouring districts within the Canterbury region. The region's population over the period 2009 to 2014 has grown by 2.4%. Statistics New Zealand's 'medium' population projections have the region's population increasing at an average rate of 0.8% per annum to 729,200 over the period 2014-43.

Employment

4.3 Employment data highlights the dependence of the Selwyn District on the agriculture sector. In February 2014, 2,990 jobs (19.9%) of the Selwyn District's 15,010 jobs were in the agriculture, forestry and fishing industry group,

⁷ Data in this section from Statistics New Zealand.

⁸ Statistics New Zealand prepare three sets of projections – high, medium and low – according to natural population change (i.e. the net effect of birth and death rate assumptions) and net migration assumptions. These projections do not explicitly incorporate assumptions about different rates of economic development.

with most (an estimated 2,878 jobs) being agricultural jobs. Dairy cattle farming accounted for 980 jobs (6.5% of total employment) and sheep, beef cattle and grain farming 760 jobs (5.1% of total employment). There were 1,730 jobs (11.5% of total employment) in the manufacturing sector, including 1,170 jobs (7.8% of total employment) in food manufacturing of which dairy product manufacturing accounted for 470 jobs (3.1% of total employment). Taken together, dairy cattle farming and dairy product manufacture directly account for 9.7% of total employment in the District. With the inclusion of the flow on, or “multiplier” effects, (see next section of this report), the dairy sector accounts for around 15% of total employment in the District.

- 4.4** Other important employment sectors in the District are education and training (1,830 jobs or 12.2% of the total), public administration and training (1,770 jobs or 11.8% of the total), construction (1,500 jobs or 10.0% of the total), retail trade (970 jobs or 6.5% of the total), professional, scientific and technical services (940 jobs or 6.3% of the total), and health care and social assistance (610 jobs or 4.1% of the total).
- 4.5** Statistics New Zealand estimate total employment in the Canterbury region in February 2014 at 275,210, which represents 13.8% of the total persons employed in New Zealand. The agriculture, forestry and fishing industry group employed 15,300 persons, of which 14,380 were engaged in agriculture (including 93% of agriculture and fishing support industry employees based on the proportionate shares in agriculture and fishing). Other significant sectors are manufacturing employing 34,140 (of which the most significant subsectors are food products manufacturing (11,600)⁹, machinery and equipment manufacturing (5,390), fabricated metal products manufacturing (3,170) and transport equipment manufacturing (2,350)), health care and social assistance (30,350), construction (29,830), retail trade (28,090), education and training (20,640), professional, scientific and technical services (19,120) and accommodation and food services (17,490). Besides the tourism related aspects of sectors such as retail trade, education and training and accommodation and food services, the key drivers of the Canterbury economy remain largely agriculture and manufacturing.

⁹ Including meat and meat products (4,800), seafood (1,080) and dairy products (1,690).

- 4.6** There are important linkages between the performance of the Canterbury regional economy (which is heavily dependent upon agriculture and agricultural product processing) and the Christchurch City economy. Apart from construction activities associated with the Christchurch rebuild, and tourism which accounts for some but not all¹⁰ of the jobs created in the retail trade and accommodation and food services sectors, the key economic drivers for Christchurch City are manufacturing and services provided to the agriculture and agricultural product processing activity within the wider Canterbury region.

5. ECONOMIC BENEFITS OF MAINTAINING CURRENT OPERATIONS OF THE FONTERRA'S DARFIELD MILK PROCESSING PLANT

- 5.1** Before Fonterra developed the Darfield milk processing plant, milk from the Selwyn District and the surrounding North and Mid-Canterbury catchment areas was processed at Fonterra's Clandeboye plant near Timaru, and when this plant had capacity constraints, at Fonterra's Edendale plant in Southland. The opening of the Darfield plant not only led to a significant reduction in truck and tanker kilometres (up to 30,000 truck and tanker kilometres per day) but also spread capacity risk across the two largest Fonterra plants within Canterbury and the three largest Fonterra plants in the South Island.
- 5.2** In addition, there are a number of advantages in maintaining production capacity at the Darfield site as compared to relocating production capacity to potential new sites and/or the expansion of other existing plants. The key advantages are:
- (a) The continued optimum use of existing relatively new "sunk" assets, which otherwise would be largely "stranded" – i.e. the continued use of plant, machinery and buildings with significant remaining economic life but which would have little if any residual value if the plant reduced its operating capacity or ceased operating and these assets had to be sold or relocated to other sites;
 - (b) The surrounding area has dairy growth potential;
 - (c) The site is large enough to allow for future expansions to cope with predicted future increases in North and Mid Canterbury milk supply;

¹⁰Employment in tourism is difficult to identify from official statistics since the relevant sectors such as retail trade and accommodation and food services for which data is collected meet the needs of domestic and international visitors, business travellers and local residents and businesses.

- (d) The site is on a main road with good road network links;
- (e) The site is adjacent to the rail network for delivery of inputs and export of milk products;
- (f) The site is close to Lyttelton Port;
- (g) The site is close to Darfield and Christchurch City for skilled staff and support industries;
- (h) The site has a sufficient supply of good quality water, a reliable electricity supply and is of sufficient size to enable on-site wastewater disposal; and
- (i) The site is some distance from neighbours and effects on them can be mitigated.

5.3 Most of the plant's operational input supplies other than milk and employee labour come from Christchurch City. Some local Selwyn District firms also provide goods and services to the plant including, for example security services, laundry services, gardening services, canteen outsourcing, electrical maintenance services and mechanical maintenance services. Fonterra estimate around 10% of the value of operational input supplies (other than milk and employee labour) are supplied from within the Selwyn District.

5.4 The Darfield milk processing plant currently employs 200 permanent full time equivalent (FTE) staff, as well as a significant number of contractors and temporary staff. It is estimated that at least 50% of the staff directly employed at the plant reside permanently within the Selwyn District, whilst a number of contractor staff will also be local residents. For the 100 staff residing in the Selwyn District, their estimated wages and salaries are \$7.5 million per annum.¹¹

5.5 In addition to these direct economic impacts there are indirect impacts arising from:

- (a) The effects on suppliers of goods and services provided to the site from within the District (i.e. the "forward and backward linkage" effects); and
- (b) The supply of goods and services to employees at the site and to those engaged in supplying goods and services to the site (i.e. the "induced" effects). For example, there will be additional jobs and incomes for

¹¹i.e. based on an average annual salary of \$75,000.

employees of supermarkets, restaurants and bars as a consequence of the additional expenditure by employees living within the Selwyn District.

5.6 District multipliers can be estimated to gauge the size of these indirect effects. The size of the multipliers is a function of the extent to which a district economy is self-sufficient in the provision of a full range of goods and services and the district's proximity to alternative sources of supply. District multipliers typically fall in the range of 1.5 to 2.0¹² and taking the low point of 1.5, given the Selwyn District's close proximity to Christchurch, implies total impacts (i.e. direct plus indirect impacts) of Fonterra's current operations at its Darfield site of:

- (a) 150 additional jobs for local Selwyn District residents; and
- (b) \$11.25 million per annum in additional wages and salaries for local Selwyn District residents.

5.7 In addition to the additional revenues, employment and incomes generated by the Darfield plant itself, condensate and process water from the plant is used to irrigate a neighbouring farm owned by Fonterra (492 hectares irrigated) and two other third party farms (the first 174 hectares irrigated and the second 121 hectares irrigated). The Fonterra farm is used for supplement production, with the third party farms being used for dairy support and irrigated sheep farming respectively. The irrigation using condensate and process water from the Fonterra plant is estimated to improve farmer returns by \$250-\$500 per hectare for dairy support and \$650 per hectare for irrigated sheep farming¹³. This implies additional earnings from the irrigation using the plant's condensate and process water of \$0.25 million to \$0.41 million per annum across the three farms.

5.8 Further there are important economic linkages between Christchurch City's economy and farming and agricultural product processing in the rural hinterland of the Canterbury region. The Darfield milk processing plant, its dairy farm suppliers, its local suppliers of goods and services and their employees purchase goods and

¹²Work undertaken for the Christchurch City Council and the Canterbury Regional Council by Mr. Geoffrey Butcher estimated employment and household income (i.e. wages and salaries) multipliers for the Canterbury region of around 2.5. (See Appendix 8 of evidence of Mr. Geoffrey Butcher (dated 27 August 2010) for the Christchurch City Council and for the Canterbury Regional Council Regional Council, in the matter of appeals pursuant to Clause 14 of the First Schedule to the RMA in relation to Proposed Change 1 to the Canterbury Regional Policy Statement.)

¹³ Ford S.J. (2011); Farmer Returns from the Irrigation of Condensate Water; a report prepared for Fonterra.

services from Christchurch City businesses providing employment and incomes for Christchurch City residents. For example, Lincoln University's Agribusiness and Economic Research Unit (AERU)¹⁴ has estimated farms in the Selwyn and Waimakariri Districts spend \$306 million per annum¹⁵ in Christchurch City, whilst rural businesses (which will include Fonterra's plant at Darfield) within the two Districts account for a further \$511 million per annum. Combining these expenditure flows with the indirect ("multiplier") expenditure flows raises this to \$2.2 billion, and this is estimated to generate around 10% of the City's gross domestic product (GDP) and more than 12,500 fulltime equivalent jobs for Greater Christchurch residents.¹⁶

5.9 Conservative¹⁷ estimates for the direct and indirect effects of Fonterra's Darfield plant's existing operations for the Canterbury region (principally in the Selwyn District and Christchurch City) are the creation of 400 jobs and incomes of \$30 million per annum.

5.10 Consequently restrictions or unnecessary regulation placed on Fonterra's milk processing plant's current operations impacts negatively not just on Fonterra shareholder suppliers but also businesses and residents within the Selwyn District, Christchurch City and the wider Canterbury region.

6. ECONOMIC BENEFITS FROM THE EXPANSION OF PROCESSING CAPACITY AT FONTERRA'S DARFIELD SITE

Increased Economic Activity during Construction of Additional Dryers and Related Facilities¹⁸

¹⁴ See AERU: *The Wheel of Water; Agricultural Expenditure Flows for Selwyn and Waimakariri Districts into Christchurch*. Report prepared for Aqualink. September, 2013.

¹⁵ Of which dairy farm expenditure is \$68 million.

¹⁶ The analysis is conservative in that it excludes the activity associated with agricultural product processing plants within Christchurch City and it only focuses on Selwyn and Waimakariri Districts and not districts further south within the Canterbury region.

¹⁷ Relates only to Fonterra's fulltime workforce of 200 staff and assumes a regional multiplier of 2.0. Note: No account is taken of on-farm employment and incomes since without the Darfield plant it is assumed milk production would be unchanged.

¹⁸ Unless stated otherwise data in this section provided by Fonterra.

- 6.1** The next (Stage 3) expansion of processing capacity on Fonterra's Darfield site (i.e. the addition of a third new dryer and related facilities) is likely to commence within the next 5 years and will take around two years to complete. The Stage 4 expansion (i.e. the addition of a fourth new dryer and related facilities) will take a further two years to complete, but is likely to be completed three to five years after the Stage 3 expansion. Each of the two remaining expansion stages is expected to cost around \$390 million (excluding land costs). The majority of the equipment, materials and services required for the plant's expansion will be sourced from within New Zealand, with the remainder imported from overseas. Local Selwyn District suppliers will be used wherever possible, but realistically most suppliers from the Canterbury region will be predominantly located in Christchurch City. Goods and services, which may be supplied locally (i.e. from businesses located within the Selwyn District) include excavation services, concrete, road construction materials, fencing, shelter belt planting, re-grassing, catering services, laundry services, accommodation, security services and construction labour.
- 6.2** During each expansion construction phase, an on-site workforce starting at 50 employees and peaking at 700 employees will be required with an estimated monthly average of around 300 employees. Wage and salary payments for these employees are estimated to average \$18.75 million per annum.¹⁹ It is expected round half of the construction workforce will reside permanently within the Selwyn District or Christchurch City, providing additional jobs and incomes within the local economy.
- 6.3** However in addition to these direct economic impacts will be the direct (or 'multiplier') impacts. Using a multiplier for the Selwyn District of 1.5 and assuming half of the construction workforce will reside within the District, implies total impacts (i.e. direct plus indirect impacts) during each of the two construction phases of:
- (a) 225 additional jobs for local Selwyn District residents; and
 - (b) \$14.1 million per annum in additional wages and salaries for local Selwyn District residents.

¹⁹Based on an average salary per employee of \$62,500 per annum.

- 6.4** For the Canterbury region, 2.0 is a more realistic conservative multiplier, given the greater self-sufficiency of the total region, which includes Christchurch City. The total impacts for the Canterbury region during each of the two construction phase are estimated to be:
- (a) 600 additional jobs for Canterbury residents; and
 - (b) \$37.5 million per annum in additional wages and salaries for Canterbury residents.

Increased Economic Activity during Expanded Plant's Operation²⁰

- 6.5** After the expansion of processing capacity, the site will require additional inputs of materials and services. These are likely to be largely drawn from the Canterbury region, with some of these goods and services provided by local Selwyn businesses. Around 10% of Fonterra's current Darfield plant maintenance expenditure is with contractors based within the Selwyn District and this is likely to continue after the plant expansion. Locally provided goods and services are likely to include security services, laundry services, building and grounds services, canteen outsourcing, electrical maintenance services, waste treatment sludge disposal and mechanical maintenance services.
- 6.6** Once the two new dryers and related facilities are operational Fonterra expects the current workforce at the site (including milk tanker drivers) will grow from 200 to 435 – i.e. there will be 235 additional jobs. Their additional wages and salaries are estimated at \$17.6 million per annum (on the basis of an average salary for plant employees and drivers of \$75,000 per annum). These additional workers are likely to reside in the Selwyn District or Christchurch, further increasing levels of expenditure in the local economy.
- 6.7** Again using a local multiplier of 1.5, and assuming a 50/50 split between workers residing in the Selwyn District and Christchurch implies an increase in direct plus indirect employment of 176 jobs and an increase in direct plus indirect household income of \$13.2 million per annum for the Selwyn District economy.

²⁰Unless stated otherwise data in this section provided by Fonterra.

- 6.8** For the Canterbury region, using a multiplier of 2.0, the total increase in employment is 470 jobs and the total increase in household income is \$35.2 million per annum.

Economic Benefits from Increased Economic Activity

- 6.9** As indicators of levels of economic activity, economic impacts in terms of increased expenditure, incomes and employment within the local and regional economies are not in themselves measures of improvements in economic welfare or economic wellbeing. However, there are economic welfare enhancing benefits associated with increased levels of economic activity. These relate to one or more of:

- (a) Increased economies of scale: Businesses and public sector agencies are able to provide increased amounts of outputs with lower unit costs, hence increasing profitability or lowering prices;
- (b) Increased competition: Increases in the demand for goods and services allow a greater number of providers of goods and services to enter markets and there are efficiency benefits from increased levels of competition;
- (c) Reduced unemployment and underemployment²¹ of resources: To the extent resources (including labour) would be otherwise unemployed or underemployed, increases in economic activity can bring efficiency benefits when there is a reduction in unemployment and underemployment. The extent of such gains is of course a function of the extent of underutilized resources at the time and the match of resource requirements of a project and those resources unemployed or underemployed; and
- (d) Increased quality of central government provided services: Sometimes the quality of services provided by central government such as education and health care are a function of population levels and the quality of such services in a community can be increased if increased economic activity maintains or enhances population levels.

²¹Underemployment differs from unemployment in that resources are employed but not at their maximum worth; e.g. in the case of labour, it can be employed at a higher skill and/or productivity level, reflected in higher wage rates.

- 6.10** It is reasonable to presume that increases in economic activity (i.e. expenditures, incomes and employment) within the local Selwyn District economy as a consequence of expansions of milk processing capacity at Fonterra's Darfield site will give rise to one or more of these four welfare enhancing economic benefits for the local community.

7. POTENTIAL ECONOMIC COSTS OF EXPANSION OF MILK PROCESSING CAPACITY AT FONTERRA'S DARFIELD SITE

Lost Agricultural Production

- 7.1** Lost agricultural production is not an external cost of continued use and expansion of milk processing capacity at the Darfield site. The productive value of the land in alternative uses (such as agricultural and other use) has been internalised into the cost structure of the development – in other words Fonterra in purchasing the land has paid a price reflective of future net returns from alternative uses for the land. Such costs are not costs to be borne by the wider community.
- 7.2** In any case the increase in the land's rateable value is indicative of the land being used more efficiently than if it continued only in its previous use of lifestyle blocks (this being the area where the factory itself and any proposed expansion will be primarily located).
- 7.3** Furthermore the plant and roads on the site currently require less than 2% of the site (13 hectares²² out of 680 hectares), and the remainder of the site continues to be used for agricultural purposes with an improved supply of irrigation water from the plant's treated wastewater system. Also there is an additional 212 hectares of third party irrigation, increasing production from these properties which are not currently irrigated.

Reductions in Tourism²³

²²The Stage 2 expansion only involved an additional 0.5 hectares of site coverage.

²³The tourism impacts of the development of a milk powder plant on the site were covered in detail in the evidence of Mr. Rob Greenaway for Stage 1.

- 7.4** Whilst tourism is not as significant a driver of the District economy as other industries (e.g. agriculture), the District is the home to several ski-fields (Broken River, Mt Cheeseman, Craigieburn, Mt Olympus, Porters Ski Area and Temple Basin) and the Arthurs Pass National Park and offers a wide range of outdoor activities for visitors to the District to enjoy.
- 7.5** The plant does not impact on outdoor pursuits in the District such as skiing, tramping, mountain climbing or fishing. The evidence of Mr Greenaway in relation to the initial Stage 1 development of the plant concluded that it would not cause adverse impacts on regional tourism activity. Therefore the plant or any proposed expansion of it will not have any discernable negative impact on tourist visitor numbers, their length of stay in the District and tourist expenditure in the District.
- 7.6** In fact the presence of a major manufacturing plant within the District is likely to lead to some increase in visitor numbers to the District and benefits in terms of additional visitor spending on locally provided accommodation and hospitality.

Utilities

- 7.7** Externality costs can arise when utilities provided by central or local government (e.g. roads, water supply, storm water and flood control systems and wastewater disposal) are not appropriately priced. In the case of Fonterra's milk processing plant at Darfield no such externality costs arise.
- 7.8** Fonterra has met the costs of improvements onto State Highway 73 and the level crossing providing access to the site from the existing road network. Fonterra and its farmer suppliers also make payments via road user charges and rates for ongoing maintenance and necessary upgrades to the state highway and local district council road networks.
- 7.9** With respect to water supply, on-site bores are used for the plant. For storm water and wastewater disposal the plant is totally self-sufficient.

- 7.10** Therefore the plant does not use the Selwyn District Council provided services and there can be no concerns that other ratepayers of the District are providing subsidised services to the plant.

8. CONCLUSIONS

- 8.1** Fonterra's proposed Plan Change enabling a DPMA to cover its Darfield site will provide for Fonterra's Darfield milk processing plant's efficient continued use and expansion. It will reduce the ongoing reliance on the resource consent process for variations or changes in the future use of the site and reduce the time, costs and uncertainties associated with seeking future consents for what is largely the consolidation of an existing established dairy plant.
- 8.2** The Plan Change will continue to contribute to the economic well being of the Selwyn District and broader Canterbury regional Canterbury communities by:
- (i) Providing employment and incomes for local residents and businesses;
 - (ii) Providing the local economy with greater diversity and resilience;
- 8.3** The proposed Plan Change will maintain and improve resource use efficiency by:
- (i) Retaining and increasing economic activity and population in the Selwyn District, enabling increased economies of scale in the local provision of goods and services;
 - (ii) Reducing transport costs for the collection of milk and the export of finished products; and
 - (iii) Reducing externality costs associated with road transport including road accident costs, road transport pollution costs and travel time costs for other road users.
- 8.4** The Plan Change will not give rise to economic externality costs.

APPENDIX 9:

Letter from CPW re designation and Attachment

P O Box 9424
Tower Junction 8149
Christchurch

Tel: (03) 982-4267
www.cpwlimit.co.nz



1 March 2016

Selwyn District Council
2 Norman Kirk Drive
Rolleston 7614

To Whom It May Concern

CENTRAL PLAINS WATER - DESIGNATION D060001

I refer to Fonterra Co-operative Group Limited's private plan change request to introduce a Dairy Processing Management Area into the Selwyn District Plan for its milk processing site in Darfield.

I confirm on behalf of Central Plains Water Limited that we have agreed with Fonterra to alter the current Designation through Fonterra's property in Darfield to the amended corridor, should CPW decide to give effect to the designation in this location. This agreement is on the basis that Fonterra obtains the agreement of the owners of the land affected by the amended corridor (i.e. the Council land, the Buttle land and the Aigen Farm land) which I understand has occurred. A plan showing the current designation (coloured red) and agreed amended corridor (coloured green) is attached for your reference.

If you require any further detail please do not hesitate to contact me on 03 928 2953 or ktaylor@cpwlimit.co.nz.

Yours faithfully

Karen Taylor
Legal Adviser
Central Plains Water Limited

