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**Request for Change to the Selwyn District Plan
prepared for**

**ROLLESTON
INDUSTRIAL
DEVELOPMENTS
LIMITED**

Maddisons Road, Rolleston

March 2020

Request for Change to the Selwyn District Plan
prepared for

ROLLESTON INDUSTRIAL DEVELOPMENTS LIMITED

Maddisons Road, Rolleston

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Request to Change the Selwyn District Plan under Clause 21 of the First Schedule of the Resource Management Act 1991

TO: The Selwyn District Council

Rolleston Industrial Developments Ltd requests changes to the Selwyn District Plan as described below.

1. The location to which this request relates is:
 - On the south side of Maddisons Road, adjoining the eastern boundary of IPort. A location plan/outline development plan is attached in **Attachment 2**.
 - Total Area: 27.2755ha
 - Legal Description: Lot 3 DP 52556 See **Attachment 1**.
2. The Proposed Plan Change undertakes the following in the Rural Volume (changes underlined or ~~struck through~~):
 1. To amend Rural Volume, Chapter B3.4, Introduction, Amenity Values/Rural Character, to read:

...The Council believes these effects are part of the character of the rural area. This District Plan has policies and rules to maintain a generally pleasant living and working environment. However, residents should not expect an environment which is as conducive to residential activities as Living zones. 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. The policies and rules also anticipate the establishment of a new dairy processing site adjacent the Business 2A Zone at Rolleston.
 2. To amend Rural Volume, Policy B3.4.4, Explanation and Reasons, to read:

... 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~~ Zone that is limited to sites of existing and established dairy processing facilities in the Rural Outer Plains and a single site adjacent the Business 2A Zone in the Rural Inner Plains. 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 (Inner Plains) Zone means that rural based industrial activities of a size and scale beyond that which is permitted by the District Plan are unlikely to be able to locate in this area without generating significant adverse amenity effects, with the exception of the DPMA adjoining the Business 2A Zone at Rolleston, where the site's proximity to the Business 2A Zone assists with mitigating potential adverse effects on the adjoining rural area.

3. To amend Rural Volume, Policy B3.4.5, to read:

Enable the continued and enhanced operation, innovation and development of established dairy plant sites, and the establishment of a new dairy plant site, 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 and within the Rural (Inner Plains) Zone adjacent the Business 2A 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.

Explanations 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 for a new Dairy Processing Facility adjacent the Business 2A Zone and is not intended to provide a policy basis for other 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 land use 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 efficiencies of a new site adjacent the IPort and Midland Port industrial areas in the Business 2A Zones 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.

4. To amend Rural Volume, rule 3.13.1.6 to read:

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, ~~and 26B~~ and 26C 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. With respect to the Noise Control Boundary as shown in the Outline Development Plan in Appendix 26B the cost of this report along with providing the design acoustic requirements shall be met by Fonterra.

5. To amend Rural Volume, Appendix 26, rule E26.1.1 to read:

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:

...

e) Within the areas specified in Appendix E26A and E 26 B Activities which can comply as a permitted activity with the rules of the Rural (Outer Plains) Zone, and within the area specified in Appendix E26C activities which can comply as a permitted activity with the rules of the Rural (Inner Plains) Zone, except that any calculation of density or site coverage shall exclude the land within the Height Control Zone.



6. To amend Rural Volume, Appendix 26, rule E26.1.2 to read:

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 Plan in Appendix 26A, ~~and~~ Appendix 26B, and Appendix 26C.

7. To amend Rural Volume, Appendix 26, rule E26.1.3 to read:

All permitted activities shall be located within the Height Control Zone identified on the Outline Development Plan in Appendix 26A, ~~and~~ Appendix 26B and Appendix 26C, with the exception of: ...

8. To amend Rural Volume, Appendix 26, rule E26.1.4 to read:

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 (for areas shown on the Outline Development Plan in Appendices 26A and 26B) and the height rules of the Rural (Inner Plains) Zone (for areas shown on the Outline Development Plan in Appendix 26C) and either the setback rules of the relevant Rural ~~(Outer Plains)~~ Zone or any setback shown on the Outline Development Plan in Appendix 26A and Appendix 26C, whichever is the greater setback from the boundary.

9. To amend Rural Volume, Appendix 26, rule E26.1.5B to read:

Existing landscape planting as shown on the Outline Development Plan in Appendix 26B and Appendix 26C 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.

10. To amend Rural Volume, Appendix 26, by inserting new rule E26.1.5C as follows:

Prior to the construction of any new building associated with dairy processing activity, landscape planting shall be established and located in general accordance with the landscape provisions of the Outline Development Plan in Appendix 26C.

11. To amend Rural Volume, Appendix 26, rule E26.1.6 to read:

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

12. To amend Rural Volume, Appendix 26, rule E26.1.7 to read:

Buildings within the Height Control Zone shall comply with the height limits shown in the Outline Development Plans in Appendix 26A, ~~and~~ Appendix 26B



and Appendix 26C. Up to 2 Boiler stacks and 4 exhaust vents per dryer shall be exempt from height limits.

13. To amend Rural Volume, Appendix 26, rule E26.1.13 to read:

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, ~~and~~ Appendix 26B and Appendix 26C, 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.

14. To amend Rural Volume, Appendix 26, rule E26.1.14 to read:

Secondary access points shown on the Outline Development Plan in Appendix 26A, ~~and~~ Appendix 26B and Appendix 26C 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.

15. To amend Rural Volume, Appendix 26, rule E26.1.15 to read:

All vehicle parking and manoeuvring areas shall be located as shown on the Outline Development Plan in Appendix 26A and Appendix 26C and comply with Appendix 10 and Appendix 26B as to layout and design.

16. To amend Rural Volume, Appendix 26, rule E26.1.17 to read:

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~~ Appendix 26B and Appendix 26C.

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".

17. To amend Rural Volume, Appendix 26, rule E26.3.7 to read:



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 Plan in Appendix 26A, ~~and 26B~~ and 26C, 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.
- d) The effects of the proposed access design for access shown on the Outline Development Plan Appendix 26C, on the safety and efficiency of the frontage road.

18. To amend Rural Volume, Appendix 26, rule E26.3.8 to read:

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 Plan in Appendix 26A and Appendix 26C 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.

19. To amend Rural Volume, Appendix 26 E26.6 Reasons for Rules, to read:

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 case of established plants, reflects 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 Rolleston site has larger setbacks for buildings from rural boundaries, to manage potential effects on the rural area. Taller structures and buildings are instead to be clustered towards the boundaries of the Business 2A Zone, where there is less sensitivity to large buildings and structures.

...

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 on the Synlait and Fonterra sites, and towards the Business 2A Zone boundaries for the Rolleston site.

Where activities are proposed which are compliant with the ~~Rural Outer Plains~~ rules of the underlying Rural Zone, 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 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. The ODP's contained within ~~both~~ Appendix



26A, ~~and 26B and 26C~~ require 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, including at the Rolleston site. The purpose of this rule is to ensure that the Synlait and Rolleston Dairy Processing Management Areas ~~has~~ have a consistent landscape theme and that planting is appropriately established and cared for, ensuring its longevity and effectiveness. The Rolleston planting is also intended to offer some visual screening of the site when viewed from adjoining rural areas. Identified shelter belts at the Rolleston site are also to be retained so as to provide a degree of screening.

...

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 and 26C~~ 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.

...

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. For Appendix 26A and Appendix 26B, 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. For Appendix 26C, the Noise Control Boundary is based on predicted noise dispersion from dairy processing activity.

...

20. To amend Rural Volume, by inserting Appendix E26C Rolleston ODP attached in **Attachment 2**.
15. Any other consequential amendments including but not limited to renumbering of clauses.
3. An assessment is provided in **Attachment 3** in accordance with the requirements of the Resource Management Act 1991 and including Section 32 of the Act.

Kim Seaton, Principal Planner

DATED: 6 March 2020

(Signature of applicant or person authorised to sign on behalf)

Address for service:

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Attachment 1: Certificate of Title



**RECORD OF TITLE
UNDER LAND TRANSFER ACT 2017
FREEHOLD
Search Copy**




R.W. Muir
Registrar-General
of Land

Identifier CB31A/670
Land Registration District Canterbury
Date Issued 24 May 1988

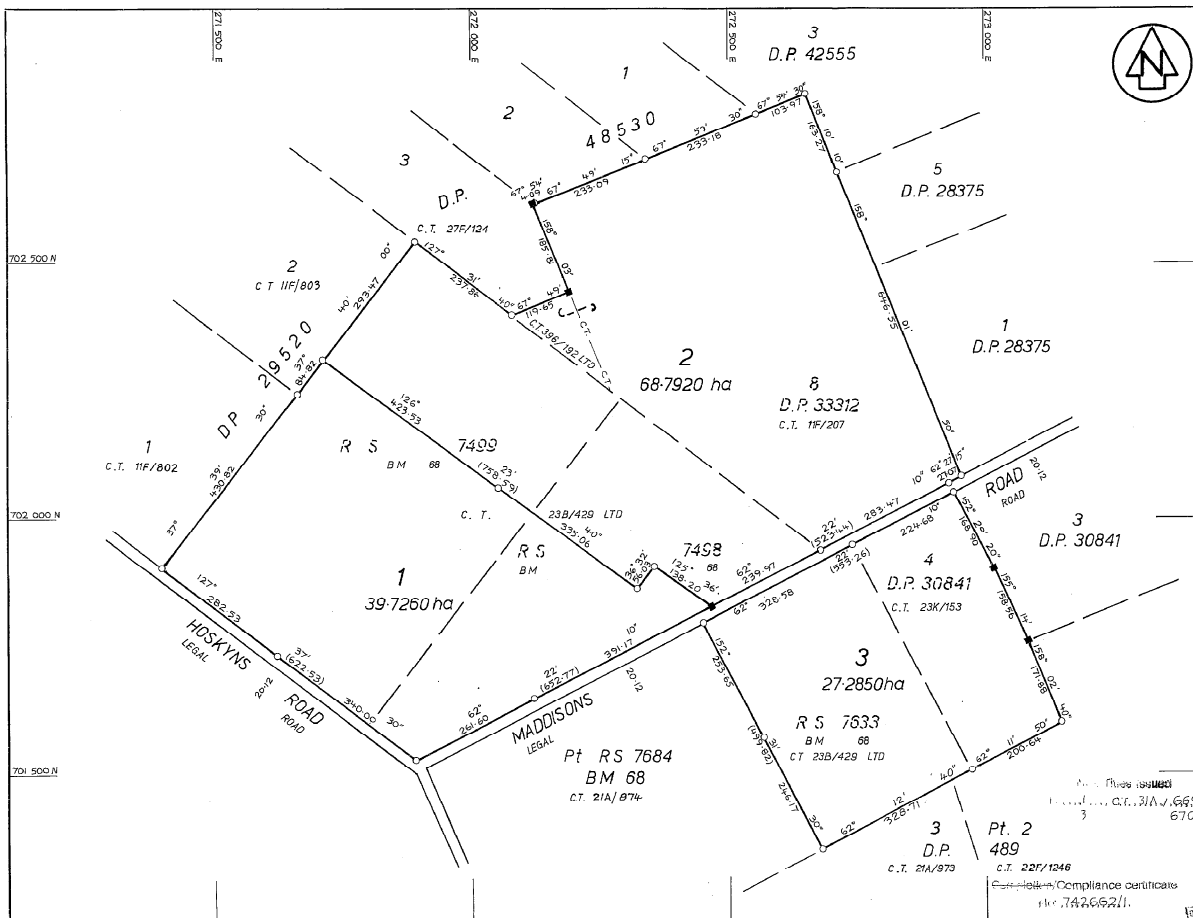
Prior References

CB23B/429 CB23K/153

Estate	Fee Simple
Area	27.2850 hectares more or less
Legal Description	Lot 3 Deposited Plan 52556

Registered Owners
Iport Rolleston Holdings Limited

Interests



Approvals

Pursuant to a resolution under Section 305 of the Local Government Act 1974 dated this 24th Day of November 1987 the Papanya County Council has approved this plan of subdivision and certifies that the plan is in accordance with the requirements and provisions of the Operative District Scheme

Chairman

Total Area 135 8030 ha

LAND DISTRICT CANTERBURY
SURVEY BLK. & DIST. XV. ROLLESTON
NZMS 261 SHT. M. 36 RECORD MAP No 10000/3-1
10000/2-1

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












W. M. HANNEY, SURVEYOR GENERAL, DEPARTMENT OF LANDS AND SURVEY, WELLINGTON, NEW ZEALAND.

L & S FORM N82



Attachment 2: Proposed Outline Development Plan

KEY:

-  Site Boundary
-  Dairy Processing Management Area (DPMA)
-  Rural Buffer Area
-  Height Control Area (Note 1)
-  12m Building Height
-  25m Building Height
-  35m Building Height
-  55m Building Height
-  Noise Control Boundary
-  Rail Siding
-  Primary Access
-  Secondary Access
-  Landscape Bunding (Note 2)
-  Screen Planting
-  Retention of Existing Shelterbelts
-  Potential Removal of Area of Shelterbelt (Note 3)

Notes:
(1) The Height Control Area includes all buildings associated with milk processing and storage activities, as well as all vehicle parking and manoeuvring areas.
(2) Landscape bunding height a minimum of 2m high and is to include planting
(3) Primary access within the range as shown (depending on final location of the IPort Road). The shelterbelt within this area to be removed to the extent required to allow for safe access.

ROLLESTON DAIRY MANAGEMENT
PROCESSING AREA (DPMA)

OUTLINE DEVELOPMENT PLAN

DRAWING STATUS
FINAL DRAFT

REVISION
10 [23.01.20]

A

STAGE CONSENT	DRAWN
SCALE 1:4000 @ A3	DATE 23.01.20
JOB NO. 021024	DWG NO. DPMA-DRG-LA-100-A





Attachment 3: Section 32 Evaluation



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Appendix A Acoustic Assessment



- Appendix B Infrastructure Report
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- Appendix D Landscape and Visual Impact Assessment
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Introduction

1. Rolleston Industrial Developments Ltd requests a change to the Selwyn District Plan to provide a Dairy Processing Management Area ('DPMA') of approximately 27.27 hectares adjacent the Business 2A Zone industrial area, on Maddisons Road, Rolleston.
2. This document forms the Section 32 evaluation of the plan change, consisting of an evaluation of the contents of the Proposed Plan Change, and incorporates material from the following documents:
 - Acoustic Assessment (Appendix A)
 - Infrastructure report (Appendix B)
 - Integrated Transport Assessment (Appendix C)
 - Landscape and Visual Impact Assessment (Appendix D)
 - Economic Assessment (Appendix E).
3. The site, which is currently predominantly rural pasture, is zoned Rural Inner Plains. No specific dairy processing facility proposal exists at this stage, however the applicant anticipates demand for dairy processing facilities to increase in the District, and wishes to establish a planning framework to enable a rapid response to potential processing opportunities in the future. In particular, the applicant anticipates demand for processing facilities in close proximity to key transport links (including State Highway 1, the main north-south rail corridor and Midland Port), other (potentially complementary) business activities in the adjacent business zones, and urban centres which meet the needs of potential employees
4. This plan change application therefore seeks to provide for a Dairy Processing Management Area on the site, with sufficient flexibility to allow for a range of dairy processing facility layouts, whilst ensuring that the potential adverse effects associated with any new facility in that location are adequately avoided, remedied or mitigated.

The Site and Surrounding Environment

5. The site is located at Maddisons Road, between Hoskyns and Weedons Ross Roads. The site is legally described as Lot 3 DP 52556, held within Certificate of Title CB31A/670. Its location is indicated on the aerial photograph in Figure 1 below, and in the Outline Development Plan contained in Attachment 2 of the Plan Change Application.
6. The site is accessed currently from Maddisons Road in one location, via an informal rural vehicle crossing. To the north, northwest, southeast and east of the site are rural areas zoned Rural Inner Plains, with some rural residential development to the northeast on Maddisons Road. To the west and southwest of the site is the developing IPort industrial area (Business 2A Zone).



Figure 1: Aerial photograph of site (Source: Canterbury Maps)

The Plan Change

Description of the Proposal

7. It is proposed to provide for a Dairy Processing Management Area (DPMA) within the site. The DPMA will be subject to an Outline Development Plan (ODP) and will otherwise generally be subject to the District Plan provisions that currently apply to the Fonterra and Synlait DPMA's, with minor amendments to recognise the new site and ODP. The rural zoning of the site will remain unchanged.

Proposed Amendments to the District Plan

8. The proposed amendments to the Selwyn District Plan are set out in the form above.

Servicing

9. The development is able to be fully reticulated with sewer, water, stormwater, electricity and telecommunications, as set out in the Infrastructure Report attached in Appendix B. Some upgrading, for example of electricity infrastructure, may be required at the developer's expense. This can be upgraded at such time as a detailed proposal for site development is forthcoming. Importantly, no impediments are known to exist that would prevent the servicing of the site, and any related upgrades that may be required in the future.



Consultation

10. The applicant's consultants have discussed the application with Selwyn Council staff through the development of this proposal.
11. Consultation with local runanga has been initiated via Mahaanui Kurataiao Limited. Responses from the runanga will be forwarded to the District Council in due course.

Assessment of Environmental Effects of the Proposed Plan Change

12. This assessment is being undertaken in respect of Clause 22(2) of Schedule 1 that requires the following be undertaken:

(2) Where environmental effects are anticipated, the request shall describe those effects, taking into account clauses 6 and 7 of Schedule 4, in such detail as corresponds with the scale and significance of the actual or potential environmental effects anticipated from the implementation of the change, policy statement, or plan. 7.2 Clause 6 outlines the information required in an assessment of environmental effects. In comparison Clause 7 specifies the range of matters that must be addressed by an assessment of environmental effects.

13. As no specific development proposal exists for the site, nor is there any existing dairy processing facility on site, the DPMA has been generally based on assumptions about the level of built development that will occur on a site of around 27 ha in area, with an assumed layout similar to other existing dairy processing facilities. To that end, Babbage Consultants have confirmed that the proposed ODP is capable of accommodating typical dairy processing facility layouts. 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.
14. The primary assumptions for the purpose of informing these assessments include:
 - Dryers and 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 in the southwest part of the site, adjoining the Business 2A Zone;
 - 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.
 - Industry best practice for noise control is applied to all new plant;
 - Two potential rail siding routes, in either case extending from the southwest corner of the site in the position identified on the ODP;
 - Primary vehicular access will be located along the western boundary, with flexibility required so that the site development can respond to the emerging road network in



the adjoining Business 2A zone. A further vehicle access is anticipated from the adjoining Business 2A zone to the south (LPC Midland Port);

- 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 northern and eastern perimeter of the site and will be maintained to a high standard.

15. The range of actual or potential environmental effects arising from the plan change request are seen as being limited to the following:

Landscape and Visual Effects

16. A Landscape and Visual Effects Assessment of the proposed Plan Change has been undertaken by Novo Group, and is attached in Appendix D. That assessment considered the existing landscape character of the environment, and the potential visual/visual amenity impacts of the proposed DPMA. The visual assessment was undertaken from multiple reference points around the site.
17. Section 6 of the Landscape and Visual Effects assessment recommends a range of mitigation measures to mitigate against potential adverse visual effects. The recommended mitigation measures and the applicant's response to those recommendations are:

Recommendation	Response
Requirement for a landscape plan Counterbalance the bulk of the DPMA (elements) with vegetation i.e. planting that would be of a sufficient height to screen.	Rural volume, Appendix E26, Rule E26.1.5A-E26.1.6 will require resource consent for landscaping planting, with Council's control covering matters including height and spacing of planting, plant maintenance and effectiveness of the proposed landscape planting to mitigate the adverse effects of proposed buildings and activities on the landscape values in the locality of the DPMA.
Maintain a 20m wide roadside buffer with earth bunding along the Maddisons Road boundary	This requirement has been included in the proposed ODP.
Have a concentration of new planting along the northern and eastern boundaries alongside the rural residential areas.	This requirement has been included in the proposed ODP.



Retention of shelterbelts along the external boundary of the site, where possible. Where access for vehicle and rail siding is required, the cut back of shelterbelts be minimised as much as possible.	This requirement has been included in the proposed ODP.
Avoid building domination by managing placement and location (height limits and controls in the ODP). A LRV (Light Reflectivity Value) outline and colour scheme spectrum on buildings should be considered for reflectivity limits and blending to surrounding areas i.e. no bright, intrusive colours.	This requirement has been included in the proposed ODP. Rural Volume, Appendix 26, Rule E26.1.8 Building Colour will apply to the site, specifying the dark colours that must apply to buildings over 12m in height.

18. With the implementation of the recommended mitigation measures, the Landscape and Visual Assessment concludes that while the potential adverse visual effects of the proposal are likely to be highest on rural areas to the north / east on Maddisons, higher effects in the short term are likely to be lessened over time with the establishment of landscaping and buffering along boundaries, with the proposed mitigation further alleviating any potential adverse visual effects. The Assessment further concludes that future development and the immediately adjacent Business 2A Zone sites act as a major offsetting element. The Visual Assessment finally concludes that a DPMA is a suitable land use, that can be appropriately absorbed, with mitigation, into the subject landscape.
19. The findings of that assessment are accepted and adopted, and on that basis it is considered that the potential adverse visual and landscape effects of the proposal can be adequately avoided or mitigated.

Transportation

20. Transport effects on the safety and efficiency of the road network may arise from the proposed DPMA. An Integrated Transport Assessment has been prepared for the proposal by Novo Group, attached in Appendix C.
21. That assessment considers the proposed transport connections provided by the proposed Outline Development Plan, and transportation related impacts of a DPMA that could be developed as a result of the proposed Plan Change.
22. The assessment recommends the insertion of an additional matter of discretion into Rule E26.3.7 in regard access design. That recommendation is accepted and a new matter of discretion is recommended in the proposed Plan Change. The assessment concludes that the effects of the proposed Plan Change activity on the safety and efficiency of the wider transport network have been reviewed and are considered to be acceptable. The Transport Assessment further concludes that, subject to insertion of the recommended additional



assessment matter for access design, the transport effects of the proposed Plan Change are considered to be acceptable and less than minor.

23. The findings of the Integrated Transport Assessment are accepted and adopted, and on that basis it is considered that the potential adverse traffic effects of the proposal can be adequately avoided or mitigated.

Infrastructure

24. A high level review of infrastructure required and available for the proposed DPMA has been undertaken by Babbage Consultants and is attached in Appendix B. The review concludes that the site would enable most types of dairy processing operational facilities to be built, and that water supply and stormwater disposal do not appear to constrain future dairy development. Potential trade waste constraints are identified, and the review does not confirm the availability of the likely required power supply. Potential mitigation measures to address the trade waste constraints are identified and further investigation of power supply is recommended. Babbage's review is accepted.
25. Both the trade waste and possible power supply constraints are considered to have engineering /development solutions for upgrades and increasing capacity, if required. Any such requirements can be identified and resolved at the time of detailed development proposals. As such, it is considered that the proposed DPMA will not be subject to any unresolvable infrastructure constraints.

Natural Hazards and Contaminated Land

26. The Plan Change site is not subject to any notable natural hazards. The site is not noted on the District Plan Planning Maps as being subject to flood hazard. The site is not subject to any known fault lines. The land is generally flat and is not known to be unstable or prone to erosion.
27. The site is not listed in the Environment Canterbury Listed Land Use Register and is not known to have historically accommodated any activities from the Hazardous Activities and Industries List. Any future development of the land that constitutes earthworks, subdivision or a change of use would require further consideration as to the relevance of the NES for Assessing and Managing Contaminants in Soil to Protect Human Health.
28. Based on the information noted above, it can be concluded that the site is not subject to any notable risk from natural hazards or contamination.

Noise

29. An Acoustic Assessment has been undertaken by Novo Group and is attached in Appendix A. The assessment considers dominant noise sources typically found at dairy processing facilities, including:
 - a. Whole Milk Production (WMP) Dryer Facilities;
 - b. Boilers;



- c. Other fixed mechanical plant (cooling towers, workshops, cleaning and sanitising facilities etc);
 - d. Product load out, coal and milk reception facilities;
 - e. Tanker routes on-site; and
 - f. Rail spurs.
30. The assessment also employs a maximum expansion scenario of up to two WMP dryers, up to two boilers, associated ancillary mechanical services, associated dry store space and tanker and rail movements.
31. The assessment proposes a Noise Control Boundary (NCB), to be implemented via the ODP, consistent with acoustic management at the Synlait and Fonterra sites. Rule E26.1.17 Noise will therefore apply to the proposed DPMA, with a minor amendment to recognise the proposed ODP. The implementation of the NCB, together with the implementation of a rural buffer in the ODP to provide separation between key DPMA activities and the rural boundaries, will provide effective management of noise effects. It is noted that there are currently no dwellings within the NCB. Any future new buildings for sensitive activities to be located within the NCB will require acoustic insulation to be installed, in accordance with Rural Volume, Rule 3.13.1.6.
32. It is noted that of the Rural zoned properties affected by the NCB, two are part of larger land parcels that are only marginally affected by the NCB and therefore have ample room to avoid the proposed NCB whilst still locating proximate to a legal road boundary if desired (854 Maddisons Road and 77 Weedons Ross Road), and three have existing dwellings on the parcels beyond the NCB and cannot have additional dwellings built on them as of right due to housing density restrictions in the District Plan (810, 767 and 790 Maddisons Road). However, should dwellings be proposed within the NCB, the proposed acoustic attenuation measures will not prevent them from being established as a permitted activity.
33. The Acoustic Assessment concludes that with the recommended NCB and current surrounding sensitive activities located outside the NCB, with the requirement for any future sensitive activities to be appropriately insulated in accordance with Rule 3.13.1.6, the acoustic effects of the proposed DPMA will be less than minor. The findings of the Acoustic Assessment are accepted and adopted, and on that basis it is considered that the potential adverse acoustic effects of the proposal will be less than minor.

Lighting

34. Any future development of the site will be subject to the existing DPMA rules, that provide for a maximum permitted light spill of 3 Lux (vertical or horizontal) at the site boundary. That is the same limit as currently applies to the Rural zone. It is anticipated that any future development will implement mitigation measures such as light suppression measures, directional lighting etc., as necessary to achieve compliance with the lighting rules and to minimise glare and light spill. The existing lighting rules are understood to be achievable for the Fonterra and Synlait sites, and as such it is anticipated that they will be achievable at the IPort site also. The existing rules are therefore considered to be appropriate.



Cultural and Heritage Values

35. A review of the Mahaanui Iwi Management Plan and Selwyn District Plan indicate that the site contains no natural surface waterbodies, no statutory acknowledgement areas and no known waahi tapu, taonga or other sites of significance to Iwi. It is expected that any future resource consents for development of the zone, where required, will incorporate a condition of consent addressing accidental discovery protocol. Consultation is being undertaken with Runanga in respect of this plan change and the outcomes of that consultation will be reported back to Council.

Economic Impacts

36. An Assessment of Economic Impacts has been prepared by Brown, Copeland & Co Ltd and is attached as Appendix E. The report assesses the economic effects of the proposed Plan Change, considering the relevant economic effects, a description of the Selwyn District and Canterbury regional economies, the potential economic benefits of the proposed DPMA, and potential economic costs of the proposal.
37. The report concludes that if the DPMA attracts an activity which would not otherwise be located within the Selwyn District, the proposed Plan Change will contribute additional employment and incomes, and provide the local economy with greater diversity and resilience. The report acknowledges that if the activity would otherwise have located within the Selwyn District anyway, for example an expansion of existing DPMA facilities, then additional employment, income and expenditure for the local economy would not result, but efficiency benefits would likely arise for the operator, reflecting the choice of DPMA sites over other alternative sites within the District. Resource use efficiencies that are anticipated from the proposed Plan Change include increasing economic activity and population in the District, reducing commuting costs for local residents (relative to residents needing to travel to Christchurch City or further afield), and potential for agglomeration economies. The report concludes that the Plan Change will not give rise to economic externality costs.
38. The findings of the Economic Impact Assessment are accepted and adopted, and on that basis it is considered that the proposed DPMA will have neutral or potentially positive economic effects and will not give rise to adverse economic effects that are more than minor.

Summary of Effects

39. The above assessment has considered the effects of the proposal to establish a new DPMA adjacent the existing Business 2A Zone at Rolleston, within the Rural (Inner Plains) Zone. Effects considered include:
- Transport related matters, including safety and efficiency, and potential access location and design;
 - Rural landscape character and visual effects;
 - The ability to effectively service the site;
 - Economic effects;



- Cultural values; and
 - Acoustic effects arising from anticipated activities within the site.
40. Each of these matters have been appropriately assessed in a manner relative to the scale and significance of the potential effect.
41. In summary, where potential adverse environmental effects have been identified, mitigation methods have been adopted or incorporated into appropriate provisions in the DPMA that will apply to the Rolleston site to ensure effective mitigation, consistent with existing DPMA sites at Darfield and Dunsandel. In addition to environmental effects, this Assessment has identified potential positive effects with regard to employment and income to the wider district and regional economy.

Statutory Requirements of Section 32 of the Act

42. Before a proposed plan change is publicly notified an evaluation must be carried out by the person making the request. The evaluation, carried out under Section 32 of the Resource Management Act, must examine:
- (a) the extent to which the objectives of the proposal being evaluated are the most appropriate way to achieve the purpose of the Act; and*
 - (b) whether, the provisions in the proposal are the most appropriate way to achieve the objectives by:*
 - i) identifying other reasonably practicable options for achieving the objectives; and*
 - (ii) assessing the efficiency and effectiveness of the provisions in achieving the objectives; and*
 - (iii) summarising the reasons for deciding on the provisions; and*
 - (c) contain 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.*
43. In assessing the efficiency and effectiveness of the provisions, the evaluation must also:
- Identify and assess the benefits and costs of effects, including opportunities for economic growth and employment;
 - If practicable, quantify these benefits and costs;
 - Assess the risk of acting or not acting if there is uncertain or insufficient information about the subject matter of the provisions.



44. Section 32(6) clarifies that where no actual objectives are stated in the proposal, the objective is the purpose of the proposal.
45. A Ministry for the Environment guide to Section 32¹ notes that Section 32 case law has interpreted 'most appropriate' to mean "suitable, but not necessarily superior". "Effectiveness" is noted in the guide as assessing the contribution new provisions make towards achieving the objective, and how successful they are likely to be in solving the problem they were designed to address. "Efficiency" is noted as measuring whether the provisions will be likely to achieve the objectives at the lowest total cost to all members of society, or achieves the highest net benefit to all of society. The assessment of efficiency under the RMA involves the inclusion of a broad range of costs and benefits, many intangible and non-monetary.

The Extent to which the Objectives of the Proposal are the Most Appropriate Way to Achieve the Purpose of the Act

46. Section 32(1)(a) requires examination of the extent to which the objectives of the proposal are the most appropriate way to achieve the purpose of the Act.
47. The proposal does not involve any new, or the alteration of any existing, objectives of the Selwyn District Plan. The existing objectives are assumed to be the most appropriate for achieving the purpose of the Resource Management Act, having previously been assessed as such.
48. In regard to the more general objective of the proposal, being the purpose of the proposal, the objective is to provide for the establishment of a new DPMA located adjacent the Business 2A Zone in Rolleston. The evaluation must therefore consider the extent to which enabling the establishment of a new DPMA at Rolleston achieves the purpose of the Act.
49. The purpose of the Act is to promote sustainable management of natural and physical resources.
50. 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.
51. 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 further below):

¹ MfE, A Guide to Section 32 of the Resource Management Act 1991 (2017), Wellington.



- It pro-actively and specifically manages the use and development of land for dairy processing activities.
- Dairying remains a significant land use in Selwyn District and it is reasonable to anticipate demand for processing facilities in close proximity to key transport links, including State Highway 1, the main north-south rail corridor and LPC Midland Port.
- The concentration of processing buildings and activities adjacent the existing Business 2A Zone assists with reducing adverse rural character and visual effects that might otherwise arise.
- The proposed DPMA provides a mechanism for the management of environmental effects of dairy processing to be considered comprehensively, consistent with the existing management of effects at other DPMAs within Selwyn District. Potential adverse effects can be effectively avoided or mitigated through compliance with the ODP and associated rules.
- It enables the community to provide for its economic wellbeing, and thereby contributing to its social wellbeing.
- The life-supporting capacity of water and soil can be addressed through requirements for earthworks and construction management in accordance with existing rules within the District Plan, with additional controls through Regional Council requirements.

Whether, the Provisions in the Proposal are the Most Appropriate way to Achieve the Objectives

Identifying other reasonably practicable options for achieving the proposal (s32(1)(b)(i))

52. The provisions of the proposal are summarised at the beginning of the report and the proposed ODP for the site is contained within Attachment 2.
53. In addition to this request for a plan change, other reasonably practicable options for achieving the proposal include:
 - Through applying for resource consents as required for a new plant on the subject site (the status quo);
 - Developing a new plant at an alternative location; or
 - Expansion of existing DPMA site(s); or
 - Waiting for the Selwyn District Plan Review and seek the introduction of a DPMA for the site either through a request to Council to implement or adopt a new zone as part of the Notified Plan or through a submission.
54. In regard establishing the DPMA through a resource consent process, resource consents have the potential to enable the same development to be established. However, given the



existing suite of objectives, policies and rules applying in the Rural (Inner Plains) Zone, which are very restrictive in regard large scale rural industrial activity and do not provide for DPMA's, the resource consent process would provide a great deal of uncertainty as to the outcomes that can be achieved. Resource consents for a development of the scale proposed are also inefficient, with changes to consents commonly required as the site develops and matures, resulting in ongoing time and costs to the consent holders (preparation of applications), the District Council (processing and administration of applications), and potentially for adjoining land owners (where they may be identified as affected parties).

55. In regard alternative locations, the most obvious alternative location for a new plant would be in the adjacent Business 2A Zone. However the large land areas required for a dairy processing plant make the Business 2A Zone an unlikely location. Additionally, land purchase costs within existing Business zones tend to be considerably higher than in rural areas, lessening the economic viability of a dairy processing proposal in a business zone.
56. Any other rural location would require either resource consents or a plan change process and thus would have no obvious benefit over the proposed site. Alternative rural sites may also offer fewer locational advantages (e.g. proximity to transport links, urban areas, etc) and result in greater adverse effects through isolated/dispersed development (e.g. visual amenity effects, infrastructure requirements and effects, etc). Establishment of a new dairy operator within an existing DPMA, adjacent a dairy competitor, is not considered to be a realistic proposition. It is acknowledged that existing Fonterra or Synlait operations could expand within the existing DPMA's.
57. In regard the District Plan review process, this option is understood from early discussions with Council not to be favoured by Council, and any inclusion in the District Plan process would therefore require a private plan change to be prepared in any case.
58. In conclusion, this request for Plan Change has been prepared based on information about the nature of buildings and dairy processing activities that could be anticipated for a dairy processing site of the size considered. Economic, noise, traffic and noise effects assessments have been undertaken and a proposal for district plan policy and rule changes are proposed that are consistent with the provisions applying to existing DPMA's in Selwyn District and that will effectively manage potential effects arising from the proposed DPMA. The other options considered above are not considered to be any more practicable than the proposed option. It is therefore concluded that the requested Plan Change is the most reasonably practicable option.

Assessing the efficiency and effectiveness of the provisions in achieving the objectives

59. Section 32 of the Act requires consideration of the benefits and costs of the proposal when assessing efficiency and effectiveness, including environmental, economic, social and cultural effects. Consideration is directed by s32(2)(a)(i) and (ii) to include consideration of opportunities for economic growth and employment. All effects are required to be quantified where practicable (s32(2)(b)).
60. Section 32(2) also an assessment of the risk of acting or not acting if there is any uncertain or insufficient information about the subject matter of the provisions (s32(s)(c)). These matters are addressed in the tables below.



Objective: To provide for the establishment of a new DPMA located adjacent the Business 2A Zone in Rolleston			
Proposed provisions – establish new DPMA with minimal changes to the existing DPMA policies and rules, insert a new ODP.	Costs	Benefits	Risk of Acting/Not Acting
	<p>Environmental Effects</p> <p>Potential adverse effects on rural character, landscape and amenity for adjoining rural residents.</p> <p>Potential construction effects, i.e. noise and dust on rural residents and employees in adjoining the Business 2A Zone, during construction.</p> <p>Loss of rural land for agriculture/horticulture purposes.</p> <p>Loss of potentially productive soils where building and hard surfacing occurs.</p> <p>Distance for travel from milk suppliers.</p>	<p>Environmental Effects</p> <p>Potential for adverse visual/landscape/character effects minimised through location/concentration immediately adjacent an existing industrial zone.</p> <p>Routing of traffic through existing industrial zone with roading network designed to accommodate large volumes of heavy vehicles.</p> <p>Traffic benefits of location adjacent Midland Port (Business 2A Zone) and the main rail corridor.</p> <p>No existing dwellings located within the proposed NCB.</p> <p>Long term landscape mitigation through new planting and bunding,</p>	<p>In the absence of a detailed development proposal, there is some uncertainty as to the built form and layout that will be developed, and therefore some uncertainty as to potential landscape and rural character effects. That uncertainty has been addressed by the implementation of an ODP that specifies height control areas and ensures that the larger bulk of buildings will be located towards the boundaries of the adjoining Business 2A Zone and away from the more sensitive rural boundaries.</p> <p>Information on the general character and scale of dairy processing activity is available, sufficient to enable an assessment of the potential effects of a new DPMA in this location. The values and resources of the existing environment near the site are also</p>



	<p>Economic Effects</p> <p>Cost of undertaking the plan change, including administrative costs for the District Council.</p> <p>Cost of installing acoustic insulation and ventilation (if required) for any new houses within the NCB.</p> <p>Potential impacts on roading and servicing infrastructure, though it is anticipated that any upgrades that might be required would be funded by the developer.</p> <p>Social Effects</p> <p>Requirement for acoustic insulation of future dwellings within adjoining land areas affected by the NCB.</p> <p>Increased traffic through Business 2A Zone roads and the road network that feeds into that zone (and the proposed DPMA).</p> <p>Cultural Effects</p> <p>Uncertainty as to method and extent of discharges to air,</p>	<p>and retention of existing perimeter shelter belts where possible.</p> <p>Economic Effects</p> <p>Access to new employment opportunities.</p> <p>Reduced regulation costs for the future developer of the proposed DPMA.</p> <p>Significant investment for the physical establishment of the site.</p> <p>Social Effects</p> <p>Of the rural properties affected by the NCB, two are only marginally affected and three are already restricted by District Plan density provisions from establishing additional dwellings.</p> <p>New direct or indirect employment opportunities give rise to potential benefits in social wellbeing.</p>	<p>sufficiently well understood to enable assessments of environmental effects on adjoining areas to be undertaken.</p> <p>Overall, the proposed provisions are considered to provide appropriate parameters for future activity and development on the site.</p> <p>The information available to assess the proposal is therefore considered to be sufficiently certain that there is no notable risk in acting or not acting.</p>
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	stormwater and treated wastewater, prior to detailed development design and regional council resource consent applications occurring.	Cultural Effects Site is not located within any sites or areas of known significance to Iwi, nor does it contain or closely adjoin any waterways. The site does not contain any heritage buildings.	
Effectiveness and efficiency	Effectiveness The proposed Plan Change to implement a DPMA overlay on the site, and application of the existing suite of District Plan DPMA rules with only such changes as are necessary to account for the new DPMA site and ODP, is considered to be an effective means of achieving a new DPMA at Rolleston.	Efficiency With reference to the costs and benefits outlined above, the potential benefits of the proposed Plan Change are considered to outweigh the costs. The proposed Plan Change is therefore considered to be an efficient means of achieving the objective.	



Alternative – resource consents (status quo)	Costs	Benefits	Risk of Acting/Not Acting
	<p>Environmental Effects</p> <p><i>As above for the proposal.</i></p> <p>Economic Effects</p> <p>Cost of preparing multiple resource consents, and administrative costs for the District Council in processing them. Likelihood of costs arising from further resource consent requirements or changes to resource consent conditions in the future. Costs in time and, where required, professional advice for any parties who may be identified as affected parties for each new resource consents.</p> <p>Added uncertainty of outcomes arising from ad hoc resource consent processes.</p> <p>Cost of installing acoustic insulation and ventilation (if required) for any new houses within the NCB.</p>	<p>Environmental Effects</p> <p>Potential for adverse visual/landscape/character effects minimised through location/concentration immediately adjacent an existing industrial zone.</p> <p>Routing of traffic through existing industrial zone with roading network designed to accommodate large volumes of heavy vehicles.</p> <p>Traffic benefits of location adjacent Midland Port (Business 2A Zone) and the main rail corridor.</p> <p>Long term landscape mitigation through new planting and possibly bunding, and retention of existing perimeter shelter belts where specified.</p>	<p>In the case of a resource consent application, it is unlikely that there would be any uncertain or insufficient information and as such no risk of acting or not acting.</p>



	<p>Potential impacts on roading and servicing infrastructure, though it is anticipated that any upgrades that might be required would be funded by the developer.</p> <p><i>Social Effects</i></p> <p>Increased traffic through Business 2A Zone roads and the road network that feeds into that zone (and the proposed DPMA).</p> <p>No requirement for acoustic insulation of future dwellings within adjoining land areas – potential for reverse sensitivity effects to arise in future.</p>	<p><i>Economic Effects</i></p> <p>Access to new employment opportunities.</p> <p>Significant investment for the physical establishment of the site.</p> <p><i>Social Effects</i></p> <p>New direct or indirect employment opportunities give rise to potential benefits in social wellbeing.</p> <p><i>Cultural Effects</i></p> <p>Site is not located within any sites or areas of known significance to Iwi, nor does it contain or closely adjoin any waterways. The site does not contain any heritage buildings.</p> <p>Some certainty will be achieved as the resource consents will likely be of sufficient detail that discharges will be reasonably well known at the time of application.</p>	
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<i>Effectiveness and efficiency</i>	<i>Effectiveness</i>	<i>Efficiency</i>
	<p>Resource consent processes are considered to be a less effectiveness means of achieving the objective of establishing a new DPMA than the proposal, due to the ad hoc nature of the process, reduced strategic overview and absence of Noise Control Boundary mechanism.</p>	<p>With reference to the costs and benefits outlined above, the potential net benefits of the resource consent process are considered to be reduced by the economic and social costs of the resource consent process. The resource consent method is therefore considered to be a less efficient means of achieving the establishment of a DPMA than the proposal.</p>



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))

61. Table 1 below provides an assessment of the proposed Plan Change against the relevant existing objectives of the District Plan. Reference is also made to supporting policies in respect of each objective, where relevant.

Table 1: Assessment of relevant plan change provisions against the objectives of the District Plan

District Plan provisions	Comment / Assessment
Rural Volume – B1 Natural Resources	
LAND AND SOIL	
Objective B1.1.1 <i>Adverse effects of activities on the District's land and soil resources are avoided, remedied or mitigated.</i>	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.
Objective B1.1.3 <i>Promote the sustainable management of the soil resources of the District.</i>	The proposed DPMA 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.
Policy B1.1.7 <i>Avoid removing large quantities of topsoil from sites unless:</i> <ul style="list-style-type: none"> <i>The site will be covered in hardstanding; or</i> <i>The topsoil will be replaced and the site replanted, when the activity ceases.</i> 	Some loss of soil resource will inevitably occur through the physical establishment of a DPMA (buildings and hard surfaces), though the area of soils lost will be very small relative to the expanse of the wider rural zone (<27ha).
WATER	
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>	While Objective B1.3.1 seeks to avoid or mitigate water contamination, Objective B1.3.6 emphasises the need for land use activities and earthworks in particular to be managed to protect water and related habitat and natural character. The proposed DPMA site does not contain any water bodies nor is it located in close proximity to any naturally occurring water bodies. Potential adverse effects of the proposal on water quality will therefore be managed by a combination of distance between works and any water, regional plan rules and resource consents for discharges, and existing earthworks rules in the District Plan that will apply to the proposed DPMA.
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>	
Policy B1.3.4 <i>Manage land to protect water resources and avoid, remedy, or mitigate adverse effects on surface water quality and quantity, and aquatic habitat from activities and development, including:</i> <ul style="list-style-type: none"> <i>Activities locating close to waterbodies; or</i> <i>Activities which may result in surface run-off of contaminants, or leaching of contaminants into groundwater.</i> 	



Rural Volume – B2 Physical Resources

TRANSPORT NETWORKS ROAD, PATHWAYS, RAIL AND AIRFIELDS

Objective B2.1.1

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.

Policy B2.1.2

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.

Policy B2.1.3

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.

Policy B2.1.4 (a)

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:

- 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.*

Policy B2.1.6

Avoid adverse effects of on-road parking and loading generated by surrounding land uses on rural roads.

Policy B2.1.19

Encourage viable alternatives to road transport such as the movement of freight via rail.

Primary road access to the proposed DPMA will be via the developing Business 2A Zone that adjoins. The potential road access has been assessed in the Transport Assessment attached, and determined to be appropriate. Detailed design of the future access will be subject to further scrutiny to ensure it is safe and efficient. The site will not have direct access to a State Highway or Arterial Road and the site is adequately sized to allow for all car parking to be contained within the site. Of particular value will be the site's ability to extend rail infrastructure from the adjoining LPC Midland Port and main rail corridor to directly serve the proposed DPMA. Development of the site will be subject to District Plan standards pertaining to car parking and access layout and design. As such, it is considered that the proposal will achieve the transport related objectives and policies of the District Plan.

Rural Volume – B3 People's Health, Safety and Values

Quality of the Environment

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.

RURAL CHARACTER

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.

Policy B3.4.3

The proposed DPMA is consistent with the anticipation of a variety of rural related activities in the rural area. The DPMA will support dairy primary production activity in the District.

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. Additional controls are contained in the existing rules of Appendix 26 of the District Plan, addressing effects such as lighting, construction and earthworks and these will apply to the proposed DPMA. The combined effect of these provisions is to avoid and mitigate those effects and set standards beyond which resource consent would be required for further assessment.



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

Policy B3.4.4

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.

Policy B3.4.5

Enable the continued and enhanced operation, innovation and development of established dairy plant sites, and the establishment of a new dairy plant site, 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 and within the Rural (Inner Plains) Zone adjacent the Business 2A 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.

Policy B3.4.6

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

Policy B3.4.7

Avoid high rise buildings or highly reflective utility structures.

Effects on rural character will be minimised by the co-location of the site adjoining an existing Business 2A Zone, minimising adverse fringe effects on the rural area. Potential adverse amenity effects will be managed through the proposed ODP, including clustering taller building forms towards the industrial zone boundaries and requirements for new landscaping on rural boundaries, and retention of shelter belts on other peripheral boundaries where practicable.

An amendment is proposed the explanation and reasons for Policy B3.4.4, to make clear that a DPMA overlay is provided for at the Rolleston site, and effects associated with dairy processing are therefore anticipated in that particular location. Similar amendments are proposed to Policy B3.4.5. The amendments will ensure that the policies explicitly providing for DPMA in the District continue to clearly define the locations where DPMA are anticipated and provided for, and that the proposed Plan Change will include an ODP to provide for the integrated management of effects at the boundary of the new DPMA. The proposed amendments to B3.4.4 and B3.4.5 are necessary to ensure the objectives of this chapter are achieved.

The proposed DPMA will of necessity enable a dense built form within the site, denser than otherwise permitted in the Rural (Inner Plains) Zone. This is necessary for Policy B3.4.5 to be achieved. The ODP will ensure that the higher building forms will be clustered towards the industrial zone boundary, and any structures taller than 12m will be subject to existing DPMA rules pertaining to building colour, to ensure such structures are not highly reflective.

GLARE AND NIGHTGLOW

Policy B3.4.11

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.

Existing lighting rules within Appendix E26 of the District Plan will apply to the proposed DPMA, to ensure this policy is achieved.

NOISE AND VIBRATION

Policy B3.4.13

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.

The proposed DPMA will be subject to the same noise rules as currently apply within other DPMA within the District, requiring specific day and night time noise limits to be met at a Noise Control Boundary identified on the ODP. The proposed ODP includes a NCB. No dwellings existing within that boundary currently, and the ODP/NCB itself does not prevent any dwelling from being established within it, albeit any future dwelling would have to be acoustically insulated or ventilated to meet District Plan criteria, to avoid potential reverse sensitivity effects and ensure persons indoors within the new dwelling are not disturbed.

DUST

Policy B3.4.16

Mitigate nuisance effects on adjoining dwellings caused by dust from earthworks, or stockpiled material.

Potential adverse dust effects, including those on neighbouring properties, will be avoided or mitigated through the application of the existing suite of rules in the District Plan that control earthworks volumes, and depths of cut and fill. Stockpile heights are also subject to limits. Where



any large scale earthworks are proposed, they will be subject to resource consent, to ensure adequate management of dust occurs, both within the site during construction and where any material is to be transported off site. This will ensure that Policy B3.4.16 can be achieved.

REVERSE SENSITIVITY EFFECTS

Policy B3.4.20

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.

Policy B3.4.21

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.

The requested Plan Change will provide for a new rural industrial activity. The provisions of the proposed ODP, together with rules that will apply to the site in Appendix E26 of the District Plan, will ensure that potential adverse reverse sensitivity effects are avoided as far as possible, or otherwise mitigated. There are no lawfully established uses in the Rural Zone near the proposed DPMA site currently, for which the proposed DPMA might give rise to reverse sensitivity effects, i.e. the DPMA will not be unusually sensitive to rural activity. As noted above, any new dwellings within the proposed NCB will be subject to noise insulation or ventilation requirements to avoid disturbance of persons inside the house and thus minimise and mitigate the likelihood of reverse sensitivity effects arising. The proposal will therefore achieve the outcomes sought in these policies.

62. Overall, it is considered that the proposed Plan Change is consistent with the objectives and policies of Selwyn District Plan, including those that seek to recognise and provide for DPMAs, albeit two policies and explanations will require amendment to recognise the new site which is in the Rural Inner Plains Zone rather than the Rural Outer Plains as is the case with the two existing DPMAs. As such, it is considered that the resultant character, amenity and environmental effects of the proposal are consistent with those sought in the District Plan for DPMAs. Given this, it is considered that the proposal is an appropriate means of achieving the outcomes sought by the objectives and policies of the District Plan.

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

63. Based on the above assessment, it is concluded that the proposed Plan Change is the most appropriate method for achieving the objectives and policies of the District Plan and the objective of the proposal. The reasons for this decision are:
- The proposal's location adjacent an existing Business 2A Zone and key transport corridors will mitigate potential adverse effects on the rural zone and enable ready access to both vehicular and rail transport methods.
 - The assessments contained in this report confirm that the potential effects of the proposal are acceptable and able to be avoided or mitigated.
 - The proposed Plan Change will enable the insertion of an ODP and associated NCB into the District Plan, providing an integrated method of managing environmental effects associated with a dairy processing plant.
 - The proposal will provide for employment opportunities and economic benefits.
64. It is concluded that the economic, social, cultural and environmental benefits of the proposed Plan Change outweigh the potential costs. On this basis, the proposed DPMA



overlay and associated ODP are considered to be an appropriate, efficient and effective means of achieving the purpose of the Resource Management Act.

Statutory Framework

Sections 74 & 75 of the RMA

65. 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.
66. The District Council must also have regard to an evaluation report prepared in accordance with s32.
67. 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.
68. 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.
69. 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.

Section 31 – Functions of Council

70. 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.
71. The requested plan change accords with these stated functions. The proposal provides for the use and development of land for dairy processing activities and seeks to implement existing District Plan DPMA provisions over the site, with only such amendments as are necessary to recognise the site, the proposed ODP and any issues that are particular to the site. The proposed ODP and the amended DP rules 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.



Section 75 – Contents of District Plans

72. Section 75 requires a District Plan to state objectives for the District, policies to implement the objectives and rules to then implement the policies.
73. The proposal does not introduce any new, or alter any existing, objectives, but does amend two existing policies to reflect the new DPMA site and introduces 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).
74. Section 75 requires a District Plan to not be inconsistent with Regional Plans. These are identified and discussed in paragraphs further below.
75. 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:

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

76. The Selwyn District Plan is required under Section 74(1)(ea) of the Resource Management Act to prepare or change its district plan in accordance with National Policy Statements (NPS), and the New Zealand Coastal Policy Statement.
77. The New Zealand Coastal Policy Statement is not relevant to the site, given the large distance between the site and the coastal environment.
78. Four NPS are to be considered:
 - NPS for Renewable Electricity Generation 2011
 - NPS for Electricity Transmission 2008
 - NPS for Freshwater Management 2014
 - NPD on Urban Development Capacity 2016.
79. As the proposal addresses a rural industrial form of development in the rural zone, the NPS on Urban Development Capacity is not relevant to this proposal.
80. With regard to the other NPS, the proposal does not involve nor is it located in the proximity of a renewable electricity generation activity. Similarly, the proposed DPMA site is not located in close proximity to any main electricity transmission lines nor is there a substation within the site. Stormwater and waste water discharges will be dealt with at a future consenting stage, however no practices or effects are anticipated that would be inconsistent with the NPS for Freshwater Management.



Canterbury Regional Policy Statement

81. The Selwyn District Plan is required under Section 73(4) of the Resource Management Act to give effect to the Canterbury Regional Policy Statement 2013 (RPS). Section 74(2) of the Act also requires territorial authorities to have regard to any proposed regional policy statement when preparing or changing a district plan.
82. The most relevant objectives and policies of the RPS are those contained in Chapters 5 (to the extent relevant to the entire region), 6, 7, 14 and 16. Relevant objectives and policies are considered in Table 2 below.

Table 2: Assessment of the plan change provisions against the objectives of the Regional Policy Statement

Regional Policy Statement provisions	Comment / Assessment
Chapter 5 – Land Use and Infrastructure	
<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> <ol style="list-style-type: none"> 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 2) enables people and communities, including future generations, to provide for their social, economic and cultural well-being and health and safety; and which: <ol style="list-style-type: none"> 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; b) provides sufficient housing choice to meet the region's housing needs; c) encourages sustainable economic development by enabling business activities in appropriate locations; d) minimises energy use and/or improves energy efficiency; e) enables rural activities that support the rural environment including primary production; f) is compatible with, and will result in the continued safe, efficient and effective use of regionally significant infrastructure; 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; h) facilitates the establishment of papakāinga and marae; and i) avoids conflicts between incompatible activities. <p>Policy 5.3.7 Strategic land transport network and arterial roads (Entire Region) <i>In relation to strategic land transport network and arterial roads, the avoidance of development which:</i></p>	<p>The proposal is for growth in a form of rural industry, which is appropriate to be located in the rural zone, however the site in this particular instance adjoins an existing urban boundary and thus is consolidating rural industry adjacent urban industry. The proposal will provide for the wellbeing of people and communities through employment opportunities, and the application of development controls through the proposed ODP and suite of DPMA rules will ensure that the quality of environment is generally maintained, including in respect of effects on adjoining properties. The proposal provides for a rural industry that will support rural primary production, i.e. the dairy industry. The proposal will have no adverse effects on any regionally significant infrastructure, nor will it give rise to conflict between incompatible activities, noting that all existing rural dwellings are located beyond the proposed Noise Control Boundary, and the proposed DPMA will be subject to rules controlling matters such as noise, lighting, signage, landscaping etc. to minimise effects on adjoining properties.</p> <p>The proposed Plan Change is therefore consistent with the relevant objectives and policies of Chapter 5.</p>



1. adversely affects the safe efficient and effective functioning of this network and these roads, including the ability of this infrastructure to support freight and passenger transport services; and
2. in relation to the strategic land transport network and arterial roads, to avoid development which forecloses the opportunity for the development of this network and these roads to meet future strategic transport requirements.

Chapter 6 – Recovery and Rebuilding of Greater Christchurch

Objective 6.2.1 Recovery framework

Recovery, rebuilding and development are enabled within Greater Christchurch through a land use and infrastructure framework that:

1. identifies priority areas for urban development within Greater Christchurch;
2. identifies Key Activity Centres which provide a focus for high quality, and, where appropriate, mixed-use development that incorporates the principles of good urban design;
3. avoids urban development outside of existing urban areas or greenfield priority areas for development, unless expressly provided for in the CRPS;
4. protects outstanding natural features and landscapes including those within the Port Hills from inappropriate subdivision, use and development;
5. protects and enhances indigenous biodiversity and public space;
6. maintains or improves the quantity and quality of water in groundwater aquifers and surface waterbodies, and quality of ambient air;
7. maintains the character and amenity of rural areas and settlements;
8. protects people from unacceptable risk from natural hazards and the effects of sea-level rise;
9. integrates strategic and other infrastructure and services with land use development;
10. achieves development that does not adversely affect the efficient operation, use, development, appropriate upgrade, and future planning of strategic infrastructure and freight hubs;
11. optimises use of existing infrastructure; and
12. provides for development opportunities on Māori Reserves in Greater Christchurch.

Policy 6.3.1 Development within the Greater Christchurch area

In relation to recovery and rebuilding for Greater Christchurch:

1. give effect to the urban form identified in Map A, which identifies the location and extent of urban development that will support recovery, rebuilding and planning for future growth and infrastructure delivery;
2. give effect to the urban form identified in Map A (page 6-27) by identifying the location and extent of the indicated Key Activity Centres;

Chapter 6 applies to Greater Christchurch, an area which is defined as including that part of Selwyn District which includes the subject land. For the purposes of Chapter 6, Rural Activities is defined as meaning:

'activities of a size, function, intensity or character typical of those in rural areas and includes:

- Rural land use activities such as agriculture, aquaculture, horticulture and forestry.
- Businesses that support rural land use activities.
- Large – footprint parks, reserves, conservation parks and recreation facilities. Residential activity on lots of 4 ha or more.
- Quarrying and associated activities.
- Strategic infrastructure outside of the existing urban area and priority areas for development.'

Dairy processing facilities are considered to fall within this definition, being a business that supports rural land use activities (dairying). The proposed DPMA will not allow for general industrial use within the site, and objectives and policies of Chapter 6 pertaining to urban industrial and business land are therefore not considered applicable to the proposal.

In regard Objective 6.2.1, the proposed DPMA is located in the rural area and is not an urban activity and therefore will not be an urban expansion. The site is not located in a sensitive landscape, nor will any sensitive indigenous vegetation be affected. Water quality can be maintained at the time of detailed design through engineering solutions and regional plan/discharge consent requirements. The proposal will have some effect on rural character and amenity, though the landscape and visual assessment attached in Appendix D confirms that effect will be minimised by the location adjoining the Business 2A Zone. The proposal is well located adjacent to existing traffic infrastructure, notably including access to rail.



3. enable development of existing urban areas and greenfield priority areas, including intensification in appropriate locations, where it supports the recovery of Greater Christchurch;
4. ensure new urban activities only occur within existing urban areas or identified greenfield priority areas as shown on Map A, unless they are otherwise expressly provided for in the CRPS;
5. provide for educational facilities in rural areas in limited circumstances where no other practicable options exist within an urban area;
6. provide for a metropolitan recreation facility at 466-482 Yaldhurst Road; and
7. avoid development that adversely affects the function and viability of, or public investment in, the Central City and Key Activity Centres.

Objective 6.2.4 Integration of transport infrastructure and land use

Prioritise the planning of transport infrastructure so that it maximises integration with the priority areas and new settlement patterns and facilitates the movement of people and goods and provision of services in Greater Christchurch, while:

1. managing network congestion;
2. reducing dependency on private motor vehicles;
3. reducing emission of contaminants to air and energy use;
4. promoting the use of active and public transport modes;
5. optimising use of existing capacity within the network; and
6. enhancing transport safety.

Policy 6.3.4 Transport effectiveness

Ensure that an efficient and effective transport network that supports business and residential recovery is restored, protected and enhanced so that it maintains and improves movement of people and goods around Greater Christchurch by:

1. avoiding development that will overload strategic freight routes;
2. providing patterns of development that optimise use of existing network capacity and ensuring that, where possible,
3. new building projects support increased uptake of active and public transport, and provide opportunities for modal choice;
4. providing opportunities for travel demand management; requiring integrated transport assessment for substantial developments; and
5. improving road user safety.

Policy 6.3.5 Integration of land use and infrastructure

Recovery of Greater Christchurch is to be assisted by the integration of land use development with infrastructure by:

1. Identifying priority areas for development to enable reliable forward planning for infrastructure development and delivery;
2. Ensuring that the nature, timing and sequencing of new development are co-ordinated with the development, funding, implementation and operation of transport and other infrastructure in order to:
 - a. optimise the efficient and affordable provision of both the development and the infrastructure;
 - b. maintain or enhance the operational effectiveness, viability and safety of existing and planned infrastructure;
 - c. protect investment in existing and planned infrastructure; and

Dairy processing facilities inevitably rely on heavy vehicle movements to bring raw milk product to the site, and to export processed product. In the case of the proposed DPMA, the site is well located relative to the State Highway network and rail corridor to export processed product efficiently, though this in turn may result in longer vehicle movements to bring the raw milk product from suppliers. The site's proximity to urban Rolleston and associated public transport links will assist in minimising travel distances, for those employees located in the Rolleston area. The attached Transport Assessment has confirmed the suitability of the adjoining road network for the vehicle movements anticipated and an integrated transport assessment has been undertaken in support of the proposal.



- d. ensure new development does not occur until provision for appropriate infrastructure is in place;
- 3. Providing that the efficient and effective functioning of infrastructure, including transport corridors, is maintained, and the ability to maintain and upgrade that infrastructure is retained;
- 4. Only providing for new development that does not affect the efficient operation, use, development, appropriate upgrading and safety of existing strategic infrastructure, including by avoiding noise sensitive activities within the 50dBA Ldn airport noise contour for Christchurch International Airport, unless the activity is within an existing residentially zoned urban area, residential greenfield area identified for Kaiapoi, or residential greenfield priority area identified in Map A (page 6-28); and
- 5. Managing the effects of land use activities on infrastructure, including avoiding activities that have the potential to limit the efficient and effective, provision, operation, maintenance or upgrade of strategic infrastructure and freight hubs.

Chapter 7 Freshwater

Objective 7.2.1 Sustainable management of fresh water

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:

- 1. the life-supporting capacity ecosystem processes, and indigenous species and their associated freshwater ecosystems and mauri of the fresh water is safe-guarded;
- 2. the natural character values of wetlands, lakes and rivers and their margins are preserved and these areas are protected from inappropriate subdivision, use and development and where appropriate restored or enhanced; and
- 3. any actual or reasonably foreseeable requirements for community and stockwater supplies and customary uses, are provided for.

Water quality and the effects of any water takes necessary for development of the proposed DPMA can be managed at the time of detailed design through engineering solutions and regional plan/discharge consent requirements.

Objective 7.2.4 – Integrated management of fresh water resources

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:

- 1. the Ngai Tahu ethic of Ki Uta Ki Tai (from the mountains to the sea);
- 2. the interconnectivity of surface water and groundwater;
- 2. the effects of land uses and intensification of land uses on demand for water and water quality; and
- 4. kaitiakitanga and the ethic of stewardship; and
- 5. any net benefits of using water, and water infrastructure, and the significance of those benefits to the Canterbury region.

Chapter 12 Air Quality

Objective 14.2.2 – Localised adverse effects of discharges on air quality

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.

As is typically the case for dairy processing facilities in Canterbury, it is anticipated that any future DPMA operation on the site will require resource consents for the discharge of contaminants to air. There are understood to be engineering and design solutions available to ensure that any localised adverse effects on air quality can be managed and minimised.



Chapter 16 Energy

Objective 16.2.1 – Efficient use of energy

Development is located and designed to enable the efficient use of energy, including:

....

2) planning for efficient transport, including freight

The proposed DPMA is located in close proximity to State Highway 1 and the main north south rail corridor (via LPC Midland Port site in the adjoining Business 2A Zone). This proximity will assist in efficient use of energy in transport of freight, however the location of the DPMA within the Inner Plains is potentially less efficient than an Outer Plains location due to the transportation distances of raw milk product to the site.

83. Overall, the development is considered to be generally consistent with the Regional Policy Statement.

Land and Water Regional Plan, Canterbury Air Regional Plan

84. The operative Land and Water Regional Plan broadly seeks to manage land and water within the Canterbury Region, by setting water allocation limits and limits on the type and amount of discharges permitted. The objectives and policies of the Canterbury Air Regional Plan broadly seek, in relation to industrial and trade activities and large scale fuel burning devices, identifying best practicable options to minimise the effects of discharges, manage and in some situations avoid discharges of PM₁₀, manage discharges of odour and dust from solid or liquid waste, and addressing localised effects of discharges including relative to sensitive receptors.
85. It is anticipated that any future discharges associated with the development of the proposed DPMA site will either fall to be permitted under the Rules of the Land and Water Regional Plan or Air Regional Plan, or will be assessed in an integrated manner through the resource consent process, with Environment Canterbury as the administering body. At such time as detailed development plans for the DPMA are advanced, various options for the design and management of discharges will be available, to ensure any adverse effects are minimised.
86. In summary, the proposed DPMA is not considered to be inconsistent with the relevant Regional Plans.

Canterbury Regional Land Transport Strategy 2012-2042 (RLTS)

87. The Canterbury Regional Land Transport Strategy (RLTS) establishes 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.
88. The provisions of the DPMA accord with this Strategy, specifically requiring any new access points to be developed in accordance with District Plan standards or otherwise seek resource consent. Accordingly, the safety and efficiency of the local roads adjoining the site and the wider road network will be protected and can respond, as necessary, to any changes to the RLTS.



Mahaanui – Iwi Management Plan 2013

89. The Mahaanui Iwi Management Plan (IMP) sets out Ngāi Tahu's objectives, issues and policies for natural resource and environmental management within the area bounded by the Hurunui River in the north and the Ashburton River in the south. Under Section 74(2A) of the Resource Management Act, a territorial authority must take into account any such plan to the extent that it has a bearing on the resource management issues of the district. The IMP is primarily a tool for the Rūnanga in the area it covers; the plan also provides guidance to territorial authorities and others. The IMP sets out the broad issues as well as the specifics for particular areas. These matters are considered below, as they are relevant to this proposed Plan Change. It is noted that the IMP does not identify any specific cultural values associated with the subject land that might be adversely impacted by its development.

Ranginui

90. The relevant matters identified in IMP are discharges to air and the protection of night time darkness. The proposed Plan Change does not contain new controls on discharges to air, however existing rules controlling light spill in DPMA's are proposed to apply to the site. Air discharges will occur when the site is operational, potentially from large scale burning devices, as well as discharges of dust to air during the development of the site. Such discharges are controlled by Environment Canterbury through the Regional Air Plan.

Wai Māori

91. Freshwater is of considerable cultural significance to Rūnanga. The main matters of concern relate to water quality and quantity and mixing waters from different waterbodies. The proposed DPMA site does not contain any waterways. Future discharges of effluent will either be to a reticulated system or otherwise resource consent will be sought to put the discharges to ground. In either case, the potential for adverse impacts on groundwater quality can be limited. Depending on water supply requirements and availability, the site will either connect to a Council water supply, or be serviced through groundwater wells. Stormwater generated by new buildings and hardstand areas is anticipated to be treated where necessary and disposed of on site, and again will be subject to the Land and Water Regional Plan discharge standards. It is therefore anticipated that no untreated stormwater will reach groundwater. The proposed DPMA can be therefore be developed to ensure that there will be minimum adverse impact on the freshwater quality or quantity within this locality.

Papatūānuku

92. The use of land and how it is developed is of importance to Rūnanga. This section identifies issues such as the rural and urban land uses, the subdivision and development of land, stormwater, earthworks, waste management, and discharges to land. The potential effects of the proposal on the environment have been discussed in the assessment above. That assessment concludes that potential adverse effects on water quality and the quality of the natural environment generally can be managed and minimised. Some impact on soil health will be inevitable due to the requirement for buildings and hard surfaces on the site, however it will be offset as much as possible by the retention of rural buffers on the periphery of the site and requirements for new planting.



Tāne Mahuta

93. This section addresses the significance of indigenous biodiversity and mahinga kai to Rūnanga. The proposed DPMA site is not located in a known mahinga kai area. The subject land has been used for farming purposes for many years. There are no notable indigenous plantings within the site. The proposed Plan Change has specific planting requirements identified on the ODP, and requires the retention of some areas of existing shelter belts on the periphery of the site.

Ngā tūtohu whenua

94. There are no known wāhi tapu, wāhi taonga or mahinga kai sites within the application site or close by.

Te Waihora

95. The application site sits with the catchment of Te Waihora. The main matters of concern within this area relate to the management of water and waterways within the Te Waihora catchment, and the subsequent impact that can have on the water quality of Te Waihora and its environment. The proposal does not involve an activity that could adversely impact on the lake and its environmental and cultural values.

Summary

96. It is considered that overall the proposal will not have an adverse impact on the cultural values of iwi as set out within IMP.

Land Use Recovery Plan (LURP)

97. The LURP was prepared under the Canterbury Earthquake Recovery Act 2011 to provide for the recovery process in the Greater Christchurch sub- region. The LURP provides the framework to rebuild existing communities, develop new communities, meet land use needs for commercial and industrial developments, and to take into account natural hazards and environmental constraints that may affect the rebuild and recovery.
98. The LURP is focused on metropolitan urban Christchurch and includes the areas surrounding Rolleston. All decisions under the RMA must not be inconsistent with the LURP. As a rural
99. The LURP provides for rural activities. The definition of rural activities, included in the amendments to the Canterbury Regional Policy Statement (Appendix 1 of the LURP) includes businesses that support rural land use activities. Dairy processing plants are considered to be a business that supports rural land use activities. As the provisions of Appendix E26 of the District Plan and the proposed DPMA do not allow for any general industrial uses of the site, the proposal is considered to be not inconsistent with the LURP.



Part II of the Resource Management Act 1991

100. The purpose of the Resource Management Act is set out in Section 5 of the Act, being the sustainable management of natural and physical resources. This purpose is subject to Sections 6, 7 and 8 of the Act which set out that matters that are to be taken into consideration in achieving the purpose.
101. Section 6 identifies the matters of national importance that must be recognised and provided for when exercising a function under the Act. None of the listed matters in section are relevant to this site. As discussed above, in relation to section 6 and section 8 matters there are no known wāhi tapu, wāhi taonga or mahinga kai sites within the application site or close by.
102. In terms of section 7, the matters of most relevance to the proposed DPMA are the maintenance and enhancement of the quality of the environment, and maintenance and enhancement of amenity values. As discussed in the assessment above, although there will be some impact on rural character and therefore amenity values from the establishment of the DPMA, those effects are considered to be minor and mitigated to a large degree by the location adjacent the developing Business 2A Zone. The proposed ODP and associated DPMA rules will also ensure that any adverse effects are appropriately managed and the quality of the environment is generally maintained. In regard Section 7(b) and the efficient use of natural and physical resources, the site's location in close proximity to State Highway 1 and the main north south rail corridor make the site highly accessible and as such the proposed development will be an efficient use of the existing physical resources of the area.
103. With regard to section 8, Rule E26.2.4 provides Council with control over Accidental Discovery Protocol for any large earthworks, while Rule E26.2.6 provides Council control over the Protocol for consents for new buildings for milk processing or storage on site, and those rules are proposed to apply to the site development. Consultation has also been initiated with Runanga in respect of this Plan Change application.
104. An overall assessment of the proposal to provide for a DPMA on the site is considered to achieve the purpose of the Resource Management Act. The proposal provides for the economic and social well-being of residents of Selwyn District and the Greater Christchurch area by providing for employment opportunities and growth, while avoiding or mitigating adverse effects associated with the proposal.



Appendix A

Acoustic Assessment



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Environment Noise Assessment

Prepared for

**ROLLESTON
INDUSTRIAL HOLDINGS
LTD**

**Lot 3 DP 52556, Maddisons Road
Rolleston, Selwyn District**

December 2019



Environmental Noise Assessment
Prepared for

Rolleston Industrial Holdings Ltd

Lot 3 DP 52556, Maddisons Road
Rolleston, Selwyn District

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Introduction

1. Rolleston Industrial Holdings Ltd has commissioned Novo Group to prepare an environmental noise assessment for a Plan Change application to establish a Dairy Processing Management Area (DPMA) at the application site enabling the development of a dairy processing facility. 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.
2. 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. In addition, it is proposed to adopt the noise related rules set out in Appendix 26 of the Selwyn District Plan Rural Volume (Dairy Processing Management Area).
3. This environmental noise assessment will be based on an assumed maximum expansion scenario to assist in the development of an appropriate Noise Control Boundary (NCB) for the site. This assessment makes use of relevant information and methodology from the Noise Assessment undertaken for the Fonterra Darfield DPMA by Marshall Day Acoustics (MDA) (Hay 2015), as it is an accepted procedure, regarding noise, in support of a private plan change in the Selwyn District.
4. The objective of the proposed DPMA and its noise rules is to provide a clear boundary which defines the extent of acceptable noise effects for the surrounding community. Activities within the DPMA's NCB can develop as required, with the understanding of what noise level can be expected when the site is fully developed.

The Proposal

5. It is proposed to develop the site at Lot 3 DP 52556 on Maddisons Road as a dairy processing facility. The site will take primary access from within the IPort industrial subdivision and is predicted to generate 400 vehicle movements per day. The site location is illustrated in Figure 1. The areas north across Maddison Road, as well as to the east and south east are zone as Rural Inner Plains. The areas south and south west is zoned as Business 2A.

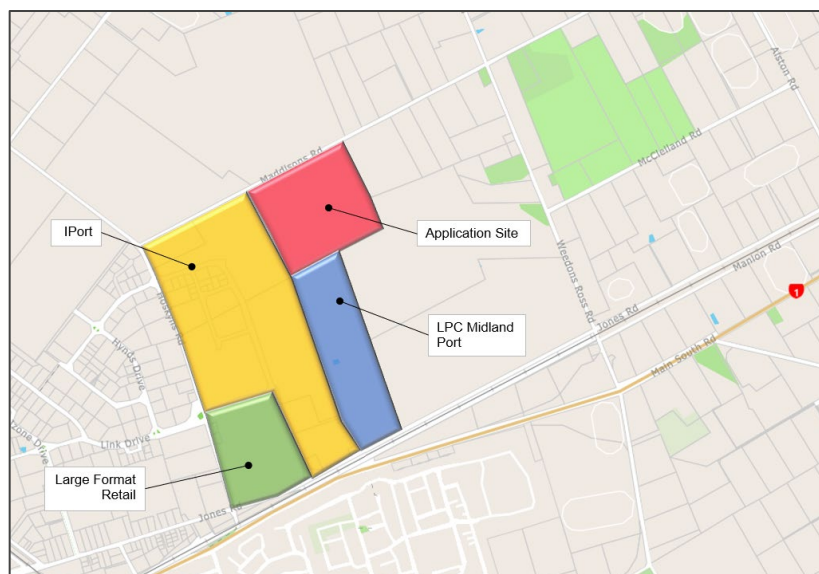


Figure 1: Site Location



District Plan

6. Rule 9.16 states that 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 shall comply the limits in **Table 1** below.

Table 1: Maximum Noise Limit at Notional Boundary

Zone of site receiving noise from the activity	Time (hrs)	Noise Limit (dB)	
		L10	Lmax
Rural Inner Plains Zone – Notional Boundary	07:30-20:00	60 dBA	85dBA
Rural Inner Plains Zone – Notional Boundary	20:01-07:29	45dBA	70dBA

7. However, the plan change proposes to adopt the noise related rules set out in Appendix 26 of the Selwyn District Plan Rural Volume (Dairy Processing Management Area) which state that noise arising as a result of any activity within a DPMA shall not exceed the following limits at the Noise Control Boundary shown on the Outline Development Plan:

Table 2: DPMA Noise Limits

Time period	Noise Limits	
	LAeq	LAfmax
Daytime 07:30 – 20:00	55dB	80dB
Night-time 20:0 – 07:30	45dB	70dB

Methodology

8. An accurate noise source inventory is established in order to predict the on-site noise levels and to subsequently develop an appropriate NCB. The dominant noise sources at dairy processing facilities are:
- Whole Milk Production (WMP) Dryer Facilities;
 - 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.
9. The ODP does not consist of detailed design information at this stage, such as scale of production, number of plant equipment, number of milk tankers in the fleet, exact location of associated structures. Only the wider potential footprint areas of where the processes would take place was available at the time of assessment (refer to Development Plan below)



Figure 2: Indicative Development Plan

- SoundPLAN noise modelling software was used to predict the Dairy Hub noise propagation and to subsequently establish the NCB (refer to Appendix 1 for dispersing model and Appendix 2 for recommended NCB). SoundPLAN makes use of the calculation method as per ISO 9613-2:1996 "Acoustics – Attenuation of sound during propagation outdoors – Part 2: General method of calculation.
- The table below presents the relevant noise sources and related sound power levels used in the dispersion model.

Noise source	Sound power levels dB							
Octave band frequencies, Hz	63	125	250	500	1000	2000	4000	dBA
Milk Tanker	99	103	100	101	100	100	93	105
Milk Reception	93	92	95	97	95	91	89	98
Dryer exhaust Stack	99	87	83	83	80	77	75	85
Cooling Tower	87	85	77	75	74	72	73	80
HVAC	38	55	64	64	62	63	61	70



Delivery vehicle	44	60	62	65	69	68	63	79
Train Idling	Total sound power level of 108dBA used in the model							

12. 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. Due to the limited information about the detailed location of the components as well as daily operations, however, the following approach in terms of the noise prediction has been taken:
 - A line source was assigned to the perimeter of the site with cumulative sound power levels used to predict the worst case noise propagation with the facilities running simultaneously at the nearest extent to the neighbouring properties for worst case effect.
 - Line sources were also assigned to the potential vehicle circulation and rail links, with a worst case 15minute period of two tanker movements (or the equivalent of 20 light vehicle movements) and 1 train movement happening simultaneously.
13. The assumed maximum expansion scenario used as a basis for our consideration is based on similar sized areas on which Dairy Production facilities operate. This would entail:
 - i. Up to two WMP dryers ;
 - ii. Up to two boilers ;
 - iii. Associated ancillary mechanical services;
 - iv. Associated dry store space; and
 - v. Associated number of tanker and rail movements.
14. As per the noise assessment process as part of a private plan change for a DMPMA in the Selwyn District, a Noise Control Boundary (NCB) is established as part of the ODP. The intention is that the NCB would replace the existing noise limits relating to compliance at the notional boundary of any residential dwelling.
15. Construction will be subject to New Zealand Standard NZS 6803:1999 “Acoustics – Construction Noise”.

Assumptions

16. The dispersion models represent a worst-case scenario with down wind conditions for all receptors. It is assumed that all relevant processes and components are running simultaneously and at full capacity.

Assessment Results

17. The dispersion model (refer to Attachment 1) indicates that the noise levels from the DPMA will comply with the day and night time notional boundary limits at the current surrounding dwellings. It is therefore appropriate to propose an NCB that is informed by the 45dBA contour as per the dispersion model.
18. The predicted noise levels between the site boundary and the recommended NCB range from 45dBA – 50dBA, therefore any potential noise sensitive constructed in this area will sufficiently be sound insulated



as required by Appendix 26 of the Selwyn District Plan Rural Volume, which states that any sensitive activity within the Noise Control Boundary as shown in the Outline Development Plan in 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.

Proposed Noise Control Boundary

19. According to Hay (2015) (Fonterra Darfield DPMA Noise Assessment) the purpose of a NCB is to:
 - i. Provide certainty 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.
 - ii. Provide certainty for neighbours and Council as to exactly where the Dairy Hub shall comply with noise limits.
 - iii. Provide an easily found line for the purpose of future noise monitoring and assessment, even when such monitoring may be occurring in the dark.
20. For the purpose of the Rolleston Dairy Hub NCB the preference is to have the NCB follow simple offsets from the site boundary via a straight line.
21. The proposed NCB does cut across privately owned rural land to the north, north east, east and south east. Currently there are no dwellings in these areas, but dwellings could potentially be constructed in these areas. The plan change application is proposing to adopt the noise related rules set out in Appendix 26 of the Selwyn District Plan Rural Volume, triggering requirements for acoustic insulation to be built into new buildings for sensitive activities to be located within the NCB.
22. The proposed NCB does also cut across privately owned Business 2A Zone properties to the south and south west, however, there are no noise limits that apply at any point within the boundary of a Business 2A Zone. Using the limits associated with a Business 1, 1A or 3 Zone site, the predicted worst case exceedance of the night time from the Dairy Processing Facility will not be unreasonable considering the nature of the activities at IPort and LPC Midland Port.

Conclusion and Recommendations

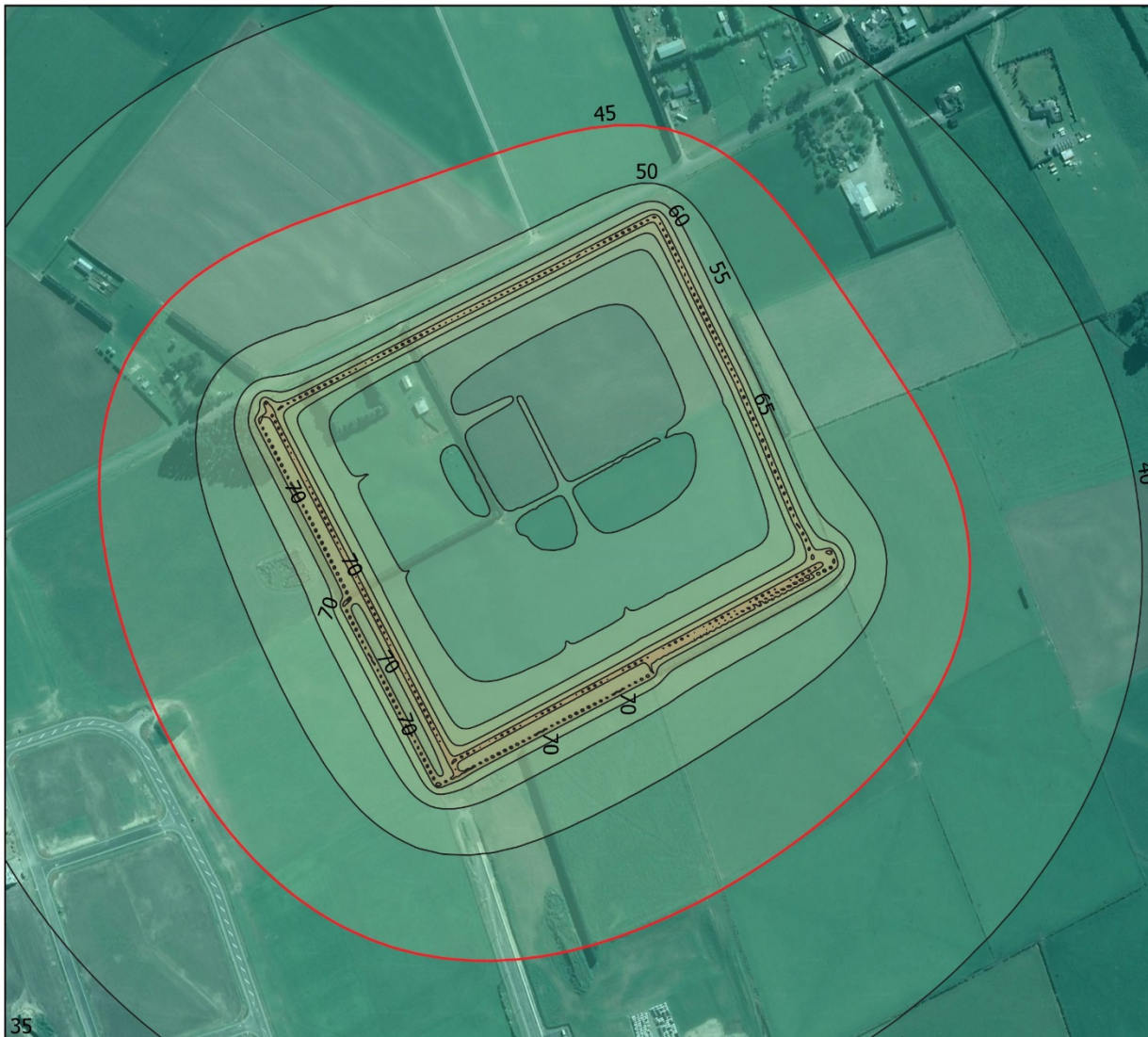
23. Rolleston Industrial Holdings Ltd has commissioned Novo Group to prepare an environmental noise assessment for a Plan Change application to establish a Dairy Processing Management Area (DPMA) at the application site enabling the development of a dairy processing facility.
24. A SoundPLAN model was developed to predict the worst case propagation, including the 'loudest' noise along the perimeter of the site, noting that limited operational information was available at the time the model was developed. The dispersion model indicates that the dairy processing activities will comply at the notional boundary of the existing surrounding residential dwellings.
25. With the recommended NCB informed by the dispersion model, it is considered appropriate in providing effective control of noise effects from the dairy hub on the surrounding sensitive activities, however, if more detailed information becomes available it is recommended that the NCB be amended if significant changes to the scale of the operation is envisaged.




26. It is concluded that by implementing the recommended NCB, with current surrounding sensitive activities located outside the NCB and any potential sensitive activities that may be constructed within the NCB but appropriately insulated in accordance with Appendix 26, the effect from the Rolleston Dairy Hub is less than minor.



Appendix 1 Noise Dispersion Model













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Rolleston Dairy Hub

Operational Noise
Dispersion

Noise Contours dB LAeq

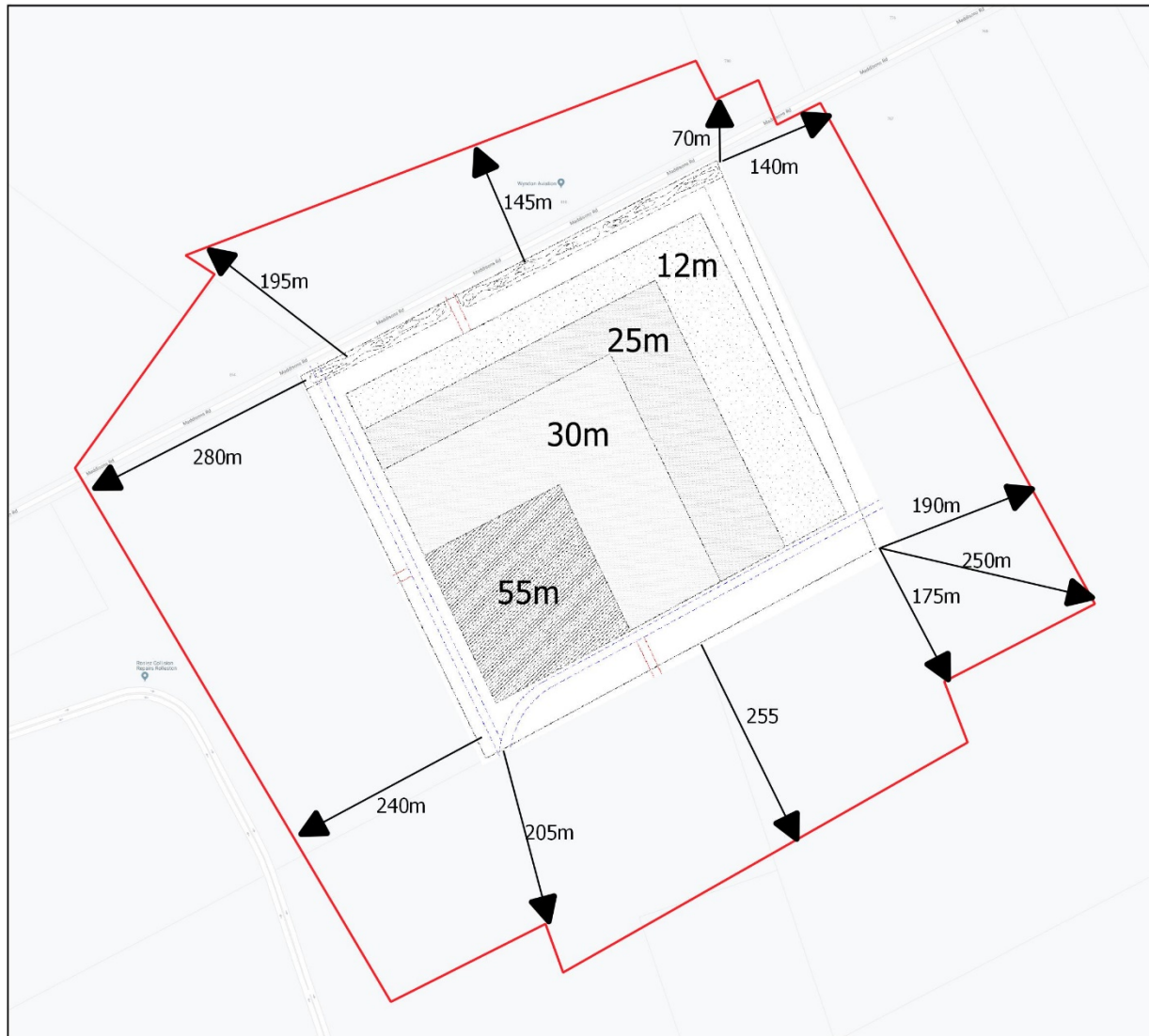
-  30.00
-  35.00
-  40.00
-  45.00
-  50.00
-  55.00
-  60.00
-  65.00
-  70.00
-  75.00

0 100 200 m





Appendix 2 Proposed Noise Control Boundary



Rolleston Dairy Hub

Noise Control Boundary

— Noise Control Boundary

0 100 200 m





Appendix B

Infrastructure Report

27 September 2019

Job No: 62916

Novo Group

279 Montreal Street

Christchurch 8140

ROLLESTON SITE PLANNING CHANGE

Dear Kim,

Executive Summary

A high-level review focused on identifying any fundamental constraints to the development of a dairy site in Rolleston was undertaken by Babbage.

Following the review of the Novo Group Development Plan, the Opus Water Supply Report and the MWH Waster Water Report the following was concluded;

- The proposed Rolleston site Development Plan will enable most types of operational facilities to be built.
- Boundary noise limits need to be considered to ensure they do not limit the selection of plant options or require costly mitigations.
- Based on the reports provided by Novo water supply and stormwater disposal do not appear to constrain a future dairy development.
- There is a 10 l/s trade waste disposal allocation for this area which would need to be taken up. However, if limited to this allocation 10 l/s would constrain the extent of the development. Potential mitigations to this constraint are listed in the body of this letter.
- Power is a risk. As has been done for Water and Wastewater it is recommended a power study is undertaken to ensure supply limits and any future network upgrades are understood.
- There is currently a consented dairy site within the Rolleston area which provides additional confidence to the above.



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Planning

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Land Surveying
Civil Engineering
Environmental Engineering
Geotechnical Engineering
Process & Mechanical Engineering

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Key assumptions made during this assessment were;

- The Opus and MWH Reports provided are current and haven't been superseded by any further evaluations.
- The recommendations outlined in the reports will be implemented as part of the industrial site development.

Background

Babbage was engaged by Novo Group to provide assistance to a planning change application for a potential future dairy site in Rolleston. The scope of the engagement was;

- Review the preliminary Development Plan developed by Novo Group
- Assessment of potential services constraints, in particular;
 - Water Supply
 - Wastewater Discharge
 - Stormwater
 - Power

Assumptions

The following assumptions were made as part of the evaluation;

- The Opus Water Supply Report (2014) provided by Novo Group is still current and hasn't been superseded by any further site evaluations.
- The recommendations outlined in the Opus Water Supply Report (2014) will be implemented as part of the industrial site development.
- The MWH Izone Industrial Site and future Hoskyns Industrial Site Development Wastewater Report (2014) is still current and hasn't been superseded by any further evaluations.

Development Plan Review

A high-level review of the Development Plan drawing was undertaken and assessed against comparable dairy developments Babbage has led.

- The Development Plan that has been mapped out to designate height limits is very broad both in terms of height limits and the areas allocated for each height.
- The locations of each of the height limit zones will not limit the types of expected dairy processing facilities that can be built on this site.
- The access points provide good flexibility to ensure a cohesive and efficient Site Master Plan can be developed.
- For the planning change submission the future operation of a coal fired boiler needs to be considered. Though the submission may not elude to a future boiler, it should not limit the ability for to consent for the operation of a future coal fired boiler.

In summary the development of the most types of operational facilities we would expect to be built can designed within the constraints outlined in the Novo Group Development Plan drawing.

Traffic

The traffic movements will increase over time as the stages of the site development are built. 200 vehicles per day (400 movements) of which 50 vehicles (100 movements) are trucks are reasonable numbers for the initial planning change submission.

Noise

Boundary noise limits is an important factor when developing a dairy site. Mitigations to achieve lower than normal noise limits would incur significant cost during the construction of the facility. As with the approach to the building heights and locations, it is recommended that boundary noise limits are broadly considered to ensure they do not require mitigations over and above what are normally implemented on a dairy processing site.

High Level Services Assessment

Water Supply

The Opus report recommends 3 new wells are bored to deliver 1 l/s/ha of the 178ha industrial site (which the proposed dairy site sits within). Assuming that the development of the land for industrial use follows this recommendation it can be confirmed that;

- The total daily water available to the 27ha dairy site would be 2.33ML per day (assuming allocation is in line with the design basis)
- This volume of water will enable range of options to develop dairy facilities on this site
- Adequately sized water storage tanks will enable peak flows to be managed and a Fire Water reservoir to maintained on site

Wastewater Disposal

The MWH report confirms the following;

- Peak flow capacity of the downstream infrastructure is 75 l/s
- The Izone Industrial Zone allocation of the 75 l/s is 53 l/s
- There is a 10 l/s allocation for the future Hoskyns Road Industrial development
- An additional 10 l/s capacity is available for a future trade waste allocation

On the basis that the trade waste allocation of 10 l/s is taken up the initial development of the site would not be significantly constrained. However, the execution of future stages would be. There are a range of options to work within this constraint to further develop the site. These include;

- Onsite trade waste treatment and re-use (also reduces water take)
- Trade waste treated on site and disposed to neighbouring rural land
- Treated trade waste storage on site to enable discharge during off peak times
- Treatment of trade waste on site to reduce additional load on Pines WWTP
- Upgrade network to enable higher peak flows
- Negotiate to use a portion of the Izone allocation of the peak flow

Each of the above have been implemented on Babbage led developments. The specific solution is depended on a range of factors and would be recommended as part of a full project engineering study in preparation for a Resource Consent.

Power

A dairy development is likely to require a power supply in the order of 4.5MW. This level of power supply is often required to be worked through with local authorities to enable upgrades to the distribution network. In the absence of a power study this is a high-risk item. It is recommended that a power study is undertaken to establish power availability and potential upgrades required to the newtwork.

Stormwater

The MWH report states that it is common in the Rolleston area to discharge SW to ground. It is anticipated that the development will have adequate area to manage SW on site.

Conclusions

Following the review of the Novo Group Development Plan, the Opus Water Supply Report and the MWH Waster Water Report the following can by concluded;

- The proposed Rolleston site and Development Plan will enable most types of operational facilities to be built.
- Boundary noise limits need to be considered to ensure that these do not result in costly mitigations during the design of the site.
- On the basis that the industrial land is developed in accordance with the Opus recommendations, water supply to site is not a constraint.
- 10 l/s trade waste disposal allocation would need to be taken up. The allocation currently available would constrain future expansion of the site however these constraints can be mitigated as outlined.
- Power is often a constraint. It is recommended that a power study is undertaken to ascertain the power available and likely future network upgrades required.
- Stormwater will be able to be managed within the site.
- Dairy sites have previously been consented within the Rolleston area which provides additional confidence to the above.

Dan Parker

Project Manager



Appendix C

Integrated Traffic Assessment



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Transport Assessment

Prepared for

**ROLLESTON
INDUSTRIAL HOLDINGS
LTD**

**Lot 3 DP 52556, Maddisons Road
Rolleston, Selwyn District**

November 2019



Transport Assessment
Prepared for

Rolleston Industrial Holdings Ltd

Lot 3 DP 52556, Maddisons Road
Rolleston, Selwyn District

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Appendices

Appendix 1 Proposed Outline Development Plan

Appendix 2 IPort Road Network

Appendix 3 IPort Traffic Generation Data



Introduction

1. Rolleston Industrial Holdings Ltd has commissioned Novo Group to prepare a Transport Assessment for a Plan Change application to enable the development of a dairy processing facility.
2. This report provides an assessment of the transport aspects of the proposed development. It also describes the transport environment in the vicinity of the site, describes the transport related components of the proposal. It has been prepared broadly in accordance with the Integrated Transportation Assessment Guidelines specified in New Zealand Transport Agency Research report 422, November 2010 and other relevant best practice guides.
3. It is proposed to undertake a Plan Change to enable development of the site at Lot 3 DP 52556 on Maddisons Road as a Dairy Processing Management Area (DPMA). The site will take primary access from within the IPort industrial subdivision and is predicted to generate up to 400 vehicle movements per day.
4. The site location is illustrated in **Figure 1** and a copy of the proposed Outline Development Plan is contained in **Appendix 1**.

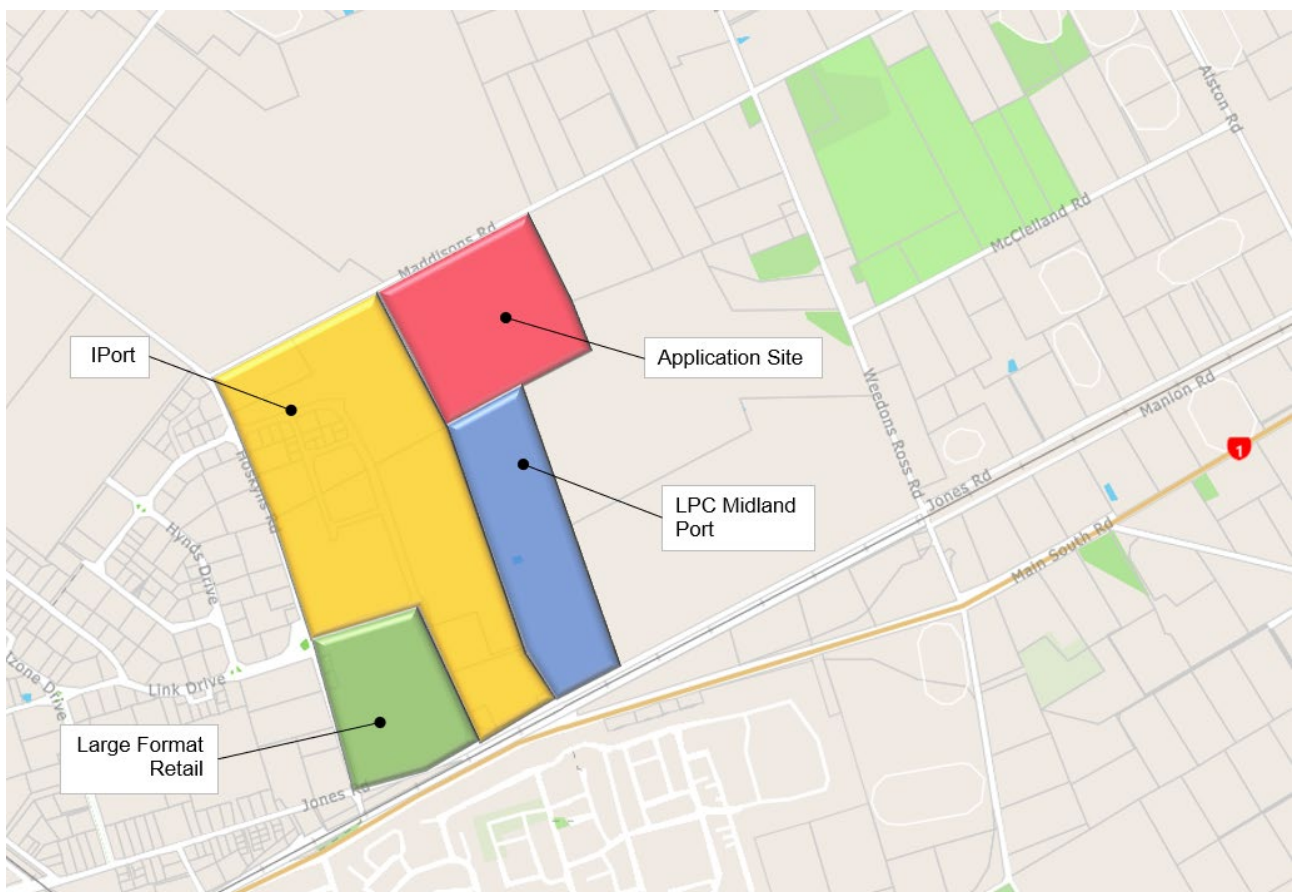


Figure 1: Site Location



Transport Environment

Road Network

5. The Plan Change application site currently has a Rural zoning, although it has also shares boundaries with IPort and the Lyttelton Port Company Midland Port rail hub. These adjacent activities are urban in nature and are zoned Business 2A . Whilst the majority of the IPort road network is complete, there are elements within the immediate vicinity of the application site that are in the process of being designed / approved (as will be discussed later).
6. The following sections provide details of the transport network in the vicinity of the site.

Maddisons Road

7. **Table 1** sets out the transport details of Maddisons Road.

Table 1: Maddisons Road Transport Features

Key Feature or Characteristic	Comment
Road Classification	Local Road
Cross-Section Description	Sealed width of approximately 5.8m accommodating two traffic lanes (one in each direction). Wide grassed berms beyond this of approximately 7.0m width on both sides.
Traffic Volumes	3,000 vehicles per day (from Mobile Road).
Speed	80km/hr
Pedestrian / Cycling Infrastructure	None

Internal Link to IPort

8. Two new road links are proposed from IPort Drive toward the application site (Proposed Roads D and K). Proposed Road L runs parallel to the application site boundary and links these roads. These roads are shown on the subdivision plans included in **Appendix 2** and the details are summarised in **Table 2**.

Table 2: Internal Link

Key Feature or Characteristic	Comment
Road Classification	Local Road
Cross-Section Description	Carriageway width of 12m, assumed to incorporate on-street car parking.
Traffic Volumes	100 to 120 vehicles per hour in the peaks and 700 to 850 vehicles per day ¹ .
Speed	50km/hr
Pedestrian / Cycling Infrastructure	2.0m wide footpath on one side of the road.

¹ Based on traffic generation data from the ITE as set out in **Appendix 3**.



Crash History

9. The NZ Transport Agency Crash Analysis System (CAS) has been reviewed to identify crashes that have been reported outside the application site on Maddisons Road and on IPort Drive within 50m of the proposed access locations. This review was of the most recent five-year period available (September 2014 to September 2019). No crashes were reported within these review parameters.

The Proposal & Current Dairy Processing Management Area Rules

10. It is proposed to provide a Plan Change that enables the establishment of a dairy processing facility at the application site. A copy of the proposed Outline Development Plan is included in **Appendix 1** and the following sets out the transport components of the proposal.
11. In addition, it is proposed to adopt the transport related rules set out in Appendix 26 of the Selwyn District Plan Rural Volume (Dairy Processing Management Area). These are referred to in the following sections.

Traffic Generation

12. The traffic generation of the proposed activity has been estimated by Babbage Consultants Ltd as part of their initial infrastructure review. This was based on their experience of other dairy processing operations. It is estimated that the dairy processing facility would generate 400 vehicle movements per day, of which 100 vehicle movements would be trucks or truck and trailer movements. Novo Group has estimated that potentially 15% of the daily traffic generation could occur in the weekday peak hours, which would be approximately 60 vehicles per hour.
13. It is noted that the above traffic generation is similar to that of the Synlait processing plant at Dunsandel in 2012. The information submitted as part of the Plan Change application for that site suggested a daily traffic generation of 520 vehicles and a peak hour traffic generation of approximately 65 vehicles per hour, which occurred around 18:00². The following were understood to be operational at the site at that time:
 - i. Two milk dryers;
 - ii. Dry stores;
 - iii. Administration offices; and
 - iv. Approximately 135 day shift staff plus 30 night shift staff.
14. The Synlait site overall was 113.6ha and the Plan Change sought to expand the operation. The final development envisaged by the Plan Change would have resulted in 916 vehicle movements per day.
15. The Plan Change site in this application is approximately 27.3ha and using a pro-rata approach to the traffic volumes of the ultimate Synlait development would suggest traffic volumes in the order of 220 vehicle movements per day. This suggests that the 400 vehicle movements per day assumed in this assessment is sufficiently robust.

² Information from the Synlait Plan Change Transportation Assessment prepared by Traffic Design Group (now Stantec).



Parking & Loading

District Plan Rules

16. The Dairy Processing Management Area rules regarding parking require the following:

All vehicle parking and manoeuvring areas shall be located as shown on the Outline Development Plan in Appendix 26A and comply with Appendix 10 and Appendix 26B as to layout and design.

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.

17. The above sets out the permitted location for car parking and manoeuvring (i.e. within the Height Control Area) and the standard for the design of these car parks. This includes the dimensions and formation of the car parking.
18. There is no requirement with regards to the minimum number of car parking or loading spaces. Typically, Rule 4.6.1.4 of the District Plan would require all car parking for an activity in the Rural zones to be accommodated on-site. However, that rule is not applicable to the Dairy Processing Management Area.

Parking Demands

19. The car parking demand at the Plan Change site has been estimated as being in the order of 90 vehicles. This is based on the information provided for the Synlait Dunsandel Plan Change, which identified a demand for 90 vehicles for the 2012 operation, which had 165 staff.
20. The demand for loading is anticipated to be in the order of five trucks at any given time. This is based on there being 50 truck arrivals per day and spreading these across a nominal ten-hour working day.

Site Layout & Access

Vehicle Access Arrangements

21. The Dairy Processing Management Area rules regarding access that require:

All access from a local road shall comply with the design requirements of Appendix 10

22. Appendix 10 of the Rural Volume includes rules with regards to:

- i. The separation of the accesses from intersections;
- ii. Sight distance requirements from vehicle crossings; and
- iii. The design and siting of a vehicle crossing.

23. The Outline Development Plan for the Plan Change indicates primary access to the proposed roads in in the IPort subdivision. Two roads are proposed in the IPort subdivision that link towards the Plan Change site, although it is proposed that access will be to only one of these. The Outline Development Plan allows for either of these roads to be used for access (but not both). Equally, this access could be to Proposed Road L, which links to Proposed Roads D and K.



24. Secondary access is proposed to Maddisons Road. The District Plan Rules state the following regarding secondary accesses:

Secondary access points shown on the Outline Development Plan in Appendix 26A and Appendix 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.

25. It is proposed that the rule be amended to reflect a new Appendix 26C IPort DPMA, with an Outline Development Plan inclusive of the Maddisons Road secondary access. The Maddisons Road secondary access will therefore similarly be available only for farm activities, emergency access and situations where the primary access is temporarily unavailable.
26. An “internal” access is also proposed to the Lyttelton Port Company Midland Port facility. No through access to the wider road network is anticipated for this access, although it would be used to access the rail-sidings.
27. An access to Maddisons Road could be constructed to comply with the requirements of Appendix 10. However, potential access to Proposed Roads D, K and L would likely not comply because of the arrangement of those proposed roads. These are also Urban roads, whereas the requirements of Appendix 10 relate to a Rural environment. The effects of this are discussed later in this report.

Rail Access

28. Access for a rail siding has been included on the Outline Development Plan. This access will link to the Lyttelton Port Company Midland Port facility and provides the ability to transport raw material and product via rail. This will potentially reduce the truck volumes associated with the proposed activity.

Assessment of Effects

29. The key matters for the assessment of transport effects are considered to be as follows:
- i. Parking & Loading: Whether the existing rules adequately provide for the provision and layout of parking and loading at the application site;
 - ii. Access Arrangements: Whether the accesses are anticipated to operate safely and efficiently and whether the existing rules adequately provide for access; and
 - iii. Wider Network Effects: Whether the effects of the proposed activity can be satisfactorily accommodated by the surrounding road network.

Parking & Loading

Parking Provision

30. There is no requirement for any car parking to be provided at the Plan Change site and this is consistent with the other Dairy Processing Management Area sites. However, it is considered to be within the dairy processing facility operator’s best interest to provide on-site car parking and we are not aware of any issues regarding this approach to car parking at the other Dairy Processing Management Area sites.
31. The predicted car parking demand at the site has been estimated as 90 cars. Assuming an area of approximately 30m² per car park leads to an area of 2,700m² required for car parking. This is



approximately 1% of the overall Plan Change area, so it is considered there is ample space to accommodate car parking.

32. Changes will be required to the text of District Plan Rule E26.1.5 (Dairy Processing Management Area – Parking) to include the Plan Change site.

Car Parking Layout

33. The District Plan includes sufficient controls regarding the layout and formation of car parking in Appendix 10 (referred to in Rule E26.1.5) to provide a practical and functional arrangement. No further consideration of this matter is considered necessary.

Loading

34. The District Plan does not include rules regarding the provision or layout of loading spaces for this activity. Again, it is considered to be within the dairy processing facility operator's best interest to provide on-site car parking and we are not aware of any issues regarding this approach to car parking at the other Dairy Processing Management Area sites.
35. It is considered there is more than sufficient area within the Plan Change site to satisfactorily accommodate loading. As such, the effects of this are considered to be acceptable.

Access Arrangements

Proposed Subdivision Access

36. Primary access to the Plan Change site is proposed to be via one of (but not both of) the proposed subdivision roads within IPort. These roads are illustrated in **Figure 2**.

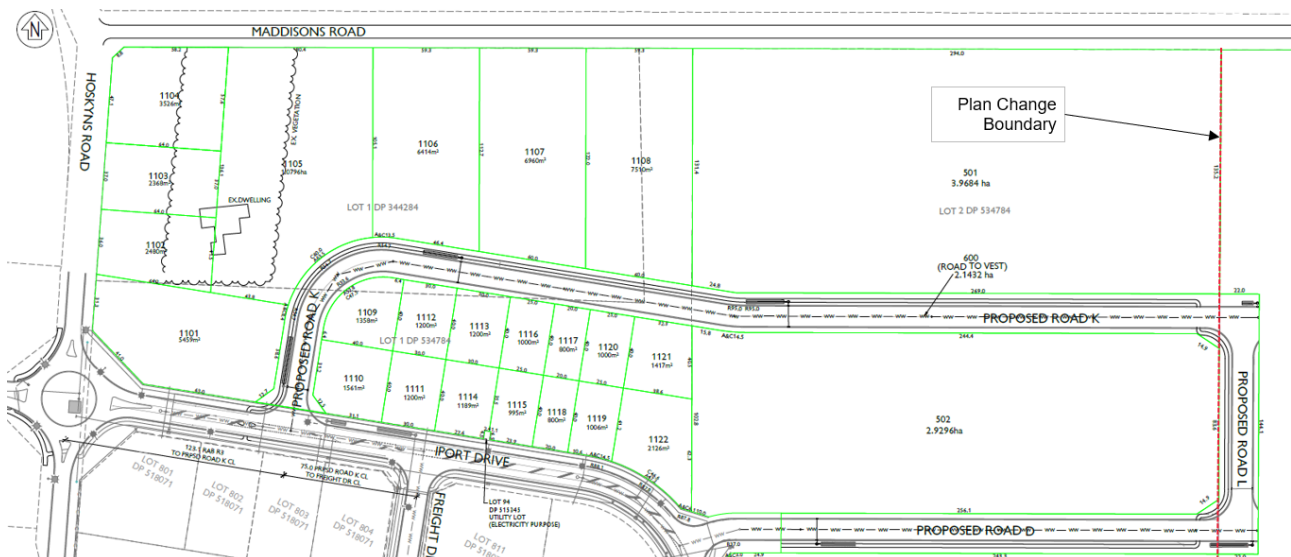


Figure 2: Proposed Subdivision Road Arrangement

37. The road arrangement illustrated in **Figure 2** indicates that Proposed Roads D and K both run direct into the Plan Change site. This is considered to be acceptable and will provide safe and efficient access. The accesses will essentially be at the end of a cul-de-sac so vehicles will not need to give-way to passing traffic. It is also anticipated that vehicles accessing the site would have priority over Proposed



Road L, because of the road alignments. In addition, the visibility out of the access will be good, as drivers are simply looking along a straight segment of road.

38. The alignment of having an access that runs straight into the site means that the access will not be able to comply with Rule E26.1.14, which requires:

All access from a local road shall comply with the design requirements of Appendix 10.

39. The District Plan access arrangement is premised on access being taken from the side of a road. However, the potential access arrangements could have access being a continuation of a road. This non-compliance is Restricted Discretionary with the following matters listed.

a) The effects of any access not shown on the Outline Development Plan 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.

40. An additional assessment matter is considered appropriate for the application site because the above are not considered to satisfactorily address the potential effects associated with the non-compliance. The proposed site access would be in the correct location (as shown on the relevant Outline Development Plan) and access is not taken from a State highway. Equally, the design of the intersection and road are not necessarily applicable, as this is a vehicle crossing / site access.

41. It is recommended that the assessment matters listed under E26.3.7 be amended to include the following additional matter:

d) With regard to the access designs for the Outline Development Plan Appendix 26C, whether the proposed access arrangement will compromise the safety or efficiency of the frontage road.

42. As identified in paragraph 35, the effects of the access that is anticipated are considered to be acceptable. The above alteration to the assessment matters enables this to be appropriately considered at the time of applying for resource consent.

43. An access could also be constructed from Proposed Road L. This again may not comply with the District Plan rules as this would be an urban road, whereas the rules relate to rural roads. The additional assessment matter would enable consideration of the suitability of the proposed access arrangement and this is considered to be an acceptable mechanism for control.

Maddisons Road Access

44. The Maddisons Road access is anticipated to operate efficiently. This is a secondary access and is therefore anticipated to receive minimal use. The traffic volumes on Maddisons Road are low, such that traffic using this access will be able to identify safe gaps in traffic.
45. It is noted that the District Plan Dairy Processing Management Area rules include the following statement regarding secondary accesses, which will need to be updated to include the application site;



Secondary access points shown on the Outline Development Plan in Appendix 26A and Appendix 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.³

46. This access will also be able to be designed in accordance with the requirements of the District Plan. Alternative access arrangements would be subject to the additional assessment matter recommended in paragraph 37.

LPC Midland Port Access

47. The access to the LPC Midland Port site is proposed to be for internal access only. Given it does not take access to the wider road network, it would not be subject to the design requirements of the District Plan. This is considered acceptable as it would be the subject of negotiations between the Plan Change developer and the Lyttelton Port Company.

Rail Access

48. The rail access via the Lyttelton Port Company will need to be designed in accordance with them to confirm that it meets their requirements. The operation of the rail siding along the southern boundary of the Plan Change site will not affect traffic operations.
49. The operation of a rail corridor that runs along the western boundary would require warning devices (such as barriers and lights) to ensure that people entering and exiting the site are aware of the presence of a train. The number of train movements is not anticipated to be high and it is considered unlikely that it will conflict with times of high traffic movements (i.e. staff shift change over). This will ultimately be a management matter for the site operator and the effects are anticipated to be acceptable.

Wider Network Effects

IPort Network

Daily Traffic Volumes

50. The majority of traffic generated by the proposed activity would be to / from the IPort road network via Proposed Road D, K and potentially L. These roads have been designed with a 12m carriageway.
51. NZ Standard 4404 (*Land Development and Subdivision Infrastructure*) suggests that an Industrial Local Road that has an 8.4m wide carriageway (including on-street car parking) can accommodate 2,000 vehicle movements per day. The highest traffic volume (prior to the Plan Change traffic being included) is on Proposed Road K which may accommodate 850 vehicles per day. The proposed traffic generated by the Plan Change development is estimated as being 400 vehicles per day, which leads to a total predicted traffic volume on Proposed Road K of 1,250 vehicles per day. This remains within the limits of NZS4404 and is therefore considered to be acceptable.
52. The traffic volumes on Proposed Roads D and L are lower than those estimated for Proposed Road K. The effects of taking access to these roads are considered to be acceptable given the traffic volumes will be lower and the effects on Proposed Road K were considered to be acceptable.

³ Refer to E26.1.14 of the District Plan Rural volume.



Peak Hour Traffic Volumes

53. With regards to peak hour traffic, we have traffic modelling data of the road network around IPort for a range of scenarios of wider road network connectivity. Whilst the purpose of this modelling was to consider the effects of potential access options to and across State Highway 1, it does include predicted traffic volumes and the IPort Drive / Link Drive intersection with full development of IPort. This modelling indicates the highest volumes predicted on IPort Drive north of the intersection are in the order of 300 vehicles per hour in the peak hours.
54. The peak hour traffic volumes to / from Proposed Road K are 120 vehicles per hour. The proposed Plan Change activity would increase these to 180 vehicles per hour. **Table 3** is an extract from Austroads *Guide To Traffic Management (Part 3 – Traffic Studies)*⁴ that identifies the volumes at which assessment of intersection operation is considered necessary.

Table 3: Intersection Volumes below which Capacity Analysis is Unnecessary

Major Road Type	Major Road Traffic Volume (vph) (IPort Drive)	Minor Road Traffic Volume (vph) (Proposed Road K)
Two Lane	400	250
	500	200
	650	100

55. The predicted traffic volumes at the IPort Drive / Proposed Road K intersection are lower than those set out in **Table 3**, so the operation of this intersection is considered to be acceptable with the proposed Plan Change traffic added to the road network. The operation of the IPort Drive / Proposed Road D intersection would also be acceptable, noting the traffic volumes would be lower still.
56. The safety of these intersections is considered to be acceptable, noting these are new elements of the road network that have / will be undergoing safety audits. Both intersections have right turn bays proposed to provide a safe waiting facility for vehicles turning from IPort Drive. These intersections also have good visibility, noting that the Proposed Road D intersection is on a straight and the Proposed Road K intersection is on the outside of a bend.
57. The safety effects at the Proposed Road K / Proposed Road L intersection and the Proposed Road D / Proposed Road L intersection are also considered to be acceptable. The traffic volumes will be very low in this area and this is a newly designed road network that will have been through a Road Safety Audit process.

Maddisons Road

58. The effects on Maddisons Road are anticipated to be acceptable because of the low volumes predicted to use this access associated with the Plan Change.

Alternate Transport Modes

59. The site is reasonably remote to residential areas, so it is anticipated that walking will not form a significant portion of the mode share for journeys to work. That said, there are footpaths proposed on

⁴ Refer to Table 6.1 of that document.



the surrounding road network so staff will be able to walk to the facilities in the emerging surrounding area.

60. Similarly, the site is not served by passenger transport. It is considered unlikely that staff would use the bus given the lack of facilities. This is consistent with the IPort development.
61. There is potential that staff would cycle to the Plan Change site. It is approximately 2.5km from the centre of Rolleston and this is a comfortable cycling distance. The roads within IPort are sufficiently low volume to accommodate cycles without requiring dedicated provision.

Summary & Conclusion

Summary

62. It is proposed to undertake a Plan Change to enable development of the site at Lot 3 DP 52556 on Maddisons Road as a dairy processing facility. The site will take primary access from within the IPort industrial subdivision, with secondary access to Maddisons Road and a potential internal link to the LPC Midland Port. A potential rail link to the Midland Port is also proposed. The Plan Change activity is predicted to generate up to 400 vehicle movements per day and 60 vehicle movements per hour.
63. Matters associated with car parking and loading have been considered. It is noted there is no requirement for these to be provided, consistent with the existing Dairy Processing Management Area sites. There is more than sufficient space within the site to accommodate car parking and loading and it is within the best interest of the developer to accommodate these demands. As such, this approach is considered to be acceptable.
64. Standards are set out in the District Plan to ensure the car parking arrangement is practical and functional.
65. The access arrangements have been considered and are anticipated to be acceptable. It is noted that the access to the IPort road network is unlikely to comply with the District Plan requirements. The following assessment matter (under E26.3.7) is proposed to enable a suitable assessment of the effects of this non-compliance:

d) With regard to the access designs for the Outline Development Plan Appendix 26C, whether the proposed access arrangement will compromise the safety or efficiency of the frontage road.

66. The effects of the proposed Plan Change activity on the safety and efficiency of the wider transport network have been reviewed and are considered to be acceptable.

Conclusions

67. The transport effects of the proposed Plan Change are considered to be acceptable and less than minor subject to alterations to the District Plan rules as identified in this report (or alternative wording with the same intention).



Appendix 1

Proposed Outline Development Plan



Appendix 2

IPort Road Network



Application for
Subdivision Consent

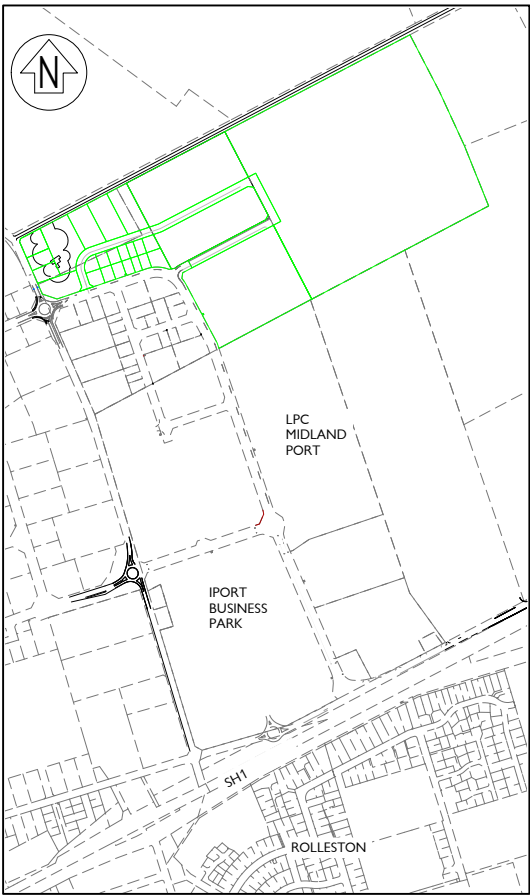
Comprised in CFR CB31A/670,
882713, 882714, 882715, 181742

Total Area : 48.3698 Ha

ZONE : BUSINESS 2A & INNER PLAINS
Selwyn District Plan
(Operative)

NOTE : Areas and dimensions are subject to final survey

THIS PLAN IS PREPARED FOR THE PURPOSE
OF OBTAINING A RESOURCE CONSENT
FROM COUNCIL TO THE DEVELOPMENT
THE INFORMATION CONTAINED HEREON SHOULD
NOT BE USED FOR OTHER PURPOSES



LOCATION DIAGRAM
SCALE 1:10000 [A1]

IPORT BUSINESS PARK

LOT 2 DP 535292
IPORT BUSINESS PARK

LPC MIDLAND PORT

LOT 1 DP 344284

501
3.9684 ha
LOT 2 DP 534784
600
(ROAD TO VEST)
2.1432 ha

502
2.9296ha

504
26.9700 ha
LOT 3 DP 52556

LOT 1 DP 534784

IPORT DRIVE

LOT 94
DP 515345
UTILITY LOT
(ELECTRICITY PURPOSE)

FREIGHT DRIVE

CONTAINER DRIVE

IPORT DRIVE

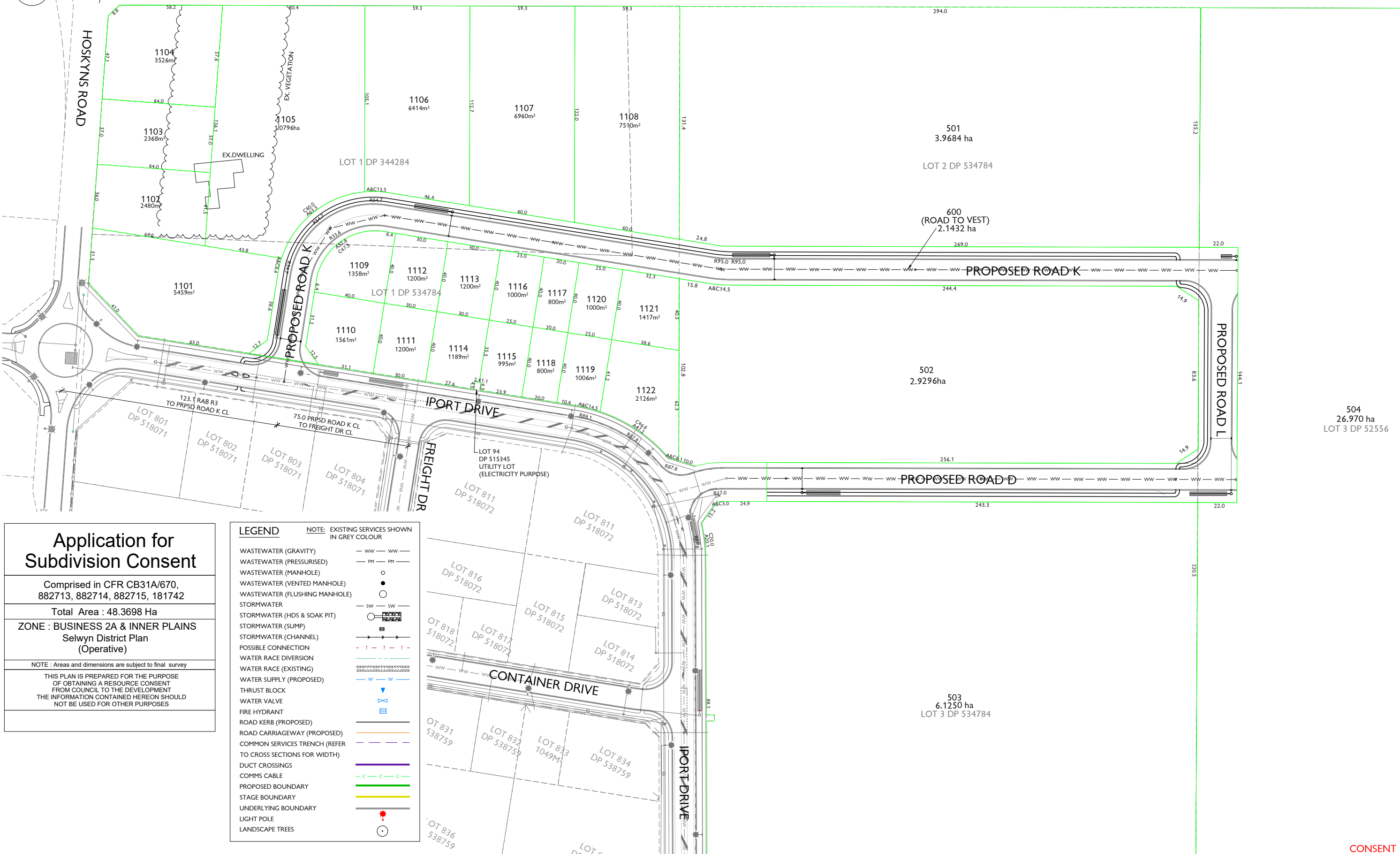
503
6.1250 ha
LOT 3 DP 534784

CONSENT

No.	Amendment	Drawn	Date	Surveyed:	Survey Date:	Name	Date	Client
A	ISSUE FOR CLIENT REVIEW	JZ	23.10.19	-	-	Designed	-	-
B	ISSUE FOR CONSENT APPLICATION	JZ	25.10.2019	Coord System: NZGD2000 Mt Pleasant	-	Drawn	J.ZHOU 22.10.2019	-
				Calibration: -	-	Drng. Chk	T.McLEOD 22.10.2019	-
				Origin of Levels: BM B882	Datum: Lyttelton 1937	Proj. Mgr	T.McLEOD 09.08.2019	-
				SS Pin in Conc. Jones Road	-	Design Review	-	-
				R.L. 55.934m (LINZ DEC 2013)	-	Approved	T.McLEOD 23.10.2019	-



Project Title I PORT INDUSTRIAL DEVELOPMENT JONES ROAD, ROLLESTON	Project No. 450029	Set No. C1	Sht No. 01	Rev B
Drawing Title SUBDIVISION PLAN FOR STAGE 11 OVERVIEW PLAN	Eliot Sinclair surveyors engineers planners			
Scales [A1] 1:1000 [A3] 1:2000				



Application for Subdivision Consent

Comprised in CFR CB31A/670,
882713, 882714, 882715, 181742

Total Area : 48.3698 Ha

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LEGEND

NOTE: EXISTING SERVICES SHOWN
IN GREY COLOUR

WASTEWATER (GRAVITY)	— ww — ww —
WASTEWATER (PRESSURISED)	— PM — PM —
WASTEWATER (MANHOLE)	○
WASTEWATER (VENTED MANHOLE)	○
WASTEWATER (FLUSHING MANHOLE)	○
STORMWATER	— SW — SW —
STORMWATER (HDS & SOAK PIT)	○
STORMWATER (SUMP)	○
STORMWATER (CHANNEL)	—
POSSIBLE CONNECTION	- - - - -
WATER RACE DIVERSION	—
WATER RACE (EXISTING)	—
WATER SUPPLY (PROPOSED)	— w — w —
THRUST BLOCK	—
WATER VALVE	—
FIRE HYDRANT	—
ROAD KERB (PROPOSED)	—
ROAD CARRIAGEWAY (PROPOSED)	—
COMMON SERVICES TRENCH (REFER TO CROSS SECTIONS FOR WIDTH)	—
DUCT CROSSINGS	—
COMMS CABLE	— c — c —
PROPOSED BOUNDARY	—
STAGE BOUNDARY	—
UNDERLYING BOUNDARY	—
LIGHT POLE	—
LANDSCAPE TREES	—

CONSENT

No.	Amendment	Drawn	Date	Surveyed:	Survey Date:	Name	Date	Client
A	ISSUE FOR CLIENT REVIEW	JZ	22.10.2019	Coord System: NZGD2000 Mt Pleasant	-	Designed J.ZHOU	22.10.2019	-
B	ISSUE FOR CONSENT APPLICATION	JZ	25.10.2019	Calibration: -	-	Drawn T.McLEOD	22.10.2019	-
				Origin of Levels: BM B882 SS Pin in Conc. Jones Road R.L. 55.934m (LINZ DEC 2013)	Datum: Lyttelton 1937	Proj. Mgr T.McLEOD	09.08.2019	-
						Design Review	-	-
						Approved T.McLEOD	-	-
							Date	22.10.2019



Project Title
I PORT INDUSTRIAL DEVELOPMENT
JONES ROAD, ROLLESTON

Project No.
450029

Set No.
C1

Sht No.
02

Rev
B

Drawing Title
SUBDIVISION PLAN FOR STAGE 11 BEING
SUBDIVISION OF LOT 1 DP 344284, LOTS 1-3
DP 534784, & LOT 3 DP 52556

Scales
[A1] 1:1000 [A3] 1:2000

Eliot Sinclair
surveyors | engineers | planners

Application for Subdivision Consent

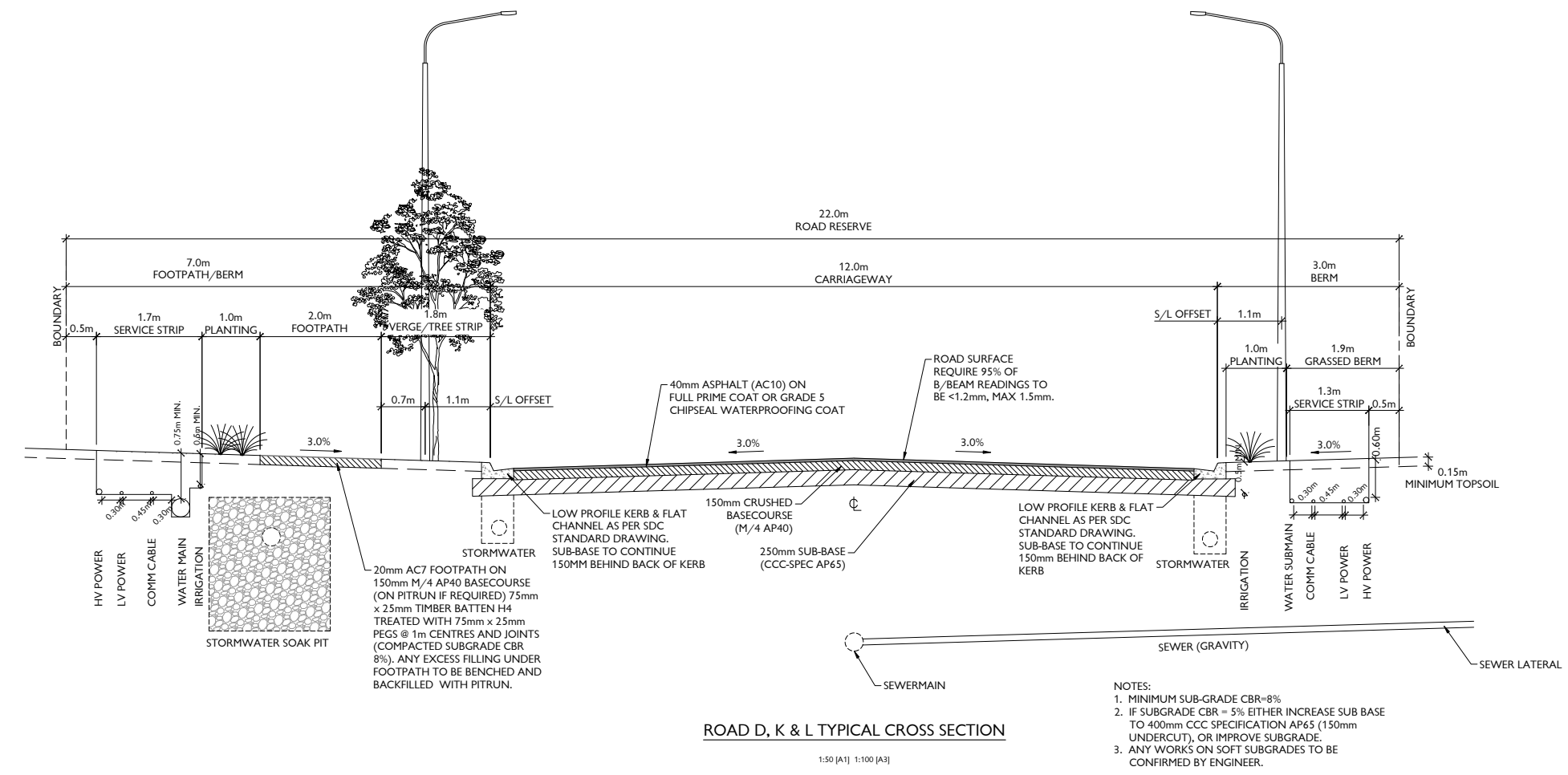
Comprised in CFR CB31A/670,
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Total Area : 48.3698 Ha

ZONE : BUSINESS 2A & INNER PLAINS
Selwyn District Plan
(Operative)

NOTE : Areas and dimensions are subject to final survey

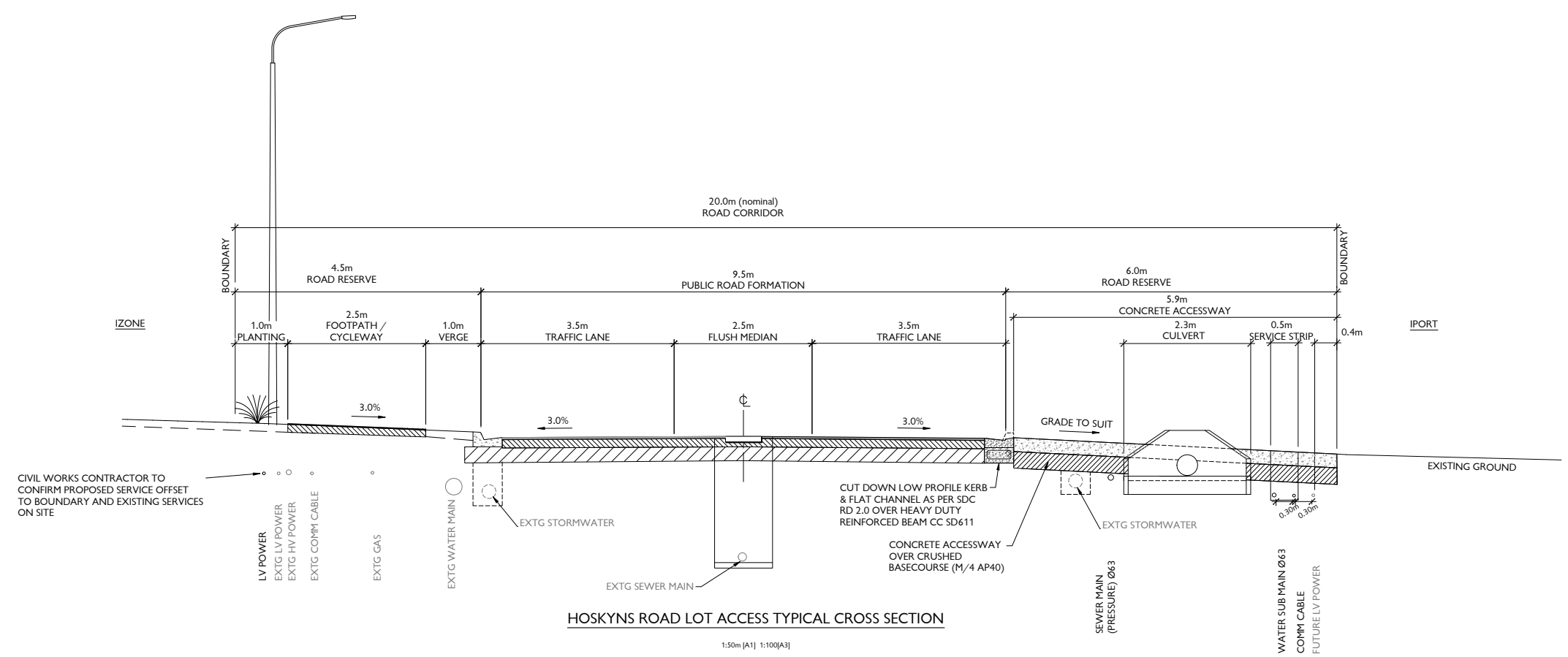
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ROAD D, K & L TYPICAL CROSS SECTION

1:50 [A1] 1:100 [A3]

- NOTES:
1. MINIMUM SUB-GRADE CBR=8%
 2. IF SUBGRADE CBR = 5% EITHER INCREASE SUB BASE TO 400mm CCC SPECIFICATION AP65 (150mm UNDERCUT), OR IMPROVE SUBGRADE.
 3. ANY WORKS ON SOFT SUBGRADES TO BE CONFIRMED BY ENGINEER.




HOSKYN'S ROAD LOT ACCESS TYPICAL CROSS SECTION

1:50m [A1] 1:100[A3]

CONSENT

	No.	Amendment	Drawn	Date	Surveyed:	Survey Date:	Name	Date	Client	
	A	ISSUE FOR CLIENT REVIEW	JZ	24.10.2019	Coord System: NZGD2000 Mt Pleasant		Designed	-		-
	B	ISSUE FOR CONSENT APPLICATION	JZ	25.10.2019			Drawn	J.ZHOU		22.10.2019
					Dr. Chk	T.McLEOD	22.10.2019			
					Calibration: -	Proj. Mgr	T.McLEOD	09.08.2019		
					Origin of Levels: BM B882 SS Pin in Conc. Jones Road R.L. 55.934m (LINZ DEC 2013)	Datum: Lyttelton 1937	Design Review	-		Date
							Approved	-		-
							T.McLEOD	-		Date
								22.10.2019		



I PORT
BUSINESS PARK

Project Title	IPORT INDUSTRIAL DEVELOPMENT JONES ROAD, ROLLESTON	Project No.	450029	Set No.	C1	Sht No.	03	Rev	B
Drawing Title	STAGE 11 SUBDIVISION PLAN TYPICAL ROAD CROSS SECTIONS				Eliot Sinclair surveyors engineers planners				
Scales	AS SHOWN								



Appendix 3

IPort Traffic Generation Data

021-024 - Rolleston Dairy Hub: Background Traffic Generation

Land Use

Northern Block	3.9684 ha	40%
Central Block	2.9296 ha	30%
Southern Block	2.9296 ha	30%
	9.8276 ha	

Distribution

Road K (North)	5.4332
Road D (South)	4.3944
	9.8276

ITE Data - Industrial Park (per Acre)

	Arr	Dep	Total
AM Peak	7.097	1.454	8.55
PM Peak	1.856	6.984	8.84
Daily	31.555	31.555	63.11

Traffic Assignment

Road K (North)

Site Area 5 ha
13.42571 Acre

	Arr	Dep	Total
AM Peak	95	20	115
PM Peak	25	94	119
Daily	424	424	847

Road D (South)

Site Area 4 ha
10.85878 Acre

	Arr	Dep	Total
AM Peak	77	16	93
PM Peak	20	76	96
Daily	343	343	685



Appendix D

Landscape and Visual Impact Assessment



novo group
Planning. Traffic. Development.

Landscape and Visual Effects Assessment

DAIRY PROCESSING MANAGEMENT AREA PLAN CHANGE

prepared for

Rolleston Industrial Developments Ltd

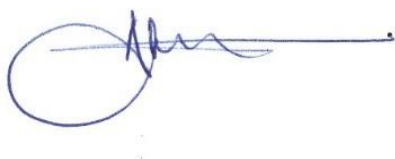
Rolleston

January 2020

Landscape and Visual Effects Assessment (LVA)

Dairy Processing Management Area Plan Change

Document Date:	24/01/2020
Document Version/Status:	Final Draft 1.0
Project Reference:	021024
Project Manager:	Kim Seaton
Prepared by:	Anne Wilkins, Senior Landscape Architect
Reviewed by	Kim Seaton, Senior Planner



Anne Wilkins

Senior Landscape Architect

BLA (Hons) (NZILA Reg.)

Dated

24 January 2020

Rev 1.0

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1.0 Introduction

Purpose

1. The purpose of this report is to assess the landscape and visual (LVA) matters and potential effects resulting from the proposed plan change for the establishment of a Dairy Processing Management Area (DPMA).
2. The components for the visual assessment are as per the proposed height limits within the plan change (as outlined by the Outline Development Plan Appendix B).
3. The structure of the report is:
 - a) To describe and analyse the receiving environment, and the character and amenity of the site to frame the proposal context.
 - b) An assessment will provide the actual and potential effects resulting from the proposed plan change and the development of the DPMA in the future.
 - c) A review of any potential design and mitigation decisions follows to further establish the ability for the proposal to be able to be suitably absorbed into the surrounding environment.

Methodology

4. The assessment of landscape and visual effects was undertaken using best practice methodology undertaken by a Registered Landscape Architect (author). The methodology, including the effects assessment, the rating and the scaling methodology, has been outlined in Appendix C. This aligns qualitative assessment, with the NZILA Landscape Assessment Guidelines (10.2), and other relevant best practice guidelines.
5. The investigation and research reviewed for this report includes the Novo Planning Reports and the Outline Development Plan (ODP), a review of the Babbage Report '62916 – DPMA Letter', a review of the IPort plans and the LPC plans. This was alongside project team meetings over the duration (of the project).
6. Several site visits have been undertaken over the period of the project development, on the 07.08.19, the 13.01.20 and the 18.01.20 respectively. Observations made on the site visits enabled understanding of the general site conditions and character and the relationship of the site to the surrounding topography, buildings and vegetation. The likely visibility of the subject site and the proposed infrastructure was made in order to frame the visual assessment. The review of residential dwellings was done via site visit observations and a desktop study to analyse any potential visual effects. Any site-specific views from private properties would require a visit in order to accurately evaluate exact viewsheds.
7. Photos were taken during visits at key locations for reference and assessment. Additionally, a desktop analysis of site surrounds including GIS, Google Earth and LINZ Maps has been undertaken. These are outlined in the Appendix A.



8. An Outline Development Plan (ODP) has been prepared. This is described in the Section 2 Proposal Details following. The scope of the assessment will include an assessment of the potential visual impacts of the Plan Change i.e. height limits. These height limits are up to 55m (consistent with Appendices E26A and E26B of the Selwyn District Plan). Given the built form is not defined, the height limits will generally be based upon a 'worst-case scenario' i.e. the full extent of the height limit boundary areas as defined by the ODP. No visualisations or montages have been provided for this initial assessment given the high-level nature of the ODP.
9. It is of note that two similar areas in the local vicinity have been developed of a comparable nature and will be referred to as required in the report for context and/or analogy. These sites are the (existing) Fonterra and Synlait DPMA sites, located at Darfield 27km away (Fonterra) and 24 km away in Dunsandel (Synlait) respectively.

2.0 Proposal Details

Plan Change Description

10. The site is located at Lot 3 DP 52556 Maddison's Road and is currently zoned as Rural Inner Plains. The site immediately adjacent; the developing IPort industrial area, is zoned 'Business 2A Zone'. The wider site to the north is Rural Inner Plains with some residential in the vicinity.
11. The Plan Change application is; to include an overlay for a Dairy Processing Management Area for the subject site, with the overall zoning of the site to remain unchanged.
12. The dairy plant requires a set area in order to respond to, and develop with, any future requirements. This is dependent on a range of factors, such as demand, operational requirements, expansion or upgrades. This leaves a degree of ambiguity for the actual appearance of the site over time, which will need to be controlled via height limits within defined areas within the site itself. The ODP (outlined below) has aligned with considerations for layout and design opportunities, including for future development.
13. Generally, the Plan Change will be:
 - a) Subject to the Selwyn District Plan provisions as outlined in the main Plan Change application. These pertain to access, landscaping and (any) mitigation as shaped by the relevant assessments.
 - b) Be of a similar nature that currently applies to the (existing) Fonterra and Synlait DPMA sites (where a similar undertaking has occurred).
 - c) Outline specific amendments to recognise the new IPort site adjacent and the proposed ODP.
14. The key objective is to ensure the DMPA would be seamlessly incorporated into the surrounding areas, diverse as they are, being an alignment with the highly built-up and developed nature of the IPort site and industrial Business Zone area. This also includes allowing for the reinforcement of the wider rural character such as vegetative stands,



shelterbelts and rural features, while including and contributing to the biodiversity of the Rural area.

15. Generally, this can be met through the restrictions in the suggested amendments in the planning application; particularly with controls on elements such as colourations, landscaping and other constraints. These are further detailed in the Mitigation in Section 5.0.

Outline Development Plan

16. The outline development plan (ODP) has been developed for the site to show the potential development that could occur, if an overlay provision is added. It also provides general constraints, restrictions and mitigation areas that would be associated with the site development. The development of the area could include warehouses, dryer towers, drystores, boilers and boiler stacks, office and service buildings, asphalt and/or loose aggregate areas for servicing, roading and servicing as required to function these features.
17. Primary vehicle access to the site for dairy processing purposes has been specified on the west boundary. A potential additional access will be provided to the LPC Midland Port land to the south. A secondary existing vehicle access is to be retained to Maddisons Road. That access will generally be available for farming activity, emergency access and where other road access is temporarily unavailable, only. An area for an extension of the rail siding has been included as part of the plan; which may be developed in the future.
18. The ODP establishes general areas based on the considerations above; no building, layouts or design has been developed. Given the unspecified design of the area, a height limit for each of these areas has been outlined and included in the ODP. This forms the basis for assumption of visual changes in this assessment, in order to assess the proposed Plan Change.
19. Generally, the 'Height Control Zones' have been designed to integrate with the surrounds. The highest structures (outlined as up to 55m) have been concentrated in the southwest area that immediately adjoins the developing IPort site / Business 2A Zone.
20. Landscape and buffer areas have been concentrated on the north and east boundaries alongside the rural-residential areas. Landscaping would be developed in these areas, for screening, softening and integration¹. Primarily, the key means to achieve this will be through the ODP, with the eventual development of a detailed landscape plan.

3.0 The Receiving Environment

Character Context

21. The environment is located within the Canterbury Plains approximately 12km west of Christchurch in an industrial-rural fringe area in the Selwyn District. The landscape is distinctly characterised by this juxtaposition. The site sits immediately between these two landscapes, on the fringe of the industrial Port and LPC sites.

¹ See Mitigation section.



22. The wider rural environment is marked by large flat rectangular paddock patterns segregated by roads, irrigation, channels, swales and/or shelterbelts. This is punctuated by rural residential dwellings, and rural structures such as sheds, as well as supporting infrastructure such as power poles, stormwater systems, minor substations and ancillary features that service the wider rural and Canterbury area.
23. The industrial landscape counteracts this outer rural area. The landscape is made up of existing and expanding industrial, retail and residential blocks. The area is experiencing rapid growth post-earthquake in Christchurch and many of these developments are currently in construction and dynamic. The area contains both large and medium density sites, with the specific buildings, forms and structures depending on the land-use. A number of larger warehouses and industrial facilities lie north of the State Highway linked to the west of the subject site. Ancillary signage, lights, infrastructure and supporting features are also present typical of an industrial environment.
24. The area is heavily associated with movement and transport networks. The landscape contains the key State Highway 1 network running through wider Canterbury to wider areas of the South Island. The major South Island rail network traverses parallel to this network.
25. The closest settlement in the area is the town of Rolleston which lies approximately 1.8km to the south. The nearest subdivision is a residential area, contained by bunding and fences along the State Highway to the north. The Rolleston suburban area is expanding, with larger areas of retail and commercial areas developing to support the residential growth occurring.
26. Overall, the landscape context is especially dynamic; given a) the fringe nature of the landscape, with intersecting land uses and characteristics, b) the rapidly developing future land-uses and expansion, and c) the strong network corridors traversing through the area.

Localised Landscape

27. The landscape to the north is open paddocks and pasture land for farming and rural activities. These are typical Canterbury Plains geometric regular paddocks, delineated by farm fencing and shelterbelts.
28. Vegetation in the area is mostly exotic tree stands, shelterbelts, small pockets of woodland areas and feature planting around rural residential areas. One woodland area lies immediately on the northwestern boundary adjacent to the site, made up predominantly of *Pinus radiata* trees. This woodland is within the IPort development site.
29. The area contains several important movement network corridors in the vicinity. Between the State Highway and Jones Road is the main Canterbury rail corridor, and the Rolleston train station in the near vicinity. There is a busy intersection located at the juncture of SH1, the entrance to Rolleston and Hoskyns Road (access to Maddisons Road).
30. The area is bustling, with industrial developments. There are several large format retail areas on the corner of Jones Road and Roskyns Road. The site is located immediately adjacent to and intersecting with, two key developing areas: IPort and LPC Port. These two sites form important contextual features; for visual impact, context and for the future of the landscape character. These areas details are:



- a) The site is bordered to the west by IPort the industrial and logistics park located on 122 hectares of industrial-zoned land. The development is to support agribusiness and freight movements through the Canterbury region.
- b) To the south is the proposed LPC Midland Port site, which is a transport node for storage for *'receiving, storing and consolidating containers and as a distribution point where containers are transferred between trucks and trains'*².

DPMA / Plan Change Site

- 31. The proposed plan change site is an open flat area, divided into approximately six large paddocks. The coverage is mostly exotic grassland or dug out earth for crops.
- 32. The site is largely a flat and open environment. Mildly undulating terrain exists in the north west area of the site. Vegetation on the site is limited, apart from the mature shelterbelt hedging. The entirety of the southern and the western boundaries are demarked by tall and well-established shelterbelts, running unbroken along each site border. Portions of less established shelterbelts runs along the eastern boundary, starting approximately 175m back from Maddisons Road. The heights of these shelterbelts range from approximately 12 – 15m.
- 33. The built features are minimal, made up of a small collection of farming sheds to the north of the site, approximately 90 metres south of Maddisons Road. The buildings are open style farmsheds, a small silo and another enclosed corrugated shed. There are several rows of established shelterbelts containing these farm sheds.
- 34. Bordering the site is open, wire farm fencing. The site has one split, unsealed vehicle crossing off Maddisons Road. The access is demarked by open steel frame wire gates for entry to the farm sheds and presumably stock control. Other infrastructure is limited, only present in the form of timber power poles traversing across the west of the site.

4.0 Policy Framework

Existing Zone Attributes

- 35. The key objectives are outlined in the Selwyn District Plan, within the Rural Volume, Part B, in the matters outlined by:

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.

- 36. The policies regarding operation and activities in the area outline:

² As per LPC Website



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>
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 <u>and adjacent the Business 2A Zone at Rolleston</u>, 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>

37. The policy recognises the Rural zone as an area where a variety of dairy type activities occur, and to maintain environmental standards that allows for this primary production / other business activities to operate. The Plan Change would allow for a range of activities. The scale of the activity is outside that which is usually anticipated in a rural area. Predominantly, rural activities relate to structures such as haysheds, silos and other ancillary storage structures and sheds. The Plan Change would allow for more extensive activities relating to typically rural industrial type activities and associated structures such as larger warehouses, storage tanks, drystack and boilers and other ancillary requirements for dairy processing. The proximity to a highly built up area of industry and business reflects that of a mixed environment, making this more intensive activity able to be absorbed into a rural environment.
38. The policy relating to amenity values outlines:

Policy B3.4.3	<i>Avoid, remedy or mitigate significant adverse effects of activities on the amenity values of the rural area.</i>
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The amenity of the area is not high, given the lack of wide open, pleasant and / or undisturbed areas³. The area interfaces with a business and industrial area where these values are already adapted. Mitigation, in the form of ODP controls and landscaping, will also act to maintain rural amenity values and integration into the wider landscape character, as far as practicable.

39. The policy relating to buildings outlines:

Policy B3.4.7	<i>Avoid high rise buildings or highly reflective utility structures.</i>
	<i>Explanation and Reasons:</i>
	<i>...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...</i>

³ See landscape character and amenity sections for further details.



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; [or] large structures protruding above rooftops.

The exemption outlines buildings that are specifically for dairy management processing (under a potential DPMA). The DP notes the Inner Plains location may be inappropriate for this use, but the proposed subject site is likely to be able to be absorbed given the adjoining industrial zone; reflected by the proposed planning report amended wording. Conditions / mitigation can be applied to avoid overly reflective structures⁴ and appropriate and suitable signage requirements.

40. The policies regarding setbacks and surrounding areas outlines:

Policy B3.4.17

Ensure buildings and trees do not excessively shade adjoining properties.

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.

41. The buildings will be predominantly higher than any other in the vicinity. However, it is likely shading to existing dwellings will be minimal as given the control of locations of higher buildings. Distance has been considered. The highest built forms in the ODP have been concentrated in the southwest of the site, away from rural-residential properties in the north east. This also moves the higher buildings into the internal areas adjacent to IPort and LPC sites and away from the key local roads; Maddisons Road etc. Buildings that are above 25m will be at least 200 metres away from any rural residential dwelling. The closest dwelling is 100 metres from the north east property boundary on Maddison Road, and there will be no buildings located over 25m located close to this area. This would also minimise impact upon privacy and outlook, though some visual changes are likely to be evident from a distance. The ODP outlines the retention of sections of shelter belts (hedging) to further increase the offset from adjoining properties.

5.0 Assessment of Landscape and Visual Effects

Landscape Character

42. The landscape character is mixed. The rural nature, characterised by the open, expansive pastoral use punctuated by roads, fences and shelterbelts, is located immediately adjacent to the highly developing industrial and business areas. Generally, the industrial use represents the key visual attributes in the west and south, and the rural area is representative to the (wider) north.

⁴ See mitigation section.



43. The rural character is already diminished due to the built-up and developing urban industrial nature of these areas. These are concentrated around the vicinity of the main intersection of State Highway 1, Hoskyns Road and the entrance to the township; Rolleston Drive.
44. Overall the landscape, given its movement towards industrial areas of agribusiness and rural support sites, will largely be appropriate for the DPMA site. This indicates the development can be suitably absorbed into the landscape character over the long-term.

Physical Nature

45. The environment is modified and/or built-up. A rural area is not natural but altered; adapted for stock grazing or crops. Any occurring physical changes will not be to an undisturbed landscape. The nature of the DPMA will, however, increase the physical modifications and require a higher degree of earthworks and therefore change across the site, as compared to the current rural environment. The development will likely require a high-level of servicing and support for its functioning.
46. The physical landscape, given that it is modified farmland with minimal areas of existing vegetation or waterways, has a low to moderate sensitivity to change. The key to ensure low physical effects will be the treatment of features such as runoff, built forms construction measures and long-term functionalities that may have tangible potential [physical] adverse effects. A development that supports low environmental impacts is key in mitigating any cumulative or long-term effects of the physical changes.

Amenity Values

47. Amenity as defined under the Act as “*appreciation of [its] pleasantness, aesthetic coherence and cultural and recreational attributes*”. The aim of maintaining amenity values is to ensure that the DPMA sits as seamlessly and harmoniously into its surroundings as possible.
48. Amenity is mostly derived from the surrounding rural landscapes with primary production areas and a more pleasant outlook on to the distant Plains or geographical features to the north. What existing rural amenity there is, has even now been diminished by the presence of the highway, the industrial areas, developing areas and the heavily built out township and surrounding spaces related to Rolleston. The DMPA will add to the built form of the area versus the spaciousness which would be achieved through retaining open paddocks. However, comparative to the other industrial and business developments in the immediate area, this is likely to have a small impact on the already adapted amenity of the landscape.
49. The resulting impact of the DPMA includes a loss of rural open space. The DPMA will be densely built out, thus reducing the site appearance of expansiveness. The protection of some open spaces on the periphery of the site will act to retain some rural character. This will be of a limited extent, as there is a comparatively minor amount of open space to built form. The addition of built forms and large structures will inevitably detract from views to open spaces and will change the existing amenity. The site being immediately adjacent to future development area mitigates this, as it can be absorbed (into the built-up area) rather than take away from the wider rural plains i.e. fringe effect.



50. The impact of the adjacent existing and future industrial and business areas (particularly the IPort and the LPC Midland Port) is key. Firstly, it impacts the current perception of the area, and secondly it adapts the landscape to be able to 'hold' or absorb changes. The mix of land uses and juxtaposition of existing and future developments means the existing landscape coherency and readability is currently very low.
51. Regarding 'naturalness' in the area; there is very little in the area that is non-modified or not built-up in nature. The area lacks any large areas of open spaces unbroken by features, built forms or roading or transport corridor infrastructure. Similarly, no outstanding features or landscapes are present in the vicinity of the site.
52. Aesthetics are mixed, providing no overriding main descriptive appearance or common thread that is unique to the area. Given the nature of various developments over differing eras and times, the result has been mixed built forms of all materiality, of industrial, residential and rural character. No evident overarching design aesthetic or cohesive appearance exists in the wider area. Amenity in the context of the area is predominately low, or in the least highly inconsistent.
53. The DMPA would be more industrial in appearance than the usual rural aesthetic. The built forms of these environments are typically represented by rural farmsheds, woolsheds, haystacks reaching upwards of 12 -2m heights, and sporadically located across open associated environments, such as paddocks, stock and grazing yards. Currently warehouses, farm sheds and other buildings both rural and industrial are largely in the order of two – three story (generally 15-20m). The ODP outlines a height ranging from 12m to 25m to 30m to 55m height limits in areas within the site. These types of heights are not evident in the existing landscape and will adapt the visual amenity. There are anticipated building heights within the IPort and the storage containers at LPCs Midland Port, which will become more evident over time. The height limit in these locations, as specified for the Business 2A Zone, is 15m for a building and 25m for a structure⁵. The surrounding existing and developing heights will mitigate some of the height differential.

Perceptual and Associative Values

54. The area is dynamic, expanding and evolving, meaning the landscape will be *more susceptible and adaptable to change*. The industrial and large-scale developments emerging and existing in the area, offsets any alterations at the Plan Change site. The association is one of growth and change, meaning any new elements would be easier to absorb.
55. The business zone off Hoskyns Road, the Rolleston intersection and the IPort and LPC are key features that would create perception that large scale industrial features (such as drystocks) are expected in this type of landscape. This diminishes the risk that the DPMA would be out of place or unforeseen.
56. The SDC plan acknowledge sites established for dairy processing activities in the Rural Outer Plains to "*enable the continued and enhanced operation, innovation and development of established dairy plant sites*"⁶. Dairying plants and associations are expected in the Rural landscape, albeit in the Rural Outer Plains at present. An

⁵ A structure being less than 10m² in area. Township Volume, Rule 16.6.2.

⁶ Selwyn District Plan, Rural Volume, Part B, Policy B3.4.5



amendment to Policy B3.4.5 of the Rural Volume is proposed to recognise the proposed DPMA adjacent the Business 2A Zone. The built forms are widely recognisable to a rural environment given their silo like form and would be appreciated as functioning rural and rural industrial elements. Though the scale of the buildings could be considerably larger and more dominant than other rural buildings in the vicinity.

57. The overriding character is diverse, intersecting the areas rural and industrial aesthetics and characteristics. There is a distinct transitional area where the character changes from industrial / commercial to rural; and the DPMA lies within this transitional area. A DPMA is *a suitable land use appropriate for this bridged area* given its connection to both the surrounding rural area and the required proximity to key connection corridors and industrial infrastructure. The DPMA features directly link to the environment in which it is located, and would also aesthetically align with both the agribusiness, and similarly the rural landscape.
58. Association to similar facilities in the area offsets the potential effects as the activity is correlated with the landscape. There is an association of existing rural and industrial activities. Additionally, there are two DMPAs in the wider vicinity, albeit they are located approximately 25km away from the subject site. These are not within the direct view spectrum but do form part of the wider landscape fabric i.e. a known entity. Comparatively, these sites are much larger, at 680 and 187 hectares, to the 27-hectare site of this proposal.

Key Viewsheds and Audiences

59. Due to the potential height limits outlined in the ODP, the visual range for viewing audiences is large and varied. Views are generally from either business sites, residential or rural-residential dwellings or from roads. The visual audiences can be grouped into:

a) Those within the immediate surrounding areas, with direct or indirect views onto the subject site or some or all of the buildings associated with a potential DPMA:

- i) Rural-residential dwellings off Maddison Road and off surrounding local roads in the vicinity including Jones Road, Weedons Ross Road and Hoskyns Road.
- ii) Residential dwellings in Rolleston.
- iii) Transient users along local road, specifically SH1 and Maddisons Road, including railway users.
- iv) Recreational user groups, specifically Weedons Reserve.
- v) Industrial users in existing development areas to west and south.

b) Those at wider and distant surrounding areas, with potential views to the subject site and/or (likely +35m – 55m height) buildings associated with the DPMA:

- i) Rural and residential groups to the north including West Melton and surrounds.
- ii) Rural and residential properties to the east including Templeton, Prebbleton and wider Christchurch.



- iii) Recreation, rural and residential groups at the Port Hills, Tai Tapu and other hilly areas to the south.

Visibility Analysis and Influences

- 60. The structures associated with a DPMA are likely to be highly visible given two factors; their height and their bulk. Visibility, however, does not necessarily directly relate to an adverse effect, if the structures can be suitably placed, absorbed and deemed appropriate for their location. The proposed potential additional height and bulk will provide a clear visual counterpoint to the lower levels of the surrounding rural residential backdrop. At a maximum potential height of up to 55 metres, these structures will be very visible. To the south the built-up nature of the business and industrial areas will significantly offset this as large structures, buildings, warehouses and the shipping containers of the LPC site will act to counterbalance the height of the DPMA elements.
- 61. The prominence of the DMPA features would also diminish with distance. Distance, when paired with atmospheric and other conditional factors (cloud etc.) is a mitigating factor. Foreground views, such as vegetation or other buildings, would additionally screen and interrupt direct views.
- 62. Many audiences are in transit, translating to short-term viewing. This is namely those traversing down the state highway, the local and arterial route roads and railways, as well as the surrounding rural roads linking through to the south or inland areas. Also, the short-term temporary views from those visitors, employees, or other, of the business and industrial areas in the vicinity. Broadly speaking, the visual impact of transient views is generally lowered, given it is at a temporal scale i.e. only for a 'passing time'. There are a broad range of travellers going through SH1, being both visitors, locals and tourists, so the viewing audiences from these locations could be very broad.

Visual Impacts

Rural-residential dwellings; Maddisons Road area⁷

- 63. There are rural-residential dwellings in the vicinity, located mainly to the north / north-east. There are approximately 18 – 20 dwellings within 1km of the subject site. The area in closest proximity is concentrated to the west in a small 'pocket' of lifestyle / rural residential dwellings to the north east of the site off Maddisons Road. There are approximately 14 dwellings which are located off the intersection of Weedons Ross Road (721 through to 810 Maddisons Road) the closest being approximately 160 metres from the eastern boundary. Wyndom Aviation site is directly north across from the site, which is setback and relatively screened from the street.
- 64. There is a (new) house being built directly across the road from the subject site. As the house is newly established, there is no existing buffering or screening in place⁸ along the southern boundary that would prevent direct views. Some low-level earth bunding to the

⁷ And other local roads as listed.

⁸ As observed at the most recent site visit January 2020.



south of the house, has been established presumably to create future buffering from the road.

65. Very few of the other rural residential dwellings have direct views onto the site. Many of these properties have established landscaping, trees and fencing preventing any wide sweeping views. However, the introduction of 35 – 55m vertical heights may be dominant and protrude over and above some of this vegetation or screening, resulting in a visual change.
66. Views across rural landscapes, meaning open expansive pasture areas, are only evident to the north. Views south already have evident interruptions to the skyline with existing buildings. Effectively the open space has been already been disrupted due to the prominent structures of the LPC and Industrial IPort. However, it is of note that areas of the LPC and Iport are largely screened from this residential area by tree stands and shelterbelts, some vegetation of which are within the subject site.
67. Existing mitigating factors for the proposed DPMA include:
 - i) The backdrop of the built-up areas being the industrial areas; though the containers and buildings are mostly screened via existing vegetation.
 - ii) Rural residential existing landscaping and gardens that act to screen direct views out to the wider rural landscape, paired with the orientation and internal setback, typical of rural-residential houses.
68. The visual impact, resulting from the introduction of height and bulk of built forms, for rural residential properties down Maddisons Road, would be **moderate – high**. The visual impact on the properties directly across or adjacent to the site are likely to be **high**, prior to any established screening or buffering. Landscaping mitigation would screen and soften the northern and eastern boundaries of the site, so it is likely that any impact **could be reduced over time**. For other wider rural-residential areas, the impact is likely to be lessened as changes are offset by foreground rural ‘open’ areas and distance, resulting in a **moderate** impact.

Residential dwellings; Rolleston

69. Rolleston is bordered in the north by a large timber fence, earth bunding and thick planting. This was formed at the time of establishing the residential subdivision, in order to contain, encompass the town and provide acoustic screening for residential dwellings. The importance of this, is that it has resulted in a well-established separation and thick screening from areas, and subsequently views, to the north. Additionally, the landscape of Rolleston is very flat with no real contrast in elevation, further limiting views to the north.
70. The introduction of a much larger (built form) height could interrupt the skyline. Like the rural residential properties, visible built form (at heights +35m) could extrude upwards beyond the existing screening. However, this will be experienced at distance, as the closest dwelling is at least 1.3 km⁹ away, as well as being viewed across substantial vegetation and other buildings and the LPC site.

⁹ As demarked from the southern boundary of the site.



71. The foreground is already very highly developed. The nature of the industrial area is built-up with large warehouses, specifically, the areas of 4x high 'stacked' shipping containers at the LPC site, and the large warehouses at the IPort site. For any direct or indirect views to the DPMA elements, these will be experienced in the context of the already highly modified and developed industrial area (as outlined in the landscape character and amenity assessment).
72. Views to adjacent geographical features are limited from Rolleston. The nature of the Rolleston development is inward facing and not out towards the wider northern rural landscape. Views to the distant hills and South Island mountain range(s) is not particularly evident as the orientation of most dwellings and commercial / retail spaces are centrally focused. As a result, horizon / skyline interruptions are unlikely as views to the north are very minimal.
73. Existing potential mitigating factors include:
- i) The future development areas and the industrial character of the area immediately adjacent acts to 'absorb' any changes.
 - ii) The highly evident development of buildings and ancillary features adjacent to the site and within Rolleston. The large scale of shipping containers at LPC; acting as a break / screen.
 - iii) The dynamic landscape that is being highly modified and developing.
 - iv) The orientation of dwellings / Rolleston being largely internalised and not outwards towards the north.
 - v) Well established screening, vegetation, earth bunding and fencing along the border of Rolleston.
74. Given the range of existing mitigating factors, the visual effects are **low-moderate**.

Local Roads; SH1 etc.¹⁰

75. There are many roads in the vicinity of the works. Roads bordering the site area, are Jones Road (Main South Road), Maddisons Road, Weedons Ross Road, and Hoskyns Road. Other major roads in the vicinity include the key State Highway 1, Rolleston Drive, Newtons Road, West Melton Road, Railway Road and Wards Road.
76. Traversing either west to east, or vice versa, down SH1, views to the site will be evident (within 1.5km at closest) to the receptor. Speeds along this road are up to 100km in areas, meaning any visibility would be fleeting while moving at considerable speeds. There is a 'pause point' at the intersection at the entrance to Rolleston township. However, there are many built elements, such as the railway tracks and associated infrastructure, the industrial area and the IPort, that act to counteract any visual impact from this intersection.
77. The new motorway changes are currently underway adding to the dynamic nature of the changing landscape. The new overbridge located to the south of Rolleston, traverses at a

¹⁰ As outlined in the following sections



higher elevation to that of the existing flat motorway meaning elevated views down onto the site could be evident. When moving at speed across the overbridge, these will be experienced for only a short time.

78. Views to the wider hills and Southern Alps mountains are evident, particularly on clear days. The distant geographical features form part of the experience of the Canterbury Plains. Visual interruption in the form of dominant built forms would act to interrupt these views and reduce scenic value. Positively, the DPMA subject site is 'attached' to an adjacent industrial area, meaning any built forms will be associated with the industrial area, rather than standing out distinctly on the horizon line in the middle of flat open rural environment. The adjacent business industrial area can effectively absorb the proposed building height as the area will form one 'break' in the wider landscape. This is generally preferred to the DPMA standing out as a solo element, amongst an uninterrupted landscape.
79. Any removal of sections of shelter belts along the southern boundary to allow for the rail siding and access, may mean direct views through to buildings, meaning the potential for more obvious and direct views through to the site. The ODP outlines sections that could be removed and views adjacent to these areas would have views through to the subject site.
80. Existing potential mitigating factors includes:
 - i) The speed at which views are experienced, mostly upwards of 80km.
 - ii) The existing built-up infrastructure in the area that would offset DPMA built forms.
 - iii) The containers at LPC are a large dominant visual element, particularly from the State Highway. These also form a backdrop to the north and the south from surrounding local roads.
 - iv) Tall established shelter belts along the boundaries of the site.
 - v) Transient views, and exposure to the (potential) view is temporary only. This generally lessens the impact, compared to the permanent 'fixed' nature of views from dwellings.
81. Experienced at speed and temporarily, the DPMA is likely to be able to be absorbed into the character of the industrial area adjacent. The effects upon road users are **moderate**.

Recreational area; Weedons Reserve

82. The Weedons Reserve is situated off the intersection of Weedons Ross Road and Maddisons Road. It contains a golf course, clubrooms, playground, a dog park and a tennis court amongst several other pocket park areas that are ancillary to the larger golf course.
83. Weedons School is located at 135 Weedons Ross Road across from the Reserve, as well as a cemetery located at 179, at the intersection of Maddisons Road. Limited visual impacts are anticipated for these sites, given existing surrounding vegetation and their nature i.e. limited / temporary use only. For the purposes of this assessment, given they are adjacent to and within 1km of the site, have been included in the spectrum of recreational uses (though not typically outlined as such).



84. The existing potential mitigating factors includes:
- i) The landscape is very well screened with vegetation and large tree copses to the west. The views to the site are likely to be very minimal, if any.
 - ii) The user groups are only party to any apparent pocketed views for a limited time¹¹.
 - iii) The landscape is not pristine and does not rely on wider associated rural landscape values to enhance the recreational use i.e. views out to the wider surrounds and / or rural landscape do not make up the 'pleasantness' of the reserve.
85. The recreational areas are used by a limited scope of groups, that are temporary audiences only. The anticipated effects on these areas are **low**.

Industrial Areas

86. The nature of the visual audience at the industrial area is transient, being staff, employees and visitors that will be exposed to views for the short term. This is paired with the expectation of industrial features within the area. Effectively, receptors are already within a highly developed landscape being largely visually cluttered, and built-up. The visual amenity is already minimal, such is the nature of the existing and future industrial area.
87. The existing potential mitigating factors includes:
- iv) The landscape is modified and is industrial in nature.
 - v) Viewing audience is transient, only experiencing views for a short period of time.
88. The nature of the industrial area, being modified developed and highly built out, means any visual impact to this area is significantly reduced, and the likely visual effects would be **low**.

Potential Visual Impacts on Wider Areas

89. For rural-residential areas further north the retention of existing large areas of rural landscape and open paddocks will buffer the site. Some height / built form may protrude upwards and be visible to some dwellings in the wider area, but distance, existing vegetation and offset in the form of surrounding buildings, will largely mitigate this.
90. Areas in Christchurch with views to the site will be limited given the generally flat and low-lying nature of the town. Skirting areas such as Hornby and Prebbleton could be exposed to broken views. This is likely to be minimal given the nature of the flat landscape i.e. these areas are located on the same ground plane, and at the same level, as the subject. The residential / commercial / industrial activities at Templeton also act to buffer the site. Views from Templeton will be very limited in scope give the distance – upwards of 7km – and the expansive landscapes in the fore and mid ground buffering the site.
91. Views from the very far north parts of the Malvern Hills, specifically that have recreational areas such as the walks, hikes and ski fields, could occur. Again, distance and offset from one another will be largely mitigating. Views to the (closer) Darfield Fonterra Dairy site will

¹¹ This could pertain to several hours depending on use; i.e. school room or golf course could be for more extended hours.



be more evident in the foreground. Cumulative effects could occur; where a broad spectrum of these larger dairy management plants could be visible at once i.e. Fonterra and (potentially) the subject site.

92. Views from the wider Port Hills areas to the south will be limited. The orientation of occupied areas is north and there could be oblique views to the wider Canterbury Plains from sections of the hills in Tai Tapu and Landsdowne. Distance will be a major mitigating factor being almost 20 kilometres away from the subject site.
93. The existing potential mitigating factors includes:
 - i) Distance, at a minimum will be upwards of 7 kilometres.
 - ii) Flat landscape that means views 'down' are not readily available and any existing vertical elements screen potential views or at the very least break up views.
 - iii) The existing built-up infrastructure, Templeton, and other ancillary towns, in immediately surrounding areas.
 - iv) Multitude of various breaks, interruptions, and various screening in the foreground and mid ground.

6.0 Design and Mitigation

94. The ODP layout has been pre-emptively developed with regard to possible areas for mitigation and with built forms situated in order to lessen any potential adverse effects, i.e. the overall higher height limits are concentrated closer to the adjacent IPort and LPC sites so that the DPMA built forms can be better absorbed.
95. Landscaping is appropriate for the site and is recommended to ensure an integration to the surrounding environment. For the most part the key for landscaping is screening. Furthermore, the inclusion of planting meets the requirements of the District Plan; supporting 'increasing general biodiversity in the rural environment'.
96. Landscaping does not provide immediate screening as any vegetative planting will take time to establish. Therefore, the design and implementation of any landscaping is encouraged as soon as practicable to establish boundary screening prior to the future development of the DMPA. This aligns with a more considerate approach for a comprehensive landscape development that evolves interactively rather than as a reaction to built development. This will give time for the planting to establish and mature, to be at a suitable scale and height for effective medium – long term mitigation.
97. The ODP aims to provide for a well-balanced density at the site. This would mean grouping of buildings where possible rather than spreading out of forms; this considered and legible design through appropriate dispersion or grouping is supported i.e. streamlining.
98. Protection of the existing landscaping, specifically along external boundaries, is recommended where possible in order to maintain visual coherence and character. This will also provide existing screening, when the development of the DPMA occurs. It is recommended that a focus on the retention of the shelterbelts along the southeast



boundary, which provides a visual break between the adjacent site and the wider road corridor (State Highway). This is notwithstanding the removal required for the proposed rail and road links necessary for the proposal.

Recommendations

- a) An adoption of a landscape plan for the site which would:
 - i) Outline landscape plant palettes as well as species and heights.
 - ii) Plant palettes that would reflect existing and future vegetative patterns present in the area, to allow for integration to surrounding landscapes i.e. the new planting at the IPort development includes streetscape planting of rows of Totara trees and native areas of vegetation on bunding, and the rural existing shelterbelts and mature trees.
 - iii) At least 20m wide roadside buffering area with earth bunding to be included along the Maddisons Road boundary.
 - iv) Have a concentration of new planting along the northern and eastern boundaries alongside the rural residential areas.
 - v) Retention of shelterbelts along the external boundary of the site, where possible. Where access for vehicle and rail siding is required, the cut back of shelterbelts be minimised as much as possible.
 - vi) Counterbalance the bulk of the DPMA (elements) with vegetation i.e. planting that would be of a sufficient height to screen.
- b) Avoid building domination by managing placement and location (height limits and controls in the ODP). The SDP Policy B3.4.7 outlines avoidance of highly reflective structures. An LRV (Light Reflectivity Value) outline and colour scheme spectrum on buildings should be considered for reflectivity limits and blending to surrounding areas i.e. no bright, intrusive colours.
- c) Apply the intentions of the ODP.

7.0 Summary

- 99. Landscape character is varied, given the mix of environments and land uses. The subject site is on a fringe area, bridging between business, residential and rural environments, additionally influenced by the strong presence of the state highway road and the rail corridors.
- 100. Amenity values are limited to some areas of rural open space, over all being low due to the complex nature of the intercepting land uses; agribusiness, rural, residential and transport corridors. The area is not pristine or unmodified. Perceptive and associative values of the place are an actively developing and dynamic landscape that is partial to change. This acts to absorb any landscape adaptations at the DPMA site.



101. Visibility is potentially very high. The visual audience could be very extensive given the height and bulk of the proposed DPMA, and the extended visual range that this pertains to. The effects are likely to be varied, depending on where the visual receptor is located, and the type of audience are i.e. transient or fixed. Fixed views are limited to the residential and rural residential areas sparsely located in close vicinity to the subject site.
102. The potential adverse visual effects are likely to be highest on rural residential areas to the north / east on Maddisons. Higher effects in the short term are likely to be lessened over time with the establishment of landscaping and buffering along boundaries. Mitigation, such as landscaping and built form controls, could further alleviate any potential visual impacts.
103. Future development and the immediately adjacent IPort and LPC sites act as a major offsetting element. A DPMA is a suitable land use, that can be appropriately absorbed, with mitigation, into this landscape. This is predominantly given the DPMA connection to both the surrounding rural area, the transport corridors and the expanding industrial area.



Appendix 1

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FIGURE 1: Site Location and Context



FIGURE 2: Site adjacent to IPort and LPC Midland Port development context to the west



FIGURE 3: Example of Existing (DPMA) Area
Development and Built forms at Fonterra and Synlait - comparative study for built form coverage



FIGURE 4: Rural residential properties in the vicinity of the subject site
Maddisons Road dwellings (and properties numbers) shown. Located in the same rural block or in close(est) vicinity to the subject site.



FIGURE 5: Photo Locations and References
Circle shown at 1km mark for reference of proximity



FIGURE 6: LPC Midland Port site existing containers



FIGURE 7: View east towards subject site from LPC Midland Port site



FIGURE 8: View east towards subject site from IPort Drive Road
Development shown in foreground. Shelterbelt within subject site shown in background.





FIGURE 9: View north from Johns Road across LPC site
Rail siding entering LPC site from Johns Road - example of rail siding extension that could be present at the DPMA site. Containers in foreground (site not visible). Height from DPMA will probably emerge if built up to heights of 25-55m



FIGURE 10: View north from within entrance to Weedons Reserve
Thick vegetation shown along the western boundary shown,. Also shown the Weedons Reserve golf club building.



FIGURE 11: View northwest from Weedons Ross Road
Open space and rural paddocks across to subject site with shelterbelts.





FIGURE 12: View south directly adjacent to subject site from Maddisons Road



FIGURE 13: View east from Maddison Road

(New) rural residential property shown situated across from the subject site. Farmshed shown east of subject site.

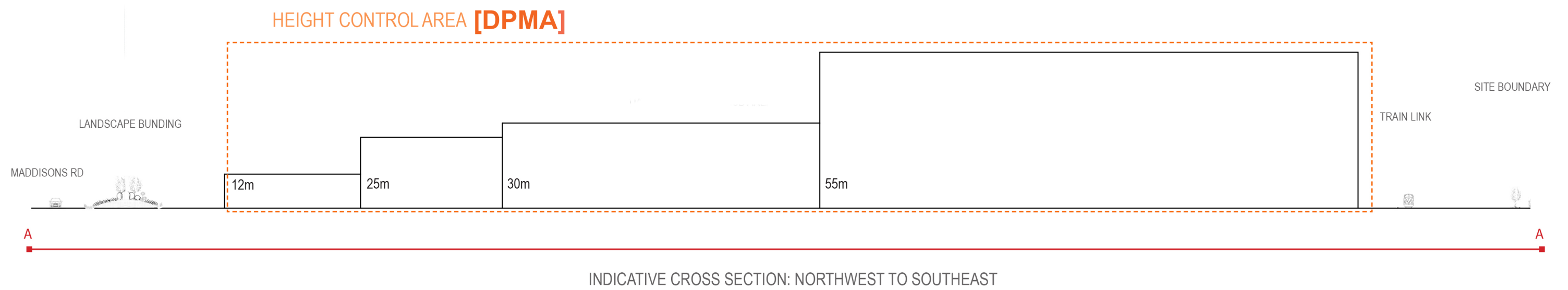
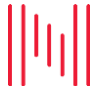


FIGURE 14: Built form analysis and height comparison



















FIGURE 15: Example of mitigation planting / landscape buffering
20-metre-wide landscape bunding with planting shown



Appendix 2

Outline Development Plan References

KEY:

-  Site Boundary
-  Dairy Processing Management Area (DPMA)
-  Rural Buffer Area
-  Height Control Area (Note 1)
-  12m Building Height
-  25m Building Height
-  35m Building Height
-  55m Building Height
-  Noise Control Boundary
-  Rail Siding
-  Primary Access
-  Secondary Access
-  Landscape Bunding (Note 2)
-  Screen Planting
-  Retention of Existing Shelterbelts
-  Potential Removal of Area of Shelterbelt (Note 3)

Notes:
(1) The Height Control Area includes all buildings associated with milk processing and storage activities, as well as all vehicle parking and manoeuvring areas.
(2) Landscape bunding height a minimum of 2m high and is to include planting
(3) Primary access within the range as shown (depending on final location of the IPort Road). The shelterbelt within this area to be removed to the extent required to allow for safe access.

ROLLESTON DAIRY MANAGEMENT
PROCESSING AREA (DPMA)

OUTLINE DEVELOPMENT PLAN

DRAWING STATUS
FINAL DRAFT

REVISION
10 [23.01.20]

A

STAGE CONSENT	DRAWN
SCALE 1:4000 @ A3	DATE 23.01.20
JOB NO. 021024	DWG NO. DPMA-DRG-LA-100-A





Appendix 3

Methodology



Table One: Effects Analysis

Pigeon Bay Criteria	Effect in Application	Meaning
i) Natural Science	Physical / Biophysical Effects	<i>Those tangible effects on landforms and vegetation resulting from the Project. It includes effects on existing properties in the direct landscape and adjacent environments.</i>
iv) Transient Values		<i>The physical effects also relate to short term and long-term cumulative effects over time.</i> <i>The transient values: occasional presence of wildlife; or its values at certain times of the day or of the year</i>
ii) Legibility Values	Perceptual or Sensory Effects	<i>Effects on people's perceptions of landscape including visual and aesthetic qualities like visual coherence and legibility in the landscape that the proposed site currently inhabits, and the community it is adjacent to.</i>
vi) Shared and Recognised Values	Amenity Effects	<i>"Those natural or physical qualities and characteristics of an area that contribute to people's appreciation of its pleasantness, aesthetic coherence, and cultural and recreational attributes" (s7 RMA). The criteria are used to define amenity values including aspects such as a sense of spaciousness (wide open spaces), privacy, quietness and absence of traffic and bustle, an environment relatively uncluttered by structures and artificial features, etc.¹</i>
v) Tangata Whenua Values		
vii) Historic Values	Associative Effects	<i>Human connotation with a place or a landscape. Including spiritual, cultural or social associations.</i>
iii) Aesthetic Values	Visibility analysis and influences	<i>The physical orientation and visibility, including fixed views from the properties in the vicinity, the view from any recreational areas, and the transitional views by various road users. and the distance of the proposal from key viewpoints.</i>
	Nature, audience and sensitivity	<i>Being that of the viewing location (orientation of view; public or private locations) and that of the viewing audience (e.g. homeowners and recreationalists) on a per viewpoint basis. Considers the overall scale and bulk of the proposal in relation to the surrounding fabric, and character and existing amenity values.</i>

¹ Goodman, de Lambert, Dawson, McMahon & Rackham (2000). *Impact of development on rural landscape values*. Ministry for the Environment.



Table Two: Landscape and Visual Effects Rating Scale

Relation to Planning Rating	Rating	Description
Less than minor	Negligible	<ul style="list-style-type: none"> Effects are not present. The assessment of a “negligible” level of impact is usually based on distance.
	Very Low	<ul style="list-style-type: none"> Effects are acceptable. Does not require mitigation.
	Low	<ul style="list-style-type: none"> Effects are minimal. Unlikely to require mitigation
Minor	Moderate	<ul style="list-style-type: none"> Effects are apparent and could be cumulative. Mitigated to an appropriate level.
More than minor	High	<ul style="list-style-type: none"> Effects are distinct in nature and likely to be cumulative. The potential for additional mitigation to reduce effects to a lower degree.
	Very High	<ul style="list-style-type: none"> Effects are very distinct. Mitigation is unlikely to reduce the degree of effect to any discernible degree.
	Extreme	<ul style="list-style-type: none"> Effects are unacceptable for the environment. Cannot be mitigated.

Note: The use of the NZ Institute of Landscape Architects’ ‘Best Practice Note - Landscape Assessment and Sustainable Management 10.1. has been applied for the effects rating scale. The ‘Relation to the Planning Rating’ is my own interpretation of the scale application (i.e. there is no given NZILA assessment criteria that directly relates to this scale).



Appendix E

Economic Assessment

**APPLICATION FOR A PLAN CHANGE TO ESTABLISH A DAIRY PROCESSING
MANAGEMENT AREA COVERING ROLLESTON INDUSTRIAL HOLDINGS LIMITED SITE IN
MADDISONS ROAD**

ASSESSMENT OF ECONOMIC IMPACTS

**Mike Copeland
Brown, Copeland & Co Ltd**

24 January, 2020

1. INTRODUCTION

Background

- 1.1** Rolleston Industrial Holdings Limited (RIHL) own land in Maddisons Road, adjacent to the IPort industrial area at Rolleston and wishes to establish a Dairy Processing Management Area (DPMA) on the site. At this stage there is no particular tenant identified to utilize the DPMA, but rather RIHL wishes to create the opportunity for such a facility to be established and to provide some flexibility given there currently are no development plans available. The site has a total area of 27 ha and it is proposed that the area covered by dairy processing activities will be up to 25 ha.
- 1.2** In 2014, Synlait Milk Limited (Synlait) submitted a request to the Selwyn District Council for a private Plan Change to introduce a DPMA for its existing Dunsandel milk processing site to recognise the existing dairy processing activities on the site and to provide for their continued use and expansion. The decision to accept the Synlait Plan Change was made by the Council on 25 March, 2015. The Synlait DPMA site has a total area of 187 ha and currently dairy processing activities cover 113.6 ha.
- 1.3** In 2016 Fonterra sought a Plan Change enabling a DPMA to cover its Darfield site, again to recognise the existing dairy processing activities on the site and to provide for their continued use and expansion. The decision to accept the Fonterra Plan Change was made by the Council on 14 June, 2017. The Fonterra DPMA site has a total area of 680 ha and currently dairy processing activities cover 132 ha.
- 1.4** As with the Plan Changes establishing the Synlait and Fonterra DPMAs, the RHIL proposed Plan Change 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.

Report Objective

- 1.5** The objective of this report is to assess the economic effects of RIHL's proposed Plan Change enabling a DPMA to cover its Maddisons Road 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

- 1.6** This report is divided into 5 parts (in addition to this introductory section). These are:
- (a) A consideration of the relevance of economic effects under the RMA;
 - (b) A description of the Selwyn District, and Canterbury regional economies;
 - (c) The economic benefits from the establishment of a DPMA on RIHL's site in Maddisons Road;
 - (d) A discussion of some potential economic costs from the establishment of a DPMA on RIHL's site in Maddisons Road; and
 - (e) Some overall conclusions.

2. ECONOMICS AND THE RMA

Community Economic Wellbeing

- 2.1** 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.
- 2.2** 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 must be taken into account. This is underpinned by the definition of "*environment*" which also extends to include people and communities.

- 2.3** How the establishment of a DPMA on RIHL's site in Maddison Road will enable the residents and businesses of the Selwyn District, Christchurch City and the Canterbury region to provide for their social and economic wellbeing is discussed later in this report.

Economic Efficiency

- 2.4** 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 efficiency¹. 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"*².

- 2.5** 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.

- 2.6** The proposed Plan Change to enable, at least cost, dairy processing activities to be established at RIHL's site in Maddisons Road is consistent with the efficient use of resources, especially in regard to reducing consenting costs and enabling economies of scale and scope through grouping similar and related activities together. These economic efficiency benefits are discussed later in this report.

¹ 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.

² Pass, Christopher and Lowes, Bryan, 1993, *Collins Dictionary of Economics* (2nd edition), Harper Collins, page 148.

Viewpoint

- 2.7** An essential first step in carrying out an evaluation of the positive and negative economic effects of the Plan Change 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.
- 2.8** RIHL's Maddisons Road 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 will benefit from the DPMA's establishment since firstly, many of the staff likely to be employed at the facility will reside in Christchurch (as well as Selwyn), and secondly, Christchurch businesses as well as Selwyn based businesses will provide goods and services to the facility and its employees. 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 regional economy (incorporating Christchurch City effects).
- 2.9** There will also be private or financial benefits associated with the DPMA's establishment. 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 RIHL, the eventual occupier of the site and its customers. Economists refer to such effects as "externalities"³.

3. BACKGROUND TO SELWYN DISTRICT AND CANTERBURY REGION'S ECONOMIES⁴

Population

- 3.1** Statistics New Zealand's June 2019 population estimate for the Selwyn District is 65,600 or 1.3% of New Zealand's population. In 2013 population in the District was estimated to be 46,700, implying an increase of 40.5% over the period 2013 to 2019, as compared to only 10.7% for New Zealand as whole. Statistics New Zealand's 'medium' population projections⁵ have the Selwyn District's population

³Defined 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.

⁴Data in this section from Statistics New Zealand.

⁵Statistics 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.

increasing to 99,500 in 2043 – i.e. an average rate of increase of 1.8% per annum over the period 2019-43, compared to an average rate of growth for New Zealand of 0.8% per annum.

- 3.2** Statistics New Zealand's June 2019 population estimate for the Canterbury region is 628,600 or 12.8% of New Zealand's total population. It is the second largest region in New Zealand in terms of population. In 2013 population in the Region was estimated to be 562,900, implying an increase of 11.7% over the period 2013 to 2019. Statistics New Zealand's 'medium' population projections have the region's population increasing at an average rate of 0.8% per annum to 767,300 over the period 2019-43.

Employment

- 3.3** Employment data highlights the dependence of the Selwyn District on the agriculture sector. In February 2019, 3,150 jobs (16.7%) of the Selwyn District's 18,900 jobs were in the agriculture, forestry and fishing industry group, with most (an estimated 3,060 jobs) being agricultural jobs⁶. Dairy cattle farming accounted for 1,100 jobs (5.8% of total employment) and sheep, beef cattle and grain farming 590 jobs (3.1% of total employment). There were 2,900 jobs (15.3% of total employment) in the manufacturing sector, including 1,600 jobs (8.5% of total employment) in food manufacturing of which dairy product manufacturing accounted for 940 jobs (5.0% of total employment). Taken together, dairy cattle farming and dairy product manufacture directly account for 10.8% of total employment in the District.
- 3.4** Other important employment sectors in the District are education and training (2,100 jobs or 11.1% of the total), construction (1,800 jobs or 9.5% of the total), public administration and safety (1,550 jobs or 8.2% of the total), retail trade (1,300 jobs or 6.9% of the total), professional, scientific and technical services (1,300 jobs or 6.9% of the total), and accommodation and food services (1,250 jobs or 6.6% of the total).
- 3.5** Statistics New Zealand estimates total employment in the Canterbury region in February 2019 at 305,300 which represents 13.4% of the total persons employed

⁶Including agriculture support jobs.

in New Zealand.⁷ The agriculture, forestry and fishing industry group employed 16,400 persons (5.3% of total jobs) of which most (14,424) were engaged in agriculture.⁸ Other significant sectors are manufacturing employing 36,100 or 11.8% of total jobs (of which the most significant subsectors are food products manufacturing (12,500 jobs), machinery and equipment manufacturing (5,400 jobs), fabricated metal products manufacturing (3,800 jobs) and transport equipment manufacturing (2,950 jobs)), health care and social assistance (34,400 jobs or 11.3% of total jobs), retail trade (30,600 jobs or 10.0% of total jobs), construction (29,700 jobs or 9.7% of total jobs), education and training (23,200 jobs or 7.6% of total jobs), professional, scientific and technical services (23,100 jobs or 7.6% of total jobs) and accommodation and food services (21,700 jobs or 7.1% of total jobs).

3.6 The key drivers of the Canterbury economy remain largely agriculture, manufacturing and tourism, the last of which includes parts of the retail trade, accommodation and food services and education and training sectors. Employment in other sectors is to a large extent driven by the demand for goods and services by these industries and their employees with the so called “multiplier” effects creating additional jobs for the region’s economy.

3.7 The agriculture, forestry and fishing industries and the manufacturing industry together generate an estimated 52,500 jobs or 17.2% of total employment in the Canterbury region and underpin much of the economic activity of Greater Christchurch and the wider Canterbury region.

4. ECONOMIC BENEFITS OF PROPOSED PLAN CHANGE

Additional Employment, Incomes and Expenditure

4.1 Although there is as yet no specific tenant in mind, the DPMA enabled by the proposed Plan Change is expected to attract dairy processing activity to the site. Engineering consultants to RIHL, Babbage Consultants Limited, advise that given the size of the site it is more likely that it will accommodate the production of a value added product, rather than a primary milk powder production facility, though either is a possibility. If this activity would otherwise have been located within the

⁷Statistics NZ, NZ Stat, Business Demography Statistics; Geographic Units by Industry and Statistical Area.

⁸ Including agriculture’s proportionate share of agriculture, forestry and fishing support services.

Selwyn District, then from a District (and Regional) perspective the Plan Change will not create additional employment, incomes and expenditure for the local economy. However there will be efficiency benefits for the operator reflecting the choice of this site over other alternative sites within the District.

4.2 If the DPMA enabled by the proposed Plan Change attracts an activity, which would not otherwise have located within the Selwyn District, there will be additional employment, incomes and expenditure generated for the local District economy. This will be in relation to the activity itself – i.e. the direct economic impacts – and the indirect or “multiplier impacts as a result of:

- (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 employees of supermarkets, restaurants and bars as a consequence of the additional expenditure by employees living within the Selwyn District.

4.3 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 underemployment⁹ 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.

4.4 Although the additional economic activity likely to generated by the DPMA proposed for the Maddisons Road site will be relatively small (e.g. in comparison to that generated by Fonterra's Darfield DPMA site), such activity that will be generated by the site will contribute to these types of economic benefits for the Selwyn District economy.

4.5 Alsoto the extent that the Maddisons Road DPMA generates additional employment opportunities for the Selwyn District, it will reduce the reliance of local residents on employment opportunities in Christchurch City and therefore potentially reduce their commuting transport costs.¹⁰

Other Efficiency Benefits

4.6 The establishment of a DPMA on the Maddisons Road site will reduce the reliance on the resource consent process for the initial establishment of dairy processing activity on the site and any subsequent changes in scale or configuration of that activity. Also locating dairy processing activity on the site will provide agglomeration economies¹¹ in that the site is in close proximity to other industrial

⁹Underemployment 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.

¹⁰There may be additional commuting costs for Christchurch residents attracted to jobs at the DPMA, depending on their place of residence and the location of alternative employment for them.

¹¹ Agglomeration economies or agglomeration effects are cost savings or revenue increases which occur as a result of firms locating near to each other in industrial clusters.

activities located in Rolleston. Also the site is close to two inland ports and has good access to both rail and road networks.

5. POTENTIAL ECONOMIC COSTS OF PROPOSED PLAN CHANGE

Lost Agricultural Production

- 5.1** The site of the proposed DPMA is zoned “Rural Inner Plains” and is used for pastoral grazing. However, any lost agricultural production is not an external cost of using the site for the proposed DPMA. 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 RIHL 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.

Utilities

- 5.2** 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 the proposed Maddisons Road DPMA no such externality costs arise.
- 5.3** RIHL and any subsequent occupier of the site will meet the capital costs of infrastructure connections required for the site’s development via development charges. The payment by the site’s owners/occupiers of rates, user charges, petrol taxes and road user charges will meet the ongoing operation and maintenance costs of infrastructure. Therefore other Selwyn District ratepayers, residents and businesses will not be required to cross-subsidise the proposed development.

6. CONCLUSIONS

- 6.1** RIHL’s proposed Plan Change enabling a DPMA for its Maddisons Road site at Rolleston will provide for the efficient initial and future development of dairy processing activity on the site. It will reduce 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.

6.2 If the DPMA attracts an activity which would not otherwise be located within the Selwyn District, the Plan Change will contribute to the economic well being of the Selwyn District by:

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

6.3 It will also maintain and improve resource use efficiency by:

- (i) Increasing economic activity and population in the Selwyn District, enabling increased economies of scale in the local provision of goods and services;
- (ii) Reducing commuting costs for local residents; and
- (iii) Providing the potential for agglomeration economies to occur.

6.4 The Plan Change will not give rise to economic externality costs.