46. The overall appearance of the site will still be predominantly one of open rural space with the vineyard plantings adjacent to New Renwick Road. All land to the south and west of the expanded facilities will remain in parkland with screen plantings as shown on the landscape plan. The proposed development is consistent with the landscape objectives, as the expansion of facilities will maintain an open rural character in the context of working rural environment, which environment has a heavy emphasis on vineyard production and associated facilities. The explanation section to this set of objectives at 5.5, notes the following:

> Elsewhere in the Wairau/Awatere the landscape is less sensitive to change. For both residents and visitors these modified landscapes contribute significantly to the identity of Marlborough. The best known examples are the vineyard landscapes of the Wairau and Awatere valleys.

47. Vineyard landscapes are now a significant part of the modified landscape. The vineyard landscape throughout Marlborough includes significant built development for winery and processing facilities associated with vineyard production.

48. Section 12.0 provides for the relevant Objectives and Policies under the heading of Rural Environment. Objective 12.2.2 seeks to maintain or enhance the life supporting capacity of the versatile soils of the Rural 3 Zone. With the expansion of viticulture throughout Marlborough, it follows that there has to be expansion of the production and processing facility. In this case, it is an efficient use of the land and existing building resources to expand at the existing site, rather than fragment the production and processing facilities for Villa Maria. Taken on a regional basis, the proposal is in an overall sense, a sustainable management of the versatile soils in the region, given the existing location of Villa Maria's processing and winery facilities.

49. The Objective and Supporting policies have an emphasis on Rural Amenity. Objective 2 states the following:

> To protect rural amenity values of the Rural 3 Zone by encouraging the establishment of a range of activities which do not create unacceptably unpleasant living or working conditions for residents and visitors, nor a significant deterioration of the quality of the rural environment.

50. The Supporting Policies recognise that activities in rural areas will result in effects such as noise, dust, smell and traffic generation and that these will require mitigation where they have a significant adverse effect on the rural environment. Supporting Policy 2.1 recognises that the rural area is a working environment and there will be a level of noise and traffic generation which is appropriate but where those effects are significant they require mitigation. In this case, the increase in the capacity of the processing and storage facilities will result, on an incremental basis, in additional traffic generation. Through construction phases there will be noise and dust. However, these issues are mitigated by the location of access to the site, the provision for appropriate manoeuvring onsite and parking onsite.

51. Overall it is considered that the subject proposal is consistent with the relevant objectives and policies under the Rural Environment section of the Resource Management Plan.

52. The PMEP gives greater recognition to the importance of primary production generally and the viticulture and wine industries particularly than its predecessor. Volume 1 of the Plan identifies the issues, objectives, policies and methods which the PMEP seeks to implement. In the Wairau Plan area of the Rural Environment Zone (which the subject land is located) viticulture is identified as a dominant land use. The PMEP identifies that within this area an enabling approach is to be taken to primary production activities and that Council does not wish to constrain the type of farming activity occurring.

ADDITIONAL INFORMATION REQUIRED IN SOME APPLICATIONS

53. The Applicant holds two resource consents which permit it to discharge winery waste water onto its own land and onto the Bishell Farm for the current processing capacity of the winery. Those consents are subject to conditions, including monitoring requirements, which the Applicant is prepared to continue to accept even though it is proposing to comply with the permitted activity standards of the two relevant plans.

54. The professional advice that the Applicant has received is that the additional volumes of wastewater are able to be discharged to the Bishell land in terms of the permitted activity standards of the rules on the PMEP and the WARMP. On this basis, no resource consent is needed but the Applicant is prepared to accept monitoring and other conditions including those of a kind to which it is already subject in the two resource consents it currently holds.

55. In terms of Clause 6 (1) (a) of the Fourth Schedule, the Applicant considers that the proposal will not give rise to significant adverse effects so no possible alternative locations or methods have been considered.

56. In terms of Clause 6(b) of the Fourth Schedule, the actual and potential effects have been identified previously as being those arising from increased traffic, visual and landscape effects and amenity issues. All of those effects have been assessed as being at insignificant levels and as being readily able to be absorbed within the site and the locality. To the extent light spill may be an issue, the Applicant has commissioned a specialist report and that is Document 8.

57. There are no hazardous substances or installations in terms of Clause 6(1)(c).

58. The effects of the increased volume of discharge are detailed in Document 1, which is the IPC report.

59. In terms of Clause 6(1)(d), there are no adverse effects of any discernible kind which have been identified by the Applicant or its specialist advisers. The Applicant will continue to maintain a high standard of landscaping and architectural coherence so that any visual impacts from the extended building footprint will be minimal.

60. In terms of Clause 6(1)(h) the Applicant considers that the effects of the Proposal on the environment and on any other person are less than minor. The Proposal will give rise to no discernible effects of any kind and is contained within a large parcel of land with no residences in the immediate vicinity of the proposed development. A map showing the location and distance of the nearest residences is Document 9. For this reason, the Applicant considers the Proposal is able to be processed on a non-notified basis and on the basis that it has obtained the written consent of the Bishells and its immediate neighbours, the Hammonds.

61. The Applicant considers that 6(1)(g) is inapplicable provided it complies with the recordkeeping requirements Rule 3.3.26.9 in the PMEP. The Applicant is however willing to accept any reasonable monitoring conditions Council may require.

62. Clause 6(1)(h) is inapplicable.

MATTERS THAT MUST BE ADDRESSED BY AN ASSESSMENT OF ENVIRONMENTAL EFFECTS - SCHEDULE 4: CLAUSE 6

63. The Applicant considers that these matters have been addressed in specific terms in previous sections of this AEE and in the expert reports which accompany it.

CONCLUSION

64. In the Applicant's submission:

(a) The Proposal has no adverse environmental effects which are more than minor.

(b) Any adverse effects from the Proposal in terms of visual impact, amenity, noise, traffic and odour are able to be, and will be, mitigated.

(c) The Proposal is consistent with the Objective and Policies of the Plan.

(d) In order for Marlborough to continue to maintain and to enhance its reputation as a producer of premium wines, facilities of the type the subject of the Proposal will need to continue to operate and will need to grow. The Proposal will be undertaken to high standards and in a manner which is considerate of and sensitive to the existing environment.

65. The Applicant respectfully requests that consent be granted in terms of this Application.

Independent Project Consultants

Assessment of Effects and Regulatory Implications of Increasing Volumes of Winery Wastewater

Villa Maria Estate Ltd

New Renwick Road, Fairhall, Blenheim

June 2017

Consultant: Glenn Thomas

DESIGN ACCREDITED

TABLE OF CONTENTS

1. BACKGROUND

The applicant, Villa Maria Estate Ltd (VM) owns 12.36ha located on the corner of New Renwick and Paynters Roads located approximately 10 kilometres west of Blenheim. On this property the applicant process wine and operates it cellar door. The applicant is seeking resource consent to increase the processing capacity of its winery to 35,000 tonnes. This report assesses the environmental and regulatory implications of the increase in wastewater associated with the increase in capacity.

VM presently holds consents to discharge wastewater from the processing of 25,000 tonnes to 9.4 hectares of its own land (consent U980558 due to expire 31 August 2033) and 16 hectares of the Bishell owned land (consent U071369 expiring 1 March 2018), also known as Diversion farm.

Although the existing discharges are undertaken pursuant to resource consents, it appears that the existing discharges and the discharges from an increase in capacity could be undertaken as permitted activities and without resource consent.

1.1 Wastewater System Description

The winery wastewater is gravity fed to a main concrete collection sump and drains through a 25mm stainless screen to sump two. Two submersible pumps then transfer the wastewater to a Contra-sheer rotary drum separator that separates the solids into a bin below. The liquid portion is gravity fed into eleven 30m^3 above ground plastic storage tanks.

The stored liquid is aerated and pH adjusted, if required, before being pumped to either the Winery or Diversion farm irrigation blocks via underground mainlines and spread evenly through 29 K-line sprinklers.

2. DESCRIPTION OF THE PROPOSED ACTIVITY

Villa Maria are seeking to increase the annual processing capacity of the winery from 25,000 tonnes to 35,000 tonnes of grapes, which will result in an increase in vintage volume from 260 m^3/day (3-year average) to 650 m^3/day.

2.1 Land Available for Wastewater Disposal

An assessment of the likely effluent quantities and other characteristics is given below. The disposal areas currently available under existing consents are as follows: -

Villa Maria (VM) Winery block less set-backs	= 8.6 ha
Bishell land (Diversion Farm) less 20m set-back	= 9.8 ha
Total Area Available	**= 18.4 ha**

On Diversion farm, currently 9.8 of the total 16 hectares is being irrigated by the applicant. Rule 3.3.26.2(b) of the PMEP requires a 20 metre setback from the Fairhall river, which equates to a further reduction of 2.4ha bringing the available area to 7.4ha on Diversion farm. The winery block is expected to reduce to 7.8ha to allow for extra tanks to be constructed, bringing the total to 15.2ha of land for irrigation on both blocks of land.

2.2 Rules and Regulations

The Proposed Marlborough Environment Plan (PMEP) that was notified in June 2016, replaces the RPS, the WARMP, and the Marlborough Sounds Resource Management Plan in one document. Rule 3.3.26.1 allows the discharge of agricultural liquid waste as a Permitted Activity, subject to the following conditions, (which this assessment will show that VM can comply with)

3.3.26.1 The discharge must not occur into or onto a Soil Sensitive Area

3.3.26.2 The discharge must not occur within:

(a) 50m of a bore unless the bore intercepts the confined layer of Riverlands FMU or the confined layer of the Wairau Aquifer FMU;

(b) 20m of a river, lake, Significant wetland, drainage channel or Drainage channel network

(c) 10m of the boundary of any adjacent land in different ownership

3.3.26.3 A high rate discharge system must not be used to discharge onto land with an average slope of 7° or greater, and the slope must not exceed 11.3° (1:5) at any point.

3.3.26.4 The discharge must not occur when the soil moisture exceeds field capacity.

30.1.8.9.1 Ponding must not be detectable beyond 24 hours after the discharge.

3.3.26.6 The discharge must not result in anaerobic soil conditions.

3.3.26.7 The total cumulative nitrogen (N) loading from all discharges on the areal extent of land to be used for the discharge must not exceed 200 kg N/hectare/year (excluding N from direct animal inputs).

3.3.26.8 The pH of the liquid waste must range between 4.5 and 9 immediately prior to discharge.

3.3.26.9 Records of pH levels must be kept and available upon request by the Council.

In the Wairau/Awatere Resource Management Plan (WARMP) Rule 30.1.8.9 allows the discharge of liquid waste to land as a Permitted Activity, subject to the following conditions, (which this assessment will show that VM can also comply with)

30.1.8.9.1 The characteristics of the waste shall be such that:

a) BOD_5 - 5,000 g/m^3;

b) Faecal coliforms - 100/100 ml;

c) Free available chlorine < 1 g/m^3;

d) Other contaminants shall not exceed the toxicant limits for irrigation water quality which are set out in Appendix P. These limits are derived from the Australian Guidelines for Fresh and Marine Waters (Australian and New Zealand Environment and Conservation Council [ANZECC] 1992);

e) No objectionable odours can be detected at or beyond the legal boundary of the area on which the liquid waste is discharged.

30.1.8.9.2 The total nitrogen loading on the land to be used for the discharge shall not exceed 200kg/ha/yr.

30.1.8.9.3 The discharges shall be applied evenly over the disposal area at a rate not exceeding 10mm/day.

30.1.8.9.4 The discharge shall not be within 20 metres of any surface water body or drainage channel.

30.1.8.9.5 There shall be no runoff of the waste into any surface water body.

30.1.8.9.6 A buffer zone of a minimum of 10 metres width shall be maintained between the area of discharge and the legal boundary of the land on which the liquid waste is discharged.

30.1.8.9.7 The discharge shall not be within any class NS catchment defined in Appendix J.

3. ASSESSMENT OF PERMITTED ACTIVITY STANDARDS OF RULE 3.3.26.1

3.1 Soil Assessment and Properties

3.1.1 Villa Maria Winery Block

The 8.6 hectares of VM owned land that is currently being irrigated to is flat in contour. There is a drain running through each of the two paddocks, which only has water in it after periods of rainfall.

Photo: From the most eastern point looking west with VM winery in background, demonstrating flat contour

VM have previously engaged Dr Iain Campbell to carry out soil investigations, and which showed that the bulk of the soils on the VM block are more towards Paynter Series, with the area to the SE moving more towards the Brancott Series (John Bealing AEE Report, 2007).

Both soils are imperfect to poorly drained and classified as high risk, using the decision tool constructed by Houlbrooke & Monaghan (2010) to guide appropriate effluent management practice considering the effects-based assessment of different soil and landscape features. (Category B of the FDE Soil Risk Category Table from FDECoP - See Appendix 10.3)

Paynter Heavy Silt Loam

This is a slow draining soil developed in swampy land along the base of the Wither Hills and in a small area near Lake Grassmere. It is derived from material washed off the adjoining rolling to hilly land, and the general high groundwater level is due mainly to seepage from these slopes. The general swampy conditions favour the accumulation of organic matter at the surface, but decomposition is slow. A typical profile from a drained field near Blenheim is:

200mm	greyish-black friable silt loam with a weak fine granular to medium blocky structure
375mm	light-yellowsh-grey sticky clay loam with a weak coarse blocky structure and many prominent medium yellow-brown mottlings.
On	bluish-white clay loam with few distinct yellow streaks.

In some places, a few stones appear in the profile.

The drainage is very slow and the soil is waterlogged for long periods. With closely spaced surface and subsoil drains, it is used for annual crops. Good pastures respond to phosphate fertilizers and a slight response is expected from lime.

Brancott Series

A soil of the undissected older terraces on flat to gently undulating slopes (0 to 3°). They are rated as moderately well drained in loamy alluvium. They have deep (>750mm) silt loam soils where the A horizon is characterised by very dark greyish brown silt loams and overlie yellowish brown silt loam Bw horizons. Slightly compact Bw(g)(x) horizons with ocherous and grey mottles occur at depths greater than 500mm. They are not firm enough to form a significant barrier to plant roots, but they do slightly impede downward water movement. C horizons are olive silt loams or sandy loams.

Brancott Silt Loam

Paynter Heavy Silt Loam

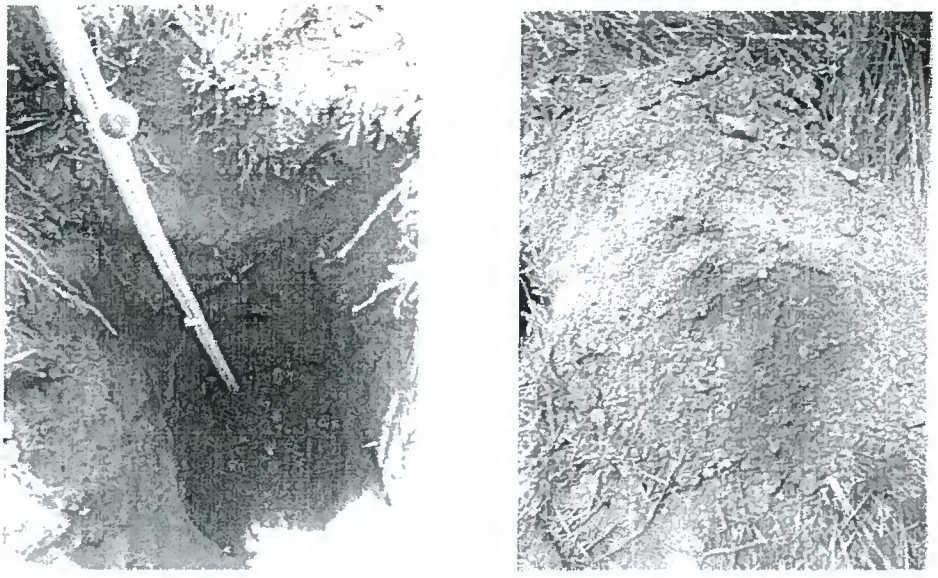
A field examination was carried out of the blocks soil onsite on 30th of November 2016. Soil samples taken showed a silt loam in the eastern paddock with mottling at approximately 500mm depth and consistent with the Brancott Series outlined by Dr Campbell.

In the western paddock, a friable silt loam on top of a yellow sticky clay loam was evident, consistent with the Paynter Series of soil.

3.1.2 Diversion Farm (Bishell Block)

VM discharge wastewater onto 9.8 hectares of the Bishell owned block known as Diversion Farm. The block used for irrigation by VM is intersected by the Fairhall river and is flat in contour. A desktop study using Landcare S-Map stated the soil type as Awatere sandy loam, which is a well-drained slightly stoney loam over a sandy loam and is classified as category D, low risk.

A field site study was undertaken on 1 December 2016 with the test pits in the south west paddock showed a free draining sandy soil and test pits on the northern side of Fairhall river revealed a free draining silt loam with some stones.



Free draining sandy soils – Low Risk

Free draining gravelly soil - Low Risk

3.2 Hydraulic Loading

Definitions of terms used

Application Depth

The mean depth (mm) of liquid FDE applied to the soil surface during a single application event.

Application Intensity

The rate (mm/hr) at which FDE is applied to land.

Application Rate

The commonly used alternative term for application intensity.

Infiltration Rate

The rate at which the soil can absorb water (mm/hour). Infiltration rate changes according to the wetness of the soil

For a land treatment system to be sustainable, it must be efficient in both the retention of winery wastewater constituents in the soil and the subsequent plant uptake of nutrients applied.

The application rate (intensity) of winery wastewater application has a strong influence on nutrient treatment efficiency when apply to soils that exhibit a high degree of preferential flow, have a drainage limitation or that are located on sloping land. (Laurenson and Houlbrooke, 2012)

The soils on the Winery block have impeded drainage or low infiltration rate, whereas the Diversion Farm block has been assessed as having well drained flat land.

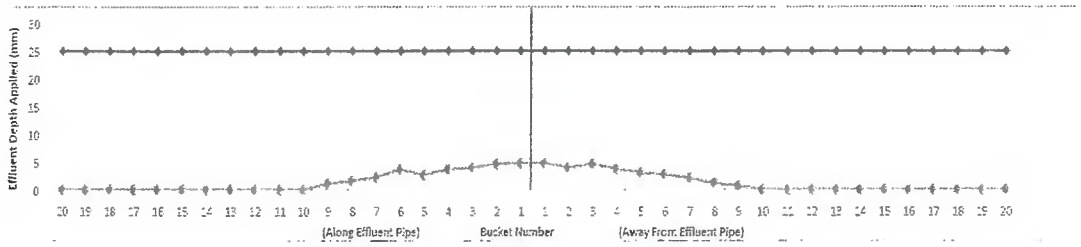
The wastewater irrigation method uses K-line pod sprinklers, which is a low rate irrigation system that reduces the chance of overloading the soils and prevents loss of nutrients in surface runoff and via preferential flow.

3.2.1 Application Rate Test (Irrigation Depth Test)

An irrigation depth test was carried out to determine sprinkler operating performance and enable analysis to be completed based on results gathered at the time.

Sprinkler Irrigation Depth Test Results

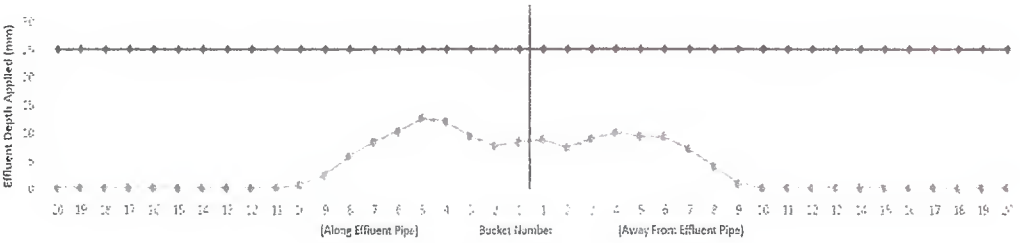
Villa Maria Winery depth test - Sprinkler #4



Average depth of effluent applied:	7.4 mm
Maximum depth of effluent applied:	12.5mm
Average application rate:	8.9 mm/hour
Distribution uniformity:	1.45

The depth test shows that the wastewater is being applied at low application rates of under 10mm per hour, which is in line with best practice for the heavier soils on the winery block. To meet the WARMP rule 30.1.8.9.3 the sprinklers would have to be moved after 1 hour on the winery block and after 2 hours on Diversion farm.

Diversion Farm depth test – Sprinkler #1



Average depth of effluent applied:	3.0mm
Maximum depth of effluent applied:	4.7mm
Average application rate:	4.5mm/hour
Distribution uniformity:	1.49

3.2.2 Solids Volume

Approximately 15 to 20% of the total grape weight is in seeds, stems, skins and pulp (Laurenson and Houlbrooke 2012). An increased throughput of 35,000 tonne of grapes per year equates to approximately 6,000 tonnes of solid waste known as grape marc.

Grape marc is stored and the liquid leachate from this storage area is captured in the main collection sump of the wastewater system. All of the solids are transported off site for disposal.

3.2.3 Liquid Inputs

Tank Washings, including tartaric acid, which comes from the tartrate deposits formed on tank surfaces, and removed using hot water

General Washings, including floor washings as well as plant and equipment washings during the vintage, water is also used to wash all grape contact surfaces to remove juice sugars that build up and cause spoiling of the juices.

Push through water. Water used to push vine through pipes at the end of a pumping operation.

Cleaning chemicals. Mostly caustic and citric acid, and are used to clean tanks before carrying out a juice or wine movement.

Barrel washings. A mixture of cold and hot water used to remove yeast lees/other sediments and tartaric deposits. Some hot water recycling will occur to provide as much energy conservation as possible.

Stormwater. After significant rainfall events, run-off from outside concrete surfaces that have not been diverted to stormwater will be disposed of through the wastewater system. Although this will increase the volume of liquid to dispose of, it will not increase the volume of nutrients.

3.2.4 Volumes of Wastewater

The expanded winery will process 35,000 tonnes per year with a maximum anticipated daily production of 650m^3 per day wastewater during vintage and 80m^3 non-vintage.

Table 1: Past and Estimated Future Grape Tonnage. WW Volumes and Total N Levels

Year	Grape Tonnage	WW Vol (m3/year)	Grape Tonne:WW Vol.ratio	WW Vol: Grape Tonne Ratio	Total N avg Conc g/m3	Total N kg	Total N Kg/ha
2013	12300	26683	0.46	2.17	33	880.5	58
2014	22454	32131	0.70	1.43	37.9	1,217.8	80
2015	17938	25546	0.70	1.42	52.1	1,331.0	88
2016	23102	31006	0.75	1.34	40.5	1,255.7	83
2020 (est)	30000	42900	0.70	1.43	40.5	1,737.5	114
2025 (est)	35000	49000	0.71	1.40	40.5	1,984.5	131

Anticipated wastewater volumes during vintage and non-vintage has been estimated by the following.

- Estimate 700-750 litres wine per tonne of grapes processed
- Based on 35,000 tonnes grapes processed per year, equates to 24,500 – 26,250m^3 wine
- Estimate 2.0 litres wastewater per litre wine
- Equates to approximately 50,000m^3 wastewater
- Assume 50% produced during vintage = 25,000m^3
- A 40-day vintage period equates to 625m^3 per day

Based on current wastewater generation numbers, a maximum wastewater production of 650m^3/day has been calculated and will be used from this point forward.

Table 2: Average and Maximum Daily Wastewater (WW) Volumes over 3yr Period

Annual Analysis	2014	2015	2016
Max Volume m^3	953.7	536.6	487.3
Average Volume m^3	88	70	84.7
Vintage			
Maximum Volume m^3	953.7	536.6	487.3
Average Volume m^3	270.1	276.1	230.8
Non-Vintage			
Maximum Volume m^3	388.7	397	495.2
Average Volume m^3	39.4	45.3	54.9

Table 2 above shows that during 2014 vintage, a maximum daily volume of 953.7m^3 was generated on 17th April and applied, with an average daily volume of 270.1m^3, which is well under the consented average of 650m^3/day. This high maximum daily volume was due to a one-off heavy rainfall event causing a large volume of stormwater to enter into the system.

2016 is to date, VM's highest producing vintage season with a total of 23,103 tonne of grapes that generated a maximum daily WW volume of 487.3m^3 and an average daily volume of 230.8m^3, which is 35% of the consented average daily wastewater volume limit of 650m^3.

The CoP for Winery Wastewater (2010) states that NZ average is 3m^3 wastewater to every tonne grapes per annum with a target of 1.5:1. Over the past three years VM have averaged 1.4:1.

3.3 Nutrient Loading

Land application of winery wastewater has the benefit of spreading nutrients over a large area. BOD levels are reduced by exposure to natural sunlight and air, and is also broken down by soil bacteria. Sunlight can also kill any faecal coliforms. Land application has the advantage of returning nutrients to the land.

3.3.1 Total Nitrogen (N)

Table 1 above shows historical data from VM and shows numerous nutrient composition tests have been carried out over the past three years in particular. The average concentration of total Nitrogen has been 41g/m^3 and a decreasing trend in concentration strength (See Appendix 10.5 for Nitrogen Concentration graph)

Using the same wastewater volume ratio to grape tonne ratio as 2014 and 2015 of 1.43, gives an estimated wastewater volume of 50,000m^3 per year in the future.

The future production of Nitrogen would therefore be almost 2,000 Kg N. At this rate, to meet the PMEP and WAMP permitted activity rules of 200 Kg N/ha, disposal area requirements would be nearly 10 hectares, which can be easily met with existing irrigation land available. Therefore, no significant effects on the environment are expected as long as VM continue to manage discharge as per their plan and the MDC regulations.

3.3.2 Winery Waste pH

The wastewater has a pH level of between the consented range of 4.5 – 8. The pH is continually monitored and corrected if outside the acceptable range before irrigation occurs.

Rule 3.3.36.8 of PMEP allows the pH range of the liquid waste to be between 4.5 and 9, which can be met. Soil samples collected since 2008 show the pH has stayed relatively constant between 6.2 and 6.7 and there are no material adverse effects on the environment.

3.3.3 Biological Oxygen Demand (BOD)

The BOD of waste is a measure of the oxygen consumption during the breakdown of organic matter. The high BOD in grape wastewater may temporarily reduce soil oxygen. However, the ability of soils to assimilate wastewater is rapid and anaerobic conditions are not persistent, particularly if applied at rates suitable to the nutrient demand and when there is a suitable soil moisture deficit (Laurenson and Houlbrooke, 2012).

The aerator in the above ground tanks reduces the likelihood of the wastewater becoming anaerobic thereby reducing BOD_5 levels and odour.

The CoP recommends an application rate of 120kg BOD/ha/day. a three-year average of 3,300 g/m^3, the application rate equates to 2,740 kg/day during vintage and would require 22.8 hectares.

With a revised total of 15.2 ha available for irrigation, VM are short of the required 22.8 ha as mentioned above, however it is estimated that the effects on the environment will be minor as per the reasons mentioned above and the discharge will, in any event meet the PMEP PA standards in Rule 3.3.26.1. The BOD_5 concentration has been declining and whilst the WARMP PA rule 30.1.8.9.1 states a BOD_5 level of 5,000g/m^3, this would have been exceeded only once since the 2015 vintage.

3.3.4 Total Phosphorus (P)

Using a three-year average of 7g/m^3 Phosphorus, the average application of phosphorus would be approximately 350kg per year.

Pasture grazing uses approximately 30 kg/ha/year, therefore an area of 12 hectares would be required and can be met. Recent soil analysis shows the phosphorus levels to be low to medium. No significant effects on the environment are expected as long as ponding and surface runoff in particular, are reduced through continued good management.

3.3.5 Sodium (Na^+) and Potassium (K^+)

The potential for K and Na in particular to accumulate in the soil and impact on soil structure is a growing concern in the agricultural industry. High winery wastewater loadings of K^+ far exceed plant requirements, but K^+ and Na^+ are readily leached during winter rainfall events and pose limited risk of accumulation or subsequent soil dispersion, except for soils with high clay content that drain slowly.

It is recommended to maintain a Sodium Adsorption Ratio (SAR) of winery wastewater below a level of 6 (Laurenson and Houlbrooke, 2011).

Over the past three years, VM SAR levels have averaged at a level of 5.3. Recent soil tests have the Na levels in the medium range and K levels in the high range.

3.4 Land Area Requirements

In the existing consent (U071369), condition 6 states:

"the wastewater shall be discharged at a rate not exceeding 10mm/day (on a weekly average) and shall not exceed 25mm per day in any circumstance".

10mm irrigated over 1 hectare = $100m^3$

Therefore, with an estimated daily volume during vintage of $650m^3$, a minimum disposal area of 6.5 hectares is required.

There is currently 7.4 ha available for irrigation on the Diversion farm. This area has been determined after excluding areas that are unable to be irrigated and a setback distance of 20 metres from the Fairhall river in line with the WARMP and PMEP permitted activity rules. Another 7.8 ha of irrigation land is available on the VM winery block, giving a total of 15.2 hectares.

There is enough land available with good management to handle the loadings from the proposal without causing significant adverse effects on the environment.

4. ALTERNATIVE LOCATIONS OR METHODS

It is my understanding that VM have investigated a number of alternative options over the years and continue to do so as technology changes. Land application of wastewater is the preferred treatment option as the soil physically filters out constituents, whilst attenuating potential contaminants and nutrients.

The proposal is not believed to have any adverse environmental effects that are more than minor, providing the system continues to be maintained at an efficient and high level.

Alternative options include growing crops that absorb large amounts of nutrients from the soil, and cut and carry of grass/crops to reduce the quantity of key nutrients added to the soil.

5. RISKS FROM HAZARDOUS SUBSTANCES

No hazardous substances are involved

6. CONTAMINANTS DISCHARGE

The wastewater is of relatively low concentrations for most major contaminants. Irrigation occurs through a low rate system that is suited to heavier soils on the winery block. As long as the system is correctly managed, it will meet the requirements of the PMEP and have no significant effect on the environment.

7. MONITORING

The applicant will continue annual soil samples and biannual wastewater samples ideally at least once during vintage and once outside of vintage.

8. SUMMARY

- The proposal is to increase production up to 35,000 tonnes grapes per annum. The volume of wastewater is 50,000m^3 of which 25,000m^3 or 650m^3/day is expected during vintage.
- The wastewater area available is 15.4 hectares after setbacks required to meet both the WARMP and PMEP permitted activity rules.
- An assessment of the environmental effects of the increased productivity shows that there is sufficient area for all parameters of the proposed permitted activity rule 3.3.26 to be met with no significant adverse effects on the environment.
- Applying to land is considered the best option for disposal of VM wastewater. Good management is essential to reducing any potential negative effects on the environment.

Yours faithfully,

Glenn Thomas BASc PGDipASc DipTech
INDEPENDENT PROJECT CONSULTANTS LTD
Farm Dairy Effluent Accredited Designer

Statement of Limiting Conditions of Report

Purpose

This report has been prepared for Villa Maria Estate Ltd at the direction of Radich Law.

Responsibility to Third Party

Responsibility and liability of Independent Project Consultants Ltd is limited only to the client to whom the report is addressed. Independent Project Consultants Ltd disclaim all responsibility and liability to any other party that may wish to use or refer to the report, without that party having first obtained the written consent of Independent Project Consultants Ltd and the author, to do so. Independent Project Consultants Ltd reserves the right to alter, amend, explain or limit any further information given to any other party.

Reliability of Data

Information and data contained in this report was gathered for assessment and comparison from reliable sources and is believed to be correct. All reasonable attempts have been made to verify the authenticity of this information but Independent Project Consultants Ltd cannot guarantee its accuracy.

Assumptions

This report contains assumptions believed to be fair and reasonable at the time of the report. In the event that assumptions made based on information relied upon is later proven incorrect, or known by the recipient to be incorrect at the date of reporting, Independent Project Consultants Ltd reserves the right to reconsider the report and any advice contained within it.

9. REFERENCES

Bealing J (2007) Assessment of effects on the environment. Agfirst resource consent application for Villa Maria Estate Ltd.

DairyNZ Limited (2011) Farm Dairy Effluent (FDE) Design Code of Practice: Dairy NZ Ltd

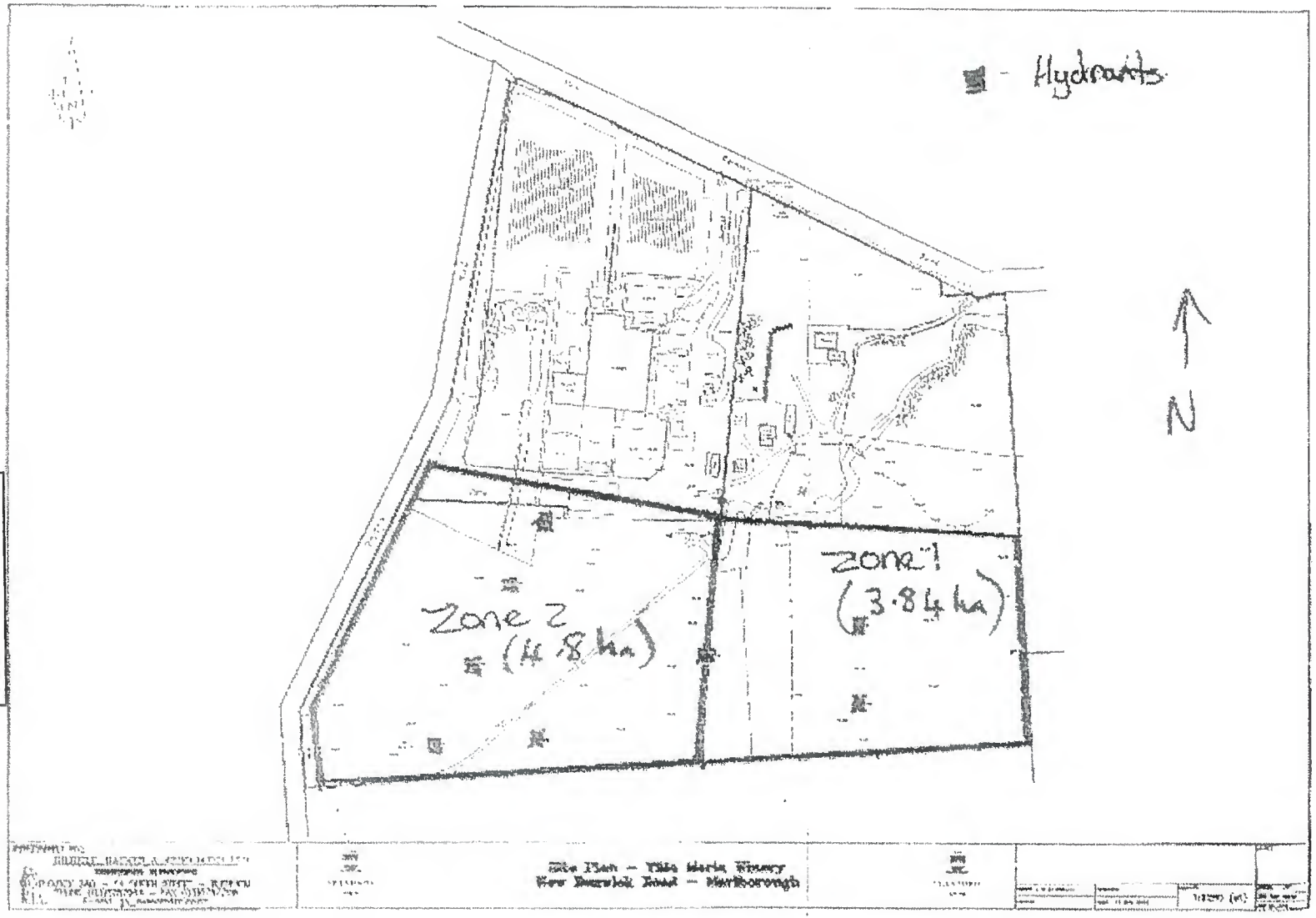
Laurenson S, Houlsbrooke DJ (2011) The effect of sodium and potassium on soil structure. AgResearch client report for Marlborough District Council

Laurenson S, Houlsbrooke DJ (2012) Review of guidelines for the management of winery wastewater and grape marc. AgResearch client report for Marlborough District Council

New Zealand Winegrowers (2010) New Zealand Winegrowers Code of Practice for Winery Waste Management. Prepared by MWH

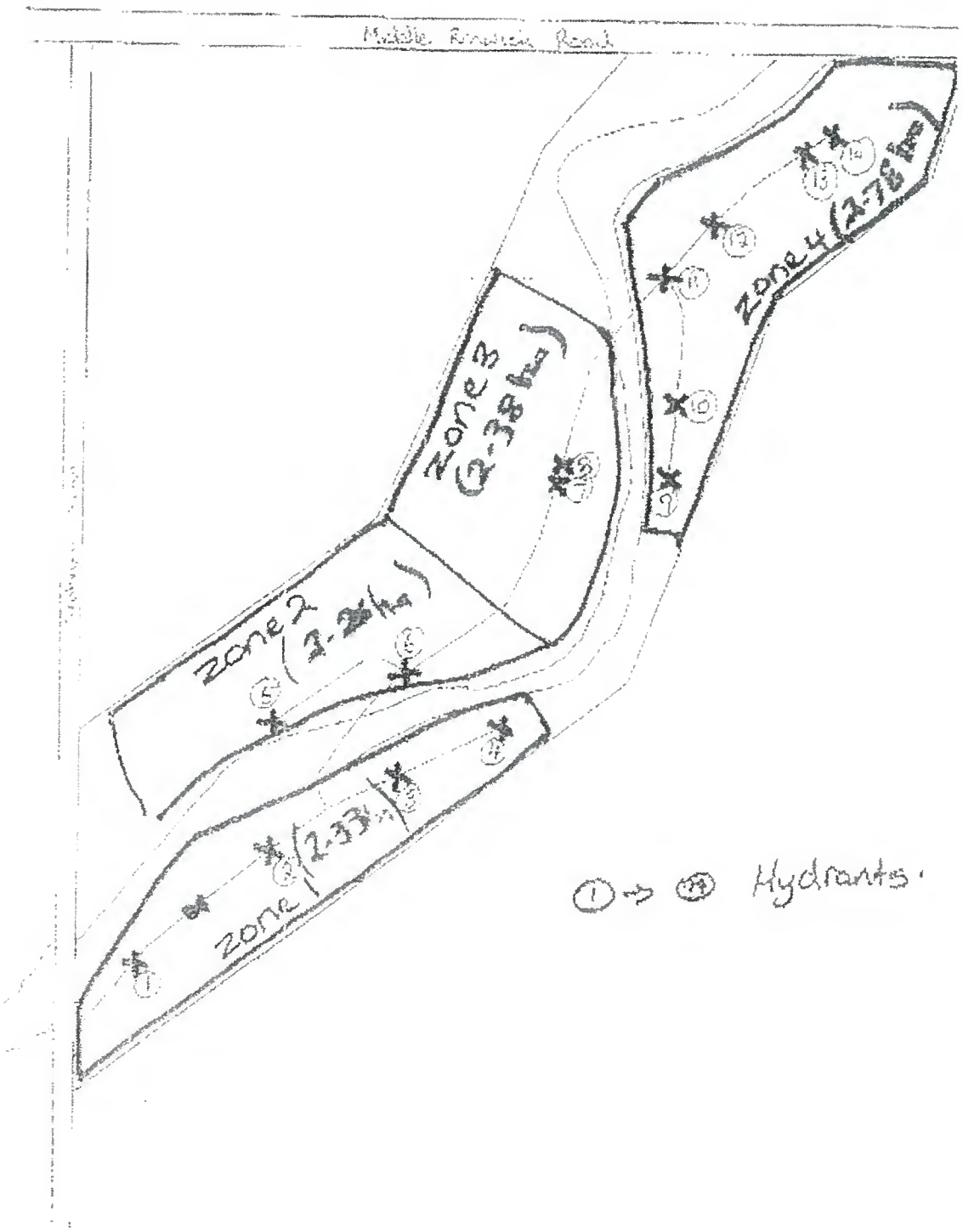
10. APPENDICES

10.1 Villa Maria Estate – Map of Irrigation Areas



10.2 Diversion Farm - Map of Irrigation Area

Bishell Waste Water Disposal Area



10.3 FDE Soil Risk Category Table

This table describes effluent considerations related to the risk class

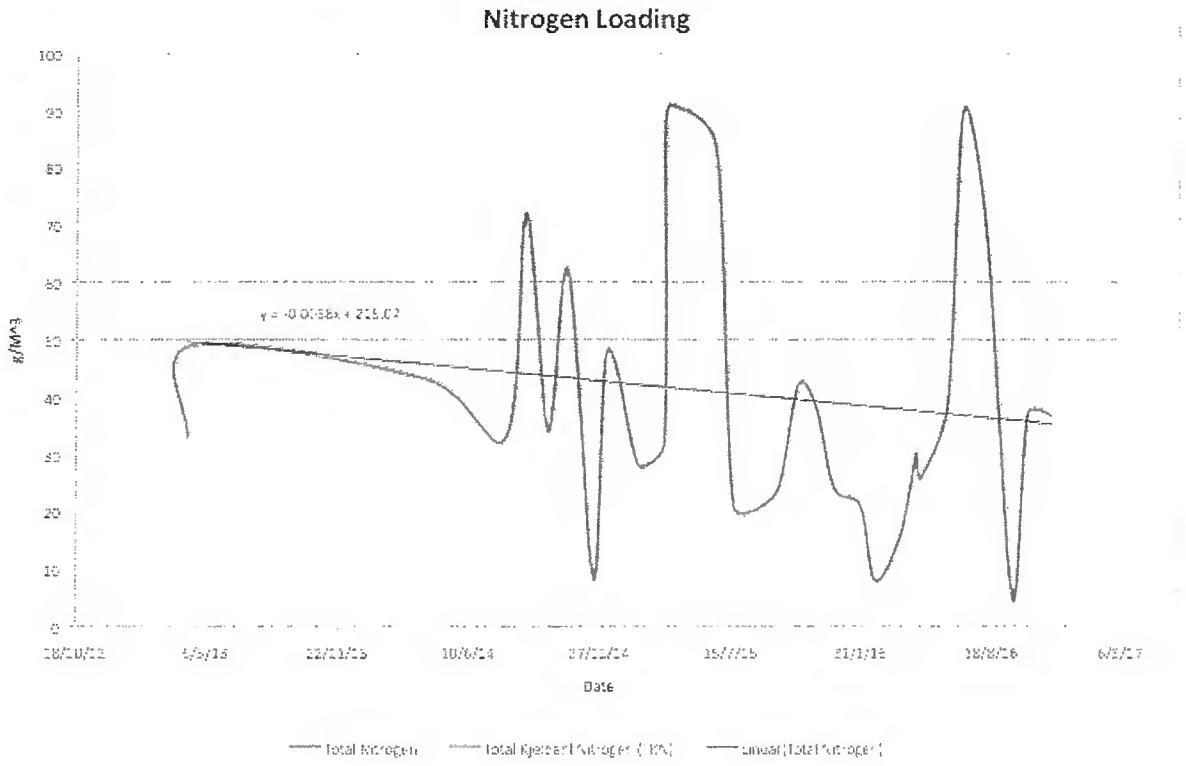
Category	A	B	C	D	E
Soil and landscape feature					
Risk					
Application depth (mm)					
Storage requirement					
Max depth High rate tool					
Max depth Low rate tool					

10.4 Villa Maria Estate – Water & Wastewater Analysis

Villa Maria Estate - Marlborough Water and Wastewater Analysis

2013-2016	Median	Mode	Mean	Count	Std Dev (P)	Mean+2SD Max
pH	5.50	6.50	5.57	31	0.95	7.47
Total Calcium	30.00	25.00	49.63	31	62.76	175.15
Total Magnesium	5.20	4.30	5.99	31	3.15	12.29
Total Mercury	0.0021	0.0021	0.0021	23	0.000	0.0021
Total Potassium	164.00	220.00	168.03	31	102.21	372.46
Sodium Absorption Ratio	5.10	3.70	5.29	31	2.74	10.77
Total Sodium	116.00	240.00	124.89	31	61.78	248.45
Chloride	18.00	21.00	16.47	31	4.85	26.17
Total Nitrogen	34.00	33.00	40.49	31	23.90	88.29
Nitrate-N + Nitrite-N	0.10	0.10	0.12	31	0.10	0.31
Total Kjeldahl Nitrogen (TKN)	34.00	33.00	40.46	31	23.95	88.36
Total Phosphorus	6.80	4.10	7.45	31	3.51	14.47
Biological Oxygen Demand	2500.00	6700.00	3305.77	31	2525.57	8357.90
Chemical Oxygen Demand	3900.00	2300.00	5083.04	23	3885.21	12853.46
Escherichia coli	1300.00	16000.00	5616.09	23	6609.22	18834.53
Total Arsenic	0.021	0.021	0.021	23	0.000	0.021
Total Cadmium	0.001	0.001	0.001	23	0.000	0.001
Total Chromium	0.011	0.011	0.012	23	0.004	0.021
Total Copper	0.063	0.063	0.081	23	0.056	0.193
Total Lead	0.011	0.016	0.015	23	0.009	0.032
Total Nickle	0.011	0.011	0.011	23	0.001	0.014
Total Zinc	0.560	0.630	0.76	23	0.476	1.714

10.5 Wastewater Nitrogen Concentration



General Notes

NB: THIS PLAN IS CONCEPTUAL ONLY AND UNDER NO CIRCUMSTANCES IS IT INTENDED TO BE USED FOR CONSTRUCTION PURPOSES. THE NOMINATED CONTRACTOR IS TO DETERMINE ALL SPECIFICATIONS. THIS PLAN IS TO REMAIN THE COPYRIGHT OF VISUAL LANDSCAPE DESIGN

VISUAL LANDSCAPE DESIGN
VILLA MARIA - MARLBOROUGH
LANDSCAPE PROPOSALS
visual.design@xtra.co.nz

No.	Revision/Issue	Date

Firm Name and Address
VLD

Project Name and Address
VILLA MARIA - MARLBOROUGH
LANDSCAPE PROPOSALS
FOR RESOURCE CONSENT

Project	Sheet
LP - RC r9	1
Date 30–11–15	
Scale 1;2000 approx @ A3	

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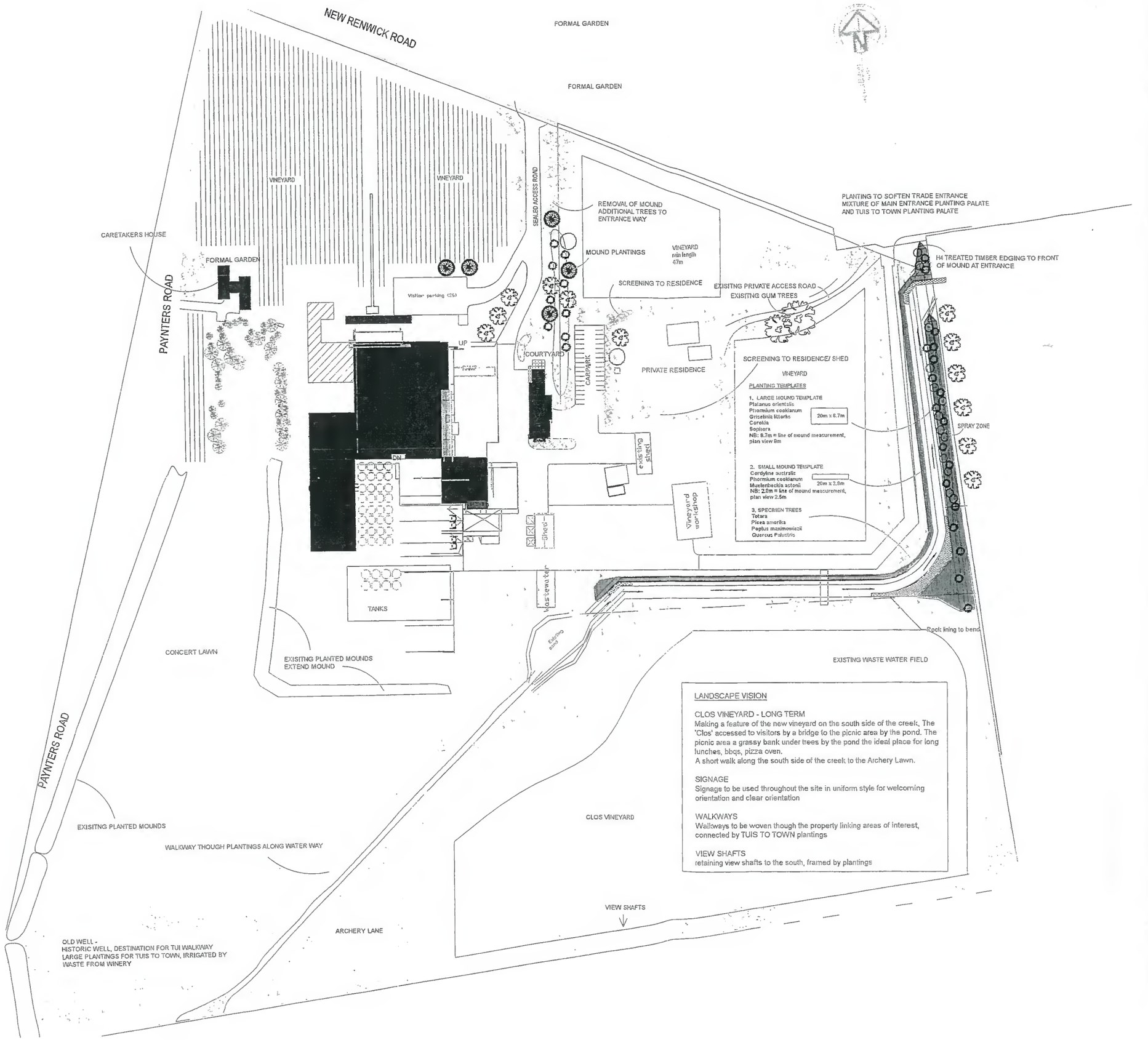
NELSON NZ



General Notes

NB; THIS PLAN IS CONCEPTUAL ONLY AND UNDER NO CIRCUMSTANCES IS INTENDED TO BE USED FOR CONSTRUCTION PURPOSES. THE NOMINATED CONTRACTOR IS TO DETERMINE ALL SPECIFICATIONS. THIS PLAN IS TO REMAIN THE COPYWRITE OF VISUAL LANDSCAPE DESIGN

VISUAL LANDSCAPE DESIGN
VILLA MARIA - MARLBOROUGH
LANDSCAPE PROPOSALS
MASTERPLAN - draft TWO
visual.design@xtra.co.nz

No.	Revision/Issue	Date

Firm Name and Address
VLD

Project Name and Address
VILLA MARIA - MARLBOROUGH
LANDSCAPE PROPOSALS
MASTER PLAN - draft 3

Project	Sheet
MP - d3	01
Date 16-09-14	
Scale NTS	

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North

Visitor parking

Plant

Winery

HALL 1

HALL 2

HALL 3

PLANT

TANKS

Staff amenities

Staff parking

Existing dwelling

existing shed

Shed

Staff parking

Wastewater

Vineyard workshop

Access road

Bund

LEGEND:

- New tanks in existing indoor area
- New roof over existing & new outdoor areas
- Cellar door and visitor area, previously consented but not yet built
- Location of plant area to me moved & replaced with barrel work area
- High level visitor walkway
- Location of new wine making viti offices
- Expand receival and press area
- New large wine tanks outside
- Plant room extension

SITE PLAN
Scale 1:500(A1)
1:1000 (A3)

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VILLA MARIA EXPANSION 2017

smartalliances LTD

ISSUE	DWG NO.	REVISION
INFORMATION	3981-SK10 (A1)	02

C:\D FILE REF: 3439-RCoverview2013

COMPUTER FREEHOLD REGISTER UNDER LAND TRANSFER ACT 1952

Search Copy

R.W. Muir
Registrar-General
of Land

Identifier	**MB6B/216**
Land Registration District	**Marlborough**
Date Issued	07 August 2003

Prior References
MB5D/1133

Estate	Fee Simple
Area	12.4053 hectares more or less
Legal Description	Lot 1 Deposited Plan 11353

Proprietors
Villa Maria Estate Limited

Interests

Appurtenant hereto is a right to convey water specified in Easement Certificate 189786.2 - 11.3.1997 at 9:50 am

The easement specified in Easement Certificate 189786.2 is subject to Section 243(a) Resource Management Act 1991

Subject to a right (in gross) to convey electricity over part marked A and B on DP 346640 in favour of Marlborough Lines Limited created by Transfer 6543799.1 - 23.8.2005 at 9:00 am

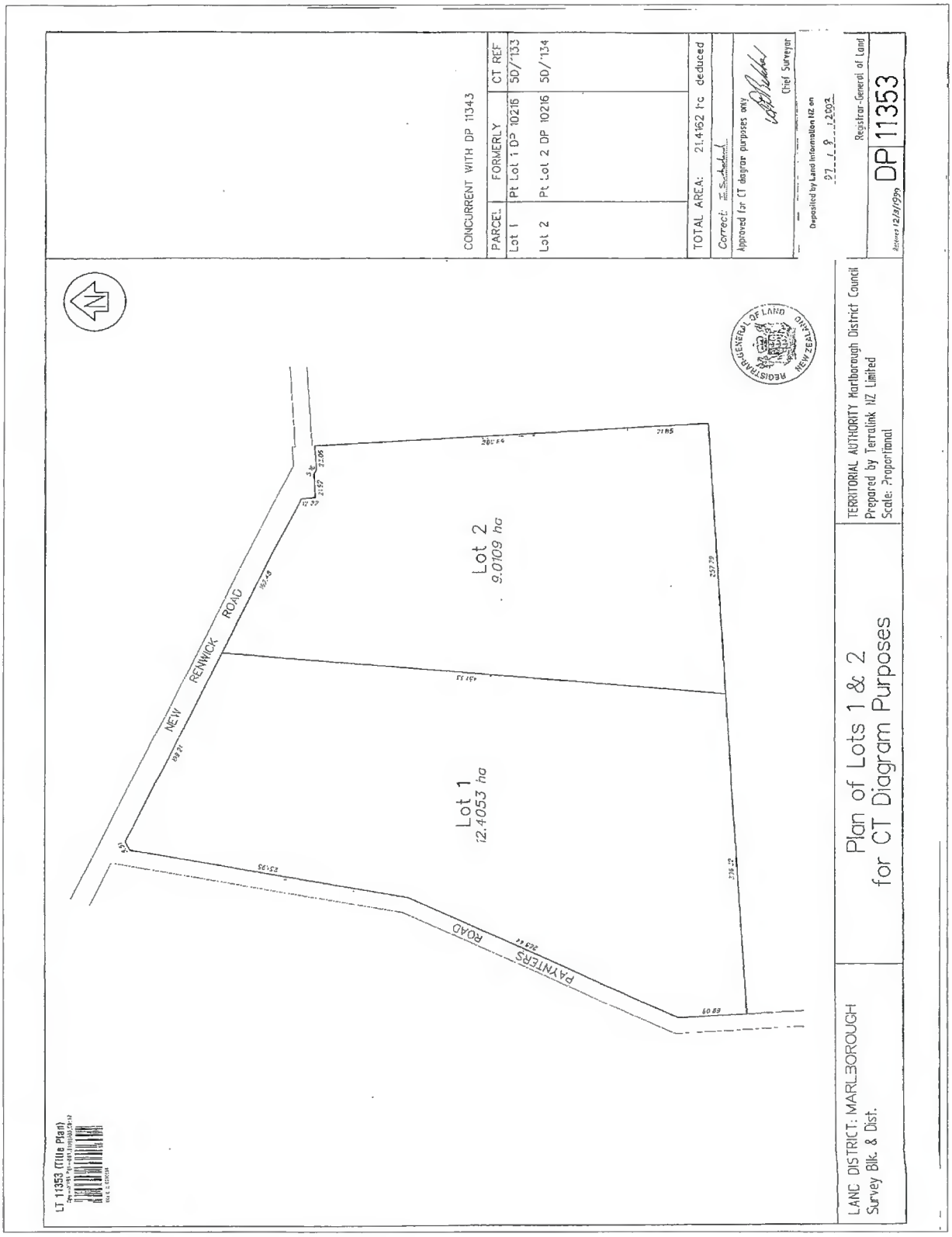
Subject to a right to convey water over part marked A on DP 11538 created by Easement Instrument 7244845.1 - 22.2.2007 at 9:00 am

8841922.1 Encumbrance to Marlborough District Council - 18.8.2011 at 2:40 pm

Subject to a right (in gross) to convey electricity over part marked A and C on DP 460475 in favour of Marlborough Lines Limited created by Easement Instrument 9273616.2 - 14.1.2013 at 11:34 am

9982511.10 Mortgage to Coöperatieve Centrale Raiffeisen - Boerenleenbank B.A. - 27.2.2015 at 5:49 pm

10510582.1 CERTIFICATE PURSUANT TO SECTION 77 BUILDING ACT 2004 THAT THIS COMPUTER REGISTER IS SUBJECT TO THE CONDITION IMPOSED UNDER SECTION 75(2) (ALSO AFFECTS MB6B/217) - 27.7.2016 at 3:36 pm



COMPUTER FREEHOLD REGISTER UNDER LAND TRANSFER ACT 1952

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R.W. Muir
Registrar-General
of Land

Identifier	**MB6B/217**
Land Registration District	**Marlborough**
Date Issued	07 August 2003

Prior References
MB5D/1134

Estate	Fee Simple
Area	9.0109 hectares more or less
Legal Description	Lot 2 Deposited Plan 11353

Proprietors
Villa Maria Estate Limited

Interests

Subject to a right to convey water over part marked A on DP 10216 specified in Easement Certificate 189786.2 - 11.3.1997 at 9:50 am

The easement specified in Easement Certificate 189786.2 is subject to Section 243(a) Resource Management Act 1991

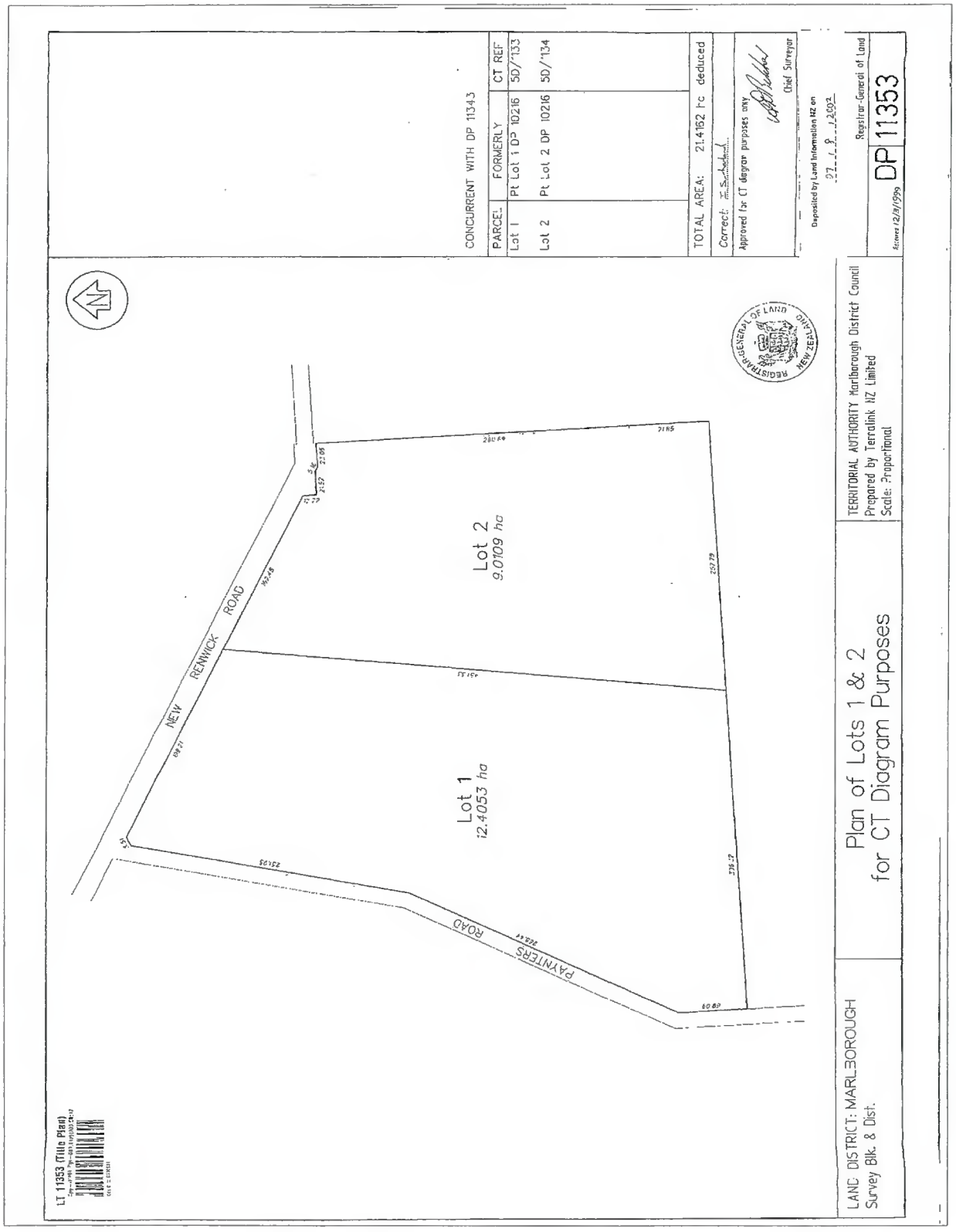
Appurtenant hereto is a right to convey water created by Easement Instrument 7244845.1 - 22.2.2007 at 9:00 am

Subject to a right (in gross) to convey electricity over part marked B on DP 415644 in favour of Marlborough Lines Limited created by Easement Instrument 8147773.1 - 30.4.2009 at 9:00 am

9982511.10 Mortgage to Coöperatieve Centrale Raiffeisen - Boerenleenbank B.A. - 27.2.2015 at 5:49 pm

10510582.1 CERTIFICATE PURSUANT TO SECTION 77 BUILDING ACT 2004 THAT THIS COMPUTER REGISTER IS SUBJECT TO THE CONDITION IMPOSED UNDER SECTION 75(2) (ALSO AFFECTS MB6B/216) - 27.7.2016 at 3:36 pm

Identifier **MB6B/217**



COMPUTER FREEHOLD REGISTER
UNDER LAND TRANSFER ACT 1952

Search Copy

R.W. Muir
Registrar-General
of Land

Part-Cancelled

Identifier	**MB41/14**
Land Registration District	**Marlborough**
Date Issued	01 July 1943

Prior References
MB1/192 MB35/283 MB35/291

Estate	Fee Simple
Area	76.6879 hectares more or less
Legal Description	Lot 1 Deposited Plan 1447

Proprietors
Caythorpe Trustees Limited as to a 1/2 share
Caythorpe Trustees Limited as to a 1/2 share

Interests

589 Order in Council imposing Building Line Restriction

30011 Compensation Certificate by The Minister of Works - 15.1.1959 at 2.00 pm

49353 Gazette Notice declaring part of the within land (1 rood 2.5 perches) of land taken for Road - 17.1.1967 at 11.31 am

82812 Gazette Notice declaring that the part of No. 6 State Highway adjoining the within land to be a limited access road pursuant to Section 4 of the Public Works Amendment Act 1963 - 31.3.1976 at 1.48 pm

87600 Encumbrance to The Marlborough County Council - 21.6.1977 at 10.54 am

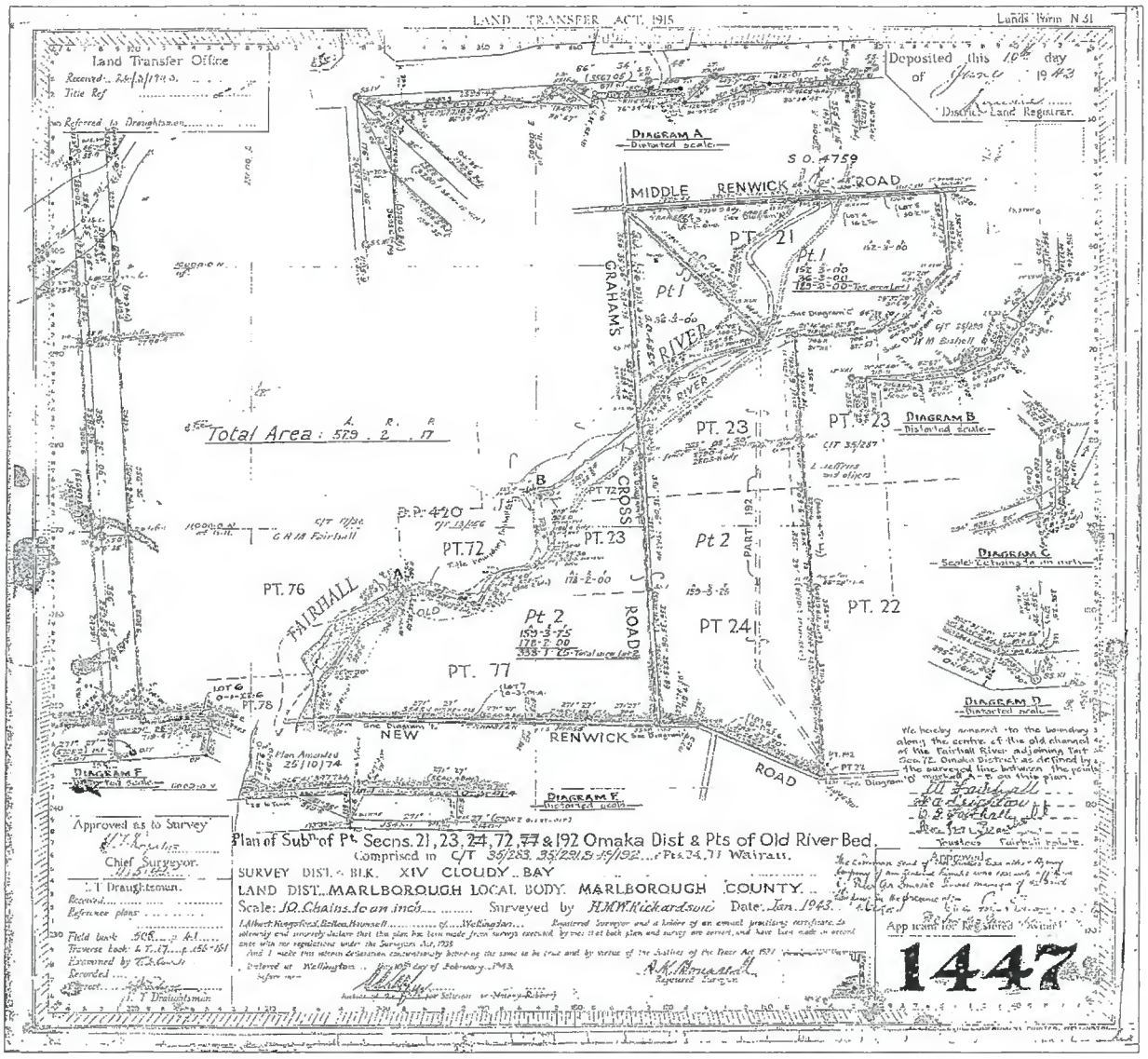
199344.1 Crossing Place Notice under Section 91 Transit New Zealand Act 1989 - 20.8.1998 at 3.25 pm

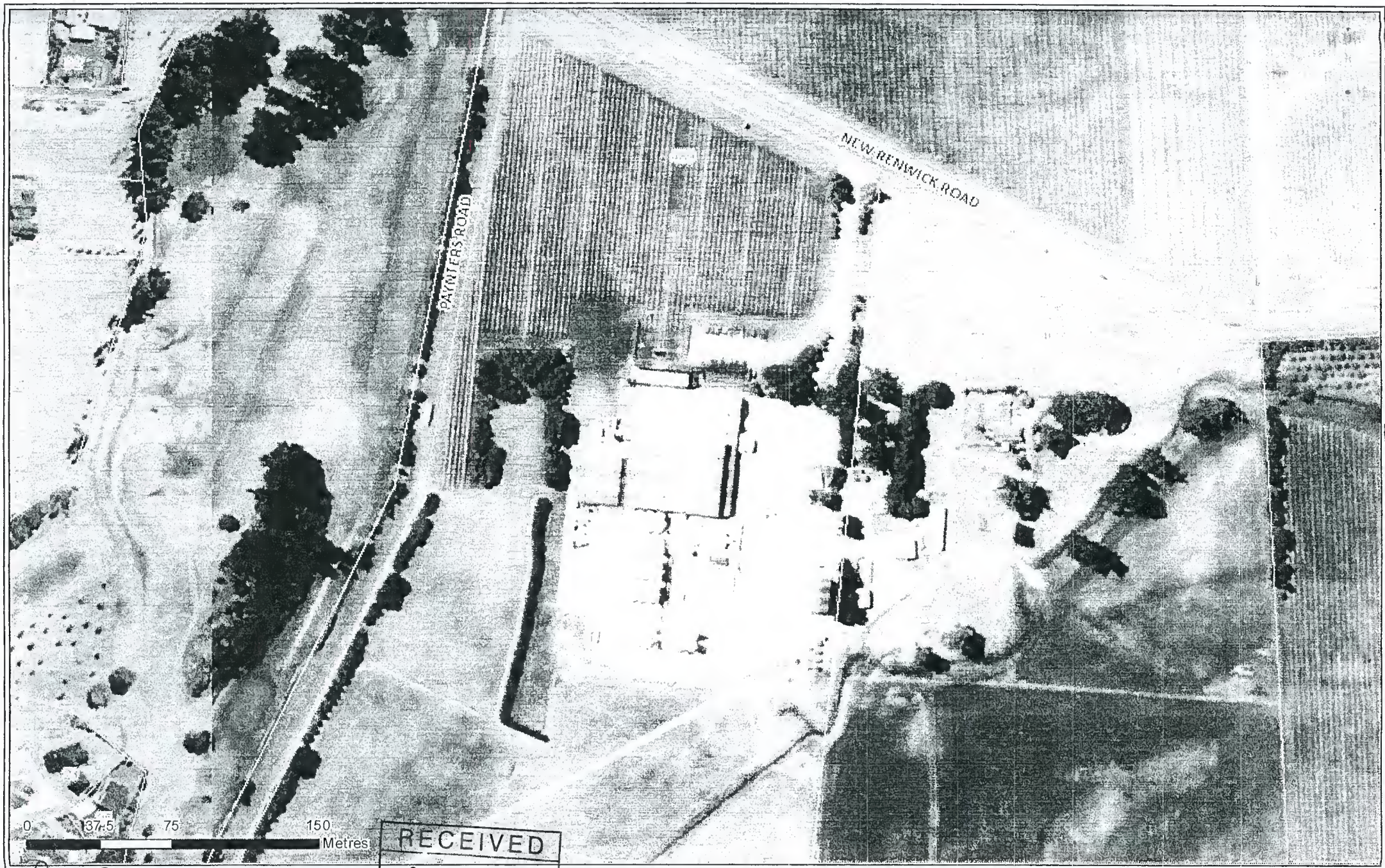
199343.3 Crossing Place Notice under Section 91 Transit New Zealand Act 1989 - 20.8.1998 at 3.25 pm

199343.4 Crossing Place Notice under Section 91 Transit New Zealand Act 1989 - 20.8.1998 at 3.25 pm

10270650.2 Mortgage to ANZ Bank New Zealand Limited - 2.12.2015 at 3:14 pm

Identifier **MB41/14**





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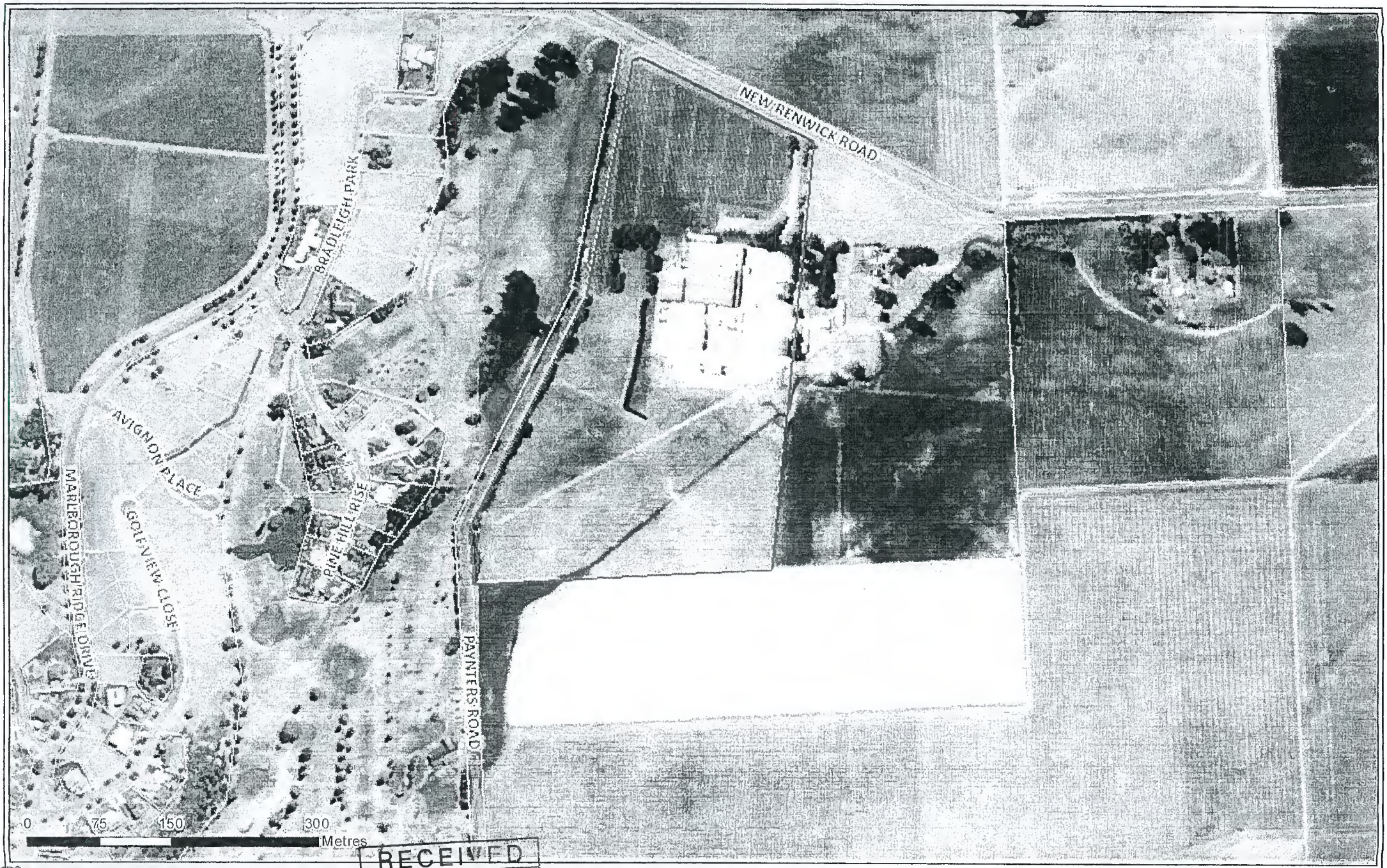
MARLBOROUGH DISTRICT COUNCIL SMART MAPS



Smart Map Print

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MARLBOROUGH DISTRICT COUNCIL SMART MAPS

7.

Traffic Design Group Limited
[illegible]

John Foley
National Wineries Manager
Villa Maria
PO Box 43046
Blenheim 7201

TDG Ref: 13315
25 February 2016

Issued via email: JohnF@villamaria.co.nz

Dear John

Villa Maria Winery, Fairhall: Proposed Expansion

Following your request, we are pleased to provide this assessment of the potential effects arising from the proposed expansion of the Villa Maria winery facilities near Fairhall.

1. Existing Transport Environment

The Villa Maria Winery is located on the southern side of New Renwick Road, about 1km west of Fairhall near Blenheim. New Renwick Road is classified as a Collector Road in the Wairau / Awatere Resource Management Plan (WARMP) and has a sign-posted speed limit of 80km/h. The Annual Average Daily Traffic volume is about 2,500 vehicles per day (vpd). This suggests that peak hour traffic volumes will be in the range 200-300 vehicles per hour (vph).

The winery has two driveways: the western driveway represents the main visitor entrance to the site with the eastern driveway forming the primary truck and general service access.

The visitor entrance is located on a straight and level section of New Renwick Road that provides very good sight distances in both directions. The northern shoulder of the road has been widened and sealed to allow through traffic to safely pass a vehicle that has stopped in the road to turn right into the winery.

The eastern driveway is located on the outside of a curve on New Renwick Road that has a 65km/h speed advisory. The carriageway shoulders have been widened to conform with the WARMP requirements for a rural commercial site access.

2.1 Existing Situation

Based on the information provided, the average daily number of vehicle movements at the winery is about 80vpd and rises to about 220vpd during the peak harvest period. The following table shows the general breakdown of vehicle movements excluding any visitor movements. While the bulk of these movements occur at the service driveway, about 20vpd of the staff travel movements typically occur at the main visitor driveway.

Activity	Vehicle Movements Per Day	
	May to March	Vintage
Permanent Staff	68	68
Vintage Staff	0	48
Fruit Trucks	0	92
Tankers	4	4
Other Trucks	6	8
Total	78	220

Table 1: Average Vehicle Movements Per Day (Existing Situation)

During the vintage period, the volume of fruit trucks entering the winery can vary widely from day to day with an average of about 45. The maximum number of fruit trucks entering the site is about 80 per day (160 movements in and out). Based on experience, we would expect about 75% of the fruit truck movements to occur between 8am and midnight with the balance occurring between midnight and 8am. On this basis, there would be four to five truck movements per hour during the day at the driveway and two to three movements per hour during the night.

It is understood that about 54% of fruit trucks, all tankers and all service vehicles approach the winery from the east. This means that on average, there are about 50 fruit truck movements per day on new Renwick Road east of the winery or two to three trucks per hour.

2.2 Proposed Expansion

It is understood that the proposed expansion of the winery facilities will enable it to process 35,000 tonnes of grapes, an increase of 10,000 tonnes compared with the current situation. This will require additional staff and involve an increase in fruit truck deliveries during the vintage period. Table 2 shows the expected average number of vehicle movements following the expansion. It indicates that the average daily number of movements could increase to about 310vpd during the vintage period. Again, there will be a wide variation in daily fruit truck volumes but a maximum of 125 trucks in one day is anticipated (250 vehicle movements in and out).

Activity	Vehicle Movements Per Day	
	May to March	Vintage
Permanent Staff	78	78
Vintage Staff	0	68
Fruit Trucks	0	150
Tankers	6	6
Other Trucks	6	8
Total	90	310

Table 2: Average Vehicle Movements Per Day (with Expansion)

Since the proposed expansion is not expected to affect the fruit truck arrival patterns, it is expected that on average there would be about 80 fruit truck movements per day on New Renwick Road east of the winery at harvest time. This represents an average hourly fruit truck volume of about four trucks; two in and two out.

3. Assessment of Transport Effects

3.1 Traffic Volumes

Based on the typical approach routes used by the fruit trucks, the proposed expansion will increase the traffic volumes on New Renwick Road by 25-30 truck movements per day east of the winery and 20-25 truck movements per day west of the winery during the peak harvest period. If all the additional truck movements occurred during the day, the expansion could result in an increase from an average of two to three fruit trucks per hour to an average of about four truck movements per hour. This is well within the capacity of New Renwick Road and of the commercial driveway, including its widened intersection arrangements. Given this low volume of additional truck movements, they would not be noticeable to other drivers.

During the critical vintage period, staff members typically arrive within a 15-20 minute period at the start of each shift and all leave in a short period at the end of each shift. As with other wineries, the winery typically operates under two 12 hour shifts during this period. As a result, these trips, apart from administration staff, are outside the on-road peak hour, are still relatively low, and are easily accommodated within the surrounding road network. The winery has two vans that are used for transporting temporary staff to and from the winery at the start and end of shifts which reduces the demand for travel by private motor vehicle.

3.2 Driveway Design

The existing commercial vehicle access has been designed to conform with District Plan rules for a rural commercial access and includes wide sealed shoulders on both sides of the road. The existing driveway configurations are also consistent with the design guidelines set out in the Austroads Guide to Road Design, Part 4a. The anticipated change in traffic volumes using the driveways is not sufficient to warrant a higher standard of driveway design.

3.3 Road Safety

The NZTA Crash Analysis System has been used to investigate reported crashes in the most recent five years in the vicinity of the winery. Only one crash has been reported and occurred when a west bound vehicle left the road at the corner of New Renwick Road by the eastern driveway. Excess speed was identified as a contributing factor to the crash. Although this is an infrequent event, the likelihood of further crashes could be mitigated with an advanced warning sign for the curve, e.g. PW17 sign. There may also be some merit in installing PW11.1 signs on the approaches to the eastern driveway because of the high volume of trucks using this access. However, there is no indication that the presence of this commercial driveway access, designed as it is in full accordance with Council standards, is having any effect whatever on the safety of this local road environment.

4. District Plan Provisions

This proposal has been assessed in terms of Chapter 27.2 - *'General Rules: Rules Relating to Transportation'*. The following summarises the compliance of the proposed winery expansion with the relevant provisions within the WARMP.

4.1 Loading

Section 27.2.2.2 of the WARMP sets out required standards for loading facilities:

(i) Where articulated trucks are used in connection with any site, sufficient space not less than 20m in depth shall be provided.

(ii) Each loading space required by the Plan shall have unobstructed vehicular access to a road or service lane.

(iii) Parking areas and loading areas may be served in whole or in part by a common manoeuvre area which shall remain unobstructed.

(iv) Loading and manoeuvring shall as dictated by the circumstances accommodate the minimum appropriate swept paths.

(v) All loading facilities shall be designed to ensure that vehicles are not required to reverse either into or out of the site.

(vi) Commercial space designated for loading purposes shall be formed and finished to an all-weather dust free surface and shall be maintained in a condition available for loading purposes at all times.

(vii) All car parking and loading spaces shall be located on the site of the activity they are intended to serve.

The loading facilities have been designed to accommodate the largest articulated and truck & trailer combinations that will service the winery. These vehicles typically include truck & trailer combinations delivering grapes during the grape harvest and large bulk tankers throughout the year. The site arrangements include a generous yard area, well removed from the road that easily accommodates all of the manoeuvring area required for the largest of truck & trailer units to deliver the grapes to the hoppers, and drop and store the trailer units temporarily within the yard while the truck s are tipping. These arrangements have already been tested through the last vintage and will remain unchanged, in terms of grape delivery.

Tankers are used for bulk transport of wine to Auckland for bottling. A one-way truck path is proposed around the tank farm so that tankers and trucks do not need to undertake any reverse manoeuvres on site.

The two-way winery driveway has been designed to readily accommodate the flow of all large commercial vehicles. All loading activity occurs and will continue to occur entirely within the site, as described.

4.2 Vehicle Parking

All parking for the site activities will continue to be provided on-site as required by the WARMP.

The winery currently has 20 visitor parking spaces and the development proposal includes 45 spaces for employees that will be accessed from the commercial driveway.

All car parks are located more than 30m from New Renwick Road and provide adequate manoeuvring space such that all vehicles can depart from the winery in a forward direction.

No changes are being made to the cellar door, which does not include a restaurant. The proposed expansion is therefore not expected to change the visitor parking demands and no change to the generous on-site visitor parking arrangement is proposed.

The number of employee parking spaces is generally sufficient to meet the parking demands anticipated throughout the year. There is potential for the capacity to be exceeded at shift change over times during the harvest season but this will be a short duration effect and any such vehicles are able to be readily accommodated within the generous yard space adjacent the parking area, in any such temporary event, well removed from the road. All parking will continue to be entirely contained within the site at all times.

4.3 Site Access

The relevant rules for this site from Section 22.2.4 of the WARMP are summarised as follows:

27.2.4.4 **Vehicle Crossing Separation:**

For sites with frontage to a road where the speed limit is 100km/h, the minimum spacing between successive accesses shall be 200m

For all other sites, the minimum distance between accesses to the site shall be:

a) 7.5m for residential activities
b) 15m for all other activities.

27.2.4.5 **Number of Vehicle Crossings:**

No more than three site accesses for developments accessing a Collector Road with a frontage more than 100m.

27.2.4.6 **Access Separation from Intersections**

A minimum separation distance of 90m to the nearest local road from an access.

The length of the winery frontage to New Renwick Road exceeds 100m and three driveways are permitted under the WARMP. The winery has two driveways separated by a distance of about 200m which meets the WARMP requirement for driveway separation. The nearest intersection is at Paynters Road and is more than 90m from the driveways. All of these arrangements remain completely unchanged from what now exists and which has proven to operate safely and efficiently, as expected.

27.2.4.7 **Access Design**

Access Standard

Where an access connects to a Collector road where the speed limit is over 50km/h, local road widening will be undertaken in accordance with Figure 13 of the WARMP for a Commercial Access in a Rural Zone.

Sight Distance

The minimum required sight distance for an access to a road with an 85th percentile operating speed of 80km/h shall be 175m.

The existing access is constructed to the requirements of WARMP Figure 13. Clear sightlines are available that easily exceed the required 175m.

4.4 Assessment in Terms of Transport Criteria 27.2.8.2

The transport related features meet the relevant objectives and policies, and all of the relevant rules are met unless otherwise described above.

1. The expanded activity will not impact on the proper functioning of the transportation hierarchy.
2. There are no existing traffic problems in the immediate area, and as described, the traffic flows to and from the winery are relatively light. Furthermore, the regular users associated with the winery will be well familiar with the winery driveways. With the relatively modest increase in traffic generated by the winery expansion, the excellent inter-visibility sightlines, wide spacing from neighbouring driveways and the familiarity of staff and commercial operators with the existing winery driveways, it is not expected that the expanded activity will have any effect on the existing safe local driving environment.
3. The expanded activity is not expected to have any adverse effect on any existing and probable future traffic volumes on adjoining roads.
4. The number of existing pedestrians and cyclists in this rural locality is minimal as it is remote from centres of population. It is considered that the expanded activity will have no effect on the ability of the existing roading system to accommodate cycle and pedestrian movements safely.
5. The activity will have no adverse transportation effects on local amenity.
6. The actual or potential effect on traffic safety is assessed to be neutral because the existing access arrangements are already designed to safe standards in accordance with the highest expectations of the WARMP and of good practice.

Overall, the actual or potential effect of this expanded winery on the road network will be minimal, and is not expected to be noticeable to other road users from the day to day traffic variations with which they are already familiar.

5 Conclusions

Overall, we have concluded that the proposed expansion will have no noticeable traffic effects during the year. Although, there will be an increase in truck volumes during the harvest period, the hourly volumes of truck movements will remain sufficiently low that they will not affect the capability of the roads to operate safely and are unlikely to affect the movement of general traffic in the area.

We trust that this report is clear but would be happy to clarify any matters raised as necessary.

Yours sincerely
Traffic Design Group Ltd

Chris Rossiter
Principal transportation Engineer
chris.rossiter@tdg.co.nz

Dave Petrie
Senior Associate
dave.petrie@tdg.co.nz

Filenote

Job: 13315

To: Dave Petrie

From: Chris Rossiter

Date: 25 February 2016

Subject: Coach parking

---

1. Coach Parking Options

The Villa Maria Winery has a visitor car park with sufficient space for about 20 cars. The car park has been configured with a single wide aisle and right angle parking on each side. This configuration does not provide an area that is suitable for coach parking or manoeuvring.

1.1 Option 1 – Coach Parking Bay

The simplest option for accommodating a coach would be to create a coach parking bay on the south side of the car park. This would need to have a minimum depth of 13m and minimum width of 4m (desirable 5m). This would allow a coach to drive forward into the main car park, reverse into the coach bay and then depart in a forward direction. In order to accommodate the swept path of the coach, car parking would not be permitted immediately adjacent to the coach space.

1.2 Option 2 – Coach Lane

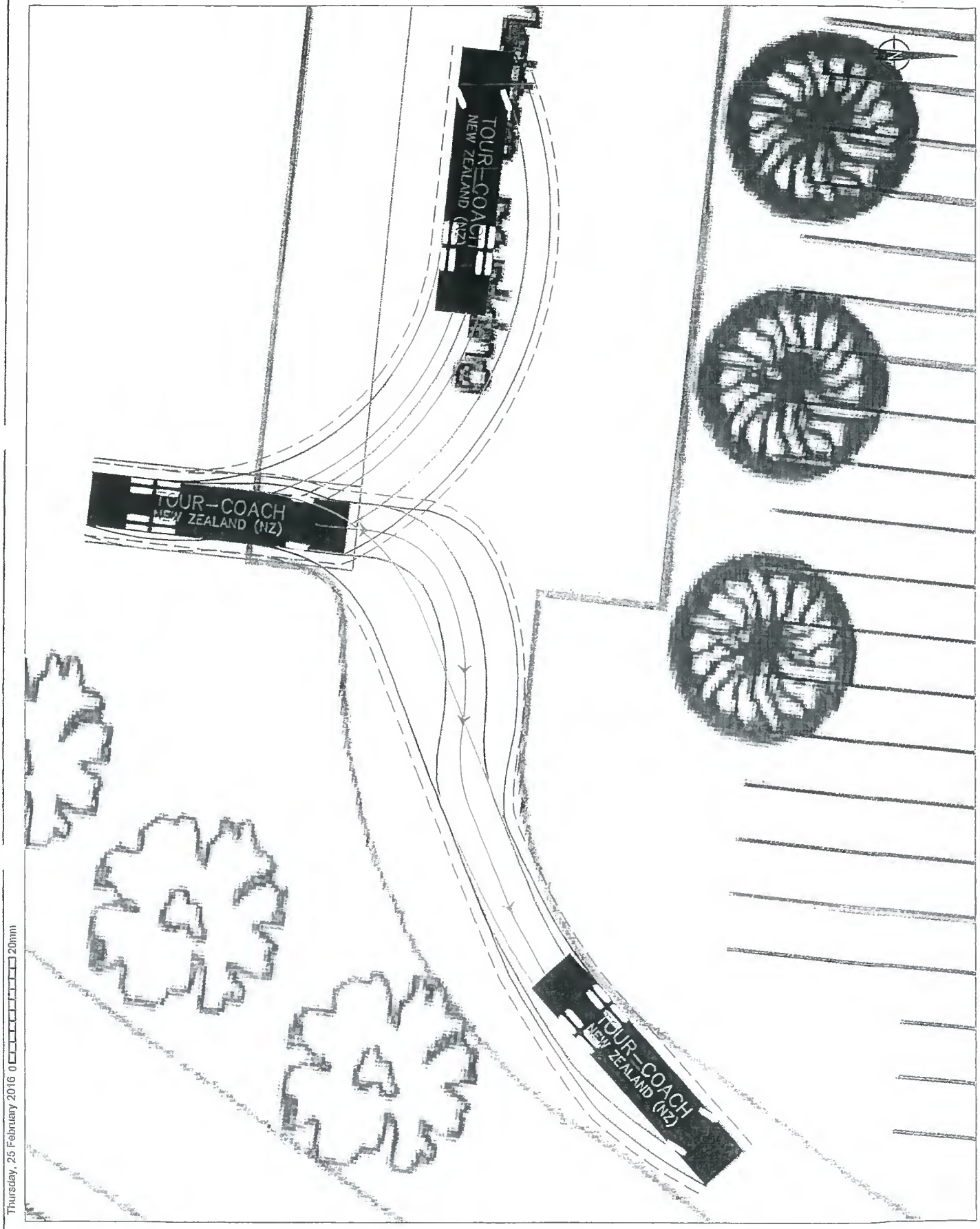
Under this option, a one-way coach only lane would be constructed from the yard access gate to the eastern end of the car park. The alignment would follow the yard fence line initially before curving to the north to join the car park. This option would allow a coach to drive forwards through the site and to stop by the car park for passengers to load or unload.

With this option, it would not be necessary for all of the coach lane to be sealed. A formed but permeable surface could be used for the section by the fence line.

1.3 Option 3 – Turning Circle

A tour coach requires a turning circle with a diameter of 25-30m. The proposed site layout does not provide sufficient space to create a turning circle unless vines or landscaping are removed.

PO Box 8615, Riccarton, Christchurch 8440
New Zealand
: +64 3 348 3215
www.tdg.co.nz



Thursday, 25 February 2016 0 20mm

VILLA MARIA WINERY

COACH TRACKING

TDG

1

SCALE: 1:250 @ A4

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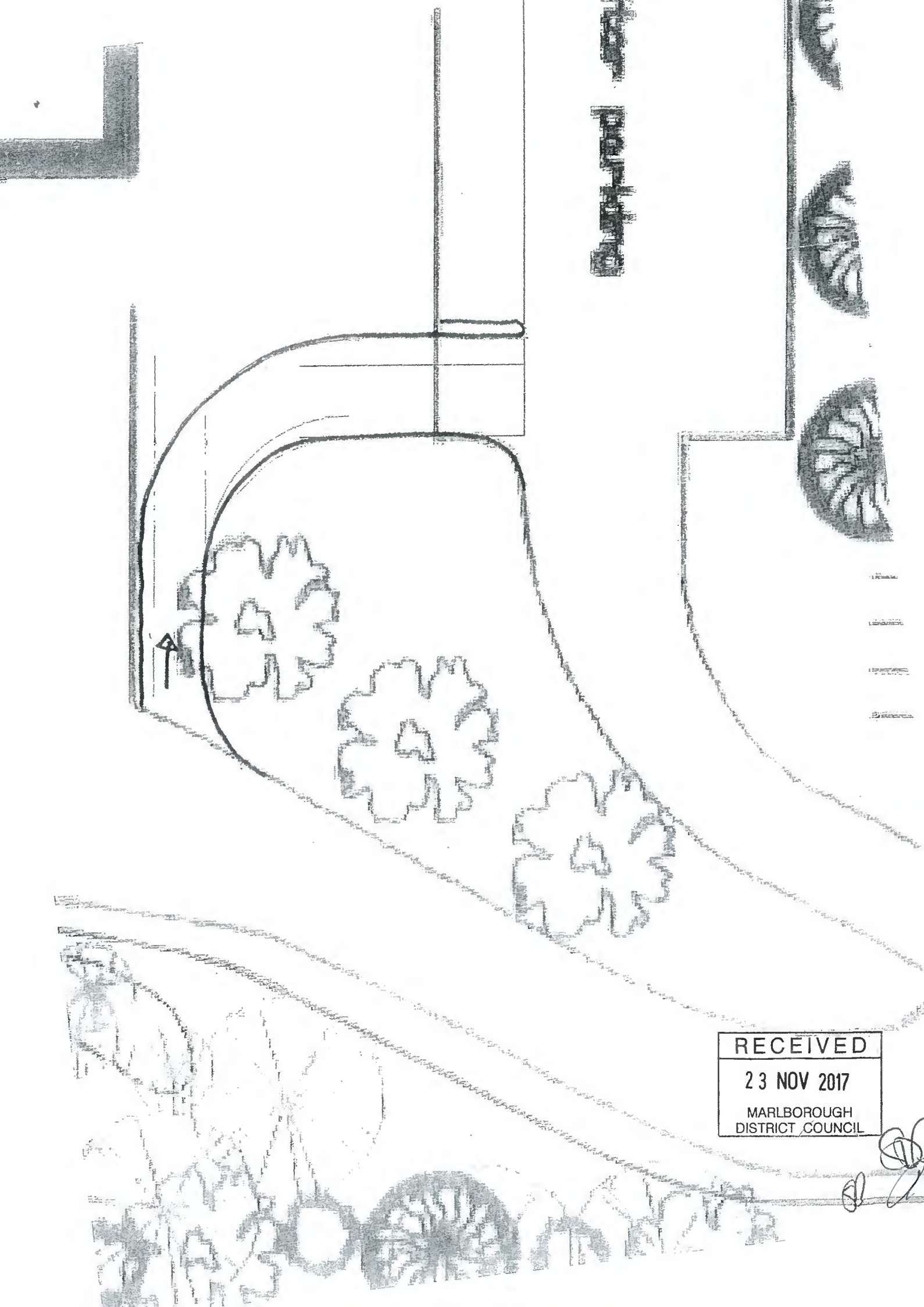

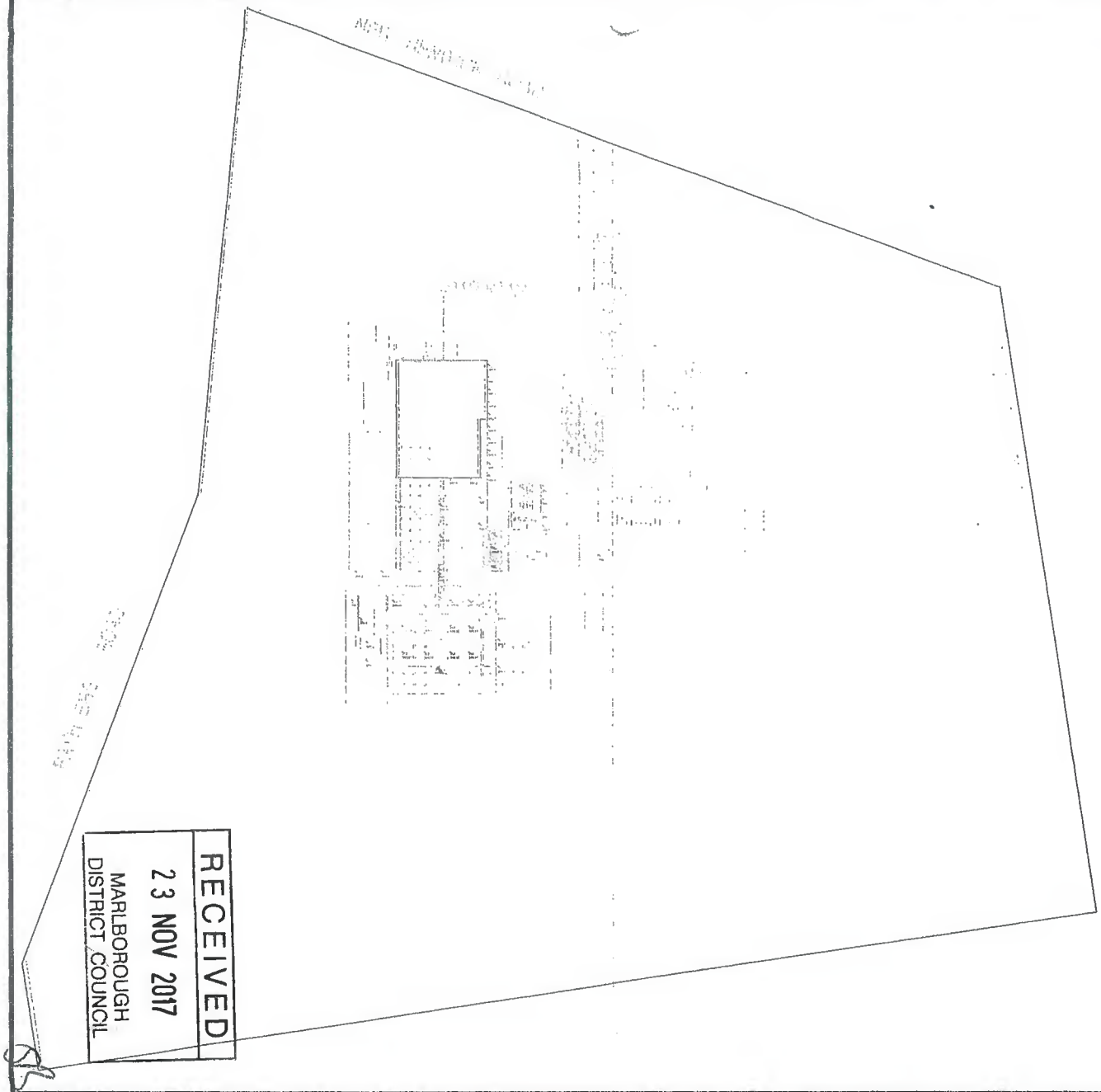

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23 NOV 2017
MARLBOROUGH DISTRICT COUNCIL

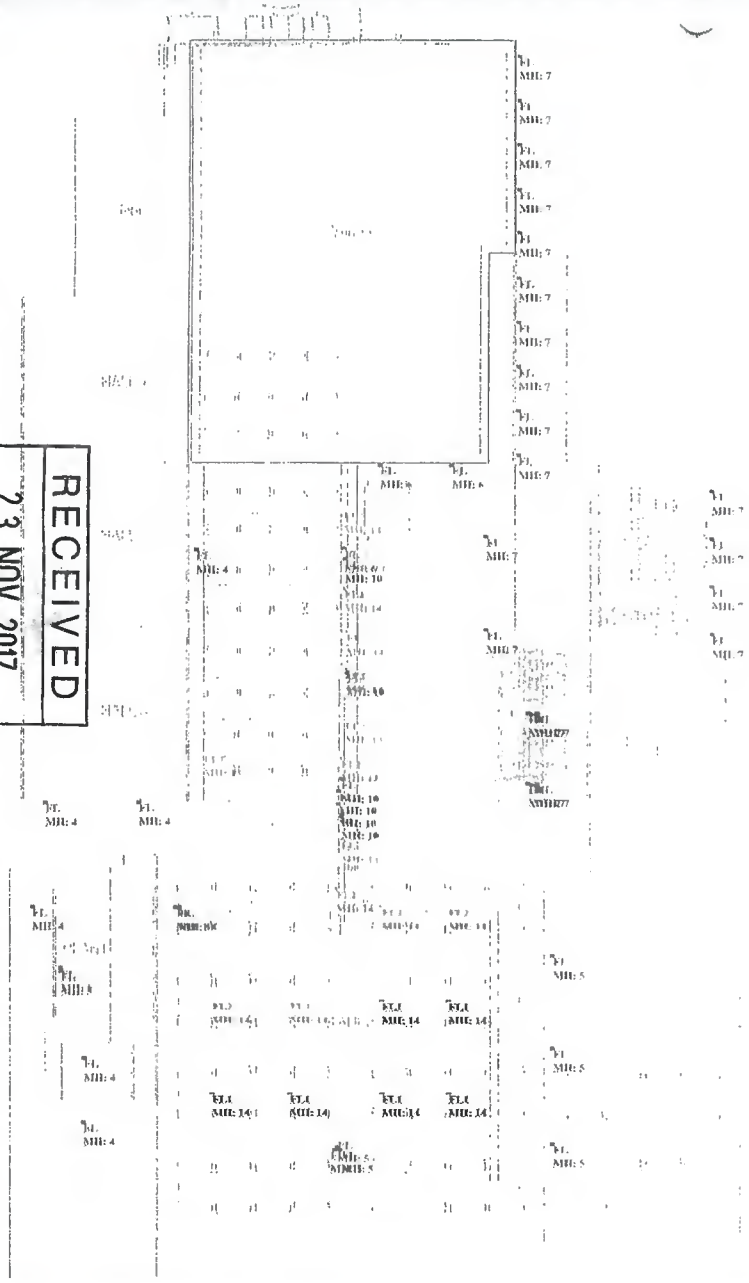
CLIENTS NAME VILLA MARIA WINERY	Villa Maria Winery.AGI		
	DESIGNED BY: CWM	Checked By:	Page 1 of 3

SOUTH ISLAND LIGHTING DIVISION
118 MONTREAL STREET,
SYDENHAM, CHRISTCHURCH
NEW ZEALAND
DDI: 03-3645242
M: 021-778036
E:christina.west-mclaren@ideal.co.nz

REXEL LIGHTING
Total lighting solutions.

IDEAL ELECTRICAL SUPPLIERS
REXEL GROUP

REVISIONS	#	DATE	DRAWING NUMBER
	I	18/03/2016	



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CLIENT'S NAME VILLA MARIA WINERY	Villa Maria Winery.AGI		
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#	DATE	DRAWING NUMBER
1	18/03/2016	

Smart Map Print

* Owned by Villa Maria

1:5,000 8/5/2016

MARLBOROUGH DISTRICT COUNCIL SMART MAPS

To: Marlborough District Council
PO Box 443
Blenheim 7240

MARLBOROUGH DISTRICT COUNCIL

ISO 9001:2008
Document Number:
RAF0010-CI1921

SUBMISSION ON APPLICATION FOR A RESOURCE CONSENT

1. Submitter Details

Name of Submitter(s) in full .....

Electronic Address for Service *(email address)* .....

Postal Address for Service *(or alternative method of service under section 352 of the Act)* .....

.....

.....

Primary Address for Service *(must tick one)*

Electronic Address *(email, as above)* ☐ or, Postal Address *(as above)* ☐

Telephone *(day)* ..... Mobile ..... Facsimile .....

Contact Person *(name and designation, if applicable)* .....

.....

2. Application Details

Application Number U.....

Name of Applicant *(state full name)* .....

Application Site Address .....

Description of Proposal .....

.....

.....

3. Submission Details *(please tick one)*

I/we support all or part of the application ☐

I/we oppose all or part of the application ☐

I/we are neutral to all or part of the application ☐

☐ I am a trade competitor for the purposes of section 308B of the Resource Management Act 1991

☐ I am directly affected by an effect of the subject matter of the submission that:

a) adversely affects the environment; and

b) does not to relate to trade competition or the effects of trade competition

☐ I am NOT directly affected by an effect of the subject matter of the submission that:

a) adversely affects the environment; and

b) does not to relate to trade competition or the effects of trade competition

☐ I am NOT a trade competitor for the purposes of section 308B of the Resource Management Act 1991

The specific parts of the application that my/our submission relates to are *(give details, using additional pages if required)*

The reasons for my/our submission are *(use additional pages if required)*

The decision I/we would like the Council to make is *(give details including, if relevant, the parts of the application you wish to have amended and the general nature of any conditions sought. Use additional pages if required)*

4. Heard in Support of Submission at the Hearing

I/we wish to speak in support of my/our submission ☐

I/we do not wish to speak in support of my/our submission ☐

OPTIONAL: Pursuant to section 100A of the Resource Management Act 1991 I/we request that the Council delegate its functions, powers, and duties required to hear and decide the application to one or more hearings commissioners who are not members of the Council. *(Please note that if you make such a request you may be liable to meet or contribute to the costs of commissioner(s). Requests can also be made separately in writing no later than 5 working days after the close of submissions.)* ☐

5. Signature

Signature ..... Date .....

Signature ..... Date .....

6. Important Information

- Council must receive this completed submission before the closing date and time for receiving submissions for this application. The completed submission may be emailed to mdc@marlborough.govt.nz.
- The closing date for serving submissions on the consent authority is the 20th working day after the date on which public or limited notification is given. If the application is subject to limited notification, the consent authority may adopt an earlier closing date for submissions once the consent authority receives responses from all affected persons.
- You must serve a copy of your submission on the applicant as soon as is reasonably practicable after you have served your submission on the consent authority.
- Only those submitters who indicate that they wish to speak at the hearing will be sent a copy of the section 42A hearing report.
- If you are making a submission to the Environmental Protection Authority, you should use form 16B.
- If you are a trade competitor, your right to make a submission may be limited by the trade competition provisions in Part 11A of the Resource Management Act 1991.
- If you make a request under section 100A of the Resource Management Act 1991, you must do so in writing no later than 5 working days after the close of submissions and you may be liable to meet or contribute to the costs of the hearings commissioner or commissioners. You may not make a request under section 100A of the Resource Management Act 1991 in relation to an application for a coastal permit to carry out on activity that a regional coastal plan describes as a restricted coastal activity.
- Please note that your submission (or part of your submission) may be struck out if the authority is satisfied that at least 1 of the following applies to the submission (or part of the submission):
  - it is frivolous or vexatious;
  - it discloses no reasonable or relevant case;
  - it would be an abuse of the hearing process to allow the submission (or the part) to be taken further;
  - it contains offensive language;
  - it is supported only by material that purports to be independent expert evidence, but has been prepared by a person who is not independent or who does not have sufficient specialised knowledge or skill to give expert advice on the matter.

7. Privacy Information

The information you have provided on this form is required so that your submission can be processed under the Resource Management Act 1991. The information will be stored on a public file held by Council. The details may also be available to the public on Council's website. If you wish to request access to, or correction of, your details, please contact Council.