

## Submission Form 16 to the Otago Regional Council on consent applications

This is a Submission on (a) limited notified/publicly notified resource consent application/s pursuant to the Resource Management Act 1991.

**Submitter Details:**

(please print clearly)

Full Name/s:

Amisfield Orchard Ltd

Postal Address:

84 Fatten Road RD2Cromwell

Post Code:

9384

Phone number:

Business:

027 445 4424

Private:

03 445 4414

Mobile:

027 445 4424

Email address:

Malcolm.Little@xtra.co.nz

I/we wish to ~~SUPPORT~~ **OPPOSE** / submit a **NEUTRAL** submission on (circle one) the application of:

Applicant's Name:

Cromwell Certified Concrete Limited

And/or Organisation:

Application Number:

RM20.360.01 - 04

Location:

Cromwell, approximately 400 metres south southeast of the intersection of Luggate-Cromwell Road (State Highway 6) and Mt Pisa Road

Purpose:

Various consents relating to gravel washing

The specific parts of the application/s that my submission relates to are: (Give details)

See attached appendix and emails with photos etc

My/Our submission is (include: whether you support or oppose the application or specific parts of it, whether you are neutral regarding the application or specific parts of it and the reasons for your views).

Oppose the application

See attached appendix and emails with photos etc

We seek the following decision from the consent authority (give precise details, including the general nature of any conditions sought)

Decline the application

See attached appendix and emails with photo's etc

I/we:

- Wish to be heard in support of our/my submission
- Not wish to be heard in support of our/my submission

If others make a similar submission, I/we will consider presenting a joint case with them at a hearing.

- Yes
- No

I, ~~am~~ **am not** (choose one) a trade competitor\* of the applicant (for the purposes of Section 308B of the Resource Management Act 1991).

\*If trade competitor chosen, please complete the next statement, otherwise leave blank.

I, **am/am not** (choose one) directly affected by an effect as a result of the proposed activity in the application that:

- a) adversely affects the environment; and
- b) does not relate to trade competition or the effects of trade competition.

I, ~~do/do not~~ (choose one) wish to be involved in any pre-hearing meeting that may be held for this application.

I ~~do/do not~~ request\* that the local authority delegates its functions, powers, and duties to hear and decide the application to 1 or more hearings commissioners who are not members of the local authority.

I ~~have~~ **have not** served a copy of my submission on the applicant.

Signature/s of submitter/s  
(or person authorised to sign on behalf of submitter/s)

23/5/2021

(Date)

## Appendix : Submission on CCC Ltd from Amisfield Orchards Ltd to CODC / ORC

### Introduction

Amisfield Orchard Ltd (AOL) is owned by Malmuzza Holdings Ltd (Murray Little – solicitor/partner Cruickshank Pryde) and trustees of the Hayden Little Family Trust (Malcolm Little/Hayden Little, CP Trustees Ltd)

Author/ Trustee – Malcolm Little BAgSc NZIP Rural Valuer 35 yrs experience as rural banking executive and personal business in farming, orchards, viticulture, forestry, export packhouse, consultancy to the second largest cherry operation etc and business management. Developed 8 orchard properties to date

AOL owns a 6.78ha 4 yr old cherry orchard on the eastern boundary of the 9.87ha lifestyle/horticultural block the CCCL purchased in 2018.

### Background/Location (see updated site plans)

AOL was formed in Aug 2017 to develop 5ha of the property into an export cherry orchard with the balance of the land 1.78ha to be utilised for a dwelling, parking and seasonal workers accommodation being the balance of the land elevated and outside the orchard environment/structures apart from a small harvest and tree nursery area. This support land bounds with the CCCL acquisition.

The AOL property has no buildings or other improvements except a frost fan

Over 2017-2021 AOL fully established 3,300 cherry trees with the first commercial harvest due this season with peak production expected in the 2023/24 season.

At this time the CCCL quarry to the south west was coming to the end of its economic life under its existing consent and would have little long term impact

Orchard development included intensive pole, cable and screw anchor structures to support bird nets and retractable rain covers. Bird nets have been applied to the structure and rain covers to be added prior to peak production.

The support area was cultivated and fill applied over the past couple of year in preparation for a dwelling and seasonal workers accommodation (essential to harvest the crop). In Nov 2020 a building platform was approved by CODC and a house plan (see attached) completed July 2020 - commenced prior to any knowledge of the quarry expansion.

Our surveyor is currently working on the building consent and approval of the seasonal workers accommodation (in time for the first harvest) – **these facilities are critical to harvest the crop due to extreme lack of accommodation over December/ January harvest period.**

The numbers of people residing on the boundary of the applicant's property is likely to exceed 50 pickers for 1.5 months, 10 people pruning for 2-3 months and 2-3 permanent staff all year round.

The AOL title is subject to 'no complaining gag' and dwelling number covenants in respect to the existing CCCL quarry to the south. Amisfield Orchards can build a house as long as the Hayden Little Family Trust (HLFT) doesn't – the trust has no intention of doing so in the short term but also has an approved building site.

When the existing quarry is no longer commercially viable the covenants end – under the current consent this was likely to be in a few years

Access and services to our property is via a 10m wide ROW/easement over the CCCLs new property they propose to expand into. This will create a narrow causeway with 50ft drop offs either side onto gravel or eventually a small 35ft deep lake.

CCCL have requested the ROW/Easements be redirected around the recently acquired land adding considerable distance on a gravel road around a pit to get to our property – this was declined.

### **The ROW/Easement has scant consideration in the CCCL RC application**

In 2001 the CODC approved the subdivision of the dryland farmland around the existing quarry to facilitate lifestyle horticulture/viticulture titles with two vineyards, two cherry orchards and a dwelling/commercial storage developed since.

In April 2015 the CODC granted a new consent with basic poorly defined conditions comprising 2-3 pages - scant compared to recent quarry consents in built up areas (see Fulton Hogan's Royden quarry RC decision in March 2020 which is now subject to Environment Court appeal)

**CCCL is applying for a completely new replacement consent to increase output by 200% thus increase the adverse effects. AOL thinks all reference to what the past consent conditions allowed is not a justification for continuation of current practices that don't take account of changes to its surrounding environment and new best practices.**

CCCL purchased this relatively narrow small title (by commercial quarrying standards) between and further up wind of two established/establishing businesses and dwelling/build platforms - time has moved on and CCCL is no longer surrounded by open unoccupied farmland.

The existing CCCL operations is now surrounded by horticulture, viticulture and lifestyle blocks with dwellings as are the areas north and south between Lake Dunstan and SH6

CCCL requested a meeting with AOL in June 2020 and presented an incomplete draft report on the proposed quarry expansion. At this time AOL was already planning a dwelling and seasonal workers accommodation and well underway establishing a multi-million dollar cherry business. AOL expressed concerns on the adverse effects.

There have been no further formal meetings with CCCL or their contractors/experts on the proposal or to discuss AOLs business plans and the effects on a modern cherry orchard operation.

We understand other neighbours experienced a similar lack of any meaningful consultation.

### **Notification**

AOL received the RC application on 27/28 April 2021 however ORC surprisingly didn't know who owns the effected properties and ORC re notified on the 11 May 21 with a further 2 weeks to submit. Given this is a joint hearing and effected persons could submit to CODC and ORC in one report, we expected CODC to follow suit given the ORC information was received by some effected two weeks later.

This didn't occur and effected persons were informed that the acceptance of a submission to the CODC could be refused if not received by 25 May. Accordingly effected persons are forced to do two submissions or keep to the 25 May CODC deadline after only having the ORC info for 2 weeks.

AOL requested the justification of only notifying properties within 100m when video evidence had been supplied showing dust movements in excess of 200m and recent Canterbury resource consent conditions have imposed setbacks of up to 500m from crushing/ 200m from quarrying. **Canterbury District Health Board (CDHB) recommends 250m separation due to dust effects.**

There appears to be no sound logic or reason to assume no effects are experienced beyond 100m (dust, noise, visual, trucks etc).

AOL believes it should have been public notification or at least properties within 500m should be notified. The notification by the CODC and ORC should be reviewed

## **Adverse Effects**

The Mt Pisa / Amisfield flats is the most, if not one of the driest, windy built up mountainous regions in NZ with very high summer temperatures.

Our rain fall is generally below 400mm/annum being classified as semi-desert with slightly less rainfall in winter (NIWA). The Amisfield location has less rain than most areas in in Central Otago based on Harvest.com weather sites and often has over 20% less rain than Bannockburn some 15km to the south based on our orchard weather station records.

A high percentage of the rain falls occur in single events normally in spring/summer and there are long dry spells which requires irrigation for most non-tap root vegetation to survive.

Amisfield is classified by CODC as a very high wind zone in regard to building and we have sustained significant damage to orchard infrastructure especially in recent years from extreme winds coming over the Pisa range from the westerly quarter.

Further, mini tornados along the flats have caused damage to our orchard and residential property (NZAIR report comments on the effects of topography on wind)

## **Dust (refer attached photos and videos of the dust issues – via emails)**

The existing CCCL quarry has no ongoing rehabilitation so is nearly all exposed surfaces (NZAIR) and CCCL proposes to strip the topsoil off the expanded area for bunds with no progressive rehabilitation proposed accordingly the quarry will be largely all dust bearing surfaces except ponds and rock stock piles.

Existing and proposed bunds have no sprinkler vegetative cover, get filled with rabbit holes and dust bearing. This is unacceptable and not best practice - other quarries are required to establish and maintain cover and trees on all bunds between neighbours, public roads and ROWs.

Accordingly with an over 200% increase in output and hundreds of truck movements internally and externally per day with extreme winds, little rain and high temperatures, it highly probable that without the complete area being watered immediately night and day, dust will leave the boundary.

AOL does not agree with or have any confidence in the findings/conclusions of the Becca reports

Did the author actually visit the site on a windy day?

We understand the peer review reports were desk top.

The reasons we don't accept the reports are as follows:

- The data is from a site 2 km away in a mountain/valley environment and as NZAIR stated the wind is affected by the terrain. The site used is further down the narrowing valley where wind backs up due to the constriction created by the Sugar Loaf terrace then increasing as the valley opens up closer to Cromwell. Wind is volatile - coming and going very quickly.
- We have experienced audible effects of large particles off the quarry hitting vehicles (see video) during very high winds (will sand blast windows over time)
- The air quality reports have a disclaimer that they have relied on information from Landpro the paid consultant of CCCL – we are concerned about the accuracy and content of the information supplied to the experts (selective / lack of)
- The data is for a selective 8-9 month period with the 'experts' stating this is acceptable as there is more rain in winter – perhaps the experts should check NIWA data that shows it is less as do the Harvest. Com weather stations The raw data that Beca has used to come to its conclusions is not supplied and needs to be. It appears to be over a selected short time frame (9 mths in 2019) and may not be representative of the wind load (wind intensity varies year to year). A longer period needs to be assessed  
The winter months have frequent windy SW fronts so has this data been excluded due to the proximity/vulnerability of dust receptors from this wind direction?
- Comparison's with other locations are not valid due to the extreme differences in mountainous regions (how could you compare an open landscape of Earnscleugh with a low hills to this high mountain valley location?).

**There has probably been no other situation in NZ where a quarry is being sort on the boundary of a modern export cherry orchard - there has been no attempt to understand, report or mitigate the adverse effects on our cherry structures, consented building platforms, seasonal workers accommodation, people (staff/owners/contractors), livestock and plants**

#### **Dust Mitigation**

AOL has no confidence that the DRAFT Dust Management plan will prevent significant dust being deposited on houses, workers, cherry structures etc.

CCCL has consistently been non-compliant with its RC conditions namely:

- 1) encroached on neighbouring land and conducted unconsented activities

- 2) regularly discharge large quantities of dust over neighbours properties particularly noticed by AOL recently during development work and on our developed land (historical complaints being low because of the 2001 gagging covenants and up to recently surroundings were largely undeveloped). CCCL failed to mitigate any of the dust pollution events we reported.
- 3) failed to establish/maintain 2 rows of trees on its south boundary as failed to locate the boundary
- 4) failed and continues to fail to control rabbits which are a source of dust surfaces (see their ecological report/ e mailed photos)
- 5) in the past 12 months there has been a significant effort into getting their operation in order for this consent
- 5) during this process there has been a lack of effort to understand AOL's business, consult and accept the world has moved on and they are now surrounded by rural residential/hort/vit developments.

Accordingly we have no confidence in CCCL self monitoring their dust and wind. Like water take consents this should be electronic, on-line and available to see by councils and effected parties 24/7

Not - quote .... 'trigger values can be applied for reviewing and where necessary temporarily ceasing work' (Table 11 Page 46 of application)

#### **Draft Air Quality Management Plan**

4.2 . Complaint Action '**As soon as possible** after receipt of a complaint, the Quarry Manager will:

- Undertake a site inspection and note all dust generation activities taking place and mitigation methods being used
- Visit the area from where the complaint originated to ascertain if dust is still a problem (**as soon as possible ie within 2 hours, where practicable**)

#### 7. Reporting

'...CCC will notify the Consents Compliance Manager ORC of any non-compliance **as soon as practicable**' Page 13

Clearly the neighbours will be subject to hours of dust before mitigation has to be implemented or councils take non-compliance action  
CODC and ORC are under resourced and have not taken any action against CCCL to date despite complaints including unconsented quarrying (a farmer digging a whole gets in trouble but nothing happened to CCCL) and no action on recent dust complaints (by the time they arrive winds dropped or reasons why no action taken being ridiculous such as can't see the dust on surfaces). Canterbury quarry affected parties have emailed saying they experience the same from councils  
**In very strong winds and active surfaces everywhere on the CCCL site, dust will escape the boundaries unless all active sites have overhead sprinklers (not proposed).**

At any time, before any action can be taken AOL property, will covered in dust as per the emailed videos and photo .

In the middle of a hot windy night when we are all asleep there won't be any complaints and unless CCCL is connected to online sensor alarms no mitigation actions will take place and even if connected it will be too late to stop dust even if it were possible

**AOL does not agree that the term of the RC is open ended given the nature of the activities in a fully developed lifestyle/horticultural location.**

**A term of <10yr should be adopted to review conditions, compliance and reset this RC if granted in any form**

## **Specific dust issues**

### **1) Health and Safety (see photos via email )**

According to the experts the rock in our region has a higher Respirable Crystalline Silica (RCS) content than other regions like Canterbury (NZAIR) so the concern for owners, staff and contractors is even greater than those expressed by effected persons in recent quarry RCs in Canterbury. CDHB recommends 250m separation No health report has been provided by the applicant or requested by the CODC / ORC despite a possibly unique situation where you have an extreme climate, high RCS dust and a large number of staff working on the property at times in very close proximity to a quarry (certainly within 100m where it is acknowledged dust can travel). See video evidence the distance dust travels is even greater and will cover all AOLs property.

Hundreds of internal truck movements without covers to prevent dust adds to the dust load.

The application does not stipulate where on the existing quarry the **crushing plant** will definitely be located – AOL is opposed to crushing within 500m of its boundary AOL intends to get signed statements from contractors that had to stop work due to the dust.

CCCL proposes to quarry to the boundary of AOL and the backyard of the consented building sites and seasonal workers accommodation (building plans completed last year with consents currently underway).

**The dust effects from quarrying with less than a 200m set back and no effective screening will seriously degrade people's health and quality of life on AOLs property**

**This is totally unacceptable and doubt there has been a recent consent to quarry within 200m of a dwelling or crush within 500m (see Fulton Hogan Royden Quarry March 2020 RC conditions).**

**It should be even greater given the Amisfield environment is more extreme**



2) **Cherry structures** (see emailed photos/examples of rain covers).

AOL has completed the pole/cable/screw anchors base structures which supports nearly 50,000 m<sup>2</sup> of bird nets which will sit above 50,000m<sup>2</sup> of retractable rain covers to be attached in 2022 /23.

- The dust will be trapped and concentrated by the nets and deposited on the trees and rain covers when extended or in the folds when retracted accumulating in vast quantities. Photosynthesis will be reduced by deposits on leafs and soiled fabric (crop production reduced). **How are they to be cleaned and who pays?**
- Retraction fittings clogged with dust and spinning micro sprinklers (2,000) are already being clogged reducing water applications with serious implications on tree health and crop yields (unless manually cleaned and who pays?)
- Dust will settle on flowers effecting critical pollination and effectiveness of pest and disease sprays diminished due to dust absorption at considerable cost to AOL

3) The seasonal workers accommodation (SWA) to a maximum of 60 people is a discretionary restricted activity with Council restricted to exercising discretion on visual effects, managing noise, incidental activities, effects on roading and parking, management regime and provision for water, wastewater, electricity and telecommunications.

Having set SWA's up in the past, the requirements are expected to be readily meet and consented in the next couple of months and established before the harvest season commences. A quarry operation will effect quality of life after 4pm and days off without an adequate set back/screening from the adverse effects as per above. CCCL was informed of SWAs prior to the their consent being notified

4) If livestock are used for weed control they are also affected – see photos of Angus calves grazing to the south of the quarry with dust excreted from eyes. Staff eyes are similarly affected but lungs cant excrete RCS dust

**Health and Safety /ROW**

AOL accesses and receives power and telecommunications to its property via a 10 m wide 250m long ROW on the CCCL expansion title

The proposal will see 50ft cliffs dropping into mini lakes either side of what will be a narrow causeway and on the western boundary just meters from family/children and workers accommodation

Overseas workers are prone to wandering behaviour that is permitted in their home countries and children play in the outdoors.

There are no security fences proposed and steep cliffs/scree sidings into water is very dangerous

Vehicle mishaps on the ROW and boundary could be fatal

There is no set back or visual screening (bunds and vegetation) proposed along the ROW yet hundreds of people will be using what will be an ugly and dangerous access. Vehicles will be covered in dust from all directions except south east

No geologist assessments or reports have been supplied or requested by councils on the stability of this narrow causeway especially in the event of an earthquake or wave erosion once the lakes are formed. There is no detail how the underpass is going to be constructed and if access/services will be cut off.

## **Visual Effects**

CCCL propose no set back or sprinkler irrigated trees/vegetative cover on narrow 3m high bunds that will become rabbit infested dust producing eye sore for AOL .

It is critical that any grass, shrub, cover plants have sprinkler irrigation or they will fail to establish or survive – as an example **see photos** of current quarry bund along AOL ROW.

CCCL proposes no bunding on the expansion title along our ROW

Visual pollution will occur along the ROW and along the western boundary comprising the dwelling site and seasonal workers accommodation.

The mountain views to the west are more important than to the lake as evening is social time, the west side of the building is sheltered from prevailing wind and is not shaded. Similar for the seasonal workers accommodation

AOL dwelling plan is for two stories so the view will be down into the quarry unless there is adequate set back and screening (established trees).

Without adequate setback from ground level any screening will block out the mountain views (Mt Pisa)

Lights from vehicles, trucks, equipment, security etc is a major concern in the hours of darkness have a significant adverse effect. Reference to lights on SH 6 appears to have no relevance as its probably 900m away

## **Noise**

AOL is very concerned about the loss of reasonable quality of life due to the noise pollution from quarrying on our boundary. What is the level of noise from hundreds of trucks being filled on your back yard – once again no set back.

Once again with no set back we ask the question ‘.. would anyone considering this application like to have this happening for their entire lifetime 25m from their back or front yard?

Truck and digger noise, rocks hitting the truck decks, alarms etc etc only a cricket pitch away.

## **Loss of prime horticultural soils**

CODC district plan states this has to be considered but it hasn't – sadly Councils give little weight to this issue despite local and nationwide concerns

This lifestyle / hort title purchased by CCCL to quarry has a limited life and will be of limited productive use once mined 30ft below the water table  
In contrast a lifetime of horticultural production adds considerable more value to the region and NZ. This title is in a prime location close to other orchards and support industries / infrastructure required for a successful horticultural operation  
With 8ha in cherries this title could gross \$200,000 per ha in export earnings or \$1.6 m per annum and employ 50 people for 6 weeks, 10 for 2 mths and 2-3 full time staff while supporting packhouses, trade and domestic businesses etc  
I know little about quarry income but suspect no contest for a lifetime of food production vs <20yrs it would take to mine this.  
There are plenty of open rural poor river soils in the region that should be quarried before this property.  
It makes no sense to mine this prime property  
Where is the report / analysis on this issue?

### **Rehabilitation Plan**

Totally underwhelming, minimalistic and noncommittal  
CCCL have provided a **draft** plan with nothing confirmed on what this site will look like. It states 'times may change' and it could be a landfill or subject to available material, could be anything from cliffs/steep sidings into deep pit lakes to an unlikely gentle slopping horse riding public space (as they portray)  
CCCL propose no ongoing reahabilitation or commitment to give effected parties any confidence in what this site will look in the future or what activities will occur  
The applicants required OIC approval to purchase this title – what is stopping them from walking away from this and/or putting CCCL into receivership. You would expect the bond would need to be at least be set at the inflation adjusted cost of rehabilitation – probably millions?

**Another reason this RC should have a short term to review and reset conditions in line with the rapidly changing environment**

### **Working Hours**

The application mentions the existing consented hours but does not mention public holidays going forward  
AOL opposes any working hours outside 7am to 6pm or work on Saturday afternoon, Sundays and public holidays  
People sleep to 7am and in the evening don't want dinner served up with a helping of quarry noise

### **Time to assemble response**

AOL has not had time to fully research this complicated and technical RC application or fully understand the process (from notification to the Environment Court) or co-ordinate a detailed informed response with other effected parties.  
We do not accept the findings from the Landpro compiled application

AOL requires expert advice, research and reports on the following:

- Air quality/dust pollution
- AOL on the effects on the cherry orchard – in support of AOLs expertise
- Noise pollution
- Rehabilitation of quarries
- Visual pollution
- Quarry consent application, best practices and Environment Court decisions
- Legal representation

CCCL/Landpro has had over a year to put their case together and took 3 months to respond to requests for more information from CODC and ORC.

Affected persons know very little about this process and are in full time employment accordingly request the same opportunity to prepare a case

The applicant and the Councils have reduced the pool of available experts

(especially air pollution) and with a Covid environment we don't know the time frames to acquire the necessary reports and information for a response to the hearing and possibly the Environment Court

**We request a minimum period of three months for a hearing date but request a review of this in two wks time when we will know the availability of experts etc**

## Summary

The current CCCL operation under its current consent is about to run out and they would be soon looking at rehabilitation. This consent application should be considered as a 'start-up' given they seek to mine another title, increase 2 fold from 70,000 to 200,000 m<sup>3</sup> and mine into the ground water all of which triggers a significant increase in effects on the surrounding environment.

The current RC and its conditions are therefore redundant yet there is reference to it and the application does not bring the existing area up to the current standards that are imposed on recent quarry consents via conditions – **for example no set back is proposed on the existing quarry area yet activity increases 200%**

Amisfield Orchards Ltd does not support the CCCL RC application to quarry the narrow title on our western boundary as the adverse effects from dust, noise, visual pollution etc cannot be mitigated without acceptable setbacks from the AOLs residential and horticultural activities and considerably better plans and actions are required than proposed .

There are numerous other issues with this application that adversely affects many aspects of AOL's operation as outlined above that we oppose (some not covered in the CCCL application such as safety, ROW etc).

We do not agree and therefore would like to challenge a number of expert reports findings with our own expert reports or peer reviews

The largest number of quarry consents in recent years have been in Canterbury. We refer to the Fulton Hogan, Royden Quarry decision in March 2020 and believe the conditions

imposed there (and in other recent quarry consents/Environment Court rulings) should be a minimum given the Amisfield location has a more extreme climate.

**AOL believes these should be applied to the entire operation**

In 2001 the CODC approved a lifestyle/Hort/Vit subdivision to accommodate the demand for these enterprises and facilitate a higher and better use of dry pastoral land

Accordingly we believe CCCL was in error in purchasing this narrow property to quarry in a developed environment as it was never going to be able to provide the required setbacks to mitigate the adverse effects on neighbours houses, orchard staff, orchard plants/structures, seasonal workers accommodation and buildings.

CCCL should look elsewhere to generate profit to their overseas investor as this location has been 'built out' and is no longer suitable for quarrying

**AOLs requests the application be declined**

**Malcolm Little. Murray Little. Hayden Little**

Site maps



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**CROMWELL BRANCH**  
 30 The Mill  
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 Cromwell 3442  
 03 445 1826  
 E. Cromwell@ppgroup.co.nz

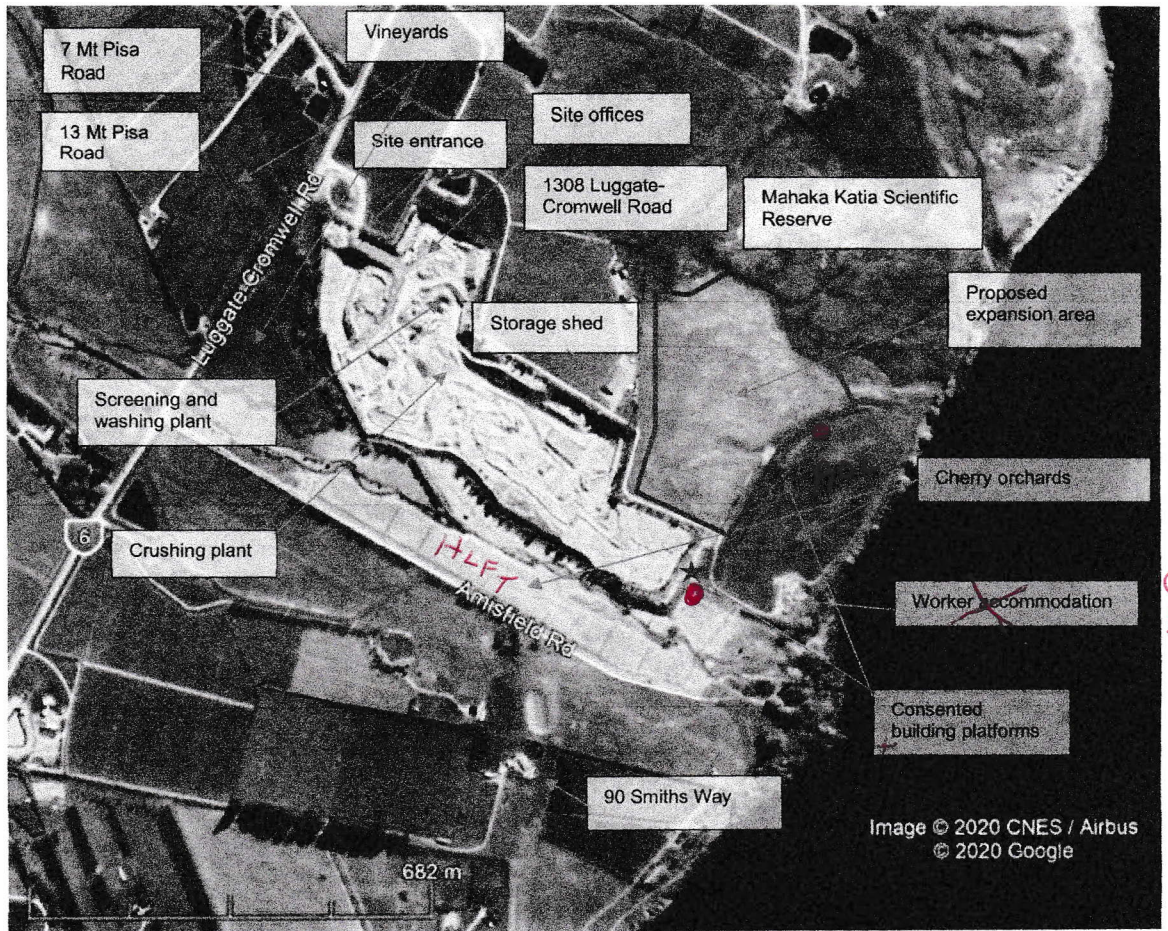
**Cromwell Certified Concrete**  
 Amisfield Quarry

**Aerial Photograph and Boundaries**  
 April 2019

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Approved by:	J.S.	Issue Date:	02/04/2019
Drawn on:	C2618	Revision:	A
Sheet No:	1	Drawn by:	J. Brown

# Site map



Contractor Base

Figure 1 Aerial photograph showing the location of the quarry and the surrounding properties

① Seasonal Workers Accommodation

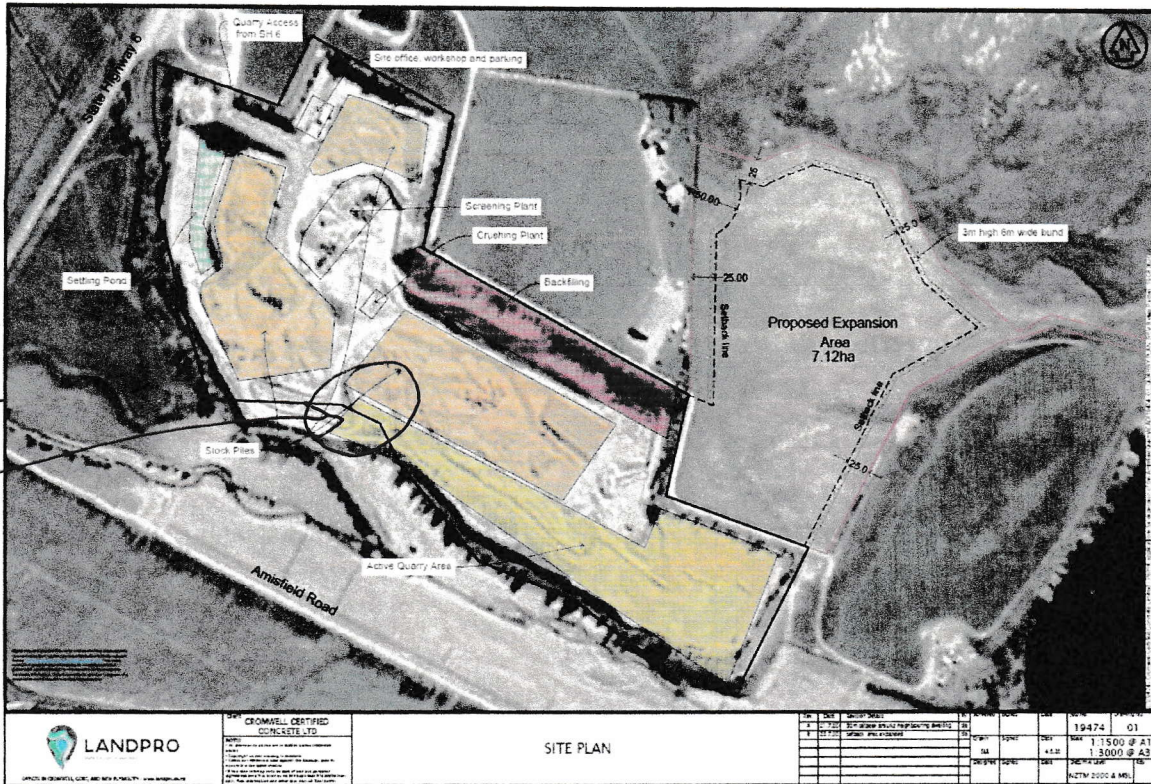


Figure 1: Extraction plan and aerial photograph (Source: LANDPRO)

1.1.b Location

Amisfield Quarry is located on State Highway 6, at 1248 Cromwell – Luggate Road. The site for the proposed quarry expansion backs on to the D.O.C Mahaka Katia scientific reserve, which is an example of a dryland ecosystem which supports a variety of endemic and threatened plant species.



Figure 2: Location Map (Adobe InDesign + LINZData).

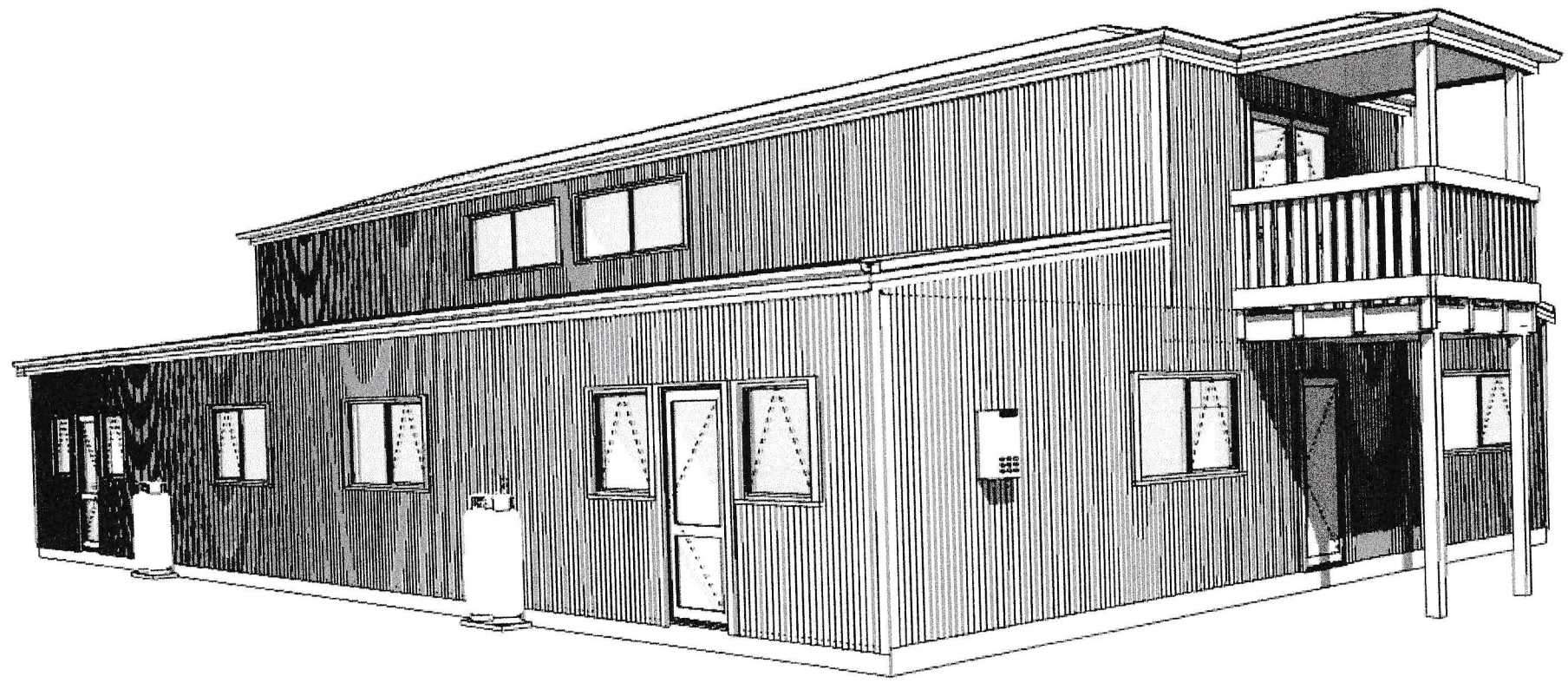


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# AOL Dwelling Plan for west boundary



PROPOSED DWELLING FOR:  
**Malcom Little,  
Amisfield**

DRAWING TITLE  
**3D IMAGE**

Last Saved by: greer.tekahu  
File Location: F:\Current\15100\2020\20200716\20200912\2020.ph  
SCALE: 1:100 @ A3  
DRAWN: greer.tekahu  
DATE: 9/07/2020  
FILE: 201286  
SHEET: 1  
OF: 1

Customer Sign: \_\_\_\_\_ Date: \_\_\_\_\_

# AOL Dwelling Plan for west boundary

Colorsteel Corrugated Roofing

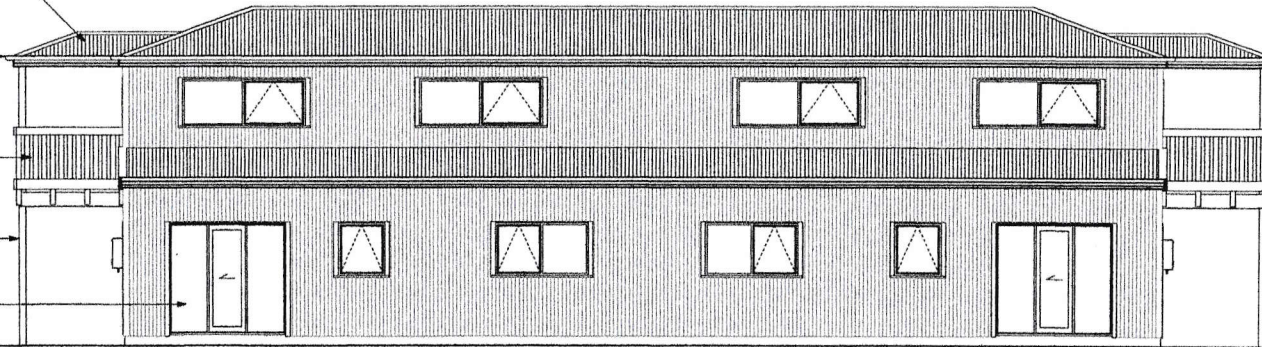
Steel & Tube Multiline 185mm  
Colorsteel Fascia & Gutter

Timber Balustrade

Pro-lam Posts TBC for Bracing

Aluminium Joinery

**REAR ELEVATION**



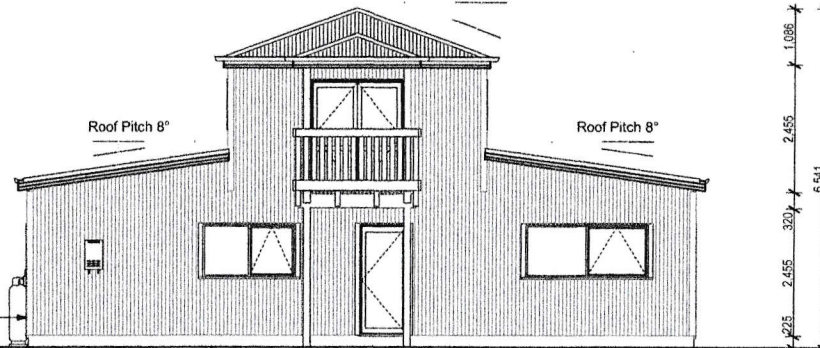
Roof Pitch 20°

Roof Pitch 8°

Roof Pitch 8°

Direct fixed Vertical Corrugate

**RIGHT ELEVATION**



Customer Sign: \_\_\_\_\_ Date: \_\_\_\_\_

PROPOSED DWELLING FOR:  
**Malcom Little,  
Amisfield**

DRAWING TITLE  
**ELEVATIONS**

SCALE:  
1:100 @ A3  
DRAWN:  
greer.tekahu

DATE:  
9/07/2020  
FILE:  
201286

SHEET:  
**5**  
OF:

# Tree Fruit

Home Business • Orchard • Shed • Crop

The magazine and website for fruit growers

• Tree Fruit mag Manuals • Log in

## Rain covers

### Rain covers eliminate cherry cracking

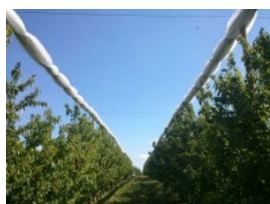
Written by InSeason Ag



InSeason Ag specialises in agricultural plastic products. From reflective films, rain covers, hail netting, to weed matting, we manufacture and supply a wide variety of premium agricultural films and fabrics.

### Voen rain cover system

Written by Trouw Horticult



Voen covers have improved significantly since they were first introduced into Australia.

### Effective rain cover system

Written by Franklin Trouw



VOEN Vohringer GmbH & Co KG of Germany, in association with Trouw Horticulture have been supplying the Australian and New Zealand horticultural industry with an effective rain control system for seven years, covering 320 ha of orchards.

### Voen: unique, proven rain control system

Written by Franklin Trouw

### Cherries—rain, risk & R&D

Why is what you did in the orchard last season

Written by Ken Gaudion

### Effective rain control system

Written by Environet Canopies





There has been many attempts to install rain covers over cherries in the past, but none have proved successful. VOEN Vohringer GmbH & Co KG of Germany, in association with Trouw Horticulture have been supplying the Australian and New Zealand horticultural industry with an effective rain control system for seven years, covering...

not relevant this season?



Rain on cherries at picking times has been a constant problem for growers.

## ABOUT THIS WEBSITE

This website presents articles from the Tree Fruit magazine.

Here you can find information about fruit growing under specific topics (found in the menu)

REGISTER - and you can read complete feature articles without interruption.

## LIKE WHAT WE DO?

We produce and distribute Tree Fruit magazine.

AND we design and maintain this and other websites.

Discover what we can do for you.

[Contact us](#)



## OUR SERVICES

Fruit Tree Media services:

- Design (website, e-commerce, print)
- Writing (editorial, advertorial, testimonials)
- Photography (in the field or studio)

### THE DIFFERENCE?

- We understand crop production practices (horticulture and broadacre).
- We can translate technical information into understandable, effective messages.

## ORCHARD MANUALS

Orchard Manuals that help orchardists grow fruit profitably.

Latest orchard management, tree training and fruit production methods.

Easy to follow instructions, many illustrations and photos. Available as PDF files—ready to download and print!

Find them here or from our sister site: [orchardmanuals.com.au](http://orchardmanuals.com.au)

- We design to your specifications, or leave it to us to produce something new, innovative and effective that highlights your business and products, and attracts the attention of your target audience.

See our website for more information or contact us.

