

IN THE ENVIRONMENT COURT  
AT CHRISTCHURCH

I TE KŌTI TAIAO O AOTEAROA  
KI ŌTAUTAHI

Decision No. [2023] NZEnvC 97

IN THE MATTER

of the Resource Management Act 1991

AND

an appeal under s 120 of the Act

BETWEEN

AMISFIELD ENVIRONMENT  
PROTECTION GROUP

(ENV-2022-CHC-22)

Appellant

AND

CENTRAL OTAGO DISTRICT  
COUNCIL

First Respondent

AND

OTAGO REGIONAL COUNCIL

Second Respondent

AND

CROMWELL CERTIFIED  
CONCRETE LIMITED

Applicant

Environment Judge J E Borthwick – sitting alone under s 279 of the Act

In Chambers at Christchurch

Date of Consent Order: 15 May 2023

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**CONSENT ORDER**

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A: Under s 279(1)(b) of the Resource Management Act 1991, the Environment Court, by consent, orders that:

- (1) the appeal is allowed to the extent that the relevant resource consents, specifically RC200343, RM20.360.01 RM20.360.02, RM20.360.03, RM20.360.04, are amended as set out in Annexure A, attached to and forming part of this order;
- (2) the appeal is otherwise dismissed.

B: Under s 285 of the Resource Management Act 1991, there is no order as to costs.

## REASONS

### Introduction

[1] This proceeding concerns an appeal lodged by Nicola and Bryson Clark, David and Lynley Stevens,<sup>1</sup> Justine and Philip Davis, Lois and Robin Greer, Lindsay Moore, and Douglas Cook (collectively referred to as “Amisfield Environment Protection Group”) against the joint decision of the Central Otago District Council and the Otago Regional Council.

[2] Cromwell Certified Concrete Limited operates an existing quarry at 1248 Luggate-Cromwell Road. The appealed decision granted a suite of resource consents authorising the expansion of the existing quarry by:

- (a) deepening the existing quarry to below groundwater level; and
- (b) authorising the excavation of aggregate from a 9.9 ha block of land adjacent to the existing quarry.

[3] I have read and considered the consent memorandum of the parties dated

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<sup>1</sup> As trustees of the D H & L M Stevens Family Trust.

8 March 2023, which sets out the agreement reached between the parties to resolve the appeal.

### **Other relevant matters**

[4] No other person has given notice of an intention to become a party to this appeal under s 274 of the Act.

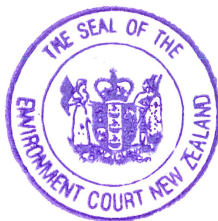
[5] The parties agree that costs should lie where they fall and accordingly no order for costs is sought.

### **Outcome**

[6] The court understands for present purposes that all parties to the proceeding have executed the memorandum requesting this order and are satisfied that all matters proposed for the court's endorsement fall within the court's jurisdiction and conform to the relevant requirements and objectives of the Act including, in particular, pt 2.

[7] On the information provided to the court, I am satisfied that the orders will promote the purpose of the Act so I will make the orders sought under s 279(1) RMA, such order being by consent, rather than representing a decision or determination on the merits pursuant to s 297.

  
\_\_\_\_\_  
**J E Borthwick**  
Environment Judge



**Annexure A**

Resource consents RC200343, RM20.360.01, RM20.360.02, RM20.360.03 and  
RM20.360.04.

(Additions are underlined, deletions are in ~~striketrough~~.)



## **RC200343: Land Use Consent**

### **General**

1. The activities authorised by this consent shall only be undertaken on Lot 3, Lot 5 (access), and Lot 8 DP 301379 generally in accordance with the information and plans submitted with the application dated 23 October 2020, further information provided on 9 March 2021 and 10 November 2021, and with the evidence submitted by the Consent Holder at the hearing **and in reply**, including the following specific plans:
  - a. Site Plan prepared by Landpro, Revision F dated 9 December 2021;
  - b. Mine Plan (Maps 1 to 4) received as further information 10 November 2021;
  - c. **Temporary Diversion and Bund Extension** received as further information 10 November 2021;
  - ~~c.d.~~ **Site Plan Proposed Conveyor 19474-01**; and
  - ~~d.e.~~ **Amisfield Quarry Draft Rehabilitation Plan**, February 2021, as updated and submitted March 2022 to show that ponded groundwater is only to remain in Lot 3 DP 301379 (the Expansion Area) after rehabilitation. Should there be any inconsistencies between those documents and consent conditions, the consent conditions shall prevail.
2. Prior to the exercise of this land use consent the Consent Holder shall surrender land use consent RC1500052 issued by Central Otago District Council.
3. The lapse date for the purpose of Section 125 shall be 5 years from the date of granting the consent.
4. The annual volume of aggregate material extracted from the Quarry shall not exceed 200,000 m<sup>3</sup>.
5. The maximum area of unconsolidated land comprising of the excavation area, backfilling areas and rehabilitation area shall not exceed 2 ha.

*Advice Note: The maximum area of unconsolidated land does not include the haul roads within the existing quarry, land covered by the conveyor, the processing area, stockpiles, areas which are covered with 50mm (or more) of washed gravels or stabilised with a dust suppressant, portacoms or workshops, or the conveyor and its associated service area.*
6. The height of aggregate stockpiles shall be maintained below the height of existing ground level at the point immediately due northeast of stockpile.
7. Activities authorised by this consent shall not give rise to dust or the deposition of particulate matter that causes a noxious, dangerous, objectionable or offensive effect beyond the boundary of the site.

### **Enabling Works**

8. Prior to the commencement of the consented activity, a right turn bay shall be constructed within State Highway 6 at the access to the site.
9. Prior to the right turn bay formation works occurring, the Consent Holder shall submit to Central Otago District Council a copy of Waka Kotahi NZ Transport Agency's approval to undertake works on the State Highway (as detailed in advice notes a to c).

*Advice Note:*

- a. *It is a requirement of the Government Roadway Powers Act 1989 that any person wanting to carry out works on a state highway first gain the approval of Waka Kotahi New Zealand Transport Agency for the works and that a Corridor Access Request (CAR) is applied for before any works commence. A CAR will be required for the right turn bay formation works within State Highway 6.*
  - b. *Detailed design approval from Waka Kotahi NZ Transport Agency shall be gained by the Consent Holder prior to applying for a CAR. The detailed design shall be prepared by a suitably qualified professional who has been certified by Waka Kotahi. In developing the detailed design, the Consent Holder will need to consult with the Waka Kotahi appointed state highway maintenance contractor for Central Otago (Aspiring Highways) and a Waka Kotahi Safety Engineer.*
  - c. *A Corridor Access Request is made online via [www.submitica.co.nz](http://www.submitica.co.nz). The CAR needs to be submitted at least 21 working days before the planned start of works. A copy should also be sent to the Waka Kotahi NZ Transport Agency System Design and Delivery Planning Team at [EnvironmentalPlanning@nzta.govt.nz](mailto:EnvironmentalPlanning@nzta.govt.nz). The Corridor Access Request will need to include:*
    - (i) *The detailed final design for the right turn bay, including both layout and pavement design.*
    - (ii) *A Construction Traffic Management Plan that has attained approval from the Waka Kotahi NZ Transport Agency appointed state highway maintenance contractor for Central Otago (Aspiring Highways).*
10. Prior to the commencement of the consented activity, the Consent Holder shall provide to Central Otago District Council correspondence from Waka Kotahi NZ Transport Agency confirming that works to the State Highway, including the construction of the right turn bay, have been constructed to Waka Kotahi NZ Transport Agency standards.

**Bunds – Lot 8 DP 301379**

11. Within 12 months of the exercise of this consent, the Consent Holder shall plant or stabilise by other means the inward and outward faces of the existing bunds within Lot 8 DP 301379.
12. Within 12 months of the exercise of this consent, the consent holder shall construct a new section of bund within Lot 8 DP 301379 along its boundary with Lot 2 DP 508108 (shown in 'Site Plan Rev F' attached as Appendix 1 to this consent). Following construction, the new section of bund shall be immediately stabilised using mulch or another suitable product. As soon as practicable following construction, it shall be planted with native plant species and thereafter watered to ensure 90% cover is established and maintained. Dust control measures shall be put in place during formation of the bund to ensure compliance with Condition 7 of this consent.
13. The height of the new section of bund to be formed within Lot 8 DP 301379 along its boundary with Lot 2 DP 508108 shown in 'Site Plan Rev F' attached as Appendix 1 to this consent shall be the same height (within 200 mm) of the existing bund immediately to the west and east of the new section.

*Advice note: Bund refers to mounded land above ground level that surrounds the active quarry area.*

**Bunds – Lot 3 DP 301379**

14. **No earlier than 24 months P**prior to extraction of Lot 3 DP 301379, perimeter bunding, landscape planting and associated irrigation shall be established on that parcel of land in accordance with the information and plans submitted with the application. All outward faces and the crest of the bunds shall be stabilised and planted **as soon as practicable following construction**. All inward faces of the bunds shall be stabilised.



15. The bunds shall be constructed during winter months (1st May to 31st August) for dust mitigation reasons and so as to avoid bird nesting season which is from 1 September to 1 January.
16. The consent holder shall submit a Bund Landscaping Plan for certification by the Consent Authority at least 20 working days prior to commencing planting. Species selected for planting shall be limited to groundcover species which do not grow to greater than 0.5m in height.
17. In preparing the Bund Landscaping Plan the Consent Holder shall engage with ~~both~~ the owners of Lot 2 DP 301379, the Department of Conservation and Kāi Tahu regarding the selection of locally sourced native plant species, eco-typed to the area.
18. If 30 working days have elapsed and no advice has been provided by ~~either~~ the owners of Lot 2 DP 301379, the Department of Conservation or Kāi Tahu as to the plant species to be used for planting of the bund, the Consent Holder shall choose appropriate local native plants and submit the Bund Landscaping Plan for certification by the Consent Authority at least 20 working days prior to commencing planting.
19. Planting the bund in Lot 3 DP 301379 shall not commence until the Consent Holder has received written certification of the Bund Landscape Plan. Notwithstanding this, the works may proceed if the Consent Holder has not received a response from the Consent Authority within 20 working days of the date of the submission of the Bund Landscape Plan.
20. The perimeter bunding shall include:
  - a. Establishment of 3 m high earth bunds around the perimeter of that parcel of land, with the exception of site accessways and along the boundary of Lot 3 DP 301379 adjacent to Lot 2 DP 301379. The bund on Lot 3 DP 301379 adjacent to Lot 2 DP 301379 shall be 2.5m high, unless a 3 m high bund along that boundary is necessary to achieve compliance with condition 34 of this consent. Where topography varies, a uniform top bund elevation shall be maintained. The outer face of the bund adjacent to the full length of the boundary with the Clark property to the west of Lot 3 DP 301379 shall have a gradient of 1:5 – 1:6 with an irregular slope profile. In all other areas the outer face of the bund shall have a gradient of 1:3 – 1:5 with an irregular slope profile.
  - b. Following the construction of the bunds, they shall be immediately stabilised using mulch or another suitable product.
  - c. As soon as practicable following construction of the bunds, they shall be planted with native plant species (90% cover) selected in accordance with the Bund Landscape Plan and Condition 19 and thereafter watered to ensure 90% cover is established and maintained. Dead or diseased plants shall be replaced in the next planting season.
  - d. Control of weed species shall be undertaken.

#### **Fences, Security and Signage**

21. The consent holder shall install a deer fence or similar in Lot 3 DP 301379 between the parcel boundary and the bund to a height of 2 m.
22. The gates at the entrance to Lot 8 DP 301379 shall be locked outside of operating hours and a sign of up to 3m<sup>2</sup> that complies with Standard 4.7.6 H. Signs and Standard 12.7.5 of the Central Otago District Plan shall be erected at the entrance which is able to be read from a distance of five metres stating as a minimum:
  - a. The name of the site;
  - b. The name of the owner of the operation and a day time and out of hours contact telephone number for the Quarry Manager;
  - c. That groundwater is vulnerable to contamination;
  - d. That no materials may be discharged or disposed of within the site perimeter without

express written permission from the Quarry Manager.

23. The Consent Holder shall rabbit proof all fences around the boundary of the site.

#### Management Plans

24. At least one month prior to exercising this resource consent, the Consent Holder must prepare a Quarry Management Plan (QMP) and submit it for certification by the Consent Authority. The QMP shall be provided to the owners of Lot 2 DP 301379 for comment prior to submission to the Consent Authority. The Consent Holder shall allow the owners of Lot 2 DP 301379 10 working days to provide feedback.

25. The QMP shall include, but not be limited to:

- a. A plan showing the areas of extraction, the location of the screening and crushing plant, and the locations of the aggregate stockpiles;
- b. The setbacks in the expansion area required by RM.20.360.03 (granted by the Otago Regional Council);
- c. Names and contact details of staff responsible for implementing the QMP (during and after hours) and reviewing the QMP in order to achieve the requirements of this consent;
- d. A description of the proposed methods of any enabling works including overburden removal operations, stripping and placement of material;
- e. A description of all relevant site operations and procedures including mobile re-fuelling procedures and spill responses;
- f. A description of all environmental effects, including (but not limited to) noise, dust and visual effects;
- g. All operational traffic aspects;
- h. All consent conditions and any other mitigation measures to be employed to minimise environmental effects and/or adhere to best practice;
- i. Relevant monitoring and reporting requirements;
- j. Confirmation by survey of the highest groundwater levels across the quarry;
- k. A plan showing areas that will be subject to progressive rehabilitation.

The Consent Holder may review and update the QMP where it is to modify SOPs, respond to complaints and monitoring data, implement technological or process improvements, providing revisions are certified by the Consent Authority.

26. At least one month prior to exercising this resource consent, the Consent Holder shall prepare a Dust Management Plan (DMP) and submit it for certification by the Consent Authority. The DMP shall be reviewed by a SQEP and be provided to the owners of Lot 2 DP 301379 for comment prior to submission to the consent authority. The Consent Holder shall allow the owners of Lot 2 DP 301379 10 working days to provide feedback.

27. The DMP shall include, but not be limited to:

- a. A description of the purpose of the DMP;
- b. A description of the dust sources on site;
- c. A description of the receiving environment and identification of sensitive receptors within 250 m of site boundaries (sensitive receptors being any dwelling and the land within 20 m of the façade of an occupied dwelling's notional boundary, and sensitive commercial crops);
- d. The methods (including dust reduction through design methodologies) which will be



- employed to ensure compliance with the conditions of this consent;
- e. A description of site rehabilitation methodology and associated dust control measures. Rehabilitation shall be undertaken progressively where practicable;
  - f. A description of particulate matter and wind monitoring requirements required by RM360.60.03 (granted by the Regional Council);
  - g. A description of procedures for responding to dust and wind condition-based trigger levels set by RM360.60.03 and associated follow up investigations, actions and recording of findings;
  - h. A system for training employees and contractors to make them aware of the requirements of the DMP;
  - i. Names and contact details of staff responsible for implementing and reviewing the DMP in order to achieve the requirements of this consent, and procedures, processes and methods for managing dust outside of standard operating hours;
  - j. A method for recording and responding to complaints from the public;
  - k. A maintenance and calibration schedule for meteorological and particulate matter monitoring instruments;
  - l. Contingency measures for responding to dust suppression equipment malfunction or failures, including wind and particulate matter monitoring instruments;
  - m. A procedure for completing an end-of-day dust control checklist;
  - n. Separate Standard Operating Procedures (SOPs) dedicated to the management of potential dust discharges from specific sources, including but not limited to:
    - (i) Stockpiles;
    - (ii) Site roads – sealed and unsealed;
    - (iii) The conveyor used to convey aggregate from Lot 3 DP 301379 to the processing plant located within Lot 8 DP 301379;
    - (iv) Triggers for the use of water for dust suppression;
    - (v) The use of dust suppressants other than water;
    - (vi) Aggregate excavation and backfilling areas;
    - (vii) Topsoil and overburden stripping and stockpiling;
    - (viii) Bund construction, maintenance and the recontouring of slopes during rehabilitation;
    - (ix) Any automated dust suppression for dust prone areas that can be activated outside of working hours;
    - (x) Location and calibration of particulate matter and meteorological monitoring equipment, and the frequency for review of the location and calibration of that equipment;
  - o. Environmental information management for recording, quality assurance, archiving and reporting all data required for dust management on the site.

*Advice note: The location of the PM<sub>10</sub> monitoring equipment will be reviewed on an annual basis as part of the annual report required by Condition 61 of this consent.*

28. The Consent Holder may review and update the DMP where it is to modify SOPs, respond to complaints and monitoring data and implement technological or process improvements, provided revisions are certified by an independent Suitably Qualified and Experienced Practitioner (SQEP) and the updated plan is provided to the Consent Authority.

29. The Consent Holder shall carry out its activities in accordance with the QMP and DMP at all times.
30. Works authorised by this consent shall not commence until the Consent Holder has received written certification of the QMP and DMP.

**Hours of Operation**

31. The hours of operation for quarry activities other than monitoring and dust suppression are limited to:

Monday to Saturday (excluding public holidays):

- a. Arrival and departure of staff: 0600 to 2000 hours;
- b. Site excavation, processing, dump truck, loader and purchasing truck movements: 0700 to 1900 hours except that no more than twice per week, up to 4 purchasing trucks may enter the site, be loaded and depart the site between 0600 to 0700 hours Monday to Friday and between 1900 to 2000 hours Monday to Friday provided that:
  - (i) no more than 1 truck shall be loaded in any 15 minute period between 0600 to 0700 hours; and
  - (ii) between the hours of 0600 to 0700 hours, no truck shall be loaded with any product larger than 22 mm concrete aggregate.

Sundays and public holidays: Dust management activities only.

**Noise**

32. There shall be no stockpiling or processing of aggregate in the quarry expansion area.
33. Operation of processing plant shall be restricted to the hours of 0700 to 1900 hours, Monday to Saturday.
34. Noise from the operation of the quarry shall comply with the following noise limits as assessed at the notional boundary of any dwelling when measured in accordance with NZS 6801:2008 Acoustics – Measurement of environmental sound and assessed in accordance with NZS 6802:2008 Acoustics – Environmental noise. Due to the nature of the proposed activity, no duration adjustment in accordance with NZS 6802:2008 shall be permitted.

Day	Time period	Noise limit
Monday to Saturday	0700 to 2000 hours	55 dB L <sub>Aeq</sub> (15 min)
At all other times		40 dB L <sub>Aeq</sub> (15 min) and 70 dB L <sub>Amax</sub>

35. All vehicle reversing alarms on quarry-based equipment or trucks, shall only be broadband reversing alarms. The conveyor hopper/chute located on Lot 3 DP 301379 shall be rubber lined.
36. Construction activities shall be managed in accordance with the requirements of NZS 6803:1999 Acoustics – Construction Noise and any noise generated shall comply with the limits given in Table 2 of that standard.

For the purposes of this consent “construction activities” means activities associated with the establishment, or rehabilitation of the quarry, such as: site establishment; the construction and removal of bunds, topsoil stripping, creation and removal of the underpass to the expansion area, constructing slope batters and contouring the final land. If ongoing backfilling



activity associated with the construction of slope batters occurs at the same time as the quarry is operational, this is not considered to be construction noise and shall comply with the operational noise limits for the site.

37. Compliance monitoring of the daytime noise generated by quarrying activities shall be measured and assessed by a suitably qualified and experienced acoustic consultant as follows:
  - a. once within the first 12 months following the commencement of quarrying within Lot 3 DP 301379; and
  - b. once when quarrying within Lot 3 DP 301379 initially advances to within 200 m of the dwelling at 1308 Luggate-Cromwell Road.

The measurements required by this condition shall be undertaken when excavation is occurring at the highest ground elevation and shall include day time noise readings taken at a time when processing machinery is operating simultaneously with quarrying activity within Lot 3 DP 301379.

38. Within 10 working days of each round of monitoring in accordance with Condition 37, a report describing the measurement results and compliance or otherwise with the noise limits in Condition 34 shall be prepared by a suitably qualified and experienced acoustic consultant and submitted to the Consent Authority. That report shall also address whether compliance with the noise limits in Condition 34 of this consent will be maintained at closer distances to the dwelling at 1308 Luggate-Cromwell Road and a dwelling (if existing) on Lot 1 DP 508108. If the report identifies that noise levels are higher than authorised by Condition 34, it shall recommend mitigation measures to be adopted by the consent holder to achieve compliance with Condition 34. A copy of the report shall be provided to the Consent Authority.

#### **Traffic**

39. The activity shall be limited to a maximum of 150 heavy vehicle movements per day.
40. Vehicle and heavy machinery speeds within the site shall not exceed 20 km/h.

#### **Hazardous Substances**

41. To minimise the risk posed from Hazardous Substance spills:
  - a. The Consent Holder shall take all practicable measures to avoid spills of fuel or any other contaminant within the site.
  - b. Permanent storage of fuel and lubricants shall only occur within the workshop area identified on 'Site Plan Rev F' attached as Appendix 1 to this consent. Lubricant shall be stored in a bunded area capable of containing 125% of the volume being stored. Fuel shall be stored in a double skinned tank certified in accordance with the manufacturers specifications and capable of containing a spill at maximum capacity;
  - c. Refuelling and maintenance of all vehicles or machinery except for the long-reach excavator shall be undertaken within the workshop area identified on 'Site Plan Rev F' attached as Appendix 1 to this consent;
  - d. Mobile refuelling of the excavator shall be undertaken using a drip tray at a location at least 10 m from any waterbody (including exposed groundwater), water flow channel or stormwater system using a nozzle that incorporates a shut off valve and sensor system to avoid fuel leaks or overflowing of the excavator fuel tank;
  - e. No machinery shall be cleaned or stored within 10 m of any waterbody, water flow channel or stormwater system. A spill kit of suitable capacity shall be kept on site at all times. A spill kit shall also be carried by the mobile refuelling vehicle at all times.

42. In the event of a spill of fuel or any other contaminants to land, the Consent Holder shall clean up the spill as soon as practicable and take measures to prevent a recurrence.
43. The Consent Holder shall inform the Consent Authority and the Amisfield Estate Society Incorporated within 24 hours of any spill event to land greater than 4 litres and shall provide the following information:
  - a. The date, time, location and estimated volume of the spill;
  - b. The cause of the spill;
  - c. The type of contaminant(s) spilled;
  - d. Clean up procedures undertaken;
  - e. Details of the steps taken to control and remediate the effects of the spill on the receiving environment and an assessment of the risks to the Amisfield Estate Water Supply Bore; and
  - f. An assessment of any potential effects of the spill and measures to be undertaken to prevent a recurrence.

#### **Ecology**

44. No quarrying shall be undertaken, or heavy machinery be used within 50 metres of the Mahaka Katia Scientific Reserve between 1 September and 1 January in any year (bird nesting season).
45. Any planting required as part of mitigation for the proposed works shall be accompanied by a pest management plan identifying the control of pest plant and animal species including rabbits that may impact on the viability of the mitigation proposed.
46. Control of weed species identified in the 2019 Otago Regional Pest Management Strategy (RPMS) shall be undertaken within the 25 m buffer between the boundary of the Mahaka Katia Scientific Reserve ([Lot 2 DP 300388](#)) and [the proposed expansion area identified on 'Site Plan Rev F' attached as Appendix 1 to this consent, and also within Lot 3 DP 301379 in the area between the bund and the boundary of Lot 3 DP 301379 with Lot 2 DP 301379.](#) Weed species of concern are, exotic broom, gorse, Russell lupin, ragwort, nodding thistle, wilding pine sp. (see RPMS for full list of unwanted organisms).
47. Water used in the quarry for dust mitigation shall not directly enter Mahaka Katia Scientific Reserve.

#### **Accidental Discovery Protocol**

48. In the event of any discovery of archaeological material:
  - a. The Consent Holder shall immediately:
    - (i) Cease extraction operations in the affected area and mark off the affected area;
    - (ii) Advise the Central Otago District Council of the disturbance; and
    - (iii) Advise Heritage New Zealand Pouhere Taonga of the disturbance.
  - b. If the archaeological material is determined to be Koiwi Tangata (human bones) or taonga (treasured artefacts) by Heritage New Zealand Pouhere Taonga, the Consent Holder shall immediately advise the office of Kāi Tahu of the discovery.
  - c. If the archaeological material is determined to be Koiwi Tangata (human bones) by Heritage New Zealand Pouhere Taonga, the Consent Holder shall immediately advise the New Zealand Police of the disturbance.
  - d. Work may recommence once Heritage New Zealand Pouhere Taonga (following consultation with Kāi Tahu if the site is of Maori origin) confirms to Central Otago



District Council that appropriate action has been undertaken.

### **Rehabilitation**

49. Within two years of exercising this resource consent, the Consent Holder shall submit to the Central Otago District Council a Rehabilitation and Closure Plan for the site. The Rehabilitation and Closure Plan shall provide for:
- a. Progressive rehabilitation of areas that will not be subject to future quarrying activities;
  - b. Removal of all buildings, other structures and plant from the site;
  - c. Recontouring of the land to provide a stable profile;
  - d. Management of dust to avoid nuisance beyond the site;
  - e. Record keeping requirements of any material to be brought to the site as part of the rehabilitation process, including cleanfill material;
  - f. Re-establishment of topsoil and grass, plants or trees utilising best practice;
  - g. Appropriate drainage of the site, to avoid uncontrolled runoff into any water body; and
  - h. Leaving the site in a clean and tidy state.

The Rehabilitation Plan shall be prepared in consultation with adjoining landowners and Kāi Tahu. Feedback received from those persons shall be included for the information of Central Otago District Council.

50. Implementation of the Rehabilitation and Closure Plan shall not commence until the Consent Holder has received written certification of that Plan from the Central Otago District Council. Notwithstanding this, the works may proceed if the Consent Holder has not received a response from the Central Otago District Council within 20 working days of the date of the submission of the Plan.
51. Implementation of the Rehabilitation and Closure Plan shall be completed within 3 years of quarrying activities ceasing, noting that no construction or earthworks be undertaken within 50 m of the Mahaka Katia Scientific Reserve between 1 September and 1 January in any year (bird nesting season).
52. Any material used to backfill areas where groundwater has been exposed shall originate from within the site and shall only consist of virgin excavated natural materials.
53. The final rehabilitated landform shall not include lakes/ponds within Lot 8 DP 301379.

### **Cleanfill**

54. The consent holder shall ensure that if cleanfill is imported into the site under any relevant regional permitted activity rules:
- a. The origin and location of deposition within the site of any externally sourced cleanfill shall be recorded; and
  - b. Externally sourced cleanfill shall not be placed horizontally within 10 metres of any waterbody (including exposed groundwater), water flow channel or stormwater system and shall only be placed above the highest recorded groundwater level for that part of the site specified in the QMP.

*Advice note: This consent does not authorise the importation of cleanfill for use on the site. At the time of granting this consent, the use of cleanfill on the site for rehabilitation purposes is not controlled by the Central Otago District Plan, and the discharge of any contaminants into or onto land when occurring as the result of cleanfill landfills is a permitted activity under Rule 7.6.3 of the Otago Regional Waste Plan provided that no sediments enter into any water*

*body. However the use of cleanfill may not remain a permitted activity in the future and may require a resource consent under the relevant plans.*

### **Complaints Register**

55. The Consent Holder shall maintain and keep a register for complaints regarding all aspects of operations at the site related to the exercise of this consent, received by the Consent Holder. The register shall record:
- a. the date, time and duration of the event/incident that has resulted in a complaint;
  - b. the location of the complainant when the event/incident (if possible, specify nature of incident e.g. dust nuisance) was detected;
  - c. the possible cause of the event/incident;
  - d. the weather conditions and wind direction at the site when the event/incident allegedly occurred;
  - e. any corrective action is undertaken by the Consent Holder in response to the complaint;
  - f. any other relevant information.
56. The complaints register shall be available to the Central Otago District Council on request.
57. Complaints received by the Consent Holder that may indicate non-compliance with the conditions of this resource consent shall be forwarded to the Central Otago District Council within 5 days of the complaint being received.

### **Community Liaison Group**

58. Within 12 months of the commencement of this consent, the Consent Holder shall, at its own cost, facilitate community liaison meetings with invitations sent by letter or email to the various organisations and the owners/occupiers of properties listed in Appendix 2 of this Consent. Meetings shall be held at not less than 12 monthly intervals.
59. The purpose of the meetings shall be for the Consent Holder to report to those attending on the activities undertaken in the past 12 months and the works planned in the next 12 months, to provide explanation of the results of monitoring undertaken during the preceding 12 months, and to respond to any feedback from attendees regarding effects of consented activities.
60. The Consent Holder shall keep minutes of the meetings and shall provide them to all invited parties within two weeks of a meeting.

### **Annual Report**

61. The Consent Holder shall submit an Annual Report before the end of February each year which addresses the following:
- a. The volume of material removed from the site in the preceding 12 months;
  - b. Complaints Records for the preceding 12 months;
  - c. Any amendments made to the QMP or DMP;
  - d. The volume of aggregate extracted in the preceding 12 months; and
  - e. Records of any cleanfill material brought to site (if any);
  - f. Details of the work plan for the next 12 months, including locations planned for cleanfill deposition and specification by a SQEP of the locations of the mobile PM10 monitors during that period so as to comply with the relevant requirements of RM20.360.03.



## **Bond**

62. Within three months of the commencement of this consent, the Consent Holder shall enter into an enforceable written agreement acceptable to the Consent Authority that provides for a minimum \$250,000 bond in favour of the Consent Authority pursuant to sections 108(2)(b) and 108A of the Resource Management Act 1991. The purpose of the bond is to secure the costs of the following works, in the event of default by the Consent Holder in relation to those works:
- a. removal of any plant or buildings;
  - b. remediating any contamination caused by fuel spills or other activities within the site;
  - c. providing alternative drinking water supplies to parties affected by contamination described in clause (b);
  - d. recontouring of the quarry area, respreading of subsoils and topsoil, re-establishing grass, undertaking additional planting, and establishment of drainage sufficient to meet the post quarrying land use; and
  - e. leaving the land in a clean and tidy state.
63. Prior to entering into the bond referred to in Condition 62 of this consent, the Consent Holder shall engage a SQEP to review the bond amount required by Condition 62 and provide a report with their findings and recommendations (Bond Review Report). The Consent Holder shall submit the Bond Review Report to the Consent Authority at least 20 working days before entering into the bond. If the Bond Review Report recommends a higher amount than the amount specified in Condition 62, the Consent Holder shall provide a bond for the higher amount.
64. The bond must be a cash bond or bank bond provided by a registered trading bank of New Zealand acceptable to the Consent Authority. The guarantor shall bind itself to pay up to the bond quantum for the carrying out and completion of all obligations of the Consent Holder under the bond. The bond amount must be sufficient to cover the costs of undertaking the works specified in Condition 62.
65. The bond amount shall be adjusted annually on the anniversary of the land use consent to increase the bond based on the consumer price index (CPI) or to be reduced on a pro rata basis if areas of rehabilitation have been completed that year.
66. If the Consent Holder and the Central Otago District Council cannot agree on the terms of the bond, the dispute must be resolved through an agreed disputes resolution process or referred to arbitration.
67. The costs of and incidental to the preparation of all bond documentation, including the Consent Authority's costs, must be met by the Consent Holder.
68. The Consent Authority shall release the bond upon:
- a. The Consent Holder providing verification that the Site has been rehabilitated in accordance with Condition 62; or
  - b. The replacement of the bond with a new bond acceptable to the Consent Authority, including if the consent is transferred to another party.

## **Review**

69. Within ten working days of each anniversary of the date of this consent coming into force, in accordance with Sections 128 and 129 of the Resource Management Act 1991, the conditions of this consent may be reviewed for any of the following purposes:
- a. To deal with any adverse effects on the environment that may arise from the exercise of the consent which were not foreseen at the time the application

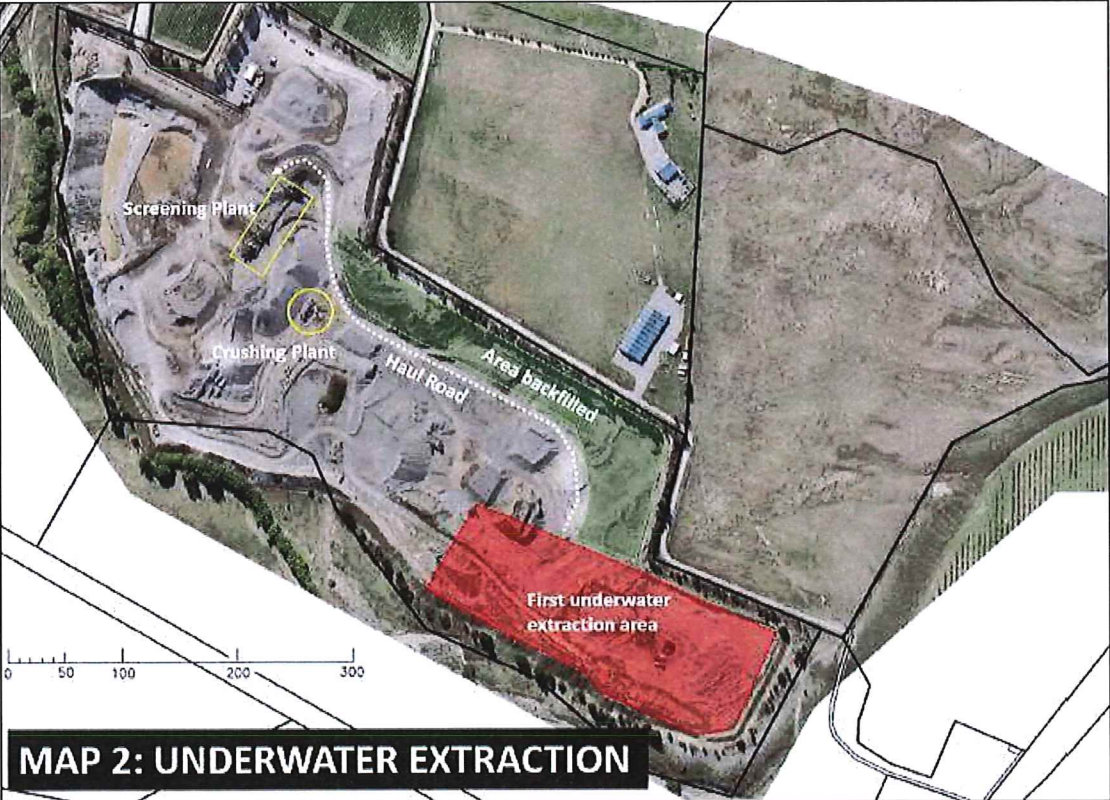
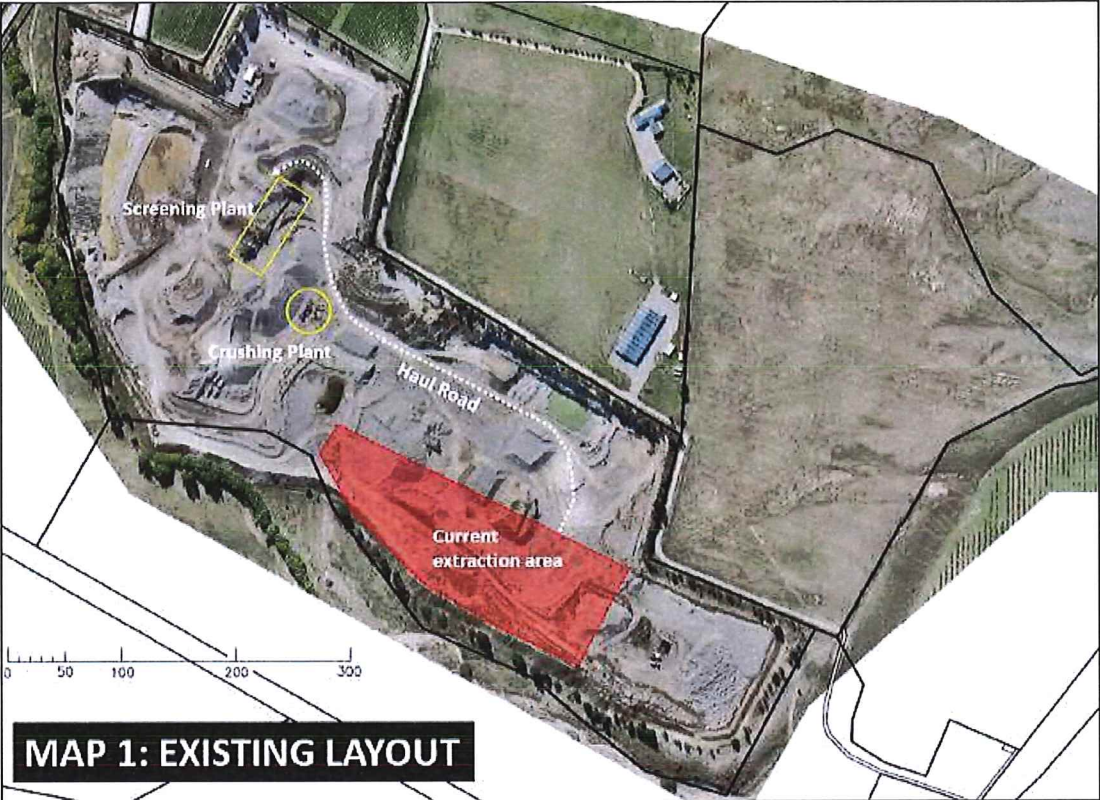
was considered and which it is appropriate to deal with at a later stage;

- b. To deal with any greater than minor adverse effects on the environment arising from the exercise of the consent, that has been identified by monitoring of this consent; or
- c. To avoid, remedy and mitigate any adverse effects on the environment which may arise from the exercise of the consent and which have been caused by a change in circumstances such that the conditions of this resource consent are no longer appropriate in terms of the purpose of the Resource Management Act 1991.

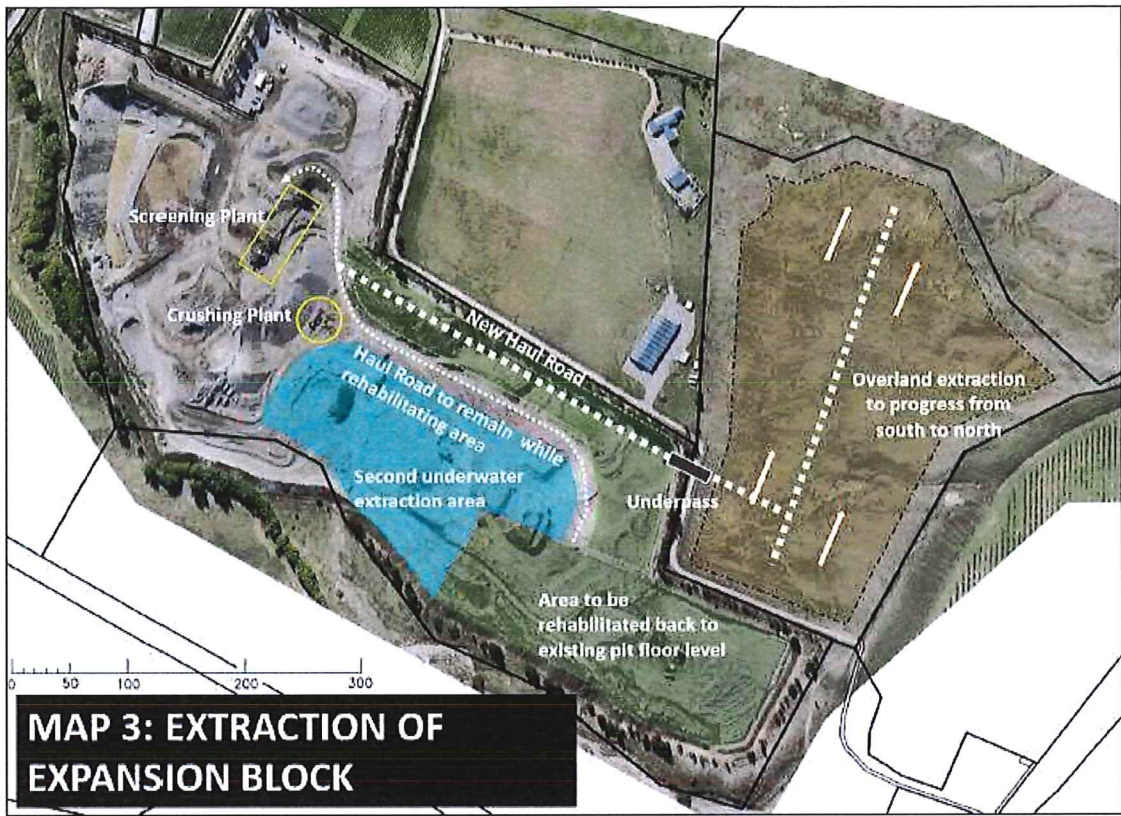




Mine Plan (Maps 1 to 4)













## Appendix 2: People/Organisations to be invited to Community Liaison Group meetings

- Owners/occupiers of the following properties:
  - Lot 2 DP 300388 [Department of Conservation]
  - Lot 1 DP 508108 [Amisfield Orchard Limited]
  - Lot 2 DP 508108 [Hayden Sinclair Little, Tessa Leanne Nyhon]
  - Lot 6 DP 301379, Lot 1 DP 301379 & Lot 10 DP 301379 [Manukau Fifty Limited]
  - Lot 2 DP 301379 [Bryson David Clark, Nicola Jane Clark]
  - Lot 2 DP 518956 [Justine Kate Davis, Philip John Davis, GCA Legal Trustee 2018 Limited]
  - Lot 7 DP 518513 [Lowburn Land Holdings LP]

Holders of the following groundwater permits:

- 2003.363 [Lowburn Land Holdings Limited Partnership]
- 2010.152.V1/G41/0220 [Wanaka Road Wine Holdings Ltd]
- 2001.831/G41/0238 [Manukau Fifty Limited]
- 2004.853/G41/0326 [Jane Marie Miscisco]
- 2006.036/G41/0346 [Felton Park Limited]
- RM14.211.02/G41/0321 [Irrigation and Maintenance Limited]

Organisations

- Aukaha
- Amisfield Estate Society, which takes water from Bore G41/0111
- Otago Regional Council
- Central Otago District Council

RM20.360.01: Water Take

**WATER PERMIT**

Pursuant to Section 104B of the Resource Management Act 1991, the Otago Regional Council grants consent to:

Name: Cromwell Certified Concrete Limited

Address: 810 Great South Road, Penrose, Auckland 1061

Activity: To take and use ground water for the purpose of gravel washing, irrigation, potable and sanitary use and dust suppression.

Term: 6 years Location of consent activity: 1248 Luggate-Cromwell Road (State Highway 6)

Legal Description of land at point of abstraction: Lot 8 DP 301379

Legal Description of land where water is to be used: Lots 3, 5, and 8 DP 301379

Map Reference at point of abstraction: Bore G41/0127 - NZTM 2000 E1305397 N5017068

Bore G41/0456 - NZTM 2000 E1305502 N5017223

**Conditions**

1. This permit shall be exercised in conjunction with Water Permit RM16.108.01, Discharge Permit RM20.360.02, and any consents granted in replacement of those permits.
2. If this consent is not given effect to within a period of five years from the date of commencement of this consent, this consent shall lapse under Section 125 of the Resource Management Act 1991. The consent shall attach to the land to which it relates.
3. The combined rate of abstraction from bore G41/0127 and bore G41/0456 shall not exceed 24 litres per second.
4. The rate of abstraction when combined with Water Permit RM16.108.01 shall not exceed 25 litres per second from bore G41/0127 and 45 litres per second from bore G41/456, and the quantity of water abstracted shall not exceed:
  - a. 3,024 cubic metres per day;
  - b. 93,744 cubic metres per month; and
  - c. 846,720 cubic metres per year.
5. The consent holder shall:
  - a. Maintain water meter(s) to record the water take, within an error accuracy range of +/- 5% over the meter(s)' nominal flow range, and a telemetry compatible datalogger with at least 24 months data storage and a telemetry unit to record the rate and volume of take, and the date and time this water was taken.
  - b. The datalogger shall record the date, time and flow in litres per second.
  - c. Data shall be provided once daily to the Consent Authority by means of telemetry. The consent holder shall ensure data compatibility with the Consent Authority's time-series database.
  - d. The consent holder shall ensure the full operation of the water meter(s), datalogger and telemetry unit at all times during the exercise of this consent. All malfunctions of the water meter and/or datalogger and/or telemetry unit during

the exercise of this consent shall be reported to the Consent Authority within 5 working days of observation and appropriate repairs shall be performed within 5 working days. Once the malfunction has been remedied, a Water Measuring Device Verification Form completed with photographic evidence shall be submitted to the Consent Authority within 5 working days of the completion of repairs.

- e. The water meter(s), datalogger and telemetry unit shall be verified for accuracy within one month from the first exercise of this consent.
  - f. Any electromagnetic or ultrasonic flow meter shall be verified for accuracy every five years from the first exercise of this consent.
  - g. Each verification shall be undertaken by a Consent Authority approved operator and a Water Measuring Device Verification Form shall be completed and submitted to the Consent Authority with receipts of service within 5 working days of the verification being performed, and at any time upon request.
6. The consent holder shall take all practicable steps to ensure that:
- a. There is no leakage from pipes and structures;
  - b. There is no runoff of irrigation water either on site or off site;
  - c. A back flow preventer device is fitted to prevent any contaminants from being drawn into the source of the water.
7. The Consent Authority may, in accordance with Sections 128 and 129 of the Resource Management Act 1991, serve notice on the consent holder of its intention to review the conditions of this consent for the purpose of imposing aquifer restriction levels, if and when an operative regional plan sets aquifer restriction levels.
8. The Consent Authority may, in accordance with Sections 128 and 129 of the Resource Management Act 1991, serve notice on the consent holder of its intention to review the conditions of this consent within 3 months of each anniversary of the commencement of this consent for the purpose of:
- a. Determining whether the conditions of this consent are adequate to deal with any adverse effect on the environment which may arise from the exercise of the consent and which it is appropriate to deal with at a later stage; or
  - b. Ensuring the conditions of this consent are consistent with any National Environmental Standard or National Planning Standard.



RM20.360.02: Discharge Permit

**DISCHARGE PERMIT**

Pursuant to Section 104B of the Resource Management Act 1991, the Otago Regional Council grants consent to:

Name: Cromwell Certified Concrete Limited

Address: 810 Great South Road, Penrose, Auckland 1061

Activity: To discharge contaminants to land for the purpose of gravel washing and dust suppression.

Term: 14.25 years (expiring 21 July 2036)

Location of consent activity: 1248 Luggate-Cromwell Road (State Highway 6)

Legal description of consent location: Lots 3, 5, and 8 DP 301379

**Conditions**

1. This permit shall be exercised in general accordance with the plans and information provided with the application with the discharge of contaminants being sediment in the existing settlement pond in the north-western corner of the site.
2. This permit shall not commence until discharge permit RM16.108.02 has been surrendered or expired.
3. This consent shall be exercised in conjunction with water permits RM16.108.01 and RM20.360.01 (or any permits granted which replace those permits) which authorise the abstraction of water from bores G41/0456 and G41/0127.
4. The volume of water discharged shall not exceed:
  - a. 3,024 cubic metres per day;
  - b. 93,744 cubic metres per month; and
  - c. 846,720 cubic metres per year.
5. No contaminants other than silt and sediment shall be discharged into the Pisa Groundwater Management Zone.

*Advice note: for the purpose of this consent, silt and sediment is the natural fine material that results from the crushing and washing aggregate.*
6. The discharge treatment system shall be located at approximate map reference NZTM (NZDG2000) E1305493 N5017426 and shall include a primary settlement pond with minimum dimensions of 40 m long, 5 m wide and 1 m depth with an overflow to a larger infiltration/settlement pond. These ponds shall be maintained by the Consent Holder in effective operating condition at all times, including at least:
  - a. Three monthly inspections; and
  - b. Pond desludging at least 6 monthly or more frequently if required.
7. The Consent Holder shall ensure that there is no direct discharge from the ponds to any surface watercourse.
8. Within three months of this consent being exercised, a water quality monitoring network shall be established for the quarry which shall include:
  - a. three new groundwater monitoring locations (MW1, MW2 and MW3 within 25 m of the marked locations illustrated in Appendix 1 to this consent) with the following specifications:

- (i) A well with a 2 m screen across the water table at each site.
  - (ii) A second piezometer nested with the water table well screened at 8 to 10 m below the water table at MW2 and MW3. The nested piezometers shall be installed to provide for separation, via grouting, of the screened intervals of the two piezometers to enable depth specific groundwater quality monitoring.
- b. the settling pond and the exposed area of groundwater (to assess discharge water quality).
  - c. Target monitoring bores (G41/0321, G41/0220, G41/0111), and
  - d. G41/0319 to represent an upgradient (control) bore.

*Advice note: All monitoring locations should be surveyed and the final locations confirmed in conjunction with the Consent Authority. If upon inspection it is apparent that the headworks of an existing bore do not allow sampling, it will not form part of the water quality monitoring network.*

- 9. The bore drilling and installation of the piezometers required by Condition 8 shall be overseen by a suitably qualified person. A report that demonstrates compliance with the requirements of Condition 8 shall be submitted to the Consent Authority within one month of the installation of the bore.
- 10. The consent holder shall take quarterly representative water samples from the water quality monitoring network established in Condition 8 commencing within three months of this consent being exercised. Quarterly monitoring shall continue for the duration of this consent. During each monitoring event:
  - a. Water levels shall be measured and recorded at the time of sampling.
  - b. Field parameters (temperature, pH, Dissolved Oxygen, Electrical Conductivity and Oxidation Reduction Potential) should be measured and recorded at the time of sampling using a calibrated water quality meter in a flow cell. Samples should be collected after field parameters have stabilised to within 5% of the previous three measurements. Field filtering of samples shall be completed for dissolved metals analysis.
  - c. Samples should be analysed by a laboratory with IANZ accreditation or equivalent for Total petroleum hydrocarbons, total suspended solids, turbidity, major ions (sodium, potassium, calcium, magnesium, alkalinity, chloride, sulphate, nitrate), copper, chromium, zinc, Arsenic and E-coli, iron and manganese. Samples should be analysed for both total and dissolved metals.
  - d. The sampling shall be undertaken by a suitably qualified person in general accordance with the National Environmental Monitoring Standards Water Quality Part 1 of 4: Discrete Sampling, Measuring, Processing and Archiving of Discrete Groundwater Quality Data.

If permission to sample any of the private bores is not granted, the remaining water quality network shall still be sampled.

- 11. In addition to water quality sampling described in Condition 10, within three months of consent being exercised the Consent Holder shall take monthly water samples from Bores M1, M2 and M3. Monthly monitoring shall continue for the duration of this consent. Those samples shall be analysed in accordance with Condition 10. a., c., and d., for turbidity and iron.
- 12. Prior to consent being exercised the consent holder shall take representative water samples from the target monitoring bores, the settling pond and G41/0319 in accordance with Condition 10 a. – 10 d.

If permission to take baseline samples from any of the private bores is not granted, the remaining water quality network shall still be sampled.



13. The Consent Holder shall submit an Annual Groundwater Report before the end of February to the Consent Authority ([customerservices@orc.govt.nz](mailto:customerservices@orc.govt.nz)) and owners of sampled bores. The report shall:
- a. Be undertaken by a suitably qualified and experienced water quality expert who has reviewed all the available water quality and level data.
  - b. Include a conceptual groundwater model for the site based on the collected data.
  - c. Include an assessment of whether the data indicates activities on the Consent Holder's site are adversely impacting groundwater quality, and in particular, sensitive receptors.
  - d. State the identity, expertise and sampling methodology of the person(s) who collected water samples in accordance with this resource consent;
  - e. Identify any measures required under Condition 14 or 15;
  - f. Include ~~G~~copies of the complaints record for any complaints in relation to groundwater quality for the preceding 12 months.
14. Should the measured value of any of the determinants in a sample from monitoring bores measured in accordance with Condition 10 and 11 exceed a NZ Drinking Water Standard Maximum Acceptable Value or Guideline (Aesthetic) Value (as specified in the relevant New Zealand Drinking Water Standards at the time of sampling), except for turbidity for which the NZDWS (2005, revised 2018) aesthetic guideline of 2.5 NTU is replaced by a guideline of 4.0 NTU, then the Consent Holder shall:
- a. Advise the Consent Authority ([customerservices@orc.govt.nz](mailto:customerservices@orc.govt.nz)) and bore owners within 48 hours of receipt of the results;
  - b. Within one week from the receipt of the results, begin an investigation into the cause of the elevated sample results. The investigation is to be carried out by a suitably qualified water quality expert and is to include, but is not limited to;
    - (i) results of water quality sampling;
    - (ii) activities at Amisfield Quarry,
    - (iii) activities at the neighbouring property,
    - (iv) rainfall in the past 48 hours, and
    - (v) ~~and~~ any additional water quality monitoring that may be required to assess the potential cause of contamination.
  - c. Within one month of receipt of the elevated sample results, submit a report signed by a suitably qualified water quality expert to the Consent Authority and the bore owner on the investigation undertaken, any potential sources of contamination identified, the likely cause(s) of the contamination and recommend any remedial measures to prevent or mitigate the contamination.
  - d. In the event that the report concludes that it is likely that the contamination was caused by the consent holder; and
    - (i) the contamination was in potable drinking water supply, the Consent Holder shall, within 48 hours of receipt of the report, provide the bore owner with an alternative supply of potable drinking water sufficient to provide 2,000 litres per day to each household provided by the supply until such time as monitoring demonstrates compliance with the relevant MAV or Guideline values. All costs associated with this shall be borne by the consent holder.
    - (ii) the contamination was in a monitoring bore, sampling frequency at the closest target monitoring bore identified in Condition 8 (c) shall increase to 1 per week until the issue has been rectified.

*Advice Note:*

*1. The Guideline Values and Maximum Acceptable Values (MAV) are specified in the publication 'Drinking-water Standards for New Zealand 2005 (Revised 2018)', Ministry of Health or its replacement. The Guideline Values are the limits for aesthetic determinants that, if exceeded, may render the water unattractive to consumers. These standards are primarily aimed at water supply authorities who generally treat water to ensure that these standards are met.*

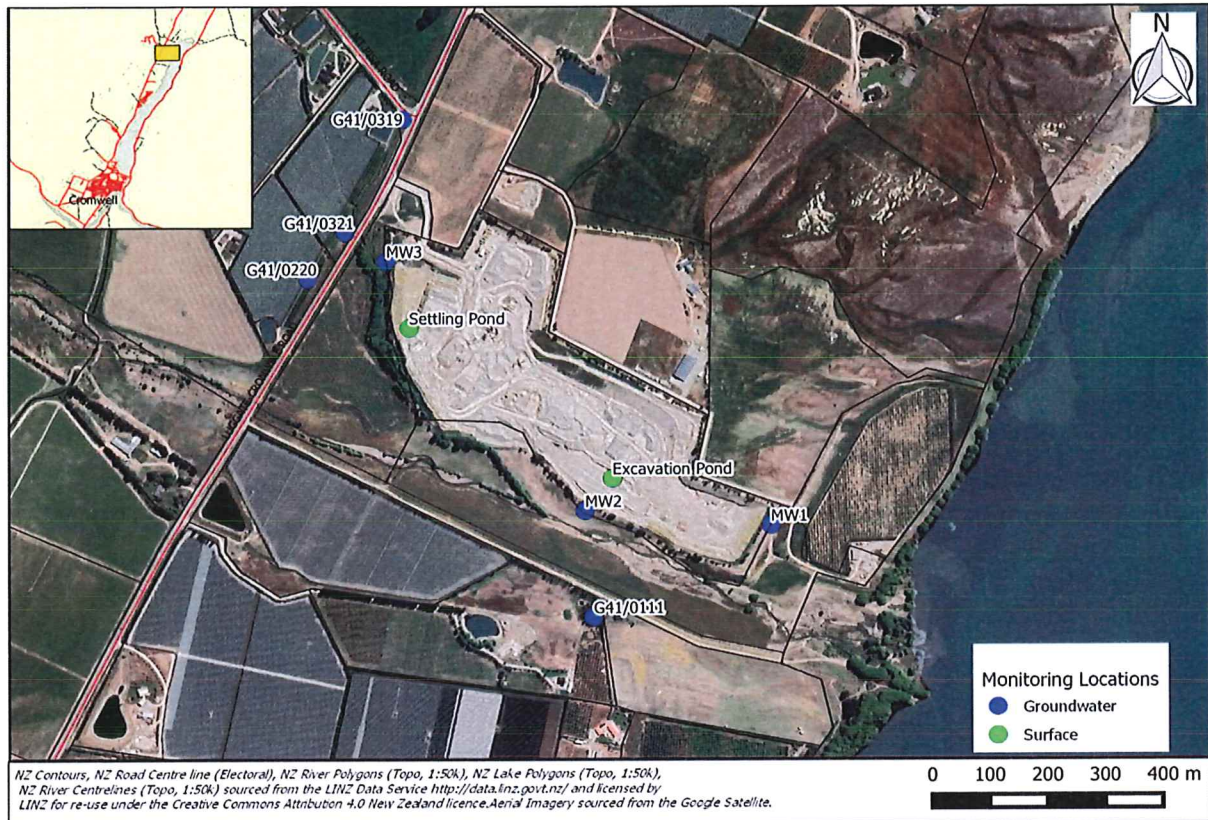
*2. Shallow groundwater in this area is vulnerable to increases in turbidity and other contaminants such as nitrate nitrogen, following heavy rainfall. It is likely that if groundwater quality monitoring is undertaken within days or weeks of heavy rainfall that there will be increases in these contaminants in groundwater.*

*3. The NZ Drinking Water Standards are currently (April 2022) being reviewed and new standards are expected to be implemented in July 2022. The draft new standards include a turbidity aesthetic value of 4.0 NTU which would replace the current guideline value of 2.5 NTU.*

15. If a report required under Condition 14 concludes that the discharge is causing a significant adverse water quality effect at a target monitoring bore, the Consent Holder shall within three months of receiving that report implement additional or alternative sediment treatment/ management measures to reduce the concentration of suspended solids entering the infiltration/settling pond:
  - a. The Consent Holder shall report to the Consent Authority as soon as practicable on the completion of any such works; and
  - b. Within 12 months of completion of any additional sediment treatment/management measures, the Consent Holder shall provide a report to the Consent Authority written by a suitably qualified person on the effectiveness of those measures.
16. The Consent Holder shall ensure that the discharge authorised by this consent does not cause any flooding, erosion, scouring, land instability or damage to any adjacent property.
17. The Consent Authority may, in accordance with Sections 128 and 129 of the Resource Management Act 1991, serve notice on the Consent Holder of its intention to review the conditions of this consent within 3 months of each anniversary of the commencement of this consent for the purpose of:
  - a. Adjusting the consented rate of discharge under Condition 4, should the consented amounts or rates of water take approved under Water Permits RM16.108.01 and RM20.360.01 (or any replacement consents) be reduced; or
  - b. Adjusting the frequency and duration of the sampling of Bores M1, M2 and M3 or the target monitoring bores required by Condition 10 and 11 of this consent; or
  - c. Determining whether the conditions of this consent are adequate to deal with any adverse effect on the environment which may arise from the exercise of the consent and which it is appropriate to deal with at a later stage (including any adverse effects of the discharge to the ponds on groundwater quality in bore G41/0321, G41/0111 or G41/0220); or
  - d. Ensuring the conditions of this consent are consistent with any National Environmental Standards.



# Appendix 1: Water Quality Monitoring Network





RM20.360.03: Air Discharge Permit

**DISCHARGE PERMIT**

Pursuant to Section 104B of the Resource Management Act 1991, the Otago Regional Council grants consent to:

Name: Cromwell Certified Concrete Limited

Address: 810 Great South Road, Penrose, Auckland 1061

Activity: To discharge contaminants to air for the purpose of operating an alluvial quarry.

Term: 14.25 years (expiring 21 July 2036)

Location of consent activity: 1248 Luggate-Cromwell Road (State Highway 6)

Legal Description of consent location: Lots 3, 5, and 8 DP 301379

**General Conditions**

1. The activity shall be carried out in general accordance with information and plans submitted with the application dated 23 October 2020 for resource consent RM20.360.03 and with evidence submitted by the Consent Holder at the hearing, **and in reply**. Should there be any inconsistencies between those documents and consent conditions, the consent conditions shall prevail.
2. If this consent is not given effect to within a period of five years from the date of commencement of this consent, this consent shall lapse under Section 125 of the Resource Management Act 1991. The consent shall attach to the land to which it relates.
3. Aggregate extracted from the site shall not exceed 200,000m<sup>3</sup> in any 12-month period.
4. The discharge shall not give rise to dust or the deposition of particulate matter that causes a noxious, dangerous, objectionable or offensive effect beyond the boundary of the site.
5. The Quarry Manager or another nominated person shall be available at all times (including outside quarry operation hours) to respond to dust emission complaints and trigger level alerts in accordance with measures described in the Dust Management Plan (DMP).
6. The maximum area of unconsolidated land comprising of the excavation area, backfilling areas and rehabilitation area shall not exceed 2 hectares.

*Advice Note: The maximum area of unconsolidated land does not include the haul roads, processing area, stockpiles, areas which are covered with 50mm (or more) of washed gravels or stabilised with a dust suppressant (excluding water), portacoms or workshops, or the conveyor and its associated service area.*

**Dust Management Plan (DMP)**

7. At least one month prior to exercising this resource consent, the Consent Holder shall prepare a Dust Management Plan (DMP) and submit it for certification by the Consent Authority. **The DMP shall be reviewed by a SQEP and shall be provided to the owners of Lot 2 DP 301379 for comment prior to submission to the Consent Authority. The Consent Holder shall allow the owners of Lot 2 DP 301379 10 working days to provide feedback.**

8. Works shall not commence until the Consent Holder has received written certification from the Consent Authority of the DMP.
9. The DMP shall include, but not be limited to:
  - a. A description of the purpose of the DMP;
  - b. A description of the dust sources on site;
  - c. A description of the receiving environment and identification of sensitive receptors within 250 m of site boundaries (sensitive receptors being any dwelling and the land within 20 m of the façade of an occupied dwelling's notional boundary, commercial storage building and sensitive commercial crops);
  - d. The methods (including dust reduction through design methodologies) which will be employed to ensure compliance with the conditions of this consent;
  - e. A description of site rehabilitation methodology and associated dust control measures;
  - f. A description of particulate matter and wind monitoring requirements including:
    - (i) The location of the wind monitoring equipment;
    - (ii) The location of particulate matter monitors between active work areas and sensitive off-site activities;
    - (iii) Details of wind speed trigger levels as set out in Condition 12(a) and associated alarm system. This shall also include the wind direction to be used in fulfilment of Condition 12(b);
    - (iv) Details of the particulate matter trigger levels as set out in Conditions 14 and 15 and associated alarm system; and
    - (v) Monitoring instrumentation methodology, setup requirements, maintenance and calibration procedures, and the frequency of review of the location of monitoring equipment and calibration.
  - g. A description of procedures for responding to dust and wind condition-based trigger levels and associated follow up investigations, actions and recording of findings;
  - h. A system for training employees and contractors to make them aware of the requirements of the DMP;
  - i. Names and contact details of staff responsible for implementing and reviewing the DMP in order to achieve the requirements of this consent, and procedures, processes and methods for managing dust outside of standard operating hours;
  - j. A method for recording and responding to complaints from the public in accordance with Condition 38;
  - k. A maintenance and calibration schedule for meteorological and particulate matter monitoring instruments;
  - l. Contingency measures for responding to dust suppression equipment malfunction or failures, including wind and particulate matter monitoring instruments;
  - m. A procedure for completing an end-of-day dust control checklist;
  - n. Separate Standard Operating Procedures (SOPs) dedicated to the management of potential dust discharges from specific sources, including but not limited to:
    - (i) Stockpiles;
    - (ii) Site roads – sealed and unsealed;
    - (iii) The conveyor used to convey aggregate from Lot 3 DP 301379 to the processing plant located within Lot DP 301379;



- (iv) Triggers for the use of water for dust suppression;
  - (v) The use of dust suppressants other than water;
  - (vi) Aggregate excavation and backfilling areas;
  - (vii) Topsoil and overburden stripping and stockpiling;
  - (viii) Bund construction, maintenance and the recontouring of slopes during rehabilitation;
  - (ix) Any automated dust suppression for dust prone areas that can be activated outside of working hours;
  - (x) Location and calibration of particulate matter and meteorological monitoring equipment and the frequency of review of their location and calibration;
- o. Environmental information management for recording, quality assurance, archiving and reporting all data required for dust management on the site.
10. The Consent Holder shall carry out its activities in accordance with the DMP at all times.
11. The Consent Holder may review and update the DMP where it is to modify SOPs, respond to complaints and monitoring data, implement technological or process improvements, providing revisions are certified by an independent Suitably Qualified and Experienced Practitioner (SQEP). Following recertification by the SQEP, the updated DMP shall be provided to the Consent Authority within 10 working days.

### **Trigger Levels and Dust Mitigation**

#### *Trigger Levels*

12. Quarry activities (except dust suppression measures) within 250 metres of a sensitive receptor location (sensitive receptors being those defined in Condition 9(c)) shall not be undertaken when:
- a. Wind speed reaches or exceeds 7 m/s (10 minute scalar average); and
  - b. Quarry activities would be directly upwind of a sensitive receptor (10-minute average wind direction); and
  - c. Less than 1 mm of rain has fallen during the preceding 12 hours.
13. If at any time, including outside normal operating hours, visible dust is blowing beyond the site boundary or if the particulate matter monitoring trigger in Condition 14 is breached the Consent Holder shall:
- a. Cease all quarry activities (including loading of purchasing trucks), except dust suppression measures;
  - b. Continue all dust suppression activities including but not limited to the immediate watering of both active and inactive exposed surfaces;
  - c. Investigate possible sources of the dust;
  - d. Only resume quarry activities (other than dust suppression) once there is no longer visible dust blowing beyond the site boundaries and when the monitoring trigger in Condition 14 is no longer being breached; and
  - e. Notify the Consent Authority within 24 hours, detailing its cause and the dust suppression actions undertaken.
14. The trigger concentration which indicates the potential for excessive quarry derived dust at or beyond the site boundary is a maximum real time PM<sub>10</sub> concentration of 150 micrograms per cubic metre, as a rolling 1-hour average, which shall be updated every ten minutes.

15. A pre-trigger concentration alert level shall be specified in the DMP, the purpose of which is to provide an early warning that the trigger concentration in Condition 14 may be reached. This shall be a maximum PM<sub>10</sub> concentration value of 150 micrograms per cubic metre, as a rolling 10-minute average, which shall be updated every 1 minute.
16. If the investigation required under Condition 13(c) determines the source of dust is localised to the excavation area only and is only impacting on areas downwind of this source, then activities within the central processing area, including sales of product, can continue. This is contingent on all activities within the existing processing and load out area not causing visible dust blowing beyond the site boundary and their downwind real time PM<sub>10</sub> monitors not reaching or exceeding the trigger in Condition 14.
17. The Consent Holder shall submit a report by an independent Suitably Qualified and Experienced Practitioner (SQEP) to the Consent Authority 2 years after the exercise of this consent and a further report 12 months after quarrying has commenced on Lot 3 DP 301379 to confirm that the PM<sub>10</sub> trigger concentration levels set in Conditions 14 and 15 are not giving rise to a breach of Condition 4 of this consent or if they are set unnecessarily low for avoiding such effects. The report shall contain data on PM<sub>10</sub> levels recorded by the monitors from two early summer to late autumn periods (1 October to end of May) and shall identify whether a change is needed to the trigger levels in Condition 14 and 15 to achieve routine compliance with Condition 4 of this consent.
18. If the report by an independent SQEP (as required under Condition 17) determines the PM<sub>10</sub> trigger concentration should be decreased in order to achieve routine compliance with Condition 4, then the revised value as recommended by the SQEP shall be specified within an updated DMP and alarm settings on monitoring equipment shall be adjusted to reflect this revised value within 15 working days of receipt of the SQEP's report.

### **Mitigation Measures**

19. The Consent Holder shall take all reasonably practicable measures to minimise the discharge of dust from quarry activities, including but not limited to:
  - a. Placing clean reject gravel over extraction areas if they are not being actively used by the Consent Holder. Areas where clean reject gravel cannot be placed, such as the quarry walls, will be stabilised using measures such as polymers, planting or hydro-seeding;
  - b. Assessing weather and ground conditions (wind and dryness) at the start of each day and ensure that applicable dust mitigation measures and methods are ready for use prior to commencing quarry activities;
  - c. Taking wind direction and speed into account in planning quarry activities to minimise the risk of dust dispersion towards any residential dwellings, commercial storage building and sensitive commercial crops that are within 250 metres of the site boundary;
  - d. Water suppression such as using watercarts or fixed sprinklers will be applied as required to dampen down disturbed areas and stockpiles. This shall occur during dry weather, irrespective of wind speed and a back up watercart shall be available in the event that the dedicated site watercart breaks down;
  - e. Pre-dampening topsoil and overburden with a water cart or sprinklers prior to its extraction and removal.
  - f. Constructing and maintaining unsealed internal haul roads so that their surfaces consist of a crushed clean aggregate layer that is free of potholes;



- g. Minimising drop heights when loading trucks, conveyor hoppers and when moving material;
  - h. Operating fixed and mobile crushing plant in conjunction with water dust suppression (either sprays or high-pressure fogging system) as necessary to avoid the dust trigger level, as specified in Condition 14 and 15, being reached or exceeded;
  - i. Undertaking routine onsite and offsite inspections of visible dust emissions and deposited dust throughout each day of quarry activities and electronically logging findings and any dust suppression actions, and making the results of the inspections available to the Consent Authority when requested;
  - j. Maintaining an adequate supply of water and equipment on site for the purpose of dust suppression at all times;
  - k. Application of water via watercart or fixed irrigation of dust suppression water onto any section of the external access road shall be used as a contingency/back up measure;
  - l. Fixed and mobile crushing and screening plant shall be located in the areas identified on Site Plan Rev F included in Appendix 1 to this consent.
20. Aggregate (once extracted from the quarry face) shall be placed on a field conveyor and transported from within Lot 3 DP 301379 to the processing plant within Lot 8 DP 301379. Haul tucks shall not be used for that purpose.
21. Land stripping and land rehabilitation shall be carried out during winter months (1 May to 31 August) when ground conditions are damp (or the ground or material to be used for rehabilitation has been thoroughly wetted with a water cart) and winds are below 7 m/s (10 minute average).
22. The Consent Holder shall impose a speed restriction on all internal haul and access roads of 20 km/hr.
23. The Consent Holder shall maintain the existing seal along the length of the site access road contained within Lot 5 DP 301379.
24. ~~Within the expansion area (Lot 3 DP 301379) the conveyor shall be located within the area identified as 'area where conveyor can be placed' on 'Site Plan – Proposed Conveyor' (numbered 19474-01) as shown in Appendix 2 to this consent. The northeast-southwest aligned section of conveyor within the expansion area (Lot 3 DP 301379) shall be located at least 75 m from the shared boundaries with Lot 2 DP 301379 and Lot 1 DP 508108.~~
25. The height of aggregate stockpiles within the stockpiling area as shown on 'Site Plan Rev F' shall be maintained below the height of existing ground level adjacent to the boundary of Lot 2 DP 301379. at the point immediately due northeast of stockpile.

#### **Meteorological Monitoring**

26. Prior to exercising this consent, the Consent Holder shall install a meteorological monitoring station at the location described in the DMP. The meteorological monitoring station shall be capable of continuously monitoring:
- a. Wind speed and direction at a minimum height of 6m above the natural ground level;
  - b. Rainfall;
  - c. Relative humidity; and
  - d. Temperature.

27. The meteorological monitoring instruments shall:
- a. Measure wind speed as 1-minute scalar averages with maximum resolution of 0.1 metres per second (m/s), have an accuracy of at least within +/-0.2 m/s, and a stall speed no greater than 0.5 m/s;
  - b. Measure wind direction as 1-minute vector averages with maximum resolution of 1.0 degree and accuracy of at least within +/- 1.0 degree, and a stall speed no greater than 0.5 m/s;
  - c. Measure screened temperature with accuracy of +/- 0.5 degree;
  - d. Measure relative humidity with an accuracy of +/- 1%;
  - e. Measure rainfall with an accuracy of +/- 0.2mm;
  - f. Be located on the site in accordance with AS/NZS 3580:14-2014 (Methods for sampling and analysis of ambient air – Part 14 Meteorological monitoring for ambient air quality monitoring applications). If the monitoring station cannot be located in accordance with AS/NZS 3580:14-2014 an alternative location shall be agreed in writing with the Consent Authority;
  - g. Maintain a date and time stamped electronic record for at least 36 months of meteorological monitoring results, recorded as rolling 10-minute averages, which are up-dated every one-minute in real-time.
  - h. Send an alarm to the Quarry Manager (for example via mobile phone) if the wind speed trigger level in Condition 12(a) is reached or exceeded while the rainfall criteria specified in Condition 12(c) are being met.
  - i. Be maintained and calibrated in accordance with the manufacturer's specifications.
28. All meteorological monitoring data shall be made available to the Consent Authority on request.

#### **Particulate Matter Monitoring**

29. Prior to exercising of this consent, the Consent Holder shall operate and maintain one permanent real-time dust management monitor for continuous monitoring of ambient 10-minute average PM<sub>10</sub> concentrations, which shall be installed and operated at a fixed location at the existing quarry's southwest boundary and in accordance with the DMP.

*Advice Note: The permanently located real-time dust management monitor shall be an accepted method for general dust management/monitoring purposes, and does not need to be a certified USEPA, or National Environmental Standards for Air Quality (NESAQ) compliant method.*

30. The permanent monitor shall be installed, operated, maintained and calibrated in accordance with the AS/NZS 3580.12.1:2015 *Methods for sampling and analysis of ambient air – Determination of light scattering – Integrating nephelometer method*, or else an equivalent or superior standard which is approved by the Consent Authority;
31. Prior to the exercising of this consent, the Consent Holder shall operate and maintain at least two mobile real-time dust management monitors for continuous monitoring of ambient ten-minute average PM<sub>10</sub> concentrations, ~~whose~~ The location of those dust monitors may changes in relation to thefor different stages of the quarry development, provided that when quarrying is occurring outside of groundwater and within 250 m of the existing consented dwelling on Lot 2 DP 301379, a dust monitor shall be placed at the northwest corner of Lot 3 DP 301379. For the first 12 months of operations, the location of the mobile monitors shall be as identified in the DMP. The locations of the



mobile monitors thereafter shall be reviewed by a SQEP and if the SQEP recommends that the locations of the monitors should be changed, this shall be identified in the annual report required by Condition 43 of this consent.

32. The mobile real-time dust management monitors can be equivalent to that used for the permanently located dust monitor, or else be a lower cost method, on the basis that this can be effectively calibrated against the permanent dust monitor.
33. The two mobile dust monitors shall be positioned at different site boundary locations, such that real-time dust monitoring is undertaken at locations which are between active excavation and central processing areas and downwind sensitive receptor locations, when the latter are within 250 metres of the dust source.
34. All three dust monitors shall:
  - a. Be sited in general accordance with AS/NZS 3580.1.1:2016 Methods for sampling and analysis of air – Guide to siting air monitoring equipment;
  - b. Have a GPS location service (or similar technology) which enables their locations to be remotely monitored and recorded;
  - c. Provide and record the results continuously using an electronic data logging system with an averaging time for each parameter of not more than one minute;
  - d. Record monitoring results in real-time as rolling 10-minute averages in an appropriate electronic format;
  - e. Be fitted with an alarm system that is able to send warnings and alerts to the Quarry Manager or other nominated person; and
  - f. Be maintained in accordance with the manufacturer's specifications.

#### **Setbacks**

35. Active quarrying excavations within Lot 3 DP 301379 shall be set back:
  - a. At least 25 m from the boundary of that land apart from along the right of way between Lot 8 DP 301379 and Lot 3 DP 301379 where a 10 m setback is required; and
  - b. 50 m from the boundary of Lot 3 DP 301379 in the vicinity of the existing main dwelling on Lot 2 DP 301379; and
  - c. 50 m from a commercial crop sensitive to dust which existed at the time this consent was granted; and
  - d. 50 m from a dwelling authorised by RC210261 on Lot 1 DP 508108, if one exists at the time of extraction.

As shown on Site Plan Rev F included in Appendix 1 to this consent.

#### **Video Monitoring**

36. The Consent Holder shall install, operate and maintain at least two video cameras at locations which provide a clear view of the site activities (i.e. on the boundary bunds looking in). When quarrying is within 250m of the existing consented dwelling on Lot 2 DP 301379, one of those cameras shall be located so as to provide a clear view of land between the western bund on Lot 3 DP 301379 and the boundary between Lot 3 DP 301379 and Lot 2 DP 301379. Data collected by the video cameras shall be recorded and kept for a minimum period of six months following recording and supplied to Otago Regional Council on request.

#### **Bund Formation and Planting**

37. When constructing the bunds, the following controls apply:

- a. The bunds shall be constructed during winter months (1st May to 31 August) for dust mitigation reasons and so as to avoid bird nesting season which is from 1 September to 1 January;
- b. Maintain a buffer distance of 250 m when wind speeds are above 7 m/s (10 minute average) in a direction towards the nearest sensitive locations;
- c. Material to be excavated shall be thoroughly wetted using a water cart, if not already damp, ahead of excavation and wetted thoroughly thereafter;
- d. Wind monitoring shall be carried out and dust generating activities shall cease when the wind is blowing towards sensitive locations and the wind speeds exceed 7 m/s (10 minute average) in accordance with Condition 12(a);
- e. Following the construction of the bunds they shall be immediately stabilised using mulch or another suitable product.
- f. Vegetated cover (90%) shall be established on all new bunds as soon as practicable and maintained to ensure healthy cover during dry months.
- g. Within 12 months of the exercise of this consent, the Consent Holder shall plant or stabilise by other means the inward and outward faces of the existing bunds within Lot 8 DP 301379.

### **Complaints Register**

38. The Consent Holder shall maintain a Complaints Register for any complaints received. The Complaints Register shall include:
  - a. The date and time the complaint was received;
  - b. The nature and location of where the complaint has originated, if provided;
  - c. A summary of the complaint;
  - d. Particulate matter and wind conditions at the time when the dust was observed by the complainant; and
  - e. Any corrective action undertaken by the Consent Holder to avoid, remedy or mitigate the issue raised.
  - f. Any amendments made to the DMP in response to the complaint(s).
39. The Complaints Register shall be provided to the Consent Authority on request.

### **Community Liaison Group**

40. Within 12 months of the commencement of this consent, the Consent Holder shall, at its own cost, facilitate community liaison meetings with invitations sent by letter or email to the various organisations and the owners/occupiers of properties listed in Appendix 2 of this Consent. Meetings shall be held at not less than 12 monthly intervals.
41. The purpose of the meetings shall be for the Consent Holder to report to those attending on the activities undertaken in the past 12 months and the works planned in the next 12 months, to provide explanation of the results of monitoring undertaken during the preceding 12 months, and to respond to any feedback from attendees regarding effects of consented activities.
42. The Consent Holder shall keep minutes of the meetings and shall provide them to all invited parties within two weeks of a meeting.

*Advice note: Community Liaison Group meetings are not restricted to matters relating to the discharge of contaminants to air, other matters relating to the operation of the quarry such as groundwater matters and noise can also be discussed.*



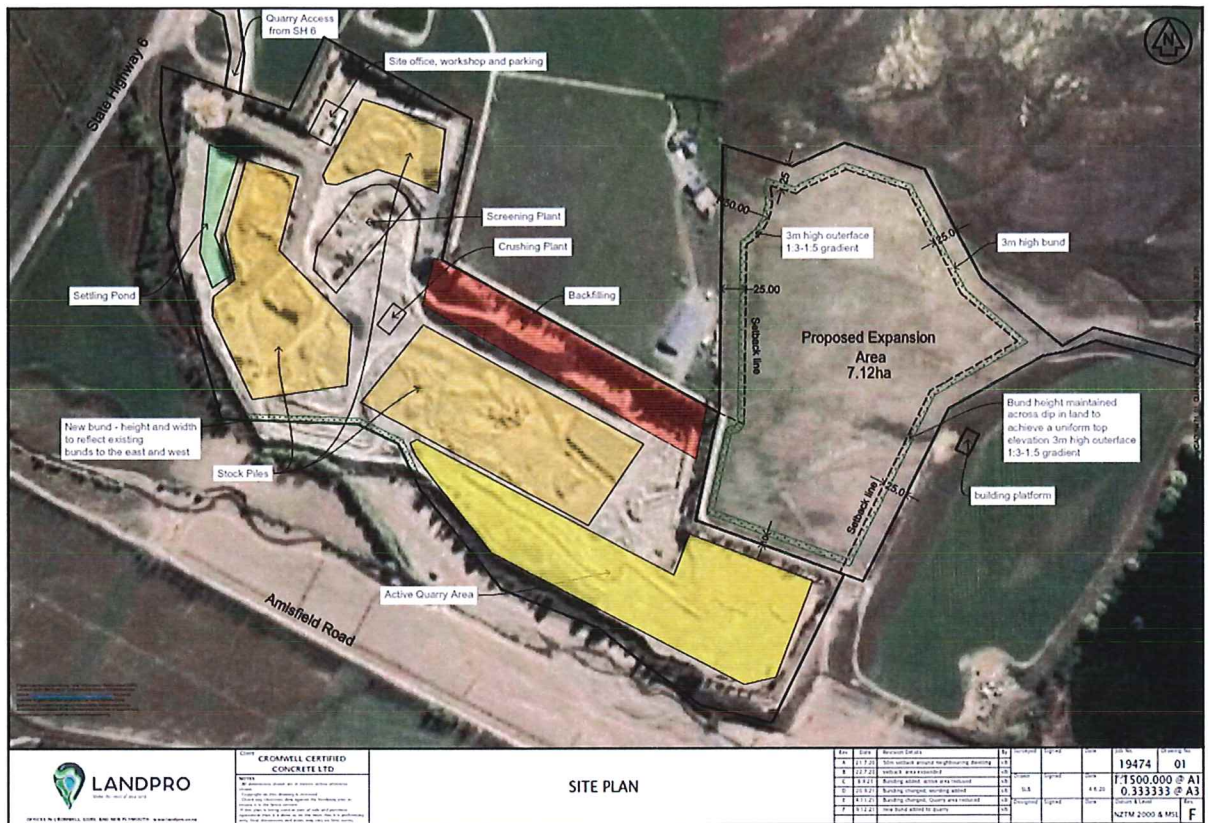
### **Annual Report**

43. On the annual anniversary of this consent the Consent Holder shall provide a report to the Consent Authority to include the following:
- a. The number of occasions that the particulate monitors recorded a breach of the trigger level in Condition 14;
  - b. Complaints Records for the preceding 12 months;
  - c. Maintenance and calibration records for the particulate monitors;
  - d. The volume of aggregate extracted in the preceding 12 months;
  - e. Any amendments made to the DMP; and
  - f. Details of the work plan for the next 12 months, including specification by a SQEP of the locations of the mobile PM<sub>10</sub> monitors during that period so as to comply with the requirements of conditions 31, 33 and 34(a) of this consent.
  - g. Minutes from Community Group Meetings.

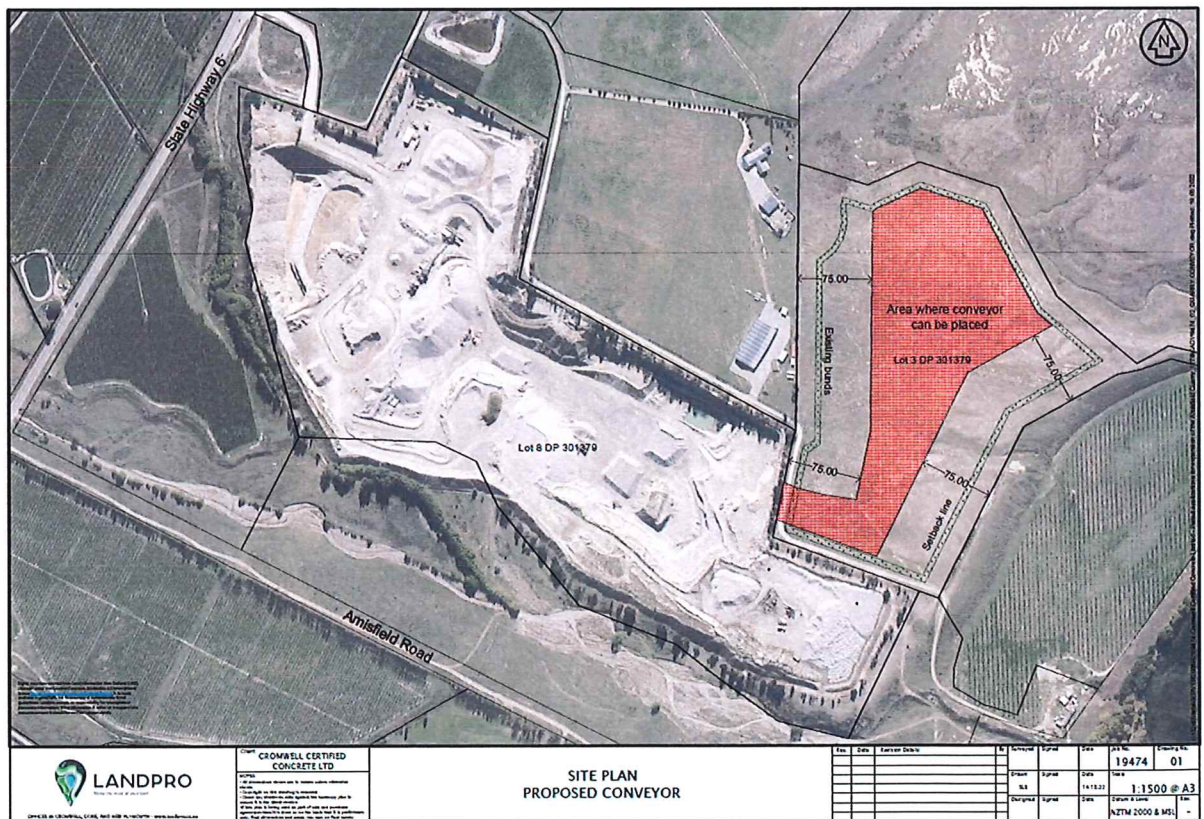
### **Review**

44. The Consent Authority may, in accordance with Sections 128 and 129 of the Resource Management Act 1991, serve notice on the Consent Holder of its intention to review the conditions of this consent within 3 months of each anniversary of the commencement of this consent for the purpose of:
- a. To deal with any adverse effect on the environment which may arise from the exercise of the consent that was not foreseen at the time of granting of the consent, and which is therefore more appropriate to deal with at a later stage; and/or
  - b. To require the Consent Holder to adopt the best practicable option to reduce any adverse effects on the environment resulting from the activity; and/or
  - c. Ensuring the conditions of this consent are consistent with any National Environmental Standard or National Planning Standard; and/or
  - d. Implementing any changes required to adopt recommendations included in a report prepared and pursuant to Condition 17 of this consent.

## Appendix 1: Site Plan



## Appendix 2: Site Plan – Proposed Conveyor







RM20.360.04: Bore Consent

**LAND USE CONSENT**

Pursuant to Section 104A of the Resource Management Act 1991, the Otago Regional Council grants consent to:

Name: Cromwell Certified Concrete Limited

Address: 810 Great South Road, Penrose, Auckland 1061

Activity: To construct a bore for the purpose of excavating gravel below groundwater and to decommission the bore within Lot 8 DP 301379 following completion of excavations.

Term: For an unlimited term

Location of consent activity: 1248 Luggate-Cromwell Road (State Highway 6)

Legal description of consent location: Lots 3 and 8 DP 301379

Conditions:

1. This permit shall be exercised in general accordance with the plans and information provided with the application.
2. If this consent is not given effect to within a period of five years from the date of commencement of this consent, this consent shall lapse under Section 125 of the Resource Management Act 1991. The consent shall attach to the land to which it relates.
3. The Consent Holder shall undertake water quality sampling and reporting as per the requirements of RM20.360.02: Discharge Permit, which are considered to provide an integrated water quality monitoring programme for the site (refer to Appendix 1 for the monitoring locations).
4. A Groundwater Management Plan (GMP) shall be submitted to the Otago Regional Council at least 1 month prior to the exercise of this consent for certification that it documents, as a minimum:
  - a. A plan showing the areas of groundwater extraction and the water quality monitoring network;
  - b. A description of the groundwater quality monitoring required by the conditions of this consent and RM20.360.02;
  - c. Names and contact details of staff responsible for implementing and reviewing the GMP in order to achieve the requirements of this consent;
  - d. A description of the proposed methods of excavating aggregate within groundwater;
  - e. A description of all relevant site operations and procedures, including mobile refuelling procedures and spill responses;
  - f. A description of all environmental effects, including (but not limited to) discharges to water;
  - g. All consent conditions and any other mitigation measures to be employed to minimise environmental effects and/or adhere to best practice;
  - h. The minimum maintenance frequency for all machinery operated by the Consent Holder and working on the site;
  - i. Confirmation by survey of the highest groundwater levels across the quarry;
  - j. Relevant monitoring and reporting requirements.
5. Activities authorised by this consent shall not commence until the Consent Holder has received written certification of the GMP. Notwithstanding this, the works may proceed



if the Consent Holder has not received a response from the Consent Authority within 20 working days of the date of the submission of the GMP.

6. Any erosion, scour or instability of the bed or banks of the pit or formed waterbody that exceeds the extent shown in the consent application shall be reinstated or remedied by the Consent Holder. When such reinstatement or remediation is necessary, the Consent Holder shall record the following information and include it in the Annual Groundwater Report required by Condition 10 of this consent:
  - a. The location of the reinstatement or remediation works identified on a site plan;
  - b. A description of the nature of the damage that occurred, including photographs;
  - c. An assessment of the likely causes of the damage, including reference to preceding weather conditions, activities taking place in the area, the angle of the pit slopes etc.
  - d. A description of the nature of the reinstatement or remediation works required and when these were carried out;
  - e. Any changes to be made to site management measures to reduce the likelihood of similar issues arising in future.
  
7. In the event of a discharge of unauthorised contaminant(s) to water or to land in a manner that may enter water, including but not limited to fuel, hydraulic fluid, overspray of weed killer, contaminated soil/hardfill or leachate, the Consent Holder shall:
  - a. Undertake all practicable measures as soon as possible to contain the contaminant;
  - b. Ensure that the contaminants and any material used to contain it are removed from the site and disposed of at an authorised landfill;
  - c. Immediately notify the Consent Authority and Amisfield Estate Society Incorporated of the spill or contamination and of the actions taken and to be taken to remediate and mitigate any adverse environmental effects;
  - d. Immediately have a suitably qualified water quality expert assess the risk of the spill to bore G41/0111 (the Amisfield Estate Society Incorporated drinking water supply) and provide recommendations on the measures to be taken to address any identified risk;
  - e. Provide a copy of the risk assessment carried out under Condition 7(d) above to the Consent Authority and Amisfield Estate Society Incorporated within 1 week and implement all recommendations in the risk assessment;
  - f. If requested by the Consent Authority, undertake additional water quality sampling and any other actions necessary to remediate or mitigate any adverse effects on the environment, to the satisfaction of the Consent Authority.
  
8. The Consent Holder shall ensure that:
  - a. All machinery to be operated within exposed groundwater on the site is thoroughly cleaned of vegetation (e.g. weeds), seeds or contaminants at least 10 metres away from any waterbody, water flow channel or stormwater system, prior to entering the site;
  - b. All machinery shall be regularly maintained to ensure that no contaminants (including but not limited to oil, petrol, diesel, hydraulic fluid) shall be released into water, or to land where it may enter water, from equipment being used for the works;

- c. All contaminant storage or re-fuelling areas (other than areas where mobile re-fuelling occurs) are bunded or contained in such a manner so as to prevent the discharge of contaminants to water or to land where it may enter water;
  - d. No machinery shall be maintained, cleaned, stored or refuelled within 10 metres of any waterbody (including exposed groundwater), water flow channel or stormwater system;
  - e. Permanent storage of fuel and lubricants shall only occur within the workshop area identified on 'Site Plan Rev F' attached as Appendix 1 to this consent. Lubricant shall be stored in a bunded area capable of containing 125% of the volume being stored. Fuel shall be stored in a double skinned tank certified in accordance with the manufacturers specifications and capable of containing a spill at maximum capacity;
  - f. Refuelling and maintenance of all vehicles or machinery except for the long-reach excavator shall be undertaken within the workshop area identified on 'Site Plan Rev F' attached as Appendix 1 to this consent ;
  - g. Mobile refuelling of the excavator shall only be undertaken using a nozzle that incorporates a shut off valve and sensor system to avoid fuel leaks or overfilling of the excavator fuel tank;
  - h. Mobile refuelling occurs in accordance with best practice, a drip tray is used at all times for such refuelling, and spill kits are available at the mobile refuelling locations;
  - i. The origin and location of deposition within the site of any externally sourced cleanfill shall be recorded;
9. Externally sourced cleanfill shall not be placed horizontally within 10 metres of any waterbody (including exposed groundwater), water flow channel or stormwater system and shall only be placed above the highest surveyed groundwater level as specified in the GMP.
10. The Consent Holder shall maintain a permanent record of any complaints received alleging adverse effects from or related to the works authorised by this consent. This record shall include:
- a. The name and address of the complainant (if provided);
  - b. The date and time that the complaint was received;
  - c. Details of the alleged event;
  - d. Weather conditions at the time of the complaint; and
  - e. Any measures taken to mitigate/remedy the cause of the complaint.
- This record shall be made available to the Consent Authority on request.
11. The Consent Holder shall submit an Annual Groundwater Report before the end of February each year which includes the following:
- a. Results of the water quality monitoring carried out in accordance with Condition 3;
  - b. The identity and expertise of the person(s) who collected water samples in accordance with this resource consent;
  - c. Identification of any measures required under Condition 10(e);
  - d. Records kept in accordance with Condition 10 and 8(i); and



- e. Copies of the complaints record for any complaints in relation to groundwater quality for the preceding 12 months.
12. The Consent Authority may, in accordance with Sections 128 and 129 of the Resource Management Act 1991, serve notice on the Consent Holder of its intention to review the conditions of this consent within 3 months of each anniversary of the commencement of this consent for the purpose of:
- a. Adjusting the variables or frequency of the sampling requirements under Condition 3; or
  - b. Determining whether the conditions of this consent are adequate to deal with any adverse effect on the environment which may arise from the exercise of the consent and which it is appropriate to deal with at a later stage; or
  - c. Ensuring the conditions of this consent are consistent with any National Environmental Standard or National Planning Standard.

# Appendix 1: Water Quality Monitoring Network

