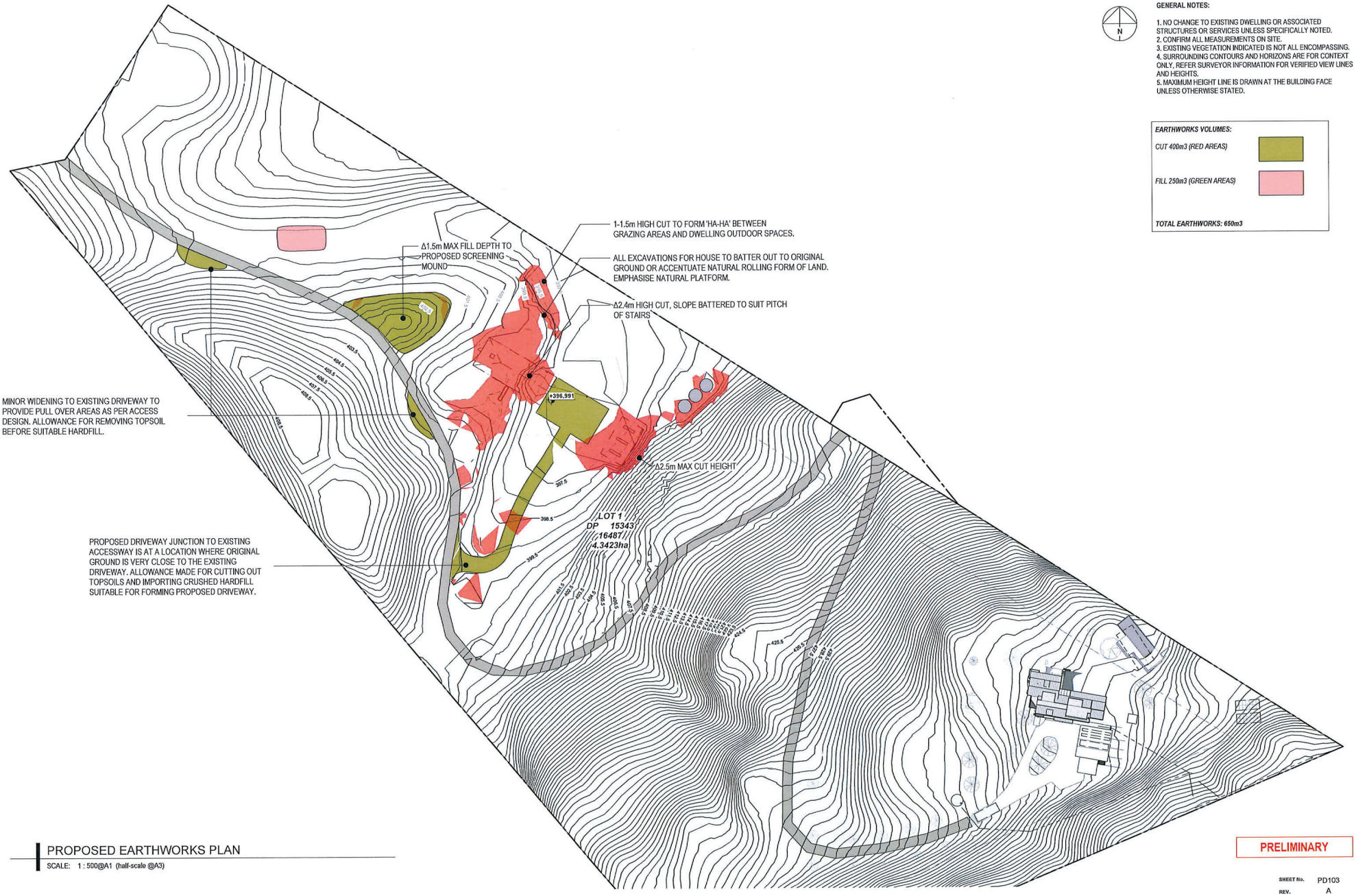

GENERAL NOTES:

1. NO CHANGE TO EXISTING DWELLING OR ASSOCIATED STRUCTURES OR SERVICES UNLESS SPECIFICALLY NOTED.
2. CONFIRM ALL MEASUREMENTS ON SITE.
3. EXISTING VEGETATION INDICATED IS NOT ALL ENCOMPASSING.
4. SURROUNDING CONTOURS AND HORIZONS ARE FOR CONTEXT ONLY. REFER SURVEYOR INFORMATION FOR VERIFIED VIEW LINES AND HEIGHTS.
5. MAXIMUM HEIGHT LINE IS DRAWN AT THE BUILDING FACE UNLESS OTHERWISE STATED.

EARTHWORKS VOLUMES:

CUT 400m3 (RED AREAS)

FILL 250m3 (GREEN AREAS)

TOTAL EARTHWORKS: 650m3

PROPOSED EARTHWORKS PLAN

SCALE: 1 : 500@A1 (half-scale @A3)

PRELIMINARY

SHEET No. PD103
REV. A
DATE: 20/11/22

PROJECT No: 1612 - 2
PROJECT: BARN HOUSE
134 MALAGHANS RD, DALEFIELD
SHEET: PROPOSED EARTHWORKS PLAN

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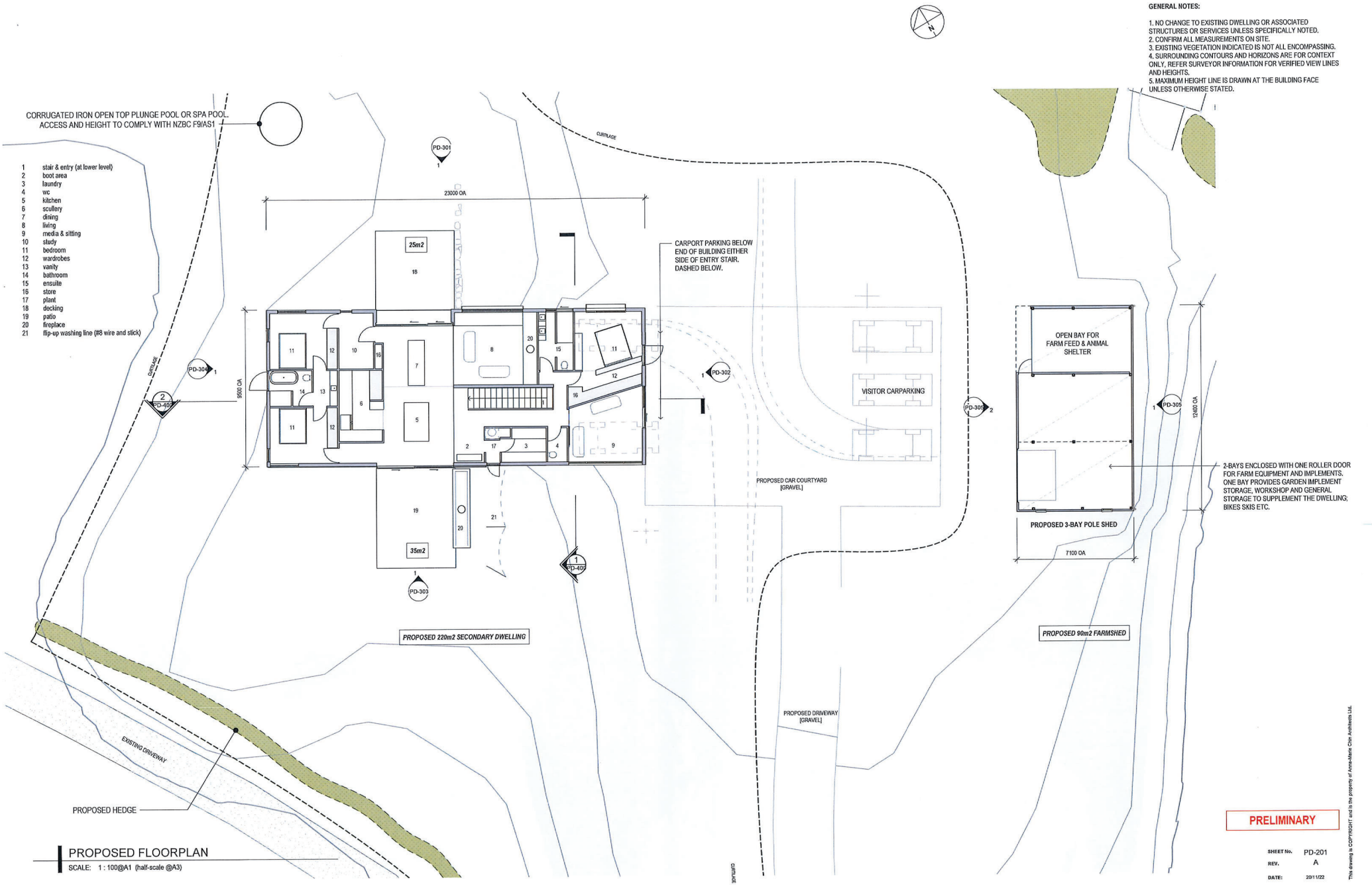

PROPOSED FLOORPLAN

SCALE: 1 : 100@A1 (half-scale @A3)

PRELIMINARY

SHEET No. PD-201
REV. A
DATE: 20/11/22

PROJECT No: 1612_2
PROJECT: BARN HOUSE
134 MALAGHANS RD, DALEFIELD
SHEET: PROPOSED FLOOR PLANS

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GENERAL NOTES:

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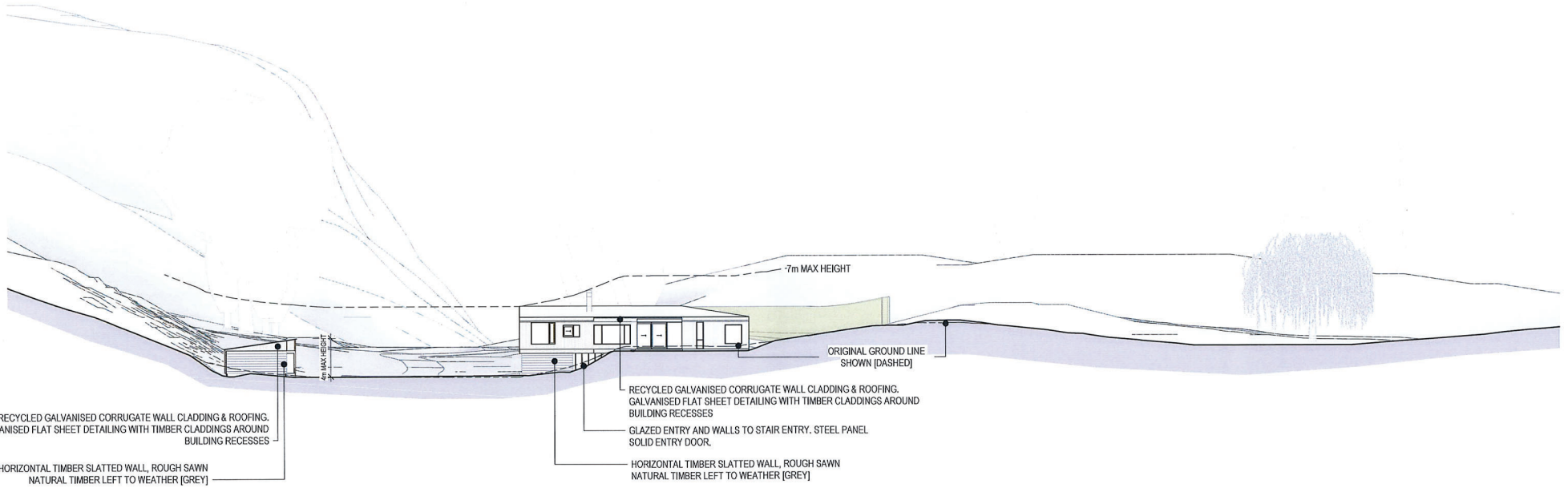

1 ELEVATION - PROPOSED SHED & HOUSE - NORTH

PD-201 SCALE: 1 : 200@A1 (half-scale @A3)

PRELIMINARY

SHEET No. PD-301
REV. A
DATE: 20/11/22

PROJECT No: 1612 - 2

PROJECT: BARN HOUSE
134 MALAGHANS RD, DALEFIELD

SHEET: PROPOSED ELEVATIONS

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GENERAL NOTES:

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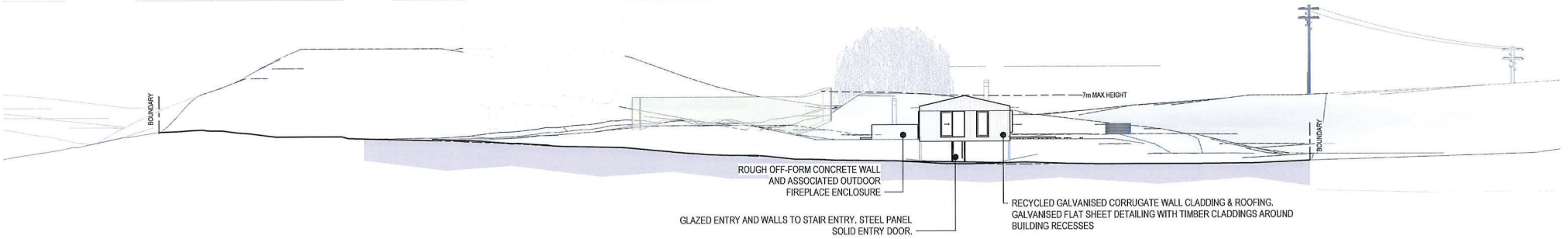

1 ELEVATION - PROPOSED HOUSE - EAST

PD-201 SCALE: 1 : 200@A1 (half-scale @A3)

PRELIMINARY

SHEET No. PD-302
REV. A
DATE: 2011/22

PROJECT No: 1612 - 2
PROJECT: BARN HOUSE
134 MALAGHANS RD, DALEFIELD
SHEET: PROPOSED ELEVATIONS

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GENERAL NOTES:

1. NO CHANGE TO EXISTING DWELLING OR ASSOCIATED STRUCTURES OR SERVICES UNLESS SPECIFICALLY NOTED.
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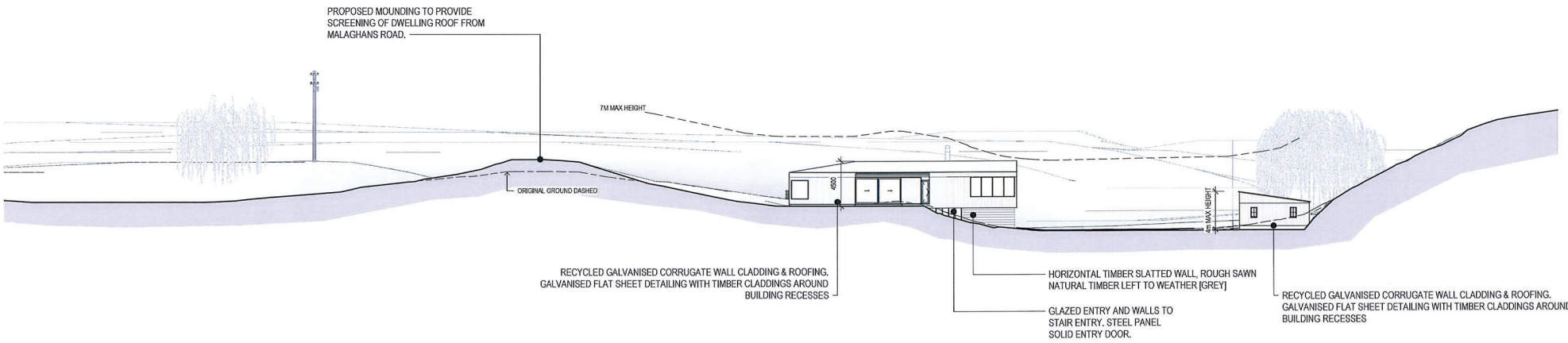

1 ELEVATION - PROPOSED SOUTH

PD-201 SCALE: 1 : 200@A1 (half-scale @A3)

PRELIMINARY

SHEET No. PD-303
REV. A
DATE: 20/11/22

PROJECT No: 1612 - 2
PROJECT: BARN HOUSE
134 MALAGHANS RD, DALEFIELD
SHEET: PROPOSED ELEVATIONS

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GENERAL NOTES:

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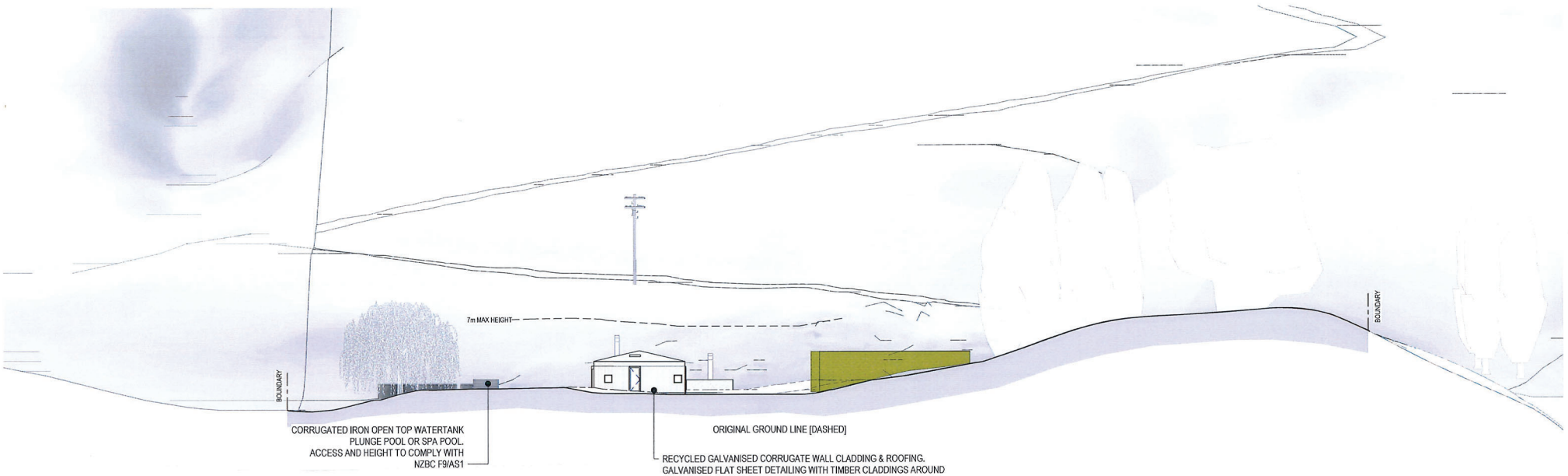

1 ELEVATION - PROPOSED WEST

PD-201 SCALE: 1 : 200@A1 (half-scale @A3)

PRELIMINARY

SHEET No. PD-304
REV. A
DATE: 2011/22

PROJECT No: 1612 - 2
PROJECT: BARN HOUSE
134 MALAGHANS RD, DALEFIELD
SHEET: PROPOSED ELEVATIONS

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GENERAL NOTES:

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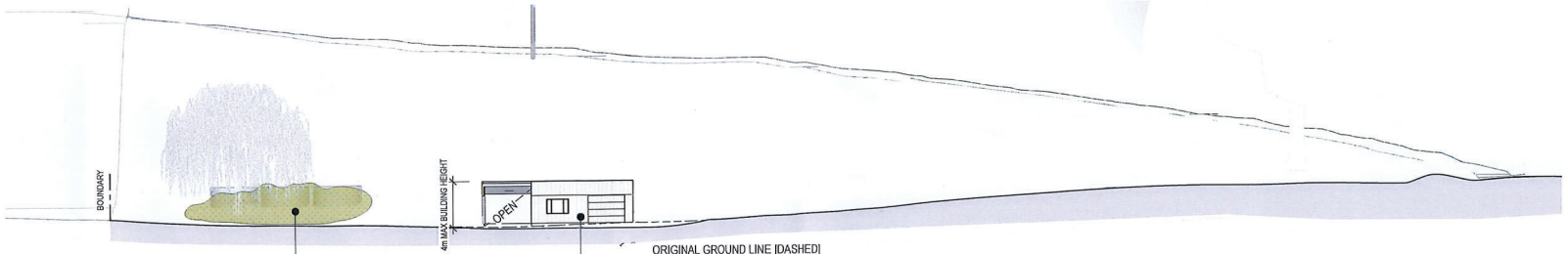
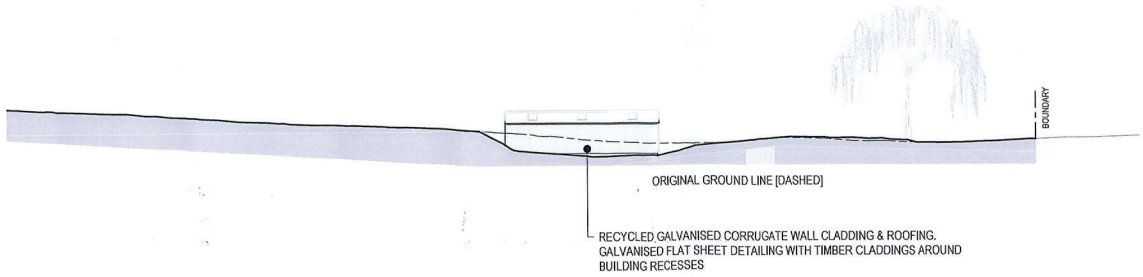


2 PD-201 **ELEVATION - PROPOSED SHED - WEST**

SCALE: 1 : 200@A1 (half-scale @A3)



1 PD-201 **ELEVATION - PROPOSED SHED - EAST**

SCALE: 1 : 200@A1 (half-scale @A3)

PRELIMINARY

SHEET No. PD-305
REV. A
DATE: 20/11/22

PROJECT No: 1612 - 2

PROJECT: BARN HOUSE
134 MALAGHANS RD, DALEFIELD

SHEET: PROPOSED ELEVATIONS - SHED

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GENERAL NOTES:

1. NO CHANGE TO EXISTING DWELLING OR ASSOCIATED STRUCTURES OR SERVICES UNLESS SPECIFICALLY NOTED.
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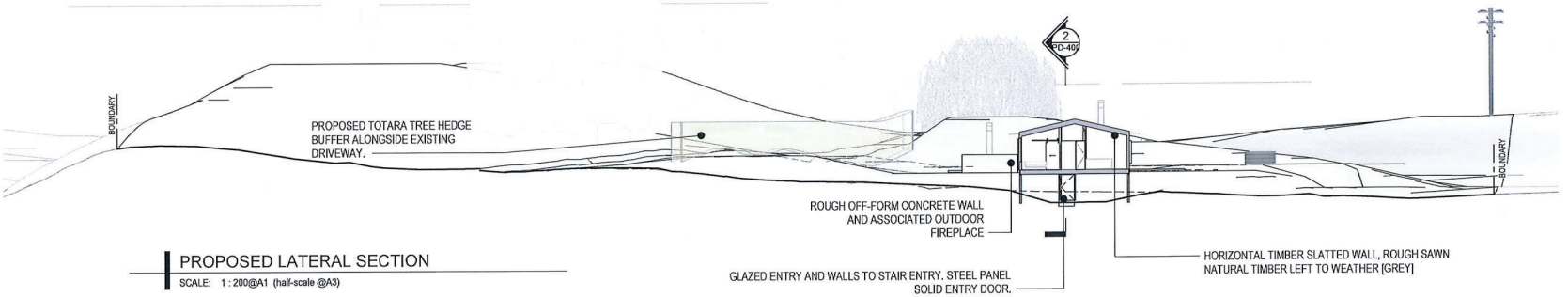
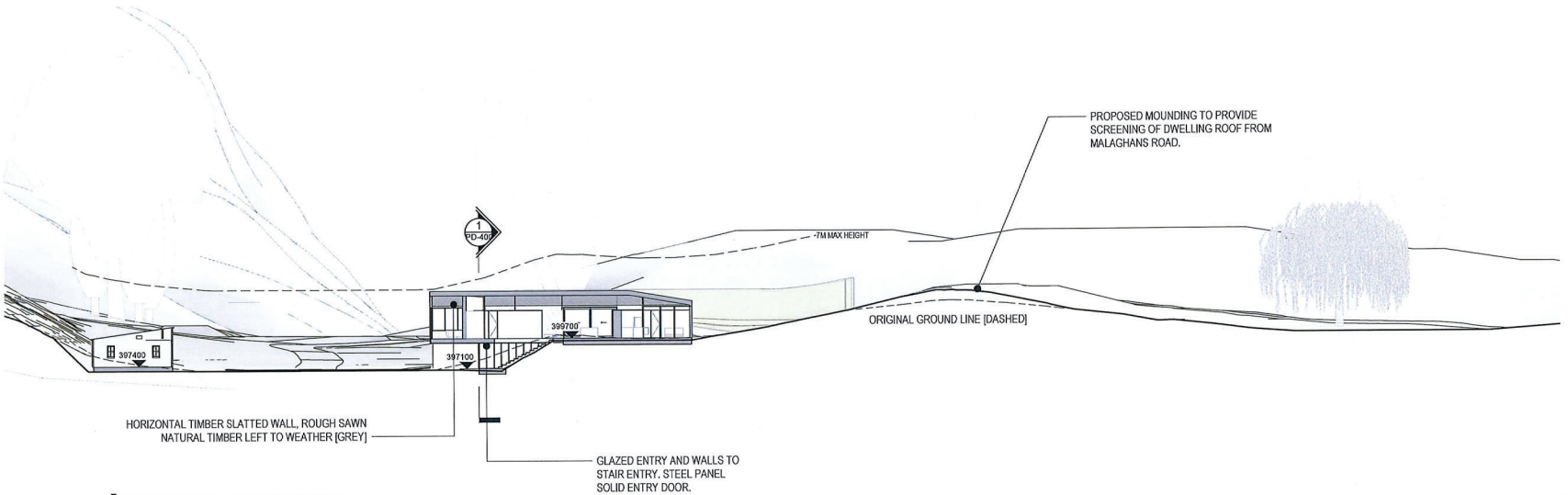


PROPOSED LATERAL SECTION

SCALE: 1 : 200@A1 (half-scale @A3)



PROPOSED LONG SECTION

SCALE: 1 : 200@A1 (half-scale @A3)

PRELIMINARY

SHEET No. PD-400
REV. A
DATE: 20/11/22

PROJECT No: 1612 c2
PROJECT: BARN HOUSE 134 MALAGHANS RD, DALEFIELD
SHEET: PROPOSED SITE SECTIONS

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GENERAL NOTES:

1. NO CHANGE TO EXISTING DWELLING OR ASSOCIATED STRUCTURES OR SERVICES UNLESS SPECIFICALLY NOTED.
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CLOSE-UP VIEW OF RECYCLED/WEATHERED GALVANISED CORRUGATE STEEL, VERY LOW LIGHT REFLECTIVITY.

DISTANT VIEW OF RECYCLED/WEATHERED GALVANISED CORRUGATE STEEL

EXAMPLE OF TIMBER SLATTED WALLS / SCREENS

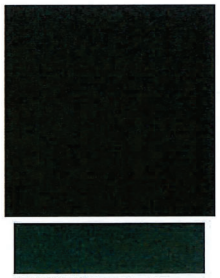
MATERIALS PALETTE

WALL CLADDING & ROOFING
PREWEATHERED GALVANISED CORRUGATE WITH GALVANISED FLAT SHEET DETAILING WHERE REQUIRED.

RECESSES & DETAILS
WEATHERED GREY TIMBER

WINDOWS AND DOORS
RECESSIVE DARK COLOURED POWDERCOATING TO ALUMINIUM WINDOW FRAMES.

METROPOLIS COAL DUST KINETIC



9009100K Duratec®
Metropolis® Coal Dust Kinetic
LRV 08% RGB 61 63 63

PRELIMINARY

SHEET No. PD-601
REV. A
DATE: 20/11/22

PROJECT No: 1612 - 2
PROJECT: BARN HOUSE
134 MALAGHANS RD, DALEFIELD
SHEET: MATERIAL PALETTE

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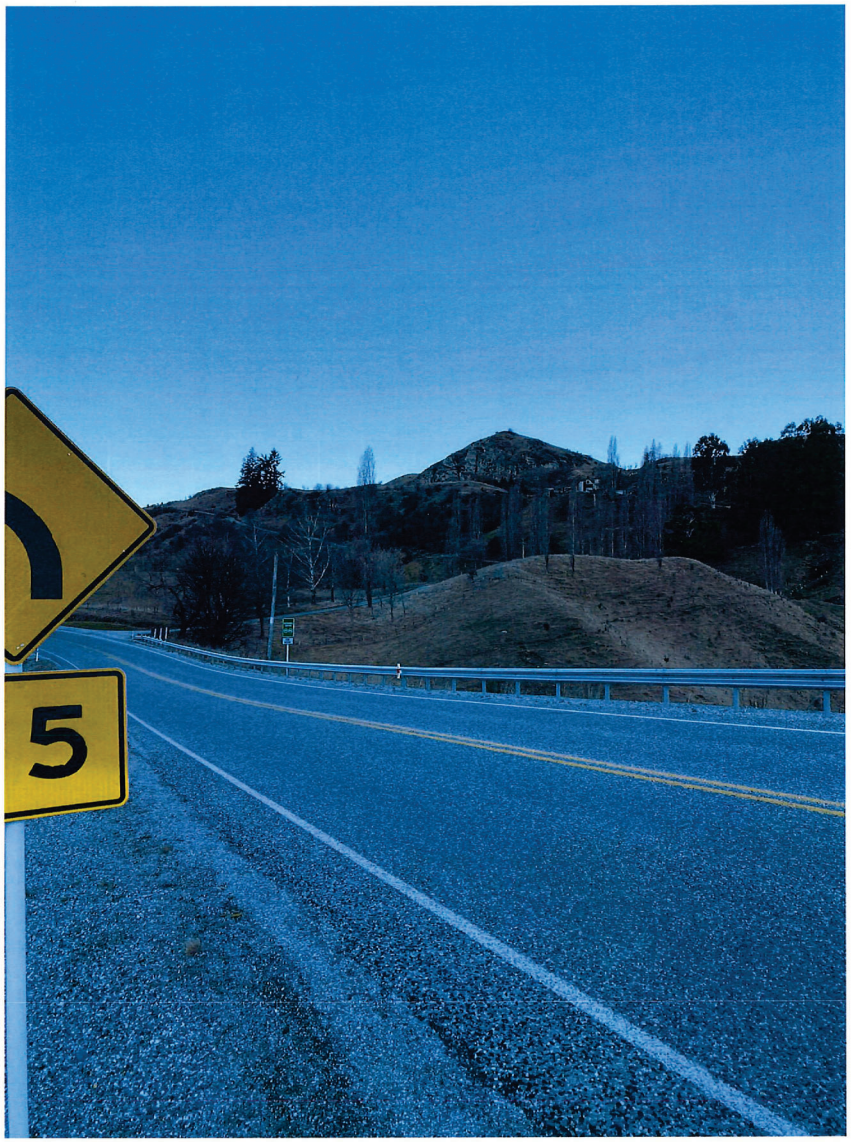

MALAGHANS NORTHBOUND 1

SCALE: @A1 (half-scale @A3)

PRELIMINARY

SHEET No. PD-700

REV. B

DATE: 20/11/22

PROJECT No: 1612 - 2

PROJECT: BARN HOUSE

134 MALAGHANS RD, DALEFIELD

SHEET: 3D VIEWS

anna-marie chin architects

MALAGHANS NORTH BOUND 2

SCALE: @A1 (half-scale @A3)

PRELIMINARY

SHEET No. PD-701

REV. B

DATE: 20/11/22

PROJECT No: 1612 - 2

PROJECT: BARN HOUSE

134 MALAGHANS RD, DALEFIELD

SHEET: 3D VIEWS

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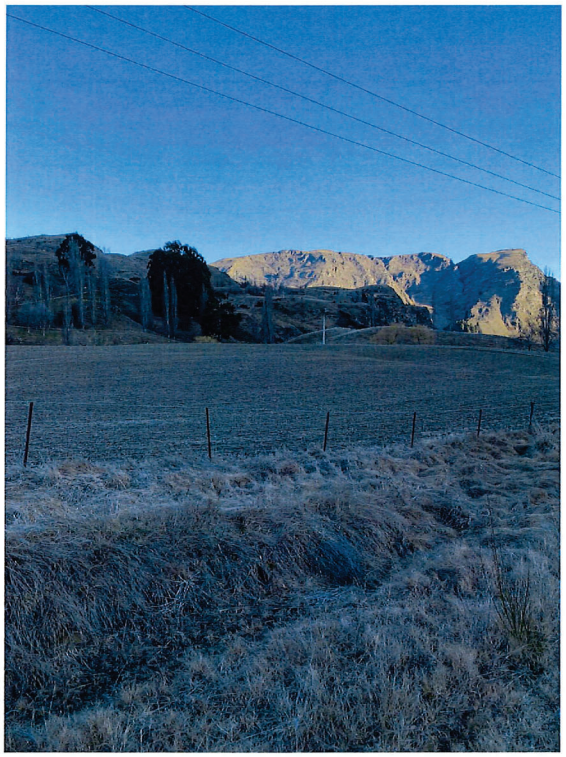

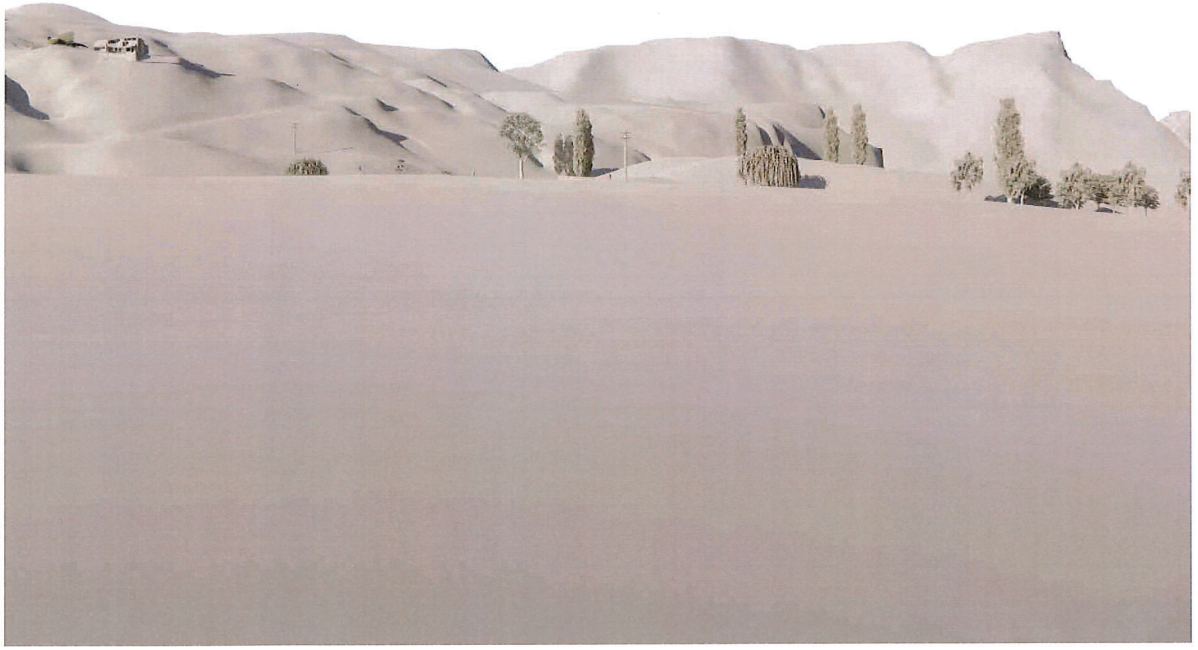

MALAGHANS SOUTHBOUND 1

SCALE: @A1 (half-scale @A3)

PRELIMINARY

SHEET No. PD-702

REV. B

DATE: 20/11/22

PROJECT No: 1612 - 2

PROJECT: BARN HOUSE

134 MALAGHANS RD, DALEFIELD

SHEET: 3D VIEWS

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MALAGHANS S2

SCALE: @A1 (half-scale @A3)

PRELIMINARY

SHEET No. PD-703

REV. B

DATE: 20/11/22

PROJECT No: 1612 - 2

PROJECT: BARN HOUSE
134 MALAGHANS RD, DALEFIELD

SHEET: 3D VIEWS

anna-marie chin architects

ORC NOTIFICATION RECOMMENDATION REPORT

ID Ref:	A1756014
Application No:	RM23.065
Prepared for:	Staff Consents Panel
Prepared by:	Alice Floyd, Consents Planner
Date:	28 February 2023

Subject: **Notification recommendation for application RM23.065 by Jono Hay and Georgina Tudor - Jones to discharge treated wastewater to land for the purpose of disposing of wastewater from a residential dwelling**

---

1. Purpose

To report and make recommendations under sections 95A-G of the Resource Management Act 1991 (the Act) on the notification decision for the above application.

2. Background Information

Applicant: Jono Hay and Georgina Tudor-Jones

Applicant's Agent: Bridget Allen of Bridge Consulting

Site address or location: 134 Malaghans Road, Wakatipu, Queenstown 9349. Approximately 1200 metres southwest from the intersection of Arthurs Point Road and Littles Road.

Legal description(s) of the site: Lot 1 DP 15343

Record of title number and owner: 16487; Barbara Hay and James Hay

Map reference (NZTM2000): E1261184 N5011317

Consent sought: RM23.065.01 - Discharge permit to discharge treated wastewater to land

Purpose: Disposal of wastewater from a residential dwelling

Current consents: N/A

Section 124 timeframes: N/A

2.1 Key issues/risks

The key issues/risks with the application are:

- Application is for discharge of wastewater to land within the Lake Hayes catchment

At this stage there are no principal issues in contention that need to be raised.

2.2 Summary

I recommend the application is processed on a non-notified basis.

This is because:

- The adverse effects on the environment from the proposed activity will be no more than minor; and
- The mitigations proposed adequately compensate or offset the actual or potential adverse environmental effects.

3. Description of Activity

The application is for a new consent for the discharge of wastewater to land. The applicant seeks consent to discharge wastewater to land for the purpose of disposing treated wastewater from a residential dwelling at 134 Malaghans Road, Wakatipu, Queenstown.

Bridget Allen of Bridge Consulting has provided a description of the proposal on pages 167-170 of the Application titled: 3.0 Description of the Proposal, Bridget Allen, 2 February 2023. This description is adopted for this report. The key points of the activity are explained below

- The maximum volume of discharge will be 990 L/day. This volume is consistent with the typical wastewater volumes generated by a three-bedroom dwelling as outlined in the Australian/New Zealand Standard for On-site Domestic Wastewater Management (AS/NZS 1547:2012).

- The applicant proposes to install an aerated package treatment plant, with a total operating capacity of 8,130L. Untreated effluent will flow into a 2,330 Litre (L) capacity primary pre-treatment chamber, followed by a 2,330L capacity secondary pre-treatment chamber before passing through a 1,700L capacity aeration chamber and a clarifier fitted with an outlet solids filter.

- Effluent from the package treatment plant will be dose pumped to a disposal field with an effective area of 360 square metre (m^2), designed for subsurface application of effluent via drip line irrigation. 990L/d and a disposal field of 360m^2 results in a maximum daily application rate of 2.75 millimetre (mm)/day. This rate is within the recommended design loading rate of 30mm/day for drip irrigation of treated effluent, in Category 3 soils, as specified in the AS/NZS 1547:2012.

The applicant has provided the following documentation with the application:

- Resource consent application and supporting information report signed by the applicant and 2 February 2023
- Proposed Site Plan 2 February 2023
- Further information response 7 February 2023

3.1 Quality of Discharge

According to the manufacturer, the expected effluent quality (expressed in mg/L) from such a system at the point where it enters the environment is:

Contaminant	*Expected concentration*
5-day Biochemical Oxygen Demand (BOD5)	*<20 mg/L*
Total Suspended Solids (TSS)	*<30 mg/L*
Total Nitrogen (TN)	*<35 mg/L*
Total Phosphorus (TP)	*<10 mg/L*
Escherichia coli	*1,000 cfu/100 millilitres*

Effluent may undergo some further treatment once discharged to the disposal field, as a result of soil renovation and other natural processes.

3.2 Description of the Environment

A description of the site and surrounding environment is provided in the application and that is adopted for the purposes of this report. Key details are as follows:

- Soils present on the site are described as Loams i.e. Category 3 soils as per AS/NZS 1547: 2012.
- The depth to groundwater at the site is between 21m – 22m below ground level.
- The nearest bore used for domestic water supply (CB11/0139) is located approximately 73 m east of the disposal field. The bore is owned by Martin Hay and Barbara Hay who are also the site landowners and the applicant's parents.
- The closest surface waterway to the discharge site is the Shotover River located approximately 1,800 m to the southwest.
- The nearest current consented surface water take is approximately 750 m south and held by Redemption Song LLC. The take is located approximately 750 downgradient of the discharge site.

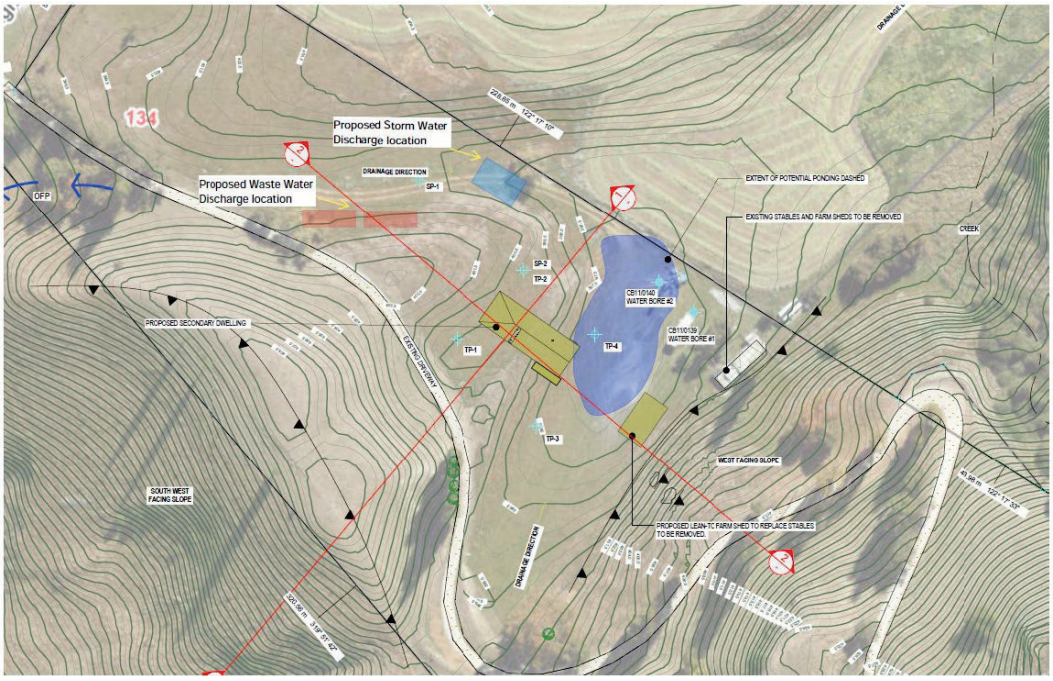


Figure 1: Site Plan. Source: Application

3.2.1 Site Visit

A site visit was not undertaken for this application as there was considered to be sufficient photographic evidence, plans and aerial mapping information of the site to understand the nature of the site. The scale and the nature of the activity proposed means that a site visit was not required in this instance.

3.2.2 Recognised values listed in the Regional Plan: Water for Otago

The RPW outlines the natural and human use values of various watercourses throughout the Otago Region.

The Shotover River is identified in Schedule 1A as having the following natural values:

- Refers to the bed composition of importance for resident biota. Specifically, gravel, boulders, sand and rock.
- Large water bodies supporting high numbers of particular species, or habitat variety, which can provide for diverse life cycle requirements of a large number of particular species, or a range of species.
- Absence of pest pants such as weeds
- Presence of riparian vegetation of significance to aquatic habitats.
- Presence of a significant range of indigenous waterfowl.
- Presence of indigenous waterfowl threatened with extinction.
- Outstanding:
  a) For its wild and scenic characteristics
  b) For its natural characteristics, in particular the high natural sediment load and active delta at confluence with Kawarau River
  c) Scientific value, in particular the high natural sediment load and active delta at confluence with Kawarau River
  d) For recreational purposes, in particular rafting, kayaking and jet boating
  e) For historical purposes, in particular gold mining.
- Spectacular and rugged river gorge, schistose landscape, fast flowing white water and rapids, old gold sluicing landscape, in mainstem between confluence with Iron Stone Stream and Arthur Point.
- Wild and scenic characteristics, from confluence with Iron Stone Stream to its source.
- Lochnagar and Lake Creek, outstanding
  a) Essential characteristics that determine the ecosystem's integrity, form functioning and resilience.
- Significant habitat: Areas of importance to internationally uncommon species – black fronted tern, banded dotterel – in main stem between Arthur Point and its source
- A high degree of naturalness above 900 metres above sea level.

Schedule 3A identifies the uses of groundwater from particular aquifers in Otago. The Wakatipu Basin Aquifer is not recognised in Schedule 3A for any human use values.

Schedule 3B identifies the location of groundwater takes for the purpose of community water supply. There are no Schedule 3B community water supply takes located in close proximity to the discharge.

4. Status of the Application

Rule 12.A.2.1 of the Regional Plan: Water ("RPW") states:

Except as provided for by Rules 12.A.1.1 to 12.A.1.4, the discharge of human sewage to water, or onto or into land in circumstances where it may enter water, is a ***discretionary*** *activity.*

The provisions of Rules 12.A.1.1 to 12.A.1.4 that are not met are:

- 12.A.1.4 (b) which states "*The discharge does not occur within any Groundwater Protection Zone, as identified on the C-series maps, nor in the*

area of the Lake Hayes catchment as identified on Map B6." As noted above, the site is located within the Lake Hayes catchment.

Unless discussed above, all other relevant permitted activity rules are complied with.

Overall, the application is a ***discretionary*** activity.

4.1 Permitted Activity Rules

There are no permitted activity rules that are directly relevant to this application.

5. Assessment of Adverse Environmental Effects

An assessment of effects is provided in the application and that is adopted for the purposes of this report. Key details are outlined below as it relates to understanding the scale of effects and to inform the recommendation on notification.

5.1 Effects on Human Health

At this site, soils are classed in the AS/NZS 1547:2012 standards as being classed as category 3 loams. The loading rate for these soils is 30 mm/day. The applicant proposes a system with soil loading being 2.75 mm/day which is well below the maximum loading rate for these types of soils.

Surface ponding of effluent can pose a significant human health risk. The proposed wastewater discharge, if operated as designed, should not result in the surface ponding of effluent and associated adverse effects on human health. The effects of the discharge on human health from surface ponding of effluent are expected to be no more than minor.

5.2 Effects on Soils

High suspended solids in effluent discharged can cause clogging of soil pores and reduce the long-term sustainability of the land disposal area with consequent effects of surface ponding and limited treatment of contaminants within the soil profile. The applicant has stated that after treatment the wastewater discharged will have low suspended solid concentrations of an average of 30 mg/L. Given the low concentration of suspended solids in the wastewater, and category three loam soils at the site, effects on soil are expected to be no more than minor.

Excessive BOD_5 concentrations within the wastewater discharged can also clog soil pores. A healthy soil environment can assimilate up to 600 kg BOD_5/ha/day. The land disposal area covers an area of 0.036 ha and up to 21.6kg BOD_5/day could be applied. With a maximum BOD_5 concentration of 20 mg/L and maximum discharge applied for of 990 L/day, the BOD load will be 0.0198 kg BOD_5/day, which is significantly less than this. The effects of BOD from the discharges on the soil are expected to be no more than minor.

5.3 Effects on Groundwater

The discharge has the potential to introduce and increase nitrogen and pathogen concentrations within the groundwater.

Nitrogen

Nitrate-nitrogen is mobile through the soil and has the potential to adversely affect human health if present in high concentrations in drinking-water. The Drinking Water Standard for New Zealand 2005 (MoH, 2005) specifies a Maximum Acceptable Value for nitrate-nitrogen of 11.3mg/L.

The proposed treatment system will produce effluent that will be discharged to land via subsurface drip-line irrigation. The low application rate (*2.75 mm per day maximum*) should ensure leaching of nitrate into the groundwater is kept to a minimum.

In terms of the nitrogen loading rate, based on the property area of 4.45 ha, the maximum discharge volume of 990 L/d and a total nitrogen concentration in the effluent discharge of 35 mg/L, the nitrogen loading rate will be in the order of 144.54 kg N/ha/year. This is a low application rate when compared with nitrogen contributions from surrounding domestic wastewater discharges. This discharge therefore should not have any adverse effects on groundwater nitrogen concentrations providing the disposal system is effectively managed.

Pathogens

Council's Resource Science Unit (RSU) commented on the proposed wastewater discharge disposal field on 20 February 2023. Overall, RSU considered that the system and its location look to be acceptable under normal conditions, although noted that there is a potential risk of ponding adjacent to, and direct infiltration of contaminated water close to the two bores (CB11/0139 and CB11/0140) located within the site.

Despite the above, it is noted that the RPW relies on a separation distance of 50 m between the discharge of sewage from any bore to avoid contamination. The disposal field complies with this setback, and the activity would otherwise be a permitted activity if it were not located within the Lake Hayes Catchment.

Furthermore, the level of faecal coliforms in the treated effluent discharged is low (<1,000 cfu/100 ml). Given the relatively small volume of discharge and the proposed quality of the discharge, attenuation of pathogens should be achieved through the underlying soils prior to reaching any groundwater.

Overall, potential adverse effects on groundwater are expected to be no more than minor.

5.4 Effects on Surface Water

Wastewater discharges to land may contaminate surface water via groundwater or from overland flow during disposal system malfunction.

The RPW relies on a separation distance of 50m between small-scale discharges of sewage and a surface water body to avoid contamination. In this instance, the nearest surface watercourse (Shotover River) is located over 1500m to the southwest and is unlikely to be affected by the proposed discharge, provided the discharge is undertaken in accordance with the application.

The wastewater discharge is located within the Lake Hayes catchment. The distance from the disposal field to Lake Hayes is over 8 km and is unlikely to have any effect on surface water quality. The disposal field is also located over 3km from Dan O'Connell Creek which is a direct tributary of Lake Hayes. RSU also noted that any

groundwater will take a long time to get to a surface water body. Furthermore, due to its proximity to the Lake Hayes/ Shotover catchment boundary, RSU noted that there is potential for the discharge to end up in the Shotover catchment, or only partially within the Lake Hayes catchment.

Given the separation distances from both water bodies discussed above and the level of treatment proposed, adverse effects on surface water and the wider Lake Hayes catchment will be less than minor.

Overall, potential adverse effects on surface water are expected to be no less than minor.

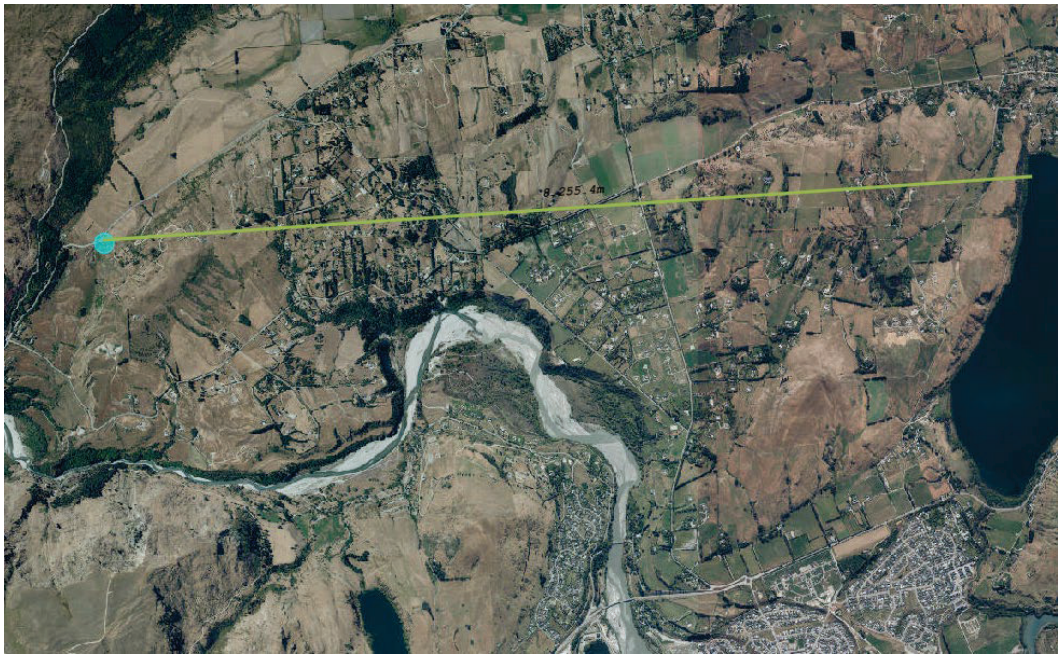


Figure 2: Location of site relative to Lake Hayes, pictured right. Source: Otago Maps.

5.5 Effects on Air Quality

The greatest potential for odour nuisance from on-site systems arises from system failure and effluent ponding. Neither of these problems should occur if the treatment and disposal system is maintained properly, as recommended in consent conditions.

Overall, potential adverse effects on air quality are expected to be less than minor.

5.6 Effects on Neighbouring Properties

There is potential for wastewater discharges to contaminate groundwater beneath neighbouring properties. Given the location of the discharge in relation to nearby groundwater takes and the quality of effluent being discharged, adverse effects on neighbouring properties are considered to be less than minor.

5.7 Effects on Cultural Values

As discussed in section 5.3 & 5.4 above, given the volume and quality of the discharge along with the method of effluent treatment and disposal, the proposed

discharge to land will have less than minor effects on groundwater and surface water bodies near the site. An assessment of the proposal against relevant provisions of the Kai Tahu ki Otago Natural Resource Management Plan 2005 is given later in this report. Overall, there should be no adverse effects on cultural values due to the proposed mitigation measures proposed by the applicant.

5.8 Consideration of Alternative

The applicant has investigated the possibility of alternatives and found the proposed system to be the most efficient as the Lake Hayes area is not connected to a reticulated system.

5.9 Cumulative Effects

Adverse effects can arise from many on-site wastewater treatment systems in close proximity, such as ground or surface water contamination. The closest wastewater discharge to the proposed wastewater discharge location is 800 m south (RM17.026). Furthermore, there are approximately 10 more wastewater discharges within a 2 km radius of the site, as the application is located in the non-reticulated area of Lake Hayes. Cumulative effects of multiple wastewater discharges can have significant effects on the environment. However, in this instance the proposed wastewater system is deemed to be at an appropriate calibre to avoid any more than minor effects on the environment.

Council staff are not aware of any adverse cumulative effects resulting from multiple wastewater discharges in the area. The likelihood of such effects can be avoided or mitigated, provided discharges are properly managed and appropriate conditions applied to discharge permits. Cumulative effects are expected to be no more than minor.

5.10 Effect on drinking water sites

There are not any drinking water sites, or sources for drinking water in proximity to the site. In general, there is potential for wastewater discharges to contaminate groundwater beneath neighbouring properties and surface water. Given the location of the discharge in relation to nearby groundwater takes and the quality of effluent being discharged, adverse effects on neighbouring properties are considered to be less than minor. In this instance, the nearest surface watercourse (Shotover River) is located over 1800m to the southwest and is unlikely to be affected by the proposed discharge, provided the discharge is undertaken in accordance with the application.

Overall, potential adverse effects on any registered drinking water sites are expected to be less than minor.

5.11 Conclusion

Overall, the adverse effects of the proposed activity are expected to be no more than minor.

6. Notification and Written Approvals

6.1 Section 95A Public Notification

Step 1: Is public notification mandatory as per questions (a) – (c) below?

(a) Has the applicant requested that the application be publicly notified? **No**

(b) Is public notification required by Section 95C? **No**
Has further information been requested and not provided within the deadline set by Council? **No**

Has the applicant refused to provide further information? **No**
Has the Council notified the applicant that it wants to commission a report but the applicant does not respond before the deadline to Council's request? **No**
Has the applicant refused to agree to the Council commissioning a report? **No**

(c) Has the application been made jointly with an application to exchange recreation reserve land under section 15AA of the Reserves Act 1977? **No**

Step 2: Is public notification precluded as per questions (a) – (b) below?

(a) Is public notification precluded by a rule in the plan or a NES? **No**

(b) Is the application for one or more of the following activities but no other activities**:**

(i) A controlled activity? **No**

(ii) A restricted discretionary, or discretionary activity, but only if the activity is a subdivision of land or a residential activity? **No**

(iia) A restricted discretionary, discretionary or non-complying activity but only if the activity is a boundary activity? **No**

Step 4: Do special circumstances exist in relation to the application that warrant the application being publicly notified? No

6.2 Section 95B Limited Notification

Step 1

Section 95B(2) Are there any affected groups or persons identified under Section 95B(2):

(a) Protected customary rights groups? **No**

(b) Customary marine title groups? **No**

Section 95B(3)(a) Is the proposed activity on or adjacent to, or may it affect, land that is the subject of a statutory acknowledgement made in accordance with an Act specified in Schedule 11? **No**

Section 95B(3)(b) Is a person to whom a statutory acknowledgement is made an affected person under Section 95E? **No**

Step 2

Is Limited Notification precluded under Section 95B(6)?

(a) Is the application for a resource consent for one or more activities, and each activity is subject to a rule or national environmental standard that preclude limited notification? **No**

(b) **(i)** Is the proposal a Controlled Activity that requires consent under the District Plan (other than a subdivision of land)? **No**

(ii) Is it a prescribed activity under Section 360G(1)(a)(ii)? **No**

Step 3

Having regard to Section 95E of the Resource Management Act, identify persons who would be adversely affected by the proposed activity by effects that are minor or more than minor, but not less than minor and give reasons why affected parties were identified.

There are not any persons who are considered to be affected parties to the application because the system is considered to be at an appropriate calibre to prevent any potentially affected parties from being affected. Furthermore, the landowners are considered not to be affected as they have provided their approval..

The following parties were not considered to be affected parties to the application as effects on them will be less than minor or they are not considered to be affected parties:

Party	**Why they are not affected**
Te Ao Marama Incorporated on behalf of Mana Whenua	The potential adverse effects on groundwater and surface water bodies in proximity to the proposed discharge site are considered to be less than minor. Adverse effects on iwi values are considered to be less than minor. The application does not occur within a statutory acknowledgement area.
Department of Conservation	The potential adverse effects on surface water bodies in proximity to the proposed discharge site are considered to be less than minor. Adverse effects on indigenous aquatic values are considered to be less than minor.
Public Heath South (PHS)	The potential adverse effects on soils, groundwater and surface water bodies in proximity to the proposed discharge site are considered to be less than minor. Adverse effects on human health are considered to be less than minor.
Neighbouring Properties	The potential adverse effects are not expected to extend beyond the property boundary. Therefore, effects on neighbouring properties are considered to be less than minor.
Nearby Groundwater Users	There is the potential for wastewater discharges to contaminate groundwater beneath neighbouring properties. There are four current groundwater takes used for domestic supply located within 2km of the discharge site; the nearest being approximately 950 m from the proposed disposal field. However, due to the separation distances, the calibre of the system and proposed mitigation measures, the effects are considered to be less than minor. Therefore, it is considered there will be no effects on nearby groundwater users.

Have all persons identified as affected under Step 3 provided their written approvals? Yes

Step 4 Further notification in special circumstances

Do special circumstances exist in relation to the application that warrant notification of the application to any other persons not already determined to be eligible for limited notification under this section (excluding persons assessed under Section 95E as not being affected persons)? **No**

If notification or limited notification is required then has the applicant paid the additional notification fee? Not applicable

7. NOTIFICATION RECOMMENDATION:

In accordance with the notification steps set out above, it is recommended that the application proceed on a non-notified basis.

Alice Floyd
Consents Planner
28 February 2023

DECISION ON NOTIFICATION

Sections 95A to 95G of the Resource Management Act 1991

Date: **28 February 2023**

Application No: **RM23.065**

Subject: ***Decision on notification of resource consent application under delegated authority***

Decision under Delegated Authority

The Otago Regional Council decides that this resource consent application is to be processed on a **non-notified**[1] basis in accordance with sections 95A to 95G of the Resource Management Act 1991.

The above decision adopts the recommendations and reasons outlined in the Notification Recommendation Report above in relation to this application. I have considered the information provided, reasons and recommendations in the above report. I agree with those reasons and adopt them.

This decision is made under delegated authority by:

Alexandra King
Acting Manager Consents
28 February 2023

[1] Once all identified affected parties have provided their unconditional written approval to the application. If these approvals are not provided then the application will proceed by limited notification.

ORC SECTION 42A REPORT

1. Summary of Recommendation

I recommend that this application be approved, subject to the conditions discussed at the end of this report.

Please note that this report contains the recommendations of the Consent Officer and represents the opinion of the writer. It is not a decision on the application.

There are no principal issues in contention with the applicant and no evidence was heard as it relates to the application as it is being processed non-notified without a hearing. The key risks/issues with the application were discussed in section 2.1 of this report.

2. Section 104 Evaluation

Section 104 of the Act sets out the matters to be considered when assessing an application for a resource consent. These matters are subject to Part 2, the purpose and principles, which are set out in Sections 5 to 8 of the Act.

As this application is for a discretionary activity, the Council may grant or refuse the application. If granting consent, the Council may impose conditions under section 108 of the Act.

2.1 S104(1)(a) – Actual and potential effects on the environment of allowing the activity

The actual and potential adverse environmental effects of the proposed activity were considered earlier in this report.

In addition to these adverse effects, it is considered that the proposal will have the following positive effects:

- Disposal of high-quality treated wastewater in a well-managed, sustainable manner.
- Enables the continued use of existing land resources.

2.2 S104(1)(ab)

The applicant has not proposed or agreed to any measures to offset or compensate for adverse effects that will or may result from allowing the activity. This is because the potential adverse effects are expected to be no more than minor.

2.3 S104(1)(b) Relevant Planning Documents

2.3.1 National Environmental Standard for Sources of Human Drinking Water

Regulations 7 and 8 of the National Environmental Standard for Sources of Human Drinking Water (NES) need to be considered when assessing discharge permits that have the potential to affect registered drinking water supplies that provide 501 or more people with drinking water for 60 or more calendar days each year. There are no registered drinking water supply wells in the vicinity and therefore any effects on human drinking water are considered to be less than minor.

Regulations 11 and 12 of the NES requires the Consent Authority to place an emergency notification condition on relevant consent holders if it is assessed that the

activity could pose a risk to the drinking water supply in the case of an unintended event (e.g. a spill or other accident).

There are also requirements under the Water Services Act 2021 which are addressed under s104G of the RMA which is included below in this report.

2.3.2 National Environmental Standards for Freshwater 2020

The NESFW 2020 regulations came into force on 3 September 2020. They impose standards on a range of farming activities and other activities relating to freshwater. They also set out a framework for consenting certain activities if the standards are not met.

This application does not trigger consent under the NESFM and therefore the standard assessments for freshwater do not apply.

2.3.3 National Policy Statement for Freshwater Management

The NPS-FM came into force on 3 September 2020 and was amended in December 2022, replacing the previous 2014 NPS-FM. Part 2 of the NPS-FM sets out the national objective for future freshwater management and 15 separate policies that support this objective. The objective and policies in the NPS-FM are relevant when considering a wastewater discharge permit application which may adversely affect freshwater.

The objective of the NPS-FM 2020 is to ensure that natural and physical resources are managed in a way that prioritises:

(a) first, the health and well-being of water bodies and freshwater ecosystems;
(b) second, the health needs of people (such as drinking water); and
(c) third, the ability of people and communities to provide for their social, economic, and cultural well-being, now and in the future.

This application involves an activity that supports the ability of people and communities to provide for their social, economic, and cultural well-being, now and in the future. To this extent, it sits third on the NPS-FW priority list. Nevertheless, since the proposal is not likely to result in any unacceptable effects on the health and well-being of the resource, nor on the health needs of people, it is considered consistent with this overall objective.

Policy 1:	*Freshwater is managed in a way that gives effect to Te Mana o te Wai.*
Policy 3:	*Freshwater is managed in an integrated way that considers the effects of the use and development of land on a whole-of-catchment basis, including the effects on receiving environments.*
Policy 4:	*Freshwater is managed as part of New Zealand's integrated response to climate change.*
Policy 5:	*Freshwater is managed through a National Objectives Framework to ensure that the health and well-being of degraded water bodies and freshwater ecosystems is improved, and the health and well-being of all other water bodies and freshwater ecosystems is maintained and (if communities choose) improved.*
Policy 7:	*The loss of river extent and values is avoided to the extent practicable.*
Policy 8:	*The significant values of outstanding water bodies are protected.*

Policy 15: *Communities are enabled to provide for their social, economic, and cultural well-being in a way that is consistent with this National Policy Statement.*

The discharge is expected to have less than minor effects on groundwater and surface water so is generally consistent with the NPS-FM. The Council has proposed a progressive implementation plan for meeting the NPS-FM 2017 and this includes developing a new land and water plan that will be notified by 2023 that includes objective and targets for FMUs in accordance with the requirements of the NPS-FM. A review condition has been recommended to allow conditions to be imposed on the discharge permit, if required, once the new land and water plan is fully operative.

2.3.4 Regional Policy Statement, Proposed Regional Policy Statement and Partially Operative Regional Policy Statement

The proposed Regional Policy Statement (pRPS) was notified on 23 May 2015 and a The partially operative RPS was made partially operative on the 14th of January 2019 ("PO-RPS") and through various court orders. Since then there have has been number of appeals resolved through the Environment Court. On 15 March 2021, the Council approved and provided notice for these further provisions to be added to the PO-RPS. The provisions that are the subject of court proceedings and are not made operative is now limited to Policy 4.3.7 (significant infrastructure) and specific methods of Chapter 3. None of the remaining proposed provisions are applicable to the application, therefore full weight and consideration can be provided to the PO-RPS.

On 26 June 2021 Council notified the proposed Otago Regional Policy Statement. On 30 September 2022 Council notified the freshwater instrument components of the proposed Otago Regional Policy Statement that was originally notified in June 2021**.** This RPS gives effect to the NPS-FW 2020 and includes freshwater visions, FMU's and rohe. As this RPS has been notified, it has been included and assessed below..

PO-RPS

- Policy 1.1.1 Provide for the economic wellbeing of Otago's people and communities by enabling the resilient and sustainable use and development of natural and physical resources.
- Policy 1.1.2 Provide for social and cultural wellbeing and health and safety by all of the matters listed in the policy.
- Policy 1.2.1 Achieve integrated management of Otago's natural and physical resources.
- Policy 2.1.2 Taking the principles of Te Tiriti o Waitangi into account including by involving Kāi Tahu in resource management processes implementation, having particular regard to the exercise of kaitiakitaka and taking into account iwi management plans.
- Policy 2.2.1 Managing the natural environment to support Kāi Tahu wellbeing.
- Policy 2.2.2 Recognise and provide for the protection of sites of cultural significance to Kāi Tahu including the values that contribute to the site being significant.
- Policy 2.2.4 Enable sustainable use of Māori land.
- Policy 3.1.1 Managing for freshwater values including those listed in the policy.
- Policy 5.4.1 Manage discharges that are objectionable or offensive to Kāi Tahu and/or the wider community.

MW–O1 – Principles of Te Tiriti o Waitangi The principles of Te Tiriti o Waitangi are given effect in resource management processes and decisions, utilising a partnership

approach between councils and Papatipu Rūnaka to ensure that what is valued by mana whenua is actively protected in the region.

MW–P1 – Treaty obligations Promote awareness and understanding of the obligations of local authorities in regard to the principles of Te Tiriti o Waitangi, tikaka Māori and kaupapa Māori.

MW–P2 – Treaty principles Local authorities exercise their functions and powers in accordance with Treaty principles, by:

1. recognising the status of Kāi Tahu and facilitating Kāi Tahu involvement in decision-making as a Treaty partner,
2. including Kāi Tahu in resource management processes and implementation to the extent desired by mana whenua,
3. recognising and providing for Kāi Tahu values and resource management issues, as identified by mana whenua, in resource management decision-making processes and plan implementation,
4. recognising and providing for the relationship of Kāi Tahu culture and traditions with their ancestral lands, water, sites, wāhi tapu, and other taoka by ensuring that Kāi Tahu have the ability to identify these relationships and determine how best to express them,
5. ensuring that regional and district plans recognise and provide for Kāi Tahu relationships with Statutory Acknowledgement Areas, tōpuni, nohoaka and customary fisheries identified in the NTCSA 1998, including by actively protecting the mauri of these areas,
6. having particular regard to the ability of Kāi Tahu to exercise kaitiakitaka,
7. actively pursuing opportunities for:
   i. delegation or transfer of functions to Kāi Tahu, and
   ii. partnership or joint management arrangements, and
8. taking into account iwi management plans when making resource management decisions.

MW–P3 – Supporting Kāi Tahu well-being The natural environment is managed to support Kāi Tahu well-being by:

1. protecting customary uses, Kāi Tahu values and relationships of Kāi Tahu to resources and areas of significance, and restoring these uses and values where they have been degraded by human activities,
2. safeguarding the mauri and life-supporting capacity of natural resources, and
3. working with Kāi Tahu to incorporate mātauraka in resource management.

IM–O1 – Long term vision The management of natural and physical resources in Otago, by and for the people of Otago, including Kāi Tahu, and as expressed in all resource management plans and decision making, achieves healthy, resilient, and safeguarded natural systems, and the ecosystem services they offer, and supports the well-being of present and future generations, mō tātou, ā, mō kā uri ā muri ake nei.

IM–O2 – Ki uta ki tai Natural and physical resource management and decision making in Otago embraces ki uta ki tai, recognising that the environment is an interconnected system, which depends on its connections to flourish, and must be considered as an interdependent whole.

IM–P2 – Decision priorities Unless expressly stated otherwise, all decision making under this RPS shall:

1. first, secure the long-term life-supporting capacity and mauri of the natural environment,
2. secondly, promote the health needs of people, and
3. thirdly, safeguard the ability of people and communities to provide for their social, economic, and cultural well-being, now and in the future.

IM–P6 – Acting on best available information. Avoid unreasonable delays in decision-making processes by using the best information available at the time, including but not limited to mātauraka Māori, local knowledge, and reliable partial data.

IM–P13 – Managing cumulative effects Otago's environmental integrity, form, function, and *resilience*, and opportunities for future generations, are protected by recognising and specifically managing the cumulative *effects* of activities on *natural and physical resources* in plans and explicitly accounting for these *effects* in other resource management decisions.

IM–P15 – Precautionary approach Adopt a precautionary approach towards proposed activities whose *effects* are uncertain, unknown or little understood, but could be significantly adverse, particularly where the areas and values within Otago have not been identified in plans as required by this RPS.

LF–WAI–O1 – Te Mana o te Wai The mauri of Otago's *water bodies* and their health and well-being is protected, and restored where it is *degraded*, and the management of *land* and *water* recognises and reflects that:

1. *water* is the foundation and source of all life – na te wai ko te hauora o ngā mea katoa,
2. there is an integral kinship relationship between water and Kāi Tahu whānui, and this relationship endures through time, connecting past, present and future,
3. each *water body* has a unique whakapapa and characteristics,
4. *water* and *land* have a connectedness that supports and perpetuates life, and
5. Kāi Tahu exercise rakatirataka, manaakitaka and their *kaitiakitaka* duty of care and attention over wai and all the life it supports.

LF–WAI–P3 – Integrated management/ki uta ki tai Manage the use of *freshwater* and *land* in accordance with tikanga and kawa, using an integrated approach that:

1. recognises and sustains the connections and interactions between *water bodies* (large and small, surface and ground, fresh and coastal, permanently flowing, intermittent and ephemeral),
2. sustains and, wherever possible, restores the connections and interactions between *land* and *water,* from the mountains to the sea,
3. sustains and, wherever possible, restores the habitats of mahika kai and indigenous species, including taoka species associated with the *water body*,
4. manages the *effects* of the use and development of *land* to maintain or enhance the health and well-being of *freshwater* and *coastal water*,
5. encourages the coordination and sequencing of regional or urban growth to ensure it is sustainable,
6. has regard to foreseeable *climate change* risks, and
7. has regard to cumulative *effects* and the need to apply a precautionary approach where there is limited available information or uncertainty about potential adverse *effects*.

LF–WAI–P4 – Giving effect to Te Mana o te Wai

All persons exercising functions and powers under this regional policy statement and all persons who use, develop or protect resources to which this regional policy statement applies must recognise that LF-WAI-O1, LF-WAI-P1, LF-WAI-P2 and LF-WAI-P3 are fundamental to upholding *Te Mana o te Wai*, and must be given effect to when making decisions affecting *freshwater,* including when interpreting and applying the provisions of the LF chapter.

LF–VM–O2 – Clutha Mata-au FMU vision

In the Clutha Mata-au *FMU*:

(1) management of the *FMU* recognises that:
  (a) the Clutha River / Mata-au is a single connected system ki uta ki tai, and
  (b) the source of the wai is pure, coming directly from Tawhirimatea to the top of the mauka and into the awa,
(2) *freshwater* is managed in accordance with the LF–WAI objectives and policies,
(3) the ongoing relationship of Kāi Tahu with *wāhi tūpuna* is sustained,
(4) *water bodies* support thriving mahika kai and Kāi Tahu whānui have access to mahika kai,
(5) indigenous species migrate easily and as naturally as possible along and within the *river* system,
(6) the national significance of the Clutha hydro-electricity generation scheme is recognised,
(7) in addition to (1) to (6) above:
  (a) in the Upper Lakes rohe, the high quality *waters* of the *lakes* and their tributaries are protected, recognising the significance of the purity of these *waters* to Kāi Tahu and to the wider community,
  (b) in the Dunstan, Manuherekia and Roxburgh rohe:
    (i) flows in *water bodies* sustain and, wherever possible, restore the natural form and function of main stems and tributaries to support Kāi Tahu values and practices, and
    (ii) innovative and sustainable *land* and *water* management practices support food production in the area and reduce discharges of nutrients and other *contaminants* to *water bodies* so that they are safe for human contact, and
    (iii) sustainable abstraction occurs from main stems or *groundwater* in preference to tributaries,
  (c) in the Lower Clutha rohe:
    (i) there is no further modification of the shape and behaviour of the *water bodies* and opportunities to restore the natural form and function of *water bodies* are promoted wherever possible,
    (ii) the ecosystem connections between *freshwater*, *wetlands* and the coastal environment are preserved and, wherever possible, restored,
    (iii) *land* management practices reduce discharges of nutrients and other *contaminants* to *water bodies* so that they are safe for human contact, and
    (iv) there are no direct *discharges* of *wastewater* to *water bodies*, and
(8) the outcomes sought in (7) are to be achieved within the following timeframes:
  (a) by 2030 in the Upper Lakes rohe,
  (b) by 2045 in the Dunstan, Roxburgh and Lower Clutha rohe, and
  (c) by 2050 in the Manuherekia rohe.

LF–VM–P5 – Freshwater Management Units (FMUs) and rohe

Otago's *freshwater* resources are managed through the following *freshwater management units* or rohe which are shown on MAP1:

Table 1 – Freshwater Management Units and rohe

Freshwater Management Unit	**Rohe**
Clutha/Mata-au	Dunstan

LF–VM–O7 – Integrated management
Land and *water* management apply the ethic of ki uta ki tai and are managed as integrated natural resources, recognising the connections and interactions between *freshwater*, *land* and the coastal environment, and between surface water, *groundwater* and *coastal water*.

LF–FW–O8 – *Freshwater* In Otago's *water bodies* and their catchments:
(1) the health of the wai supports the health of the people and thriving mahika kai,
(2) *water* flow is continuous throughout the whole system,
(3) the interconnection of *freshwater* (including *groundwater*) and *coastal waters* is recognised,
(4) native fish can migrate easily and as naturally as possible and taoka species and their habitats are protected, and
(5) the significant and outstanding values of Otago's *outstanding water bodies* are identified and protected.

LF–FW–P7 – *Freshwater* *Environmental outcomes, attribute* states (including target *attribute* states) and *limits* ensure that:

(1) the health and well-being of *water bodies* is maintained or, if *degraded,* improved,
(2) the habitats of indigenous species associated with *water bodies* are protected, including by providing for fish passage,
(3) *specified rivers and lakes* are suitable for primary contact within the following timeframes:
    (a) by 2030, 90% of *rivers* and 98% of *lakes*, and
    (b) by 2040, 95% of *rivers* and 100% of *lakes*, and
(4) mahika kai and *drinking water* are safe for human consumption,
(5) existing *over-allocation* is phased out and future *over-allocation* is avoided, and
(6) *freshwater* is allocated within environmental limits and used efficiently.

LF–FW–P15 – Stormwater and wastewater discharges
Minimise the adverse effects of direct and indirect discharges of stormwater and wastewater to freshwater by:
(1) except as required by LF–VM–O2 and LF–VM–O4, preferring discharges of wastewater to land over discharges to water, unless adverse effects associated with a discharge to land are greater than a discharge to water, and
(2) requiring:
    (a) all sewage, industrial or trade waste to be discharged into a reticulated wastewater system, where one is available,
    (b) all stormwater to be discharged into a reticulated system, where one is available,
    (c) implementation of methods to progressively reduce the frequency and volume of wet weather overflows and minimise the likelihood of dry weather overflows occurring for reticulated stormwater and wastewater systems,

(d) on-site wastewater systems to be designed and operated in accordance with best practice standards,
(e) stormwater and wastewater discharges to meet any applicable water quality standards set for FMUs and/or rohe, and
(f) the use of water sensitive urban design techniques to avoid or mitigate the potential adverse effects of contaminants on receiving water bodies from the subdivision, use or development of land, wherever practicable, and

(3) promoting the reticulation of stormwater and wastewater in urban areas.

LF–LS–O11 – *Land* and soil
The life-supporting capacity of Otago's soil resources is safeguarded and the availability and productive capacity of highly productive land for *primary production* is maintained now and for future generations.

LF–LS–O12 – Use of land
The use of *land* in Otago maintains soil quality and contributes to achieving *environmental outcomes* for *freshwater*.

LF–LS–P16 – Integrated management
Recognise that maintaining soil quality requires the integrated management of *land* and *freshwater* resources including the interconnections between soil health, vegetative cover and *water* quality and quantity.

LF–LS–P17 – Soil values
Maintain the mauri, health and productive potential of soils by managing the use and development of *land* in a way that is suited to the natural soil characteristics and that sustains healthy:
(1) soil biological activity and biodiversity,
(2) soil structure, and
(3) soil fertility.

Assessment partially operative and proposed RPS

Given the volume and quality of the discharge along with the method of effluent treatment and disposal, the proposed discharge will have a less than minor effect on groundwater and surface water bodies near the discharge site, including the nearby Shotover River. Any adverse effects on iwi values and/or human health as a result of the activity will be less than minor.

Overall, the proposed discharge is consistent with the policies of the pRPS and PO-RPS outlined above.

2.3.5 Regional Plan: Water

The following objective and policies are relevant to this application to discharge treated wastewater:

- Objective 7.A.1 To maintain water quality in Otago's fresh water but enhance water quality where it is degraded.
- Objective 7.A.2 To enable the discharge of water or contaminants to water or land, in a way that maintains water quality and supports natural and human use values, including Kai Tahu values.
- Objective 7.A.3 To have individuals and communities manage their discharges to reduce adverse effects, including cumulative effects, on water quality.
- Policy 7.B.1 Manage the quality of water in Otago's fresh water

- Policy 7.B.2 Avoid objectionable discharges of water or contaminants to maintain the natural and human use values, including Kāi Tahu values, of Otago's fresh water.
- Policy 7.B.3 Allow discharges of water or contaminants to Otago lakes, rivers, wetlands and groundwater that have minor effects or that are short term discharges with short term adverse effects.
- Policy 7.B.4 - to have regard to the ability of the land to assimilate the water or contaminants; any potential for soil contamination; any potential for land instability; any potential adverse effects on water quality; andany potential adverse effects on use of any proximate coastal marine area for contact recreation and seafood gathering.
- Policy 7.B.8 Encourage adaptive management and innovation that reduce the level of contaminants in discharges.
- Policy 7.C.1 to have regard to opportunities to enhance the existing water quality of the receiving water body at any location for which the existing water quality can considered degraded in terms of its capacity to support its natural and human use values.
- Policy 7.C.2 - have regard to: the nature of the discharge and the sensitivity of the receiving environment to adverse effects; the financial implications, and the effects on the environment of the proposed method of discharge when compared with alternative means; and the current state of technical knowledge and the likelihood that the proposed method of discharge can be successfully applied.
- Policy 7.C.3 - have regard to any relevant standards and guidelines in imposing conditions on the discharge consent.
- Policy 9.4.1 - ensure that the suitability of aquifers to support recognised uses of groundwater is maintained when discharging contaminants.
- Policy 9.4.18(c) identify and manage the vulnerability of groundwater to leachate contamination as a result of point source discharges of water or contaminants to land or groundwater. Any land overlying groundwater at high risk of contamination is identified as Zone A of a Groundwater Protection Zone (GPZ).

The proposal is consistent with all of the above objectives and policies. Effects on surface water and ground water are no more than minor. Effects on human use values and cultural values are less than minor. Effects on Lake Hayes are also anticipated to be less than minor due to the separation distance from the wastewater disposal field and the calibre of the proposed treatment system. Effects on surface water and groundwater have been assessed above and du to separation distances are assumed not to have any effects. Therefore, the application is consistent with the above policies

2.3.6 Section 104(1)(c) Any other matters

The Kai Tahu ki Otago Natural Resource Management Plan 2005 (NRMP) is considered to be a relevant other matter for the consideration of this application. This is because the RPW is yet to be amended to take into account this Plan and this Plan expresses the attitudes and values of the four Papatipu Rūnaka: Te Rūnanga o Moeraki, Kāti Huirapa Rūnaka ki Puketeraki, Te Rūnanga o Ōtākou and Hokonui Rūnanga. The following objectives and policies of are of most relevance to this application:

- To require land disposal for human effluent and other contaminants.
- To require monitoring of all discharges and that this be undertaken on a regular basis and all information, including an independent analysis of monitoring results, be made available to Kai Tahu ki Otago.

- To require that all discharge systems are well maintained and regularly serviced. Copies of all service and maintenance records should be available to Kai Tahu ki Otago upon request.
- To require visible signage informing people of the discharge area. Such signs are to be written in Maori as well as English.
- To require groundwater monitoring for all discharges to land.

As effluent from the treatment and disposal system is to be discharged to land, the proposed activity is not considered inconsistent with the above management policies. Monitoring and reporting of the discharge has been recommended, monitoring of groundwater however has not as the effects on groundwater will be less than minor as discussed in Section 5.3 of the s95 notification assessment. The conditions on consent relating to discharge quantity, quality and maintenance requirements will ensure the effects will be as predicted. The proposal is in accordance with the NRMP.

The Ngāi Tahu ki Murihiku Natural Resource and Environmental Iwi Management Plan 2008 - The Cry of the People, Te Tangi a Tauira is considered to be a relevant other matter for the consideration of this application. This is because the RPW is yet to be amended to take into account this Plan and this Plan expresses the attitudes and values of the four Rūnanga Papatipu o Murihiku – Awarua, Hokonui, Ōraka/Aparima and Waihōpai.

- Ensure that Ngāi Tahu ki Murihiku are provided with the opportunity to participate through pre hearing meetings or other processes in the development of appropriate consent conditions for discharge consents, including monitoring conditions.
- Require that sufficient and appropriate information is provided with applications to allow tangata whenua to assess cultural effects (e.g. nature of the discharge, treatment provisions, assessment of alternatives, actual and potential effects).
- Assess proposed wastewater discharge activities in terms of:
    - type/ nature of the discharge;
    - location and sensitivity of the receiving environment;
    - cultural associations with location of operations;
    - actual and potential effects on cultural values;
    - available best practice technology;
    - mitigation that can occur (e.g. using plants to filter waste, discharging at specific times to minimise impact, treatment options)
    - community acceptability;
    - cost.
- Avoid the use of water as a receiving environment for the direct, or point source, discharge of contaminants. Even if the discharge is treated and therefore considered “clean”, it may still be culturally unacceptable. Generally, all discharge must first be to land.
- Assess waste disposal proposals on a case by case basis, with a focus on local circumstances and finding local solutions.
- Wastewater disposal options that propose the direct discharge of treated or untreated effluent to water need to be assessed by the kaitiaki rūnanga on a case by case, individual waterway, basis. The appropriateness of any proposal will depend on the nature of the proposal, and what waterway is involved. Individual waterways possess their individual mauri and values, and kaitiaki rūnanga are in the best position to assess the potential impacts of a proposal on such values.
- Encourage creative, innovative and sustainable approaches to wastewater disposal that make use of the best technology available, and that adopt

principles of waste reduction and cleaner production (e.g. recycling grey water for use on gardens, collecting stormwater for a pond that can then be used for recreation in a new subdivision).

- Require that the highest environmental standards are applied to consent applications involving the discharge of contaminants to land or water (e.g. standards of treatment of sewage).
- Require soil risk assessments (type and percolation of the soils) prior to consent for discharge to land, to assess the suitability and capability of the receiving environment. Wastewater loading rates (mm/day) must reflect effluent quality and soil properties.
- Encourage the establishment of wetland areas, where practical, to improve discharge to land activities, through allowing Papatūānuku the opportunity to filter and clean any impurities.
- Require the use of buffer zones, bunds and other mechanisms to prevent wastewater from entering waterways.
- Promote the use of high uptake vegetation (e.g. commercial production forest plantations) for wastewater disposal, and to ensure that Ngāi Tahu ki Murihiku are involved in decisions relating to such disposal.
- Any discharge activity must include a robust monitoring programme that includes regular monitoring of the discharge and the potential effects on the receiving environment. Monitoring can confirm system performance, and identify and remedy any system failures.
- Require that large scale wastewater disposal operations (e.g. town sewage schemes, industry) develop environmental management plans, including contingency plans to cope with any faults, breakdowns, natural disasters, or extreme weather events (e.g. cash bonds for liability).
- Duration of consent for wastewater disposal must recognise and provide for the future growth and development of the industry or community, and the ability of the existing operations to accommodate such growth or development.
- Recommend a duration not exceeding 25 years, for discharge consents relating to wastewater disposal, with an assumption that upon expiry (if not before), the quality of the system will be improved as technological improvements become available. In some instances, a lesser term may be appropriate, with a condition requiring the system is upgraded within a specified time period.
- Require conditions of consent that allow for a 5-year review of wastewater disposal activities. During review, consent holders should be required to consider technological improvements. If improvements are available, but not adopted, the consent holder should provide reasons why.

The mitigation methods proposed by the applicant and calibre of the wastewater system are considered acceptable and prevent any areas of concern being triggered under the Ngāi Tahu ki Murihiku Natural Resource and Environmental Iwi Management Plan 2008 - The Cry of the People.

There are no other matters of concern that the Council considers relevant to this application.

2.3.7 Section 104(2D)

When considering a resource consent application that relates to a wastewater network, as defined in section 5 of the Water Services Act 2021, a consent authority—

(a) must not grant the consent contrary to a wastewater environmental performance standard made under section 138 of that Act; and

(b) must include, as a condition of granting the consent, requirements that are no less restrictive than is necessary to give effect to the wastewater environmental performance standard.

This application is not for a wastewater network as defined in the Act, so the consent is able to be granted. This is because the system is not going to be operated by, for or on behalf of a local authority, council-controlled organisation, or subsidiary of a council-controlled organisation: a department or the New Zealand Defence Force.

3. Section 104G Consideration of activities affecting drinking water supply source water

When considering an application for a resource consent, the consent authority must have regard to the actual or potential effect of the proposed activity on the source of a drinking water supply that is registered under section 55 of the Water Services Act 2021; and any risks that the proposed activity may pose to the source of a drinking water supply that are identified in a source water risk management plan prepared in accordance with the requirements of the Water Services Act 2021.

Actual and potential effects of the proposed activity on the source of a registered drinking water supply have been considered in Section 5.10 of this report and there are not any sites that will be affected by this activity.

4. Sections 105 and 107 Evaluation of Discharges

Section 105(1) states for a discharge permit that the Consent Authority shall have regard to:

a) the nature of the discharge, the sensitivity of the receiving environment, and the applicant's reasons for the proposed choice; and

b) any possible alternative methods of discharge including discharge into any other receiving environment.

Section 107(1) of the Act states that a discharge permit shall not be granted if, after reasonable mixing, the contaminant or water discharged is likely to give rise to all or any of the following effects in the receiving waters:

- The production of any conspicuous oil or grease films, scums or foams, or floatable or suspended material; or
- Any conspicuous change in the colour or visual clarity; or
- Any emission of objectionable odour; or
- The rendering of fresh water unsuitable for consumption by farm animals; or
- Any significant adverse effects on aquatic life.

These matters were considered in the notification report above. In summary, consent can be granted in regard to the matters in s105(1) and 107(1) of the Act.

5. Part 2 of the Act

Under Section 104(1) of the RMA, a consent authority must consider resource consent applications "subject to Part 2" of the RMA, specifically, sections 5, 6, 7 and 8. Decision makers must consider Part 2 when making decisions on resource consent applications, where it is appropriate to do so.

The discharge of treated wastewater to land is consistent with the purpose and principles of the Act as outlined in Sections 5-8. The proposed activities are consistent with sustaining the potential of natural resources to meet the needs of future generations, the safeguarding of the life-supporting capacity of water and avoiding, remedying and mitigating adverse effects on the environment. The principles of the Treaty of Waitangi have been taken into account and the application has been processed according to Council's protocol for consultation with Iwi.

Overall, the application is consistent with Part 2 of the Act, given the minor nature of the activity and the proposed conditions of consent.

6. Section 108 of the Act

The attached conditions are recommended in accordance with Sections 108 and 108AA of the Act. These conditions have been recommended because:

- They will ensure that any actual or potential adverse effects due to the proposed activity will be mitigated to an extent where effects on the environment and other parties will be less than minor.
- They will ensure the treatment and disposal system will be maintained in an efficient operating condition as to ensure the discharge is of an appropriate quality and standard.

7. Recommendation

That the Council grants to Jono Hay and Georgina Tudor-Jones Land Use Consent RM23.065.01 subject to the terms and conditions set out in the attached consent.

7.1 Reasons for the Recommendation

(a) The effects of the activity are expected to be no more than minor.
(b) The activity is consistent with the relevant statutory requirements.
(c) The activity is consistent with Part 2 of the Act.

7.2 Term of Consent

Case law has distilled the following factors that will be relevant to the Council's determination of the duration of a resource consent:

- The duration of a resource consent should be decided in a manner which meets the RMA's purpose of sustainable management;
- Whether adverse effects would be likely to increase or vary during the term of the consent;
- Whether there is an expectation that new information regarding mitigation would become available during the term of the consent;
- Whether the impact of the duration could hinder implementation of an integrated management plan (including a new plan);
- That conditions may be imposed requiring adoption of the best practicable option, requiring supply of information relating to the exercise of the consent, and requiring observance of minimum standards of quality in the receiving environment;
- Whether review conditions are able to control adverse effects;
- Whether the relevant plan addresses the question of the duration of a consent;
- The life expectancy of the asset for which consents are sought;
- Whether there was significant capital investment in the activity/asset; and
- Whether a particular period of duration would better achieve administrative efficiency.

The application seeks a term of 15 years. A consent term of 15 years is recommended for the following reasons:

- A 15-year term consent is reasonable as it takes into consideration life expectancy and future efficiency of the proposed system;
- A 15-year term of consent takes into account that new systems and technology may become available in the future and should be adopted as practicable in order to mitigate any adverse effect on the environment arising as a result of the exercise of this consent;
- A 15-year term of consent is consistent with the objectives and policies of the relevant plans.
- A longer consent duration may impact on the implementation of an integrated management plan or a new plan; and
- A review condition alone should not be relied upon as a way of granting a long-term permit. There is a high degree of risk with this approach and level of uncertainty for all parties involved.

Alice Floyd

Alice Floyd
Consents Planner
28 February 2023

DECISION ON RESOURCE CONSENT APPLICATION

Section 113 of the Resource Management Act 1991

Date: **28 February 2023**

Application No: **RM23.065**

Subject: ***Decision on non-notified resource consent application under delegated authority***

1. Notification

The application was approved to be processed non-notified and under delegated authority on 28 February 2023.

2. Decision and Reasons for Decision

I have considered the information provided, reasons and recommendation in the above report.

No principal issues were in contention and no evidence was heard as this was a non-notified consent that did not require a hearing. There are no main findings as it relates to any principal issues in contention.

I agree with the reasons and recommendations provided by Alice Floyd in the above report and adopt them as the reasons for decision under Section 113(1) to (3). This decision, report and any accompanying letter are the written decision under Section 113(4).

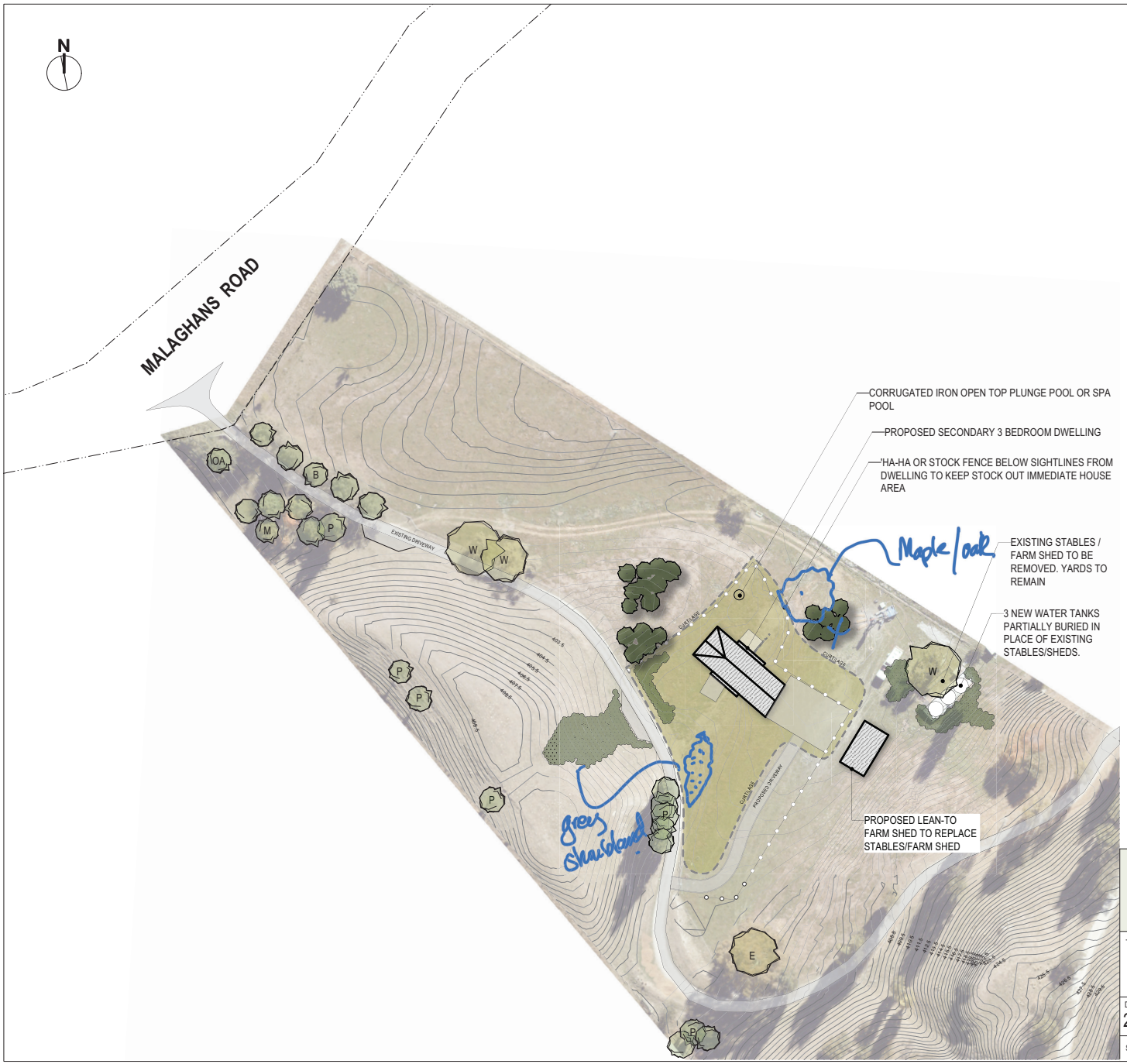
3. Conditions (section 108)

Pursuant to sections 108 and 108AA of the RMA, this consent is issued subject to the appended conditions.

4. Decision under delegated authority

Under delegated authority, this resource consent application is granted by the Otago Regional Council by:

Alexandra King
Acting Manager Consents



PLANTING KEY:

EXISTING TREES TO BE RETAINED

PROPOSED TREES

PROPOSED GREY SHRUBLAND PLANTING

EXISTING TREES - TO BE RETAINED

OA - OAK TREE
M - MAPLE TREE
B - SILVER BIRCH
P - POLAR
W - WILLOWS
E - EUCALYPTUS

PROPOSED NEW VEGETATION

GREY SHRUBLAND MIX
Coprosma propinqua
Coprosma crassifolius
Corokia cotoneaster
Discaria toumatou
Olearia lineata
Muehlenbeckia complexa

Minimum of 1 plant per m^2 over planting area.
Minimum of 1.5l pot size at time of planting.
A mix of the above species is to be used in mass planting sweeps.

PROPOSED TREES
Fuscospora cliffortioides - *Mountain Beech x10*
Plagianthus regius - Ribbonwood x 10

All specimens are to be no less than 2.5m high, with a 25mm caliper at the time of planting.

vivian+espie
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vivian+espie Limited Resource Management and Landscape Planning
PO Box 2514
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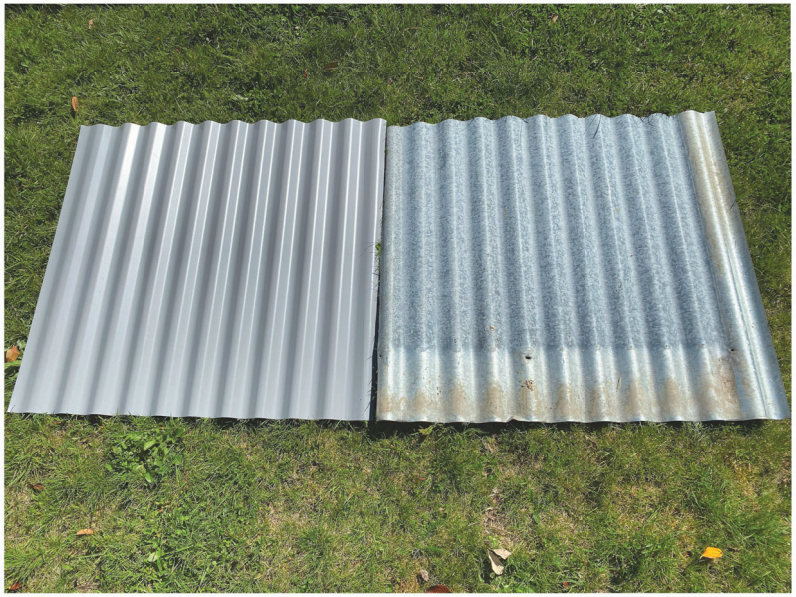
Tel +64 3 441 4189 Fax +64 3 441 4190 Web www.vivianespie.co.nz

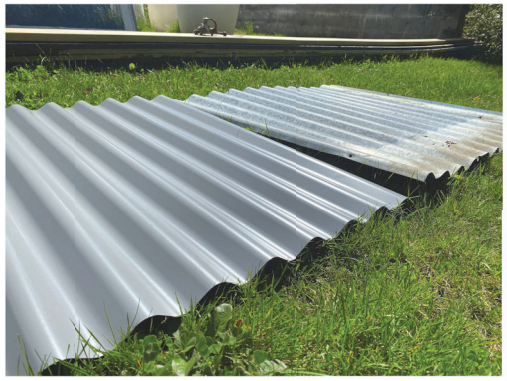
TITLE
J Hay
Structural Landscape Plan

DRAWING NUMBER	DRAWN BY	DATE
2026.02	JM	30/10/2023

SCALE 1:1000 | FILE NAME 2026.01.v2023.vwx

FLAT PLANE EXAMPLE





COLOURSTEEL SANDSTONE GREY - LRV 27% -CORRUGATE PROFILE

COMPARISON WITH RECYCLED GALVANISED -CORRUGATE PROFILE

(SAMPLE OF ACTUAL CLADDING FOR SPECIFIC PROJECT)

COLORSTEEL

Sandstone Grey

TSR: 42%
LRV: 27%

VERTICAL PLANE EXAMPLE

GENERAL NOTES:

1. NO CHANGE TO EXISTING DWELLING OR ASSOCIATED STRUCTURES OR SERVICES UNLESS SPECIFICALLY NOTED.
2. CONFIRM ALL MEASUREMENTS ON SITE.
3. EXISTING VEGETATION INDICATED IS NOT ALL ENCOMPASSING.
4. SURROUNDING CONTOURS AND HORIZONS ARE FOR CONTEXT ONLY. REFER SURVEYOR INFORMATION FOR VERIFIED VIEW LINES AND HEIGHTS.
5. MAXIMUM HEIGHT LINE IS DRAWN AT THE BUILDING FACE UNLESS OTHERWISE STATED.

As these images show, the reflectivity of the coloursteel product (compliant <30% LRV) is more reflective than that of the proposed cladding. Further to this, the variation and mottling effect of the recycled product provides tonal variation which is more natural in appearance and reduces the reflectivity effect-it is noted there is little to no glare produced due to the chalky nature of the weathered coating.

The existing farm sheds on site, have the same material on the roof, reference of this can be seen in the Landscape Peer review report and the application Landscape Report prepared by Vivian Espie.

These physical samples are available for viewing if required.

RESOURCE CONSENT

SHEET No. PD-602
REV. A
DATE: 18/10/23

PROJECT No: 1612 - 2

PROJECT: BARN HOUSE
134 MALAGHANS RD, DALEFIELD

SHEET: MATERIAL CLARIFICATIONS

anna-marie chin architects

Attachment A

QUEENSTOWN LAKES DISTRICT COUNCIL

QLDC GUIDELINES FOR ENVIRONMENTAL MANAGEMENT PLANS

JUNE 2019

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INTRODUCTION

This Guideline provides content requirements for the preparation of Environmental Management Plans ('**EMP'**), associated with land development activities as required by Queenstown Lakes District Council ('**QLDC'**) issued resource consents (*Resource Management Act*, 1991).

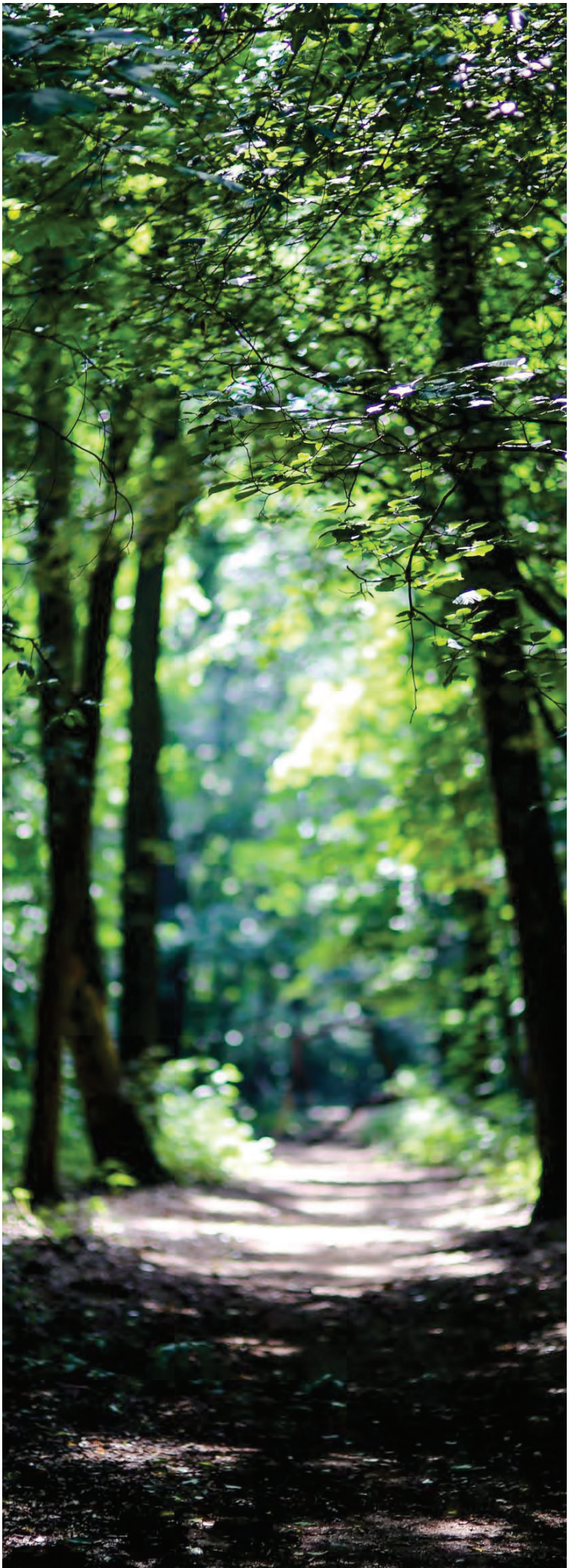
This document can also be applied to small-scale construction sites (e.g. residential construction projects) to assist in compliance with the environmental protection measures outlined in the Earthworks chapter of the Queenstown Lakes District Plan.

For the duration of the works approved under the relevant resource consent (e.g. bulk earthworks, bulk earthworks associated with subdivision), the Consent Holder will need to develop, implement and maintain an EMP that meets the requirements of this document. This process may be managed by the Principal Contractor and some aspects will need to be prepared by a Suitably Qualified and Experienced Person.

The EMP shall address:

a) Administrative requirements, and
b) Operational requirements – identified for each environmental element (e.g. erosion and sediment, dust, noise)

This Guideline shall be read in conjunction with the 'Environmental Management' conditions of the relevant QLDC issued resource consent.



PURPOSE

The purpose of this Guideline is to provide guidance to consent holders and their contractors and consultants about what information, administrative and operational measures shall be outlined in EMPs that are to be submitted for acceptance by QLDC. The Guideline will not prescribe onsite technical measures directly, but will reference guidance and other best practice documents which will provide this detail.

The ultimate objective of this Guideline is to ensure that the Queenstown Lakes District's environmental values are appropriately protected from land development activities through the following:

> Ensure that the capability of environmental managers is commensurate with the inherent environmental risks encountered.
> Outline the environmental elements that must be managed on land development projects within the district.
> Provide a clear set of expectations of the information that must be included in EMPs for acceptance by QLDC so that EMPs are clear to follow and capable of appropriately and comprehensively protecting environmental values present at specific sites and beyond.
> Ensure that all land development sites have nominated environmental representatives that can oversee day-to-day environmental management, associated with land development sites within the district.
> Provide consent holders and their contractors and consultants with a record keeping system that demonstrates that environmental management is undertaken efficiently and effectively.

STAKEHOLDER CONSULTATION

During the preparation of EMPs (or during subsequent construction), consent holders are encouraged to consult with stakeholders to obtain their specific knowledge regarding environmental management and specific issues associated with relevant Sensitive Environmental Receptors.

EMP CATEGORIES

There are three different categories of EMPs which are based on the anticipated level of environmental risk for each project. Each category has varying levels of detail required. The table below outlines the three categories, how they are determined and the general details required in the EMP.

ENVIRONMENTAL RISK LEVEL FOR EMP CATEGORY	CHARACTERISTICS OF RISK LEVEL	EMP DETAIL REQUIRED
LOW	• Less than 2500m2 disturbed surface area open at any one time; and • Less than 15% (6.6 degrees) slope; and • Earthworks not located within 50m of a Sensitive Environmental Receptor; and • Controls installed and maintained in accordance with Template EMP including measures to ensure sediment does not enter the stormwater network	Complete **Short Form EMP** template
MEDIUM	• Greater than 2500m² disturbed surface area open at any one time; or • Where a Sensitive Environmental Receptor within 50m of the site or specific environmental adverse effect has been identified. All projects not meeting the characteristics of 'Low Risk' (above) and 'High Risk' (below)	EMP prepared by Suitably Qualified and Experienced Person – and **selected Administrative requirements** and **selected Operational requirements for relevant environmental elements (as outlined in the Operational Requirements of this document)**

HIGH	• Projects which have greater than one hectare of land exposed, or
	• Projects which have greater than 2500m² disturbed surface area open at any one time and include any any of the following characteristics:
	  ○ Project working within or discharging to Sensitive; or Environmental Receptors such as a Waterbody or storm water network
	  ○ Topography where any slope is greater than 15% (6.6 degrees)
	  ○ Soils with high erodibility (e.g. silts or other soil types with high silt content) as determined by geotechnical advice.
		EMP prepared by Suitably Qualified and Experienced Person – and **all Administrative and Operational requirements for all environmental elements (as outlined in the Operational Requirements of this document)**

EMP UPDATES

The Consent Holder (or nominated Contractor) shall develop and document a process of periodically reviewing the EMP.

This process will focus on identifying opportunities for continual improvement of processes and practices to ensure that the EMP is relevant to the work under the resource consent.

The process shall address how environmental incident corrective actions, or legislative changes will be addressed via an update of the EMP. The Consent Holder (or nominated Contractor) shall establish and implement document version control.

Updates to the EMP shall be undertaken by the Consent Holder (or nominated Contractor) when:

1. The construction program moves from one Stage to another; or
2. Any significant changes have been made to the construction methodology since the original plan was accepted for that Stage; or
3. There has been an Environmental Incident and investigations have found that the management measures are inadequate; or
4. Directed by QLDC's Monitoring and Enforcement team

Where undertaken, updates to the EMP shall be submitted to QLDC for acceptance at RCMonitoring@qldc.govt.nz

SHORT FORM EMP (LOW RISK PROJECTS ONLY)

For Low Risk projects, Consent Holder (or nominated Contractor) need only complete the Short Form Environmental Management Plan template. A copy of this template is attached to this Guideline as Appendix 2.

This template includes all the administrative and operational aspects relevant to Low Risk projects and includes:

- General project and site information
- Environmental roles and responsibilities
- Details of site specific environmental inductions for staff and subcontractors
- Environmental Incident response
- Key environmental constraints
- Mitigation measures
- Environmental inspections (daily pre-start and Pre and Post-Rain Event) and maintenance
- Site procedures for managing storm events

The Short Form EMP is also intended to be utilised for smaller construction projects that do not trigger the need for an earthworks consent and will ensure that the works remain a permitted activity under the District Plan through compliance with the specific Environmental Protection Measures within the Earthworks chapter.

ADMINISTRATIVE REQUIREMENTS (FOR MEDIUM AND HIGH RISK PROJECTS ONLY)

The following administrative elements must be included where specified for each EMP category. The requirements for each administrative element are outlined in detail below.

Medium and High Risk level projects:

> Site induction
> Management of sub-contractors
> Notification and management of Environmental Incidents
> Environmental roles and responsibilities of key personnel
> Records and registers
> Weekly and Pre and Post-Rain Event inspections (monitoring)

High Risk level projects only:

> Monthly environmental reporting

SITE ENVIRONMENTAL INDUCTION

The purpose of the site environmental induction is to ensure that all staff and subcontractors onsite are aware of their environmental responsibilities.

Prior to commencing ground-disturbing activities, the Consent Holder (or nominated Contractor) shall ensure that all staff involved in, or supervising, works onsite have attended an Environmental Site Induction. This includes at a minimum, all site management staff, employees and subcontractors working on activities which disturb the ground surface.

The Consent Holder (or nominated Contractor) shall prepare and deliver a project specific site induction to all persons upon entering the site. The Consent Holder (or nominated Contractor) shall maintain a register signed by those inducted. The register shall contain but not be limited to the name of the inductee, date inducted, and the name of the induction facilitator.

A copy of the Consent Holder's (or nominated Contractor's) Environmental Site Induction shall be included in the EMP. The induction shall include but not be limited to:

a) Basic roles and responsibilities for environmental management
b) Specific locations within the site of environmental significance or risks, including Exclusion Zones and Sensitive Environmental Receptors
c) Scope and conditions of resource consents applicable to the works
d) The limit of clearing and earthworks for each Stage of works
e) Environmental management measures stipulated in the EMP
f) Procedures of notifying of potential Environmental Incidents
g) Procedures for managing storm events (wind and rain)

MANAGEMENT OF SUB-CONTRACTORS

All sub-contractors must attend the site specific Environmental Induction and must be recorded on the site environmental induction register. The Consent Holder (or nominated Contractor) must ensure that all sub-contractors comply with the EMP at all times.

NOTIFICATION AND MANAGEMENT OF ENVIRONMENTAL INCIDENTS

The Consent Holder (or nominated Contractor) shall notify QLDC of details of any Environmental Incident where the EMP has failed leading to any adverse environmental effects offsite (including nuisance effects associated with dust as well as spills of fuels and chemicals to ground onsite).

All Environmental Incidents shall be notified to QLDC within 12 hours of becoming aware of the incident RCMonitoring@qldc.govt.nz

ENVIRONMENTAL INCIDENT MANAGEMENT

The Consent Holder (or nominated Contractor) shall undertake immediate remedial actions to mitigate adverse environmental effects. Immediate response actions should not be delayed.

Once the immediate risk from the Environmental Incident is alleviated, the Consent Holder (or nominated Contractor) shall investigate the cause of the breach and/or adverse environmental effects, then identify and implement corrective actions as soon as practicable.

The Consent Holder (or nominated Contractor) shall provide an Environmental Incident Report to QLDC within 10 working days of the incident occurring. This report must detail:

a) The nature of the Environmental Incident
b) What management measures were in place to prevent the incident from occurring
c) Probable causes of the incident
d) What corrective actions have been undertaken to prevent incidents reoccurring

A template for the Environmental Incident Report template is provided in Appendix 3. The Consent Holder (or nominated Contractor) may utilise the template or use their own template where the information is the same, where deemed suitable by QLDC.

ENVIRONMENTAL ROLES AND RESPONSIBILITIES OF PERSONNEL

The Consent Holder's (or nominated Contractor's) EMP shall document all environmental-specific roles and responsibilities of personnel. This should also include email address and mobile phone numbers for each key role. At a minimum, this will include:

> Project Manager
> Site Supervisor
> Environmental Representative
> Environmental Advisor/Manager (**'SQEP'**)

ENVIRONMENTAL REPRESENTATIVE

The EMP shall identify an Environmental Representative for the site and outline their role. This role should actively support the project leadership (Project Manager and/or Supervisor) with the day-to-day implementation of environmental controls and administrative activities.

In particular, the role involves:

Implementation of environmental management

> Ensure installation of environmental controls as per the EMP
> Undertake environmental site inspections of the project
> Oversee the maintenance and improvement of defective environmental controls
> Undertake Environmental Incident reporting
> Undertake environmental monitoring where appropriately trained (High Risk projects)

Communication

- Keep project leadership informed of environmental performance of the project
- Inform staff of procedures and constraints applicable to managing specific environmental issues
- May be responsible for providing environmental inductions to all staff and sub-contractors

Complaints and Incidents

- Assist the project leadership in attending to Environmental Incidents and Complaints

Familiarity

The Environmental Representative should be familiar with:

- Environmental aspects of the project
- Environmental Management Plan
- Best practice erosion and sediment control from:
    - *Guidance Document 2016/005: Erosion and Sediment Control Guide for Land Disturbing Activities in the Auckland Region* (*GD05*); and/or,
    - *Erosion and Sediment Control Toolbox for Canterbury* on Environment Canterbury website; and/or,
    - *Best Practice Erosion and Sediment Control*, International Erosion Control Association Best Practice Guidelines

RECORDS AND REGISTERS

Environmental records are to be collated onsite and shall be made available to QLDC upon request, immediately if the request is made by a QLDC official onsite and within 24 hours if requested by a QLDC officer offsite.

Records and registers to be managed onsite shall include the following:

Medium and High Risk projects:

a) Environmental Induction attendance register
b) Environmental Incident reports and associated corrective actions undertaken
c) Complaints register and associated corrective actions undertaken
d) Daily diary entries (including pre-start inspection observations)
e) Post-Rain event inspection observations and corrective actions

High Risk projects only:

f) Weekly Site Inspection checklists
g) Monitoring results (e.g. water quality)
h) EMP Non-conformance register (based on weekly inspection results or otherwise identified) and associated corrective actions taken

WEEKLY AND PRE AND POST-RAIN EVENT SITE INSPECTIONS

The EMP shall state that the Consent Holder's (or nominated Contractor's) Environmental Representative shall undertake and document weekly and Pre and Post-Rain Event site inspections for the purpose of monitoring the following:

- Verifying that the management measures prescribed in the EMP are present, functional and adequate
- Observe the site for actual or potential adverse environmental effects

- > Identify maintenance requirements for implemented management measures, and
- > Verifying preparedness for adverse weather conditions where rain and/or wind is forecast

In some situations such as High Risk sites, during sensitive phases in the construction methodology, or following Environmental Incidents, weekly inspections may need to be undertaken by a SQEP.

The Consent Holder (or nominated Contractor) shall undertake corrective actions to rectify issues identified by the site inspections. Each weekly inspection shall be recorded including date, observations and any corrective actions.

The Weekly and Post-Rain Event Site Inspection records shall be made available to QLDC within 48 hours of a request being made.

Between the Weekly and Post-Rain Event inspections, the Environmental Representatives shall also undertake a daily pre-start inspection to ensure that no new environmental issues have arisen or mitigation measures have been compromised from the previous day's work. Observations should be recorded (e.g.in a works diary).

MONTHLY MONITORING BY SQEP ON HIGH RISK SITES

A SQEP shall monitor the site monthly to ensure that the site is complying with its EMP, identify any new environmental risks arising that could cause an environmental effect and suggest alternative solutions that will result in more effective and efficient management. The outcome of these inspections should be reported and included in the Monthly Environmental Report referred to in the section below.

MONTHLY ENVIRONMENTAL REPORTING (HIGH RISK PROJECTS ONLY)

The Consent Holder (or nominated Contractor) shall complete and submit exception reporting to QLDC in the form of a monthly environmental report. The monthly environmental report shall be submitted to QLDC's Regulatory Department within five (5) working days of the end of each month.

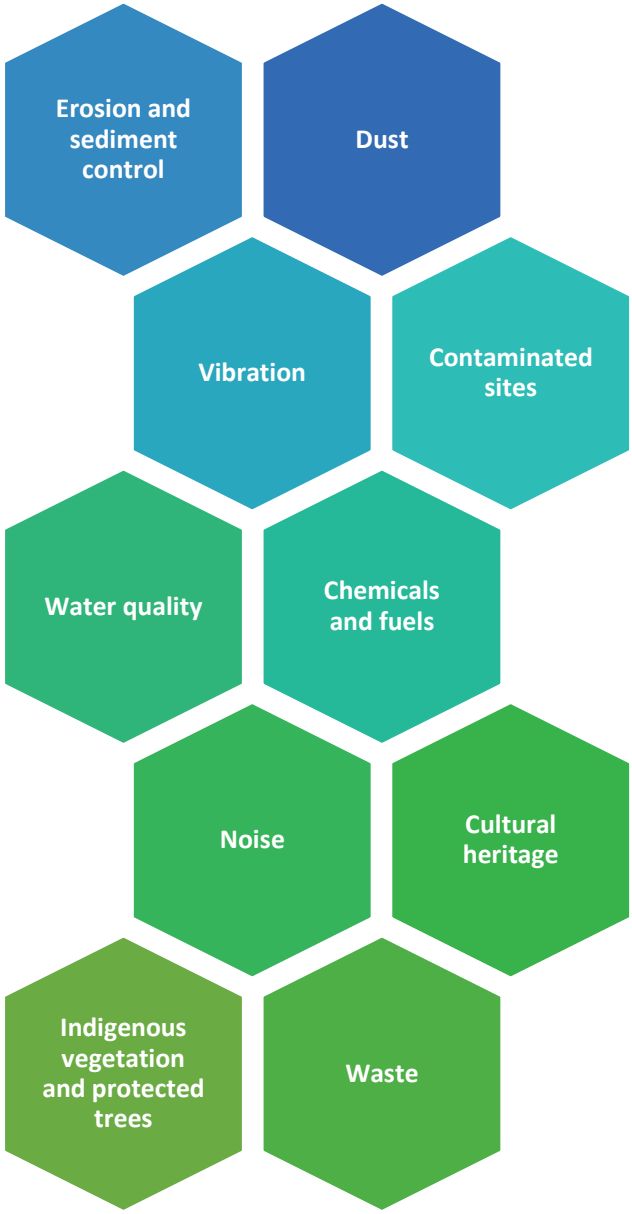
The monthly environmental report shall include exception reporting and statements actively addressing but not limited to the following that occurred during the reporting month:

a) Updates to the EMP and the Erosion and Sediment Control Plan ('**ESCP'**)
b) Weekly Site Inspections – number of inspections completed, and summary of corrective actions undertaken
c) Monitoring reporting – summary of monitoring and whether non-conforming results were obtained
d) Positive environmental outcomes achieved and opportunities identified by the Consent Holder (or nominated Contractor)

Where exception reporting demonstrates repeated or multiple non-conformances of the same issue, QLDC may instruct the Consent Holder to undertake a review of the adequacy of management measures outlined in the EMP and provide response back to QLDC within five (5) working days, either confirming and justifying the suitability of the existing EMP or notifying of updates to the EMP and the justification.

OPERATIONAL REQUIREMENTS (FOR MEDIUM AND HIGH ENVIRONMENTAL RISK PROJECTS ONLY)

Environmental elements included in the EMP shall include, but not be limited to those defined in the following sections:



The Consent Holder (or nominated Contractor) shall select mitigation measures which effectively mitigate or avoid adverse effects on the environment. A brief justification of the suitability of the management measures based on the risk assessed shall be provided in the EMP for each environmental element.

It is noted that some environmental elements may not be applicable to all sites. If this is the case, this simply needs to be stated. It is expected that the detail included will be commensurate with the environmental risk posed for each element.

EROSION AND SEDIMENTATION (INCLUDING EROSION AND SEDIMENT CONTROL PLAN)

The requirements and recommendations set out below should not be inferred to preclude innovative or alternative solutions that provide improved value for money or environmental outcomes that meet the intent and principles of this Guideline.

The Consent Holder (or nominated Contractor) is responsible for temporary erosion and sediment control and for ensuring that controls are adequately designed, installed, adapted, maintained and decommissioned.

PROJECT RISK

For the purpose of the management requirements to be employed under this Guideline, the project is deemed to have Erosion Risk identified in the erosion risk level table below unless otherwise stated in the conditions of consent.

EROSION RISK	CHARACTERISTICS OF RISK LEVEL
LOW	• <2500m2 disturbed surface area open at any one time • Controls installed and maintained in accordance with Short Form EMP (QLDC proforma)
MEDIUM	All projects not meeting the characteristics above or below
HIGH	**Projects with two or more of the following characteristics:** • Project duration > 6 months • Project working within or discharging to Sensitive Environmental Receptors such as a Waterbody • Projects which have > 1 hectare of land exposed • Topography where any slope is greater than 15% (6.6 degrees) • Soils with high erodibility (e.g. silts or other soil types with high silt content) as determined by geotechnical advice.

EROSION AND SEDIMENT CONTROL PRINCIPLES

Erosion and Sediment Controls for all projects shall be designed, installed, maintained and decommissioned in accordance with the following principles:

a) Erosion and sediment controls are integrated with construction planning
b) Effective and flexible erosion and sediment control plans are developed based on soil, site slope, weather, construction conditions and the receiving environment
c) The extent and duration of soil exposure is minimised
d) Water movement through the site is controlled – in particular clean water is diverted around the site and 'dirty' and 'clean' water[1] is kept separated as far as practicably possible
e) Soil erosion is minimised as far as reasonable and practical (to the satisfaction of QLDC)

[1] 'Dirty' water are those that have picked up and are carrying sediment in suspension following erosion of the exposed soil. 'Clean' water has no sediments (or negligible sediments) in suspension and has not made contact with exposed soils.

f) Disturbed areas are promptly stabilised
g) Sediment retention on site is maximised (i.e. must meet the discharge criteria for suspended sediment in Table 4.3)
h) Controls are maintained in proper working order at all times, and
i) The site is monitored and erosion and sediment practices adjusted to maintain the required performance standard.
j) Avoidance of discharges, especially sediment off site.

EROSION AND SEDIMENT CONTROL PLAN

As per the conditions of the resource consent, prior to ground disturbance on a Stage of works, the Consent Holder (or nominated Contractor) shall submit for review and acceptance, an Erosion and Sediment Control Plan (**ESCP**) for that Stage.

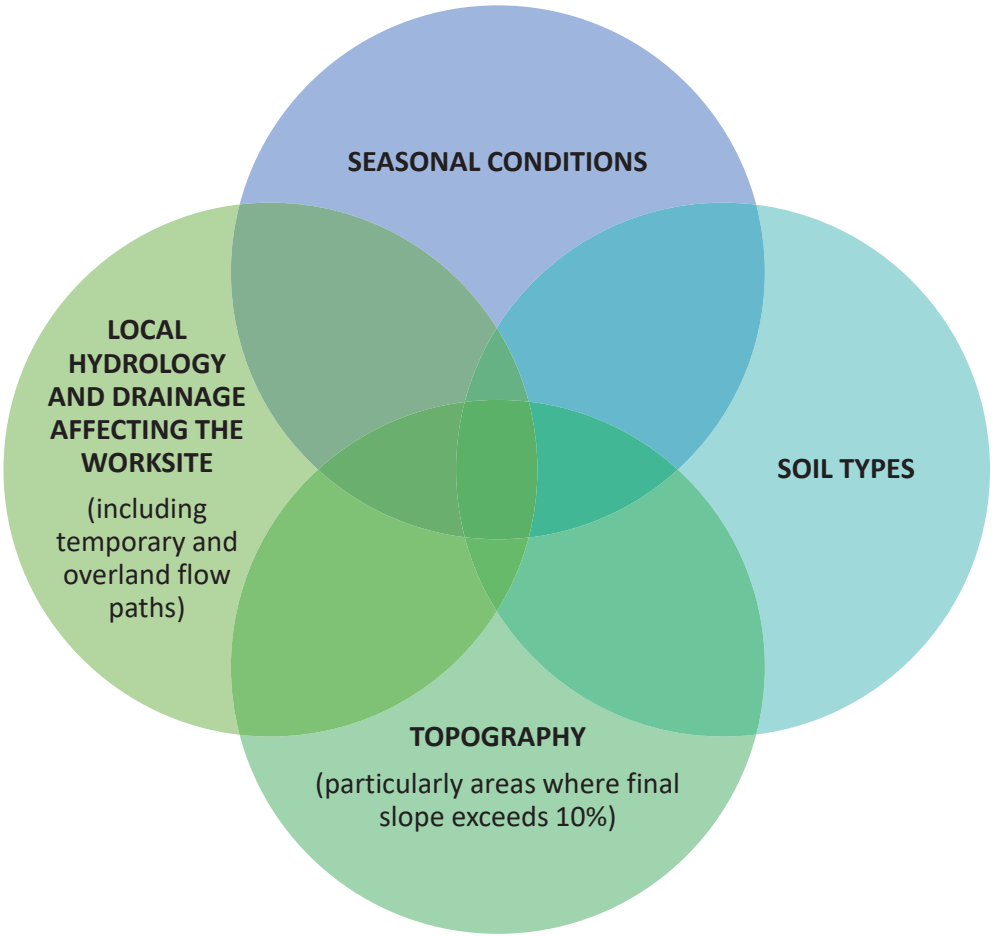
An ESCP is required to be prepared for all areas prior to disturbance including but not limited to bulk earthworks, stockpile and storage areas, and access and haulage tracks.

As specified by conditions of resource consent regarding Hold Points, vegetation clearance for that section shall not start until the ESCP for that section is accepted by QLDC and erosion and sediment control devices are installed in accordance with the ESCP.

For large sites, multiple ESCPs may be required i.e. one for each Stage.

PLAN REQUIREMENTS

The ESCP shall be developed in accordance with the Erosion and Sediment Control Principles outlined in page 13 and taking into account:



The ESCP shall consist the following information:

A) The works and area that the plan is valid for

B) The location of major features of the site including Waterbodies, limitations of disturbance areas, property boundaries and other important features (including Sensitive Environmental Receptors, Contaminated Sites)

C) Contour lines and flow direction arrows sufficient to show direction of water flow

D) The type and location of all erosion and sediment control measures, including but not limited to:

- proposed erosion control measures including soil treatment and batter stabilisation methods such as soil binders, geofabric, hydromulching
- clean and dirty water drainage paths
- sediment controls
- location of nominated discharge points
- site exit points and controls

E) The installation sequence and timing of controls

F) Response strategy for managing Significant Rain Events

G) Persons responsible for the development of the ESCP including their experience and qualifications for determination by QLDC as to whether suitably qualified and experienced

For Medium Risk sites the ESCP shall include[2]:

The above (A-G) and also

H) Design calculations for all clean and dirty water diversions and sediment control measures, including sediment retention devices, spill-ways, outlet structures.

I) The monitoring and maintenance requirements for the project site, erosion and sediment controls and receiving environment in line with best practice erosion and sediment control principles

For High Risk sites the ESCP shall include:

The above (A-I) and also

J) The proposed frequency and timing of independent audits (refer the Administrative Requirements detailed on page 18)

Personnel – Plan development

The ESCP shall be prepared and updated by personnel who have the requisite level of training and experience as follows:

- ESCP to be prepared by Suitably Qualified and Experienced Person (see definition) with experience in relevant construction type.

Implementation and revision of plan

The Consent Holder (or nominated Contractor) shall:

a) Provide and implement As Built plans for the Erosion and Sediment Control Plan
b) monitor the continued effectiveness of the ESCP during the contract
c) update the ESCP where necessary

[2] Best practice erosion and sediment control from:
- *Guidance Document 2016/005: Erosion and Sediment Control Guide for Land Disturbing Activities in the Auckland Region* (*GD05*); and/or,
- *Erosion and Sediment Control Toolbox for Canterbury* on Environment Canterbury website; and/or,
- *Best Practice Erosion and Sediment Control*, International Erosion Control Association Best Practice Guidelines

The plans shall be updated when:

- The construction program moves from one Stage to another; or
- Any significant changes have been made to the construction methodology since the original plan was accepted for that Stage; or
- There has been an Environmental Incident and investigations have found that the management measures are inadequate; or
- Directed by QLDC's Resource Management Engineering team during subdivision inspections or QLDC's Regulatory Department through enforcement

Bulk earthworks may not commence until the following has been completed in order to satisfy HOLD POINTS 1 and 2 as required by conditions of the resource consent:

- The updated ESCP is submitted and deemed acceptable by QLDC in conjunction with the overarching EMP; and
- The erosion and sediment control devices are installed correctly; and
- As Built plans have been provided and deemed acceptable by QLDC

EROSION AND SEDIMENT CONTROL GENERAL REQUIREMENTS

Installation

As soon as practicable and prior to bulk earthworks operations (and vegetation clearance) for any Stage of works, the Consent Holder (or nominated Contractor) must provide and implement As Built plans for the erosion and sediment controls. The completion of these activities on High Risk sites will be HOLD POINT 2 for any further earthworks.

Operation and Maintenance

The Consent Holder (or nominated Contractor) shall maintain all erosion and sediment controls in effective working order at all times.

Reuse of water collected in sediment retention devices for dust suppression and appropriate construction works is preferred over release into the environment. Where water is being stored for dust suppression the required design capacity of the sediment retention devices must be available (noting that depending on site constraints this may not always be practical).

Sediment retention devices and other sediment controls shall be operated and maintained in a matter that minimises the risk of adverse environmental effects.

Where flocculants are used to treat sediment-laden runoff, they must not cause adverse environmental effects to the receiving waters of the environment and must be approved for use in the ESCP/EMP.

EROSION AND SEDIMENT CONTROL PERFORMANCE REQUIREMENTS

Releases from site must not cause scour at the area of Discharge. Water must only be released at the Discharge Point nominated within the ESCP and as deemed acceptable by QLDC. Any modification to Discharge Point must be accepted by QLDC.

The Consent Holder's (or nominated Contractor's) erosion and sediment controls shall be sufficient to achieve the water quality criteria for Discharge in accordance with Table 4.3 provided resource consent has been obtained for the earthworks activity. Otherwise the performance criteria shall be in accordance with the currently active Operative and Proposed District Plan.

Decommissioning and removal

The Consent Holder (or nominated Contractor) shall remove temporary controls when permanent measures are in place and/or Site Stabilisation (defined as at least 80% revegetation cover) has occurred. For bulk earthworks associated with subdivisions, this should occur prior to s224(c) certification[3] by QLDC or unless a legal mechanism is in place to ensure Stabilisation will be achieved.

ADMINISTRATIVE REQUIREMENTS

Monthly erosion and sediment control audits by the SQEP on High Risk sites

As specified in the conditions of the resource consent, the Consent Holder (or nominated Contractor) shall engage their SQEP to undertake monthly erosion and sediment control audits by their SQEP approved by QLDC. This can be undertaken at the same time of the monthly environmental inspection to be undertaken by the SQEP as outlined on page 11.

This documentation may stand in place of the erosion and sediment control component of the monthly environmental reporting.

Independent audits

For sites determined to have a very erosion risk (as per the criteria in the erosion risk level table on page 13 or specified by conditions of resource consent); conditions of resource consent may require that the Consent Holder engage an independent SQEP to be approved by QLDC, to assess the compliance of the erosion and sediment control measures against:

a) the accepted ESCP
b) Erosion and Sedimentation section of this Guideline specifically ESCP principles outlined
c) Discharge criteria specified in the water quality discharge table on page 18

The Consent Holder (or nominated Contractor) shall submit the independent review report to QLDC with proposed and completed actions undertaken to address the issues identified during the audit not more than seven (7) working days following the audit.

DESIGN AND TECHNICAL REQUIREMENTS

Technical standards and design requirements

The Consent Holder (or nominated Contractor) shall ensure sediment and erosion controls are designed, installed and maintained in accordance with best practice erosion and sediment control principles and standards[4], as well as manufacturer's specifications.

[3] Certification from QLDC that all subdivision conditions of resource consent have been met.

[4] Best practice erosion and sediment control from:

- *Guidance Document 2016/005: Erosion and Sediment Control Guide for Land Disturbing Activities in the Auckland Region* (*GD05*); and/or,
- *Erosion and Sediment Control Toolbox for Canterbury* on Environment Canterbury website; and/or,
- *Best Practice Erosion and Sediment Control*, International Erosion Control Association Best Practice Guidelines

WATER QUALITY

The Consent Holder (or nominated Contractor) shall be responsible for the management of the water quality to ensure that adverse environmental effects to Waterbodies within the site or adjacent Waterbodies into which the site discharges.

PERFORMANCE REQUIREMENTS

The Consent Holder (or nominated Contractor) shall at all times undertake reasonable and practicable management measures to avoid adverse environmental effects within the site or adjacent waterbodies into which the site discharges.

Water quality management measures shall be designed to achieve Discharge from site compliant with the Water Quality (Discharge) Criteria outlined in the table below.

The Consent Holder (or nominated Contractor) shall develop and undertake a water quality Monitoring Plan that is reasonable and practicable in accordance with the requirements stipulated on page 19.

Depending upon the specific circumstances (volumes, waterway, etc) a discharge permit may need to be obtained from the Otago Regional Council.

WATER QUALITY RISK	PARAMETER	DISCHARGE CRITERIA
LOW WATER QUALITY RISK	TURBIDITY	No visual evidence of sediment run-off at Discharge Point
	HYDROCARBONS, TANNINS, PAINT	No visible trace
	WASTE	No waste or litter visible
MEDIUM AND HIGH WATER QUALITY RISK	SUSPENDED SOLIDS	<50 mg/L Total Suspended Solids (TSS); unless specified otherwise by resource consent conditions or agreed with QLDC. May utilise equivalent turbidity expressed as Nephelometric Turbidity Units (NTU) as determined by laboratory analysis by correlating turbidity with the suspended solid criteria for the specific site.
	PH	Stable pH reading and within 6.5 – 8.5
	HYDROCARBONS, TANNINS, PAINT	No visible trace
	WASTE	No waste or litter visible

FLOCCULATION

Where flocculation is undertaken onsite, the Consent Holder (or nominated Contractor) shall select, store, apply and monitor the use of flocculants in accordance with best practice erosion and sediment control principles and standards[5] to ensure that the flocculant does not cause adverse environmental effects on surrounding land and water. If monitoring by the Consent Holder (or nominated Contractor) or QLDC indicates adverse environmental effects may be occurring, flocculation shall cease until changes are made to the flocculation process to prevent the adverse environmental effects.

Management of sediment retention device sludge where flocculation has been used shall be in accordance with the chemical supplier's advice and documented in the EMP.

STORMWATER REUSE

The reuse of stormwater (including stormwater captured in sediment retention devices) for dust suppression, roadworks or landscaping is preferred over discharge. This will need to be factored into the design of the sediment retention device in the form of additional capacity (noting that depending on site constraints this may not always be practical).

MONITORING

The Consent Holder (or nominated Contractor) shall develop and implement a water quality monitoring plan to verify the effective management of water quality risks from site. Applicable water quality criteria consists of 'Discharge' criteria only (noting that the Otago Regional Council manages instream sediment).

Discharge criteria are applicable to any liquid, soluble or material flows moving beyond the boundary of the site where it could reasonably enter a waterbody or storm water network, enter waterbodies within the site or waterbodies adjacent the site. Discharge criteria also applies from Discharges from sediment retention devices.

It is expected that the sampling location will be at the discharge point where discharge crosses the site boundary unless otherwise agreed with QLDC.

The timing of the discharge monitoring shall occur prior to dewatering Discharge from sediment retention devices and during rain events when 'controlled' or 'uncontrolled' Discharge crosses the boundary of the site.

[5] Best practice erosion and sediment control from:

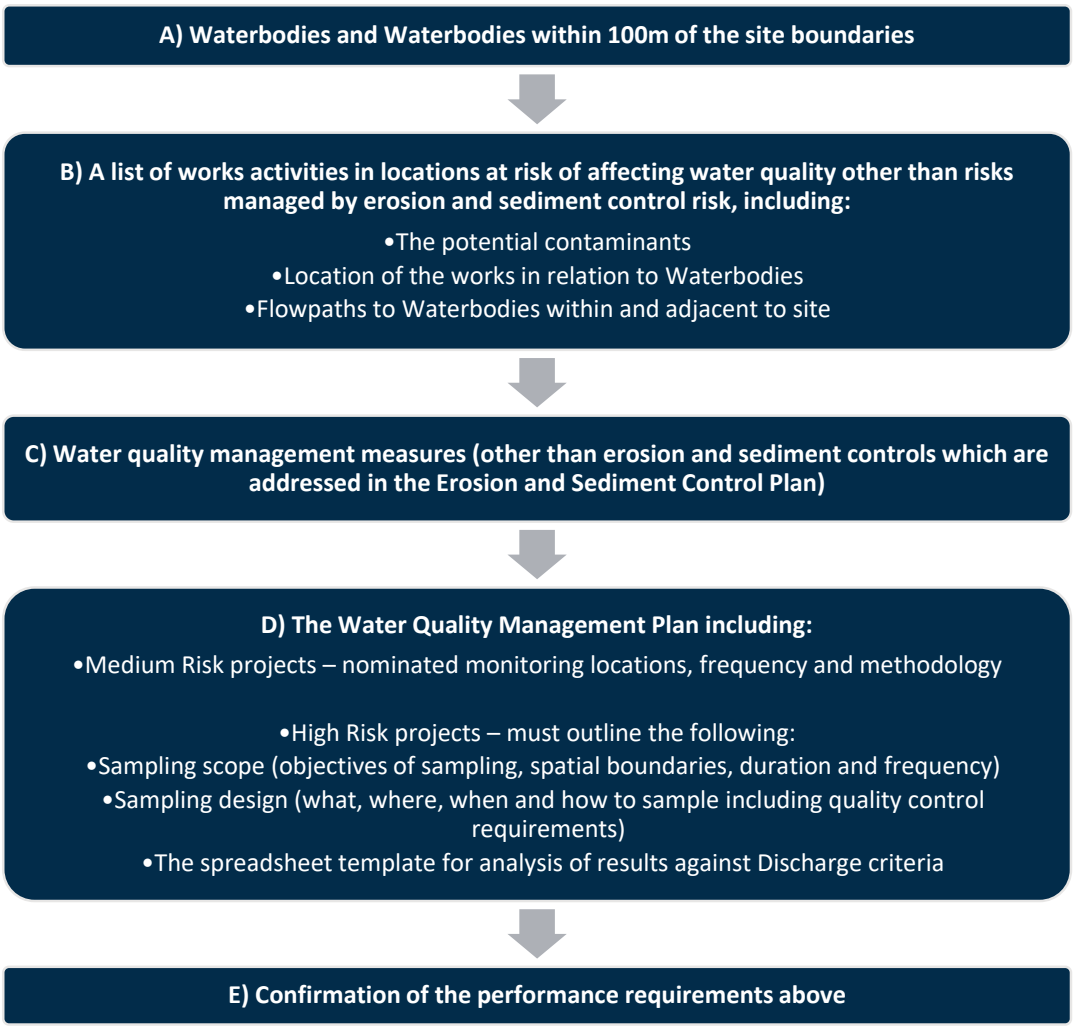
- *Guidance Document 2016/005: Erosion and Sediment Control Guide for Land Disturbing Activities in the Auckland Region* (*GD05*); and/or,
- *Erosion and Sediment Control Toolbox for Canterbury* on Environment Canterbury website; and/or,
- *Best Practice Erosion and Sediment Control*, International Erosion Control Association Best Practice Guidelines

Monitoring results should be recorded on a monitoring spreadsheet and evaluated by the Consent Holder (or nominated Contractor) against the water quality criteria to verify compliance. For each monitoring result that does not conform to the water quality criteria, the Consent Holder (or nominated Contractor) shall:

a) Report the non-conformance to QLDC including the water quality parameter that exceeded the criteria and level that was recorded;
b) Where the discharged water was as the result of the erosion and sediment controls failing or exceeding capacity the following should be reported:
    a. the depth of rain recorded at the nearest meteorological station that collects daily rain data,
    b. size of the Rain Event Average Recurrence Interval (ARI[6]),
    c. duration of the Rain Event;
c) Identify the cause and develop and implement corrective actions such as improved work procedures or management measures to improve water quality and prevent re-occurrence of monitoring non-conformances.

EMP REQUIREMENTS FOR WATER QUALITY

The EMP shall include descriptions and/or diagrams of:



[6] Information can be found using the NIWA HIRDS website: https://hirds.niwa.co.nz/

DUST

The Consent Holder (or nominated Contractor) shall be responsible for managing construction works to appropriately avoid and mitigate adverse effects on air quality from dust.

PERFORMANCE REQUIREMENTS

The Consent Holder (or nominated Contractor) shall at all times take reasonable and practicable management measures to avoid dust moving beyond the boundaries of the site.

MONITORING

Weekly inspections shall include observations of the site for visual evidence of dust travelling beyond the boundaries of the site and evidence of dust fall out from the works on adjacent vegetation or buildings.

EMP REQUIREMENTS FOR DUST

The EMP shall include documents and/or diagrams indicating the following:

a) Location of dust sensitive receivers onsite & off site
b) Works likely to cause adverse environmental effects including Environmental Nuisance effects in relation to dust and location of these works onsite (for example excavation and moving plant)
c) Prevailing wind direction and speeds generally expected for the site location
d) Evaluation outcome of which air quality sensitive receivers will likely experience Environmental Nuisance effects or adverse environmental effects in relation to dust
e) Management measures and strategies for mitigating Environmental Nuisance and adverse environmental effects associated with dust
f) Confirmation of the performance requirements above

CULTURAL HERITAGE

The Consent Holder (or nominated Contractor) shall be responsible for the management and protection of Cultural Heritage within and adjacent to the site to avoid adverse environmental effects to Cultural Heritage.

PERFORMANCE REQUIREMENTS

The Consent Holder (or nominated Contractor) shall at all times take reasonable and practicable management measures to avoid adverse environmental effects to Cultural Heritage from construction works. This includes ensuring that the works are undertaken in accordance with the obligations of the *Heritage New Zealand Pouhere Tāonga Act*, 2014 (HNZPTA).

ACCIDENTAL DISCOVERY

The Consent Holder (or nominated Contractor) must comply with the relevant resource consent conditions associated with accidental discovery as well as the obligations under the HNZPTA. This can be achieved through following the Accidental Discovery Protocol found in Appendix 4 of this document.

EMP REQUIREMENTS FOR CULTURAL HERITAGE

The EMP shall include descriptions and/or diagrams of[7]:

A) Locations of known Cultural Heritage significance within and adjacent to the site

B) Work under the project that is or is likely to occur in close proximity to Cultural Heritage

C) Cultural Heritage management and protection measures

D) Confirmation of the performance requirements above

[7] Sources of information include Aukaha, Te Ao Marama, Heritage New Zealand Pouhere Tāonga and Archsite.

NOISE

The Consent Holder (or nominated Contractor) is responsible for the management of construction noise generated from construction works.

PERFORMANCE REQUIREMENTS

The Consent Holder (or nominated Contractor) shall at all times take reasonable and practicable management measures to avoid and mitigate effects from noise associated with construction works.

The Consent Holder (or nominated Contractor) shall ensure that all works are undertaken in accordance with the noise limits set in any relevant conditions of consent or in the absence of a consented limit must comply with the noise limits specified in the Zone Standards.

For all sites the Consent Holder (or nominated Contractor) shall review the Noise Management Plan or EMP, update and implement additional management measures:

a) In response to a justifiable Complaint caused by construction works
b) When changes in the equipment/work method, intensity, location, duration or timing of effects that are expected to increase noise impacts are foreseen.

EMP REQUIREMENTS FOR NOISE

For consents where no specific Noise Management Plan is required to be prepared by a Suitably Qualified and Experienced Person:

If the relevant resource consent does not require a specific Noise Management Plan by a Suitably Qualified and Experienced Person then the EMP shall include the following:

a) Location of any Sensitive Environmental Receptors
b) Noise generating activities, their locations, work periods
c) Evaluation and outcome of whether Sensitive Environmental Receptors will likely be affected by construction noise
d) Noise management measures to avoid or mitigate noise effects
e) Confirmation of the performance requirements above

For consents where specific Noise Management Plan is required to be prepared by a Suitably Qualified and Experienced Person:

If required by conditions of the relevant consent then a specific Noise Management Plan must be prepared by a Suitably Qualified and Experienced acoustic expert and shall be commensurate to the level of detail required to appropriately avoid or mitigate adverse effects associated with noise.

VIBRATION

The Consent Holder (or nominated Contractor) is responsible for managing work to avoid environmental effects or nuisance to Sensitive Environmental Receptors and Critical Facilities, Infrastructure or Utilities.

FOR THE PURPOSE OF THIS GUIDELINE, POTENTIAL VIBRATION EFFECTS ARE CATEGORISED IN TWO FORMS:

1. Nuisance vibration management relates to managing vibration to avoid nuisance to public, residents or people utilising the area in the vicinity of the site.
2. Building/structural vibration management relates to managing vibration to avoid structural damage to buildings and structures within and beyond the site. This also includes managing effects on building contents and surrounding utilities and services.

In addition to any Sensitive Environmental Receptors and Critical Facilities, Infrastructure and Utilities identified in relevant resource consents, the Consent Holder (or nominated Contractor) shall be responsible for identifying any additional Sensitive Environmental Receptors and Critical Facilities, Infrastructure and Utilities likely to be affected by construction vibration through the application of the performance requirements in 4.6.2.

PERFORMANCE REQUIREMENTS

The Consent Holder (or nominated Contractor) shall at all times take reasonable and practicable management measures to mitigate:

1. Vibration effects associated with the project so as to minimise Environmental Nuisance effects on Sensitive Environmental Receptors outside of the site.
2. Environmental effects to buildings, structures, services and utilities within or beyond the boundary of the site in accordance with *DIN 4150-3:1999 Effects of vibration on structures.*

EMP REQUIREMENTS FOR VIBRATION

For consents where no specific Vibration Management Plan is required to be prepared by a suitably Qualified and Experienced Person:

If the relevant resource consent does not require a specific Vibration Management Plan by a Suitably Qualified and Experienced Person then the EMP shall include the following:

a) The type of vibration sensitive receptors and Critical Facilities, Infrastructure and Utilities potentially affected by the works and their location in relation to the subject site
b) Vibration management measures and strategies to avoid or minimise environmental effects of vibration in terms of both Environmental Nuisance and structural/building receptors
c) Contingency plan for observed damage to structures (private or public)
d) Confirmation of the performance requirements above

For consents where specific Vibration Management Plan is required to be prepared by a Suitably Qualified and Experienced Person:

If required by conditions of the relevant consent, then a specific Vibration Management Plan must be prepared by a Suitably Qualified and Experienced acoustic expert and shall be commensurate to the level of detail required to appropriately avoid or mitigate adverse effects associated with vibration.

CONTAMINATED SITES

The Consent Holder (or nominated Contractor) is responsible for work in order to mitigate the risks of environmental effects from Contaminated Sites within the work site.

PERFORMANCE REQUIREMENTS

The Consent Holder (or nominated Contractor) shall at all times take reasonable and practicable management measures to manage known contamination sites in order to avoid and prevent the spread of contaminants either within the site or beyond the boundary of the site. Management shall be in accordance with the Ministry for the Environment's *User's Guide, National Environmental Standards for Assessing and Managing Contaminants in Soil to Protect Human Health.*

EMP REQUIREMENTS FOR CONTAMINATED SITES

For consents where no specific Contaminated Site Management Plan is required to be prepared by a Suitably Qualified and Experienced Person:

If the relevant resource consent does not require a specific Contaminated Site Management Plan by a Suitably Qualified and Experienced Person then the EMP shall include documents and/or diagrams indicating the following:

a) Contingency plan for the event that a Contaminated Site is discovered during construction
b) Confirmation of the performance requirements above

For consents where specific Contaminated Site Management Plan is required to be prepared by a Suitably Qualified and Experienced Person:

If required by conditions of the relevant consent then a specific Contaminated Site Management Plan must be prepared by a Suitably Qualified and Experienced expert and shall be commensurate to the level of detail required to appropriately avoid or mitigate adverse effects associated with Contaminated Sites.

If a Contaminated Site has been identified prior to the issue of resource consent then this would usually require an expert to prepare the Contaminated Site Management Plan.

VEGETATION MANAGEMENT

The Consent Holder (or nominated Contractor) is responsible for work in order to mitigate the risks of environmental effects to Indigenous Vegetation or Protected Trees within the site when either clearing Indigenous Vegetation directly or working in proximity to Indigenous Vegetation or Protected Trees.

PERFORMANCE REQUIREMENTS

The Consent Holder (or nominated Contractor) shall adhere to any limit of clearing specified within relevant resource consents.

The Consent Holder (or nominated Contractor) shall at all times take reasonable and practicable management measures to avoid disturbance to vegetation or ground surface outside the limits of clearing and to minimise disturbance to vegetation or ground surface outside of the limits of clearing.

The Consent Holder (or nominated Contractor) shall install identification markers along the limits of clearing prior to commencing vegetation clearing and ground disturbance. Identification markers shall be maintained for the duration of the works or at least until works are complete in the adjacent area.

Where works encroach on individual trees or vegetation to be protected/retained, ground disturbance or other works including stockpiling, shall not encroach within the dripline of the tree unless otherwise deemed suitable under the relevant resource consent.

The Consent Holder (or nominated Contractor) must undertake works in accordance with any relevant resource consents and supporting documents associated with the application for resource consent.

EMP REQUIREMENTS FOR VEGETATION MANAGEMENT

For consents where no specific Vegetation Management Plan is required to be prepared by a Suitably Qualified and Experienced Person:

If the relevant resource consent does not require a specific Vegetation Management Plan by a Suitably Qualified and Experienced Person then the EMP shall include documents and/or diagrams indicating the following:

a) A drawing depicting the following locations and dimensions of limits of clearing as specified in the relevant resource consent (if Indigenous Vegetation clearing or works around Protected Trees is occurring)
b) Management measures and strategies to minimise the area of clearing (if Indigenous Vegetation clearing or works around Protected Trees is occurring)
c) Methodology and management measures to protect vegetation that is to be retained
d) Confirmation of the performance requirements above

For consents where specific Vegetation Management Plan is required to be prepared by a Suitably Qualified and Experienced Person:

If required by conditions of the relevant consent then a specific Vegetation Management Plan must be prepared by a Suitably Qualified and Experienced Person and shall be commensurate to the level of detail required to appropriately avoid or mitigate adverse effects associated with vegetation clearance.

CHEMICALS AND FUELS MANAGEMENT

The Consent Holder (or nominated Contractor) is responsible for the management of all chemicals and fuels within the site so as not to cause adverse environmental effects (including environmental nuisance off site).

Where the works trigger an approval in relation to chemical storage, the Consent Holder shall be responsible for obtaining and complying with the relevant approval.

PERFORMANCE REQUIREMENTS

The Consent Holder (or nominated Contractor) shall ensure spill response equipment is available on the site for use in an emergency. Spill response equipment shall be commensurate with the site location, topographical features, type and quantity of chemicals and fuels being stored on site.

The Consent Holder (or nominated Contractor) shall promptly remediate any contamination resulting from spill, leaks and discharges to a condition similar to that existing before the contamination.

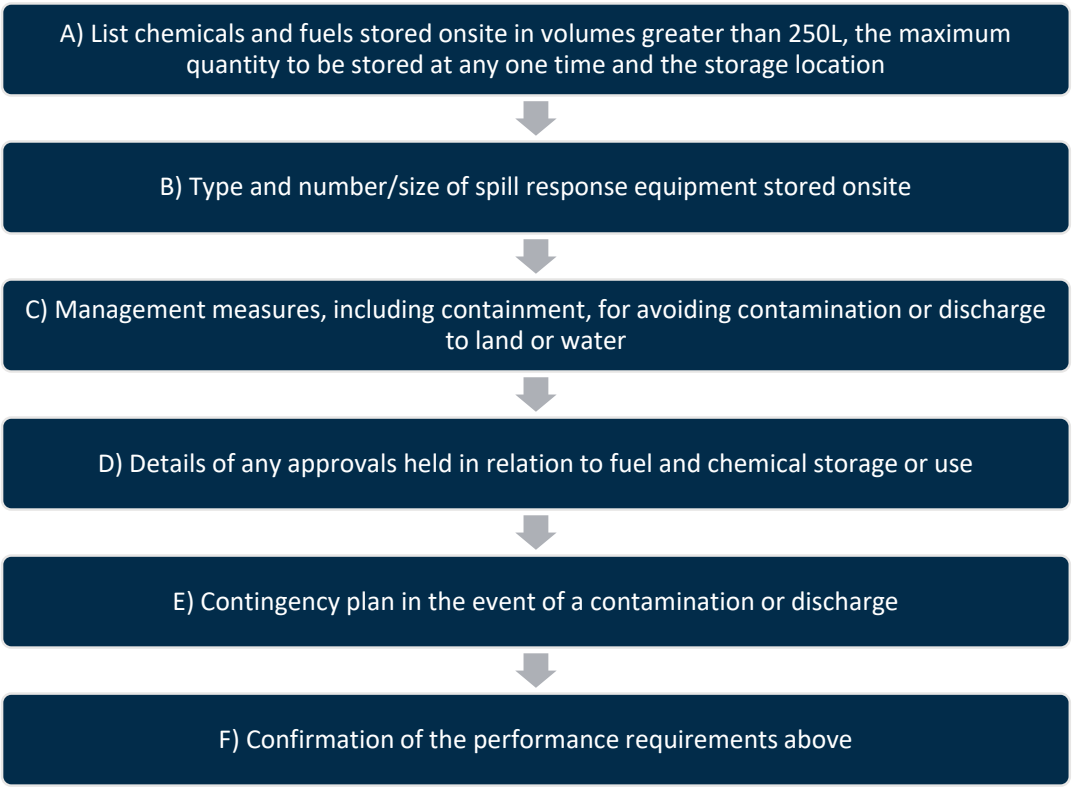
Refuelling of machinery shall conform to the following requirements:

a) Occur at least 30m from a waterway
b) Fuelling activity to be supervised at all times
c) Hoses to be fitted with a stop valve at the nozzle end

Machinery shall be maintained to minimise the leakage of oil, fuel, hydraulic and other fluids.

EMP REQUIREMENTS FOR CHEMICALS AND FUELS MANAGEMENT

The EMP shall include documents and/or diagrams indicating the following:



WASTE MANAGEMENT

The Consent Holder (or nominated Contractor) is responsible for the management of all wastes within the site so as not to cause adverse environmental effects (including environmental nuisance off site).

PERFORMANCE REQUIREMENTS

The Consent Holder (or nominated Contractor) shall ensure that all wastes have been removed from site. No waste shall be burnt onsite.

The Consent Holder (or nominated Contractor) shall provide bins at common areas at all times. Bins shall be fitted with lids and serviced prior to being filled to capacity. During construction, the Consent Holder (or nominated Contractor) shall maintain the site free of litter and ensure that no litter leaves the boundary of the site or enters any waterway within the site.

Vegetation waste from clearing and striping, that is free of noxious plants, may be used in conjunction with soil erosion and sediment measures such as brush matting or mulching.

Mulch stockpiles shall be separated from drainage lines and waterways to inhibit discharges. Mulch stockpiles shall be no higher than 2.5m in height. When temperatures exceed 30 degrees Celsius they should be no higher than 1.5m and monitored regularly for excess leachate and heat.

EMP REQUIREMENTS FOR WASTE MANAGEMENT

The EMP shall include documents and/or diagrams indicating the following:

a) Waste containment locations
b) Any mulch stockpiles shall be located on a plan
c) Confirmation of the performance requirements above

APPENDIX 1: DEFINITIONS

TERM	EXPLANATION
ACCIDENTAL DISCOVERY	When an archaeological site (defined as a place associated with pre-1900 human activity, where there may be evidence relating to the history of New Zealand), regardless of cultural association is discovered during construction. Works onsite must cease immediately and the accidental discovery protocol in Appendix 4 must be followed.
AVERAGE RECURRENCE INTERVAL (ARI)	The average or expected value of the periods between exceedances of a given rainfall total accumulated over a given duration. For example a 100-year ARI event will occur on average once every 100 years. It is implicit in this definition that the periods between exceedances are generally random.
CLEARANCE OF VEGETATION	The removal, trimming, felling, or modification of any vegetation and includes cutting, crushing, cultivation, soil disturbance including direct drilling, spraying with herbicide or burning. Clearance of vegetation includes, the deliberate application of water or oversowing where it would change the ecological conditions such that the resident indigenous plant(s) are killed by competitive exclusion. Includes dryland cushion field species.
CONSENT HOLDER	The land owner of the resource consent that has been issued. It is noted that generally the consent holder delegates functions and duties to the Principal Contractor tasked with delivery of construction activity. The ultimate responsibility for ensuring compliance with resource consents however, will continue to be with the land owner that resource consent has been issued to.
COMPLAINT	A verbal or written complaint from a member of the public regarding the works and the effect upon their person or property.
CONTAMINATED LAND	This means land that has a hazardous substance in or on it that— (a) has significant adverse effects on the environment; or (b) is reasonably likely to have significant adverse effects on the environment Management of contaminated land must comply with the *National Environmental Standard for Assessing Contaminants in Soil to Protect Human Health*.
CRITICAL FACILITY, INFRASTRUCTURE AND UTILITY	Critical facilities include medical/health buildings, educational / research facilities, courts of law and community buildings. The latter

	three are only considered critical when in use. Critical facilities are usually sensitive to both construction noise and vibration. Critical infrastructure and utilities include dams, pump stations, electrical and telecommunications facilities (including railway signalling systems), oil and gas pipelines and other petrochemical installations and utilities such as water mains and sewers. Critical infrastructure and utilities are typically sensitive to construction vibration.
CULTURAL HERITAGE	Includes wāhi tūpuna, historic heritage and archaeological sites related to Māori, Pākehā, Chinese or other occupation and use of land.
DISCHARGE	The movement of a substance/material or medium: a) into a Waterbody or gravels upon an aquifer within the site, b) into a Waterbody or gravels upon an aquifer adjacent to the site, and c) beyond the boundary of the site where it could reasonably enter a Waterbody, gravels upon an aquifer or storm water network.
DISCHARGE POINT	The location(s) at which Discharge crosses from the site into the locations (A-C) as outlined in the definition of Discharge.
ENVIRONMENTAL MANAGEMENT PLAN (EMP)	An Environmental Management Plan is a specialised document prepared and implemented to avoid, remedy and mitigate adverse environmental effects associated with land use activities.
ENVIRONMENTAL NUISANCE	The emission, discharge, depositing or disturbance of a pollutant that unreasonably interferes with, or is likely to unreasonably interfere with, a person's enjoyment of the environment or unhealthy, offensive or unsightly conditions caused by contamination or a pollutant. Also includes nuisance associated with noise and vibration.
ENVIRONMENTAL INCIDENT	The occurrence of a reportable breach of the relevant legislation, District Plan or other planning documents, the resource consent and the EMP. For the purpose of this document, a reportable breach is one that causes a significant environmental effect or nuisance offsite or to Sensitive Environmental Receptors within the site including waterways, aquifers or groundwater onsite.
ERODIBILITY RATING	A factor that is determined by how likely a specific soil type is to erode based on its physical and chemical properties as determined in Geotech report and or Suitably Qualified & Experienced Person.
EXCLUSION ZONE	An area not to be entered by a person or machine for the duration of the works or otherwise designated period of time or restricted access for authorised persons.

HAZARDOUS SUBSTANCE	This includes, but is not limited to, any substance defined in section 2 of *the Hazardous Substances and New Organisms Act,* 1996 as a hazardous substance.
HOLD POINT	A mandatory confirmation point beyond which no further construction activities may commence until QLDC has provided notice to the Consent Holder that the HOLD POINT matter(s) have been accepted as suitable. These are set through conditions of resource consent.
INDIGENOUS VEGETATION	Vegetation that occurs naturally in New Zealand, or arrived in New Zealand without human assistance, including both vascular and non-vascular plants. Shall have the same meaning as the Queenstown Lakes District Plan. Includes 'Tāonga species' listed within the *Ngai Tahu Claims Settlement Act*, 1998.
PROTECTED TREES	Any trees that a registered as protected under the Queenstown Lake District Plan.
RAIN EVENT	Any precipitation event that generates overland flow.
SENSITIVE ENVIRONMENTAL RECEPTORS	Living things, ecosystems or sites of cultural significance that can be adversely impacted by exposure to pollution or contamination. Includes places and areas occupied by people that are more susceptible to the adverse effects of exposure to toxic chemicals, pesticides, and other pollutants than the general population (e.g. hospitals, schools, daycare facilities), drinking water sources, and also sensitive plant and animal species and habitats. Also includes wāhi tūpuna and other places of cultural and heritage significance.
SIGNIFICANT RAIN EVENT	A rain event at an intensity of 20mm/ 12hrs.
SITE	This has the same meaning as what is in the Queenstown Lakes District Plan.
STABILISED	Inherently resistant to erosion or rendered resistant, such as by using indurated rock or by the application of basecourse, grassing, mulch, or another method to the reasonable satisfaction of QLDC. Where seeding or grassing is used on a surface that is not otherwise resistant to erosion, the surface is considered stabilised once, on reasonable visual inspection by QLDC, a minimum of 80% vegetative ground cover has been established over the entire area. "Non-stabilised" areas are those which do not meet the definition of "stabilised".
STAGE	A discrete sub-area of works within the overall site. The boundaries of each stage should be clearly identified in the resource consent application and/or the EMP.

SUITABLY QUALIFIED AND EXPERIENCED PERSON	A person who has the abilities, formal qualifications, relevant experience, the skills and competencies necessary to perform a particular job. The qualification and experience level required will be commensurate to the specific complexities, constraints and issues associated with the project. SQEPs will be required for sites that are classified as 'Medium Risk' or High Risk' in Table 4.1 of this document. **For High Risk sites,** only the following will be considered eligible: - Certified Practitioner in Erosion and Sediment Control (CPESC); or - Chartered Professional Engineer (CPEng) in Environmental or Civil Engineering; or, - Certified Environmental Practitioner (CEnvP). All of the above must hold at least three years' experience in preparing, implementing or managing EMPs and Erosion and Sediment Control Plans (ESCPs) on High Risk construction sites. This must include experience of onsite management and/or oversight of construction environmental management (including erosion and sediment control). For **Medium Risk sites**, QLDC will decide whether the person nominated person qualifies as a SQEP based on the inherent risks of the project. The level of qualifications and experience outlined for High Risk sites may also be required for some Medium Risk sites. Anyone that QLDC approves outside of the above three SQEP categories must provide evidence to QLDC that they have undertaken environmental awareness training. This training needs to cover administrative and operational requirements outlined in this guidance document (including a focus on erosion and sediment control).
WATERBODY	Fresh water or geothermal water in a river, lake, stream, pond, wetland, or aquifer, or any part thereof, that is not located within the coastal marine area.

APPENDIX 2: ENVIRONMENTAL MANAGEMENT PLAN FOR LOW RISK SITES

Project Address: 134 Malaghans Road, Dalefield	**QLDC Consent Number (if applicable): RM** 230288 **BC** N/A
Brief Project Description: Earthworks associated with developing proposed residential dwelling, new gravel drive-way (30-40m in length), preparation of building platform for construction and minor sculpting of immediately surrounding land forms.	
Nearest Sensitive Receptors: (e.g storm water network, waterway) Seasonal waterway, ~100m to the NE of the subject site, noting this is only a seasonal flow and is dry in summer months.	

Purpose

This document is for use for sites that are deemed through resource consent to be of low environmental risk. These are also designed for the construction industry to provide guidance to construction environmental management on small scale jobs with low environmental risk.

This document is a guide for operators to help control environmental effects such as storm water, erosion and sediment run off into nearby waterways and storm water infrastructure, manage dust, noise, litter pollution and other construction related effects to neighbours and the environment.

Administrative requirements

Roles and responsibilities

ROLE	NAME	PHONE NUMBER	EMAIL
SITE SUPERVISOR	TBC		
ENVIRONMENTAL REPRESENTATIVE	Jono Hay (owner)	0274059216	jono_hay@icloud.com

Inductions

All workers on site shall be briefed on the control measures outlined in this Environmental Management Plan. This should include and outline of the rapid stabilisation and spill response procedures. A copy of this Environmental Management Plan shall be kept on site at all times.

Environmental incident notification and reporting

Any environmental incidents which may result in an adverse effect on the environment or community shall be notified to the Regulatory Team at Queenstown Lakes District Council within 12 hours of the incident occurring. Any spills or offsite release of a hazardous substance shall be notified immediately to the Pollution Hotline at Otago Regional Council.

QLDC Regulatory Team – 03 441 0499 **ORC Pollution Hotline – 0800 800 033**

Environmental inspections
The Environmental Representative will inspect all control measures at the start of each working day, and ensure that all measures are in good condition and suitable for the works. Inspections will also be undertaken where adverse weather events are forecast. The site should always be suitably stabilised to limit erosion and sedimentation, any potential spills, discharges and deposition of waste from site.

Operational requirements

Site Set-up
The site will have the following measures installed. These need to be considered when planning the site set out:

- [X] Stabilised access point
- [X] Waste collection facility
- [X] Concrete wash out bay
- [X] Parking area
- [ ] Hazardous substance storage facility
- [X] Wash down facility (mud from tyres)
- [ ] Fencing
- [X] Spill kit

Further Comments/Other Measures:

Refer ESCP Plan

Drainage, Erosion and Sediment Control
Under the Queenstown Lakes District Plan, no discharge of water holding sediment is allowed off-site, unless you have a resource consent permitting this activity. Consider your site and your works: what's the best tool for the job, to make sure your site is stabilised at all times.

The site will have the following measures installed. These need to be considered when planning the site set out:

- [ ] Water diverted around site
- [X] Minimise area of exposed soil
- [ ] Sediment fences
- [ ] Bunds and/or catch drains
- [ ] Sediment retention device
- [X] Stockpile management
- [X] Stabilisation following earthworks
- [ ] Storm water inlets protected (cl off or sediment sock)

Ongoing management of erosion and sediment controls:

- [X] E&SCs to be inspected daily, prior to heavy rainfall and following heavy rainfall
- [ ] E&SCs are always correctly installed and suitable for the planned works
- [ ] Sediment deposits removed from E&SCs following storm events to ensure capacity for next storm

Rapid Stabilisation Procedure:
In the event of heavy rainfall or significant weather event forecast, the site can be quickly stabilised by:

Installation of silt fences around any temporary stockpiles.

Further Comments/Other Measures:

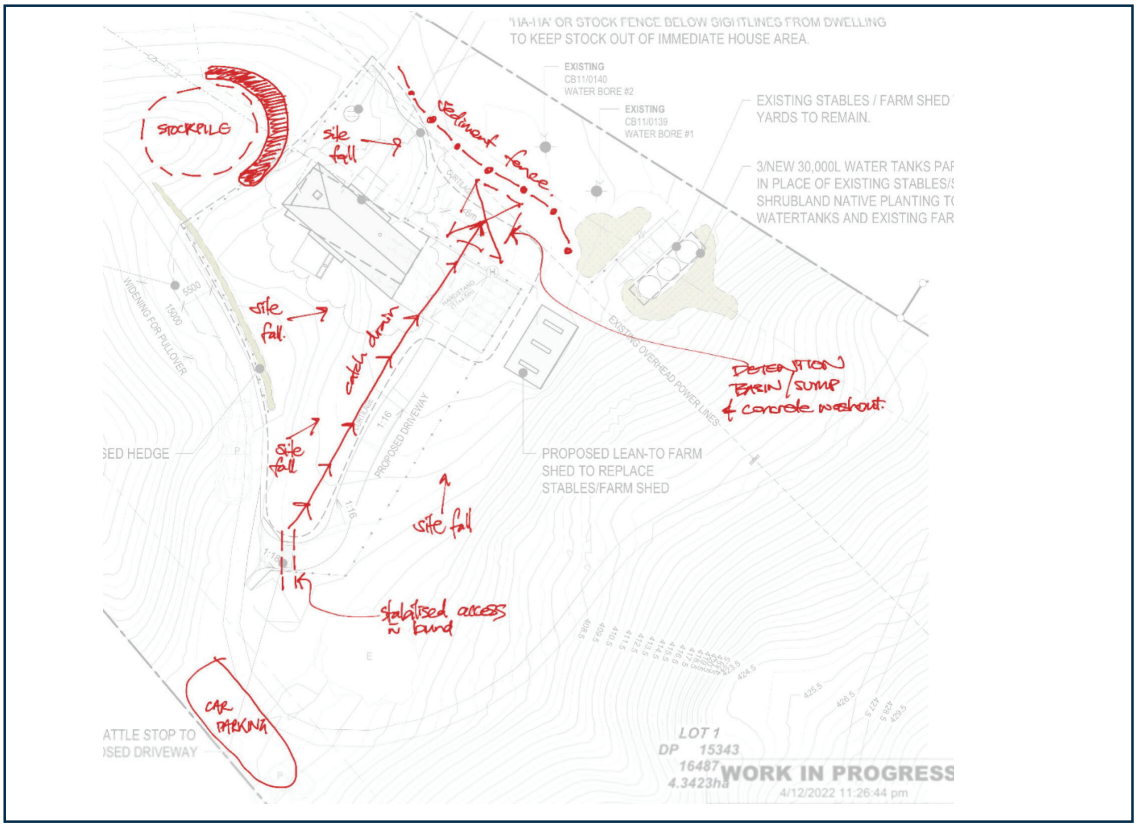
Erosion and Sediment Control Plan:

An example of this at the end of this appendix

This needs to demonstrate:

> overland flow paths
> locations of controls (sediments fences, catch drains, sumps, etc)
> stormwater outlet point

Draw ESCP Here



Disclaimer: It is noted that these are for the operators own use and Council accepts no responsibility for failure of these plans in the case of any environmental incidents. This document is intended as a guide for operators and it is recommended that if the operator is unsure of how to manage a potential environmental effect they should seek the advice of an appropriately qualified environmental professional.

Dust Management

The site will have the following measures installed. These need to be considered when planning the site set out:

☐ Irrigators for soil dampening ☒ Hand watering ☐ Longstanding stockpiles covered/stabilised

☒ Stockpile heights minimised ☐ Geotextiles ☐ Soil binders

device

☐ Progressive stabilisation

Ongoing management of dust:

☒ Dust generating activities avoiding during windy weather (where possible)

☒ Stabilise site when works untended for more than 5 calendar days.

Further Comments/Other Measures:

Re-vegetation of exposed areas implemented promptly, staged as areas are completed.

Noise and Vibration management

Ongoing management of noise and vibration:

☒ Noisy activities to be undertaken between 0800hrs – 1700hrs Monday to Saturday inclusive

☐ Letter drops to neighbours during any unusually loud or noisy activities outside of 0800 – 1700 Mon to Sat

☐ Noise dampening devices utilised and avoidance of loud slamming to be avoided where possible

Further Comments/Other Measures:

Limited noise generating earthworks expected.

Cultural Heritage Management

Accidental Discovery Protocol

In the event that an archaeological site (defined as a place associated with pre-1900 human activity, regardless of cultural association) is discovered during construction, works onsite will cease immediately and the accidental discovery protocol attached to this document as Appendix 4 will be followed.

Further Comments/Other Measures:

Chemicals and Fuels management

The main environmental concern for fuel and chemical management is avoiding spills entering a watercourse or groundwater.

Ongoing management of chemicals and fuels:

- [x] Containers closed and appropriately stored at all times when not in use
- [x] Spill kit onsite at all times and restocked immediately following any spills

Spill Response procedure:

1. Raise the alarm. 2. Evacuate people, if necessary. 3. If the spill involves a flammable substance, move away from the spill before using a mobile or cordless phone. 4. Call emergency services (dial 111) and ask for Fire. Tell the 111 Operator that you have a chemical spill and if you can, tell them what the chemicals are and the quantities involved. 5. ONLY if it is safe to do so close the valve, plug the leak or turn the container upright. 6. Use safety equipment to contain the spill. Prevent the spill from entering drains or waterways. 8. Clean up the spill. 9. Recover the product or dispose of the waste safely.

Further Comments/Other Measures:

Waste management

Ongoing management of waste:

- [x] Appropriately-sized bin located onsite with lid
- [ ] Site cleaned free of rubbish at the end of each day
- [x] Waste regularly removed from site such that bins are not overflowing
- [ ] Adopt the Waste Hierarchy

Further Comments/Other Measures: