

Attachment 4

Appropriateness for FTAA Process

Relevant to Fast-track Referral Application Form Section 2.6



Appropriateness for Fast-track Approvals Process

Note: The structure of this attachment follows the relevant criteria from Section 2.6 of the Fast-track Approvals Referral Application Form, using the relevant section numbering and bold italic headings.

2.6.1 The criteria for accepting a referral application is that the project is an infrastructure or development project that would have significant regional or national benefits. Explain how this project satisfies the criteria:

Overview

The Whiterock Quarry and Managed Fill is an infrastructure project that will have:

Managed Fill

- Significant regional strategic benefits
- Significant regional economic benefits
- Significant regional social benefits
- Significant environmental benefits

Lime Quarry

- Significant regional benefits to primary industries

The Applicant's detailed assessments of the significant regional benefits associated with the Whiterock Managed Fill component are mainly contained in two supporting reports as attachments, these are:

- Attachment 5: WSP 2025. *Whiterock Quarry & Managed Fill – Analysis of the Significant Benefits to the Region*, 21 May 2025, Rev 0
- Attachment 6: Brown Copeland & Co Ltd 2025. *Whiterock Quarry & Managed Fill – Assessment of Economic Benefits*, Rev 0

The further subsections below (within the response to 2.6.1) provide a breakdown of the key conclusions of the above two reports, and also addresses the lime quarry's benefits. Additional content is provided to the other considerations (sub-sections **2.6.2.4_5_6_7_9_10** & 11 of the Referral Application Form) further below, that the Minister may consider for the purposes of determining the projects satisfying the main criteria in Section 2.6.1.



Managed Fill

Operation

The Applicant’s Project site has operated as a lime quarry and processing operation since the 1940’s. The existing operational quarry pit on the site is proposed to be utilised for a Class 3 Managed Fill facility. The Project site is located at 150, 154 and 174 Quarry Road, Loburn, approximately 23.5 km from the centre of Rangiora, 34 km to Kaiapoi, and 50 km to the centre of Christchurch.

The primary waste material to be received at the Applicant’s Whiterock Managed Fill site will be sorted inert construction and demolition (C&D) materials, contaminated soils, and asbestos. No degradable organics will be accepted at the site. These inert waste types are consistent with Class 3 Managed Fill materials as detailed in Section 2 of the WasteMINZ Disposal to Land Guidelines 2023 (the ‘WasteMINZ Guidelines’). The airspace of the managed fill will be approximately 500,000 m³. This is equivalent to approximately 800,000 tonnes of waste material assuming 1.6t/m³, and an estimated 40,000 tonnes per annum over the 20 year expected lifespan.

Summary of Strategic and Economic Benefits

The Applicant’s development of the proposed managed fill site will expand the disposal options available in Canterbury, to facilitate a more efficient disposal to land sector, by:

- Providing a dedicated facility for the safe management of inert waste streams;
- Reducing transport distances (compared to other disposal options for equivalent materials); and
- Ensuring the optimisation of filling across landfill disposal types in the Region (i.e. by sites with the appropriate level of containment relevant to waste material accepted – essentially putting the right waste in the right place).

The WasteMINZ Guidelines are the current endorsed guidance for the disposal to land sector, establishing best practice approaches for the management of solid waste (disposal facilities). The current landfill classification system, Classes 1 to 5, were established to reflect the difference in controls associated with each type of waste stream and to provide clear guidance on waste acceptance and engineered containment design. A summary of the class definition and the anticipated characteristics of the waste and the main anticipated contamination risks is provided in Table 1.

Table 1. Landfill Class Rationale - Simplification of Table 2-2 in the WasteMINZ Disposal to Land Guidelines 2023

Class 1	Class 2	Class 3	Class 4	Class 5
Municipal Solid Waste Landfill	Construction and Demolition (C&D) Landfill	Managed Landfill	Controlled fill	Cleanfill
Household Refuse, Industrial Commercial Waste	Biodegradable waste including Timber and Textiles	Inert Materials, including Contaminated Soil, sorted C&D waste	Low level contaminated soils and hardfill (e.g., concrete rubble)	Virgin Excavated Natural Materials, clean soil suitable for re-use
Landfill Leachate and Landfill Gas (LFG)	Potential Leachate and LFG	Low production of Leachate, no LFG	No leachate or LFG	No leachate or LFG



Across New Zealand there is an increasing demand for Class 2 to 4 sites. This is because the operational costs associated with a Class 1 Municipal Landfill (landfill gas capture, operational controls etc.) and external levies placed on Class 1 Landfills are driving up the cost of disposal. This is true in the context of the Canterbury Region, too.

Adding to this context is that soil contamination waste disposal options within Canterbury are fairly limited now and will become more so with the Burwood Landfill Class 4 operation in Christchurch most likely ending in 2026.

By way of example the nearest facility to Burwood which could take Whiterock's proposed waste stream is the Kate Valley Regional Landfill in Waipara. This Class 1 facility has a public gate fee of approximately \$198/tonne (with higher rates charged for specified or special waste). The gate fees for Class 1 landfills (including Kate Valley) are likely to increase in line with planned national increases to the Waste Disposal Levy and any additional emission trading scheme (ETS) charges.

For the proposed Whiterock Managed Fill site the gate fee is indicated to sit around \$110.00 per tonne. The primary beneficiaries of this disposal cost saving will be local businesses, residents, ratepayers and taxpayers of the Canterbury region.

As explained in the Significant Benefits report (Attachment 5) there is a significant infrastructure deficit in New Zealand and with the projected population growth of the Canterbury Region (anticipated to accommodate 57% of the South Island's population in 2048), it is likely that demand for suitable disposal locations for inert C&D materials and contaminated soils will continue for the life of the proposed facility. Growth in the Greater Christchurch area, through to 2048, is projected to be between 0.5-0.9% per year – the highest in the Canterbury Region.

The Economic Benefits report (Attachment 6) elaborates further when applying a regional viewpoint, when considering the primary beneficiaries of the managed fill aspect of the Project which are the businesses, residents, ratepayers and taxpayers of "Greater Christchurch" – i.e. the Waimakariri District, the Selwyn District, and Christchurch City. Greater Christchurch forms a significant part of the Canterbury region, especially having regard to existing and projected future population levels and general economic growth. For example, Greater Christchurch accounts for 82.4% of the Canterbury region's population and this is expected to grow to 83.4% by 2048.

As explained in the Significant Benefits report (Attachment 5), geographically, the waste disposed of at Whiterock is mostly expected to be generated in the Greater Christchurch and the North Canterbury area. For waste generated in these areas, Whiterock is likely to provide a lower cost of disposal than alternatives. This is because of the:

- Lower operating costs associated with a Class 3 site (compared to additional controls and monitoring associated with a Class 1 or 2 landfill);
- Reduced transport distances (than alternative facilities); and
- Lower external levies (than a Class 1 or 2 facility).

The calculated cost benefits of the proposed facility, compared to existing alternative disposal options/sites have been summarised in the Significant Benefits report (Attachment 5) as:

- A haulage saving of between \$288,000 and \$3,456,000
- A gate fee saving of between \$35.8m and \$74.2m
- A combined saving of between \$36.3m and \$74.5m



As concluded in the Significant Benefits report (Attachment 5), the proposed facility would achieve the following benefits:

- Increasing competition in the disposal to land sector in the Canterbury Region by:
 - Increasing investment in waste sorting and stimulating more recovery of materials/diversion from Class 1 Landfills.
 - Reducing disposal costs for inert C&D materials and contaminated soils with direct benefit to economics associated with the development of residential and commercial projects (including infrastructure).
- Generating climate change benefits by reducing the transport emissions associated with disposal compared to the equivalent alternative sites (Burwood Class 4 site excluded).
- Providing a relatively immediate solution for the disposal of inert C&D waste and contaminated soils, due to the existing void space, enabling additional capacity (and competition) in the Canterbury Region.
- Supporting the delivery of strategic initiatives to support the aspirations of the Canterbury Region, such as:
 - Facilitating a range of development projects in the short and medium term, including being a highly feasible and practicable option for eight of the 22 Fast-track Approvals Act 2024 (FTAA) listed projects in Canterbury, including nationally significant infrastructure such as the recently announced Roads of National Significance state highway project for Greater Christchurch.
 - Numerous landfill remediation projects, which pose a significant environmental issue due to the increased risks to these landfills from natural hazards exacerbated by climate change, i.e. landslips, river flooding, and rising sea levels at the coast.
 - The projected urban growth of the Canterbury Region by providing more lower cost disposal options and a specific facility for targeted waste streams.
- Contributing to the achievement of national strategy and policy, ensuring the right waste goes to the right place by:
 - Optimising the utilisation of landfill airspace at Class 1 and 2 facilities which are set-up to receive those waste streams requiring a higher level of containment.
 - Ensuring these facilities remain available for the disposal of degradable organic materials not catered for at a Class 3-4 facility, noting the significant requirements for establishing a new Class 1 facility.

The Significant Benefits report (Attachment 5) explains Whiterock would be an ideal disposal option, based on the type of waste likely to be generated by those eight listed FTAA projects and the proximity of those projects to the Whiterock site (as compared to the other alternative disposal options). In this way, Whiterock could support and facilitate these listed regionally or nationally significant projects or similar projects that may not be listed in the FTAA but still make a significant contribution to living in this region.

The Economic Benefits report (Attachment 6) has concluded that the proposed new Whiterock Class 3 Managed Fill site will give rise to the following economic benefits:

- Lower inert C&D materials and contaminated soil disposal transport costs, including lower cartage costs, carbon emissions, and other road externality costs;



- Lower inert C&D materials and contaminated soil disposal landfill charges, reflecting a more appropriate level of infrastructure, a lower waste levy and no ETS charges being payable;
- Preserving the capacity of the Class 1 Kate Valley Landfill facility for waste that cannot go to Whiterock, and offering the potential for an overall increase in the electricity generation from the Kate Valley Landfill site; and
- Delaying the need to consent and develop new sites for landfills, which are likely to be located further distance from Greater Christchurch's main urban centres as compared to the Whiterock site.

The Economic Benefits report (Attachment 6) also concludes the Whiterock Managed Fill facility will place downward pressure on inert C&D materials and contaminated soil disposal costs. This would benefit businesses and residents - both directly and indirectly as ratepayers and taxpayers - by facilitating significant regional infrastructure and land development

Summary of Social Benefits

The Project will provide significant regional social benefits, through assisting with construction required to increase the supply of housing, address housing needs, or contribute to a well-functioning urban environment for Greater Christchurch through reduced development costs. For the full details refer to Section 2.6.2.5 below.

Summary of Environmental Benefits

The significant environmental benefits of the Whiterock Managed Fill facility are the sum of the following issues being considered:

- Climate change mitigation by:
 - Reducing greenhouse gas emissions associated with carbon emissions arising from the transport of waste (refer Section 2.6.2.9);
 - Backing out of fossil fuel use for electricity generation from increased electricity production at Kate Valley Regional Landfill (refer Attachment 6);
 - Support recovery from natural hazards such as fires, severe weather events, and earthquakes that generate inert C&D materials and contaminated soils (refer Section 2.6.2.10).
- Reducing costs for existing and future closed landfill remediation (and removal) projects in greater Christchurch that require disposal of degraded and therefore inert waste (refer Section 2.6.2.11);
- Increased sorting and recovery of valuable resources that will have a cumulative effect of reducing the overall volume of inert and recoverable materials disposed of to Class 1 Landfill (refer Section 2.6.2.11); and
- Minimising the frequency of illegal dumping of waste by increasing affordability of disposal of the types of waste that can be received by the Whiterock site (refer Section 2.6.2.11).

Quarry - Limestone

The Applicant's lime resource at Whiterock also supports primary industries by supplying AgLime to primary industries. AgLime is used widely to increase farm pasture productivity and quality and crushed bulk lime can be used in tracks and lanes for farming businesses in the north and mid Canterbury region. For the full details refer to Section 2.6.2.7 below.



2.6.2 Explain how referring the project to the fast-track approvals process:

2.6.2.1 Would facilitate the project, including by enabling it to be processed in a more timely and cost-effective way than under normal processes;

Applications for resource consent to establish the Whiterock site as a Class 3 Managed Fill site were lodged with the Councils¹ on 2 April 2024 - before the FTAA received Royal assent and after the COVID-19 Recovery (Fast-Track Consenting) Act 2020 was repealed. At that time, it was uncertain as to what the final enacted form of the FTAA would be.

Following further information requests and responses, public notification of the lodged resource consents for Whiterock occurred on 11 September 2024. In total 573 submissions were received, with 510 in opposition and 57 submissions in support. Of the total submissions, 89 submissions indicated a desire to be heard. The final number and content of submissions was not confirmed until 31 January 2025, due to an issue with the Canterbury Regional Council's online submission form².

As a general proposition, landfill proposals tend to provoke a strong reaction from people and therefore a large number of submissions in opposition. Put simply, they are unpopular despite the benefits. With that general context in the background and taking into account the relatively large number of submissions received on the Whiterock proposal, the Applicant apprehends a high likelihood that - no matter which way a Council-level decision was to go - appeals to the Environment Court will follow.

Realistically, an appeal could add 12 to 18 months to the approvals process. This is a somewhat conservative estimate and depends on numerous variables including key matters such as how many participants there might be in the appeal process (all submitters would have the right to join³) and the breadth of issues in contention (a very large number of issues have been raised by submitters).

The Council RMA application is currently on hold at the Applicant's request, given this referral application. Even if the Applicant had taken it off hold (23rd May 2025 for example) *and* the existing scheduling for evidence exchange and hearing time resumes from the point at which it was suspended *and* there was no need for additional evidence or more hearing time than currently scheduled *and* if the Commissioners then issued a decision within 30 working days – a Council-level decision would not issue until 1 December 2025.

There is then a 15 working-day appeal period and a subsequent 15 working-day Section 274 (under the RMA) notice period. These procedural steps alone would take the Council RMA application to 4 February 2026.

At that point the Court would take stock of the issues and parties before it and look to schedule mediation and/or evidence exchange. An evidence exchange timetable would be likely to cover a couple of months at least, to provide for Applicant, Council, Appellant and Section 274 party evidence (and likely rebuttal evidence of the appellant too).

Then a hearing date would need to be found that accommodates both party and Court availability. The longer an estimated hearing duration is, the harder it is to find a hearing time that suits. Given the number of submitters involved, it is reasonable to assume at least one weeks' hearing time will be needed – although two is probably more realistic.

¹ With both the Canterbury Regional and Waimakariri District Councils.

² Canterbury Regional Council s42A Report (9 March 2025) at [46] and [47].

³ Section 274(1)(e) and (f) of the Resource Management Act 1991 (RMA).



Taken together (and assuming there are no further appeals to the High Court after an Environment Court decision is issued), it is reasonably conservative to envisage a consenting process that would not have concluded until around the end of 2026 or into the first half of 2027.

By comparison and even allowing for a longer timeframe than the default 30-working day decision period, there is no doubt a decision under the FTAA could emanate materially faster than it would under the traditional consenting process. The potential for significantly different processing times (under the RMA vs FTAA) is particularly high for this application given the number of submissions received on it and the breadth of potential issues raised by submitters.

The potential for 12 to 18 months difference in processing time is significant for the Region because:

- As detailed in the WSP - Significant Benefits and Brown Copeland & Co - Economic Benefits reports (Attachments 5 and 6) there is an urgent need for additional Class 3 waste disposal options in the Region – particularly one as proximate to Greater Christchurch as the Whiterock site; and with the apparently imminent closure of Burwood. Any additional time taken to consent the Project will only serve to delay realisation of the Project's strategic and economic benefits, which are described in the abovementioned reports from WSP and Brown Copeland & Co;
- Numerous Canterbury-based projects listed in Schedule 2 of the FTAA would likely benefit from the Whiterock proposal, as would other significant developments not listed. Timely processing of the Whiterock proposal will, in turn, assist with timely facilitation of those projects; and
- While Whiterock is well-positioned to implement the approvals (if granted) quickly, it is still inevitable that some lag will occur before waste can be accepted. This is primarily because of the need for the detailed landfill design peer review process and certification by the consent authorities. Seasonal lizard salvage requirements, followed by the subsequent construction activities including ancillary controls, landfill containment installation, and the final certification of the quality assurance and as built design is conservatively predicted to be a 6 month period from approvals being granted, to waste being deposited.

By way of comparative example, there is currently an Environment Court process occurring in relation to a quarry and landfill application by Woodstock Quarry Limited (for a Class 2 landfill ⁴). Key steps in the consent process include:

- The application was lodged with Councils in April 2021;
- Public notification occurred in November 2022 (19 months after lodgement);
- 397 submissions were filed (almost 200 less than for Whiterock);
- The hearing process commenced in April 2023;
- The application was declined by the Councils on 27 June 2024;
- Woodstock Quarries Limited appealed this to the Environment Court within 15 working-days (i.e. July 2024);
- It is understood a 5-day Environment Court hearing is scheduled for November 2025 ⁵.

If it had to follow the traditional RMA process, the Applicant would do everything it could to avoid an elongated process like the Woodstock one. The Applicant provided a preliminary design for the Whiterock Managed Fill (not a concept design), and also requested their application be publicly notified on lodgement, which did result in a short period of only 5 months to be notified.

⁴ Joint Decision of Independent Commissioners (26 June 2024) at [53] to [57].

⁵ <https://christchurch.scoop.co.nz/?p=64445>



However, there is no escaping the fact Whiterock's application is similarly one involving an activity that is inherently unpopular, of interest to the community, and likely to be appealed.

For all of the reasons explained above, the FTAA process is seen as more appropriate for the Project than the RMA one.

2.6.2.2 Is unlikely to materially affect the efficient operation of the fast-track approvals process

The Project that is seeking fast-track RMA approvals (i.e. resource consents) is an ideal candidate for the FTAA process. The factors that support this statement are outlined below.

If a positive referral decision is received, a full application can be submitted promptly, due to an application for resource consents having already been developed. This application (and joint assessment of effects) was submitted to the relevant regional and district councils (or 'local authorities') in April 2024 (before the FTAA was enacted); and further information was requested and provided between June and September 2024.

Consultation occurred before the application to the local authorities was first lodged, and the Project has already taken the responses from that consultation into account.

In addition to pre-lodgement consultation, the Applicant has now also had the benefit of:

- Officer Reports from both Councils (under Section 42A of the RMA); and
- Submissions from the public.

Feedback from these post-lodgement RMA process sources has been and/or is currently being reviewed by relevant experts and advisors. Their efforts in this regard will further assist in ensuring any changes to the application previously submitted such that any changes to the application as a result, can be readily and quickly made.

Therefore, due to the advanced preparation undertaken to date a substantive application, which has been informed by feedback from the local authorities, iwi and neighbours, could be submitted promptly. This will assist in making the approval process efficient – including by enabling focussed and thoughtful consideration of the critical issues early on, rather than spending valuable and undue time attempting to identify the critical issues as a first step. Additionally, if granted, the development itself could proceed relatively quickly and certainly in time to be useful for projects approved under the FTAA and other imminent development in Greater Christchurch.

The Applicant is incentivised to lodge a substantive application and to have a decision before the end of this year, for the following reasons:

- There is an urgent need for more cost-effective Class 3 waste disposal options in the Region. This need is created by projected population growth and infrastructure development (including projects listed in the FTAA) as well as business-as-usual activities;
- It is unduly expensive to dispose of Class 3 waste at a Class 1 facility but, until Whiterock is an available option, this does and will continue to occur for large amounts of waste from the Christchurch City and North Canterbury areas;
- The Applicant has done much of the work up-front but even then, there will inevitably be some work that cannot occur until the Applicant has certainty of the approvals sought. That work will result in a degree of lag (6 months) after approvals are granted (if granted) and before the managed fill site becomes operational. To provide a lower-cost waste disposal alternative in the short to medium-term – including to facilitate other significant



projects, such as those listed in the FTAA for Canterbury - the faster a decision, the better for the region.

The Applicant's team of consultants and advisors has been made aware of the Applicant's desire for a decision this year and have confirmed their willingness to assist in ensuring the FTAA process is as efficient as it can be. In doing so they have confirmed both their availability to commit and their understanding of the need for a proactive and responsive approach such that the efficiency and time benefits the FTAA process offers, can be realised.

An Authority under the Wildlife Act has been obtained for lizard management. No other regulatory approvals are required.

As a result of the above factors, this Project is well-suited to the process and timing expectations of the FTAA.

2.6.2.4 Will the project deliver new regionally or nationally significant infrastructure or enable the continued functioning of existing regionally or nationally significant infrastructure?

Yes, the Project will assist with the delivery of new and enable the continued functioning of existing regionally significant infrastructure and nationally significant infrastructure - refer to supporting Significant Benefits report (Attachment 5). The Canterbury Regional Policy Statement 2013 (updated October 2020) provides a definition of regionally significant infrastructure ⁶ and the National Policy Statement for Urban Development 2020 (NPS-UD) provides a definition of nationally significant infrastructure ⁷. Further, it is considered waste diversion and waste minimisation and landfills is of strategic regional significance.

In summary, and as outlined in the Significant Benefits report (Attachment 5), it is considered that the addition of a new Class 3 Managed Fill at Whiterock would support or enable regionally and nationally significant infrastructure in the following ways:

- Support new 'nationally significant infrastructure' such as the SH1 Belfast to Pegasus Motorway and Woodend Bypass which is a Road of National Significance (RONS) currently in design phase and expected to be constructed by 2030 ⁸. Waste disposal is an important cost component of infrastructure construction and having a Class 3 facility with lower

⁶ **Regionally significant infrastructure is:** 1. Strategic land transport network and arterial roads 2. Timaru Airport 3. Port of Timaru 4. Commercial maritime facilities at Kaikōura 5. Telecommunication facilities 6. National, regional and local renewable electricity generation activities of any scale. The electricity transmission network 8. Sewage collection, treatment and disposal networks 9. Community land drainage infrastructure 10. Community potable water systems 11. Established community-scale irrigation and stockwater infrastructure 12. Transport hubs 13. Bulk fuel supply infrastructure including terminals, wharf lines and pipelines. 14. Electricity distribution network 15. Infrastructure defined as 'strategic infrastructure' in this regional policy statement. Note: For the avoidance of doubt, this infrastructure is also referred to as 'infrastructure that is regionally significant'.

⁷ **Nationally significant infrastructure means** all of the following: a. State highways b. the national grid electricity transmission network c. renewable electricity generation facilities that connect with the national grid d. the high-pressure gas transmission pipeline network operating in the North Island e. the refinery pipeline between Marsden Point and Wiri f. the New Zealand rail network (including light rail) g. rapid transit services (as defined in this clause) h. any airport (but not its ancillary commercial activities) used for regular air transport services by aeroplanes capable of carrying more than 30 passengers i. the port facilities (but not the facilities of any ancillary commercial activities) of each port company referred to in item 6 of Part A of Schedule 1 of the Civil Defence Emergency Management Act 2002

⁸ <https://www.nzta.govt.nz/projects/sh1-belfast-to-pegasus-motorway-and-woodend-bypass/>

disposal costs than existing Class 1 or 2 facilities will provide a more cost-effective disposal of soil for this RONS project.

- Enable the continuing functioning of existing 'regionally significant infrastructure' such as Council's wastewater, water supply, and stormwater networks ('3 waters') and roading renewals and upgrades for urban areas in Greater Christchurch and North Canterbury. Waste disposal is an important cost component of renewals and upgrades to networks. In Christchurch for example approximately 50% of the roading pavement is impacted from historic coal tar application as a binder. Having an alternative Class 3 facility with lower disposal costs than other existing facilities in the region will provide more cost-effective options for maintenance and upgrades to existing Council infrastructure; and
- Enable the continued functioning of strategic infrastructure being the Kate Valley Regional Landfill by reducing overall volumes and the inert waste currently going to this Class 1 landfill. The diversion of inert waste from a Class 1 landfill is important because fill sites are a finite resource. Preserving the airspace in Class 1 facilities is an important, strategic objective to ensure these critical pieces of infrastructure last for as long as possible and so society does not pay more than it needs to, in disposing of waste.

2.6.2.5 Will the project increase the supply of housing, address housing needs, or contribute to a well-functioning urban environment (within the meaning of policy 1 of the National Policy Statement on Urban Development 2020). If yes, explain how the project will achieve this.

Yes, the Project will assist the housing supply and contribute to a well-functioning urban environment for Greater Christchurch through reduced development costs. Therefore providing significant regional social benefits.

The Significant Benefits report (Attachment 5) details that six of the Fast-track listed projects in Greater Christchurch are greenfield residential development projects. These listed projects combined will provide approximately 8,300 additional residential dwellings in Greater Christchurch.

The Whiterock Managed Fill site as a dedicated inert C&D materials and contaminated soil managed fill facility would provide \$30-\$60 per tonne cost savings compared to existing alternative facilities. This would in turn directly contribute to housing supply by improving the economics of both beforementioned greenfield and urban intensification which is discussed further below.

By reducing costs associated with demolition and redevelopment, the Project would support higher-density development in established urban areas - a key principle of Policy 1 of the NPS-UD⁹.

Specific analysis of the assistance to urban intensification and where this supports the implementation of the NPS-UD for the Project is provided below:

- **Redevelopment Project Viability:** Demolition of old housing stock generates significant waste volumes - approximately 30 tonnes per dwelling, of which 57% is rubble, concrete, and other inert C&D waste which would be appropriate at Whiterock. At \$30-\$60 savings

⁹ https://www.beehive.govt.nz/sites/default/files/2020-07/Final-NPS-UD-July_0.pdf



per tonne, this represents ~\$500-\$1,026 in direct cost reduction per dwelling demolished, making marginal residential redevelopment projects economically viable^{10 11 12}.

- **Brownfield Development Enablement:** By reducing disposal costs for contaminated soils (including asbestos), the Whiterock Managed Fill facility would significantly improve the economics of already cleared brownfield sites proposed to be used for residential development.
- **Improving Waste Management Infrastructure:** Providing specialised disposal facilities for inert C&D materials represents an improvement in regional infrastructure that supports efficient urban development¹³.

2.6.2.6 Will the project deliver significant economic benefits, and if so, how?

Yes, the Project will deliver significant economic benefits to Greater Christchurch.

As concluded in Economic Benefits report (Attachment 6), the proposed new Whiterock Class 3 Managed Fill facility will give rise to the following economic benefits:

- Lower inert C&D materials and contaminated soil disposal transport costs, including lower cartage costs, carbon emissions, and other road externality costs;
- Lower inert C&D materials and contaminated soil disposal landfill charges, reflecting a more appropriate level of infrastructure, a lower waste levy and no ETS charges being payable;
- Preserving the capacity of Kate Valley for waste that cannot go to the Whiterock Managed Fill facility, and therefore offering the potential for an overall increase in the electricity generation potential from the Kate Valley Landfill; and
- Delaying the need (and cost) to consent and develop new sites for landfills, which are likely to be located further distance from Greater Christchurch's main urban centres as compared to the Whiterock site.

The Significant Benefits report (Attachment 5) identifies the most likely alternative and existing disposal sites to be Kate Valley (a Class 1 site, 65 kms from the Christchurch CBD), Taiko Road, Cave (a Class 2 site, 192 kms from the Christchurch CBD) and Plantation Road, Hororata, (a Class 3 site, 62 km from Christchurch CBD).

The Significant Benefits report also outlines the current gate disposal fees per tonne of these three current sites comparative to the indicative Whiterock Managed Fill site gate disposal fee. Combining the haulage cost and gate fee savings together implies potential cost savings from the proposed Whiterock site of:

- Compared to the Kate Valley Landfill - \$74.6 million in aggregate, \$3.7 million per annum or \$93.2 per tonne of waste material;
- Compared to the Taiko Road (Cave) Landfill - \$39.3 million in aggregate, \$2.0 million per annum or \$49.1 per tonne of waste material; and
- Compared to the Plantation Road (Hororata) Landfill - \$36.3 million in aggregate, \$1.8 million per annum or \$45.4 per tonne of waste material.

¹⁰ <https://environment.govt.nz/facts-and-science/waste/waste-facilities-and-disposal/>

¹¹ <https://knowledgeauckland.org.nz/media/fxwbvcbl/tr2019-009-cba-on-waste-diversion-from-landfill-homes-land-community-auckland.pdf>

¹² <https://www.aucklandcouncil.govt.nz/plans-projects-policies-reports-bylaws/our-plans-strategies/topic-based-plans-strategies/environmental-plans-strategies/docs/wastemanagementplan/waste-assessment-2023.pdf>

¹³ <https://environment.govt.nz/assets/Publications/Files/economic-factors-of-waste-minimisation-final.docx>



The Significant Benefits report and Economic Benefits reports (Attachments 5 and 6) also take into consideration two other potential alternatives:

- **The continued use of the Burwood landfill in Christchurch.** This landfill is a Class 4 site and is scheduled to be closed in 2026 (there has been three extensions of its closure). As a Class 4 facility Burwood is unable to accept some waste streams (asbestos waste or contaminated soils above recreational soil contaminant standard levels), which could be disposed of at the proposed Whiterock Landfill. Whether or not the Christchurch City Council extends the Burwood operation beyond 2026, the benefits of the proposed facility at Whiterock would remain largely the same. The Whiterock Managed Fill has a 20 year life so it is very reasonable to expect that Burwood will cease at some early stage during the life of Whiterock.
- **The proposed Woodstock landfill, at Trigg Hill near Oxford.** Based on the current application, this facility is proposed to operate as a Class 2 landfill, but with additional engineering controls and subject to a higher waste disposal levy than the proposed facility at Whiterock. This option would still incur a transport cost penalty from many locations and would involve the use of a Class 2 disposal facility, therefore one with a higher capability and cost than is required for the disposal of Class 3 waste. The proposed Woodstock Landfill will not be available as quickly as Whiterock and therefore may not be ready for projects in the immediate to medium-term, including the projects listed in the FTAA.

2.6.2.7 Will the project support primary industries, including aquaculture, and if so, how?

Yes, the Project will support primary industries in the region. The quarry operation has and will continue to supply processed AgLime to primary industry clients, being large scale farmers directly, and lime spreader contractors^{14 15 16} that operate in the mid and north Canterbury Region. Lime application on pasture benefits grazing by neutralizing soil acidity, improving nutrient availability, and enhancing soil structure, ultimately increasing pasture productivity and quality. This leads to healthier plants, improved grazing conditions for livestock, and better overall soil health¹⁷.

The soft lime rock specific to the Whiterock quarry site is also crushed to create a product called 'Track rock' and is applied by contractors¹⁸ to cow lanes as it reduces hoof soreness and damage compared to other track aggregates.

Approximately 55,000 m³ (bulked) of lime rock over the next 10 years would be excavated in order to develop the managed fill floor and sides. This is conservatively assessed as at least 55,000 tonnes of processed AgLime or crushed lime for supply to the primary industries market.

¹⁴ <https://www.facebook.com/spreadingcanterbury/>

¹⁵ <https://www.stubbsgroundspreading.co.nz/>

¹⁶ <https://whitepages.co.nz/w/plaskett-fert-spreading/>

¹⁷ <https://www.dairynz.co.nz/feed/soil/fertility/#:~:text=Liming%20is%20carried%20out%20to,expense%20of%20low%20fertility%20species.>

¹⁸ <https://www.mitchelmorecontracting.com/>



2.6.2.9 Will the project support climate change mitigation, including the reduction or removal of greenhouse gas emissions, and if so, how?

Yes, the Project will support the reduction or removal of greenhouse gas emissions, as outlined in the Significant Benefits report (Attachment 5), where a tool to quantify carbon reduction benefits from transport emissions associated with the Project is detailed.

In summary, it is likely that the addition of a Class 3 Managed Fill facility at the Whiterock site would reduce the transport emissions associated with waste disposal compared to the equivalent alternative sites, further contributing to environmental benefits.

2.6.2.10 Will the project support climate change adaptation, reduce risks arising from natural hazards, or support recovery from events caused by natural hazards, and if so, how?

Yes, the Project will support recovery from events caused by natural hazards and hence provide environmental benefits. The Project will provide a readily available facility to dispose of inert C&D materials and contaminated soils generated from natural disasters such as fires, severe weather events and earthquakes. For example, the Canterbury earthquakes recovery resulted in the re-opening of Burwood landfill area for a period to take C&D materials. Like Burwood, the relevant proximity of the proposed site and ability to accept large volumes of disaster related waste on short notice, rather than setting up additional facilities, will also contribute to broader environmental benefits.

2.6.2.11 Will the project address significant environmental issues, and if so, how?

Yes, the Project will address three significant environmental issues being: closed landfill remediation, waste minimisation, and illegal dumping. More detail is provided on each issue below.

Closed Landfill Remediation (and Removal) Projects

Attachment 5 the Significant Benefits report describes the capacity of the proposed facility to receive managed fill waste expected to be generated by closed landfill remediation and removal projects. These projects can be considered a significant environmental issue due to the increased risks to these landfills from natural hazards exacerbated by climate change, i.e. landslips, river flooding, and rising sea levels at the coast.

Christchurch City Council have a series of closed landfill remediation projects in their 10 year long term plan. Three of which at Onuku Bay¹⁹, Okains Bay²⁰, Allandale²¹ have budgets totalling \$6.3M and will include waste disposal to a facility authorised to receive the material (which could include Whiterock).

Waimakariri District Council also has a landfill remediation project with a budget of \$350,000 included in their draft annual plan, depending on the scale of remediation this could also result in disposal of excavated waste to the proposed Whiterock facility.

¹⁹<https://budget.ccc.govt.nz/public/Transport%20&%20Waste/Refuse%20&%20Recycling/Onuku%20Bay%20Landfill%20Remediation>

²⁰<https://budget.ccc.govt.nz/public/Transport%20&%20Waste/Refuse%20&%20Recycling/Okains%20Bay%20Closed%20Landfill%20Remediation>

²¹<https://budget.ccc.govt.nz/public/Transport%20&%20Waste/Refuse%20&%20Recycling/Allandale%20Closed%20Landfill%20Remediation>



The significant costs of disposal can be a limiting factor for remediation of closed landfill sites, especially where costs associated with remediation are unplanned expenses not included in the lifecycle costs of the former landfill sites. The availability of a suitable disposal facility (capable of accepting degraded and therefore inert waste, inclusive of a broad range of contaminants) is likely to influence remediation planning and the overall budget for choosing remediation (removal) over further protection works. The proposed Whiterock facility is well placed to accept the broad range of contaminants expected at these sites and would be at a lower gate fee, and is likely to provide significant savings compared to disposal at a Class 1 landfill.

Waste Minimisation

Refer to Attachment 5 the Significant Benefits report for details on how the Project contributes to waste minimisation. Strategically the Project would result in a broader range of disposal options for waste in Canterbury, with access to a dedicated Class 3 facility for inert materials and sorted C&D waste. Indirectly it is assumed that through an increase in available disposal options, further investment in waste sorting and recovery is likely to arise, as suppliers seek more efficient disposal options than are currently available.

The investment in dedicated alternative disposal facilities and increased sorting and recovery of valuable resources will have a cumulative effect of reducing the overall volume of inert and recoverable materials disposed of to a Class 1 Landfill – a key metric for waste diversion and minimisation in New Zealand.

Illegal Dumping

Current practice in the development of ‘contaminated’ land sees a large volume of soil being disposed of at municipal landfill sites throughout Aotearoa New Zealand. Refer Figure 1 below.

Illegal dumping of waste is a problem in Canterbury. An example is asbestos in soil materials being dumped at a river in the Waimakariri District ²². While specific data on the proportion of illegally dumped waste in Canterbury that is contaminated soils and inert C&D material is limited, given the substantial contribution of these wastes to overall landfill volumes it's more than likely that a portion of illegally dumped waste in Canterbury includes these materials. The Project will contribute to reducing the disposal costs for the managed fill materials proposed to be accepted and hence, by reducing the costs of disposal, could contribute to a reduction in illegal dumping of these materials (as lower disposal costs encourage appropriate disposal).

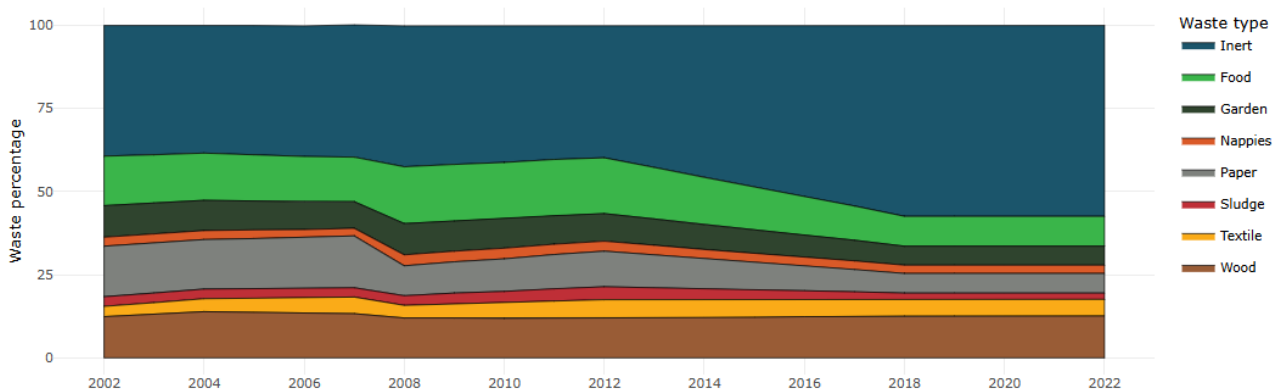


Figure 1: Waste percentages per waste type in Class 1 landfill ²³

²² <https://focusanalytics.co.nz/illegally-dumped-asbestos-beside-the-river-leaves-ratepayers-with-costly-clean-up-bill/>

²³ <https://environment.govt.nz/facts-and-science/waste/waste-facilities-and-disposal/>.