

RC215276 Woodstock Quarries Ltd – Application for Earthworks and Landfill

The responses in this table correspond to the numbering in the column to the left. Please note that the numbering on the left replaces bullet points in the RFI from WDC. This response is to be read in conjunction to the response from the Applicant dated 21 February 2022 to Request for Information 1 of 10 June 2021 from Environment Canterbury. The reference to Attachments in this response relate to the Attachments that accompany the response to Environment Canterbury.

Req	uest	Response
RFI	dated 15 June 2021	<u>. I</u>
1	 Drawing / Plans (a) Proposed designated location of stockpile areas of quarry material both long term and short term (b) Setbacks of stockpiles/excavation from boundaries and waterways (c) Layout and design of proposed waste drop off areas (d) Roads used for quarrying activities and for landfill activities (e) Location if all structures onsite, associated car parking facilities and the weigh station (f) Areas of wetlands and streams (g) Storm water channels/overland flow paths (h) Areas of hazardous substances and fuel facilities, storage etc 	 (a) The location of current stockpiles are shown on Drawing A4 of Appendix 2 Drawings Issue 2 (Attachment 8). These are likely to continue as long-term stockpile areas. Future stockpile areas are likely to be established in the floor of the proposed landfill area prior to the final shaping of the landfill basegrades. Other stockpile areas may also be established at other locations in accordance with the condition of the existing resource consents. These will be added to the Landfill Management Plan as and when established. During the first stage of development stockpiles of soil and clay will be established as shown on Drawing F3 of Appendix 2 Drawings Issue 2 (Attachment 8) (b) Stockpiles of quarry material are generally set back a minimum of 50m from boundaries and 20m from waterways. (c) The layout and design of the Container Transfer area is shown on Drawing F1 shown on Appendix 2 Drawings Issue 2 (Attachment 8). It is noted that the waste containers which are dropped off, and picked up, at the Container Transfer area are sealed and covered, and no waste is deposited at this location. Waste is only deposited within the active landfill area. (d) The roads used for quarrying activities and for future landfill area. (d) The roads used for quarrying activities and for future landfill activities are shown on Drawings B1 and B2 of Appendix 2 Drawings Issue 2 (Attachment 8). (e) The location of structures, carparking, and the weigh station, along with the Container Transfer area, is shown on Drawing F1 shown on Appendix 2 Drawings Issue 2 (Attachment 8).

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		 (f) The areas of wetlands and streams is shown on Figure 2.3 of Appendix 4A Hydrogeology Report 2 (Attachment 1). Additional information and mapping of wetlands is included in Appendix 6 Ecological Assessment and on Attachment 4 Letter from Ecology Consultant (g) Storm water channels/overland flow paths are shown on Drawing A3 shown on Appendix 2 Drawings Issue 2 (Attachment 8). (h) The location of current, and possibly future, hazardous substances and fuel facilities are shown on Drawing A5 shown on Appendix 2 Drawings Issue 2 (Attachment 8). 	
2	Consenting activity Please provide further clarification in terms of how the existing quarry will operate in conjunction with the staging operation of the landfill operation, as it remains unclear how the activities will operate in tandem. This should also include an assessment against the conditions of the consented quarry activities in terms of compliance with this resource consent to determine that the proposed landfill operation does not trigger any further consents/variations for the quarry as a section 91 matter. Please also provide a plan that shows the proposed areas of the proposed landfill operation in relation to the consented quarry area. It may be useful to superimpose these two activities over one site plan so that the Council can fully understand how these activities will collocate.	The existing consent RC185244 permits the Applicant to carry out quarrying activity over all the site, being all of Lot 1 DP481768 with conditions limiting the area that can be actively quarried, and conditions limiting the area of land that can be disturbed at any one time. The Applicant complies with these conditions. The proposed landfill, as shown on numerous drawings, overlaps the area which is consented for quarrying activity. This Application clearly defines the area which will be both quarried and landfilled and provides a detailed assessment of the potential impacts of this combined activity. The Applicant has also provided a comprehensive set of proposed Conditions of Consent to mitigate the effects of this combined activity. The Applicant's assessment is that no variations or further consents are required to carry out quarrying activity outside the area which is the subject of this current Application.	
3	Visual Please provide a Landscape and Visual Impact Assessment, prepared by a qualified landscape architect that assesses the potential landscape and visual effects of the proposed development including on the adjoining neighbours and wider public environment. This assessment is required to fully understand and assess the nature and extent of the visual and landscape effects of the proposal on the environment, given its location within the Buffer Outstanding Landscape Area.	As noted in our response dated 6 July 2021 the Application already contains an assessment of the visual effects of the proposed activities, including recognition of their location in the Buffer Outstanding Landscape Area. This is detailed in clauses 170 to 184 of the amended AEE dated May 2021. The Application has clearly identified the improvement in visual amenity that will achieved because of landfilling activity being added to the quarrying activity. It is therefore unreasonable to require a Landscape and Visual Effects assessment report. As discussed at the meeting on 12 August we have received proposals from Landscape Architects with fees of over \$15,000 to complete a Landscape and	

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		Visual Impact Assessment which will essentially repeat the assessment already completed by an experienced Land Use Planner in the AEE.	
4	Bunding Please provide further information on the bunding proposed (both internally within the quarry property boundary and the 'optional bunding' that is located within the neighbouring property) for this landfill operation as it is unclear how this bunding is incorporated into this consent. Will it be constructed prior to commencement of the first stage of the landfill or at a later stage? Also please provide more detailed cross sectional plans, drawn to scale of the proposed bunding along the adjacent properties or the 'optional bunding' that's located within the neighbours property.	The Applicant advises that the first stage of bunding on the Applicants property was completed some time ago under the consents that existed at that time. This bund provides visual screening, noise screening, and dust barrier to the current quarry activities and much of the future landfill activities at the eastern side of the site. The Applicant advises that the "Optional Bunding" shown on Drawing B3 of Appendix 2 Drawings Issue 2 (Attachment 8) is no longer proposed at this stage. The areas shown as Extraction Area B, Extraction Area D, Landscape Bund, and Southern Bund are also no longer part of the Application. These areas were not	
		essential to the proposed landfill construction.	
5	 Roading Please provide a traffic assessment report prepared by a suitably qualified person that assesses the following points: (a) Provide a traffic management assessment of the proposed day to day operations of the facility noting any conflicts in traffic with regard to heavy vehicles entering and exiting Trig Road, as well as utilising onsite access ways. The assessment should include onsite vehicle movements associated for both the landfill and quarry operation as they are proposed to operate concurrently. (b) Please provide a site plan addressing onsite traffic management. This plan shall illustrate the different terraces utilised within the facility including proposed waste and quarry material transfer areas, proposed areas designated for stock pile storage (Long and short), proposed areas utilised by employees (toilet, kitchen, officers etc), sediment retention pond area and how vehicles both big and small are to travel between 	The Application already contains an assessment of the day to day operations of the facility in relation to traffic movements. The Application clearly identifies that traffic movements of the combined quarry and landfill activities will be less than the 250 vehicle movements per day base line of the District Plan, and there will be a maximum of 76 vehicle movements per day over and above the number of movements permitted under the existing quarry consent. Any effects, including increased costs of road maintenance, of the additional traffic movements proposed on the roading network are already fully addressed by the Applicant having a road maintenance agreement between WQL and the Councils Roading Manager. This agreement remains as a living document and is subject to the satisfaction of the Councils Roading Manager. As agreed at the meeting with WDC and the Applicant on 12 August 2021 the following information is provided. (a) Drawing F2 of Appendix 2 Drawings Issue 2 (Attachment 8) shows the	
	these zones safely without creating points of conflict. (c) A designated onsite car park area will be required for the proposed site use. Please provide further information pertaining to this requirement including required number of car parks. Parking location and design.	location of the various sections of road discussed below. The labels on the drawing correspond to the labels below.	

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- (d) The detailed drawing labelled "Excavated Quarry" sheet 1 of 5, shows proposed roads to be utilised by the landfill and if they area one way or two way access roads. It is noted that some existing roads are not proposed to be used. Are these to be decommissioned or are they to be used for current quarry activities?
- (e) Please provide comments on the suitability of Trig Road for the use of the proposed heavy vehicles.
- (f) Please note that all internal access roads and Trig Road will need to be engineered assessed and upgraded where needed, so that all resulting storm water flows are appropriately managed and that the access way is stable and not subject to slip or erosion.

Trig Road Intersection. The existing entry where vehicles enter the site off Trig Road was installed under previous consents and has operated safely. The entrance has excellent visibility of over 400 metres to the west and approximately 50 metres to the east where Trig Road effectively ends with 90-degree bends to the left and to right into farm tracks. The Applicant has offered a Condition of Consent in Appendix 10A Proposed Conditions of Consent for WDC Land Use Consents Issue 2 to upgrade the Trig Road intersection to comply with WDC Standard Drawing 218.

Site Access Road (Right of Way)

The section of accessway from Trig Road to the Container Transfer / Site Facilities Area, is approximately 1.6km long and can only be used by customers of the site, service workers and staff. Signage will clearly advise that the road is not open to the public. The gates at Trig Road are locked when there are no staff on site.

This section of road will be used by the following vehicles:

- Truck and trailers hauling quarry products from the site
- Truck and tailers hauling waste to the site
- Contractors service vehicles
- Staff vehicles
- Fuel delivery trucks

As noted in the AEE for this Application it is expected that the peak traffic generation would just over 200 vehicles per day. The Applicant has offered a condition of consent in Appendix 10A Proposed Conditions of Consent for WDC Land Use Consents Issue 2 to upgrade the Site Access Rd (Right of Way) to a have a minimum carriageway width of 6.0 metres.

Site Roads.

The roads beyond the Container Transfer / Site Facilities Area will only be used by WQL staff, contractors that service on site vehicles and plant, approved contractor's truck and trailers accessing the quarry products stockpiles, the occasional fuel delivery truck, and specialist landfill construction contractors. All users of these roads will be fully inducted.

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Request	All the Site Roads will be designed, and maintained, in accordance with Section 5 Planning for Roads and Vehicle Operating Areas of the Worksafe Good Practice Guideline Health and Safety at Opencast Mines, Alluvial Mines and Quarries. In addition, WQL will be required to modify, and maintain, a Traffic Management Plan (TMP) that complies with the Health and Safety at Work Act 2015. This TMP is required to protect workers and visitors to the site and will be continually modified as the site is developed. The Applicant has offered a Condition of Consent in Appendix 10A Proposed Conditions of Consent for WDC Land Use Consents Issue 2 requiring Site Roads to be constructed and maintained to this standard. (b) Drawing F2 of Appendix 2 Drawings Issue 2 (Attachment 8) shows the location of the various sections of road discussed above. The labels on the drawing correspond to the headings used above. (c) Drawing F2 of Appendix 2 Drawings Issue 2 (Attachment 8) shows the location of the various sections of road discussed above. The labels on the drawing correspond to the headings used above. (d) Some of the Site Roads are currently not being used but could be in the future. Where Site Roads are to be recommissioned, they will be designed, and maintained, in accordance with Section 5 Planning for Roads and Vehicle Operating Areas of the Worksafe Good Practice Guideline Health and Safety at Opencast Mines, Alluvial Mines and Quarries. (e) The existing Trig Road is a typical unsealed rural road under the control of Waimakariri District Council (WDC). In accordance with Condition 9.1 of RC185244 the Applicant has a road maintenance agreement between WQL and the WDC Roading Manager. This agreement remains as a living document and is subject to the satisfaction of the Councils Roading Manager. The Applicant acknowledges that the small increase in traffic due to the proposed landfill activity may result in an increase in road maintenance required to meet the conditions of the road maintenance agreement.
	Access Road, and the Trig Road intersection will need to be upgraded and as noted in the responses above has proposed appropriate conditions of

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		consent in Appendix 10A Proposed Conditions of Consent for WDC Land Use Consents Issue 2.	
	6 Noise Please confirm the likely frequency and areas where it is likely that blasting may occur. It may be that blasting becomes more frequent than occasional, due to landfill demand. Please provide a noise assessment, prepared by a suitably qualified person that assesses the noise effects of blasting on near-by properties. This information is required to determine if the noise associated with blasting will comply with the relevant noise standards of the District Plan.	The Applicant cannot envisage any possibility that the quantities of incoming waste to the landfill would necessitate an increase in the pace of quarrying activity, with associated blasting, as the landfill airspace that has been created due to historical quarrying activity is significantly greater than that required for the foreseeable future. WQL acknowledges that blasting is an activity that is required to comply with AS2187.2. The existing quarry operation has never resulted in a noise complaint during it whole period of operation. Attachment 11 Letter from Mining Consultant provides further details of the potential impact of blasting at Woodstock Quarries.	
8	Earthworks Please provide further information on the degree of earthworks proposed for the purpose of contouring the site for the proposed land use. Is earthworks required on the site to create level terraces to accommodation buildings, car parking, turning areas, drop off zones etc?	Minor earthworks will be required to construct the Container Transfer Area, and associated buildings, carpark and turning areas. As this area is relatively flat the estimated volume of earthworks is approximately 500 cubic metres.	
9	Flooding The site is affected by flooding in a 1% and 0.5% flood eventsand vehicle access must be achieved in a 2% AEP event. As the current access ways cross the onsite overland flow path, please provide further information on the potential and actual flooding effects on the existing overland flow paths and adjoining properties.	The Applicant already has a resource consent from Environment Canterbury for the installation of culverts where the Woodstock Stream crosses the right of way to the main body of the Applicant's property. The Applicant acknowledges that part of the site, including the right of way access route is affected by flooding. At present the overland flow path is not hindered as the crossing of the existing waterways has three large culverts, as noted above, and in the event of high flows vehicles need to ford the stream. Over the last 17 years of operation access to the Woodstock Quarry site has never been blocked due to flooding.	

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		The existing crossing of the Woodstock Stream has been consented and engineered so that neighbouring properties are not affected.	
		As the site is only able to be accessed by the quarry and landfill customers using large trucks the Applicant is of the view that the request for access to be achieved in a 2% AEP event is unnecessary.	
10	Sediment retention pond Please provide preliminary design calculations and sediment pond dimensions for the proposed sediment pond located on the site. This also needs to include an assessment of effects of dam failure for the sediment pond in a large rain event, and whether or not people or property would be adversely affected by a potential breach of the storm water pond.	Details of the sedimentation pond design and operation are included in Section 4.7.2 of the Addendum to Appendix 5 Engineering Report (Attachment 3). Drawing C1 of Appendix 2 Drawings Issue 2 (Attachment 8) provides further details of the proposed sedimentation ponds. The extreme precipitation event pond is shown on Drawing B1 of Appendix 2 Drawings Issue 2 (Attachment 8). It is proposed that the sedimentation ponds will be constructed in the ground, rather than constructing an above ground dam. There will be primary overflow structure that will discharge to the Woodstock Stream, and a secondary overflow weir that will discharge into the gully to the south of the proposed sedimentation ponds. The detailed design of these structures will be subject to review by the Peer Review Panel prior to being submitted to Environment Canterbury. The	
		preliminary design for the extreme precipitation event pond is that will have a capacity of approximately 1000 cubic metres of total storage. This pond is primarily intended to attenuate the flow before it discharges into the Woodstock Stream.	
11	Rehabilitation Please provide further information on how the site will be rehabilitated as each stage progresses and works are completed. (a) Will the existing ground levels be maintained and what form of rehabilitation will this look like ie: soil and rehabilitative planting?	(a) Drawing B2 of Appendix 2 Drawings Issue 2 (Attachment 8) shows the remediated surface and Detail C of Drawing C1 in Appendix 2 Drawings Issue 2 (Attachment 8) shows the sequence of rehabilitation	

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	 (b) Is there a timeframe when these rehabilitation works will be completed for each respective stage or as a whole? (c) Will a rehabilitation management plan be provided? (d) Given the large area to rehabilitate, please confirm how much soil for remedial planting would be anticipated to truck in? (ie: volume in cubic meters and also in terms of number of truck loads). Will these increase the potential number of vehicle movements to the site and require a revision of your traffic numbers outlined within the application? 	 (b) The site rehabilitation is dependent on the rate at which waste is received at the site. Detail C of Drawing C1 in Appendix 2 Drawings Issue 2 (Attachment 8) shows the sequence of rehabilitation (c) A Landscape Management Plan will be incorporated into the Landfill Management Plan. The Applicant has offered a condition of consent confirming this. Details of the rehabilitation completed, and future rehabilitation will also be included the Landfill Annual Report. (d) The rehabilitation of the landfill will primarily be completed by using the highly weathered materials that are stripped off as overburden for future stages of the quarry operation. The preliminary location of stockpiles of soils and clay for the capping system are shown on Drawing F3 in in Appendix 2 Drawings Issue 2 (Attachment 8). It is not considered necessary to import any materials for complete the rehabilitation. 	
12	Geotechnical Please provide a geotechnical assessment that assesses any potential risk to infrastructure, roading and points of congregation in regards to natural hazards such as (but not limited to) landslide and flooding. The report shall take into account any proposed future earthworks to create level terraces for infrastructure and accesses and provide earthworks recommendations and building setbacks requirements.	Appendix 3 Geology Report includes a detailed assessment of the identified geotechnical characteristics of the site. The detailed design for each stage of the works will require the production of a design report that will include a geotechnical assessment, including the potential impact of natural hazards. The design of each stage will be subject to review by the Peer Review Panel prior to being submitted to Environment Canterbury, and / or Waimakariri District Council.	
13	Fire Hazard C and D waste landfills have high operational risk to fire. As such, please provide a fire management assessment for the site. Council recommends that you consult with FENZ to address any fire management and risk issues and how such a situation would be managed and resolved. These comments and feedback should be incorporated into a Fire Management Plan.	The risk of a fire has been assessed as high due to the proximity of the forested areas to the east of the site, and a fire coinciding with a strong northwest wind. However, the close proximity of earthmoving equipment at the landfill and quarry means that a firefighting plan could be quickly implemented. The perimeter road also acts as a firebreak and enables ready access for machinery. There are also a considerable number of helicopters within 50km of the site that can be quickly mobilised for firefighting.	

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14	Earthquake hazard and liner repair Please provide detail of the seismic environment and the level of expected	The Applicant confirms that there will be always a water truck on site which would be able to quickly respond to a fire. The Applicant also proposes to install approximately five large water tanks on the hill above the landfill that will be kept full for firefighting. A 100mm gravity water main, with fire hydrants at key locations, will be installed on the eastern perimeter road. All staff on site will be required to receive basic firefighting training to NZQA Unit Standard 9020 within three months of commencing employment on site. While most of the quarry and landfill is well screened for dust, noise, and visual amenity purposes the general site area is visible by neighbours and road users who would be able to raise an alarm. Most of the quarry and landfill staff live locally and can attend to a fire at short notice. The Applicant acknowledges that FENZ are able to provide assistance and proposes to consult with FENZ in preparing a Fire Management Plan as part of the Landfill Management Plan.
	ground shaking to be provided for in the design. Additionally, describe how the design accommodated the identified seismic conditions and any associated ground movement. Further clarification on how cells will be repairs and monitored after an earthquake event, if damage was to occur, should also be provided.	seismic conditions and expected ground movements. Section 9.3 of the Addendum to Appendix 5 Engineering Report (Attachment 3) provides further details of the seismic risk to the landfill and how this will be mitigated.
15	Leachate and monitoring wells for the wider community Please provide more clarification of ongoing leachate monitoring and testing onsite. Is periodic testing of the lower water aquifers for contamination going to occur and if so, to what extent.	These matters are all addressed in Appendix 4A Hydrogeology Report 2 (Attachment 1).

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		Appendix 10 Proposed Conditions of Consent Issue 2 (Attachment 7) has been amended to include further details of the proposed surface water and groundwater monitoring.	
16	Servicing amenities Please provide information on the proposed locations and servicing of onsite amenities (toilets, showers, lunchroom, offices).	Section 7 of Appendix 5 Engineering Report, and Section 7 of the Addendum to Appendix 5 Engineering Report (Attachment 3) provides details regarding these facilities. A drawing showing the location and layout of these facilities is shown on Drawing F1 of Appendix 2 Drawings Issue 2 (Attachment 8).	
17	Storm water The proposed location of the onsite sediment ponds is to accommodate storm water runoff from the top of the hill (landfill area) down to the sediment ponds. Please provide further clarification on how the applicant proposes to manage storm water runoff from the car park area, run off from access roads and the designated amenities area.	Stormwater runoff from the catchment of the carpark, Container Transfer area and the other parts of the facilities area will be directed to a sedimentation pond as shown of Drawing F1 of Appendix 2 Drawings Issue 2 (Attachment 8). Runoff from the access roads will continue to be directed to the existing natural flowpaths. In some locations soak pits may be required. The Applicant will prepare an Erosion and Sediment Control Plans (ESCP) in accordance with Environment Canterbury Erosion & Sediment Control Toolbox For Canterbury. Where the Environment Canterbury Erosion & Sediment Control Toolbox For Canterbury does not cover a particular situation GD05 Erosion and Sediment Control Guide for Land Disturbing Activities in the Auckland Region will be utilised.	
18	Onsite processing Please clarify the processing of waste acceptance and how that will work with regards to traffic and vehicle parking at the waste drop off zones; (a) What waste will be accepted (b) Timeframes between drop off and the waste being reviewed and accepted/declined (c) What will happened is waste is not accepted (d) Where will it be temporarily stored	 (a) The Applicant has provided details of what wastes are accepted in Appendix 10 Proposed Conditions of Consent Issue 2 (Attachment 7). Appendix 10 Draft Landfill Management Plan Issue 2 (Attachment 6) includes details of the waste acceptance processes. Hazardous waste that 	

Request (e) Will trucks wait onsite to get clarification if waste is acceptable (f) As ACM testing going to be accepted and if not, how will testing be completed (g) How will waste be transferred from the waste drop-off zone into the landfill (h) How long will waste be held in the drop off zone before being transfer to

the landfill

wind blown material

(i) Will there be screens around the temporary storage area to catch any

(b) Apart from demolition waste that can be visually assessed all other wastes are subject to a certification process. This involves the issuing a Special Waste Permit (SWP) for a specific waste stream for a waste generator. In the case of the remediation of a specific site the SWP will be specific to that site and for each batch of the materials to be removed from that site. Any hazardous waste treatment will be required to be carried out off site by the waste generators, or at a specialist hazardous waste treatment facility. Infectious substances and radioactive material will not be accepted at the proposed landfill. All testing of soils will be required to be carried out at the source site before they are dispatched to the landfill. In addition, WQL will undertake audits of the waste generators processes, and carry out random sampling / testing of soils either at the waste generators site or at the landfill.

The management and administration of the waste acceptance processes will be under the supervision of an experienced environmental engineer or technician. The engineer or technician will provide training and guidance for the staff working in the landfill. All testing of soils will be required to be carried out at the source site before they are dispatched to the landfill. In addition, WQL will undertake audits of the waste generators processes, and carry out random sampling / testing of soils either at the waste generators site or at the landfill. The Applicant has proposed conditions in Appendix 10 Proposed Conditions of Consent Issue 2 (Attachment 7) that will require all soils to be subject to the same waste acceptance processes. For some waste steams this will include initial testing for total contaminants as a screening test, followed by a TCLP testing if required. For other waste streams TCLP testing will be mandatory. Under this process all wastes, except demolition wastes must be pre-approved so there is no delay at the site.

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	(c) In the unlikely event that a load arrives on site and there is suspicion that it is not as described on the manifest and Special Waste Permit the container will be "quarantined" on the Container Transfer Area. Sampling and testing of the material will be undertaken by WQL at the waste generators cost. The container will remain in "quarantine" until the test results are received. If the WAC is met the container will be unloaded in the landfill. If the tests results do not meet the WAC the container will need to be taken away by the waste generator and the noncompliance will immediately be reported to Ecan. In the unlikely event that a load arrives at the tip area of the active landfill and there is suspicion that it is not as described on the manifest and Special Waste Permit the waste will not be spread out but will be loaded back into the container at the waste generators cost. Sampling and testing of the material will be undertaken by WQL at the waste generators cost. The container will remain in "quarantine" until the test results are received. If the WAC is met the container will be unloaded in the landfill. If the tests results do not meet the WAC the container will need to be taken away by the waste generator and the noncompliance will be immediately reported to Ecan.
	(d) In the unlikely event that a load arrives on site and there is suspicion that it is not as described on the manifest and Special Waste Permit the container will be "quarantined" on the Container Transfer Area. Sampling and testing of the material will be undertaken by WQL at the waste generators cost. The container will remain in "quarantine" until the test results are received. If the WAC is met the container will be unloaded in the landfill. If the tests results do not meet the WAC the container will need to be taken away by the waste generator and the noncompliance will immediately be reported to Ecan. In the unlikely event that a load arrives at the tip area of the active landfill and there is suspicion that it is not as described on the manifest and Special Waste Permit the waste will not be spread out but will be loaded

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		back into the container at the waste generators cost. Sampling and testing of the material will be undertaken by WQL at the waste generators cost. The container will remain in "quarantine" until the test results are received. If the WAC is met the container will be unloaded in the landfill. If the tests results do not meet the WAC the container will need to be taken away by the waste generator and the noncompliance will be immediately reported to Ecan. (e) No (f) ACM is subject to the same process as described in (b) above (g) The Applicant confirms that waste is received at the Container Transfer Area. This is the area where sealed and covered waste containers will be unloaded from road truck and trailers. The containers will then be uplifted by specialist off road trucks to transport the waste containers to the active landfill face where the containers are unloaded. The empty waste containers are then transported back to the Container Transfer Area for collection by the road truck and trailers. The waste containers can be visually inspected when they are dropped off at the Container Transfer Area. No waste is deposited at the laydown area. (h) Most of the waste will be transferred to the active landfill face on the day it arrives on site, but any waste that arrives after around 3pm will be taken to the face early the next working day. (i) There will be a 1.8 metre fence around the Container Transfer Area for security and safety purposes but as the waste is in sealed and covered containers there is very little opportunity for wind blown waste to be generated.	
19	ACM Please provide further information about how ACM and airborne asbestos will be monitored and managed at the site to reduce the risk to onsite workers and soil contamination of the wider area	The Applicant is fully aware of the significance of asbestos in the waste stream and as potential contaminant in the air. The Applicant understands that it will need to comply with the Asbestos Regulations 2016 which are administered	

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		by Worksafe NZ. The landfill will be required to have an Asbestos Management Plan. Section 4 of Appendix 10 Draft Landfill Management Plan Issue 2 (Attachment 6) provides updated details of the management of air borne contaminants, with a specific section on asbestos management.	
20	Contamination of soils outside the landfill area Please provide a further review of the onsite operation systems on the site and identified zones where contamination to the site (outside the landfill pit) may occur and how you plan to manage the issue.	This matter is addressed in Section 7.7 of the Addendum to Appendix 5 Engineering Report (Attachment 3)	
21	Tonkin and Taylor Compliance Review Clarification of identified issues 1 – 12 and 15 to 39.	The response to these items is included in the document called "Woodstock Landfill Response to Ecan RFI1_Tonkin and Taylor Section"	
	RFI as detailed in email from Ian dated 14 July 2021		
	The RFI requested further traffic assessment be completed by a suitably qualified person in order to provide Council with further clarity on the functionality of the proposed operation in regards to vehicle movements, loading and manoeuvring. Under the current information provided council has been provided with a site plan identifying how some of the existing internal roads/access ways will be utilised under the proposed landfill operation and if they will be designated one-way roads or two-way roads. However, very little information on existing roading environment, safety and stability of the existing roads/access ways, onsite loading and manoeuvring of vehicles onsite particularly at the proposed loading/ drop off area and whether or not there is potential for internal traffic conflicts". "Council also has concerns regarding the land use in regards to roading are detailed below that need to be addressed as part of this traffic assessment;	The requirement that a further traffic assessment be completed by a suitably qualified person is at odds with the advice provided in lan's email of 8 July 2021, and WQL is of the view that this is unreasonable. The Applicant has also proposed a condition of consent in Appendix 10 Proposed Conditions of Consent Issue 2 (Attachment 7) that a Traffic Management Plan (TMP) that complies with the Health and Safety at Work Act 2015 will be provided as an addendum to the Landfill Management Plan (LMP) prior to the commencement of the waste filling operation. The Applicant wishes to clarify that waste haulage road trucks will not proceed beyond the proposed drop off / pick up area, which the Applicant has labelled as the Container Transfer. The full waste containers will be dropped off at the Container Transfer by the road trucks and load up the emptied containers. The waste containers will be picked up from the Container Transfer area by a specialist all wheel drive vehicle (often called a Mule) that will take the containers to the active face, empty the containers, haul the containers back to	

Request

(a) Onsite loading and manoeuvring within the proposed drop off area for the proposed larger road haulage trucks and hook trucks. Is earthwork required to create a larger platform

Response

- (b) The feasibility of two lane manoeuvring of the larger road haulage trucks along Trig Road up the hill side. There may be vehicle conflicts from two larger road haulage trucks on this road especially at the road bends.
- (c) Is there going to be traffic conflicts onsite between trucks involved in the land use activity and those trucks involved in the quarry activity?
- (d) Design, location and number of car spaces for the proposed carpark.
- (e) Are there going to be any areas where people walking from the proposed offices, carparking area, toilets ect will have to cross or walk along designated vehicle access roads.
- (f) Are the roads adequately designed for the heavy vehicles proposed and are there potential slope instability issues o road upgrades needed.
- (g) Are there any potential internal traffic conflicts?

required to facilitate this?

(h) Will the onsite vehicle movements generated by the quarry activity occur simultaneously as the landfill activity and whether or not they will be following the same traffic plan. Form the site plan provided there are additional internal access roads onsite which were not proposed to be utilised, is this because they area to be utilised for quarrying land use only? And if so are sightlines where these roads intersect clear?".

"Due to the nature of the land use and types of vehicles proposed traffic conflicts and roading instability is deemed a high hazard and as such a suitably qualified traffic engineer should assess the existing roading environment, traffic generated, road safety, site access, onsite loading and manoeuvring against NZ standards and the WDC district plan. An assessment with regards to the proposed parking area should also be included in this assessment along with design plans and location plans".

the Container Transfer Area, and unload the waste containers ready for collection. The roads that are used by the mules are also being used by plant that are involved in the quarry operation. As shown on Drawing B2 of Appendix 2 Drawings there is a dedicated one-way uphill route and a dedicated one-way downhill route. All the quarry / landfill vehicles and plant operating around the site will be equipped with a 2-way radio system and each vehicle driver will be able to hear what is happening around the site and communicate with the

other operators. The potential for conflict beyond the drop off / pick up is

minimal. The responses to the specific questions are noted below.

- (a) Earthworks will be required to construct the Container Transfer Area. As this area is relatively flat the estimated volume of earthworks is approximately 500 cubic metres, mainly being topsoil to be used for rehabilitation and landscaping around the facilities area.
- (b) As noted above waste haulage road trucks will not proceed beyond the proposed drop off / pick up area and the steeper roads will only be accessed by specialist plant used by both the landfill and the guarry.
- (c) With the one-way traffic system in place there is minimal conflicts between the landfill mules and the quarry trucks.
- (d) The design, location and number of carparks is shown on Drawing F1 of Appendix 2 Drawings of the Application
- (e) The only area where people will be crossing designated vehicle access roads is to cross from the Container Transfer area to the toilets of the site amenities area. This will only be occasional use.
- (f) The roads beyond the Container Transfer Area are suitable for the specialist mules and quarry vehicles and will be designed and maintained in accordance with Section 5 Planning for Roads and Vehicle Operating Areas of the Worksafe Good Practice Guideline Health and Safety at Opencast Mines, Alluvial Mines and Quarries. In addition, WQL will be required to modify, and maintain, a Traffic Management Plan (TMP) that complies with the Health and Safety at Work Act 2015. This TMP is required to protect workers and visitors to the site and will be continually modified as the site is developed.

(g) There are minimal internal traffic conflicts, an speed environments. (h) WQL will be required to modify, and maintain (TMP) that complies with the Health and Safe	
is required to protect workers and visitors to modified as the site is developed. As noted in the responses above the Applicant had Consent that all the Site Roads will be constructed accordance with Section 5 Planning for Roads and the Worksafe Good Practice Guideline Health and Alluvial Mines and Quarries. The proposed parking areas and the location of sweigh station, along with the Container Transfer shown on Appendix 2 Drawings Issue 2 (Attachmatical Carparking requirements is based on the Application number of vehicles on site at any one time. It is no carparking is no longer included in the District Plate.	in, a Traffic Management Plan fety at Work Act 2015. This TMP of the site and will be continually thas offered Conditions of feed and maintained in find Vehicle Operating Areas of find Safety at Opencast Mines, structures, carparking, and the for area, is shown on Drawing F1 ment 8). The assessment of fants assessment of the likely finded that requirements for