www.nzta.govt.nz

Level 5, AON Centre
29 Customs Street West
Private Bag 106602
Auckland 1143
New Zealand

18 March 2024

Michele Schitko-Saboonchi / Vanessa Leddra
Auckland Council
By email to:
michele.schitko-saboonchi@aucklandcouncil.govt.nz
vanessa.leddra@aucklandcouncil.govt.nz

Dear Michele and Vanessa

Bombay Commercial Vehicle Safety Centre – Response to Section 92 RMA Request for Further Information

Thank you for your further request for information dated 29 February 2024, received 01 March 2024. Our response to the request is attached.

All of the information requested in the Council's letters of 30 November 2023 and 29 February 2024 has been provided. In this case, please can you complete your notification determination and statutory processing to recommend confirmation of the designation and grant of the consents sought.

The statutory process to date has been longer than anticipated. Waka Kotahi is now underway with procurement for the construction phase, Please can you provide a specific timeframe for next steps in the statutory process, with reference to the statutory timeframes as set out in the RMA.

Yours sincerely

Belinda Petersen
Principal Planner – Poutiaki Taiao / Environmental Planning

Attachment: Memorandum from WSP dated 18 March 2024.

Memorandum

To	Michele Schitko-Saboonchi and Vanessa Leddra, Auckland Council
Copy	Belinda Petersen, Nitin Sahare, Burges Daruwala, Alisdair Simpson
From	Tina Kalmar
Office	Auckland
Date	18 March 2024
File/Ref	1-C1875.08
Document Code	5C4353-WRP-04-MM-PL-1002_Rev C (WSP-WRP-RFI-015)
Subject	Bombay CVSC Notice of Requirement and Resource Consent BUN60427410 - s92 Further Information Request 29 February 2024

This memorandum provides responses with further information as requested from processing planners, Michele Schitko-Saboonchi (Resource Consent, RC) and Vanessa Leddra (Notice of Requirement, NOR) for Auckland Council, in regard to the consent application dated 24 October 2023, as summarised in Table 1.

The request follows the first information response provided by Waka Kotahi on the 26 January 2024 to Auckland Council.

Each request and its number is detailed, followed by the response provided by WSP in Table 3.

Table 1 - Summary Information for Consent No BUN60424934

Information	Details
Application number(s)	BUN60424934
Applicant	New Zealand Transport Agency Waka Kotahi (requiring authority)
Address:	253 Mill Road, Bombay Auckland

1. List of Attachments

Table 2 lists the Appendices provided with this response. As a number of drawings have been updated post-lodgement, or new drawings added to provide further information, a Drawing Schedule with document codes, identifying those that are new or have been amended is provided in **Attachment H**.

WSP
Auckland
Level 3 The Westhaven
100 Beaumont St
Auckland 1010, New Zealand
+64 9 355 9500
wsp.com/nz

Table 2 - Attachments

Attachment No.	Description	New or Updated Report/ Appendix
A	Attachment A – Copy of s92 response submitted to Auckland Council 26 January 2024	Reference copy, as Lodged
B	Attachment B – Further Information responses submitted to Auckland Council 18 March 2024 (Tabled within this Memorandum)	New
C	Attachment C – Terramesh Wall Drawing Sheet C-3011	Updated
D	Attachment D – Indicative Erosion and Sediment Control Plan (includes amended Drawings C-300 and C-3101)	Updated
E	Attachment E – Geological Cross section C-0041	Updated
F	Attachment F – Bombay Interchange Signalisation Plans	New
G	Attachment G - Site Distance Assessment	Updated
H	Attachment H - Drawings Schedule	Updated

Attachment B. Response to Further information request received 29 February under s92 RMA

Table 3 – Unresolved requests and Further Information responses

Section 92 Request for Information: BUN60424934 – tracking 29 February 2024				
Item	**Original Information request (30 November 2023)**	**Applicant's Response (26 January 2024)**	**Council further information request (29 February 2024)**	**Applicants Response (18 March 2024)**
Landscape (NOR)				
RFI 5	Clarification: Please confirm the maximum height of the terramesh walls. The LVA and AEE note that the terramesh walls are to have a maximum height of 3.7m and 1.8m high. However, the detail drawings (page C-3011 (Rev 0A)) annotates the walls as having a maximum height of 4.2m and 2.5m high. An additional 500mm and 700mm on top of already high walls and fencing is a significant structure to mitigate the effects of the increase in height from 1.8m – 2.5m and 3.7m – 4.2m may impact on the assessment undertaken in the LVA or the planting required for mitigation.	Refer to separate Memorandum dated 26 January 2024 in **Attachment A**, specifically response on p.6.	The response notes that the height of the walls are to be a maximum of 3.7m and 1.8m high as shown on the detail drawings (C-3005 and C-3006 Rev A). However, Appendix 15 in the further information response (Appendix 15_5C4353-WSP-54-DR-C-3011 Retaining Wall Detail) still annotates the walls at heights of 4.2m and 2.5m high. Therefore, it is still unclear in the documentation what the final height of the walls will be.	For clarification, the landscape response refers to the visible max. height of the Terramesh (Type 1) wall which is 3.7m (due to the incline), as the key matter concerned any visual or landscape effects from height/elevation. The retaining height including base is confirmed as 4.2m max as shown on C-3011 submitted with **Attachment A** as Appendix 15. The dimensions shown in C-3006 (**Application** – Part C-Appendix B – General Arrangement Plans) have now been updated to the actual design height to be consistent with other drawings supplied. The updated plan is provided in **Attachment C**.
Transport (NOR)				
RFI 15	Traffic Modelling Provide evidence that demonstrates that the base traffic model for the SH1 interchange, including the Great South Road / Mill Road roundabout is calibrated and represents actual operating conditions.	Refer to separate Memorandum dated 26 January 2024 in **Attachment A**., specifically response on p.10.	No further information provided. Need to better understand model calibration. RFI Response 15 states that the applicant does not have access to the models. However, RFI response 16 indicates that the models have been updated.	WSP have checked the response to RFI 15 and RFI 16 and confirm this did not mention the modelling had been updated but rather the data checked and analysed as being sufficient to support the TIA and the conclusions therein that the potential effects of the CVSC on the traffic network are less than minor.
RFI 16	Traffic Modelling Update the modelling to include the correct number of inbound trucks (8) at the northbound	Refer to separate Memorandum dated 26	States modelling has been updated and confirms that the revised number of trucks can be accommodated.	Response to RFI 12 and RFI 16 had noted an update was made to the HCV volumes in the reassessment of the AADT, not the model (i.e. phasing and timing). This was

WSP
Auckland
Level 3 The Westhaven
100 Beaumont St
Auckland 1010, New Zealand
+64 9 355 9500
wsp.com/nz

Section 92 Request for Information: BUN60424934 – tracking 29 February 2024				
Item	**Original Information request (30 November 2023)**	**Applicant's Response (26 January 2024)**	**Council further information request (29 February 2024)**	**Applicants Response (18 March 2024)**
	off-ramp and to include outbound trucks from the CVSC site. Provide an assessment of the operation of the SH1 interchange including the Great South Road / Mill Road roundabout with the revised modelling.	January 2024 in Attachment A, specifically response on p.11.	Modelling should be provided.	to ensure the data was updated to reflect the increase in HCV volumes since 2021. We also refer back to the RFI 12 response (and Table 1) for a description of this. As RFI 12 mentioned, up to 17 vehicles will be directed to the CVSC, which means an average of 8.5 HC vehicles in each direction (northbound/southbound) arrivals at the Interchange from SH1. A further desktop assessment undertaken by WSP to address RFI 16 confirms that an additional 9 traffic movements in the right turn lane of the northbound off-ramp will have a minimal impact on the operation of the SH1 interchange. The reasons for this assessment are described in following: 1. In Section 6.1.5 of the TIA report, the modelling result shows that with 6 additional vehicle movements in the northbound off-ramp, it will reach capacity and result in a queue length of 43 meters (Deg. 0.974). Assuming 3 more HCVs are added in the right turn lane of the northbound off-ramp, the queue length may extend to 88 meters (43m +15m x3 HCVs) as illustrated in Figure 1. However, this queue does not reach the merging lane with the separated left-turn bypass, which is 290 meters away (as shown in Figure 2), nor does it affect the SH1 lanes, which is 535 meters from the stop lane (as shown in Figure 3). Additional 9 vehicles queue length of 88 meters:

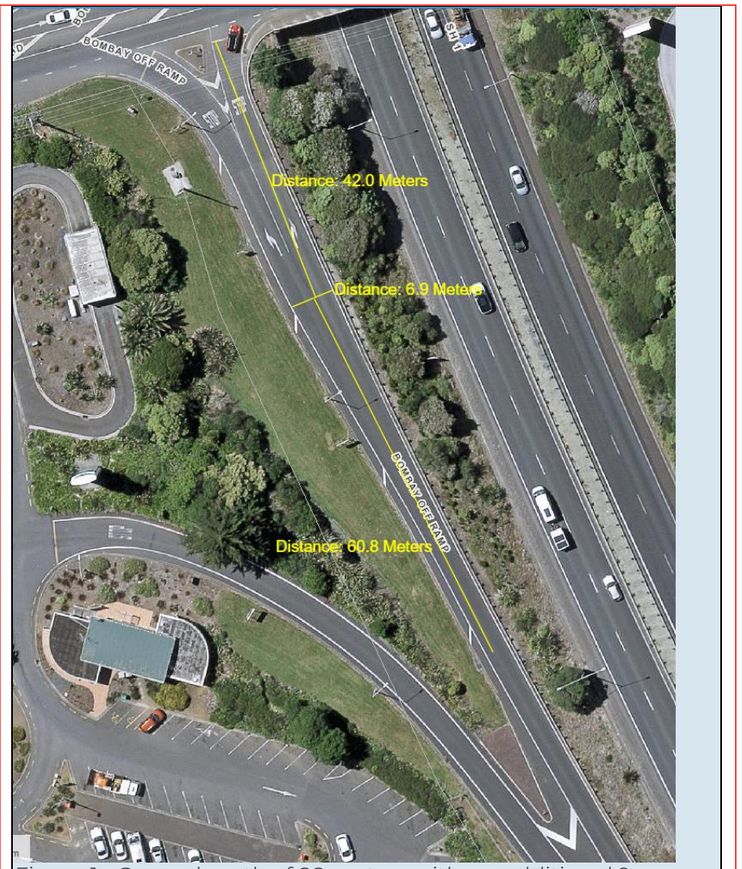


Figure 1 - Queue length of 88 meters with an additional 9 vehicles at the northbound offramp

290m distance between the stop line and the merging lane of the left turn lane:

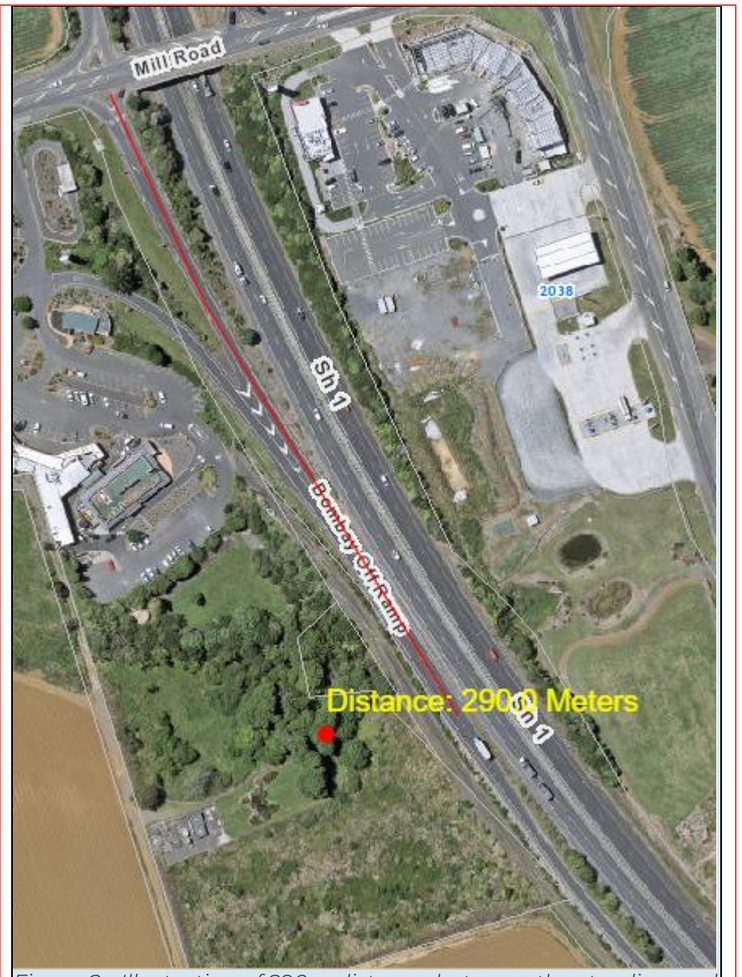


Figure 2 - Illustration of 290m distance between the stop line and the merging line of the left turn bypass onto Mill Road

535m distance between the stop line and the merging line of SH1:

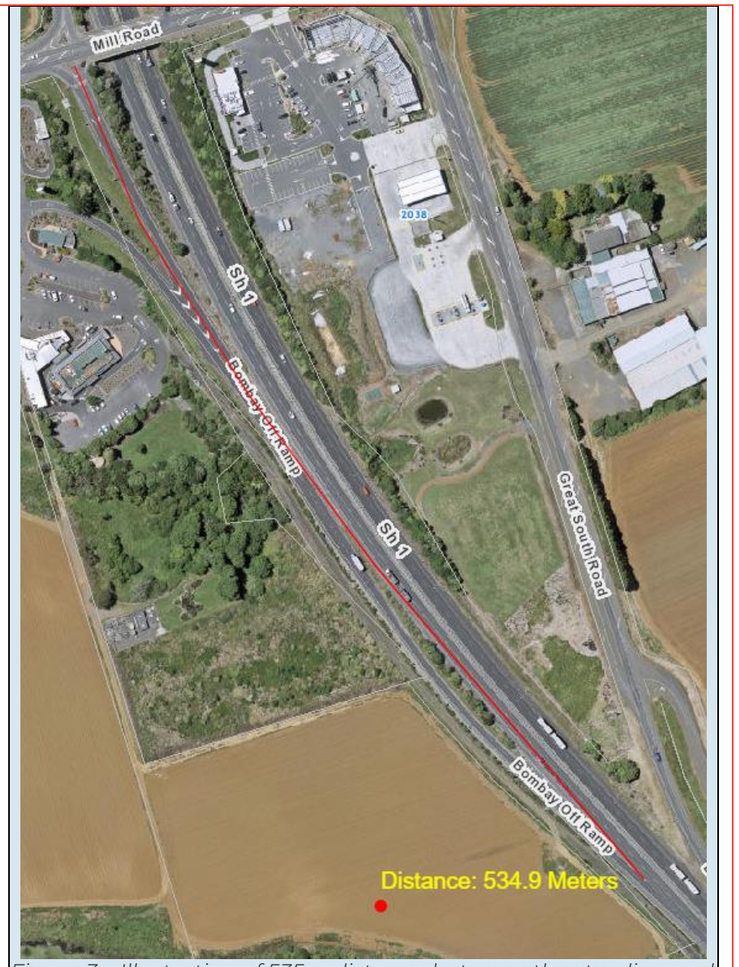
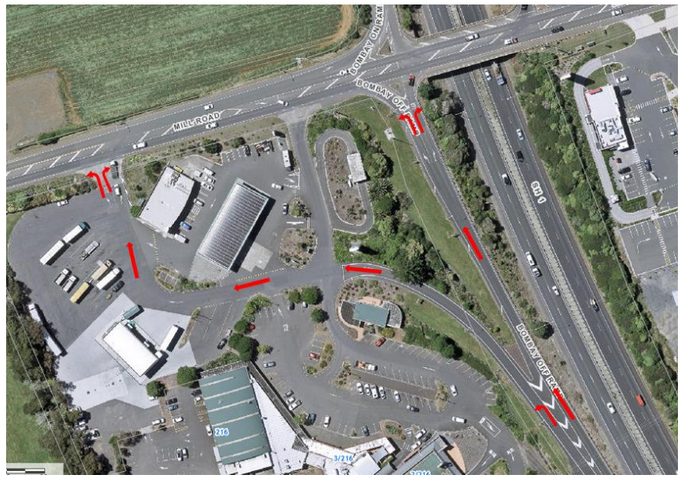


Figure 3 – Illustration of 535m distance between the stop line and the merging line of SH1

2. Vehicles can also utilize the separated left-turn bypass before reaching the intersection if queues are present, as shown in Figure 4 below. This alternative route would ensure left-turn vehicles are not affected by right-turn queue length.

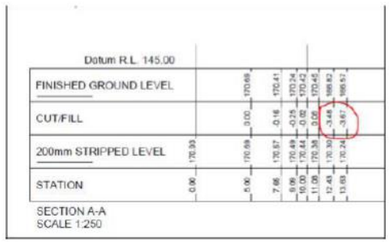
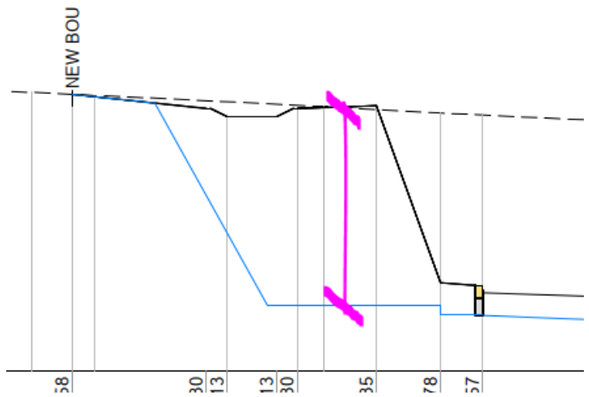
Section 92 Request for Information: BUN60424934 – tracking 29 February 2024				
Item	**Original Information request (30 November 2023)**	**Applicant's Response (26 January 2024)**	**Council further information request (29 February 2024)**	**Applicants Response (18 March 2024)**
				 *Figure 4 - Illustration of separated left-turn lane before reaching the intersection if queues are present* 3. Although WSP could not update the model, the desktop assessment as part of the s92 response finds an additional 9 right-turn movements (being assumption of worst-case scenario) could maintain the same level of service (E) as described in the TIA report section 6.1.5 and Figure 6-4, observed in 6 more right-turn movements. 4. The truck volumes directed to the CVSC can be managed by the operator remotely to ensure responsive management of HCVs directed to the CVSC based on traffic volume conditions.

Section 92 Request for Information: BUN60424934 – tracking 29 February 2024				
Item	**Original Information request (30 November 2023)**	**Applicant's Response (26 January 2024)**	**Council further information request (29 February 2024)**	**Applicants Response (18 March 2024)**
RFI 18	Traffic Modelling Provide an assessment of the safety and operational effects of the long delay times for the right turn movement from the northbound off-ramp with the addition of CVSC traffic, including any mitigation proposed to manage potential safety or operational effects.	Refer to separate Memorandum dated 26 January 2024 in **Attachment A**., specifically response on p.12.	Response of NZTA has confirmed signalisation in 2024 is noted. Layout of intersection required including interim upgrades mentioned to confirm that the modelling represents the proposed design. Measures for mitigation re. monitoring of ramp and amending operation of the CVSC. A condition may be required in this regard.	Monitoring of network performance, and where needed, amendments to operation (e.g. signal phasing) occurs as part of typical operation of the state highway network. No RMA condition is needed for this. Upgrades at the Bombay Interchange and interim road environment are proposed to address existing issues. Construction commencement of these works is planned for May 2024 and completion by late 2024. These improvements will ensure a safe and efficient operating environment for the proposed CVSC. Plans of the proposed Bombay Interchange signalisation installations are provided in **Attachment F**.
RFI 19	Traffic Modelling Provide summary SIDRA Lane and Movement outputs for the signalised arrangements at the northbound and southbound off-ramps in scenarios with and without CVSC development traffic.	Refer to separate Memorandum dated 26 January 2024 in **Attachment A**., specifically response on p.13.	Only results with the CVSC have been provided. No results with the CVSC. Due to the poor operation of the without scenario the addition of more heavy vehicles could have a significant impact.	As stated in the s92 response, the assessment has established the base case/status quo scenario without the CVSC as well as two scenarios with the CVSC (either with or without signalisation). We reiterate the CVSC scenario is flexible to meet the operational conditions on the network at any time such that effects of additional HCVs on the network can be appropriately managed and mitigated such that the effects from the CVSC operations will be less than minor.
22 [24 in SME's list]	Operational Plan Provide a copy of the recommended Operational Plan as referenced in Section 7.1 of the TIA	Refer to separate Memorandum dated 26 January 2024 in **Attachment A**., specifically response on pp.15 - 16.	Operational Plan not provided. Would be helpful as this would help understand measures to manage the effects of the operation of the site.	Waka Kotahi has a general operational plan for the operation of CVSCs throughout the country. The plan outlines consistent procedural operations and procedures for each CVSC shall be provided across the sites (i.e. roles and responsibilities for safe workplace operations, and parameters for screening vehicles). The general parameters for the Bombay site have been described in section 2.3 of the AEE in sufficient detail to enable an assessment of effects relevant to the RMA process.
23 [25 in SME's list]	Vehicle Access Provide an assessment of visibility for the:	Refer to separate Memorandum dated 26 January 2024 in **Attachment A**., specifically response on p.16.	No assessment (desktop or on-site) provided of the realigned vehicle crossing north of the site.	A Road Safety Audit (Reference: 19359, October 2022) was undertaken of the detailed design by Traffic Planning Consultants Ltd and Colin Brodie Consulting Ltd, an independent review and approval by safety

Section 92 Request for Information: BUN60424934 – tracking 29 February 2024				
Item	**Original Information request (30 November 2023)**	**Applicant's Response (26 January 2024)**	**Council further information request (29 February 2024)**	**Applicants Response (18 March 2024)**
	• Vehicle crossing at the site entry Vehicle crossing at the site exit • Realigned vehicle crossing along the northern boundary of the CVSC site Note: The assessment should be provided for the driver's eye height for both cars and trucks.		No on-site assessment provided of the sight distance from the exit from the site. Desktop assessment is based on Streetview which has a high view point of each image whereas SISD requires the driver eye height to be 1.1m. This will be a factor given the topography of Great South Road north of the site. Appears that the location of the entrance to the site shown on the aerial on page 5 of the PDF is located more southerly than the proposed entrance. Further assessment is required of the sight distances as outlined above.	engineers to identify any safety concerns that may affect the safety performance of the site. The audit also included a site visit. The safety audit team considers the safety of all road users and qualitatively reports on road safety issues or opportunities for safety improvement. A road safety audit therefore constitutes a formal examination of a road project, or any type of project which affects road users (including cyclists, pedestrians, mobility impaired etc.), carried out by an independent competent team who identify and document road safety concerns that are then referred to the design team. WSP design team confirmed actions in accordance with the RSA in November 2023. With regards to the SISD provided in *Appendix 7* to the 26 Jan s92 response, it is acknowledged the inset aerial image may show a proposed entry slightly more southerly than intended, but illustrated for explanatory purposes. WSP confirms the proposed entrance is as shown in the s92 general arrangement plan updates (*Appendix 8*, Jan 2024 s92 response), specifically Drawing C-2001 (revision 0B). This saw a change in the entry access vehicle crossing width at the Great South Road frontage, reducing from 16.2m down to 13.5m following a vehicle tracking review as part of the s92 response to take into account any possible reductions. The exit egress similarly reduced from 16.7m to 12.0m in width. The outcome is a longer landscaped area at the road frontage. The safety design issues are matters of detail beyond what is needed for the RMA process, and as such were not provided with the February s92 response. No further assessment of SISD is considered to be required as both a desktop and site visit was undertaken. For clarity however, the SISD assessment has been updated on pages 5 and 11 to incorporate the latest design layout and indication of sight distance

Section 92 Request for Information: BUN60424934 – tracking 29 February 2024				
Item	**Original Information request (30 November 2023)**	**Applicant's Response (26 January 2024)**	**Council further information request (29 February 2024)**	**Applicants Response (18 March 2024)**
				from the proposed site exist to the north (which is 260m). The updated SISD is provided in Attachment G. The RSA covers matters for Waka Kotahi and AT to consider as the Road Controlling Authorities.
Earthworks (NOR/RC) Not NOR				
42 [44 in SME's list]	The proposed Erosion and Sediment Control Plan (Report) by WSP, dated 29 June 2023 does not have a clear GD05 based earthworks ESC methodology. Please describe the proposed earthworks staging/phasing methodology including the type of controls and why relatively low efficiency Silt Fences (~50% efficient) are proposed. Given the sensitive receiving environment, please justify why more efficient Decanting Earth Bunds (~70-80% with flocculation) and or Sediment Retention Ponds (~80-90% with flocculation) are not proposed. I note the 2 x Lamellas shown in the ESCP Drawings, however the expected use and likely efficiency is not explained.	Refer to separate Memorandum dated 26 January 2024 in Attachment A., specifically response on p.26.	Unresolved as per specialist's feedback: I consider that without a well prepared indicative ESCP that I am not in a position or assess the application for potential advise effects and or be able to recommend appropriate consent conditions. Please provide the requested information through provision of an ESCP for the site.	The indicative ESCP (and plans) has been updated and is provided as Attachment D. A summary of the proposed changes to the Erosion and Sediment Control Plan (ESCP): 1. ESCP drawing has been updated to include GD05 treatment device including sediment retention ponds and decanting earth bund. 2. ESCP report updated to provide more details on the devices used. 3. The staging of earthworks cannot be confirmed at this stage and will be developed once the contractor is engaged. The ESCP update will aim to serve as a minimum control plan regardless of the staging. 4. The ESCP updates only show indicative plan and layout to achieve GD05 principles, detailed design and sizing of the devices will be provided by the contractors in the development of the final ESCP. The indicative ESCP plans are provided as Drawing C-3100 and C-3101 within Attachment D.
43 [45 in SME's list]	If the proposed ESCP is to be retained in any form, please ensure that any non-GD05 practices are fully described in a technical report that demonstrates the likely efficiency of the device/s. I note the proposed two ESCP options do not clearly depict how it all works, ie what is the purpose of the Filter Socks? Note: Whilst the option to condition a Finalised ESCP is available, the	Refer to separate Memorandum dated 26 January 2024 in Attachment A., specifically response on p.26.	Outstanding as per the above.	Please refer to response to RFI 44 above.

Section 92 Request for Information: BUN60424934 – tracking 29 February 2024				
Item	**Original Information request (30 November 2023)**	**Applicant's Response (26 January 2024)**	**Council further information request (29 February 2024)**	**Applicants Response (18 March 2024)**
	indicative plan must be capable of being a final ESCP and any subsequent Finalised ESCP will need to meet the same standard or higher.			
Flooding (NOR/ RC)				
49 [51 in SME's list]	AEE, pg. 53 The AEE states that the depth of runoff from the site post-development is changed by 25.8mm for 100yr EDC case and 27.6mm for 100y MPD case. Please provide a proposed condition to ensure that the change in runoff will be appropriately managed to ensure the increase in depth of runoff is no more than as stated.	Refer to separate Memorandum dated 26 January 2024 in Attachment A., specifically response on p.30.	Unresolved as per feedback from HW's: For the catchment area upstream of the southern motorway culvert. The applicant's assessment indicates a flood level increase of less than 30mm because of the relatively steep contours an increase of less than 30mm does not increase flood extent in this area. An increase of less than 30mm in depth will be constrained by the topography of the area. Based on the information provided attenuation is not required. However, Tables 3 and 4 utilise a flood plain area of 28652m² for the 10 and 100yr events with and without climate change. Please review this number as we would expect different floodplain extent areas (+ floodplains) depending on event (10yr or 100yr) and whether climate change rainfall was utilised. Depending on the response to the question above further consideration may be required.	We understand the issue with the same flood plain footprint used as the basis for 100- and 10-year calculations presented in tables 3 and 4 of the Flood Assessment. If the flood level of 28,652m² is a plausible 100-year level (and it is) then using the same as the basis for the calculations for 10-year flood level increases overstates the floodplain area and diminishes the incremental depth calculated. We emphasise that without re-modelling the catchment to test the effect of the proposed development upon flood plains, the only information available from Geomaps is flood plain and flood prone area information which pertains to 100-year inundation. Geomaps does not give 10-year ARI flood plains and perhaps it was too coarse to use the 100-year data available. The flood plain area of 28,652m² used in the report to calculate increases in flood levels due to larger runoff volumes is based on a measurement of the 100-year flood plain within the 155.5mRL contour in Geomaps. This is a closed contour representing a ponding area which closely aligns with the 100-year Flood Plain. It is significant that the majority of the buildings (by area) in the vicinity of the flood plain lie outside the Flood Prone Area and Flood Plain. A lesser flood plain representing 10-year flooding (if one existed) would therefore show more buildings outside the flood plain. In light of the points made above, we suggest that the focus should be on 100-year effects as discussed in the

Section 92 Request for Information: BUN60424934 – tracking 29 February 2024				
Item	**Original Information request (30 November 2023)**	**Applicant's Response (26 January 2024)**	**Council further information request (29 February 2024)**	**Applicants Response (18 March 2024)**
				submission. Without 10-year flood plain levels there is simply insufficient flood level data available to enable any meaningful discussion of 10-year effects. Note that we have used the outline of the 100-year flood plain rather than the Flood Prone area, the former being a smaller area.
50 [52 in SME's list]	AEE, pg. 53 Please provide further assessment of the flood hazards during construction. And if any effects are identified how will the effects be managed and if a condition is required.	Refer to separate Memorandum dated 26 January 2024 in Attachment A., specifically response on p.30.	Unresolved – indicative ESCP required at RC stage to enable assessment (see above).	Please refer to response to RFI 44 above.
Groundwater Diversion (RC)				
55 [57 in SME's list]	Groundwater Levels: Please provide all the groundwater level data collected fortnightly and after major storm events referenced above.	Refer to separate Memorandum dated 26 January 2024 in Attachment A., specifically responses on p.35. A geological cross-section was provided on sheets C-0040 and C-0041 in Appendix 16 of the response.	Item 57 (59 in SME's list) unresolved as per groundwater specialist's comments: I have reviewed the updated reports and plans etc. However , the Item 59 needs further clarification about the maximum excavation depth proposed. The Cut/Fill plan provided (C-0040, Revision A, dated 15/01/2024) noted that the maximum excavation depth is 4.2m as noted in the snip below. Cut/Fill Table Depth Range (-Cut +Fill) / Area (m²) / Volume (m³) / Color -4.2 - -4.0 / 119 / 6 -4.0 - -3.5 / 1439 / 378 -3.5 - -3.0 / 1336 / 1120 However, the Geological Section A-A (C-0041, Revision A, dated 15/01/2024) stated that the maximum excavation depth as 3.67m. please see the snip below as circled in Red.  Hence, confirmation is required for the actual excavation depth with an appropriate Cut/Fill Plan. Because this plan's reference will be a consent condition for the Excavation Limit in the groundwater consent.	To clarify, the excavation depths shown in the section view C-0041 were from subgrade level of retaining wall to existing ground level (as indicated by purple marker in figure below) The section views in C-0041) has now been updated to show cut/fill to subgrade level, as requested. This plan is provided in Attachment E 
56 [58 in SME's list]	Wetlands: Could the applicant please provide a more detailed explanation to support the statement "diversion of any groundwater shall not affect the base flow of any rivers or springs and the levels and flows into the wetland."			
57 [59 in SME's list]	Detailed Cross-section: Could the applicant please provide a critical geological cross-section (from south to north) showing the deepest excavation level, the wetland level, stream beds and the groundwater level throughout the section selected.			

Concluding comments

Thank you for the request for further information. All of the information requested in the Council's letter has been provided (or explanation given) and no further requests for information have been received.

This Memorandum has responded to the request in full, providing justifications and reasoning where necessary. As such, completion of the notification determination and statutory processing and grant of the consents sought is requested from Auckland Council. Our assessment finds the NOR can be considered on a non-notified or limited notification basis, and RC application can be considered on a non-notified basis.

Yours sincerely,

Tina Kalmar

Intermediate Planner, WSP

WSP
Auckland
Level 3 The Westhaven
100 Beaumont St
Auckland 1010, New Zealand
+64 9 355 9500
wsp.com/nz