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APPENDIX J

Pre-applications Meeting Minutes

Pre-Application Meeting Notes

Application ref:	PG/0183/25
Applicant:	Shaw's Quarries Limited – Jonty Taylor & Jonny Schick
Agent:	Mitchell Daysh Limited – Mark Chrisp & Madi Lawry Judith Makinson – CKL (Transportation)
Council Staff:	Bryan Hudson - Council's Transportation Manager Hayley Thomas – Project Planner
Meeting time and date:	11am Wednesday 17 December 2025
Site address:	1466 Cambridge Road, Cambridge
Legal Description:	Lot 3 DP 572677 (RT 1042280), Lot 1 DP 572677 (RT 1042278), Lot 1 DPS 71331 (RT SA57B/537), Lot 1 DPS 11673 (RT SA7D/153), Part Lot 3 DP 26177 (RT SA673/168), Lot 1 DPS 15181 (RT SA13A/753)
Zone:	Rural
Policy Overlays:	Strategic Road Significant Natural Area (WP341) Archaeological Site (S15/305) Access Strip (along Waikato River edge) Cultural Landscape Area – Alert High Amenity Landscape

The Site

The subject site is located to the west of Cambridge, between Cambridge Road at the northern boundary and the Waikato River at the southern boundary. Located at the district boundary, approximately 112ha of the site is within the Waipa District and approximately 42ha is located west of Banks Road within the Waikato District. Banks Road bisects the property and is the district boundary.

Under the Waipā District Plan, the site is within the Rural Zone. In terms of policy overlays, the area of the site closest to the Waikato River is within the Cultural Landscape Area – Alert and the High Amenity Landscape overlays. A Significant Natural Area also spans along the river edge (WP341), and an archaeological site (pā) is in the southern area of the site.

The site is not identified on Council's Special Features Map as being subject to any hazards or HAIL activities. Refer Figures 1 and 2.

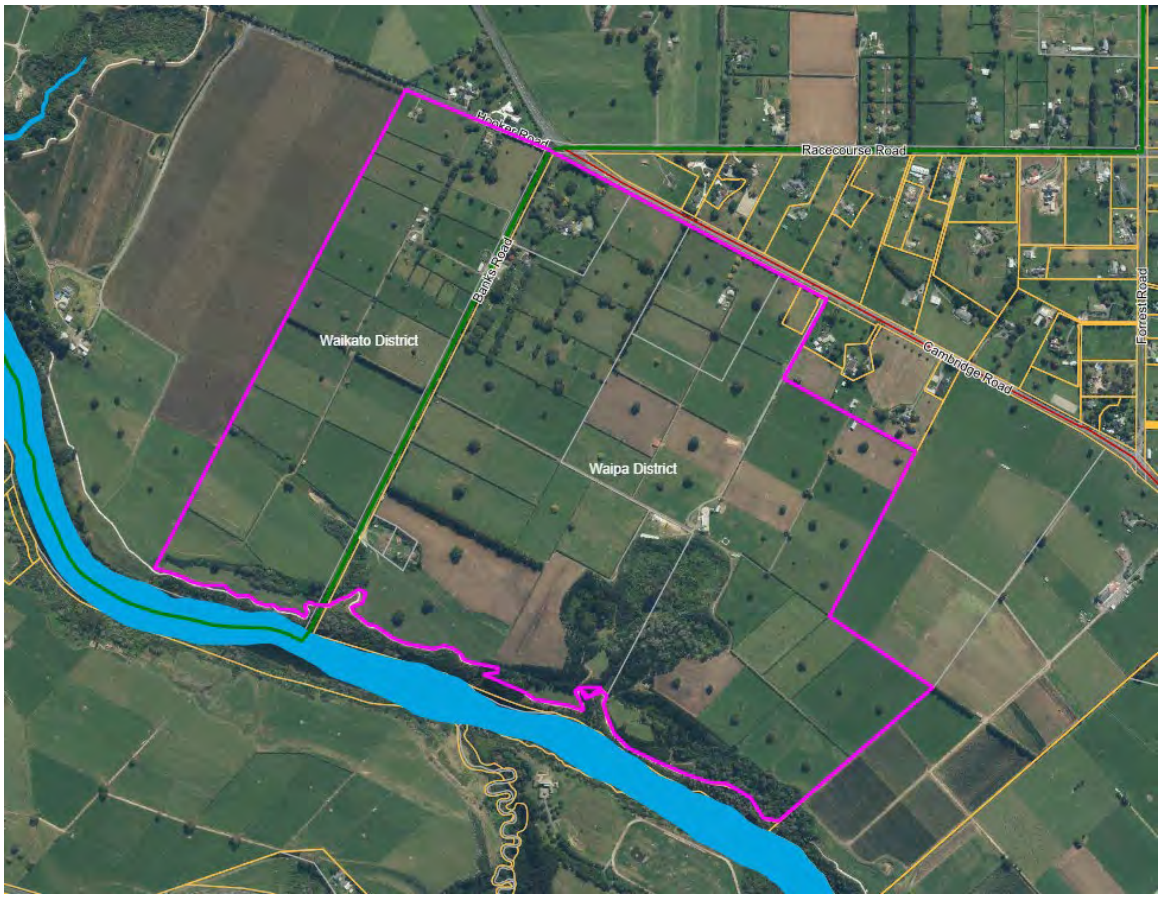


Figure 1: Aerial photograph of site (outlined in magenta)



Figure 2: District Zone and Policy Overlays Map

Proposal

Mr Chrisp and Ms Lawry explained the proposal is to establish and operate a sand extraction and processing activity at the site. The proposed quarrying boundary is shown below in Figure 3 and encompasses approximately 55ha. It is anticipated the quarry will provide a total of 3 million cubic metres of sand. In terms of operations the quarry is proposed to be open between 7am and 6pm daily. No restrictions on vehicle movements are being proposed.

At this stage there are two locations being investigated in terms of access to the quarry (shown in white in Figure 3). The westernmost option would be located on Hooker Road, approximately 70m west of the intersection with Cambridge Road. The easternmost option would be located approximately 300m east of the Cambridge Road and Racecourse Road intersection. A 300m sealed access into the site is proposed that will also have a wheel wash.

Consent would be required from both Waipa District Council and Waikato District Council. Water take and clean fill consents will also be required from Waikato Regional Council.

At this stage the following information/reports will be included with an application:

- Archaeological Assessment;
- Traffic Impact Assessment;
- Noise Impact Assessment; and
- Quarry Management Plan (including soil and erosion management).

At the meeting it was noted that the site has not been identified as containing any contaminated soils therefore the application will not include a Preliminary Soils Investigation.

The application is anticipated to be lodged in the first quarter of next year (2026).



Figure 3: Proposed scheme plan

Transportation Comments

Mr Bryan Hudson, Council's Transportation Manager, was at the meeting and provided some history of quarrying in the area and on the adjacent property. Regarding the quarry Mr Hudson noted:

- The location so close to the expressway on and off ramps north of the site would be beneficial to facilitate material heading north.
- Heavy vehicles heading south are likely to go through the Cambridge township and consideration of the management of travel routes and use of alternative routes should be assessed early and included in an application. Noting the Cambridge community concerns raised in the recent Newcombe Road quarry consent process.
- There are two entrance locations being considered by the applicant team, each of which have positive and negative factors:
  - Cambridge Road was previously the state highway so has a wide carriageway (13m) that would likely accommodate turning bays, has a higher speed environment but has limited entrances from other properties. Cambridge Road is also a Limited Access Road.

- Hooker Road is a lower speed environment, and while close to the intersection with Cambridge Road, could accommodate the anticipated quarry vehicles.

- Something to consider is if quarrying of the paper road will be undertaken and ownership of this part of the site.
- Waipa Networks have power lines within Banks Road and may have plans to upgrade these lines. Consultation with Dan Linton from Waipa Networks in recommended.

In terms of next steps, it was agreed that Ms Makinson will prepare a comparison of the two entrances to then enable further discussion with both Mr Hudson and the relevant transport manager at Waikato District Council to confirm the entrance location prior to consent lodgement.

Planning Comments

Ms Thomas, Council's Project Planner, was at the meeting and noted in terms of the District Plan, mineral extraction activities are provided for in the Rural Zone as Discretionary Activities (refer Rule 4.4.1.4(h)). Section 21.1.4.34 – Assessment Criteria for Mineral extraction activities should be referred to as a guideline for matters to be considered in a future application.

With regard to what information should be included with a consent application, Section 21.2.4.1 lists the anticipated detail for mineral extraction activities and should be referred to in the first instance.

Notification wasn't discussed at the time of the meeting; however, it is recommended that the applicant consider early discussions with adjacent property owners. A final decision on notification and any written approvals that may be required will be determined once the consent has been lodged.

In terms of the site crossing over the district boundary, there could be the opportunity for one Council to process the consent on behalf of both councils. While noting that applications would be needed to both, in terms of assessing the application and streamlining the process, a joint reporting process and decision could be undertaken. Waipa District Council would be happy to take the lead on this process if helpful.

Communication

In order to establish clear lines of communication, all correspondence shall be directed through Council's Project Planner, Hayley Thomas (Hayley.Thomas@waipadc.govt.nz).

Notes:

1. **Please note that all the information provided in this form is available to the public.**
2. **Pre-application meetings are intended to provide initial advice on specific issues identified for discussion by the applicant and any major issues. It cannot replace the in-depth investigation associated with the formal assessment of an application (and where relevant, consideration of public submissions). Advice provided by Council Staff is given in good faith and in no way binds a decision by the Council.**

Pre-Application Meeting Notes

Application ref:	PG/0183/25
Applicant:	Shaw's Quarries Limited – Jonty Taylor
Agent:	Mitchell Daysh Limited – Mark Chrisp & Madi Lawry Judith Makinson – CKL (Transportation)
Waikato Council Staff:	Hazel Coalter – Planning & Growth Manager Nicola Holmes – Land Use Consents Team Leader Yu Hu – Development Engineer Virendra Prasad – Transport Planning Lead
Waipa Council Staff:	Bryan Hudson - Transportation Manager Quentin Budd – Consents Team Leader Hayley Thomas – Project Planner
Meeting time and date:	11.30am Monday 16 March 2026
Site address:	1466 Cambridge Road, Cambridge
Legal Description:	Lot 3 DP 572677 (RT 1042280), Lot 1 DP 572677 (RT 1042278), Lot 1 DPS 71331 (RT SA57B/537), Lot 1 DPS 11673 (RT SA7D/153), Part Lot 3 DP 26177 (RT SA673/168), Lot 1 DPS 15181 (RT SA13A/753)
Waikato Zone & Policy Overlays	<u>Waikato District Plan – Operative in Part:</u> GRUZ - General rural zone Designations (Waikato Regional Airport Ltd) Aggregate extraction area Airport Obstacle Limitation Surface Outstanding Natural Landscapes Waikato River catchment <u>Operative District Plan – Waikato and Franklin Section:</u> Rural (Waikato) Zone Aggregate Extraction Policy Area Airport Obstacle Limitation Surface Landscape Policy Area River Stability Policy Area Waikato River Catchment

Waipā Zone &	Rural Zone
Policy Overlays:	Strategic Road
	Significant Natural Area (WP341)
	Archaeological Site (S15/305)
	Access Strip (along Waikato River edge)
	Cultural Landscape Area – Alert
	High Amenity Landscape

The Site

The subject site is located to the west of Cambridge, between Cambridge Road at the northern boundary and the Waikato River at the southern boundary. Located at the district boundary, approximately 112ha of the site is within the Waipa District and approximately 42ha is located west of Banks Road within the Waikato District. Banks Road bisects the property and is the district boundary. Refer Figure 1 below.

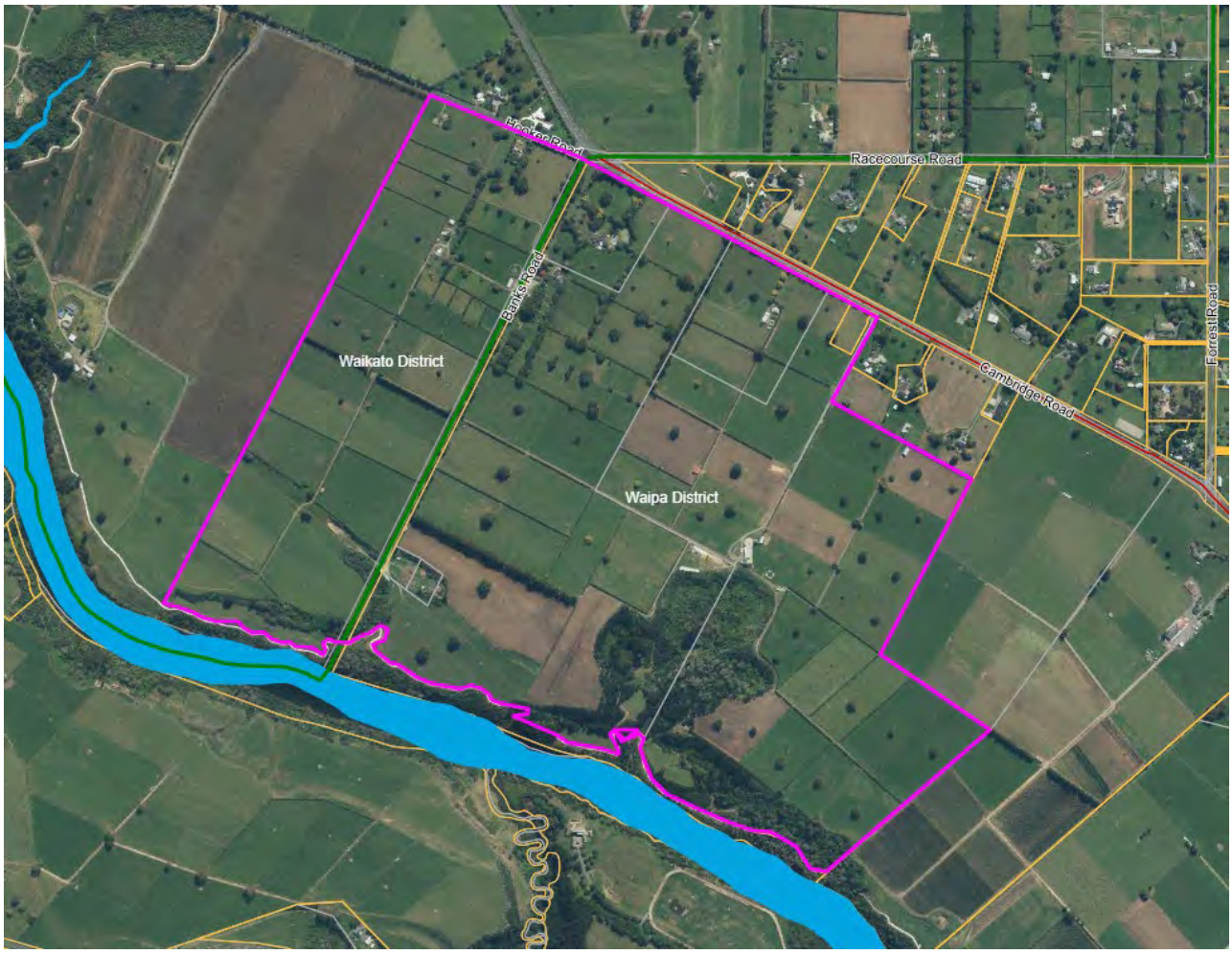


Figure 1: Aerial photograph of site (outlined in magenta)



Figure 2: Waipā District Zone and Policy Overlays Map

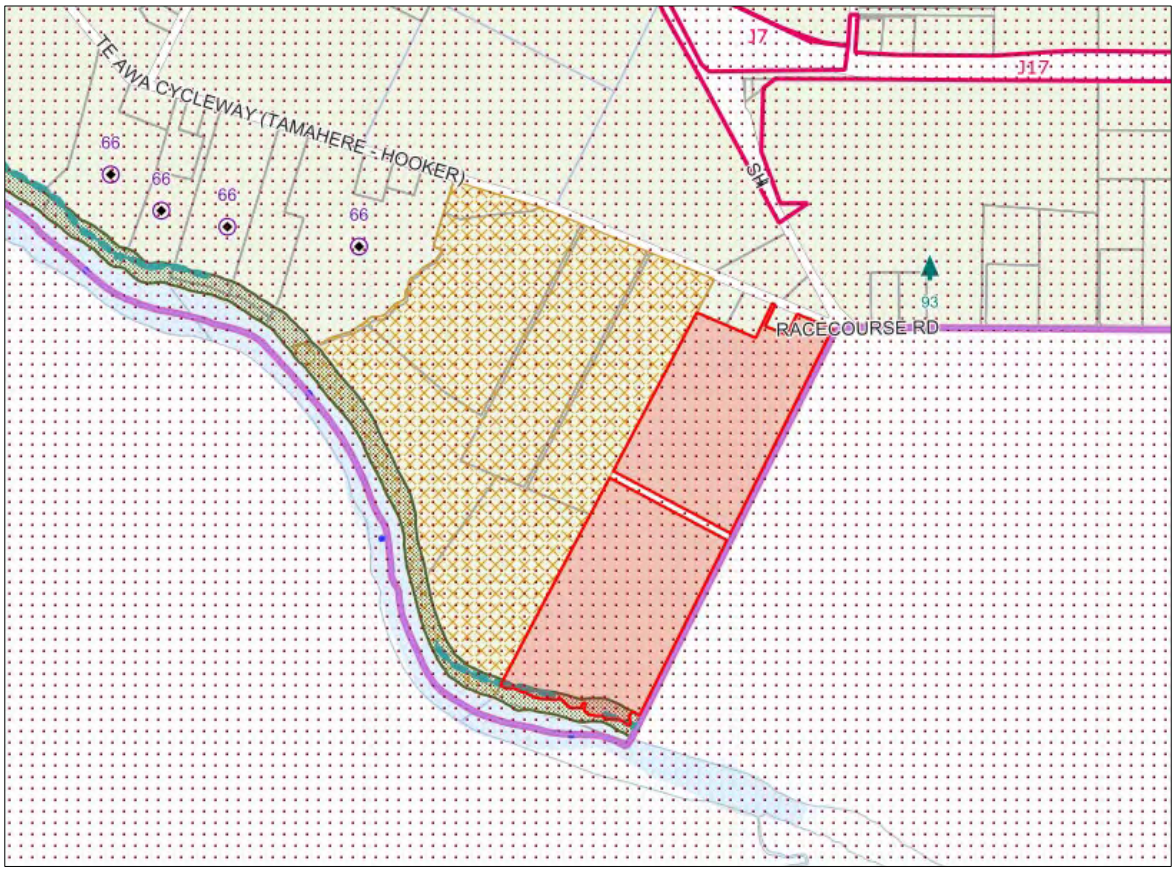


Figure 3: Waikato District Zone and Policy Overlays Map

Proposal

Mr Chrisp explained the proposal is to establish and operate a sand extraction and processing activity at the site. The proposed quarrying boundary is shown below in Figure 4. It is anticipated the quarry will provide a total of 3 million cubic metres of sand. In terms of operations the quarry will include sand washing facilities. In terms of hours of operation, the quarry is proposed to be open between 7.30am and 5.00pm daily and have no restrictions on vehicle/truck movements. The quarry will be worked in stages with approx. 4ha open at any one time and the remaining area continuing to be used as part of the current farming activity. Cleanfill is to be brought on to the site as part of the rehabilitation for each stage.

Two locations have been investigated in terms of access to the quarry (shown in white in Figure 4). The westernmost option would be located on Hooker Road, approximately 70m west of the intersection with Cambridge Road. The easternmost option would be located approximately 300m east of the Cambridge Road and Racecourse Road intersection. A 300m sealed access into the site is proposed that will also have a wheel wash.

Consent would be required from both Waipa District Council and Waikato District Council. Water take and clean fill consents will also be required from Waikato Regional Council, and it is anticipated to recycle approx. 90-95% of the water used.

At this stage the following information/reports will be included with an application:

- Archaeological Assessment;
- Traffic Impact Assessment;
- Noise Impact Assessment; and
- Quarry Management Plan (including soil and erosion management).

At the meeting it was noted that the site has not been identified as containing any contaminated soils therefore the application will not include a Preliminary Soils Investigation.

The application is anticipated to be lodged in June.



Figure 4: Proposed scheme plan

Transportation Comments

The location of the access for the quarry was discussed by those present at the meeting with Ms Judith Makinson outlining the two proposed locations, the benefits and constraints of each and the considerations undertaken and presented in the Transportation Assessment provided prior to the meeting.

Mr Bryan Hudson, Waipa DC's Transportation Manager, provided some history of quarrying in the area and on the adjacent property. Regarding the two entrance locations Mr Hudson noted each location has positive and negative factors, however on balance, he considers the proposed Cambridge Road entrance location to be the more appropriate location given the existing intersection at Hooker Road/Cambridge Road. Mr Hudson noted that this is a Limited Access Road ('LAR') and the application should include the request for access over an LAR so this can be undertaken concurrently alongside the resource consent process.

Ms Hazel Coalter, Waikato DC's Planning & Growth Manager, queried the opportunity to utilise Banks Road as the primary access for the quarry and consideration of the travel patterns in and

around the Hooker Road/Cambridge Road intersection. Ms Coalter questioned if consideration should be given to establishing a five-way roundabout and noted the Fast Track Application being proposed by WTR Racing, its proximity to the quarry site and the potential impacts of the activities all occurring in and around the intersection. Ms Coalter noted that with both proposals in the early stages, it would be a prime opportunity for all parties to consider the best outcome for the wider area.

Ms Makinson acknowledged Ms Coalter's suggestion, noting the upgrading of the intersection exceeds the scope of the quarrying activity and brought about uncertainty in regard to design, timing, constructability, and Council involvement for example. Ms Makinson also noted that an access to Hooker Road, given the road classification is a more simple process requiring a vehicle crossing application whereas the Cambridge Road access, given it is a 'Limited Access Road' is a more costly process. While open to working with the other parties involved in the WTR Racing activity, Ms Makinson reiterated the quarrying activity does not wish to be delayed due to other projects. Mr Chrisp advised that in an RMA context the WTR Racing project is also not yet 'existing' and the applicant is only required to mitigate any adverse effects arising from their proposed activity.

Mr Prasad questioned the anticipated direction split quarry vehicles would be going (i.e. north/south). Ms Makinson advised she anticipates 75% would be northwards while 25% would be to the south. Mr Chrisp noted that the applicant is seeking to not be restricted by a maximum vehicles per day, instead providing flexibility for the quarry to provide sand on a demand basis.

Regarding Banks Road, Mr Hudson noted that the Local Government Act would need to be checked in regard to quarrying occurring on the paper road. Mr Hudson also noted Waipa Networks have power lines within Banks Road and may have plans to upgrade these lines. Consultation with Dan Linton from Waipa Networks in recommended. Mr Chrisp acknowledged both matters and will address these in the application.

In terms of Hooker Road, Mr Chrisp acknowledged the community in this area and the proposal is likely to include a proffered condition to minimise the use of Hooker Road, unless quarry vehicles are supplying to a site in that area.

Ms Coalter questioned if the applicant team had been in consultation with the New Zealand Transport Agency, given the close proximity of their designation. Mr Chrisp noted the team will be doing this.

Planning Comments

Mr Chrisp outlined the information/reports that have been commenced for inclusion with the applications to Council. In terms of the requirements for Waipā District Council, Section 21.2.4.1 lists the anticipated detail for mineral extraction activities and should be referred to in the first instance. For Waikato District Council, as a minimum the matters as outlined in rules GRUZ-R40, EW-R22 (importation of clean fill) and Noise-R10 of the Waikato District Plan – Operative in Part should be addressed.

Ms Holmes noted for Waikato District Council the application should include commentary from suitably qualified person about any potential dust/air discharge effects.

Notification and written approvals were discussed, noting two properties on Racecourse Road oppositive the proposed access location are both on the market. It is recommended that the applicant consider early discussions with adjacent property owners. As noted above it is advised that consultation is also undertaken with New Zealand Transport Agency and Waipa Networks. A final decision on notification and any written approvals that may be required will be determined once the consent has been lodged.

In terms of the site crossing over the district boundary, both Councils were open to the possibility of either one Council, or a consultant, to process the consent on behalf of both councils. While noting that applications would be needed to both, in terms of assessing the application and streamlining the process, a joint reporting process could be undertaken.

Communication

In order to establish clear lines of communication, all correspondence shall be directed through the following staff for each Council:

- Waikato District Council – Nicola Holmes (Nicola.Holmes@waidc.govt.nz); and
- Waipā District Council - Hayley Thomas (Hayley.Thomas@waipadc.govt.nz).

Notes:

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Planning | Surveying | Engineering | Environmental

Our Ref: B25065

26 February 2026

Madi Lawdry
Mitchell Daysh Ltd

Issued via: madison.lawry@mitchelldaysh.co.nz

Dear Madi

Transportation Assessment - 310 Hooker Road, Cambridge

We are pleased to provide the following transportation advice assessing the access effects of a proposed sand quarry located at 1466 Cambridge Road, Cambridge (the site). The site is located across the District Council boundaries of both the Waikato District Council (Waikato DC) and Waipa District Council (Waipa DC) which bisects the site along the Banks Road corridor.

The purpose of this assessment is to provide a comparison of two possible access arrangements into the site:

- Option 1 – off Hooker as per ITA
- Option 2 – off Cambridge Road as an alternative

Location and Form of Access

For the purposes of this assessment, the access location on Hooker Road is presented as Option A and the access location on Cambridge Road is presented as Option B. The indicative access locations are shown in Figure 1 overleaf.



Figure 1: Assessed Access Locations

- **Option A (Hooker Road)** is a standard vehicle crossing designed to accommodate tracking of large vehicles.
- **Option B (Cambridge Road)** is a full T-intersection with a right-turn pockets and diverge tapers designed for 110km design speed.

Assessment Methodology

The key element of the assessment was a multi-criteria analysis (MCA) that objectively compared the relative performance of the two access options against defined criteria covering compliance, safety, operations, constructability, approvals, and amenity factors. The MCA categories were assigned weightings to reflect the priorities of the assessment. Detailed MCA criterion / analysis is provided attached. It is noted that for the purposes off assessment, constructability was considered separately except for impact on general traffic as it is more relevant to the investor than to the road controlling authority.

For the safety assessment of the proposed new intersections, a Safe System-oriented intersection risk evaluation was undertaken. This approach considers core risk elements of exposure, likelihood and severity in line with Austroads' Safe System Assessment Framework[1]. In this framework, exposure reflects traffic volumes, likelihood considers the probability of a crash given the exposure, and severity considers the expected outcome if a crash occurs, thereby aligning with Safe System principles for intersection safety evaluation. Indicative thresholds for ratings are provided in the guideline. Severity was based on the survivable speed charts for various types of impact.

For the existing Hooker Road / Cambridge Road intersection, the NZTA High-Risk Intersections Guide (HRIG) [2] was used to calculate the current DSI risk based on the recorded crash history. The observed DSI equivalents were lower than what the standard prediction model would suggest for an average intersection of this type, indicating the site is performing better than average.

[1] Research Report AP-R509-16
[2] https://www.nzta.govt.nz/resources/high-risk-intersections-guide

As a result, rather than relying solely on the raw model outputs (which would likely overestimate risk), a proportional adjustment factor was applied to the predicted future DSI values so they better reflected the observed performance of the intersection. The DSi calculations are also provided in the attachments. This approach was used to assess the comparative change in risk factors between additional turning movements at the intersection versus additional through movements at the intersection, relevant to Options A and B respectively.

Key Findings

Following analysis of both options, assessment indicates a minor overall preference towards the revised access location Option B, located on Cambridge Road. The overall scores are summarized in Table 1 below:

Table 1: MCA Summary Score

Access Option	MCA Score
Option A	148 / 220 (67%)
Option B	163 / 220 (74%)

Option A (Hooker Road access) aligns better with road hierarchy principles, as access is taken from a lower-classified road. However, it is located in close proximity to the Hooker Road / Cambridge Road intersection and increases traffic loading at that node. This results in greater turning complexity, higher interaction with active modes, and a marginally higher overall DSI risk compared with Option B.

Option B (Cambridge Road access) departs from strict hierarchy intent by introducing direct access to an arterial road. However, this option benefits from improved intersection spacing, stronger sight distance, reduced turning movements through the Hooker Road / Cambridge Road intersection, and more direct heavy vehicle routing. From a safety perspective, both the Safe System assessment and DSI analysis indicate a slightly lower overall collective risk relative to Option A.

Sensitivity Testing

Sensitivity testing was undertaken to check whether the MCA outcome was sensitive to the choice of weighting. The primary weighting set was intentionally safety-led, reflecting that intersection safety risk and crash harm outcomes were the key decision drivers for the assessment. A second weighting set was then tested with a stronger emphasis on compliance factors (road hierarchy and access spacing), reflecting a more policy-driven Road Controlling Authority perspective. The same scoring was retained for both tests, with only the weightings adjusted, to confirm whether the preferred option remained consistent under different but plausible weighting priorities.

Table 2: Criterion Weighting Summary

Category	Original (Safety-led)	Compliance-Focused Sensitivity
Compliance	10	14
Safety	20	16
Operations	6	6

Constructability	3	3
Approvals	3	3
Amenity	2	2
Total	44	44

Table 3: MCA (Sensitivity Test) Summary Score

Access Option	MCA Score
Option A	145 / 220 (66%)
Option B	159 / 220 (72%)

Option B achieves a higher overall weighted score across the MCA, including under the compliance-focused sensitivity weighting. While it departs from strict arterial access hierarchy principles, the safety and operational assessments consistently favour Option B.

Discussion and Limitations

The multi-criteria assessment involves professional judgement in assigning weightings and individual criterion scores. The weightings were selected to reflect the relative importance of compliance, safety, operations and network effects from a transport planning perspective, and were developed by two experienced transportation engineers. Notwithstanding this, the process remains inherently subjective.

To address this, sensitivity testing was undertaken by applying an alternative, compliance-focused weighting set. While the overall margin between options changed slightly, the relative ranking of the options remained consistent. The overall preference is therefore not dependent on a single weighting assumption and is also supported by the DSI risk assessment.

Yours sincerely



Jan Franta
Principal Transportation Engineer

CKL Planning | Surveying | Engineering | Environmental

Attached:

- Multi-Criterial Analysis
- Crash Estimation (Product of Flow) using NZTA HRIG

Category	Criterion	Weight	Option A Score (Hooker Rd)	Weighted Score A	Option A Commentary	Option B Score (Cambridge Rd)	Weighted Score B	Option B Commentary	Note
Compliance	Road hierarchy / lesser road access	**4**	5	20	Complies with lower classified road access intent; Hooker is local road and preferred frontage access.	2	8	Cambridge Road is major arterial; direct access conflicts with hierarchy intent (Waipa DC rule 16.4.3.2)	
Compliance	Intersection separation / spacing	**4**	2	8	~70m to Cambridge intersection; less than 100m (Waikato TRPT Table 1)	4	16	~300m to Racecourse Rd (>200m in Waipa DC rule 16.4.2.5)	
Compliance	Adjacent access separation	**2**	2	4	Adjacent access 60m W (<100m)	3	6	Adjacent access 120m E (<200m), n/a (W)	
Safety	Visibility / Sight Distance	**5**	4	20	Hooker Rd: visibility east ~80m to Cambridge intersection; west >300m; relies on reduced operating speeds near intersection (SISD W = 285m, SISD E = 51.5 for 30km/h calculated using AT PN09 centripetal force formula)	5	25	Cambridge Rd: straight/wide section with good sight distance both ways. SISD = 285m, achievable: 380m(L), 500+m(R)	
Safety	Safe Systems Intersection Rating for new intersection / access	**5**	5	25	Exposure: 1 Likelihood: 2 Severity: 3 Total: 6/48	3	15	Exposure: 3 Likelihood: 1 Severity: 4 Total: 12/48	only considers new intersection, not effects on existing Hooker / Cambridge
Safety	Impact on Death & Serious Injuries risk at Hooker / Cambridge due to increased traffic	**5**	3	15	DSi 0.57(1.51)	4	20	DSi 0.54(1.43)	Using NZTA - high risk intersection rating methodology assessment, refer to attached DSi calculations
Safety	Turning movement complexity	**2**	2	4	A series of turns on arrival with tight tracking at Hooker Rd bellmouth	5	10	Direct access avoids Hooker/Cambridge intersection turns, designed to specific vehicle needs	
Safety	Active mode / PT interaction	**3**	2	6	Bus stops and cycle lane diversion/termination at Hooker/Cambridge intersection increase exposure.	4	12	Further away from bus/cycle conflict node	
Operations	Intersection performance / delay	**4**	4	16	No issues at site access (Hooker Rd), existing intersection of Hooker and Cambridge also has spare capacity	4	16	Does not load Hooker Rd, sufficient capacity on Cambridge	
Operations	HCV routing efficiency	**1**	3	3	Marginally shorter on and off- site towards predominant direction, but more start/stops	4	4	More direct route off-site, only one intersection	Assumed 75% West, 25% East split
Operations	Oversize plant access	**1**	3	3	Potential limitation due to reverse curves and narrow road	5	5	easy access as intersection can be designed accordingly	
Constructability	Extent of works and disruption to traffic during construction	**3**	4	12	Simple vehicle access Minor (stop-go affecting 700 vpd)	2	6	Priority T with a right-turn bay, extent of works over ~320m Moderate (multiple stages affecting 8,000 vpd)	Both works short term, line marking adjustment can probably be done overnight
Approvals	Council approval complexity	**3**	2	6	Hooker within Waikato DC, but Cambridge / Hooker on the border -> need to coordinate 2 councils	4	12	Dealing with Waipa DC only	the site spans Waikato/Waipa jurisdictions increasing coordination needs. Based on Client's information, not my experience
Amenity	Residential / sensitive receptor effects	**2**	3	6	4 dwellings within 100m of access; nearby driveway and constraints noted in ITA	4	8	4 dwellings within 100m, no driveway access	
TOTAL				**148**			**163**		

Constructability	Type of access intersection	**3**	4	12	Simple vehicle access	2	6	Priority T with a right-turn bay	

Constructability	Extent of works	**5**	4	20	Localised works over ~40m + tie in	2	10	~320m of road marking adjustment, est. 50m toe-in wide road works at interface	
Constructability	Need for road widening	**3**	5	15	Not required	4	12	Presumably not required (seal width ~12.8m, required 12.5m)	coarse measurement of aerial, TBC
Constructability	Disruption to traffic during construction	**3**	4	12	Minor (stop-go affecting 700 vpd)	2	6	Moderate (multiple stages affecting 8,000 vpd)	both works short term, line marking adjustment can probably be done overnight
Constructability	Utilities / physical constraints	**2**	3	6	Transformers, power poles, trees	2	4	Trees	
Constructability	Cost	**3**	5	15	Low	3	9	Moderate	
Total				**80**			**47**		

Scenario 1 - Access on Hooker Road, loading Hooker / Cambridge intersection

Hooker / Cambridge intersection			**Product of Flow**	**est average DSi (Fig A5-11)**
Existing Conditions	Cambridge Road AADT avg	7161.5		
	Hooker Road AADT (current)	700	479	1.42
	Hooker Road AADT (with dev)	835	514	1.51
	Factor			**1.06**
Crash History (2020-25)	Total reported crashes	6	over 5 yrs	
	Fatal & Serious	0	crashes	
	Injury crashes	3	crashes	
	Property damage only	3	crashes	
	DSI equivalents (existing)	0.54		
	DSi equivalents (with dev)	0.57	Since observed DSi are less than predicted, we use observed	

Scenario 2 - New Intersection on Cambridge Rd, additional flows on Cambridge

Existing Hooker / Cambridge intersection			**Product of Flow**	**est average DSi (Fig A5-11)**
Existing Conditions	Cambridge Road AADT (current)	7161.5	479	1.42
	Cambridge Road AADT (with dev)	7261.5	481	1.43
	Hooker Road AADT	700		
	Factor			**1.00**
Crash History (2020-25)	Total reported crashes	6	over 5 yrs	
	Fatal & Serious	0	crashes	
	Injury crashes	3	crashes	
	Property damage only	3	crashes	
	DSI equivalents (existing)	0.54		
	DSi equivalents (with dev)	0.54	Since observed DSi are less than predicted, we use observed	

Conclusions:

	Sum of DSi for Hooker/Cambridhge and New Access intersections	
Approach	Scenario 1 (New Access off Hooker)	Scenario 2 (New Access off Cambridge)
DSi eq. for existing & pro-rated	0.57	0.54
DSi calculated	1.51	1.43

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