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James Beban
Urban Edge Planning

Via email: james@urbanedgeplanning.co.nz

Dear James

Pinehaven Stream Improvements – Notice of Requirement Review of Transportation Matters

Further to your request, I am pleased to provide below a review of the transportation matters arising from the Notice of Requirement for the Pinehaven Stream Improvements in Upper Hutt. I have made a site visit to the various access points and read the Pinehaven Stream Improvements Resource Consent Application and Notice of Requirement dated September 2019.

I understand that the project to which the Notice of Requirement (NOR) and resource consent application are for, addresses many of the physical works recommended in the Pinehaven Stream Floodplain Management Plan. The overview of the application included in the NOR report includes the following transportation related elements:

- a project objective *'to enable efficient and effective construction and ongoing maintenance of all structures and stream improvements'*;
- replacing a number of vehicle crossings;
- construction of a private road access to 30, 32, 34 and 36 Blue Mountains Road;
- replacement of the road crossing culverts is not included in the project; and
- the need for mitigation with regard to construction traffic is identified with the implementation of the Construction Management Plan seeking to minimise any adverse construction traffic effects.

Traffic effects with regard to ongoing maintenance activities have not been identified.

1. Existing Traffic Environment

Section 5.9 of the NOR describes the Land Transport existing environment. The road hierarchy and local traffic volumes are described. The report recognises that the area to the south of the Sunbrae Drive intersection with Blue Mountains Road has access to the north via Blue Mountains Road only. This section of road is a Primary Collector and carries approximately 5,631 vehicles per day. The report includes that the northbound lane of Blue Mountains Road adjacent to the Silverstream Reformed Church site will be required for construction purposes and a partial road closure will be required with property access maintained throughout the works.

The assessment does not include any analysis of the local road safety record, the local speed environment, the availability of footpaths and the forward sight lines along the main route.

Figure 1 shows reported crashes on the local road network for the most recent five year period.

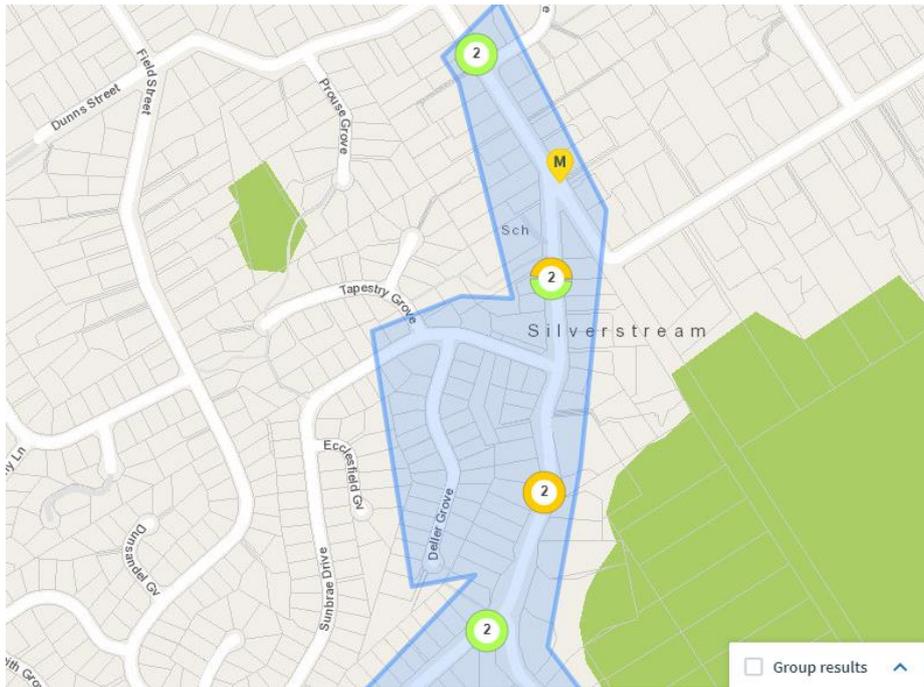


Figure 1: Reported Crashes from NZTA Crash Database

Four of these crashes involved single vehicle incidents with loss of control either as a result of turning or being positioned too far left. Crash factors for three of the other crashes included cutting corner on the bend, speed entering corner/ curve and too far left. The CTMP will need to include allowance for further restrictions to forward sight lines as a result of construction related obstructions either within or adjacent to the carriageway.

I note that some sections of local road network only have footpaths along one side of the road. The CTMP will need ensure that safe provision is made for pedestrians throughout the local road network including adequate sightlines to vehicular traffic if required to cross the road to access an alternative footpath.

Impacts of construction and maintenance activities on carriageway widths and functions including kerbside parking has not been discussed for construction access points other than adjacent to the Silverstream Reformed Church site. The CTMP should usefully identify and address any effects on kerbside parking and traffic flow in each location which is likely to be affected by construction vehicles, plant, site offices and staff vehicles.

2. Description of Project

Section 6 of the NOR report provides a description of the project. Transportation and traffic related matters include:

- the replacement of private access (vehicle and pedestrian) bridges across the stream in the lower catchment;
- likely removal of the garage and sleepout at 1 Tapestry Grove and reinstatement of the garage elsewhere in the property;
- removal of the dwelling at 4 Sunbrae Drive;
- new private accesses to 30 and 36 Blue Mountains Road with exact location subject to ongoing consultation with the property owners;
- removal of the dwelling at 48 Blue Mountains Road;
- removal of the garage at 12 Birch Grove and a new garage placed elsewhere on the property;

- offsite construction being used for some elements, including the private vehicle crossings to minimising the duration of any disruption;
- a Construction Traffic Management Plan will be developed to sit within the Construction Management Plan and will be subject to approval from GWRC prior to construction starting;
- construction will occur in stages and the whole project is expected to take 70 weeks to 2 years to complete:
 - o likely first stages with access from Birch Grove;
 - o stage 3 access from the west of 50 Blue Mountains Road;
 - o stage 4 access through 48 Blue Mountains Road;
 - o stage 5 access from yet to be confirmed access point from 40 through 34 Blue Mountains Road. Resident vehicle access will be restricted during construction;
 - o stages 6 and 7, access from Blue Mountains Road and 28 Blue Mountains Road;
 - o stage 8, access from 28 and 21A Blue Mountains Road;
 - o stage 9, access from 4 Sunbrae Drive;
 - o stage 10, access from Blue Mountains Road access to Willow Park and from 4 Sunbrae Drive;
 - o stage 11, access from Blue Mountains Road by Silverstream Reformed Church; and
 - o stage 12, access from individual properties between 50 and 56 Whitemans Road for pedestrian bridge replacement.
- potential for site offices to be located within the road reserve if other options are not viable;
- fencing will be maintained so all visitors and truck movements to the site are controlled and monitored; and
- each private bridge is expected to take two to three weeks to construct. The bridges will be lifted into place by crane and the platform may need to be within the road reserve. Residents could be without vehicle access during this period so temporary pedestrian access may be needed or temporary relocation in some instances. Two to three weeks is also expected to be needed to construct timber pedestrian bridges.

3. Planning Assessment

Section 7 of the NOR report sets out the planning assessment for the NOR. The Upper Hutt City District Plan requirements are analysed in Appendix P of the NOR report. The access matters have been correctly identified and the comment made that *'the proposed private way serving 30 to 36 Blue Mountains Road would meet these standards'*.

The District Plan access standards make reference to the Council's Code of Practice for Civil Engineering Works. An assessment against the particular requirements of this Code of Practice has not been included in the planning assessment. With the detail of the changes to the various accesses still subject to discussion with the individual property owners, a requirement for compliance with the Code of Practice should be conditioned. Such a condition should apply to any new or modified access.

4. Assessment of Alternatives

Section 8 of the NOR report includes consideration of alternatives. It is noted in Section 8.3 with regard to access to 30 to 36 Blue Mountains Road that *'consultation with each property owner is ongoing and as a result the access configuration to the site may change during the processing of this notice of requirement application'*. As referred to above, any new or modified access will need to be assessed against the Council's Code of Practice for Civil Engineering Works.

Section 8.4 of the NOR report describes construction methodology alternatives with the two main options being whether construction occurs from outside or within the stream. The assessment identifies that *'the primary difference between the two construction methodologies in terms of social impacts is the access requirements over private land and reduction in impacts on riparian vegetation habitat, which is much reduced with the instream methodology'*. With regard to social impacts on the

wider community the assessment goes on to say 'there will be some reduction in the impact on roading infrastructure from the proposed in-stream construction methodology, for those areas where the stream is adjacent to the road, as construction equipment may not be required to be located on the road'.

It is agreed that the proposed in-stream construction methodology is likely to have reduced impact in terms of traffic effects for property access and on users of the local road network than the outside stream construction methodology.

5. Assessment of Environmental Effects

Section 10.10 of the NOR report includes an assessment of the traffic and transport effects of the project. The report identifies that traffic and transport effects will be limited to the construction phase with effects including increased traffic flow, vehicle movements to and from construction sites and the use of road space for construction vehicles or equipment. It is proposed to mitigate these effects through traffic management procedures to be included in the CMP through a Traffic Management Plan to be developed for the proposed works.

The report identifies that access will be required from:

- Whitemans Road: the properties at 50 Whitemans Road
- Clinker Grove: the property at 15 Clinker Grove
- Blue Mountains Road: the properties at 8,20,28,38,48 Blue Mountains Road and Willow Park
- Sunbrae Drive: the property at 4 Sunbrae Drive; and
- Birch Grove: the properties at 10A and 12 Birch Grove.

It is proposed to control adverse traffic effects associated with construction vehicles through the Traffic Management Plan required as part of the CMP which is to be provided as a condition of consent. The Traffic Management Plan will detail actual numbers, frequencies, routes and timing of construction traffic movements. This approach is considered appropriate.

The report identifies that road space will be utilised for the channel works for the area adjacent to Blue Mountains Road within the property at 4 and 8 Blue Mountains Road. It would also seem likely that road space will also be used in many other locations for parking of staff vehicles, construction vehicles and equipment. Given the busy traffic flows on some parts of the local road network, limited forward sight lines along some sections of road and single footpaths in places, the management of all and any use of the road space for construction activity or associated vehicles will need to be carefully managed.

Ongoing traffic effects associated with maintenance activities have not been assessed. Such effects are likely to be infrequent and of much shorter duration than the construction activities. Any effects on the local road network can reasonably be expected to be managed through the implementation of temporary traffic management plans.

The NOR report concludes at 10.10.3 that:

'The traffic and transport effects of the proposed works are considered to be consistent with small scale civil construction works, and while they may pose some inconvenience to residents during the construction period, the effects will generally be considered acceptable given the necessity of the works and the implementation of traffic management practices to minimise effects as far as practicable and to maintain access to private properties.'

It is agreed that through the implementation of a construction traffic management plan, the adverse traffic effects can be minimised to ensure ongoing access along with the safe operation of the local road network for all local road users.

6. Proposed Conditions

Section 11.2 of the NOR report sets out the proposed NOR conditions. The traffic-related conditions are discussed in turn below.

Condition 1.b. includes the note that *'the final driveway and private bridge to provide for access and parking at each property from 30-38 Blue Mountains Road will be completed in consultation with each respective land owner'*.

This condition should usefully apply to any new or modified vehicle access and should include the need for compliance with the Council's Code of Practice for Civil Engineering Works. Compliance with the Code should be confirmed by Council officers.

Condition 5.a. requires a Construction Traffic Management Plan to be submitted to Council for certification.

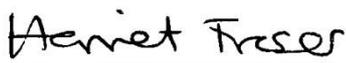
Condition 14.b. restricts heavy vehicle movements on public roads to between 9am and 6pm on Monday to Fridays (excluding public holidays). Some further restriction may be needed for instance ensuring safe pedestrian passage during the period immediately after the end of the school day. The need or not for such a restriction will likely be identified as the CTMP for individual stages is developed.

Conditions 20, 21 and 22 set out the purpose and requirements for the CTMP. Condition 22 should be expanded to include measures to mitigate any adverse effects on parking both within private properties and along the kerbside.

With the above matters addressed through conditions I am comfortable that the traffic effects associated with the Notice of Requirement can be appropriately managed, ensuring safe and efficient access for both the affected property owners and for the wider local community who travel through the local road network.

Please do not hesitate to be in touch should you require clarification of any of the above.

Yours faithfully



Harriet Fraser