# **PATERSONPITTS**GR

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4 August 2022

The Variation 2 Officer **Dunedin City Council** PO Box 5045 Dunedin

**RESPONSE TO VARITION 2 s42A REPORT RS193: 177 TOMAHAWK ROAD** SUBMITTERS: DANIELLE NICOLSON, TIM LEQUEUX AND SORREL O'CONNELL-MILNE

#### Attached:

- Structure Plan
- Stormwater Management Plan
- Geotechnical Report
- Additional Geotechnical Advice

Please find below, the submitter's response to the s42A recommendations that relate to this greenfields site.

#### **Background**

The subject site is a 7.67ha property that is currently zoned Rural (Peninsula Coast). The site contains three dwellings, two of which are not currently inhabited, and a number of rural buildings (several of which were formerly associated with horse training activities on the land). The property descends at a moderate grade from Gloucester Street, before becoming relatively level as it approaches the Tomahawk Lagoon and the Tomahawk Road frontage.

The site is bordered by the existing GR1 zone to its south-west, west and north-west aspects. To the north lies Rural (Peninsula Coast) zone; to the east is the Tomahawk Lagoon and to the south is the main entrance to Tomahawk Beach.

The majority of the property is open pasture, with a scattering of native trees and shrubs, much of which the submitter seeks to retain and protect.

The submitter proposes that 4.32ha of the site (just over half of the property area) is rezoned into the GR1 zone. The remainder of the site (some 3.35ha) will be rezoned into the Recreation zone. Overall, a rezoning of this land as proposed by the submitter will essentially serve to realign the the existing GR1 zone boundary, while at the same time achieving positive outcomes in respect to amenity and conservation values.

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## **Transportation Matters**

While no expert evidence is being supplied by the submitter in respect to transportation matters, the submitter considers the information below to be relevant.

We have reviewed the DCC Transport comments that appears in the s42a report. Quite correctly, it is noted that Gloucester Street has a relatively narrow formation, and that the intersection (with Spencer Street / Tomahawk Road) has unusual geometry. The s42a report suggest that this complexity makes the road unsuitable as the primary access for a large number of new dwellings. Taking this information on board, the submitter has elected to develop the attached Structure Plan, which proposes to limit the number of accesses into the rezoning land from Gloucester Street to a maximum of 8. Currently there are 12 sites that have established assesses from Gloucester Street, and an additional 8 sites would enable the total number of sites (20) to comply with the DCC transport policy that no more than 20 sites should be accessed from a dead-end street.

The balance of the development land will gain access from Tomahawk Road, at the southern end of the subject property. The existing accessway at this location will be upgraded the intersection between the accessway and Tomahawk Road will be improved to resolve existing sightline issues. The Structure Plan indicates the location to which this intersection will likely be relocated to.

Council's s42a report envisages that a rezoning of this land could result in an additional 134 dwellings on the property. However, the attached Structure Plan proposes a smaller yield, following the subtraction of land required for stormwater management, enhancement of designated bush and vegetation areas, the proposed Recreation zone region, and an allowance the site's topography. Overall, it is our view that the land, if rezoned, will most likely have a realistic site yield of approximately 35 dwellings.

Of these 35 dwellings, a maximum of 8 sites will be accessed from Gloucester Street. We agree with Council that the Gloucester Street intersection will require a review, however with the relatively small number of additional dwellings that will seek vehicular access via this intersection, it is considered unlikely that the rezoning will result in an adverse effect that is more than minor in this regard. In the event that a transportation review recommends some improvements are needed to this intersection, the scale of these improvements is likely to be reasonably modest, and feasibility to achieve as part of the future development works. It is anticipated that this matter could be more fully investigated at the time a resource consent application is prepared for any development within the rezoning land.

The submitter notes that a footpath could be constructed along the eastern side of Gloucester Street if this was considered important. If required, a narrow corridor of land could be vested from the rezoning property as legal road, to provide the necessary space for a footpath to be constructed. If on-street car parking is difficult, an easy solution to this would be to require than any new sites developed within the rezoning area are to provide space on-site for parking to be provided if required by future owners.

The remaining 27 sites will be accessed from Tomahawk Road. While this number of sites is slightly greater than the 20 that DCC Transport considers to be the usual standard for deadend streets, the difference between 20 and 27 in this location is minimal. The new road entering the site from Tomahawk Road is highly unlikely to ever need to be extended (or at least not for the purpose of supporting future residential growth), and with an improved intersection provided at Tomahawk Road, any adverse effects resulting from the 7 sites that exceed the 20-site standard are considered to be less than minor.

The s42a report notes that there may be possible implications for sight distances in respect of the new intersection. Our measurements suggest that a sight distance of 75m is achievable to the west of the likely intersection location (the 2GP requires a minimum sight distance of 69m). To the east, the sight distance is greater, however the influence of the bridge abutment on this sight line is something that will need to be taken into account during intersection design processes. The submitter agrees with DCC Transport that an Integrated Transport Assessment (ITA) should be undertaken by the developer to assess these matters.

Overall, taking into account the likely number of future dwellings that could be anticipated within the rezoning land (as it is presented in the attached Structure Plan), it appears that relatively straight-forward traffic engineering solutions exist for resolving both the present and future traffic issues for the roading network in this location.

# **Rural Character / Landscape Matters**

The submitter concurs with the s42a report where it concludes that 'a limited extent of residential development could potentially be accommodated within a much smaller area adjacent to existing residential development near Gloucester Street without adversely affecting existing landscape character values to a high degree. Due to the moderate - steep slopes of this part of the site, it appears likely that some residential development could occur here without intruding on the visual amenity of nearby residents, who would be able to look over this area to the rural and coastal vistas to the east.' The submitter agrees with this statement, and has been mindful of landscape matters during the development of the attached Structure Plan.

Presently, a residential subdivision (11 sites) is under construction at 155 Tomahawk Road (this property appears on the Structure Plan as the largest piece of adjacent GR1 zone land, located immediately south of where the two DCC stormwater sewers discharge onto the rezoning site). This development will essentially 'fill up' the adjoining residential zone. Development under the attached Structure Plan will effectively span the triangle of space between the line of existing houses at 215-229 Tomahawk Road (on the western side of the southern lobe of the rezoning land) and the existing house at 54 Gloucester Street. This will leave a significant offset between the new residential development and the Tomahawk Lagoon, which will maintain the landscape and amenity buffer corridor that exists around the edge of the lagoon (allowing the the lagoon to retain its rural character). Stormwater management is being carefully designed to improve existing stormwater flows from the property, as well as those that will result from the proposed development (this is discussed further below).

#### **Iwi Consultation**

The submitter has taken the opportunity to engaged with local iwi in respect of the proposed rezoning. It is acknowledged that the Tomahawk Lagoon is of cultural significance to manawhenua, particularly in respect of biodiversity, stormwater and landscape matters.

Several phone conversations have been carried out between the submitter and Aukaha (the organisation that manages consultation processes for the relevant Rūnaka), however nothing in writing has been received to-date. The initial discussions appear to have been reasonably positive. We are hopefully that a consultation response will be received prior to the hearing date, at which point we would hope that it can be circulated then.

# **Biodiversity**

As part of the s42a reporting, Council's biodiversity consultant has advised that 'the vegetation present is dominated by exotic species and pasture and does not meet ASBV or urban biodiversity mapped area (UBMA) criteria, although there are individuals of lowland totara (on the south-west boundary of site) that warrant protection, along with large individuals of ngaio (centre of the site, behind the old house). Wildland Consultant's recommendation is that from a biodiversity perspective the upper part of the site could support relatively dense residential use, but development should be avoided on the lower part of the site due to proximity to Tomahawk Lagoon and its regionally important wildlife values. If rezoning was to proceed, restoration of the lower part of the site should be considered, along with protection of the totara and larger ngaio in the rezoning area'.

The submitter is very happy with this statement as it reflects exactly the type of conservation values that are held by the submitter. The initial stages of the attached Structure Plan have been developed prior to the s42a report being published, and it is pleasing to see how much consistency there is between the documents. It is the submitter's intention to ensure that the following conservation works are undertaken as part of any site development-

- Protection of the totara and ngaio specimens
- Enhancement of other areas of vegetation within the land
- Exclusion of residential development close to the Tomahawk Lagoon, and partial restoration of this area.
- Improved on-site stormwater management and treatment.
- Provision for community and conservation activities to be undertaken within the area of flatter land on the southern lobe of the property.

Overall, the submitter considers that the proposed rezoning will not only meet the outcomes sought by DCC's biodiversity consultant, but may well exceed these.

Accordingly, no adverse effects from the proposed rezoning are anticipated in regard to biodiversity matters. Very possibly, a positive effect may be realised.

#### 3-Waters Matters

## Water Supply

The s42a report includes advises from Council's 3-Waters department. This states that 'In relation to potable water supply, the existing infrastructure appears to be adequate based on a high-level assessment, although an upgrade to the main in Gloucester Street may be required and high-water pressure at lower elevations may be an issue.

We note that there is a 100mm dia watermain contained within the carriageway of Gloucester Street and a 100mm dia water-main beneath the grass verge adjacent to the site on Tomahawk Road.

In terms of potable water, the issues raised by Council's 3-Waters department are considered manageable. The 3-Waters assessment was complete don the basis of an expected 134 new dwellings. With only 35 building platforms likely to be realised on the land, the potential demand will be proportionately less.

If required, the watermain in Gloucester Street can be upgraded as part of the development works. This is likely to be a perfectly feasible proposition. Regarding the high-water pressure at the lower site elevations, this may not be an issue now that residential activities have been excluded from the lower parts of the site. In any case, a pressure-reducing valve could be easily implemented to manage this issue.

Fire-fighting supply can be readily provided to the rezoning land by extension of the existing watermain infrastructure.

Overall, we do not consider that the proposed rezoning will result in any adverse effects in respect to water supply.

### Wastewater Disposal

Council's 3-Waters reporting has advised that while there are some issues with the wastewater network in this vicinity, these are considered to be manageable. One concern that is raised is the capacity of the pump station in Tomahawk Road. This was assessed on the basis of a possible 134 dwellings being constructed on the submission land. Now that this capacity has been pruned to a realistic yield for 35 sites, it is considered very likely that the pump station in Tomahawk Road will be able to accommodate the wastewater flows form this land.

Overall, we do not consider that the proposed rezoning will result in any adverse effects in respect to wastewater disposal. If adverse effects are found to be apparent, there will almost certainly be suitable engineering solutions available to mitigate these.

#### Stormwater Management

The s42a report notes that 'the site is located adjacent to, and discharges to, Tomahawk Lagoon and other tidal-influenced coastal areas downstream of the site. It is assumed that an overland flow path can be established/designed to be directed to safely discharge to these tidal areas from the site, without the need for onsite attenuation. Erosion protection and stormwater quality treatment would be required to protect water quality. However, Tomahawk Lagoon is classed as a regionally significant wetland and discharge would require resource consent from the Otago Regional Council. This is likely to be extremely challenging to obtain, and strong community and manawhenua opposition to a consent would be expected. Meeting the new stormwater management rules in Variation 2 is not expected to be sufficient to address stormwater issues due to this consenting requirement and Tomahawk Lagoon's status as a regionally significant wetland.'

The above statement is reasonable. The submitter is aware of the existing issues with stormwater contamination into the Tomahawk Lagoon.

However, the submitter is highly motivated to implement a stormwater solution that will not only successfully treat the water that is generated from any development within the rezoning site, but one that will also enable the existing stormwater flows that pass through the site to be collected and treated. At present, there are two DCC stormwater pipes that discharge water onto the rezoning land, neither of which include treatment facilities. These stormwater pipes collect water from the Andersons Bay residential neighbourhood, including from road mudtanks. These pipes do not effectively 'manage' stormwater, they simply serve to transfer stormwater from one point to another (as is typical of traditional local authority stormwater systems).

The submitter has commissioned the attached Stormwater Management Options evidence. This report describes how a comprehensive stormwater management system could be successfully developed within the site to enhance the quality of the water that is presently passing into the Tomahawk Lagoon from this direction. The Stormwater Management Options report incorporates a holistic approach to managing stormwater, whereby water detention is supported by significant riparian plantings and natural filtration pathways.

The submitter understands that a discharge consent will likely be required from Otago Reginal Council, however feels more optimistic about obtaining this consent that the s42a reports otherwise suggests. There is no reason for Otago Regional Council not to issue a discharge consent, provided that the design of the treatment system is comprehensive and robust.

It is the submitter's firm view that a sustainable and successful stormwater management system can be constructed within the rezoning land in a way that will achieve a nett improvement to the quality of the water that enters the Tomahawk Lagoon from this part of the City. Accordingly, we do not consider that the proposed rezoning will result in any adverse effects in respect to stormwater.

#### **Hazards Matters**

## Geotechnical

Within the s42a report, Council's geotechnical consultant has expressed a high level of concern with regard to both slope stability on the steeper parts of the site and liquefaction on the flatter areas. It is useful to note that the submitter has elected not to promote residential development on the flatter portions of the site, and instead proposes that a new Recreation zone be created over the bulk of the flatter land.

The attached expert evidence from GeoSolve, comprising a report dated 14 December 2021 and an email dated 05 August 2022, serve to address the concerns raised by Council's geotechnical consultant.

GeoSolve has provided specific reporting in relation to the steeper parts of the site. The conclusions contained in the December 2021 assessment are generally positive, and nothing in this report suggests that residential development is inappropriate for the land. The additional advice, provided in August 2022, further supports the feasibility of residential development of the land, and concludes the following-

In conclusion, there are no major constraints apparent within A and B at this stage, apart from some localised steep land. Although geological investigations have been suggested by Stantec as a requirement to determine the suitability of the site at this stage, we consider that there is no evidence to suggest a high risk of global instability, provided that the subdivision is carried out with detailed geotechnical investigation and advice. Engineering solutions are readily available to enable development on slopes up to 20 degrees and even steeper in some cases, especially where volcanic rock is present.

It will need to be acknowledged that there would be some areas within Area B that will need more detailed geotechnical investigations and specific engineering (we understand that the Structure Plan could contain a rule that requires a more comprehensive property-wide geotechnical investigation prior to the first subdivision).

The submitter is satisfied with the advice provided by GeoSolve, and is comfortable with the expectation that a more comprehensive property-wide geotechnical investigation should be carried out prior to the first subdivision. We agree with this and suggest that this is a matter which could be more closely considered as part of a future resource consent application.

Having received this advice from GeoSolve, it is our view that any adverse effects from rezoning the subject land to a residential format, in respect to geotechnical considerations, will be no more than minor.

## Flooding

The 2GP shows the presence of a Hazard 3 (coastal) Overlay Zone associated with the Tomahawk Lagoon. However, the proposed rezoning does not provide for the development of residential sites close to the elevation of the lagoon. All new houses will be located above the 10m elevation contour. Accordingly, the opportunity for residential property to be subject to flooding from the Tomahawk Lagoon does not exist.

#### Structure Plan

A Structure Plan has been attached. This illustrates the form of the proposed development, including stormwater management and treatment areas, vegetation enhancement regions, conservation provisions, and proposed restrictions on certain residential activities.

# **Planning Matters**

The submitter has obtained suitable geotechnical advice to be assured that the land is able to support new housing. In this respect, we do not consider that there is a conflict in respect to Policy 2.6.2.1.d.viii.

Similarly, the consideration of flooding form the Tomahawk Lagoon has been overcome through the exclusion of any residential development within the areas of lower elevations on the site. In this respect, we also do not consider that there is a conflict in respect to Policy 2.6.2.1.d.viii.

The proposed rezoning, as outlined by the attached Structure Plan ensures that development on the lower part of the site (adjacent to Tomahawk Lagoon) is avoided. This recognises that high natural values of the lagoon. Accordingly, we do not consider that there is a conflict in respect to Policy 2.6.2.1.d.iii. In fact, the proposed rezoning provides a number of outcomes that will enhance biodiversity values within the local environment.

Council's landscape assessment concludes that there will be high adverse effects should the entire site is rezoned. However, the submitter does not propose that the entire sites is developed. Instead, residential development is restricted to the upper slopes of the land. Therefore, we do not see that there is a conflict with Policy 2.6.2.1.d.vii.

The issues raised by DCC Transport are also able to be resolved. This is achieved partly through restricting the number of access from Gloucester Street to a maximum of 8, and partly through anticipated modest-scale infrastructure upgrades, which can be undertaken as part of the development program. In this regard, we are confident that there is no conflict with Policy 2.6.2.1.d.x.

Furthermore, the submitter has outlined a significant opportunity through the rezoning to better manage stormwater flows. Not only is development of the rezoning land able to provide a high-quality stormwater treatment system, it will also achieve enhanced treatment of the existing DCC stormwater sewer flows that pass across the site. In this

respect, a nett benefit to stormwater management is achievable (i.e. a higher level of outcome than the usual standard, which is simply to make things no worse than previous).

Finally, the submitter's proposal to rezone a large portion of the flatter land within the property into a Recreation Zone is applaudable. This is intended to enable the land to better support community, conservation, and sport and recreation activities. Exactly how these activities will occur is not yet known, but it is promising that the submitter holds a desire for this land to be used for more than just low-value, low-productivity private rural activities.

Having carefully considered the S42a recommending report, and having commissioned several independent expert reports, the submitter comfortably feels that rezoning the upper portion of the site to General Residential 1 is appropriate. The submitter is passionate about improving the site from an environmental perspective, and has been proactive in addressing the issues that have been raised in the s42a assessment. Iwi consultation has been initiated. The submitter is willing to invest in the property in order to create an outcome that is sustainable from both an economic and environmental approach. The submitter's willingness to conserve and enhance the site as well as provide much needed housing capacity, is a refreshing approach to the development of difficult sites.

Yours faithfully

**PATERSON PITTS GROUP** 

**Kurt Bowen** 

Registered Professional Surveyor