

Memo

To:	Vicki Jones
From:	John McCartney
Date:	Thursday, 13 May 2010
cc:	Denis Mander
Subject:	Plan Change 36 – Wanaka Industrial Zoning Extension

Following our recent meetings and discussions, I report as follows in relation to the servicing of the proposed plan change area with infrastructure for water supply, wastewater and storm water drainage.

1. General

The proposed plan change area encompasses land between Gordon Road and Frederick Street behind the current Ballantyne Road light industrial area. It is likely that the Plan Change will allow for further light industrial and commercial use of the land. The current proposed structure plan for the site is contained on Paterson Pitts Ltd drawing titled Gordon Industrial Development – Wanaka – Draft concept 3 and dated May 2006. My evaluation has been based on this plan.

The land is generally higher than the surrounding area and a significant amount of earthworks are proposed to generally lower the site and mitigate visibility concerns. It is currently envisaged that this proposed earthworks will allow drainage for storm water and wastewater to be directed to the Gordon Road entrance of the subject land.

2. Water Supply

The water supply network in this area of Wanaka is currently limited. Significant growth and development around Wanaka means that the existing reticulation system is approaching capacity. With the scale of the plan change proposed it is anticipated that significant further water supply infrastructure will be required to meet the expected demand. Council is addressing this by planning the construction of the new Hawthenden reservoir. This new reservoir is currently programmed to be constructed in 2012/13 with the connecting pipe work to the Gordon Block due for completion in 2017/18. These timeframes may vary due to reasons of affordability, demand and land availability.

It is currently not envisaged that the QLDC water supply will be able to provide sufficient water pressure or flows to the plan change area until after the Hawthenden Reservoir and associated reticulation has been constructed.

In order to better understand the extent of the constraint on the water supply reticulation and the required upgrades, Council is commissioning a report to clearly define the current capacity limitations and the extent of work required to supply the plan change land and other growth areas within Wanaka.

3. Wastewater Drainage

Due to the earthworks proposed on site, all allotments will drain wastewater flows to the existing infrastructure on Gordon Road. As a consequence of this, all wastewater flows will drain to the Gordon Road Wastewater Pump Station. Recent reporting has shown that the Gordon Road Wastewater Pump Station is nearing capacity and Council will be required to upgrade this in the next few years. The exact timing of this upgrade will depend upon actual flows reaching the pump station and it is currently programmed in the LTCCP for construction in 2012/13. Development within the plan change area will increase flows to this pump station and may affect the timing and extent of the upgrades required.

4. Storm Water Drainage

No reticulated storm water disposal currently exists that would cater for the proposed development. The adjacent existing industrial zoned area is serviced by reticulation that drains to a soakage basin on Ballantyne Road. Anecdotal evidence suggests that this drainage feature is functioning suitably and no flooding issues have been reported in relation to the soakage facility.

Runoff flows from the subject site currently flow northwest off the land and follow the natural drainage paths towards Frederick Street or Gordon Road:

- Near the current terminus of Gordon Road flows currently soak away with no defined overland flow path away from this area. Should this soakage be insufficient flows will continue along Gordon Road and Ballantyne Road and cross Ballantyne Road at the low point in the road. The depths required to cross the road would result in extensive flooding in parts of the existing developed areas on Ballantyne Road and Gordon Road.
- Secondary flows towards Frederick Street currently end up at the soakage facility on Ballantyne Road. Ballantyne Road itself effectively blocks secondary flows from the southwest side of the road. Extensive flooding of existing premises on Ballantyne Road, Frederick Street and Connell Terrace would occur prior to runoff crossing a low point on Ballantyne Road and continuing along the shallow flood paths on the old wastewater ponds site and Three Parks Land.

I have been informed that the existing drainage feature on Ballantyne Road has been designed and constructed to manage flows generated by a 100 year return period event. This indicates that the facility will meet QLDC requirements for managing both the primary and secondary flows from the existing developed area.

The land owner proposes to construct soakage facilities that would allow for the drainage of the land. This drainage feature would be constructed near the current terminus of Gordon Road. Experiences with similar existing drainage features for the adjacent Ballantyne Road industrial area suggest that this should be suitable.

In order to ensure that the zoning proposal is able to manage the expected storm water flows, it would be prudent to include the proposed soakage facility within the plan change area. In order to accurately do this, an amount of preliminary design work is required and the land owner has been requested to provide a report and design for the storm water disposal facility.

Council has a number of soakage facilities in South Wanaka. Anecdotally, these appear not to receive regular inspection or maintenance. I recommend that Council adopt a register of these existing facilities and any new facilities constructed as part of the plan change development and implement a regular inspection and maintenance regime.

In addition, in order to ensure that secondary flows from the catchment above the subject can be safely conveyed to Ballantyne Road, the landowner should be required to ensure a secondary flow path is available through the site all the way from Cardrona Valley Road to Ballantyne Road. Whilst this does not directly affect the subject land, it would be a major benefit to the upstream catchment. Council will need to separately address the continuation of the overland flow path across Ballantyne Road and through the old wastewater treatment site.

Due to the nature of the proposed plan change and likely business usage of the land post re-zoning, I would expect that storm water treatment devices should be installed on individual allotments to intercept grit and hydrocarbons. This requirement should be reflected in the zone rules for the plan change area.

5. Summary

In summary, the water supply, wastewater and storm water drainage matters requiring addressing are as follows:

- It is anticipated that there is currently no Council water supply available to fully service the site. The proposed Hawthenden reservoir will provide a full water supply for this site. Council is commissioning a report to confirm how much (if any) water is available to the site and what will be required to service the site with a water supply.
- Council will take into account the proposed plan change when carrying out upgrade works on the Gordon Road Wastewater Pump Station.
- The land owner has been requested to provide further information regarding the proposed stormwater drainage and disposal from the plan change area. This will allow the extent of the plan change area to include the proposed storm water soakage facility.
- The land owner is to be requested to provide a secondary flow path from the upstream catchments through the adjacent site and to the end of Frederick Street.
- Council to compile a soakage facilities asset register for existing and new soakage facilities and implement a routine inspection and maintenance regime for these assets.
- Council is to incorporate storm water secondary flow paths across Ballantyne Road and through the old wastewater treatment ponds site into development plans for this area.
- Zone rules are to require individual lot owners to design and construct grit and hydrocarbon interception devices at the time of developing the individual lots and prior to connecting to the storm water reticulation.

Should you require any further information, please contact me.