

**Further Submission in relation to PC69-0098 on behalf of B & V Gemmell,
T Coffin, and T & M Hughes, current dwelling owners from 1480 - 1484
Springs Road.**

My name is Terence Peter Hughes and I have a PhD in Animal Science from Lincoln University and a M.AgSc from Massey University. In my career I specialised in ruminant nutrition, dairy science, dairy conversions and consultancy. I was associated with the original Lincoln University dairy farm, (now being developed by Te Whariki), for 18 years, supervising it for 6 seasons.

The four issues we wish to elaborate on after hearing and reading preliminary presentations are not necessarily issues where we have any expertise but are of considerable concern to us as owners and/or occupants of houses on Springs Road already surrounded by two current developments (Te Whariki on the east and Verdecos on west side).

Use of good farmland for housing (Oppose this proposition)

Although the soils making up most of the area within PC 69 historically developed with impeded drainage (Wakanui and Temuka silt loams), the advent of hydraulic diggers and improvements to drainage and irrigation have largely reduced potential restrictions to agricultural land use of these soils. Like the old University dairy farm, I would expect areas of peat will challenge road and section preparation. We concur with the submission of Professor Keith Cameron and suggest there are plentiful shallow, shingle-based soils with limited organic matter and plant available water holding capacity, which are far less suited to agricultural use, and could be used for housing. With some of the suggested PC 69 area as low as 2m above sea level the potential for a heavier burden on drainage may not be suited to this site without careful planning. While building sites may need to be elevated, ecologically responsible water disposal systems for all sewerage, spring and storm water will be required.

Traffic flow on Springs Road (Oppose this proposition)

Springs Road bisects the proposed PC 69 (Planned Change, 69) development which is on the southern boundary of Lincoln township. With limited support for a bypass road through the Verdecos Park development and on the south side of the Lincoln University campus and no connection to Liffey Springs Rd, it is essential that estimates of traffic to be borne by Springs Road until such time as an exit to Ellesmere Road via Moir's Lane can be developed, are real.

Our concerns are amplified when the following are considered: -

- The road exit to Springs Road, designated as road B in the Te Whariki Stage 4 Subdivision Plan in the southern most corner, is not yet completed.
- Housing construction on the south-eastern corner of Verdecos Park reliant solely on Springs Road has not been completed but estimated in the model.
- The potential increase in traffic required for additional staff and post graduate students at the new science centre at Lincoln University will largely be borne by Springs Road. Completion date late 2022 to 2023.

- We have not been advised of any planned development of Springs Road in proximity to our houses or to carry additional traffic from the current proposal, PC69. The only developments are those proposed by the proponents of PC69 where traffic from potential housing sites will enter Springs Road via one of two roundabouts. Roadside developments are also planned.
- We are unaware of any plans to install streetlights, footpaths, underground storm water drains or roadside kerbing on the western side of Springs Road.

We do not envy the modellers of traffic flow especially at the intersection of Springs Road and Gerald Street and Ellesmere Junction Road. Predictions of the effects of the two current land developments prior to completion with little consideration of the building of the new science block at the University and using that predicted data to predict the additional traffic flow for the PC 69 developments appears to us to require verification. It is not clear whether the current exit from the Burns wing at the University onto Springs Road will also carry additional traffic from the new science block currently being built.

1. Could the current model be compared at the Springs Road and Gerald Street intersection with actual traffic flows along with the duration and time of day of any delays, during term time at the University.
2. Adding an additional development (PC69), especially with no proposed time scale for a planned upgrade of Springs Road as far as the southern edge of the Verdeco Park on the Western side and Te Whariki on the Eastern side, should not be considered.
3. If Springs Road is to be upgraded to carry the expected increase in traffic, when is this to occur? Is there any plan to upgrade Collins Road which could feed onto Shands Road and thus bypass the bottle neck at the Ellesmere Junction Road, Gerald Street and Springs Road roundabout?

Water

- The current proposed plan change lies outside the Lincoln growth boundary. Domestic water supply will depend on converting 3 resource consents for irrigation to provide untreated water to the Council provided that ECAN approves such a process.
- We are aware from living in the vicinity that a portion of the proposed land is prone to flooding which has been exacerbated by restricted flows in the L2 river and moderate but persistent rainfall. The extent to which the potential to flood will be increased by the proposed development remains unclear although mitigation planning for such events is sound (M R England 15 October 2021).
- It is not clear how the currently proposed sewerage pumping and treatment developments at Rolleston can accommodate the additional sewerage from PC 69 within the current 10-year SDC expansion plan (2021-2031).
- We note and commend the developers' determination to keep spring water separate from storm water

Communication between developers, SDC and close neighbours to PC 69

Although not especially excited about the Verdeco Park development over our back fences we were excited by the possibility of a connection to a sewer mainline and mains water. We had always expected to pay for the privilege. The last plan we saw had the sewer mainline installed under the berm between our front fences and Spring Road with a storm water outlet connection. In time the sewer mainline was installed as suggested with no warning that our berm was to be dug up and in my own instance the outlet from our Oasis treatment plant was blocked which caused our pump to burnout. Our storm water outlets are still the original shallow grass ditch.

We were not surprised to have developments occur over our back fences before any enquiry was made as to where our wells for domestic water were. By this stage our water was dirty from time to time, although with few exceptions we had a continuous supply. We could not get the SDC to tell us what the arrangement had been between them and the developer re our domestic water and sewerage connections.

After no communication with the SDC re our ability to connect to the sewerage mainline we again had to contact them. We learnt that we could not connect to the sewer outside the front of our properties as this was pressurized. Such detail was not supplied at the outset. The system proposed for us with no initial consultation involved sewerage from our three houses entering the Verdeco Park sewer at the back of our properties through a manhole we were to jointly pay for. This change of plan also involved access through neighbouring properties requiring legal rights of way and potentially the pumping of sewerage.

After this experience I would recommend that all properties on the periphery of such developments be kept informed of any proposed change in the consent or plan that has been agreed to between the developer and SDC. We still await a footpath, street lighting and storm water disposal as originally indicated. We note that a foot path and lighting is to be installed in Te Whariki Stage 4 on the Eastern side of Springs Road.

When a change was required from the original site at which road B (Te Whariki Stage 4 Subdivision Plan) met with Springs Road we were contacted by the developers to seek our approval. No such consent was apparently required when Verdeco Park changed their exit and entry point onto Springs Road.

It is interesting to note that Mat Collins recommends in his Transportation Hearing report of October 2021, *that the ODP indicates frontage upgrades for Springs Road and Collins Road. Detailed upgrades of these roads should be determined by the developer in collaboration with Council at subdivision stage and in accordance with Council Engineering Code of Practice requirements.* We are left asking why similar requirements don't apply to the Western side of Springs Road?

November 23 2021.