

## Submission by Nancy C Borrie

## 1. Introduction

Today I present my submission as a long term resident of Lincoln. In the past 40 years I have observed the changes that many of the Applicant's experts have referred to in their Evidence.

I come here out of concern about matters that I consider will impact the well-being of the present and future residents of Lincoln. Lincoln is not just an arrangement of houses and streets but a place where ordinary people live, work and raise their families. It has been a good place to do this and I would like to see this continue into the future. I believe that developers have a very significant responsibility to ensure that they do the very best they can to enhance the community that they intend 'dropping' 100s or 1000s of sections into. I consider that by working with the community and acknowledging expressed community Visions the process can be a win-win situation. In Lincoln there is a Visions statement that would have informed the Lincoln Strategic Plan - *Lincoln: A Vision for our future. A community-participation based envisioning project for the future Lincoln village* (2001) <sup>1</sup>. It gives a background to Lincoln and sets out residents aspirations. It was created after extensive public consultation and has formed the basis for many of the features in Lincoln today.

I consider that I should make it clear that my background has also influenced my submission and informs the reasons why I am submitting on 4 particular aspects of Proposed Plan Change 69.

I trained as a town planner at the University of Auckland in 1973 and for 8 years worked as a Planner then District Planning Officer in the Ministry of Works Dunedin. In that role I was involved in overseeing planning across Otago and Southland, then spent some time working in Head Office Wellington and District Office Christchurch.

In 1981 I moved to Lincoln. From the mid-1980s till the mid-2000s I was involved in a number of community groups/organisations in Lincoln and was a member of the Lincoln Community Committee.

During that time a number of Plan Changes occurred in Lincoln, rapidly expanding the town's size and I made submissions on a number of these, seeking to give input that would enhance the long term well-being of future residents. Examples of what I sought to be included in these Plan Changes were: connecting roadways and blue-green access ways between subdivisions; esplanade reserves and strips on the L1 and L11 streams; investigation of land suitability for housing due to chemical residues in the soil (PC 45, 46, 47, 48). Following the completion of my Masters in Resource Studies at Lincoln University I have been involved as a research assistant in a range of resource management projects at Lincoln and Waikato Universities.

For these reasons I do look critically at Proposed Plan Changes in Lincoln and make submissions that ask for changes that I think would be of benefit to the wider Lincoln community. It is on this basis that I make my submissions today – I am not providing expert evidence, rather I would consider myself an informed resident.

<sup>1</sup> Bowring et al. (2001). Lincoln – A vision for our future: A community-participation based envisioning project for the future Lincoln village. Lincoln University.

## **Submission 1.**

### **1. Provision to which my submission relates: Land use zoning**

The request that Selwyn District Council amend the Selwyn District Plan Planning Maps, by rezoning the area within Proposed Plan Change 69 to Living X, Living Z and Business 1 (Local Centre) as detailed in Attachment 3.

**1.2 My Position:** I oppose the rezoning of land for residential purposes in areas identified as flood prone and in particular the area covered by Living X Zone as detailed in Attachment 3.

**1.3 Reasons:** The SDC Proposed District Plan, ECAN Defined Flood Zones and Plan Change 69 documentation indicate that land within proposed Plan Change 69 has been identified as subject to flood hazard risks, particularly in the vicinity of the LII River.

I consider that the use of flood prone land for residential housing is undesirable, fails to consider the health and wellbeing of residents, creates a safety hazard, impacts the integrity of infrastructure, reduces the long term sustainability of residential development in that location and therefore fails to meet the requirements of the RMA and fails to take into account the effects of climate change.

### **1.4 The decision I want the Council to make:**

1. To decline the rezoning of the land in Attachment 3 to Living X for residential purposes and
2. Require the applicant to review the location of all other residential development in areas that are potentially subject to flooding so as to exclude all flood prone areas from residential zoning.

### **1.5 Speaking to my submission 1**

I am very pleased to see that the Applicant has removed the Living X zone from PC 69. But I still have concerns regarding potential flooding within parts of the remaining residential zone – My point 2 above.

A number of the Applicant's experts have indicated that the current ODP is based on what appears to be initial preliminary investigations and that the final layout, actual details and mitigation of any effects/impacts of the development will be provided in the AEE at the Subdivision Consent stage. Some of the experts indicated that they had not done in-depth investigation into the suitability of various aspects of the site for the intended purposes but stated that will come at the subdivision's consent stage, after PC 69 is granted.

This raises the 'which comes first' question – do you need to know if the land really is suitable for the intended purpose before or after the land is rezoned? The Applicant proposes 2000 sections – that number could well change, based on ground suitability, areas required for the protection of the spring heads, stream reserves etc. So the Lincoln community and SDC don't actually know what they are going to inherit i.e. how many houses and therefore the traffic flow, the impact on infrastructure and pressure on existing community facilities/resources etc.

### **1.6 My concerns are:**

- i) Given the limited amount of detailed information available, how susceptible is the site from a natural disaster view point? Flooding is recognised in the area. The L1 and LII streams are linked to Te Waihora/Lake Ellesmere and this water body is subject to fluctuating lake levels as well as sporadic mechanical opening of the lake to the sea. In addition there is the issue of sea level rise due to Climate change.

- ii) Will parts of the site be susceptible to liquefaction in an earthquake? Does the site have varying TC rating? As the Christchurch earthquakes 2010-2011 have shown, building on land that has unsuitable ground conditions causes damage to property, distress and social dislocation in the affected communities, incurs major costs for ratepayers and taxpayers via the required restoration of services by local Councils or relocation of residents by Government e.g. the Christchurch Red Zone.
- iii) Financial hardship due to insurance retreat, something that is already happening overseas. Increasingly insurance companies globally are withdrawing from insuring housing or increasing premiums to match what they perceive as an undesirable disaster risk level. I have become aware of significant changes within the insurance industry and the growing un-insurability of properties impacted by natural disasters. With the increasing frequency of major climatic events, potentially due to Climate change, I would expect that the fine print in Insurance Contracts will contain a clause exempting such claims. For that reason it is desirable to further refine the Living Zones in PC 69.

Mr Thompson in his presentation and subsequent questioning indicated that some land does liquefy and move towards a spring. He also indicated that at this stage his assessment was theoretical and he needed to check aspects. I consider this additional detailed information is essential in order to determine the suitability of land for various zones/land uses. Mr McLeod also made reference to flood levels needing to be available with regard to infrastructure at subdivision stage.

I consider this is the time when it is still possible to avoid placing urban development where natural hazards, such as flooding and liquefaction, has been observed or will potentially occur.

#### **1.7 The decision I want the Council to make:**

- i) The Applicant provide additional detailed information and a detailed map of the land suitability for residential use with respect to natural hazards such as flooding, earthquake activity, and sea level rise.
- ii) Upon the provision of the above information, the Applicant to review the location of all other residential development in areas that are potentially subject to flooding so as to exclude all flood prone areas from residential zoning.

## **2. Submission 2: 150m Buffer zone**

**2.1 Provision to which my submission relates:** That SDC amend Rule 4.9.32 (Township Volume) excluding the ODP area from this rule requirement.

**2.2 My Position:** I oppose this in full

**2.3 Reasons:** The 150m buffer zone was created in order to protect the Lincoln Sewage Treatment Plant from reverse sensitivity issues and for health and safety reasons.

The Lincoln Sewage Treatment Plant is still used as a buffer storage facility and should be retained so it can meet the ongoing wastewater treatment needs of the Lincoln community. By removing the buffer zone, residents within Plan Change 69 will potentially be exposed to noise and odour and may require Selwyn District to restrict its operations, mitigate effects or decommission the Sewerage facility thereby removing the buffer capacity. This may lead in an emergency to the spilling of untreated wastewater into the LII stream and ultimately Te Waihora/Lake Ellesmere.

**2.4 The decision I want the Council to make:** Retain Rule 4.9.32 (Township Volume) Selwyn District Operative District Plan i.e. the setback of 150 m buffer around the Lincoln Sewage treatment Plant within the area covered by Proposed Plan Change 69.

## **2.5 Speaking to my submission 2:**

The current Lincoln Sewage Treatment Plant was built in the 1980s. It was on rural zoned farmland and no housing was located close to it. At that time it was considered that a 300m buffer zone was desirable (MWD Guidelines). There was a period in the 1980s - early 1990s when there was a moratorium on the development of land in Lincoln due to lack of capacity within the sewage system. So a lack of sections for housing is not new in Lincoln.

I was part of a SDC initiated working group that looked at options for the expansion of the system. In 1994 the Lincoln Sewage Treatment Plant was a 1 stage oxidation pond. It was then upgraded by the addition of 3 aeration tanks. In 1999 the aeration tanks were upgraded to Sequential Batch Reactors (SBR) and an aerated pond. At that time discharge of effluent into the LII stream was considered undesirable so treated effluent was piped into Christchurch City at times acceptable to the City. So the system has been upgraded and expanded a number of times. I acknowledge I am not an Engineer and SDC Engineers can give more detail of this system and upgrade process.

In 1991 the RMA was passed and allowed Councils and individuals to rezone land by way of Plan/Private Changes. Consequently a number of Private Plan changes were proposed that rezoned land in the vicinity of the Lincoln Sewage Treatment Plant for housing – Ryelands (PC 45) and Te Whariki (Lincoln University and Nai Tahu). There were concerns within the community as to the desirability of allowing housing close to the Lincoln Sewage Treatment facility as the facility generated noise during operation, and odour on occasion as well as the potential to be a vector for aerial borne diseases. This issue, along with other concerns, led to an appeal to the Environment Court. I participated in the mediated settlement in the Environment Court that imposed a 150m buffer zone. I circulated a copy of this Environment Court Decision prior to the hearing.

**2.6 My concerns are:** I believe that the buffer zone of 150m around the Lincoln Sewage Treatment Plant should be retained for 4 reasons:

- i) The health and well-being of adjoining residents. I understand that the prevailing wind at the site is from an easterly direction so residents on sections immediately adjacent to the ponds would, if there was no buffer zone, at times be subject to odour nuisance. I understand that SDC has figures regarding wind incidence at the site.
- ii) The financial impact on all Lincoln residents if they are required to relocate the pond to another location. It is interesting to read the comments of SDC's Engineer, regarding the need to retain a buffer pond in event of an emergency, such as a break in the pipeline to the Pines Central Wastewater Treatment plant in Rolleston, or if in future waste treatment has to be reinstated at that site due to capacity issues within the wastewater system.
- iii) Complaints from residents living close to the site may lead to the pond being removed. Without a pond, in an emergency such a pump breakdown or a break in the Lincoln – Pines Rolleston pipeline due to natural causes or human error, I presume there would have to be an emergency discharge of untreated or semi treated effluent into the LII Stream and ultimately into Te Waihora/Lake Ellesmere. I consider this is environmentally and culturally unacceptable.
- iv) Covid 19 has highlighted the potential for vector borne diseases to impact humans so I consider a buffer should be retained until such time as the possibility of such an event happening via a waste water treatment facility is removed. Covid 19 is being found in wastewater samples.

Some Lincoln rate payers have paid for upgrades and expansions of the Lincoln waste water treatment system multiple times. SDC have in the past been confronted by some very irate people at public meetings. I consider that this investment by the community should be protected.

**2.7 Decision I want from Council:** For these reasons as I ask that the 150m buffer zone be retained around the Lincoln Sewage Treatment Plant.

I believe there are ways that this can be incorporated into PC 69. For example the same requirement was placed on the Te Whariki subdivision when it was approved. In that situation the developer created storm water treatment ponds within the 150m setback from the Sewage Treatment Plant. The same approach could be applied in this situation. Multiple 100m setbacks from spring heads are accepted by the Applicant. I ask that one 150 m setback be accepted in this situation.

### **3. Submission 3: Integration into the existing town**

**3.1 Provision to which my submission relates:** The lack of integration of Plan Change 69 into the existing Lincoln Township as shown on ODP Attachment 4, in particular the lack of vehicular/road access into the existing town.

**3.2 Reasons:** Plan Change 69 relies primarily on an east west road network that channels traffic onto Springs and Ellesmere Roads but provides only 1 indicative road access into the existing Lincoln Township. While blue green corridors mean pedestrians and bikers can access Lincoln township, this may not be practicable for many people or in certain climatic conditions.

**3.3 The decision I want Council to make:**

1. Require the Applicant to create additional road access into the adjoining Te Whariki subdivision, potentially by extending and linking up with Vernon Drive, Kaiterete Drive or any other suitable access points.
2. Require the Applicant to form the paper road into Moirs Lane and create an access from that road into Allendale Lane, and Liffey Springs utilising existing paper roads or reserve areas wherever practicable.

#### **3.4 Speaking to my submission:**

On the latest ODP, as presented on day 1 of the hearing, there appears to be no direct vehicular access into the existing Lincoln urban area from PC 69.

#### **3.5 My concerns are as follows:**

- i) **Timing of road access to Ellesmere Road.** There is an indicative vehicular access onto Ellesmere Road via Moirs Lane but, from the evidence presented and subsequent questioning, it appears that the Moirs Lane connection will not be created until a substantial number of sections have been developed. This means the main access into Lincoln will be via Springs Road. If it feasible to develop this road access then it should be provided at a much earlier stage in the development.
- ii) **Feasibility of Moirs Lane.** This connection has been indicated on the ODP. While there is a road reserve that could be used, I question the feasibility of creating this link, given the susceptibility of land to flooding, high water table levels, geological/ground and substrate conditions and the sensitive nature of the wetlands and stream margins.

Regarding this connection, after hearing the various experts I am concerned that no evidence has been given as to the feasibility of creating an access to Ellesmere Road via Moirs Lane, given the ecological significance of the stream corridor at the northern end

(As indicated by Ms Drummond), the requirement in Mahaanui Kurataiao Ltd statement Appendix 1. Ngai Tahu Subdivision and Development Guidelines. Earthworks.3.

*Earthworks should not modify or damage beds and margins of waterways, except where such activity is for the purpose of naturalisation or enhancement* and the geology of the route. SDC Development Engineering Technical Memo of 8 October 2021 in Appendix D of the Application Documents recommends that the subgrade needs to be properly investigated.

I consider the feasibility of a link to Ellesmere Road needs to be investigated further and if it is not possible to make a road connection via Moirs Lane then the Applicant should consider creating a road connection from Collins Road to Ellesmere Road. An additional access to the site is essential for safety reasons (iii below) and to reduce the traffic flow on Springs Road.

- iii) The peak traffic times in the morning will coincide with traffic coming to Lincoln University and associated research facilities. In an emergency such as a major accident on Springs Road south of Te Whariki, there will be no direct vehicular access into Lincoln and residents would be required to go 'the long way round' using roads between Lincoln and Springston or Greenpark.
- iv) A number of the experts have mentioned and spoken positively of the fact that there is no vehicular access into Te Whariki subdivision and other parts of the town. I personally think this is a serious drawback to this Plan Change and could even be considered by some to fail to create a well-functioning urban environment. One road access would be a minimum.

Just because the adjoining subdivision hasn't made provision for a connection into the adjoining land doesn't preclude it from being done. For example Te Whariki had limited vehicular access points into the existing Lincoln town so the developer bought an existing house at the south end of West Belt, demolished it and created a roadway into the subdivision. This created a more direct access to the town centre/Library/Lincoln Event Centre/Domain and schools. I consider that such an option should be investigated by the Applicant as many of the sections in the southern end of Te Whariki are not yet fully developed and built on. If offered a very attractive price and the possibility of an attractive section within the proposed subdivision, people may be willing to sell. However I think I heard Mr McLeod refer in questioning to the possibility of modifying the storm water treatment pond in Te Whariki in order to get a road connection. If this is correct then I think this should be seriously investigated.

- v) The assumption is that people with a wide range of ages and abilities will use the accessway /cycleways into the existing town so vehicular access is not necessary or desirable. But my walk along the Te Whariki walkways adjacent to the PC 69 area would suggest that there is a significant height differential between the Te Whariki site and PC 69. One of the experts did indicate that Te Whariki has been built up at the southern boundary, presumably to address the sloping topography. I question if it will be an easy ride to the shops and school. I consider the pathways need to be of an attractive gradient so people do actually use them.

I have regularly biked around Lincoln for shopping, recreation and as a commuter to the University but I admit that on a wet cold day I do not like biking and sometimes a bike is not that convenient. So I question if households i.e. a parent with 2-3 children, will be that keen to trade a dry warm car for a walk or bike ride in the rain to work, school, the shops or sports practice.

For these reasons a vehicular access into Te Whariki should be created.

I can understand where the Urban Design experts get their image of what a sustainable community could be – both my daughters live in large cities in Europe and biking or going by train from your multi storey apartment block to work is common place. But in Lincoln it is highly unlikely that there will be an alternative mode of public transport other than the bus service that uses the main road through Lincoln.

[One of the experts considered that Lincoln didn't have a good bus service. Sorry but I beg to differ with the expert. Mon –Friday we can leave Lincoln by 6.09 am and return by 11.30pm. And we can go to Burnham via Rolleston 7.17am and return by 9.43pm. Both the routes have weekend timetables. Plus there is a bus that is solely for school children that goes into Christchurch on weekdays].

- vi) An option would be to defer the hearing until information has been provided that shows the ground conditions/geology is suitable for the construction of road connection to Ellesmere Road from either Moirs Lane or Collins Road.

### **3.6 Decision I want Council to make:**

1. If it is found that it is not physically feasible or ecologically desirable to create a road connection via Moirs Lane or Collins Road on to Ellesmere Road and Te Whariki then PC 69 be declined due to traffic safety, connectivity and ecological grounds.
2. The gradients of access ways/cycleways be designed to meet internationally recognised safety and accessibility standards.

## **4 Submission 4: Esplanade Reserves**

**4.1 Provision to which my submission relates:** ODP Attachment 3 and 4 do not show an Esplanade Reserve or Esplanade Strip extending along the LII Stream or Springs Creek.

**4.2 Reasons:** The Operative SDC District Plan Township Volume Table E12.1 requires an esplanade reserve of 20 m on any sized subdivision bordering the LII. The Rural Volume Part E Appendix 17. With any rural subdivision along the LII SDC can, at its discretion, to take a 10 m Esplanade Strip when a rural subdivision takes place along the LII.

I note from Plan 11611 dated 5/5/71 that there is an unformed legal road on both sides of the LI/LII Stream. I am assuming this is the standard 20m width created at that time. In a later Plan DP 68631 dated 21/6/1995 it is shown as Moirs Lane. On Plan 11611 it is shown as following the edge of the stream then doing a right turn across the LI and LII streams and proceeding on to the formed section of Moirs Lane.

It is not clear from the PC 69 information what will happen to this unformed road reserve. The northern end may well be used by the Applicant to form the road corridor into Moirs Lane.

Given that Plan Change 69 will, if granted by SDC, rezone the land residential and integrate it into Lincoln Township, the Esplanade Reserve rules will apply to any land in Plan Change 69

that borders the stream. I'm assuming that no part of PC 69 borders the stream. So that leaves a legal road along the margin of the LII.

- 4.3** I consider that the legal road should be turned into an Esplanade reserve so that the stream margin can be protected. Presumably SDC can close the road and turn it into Esplanade Reserve. The existing legal road, or Esplanade Reserve if SDC changes the land designation, should not be incorporated into the storm water treatment area but be retained as a separate entity.

The Applicant's plan suggests that a greenway will go right down to that unformed legal road/Esplanade Reserve.

- 4.4** Esplanade Reserves exist within Lincoln and provide a buffer between residential development and the LI and LII streams as well as provide for recreation and public access ways. The future residents in the Plan Change 69 area will benefit from access to such reserves.

Springs Creek is a unique natural feature within the Lincoln District and needs to be protected from contamination by residential development. It too needs to be protected by a 20 m Esplanade Reserve along both sides of the Creek.

**4.5 The decision I want Council to make:**

1. Create an Esplanade Reserve of 20m along the eastern boundary of the Plan Change 69 area in the area currently designated as unformed legal road on Plan 11611 where it adjoins the LI and LII Streams and on any PC 69 land that has direct frontage onto the LII stream.
2. That a 20m Esplanade Reserve be created along both banks of Springs Creek when the Applicant applies for Subdivision Consent. This has already been met by the Applicant.