BEFORE INDEPENDENT HEARING COMMISSIONERS APPOINTED BY WAIKATO DISTRICT COUNCIL

| IN THE MATTER (Act) | of the Resource Management Act 1991 |
|-------------------------------|---------------------------------------|
| AND | |
| IN THE MATTER | of the Proposed Waikato District Plan |
| BETWEEN | Mr S. Upton |
| | (Submitter) |
| AND | Waikato District Council |

STATEMENT OF EVIDENCE OF DAVID GRAHAM MANSERGH

Dated 27 November 2020

INTRODUCTION

- 1. My full name is David Graham Mansergh. I am a qualified Landscape Architect and Recreation Planner. I am a Registered Member of the New Zealand Institute of Landscape Architects (NZILA). My qualifications include a Dip P&RM (Diploma in Parks and Recreation Management with Distinction) completed in 1988, a BLA Hons (Bachelor of Landscape Architecture with Honours) completed in 1990 and an MLA (Master of Landscape Architecture) completed in 1992, all from Lincoln University, Canterbury.
- I have been a Director of Mansergh Graham Landscape Architects Ltd since 1996.
 Prior to this, I was employed by the company as a landscape architect (1992 1996). I have also worked for the Department of Conservation (1986 1988) and before that, the Department of Lands and Survey (1985).
- 3. During my career I have been involved in the preparation of many visual and landscape assessments, and the peer review of landscape assessments for a range of activities and developments. These include plan changes; residential, commercial and industrial buildings within the urban and rural environment; wind farms; power transmission lines; substations; power stations; hydro dams; major port facilities; quarries; telecommunication masts; canal housing; marinas; coastal infrastructure; dairy factories and poultry farms. Of relevance, I have been involved in the design and assessment of other subdivisions and the preparation of visual simulations and photomontages.
- 4. I was involved in the NZILA Landscape Planning Initiative, tasked with developing the 'best practice' approach for landscape and visual assessment in New Zealand.
- I have presented evidence at Resource Management hearings before Council, the (then) Planning Tribunal and the Environment Court. I have acted as an Independent Commissioner at the Rangitikei District Plan hearings.
- 6. I have read the Code of Conduct for Expert Witnesses contained in the Environment Court Practice Note 2014 and have complied with that practice note in preparation of this evidence. I agree to comply with it in presenting evidence at this hearing. The evidence that I give is within my area of expertise.

I have considered all material facts that are known to me that might alter or detract from the opinions that I express in this evidence.

Role

7. I have been engaged by Mr S. Upton to provide professional opinion regarding the suitability of the landscape to the south of Ngaruawahia Township for urban intensification, as proposed by the proposed Waikato District Plan (PWDP).

Background and Involvement

- 8. I am familiar with this part of Ngaruawahia and its rural surroundings, having been involved in several projects in the area over the past three decades.
- 9. Of relevance is my involvement in the preparation of the *Ngaruawahia Study Area* | *Assessment of Landscape, Visual and Amenity Effects* report in 2014.
- 10. The purpose of the assessment was to identify landscape opportunities and constraints for the future growth of the Ngaruawahia and surrounding areas This included recommendations around the maintenance and enhancement of Ngaruawahia's surrounding rural character and amenity values.

The Submission of Mr Upton

11. Mr Upton seeks the removal of the proposed new residential zoning over the land within the block contained by Great South Road, Saulbrey Road and Jackson Street, so that it better aligns with existing topographical conditions in a manner that is advantageous to the preservation of an existing gully system and avoids high density development on elevated rural land.

CONTEXT

12. Ngaruawahia is located at the confluence of the Waikato and Waipa Rivers on the edge of the Waikato basin. The town is bounded by steep by hill country associated with the Hakarimata and Te Puroa Ranges to the west and the Taupiri Range to the north. Except for a recent subdivision adjacent to the Ngaruawahia Golf Course, the core of the town is contained both physically and visually by the gently rolling hill country to the north of Saulbrey Road, extending across the Waikato River to the hill country around Driver Road.

- 13. Except for the development on the western side of the Waikato River and that adjacent to the golf course, the transition from town to country is relatively sudden due to the topographical constraints of these features.
- 14. The relatively flat river terracing adjacent to the Waikato and Waipa Rivers is influenced by the fluvial deposition associated with the rivers. While some of the larger old river channels are evident in the wider surrounding landscape, many of the smaller and more subtle landforms and features associated with overland flow patterns have either been channelised or lost to productive land management practices such as agriculture, market gardening and horticulture. Spurs and ridges within Ngaruawahia are clearly legible due to pastoral landcover across much of the area.
- 15. Favourable topography and climate means that the land within the Ngaruawahia and surrounds is well suited to a wide range of productive uses including pastoral grazing, poultry farms, forestry, and pockets of crop production (such as cornfields). This has influenced the landscape characteristics of the land surrounding the Ngaruawahia Township, which can be described as productive pastoral farmland.
- 16. While generally open in nature, a degree of compartmentalisation is provided by subtle variations in the topographic variation and the presence of rural planting such as hedgerows and shelterbelts along boundaries and fence lines.
- 17. The key landscape features in and around the area of concern that influence existing rural character and provide amenity to adjacent urban areas include:
 - (a) Gently rolling pastoral hill country;
 - (b) Open gully and drainages;
 - (c) Existing residential development in the south of Ngaruawahia;
 - (d) Low land flats and river terraces;
 - (e) Mature rural plantings and shelter belts;
 - (f) Containing Hakarimata Ranges.
 - (g) Waikato and Waipa Rivers.

18. The following photographs depict existing the character landscape within the proposed residential zone.



Figure 1 View of the gully system with Ngaruawahia in the background



Figure 2 Low lying wet areas and drainages to the north of Saulbrey Road



Figure 3 Rolling hill country to the south of Ngaruawahia

PROPOSED RESIDENTIAL ZONE WITHIN THE AREA OF INTEREST

- 19. The planning maps contained in the proposed district plan identify that the residential zone is proposed to extend south from Jackson Street, to the east of Ngaruawahia Road. The location of this proposed growth area is partially located along a ridgeline which runs parallel with Ngaruawahia Road.
- 20. Figure 4 (below) shows the proposed residential zone at the southern extent of Ngaruawahia, overlaid on an aerial photograph. The proposed zone is shown in yellow.



Figure 4 Proposed Residential Zone

21. Figure 5 (below) shows the proposed zoning over a shaded relief map, which highlights the geophysical features in this part of the landscape, with areas of higher elevation coloured in red/brown, lowland areas in green, gullies in tan and the river's in an aqua tone.

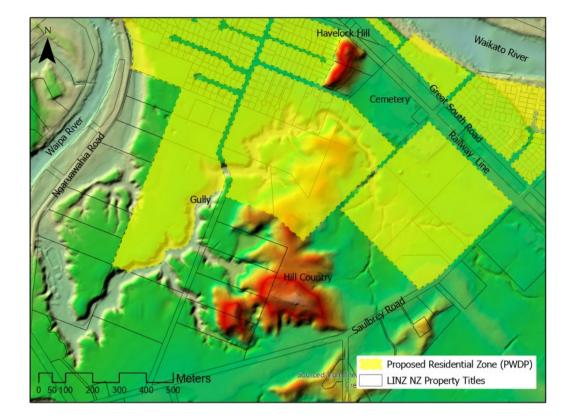


Figure 5 Shaded Relief Map

- 22. As can be seen in this figure, the proposed zoning does not respond in a sympathetic manner to the topographical features in the area, except in the west where the zone boundary follows the floor of the gully.
- 23. The relationship between the major geophysical features contained within the broader landscape and the human modifications that have occurred upon them are important factors to consider when assessing how the proposed development will influence surrounding landscape character and the amenity derived from that character.
- 24. From a landscape perspective, to minimise the effects of further residential development within the town on adjacent rural areas, the boundaries of the proposed residential zone should be sympathetic to the surrounding topography.
- 25. This is also supported by the weighted analysis undertaken in the study for Council, which considered the following factors:
 - (a) Landcover and land use

- (b) Visibility
- (c) Distance from the town centre
- (d) Topographic Position (Ridge/mid-slope/gully)
- (e) Slope
- (f) Solar gain
- (g) Elevation
- (h) Identified sensitive landscape areas (including the Waikato River and its tributaries).
- 26. The weighted analysis for this part of the study area indicated that the hill, gully, and wetland areas are less suitable for development from a landscape perspective, than the surrounding lowlands and river terrace areas. This can be seen in figure 6 below.

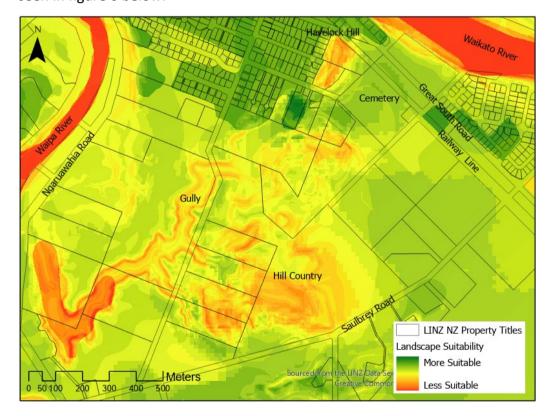


Figure 6 Landscape Suitability Weighted Analysis

27. Regarding existing landscape character and amenity values, a key finding of the *Ngaruawahia Study Area | Assessment of Landscape, Visual and Amenity Effects* was that:

Natural thresholds indicate subtle changes in landscape character and aim to protect the unique character of the Ngaruawahia Township and each of the surrounding villages. Expanding beyond the visual natural thresholds identified would create a more noticeable change in landscape character (although not significant), as development within areas out beyond these natural thresholds would be more difficult to integrate with the surrounding predominantly rural landscape character, as in most cases visual connection with the existing township is lost beyond these thresholds.

Overall, with the exception of the rivers and the Hakarimata Range, no major landscape constraints were found to exist within the Ngaruawahia and surrounds study area, only subtle differences, which make some areas slightly more or less suitable for development. Landscape is therefore not likely to be the deciding factor in determining the extent/ exact locations for future development within the Ngaruawahia Study Area. Analysis of parallel studies indicating opportunities and constraints in terms of infrastructure, urban design, heritage and culture should therefore be carefully considered.¹

- 28. I consider that the transition between the residential zone and the rural zone should occur at either (as appropriate):
 - (i) The base of the adjacent hill country; or
 - (j) Along the upper edge of a major gully system.
- 29. This approach would minimise the effect of residential development being seen on elevated land and against the skyline, reducing the prominence of the residential area from surrounding rural and urban locations.
- 30. Development on the elevated land/ridgeline, currently allowable under the residential zone will have a much greater effect on existing rural zone to the south, southeast and southwest, having the potential to adversely affect rural-amenity values. This will be particularly noticeable from along Ngaruawahia Road and the southwestern portion of Saulbrey Road (the transition between the rural and residential zone).
- 31. Avoidance of development in these areas would assist in achieving Objective5.3.1 of the PWDP:

5.3 Rural Character and Amenity

5.3.1 Objective - Rural character and amenity

¹ Ngaruawahia Study Area | Assessment of Landscape, Visual and Amenity Effects. Mansergh Graham Landscape Architects Ltd. 2014.

(a) Rural character and amenity are maintained.

- 32. Development along a ridgeline/elevated land is also more likely to be out of character with the remainder of the Ngaruawahia Township, which is contained within relatively low elevation (flat land).
- 33. The proposed zone should also avoid areas where development would require significant earthworks that would result in changes to the natural drainage flow paths and gully catchment areas. This is consistent with the requirements of the PWDP Policy 5.3.5(b)(iii) which requires that:

5.3.5 Policy – Earthworks activities

(a) Provide for earthworks where they support rural activities including:

- (i) Ancillary rural earthworks and farm quarries;
- (ii) The importation of fill material to a site;
- (iii) Use of cleanfill where it assists the rehabilitation of quarries.
- (b) Manage the effects of earthworks to ensure that:
 - (i) Erosion and sediment loss is avoided or mitigated;
 - (ii) The ground is geotechnically sound and remains safe and stable for the duration of the intended land use;
 - (iii) <u>Changes to natural water flows and established drainage paths are</u> <u>avoided or mitigated;</u>
 - (iv) Adjoining properties and public services are protected. [Emphasis added]
- 34. I recommend relocating the zone boundary from the bottom of the gully to the top edge of the gully to ensure that a consistent approach to the management of the gully can be more easily achieved. In my opinion, it is better to manage the gully system within the rural zone by a few landowners, than by multiple landowners over two zones.
- 35. Figure 7 below shows where I consider the boundary to the proposed residential zone should be located from a landscape perspective.

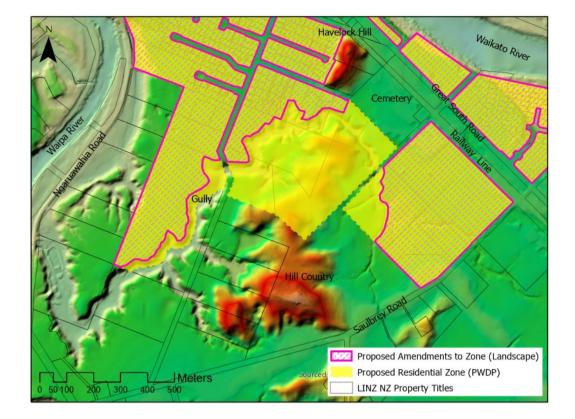


Figure 7 Recommended Amendments to Zone Boundary

36. In my opinion, the use of geophysical boundaries is a justifiable approach to urban expansion as these boundaries are manifest to everyone and require no prior knowledge to understand why they have been set where they are. This approach is consistent with the recommendations to Council contained in the Ngaruawahia Study Area | Assessment of Landscape, Visual and Amenity Effects report.

CONCLUSION

37. I support the adjustment of the proposed residential zone, in the locations identified in my evidence, as this boundary is more sympathetic to the topographical features that contribute to existing landscape character and amenity within this part of the District. I consider that it is more appropriate to run the zone boundary along the northern edge of the major gully system (as shown in the map above) in order to avoid higher density development occurring on the elevated land that acts to visually contain the town within the southern extent of Ngaruawahia Township.

- 38. I accept that lower density development on the more elevated terrain within the zone could also be an option, and that this type of development would allow for a more appropriate gradual transition between the residential zone and the less developed rural zone, where a naturally occurring topographical barrier is not relied upon.
- 39. In my opinion however, adjusting the zone boundary as set out in Figure 7 above is the better option.

David Graham Mansergh Dip P&RM (Dist), BLA(Hons), MLA, Registered ANZILA