Land Use Conflict Risk Assessment

Lot 8, DP-255203 46 Blue Hills Avenue, Goonellabah LISMORE, NSW 2480

Prepared for GM Project Development & Management

By

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1. EXECUTIVE SUMMARY

- 1. This report provides an agricultural assessment that clarifies the potential and capacity for agriculture and/or horticulture on Lot 8, DP255203, State Significant farmland located at 46 Blue Hills Avenue and points to probable future uses and anticipated impacts.
- 2. This largely south-facing 14.7ha peri-urban rural property, located some 80 metres south and east of the proposed residential subdivision, is considered unsuitable for intensive agriculture or horticulture because of uneven topography which shows gradually steepening approaches either side of a centrally located natural creek that runs the full length of the property and largely limits agrarian use to extensive, non-cultivation farming pursuits.
- **3.** Although topographic slope (exceeding 15 degrees) characterises more than 70% of the (readily accessible area of) property, there is a flatter triangular area of some 3.0ha that runs adjacent to the property eastern boundary but which includes at least three rocky outcrops that would further limit cultivation.
- **4.** Against the background of unsuitable topography and potential soil degradation risk for environmentally safe cultivation farming, it is considered that only (perennial) tree crops such as macadamia, avocado and possibly citrus could be contemplated for food production in an open farming situation.
- 5. The topographically suitable 3.0ha (noted above) -taking in an area within some 40 metres of the neighbouring north south eastern boundary, is considered well short of a sustainable viable farming unit in its own right including for 'protected' production under shade-cloth. However, this would not rule out the option of undertaking a boundary adjustment that expanded and would likely enhance the economic viability of the adjoining macadamia farm.
- 6. In the face of market determined 'price taker' variations in farm enterprise income in most years, a rule-of-thumb breakeven farm size for an owner-operated macadamia farm in this region is estimated at not less than 10ha and some 30% larger if and when external labour is employed or contracted to complete farming tasks. Similar or larger farm units are required for other

noted tree crops together with irrigation capability at time of tree planting - at the very least.

7. The writer therefore concludes that the relatively small area of useable land on this 14.7 ha property against the significant capital cost of urban fringe purchase and/or infrastructure investment, makes it unviable for intensive agriculture or horticulture and under current zoning will do little more than allow extensive livestock grazing operations in an aesthetically pleasant rural living environment.

2. Purpose of Report

The Lismore Council has requested a Land Use Conflict Risk Assessment (LUCRA) that clarifies the agricultural potential and capacity of State Significant Farmland at 46 Hills Avenue – Lot 8, DP255203, (see Appendix 1) south of a proposed residential subdivision at 30 Blue Hills Avenue (see Appendix 2).

This 14.7ha land area can currently be used for intensive plant agriculture without planning consent and without a land buffer (150 metre) distance buffer to the proposed subdivision on the northern side. As a result an assessment of commercial viability of the property covering potential future uses and impacts is required.

This will determine the most appropriate land use zone, lot size and residential intensification of land at 30 Blue Hills Avenue, Goonellabah prior to this Planning Proposal being reported to Council.

3. Author Information

The author currently owns and operates a 1900 tree macadamia farm, which was purchased in 2000. This relatively small farm has demonstrated modest financial sustainability on an owner- operator basis since purchase.

At the time of macadamia farm purchase the author was seeking to generate an operating profit over the long term against the background of having separate employment as CEO of the industry peak body – Australian Macadamia Society (AMS) for more than 10 years between 1998 and 2008.

Holding a B.AG.Ec and M.Ec from UNE, Armidale, the author has in recent years operated the macadamia farm in conjunction with farm management consulting to the Tasmanian vegetable industry, Tasmanian Farmers and Graziers Association (TFGA) and the National Farmers Federation (NFF).

4. Property Description

Appendix 3 shows a Google locality map of the 14.7ha peri-urban rural property in relation to the proposed rezoned subdivision and nearby regional centre of Lismore.

Located at the easterly edge of Goonellabah, on the outskirts of Lismore, access to the (nearer) proposed property subdivision and the rural property to the south is from Blue Hills Avenue.

Considering the eastern extremity of the proposed subdivision, the 170 metre distance across Blue Hills Avenue to approximately 3.0ha of useable land on the 14.7ha property does not appear to raise buffer concerns.

4.1 Topography and soils

Appendix 4 is an extract from Lismaps Showing contours.

The aerial map clearly identifies the physical characteristics and nature of land use for the current property and nearby proposed residential rezoning. It reflects a mix of farming and lifestyle living ranging from intermittent extensive grazing (on the property in question), protected woodlands and more intensive macadamia production on neighbouring properties.

The classification of State Significant Farmland essentially relates to the range of agrarian pursuits that topography, rainfall and (red kraznosem) soil type allow with respect to farming in the region. But, this map also shows that topographic slope, rocky outcrops and a natural water course which runs the full length of the property - play a major limiting role in defining agricultural activity under the current property configuration.

Accordingly, this has favoured cattle grazing under relatively low care pasture management coupled with rural living – the primary focus. Under this grazing system livestock are able to access year round water from the creek located on the property.

Neighbouring the eastern boundary of the 14.7ha property there is a mature, producing macadamia farm with tree age that appears to exceed 20 years – demonstrating the suitability of (and expanding) macadamia production in the region. As such this offers the potential for a boundary adjustment that would allow some 3.0ha of the flatter land on the property to be added to the neighbouring macadamia farm – making better use of it and seemingly without causing any land use conflict.

In relation to the proposed residential development at 30 Blue Hills Avenue – some 80 metres away at the nearest point, the land-use conflict risk is also considered low because the high cost of installing infrastructure and /or property purchase – at that location - does not satisfy farming viability criteria – compared to more remote (non peri-urban) locations in the region.

On balance, the peri-urban location of the property points to it being more likely to undergo non agrarian development as and when zoning allows.

5. Feasibility of Intensive Agriculture or Horticulture

Although topographic slope (exceeding 15 degrees) characterises more than 70% of the (readily accessible area of) property, there is a flatter triangular area of some 3.0ha that runs adjacent to the property eastern boundary but which includes at least three rocky outcrops that would further limit cultivation.

In the face of market determined 'price taker' variations in farm enterprise income in most years, a rule-of-thumb breakeven farm size for an owner-operated macadamia farm in this region is estimated at not less than 10ha and some 30% larger if and when external labour is employed or contracted to complete farming tasks.

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6. Conclusion

The writer therefore concludes that the relatively small area of useable land on this 14.7 ha property against the significant capital cost of urban fringe purchase and/or infrastructure investment, makes it unviable for intensive agriculture or horticulture and under current zoning will do little more than allow extensive livestock grazing operations in an aesthetically pleasant rural living environment.

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