

1 September 2025

Dear Commissioners,

I am writing to formally object to the proposed Tallawang Solar Farm development adjacent to our property, Clearview Farm, located at [REDACTED]. We operate a commercial Angus cattle breeding enterprise and have serious concerns regarding the environmental, agricultural, safety, and financial impacts of this project. These concerns are detailed below.

1. Water and Soil Contamination Risks

The natural contours of the land surrounding the proposed Tallawang Solar Farm direct surface water runoff toward Tallawang Creek, which is the primary watercourse running through our property. This creek is essential to our farm's ecosystem and water management. To assist with existing water flow in the area, two council-constructed concrete spillways have been installed along Puggoon Road, which lies adjacent to our property. However, with the anticipated increase in runoff volume due to the solar farm's extensive land clearing, hard infrastructure, and altered hydrology, we are deeply concerned about the risk of accelerated soil erosion across our land.

In the Western Regional Planning Panel's approval for the Geurie Solar Farm, conditions included a Water Assessment Report with detailed mitigation measures for drainage and runoff, and bunding requirements for substation containment to prevent contamination.

Potentia Energy's own assessment notes that the hydrology of the land will be disrupted, increasing flash flooding risks and runoff volumes equivalent to multiple Olympic-sized pools during heavy rain. Despite this, there is no clear mitigation strategy in the current proposal to address how this increased water flow will be managed or how adjacent properties will be protected.

We request:

- Baseline soil and water testing on both the solar farm site and our adjacent property prior to any construction.
- Ongoing quarterly testing for the life of the project, with results made publicly available.
- A detailed drainage mitigation plan showing its direct effect on us.

2. Boundary Setback and Visual Screening

We have raised concerns with both RES Group and Potentia Energy regarding the proximity of the solar farm to our boundary and the impact of this on both the

property's character and agricultural viability. To date, we are yet to receive any meaningful response.

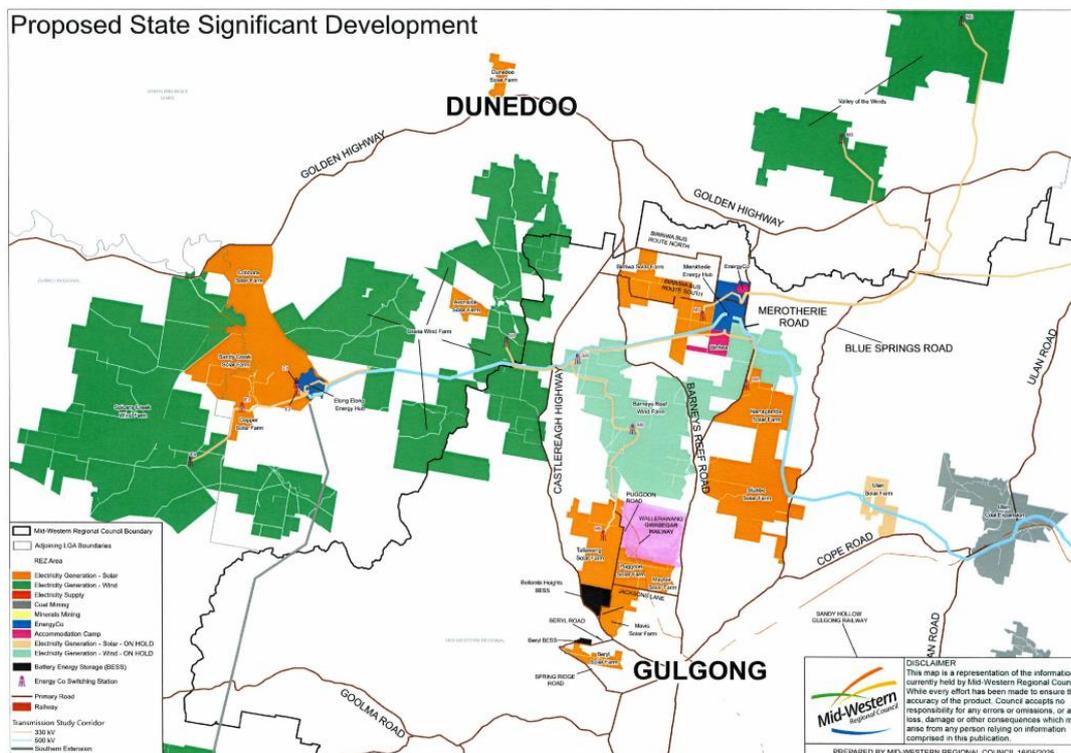
Mudgee Western Regional Council's Development Control Plan Section 6.5 requires a minimum 500m setback from any dwelling or from any lot where a dwelling may be

constructed with an established vegetation screening and a minimum setback of 200m from a formed local public road. The current proposal does not comply with this. The IPC previously imposed the strict conditions of a minimum 30 metre setback from the site's western and eastern boundaries and a robust vegetation buffer in relation to the Glanmire Solar Farm. In our case, the visual impact is severe. Our property has approximately **3.5 km of shared frontage** with the solar farm, and there is no location on our 750-acre farm from which the industrial zone will not be visible.

We request:

- Immediate enforcement of the 500m setback from our existing and planned residential dwelling lots.
- Immediate enforcement of 200m setback from Puggoon Rd.
- The establishment of a fully mature vegetation screen to be completed prior to construction, not over the course of 35 years. This screening must consist of established trees, not saplings, to ensure immediate and effective visual mitigation. Delayed or staged planting offers no protection during the operational life of the project and is not an acceptable substitute for proper screening.

Find Attached Map of Proposed Solar Farms Including Tallawang Farm with our Property Highlighted in Purple:



3. Impact on Livestock and Agricultural Productivity

Solar farms can increase local temperatures through the Photovoltaic Heat Island (PVHI) effect, with studies showing air temperatures rising by up to 1.9°C within solar arrays

1. Even a 1–2°C increase can significantly impair livestock fertility and productivity, especially in Angus cattle, which are part of the *Bos taurus* species and are less heat-tolerant than *Bos indicus* breeds

2. Angus cattle are particularly vulnerable to heat stress due to their dark coat colour, which absorbs more solar radiation, increasing body heat. Research shows:

- Bull fertility declines sharply when testicular temperatures rise above the optimal range of 2–6°C below body temperature. In one study, Angus bulls exposed to 35°C for 8 hours daily over 8 weeks showed a 28% drop in sperm motility, from 76% to 48%¹
- Recovery from heat stress takes up to 8 weeks, meaning bulls exposed during the breeding season may be infertile for the remainder of that season
- Heat stress reduces feed intake by up to 30%, lowers weight gain, and increases water consumption, all of which affect herd performance and profitability

3. These impacts are not hypothetical, they are documented physiological responses that directly affect the viability of our Angus breeding operation and subsequently cause us significant financial loss. The presence of a solar farm adjacent to our property will likely exacerbate these conditions, especially during Summer breeding seasons.

We request:

- A thermal impact assessment specific to Angus cattle adjacent to solar farms.
- Reinforced setbacks of at least 250m, with vegetative screening to mitigate heat stress effects.
- Seasonal monitoring of temperature and humidity levels at the boundary to assess ongoing risk.

4. Bushfire Risk and Emergency Access

The proposed solar farm surrounds our property on multiple sides, leaving **Puggoon Road as our only exit route**, which will be lined with solar panels. The Planning for Bushfire Protection 2019 guidelines require a **Bushfire Emergency Management and Operations Plan**, including Asset Protection Zones (**APZs**), fire suppression access, and evacuation protocols

1

https://www.researchgate.net/publication/19172570_Reproductive_Criteria_of_Beef_Bulls_during_and_after_Exposure_to_Increased_Ambient_Temperature

We request:

- Confirmation of APZs and emergency access routes.
- Indemnity coverage for adjacent landowners in the event of fire damage caused by the solar farm.
- Inclusion of our property in the solar farm's insurance coverage.

5. Devaluation of Property and Retirement Impact

We purchased Clearview Farm in 2009 as part of our long-term superannuation and retirement strategy, with the intention of building a sustainable future both financially and personally. The property had already been named "Clearview" long before our ownership, a name that reflects the sweeping panoramic views and natural beauty of the district. This name was not chosen by us, but rather inherited as part of the property's identity, underscoring its longstanding value and appeal. Located just 13 kilometres from Gulgong, the farm offers convenient access to town amenities while retaining the peace and productivity of rural life. The land supports a commercial Angus cattle breeding operation, which we have steadily developed over the years. At the time of purchase, the property included one existing residential dwelling, and we had plans drawn up and survey work completed to construct two additional homes. This potential for residential expansion was a key factor in our decision, aligning with our vision of creating a multi-generational rural lifestyle while increasing the long-term value of the land. If the solar farm proceeds as proposed, our views will be replaced by thousands of acres of industrial infrastructure, rendering future residential development impractical and significantly devaluing our property.

In multiple IPC decisions, including the Yanco Delta Solar Farm, community submissions led to increased setbacks, visual buffers, and compensation adjustments to address property devaluation.

We request:

- Independent valuation of our property pre and post-development.
- Compensation aligned with actual devaluation, not token participation in the Shared Benefit Scheme.

Please Find Attachment of Subdivision Plans:

Please Also Find Appendix A – Oryan Geospatial Surveying Letter

- Who, specifically, is financially and operationally responsible for panel damage due to bushfires, hail, or other events.
- Timelines for repair and complaint resolution.
- Monitoring frequency and specific enforcement mechanisms and how they are upheld.

8. Lack of Long-Term Studies and Regulatory Oversight

There is a lack of long-term studies on the environmental and agricultural impacts of solar farms. Key gaps include:

- No comprehensive data on soil contamination from panel degradation.
- Limited research on the effects of temperature changes on livestock fertility.
- Poor understanding of microclimate changes and their impact on pasture quality.
- No clear framework for panel recycling, with projections of 78 million tonnes of solar waste by 2050.

We request:

- A suspension on approval until independent, peer-reviewed studies are available.
- Mandatory environmental monitoring and public reporting.

9. Native and Feral Animal Displacement and Wildlife Management

The proposed industrialisation of land for the Tallawang Solar Farm will inevitably displace a wide range of feral and native animals currently residing on the affected properties. These include feral pigs, foxes, wild dogs, kangaroos, rabbits, and wombats, all of which are known to inhabit the region. With the transformation of open grazing and bushland into fenced solar infrastructure, these animals will be forced to relocate, most likely onto neighbouring properties such as ours.

This raises serious concerns about increased biosecurity risks, damage to pasture and fencing, and threats to livestock, particularly calves and breeding stock. Feral pigs, for example, are known to cause extensive damage to agricultural land and pose a direct threat to young cattle. Foxes and wild dogs are also a major concern for livestock safety.

Furthermore, no wildlife or feral animal management plan has been provided in the current proposal. The typical method of aerial shooting, which is one of the few effective ways to manage feral pig populations in large rural areas, will no longer be viable due to the extensive coverage of solar panels. The panels create a physical barrier and visual obstruction that makes aerial control unsafe and impractical.

We request:

- A comprehensive Feral Animal and Wildlife Management Plan to be developed prior to construction.
- Ongoing monitoring and control measures to be implemented in collaboration with adjacent landowners.
- Financial support or indemnity for any damage caused by displaced wildlife as a result of the solar farm's development.
- Financial compensation for additional costs incurred in managing increased activity from displaced wildlife.

10. Lack of Communication and Failure to Engage in Resolution

Over the past four years, we have made consistent and genuine efforts to engage with both RES Group and Potentia Energy to reach a fair and reasonable resolution regarding the impacts of the Tallawang Solar Farm on our property. Unfortunately, these efforts have been met with persistent silence, vague verbal assurances, and a complete absence of formal written commitments.

Our attempts began in November 2021, when we first contacted Andrew Douglas from RES Group to raise concerns about the project's impact on our land, livelihood, and retirement plans. Despite repeated follow-ups, no meaningful outcome was achieved, and nothing was ever provided in writing. On 17 February 2023, Mr Douglas visited our property in person, where we discussed the vast and irreversible effects the solar farm would have on our land. However, this meeting resulted in no binding agreement, no formal response, and no proposed solution.

In 2022, we escalated the matter by engaging solicitors to formally contact RES Group on three separate occasions, in June, July, and August. These legal letters were completely ignored, with no response whatsoever from the company, demonstrating a clear unwillingness to engage in good faith.

More recently, we have been in direct and ongoing contact with Potentia Energy, including an in-person discussion with Manfred Fahr on 28 August 2025. It is important to note that this contact was initiated by us, we had to chase Potentia to establish communication, not the other way around. Even during this on-site meeting, where we again outlined the significant impacts on our property, we were offered no legitimate financial compensation beyond the grossly undervalued Shared Benefit Scheme. We were simply told that "these things take time" and that no promises could be made. This response is not only inadequate, but also dismissive of the real and measurable harm this project is causing.

We remain in regular contact with Potentia, yet we are still receiving no formal offers, no written commitments, and no actionable responses. This ongoing lack of transparency and accountability is entirely unacceptable, especially given the scale of disruption this project has already caused to our livelihood, property value, and future.

Our most pressing concern is that, should the IPC approve the Tallawang Solar Farm without imposing specific and enforceable conditions, there will be no further incentive

for Potentia Energy to engage in meaningful negotiations or offer fair and proportionate compensation. The absence of mandated obligations would leave us, as adjacent landowners, without any formal recourse or recognition of the substantial and lasting damages we have already incurred and will continue to face. Despite years of persistent communication efforts, including legal outreach and direct engagement, we have received no binding commitments, no written assurances, and no compensation that reflects the true impact on our property, livelihood, and retirement plans.

We fear that, once approval is granted, the opportunity for resolution will be permanently foreclosed, and we will be left vulnerable to the consequences of a large-scale industrial development imposed upon us without adequate safeguards. This is not merely a matter of inconvenience, it is a matter of long-term financial harm, environmental degradation, and the erosion of our rights as landowners. It is for this reason that we are submitting this formal objection: to ensure that our concerns are not dismissed, and that the IPC exercises its authority to protect those most directly affected by this development.

11. Misclassification of Agricultural Land

The Tallawang Solar Farm proposal claims that the land designated for development is primarily Category 1 (non-native) and consists of marginal stands of isolated remnant vegetation or low-condition grassland, further stating that no land within the project area qualifies as Biophysical Strategic Agricultural Land (BSAL). It also references a Land and Soil Capability assessment classifying the site as Class 4 and Class 6, suggesting moderate to very high limitations for intensive agricultural use, and estimates that 400 hectares of marginal cropping land will be lost, but that this loss is temporary and outweighed by broader economic benefits.

This classification is inaccurate and misleading. The attached images clearly show the land in its current state, actively cultivated, green, and productive, with no visible degradation or abandonment. The field is well-maintained, fenced, and under crop, demonstrating that the land is not marginal but actively used for agricultural production. This contradicts the claim that the land is of low condition or limited use.

We strongly dispute the assertion that this land is unsuitable for intensive agriculture. The reality is that this land supports both commercial Angus cattle breeding and seasonal cropping, and its productivity has been enhanced through ongoing investment in soil conditioning, fertiliser application, fencing, and infrastructure. The loss of this land to industrial solar development is not temporary, it represents a permanent disruption to viable agricultural operations.

We request:

- A reassessment of the land classification based on current use and condition.
- Recognition of the land's agricultural value in determining compensation and mitigation.
- Inclusion of visual and operational evidence, such as the attached images, in the planning review.

See Below Photos for Reference of Actual Land Currently:







12. False Assumptions About Land Restoration Post-Decommissioning

The Tallawang Solar Farm proposal claims that the land will be reinstated for agricultural use after its 35-year operational lifespan. However, this assumption is highly questionable and unsupported by real-world evidence. The long-term environmental impacts of solar farm development, particularly on soil health, water retention, and agricultural viability are often irreversible or extremely costly to remediate.

A detailed investigation by the Institute for Energy Research found that solar farm construction practices, including clearing, grading, and infrastructure installation, lead to significant erosion and sediment runoff, especially when topsoil is removed or compacted. In one documented case, a 445-acre solar lease in Indiana resulted in the land being covered in yellow-brown sand, where no crops could grow, due to improper grading and soil disturbance.² Despite lease agreements promising restoration, the developer deferred any remedial work until 2073, leaving the land unusable for decades.

Further research shows that even seven years of solar panel coverage can reduce the land's water retention capacity, disrupt microbial activity, and degrade fertility.³ Toxic

² <https://www.instituteforenergyresearch.org/renewable/solar/solar-power-depletes-farmlands-of-rich-soil/>

³ <https://www.reuters.com/world/us/solar-capacity-grows-some-americas-most-productive-farmland-is-risk-2024-04-27/>

substances such as cadmium, lead, and selenium present in many solar panels can leach into the soil and groundwater over time, especially if panels are damaged during storms or mishandled during decommissioning.

These risks are compounded by the fact that no enforceable or detailed land restoration plan has been provided in the current proposal. Without strict oversight, funding guarantees, and long-term monitoring, the likelihood of the land being returned to viable agricultural use is extremely low.

We request:

- A comprehensive Land Restoration and Soil Rehabilitation Plan to be developed and approved prior to construction.
- Independent environmental audits every five years during the solar farm's operation.
- Financial guarantees or bonds to ensure restoration is funded and executed at the end of the project's life.
- Recognition that the loss of agricultural productivity is not temporary and must be compensated accordingly.

Conclusion

We support renewable energy but not at the cost of our livelihood, safety, and retirement. The Tallawang Solar Farm, in its current form, poses unacceptable risks and impacts. We urge the Commission to reject the proposal or to require substantial amendments to protect adjacent landowners such as ourselves.

Sincerely,

Patrick Farrell

Clearview Farm, Tallawang NSW

Our Ref: 20-609
Friday, 28 January 2022



Patrick O'Farrell

Attention: Patrick O'Farrell

Dear Patrick,

RE: EVALUATION OF SOLAR FARM PLANNING CONTROLS – [REDACTED]

O'Ryan Geospatial Pty Ltd (O'Ryan) has been engaged to evaluate the proposed Tallawang Solar Farm (TSF) development and explore relevant development controls that support the inclusion of boundary offsets and visual screening between the TSF development and the subject site. The subject site is [REDACTED], a rural property comprised of lots 31, 66, 67, 99, 194 & 196 in DP750762 and lot 230 in DP824104.

The Tallawang Solar Farm (TSF) is a State Significant Development (SSD) proposed by RES Australia. The TSF proposal involves up to 500MW of solar electricity generation and includes 500MW/1000MW-hours of battery storage. An excerpt of the scoping report, shown below in Figure 1, depicts the proposed location and layout of the TSF in proximity to the subject site.

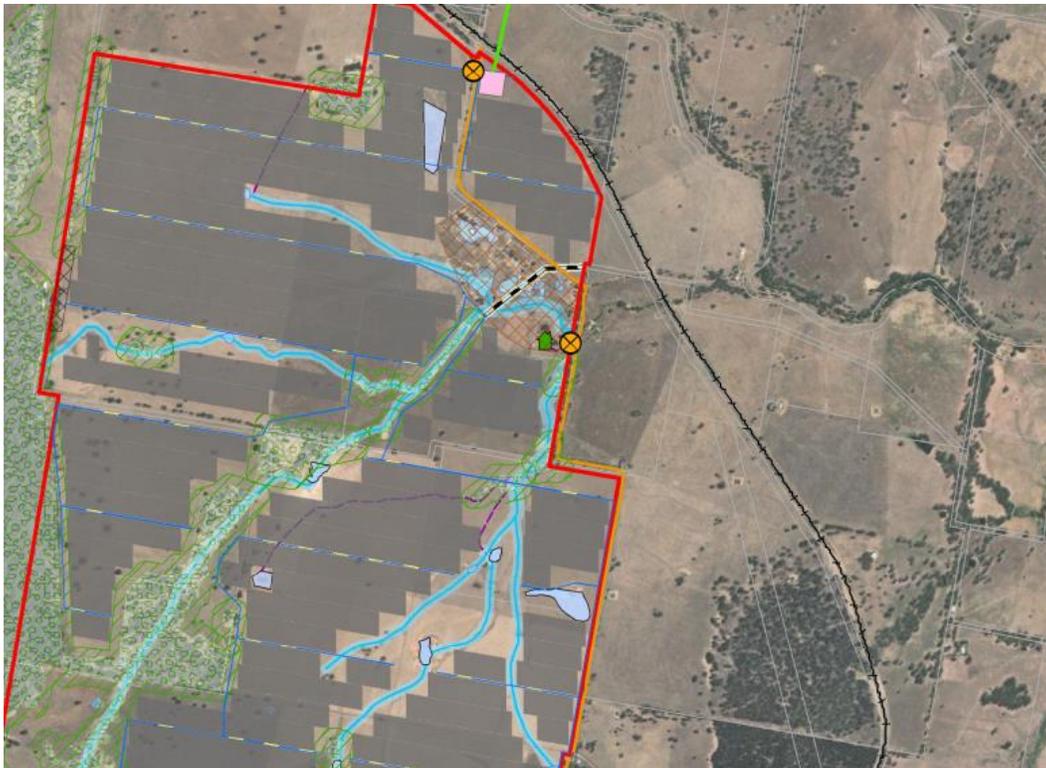


Figure 1 Excerpt of Proposed Tallawang Solar Farm

The TSF is defined as a State Significant Development (SSD) under the *State Environmental Planning Policy State and Regional Development 2011* and will be assessed by the Department of Planning, Industry and Environment (DPIE). Mid-Western Regional Council (MWRC) is not directly involved in the assessment process but may lodge a submission during the public exhibition period.

DPIE has issued the Secretary's Environmental Assessment Requirements (SEARs) for the project (attachment 2), which outlines the relevant planning and environmental controls that must be addressed in the Environmental Impact Statement (EIS) for the project. Notably, the SEARs require a detailed evaluation of Section 4.15 of the Environmental Planning and Assessment Act 1979 (EP&A Act) to be included in the EIS:

A detailed evaluation of the merits of project as a whole having regard to:

- *the requirements in Section 4.15 of the Environmental Planning and Assessment Act 1979, and how the principles of ecologically sustainable development have been incorporated in the design, construction and ongoing operations of the development;*
- *the suitability of the site with respect to potential land use conflicts with existing and future surrounding land uses; and*
- *feasible alternatives to the development (including opportunities for shared infrastructure with proposed developments in the region), and the consequences of not carrying out the development*

Section 4.15 of the EP&A Act outlines the applicable development legislation and planning controls that are to be considered during the assessment of a development application. Section 4.15 states:

(1) Matters for consideration—general *In determining a development application, a consent authority is to take into consideration such of the following matters as are of relevance to the development the subject of the development application—*

- (a) *the provisions of—*
 - (i) *any environmental planning instrument, and*
 - (ii) *any proposed instrument that is or has been the subject of public consultation under this Act and that has been notified to the consent authority (unless the Planning Secretary has notified the consent authority that the making of the proposed instrument has been deferred indefinitely or has not been approved), and*
 - (iii) *any development control plan, and*
 - (iiia) *any planning agreement that has been entered into under section 7.4, or any draft planning agreement that a developer has offered to enter into under section 7.4, and*
 - (iv) *the regulations (to the extent that they prescribe matters for the purposes of this paragraph),*
 - (v) *(Repealed)*

that apply to the land to which the development application relates,

- (b) *the likely impacts of that development, including environmental impacts on both the natural and built environments, and social and economic impacts in the locality,*
- (c) *the suitability of the site for the development,*
- (d) *any submissions made in accordance with this Act or the regulations,*
- (e) *the public interest.*

EP&A Act Section 4.15(a)(iii) requires consideration of any relevant development control plan. The Mid-Western Regional Development Control Plan 2013 (MWR DCP) incorporates the specific planning controls applied to solar farms in Section 6.5 (pages 78-82) for the Mid-Western Regional LGA. The MWRC DCP also states:

In the event that a proposal falls within the category of State Significant Development such that Council is not the approving authority, Council will request via the Secretary's Environmental Assessment Requirements (SEAR's) process that consistency with this section of the Development Control Plan is still required.

The language of the SEARs and DCP indicates that the development controls for solar farms described by section 6.5 of the MWR DPC are to be evaluated as part of EP&A Act Section 4.15. An excerpt of the relevant boundary offset controls described by section 6.5 of the MWR DCP is provided below:

- *Solar Energy Farms should not be located within 500m of any dwelling not associated with the development or from any lot upon which a dwelling may be constructed.*
- *Solar Energy Farms should not be located within 200m from a formed Local Public Road or 500m from a Regional or State Road. A greater distance may be required by the road authority where visual impact mitigation is necessary.*
- *Solar Energy Farms should not be located within 100m from a non-related property boundary; existing and proposed screenings may be used to minimise visual impacts to non-related properties. However, screening is not the only preferred method of minimising visual impact. Solar arrays shall be located in positions so as to have minimal visual impact on nearby properties, especially existing dwellings and lots on which dwellings may be constructed.*
- *Solar Energy Farm locations are to be sensitive to existing related dwellings on the subject site. Noise and glare should be minimised in all respects.*

Application of MWR DCP Section 6.5 in the context of the subject site indicates that the following boundary offsets are likely applicable for the proposed development:

- 100m offsets to the relevant subject site property boundaries, being lots 99, 195 and 66 in DP750762
- A 200m offset to Puggoon Road, which is a formed local road maintained by MWRC
- A 500m offset to the established dwelling located on lot 194/-/DP750762. Note that the existing dwelling is already located more than 500m from the TSF site boundary.
- 500m offsets to any lot on which a dwelling may be constructed

MWR DCP Section 6.5 indicates that a 500m boundary offset is required for any lot upon which a dwelling may be constructed. The *Mid-Western Regional Local Environmental Plan 2012* (MWR LEP) Clause 4.2A describes the requirements for a dwelling entitlement in rural zoned land:

- 1) *The objectives of this clause are as follows—*
 - (a) *to minimise unplanned rural residential development,*
 - (b) *to enable the replacement of lawfully erected dwelling houses in rural and environmental protection zones,*
 - (c) *to control rural residential density affected by historical subdivision patterns in Zone R5 Large Lot Residential.*

- (2) *This clause applies to land in the following zones—*
- (a) *Zone RU1 Primary Production,*
 - (b) *Zone RU4 Primary Production Small Lots,*
 - (c) *Zone RU5 Village,*
 - (d) *Zone R5 Large Lot Residential,*
 - (e) *Zone E3 Environmental Management.*
- (3) *Development consent must not be granted for the erection of a dwelling house or dual occupancy on land in a zone to which this clause applies, and on which no dwelling house or dual occupancy has been erected, unless the land—*
- (a) *is a lot that is at least the minimum lot size shown on the Lot Size Map in relation to that land, or*
 - (b) *is a lot or holding that existed before this Plan commenced and on which the erection of a dwelling house or dual occupancy was permissible immediately before that commencement, or*
 - (c) *is a lot resulting from a subdivision for which development consent (or equivalent) was granted before this Plan commenced and on which the erection of a dwelling house or dual occupancy would have been permissible if the plan of subdivision had been registered before that commencement, or*
 - (d) *is an existing holding that is not within Zone R5 Large Lot Residential, or*
 - (e) *would have been a lot or a holding referred to in paragraphs (a)–(d) had it not been affected by—*
 - (i) *a minor realignment of its boundaries that did not create an additional lot, or*
 - (ii) *a subdivision creating or widening a public road or public reserve or for another public purpose, or*
 - (f) *is, in the case of land within 500 metres of land within Zone RU5 Village, a lot that has an area of at least 5 hectares, that has a sealed road frontage and that is connected to the sealed road network, or*
 - (g) *is a holding within Zone R5 Large Lot Residential that has an area of at least 5 hectares, that has all weather access, including all weather vehicular access, to which adequate services provided by public utility undertakings are available and that is suitable for the on-site disposal of domestic wastewater, or*
 - (h) *is a former holding, or*
 - (i) *is a former rural lot that has an area of at least 40 hectares.*

MWR LEP 4.2A (3)(a) indicates that any lot greater than the minimum lot size would be entitled to erect a dwelling house. The MWR LEP Lot Size Map Sheet LSZ_005 indicates that the applicable minimum lot size is 100Ha and that no additional lot size provisions apply to the land. Lot 99 in DP750762 is a vacant lot 157.4Ha in area that meets the requirements under the MWR LEP 4.2A(3)(a) for a dwelling entitlement. Lot 99 is located on the opposite side of Puggoon Road to the TSF.

O’Ryan has also undertaken a preliminary investigation of the opportunity to subdivide the subject site to create new vacant portions greater than 100Ha and on which a dwelling could be erected. The collective area of the subject site, determined using the existing deposited plans, is 296.4 Ha. MWRC may permit a subdivision of the subject site to create two vacant portions exceeding 100Ha and one concessional lot, approximately 96Ha in area. An alternative option may be to subdivide lots 31, 196 and 99 in DP750762 and lot 230 DP824104 under MWR LEP Clause 4.1 to create two separate portions above the minimum lot size and entitled to a dwelling. The

remaining portions, denoted as Lot 1 in Figure 2, could be consolidated at a later date or remain as separate portions. Please note that a subdivision under MWR LEP clause 4.1 would be subject to a development application (DA) and the consent of MWRC.

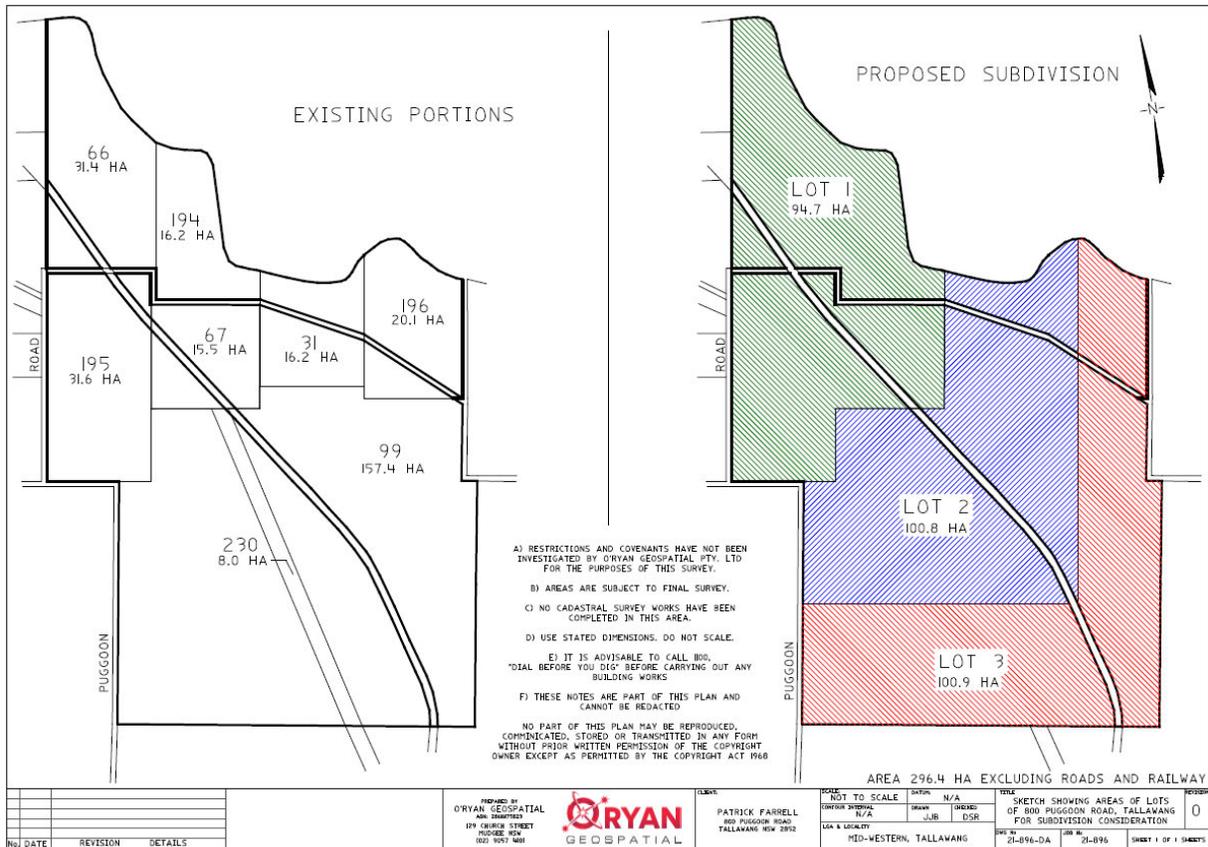


Figure 2 Proposed Subdivision Layout

O’Ryan has prepared this letter of advice to undertake a preliminary review of the planning controls that would support the inclusion of boundary offsets and visual screening between the TSF development and the subject site. This letter has also provided preliminary advice on the future subdivision opportunities for the site. If you have any further enquiries, please contact O’Ryan Geospatial at our office phone: [REDACTED] or email: [REDACTED]