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**Request for an exception to the building
height limit of 9 metres
Proposed Byron Bioenergy Facility
Wallum Place, Byron Bay**

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We declare that:

The report contains all available information that is relevant to the assessment of the Site and proposed development, activity or infrastructure to which the report relates, and the information contained in the report is neither false nor misleading.

Report version	Authors	Date	Reviewer	Approved for issue	Date
Final	A.Johnston	11/6/2021	Dr M.Jackson	Dr M.Jackson	11/6/2021

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1. Introduction

This submission has been prepared by Jackson Environment and Planning Pty Ltd in relation to an exception to the development standards in Clause 4.3 of the *Byron Local Environment Plan 2014* (BLEP2014), which limit the height of buildings on the subject land (Lot 2, DP 706286) to 9 m.

The proposed building has a maximum building height of 13.57 m (measured from the existing ground level), which is 4.57 m above the maximum building height permitted for the site by the BLEP2014.

The subject site has a minimum level AHD of 4.0m. The northern boundary of the site, closest to Wallum Place, is at 8.0 AHD (refer Appendix B). It is noted that the ground level of the existing STP infrastructure is between 7.0m and 8.5m AHD and it includes an existing biosolids storage structure that is 7.5 metres in height or approximately 15.5m AHD.

Clause 4.3 Height of buildings of the BLEP2014 states:

- 1) *The objectives of this clause are as follows:*
 - a) *to achieve building design that does not exceed a specified maximum height from its existing ground level to finished roof or parapet,*
 - b) *to ensure the height of buildings complements the streetscape and character of the area in which the buildings are located,*
 - c) *to minimise visual impact, disruption of views, loss of privacy and loss of solar access to existing development.*
- 2) *The height of a building on any land is not to exceed the maximum height shown for the land on the Height of Buildings Map.*

2. Description of the proposed development

The proposed development will involve the construction and operation of a best practice Bioenergy Facility (BEF) receiving organic waste materials from households and businesses in the Byron and neighbouring local government areas. The facility will be enclosed and operate under negative pressure to ensure all emissions from the process are treated before release. Biogas will be collected and consumed onsite to generate electricity. No biogas will be exported from the site.

Key operational features of the development within the 4,000 m² footprint includes:

- A Receival Hall;
- Four Anaerobic Digestion Tunnels with gas storage;
- Three Aerobic Composting Tunnels
- A Biofilter;
- A Percolate Storage Tank with sand filter;
- A Combined Heat and Power (CHP) unit with gas treatment and flare;
- Office and education facilities; and
- A car park to assist in traffic flow on the site.

An additional approximately 4,000 m² is occupied by the main access road, a perimeter access road, and a weighbridge. The existing STP biosolids storage area will be repurposed to store products from the BEF. The proposed Byron BEF will provide improvements to the internal access to include a wheel wash and a weighbridge. Full details of the development are shown in the Site and Civil Plans (Appendix B).

3. Justification for contravention of the development standard

Clause 4.6 Exceptions to development standards of BLEP2014 states:

- 1) *The objectives of this clause are as follows:*
 - a. *to provide an appropriate degree of flexibility in applying certain development standards to particular development,*
 - b. *to achieve better outcomes for and from development by allowing flexibility in particular circumstances.*
- 2) *Development consent may, subject to this clause, be granted for development even though the development would contravene a development standard imposed by this or any other environmental planning instrument. However, this clause does not apply to a development standard that is expressly excluded from the operation of this clause.*
- 3) *Development consent must not be granted for development that contravenes a development standard unless the consent authority has considered a written request from the applicant that seeks to justify the contravention of the development standard by demonstrating—*
 - a) *that compliance with the development standard is unreasonable or unnecessary in the circumstances of the case, and*
 - b) *that there are sufficient environmental planning grounds to justify contravening the development standard.*
- 4) *Development consent must not be granted for development that contravenes a development standard unless—*
 - a) *the consent authority is satisfied that—*
 - i. *the applicant's written request has adequately addressed the matters required to be demonstrated by subclause (3), and*
 - ii. *the proposed development will be in the public interest because it is consistent with the objectives of the particular standard and the objectives for development within the zone in which the development is proposed to be carried out, and*
 - b) *the concurrence of the Planning Secretary has been obtained.*
- 5) *In deciding whether to grant concurrence, the Planning Secretary must consider—*
 - a) *whether contravention of the development standard raises any matter of significance for State or regional environmental planning, and*
 - b) *the public benefit of maintaining the development standard, and any other matters required to be taken into consideration by the Planning Secretary before granting concurrence.*

The following submission addresses Clauses 4.6(3) and (4).

3.1. Clause 4.6(3)a

The height of the proposed structures is determined by:

- The need to prepare the site for construction while minimising excavation and the disturbance of acid sulphate soil by cutting and filling to 5.77m AHD (1.77 metres above the lowest point on the site);
- The need to receive waste in a controlled environment shed to mitigate impacts on air quality;
- Clearance and safety requirements for front end loaders, trucks (tipping), and other equipment required to operate in the Receival Hall (9 metres clearance required);
- The need for structural support of the roof and sufficient slope for runoff of rainwater to gutters (2.8 metres to peak of roof);
- Clearances to allow for safe loading and optimal operation of the tunnels to produce biogas and compost;
- The need to provide sufficient capacity in the Gas Storage Facility to minimise flaring and manage fluctuations in electricity (and therefore gas) demand;
- The need to minimise the development footprint and related clearing of vegetation by placing gas storage on top of the tunnels rather than on the ground.

As a result of these requirements, the maximum height of all structures is 13.57 metres (17.57m AHD), with the combined tunnel and gas storage facility height at 13.27 metres (17.27m AHD). Ground level for the Project is 2.5m lower than the current Byron STP ground level. The proposed structure is set in a depression in the landscape and is surrounded by dense and mature canopy approximately 20-25m high.

3.2. Clause 4.6(3)(b)

The proposed BEF will be located within the grounds of the existing Byron Bay Sewage Treatment Plant (BBSTP) and would supply the electrical energy needs of both the BEF and BBSTP. By co-locating the BEF with the BBSTP the electrical energy can be supplied ‘behind the meter’ directly to the BBSTP, avoiding the need for electricity transmission infrastructure and the costs associated with using that infrastructure. Proximity to electricity generation also reduces the amount of energy lost via transformers and transmission.

Up to 20% of the waste that will be processed by the BEF will consist of the dewatered biosolids produced by the BBSTP. Locating the BEF adjacent to the BBSTP minimises transport distances between the facilities (and related truck movements), reduces the volume of biosolids requiring transport off-site and converts the biosolids into part of a higher quality composted (stabilised) soil amendment.

The BBSTP is central within the Byron Shire thus minimising the transport distance from other organic waste generators (households and businesses) to the processing capacity provided by the BEF. Kerbside collected food and garden waste (domestic and commercial) is currently transported interstate for processing, reducing the environmental benefits delivered by source separation and composting of these wastes. The composted soil amendments generate from these wastes, which are a valuable resource, are also leaving the Byron Shire.

Buildings within the existing BBSTP are up to 15.5m AHD. The proposed BEF buildings will be compatible with the character of the water and waste treatment infrastructure already located on the lot.

3.3. Clause 4.6(4)(a)

This Clause requires the consent authority to be satisfied that the applicant’s written request adequately addresses the matters in Subclause 3 and the proposed development will be in the public interest and is consistent with the objectives of the development standard and the zone objectives.

The structures are entirely on land zoned RU2. The objectives of the RU2 zone are as follows:

Zone RU2 Rural Landscape

1. *Objectives of zone*

- *To encourage sustainable primary industry production by maintaining and enhancing the natural resource base.*
- *To maintain the rural landscape character of the land.*
- *To provide for a range of compatible land uses, including extensive agriculture.*
- *To enable the provision of tourist accommodation, facilities and other small-scale rural tourism uses associated with primary production and environmental conservation consistent with the rural character of the locality.*
- *To protect significant scenic landscapes and to minimise impacts on the scenic quality of the locality.*

The proposed BEF is consistent with the zone objectives because:

- It encourages sustainable primary industry production by converting waste into a renewable resource suitable for use as a soil amendment in a wide variety of agricultural applications;
- As demonstrated by the Visual Impact Assessment (Appendix L), it does not detract from the rural landscape character of the land, nor does it impact on the scenic quality of the locality;
- It is compatible with the nearest extensive agriculture in the locality;
- The land use is compatible with and supports the existing use of the land as a sewage treatment plant; and,
- The BEF will be a community owned facility providing a valuable integrated waste treatment, resource and energy recovery service to the community.

The objectives of the 9m building height development standard are reproduced as follows together with a response.

- a) *to achieve building design that does not exceed a specified maximum height from its existing ground level to finished roof or parapet,*

Response: No alternative design solution will allow the BEF to operate successfully without exceeding 9m in height from the existing ground level. Clause 4.6 allows for an exception to the Clause 4.3 development standard where appropriately justified.

- b) *to ensure the height of buildings complements the streetscape and character of the area in which the buildings are located,*

Response: The proposed BEF is set back over 200 metres from Wallum Place, behind the BBSTP, and 2.5 metres below the BBSTP ground level. The proposed BEF buildings will be compatible with the character of the water and waste treatment infrastructure already located on the lot. The closest other development is approximately 485 metres (along Wallum Place) from the facility entrance, and the surrounding wetland vegetation screen the BEF from that development. BSC owns the land containing the screening vegetation and uses most of it as a final stage of (wetland) treatment for wastewater. This land is very unlikely to be developed for any other purpose.

- c) *to minimise visual impact, disruption of views, loss of privacy and loss of solar access to existing development.*

Response: Topography and existing vegetation character screen the BEF from all visual receptors. This conclusion is further supported a Visual Impact Assessment of the proposed BEF (Appendix L). The assessment concluded that the height of the proposed BEF will have either a NIL or LOW potential visual impact on the assessed viewpoints.

Neighbouring development is all more than 480m from the development, and BSC owns the intervening land.

Therefore, there is no current or potential impact on the solar access, privacy or views of neighbouring developments.

4. Conclusion

Having regard to the facts and circumstances outlined in this objection, it is considered that the consent authority can be satisfied that the matters in Clause 4.6 of the BLEP2014 have been adequately addressed.

In addition, the consent authority can reasonably be satisfied that the proposed development will be in the public interest because it is not inconsistent with the objectives of the building height development standard or the zone objectives. The erection of a publicly owned building that is fit for purpose as a bioenergy facility is in the public interest.

Clause 4.6 (4) (b) provides that development consent can only be granted with the concurrence of the Secretary of the Department of Planning and Environment. The Northern Regional Planning Panel has delegated authority to assume the Secretary's concurrence.