SOUTH BURNETT
REGIONAL COUNCIL

# AGENDA

## Late Reports
## Ordinary Council Meeting
## Wednesday, 18 December 2024

**Date:** Wednesday, 18 December 2024

**Time:** 9.00am

**Location:** Warren Truss Chamber
45 Glendon Street
Kingaroy

**Mark Pitt PSM**
**Chief Executive Officer**

# Order Of Business

# 12 FINANCE & LIVEABILITY

## 12.8 DEVELOPMENT PERMIT FOR A MATERIAL CHANGE OF USE - HIGH IMPACT INDUSTRY (SAWMILL) AND CONCURRENT ERA 47 - TIMBER MILLING AND WOOD CHIPPING AT 157 BOONEENE ROAD GOODGER (AND DESCRIBED AS LOT 4 RP807137). APPLICANT: IMEMS PTY LTD C/- ONF SURVEYORS

**File Number:** **MCU23/0034**

**Author:** **Manager Planning & Development**

**Authoriser:** **Chief Executive Officer**

### PRECIS

The development application is for a Development Permit for a Material Change of Use for a High Impact Industry (Sawmill) and Concurrent Environmentally Relevant Activity (ERA) 47(b) – Timber Milling and Woodchipping – more than 10,000t but not more than 20,000t in a year on the subject site. The applicant is IMEMS Pty Ltd C/- ONF Surveyors.

### SUMMARY

- The application is for a Development Permit for a Material Change of Use for a High Impact Industry (Sawmill) and Environmentally Relevant Activity (ERA) 47(b) - Timber Milling and Woodchipping – more than 10,000t but not more than 20,000t in a year;
- The subject site is located in the Rural Zone under the *SBRC Planning Scheme 2017*, version 1.4;
- The subject site is 3.305 hectares in area;
- Boonenne Timbers currently operate a sawmill from the site processing <5,000 tonnes/year of timber product and this application seeks approval for increased activity for processing more than 10,000 tonnes per year but less than 20,000 tonnes per year;
- Proposal triggered Impact assessment pursuant to Table 5.5.13, *SBRC Planning Scheme 2017*, version 4.1;
- The development application was assessed against the entirety of the *SBRC Planning Scheme 2017*, version 1.4. Relevant parts include:
- Strategic Framework;
- Rural Zone Code; and
- Services and Works Code;
- Council issued an Information Request on 30 January 2024, with the Applicant providing a full response on 15 May 2024;
- Application underwent public notification between 31 May 2024 to 5 June 2024 and received a total of two public submissions (objections) which are summarised in this report;
- The application has been assessed and the proposal generally meets the requirements of the planning scheme and relevant codes or has been conditioned to comply (refer to Attachment A – Statement of Reasons);
- Refer to Attachment B – Approved Plans;
- Refer to Attachment C – SARA Referral Agency Response and Environmental Authority;
- Refer to Attachment D – Infrastructure Charges Notice;
- Refer to Attachment E – Traffic Engineering Response to Public/Further Submission;
- Refer to Attachment F – Noise Impact Assessment;
- Refer to Attachment G – Public Submissions; and
- Refer to Attachment H – Supporting Document - Development Application, Material Change of Use, Application for an Environmental Authority ERA 47(b) Sawmilling and Woodchipping.
- Application is recommended for approval, subject to reasonable and relevant conditions.

### OFFICER'S RECOMMENDATION

That Council approve the Development Permit for Material Change of Use for High Impact Industry (Sawmill) and Environmentally Relevant Activity (ERA) 47(b) - Timber Milling and Woodchipping - more than 10,000t but not more than 20,000t in a year on land at 157 Boonenne Road, Goodger Qld 4610 (formally described as Lot 4 on RP807137) subject to the following conditions:

**GENERAL CONDITIONS**

GEN1. The development must be completed and maintained generally in accordance with the approved plans and documents and any amendments arising through conditions to this development approval:

| Drawing Title | Prepared By | Drawing No. | Rev/Date |
|---|---|---|---|
| Site Plan | ONF Surveyors | 11574 Site | 5/12/2023 |
| Site Plan | ONF Surveyors | 11574 Site | 5/12/2023 |

| Document Title | Prepared By | Date | Ref. No. | Rev |
|---|---|---|---|---|
| Supporting Document - Development Application, Material Change of Use, Application for an Environmental Authority ERA 47(b) Sawmilling and Woodchipping | IMEMS Pty Ltd | 30/12/23 | 3111589 | 1 |
| Noise Impact Assessment | ATP Consulting Engineers | 18/08/23 | ATP230421 | 0 |

**DEVELOPMENT PERIOD - MCU**

GEN2. The currency period for this development approval for Material Change of Use for High Impact Industry (Sawmill) is six (6) years after the development approval starts to have effect.

GEN3. The development (including landscaping, parking, driveways and other external spaces) shall be maintained in accordance with the approved plans, subject to and modified by any conditions of this approval.

**PARTICULAR USE**

MCU1. This Development Permit is for the particular use(s) stated as shown on the Approved Plans and does not imply or comprise an approval for any other use(s).

**SITE OPERATIONS**

MCU2. The carrying out of the operations of the High Impact Industry (Sawmill) on site is to be in accordance with the "*Supporting Document - Development Application, Material Change of Use, Application for an Environmental Authority ERA 47(b) Sawmilling and Woodchipping*", prepared by IMEMS Pty Ltd, dated 20/12/23 as referenced at Condition GEN1.

**Timing –** At all times.

**REFUSE COLLECTION**

MCU3. Provision must be made for the storage and removal of refuse in accordance with the *Waste Reduction and Recycling Regulation 2011*.

MCU4. Any areas that are dedicated for the collection and/or storage of solid waste on the premises are to be:

(a) Level;
(b) Provided with impervious hard stand and drained; and
(c) If facing either the street frontage or adjoining properties, screened by a 1.8m high fence around the full perimeter.

MCU5. Refuse bin areas are to be provided for the washing out of the refuse bins and in connection with this:
(a) All tap outlets must be fitted with backflow prevention devices;
(b) The floor areas are to be drained to sewer; and
(c) Areas are to be covered, and drainage designed such that water not associated with the washing out process (e.g. rainfall) does not enter the sewer.

**WOOD SHAVINGS OFFCUTS AND SAWDUST DISPOSAL**

MCU6. The disposal of wood shavings and wood offcuts is to be carried out in a manner that does not cause material or serious harm to soil or water/air quality and accordance with part 8.1 of the IMEMS Pty Ltd document, dated 20/12/23 as referenced at Condition GEN1.

**REGULATED WASTE**

MCU7. All regulated waste is to be appropriately stored in accordance with recommendations in part 8 of the IMEMS Pty Ltd document, dated 20/12/23 as referenced at Condition GEN1.

**STORAGE OF HAZARDOUS CHEMICALS**

MCU8. Submit for Council's records evidence that hazardous materials used in association with the approved High Impact Industry are stored in suitable locations as certified by an appropriately qualified professional.

**Timing –** Prior to the commencement of High Impact Industry use.

MCU9. Implement and maintain management actions for the storage of hazardous material in a manner that does not cause environmental harm and at the direction/recommendations of the suitably qualified professional.

**Timing –** Prior to the commencement of High Impact Industry use.

**FUEL STORAGE AND REFUELLING**

MCU10. The storage of fuel on site must not exceed that cited in part 8 of the IMEMS Pty Ltd document, dated 20/12/23 as referenced at Condition GEN1.

**STORAGE OF LIQUID CHEMICALS (OTHER THAN FUEL**

MCU11. All liquid chemicals (including flammable liquids (other than fuel), chemicals, waste oil, acid and lube oil) must be stored within dedicated impervious secondary containment stores, structures or devices and in a manner that complies with Australian Standards AS1940 - The storage and handling of flammable and combustible liquids.

**ACOUSTICS**

MCU12. The approved High Impact Industry is to incorporate all recommendations contained in the approved Noise Impact Assessment Report by ATP Consulting Engineers dated August 2023 as referenced at Condition GEN1.

**Timing –** At all times.

**LIGHTING**

MCU13. All outdoor lighting must be designed, installed, operated and maintained to comply with the requirements of AS4282 – Control of the obtrusive effects of outdoor lighting.

**DUST EMISSIONS**

MCU14. The applicant must conduct and operate the project in a manner that minimises dust generation from the site, including wind-blown and traffic-generated dust as far as practicable. The applicant must identity and implement all practicable dust mitigation

measures, including cessation of relevant works, as appropriate, such that emissions of visible dust are minimised in all weather conditions.

**AIR QUALITY**

MCU15. There is to be no burning of timber, timber by-products or other wastes occurs on the site where directly associated with the approved High Impact Industry.

**Note:** The burning of timber associated with the existing residential use is not subject to condition MCU15.

**SITE MANAGEMENT**

MCU16. Ensure that all contractors engaged to remove from or import materials to the site maintains all Council roads clean and free of any debris from transporting of wood products and waste products.

**HOURS OF OPERATION MCU**

MCU17. Hours of operation for the High Impact Industry are to be in strictly in accordance with the following

- Monday to Friday - 6.00 am to 5.00 pm
- Saturday (and public holidays*) - 7.00 am to 12.00 pm (noon)

**ENVIRONMENTALLY RELEVANT ACTIVITY**

MCU17. The following Environmental Authority: Reference No. P-EA-100585794 dated 31/July 2024) takes effect on the date that the related approval (MCU23/0034) takes effect. Within 20 business days of the Environmental Authority taking effect, the administering authority must be given written notice of the occurrence. Prior to the commencement of the activity, the administering authority must be given written notice of the proposed date of commencement.

**ENGINEERING WORKS**

ENG1. Complete all works approved and works required by conditions of this development approval and/or any related approvals at no cost to Council, prior to commencement of the use unless stated otherwise.

ENG2. Undertake Engineering designs and construction in accordance with the Planning Scheme, Council's standards, relevant design guides, and Australian Standards.

ENG3. Be responsible for the full cost of any alterations necessary to electricity, telephone, water mains, sewer mains, stormwater drainage systems or easements and/or other public utility installations resulting from the development or from road and drainage works required in connection with the development.

**LOCATION, PROTECTION AND REPAIR OF DAMAGE TO COUNCIL AND PUBLIC UTILITY SERVICES INFRASTRUCTURE AND ASSETS**

ENG4. Be responsible for the location and protection of any Council and public utility services infrastructure and assets that may be impacted on during construction of the development.

ENG5. Repair all damages incurred to Council and public utility services infrastructure and assets, as a result of the proposed development immediately should hazards exist for public health and safety or vehicular safety. Otherwise, repair all damages immediately upon completion of works associated with the development.

**STORMWATER MANAGEMENT**

ENG6. Provide overland flow paths that do not adversely alter the characteristics of existing overland flows on other properties or that create an increase in flood damage on other properties.

ENG7. Ensure that adjoining properties and roadways are protected from ponding or nuisance from stormwater as a result of any site works undertaken as part of the proposed development.

**WATER SUPPLY**

ENG8. Provide an adequate potable water supply for the staff and visitors to the site.

**ON-SITE WASTEWATER DISPOSAL**

ENG9. Connect the development to an on-site wastewater disposal system, in accordance with the AS1547:2012 *On-site domestic wastewater management* and the Queensland Plumbing and Wastewater Code - 2019.

ENG10. Obtain a Development Permit for Plumbing Works for the on-site sewerage treatment system.

**PARKING - GENERAL**

ENG11. Provide adequate car parking spaces to accommodate all staff and visitors.

ENG12. Ensure access to car parking spaces, vehicle loading and manoeuvring areas and driveways remain unobstructed and available for their intended purpose during the hours of operation.

**VEHICLE ACCESS - TURNOUT**

ENG13. Design and construct vehicle turnout for the house generally in accordance with Council's Standard Drawing No. 00049 Rev B.

ENG14. Design and construct vehicle turnout for the sawmill site generally in accordance with Council's Standard Drawing No. 00049 Rev B, and sized to accommodate the manoeuvring of a B-Double vehicle.

**ELECTRICITY AND TELECOMMUNICATION**

ENG15. Connect the development to electricity and telecommunication services.

**EROSION AND SEDIMENT CONTROL - GENERAL**

ENG16. Undertake an Erosion and Sediment Control Program including, but not limited to the following:

a) Construction of sediment fences, earth berms, temporary drainage, temporary sediment basins and stormwater filtering devices designed to suitably manage sediment or sediment laden water from being transported to adjoining properties, roads and/or stormwater drainage systems;
b) Identification of areas to be utilised on the site for stockpiling of materials capable of being moved by the action of wind or running water; the materials shall be stored clear of drainage paths, and appropriate measures implemented to prevent the entry of such materials into either the road or drainage system;
c) Inspection regime of sediment and erosion controls; and
d) Response times to events where controls have been damaged or are inadequate, and erosion or the release of sediment or sediment laden stormwater has occurred from the site or associated works.

ENG17. Implement the approved Erosion and Sediment Control Plan and modify as necessary, to maintain compliance with the approval.

ENG18. Undertake works to reinstate or clean up the road and/or drainage system damaged/blocked as a result of erosion and/or sedimentation from the site, at no cost to Council. Undertake such works immediately where there is a potential hazard to pedestrians and/or passing traffic.

**ADVICE**

ADV1. Construction Noise and Dust Emissions Pursuant to the *Environmental Protection Act 1994*, all development involving the emission of noise and dust from building and/or construction activities, must ensure that the emissions are in accordance with the requirements of the Act.

ADV2. Infrastructure charges are now levied by way of an Infrastructure Charges Notice, issued pursuant to section 119 of the *Planning Act 2016*.

**HERITAGE**

ADV3. This development approval does not authorise any activity that may harm Aboriginal Cultural Heritage. Under the *Aboriginal Cultural Heritage Act 2003* you have a duty of care in relation to such heritage. Section 23(1) provides that "A person who carries out an activity must take all reasonable and practicable measures to ensure the activity does not harm Aboriginal Cultural Heritage." Council does not warrant that the approved development avoids affecting Aboriginal Cultural Heritage. It may therefore be prudent for you to carry out searches, consultation, or a Cultural Heritage assessment to ascertain the presence of Aboriginal Cultural Heritage. The Act and the associated duty of care guidelines explain your obligations in more detail and should be consulted before proceeding. A search can be arranged by visiting https://www.datsip.qld.gov.au and filling out the Aboriginal and Torres Strait Islander Cultural Heritage Search Request Form.

**APPEAL RIGHTS**

ADV4. Attached for your information is a copy of Chapter 6 of the *Planning Act 2016* in regard to Appeal Rights.

**TRANSPORT ROUTE/ROADWORKS**

ADV5. Any and all road upgrade requirements for Boonenne Road have been conditioned as part of the B-Double Permit assessment and approval.

**FINANCIAL AND RESOURCE IMPLICATIONS**
No implication can be identified.

**LINK TO CORPORATE/OPERATIONAL PLAN**
Growing our Region's Economy and Prosperity

- GR8 Support and advocate for appropriate growth and development with responsive planning schemes, process, customer service and other initiatives.

**COMMUNICATION/CONSULTATION (INTERNAL/EXTERNAL)**
Refer to CONSULTATION in this report.

**LEGAL IMPLICATIONS (STATUTORY BASIS, LEGAL RISKS)**
No implication identified.

**POLICY/LOCAL LAW/DELEGATION IMPLICATIONS**
No implication can be identified.

**ASSET MANAGEMENT IMPLICATIONS**
No implication can be identified.

**REPORT**

## BACKGROUND

| | | | | |
|---|---|---|---|---|
| **SITE DETAILS** | | | | |
| **Site Address** | 157 Boonenne Road GOODGER | | | |
| **Real Property Description** | Lot 4 on RP807137 | | | |
| **Easements or Encumbrances on Title** | The site is subject to an easement for an electricity transformer. The transformer is not Ergon Energy or Powerlink infrastructure. | | | |
| **Site Area** | 3.305 hectares | | | |
| **Owner** | Mr Andrew Keenan & Elizabeth Cooling | | | |
| **SITE CHARACTERISTICS** | | | | |
| **Current Land use/s** | Sawmill <5,000 tonnes/year and Dwelling House | | | |
| **Site Frontage** | Boonenne Rd (89m Frontage) | | | |
| **Roads** | **Order of Road** | **Width of Road Reserve** | **Width of Pavement** | **Road Material** |
| Boonenne Rd | Access Secondary | 20m | 6.5m (Approx) | Unsealed |
| **Easements or Encumbrances on title** | The site is subject to an easement for an electricity transformer. The transformer is not Ergon Energy or Powerlink infrastructure. | | | |
| **Existing Structures** | Dwelling house, Open air shed and Small ancillary structure. | | | |
| **Infrastructure** | Councils reticulated services are not connected to this proposal. | | | |
| **Topography** | Generally flat with slight grade on southeast heading. | | | |
| **Street trees** | Noted along frontage of Boonenne Road | | | |
| **Other features** | Not Applicable | | | |
| **PLANNING SCHEME DETAILS** | | | | |
| **Current planning scheme** | South Burnett Regional Council Planning Scheme 2017 v1.4 | | Adopted: 16 December 2020<br>Commenced: 4 January 2021 | |
| **Zone** | Rural | | | |
| **Precinct** | N/A | | | |
| **Overlay/s** | • OM8 Agricultural Overlay – Agricultural Land Class A and B | | | |
| **Infrastructure charges resolution** | Charges Resolution No. 3 | | Effective: 1 July 2019 | |
| **SURROUNDS:** | | | | |
| **Direction** | Land use | | Zone/Precinct | |
| **North** | Dwelling House/Rural | | Rural | |
| **South** | Dwelling House/Rural/Sawmill (southwest of site) | | Rural | |
| **East** | Dwelling House/Rural | | Rural | |
| **West** | Dwelling House/Rural | | Rural | |
| **Other features** | Not Applicable | | | |

| APPLICATION HISTORY: |
| --- |
| Subject lot created (as a family lot) circa 1990 |
| **PRE-LODGEMENT/CONSULTATION HISTORY** |
| Pre-lodgement meeting held between SBRC, ONF, Mr Andrew Keenan & Elizabeth Cooling late 2023 following points clarified:<br>• The proposal is for a Sawmill (High Impact Industry) which is undefined in the Rural Zone.<br>• Application for High Impact Industry will be assessed against the entire South Burnett Regional Council Planning Scheme 2017 v1.4 inclusive of applicable Performance outcomes and Strategic Framework Criteria.<br>• Application should also provide justifications against s45(5) of the *Planning Act 2016*, and Regional Plan.<br>• Application should include the following reports:<br>o Town Planning Assessment Report.<br>o Acoustic Assessment Report.<br>o Traffic Impact Assessment.<br>o Economic Needs Assessment (a possibility). |

## THE SITE

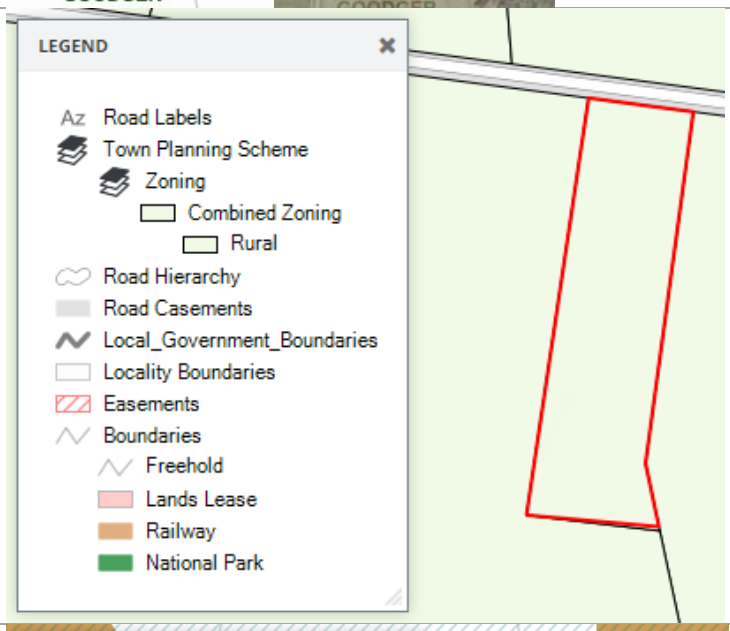
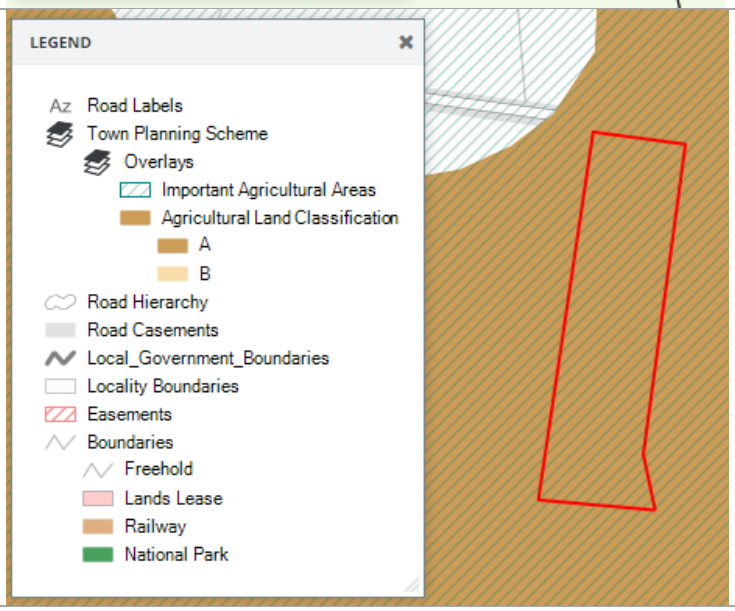
This section of the report provides a description of the site, details about the existing use and notable characteristics of the site, the standard of servicing, and the form of development in the immediately locality.

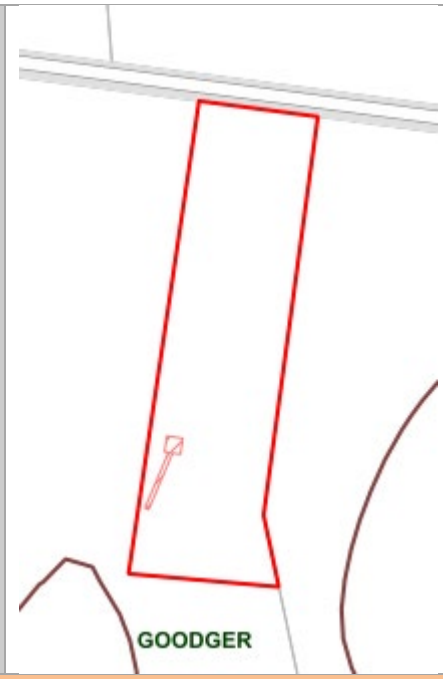
### 2.1. SITE DESCRIPTION & EXISTING USE

The 3.3 hectare site on Boonenne Road, is currently used as a sawmill by Boonenne Timbers with an existing dwelling house situated within the north-east corner of the property which is occupied by the owners/ operators. The site is located approximately 2 km west of the Bunya Highway and 1.5km east of Kingaroy-Cooyar Road.

The site is the result of a family lot subdivision circa 1990 and historically, the surrounding land parcels were under common ownership prior to the subdivision. As a result, the capacity of the site to support rural activities has been diminished as the size of the lot (3.3 ha) does not lend itself to economically viable agricultural or grazing pursuits. Existing sawmill activities have been undertaken on site for approximately 20 years with a yearly production throughput of less than 5,000 tonnes of logs per year.

Table 1 – Maps & Descriptions (Source: Intramaps)

| | |
|---|---|
| Site |  |
| Zoning |  |
| Overlays |  |
| Services | No reticulated services at this property |

| | |
|---|---|
| Topography |  |

## PROPOSAL DETAILS

The proposal plans are shown in Attachment C of this report and the proposal is as set out in Table 2 below

SUMMARY DETAILS

Table 2: Proposal

| | | | |
|---|---|---|---|
| **Name of applicant** | IMEMS Pty Ltd<br>C/- ONF Surveyors | | |
| **Application type** | Aspects of Development | Type of Approval Requested | |
| | | Preliminary Approval | Preliminary Approval |
| | Material Change of Use (MCU) | | X |
| | Reconfiguration of a Lot (RAL) | | |
| | Building Work (BW) | | |
| | Operational Work (OPW) | | |
| **Proposed Development** | High Impact Industry (Sawmill 10,000t to 20,000t P/A) | | |
| **Variations Sought** | No variations sought | | |
| **Level of Assessment** | Impact | | |
| **RECONFIGURING A LOT – DEVELOPMENT PERMIT** | | | |
| **Number of existing lots** | N/A | | |
| **Easements or lease proposed** | N/A | | |
| **Number of proposed lots** | N/A | | |
| **Lot areas** | N/A | | |

## CONSULTATION

**Referral Agencies**

| | |
|---|---|
| State Assessment and Referral Agency | SRA Reference 2401-38585, approval for an Environmental Authority (ERA-47(b)). |
| Statutory Notification | Notice of Confirmation advising application underwent public notification from Thursday 23rd May 2024 to Friday 14th June 2024 |

**Council Referrals**

| *INTERNAL REFERRAL SPECIALIST* | *REFERRAL/RESPONSE* |
|---|---|
| Development Engineer | Council's Development Engineer provided engineering conditions and calculated the Infrastructure Charges. |
| Infrastructure Charges Unit | Council adopted the LGIP on 14 June 2019 which commenced on 1 July 2019.<br><br>The types of developments that may trigger the issuing of an infrastructure charges notice are:<br>• Reconfiguring a lot;<br>• Making a material change of use; and<br>• Carrying out building work.<br><br>Refer to Attachment B for the Infrastructure Charges Notice. |

## ASSESSMENT OF ASSESSMENT BENCHMARKS

Framework for Assessment
Categorising Instrument for Statutory Assessment.

For the *Planning Act 2016*, the following Categorising Instruments may contain Assessment Benchmarks applicable to development applications:

- the *Planning Regulation 2017;*
- the Planning Scheme for the local government area
- any Temporary Local Planning Instrument; and
- any Variation Approval.

Of these, the planning instruments relevant to this application are discussed in this report.

**Impact Assessment**
Section 45(5) – An impact assessment is an assessment that –

(a) must be carried out –
  (i) against the assessment benchmarks in a categorising instrument for the development; and
  (ii) having regard to any matters prescribed by regulation for this subparagraph; and
(b) may be carried out against, or having regard to, any other relevant matter, other than a person's personal circumstances, financial or otherwise.

In regard to the prescribed regulation, being the *Planning Regulation 2017*, the following sections apply in the assessment of this application:

Section 30 – Assessment Benchmarks generally

(1) For section 45(5)(i)(a) of the Act, the impact assessment must be carried out against the assessment benchmarks for the development stated in Schedules 9 and 10.
(2) Also, if the prescribed assessment manager is the local government, the impact assessment must be carried out against the following assessment benchmarks—
  (a) the assessment benchmarks stated in—
    (i) the regional plan for a region; and
    (ii) the State Planning Policy, Part E, to the extent Part E is not identified in the planning scheme as being appropriately integrated in the planning scheme; and
    (iii) a temporary State Planning Policy applying to the premises;
  (b) if the development is not in a local government area - any local planning instrument for a local government area that may be materially affected by the development;
  (c) if the local government is an infrastructure provider—the local government's LGIP.

(3) However, an assessment manager may, in assessing development requiring impact assessment, consider an assessment benchmark only to the extent the assessment benchmark is relevant to the development.

**PLANNING REGULATION 2017**

The Planning Regulation 2017 forms the mechanism by which the provisions of the Act are administered. The Regulation has the ability to regulate and prohibit development and determines the assessment manager and the matters that trigger State interests.

| **PLANNING REGULATION 2017** | |
|---|---|
| Prohibited development | The proposed development is not prohibited development in accordance with the *Planning Regulation 2017.* |
| Infrastructure charges | The *Planning Regulation 2017* provides for the levying of infrastructure charges on development approvals. |

| | |
|---|---|
| Schedules 9, 10 and 12A | Schedules 9, 10 and 12A under the Planning Regulation 2017 are not triggered for this application. |

| **REGIONAL PLAN** |
|---|
| **Applicant's Response to the WBBRP:**<br>An assessment against WBBRP noted the following:<br><br>Under mapping for the *Wide Bay Burnett Regional Plan 2023 (WBBRP),* the site is identified as being within a Priority Agricultural Area (PAA).<br><br>PAAs are "strategic clusters of the most regionally significant agricultural production areas that contain various Priority Agricultural Land Uses (PALUs). These uses include broadacre cropping, horticulture, intensive animal industry, plantation forestry and terrestrial aqua culture".<br><br>Any non-agricultural use or resource activity seeking to operate in these areas will not be supported unless they can co-exist with the PALUs for mutual benefit and without compromising the PALUs current or future ability to operate, including the infrastructure essential to the operation of the PALUs.<br><br>The sawmill is a secondary industry to plantation forestry and considered to aligns with Objective 2.1 of the *WBBRP,* "to expand sustainable growth and secondary manufacturing for timber and wood products to service growing national demand".<br><br>Whilst the sawmill is not an agricultural use, it is an existing use that is considered consistent with the following policies in the *WBBRP* being the expansion of an allied forestry industry that provides net benefits to region:<br><br>Policies –<br><br>Agriculture<br>2.2.2 Non-agricultural uses (uses not directly allied to agricultural functions) are not supported in PAAs, unless the proposed use demonstrates net benefits for regional agricultural production or is for public infrastructure.<br><br>2.2.8 Support retention and expansion of sustainable forestry, including the protection of forestry product allied industry and haulage routes. |

## 5.3 STATE PLANNING POLICY

The State Planning Policy (July 2017) (SPP) commenced on the 3 July 2017 and is effective at the time of writing this report. The Planning Regulation 2017 (PR 2017) states the assessment must be carried out against the assessment benchmarks stated in Part E of the State Planning Policy to the extent Part E is not appropriately integrated into the planning scheme.

In accordance with section (8)(4)(a) of the *Planning Act 2016*, the State Planning Policy applies to the extent of any inconsistency with the Planning Scheme.

| **State Planning Policy - Part E** | |
|---|---|
| Liveable Communities and Housing | No applicable assessment benchmarks. |
| Economic Growth<br>• Agriculture<br>• Development and construction<br>• Mining and extractive resources<br>• Tourism | **Agriculture –** The subject site is contained within the Rural Zone to which the predominating use in the area is agricultural. It's understood that the site:<br>• Has been used for activities associated with a sawmill over the last several decades hence mapped values associated with arable soil may no longer exist. |

| State Planning Policy - Part E | |
|---|---|
| | • Is insufficient in area for any viable cropping activity (despite the agricultural mapping).<br><br>**Development and construction –**<br>• The sawmill is determined to be well located to service the local forestry industry (which is also a primary industry). |
| Planning for the Environment and Heritage<br>• Biodiversity<br>• Coastal environment<br>• Cultural heritage<br>• Water quality | **No specific assessment benchmarks.**<br>Comments - The Environmental Authority and Site Based Management Plan contain conditions to manage potential impacts to air, water and land. |
| Safety and Resilience to Hazards<br>• Emissions and hazardous activities<br>• Natural hazards, risk, and resilience | **No specific assessment benchmarks.**<br>Comments - On site operations include the storage of hazardous materials and fuel and the approval has been conditioned in respect to the safe storage of such materials and measures for chemical spills and clean up.<br><br>No burning of timber, timber by-products or other wastes occurs on the site and has been conditioned accordingly.<br><br>The site is not subject to any natural hazards such as bushfire risk, flooding or steep land. |
| Infrastructure<br>• Energy and water supply<br>• Infrastructure integration<br>• Transport infrastructure<br>• Strategic airports and aviation facilities<br>• Strategic ports | **No specific assessment benchmarks.**<br>Comments – The site has connections to all necessary infrastructure or alternative provisions such on site rainwater tanks, water supplies trucked to site and septic tanks.<br><br>The surrounding road network accommodates heavy vehicle haulage to which the Sawmill retains a current permit to traverse with heavy vehicles. |

## 5.4 REFERRAL AGENCIES

To determine whether the development application requires referral to the State Assessment and Referral Agency (SARA) or 'another entity', an assessment of the proposal against Schedule 10 of the Regulation was undertaken.

Application required referral to State Assessment and Referral Agency pursuant to the following:

- Schedule 10 Part 9 Division 54 Subdivision 1 Table 1 Item 1 (10.9.4.1.1.1) of the *Planning Regulation 2017* – Development impacting on State transport infrastructure.

The referral also included an application for an environmental authority under section 115 of the *Environmental Protection Act 1994.*

Referral Agency response letter includes Conditions from the concurrence agency (2401-38585 SRA), & Environmental Authority-ERA47(b) (P-EA-100585794).

**DEVELOPMENT CODE ASSESSMENTS**

The application is assessable against the following assessment benchmarks of the *SBRC Planning Scheme 2017* v1.4:
(a) Strategic Framework;
(b) Rural Zone Code; and
(c) Services and Works Code.

The development was assessed against all of the assessment benchmarks listed above and is considered to comply ***except*** as follows:

**(a) STRATEGIC FRAMEWORK**

| **STRATEGIC FRAMEWORK (Part 3)** | |
|---|---|
| **3.2 Settlement Pattern** | The Settlement Pattern Theme is not applicable to this application and the proposal does not conflict with Section 3.2, *SBRC Planning Scheme 2017.* |
| **3.3 Rural Futures** | The Strategic Framework (3.3.1(3) and (4)) identifies that "non-rural activities are ancillary or subsidiary to principal rural land uses to widen the economic base for rural production" and "rural areas can potentially accommodate major industries". The use of Rural land for these purposes must be balanced with the need to protect rural character, scenic values and water quality and not compromise the rural production value of surrounding land.<br><br>The existing sawmill is a secondary/ancillary industry for the processing of timber associated with regional timber plantations (ie. primary rural use) which enables the growing and processing of timber to be undertaken within the Region.<br><br>For this application, the existing sawmill is a High Impact Industry that requires isolation from urban areas, particularly with respect to noise and heavy vehicle haulage. The site has been used for the purposes of a sawmill for quite a number of years and heavy vehicle haulage routes are established and the applicant has in place a B-Double permit with the National Heavy Vehicle Regulation (NHVR) for Bonnenne Road, via Kingaroy- Cooyar Road.<br><br>Increases to throughput for the sawmill remain consistent with the historical use of the site and the locality with another sawmill located to the south.<br><br>All sawmilling activities are largely confined within the southern section of the site so that they are not highly visible from Bonnenne Road, thus lessening potential impacts upon scenic rural values when travelling along this road.<br><br>As mentioned above, water quality objectives can be maintained on site and conditioned accordingly. |

| STRATEGIC FRAMEWORK (Part 3) | |
|---|---|
| | Impacts from the sawmill (with the exception of truck haulage) are confined on site so that the productive value of nearby rural land uses is not prejudiced. Noise mitigation measures are included in the conditions of approval to maintain ongoing compliance with relevant noise criteria at the nearest noise sensitive receptors.<br><br>The proposal does not conflict with Strategic Outcomes of Section 3.3.1, *SBRC Planning Scheme* 2017 and related specific outcomes. |
| **3.4 Strong Economy** | The sawmill contributes to the economy of the South Burnett, with the processing of timber and the production of a range of timber products. It also provides ongoing stable, long term employment for local residents and contractor employment opportunities for timber haulage, by-product deliveries and servicing of the site.<br><br>The proposal does not conflict with Strategic Outcomes of Section 3.4.1, *SBRC Planning Scheme 2017* and related specific outcomes. |
| **3.5 Natural Systems and Sustainability** | The site is not affected by bushfire hazard or flooding and does not contain any significant biodiversity values likely to be impacted by the sawmilling operations.<br><br>Measures are currently implemented on site to ensure that any stormwater potentially contaminated by on site activities does not leave the site without prior treatment (ie. use of sediment basin and earthen bunds to direct flows).<br><br>The Environmental Authority contains conditions to minimise the potential for offsite impacts to air, water and land and the "*Supporting Document – Development Application, Material Change of Use, Application for an Environmental Authority ERA 47(b) Sawmilling & Woodchipping*" includes management strategies to minimise impacts from all on-site activities.<br><br>The proposal does not conflict with Strategic Outcomes of Section 3.5.1, *SBRC Planning Scheme 2017* and related specific outcomes. |
| **3.6 Strong Communities** | The Strong Communities theme is not applicable to this application and the proposal does not conflict with Section 3.6, *SBRC Planning Scheme 2017.* |
| **3.7 Infrastructure and Servicing** | The site has connections to electricity and is serviced by rainwater tanks and septic tanks. When required, potable water supplies or water for dust suppression purposes are bought in. An electrical transformer has recently been installed to facilitate improved equipment associated with the sawmill. These |

| STRATEGIC FRAMEWORK (Part 3) | |
|---|---|
| | measures will remain in place with the increased throughput of the sawmill.<br><br>The site has good access to both the Bunya Highway and Kingaroy-Cooyar Road which are the primary routes utilised by heavy vehicles. It is not anticipated that the increase in production rates will adversely affect the safe and efficient operation of the local road network.<br><br>The proposal does not conflict with Strategic Outcomes of Section 3.7.1, *SBRC Planning Scheme 2017* and related specific outcomes. |

**(b) RURAL ZONE CODE**

| RURAL ZONE CODE - OVERALL OUTCOMES (Section 6.2.13.2) | |
|---|---|
| **Overall Outcomes** | **Response** |
| (a) Land that is essential to the economic viability of productive Agricultural Land Classification Class A or Class B and rural land uses within the region is conserved. | Following the 1990 family lot subdivision of surrounding land parcels that resulted in the creation of the subject site, its productive capacity for the carrying out of agricultural or other rural pursuits was diminished as the lot size is only 3.3ha.<br><br>Consequently, the existing sawmill was established on site and has been operational for approximately twenty years.<br><br>The increase in throughput anticipated for the sawmill will continue the historic use of the site in supporting timber growing industries within the Region. |
| (b) Development comprises a wide range of existing and new rural pursuits, including cropping, intensive horticulture and animal industries, animal husbandry and keeping and other compatible primary production uses. | The continued use of the site for a sawmill supports the local economy and allied forestry industries in the Region (considered a compatible primary production use). |
| (d) Infrastructure is provided at a standard normally expected in rural locations. | The provision of on-site infrastructure is commensurate with that anticipated within a rural location. |
| (e) Areas of land used for primary production are conserved and not unnecessarily fragmented. | It is understood that primary production activities on the site ceased several decades ago.<br>The proposed development does not fragment existing rural lands. |

| RURAL ZONE CODE - OVERALL OUTCOMES (Section 6.2.13.2) | |
|---|---|
| **Overall Outcomes** | **Response** |
| (f) The viability of existing and future rural uses and activities are protected from the intrusion of incompatible uses. | The existing sawmill is a long-established use on site which has not compromised the rural capabilities of adjacent rural zoned land.<br><br>The Environmental Authority contains conditions to minimise the potential for off site impacts to air, water and land and the "*Supporting Document – Development Application, Material Change of Use, Application for an Environmental Authority ERA 47(b) Sawmilling & Woodchipping*" includes management strategies to minimise impacts from all on-site activities. |
| (g) Uses that require isolation from urban areas as a consequence of their impacts such as noise or odour may be appropriate where land use conflicts are minimised. | The sawmill is defined as a High Impact Industry, as per Schedule 1, *SBRC Planning Scheme 2017* and requires a location that is isolated from urban areas. On this basis, it is suitably located in the Rural zone.<br><br>The Environmental Authority contains conditions to minimise the potential for offsite impacts to air, water and land and the "*Supporting Document – Development Application, Material Change of Use, Application for an Environmental Authority ERA 47(b) Sawmilling & Wood chipping*" includes management strategies to minimise impacts from all on-site activities.<br><br>A Noise Impact Assessment prepared for the site recommends a number of mitigation strategies to ensure ongoing compliance with the noise criteria at the nearest noise sensitive receptors and is conditioned accordingly. |
| (h) Development embraces sustainable land management practices and contributes to the rural amenity and landscape of the area. | The "*Supporting Document – Development Application, Material Change of Use, Application for an Environmental Authority ERA 47(b) Sawmilling & Wood chipping*" includes management strategies to minimise impacts from all on-site activities. It also includes a site rehabilitation / remediation plan in the event of cessation of the sawmill activities. The proposed sawmill is likely to assist with aspects of circular economy given its proximity to Forestry, and ability to provide for subsequent products within district and broader region. |

| RURAL ZONE CODE - OVERALL OUTCOMES (Section 6.2.13.2) | |
|---|---|
| **Overall Outcomes** | **Response** |
| (i) Development is reflective of and responsive to the surrounding character of the area, natural hazards and the environmental constraints of the land. | The site is not affected by bushfire hazard or flooding and does not contain any significant biodiversity values likely to be impacted by the sawmilling operations. |
| (m) Non-rural development is appropriate only where directly associated with the rural use of the zone and does not compromise the rural use of the land. | The sawmill is located in close proximity to forestry plantations. It is also understood the mill assists Rural producers by processing lumber incidentally harvested within the district (often becomes an income option for primary producers during times of drought). |
| (n) Natural features such as creeks, gullies, waterways, wetlands and bushland are retained, managed, enhanced and buffered from adjacent development. | The site does not contain any waterway features, wetlands or significant / regulated vegetation which could potentially affected by the sawmill and the expansion of throughput. |
| (o) Water supply catchments are protected from activities that may endanger water quality. | Measures are currently implemented on site to ensure that any stormwater potentially contaminated by on site activities does not leave the site without prior treatment (ie. use of sediment basin and earthen bunds to direct flows). |

| RURAL ZONE CODE (Section 6.2.13.3) | |
|---|---|
| **Performance Outcomes** | **Assessment Benchmarks** |
| **Section 1: General** | |
| **PO2**<br>Development does not jeopardise the rural production capacity of the Zone. | Development resulting in lots less than the minimum size in Table 8.4.2 satisfying outcomes –<br>**AO2.1**<br>The proposal is necessary for the efficient production and processing of a crop grown in the area.<br>OR<br>**AO2.2**<br>The proposal provides an alternate productive rural activity that supports regionally significant industry.<br>OR<br>**AO2.3**<br>An agricultural sustainability report prepared by a suitably qualified agronomist demonstrates that –<br>(a) The lot is suitability sized for the proposed activity, including a dwelling house including yard; and<br>(b) There is sufficient water for the proposed activity; and |

| RURAL ZONE CODE (Section 6.2.13.3) | |
|---|---|
| **Performance Outcomes** | **Assessment Benchmarks** |
| | (c) The allotment is capable of being connected to reticulated electricity; and<br>(d) The proposed activity is financially viable, requiring a viability assessment that includes capital costs, operational costs, sustainable yields to support a family, climate, soils and geological factors affecting crop growth, nutrients, salinity, topography, susceptibility to flooding and erosion and an assessment of market robustness (both recent and projected) and alternative practices in the event of failure.<br>AND<br>**AO2.4**<br>Development is consistent with any Soil Conservation Plan that applies to the locality, as approved by the relevant State agency. |
| **PO3**<br>Development does not result in any degradation of the natural environment, in terms of the geotechnical, physical, hydrological and environmental characteristics of the site and its setting. | **AO3.1**<br>Uses and associated works are confined to existing lawfully cleared land or areas not supporting regulated vegetation.<br>AND<br>**AO3.2**<br>Uses and associated works are confined to areas outside stormwater discharge points, overland flow paths, watercourses and natural drainage features.<br>AND<br>**AO3.3**<br>Development, excluding forestry activities and permanent plantations, adjacent to National Parks or State Forests is set back a minimum of 100m from the park boundaries in the absence of any current 'Management Plans' for these areas. |
| **PO5**<br>Development is adequately serviced. | **AO5.1**<br>A 45kl water tank is provided for consumption purposes.<br>AND<br>**AO5.2**<br>On-site sewage treatment is provided.<br>AND<br>**AO5.3**<br>Each dwelling is provided with a service line connection to the electricity supply and telecommunications networks. |
| **PO6**<br>Development is located and designed to ensure that land uses are not exposed to: | **AO6.1**<br>Development does not occur:<br>(a) In areas that pose a health risk from previous activities; and |

| RURAL ZONE CODE (Section 6.2.13.3) | |
|---|---|
| **Performance Outcomes** | **Assessment Benchmarks** |
| (a) Areas that pose a health risk from previous activities; and<br>(b) Unacceptable levels of contaminants. | (b) On sites listed on the Contaminated Land Register or Environmental Management Register.<br>OR<br>**AO6.2**<br>Areas that pose a health risk from previous activities and contaminated soils which are subject to development are remediated prior to plan sealing, operational works permit, or issuing of building works permit. |
| **Section 2 : Where the vicinity of an existing intensive animal industry – not applicable** | |
| **Section 3 : Caretaker's accommodation – not applicable** | |
| **Section 4 : Home Based Business – not applicable** | |
| **Section 5 : Secondary dwelling – not applicable** | |
| **Section 6 : For development affected by one or more overlays** | |
| **Agricultural Land Overlay** | |
| **PO15**<br>The productive capacity and utility of agricultural land for rural activities is maintained. | **AO15.1**<br>The proposal is not located on agricultural land as identified on SPP Interactive Mapping (Plan Making).<br>OR<br>**AO15.2**<br>The proposal is necessary for the efficient production and processing of a crop grown in the area.<br>OR<br>**AO15.3**<br>The proposal provides an alternate productive rural activity that supports regionally significant industry.<br>OR<br>**AO15.4**<br>An agricultural sustainability report prepared by a suitably qualified agronomist demonstrates that –<br>(a) The lot is suitability sized for the proposed activity. Including a dwelling house including yard; and<br>(b) There is sufficient water for the proposed activity; and<br>(c) The allotment is capable of being connected to reticulated electricity; and<br>(d) The proposed activity is financially viable, requiring a viability assessment that includes capital costs, operational costs, sustainable yields to support a family, climate, soils and geological factors affecting crop growth, nutrients, salinity, topography, susceptibility to |

| RURAL ZONE CODE (Section 6.2.13.3) | |
|---|---|
| **Performance Outcomes** | **Assessment Benchmarks** |
| | flooding and erosion and an assessment of market robustness (both recent and projected) and alternative practices in the event of failure.<br>AND<br>**AO15.5**<br>Development is consistent with any Soil Conservation Plan that applies to the locality, as approved by the relevant State agency. |
| **Airport environs overlay – not applicable** | |
| **Biodiversity overlay – not applicable** | |
| **Bushfire hazard overlay – not applicable** | |
| **Extractive industry overlay – not applicable** | |
| **Flood hazard overlay – not applicable** | |
| **Historic subdivisions overlay – not applicable** | |
| **Landslide hazard overlay – not applicable** | |
| **Regional infrastructure overlay – Not applicable** | |
| **Applicant's Performance Outcomes** | |
| Applicant Submits:<br>**PO2 –** The proposal will not jeopardise the rural production capacity of the Zone as the activity supports local primary timber producers in the region providing a processing facility for their product for manufacturing of timber product for the building construction industry.<br><br>**PO3 –** The proposal conforms to existing features on site which is free of regulated vegetation. Stormwater is to be appropriately managed on site as discussed in the Supporting Document prepared by IMEMS Pty Ltd and submitted as part of the application.<br><br>Overland flows from an adjoining site to the west are directed through the mid-section of the property and directed to the south-eastern corner of the site before discharging naturally east of the site. The site is shaped to ensure the flows from the western property are kept clear of the main Sawmill and laydown areas. Log stockpiles are placed to purposely filter the flows to capture any heavy sediment on its route.<br><br>The proposal is not located adjacent to a National Park or a State Forest.<br><br>**PO5 -** The proposed development is adequately serviced.<br><br>Water is provided on site for consumption purposes and additional water is trucked in regularly for dust suppression, as required.<br><br>Electricity and telecommunications are connected to the site.<br><br>**PO6 -** The site is not known to be on the Contaminated Land Register or Environmental Management Register. No notifiable activities are known for the subject site and there is no hazardous contamination on site.<br><br>The existing and ongoing activity on the site is to continue to be managed as detailed in the "Supporting Document" prepared by IMEMS Pty Ltd.<br><br>There is minor onsite chemical storage in the Sawmill and all chemical storages are bunded. | |

| RURAL ZONE CODE (Section 6.2.13.3) | |
|---|---|
| **Performance Outcomes** | **Assessment Benchmarks** |
| **PO15 -** The subject site is located within the Important Agricultural Area shown on SPP Mapping and within Class A Agricultural Land area shown on Council's Overlay Mapping.<br><br>As provided as part of this application, the land has been taken out of the traditional rural context as a result of the smaller land area of 3.3 hectares and as such is not suited to intensive agricultural activities. The Sawmill has been operational on the site for many years which supports rural and agricultural activities in the local area by providing a processing facility for raw timber product, grown by private growers in the region.<br><br>Whilst the subject site is not utilised for agricultural activities, utility of the site to support rural activities in the locality, and more broadly the region, is able to be maintained. | |
| **Officer's Comments** | |
| **PO2 –** The corresponding Acceptable Outcomes refer to appropriate Rural Lot size as outlined in Table 8.4.2. the application is for a 'Material Change of Use – High Impact Industry' only (there is no reconfiguring a lot component in this application). Applicant's response to PO2 does not require further consideration as lot boundaries will not be altered as part of the development.<br>**PO3 -** The development has received the appropriate environmental authority (ERA47(b)) and is also conditioned accordingly.<br>**PO5 –** The proposed high impact industry will utilise existing infrastructure associated with existing operations. Conditions are imposed as necessary to ensure the development operations are sufficiently serviced (conditions may trigger upgrades as necessary).<br>**PO15 –** The productive capacity of agricultural land (in context of this proposal) was viewed in the following way:<br>a) It is understood that 157 Boonenne Rd has not been used for agricultural purposes since the early 1990's, hence it is unlikely that site has been accounted for as an agricultural resource pursuant to any planning scheme in the last 30 years.<br>b) The proposed sawmill at 157 Boonenne Rd is unlikely to affect agricultural capacity of other sites nearby (impacts either not apparent or subject to ERA 47(b) conditions and conditions imposed as part of the Council's approval. | |

**(c) SERVICE AND WORKS CODE**

| SERVICES AND WORKS CODE - OVERALL OUTCOMES (Section 8.4.2.2) | |
|---|---|
| **Overall Outcomes** | **Response** |
| (a) Infrastructure is provided in a cost-effective, efficient and co-ordinated manner to a standard ordinarily expected in the locality. | All infrastructure is in place to service the site and the anticipated increase in production rates. |
| (b) Development is planned, designed, constructed and operated to manage stormwater and wastewater in ways that protect environmental values and achieve water quality objectives; | Stormwater flows on site are managed through the use of on-site bunds (eastern and southern boundaries) which direct flows to the sediment basin. No new structures, storage areas, lay down areas or earthworks are proposed for the sawmill and therefore, no anticipated changes to stormwater flows are expected. Sewage is collected weekly by an external contractor with no wastewater disposal to land. |

| SERVICES AND WORKS CODE - OVERALL OUTCOMES (Section 8.4.2.2) | |
|---|---|
| **Overall Outcomes** | **Response** |
| (c) Development is provided with sufficient vehicle parking and servicing in a manner that provides safe and efficient access and circulation. | All vehicles associated with the sawmill enter and exit the site via the western access to the site off Boonenne Road.<br><br>Vehicular manoeuvring on site is via the existing tracks which is effectively a loop around the southern end of the site with vehicles able to stop at designated areas for deliveries or pick ups and then exiting the site in forward gear along the driveway to Boonenne Road. |
| (d) Landscaping enhances visual amenity, integrates the built and natural environments, maximises water efficiency, minimises soil loss, provides shade in large, paved areas and does not adversely impact on infrastructure. | No new landscaping is proposed which is considered appropriate as the sawmill operations are sited to the southern section of the property area, away from the Boonenne Road frontage.<br><br>The northern boundary to Boonenne Road contains a cluster of trees that does provide some screening to the property. Scattered clumps of trees on site also provide a degree of screening of storage areas. |
| (e) Filling or excavation maintains the amenity and health of the community and environment. | The anticipated increase in production does not require any filling or excavation works to be undertaken. |
| (f) Development is reflective of and responsive to the environmental constraints of the land and is established where the impacts of natural hazards are avoided or safely managed. | The site is not affected by bushfire hazard or flooding and does not contain any significant biodiversity values likely to be impacted by the sawmilling operations. |

| SERVICES AND WORKS CODE (Section 8.4.2.3) | |
|---|---|
| **Performance Outcomes** | **Assessment Benchmarks** |
| **Section 3: Vehicle Parking** | |
| **PO6**<br>Vehicle parking and access is provided to meet the needs of occupants, employees, visitors and other users. | **AO6.1**<br>Vehicle parking spaces are provided on-site in accordance with Table 9.4.5.<br>AND<br>**AO6.2**<br>A service bay is provided on-site for the service vehicle nominated in Table 9.4.5.<br>AND<br>**AO6.3**<br>Driveway crossings are provided to the standard contained in PSP1 – Design and Construction Standards.<br>AND |

| SERVICES AND WORKS CODE (Section 8.4.2.3) | |
|---|---|
| **Performance Outcomes** | **Assessment Benchmarks** |
| | **AO6.4**<br>Vehicle parking and manoeuvring areas are provided in accordance with the standards contained in PSP1 – Design and Construction Standards. |
| **Section 4: Landscaping** | |
| **PO7**<br>Landscaping is appropriate to the setting and enhances local character and amenity. | **AO7.1**<br>Landscaping is provided in accordance with the relevant zone code provisions.<br>AND<br>**AO7.2**<br>Where shade tree planting is required in vehicle parking areas each planting bed has a minimum area of $2m^2$ and is unsealed and permeable.<br>AND<br>**AO7.3**<br>Plantings along frontages or boundaries are in the form of defined gardens with three tier planting comprised of groundcovers, shrubs (understorey), and trees (canopy) and provided with a drip irrigation system, mulching and border barriers. |
| **PO8**<br>Plant species avoid adverse impacts on the natural and built environment, infrastructure and the safety of road networks | **AO8.1**<br>Landscaping utilises plant species that are appropriate for the location and intended purpose of the landscaping.<br>AND<br>**AO8.2**<br>Species selection avoids non-invasive plants.<br><br>*Editor's Note. Guidance on plant selection is provided in Branching Out - Your Handy Guide to tree Planting in the South Burnett available from Council.* |
| **Applicant's Performance Outcomes** | |
| **Applicant Submits**<br>**PO6** - The development provides sufficient vehicle parking and manoeuvring areas. The nominated rates in Table 8.4.5 for Industry are based on Gross Floor Area. The combined GFA of the Sawmill, Site Office and Lunchroom is approximately 565m² and the calculated vehicle parking rates equates to 11 parking spaces. The carparking area provides sufficient area for parking for all Staff associated with the activity which is currently 13.<br><br>Manoeuvring paths are shown on the Site Plan submitted as part of the application and Traffic Management Plans shown at Appendix B of this report.<br><br>The existing access to the site accommodates vehicles up to and including B-Double size.<br><br>The development achieves the performance outcome for vehicle parking and access as the proposal is expected to meet the needs of users of the site. | |

| SERVICES AND WORKS CODE (Section 8.4.2.3) | |
|---|---|
| **Performance Outcomes** | **Assessment Benchmarks** |
| **PO7** - No additional landscaping is proposed for the use given the nature of the use and rural properties adjoining the site. The Sawmilling activity has been established on the site for more than 20 years and is keeping with the character and uses of adjoining properties and the local area. Appropriate measures are in place in respect of air quality.<br><br>The nearest sensitive receptors are low-set dwellings along Boonenne Road to the north of the Sawmill site. It is noted that the dwellings are generally associated with rural activities or commercial operations of respective properties.<br><br>The Sawmill is located at the rear of the site and does not have prominent visibility from the Boonenne site frontage.<br><br>**PO8** - Noted. | |
| **Officer Comments** | |
| **PO6 –** Applicant's calculated parking identified the need for 11 spaces (based on existing GFA calculations) and advised that 13 bays are available. Parking is conditioned by Council's Development Engineer.<br><br>**PO7 & PO8 –** The Development site generally retains its rural setting (as viewed from the street). Conclusion is based on presence of trees, and open space areas in proximity of the house. The Sawmill location is generally out of most view catchments or located a significant distance from other sensitive uses. | |

**OTHER RELEVANT MATTERS**

The consideration of other relevant matters applies to the assessment and decision-making process for this impact assessable development application. The below summarises the matters considered by the planning assessment.

| | |
|---|---|
| **Applicant Submitted Reports** | "Supporting Document - Development Application, Material Change of Use, Application for an Environmental Authority ERA 47(b) Sawmilling and Woodchipping", prepared by IMEMS Pty Ltd, dated 30 November 2023.<br><br>"*Noise Impact Assessment*", prepared by ATP Consulting Engineers, dated August 2023 (included as part of the abovementioned Supporting Document). |
| **Assessment Considerations of Merits** | Impact assessment under the *Planning Act 2016* is an 'unbounded' assessment, meaning relevant matters other than those prescribed can also be considered, and weighing and balancing 'inside the box' as well as with factors 'outside the box' can take place in reaching a decision.'<br><br>The below outlines the planning assessment of the merits of the application presented.<br><br>• The proposal is impact assessable as the proposed use for a high impact industry is not listed as a being either accepted development or code assessable, as per Table 5.5.8, *SBRC Planning Scheme 2017*, v1.4.<br><br>In terms of broad planning merit, the proposal: |

| | |
|---|---|
| | • Enhances primary industry employment opportunity via expansion of a local allied industry;<br>• Contributes to circular economy within the region by providing a local capacity for recycling and repurposing of timber waste product, leading to less expenditure on waste management;<br>• Traffic volumes affecting the road network is commensurate with that expected (on local and state networks); and<br><br>The proposed development has been issued an Environmental Authority (EA) for the manufacturing of reconstituted timber products. The EA includes conditions to manage potential impacts to air, water and land, as does the Sited Based Management Plan. |

## 1. CONSULTATION

### Referral Agencies

| | |
|---|---|
| State Assessment and Referral Agency | SARA provided a Referral Agency Response on 17 June 2024, approving the ERA (Reference No. P-EA-100669267) and Concurrence Agency response (reference No 2401-38585 SRA) to take effect on the date this development approval takes effect – refer to Attachment C. |

### Public Notification

| | |
|---|---|
| **Date Notification Commenced** | 16 May 2024 |
| **Date Notification Completed** | 5 June 2024 |
| **Date Notice of Compliance Received** | 6 June 2024 |

| **SUBMISSION SUMMARY** | |
|---|---|
| ***Submitter Issue*** | ***Response*** |
| Two public properly made submissions were received as discussed below | |
| Issue 1<br>(a) Extended hours of operation will result in increased traffic and dust along Boonenne Road.<br><br>(b) Heavy vehicles travelling along Boonenne Road is not safe due to blind spot on the road.<br><br>(c) Sawmill already operates outside designated operating hours. | a) - Operating hours are limited to the hours of 7am to 6pm as conditioned by Council and the Referral Agency. Hours of operation are within reasonable expectation for the approved use.<br>- The development is conditioned to undertake regular measures to manage dust emissions.<br>b) Boonenne Rd is regularly traversed by heavy vehicles relating to this approved development and other Rural Activities conducted in the area. The Boonenne Timbers (sawmill) operates subject to a current 'National Heavy Vehicle Regulator Permit (No191003V10). The Department of Transport and Main Roads (concurrence agency) have imposed conditions for:<br>• Upgrades to the Boonenne Rd/Kingaroy Cooyar Rd intersection. and<br>• Heavy vehicle access (to and from the site) via Boonenne Rd/Kingaroy Cooyar Rd only.<br>c) Current development compliance issues cannot be considered as part of the material associated with the assessment of the use as proposed. Development compliance issues should be dealt with outside the purview of this assessment. |
| Issue 2<br>*Between 1 January 2013 and 1 July 2014, the Planning Scheme in effect in this part of the South Burnett Local Government Area was the Planning Scheme for the Shire of Kingaroy (PSSK). The subject site was designated within the Rural Zone by the PSSK. Upon its* | Historical aspects raised are noted, this application is for a High Impact Industry (Sawmill processing between 10,000t but no more than 20,000t per annum). |

| **SUBMISSION SUMMARY** | |
|---|---|
| ***Submitter Issue*** | ***Response*** |
| *commencement, use of the land for timber milling was not undertaken in association with the establishment, cultivation, management, silviculture, harvesting, removal, enrichment planting or limited initial processing of purpose-planted or native forests on the same site. As such, at the time the use commenced, the use did not satisfy the definition of a Forestry Business per Schedule 7 of the PSSK. The most appropriate land use term listed in Schedule 7 of the PSSK that used to describe the use of the land for timber milling at that time was Rural Service Industry.*<br><br>*Pursuant to Part 3, Table 3A of the PSSK, a Rural Service Industry was assessable development in the Rural Zone of the PSSK area and subject to Impact Assessment. The development application material does not provide any evidence that the requisite development permit was obtained to commence use of the land for the purposes of timber milling.* | The application is assessed against the South Burnett Regional Planning Scheme 2016 v1.4 (the local categorizing instrument currently in effect.<br><br>Assessment of the proposed development against South Burnett Regional Planning Scheme 2016 v1.4 identified that it was meritorious against the following:<br>1) Strategic Framework.<br>2) Rural Zone Code<br>3) Services and Works Code. |
| Issue 3<br>*As such, it is not clear if use of the site for these purposes is lawful. Further, while no Environmental Authority is required for a sawmill processing less than 5,000 tonnes of timber in a single year, an analysis of the existing traffic operations at the sawmill demonstrates that existing sawmill operations likely already exceed a throughput of 5,000 tonnes of timber in a year.* | Matters relating to existing/historical operations are not subject to this application for a High Impact Industry (Sawmill processing between 10,000t but no more than 20,000t per annum).<br><br>Traffic impacts were assessed pursuant to the tonnages proposed as part of the application. The applicant engaged PSA Consulting traffic engineers to review and determine appropriateness of traffic impacts (arising for the proposed development). PSA Consulting letter dated 10 December 2024 confirmed that traffic impacts associated with the approved development are within reasonable expectations of the local road system. |
| Issue 4<br>*The development application material states that on average two (2) log trucks/week and a firewood truck/month deliver timber to the sawmill site. However, observation of sawmill related traffic over a number of months in 2024 indicates that a more accurate estimate of development related wood deliveries to the site is likely three (3) B-Double loads and one (1) 19m semi-trailer load of timber per week. It is considered this estimate of timber deliveries is conservative as timber deliveries to the site often exceed this amount. For example, in early March 2024 at least five (5) B-Double loads of timber were delivered to the site in a single week. Deliveries of timber to the site at this frequency appear to occur at least one (1) week a month, most months of the year.* | Matters relating to existing/historical operations are not subject to this application for a High Impact Industry (Sawmill processing between 10,000t but no more than 20,000t per annum).<br>Heavy vehicle movements associated with the approved development are subject to the following:<br>• Conditions outlined in the 'National Heavy Vehicle Regulator Permit (No191003V10).<br>• Conditions outlined in the Referral Agency advice reference 2401-38585 SRA. |
| Issue 5<br>*Nevertheless, for the purposes of estimating the likely minimum throughput of the existing sawmill operations, assumptions regarding the number of timber deliveries to the site and the weight of the timber delivered has been deliberately kept* | Matters relating to existing/historical operations are not subject to this application for a High Impact Industry (Sawmill processing between 10,000t but no more than 20,000t per annum).<br>The applicant has procured the necessary environmental authority (ERA 47(b) – reference P- |

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| *conservative. For instance, if it is assumed that an average of three (3) B-Double vehicles per week and a 19m semi-trailer per fortnight deliver timber to the site and that their respective loads weigh 40 tonnes and 25 tonnes, the sawmill receives on average a total of 132.5 tonnes of timber each week for processing. Assuming the sawmill operates 50 weeks/year (allowing two weeks of non-operation for public holidays and the Christmas/New Year Period), the sawmill receives on average 6,625 tonnes of timber in a single year. This estimate is considered conservative for the reasons stated above. Nevertheless, where the sawmill's throughput exceeds 5,000 tonnes of timber in a year, the activity is considered an Environmentally Relevant Activity, and an Environmental Authority is required to carry out the activity. No Environmental Authority has been located for the existing sawmill operations on the site.* | EA-100585794 for a sawmill processing between 10,000t but no more than 20,000t per annum. |
| Issue 6<br>*While it is acknowledged a complete and thorough search of property records has not been undertaken, in our view, it is highly likely that the existing sawmill operation at the site does not benefit from a development permit for a material change of use or environmental authority, both of which are required to operate the sawmill at its estimated current intensity. It should be noted that use of the land for the purposes of timber milling at a scale that exceeds that which might be reasonably considered ancillary to use of the 3.3ha. parcel of rural land for dwelling house purposes, required and still requires a development permit for a material change of use to be obtained. Consideration of a whether a change in the way land is used constitutes a material change of use under the repealed Sustainable Planning Act 2009 or the Planning Act 2016 is quite separate from where a Environmentally Relevant Activity was included in the definition of a material change of use in the Sustainable Planning Act 2009 or whether Schedule 10 of the Planning Regulation 2017 is engaged in relation to Environmentally Relevant Activities.* | Matters relating to existing/historical operations are not subject to this application for a High Impact Industry (Sawmill processing between 10,000t but no more than 20,000t per annum).<br><br>Council has assessed a Material Change of Use- High Impact Industry on land that is zoned Rural and, in the location, identified on the proposed plans. The High Impact Industry is limited to those sections of the site as shown on the proposed plans only. Other developments currently on the site and separate to areas intended for High Impact Industry remain the subject of assessment table 5.5.13 Rural Zone. In this instance the existing dwelling house (on the Rural Zoned Lot) continues to be accepted development where maintained in situ.<br>Applicant has procured the necessary environmental authority (ERA 47(b) – reference P-EA-100585794 for a sawmill processing between 10,000t but no more than 20,000t per annum. The environmental authority is relevant to those areas to be used for High Impact Industry. |
| Issue 7<br>*It is this context within which the proposed development and its impacts must be considered by the Assessment Manager. However, this is not the context within which the proposed development is described in the development application material. Underlying the description of the development throughout the various technical reports submitted with the development application is an assumption that the existing industrial use of the land is lawful and that the proposed development and its impacts is limited in its extent to an increase in intensity of sawmill operations.* | Matters relating to existing/historical operations bear no relevance to this application for a High Impact Industry (Sawmill processing between 10,000t but no more than 20,000t per annum). |

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| Issue 7<br>*For example, the Town Planning Report submitted with the development application states in Section 1, paragraph 2 'Boonenne Timbers currently operate a Sawmill processing less than 5,000 tonnes of logs per year and* ***are applying for increased activity, more than 10,000 tonnes per year but less than 20,000 tonnes per year'****. Further, in Section 2, paragraph 1 of the document titled Application for Environmental Authority ERA 47(b) Sawmilling & Woodchipping dated 30 November 2023, it is stated that 'Boonenne Timbers has operated a timber milling activity at the site since 1997'. As demonstrated above, timber milling at the site commenced circa. 2014 and any assertion that use of the site for timber milling commenced prior to 2014 is clearly not factual. Statements and assumptions like those mentioned above are repeated throughout the development application material. As a result of this, any person of sound and reasonable mind reviewing the development application material does not illicit a complete and accurate description of the proposed development from the material. Further, the technical reports provided with the development application do not provide a complete and accurate assessment of the potential impacts of the proposed development.* | The application for High Impact Industry was considered properly made as clearly outlined in the following:<br>• DA Form 1 identifying proposed use and land to which it relates.<br>• Planning Assessment Report identifying all relevant assessment provisions, assessment manager and referral agencies.<br>• Responses to applicable assessment benchmarks pursuant to the Council's Planning Scheme and State Codes.<br>• Compliance with statutory notification requirements. |
| Issue 8<br>*Further, the development application is for a High Impact Industry processing up to 20,000 tonnes of timber in a year. The development application does not state at any point that sawmill throughput will be limited to less than 20,000 tonnes of timber (e.g. 15,000 tonnes). As such, a throughput of 20,000 tonnes must be used as the basis for quantifying, modelling and predicting the potential impacts of the proposed development. The development application material does not consider the impacts of the proposed development in this way. This results in an inaccurate description of the impacts of the proposed development being presented by the development application material. This is highlighted throughout the planning grounds of this submission.* | Assessment of the application and environmental authority is pursuant to throughputs between 10,000t but no more than 20,000t per annum.<br><br>The application and corresponding impacts were assessed on the basis of thresholds sought (between 10,000t but no more than 20,000t per annum). |
| Issue 9<br>*As a result of the above, it is considered an accurate assessment of the proposed development is unable to be undertaken by the Assessment Manager. In our view, the Assessment Manager should request that the development application is changed to accurately describe the proposed development. Where such a change is requested by the assessment Manager and made by the Applicant, the change is not likely to be considered a minor change as defined in Schedule 2 of the Planning Act. As such, the* | The application is for a Material Change of Use 'High Impact Industry' accordingly an assessment of the material was conducted and an information request issued to clarify/enable Council to undertake further assessment. To date there is no material inferring that a change other is sought nor necessary based on the following (pursuant to the *Planning Act 2016*:<br>• Does not result in substantially different development.<br>• Does not include prohibited development. |

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| *development application as changed would return to the Confirmation Stage of the assessment process. Where Part 4 Public Notification of the DA Rules again becomes relevant to assessment of the development application, the Applicant would be required to repeat Public Notification* | • Does not change level of assessment (remains impact).<br>• Does not introduce grounds for new assessment by a referral agency.<br>• Does not introduce a new of additional referral agency.<br><br>Substantially Different development test:<br>• Does not involve a new use.<br>• Does not apply to a new parcel of land.<br>• Does not dramatically change operation of the development from that intended.<br>• Does not introduce new impacts or increase severity of known impacts.<br>• Does not remove an offset component.<br>• Does not impact on infrastructure provisions. |
| Issue 10<br>*The subject site is located within the Rural Zone and the proposed development is for an industry activity. Further, the development application material states 80% of logs are sourced from Munduberra and 20% of logs are sourced from South Blackbutt. Mundubbera is located approximately 190km north-west of the proposed development by road. Blackbutt South is located approximately 58km south-east of the proposed development by road. Further, the development application material states finished timber product is transported to Brisbane and Nerangba, approximately 200km and 178km south-east of the proposed development by road.*<br><br>*With this in mind, it is noted where timber is received from the Munduberra region, the timber bypasses the regionally significant township of Kingaroy prior to reaching the site. Where timber is received from the South Blackbutt region, the timber bypasses the regionally significant township of Nanango on its way to the site. Again, when finished timber is transported to destinations on the east coast in South-east Queensland other regionally significant urban settlements are bypassed. All of these urban settlements (with the exception of Yarraman), have land located within in an industrial zone suitable to accommodate the proposed use. The State Planning Policy 2017 and the Wide Bay Burnett Regional Plan encourage such uses to be located in these areas*. | It is acknowledged that products delivered to 157 Boonenne Rd Goodger will bypass towns in SBRC where industrial zoned land exists, however the concept of 'bypassing' these centres will occur irrespective of where the development is located. Given the nature/limitations of respective haulage routes (in the district) B-doubles and other trucks will always 'bypass' other appropriately zoned sites hence this is an acceptable impact.<br><br>The proposed sawmill is a 'High Impact Industrial Use'. The major centres discussed in issue 10 contain Medium Impact Industry Zones to which High Impact Industrial would still require impact assessment. Hence the matter of locating a High Impact Industry use in Medium Impact industry Zone may attract other pertinent Strategic Planning Issues (i.e. there may be a preference to place less impactful (medium impact industries) in South Burnett's major centres, near higher concentrations of sensitive uses. |
| Issue 11<br>*The State Planning Policy 2017 encourages urban development around existing urban centres to ensure established infrastructure is utilized efficiently (Livable Communities Part E (2) (c) and (e)), while the Emissions and Hazardous Activities state interest requires that industrial development is located to avoid impacts on sensitive land uses and the natural* | It is acknowledged that State Planning Policy 2017 (SPP) and Wide Bay Burnett Regional Plan 2023 (WBBRP) seek integration of development such as that proposed however as mentioned at 10, the proposal is for 'High Impact Industry' which as a defined use remains inconsistent with the Medium Impact Industry Zones located in proximity to sensitive urban uses. |

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| *environment (Emissions and Hazardous Activities Part E (1)). The Infrastructure Integration (Infrastructure Integration Part E (2), (3) and (4)) and Transport Infrastructure (Transport Infrastructure Part E (1) – (6) inclusive) State Interests reinforce the requirement for development to be well located to ensure the sustainable growth of Queensland's Communities into the future. The proposed development is not consistent with these state interests*<br><br>*This is reflected in the inconsistency the location of the development exhibits with the Regional Settlement Strategy (Figure 2, p. 44) and other regional objectives of the Wide Bay Burnett Regional Plan, including Regional Objective 2.1 Transition into Queensland's powerhouse for advanced manufacturing (Figure 3, p. 67) and Regional Objective 2.2 Lead primary production into the mid-21st Century. The location of the proposed development is also inconsistent with the following provisions of the South Burnett Planning Scheme:* | It is concluded that the proposed development remains consistent with the SPP and WBBRP. |
| Issue 12<br>*Settlement Pattern Part 3.4 (4) 'The continued concentration of larger scale and higher impact industry on the southern approaches to town is logical from the perspectives of geography and transport… With an ample supply of existing zoned industrial land, expansion beyond zoned areas is not preferred unless there is an overriding planning need'.* | It is acknowledged there is ample supply of 'Medium Impact Industry Zoned' land in the South Burnett Region, however this application is for 'High Impact industry' which is undefined development in the 'Medium Impact Industry Zone' hence measure of need for this development cannot be simply resolved by the availability of land to which it is also an inconsistent use.<br><br>The development has a retains nexus with the primary industries that it serves hence its location in the Rural Zone has merit. |
| Issue 13<br>*Rural Futures Part 3.3.1 (1) 'The capacity of important agricultural areas, as shown on Strategic Framework map and rural activities that contribute to the Region's economy is protected from incompatible land uses to optimise agricultural development opportunities, 'Rural Futures Part 3.3.1 (3) 'Non-rural activities are ancillary or subsidiary to principal rural land uses to widen the economic base for rural production provided that rural production in surrounding areas is not compromised and rural character is maintained supports* | The Proposed development is directly associated with primary industries in SBRC and the Region hence it is considered compatible with the predominating Rural industries. |
| Issue 14<br>*No planning grounds in the form of a public benefit or otherwise have been provided within the development application material, that on balance overcome the level of inconsistency the proposed development exhibits with the strategic land use strategies found in key planning instruments of relevance. In fact, no planning grounds for locating the development on this site in the Rural Zone have been provided at all. This* | Assessment concludes the development is directly associated with rural uses undertaken in SBRC's Rural Zone and wider region which is consistent with overall outcomes in South Burnett Regional Planning Scheme 2017 (v1.4) part 6.2.13.2(2)(m). |

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| *is not surprising, given, few, if any, exist in the context of the proposed development*. | |
| Issue 15<br>*At the outset, we note that the calculation of development generated traffic provided by the Applicant does not follow any logic. The Applicant contends that the current timber throughput at the sawmill is less than or equal to 5,000 tonnes per year and that for this throughput an average of five (5) heavy vehicles and 42 light vehicles (6 day working week) (94 vehicle trips) attend the site per week together with a few incidental monthly vehicle movements. Where timber throughput at the sawmill is proposed to quadruple to a maximum of 20,000 tonnes of timber per year, development generated traffic is only predicted to result in an additional 10 heavy vehicles and an additional light vehicle (an additional 22 vehicle trips in total) attending the site each week. Both the calculation of existing development traffic and the assumed increase in development traffic is nonsensical.* | PSA Consulting (traffic engineers) were engaged to respond to the Revolution Town Planning Submission (Attachment E). PSA Confirmed that proposed increased trip generation for light and heavy vehicles cited in application material is accurate and based on the following factors:<br>• Boonenne Timbers indicated that introduction of certain technologies (into production process) requires only 2 additional employees to attend the premises.<br>• The proposal intends to produce 16,000 tonnes per year with an additional 4,000 tonnes produced in exceptional circumstances as directed by Statutory authorities.<br>• Proposed vehicle movements do not exceed state-controlled road volumes for Bunya Highway & Kingaroy Cooyar Rd (capacity being 1,700 vehicles per hour). |
| **Issue 16:**<br>*Firstly, it is stated in the development application that the sawmill employees 13 staff. This assumes an occupancy rate of 1.85 persons per vehicle. While it may be the case that not all staff will be working on the site at any one time, where shifts or starting times are staggered additional light vehicle movements will result. However, there will likely be crossovers at changes of shifts and the like. In any case, images in Appendix A of the Town Planning Report show nine (9) light vehicles parked in the staff 'carparking area'. Further, the Applicant is asking it to be believed that a quadrupling of the allowable throughput at the sawmill will require only two (2) (rounded up) additional staff members to be employed. Either the existing 13 staff are working well under capacity (which makes one consider why thirteen (13) staff are employed at the site), or the sawmill is currently processing more than 5,000 tonnes of timber in a year or the two (2) additional staff members employed if the increase in the maximum allowable throughput is approved share DNA with Eugene 'Flash' Thompson (The Flash) of Marvel Comic fame.* | PSA Consulting (traffic engineers) were engaged to respond to the Revolution Town Planning Submission (Attachment E). PSA Confirmed that Boonenne Timbers intends to introduce technologies that streamline their timber production process hence only 2 additional employees need to attend the premises. |
| **Issue 17**<br>*The reasons why the traffic generated by the development has been calculated as it has been in the technical reports supporting the development application must be justified by the Applicant. However, regardless of whether the Applicant is able to support the development generated traffic calculations provided with logical and well-reasoned information, Boonenne Road and its connections to the surrounding road network are not suitable to carry the number and types of vehicles generated by the development.* | PSA Consulting (traffic engineers) were engaged to respond to the Revolution Town Planning Submission (Attachment E). PSA Consulting confirmed that proposed vehicle movements do not exceed state-controlled road volumes for Bunya Highway & Kingaroy Cooyar Rd (capacity being 1,700 vehicles per hour). |

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| **<u>Issue 18</u>**<br>*No description of the existing road environment has been provided. Further, no assessment of the suitability of the existing vertical and horizontal geometry of Boonenne Road and its intersections with the state- controlled road network to carry development generated traffic has been undertaken. The composition of the existing Boonenne Road pavement and the impact of development generated traffic on the pavement is also unknown. Boonenne Road also functions as a school bus route and this is not mentioned in the development application material. Refer* ***Attachment 2*** *for photos of Boonenne Road approximately 175m west of the proposed access to the development.*<br>*As shown in the photos contained in* ***Attachment 2*** *Boonenne Road varies in width and formation. However, generally Boonenne Road has a 4m wide gravel pavement with 0.5 gravel shoulder. The road is neither formed nor has shoulders along the entire length of the road. The level of the road is also variable with access to the proposed development located on the eastern side of a crest. Five (5) dwellings associated with rural uses gain access from Boonenne Road.*<br>*Without traffic generated by the development, Boonenne Road likely carries approximately thirty-five (35) vehicle trips per day (seven (7) per dwelling), almost 100% of those trips being light vehicles. Using the calculations provided by the Applicant (which we maintain are nonsensical) vehicle trips per day with the sawmill; operating at its maximum intensity, average daily vehicle trips increase to approximately fifty-three (53), two (2) of which are heavy vehicle movements. As above, it is considered the projected development generated traffic will be significantly greater than this where sawmill throughput is equal to 20,000 tonnes of timber per year.*<br>*Using the Applicant's existing traffic data (10) heavy vehicle per week and 14 light vehicle trips per day) as the base scenario and assuming staff numbers increase from 13 to 20, it is considered likely traffic where the throughput of the sawmill is at 20,000 tonnes per year will equal approximately forty (40) heavy vehicle trips/week and twenty (20) light vehicle trips per day. Assuming a six (6) day working week, this equates to 27 vehicle trips/day, approximately one quarter of which are heavy vehicle trips (seven (7)). This would bring average daily traffic on Boonenne* | PSA Consulting (traffic engineers) were engaged to respond to the Revolution Town Planning Submission (Attachment E). PSA Confirmed the following with respect to the existing road environment:<br>• Boonenne Rd - Based on IPWEA Lower Order Road Desing Guideline, a road can be classified as 'minor' (50-160 vehicle movements per day) if two of the following criteria are met:<br>  o Connectivity between local roads of significance or State Controlled Roads.<br>  o Access to 20 to 50 properties.<br>  o Potential for commercial trip generation.<br>• PSA confirmed that points 1 & 3 apply to Boonenne Rd. The Planning assessment also took note of the predominant Rural Zone and concluded that commercial use of Boonenne Rd is also reasonable on basis to either existing or potentially as of right agricultural production in the district.<br>• PSA's conservative estimate for total number of vehicles travelling along Boonenne Rd (resulting from the development) is 71 Trips per day (well below the anticipated maximum).<br>• Proposed vehicle movements do not exceed state-controlled road volumes for Bunya Highway & Kingaroy Cooyar Rd (capacity being 1,700 vehicles per hour). |

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| *Road to sixty-two (62) vehicle trips per day, a 60% increase in overall traffic on Boonenne Road. Heavy vehicle trips would comprise of 11% of all vehicle trips on Boonenne Road. With reference to any well-regarded standard for road design, the existing road geometry and the construction standard of Boonenne Road is not suitable for the traffic likely to be generated by the development.*<br>*The IPWEA Lower Order Road Design Guideline, specifies a 6m wide pavement (4m wide asphalt seal) on a 7m wide formation (0.5m wide unsealed shoulders) for the projected development generated traffic. Austroads Road Design Guidelines specifies (with consideration for the type of vehicles generated by the development) a 6m wide asphalt sealed pavement on an 8m wide formation (1m wide unsealed shoulders). Both standards require dedicated school bus set-down/pick-up areas to be provided.*<br>*The design of the intersection of Boonenne Road with the Bunya Highway and Kingaroy Cooyar Road also must be considered. As shown in the images of the intersections in* ***Attachment 2****, the existing road geometry does not accommodate the turning movements of heavy vehicles associated with the use and no acceleration or deceleration lanes or Basic Right Turn treatments are provided at either intersection. Vehicle swept paths through both intersections and entering and exiting the site access must be provided to enable a thorough assessment of the suitability of the intersections and the site access.* | |
| **Issue 19**<br>*In relation to heavy vehicle access to the site, the application material mentions a NHVR Permit for access to Boonenne Road. A search of the NHVR route planner and network map indicates that Boonenne Road is not a gazetted heavy vehicle route and access and use of the road by heavy vehicle requires approval. The mapping does not indicate such an approval exists for Boonenne Road. The Applicant should provide a copy of the NHVR approval.* | Applicant has provided details of the required permit (NVHR Permit 19103V10). |
| **Issue 20**<br>*Lastly, it is noted that the proposed development has not demonstrated that the provisions of the South Burnett Planning Scheme listed below have been satisfied and insufficient information has been provided to enable reasonable and relevant conditions to be imposed to ensure the provisions will satisfied:*<br>• *PO5 of the Services and works code 'Development is provided with infrastructure which:*<br>*(a) conforms with industry standards for quality;*<br>*(b) is reliable and service failures are* | PSA Consulting (traffic engineers) were engaged to respond to the Revolution Town Planning Submission. PSA Consulting have confirmed that the proposed development's traffic related matters both internal to the site and in the external road network meet planning scheme performance outcomes cited by the<br>submitter. |

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| *minimised; and*<br>*(c) is functional and readily augmented'.*<br>• *PO6 of the Services and works code 'Vehicle parking and access is provided to meet the needs of occupants, employees, visitors and other users'.*<br>• *Part 6.2.8.2 (2)*<br>*(d) 'Development maximises the use of existing transport infrastructure and has access to the appropriate level of transport infrastructure but does not compromise the efficiency of the local and State-controlled Road network'.*<br>• *Part 6.2.8.2 (2)*<br>*(n) 'Activities generating high volumes of traffic, particularly heavy vehicle traffic, are located in areas having direct access to the major road network or access other than through residential areas or other sensitive receptors'.* | |
| **<u>Issue 21</u>**<br>*The development application material fails to demonstrate that the proposed development will maintain an acceptable level of rural amenity in the locality as a result of the potential for the development to have undue and cumulative adverse impact on the existing noise environment, air quality, water quality and rural landscape in the locality. In this respect, it is noted that the technical reports outlining the potential impacts of the development and the mitigation measures and management procedures to be incorporated in site operations to manage such impacts, are deficient in several areas.*<br><br>*Firstly, the Noise Impact Assessment omits vital information and ignores industry standard noise measurement guidelines. In particular, the Noise Impact Assessment:*<br>• *Overstates the existing background noise environment and as such does not provide a true picture of likely acoustic impacts of the development;*<br>• *Does not clearly detail the methodology used in the modelling of noise impacts; and*<br>• *Omits sensitive receptor, including a sensitive receptor on the site itself.*<br>*With reference to the above, it is considered the Noise Impact Assessment fails to recognise that a development permit for a material change of use was required (but not obtained) to commence use of the land for sawmill purposes. As such, noise generated by the existing sawmill is not being lawfully generated and must be excluded from any measurement of* | The initial application was supported by a Noise Impact Assessment from ATP Consulting Engineers (ATP) (ref ATP230421-R-NIA-01) who undertook investigations and made recommendations pursuant to Table 6.2.13 (AO1.2) of the South Burnett Regional Planning Scheme 2017 v1.4.<br><br>ATP demonstrated that noise impacts from the sawmill could be managed to an acceptable level (as outlined in parts 5 & 5.1 of the report (as required by Council's Planning Scheme).<br><br>A review of the objection relating to noise was undertaken by ATP who provided a letter (17 July 2024) outlining the following:<br>• The Noise impact assessment document ATP230421-R-NIA-01was prepared in accordance with the South Burnett Regional Planning Scheme 2017 v1.4 and Environmental Protection (Noise Policy) 2019.<br>• Noise measurements carried out as part of the impact assessment in accordance with Australian Standards AS1055.1-3 as<br>• required.<br>• ATP's Methodology for monitoring/assessing background noise accords with accepted practices.<br><br>ATP advised that in their professional view, the submitters suggest noise impact assessment criterion that both inaccurate and contradictory.<br>ATP's 17 July 2024 letter advised that:<br>• The submitters' noise-related objections are not based on sufficient evidence to warrant the refusal of the application.<br>• ATP's overall response to the objection is that report ATP230421-R-NIA-01 has demonstrated no adverse impacts on nearby sensitive |

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| *background noise. Further, contributing to inaccuracies in the measurement of background noise was the position of the noise logger. Located adjacent a roadway, the logger was susceptible to recording higher sound pressure levels of background noise than would otherwise be experienced at sensitive receptors.*<br><br>*Analysis of the weather data provided, while not provided for the whole of the measurement period that results are presented for in Appendix D, nevertheless indicates wind exceeding 18.1km/hr were experienced on two mornings and six afternoons between 21 June 2023 and 30 June 2023.The data gathered during those periods is unreliable and it is standard practice to remove the data from the background noise calculations. The anomalies caused by these issues are shown in the background noise graphs in Appendix D where high LAmax in the form of a graph that shows higher sound pressure levels being experienced over a longer period during the respective day and less difference in the sound pressure levels between the day, evening and night periods. No wind roses are presented for the locality so the impact of prevailing winds on the noise environment throughout the year may be considered.*<br><br>*Even with these anomalies, sound pressure levels during the evening and night periods were often less than 35dB. In this context rating background levels should be calculated for the purposes of setting noise limits during these periods. Where the rating background noise level is found to be less than 30 dB(A) for the evening and night periods, then it is set to 30 dB(A); where it is found to be less than 35 dB(A) for the daytime period, then it is set to 35 dB(A).*<br><br>*Further, it is noted high LAmax sound pressure levels were frequently recorded during the day and evening periods. Variable noise has the potential to cause nuisance in terms of the frequency of the noise occurrence. No explanation is provided for the high LAmax sound pressure levels recorded and no analysis of the data using the LAmax criteria is provided in the report. Importantly, the Noise Report should consider the cumulative impacts of all noise sources on the existing acoustic environment operating simultaneously and present that data using the variable LAmax, noting how frequently* | receptors where recommendations (in the report) are carried out.<br><br>Despite the detailed submission received (relating to noise) it is determined that:<br>1) Issues relating to Noise Impacts were sufficiently addressed by the noise impact assessment ATP230421-R-NIA-01; &<br>2) The Noise impact assessment was appropriately reviewed and findings clarified by ATP pursuant to matters raised in the objection. |

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| ***Submitter Issue*** | ***Response*** |
| *sound pressure levels presented using the LAmax variable exceed the Acoustic Quality Objectives in the Environmental Protection (Noise) Policy 2019.* | |
| **Issue 22:**<br>*Secondly, the site based environmental management plan provided with the development application does not include several critical parts a good site based environmental management plan (SBEMP) should include, such as:*<br>• *A section detailing the company structure and the chain of responsibility for environmental matters for the site;*<br>• *Information detailing how staff and visitors to the site will be trained and informed of their environmental responsibilities while on the site;*<br>• *How the requirements of the SBEMP will be implemented and monitored for efficacy;*<br>• *emergency procedures for responding to an environmental incidents;*<br>• *Comprehensive environmental management plans for waste management, air quality and water quality elements;*<br>• *Provision for review and update;.*<br>• *A complaint investigation procedure;*<br>• *A corrective action procedure; and*<br>• *A incident investigation record template.. nobody said it was a SBEMP, although I get the point*<br><br>*Further, no assessment of the condition of the cyclone used for sawdust extraction from the workshop was undertaken. In any case, the risk of dust and particulate matter causing adverse air quality on the site is not from milling activities undertaken within a workshop but wind erosion and wheel generated dust from the large expanse of uncompacted fine dirt that loosely resembles a carparking and maneuvering area and outdoor storage area. Where external areas of the site are not proposed to be sealed with asphalt or similar (not preferred in rural areas), they should be constructed of coarse compacted aggregate treated with a dust suppressant to minimise the potential for air quality nuisance at the site boundaries and the escape of sediment from the site eventually making its way into nearby waterways and having adverse impacts on aquatic ecosystems.* | Applicant has procured the necessary environmental authority (ERA 47(b) – reference P-EA-100585794. The Environmental authority approval was supported by the IMEMS Pty Ltd document, dated the *30 November 2023.*<br><br>To ensure compliance, an SBEMP has been conditioned as part of this approval. |
| **Issue 24:**<br>*Additionally, it is considered the proximity of the use to the public road combined with the scale of the use and the lack of any screening or landscape planting on the site results in the development being out-of-character with the rural landscapes in the locality. As such, it will have a detrimental* | Assessment of the proposed development concluded that it retains sufficient landscape character consistent with that expected in the Rural Zone.<br><br>Development is close to major haulage routes hence it meets Part 6.2.8.2(2)(d) of the South Burnett Council Regional Planning Scheme 2017 v1.4. |

| **SUBMISSION SUMMARY** | |
|---|---|
| ***Submitter Issue*** | ***Response*** |
| *and adverse impact on visual amenity in the locality. Consequently, the locality will become a less desirable place to reside and this may adversely affect the value of adjacent land and agricultural productivity in the region.*<br><br>*As per the above, the proposed development is considered to be inconsistent with the following assessment benchmarks in the Planning Scheme:*<br>• *Part 6.2.8.2 (2) (b) 'Uses and works are located, designed, screened or buffered and managed to maintain safety to people, avoid adverse effects on the natural environment and minimise impacts on adjacent non-industrial land'.*<br>• *Part 6.2.8.2 (2) (d) 'Development maximises the use of existing transport infrastructure and has access to the appropriate level of transport infrastructure but does not compromise the efficiency of the local and state-controlled road network'.*<br>• *Part 6.2.8.2 (2) (f) 'Development is provided with appropriate infrastructure and essential services'.*<br>• *Part 6.2.8.2 (2) (j) 'industrial uses are adequately separated from sensitive land use (as defined in the Regulation) to minimise the likelihood of environmental harm or environmental nuisance occurring'.*<br>• *Part 6.2.8.2 (2) (n) 'Activities generating high volumes of traffic, particularly heavy vehicle traffic, are located in areas having direct access to the major road network or access other than through residential areas or other sensitive receptors'.*<br>• *PO1 of the Rural Zone Code 'Development maintains rural amenity and character'.* | Development can be conditioned to comply with Part 6.2.8.2 (2) (f) of the South Burnett Council Regional Planning Scheme 2017 v1.4.<br><br>Separation from nearby sensitive uses is in the range of 440m to 480m (north) & 500m to 800m (south) (Part 6.2.8.2 (2) (j)).<br><br>Site is not part of a residential area, it's reasonable to expect that local road system (in the Rural Zone) could expect to accommodate all manner of vehicle types that 'residential road networks' would not expect see on a regular basis. |
| **Issue 25**:<br>*The site is burdened by an easement in favour of Ergon Energy. As per Schedule 10, Part 9 , Division 2, Table 2, of the Planning Regulation 2017 the development application is required to be referred to Ergon Energy. Council must issue a missed referral to the Applicant in accordance with the relevant provisions in the DA Rules.* | The asset is not owned by Ergon or Powerlink hence referral is not required. |
| **Issue 26:**<br>*On-site stormwater management is inadequate, and stormwater discharged from the development site may result in biosecurity/land contamination and actionable nuisance on adjacent properties*<br><br>*Stormwater discharged from the* | Conditions are imposed regarding lawful discharge of stormwater have been included to ensure compliance. |

| SUBMISSION SUMMARY | |
|---|---|
| ***Submitter Issue*** | ***Response*** |
| *development site may cause actionable nuisance to downstream property owners in terms of stormwater quality and stormwater quality. The proposed stormwater detention basin and sediment pond is not adequately sized and no location for the basin is available or noted on the site plan. As such, the stormwater management system will have the effect of concentrating contaminated (sediment) runoff onto properties to the south of the site. Further, given the nature of the use, the origin of the timber delivered to the site and the lack on existing or proposed methods for controlling the spread of weeds and other pests, the proposed development will result in an undue risk of causing biosecurity issues on adjacent properties.*<br><br>*As such, it is considered the proposed development is inconsistent with the following parts of the Planning Scheme:*<br>○ *PO4 Medium Impact Industry Zone Code 'Development is to be adequately serviced'*<br>○ *PO2 services and works code 'Development does not discharge wastewater to a waterway or off-site unless demonstrated to be best practice environmental management for that site'.* | |

## CONCLUSION

The development has been assessed with regard to the applicable assessment benchmarks as identified within this report and the attached Statement of Reasons (refer to Attachment A – Statement of Reasons). The proposed development generally complies with the assessment benchmarks, or it can be conditioned to comply. Where the applicant has not provided sufficient information, conditions have been imposed to ensure compliance. It is therefore recommended that the development application be approved subject to the conditions identified above.

## ATTACHMENTS

1. **Attachment A - Statement of Reasons**
2. **Attachment B - Approved Plans**
3. **Attachment C - SARA Referral Agency Response and Environmental Authority**
4. **Attachment D - Infrastructure Charges Notice**
5. **Attachment E - Traffic Engineering Response to Public Further Submission**
6. **Attachment F - Noise Impact Assessment**
7. **Attachment G - Public Submissions**
8. **Attachment H - Supporting Document - Development Application, Material Change of Use, Application for an Environment Authoirty ERA 47(b) Sawmilling and Woodchipping**

# NOTICE ABOUT DECISION – STATEMENT OF REASONS

*The following information is provided in accordance with Section 63(4) & (5) of the Planning Act 2016*

| | |
|---|---|
| **Applicant:** | IMEMS Pty Ltd |
| **Application No:** | MCU23/0034 |
| **Proposal:** | Material Change of Use – Sawmill (High Impact Industry) and concurrent environmentally relevant activity (ERA) 47 Timber Milling and Woodchipping |
| **Street Address:** | 157 Boonenne Road, Goodger QLD 4610 |
| **RP Description:** | Lot 4 on RP807137 |
| **Assessment Type:** | Impact |
| **Number of Submissions:** | Two (2) |

On 18 December 2024 the above development was recommended for:

☑ Approval
☐ Refusal

**1. Reasons for the Decision**

The reasons for this decision are:

- The proposal seeks an increase in local production of timber between 10,000 to 20,000 tonnes per annum at an existing sawmill.
- The proposal does not conflict with Strategic Outcomes of the, *SBRC Planning Scheme 2017*, v. 1.4 nor the Wide Bay Burnett Regional Plan 2023.
- The proposal does not conflict with the Rural Zone under the *SBRC Planning Scheme 2017, version 1.4*.
- The proposal does not conflict with the Services and Works Code under the *SBRC Planning Scheme 2017, version 1.4*.
- The proposal is compliant and or can be conditioned in accordance with the relevant provisions of the assessment benchmarks/performance outcomes of the *SBRC Planning Scheme 2017, version 1.4*.
- Surrounding land uses are residential and the High Impact Industry has provided advice from suitably qualified professionals that amenity impacts, and use of the local road system is within acceptable limits pursuant to the *SBRC Planning Scheme 2017, version 1.4*. and other categorizing instruments, regulations, and laws.
- All submissions were given extensive consideration and responded to with assistance of duly qualified professionals as outlined in the assessment report.
- The Proposal has received approval from the Concurrence Agency in relation to road usage and Environmental Authority (refer to decision at P-EA-100585794).

**2. Assessment Benchmarks**

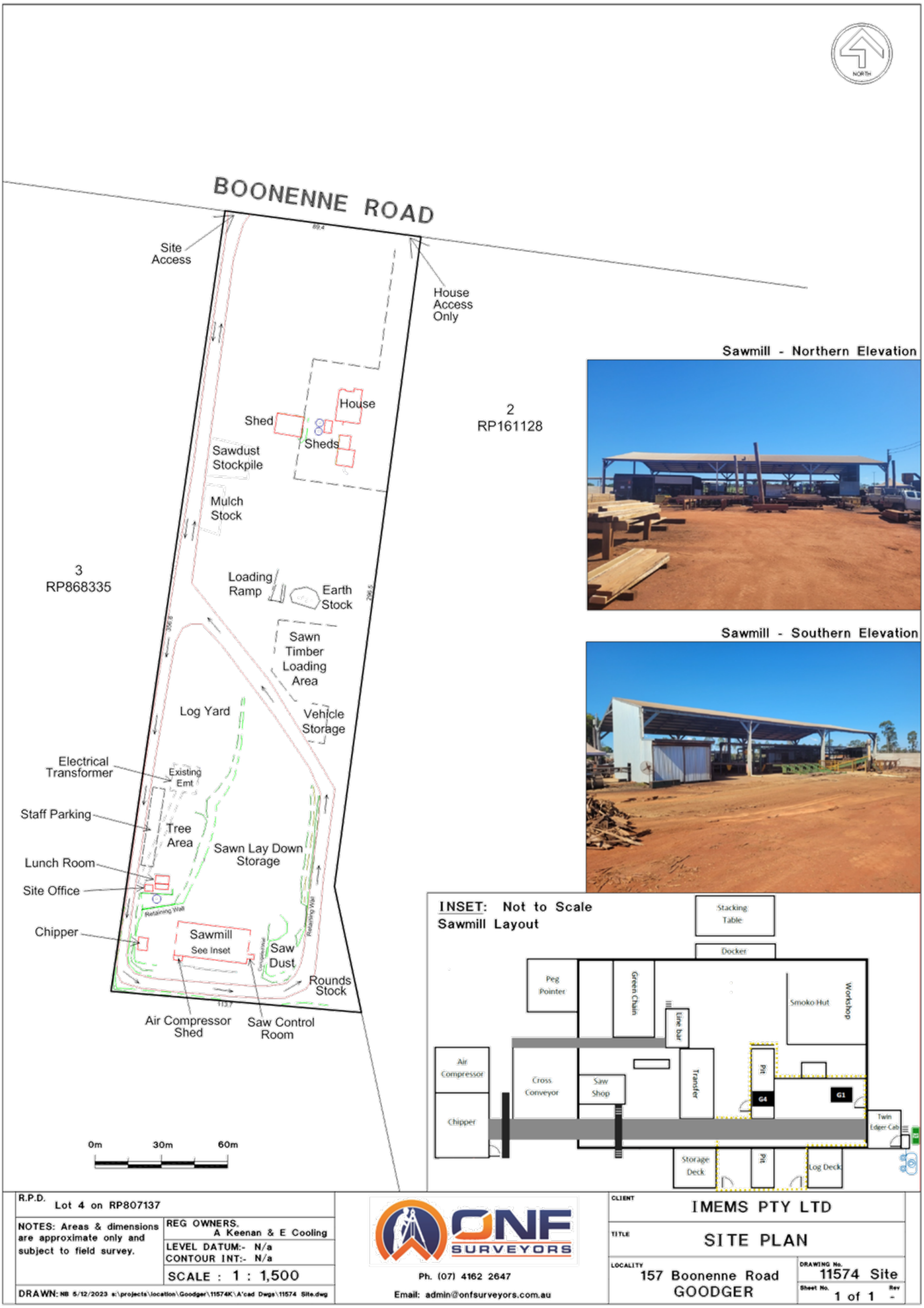
The following are the benchmarks apply to this development:

- Strategic Framework;
- Rural Zone Code; and
- Services and Works Code.

**3. Compliance with Benchmarks**

The development was assessed against all the assessment benchmarks listed above and complies with all of these or can be conditioned to comply.

**Note**: Each application submitted to Council is assessed individually on its own merit.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Site Access
House Access Only
2 RP161128
3 RP868335
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Shed
Sheds
Sawdust Stockpile
Mulch Stock
Loading Ramp
Earth Stock
Sawn Timber Loading Area
Log Yard
Vehicle Storage
Electrical Transformer
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Staff Parking
Tree Area
Lunch Room
Site Office
Sawn Lay Down Storage
Chipper
Sawmill See Inset
Saw Dust
Rounds Stock
Air Compressor Shed
Saw Control Room
Retaining Wall
Corrugated Wall
356.8
296.5
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0m
30m
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Sawmill - Northern Elevation
Sawmill - Southern Elevation
INSET: Not to Scale
Sawmill Layout
Stacking Table
Docker
Peg Pointer
Green Chain
Line bar
Smoko Hut
Workshop
Air Compressor
Cross Conveyor
Saw Shop
Transfer
Pit
G4
G1
Chipper
Twin Edger Cab
Storage Deck
Pit
Log Deck
R.P.D. Lot 4 on RP807137
NOTES: Areas & dimensions are approximate only and subject to field survey.
REG OWNERS. A Keenan & E Cooling
LEVEL DATUM:- N/a
CONTOUR INT:- N/a
SCALE : 1 : 1,500
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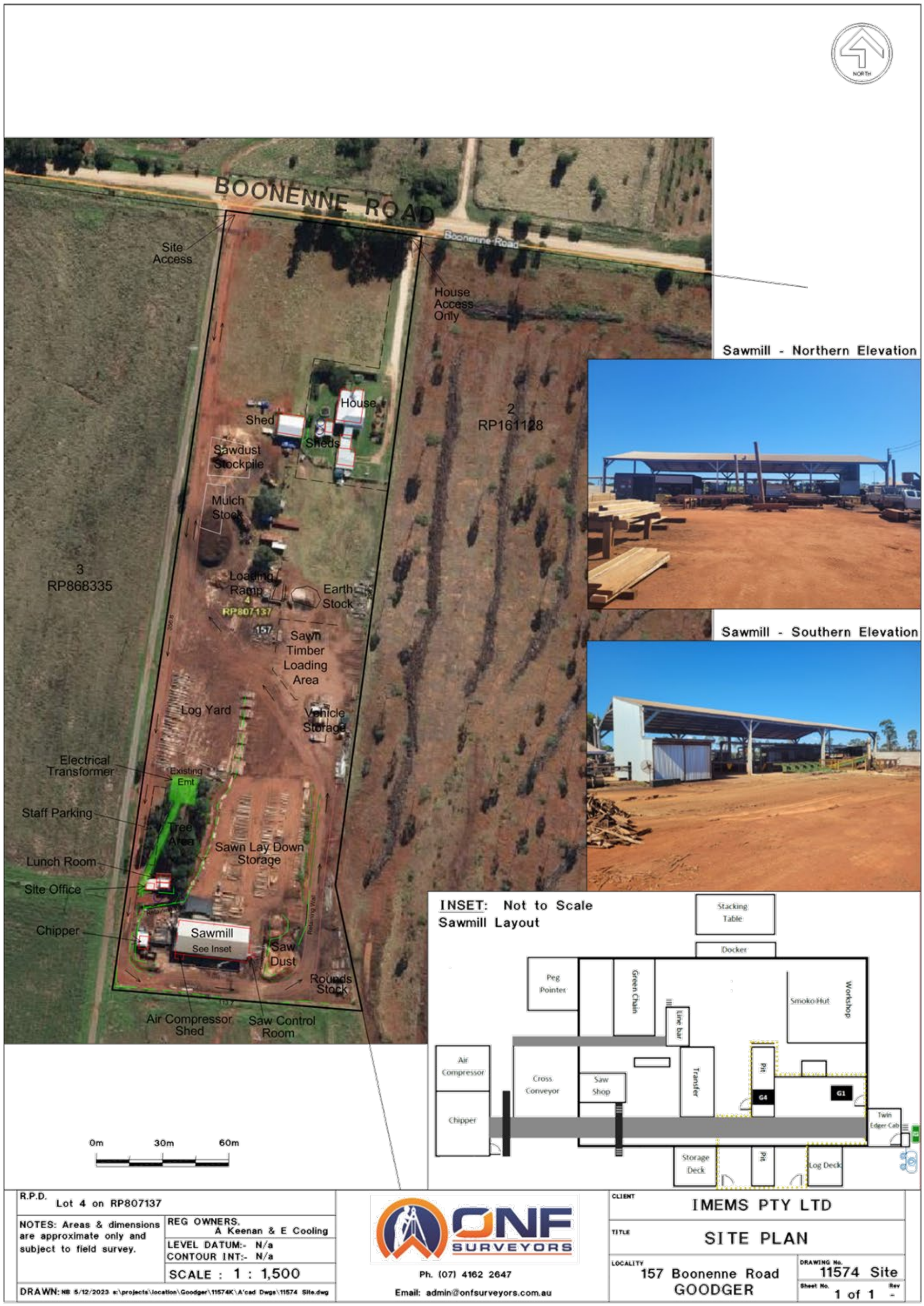
ONF SURVEYORS
Ph. (07) 4162 2647
Email: admin@onfsurveyors.com.au
CLIENT IMEMS PTY LTD
TITLE SITE PLAN
LOCALITY 157 Boonenne Road GOODGER
DRAWING No. 11574 Site
Sheet No. 1 of 1
Rev -


NORTH
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Boonenne Road
Site Access
House Access Only
2 RP161128
3 RP868335
4 RP807137
157
House
Shed
Sheds
Sawdust Stockpile
Mulch Stock
Loading Ramp
Earth Stock
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Log Yard
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Staff Parking
Tree Area
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Lunch Room
Site Office
Chipper
Sawmill
See Inset
Saw Dust
Rounds Stock
Air Compressor Shed
Saw Control Room
Sawmill - Northern Elevation
Sawmill - Southern Elevation
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Workshop
Air Compressor
Cross Conveyor
Saw Shop
Transfer
Pit
G4
G1
Chipper
Twin Edger Cab
Storage Deck
Pit
Log Deck
0m
30m
60m
R.P.D. Lot 4 on RP807137
NOTES: Areas & dimensions are approximate only and subject to field survey.
REG OWNERS. A Keenan & E Cooling
LEVEL DATUM:- N/a
CONTOUR INT:- N/a
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Sheet No. 1 of 1
Rev -

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Queensland Government

SARA reference: 2401-38585 SRA
Council reference: MCU23/0034
Applicant reference: 11574K

30 September 2024

Chief Executive Officer
South Burnett Regional Council
PO Box 336
KINGAROY QLD 4610
info@sbrc.qld.gov.au

Dear Sir/Madam

# Changed Referral Agency Response—with Conditions—157 Boonenne Road, Goodger

(Given under section 28 of the Development Assessment Rules)

On 27 September 2024, the State Assessment and Referral Agency (SARA) received representations from the applicant requesting SARA change its referral agency response. SARA has considered the representations and now provides this changed referral agency response which replaces the response dated 5 August 2024.

## Response

| | |
|---|---|
| Outcome: | Referral Agency Response – with Conditions |
| Date of Response: | 30 September 2024 |
| Conditions: | The conditions in **Attachment 1** must be attached to any development approval. |
| Advice: | Advice to the applicant is in **Attachment 2**. |
| Reasons: | The reasons for the referral agency response are in **Attachment 3**. |

## Development Details

| | | |
|---|---|---|
| Description: | Development Permit | Material Change of Use for high Impact Industry (Sawmill) and Concurrent ERA 47 – Timber Milling and Wood Chipping |
| SARA Role: | Referral Agency | |
| SARA Trigger: | • Schedule 10, Part 5, Division 4, Table 2, Item 1 (10.5.4.2.1) of the Planning Regulation 2017 – Environmentally Relevant Activity (ERA) | |



Wide Bay Burnett regional office
Level 1, 7 Takalvan Street, Bundaberg
PO Box 979, Bundaberg QLD 4670

| | |
|---|---|
| | • Schedule 10, Part 9, Division 4, Subdivision 1, Table 1, Item 1 (10.9.4.1.1.1) of the Planning Regulation 2017 – Development impacting on State transport infrastructure |
| SARA Reference: | 2401-38585 SRA |
| Assessment Manager: | South Burnett Regional Council |
| Street Address: | 157 Boonenne Road, Goodger |
| Real Property Description: | Lot 4 on RP807137 |
| Applicant Name: | IMEMS Pty Ltd |
| Applicant Contact Details: | C/- ONF Surveyors<br>PO Box 896<br>KINGAROY QLD 4610<br>admin@onfsurveyors.com.au |
| Environmental Authority: | This referral included an application for an environmental authority under section 115 of the *Environmental Protection Act 1994.* Below are the details of the decision:<br>• Approved<br>• Reference: P-EA-100585794<br>• Effective Date: Date the development application referenced MCU23/0034 is approved by South Burnett Regional Council<br>• Prescribed ERA: 47(b) – Timber Milling and Woodchipping<br>If you are seeking further information on the environmental authority, the Department of Environment and Science's website includes a register. This can be found at: www.des.qld.gov.au. |
| *Human Rights Act 2019* Considerations: | A consideration of the 23 fundamental human rights protected under the *Human Rights Act 2019* has been undertaken as part of this decision. It has been determined that this decision does not limit human rights. |

## Representations

An applicant may make representations to a concurrence agency, at any time before the application is decided, about changing a matter in the referral agency response (section 30 of the Development Assessment Rules). Copies of the relevant provisions are in **Attachment 4**.

A copy of this response has been sent to the applicant for their information.

For further information please contact Cavannah Deller, Senior Planning Officer, on 07 3244 9343 or via email WBBSARA@dsdilgp.qld.gov.au who will be pleased to assist.

Yours sincerely

Luke Lankowski
Manager, Planning – Wide Bay Burnett

cc IMEMS Pty Ltd, admin@onfsurveyors.com.au

enc Attachment 1 – Changed Referral Agency Conditions
Attachment 2 – Advice to the Applicant
Attachment 3 – Reasons for Referral Agency Response
Attachment 4 – Representations about a Referral Agency Response Provisions

## Attachment 1—Changed Referral Agency Conditions

(Under section 56(1)(b)(i) of the *Planning Act 2016* the following conditions must be attached to any development approval relating to this application)

| No. | Conditions | Condition Timing |
|---|---|---|
| 10.9.4.1.1.1—Development impacting on State transport infrastructure—The chief executive administering the *Planning Act 2016* nominates the Director-General of the Department of Transport and Main Roads to be the enforcement authority for the development to which this development approval relates for the administration and enforcement of any matter relating to the following condition(s): | | |
| 1. | (a) Road works comprising sealing of Boonenne Road for a distance of at least 19 metres from the edge of the existing seal of Kingaroy-Cooyar Road at a minimum width of 6 metres plus turn radii for the largest design vehicle.<br>(b) The road works must be designed and constructed in accordance with the Department of Transport and Main Roads' *Road Planning and Design Manual*, *Standards* and *Specifications*. | ~~Prior to the commencement of use~~ **Once the milling of ≥10,000 tonnes of timber occurs in a calendar year** |
| 2. | Heavy vehicles as defined in the *Transport Operations (Road Use Management) Act 1995* associated with the development are only to access Boonenne Road using the Kingaroy-Cooyar Road/Boonenne Road intersection. | At all times |

## Attachment 2—Advice to the Applicant

| | |
|---|---|
| **General Advice** | |
| 1. | Terms and phrases used in this document are defined in the *Planning Act 2016,* its regulation or the State Development Assessment Provisions (SDAP) version 3.0. If a word remains undefined it has its ordinary meaning. |
| 2. | Kingaroy-Cooyar Road, at the Boonenne Road intersection, is not identified as an as-of-right B-double route. It is recommended you contact the National Heavy Vehicle Regulator on 13 NHVR (13 64 87) to investigate the permits necessary for B-double vehicles to access the development site. |
| 3. | This referral agency response includes a requirement for road works at the Kingaroy-Cooyar Road/Boonenne Road intersection. It is strongly recommended that the width of seal along Boonenne Road is adequate to permit the largest vehicle using the site to turn in or out of Boonenne Road without using the adjacent lane. |
| **Further Permits Required** | |
| 4. | Road Works Approval<br>This referral agency response includes a requirement for road works on a state-controlled road. Under section 33 of the *Transport Infrastructure Act 1994,* written approval is required to carry out road works on a state-controlled road. This approval must be obtained prior to commencing any works on the state-controlled road reserve.<br><br>The road works approval process will require detailed engineering designs of the works, certified by a Registered Professional Engineer of Queensland (RPEQ).The designs will need to demonstrate compliance with the Department of Transport and Main Roads' *Road Planning and Design Manual,* technical standards and policies.<br><br>Please contact the Department of Transport and Main Roads to make an application for road works approval via WBB.IDAS@tmr.qld.gov.au, quoting reference TMR24-041547, as soon as possible to ensure that gaining a road works approval does not delay construction.<br><br>Further information on applying for road works approval, including the required application form, can be found at https://www.tmr.qld.gov.au/Community-and-environment/Planning-and-development/Other-matters-requiring-approval#roadworks. |

## Attachment 3—Reasons for Referral Agency Response

(Given under section 56(7) of the *Planning Act 2016*)

**The reasons for SARA's decision are:**

The development is for a material change of use for high impact industry (sawmill) and ERA 47(b) – Timber milling and woodchipping. Specifically, the development is to expand the operations of an existing sawmill to allow between 10,000 tonnes and 20,000 tonnes of annual throughput.

The development on site does not impact the air, acoustic or odour environment and appropriately manages contaminants and stormwater. As such, the development complies with State code 22: Environmentally relevant activities of SDAP, with no requirements.

Conditions to seal of the Kingaroy-Cooyar Road/Boonenne Road intersection (nominated heavy vehicle route) and to specify the nominated heavy vehicle route are required to ensure the development complies with State code 6: Protection of state transport networks of SDAP.

**Material used in the assessment of the application:**

- the development application material and submitted plans
- *Planning Act 2016*
- Planning Regulation 2017
- SDAP, version 3.0, as published by SARA
- Development Assessment Rules
- SARA DA Mapping system
- State Planning Policy mapping system
- Section 58 of the *Human Rights Act 2019*

## Attachment 4— Representations about a Referral Agency Response Provisions

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# Development Assessment Rules—Representations about a referral agency response

The following provisions are those set out in sections 28 and 30 of the Development Assessment Rules[1] regarding **representations about a referral agency response**

## Part 6: Changes to the application and referral agency responses

### 28 Concurrence agency changes its response or gives a late response

28.1. Despite part 2, a concurrence agency may, after its referral agency assessment period and any further period agreed ends, change its referral agency response or give a late referral agency response before the application is decided, subject to section 28.2 and 28.3.

28.2. A concurrence agency may change its referral agency response at any time before the application is decided if—

(a) the change is in response to a change which the assessment manager is satisfied is a change under section 26.1; or

(b) the Minister has given the concurrence agency a direction under section 99 of the Act; or

(c) the applicant has given written agreement to the change to the referral agency response.[2]

28.3. A concurrence agency may give a late referral agency response before the application is decided, if the applicant has given written agreement to the late referral agency response.

28.4. If a concurrence agency proposes to change its referral agency response under section 28.2(a), the concurrence agency must—

(a) give notice of its intention to change its referral agency response to the assessment manager and a copy to the applicant within 5 days of receiving notice of the change under section 25.1; and

(b) the concurrence agency has 10 days from the day of giving notice under paragraph (a), or a further period agreed between the applicant and the concurrence agency, to give an amended referral agency response to the assessment manager and a copy to the applicant.

---

1 Pursuant to Section 68 of the *Planning Act 2016*

2 In the instance an applicant has made representations to the concurrence agency under section 30, and the concurrence agency agrees to make the change included in the representations, section 28.2(c) is taken to have been satisfied.

# Part 7: Miscellaneous

## 30 Representations about a referral agency response

30.1. An applicant may make representations to a concurrence agency at any time before the application is decided, about changing a matter in the referral agency response.[3]

[3] An applicant may elect, under section 32, to stop the assessment manager's decision period in which to take this action. If a concurrence agency wishes to amend their response in relation to representations made under this section, they must do so in accordance with section 28.

# Permit

***Environmental Protection Act 1994***

## Environmental authority P-EA-100585794

*This DRAFT environmental authority is issued by the administering authority under Chapter 5 of the* Environmental Protection Act 1994.

### Environmental authority number: P-EA-100585794

**Environmental authority takes effect on the date** that your related development approval MCU23/0034 takes effect. This is the take effect date.

Within 5 business days of the environmental authority taking effect, the administering authority must be given written notice of the occurrence. Prior to the commencement of the activity, the administering authority must be given written notice of the proposed date of commencement.

The first annual fee is payable within 20 business days of the take effect date.

The anniversary date of this environmental authority is the same day each year as the take effect date. The payment of the annual fee will be due each year on this day.

### Environmental authority holder(s)

| Name(s) | Registered address |
|---|---|
| ETK ENTERPRISES PTY LTD | 157 Boonenne Rd<br>KINGAROY QLD 4610 |

### Environmentally relevant activity and location details

| Environmentally relevant activity/activities | Location(s) |
|---|---|
| ERA 47 - Timber milling and woodchipping - (b) - Milling, in a year, the following total quantity of timber - more than 10,000t but not more than 20,000t | 4/RP807137 |

**Additional information for applicants**

Environmentally relevant activities

The description of any environmentally relevant activity (ERA) for which an environmental authority (EA) is issued is a restatement of the ERA as defined by legislation at the time the EA is issued. Where there is any inconsistency between that description of an ERA and the conditions stated by an EA as to the scale, intensity or manner of carrying out an ERA, the conditions prevail to the extent of the inconsistency.

An EA authorises the carrying out of an ERA and does not authorise any environmental harm unless a condition stated by the EA specifically authorises environmental harm.

A person carrying out an ERA must also be a registered suitable operator under the *Environmental Protection Act 1994* (EP Act).



Queensland Government

Mobile and temporary activities

If you operate a mobile and temporary environmentally relevant activity (ERA), other than regulated waste transport, you are required to maintain a work diary. You must:

- use the approved form for a work diary (ESR/2015/1696);
- keep the work diary records for 2 years after the last entry;
- inform the administering authority within 7 days of the work diary being lost or stolen;
- record the information required in the work diary for each location within 1 day of leaving the location.

Contaminated land

It is a requirement of the EP Act that an owner or occupier of contaminated land give written notice to the administering authority if they become aware of the following:

- the happening of an event involving a hazardous contaminant on the contaminated land (notice must be given within 24 hours); or
- a change in the condition of the contaminated land (notice must be given within 24 hours); or
- a notifiable activity (as defined in Schedule 3) having been carried out, or is being carried out, on the contaminated land (notice must be given within 20 business days)

that is causing, or is reasonably likely to cause, serious or material environmental harm.

For further information, including the form for giving written notice, refer to the Queensland Government website www.qld.gov.au, using the search term 'duty to notify'.

Take effect

Please note that, in accordance with section 200 of the EP Act, an EA has effect:

a) if the authority is for a prescribed ERA and it states that it takes effect on the day nominated by the holder of the authority in a written notice given to the administering authority - on the nominated day; or

b) if the authority states a day or an event for it to take effect-on the stated day or when the stated event happens; or

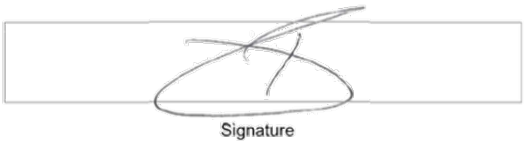
c) otherwise - on the day the authority is issued.

However, if the EA is authorising an activity that requires an additional authorisation (a relevant tenure for a resource activity, a development permit under the *Planning Act 2016* or an SDA Approval under the *State Development and Public Works Organisation Act 1971*), this EA will not take effect until the additional authorisation has taken effect.

If this EA takes effect when the additional authorisation takes effect, you must provide the administering authority written notice within 5 business days of receiving notification of the related additional authorisation taking effect.

The anniversary day of this environmental authority is the same day each year as the effective date. The payment of the annual fee will be due each year on this day. An annual return will be due each year on 01 April.

If you have incorrectly claimed that an additional authorisation is not required, carrying out the ERA without the additional authorisation is not legal and could result in your prosecution for providing false or misleading information or operating without a valid environmental authority.



Signature

**31 July 2024**

Date

Tristan Roberts
Department of Environment, Science and Innovation
Delegate of the administering authority
*Environmental Protection Act 1994*

**Enquiries:**
Energy and Extractive Resources
GPO Box 2454, BRISBANE QLD 4001
Phone: (07) 3330 5715
Email: EnergyandExtractive@des.qld.gov.au

**Obligations under the *Environmental Protection Act 1994***

In addition to the requirements found in the conditions of this environmental authority, the holder must also meet their obligations under the EP Act, and the regulations made under the EP Act. For example, the holder must comply with the following provisions of the Act:

- general environmental duty (section 319)
- duty to notify environmental harm (section 320-320G)
- offence of causing serious or material environmental harm (sections 437-439)
- offence of causing environmental nuisance (section 440)
- offence of depositing prescribed water contaminants in waters and related matters (section 440ZG)
- offence to place contaminant where environmental harm or nuisance may be caused (section 443)

**Other permits required**

This permit only provides an approval under the *Environmental Protection Act 1994*. In order to lawfully operate you may also require permits / approvals from your local government authority, other business units within the department and other State Government agencies prior to commencing any activity at the site. For example, this may include permits / approvals with your local Council (for planning approval), the Department of Transport and Main Roads (to access State controlled roads), the Department of Resources (to clear vegetation), and the Department of Agriculture and Fisheries (to clear marine plants or to obtain a quarry material allocation).

**Obligations under the *Mining and Quarrying Safety and Health Act 1999***

If you are operating a quarry, other than a sand and gravel quarry where there is no crushing capability, you will be required to comply with the *Mining and Quarrying Safety and Health Act 1999*. For more information on your obligations under this legislation contact Mine Safety and Health at www.resources.qld.gov.au, or phone 13 QGOV ( 13 74 68 ) or your local Mines Inspectorate Office.

**Development Approval**

This permit is not a development approval under the *Planning Act 2016*. The conditions of this environmental authority are separate, and in addition to, any conditions that may be on the development approval. If a copy of this environmental authority is attached to a development approval, it is for information only, and may not be current. Please contact the Department of Environment and Science to ensure that you have the most current version of the environmental authority relating to this site.

**Conditions of environmental authority**

| **Agency interest: General** | |
|---|---|
| **Condition number** | **Condition** |
| G1 | Activities under this environmental authority must be conducted in accordance with the following limitations:<br>1. The amount of timber milled must not exceed 16,000 tonnes per annum, except following a natural disaster or other unprecedented weather event, or upon direction from a statutory authority (e.g. Department of Agriculture and Fisheries) where an additional 4,000 tonnes may be processed in surplus.<br>2. Chainsaw operations must not occur before 7am and after 6pm Mondays to Saturdays.<br>3. Deliveries and removals by heavy vehicles are limited between 7am and 6pm Mondays to Saturdays.<br>4. Only maintenance works are allowed to occur on Sundays.<br>5. Operations must occur in accordance with Appendix 1 – Site Layout Plan. |
| G2 | The person undertaking the activity to which this environmental authority relates must:<br>1. at monthly intervals, make a record of the total amount, in tonnes, of timber milled at the approved place for the preceding month;<br>2. at the end of each anniversary year, calculate and make a record of the total amount of timber milled over that year;<br>3. keep record of any surplus timber milled in a calendar year in accordance with the exceptions stated in condition G1-1; and<br>4. provide this documentation to the administering authority upon request. |
| G3 | All reasonable and practicable measures must be taken to prevent or minimise environmental harm caused by the activities. |
| G4 | Any breach of a condition of this environmental authority must be reported to the administering authority as soon as practicable within 24 hours of becoming aware of the breach. Records must be kept including full details of the breach and any subsequent actions taken. |
| G5 | Other than as permitted by this environmental authority, the release of a contaminant into the environment must not occur. |
| G6 | Environmental monitoring results must be kept until surrender of this environmental authority. All other information and records that are required by the conditions of this environmental authority must be kept for a minimum of five (5) years. Upon request, all information and records required by the conditions of this environmental authority must be provided to the administering authority, or nominated delegate, within the required timeframe and in the specified format. |
| G7 | An appropriately qualified person(s) must monitor, record and interpret all parameters that are required to be monitored by this environmental authority and in the manner specified by this |

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| | environmental authority. |
| G8 | All analyses required under this environmental authority must be carried out by a laboratory that has National Association of Testing Authorities (NATA) certification, or an equivalent certification, for such analyses. |
| G9 | When required by the administering authority, monitoring must be undertaken in the manner prescribed by the administering authority, to investigate a complaint of environmental nuisance arising from the activity. The monitoring results must be provided within 10 business days to the administering authority upon its request. |
| G10 | The activity must be undertaken in accordance with written procedures that:<br>1. identify potential risks to the environment from the activity during routine operations, closure and an emergency;<br>2. establish and maintain control measures that minimise the potential for environmental harm;<br>3. ensure plant, equipment and measures are maintained in a proper and effective condition;<br>4. ensure plant, equipment and measures are operated in a proper and effective manner<br>5. ensure that staff are trained and aware of their obligations under the *Environmental Protection Act 1994;* and<br>6. ensure that reviews of environmental performance are undertaken at least annually. |
| G11 | Chemicals and fuels in containers of greater than 15 litres must be stored within a secondary containment system. |
| G12 | The following details must be recorded for all complaints received and provided to the administering authority upon request:<br>1. Date and time the complaint was received; and<br>2. If authorised by the person making the complaint, their name and contact details; and<br>3. Nature and details of the complaint. |
| G13 | As soon as reasonably practicable but no later than 5 business days of receiving a complaint (or a longer period agreed to in writing by the administering authority), an investigation must be undertaken to determine:<br>1. The potential circumstances and actions on site that may have contributed to the basis of the complaint; and<br>2. Reasonable and practicable measures that will be implemented to address the complaint. |
| G14 | As soon as reasonably practicable but no later than 5 business days of investigating a complaint under condition G13 (or a longer period agreed to in writing by the administering authority), the reasonable and practicable measures identified in the investigation must be implemented. |

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| G15 | The outcome of the investigation carried out under condition G13 and the reasonable and practicable measures implemented under condition G14 must be recorded. |
| **Agency interest: Waste** | |
| **Condition number** | **Condition** |
| W1 | All waste generated in carrying out the activity must be reused, recycled or removed to a facility that can lawfully accept the waste. |
| W2 | Waste material produced by the activity must not be burned. |
| W3 | Waste stockpiles must be managed and maintained to minimise the release of dust to the atmosphere and reduce risk of combustion. This must include at a minimum:<br>1. appropriate stockpile heights and widths;<br>2. appropriate separation distances between stockpiles;<br>3. dust suppression systems; and<br>4. weekly removals of stockpiled waste. |
| **Agency interest: Air** | |
| **Condition number** | **Condition** |
| A1 | Other than as permitted within this environmental authority, odours or airborne contaminants must not cause environmental nuisance to any sensitive place or commercial place. |
| A2 | Dust and particulate matter emissions must not exceed the following concentrations at any sensitive place or commercial place:<br>a) dust deposition of 120 milligrams per square metre per day, averaged over 30 days, when monitored in accordance with the latest edition of Australian Standard AS/NZS 3580.10.1 Methods for sampling and analysis of ambient air, Method 10.1: Determination of particulate matter – Deposited matter – Gravimetric method; or<br>b) a concentration of particulate matter with an aerodynamic diameter of less than 10 micrometre (µm) (PM10) suspended in the atmosphere of 50 micrograms per cubic metre over a 24-hour averaging time, when monitored in accordance with the latest edition of the relevant Australian Standards. |

<table>
<tr><td>A3</td><td>Point source emissions of contaminants must only be released to air in accordance with the parameters listed in Table – Point source air release limits.<br>Table – Point source air release limits
<table>
<tr><th colspan="3">Release Point (GDA 2020)</th><th rowspan="2">Contaminant</th><th rowspan="2">Maximum Release Limit</th><th rowspan="2">Monitoring Frequency</th></tr>
<tr><th>Reference</th><th>Latitude</th><th>Longitude</th></tr>
<tr><td>Green mill chipper cyclone</td><td>-26.61509</td><td>151.80907</td><td>Solid particles (dust)</td><td>50 mg/m$^3$</td><td>Upon request by the administering authority</td></tr>
</table></td></tr>
<tr><td>A4</td><td>Air quality monitoring, including for dust and point source emissions from the activity, must be undertaken in accordance with the latest edition of:<br>a) the relevant Australian Standards; or<br>a) a method approved by any other Australian, European or North American jurisdiction/EPAs (if monitoring requirements are not described in the Australian Standards); or<br>b) a method approved by the administering authority.</td></tr>
<tr><td>A5</td><td>An effective dust suppression system must be installed, operated and maintained on mechanical processing equipment to minimise the release of dust to the atmosphere.</td></tr>
<tr><td>A6</td><td>Trafficable areas must be maintained using reasonable and practicable measures necessary to minimise the release of dust to the atmosphere.</td></tr>
<tr><td colspan="2">Agency interest: Land</td></tr>
<tr><td>Condition number</td><td>Condition</td></tr>
<tr><td>L1</td><td>Other than as permitted within this environmental authority, contaminants must not be released to land.</td></tr>
<tr><td>L2</td><td>Erosion and sediment control measures must be implemented and maintained at all times that:<br>1. minimise erosion and the release of sediment within areas disturbed by the activity; and<br>2. prevent releases from the activity causing erosion outside of areas disturbed by the activity; and<br>3. prevent the release of sediment from areas disturbed by the activity to the receiving environment.</td></tr>
<tr><td>L3</td><td>Disturbance to areas as a result of carrying out activities conducted under this environmental authority must be rehabilitated so that:<br>a) The potential for erosion and sedimentation is minimised;<br>b) The potential for environmental nuisance caused by dust is prevented;<br>c) Land and water do not contain contaminants capable of causing environmental harm;</td></tr>
</table>

<table>
<tr><td></td><td>d) The landform is in stable condition;<br>e) The top layer of the soil profile is re-instated consistent with surrounding soils;<br>f) The land is re-profiled to original contours and established drainage lines; and<br>g) The land is vegetated with groundcover that is established, actively growing, self-sustaining and is not a declared pest species.</td></tr>
<tr><td colspan="2">Agency interest: Acoustic</td></tr>
<tr><td>Condition number</td><td>Condition</td></tr>
<tr><td>N1</td><td>Other than as permitted within this environmental authority, noise generated by the activity must not cause environmental nuisance to any sensitive place or commercial place.</td></tr>
<tr><td>N2</td><td>Noise from the activity must not include substantial low frequency noise components and must not exceed the levels identified in Table - Noise limits at any sensitive place or commercial place.<br>Table - Noise limits
<table>
<tr><td></td><td colspan="3">Monday to Friday</td><td colspan="2">Saturday</td></tr>
<tr><td></td><td>6am-7am</td><td>7am–6pm</td><td>6pm–6am</td><td>7am–6pm</td><td>6pm–7am</td></tr>
<tr><td></td><td colspan="3">Noise measured at the sensitive place</td><td colspan="2">Noise measured at the sensitive place</td></tr>
<tr><td>LAeq, adj, T</td><td>37</td><td>43</td><td>Not audible</td><td>43</td><td>Not audible</td></tr>
<tr><td>LAmax</td><td>44</td><td>No limit</td><td>Not audible</td><td>No limit</td><td>Not audible</td></tr>
<tr><td></td><td colspan="3">Noise measured at the commercial place*</td><td colspan="2">Noise measured at the commercial place*</td></tr>
<tr><td>LAeq, adj, T</td><td>50</td><td>50</td><td>Not audible</td><td>50</td><td>Not audible</td></tr>
</table>
* Any residential dwelling located within the lot on plans to which this authority applies are not considered to be a sensitive place, so long as a contractual arrangement exists between you and the owner of the dwelling.</td></tr>
<tr><td>N3</td><td>All monitoring of noise emissions from the activity must be undertaken when the activity is in operation.</td></tr>
<tr><td>N4</td><td>The following must be recorded when undertaking monitoring of noise emissions from the activity:<br>1. All equipment in operation at the time of the noise measurement; and<br>2. The mode of operation at the time of the noise measurement.</td></tr>
<tr><td>N5</td><td>Noise measurements must be taken using a class 1 sound level meter as classified under AS IEC 61672.</td></tr>
</table>

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| N6 | All monitoring of noise emissions from the activity must be undertaken in accordance with the most recent version of Queensland Government's 'Noise Measurement Manual' (ESR/2016/2195), the relevant Australian Standard and the Environmental Protection Regulation 2019 (Chapter 5, Part 4). |
| N7 | When required by the administering authority, noise monitoring must be undertaken in accordance with the associated monitoring requirements of *Table - Noise Limits*, and the results notified within 14 days to the administering authority. Monitoring must include:<br>1. LAeq, adj, T<br>2. Background noise (Background) as LA 90, adj, T<br>3. MaxLpA,T<br>4. the level and frequency of occurrence of any impulsive or tonal noise<br>5. atmospheric conditions including wind speed and direction<br>6. effects due to extraneous factors such as traffic noise<br>7. recording of location, date and time of measurements. |
| **Agency interest: Water** | |
| **Condition number** | **Condition** |
| WA1 | Other than as permitted within this environmental authority, contaminants must not be released to any waters. |
| WA2 | Stormwater must be managed to:<br>a) prevent stormwater from being contaminated by the activity; or<br>b) direct stormwater that is contaminated by the activity to stormwater treatment and retention measures. |
| WA3 | Where onsite stormwater basin(s) cannot meet the storage capacity to contain a 24-hour storm event with an ARI of 1 in 5 years, a high efficiency basin must be installed and operated. |
| WA4 | Sediment collected in stormwater basin(s) must be removed whenever the volume of the basin is reduced by 30 percent, or on other occasions as required by the administering authority, such as where sediments are contaminated, or where a build-up of sediments has occurred or may occur around the outlet structure. |
| WA5 | The capacity of onsite contaminated stormwater retention must be reinstated as soon as practicable and otherwise within 5 days of a rainfall event. |
| WA6 | Drainage through and from all trafficable areas and production activities must be designed to minimise surface flow velocities. |

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| WA7 | All ponds, dams or similar stormwater treatment and retention measures must be fitted with a bypass mechanism that diverts stormwater from entering into the measure once the capacity of the measure has been reached. |
| WA8 | Settled/ treated stormwater must only be released at SW1 and SW2 where an agreement with the receiving landholder is in place, or at SW3, and in compliance with the release limits prescribed in *Table – Contaminant release points and release limits.* |

**Table – Contaminant release points and release limits**

| Release and monitoring point(s) description (GDA2020) | | | Quality characteristic | Release type | | Minimum monitoring frequency |
|---|---|---|---|---|---|---|
| | | | | Limit | Type | |
| ID | Latitude | Longitude | | | | |
| SW1 | -26.61486 | 151.80990 | pH (pH units) | 6.0-8.5 | range | Within 24hours prior to release event, and weekly during any discharge |
| SW2 | -26.61534 | 151.80997 | Suspended Solids (mg/L) | 50 | maximum | |
| | | | Electrical conductivity (EC) µS/cm | 3000 | maximum | |
| SW3 | -26.61221 | 151.81033 | | | | |

Associated monitoring requirements

1. Monitoring location and release points must be situated and maintained in accordance with the Release and monitoring point(s) description (GDA2020) in *Table – Contaminant release points and release limits.*
2. Water and sediment samples must be representative of the general condition of the water body or sediments.
3. All determinations must employ analytical practical quantification limits of sufficient sensitivity to enable comparisons to be made against water quality objectives/triggers/limits relevant to the particular water or sediment quality characteristic.
4. Monitoring must be undertaken during a release and at the frequency stated.
5. All monitoring devices must be calibrated and maintained according to the manufacturer's instruction manual.

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| WA9 | The following information must be recorded in relation to all water monitoring required under the conditions of this environmental authority:<br>1. the date on which the sample was taken; and<br>2. the time at which the sample was taken; and<br>3. the monitoring point at which the sample was taken; and |

| | |
|---|---|
| | 4. the measured or estimated daily quantity of water released from each release points; and<br>5. the measured or estimated release flow rate at the time of sampling for each release point; and<br>6. the results of all monitoring and details of any exceedances of the conditions of this environmental authority. |
| WA10 | Treated stormwater must only be released to land via release points SW1, SW2 or SW3, as identified in *Table – Contaminant release points and release limits*, for the following reasons:<br>a) beneficial reuse of contained stormwater runoff on site is not viable; and<br>b) the release is necessary to maintain stormwater basin retention capacity; and<br>c) the release is in accordance with condition WA8; and<br>d) the release to land must not cause water ponding, scouring or any form of erosion; and<br>e) the release to land must not contain any other properties at a concentration capable of causing environmental harm. |

**Definitions**

Key terms and/or phrases used in this document are defined in this section. Where a term is not defined, the definition in the *Environmental Protection Act 1994*, its regulations or environmental protection policies must be

**24-hour rainfall event with an Annual Exceedance Probability of 10%** means the maximum design rainfall depth from a 24-hour duration precipitation event with an annual exceedance probability of 10%.

The Design Rainfall Depth (mm) for an AEP probability of 10% over a 24-hour duration can be calculated for your location using the Intensity–Frequency–Duration (IFD) Design Rainfall Data System on the Bureau of Meteorology website.

**Activity** means the environmentally relevant activities, whether resource activities or prescribed activities, to which the environmental authority relates.

**Administering authority** means the Department of Environment, Science and Innovation or its successors.

**Annual exceedance probability (AEP)** means the probability that a given rainfall total accumulated over a given duration will be exceeded in any one year.

**Appropriately qualified person(s)** means a person or persons who has professional qualifications, training, skills or experience relevant to the EA requirement and can give authoritative assessment, advice and analysis in relation to the EA requirements using the relevant protocols, standards, methods or literature.

**Background** means noise, measured in the absence of the noise under investigation, as $\mathbf{L_{A\ 90,\ adj,\ T}}$ being the A-weighted sound pressure level exceeded for 90 per cent of the time period of not less than 15 minutes, using Fast response.

**Certified professional in erosion and sediment control (CPESC)** is a person who is currently a Certified Professional in Erosion and Sediment Control with the International Erosion Control Association (IECA) Australasia.

**Commercial place** means a place used as a workplace, an office or for business or commercial purposes and includes a place within the curtilage of such a place reasonably used by persons at that place.

**Disturbed areas** include areas:

1. that are susceptible to erosion;
2. that are contaminated by the activity; and/or
3. upon which stockpiles of soil or other materials are located.

**Environmental nuisance** as defined in Chapter 1 of the *Environmental Protection Act 1994*.

**Groundwater** means water that occurs naturally in, or is introduced artificially into, an aquifer.

**Land** means any land, whether above or below the ordinary high-water mark at spring tides (i.e. includes tidal land).

$\mathbf{L_{Aeq,\ adj,\ T}}$ means the adjusted A weighted equivalent continuous sound pressure level measured on fast response, adjusted for tonality and impulsiveness, during the time period T, where T is measured for a period no less than 15 minutes when the activity is causing a steady state noise, and no shorter than one hour when the approved activity is causing an intermittent noise.

$\mathbf{Max_{LpA,T}}$ means the maximum A-weighted sound pressure level measured over a time period T of not less than 15 minutes, using Fast response.

**Measures** has the broadest interpretation and includes:

- Procedural measures such as standard operating procedures for dredging operations, environmental risk assessment, management actions, departmental direction and competency expectations under relevant guidelines
- Physical measures such as plant, equipment, physical objects (such as bunding, containment systems

etc.), ecosystem monitoring and bathymetric surveys.

**NATA** means National Association of Testing Authorities.

**Nominated delegate** means another government agency that provides services to the administering authority.

**Prescribed water contaminants** means contaminants listed within Schedule 10 of the Environmental Protection Regulation 2019.

**Records** include breach notifications, written procedures, analysis results, monitoring reports and monitoring programs required under a condition of this authority.

**Release of a contaminant into the environment** means to:

1. deposit, discharge, emit or disturb the contaminant
2. cause or allow the contaminant to be deposited, discharged, emitted or disturbed
3. fail to prevent the contaminant from being deposited, discharged emitted or disturbed
4. allow the contaminant to escape
5. fail to prevent the contaminant from escaping.

**Secondary containment system** means a system designed, installed and operated to prevent any release of contaminants from the system, or containers within the system, to land, groundwater, or surface waters.

**Sensitive place** includes the following and includes a place within the curtilage of such a place reasonably used by persons at that place:

1. a dwelling, residential allotment, mobile home or caravan park, residential marina or other residential premises; or
2. a motel, hotel or hostel; or
3. a kindergarten, school, university or other educational institution; or
4. a medical centre or hospital; or
5. a protected area under the *Nature Conservation Act 1992*, the *Marine Parks Act 2004* or a World Heritage Area; or
6. a public park or garden; or
7. for noise, a place defined as a sensitive receptor for the purposes of the Environmental Protection (Noise) Policy 2019.

**Substantial low frequency noise** means a noise emission that has an unbalanced frequency spectrum shown in a one-third octave band measurements, with a predominant component within the frequency range 10 to 200 Hz. It includes any noise emission likely to cause an overall sound pressure level at a noise sensitive place exceeding 55 dB(Z).

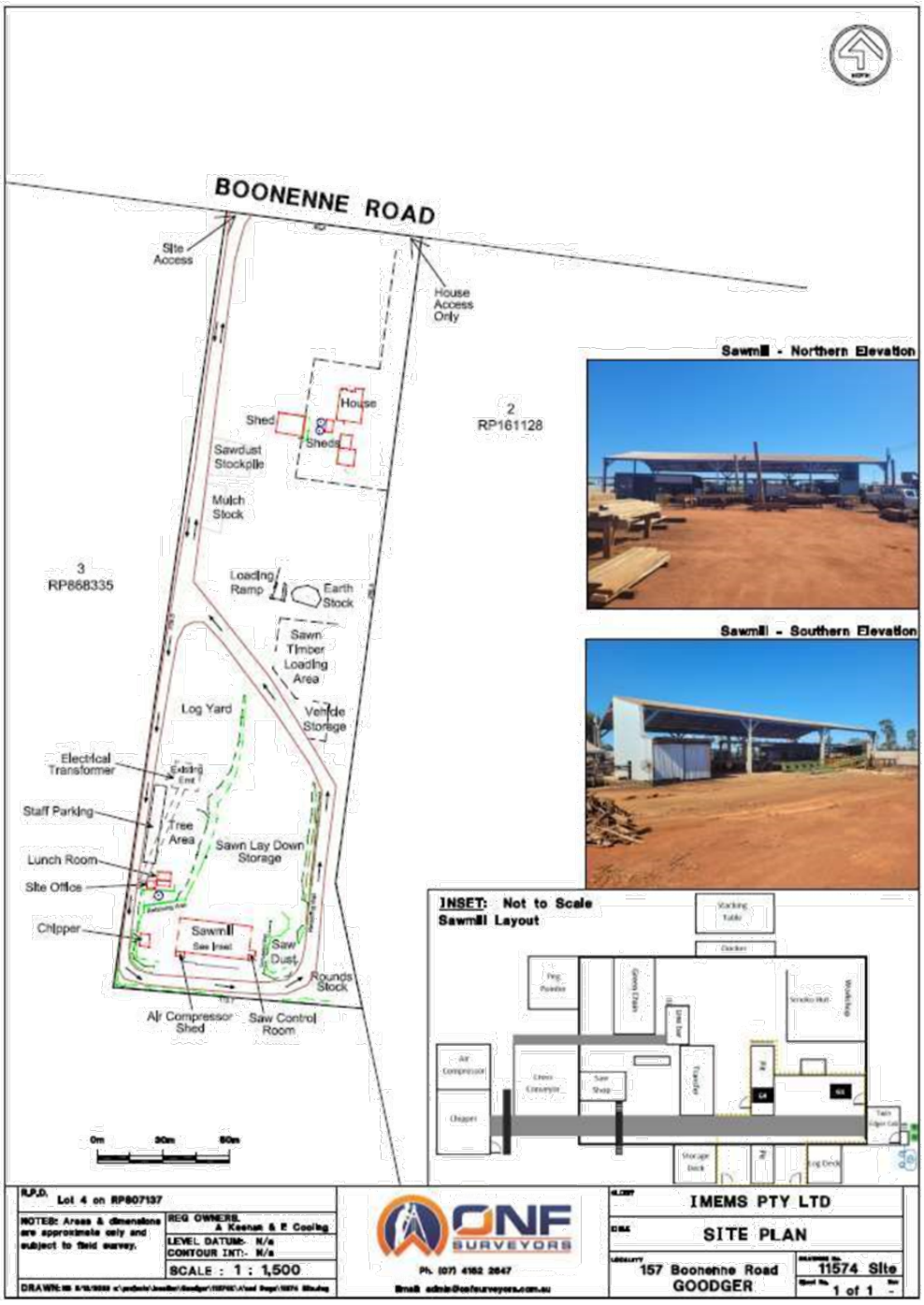
**Stormwater treatment and retention measures** includes stormwater dams/ponds and sediment dams/ponds.

**Vibration** is the oscillating or periodic motion of a particle, group of particles, or solid object about its equilibrium position.

**Waters** includes river, stream, lake, lagoon, pond, swamp, wetland, unconfined surface water, unconfined water, natural or artificial watercourse, bed and bank of any waters, dams, non-tidal or tidal waters (including the sea), stormwater channel, stormwater drain, roadside gutter, stormwater run-off, and groundwater and any part thereof.

**You** means the holder of the environmental authority.

**Appendix 1 – Site layout plan**



**END OF ENVIRONMENTAL AUTHORITY**

# INFRASTRUCTURE CHARGES NOTICE

*(Section 119 of the Planning Act 2016)*

| | | |
|---|---|---|
| **APPLICANT:** | IMEMS Pty Ltd<br>C/- ONF Surveyors<br>PO Box 896<br>KINGAROY QLD 4610 | |
| **APPLICATION:** | High impact industry (Sawmill) and concurrent ERA 47 – Timber Milling and Wood chipping | |
| **DATE:** | 12/12/2024 | |
| **FILE REFERENCE:** | MCU23/0034 | |
| **AMOUNT OF THE LEVIED CHARGE:**<br>*(Details of how these charges were calculated are shown overleaf)* | **$0.00** | **Total** |
| | $0.00 | Water Supply Network |
| | $0.00 | Sewerage Network |
| | $0.00 | Transport Network |
| | $0.00 | Parks and Land for Community Facilities Network |
| | $0.00 | Stormwater Network |
| **AUTOMATIC INCREASE OF LEVIED CHARGE:** | The amount of the levied charge is subject to an automatic increase. Refer to the Information Notice attached to this notice for more information on how the increase is worked out. | |
| **LAND TO WHICH CHARGE APPLIES:** | Lot 4 on RP807137 | |
| **SITE ADDRESS:** | 157 Boonenne Road GOODGER | |
| **PAYABLE TO:** | **South Burnett Regional Council** | |
| **WHEN PAYABLE:**<br>*(In accordance with the timing stated in Section 122 of the Planning Act 2016)* | Material Change of Use – When the change happens. | |
| **OFFSET OR REFUND:** | Not Applicable. | |

This charge is made in accordance with South Burnett Regional Council's ***Charges Resolution (No. 3) 2019***

# DETAILS OF CALCULATION

## Water Supply

### Adopted Charges

| Development Description | Number of Units | Units of Measure | Charge Rate | Reference | Amount |
|---|---|---|---|---|---|
| High Impact Industry (Sawmill) & Concurrent ERA 47 | 0 | GFA | $0.00 | CR Table 2.2 | $0.00 |

### Discounts*

| Description | Number of Units | Units of Measure | Discount Rate | Reference | Amount |
|---|---|---|---|---|---|
| Not Applicable | - | GFA | $0.00 | CR Table 2.2 | $0.00 |

## Sewerage

### Adopted Charges

| Development Description | Number of Units | Units of Measure | Charge Rate | Reference | Amount |
|---|---|---|---|---|---|
| High Impact Industry (Sawmill) & Concurrent ERA 47 | 0 | GFA | $0.00 | CR Table 2.2 | $0.00 |

### Discounts*

| Description | Number of Units | Units of Measure | Discount Rate | Reference | Amount |
|---|---|---|---|---|---|
| Not Applicable | - | GFA | $0.00 | CR Table 2.2 | $0.00 |

## Transport

### Adopted Charges

| Development Description | Number of Units | Units of Measure | Charge Rate | Reference | Amount |
|---|---|---|---|---|---|
| High Impact Industry (Sawmill) & Concurrent ERA 47 | 0 | GFA | $0.00 | CR Table 2.2 | $0.00 |

### Discounts*

| Description | Number of Units | Units of Measure | Discount Rate | Reference | Amount |
|---|---|---|---|---|---|
| Not Applicable | - | GFA | $0.00 | CR Table 2.2 | $0.00 |

## Parks and Land for Community Facilities

### Adopted Charges

| Development Description | Number of Units | Units of Measure | Charge Rate | Reference | Amount |
|---|---|---|---|---|---|

| | | | | | |
|---|---|---|---|---|---|
| High Impact Industry (Sawmill) & Concurrent ERA 47 | 0 | GFA | $0.00 | CR Table 2.2 | $0.00 |

**Discounts***

| Description | Number of Units | Units of Measure | Discount Rate | Reference | Amount |
|---|---|---|---|---|---|
| Not Applicable | - | GFA | $0.00 | CR Table 2.2 | $0.00 |

## Stormwater

**Adopted Charges**

| Development Description | Number of Units | Units of Measure | Charge Rate | Reference | Amount |
|---|---|---|---|---|---|
| High Impact Industry (Sawmill) & Concurrent ERA 47 | 0 | GFA | $0.00 | CR Table 2.2 | $0.00 |

**Discounts***

| Description | Number of Units | Units of Measure | Discount Rate | Reference | Amount |
|---|---|---|---|---|---|
| Not Applicable | - | GFA | $0.00 | CR Table 2.2 | $0.00 |

## Levied Charges

| Development Description | Water Supply | Sewerage | Transport | Parks & Land for Community Facilities | Stormwater | Total |
|---|---|---|---|---|---|---|
| High Impact Industry (Sawmill) & Concurrent ERA 47 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 |
| **Total** | **$0.00** | **$0.00** | **$0.00** | **$0.00** | **$0.00** | **$0.00** |

** In accordance with Section 3.3 of the Charges Resolution, the discount may not exceed the adopted charge. Any surplus discounts will not be refunded, except at South Burnett Regional Council's discretion.*

# INFORMATION NOTICE

| | |
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| **Authority and Reasons for Charge** | This Infrastructure Charges Notice has been given in accordance with section 119 of the *Planning Act 2016* to support the Local government's long-term infrastructure planning and financial sustainability. |
| **Appeals** | Pursuant to section 229 and Schedule 1 of the *Planning Act 2016* a person may appeal an Infrastructure Charges Notice. Attached is an extract from the *Planning Act 2016* that details your appeal rights. |
| **Automatic Increase Provision of charge rate ($)** | An infrastructure charge levied by South Burnett Regional Council is to be increased by the difference between the Producer Price Index (PPI) applicable at the time the infrastructure charge was levied, and PPI applicable at the time of payment of the levied charge , adjusted by reference to the 3-yearly PPI average[1]. If the levied charge is increased using the method described above, the charge payable is the amount equal to the sum of the charge as levied and the amount of the increase.<br><br>However, the sum of the charge as levied and the amount of the increase is not to exceed the maximum adopted charge the Authority could have levied for the development at the time the charge is paid. |
| **GST** | The Federal Government has determined that contributions made by developers to Government for infrastructure and services under the *Planning Act* 2016 are GST exempt. |
| **Making a Payment** | This Infrastructure Charges Notice cannot be used to pay your infrastructure charges.<br><br>To pay the levied charge, you must request an Itemised Breakdown showing the total levied charge payable at the time of payment. An Itemised Breakdown must be presented at the time of payment.<br><br>An Itemised Breakdown may be requested by emailing info@southburnett.qld.gov.au |

[1] 3-yearly PPI average is defined in section 114 of the *Planning Act 2016* and means the PPI adjusted according to the 3-year moving average quarterly percentage change between financial quarters. PPI Index is the producer price index for construction 6427.0 (ABS PPI) index number 3101 – Road and Bridge construction index for Queensland published by the Australian Bureau of Statistics.

Payment can be made at any of the following South Burnett Regional Council Offices:

- 69 Hart Street, Blackbutt, 4314;
- 45 Glendon Street, Kingaroy, 4610;
- 42 Stephens Street West, Murgon, 4605;
- 48 Drayton Street, Nanango, 4615;
- McKenzie Street, Wondai, 4606; or
- via other methods identified on the Itemised Breakdown.

**Enquiries**

Enquiries regarding this Infrastructure Charges Notice should be directed to the SOUTH BURNETT REGIONAL COUNCIL, Department of Development Services, during office hours, Monday to Friday by phoning (07) 4189 9100 or email at info@southburnett.qld.gov.au

PSA CONSULTING

PSA Consulting Pty Ltd ABN 83 109 836 197
T + 61 7 3220 0288 W psaconsult.com.au
**Brisbane (Head Office)** L20 / 127 Creek Street, Brisbane / Meeanjin Qld 4000
PO Box 10824 Adelaide Street Brisbane Qld 4000

10 December 2024

Boonenne Timbers – Andrew & Elizabeth Keenan
C/- IMEMS Pty Ltd
PO Box 411
Palmwoods, QLD 4555

Dear Paul Anderson,

**RE: TRAFFIC ENGINEERING RESPONSE TO PUBLIC / FURTHER SUBMISSION BY REVOLUTION TOWN PLANNING FOR DEVELOPMENT APPLICATION MCU23/0034**

## Introduction

PSA Consulting (PSA) has been engaged by Boonenne Timbers C/- IMEMS Pty Ltd to provide a traffic engineering response to *Submission to a Development Application under Section 53 (6) of the Planning Act 2016 and Section 19 of the Development Assessment Rules, under the Planning Act 2016, Section 68* by Revolution Town Planning on 14 June 2024.

This technical letter was prepared specifically in response to *Ground 3 – The proposed development will unduly adversely impact the safety and efficiency of the road network, including both the State and Local Road Network* of the reasons for refusal of the Development Application (MCU23/0034 ) for a Development Permit for a High Impact Industry and ERA 47 – Timber Milling and Woodchipping at 157 Boonenne Road in Goodger. The documents reviewed include the following:

- Development Assessment Report (dated October 2023 prepared by ONF Surveyors)
- Response to SRBC Information Request (dated 14 May 2024 prepared by ONF Surveyors)
- Response to Further Submission (dated 07 August 2024 prepared by ONF Surveyors)
- Changed Referral Agency Response – with Conditions (dated 30 September 2024 – SARA Reference 2401-38585 SRA)
- B-Double Authorisation Permit (dated 29 April 2024 from NHVR)
- Public / Further Submission (dated 14 June 2024 prepared by Revolution Town Planning)

## Public Submission

The following is an excerpt from the public submission by Revolution Town Planning in regard to the Development Application (MCU23/0034) for a Development Permit for a High Impact Industry and ERA 47 – Timber Milling and Woodchipping:

*At the outset, we note that the calculation of development generated traffic provided by the Applicant does not follow any logic. The Applicant contends that the current timber throughput at the sawmill is less than or equal to 5,000 tonnes per year and that for this throughput an average of five (5) heavy vehicles and 42 light vehicles (6 day working*

*week) (94 vehicle trips) attend the site per week together with a few incidental monthly vehicle movements. Where timber throughput at the sawmill is proposed to quadruple to a maximum of 20,000 tonnes of timber per year, development generated traffic is only predicted to result in an additional 10 heavy vehicles and an additional light vehicle (an additional 22 vehicle trips in total) attending the site each week. Both the calculation of existing development traffic and the assumed increase in development traffic is nonsensical.*

*Firstly, it is stated in the development application that the sawmill employees 13 staff. This assumes an occupancy rate of 1.85 persons per vehicle. While, it may be the case that not all staff will be working on the site at any one time, where shifts or starting times are staggered additional light vehicle movements will result. However, there will likely be crossovers at changes of shifts and the like. In any case, images in Appendix A of the Town Planning Report show nine (9) light vehicles parked in the staff 'carparking area'. Further, the Applicant is asking it to be believed that a quadrupling of the allowable throughput at the sawmill will require only two (2) (rounded up) additional staff members to be employed. Either the existing 13 staff are working well under capacity (which makes one consider why thirteen (13) staff are employed at the site), or the sawmill is currently processing more than 5,000 tonnes of timber in a year or the two (2) additional staff members employed if the increase in the maximum allowable throughput is approved share DNA with Eugene 'Flash' Thompson (The Flash) of Marvel Comic fame.*

*The reasons why the traffic generated by the development has been calculated as it has been in the technical reports supporting the development application must be justified by the Applicant. However, regardless of whether the Applicant is able to support the development generated traffic calculations provided with logical and well-reasoned information, Boonenne Road and its connections to the surrounding road network are not suitable to carry the number and types of vehicles generated by the development.*

*No description of the existing road environment has been provided. Further, no assessment of the suitability of the existing vertical and horizontal geometry of Boonenne Road and its intersections with the state-controlled road network to carry development generated traffic has been undertaken. The composition of the existing Boonenne Road pavement and the impact of development generated traffic on the pavement is also unknown. Boonenne Road also functions as a school bus route and this is not mentioned in the development application material. Refer Attachment 2 for photos of Boonenne Road approximately 175m west of the proposed access to the development.*

*As shown in the photos contained in Attachment 2 Boonenne Road varies in width and formation. However, generally Boonenne Road has a 4m wide gravel pavement with 0.5 gravel shoulder. The road is neither formed nor has shoulders along the entire length of the road. The level of the road is also variable with access to the proposed development located on the eastern side of a crest. Five (5) dwellings associated with rural uses gain access from Boonenne Road.*

*Without traffic generated by the development, Boonenne Road likely carries approximately thirty-five (35) vehicle trips per day (seven (7) per dwelling), almost 100% of those trips being light vehicles. Using the calculations provided by the Applicant (which we maintain are nonsensical) vehicle trips per day with the sawmill; operating at its maximum intensity, average daily vehicle trips increase to approximately fifty-three (53), two (2) of which are heavy vehicle movements. As above, it is considered the projected development generated traffic will be significantly greater than this where sawmill throughput is equal to 20,000 tonnes of timber per year.*

*Using the Applicant's existing traffic data (10) heavy vehicle per week and 14 light vehicle trips per day) as the base scenario and assuming staff numbers increase from 13 to 20, it is considered likely traffic where the throughput of the sawmill is at 20,000 tonnes per year will equal approximately forty (40) heavy vehicle trips/week and twenty (20) light vehicle trips per day. Assuming a six (6) day working week, this equates to 27 vehicle trips/day, approximately one quarter of which are heavy vehicle trips (seven (7)). This would bring average daily traffic on Boonenne Road to sixty-two (62) vehicle trips per day, a 60% increase in overall traffic on Boonenne Road. Heavy vehicle trips would comprise of 11% of all vehicle trips on Boonenne Road. With reference to any well-regarded standard for road design, the existing road geometry and the construction standard of Boonenne Road is not suitable for the traffic likely to be generated by the development.*

*The IPWEA Lower Order Road Design Guideline, specifies a 6m wide pavement (4m wide asphalt seal) on a 7m wide formation (0.5m wide unsealed shoulders) for the projected development generated traffic. Austroads Road Design Guidelines specifies (with consideration for the type of vehicles generated by the development) a 6m wide asphalt sealed pavement on an 8m wide formation (1m wide unsealed shoulders). Both standards require dedicated school bus set-down/pick-up areas to be provided.*

*The design of the intersection of Boonenne Road with the Bunya Highway and Kingaroy Cooyar Road also must be considered. As shown in the images of the intersections in Attachment 2, the existing road geometry does not accommodate the turning movements of heavy vehicles associated with the use and no acceleration or deceleration lanes or Basic Right Turn treatments are provided at either intersection. Vehicle swept paths through both intersections and entering and exiting the site access must be provided to enable a thorough assessment of the suitability of the intersections and the site access.*

*In relation to heavy vehicle access to the site, the application material mentions a NHVR Permit for access to Boonenne Road. A search of the NHVR route planner and network map indicates that Boonenne Road is not a gazetted heavy vehicle route and access and use of the road by heavy vehicle requires approval. The mapping does not indicate such an approval exists for Boonenne Road. The Applicant should provide a copy of the NHVR approval.*

*Lastly, it is noted that the proposed development has not demonstrated that the provisions of the South Burnett Planning Scheme listed below have been satisfied and insufficient information has been provided to enable reasonable and relevant conditions to be imposed to ensure the provisions will satisfied:*

- *PO5 of the Services and works code 'Development is provided with infrastructure which: (a) conforms with industry standards for quality; (b) is reliable and service failures are minimised; and (c) is functional and readily augmented'.*
- *PO6 of the Services and works code 'Vehicle parking and access is provided to meet the needs of occupants, employees, visitors and other users'.*
- *Part 6.2.8.2 (2) (d) 'Development maximises the use of existing transport infrastructure and has access to the appropriate level of transport infrastructure but does not compromise the efficiency of the local and state-controlled Road network'.*
- *Part 6.2.8.2 (2) (n) 'Activities generating high volumes of traffic, particularly heavy vehicle traffic, are located in areas having direct access to the major road network or access other than through residential areas or other sensitive receptors'.*

## Response to Public Submission

**Trip Generation and Impact to Surrounding Road Network**

The development currently generates 10 heavy vehicle trips per week (5 incoming, 5 outgoing) and 14 light vehicle trips per day (7 incoming, 7 outgoing). The proposal aims to increase the production of the development from less than 5,000 tonnes per year of timber to 16,000 tonnes per year of timber. In exceptional circumstances, such as natural disaster, unprecedented weather events, or upon directive from statutory authorities, an additional 4, 000 tonnes may be processed in surplus.

With the proposed increase in production, the development is expected to generate an additional 20 heavy vehicle trips per week (10 incoming, 10 outgoing) and 2 light vehicle trips per day (1 incoming, 1 outgoing). The Public / Further Submission, dated 14 June 2024 prepared by Revolution Town Planning, noted that the development trip generation does not follow any logic.

The Response to SRBC Information Request, dated 14 May 2024 prepared by ONF Surveyors, indicated that the introduction of technology into the production process requires only 2 additional employees. This suggests that the development is streamlining its production process rather that increasing its manpower, which is considered to be reasonable given the increases in technology in the years since the opening of the existing timber mill . Nonetheless, for the purpose of undertaking a more conservative analysis, the trip generation has been adjusted proportionately to the increase in production. Table 1 outlines the daily vehicle trips during current and proposed operations.

**Table 1: Development Trip Generation (Source: ONF Surveyors, PSA)**

| TYPE | EXISTING OPERATION | PROPOSED OPERATION |
|---|---|---|
| Production | <5, 000 tonnes | 20, 000 tonnes |
| Heavy Vehicle | 2 vpd<br>(averaged over 10 per week) | 8 vpd<br>(averaged over 20 per week) |
| Light Vehicle | 14 vpd | 28 vpd |

Table 1 indicates that the development will generate 8 heavy vehicle and 28 light vehicle trips per day, totalling 36 vehicles per day.

It is proposed that a maximum of 2-3 truck movements will be B-Doubles per week, while the remaining heavy vehicle movements will be semi-trailers or rigid vehicles.

The annual average daily traffic (AADT) of Bunya Highway and Kingaroy Cooyar Road was sourced from TMR Open Data Portal and outlined in Table 2 for the year 2023.

**Table 2: State-Controlled Road Volumes (Source: ONF Surveyors, PSA)**

| ROAD | DIRECTION | AADT |
|---|---|---|
| Bunya Highway | Anti-Gazettal | 578 |
| | Gazettal | 566 |
| Kingaroy Cooyar Road | Anti-Gazettal | 664 |
| | Gazettal | 643 |

According to Austroads Guide to Traffic Management Part 3: Transport Study and Analysis Methods, two-lane two-way road has a capacity of 1700 vehicles per hour as per Highway Capacity Manual. Considering this, both Bunya Highway

and Kingaroy Cooyar Road have sufficient capacity to accommodate additional traffic from the development. The additional trips generated by the development are under 3% of the volumes on the two roads.

**Boonenne Road Design**

Based on IPWEA Lower Order Road Design Guideline, a road can be classified as minor road (50 – 160 vpd) if two of the criteria are met:

- Connectivity between Local Roads of significance or state-controlled roads;
- Access to 20 to 50 properties; and
- Potential for commercial trip generation

Boonenne Road connects to both state-controlled roads, Bunya Highway and Kingaroy Cooyar Road. Moreover, the development is a commercial development. Therefore, Boonenne Road can be classified as minor road. It should be noted that Boonenne Road only services 5 residential dwelling and the development. Considering the 35 trips per day generated by the other 5 residential dwellings along Boonenne Road (at an approximate 10 trips per day), the total number of vehicles travelling along Boonenne Road is conservatively 71 trips per day.

According to IPWEA Lower Order Road Design Guideline, a minor road can be either sealed or unsealed depending on local sealing programs and priorities and therefore, sealing the road is not considered a necessary treatment.

Based on Table 1 – Road Asset Classification: Desirable Characteristics, Features and Values of IPWEA Lower Order Road Design Guideline, the required formation width for a minor road is 6.5m, with a 7.0m width required if there are more than 10 heavy vehicles per day. As Boonenne Road will carry only up to 8 heavy vehicles per day, a 6.5m formation width is deemed suitable. Boonenne Road currently has a 6.5m formation width and therefore no further mitigation measures is deemed necessary. Table 3 outlines the characteristics of a local minor road compared to Boonenne Road.

**Table 3: Minor Road vs Boonenne Road Characteristics (Source: IPWEA, PSA)**

| CRITERIA | MINOR ROAD | BOONENNE ROAD |
|---|---|---|
| Vehicles per Day | 50 vph – 150 vph | 68 vph |
| Road Type | Sealed or Unsealed | Unsealed |
| Formation | 6.5 m | 6.5 m |
| Access to Property | 20 – 50 properties | 6 properties |

Table 3 indicates that Boonenne Road can accommodate additional traffic from the development and would still be suitable for its purpose.

Based on a desktop assessment, Boonenne Road is a straight road with minimal changes in elevation. This provides adequate sight distance for both horizontal and vertical views, allowing vehicles to perceive oncoming vehicles, and therefore no further measures are deemed necessary. A turn warrant assessment has been undertaken at the Kingaroy Cooyar Road / Boonenne Road intersection as shown in Figure 1. It should be noted that it has been assumed that 10% of the AADT and development traffic occurs during peak hours.

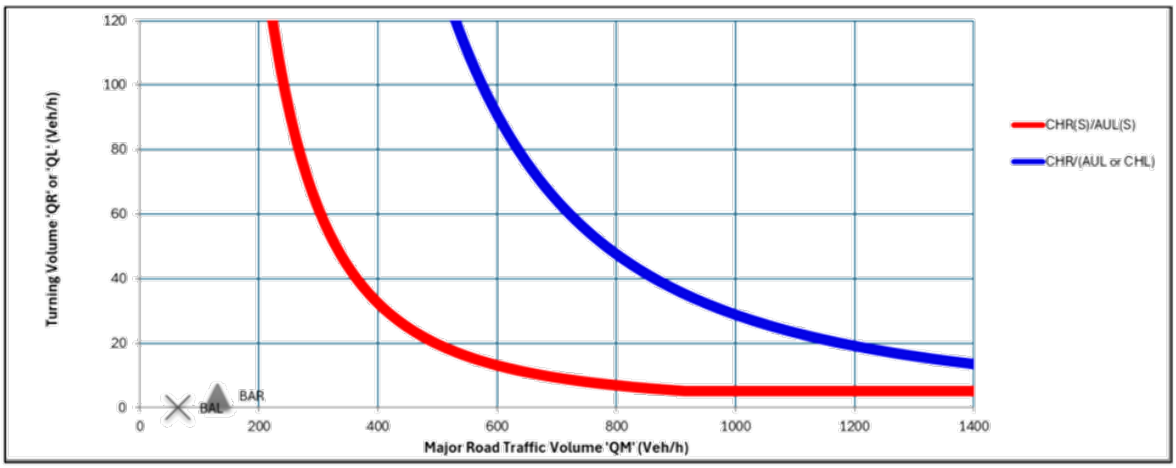


**Figure 1: Kingaroy Cooyar Road intersection Turn Warrant Assessment**

Turn warrant assessment indicates that a Basic Right Turn (BAR) Treatment and Basic Left Turn (BAL) Treatment are required to accommodate development traffic. The existing road geometry can accommodate these turn treatments and therefore no further mitigation measures is deemed necessary. A swept path analysis has been conducted at site access and the Kingaroy Cooyar Road / Boonenne Road intersection to demonstrate that a B-Double vehicle can access these roads without experiencing any conflicts. Full swept path analysis is attached in Appendix 1.

**Bus Route and Stop along Boonenne Road**

No formal bus route is currently servicing Boonenne Road. According to Response to Further Submission, dated 07 August 2024 prepared by ONF Surveyors, while the bus company does not publicly provide bus routes, the pickup point for local school children is at the intersection of Boonenne Road and Boonenne Ellesmere Road. Occasionally, the bus driver may drop children off at the operator's land as a courtesy, but Boonenne Road is not a regular or formal bus route. Therefore, no improvements are required to accommodate the school bus travelling along Boonenne Road.

**Parking Provision**

The SBRC Planning Scheme nominates minimum parking rates for an "Industry" Use as 1 space/50sqm GFA for the first 500m$^2$, then 1 space per 100sqm GFA thereafter + and AV (Articulated Vehicle) space. It should be noted that the development will only increase its production, with no increase in GFA expected. Therefore, no additional parking provision is required. Nonetheless, the development site has sufficient space to accommodate any additional parking demand.

**B-Double Authorisation Permit**

It has been noted that Boonenne Road is not part of the B-Double Route Network. However, a B-Double Authorisation Permit has been granted by the NHVR for the development, allowing heavy vehicles to use Boonenne Road until 06 July 2025. The B-Double Authorisation Permit is included in Appendix 2.

It is proposed that a maximum of 2-3 truck movements will be B-Doubles per week, while the remaining heavy vehicle movements will be semi-trailers or rigid vehicles.

## Summary

In summary, based on a review of the Development Application (MCU23/0034 ) for a Development Permit for a High Impact Industry and ERA 47 – Timber Milling and Woodchipping at 157 Boonenne Road in Goodger including the DA report, Response to SBRC Information Request, Response to Further Submission, Referral Agency Response and Further Submission, the development trips generated by the proposed increase in development are not expected to have an adverse impact on the road network in the vicinity of the site. No further mitigation measures are necessary as a result of the development.

I trust the above meet your requirements. If you have any questions, please don't hesitate to contact the undersigned.

Yours sincerely

Hannah Richardson
RPEQ 17016
**Director, Traffic and Transport Engineering**
**PSA Consulting (Australia) Pty Ltd**

| VERSION | DATE | DETAILS | AUTHOR | AUTHORISATION |
|---|---|---|---|---|
| V2 | 10 December 2024 | Letter Advice | Daina Ruth Aliboso |  Hannah Richardson |

## APPENDIX 1 - SWEPT PATH ANALYSIS


| REVISION | DESCRIPTION | BY | DATE |
|---|---|---|---|
| 1 | ORIGINAL ISSUE | D.A | 05.12.2024 |

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TOWN PLANNING | TRAFFIC ENGINEERING | TRANSPORT PLANNING | PROGRAM MANAGEMENT | INFRASTRUCTURE



| | |
|---|---|
| DRAWING TITLE | SWEPT PATH ANALYSIS - SITE ACCESS MANOEUVRE |
| CLIENT | ONF SURVEYORS |
| PROJECT | RESPONSE TO PUBLIC/FURTHER SUBMISSION |
| LOCATION | 157 BOONENNE ROAD, GOODGER QLD 4610 |

| | | | |
|---|---|---|---|
| DRAWING DATE | DECEMBER 2024 | DRAWN BY | D.A |
| ORIGINAL SIZE: A1 SCALE A3: 1:1000 | | CHECKED BY | H.R |
| SCALE | 0 10 20 30m | APPROVED BY | H.R (RPEQ: 17016) |
| SCALE 1:500 (A1) | | PROJECT NO: 1860 | DRAWING NO: SK01 / REVISION: 1 |


| REVISION | DESCRIPTION | BY | DATE |
|---|---|---|---|
| 1 | ORIGINAL ISSUE | D.A | 05.12.2024 |

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| | |
|---|---|
| DRAWING TITLE | SWEPT PATH ANALYSIS - ENTERING TO BOONENNE ROAD |
| CLIENT | ONF SURVEYORS |
| PROJECT | RESPONSE TO PUBLIC/FURTHER SUBMISSION |
| LOCATION | 157 BOONENNE ROAD, GOODGER QLD 4610 |

| | | | |
|---|---|---|---|
| DRAWING DATE | DECEMBER 2024 | DRAWN BY | D.A |
| ORIGINAL SIZE: A1 | SCALE A3: 1:300 | CHECKED BY | H.R |
| SCALE | SCALE 1:150 (A1) | APPROVED BY | H.R (RPEQ: 17016) |
| PROJECT NO. | 1860 | DRAWING NO. | SK02 |
| REVISION | 1 | | |


| REVISION | DESCRIPTION | BY | DATE |
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TOWN PLANNING | TRAFFIC ENGINEERING | TRANSPORT PLANNING | PROGRAM MANAGEMENT | INFRASTRUCTURE



| | |
|---|---|
| DRAWING TITLE | SWEPT PATH ANALYSIS - EXITING TO BOONENNE ROAD |
| CLIENT | ONF SURVEYORS |
| PROJECT | RESPONSE TO PUBLIC/FURTHER SUBMISSION |
| LOCATION | 157 BOONENNE ROAD, GOODGER QLD 4610 |

| | | | |
|---|---|---|---|
| DRAWING DATE | DECEMBER 2024 | DRAWN BY | D.A |
| ORIGINAL SIZE: A1 | SCALE A3: 1:300 | CHECKED BY | H.R |
| SCALE | SCALE 1:150 (A1) | APPROVED BY | H.R (RPEQ: 17016) |
| PROJECT NO. | 1860 | DRAWING NO. | SK03 |
| REVISION | 1 | | |

**APPENDIX 2 - NHVR B-DOUBLE AUTHORISATION PERMIT**

NHVR
National Heavy Vehicle Regulator

**Permit number**
191903V10

# B-Double Authorisation Permit

**Heavy Vehicle National Law**
This Permit is issued under the provisions of *Section 143 of the Heavy Vehicle National Law* for the operation of a Class 2 vehicle *(as defined in this Permit)* subject to the conditions set out in this Permit and any attachments.

## Permit details

This Permit is issued to

JOHNSTON FAMILY TRUST t/a BULK GRANITE HAULAGE

Address

LOT 1 OLD TOORBUL POINT RD
CABOOLTURE, QLD 4510

Type

B-Double

Vehicle configuration and description

B-Double
Combination (up to 9 axles)

**Permit period**

| Start date | End date |
|---|---|
| 07-Jul-2024 | 06-Jul-2025 |

*continued on next page...*

NHVR
National Heavy Vehicle Regulator

**Permit number**
191903V10

## Vehicle details

*GCM must not exceed manufacturer's specifications*

**Vehicle dimensions**

Length
Up to 25m/26m

Height
Up to 4.3m

Freight type
Commodity

Description of load
Commodity - Bulk Goods, Mulch, General Freight

*continued on next page...*

NHVR
National Heavy Vehicle Regulator

**Permit number**
191903V10

## Authorised Routes

Turn by turn description

191903r4v7 - Area

1) Start: Approved B-Double Network, W Dapto Rd, Kembla Grange NSW 2526
Wyllie Rd, Kembla Grange
End: 50 Wyllie Rd, Kembla Grange NSW 2526

191903r5v7 - Area

1) Start: Approved B-Double Network, Bruce Hwy, Childers QLD 4660
Goodwood Rd, [Childers – Goodwood]
End: Intersection of Goodwood Rd and Frestas Rd, Goodwood QLD 4660

191903r6v4 - Area

1) Start: Boonenne Timbers, 156 Boonenne Rd, Taabinga QLD 4610
Boonenne Rd, Taabinga
Kingaroy Cooyar Rd, Taabinga
End: Approved B-Double network, Kingaroy Cooyar Rd, Taabinga QLD 4610

## Road conditions

**Regulator**

(1) GO03 -

You may be required under another law to obtain consent or approval from a Third Party entity.

These approvals must be carried and produced on request by an authorised officer. In this section Third Party entity usually include the following -

(a) police especially with respect to the movement of vehicles which exceed dimension requirements due to the potential risks to other road users and possible need for police assistance to control traffic

(b) rail infrastructure managers the movement of oversize/overmass heavy vehicles across level crossings or restricted access vehicles near rail infrastructure may create risks that need to be managed

(c) utilities restricted access vehicles may have adverse effects on utilities infrastructure with over height vehicles and telecommunications/power lines being a common concern

(d) private road owners allowing public access toll roads, ports, airports, hospitals and private estates are potential examples where those road owners, who may not be road managers for the purpose of the HVNL, also need to grant consent to the use of restricted access vehicles

(e) forestry agencies roads owned by governmental agencies can possess different characteristics that may pose risks not found on typical roads and if the government agency is not a road manager for the purpose of the HVNL may require special consideration to manage risks arising from the use of restricted access vehicles on these roads.

**South Burnett Regional Council**

(1) RI01 - Weather and road access -

(1) On unsealed roads and single lane narrow roads, travel is suspended during periods of prolonged rain and up

NHVR
National Heavy Vehicle Regulator

Permit number
191903V10

to 1days for every 5mm of rain within the 24 hours period after the rainfall event. (i) When a prolonged rainfall event occurs, the restriction is applied to allow sufficient time for the road and road pavement to dry preventing damage.

(2) Access maybe further restricted or deferred in the event of a significant rainfall event. Contact must be made with the relevant traffic management information sources on such an occasion.

In this section -

"unsealed roads" means routes accessible by vehicles that are not sealed, or are not metalled, or are gravel roads

"single lane narrow road" means a road that permits two-way travel but is not wide enough in most places to allow vehicles to pass one another without travelling on unsealed shoulders

"prolonged rain" means periods of sustained rainfall that can also lead to flooding

"a significant rainfall event" means periods of constant or excessive rainfall that can also lead to flooding

(2) RI10 - Heavy vehicle movement - Report of Damage

In the event that the permitted heavy vehicle damages assets or infrastructure, contact must be made with James D'Arcy of Manager Infrastructure Planning via (07) 4189 9100 with receipt of the advised damage from the road manager.

A written statement of the damage must be recorded and provided in writing to the road manager prior to repairs of the damaged infrastructure or asset.

(3) RS03 - Speed Restriction - Road

The heavy vehicle is restricted to a maximum speed limit of 70 kph when travelling on Boonenne Road, except where a traffic sign indicates a lower speed limit.

(4) SBC4 - The operator is to ensure that travel along the consented roads, in particular the navigation around bends/curves, dips/depressions and crests, roundabouts intersections and grids are undertaken with extreme care at speeds that are safe/ adequate for the road condition at the time of travel.

## Travel conditions

Department of Transport and Main Roads (TMR)

(1) RI16 - On Goodwood Road the driver must end journey at Frestas Road. Full length of Goodwood Road is NOT Permitted..

## Vehicle conditions

Regulator

(1) LE07 - The driver and operator of the B-double must comply with all conditions, except conditions relating to stated routes or networks, set out in the National Class 2 Heavy Vehicle B-double Authorisation (Notice) including the schedule for a participating jurisdiction when the vehicle is being used in the jurisdiction to which that schedule applies.

(2) LE12 - A B-double may be up to 26.0m long provided the vehicle meets Schedule 6 Section 3 (3) of the Heavy Vehicle (Mass, Dimension and Loading) National Regulation.

(3) LEOL - Other Laws and Legislation

NHVR
National Heavy Vehicle Regulator

**Permit number**
191903V10

Nothing within this permit exempts the driver or operator of the permitted heavy vehicle from complying with legislation regulating the use of heavy vehicle. This includes but is not limited to conditions applied within the vehicles registration, compliance with sign posted restrictions, traffic law or compliance with lawful directions of authorised officer.

*continued on next page...*

NHVR
National Heavy Vehicle Regulator

**Permit number**
191903V10

The driver of the heavy vehicle who is driving a vehicle that is subject to a permit issued under the HVNL must keep a copy of the permit for the exemption in the driver's possession.

The driver or operator of a heavy vehicle being used on a road that is subject to a permit issued under the HVNL must not contravene a condition of the permit.

The driver or operator must comply with the provisions of the Heavy Vehicle (Mass, Dimension and Loading) National Regulation unless anything contrary is applied within this permit.

It is an offence to operate a vehicle at a mass limit greater than indicated by an official traffic sign.

## Declaration

Signed:

NHVR Delegate

**Dated: 29-Apr-2024**

Associated documents

| |
|---|
| N/A |

**Disclaimer:**
The National Heavy Vehicle Regulator (NHVR) accepts no liability for any errors or omissions and gives no warranty or guarantee that the material, information, maps or publications made accessible are accurate, complete, current or fit for any use whatsoever. The information contained within the NHVR Route Planner online map system is subject to change without notice.

NHVR accepts no liability for the information provided within the authorised route as part of this exemption/ authorisation. The operator must ensure prior to travel that the roads/areas/networks listed in the authorised route are still current and accessible as the approved network is subject to change at any given time.

To the extent permitted by law, NHVR excludes liability for any loss (including loss from viruses, or consequential damage) caused by use of or reliance on the NHVR Route Planner.

Access to the NHVR Portal and NHVR Route Planner is only provided for your personal use. You may not sell or rebrand information obtained from the NHVR Portal or NHVR Route Planner without NHVR's written permission, or represent that the information is from a source other than the NVHR.



**END OF DOCUMENT**

CONSULTING ENGINEERS

# Noise Impact Assessment

# Boonenne Timbers

## 157 Boonenne Road, Goodger

IMEMS Pty Ltd

Project No.: ATP230421

Project Name: Boonenne Timbers

Document No.: ATP230421-R-NIA-01

August 2023

# Document Control Record

| | | | |
|---|---|---|---|
| Prepared by: | Felix Gau Rinaldi | Approved by: | Sasho Temelkoski RPEQ 13551 |
| Position: | Engineer – Acoustics | Position: | Managing Director |
| Signed: |  | Signed: |  |
| Date: | 18 August 2023 | Date: | 18 August 2023 |

REVISION STATUS

| Revision No. | Description of Revision | Date | Approved |
|---|---|---|---|
| 0 | Issue 1 | 18 August 2023 | S. Temelkoski |

Recipients are responsible for eliminating all superseded documents in their possession.

atf ATP Engineering Trust
ABN: 95 634 079 845

**Gold Coast**
34 Lakefront Crescent
Varsity Lakes, QLD 4227
Ph: (07) 5593 0487

**Brisbane**
Unit 34, 30 Anstey Street
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Ph: (07) 3256 1747

E-mail: admin@atpconsulting.com.au
Internet: www.atpconsulting.com.au

# Executive Summary

ATP Consulting Engineers (ATP) was engaged to prepare a noise impact assessment (NIA) report for the approved development for timber milling and woodchipping facility at 157 Boonenne Road in Goodger.

Approval is being sought from the Department of Environment and Science for the following Environmentally Relevant Activities (ERA's):

- **ERA 47 –** *Timber milling and shredder (b) 10,000t to 20,000t per year.*

The Boonenne Timbers sawmill operation currently mills less than 5,000t per year and is proposing to increase over time to over 10,000t but less than 20,000t per year.

The existing sawmill operational footprint will remain the same with upgrades being made over time to the individual sawmilling unit operations to facilitate the increase in capacity. It should be noted that the proposed upgrades of the facility will not increase the maximum noise levels, it will simply extend the duration of noise emissions to all days permitted operation.

The purpose of this report is to assess the potential noise impacts from the proposed increase in capacity of the development on the nearest noise sensitive places in accordance with the South Burnett Regional Council *Planning Scheme 2017* and the *Environmental Protection (Noise) Policy 2019*.

Background noise monitoring was carried out between 21 June to 1 July 2023 using an automated noise logger deployed at the subject site to record the background noise levels representative of the noise amenity at the nearest noise sensitive places.

The noise measurements have been carried out in accordance with the *AS1055.1-3 - Acoustics – Description and Measurement of Environmental Noise* and the *Environmental Protection Act 1994* and the modelling of noise emissions has been carried out as per International Standard ISO 9613.

The relevant noise criteria from the *Environmental Protection (Noise) Policy 2019* and the relevant general development provisions in accordance with the South Burnett Regional Council *Planning Scheme 2017* were considered in this assessment. Detailed noise propagation modelling was carried out considering all potential noise emissions from the operation of the timber milling and woodchipping facility at 157 Boonenne Road in Goodger. to determine the potential noise impact on the nearest noise sensitive places.

The noise sources and operational scenarios included in this report have been considered based on the scale and intensity of the operations at the existing timber milling and woodchipping facility, because no changes are expected to the noise sources at 157 Boonenne Road in Goodger. The dominant noise sources are located at the covered work area, and these include noise from the circular saw and shredder. Other noise sources include delivery and dispatch of materials (truck movements), forklifts and staff and visitor parking.

The relevant noise criteria from the *Environmental Protection (Noise) Policy 2019* and the relevant general development provisions in accordance with the *South Burnett Regional Council Planning Scheme* were considered in this assessment.

The nearest noise sensitive residential receptors to the site are the low-set dwellings along Boonenne Road. However, it is to be noted that some of the dwellings are mostly used in association with rural activities or for commercial operations, rather than as Dwellings.

The results of the conservative noise propagation modelling indicate that there will be no noise impacts on the nearest noise sensitive land uses, mainly because the most dominant noise sources are located at the covered area, which is at the back of the development, approximately 330 metres from Boonenne Road and approximately 450 metres from the nearest noise sensitive use at 156 Boonenne Road.

**Noise Mitigation Measures**

To ensure ongoing compliance with the noise criteria at the nearest noise sensitive receptors, the following mitigation measures are recommended for the proposed increase in capacity of the existing development:

- Acoustic screen in a form of industrial PVC – Strip curtains such as *Flexishield* or similar are required for the openings (end of the conveyor belt course) on the eastern façade of the shredder shed to prevent noise impact on the nearest noise sensitive places.
- The acoustic screens (curtains) should be minimum 4mm thick and with 100 to 120mm overlaps. The weighted sound reduction index should be minimum $R_w$ 18. Examples of the acoustic screens (curtains) are presented in Appendix G.
- The chainsaws should not be used during night time / early morning (6:00am to 7:00am).
- Maintenance of the blades of the circular saws should be done regularly to maintain good cutting conditions and reduce noise generated by damaged equipment.
- Mobile plant to be fitted with broadband reversing beepers. All reversing beepers should meet the relevant occupational safety requirements. This should be implemented for plant operating during night-time hours where reasonable and practicable.
- Use mufflers and engine covers/screens where appropriate for generators and mobile plant.
- Care should be taken to reduce noise when loading or unloading vehicles or moving materials. Minimise drop height of materials when transferring (e.g loading and unloading vehicles and storage areas).

Provided the recommendations of this report are fully implemented, there are no further acoustic constraints on the operation of the existing timber milling and woodchipping facility at 157 Boonenne Road in Goodger.

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## Acoustics Glossary

| | |
|---|---|
| **A-weighting** | Correction to sound levels to mimic the response of the human ear at low sound frequencies. A-weighting filter covers the full audio range - 20 Hz to 20 kHz and the shape mimics the response of the human ear at the lower frequency levels. |
| **Decibel (dB)** | (1) Degree of loudness (2) A unit for expressing the relative intensity of sounds on a scale from zero for the average least perceptible sound to about 130 for the average pain level. A unit used to express relative difference in power or intensity, between two acoustic signals, equal to ten times the common logarithm of the ratio of the two levels, one of which is a standard reference value. |
| **dB(A)** | The A-weighted sound pressure level in dB. |
| **Façade adjusted** | The noise level at 1m from a building façade is calculated by adding 2.5dB to the free-field noise level to account for sound reflected from the building façade. The external noise levels at the buildings facades are "façade-adjusted". |
| **Free-field** | Noise level without any reflected sound from buildings or other hard, reflective surfaces (except for the ground plane). |
| **Hz (Hertz)** | Hertz is the standard measure of the frequency of oscillations in a wave motion. The frequency is most often measured in cycles per second (cps) or Hertz (Hz). Frequency of 1 Hz is one cycle per second. |
| **Impulsive noise and impulsiveness adjustment** | Noise having a high peak of short duration or a sequence of such peaks. Impulsive noise is present if the difference in A-weighted maximum noise levels between fast response and impulse response is greater than 2dB. Impulsiveness adjustment (penalty) of up to 5dB should be applied to the component noise level. |
| **$L_{Amax,T}$** | The maximum A-weighted sound pressure level occurring in a specified time period T in seconds. |
| **$L_{Aeq,T}$** | "Average-energy" sound level used in situations where sound varies over time. $L_{Aeq,T}$ is the A-weighted sound pressure level that has the same energy as the fluctuating sound over the time period T in seconds. |
| **$L_{A1,T}$** | Measure of the maximum sound level. $L_{A01,T}$ is a statistical parameter that is the A-weighted sound pressure level that is exceeded for 1% of the measurement time T. |
| **$L_{A10,T}$** | $L_{A10,T}$ is a statistical parameter that is the A-weighted sound pressure level that is exceeded for 10% of the measurement time T. Used as a traffic noise descriptor in Queensland. |
| **$L_{A90,T}$** | Background sound level. $L_{A90,T}$ is a statistical parameter that is the A-weighted sound pressure level that is exceeded for 90% of the measurement time T. |
| **Noise** | Unwanted sound. |
| **Octave bands and 1/3 octave bands** | A range of frequencies whose upper frequency limit is twice that of its lower frequency limit. In acoustics, the audible spectrum (20Hz to 20kHz) is divided into 10 parts |

| | |
|---|---|
| | (octaves) with centre frequencies of 31.5Hz, 63Hz, 125Hz, 250Hz, 500Hz, 1kHz, 2kHz, 4kHz, 8kHz and 16kHz.<br>For more detailed frequency analysis, octave bands are further divided into more discrete bands. For examples, 1/3 octaves bands are where each octave band is divided into three parts.<br>IEC 61260:1995, *Electroacoustics — Octave-band and fractional-octave band filters* |
| **Sound power** | The sound energy radiated per unit time by a sound source, measured in Watts (W). |
| **Sound Power Level, $L_w$ (SWL)** | Logarithmic measure of sound power on a decibel scale, referenced to the human hearing threshold of $1 \times 10^{-12}$ W. |
| **Sound pressure** | The fluctuations in air, measured in Pascals (Pa). |
| **Sound Pressure Level, $L_p$ (SPL)** | Logarithmic measure of sound pressure on a decibel scale, referenced to the human hearing threshold of $2 \times 10^{-5}$ Pa. |
| **Tonal noise, tonality, and tonality adjustment** | Tonal noise is characterised by one or more distinct frequency components ("tones") that emerge audibly from the total sound. For example, distinct tones may be emitted by fans, saws, grinders, and other equipment. Tonal noise is generally far more annoying than non-tonal noise. Presence of tonal sound ("tonality") can be identified by analysing the sound levels in adjacent 1/3 octave bands.<br>AS1055.1-1997 and the DEHP Noise Measurement Manual 2013 provides guidance on how tonality should be assessed. If tonal components are clearly audible and they can be detected by 1/3 octave analysis (1/3 octave band exceeds neighbouring bands by at least 5dB), tonality adjustment (penalty) of up to 5dB should be applied to the component noise level. |
| **Weighted Sound Reduction Index ($R_w$)** | A single-number quantity which characterises the airborne sound insulation of a material or building element over a range of frequencies. |

# 1. Introduction

## 1.1 Project Background

ATP Consulting Engineers (ATP) was engaged to prepare a noise impact assessment (NIA) report for the approved development for timber milling and woodchipping facility at 157 Boonenne Road in Goodger.

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The existing sawmill operational footprint will remain the same with upgrades being made over time to the individual sawmilling unit operations to facilitate the increase in capacity. It should be noted that the proposed upgrades of the facility will not increase the maximum noise levels, it will simply extend the duration of noise emissions to all days permitted operation.

The purpose of this report is to assess the potential noise impacts from the proposed increase in capacity of the development on the nearest noise sensitive places in accordance with the South Burnett Regional Council *Planning Scheme 2017* and the *Environmental Protection (Noise) Policy 2019*.

The noise sources and operational scenarios included in this report have been considered based on the scale and intensity of the operations at the existing timber milling and woodchipping facility, because no changes are expected to the noise sources at 157 Boonenne Road in Goodger.

## 1.2 Study Objectives

Study objectives are as follows:

- Noise measurements using an automated noise logger to obtain data on the existing background noise levels.
- Extensive noise survey of the site to determine the noise emissions from each individual noise source and the noise levels at the boundaries of the site.
- Noise propagation modelling, considering typical noise emissions associated with the use of the existing facility to calculate the noise levels at the nearest noise sensitive places.
- Assessment of the noise levels against the relevant noise criteria from the *Environmental Protection (Noise) Policy 2019*.
- Recommendation of noise mitigation measures to prevent noise impacts on the nearest noise sensitive places (if required).

### 1.3 Subject Site

The existing timber milling and woodchipping facility is located at 157 Boonenne Road in Goodger, on the land described as Lot 4 on RP807137

The site is located within the South Burnett Regional Council (SBRC) local government area and is presented in Figure 1.1.


Figure 1.1 Site location

The existing sawmill will include the following activities and operations:

- Delivery and storage of sawn hardwood logs;
- Timber cutting and storage; and
- Dispatch and other activities such as office space for sales and administration and workshop.

The existing timber milling and woodchipping facility operates 5 days a week (Monday to Friday) from 6:00am to 3:00pm. The approved development layout of the subject site is presented in Appendix A.

## 1.4 Nearest Noise Sensitive Places

The definition of "noise sensitive place" considered by DES includes a sensitive receptor for the purposes of the *EPNP 2019*. The definition of "sensitive receptor" stated in the *EPNP 2019* is: "sensitive receptor means an area or place where noise is measured". The types of sensitive receptors are listed in Schedule 1 of *EPNP 2019* and include residences, libraries and educational institutions, childcare centres, hospitals, and other medical institutions and commercial or retail activities.

The nearest noise sensitive residential receptors to the site are the low-set dwellings across Boonenne Road and to the south of the existing development.

The nearest noise sensitive places to the existing development at 157 Boonenne Road are listed in Table 1.1.

Table 1.1 Nearest noise sensitive places

| Street address | Type | Zoning |
|---|---|---|
| No. 156 Boonenne Road | Low-set dwelling | Rural |
| No. 169 Boonenne Road | Low-set dwelling | Rural |
| No. 186 Boonenne Road | Low-set dwelling | Rural |

As per the South Burnett Regional Council Planning Scheme V1.4 (2017), the site is zoned *Rural*, with the surroundings zoned as *Rural*.

The nearest noise sensitive places are identified in Figure 1.2, overlaid over the zoning map from the South Burnett Regional Council Planning *Scheme*.

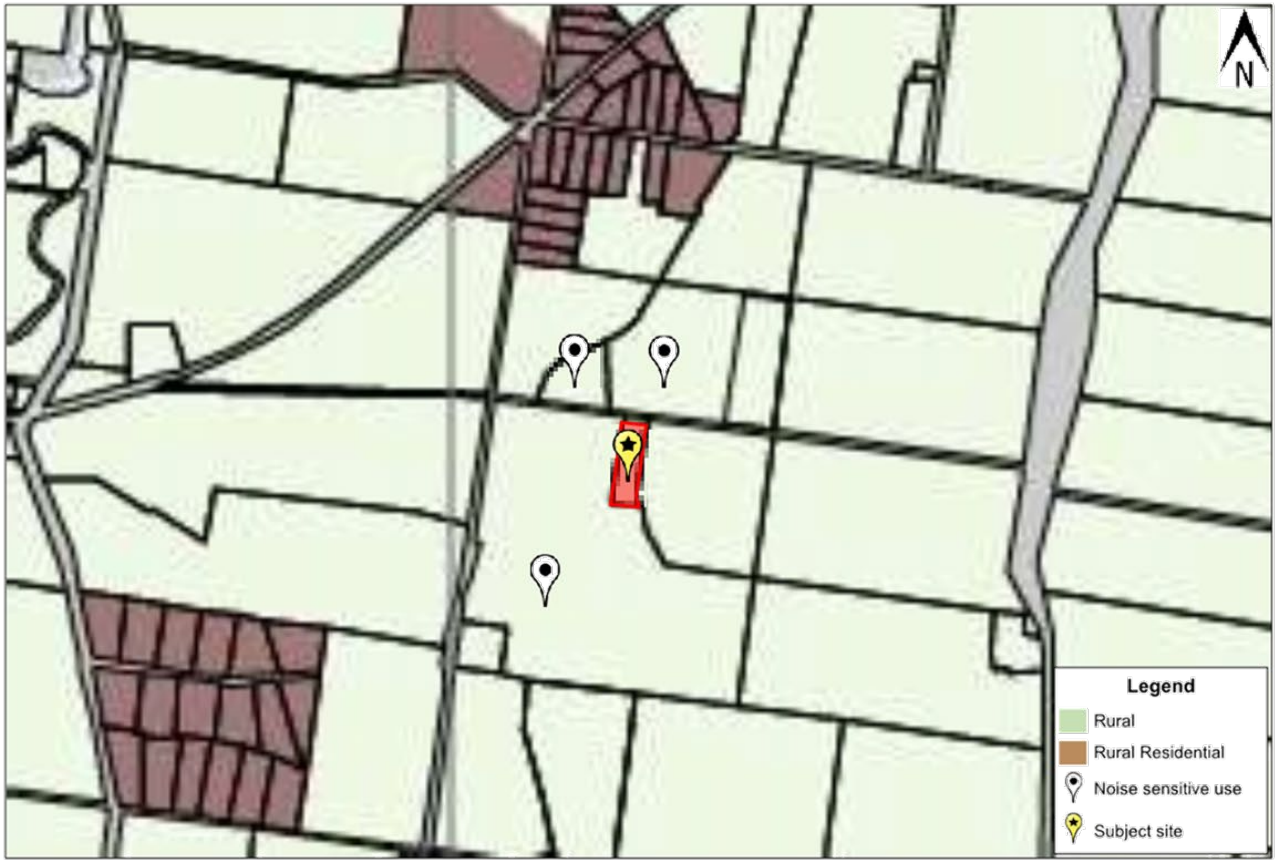



Figure 1.2 Nearest noise sensitive places

# 2. Existing Noise Amenity

## 2.1 Site-Specific Noise Measurements

Background noise monitoring was carried out in the period from 21 June to 1 July 2023 using an automated noise logger deployed along the southern boundary of Lot 3 on RP15595, No. 156 Boonenne Road, to record the background noise levels representative of the noise amenity at the nearest noise sensitive places.

In addition, a noise survey was carried out at the existing timber milling and woodchipping facility on 21 June 2023 (Wednesday).

The noise measurement methodology is summarised in Table 2.1.

Table 2.1 Noise measurements

| | |
|---|---|
| **Relevant legislation, standards, and guidelines** | The noise measurements were carried out in accordance with:<br>• Australian Standard AS 1055:2018 (*Acoustics – Description and measurement of environmental noise*).<br>• DES *Noise Measurement Manual v. 4.1*, 10 March 2020 |
| **Measurement location** | The background noise measurements were carried out along the southern boundary of Lot 3 on RP15595, No. 156 Boonenne Road, as presented in Figure 2.1.<br>The noise survey locations are presented in Figure 2.2<br>Photos showing the noise measurement locations are presented in Appendix B. |
| **Measurement period** | Continuous background noise monitoring was carried out along Boonenne Road in Goodger, 24 hours a day from 21 June to 1 July 2023.<br>Noise survey at the timber milling and woodchipping facility was carried out between 11:00am and 1:00pm on 21 June 2023 (Wednesday), while standard operations were taking place at the facility. |
| **Measurement equipment** | The following sound measurement equipment was used:<br>• Environmental noise logger – ARL Ngara (Serial No. 8780D2);<br>• Sound level meters – SVAN 977A (serial no. 92109 and 92176); and<br>• Calibration – RION NC-75 Sound Level Calibrator (serial no. 34413140).<br>The noise measurement instruments conform to Australian Standard AS/NZS IEC61672.1-2019. Calibration was performed during set up and download of the data from the noise logger. The calibration drift was <0.1 dB(A). |
| **Meteorological conditions** | The weather conditions during the monitoring period from 21 June to 1 July 2023 were mostly fine, no inclement weather was recorded on this period.<br>Full meteorological data for the noise monitoring period is presented in Appendix C. |

| | |
|---|---|
| **Analysis of data** | The background noise data was analysed to determine the following noise descriptor:<br>• $L_{A90,T}$: Background noise level during daytime (7am to 6pm), evening (6pm to 10pm) and night-time (10pm to 7am).<br>The noise survey data at 15 Boonenne Road was analysed to determine the following noise descriptors:<br>• $L_{Aeq,T}$, $L_{A10,T}$, $L_{A1,T}$, $L_{Amax,T}$ and $L_{A90,T}$;<br>• $L_{Aeq,T}$ in 1/3 octave bands to assess tonality; and<br>$L_{Amax,T}$(Fast) and $L_{Amax,T}$(Impulse) to assess impulsiveness. |

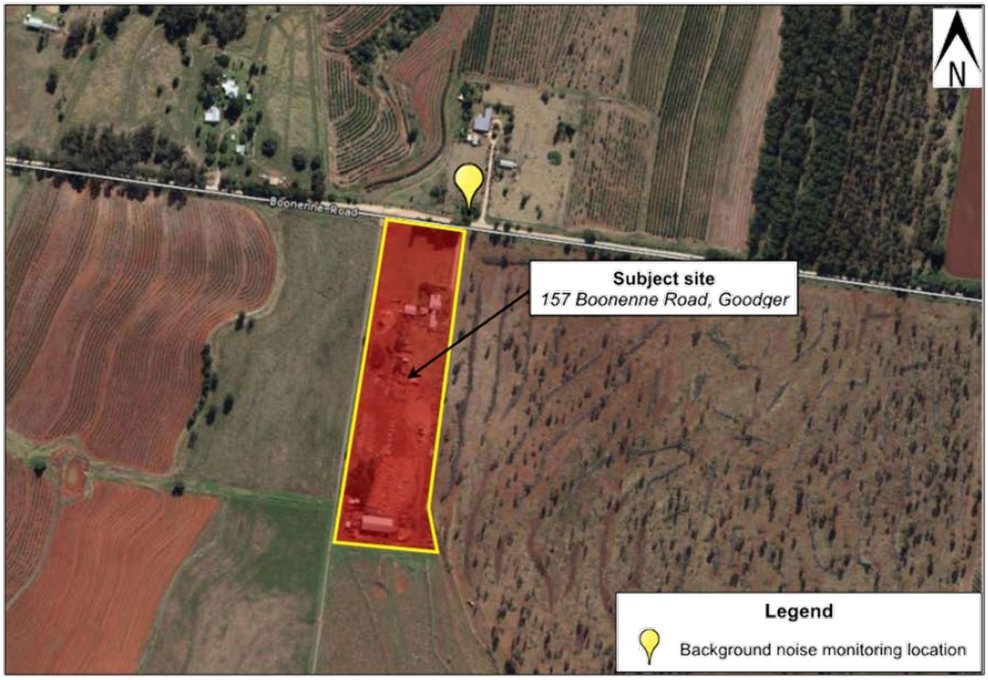



Figure 2.1 Background noise monitoring location

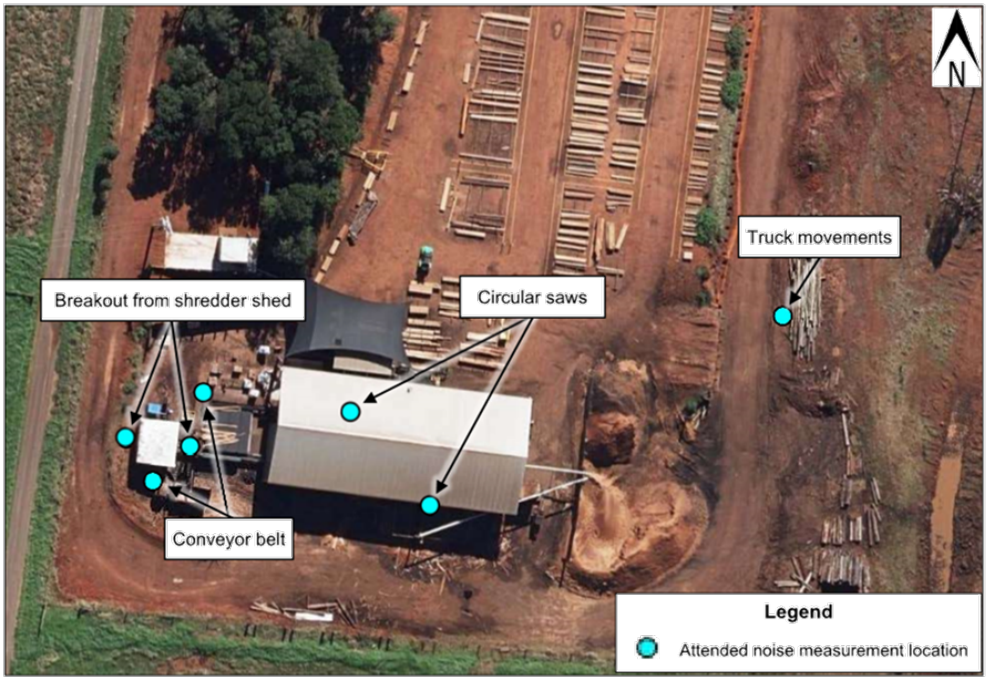



Figure 2.2 Noise survey locations at existing timber milling and woodchipping facility

## 2.2 Measurement Results

### 2.2.1 Background noise monitoring

The results of the background noise measurements undertaken from 21 June to 1 July 2023, expressed in terms of the relevant noise descriptors, are presented in Table 2.2 and Appendix D.

Table 2.2 Measured background noise levels

| Date | Background noise levels $L_{90}$ dB(A) | | |
|---|---|---|---|
| | $L_{90,11hr,Day}$ (7am–6pm) | $L_{90,4hr,Evening}$ (6pm–10pm) | $L_{90,9hr,Night}$ (10pm–7am) |
| 21 June 2023 (Wed) | — | 26 | 24 |
| 22 June 2023 (Thu) | 35 | 30 | 27 |
| 23 June 2023 (Fri) | 38 | 26 | 22 |
| 24 June 2023 (Sat) | 35 | 22 | 22 |
| 25 June 2023 (Sun) | 35 | 25 | 23 |
| 26 June 2023 (Mon) | 37 | 22 | 23 |
| 27 June 2023 (Tue) | 33 | 25 | 24 |

| Date | Background noise levels $L_{90}$ dB(A) | | |
|---|---|---|---|
| | $L_{90,11hr,Day}$ (7am–6pm) | $L_{90,4hr,Evening}$ (6pm–10pm) | $L_{90,9hr,Night}$ (10pm–7am) |
| 28 June 2023 (Wed) | 36 | 30 | 32 |
| 29 June 2023 (Thu) | 39 | 29 | 26 |
| 30 June 2023 (Fri) | 34 | 23 | 22 |
| 1 July 2023 (Sat) | 29 | 22 | 25 |
| **Arithmetic Average** | **35** | **26** | **25** |

### 2.2.2 Operational Noise Measurements Results – Near Field

Attended noise measurements were carried out at near-field locations to the equipment at the existing timber milling and woodchipping facility at 157 Boonenne Road during the current hours of operation, to determine the sound power levels of the equipment.

The results of the measurement of the operational noise levels from the mechanical equipment and plant, as carried out on 21 June 2023 (Wednesday), are presented in Table 2.4.

Table 2.3 Attended noise measurements – 21 June 2023

| Location | Source | Measurement location | Measured Sound Pressure Level (SPL) $L_{eq,adj,T}$ dB(A) | Measured Sound Power Level (SWL) $L_{eq,adj,T}$ dB(A) |
|---|---|---|---|---|
| Covered area | Circular saws | 1m setback | 91.6 | 99.5 |
| Shredder shed Western façade | Shredder | 1m setback | 70.9 | 78.9 |
| Shredder shed Eastern façade | Shredder | 1m setback | 93.2 | 101.1 |
| Covered area | Conveyor belt | 1m setback | 81.7 | 89.6 |
| Internal driveways | Truck movements | 1m setback | 63.3 | 71.3 |

# 3. Noise Criteria

The following documents outline the information to be provided to support a development application and environmental authority application for activities with noise impacts:

- Department of Environment and Science (DES), *Guideline: Environmental Protection Act 1994, Application requirements for activities with noise impacts*, 3 February 2020.
- South Burnett Regional Council Planning Scheme (2017).

The DES guideline states the following:

> *When deciding an application, the department is required to assess the application against requirements stipulated in the EP Act, including considerations stated in the EP Regulation and any relevant Environmental Protection Policy, including the EPP (Noise).*
>
> *For environmental authority applications that have noise impacts the application must describe how one of the following environmental objective and performance outcomes for the ERA will be achieved. Under Schedule 8, Part 3, Division 1 of the EP Regulation the environmental objectives and performance outcomes for noise emissions in Queensland are:*
>
> ***Environmental objective***
>
> *The activity will be operated in a way that protects the environmental values of the acoustic environment.*
>
> ***Performance outcome***
>
> *(a) Sound from the activity is not audible at a sensitive receptor, or*
>
> *(b) The release of sound to the environment from the activity is managed so that adverse effects on environmental values including health and wellbeing and sensitive ecosystems are prevented or minimised.*

The DES refers to the relevant Queensland legislation for regulating noise, including the *Environmental Protection (Noise) Policy 2019*.

## 3.1 South Burnett Regional Council Planning Scheme 2017

The *South Burnett Regional Council Planning Scheme (2017)* does not specify environmental noise limits when assessing potential noise impacts from commercial and industrial uses. As such, the noise limits stated in the *Environmental Protection (Noise) Policy 2019* were considered for the existing development.

## 3.2 Environmental Protection (Noise) Policy 2019

### 3.2.1 Acoustic Quality Objectives

The *Environmental Protection (Noise) Policy 2019* identifies environmental values for the acoustic environment and sets acoustic quality objectives for sensitive receptors. The purpose of the acoustic

quality objectives is to protect the acoustic amenity of the environment. The criteria from Schedule 1 of the policy are presented in Table 3.1.

Table 3.1 Environmental noise criteria

| Sensitive receptor | Location | Period | Acoustic quality objectives | | | Environmental value |
|---|---|---|---|---|---|---|
| | | | $L_{Aeq,adj,1\text{-}hr}$ | $L_{A10,adj,1\text{-}hr}$ | $L_{A01,adj,1\text{-}hr}$ | |
| Residence | Indoors | Day time and evening | 35 | 40 | 45 | Health and wellbeing |
| | | Night-time | 30 | 35 | 40 | Health and wellbeing, in relation to the ability to sleep |
| | Outdoors | Day time and evening | 50 | 55 | 65 | Health and wellbeing |
| | | Night-time | 37 (30 + 7) | 42 (35 + 7) | 47 (40 + 7) | Health and wellbeing, in relation to the ability to sleep |

The following is noted regarding the acoustic quality objectives:

- Under the *Noise Policy*, daytime is 7am to 6pm, evening is 6pm to 10pm and night-time is 10pm to 7am.
- The *Noise Policy* specify outdoor noise criteria of 30 dB(A) for dwellings during night-time. Since the noise propagation modelling results are calculated on the external façades of the noise sensitive buildings, the external noise criteria are derived with consideration of 7dB noise reduction by the building envelope with closed single glazed windows[1].
- The assessment of compliance with the operational noise criteria is based on the results of the noise propagation modelling for a period of 1-hour with maximum noise emissions.

### 3.2.2 Background Creep

Controlling background creep[2] is an important consideration under the *Environmental Protection (Noise) Policy 2019* and the background creep criteria states the following:

*To the extent that it is reasonable to do so, noise from an activity must not be:*

- *For noise that is continuous noise measured by $L_{A90,T}$ – more than nil dB(A) greater than the existing acoustic environment measured by $L_{A90,T}$.*
- *For noise that varies over time measured by $L_{Aeq,adj,T}$ – more than 5dB(A) greater than the existing acoustic environment measured by $L_{A90,T}$.*

It should be noted that the 2019 version of the *Noise Policy* no longer includes the background creep criteria as written above. However, the *Policy* includes the following statement "*To the extent it is reasonable to do so, noise must be dealt with in a way that ensures– background creep in an area*

[1] Typical noise reduction for single glazed windows partially open, *Planning for Noise Control Guideline*, Dept. of Environment and Science (DES).
[2] Background creep is defined as an increase in the background noise levels due to constant addition of new noise sources in the environment. The purpose of the background creep noise criteria is to prevent increase in the background noise level ($L_{90,T}$), which is the main noise amenity descriptor.

*or place is prevented or minimised*." Therefore, it is a requirement that background creep is assessed so ATP has continued to use the background creep criteria as written in the previous 2008 Policy.

The background creep criteria, based on the lowest measured existing background noise levels, presented in Section 2.2 of this report, are presented in Table 3.2.

Table 3.2 Background creep noise criteria

| Noise characteristic | Background creep criteria, $L_{Aeq,adj,T}$ | | |
|---|---|---|---|
| | **Day 7:00am to 6:00pm** | **Evening 6:00pm to 10:00pm** | **Night 10:00pm to 7:00am** |
| Continuous noise | **35** (RBL + 0) | **26** (RBL + 0) | **25** (RBL + 0) |
| Time-varying noise | **40** (RBL + 5) | **31** (RBL + 5) | **30** (RBL + 5) |

# 4. Noise Propagation Modelling

## 4.1 Modelling Methodology

A 3D model of the development and surroundings was developed using SoundPLAN noise propagation software considering the location and sound power levels of the dominant noise sources at the development.

The calculations were carried out as per the procedures specified in the International Standard ISO9613 (*Acoustics – Attenuation of sound during propagation outdoors*).

The calculation method for a single frequency is as follows:

$$L_S = [\ L_W + K_0\ ] - [\ A_{dI} + A_{div} + A_{gr} + A_{bar} + A_{atm} + d_{Lrefl} + d_{Lw}\ ]$$

Where:

| | |
|---|---|
| $L_S$ | Sound pressure for a single frequency |
| $L_W$ | Sound power of source |
| $K_0$ | Correction for propagation in limited spacial angle |
| $A_{DI}$ | Mean directivity correction |
| $A_{div}$ | Mean attenuation due to geometrical spreading |
| $A_{gr}$ | Mean attenuation due to ground effect |
| $A_{bar}$ | Mean attenuation due to screening |
| $A_{atm}$ | Mean attenuation due to air absorption |
| $d_{Lrefl}$ | Level increase due to reflections |
| $d_{Lw}$ | Correction due to source operation time |

The noise propagation losses are calculated as a combination of distance attenuation (geometrical spreading), screening, ground attenuation and other factors.

The results of noise modelling as per ISO9613 are in terms of $L_{eq}$. A conversion factor was applied to $L_{eq}$ to obtain results in terms of the other assessment criteria $L_{10}$ and $L_{01}$. The conversion factors are presented in Table 4.1.

Table 4.1 Noise descriptor conversion factors

| Type of noise | Conversion factors | |
|---|---|---|
| | $L_{eq}$ to $L_{10}$ | $L_{eq}$ to $L_{01}$ |
| Non-continuous noise | $L_{10} = L_{eq} + 3$ dB | $L_{01} = L_{eq} + 8$ dB |
| Continuous noise | $L_{10} = L_{eq}$ | $L_{01} = L_{eq}$ |

The assumptions and data used in development of the operational noise propagation model are presented in Table 4.2.

Table 4.2 Data and assumptions – Operational noise model

| | |
|---|---|
| **Terrain** | • Department of Natural Resources and Mines Airborne Laser Scanning (LiDAR) 1 metre data was used to determine the elevation of the development relative to the surrounds.<br>• The finished surface levels of the existing development were provided by IMEMS Pty Ltd.<br>• Ground surface absorption factor of 0 was applied to all paved surfaces and 1 for all grassed areas. |
| **Buildings** | • The existing buildings at the subject site were included in the model along with neighbouring buildings. The development layout is presented in Appendix A. |
| **Noise sources and operating times** | • Refer to Section 4.2. |
| **Receptors** | • Receptors were attached to the façades of the noise sensitive buildings at a height of 1.5m above finished floor level.<br>• SoundPLAN adds +2.5dB(A) to the calculated noise levels when the receptors are attached to the buildings, thus the noise levels are façade adjusted. |
| **Noise control measures** | • Refer to Section 5 of this report for recommended noise control measures. |
| **Distance attenuation** | • 3D model of the subject site and surroundings was developed using cadastral and survey data using SoundPLAN software. The source-receiver distances and geometrical spreading are automatically calculated in SoundPLAN to a high level of accuracy in accordance with the ISO9613 procedure.<br>• Separation distances and distance attenuation values are presented in Appendix E. |
| **Barrier attenuation / screening** | • Screening by walls and roofs was considered in the model. The screening was calculated in SoundPLAN in accordance with the ISO9613 procedure.<br>• Barrier attenuation / screening values are presented in Appendix E. |
| **Ground attenuation** | • Sound reflecting surfaces such as pavement are modelled with ground absorption coefficient of 0 (no absorption). Grassed and vegetated areas were modelled with ground absorption coefficient of 1 (100% absorption) in accordance with ISO9613.<br>• Ground attenuation values are presented in Appendix E. |

## 4.2 Noise Sources

Details of the major noise sources at the development with a potential to impact on the nearest noise sensitive places are presented in Table 4.3.

The noise sources used in Table 4.3 have been sourced from SoundPLAN emission library and noise measurements carried out at similar type of developments.

Table 4.3 Noise sources

| Operational Noise Source | Location (refer Figures 4.1 and 4.2) | Sound Power Level dB(A) (re $10^{-12}$W) | Operational Scenario | Tonality/ Impulsiveness |
|---|---|---|---|---|
| Chainsaw | Log yard | 114.0 dB(A) – Point Source<br><br>Derived from chainsaw manufacturer specifications – Stihl MS660 | 60min per day from 7:00am to 3:00pm | +5 dB for tonality |
| Combined noise from conveyor belts and timber processing tools | Covered area | 88.3 dB(A) – Area source<br><br>Derived from noise measurements at the existing timber milling and woodchipping facility at 157 Boonenne Road in Goodger. | Continuous operation 6:00am to 3:00pm | +5 dB for tonality |
| Circular saws | Covered area | 99.4 dB(A) – Point source<br><br>Derived from noise measurements at the existing timber milling and woodchipping facility at 157 Boonenne Road in Goodger. | 6min per hour from 6:00am to 3:00pm | +5 dB for tonality |
| Shredder | Eastern façade of the shredder shed | 100.2 dB(A) – Point source<br><br>Derived from noise measurements at the existing timber milling and woodchipping facility at 157 Boonenne Road in Goodger. | Continuous operation 6:00am to 3:00pm | +5 dB for tonality |
| Breakout noise – shredder shed | Shredder shed | 78.7 dB(A) sound power level per unit, radiated from the external walls and roof of the shredder shed.<br><br>Derived from noise measurements at the existing timber milling and woodchipping facility at 157 Boonenne Road in Goodger. | Continuous operation 6:00am to 3:00pm | +5 dB for tonality |
| Breakout noise – Flexishield | Eastern façade of the shredder shed | 82.7 dB(A) sound power level per unit, radiated from the northern and southern external Flexishield curtains on the Eastern façade of the shredder shed.<br><br>Derived from noise measurements at the existing timber milling and woodchipping facility at 157 Boonenne Road in Goodger. | Continuous operation 6:00am to 3:00pm | +5 dB for tonality |

| Operational Noise Source | Location (refer Figures 4.1 and 4.2) | Sound Power Level dB(A) (re $10^{-12}$W) | Operational Scenario | Tonality/ Impulsiveness |
|---|---|---|---|---|
| Truck movements | Internal driveways | 70.7dB(A) – Line source<br><br>Derived from noise measurements at the existing timber milling and woodchipping facility at 157 Boonenne Road in Goodger. | 10 movements per hour from 6:00am to 3:00pm | n/a |
| Forklift and trucks loading | Sawn timber storage and dispatch | 92.0 dB(A) – Area source<br><br>SoundPLAN Library: Truck loading low lift | Continuous operation 6:00am to 3:00pm | +5 dB for tonality |
| Staff and visitor carpark | Office area | SoundPLAN calculates[3] noise emissions from parking areas based on the number of parking bays, surface type, and the type of parking lot, and considers the impact noise of a car door closing – 'slam'.<br><br>The data input for the car parks is as follows:<br>• No. Parking Bays: 15<br>• Surface Type: Gravel<br>• Parking Lot Type: Staff and visitors | • 15 movements between 6:00am to 7:00am<br>• 8 movements per hour between 7:00am to 2:00pm<br>• 15 movements per hour between 2:00pm to 3:00pm | +5 dB for impulsiveness |

Excerpt from the SoundPLAN 3D noise propagation model is presented in Figures 4.1 and 4.2.

[3] SoundPLAN uses the methodology of the Bavarian parking lot study (2007) to calculate car park noise emissions. (Bavarian State Agency for the Environment 2007, *Parking Area Noise*, 6th Edition, Bavarian State Ministry for the Environment, Germany).

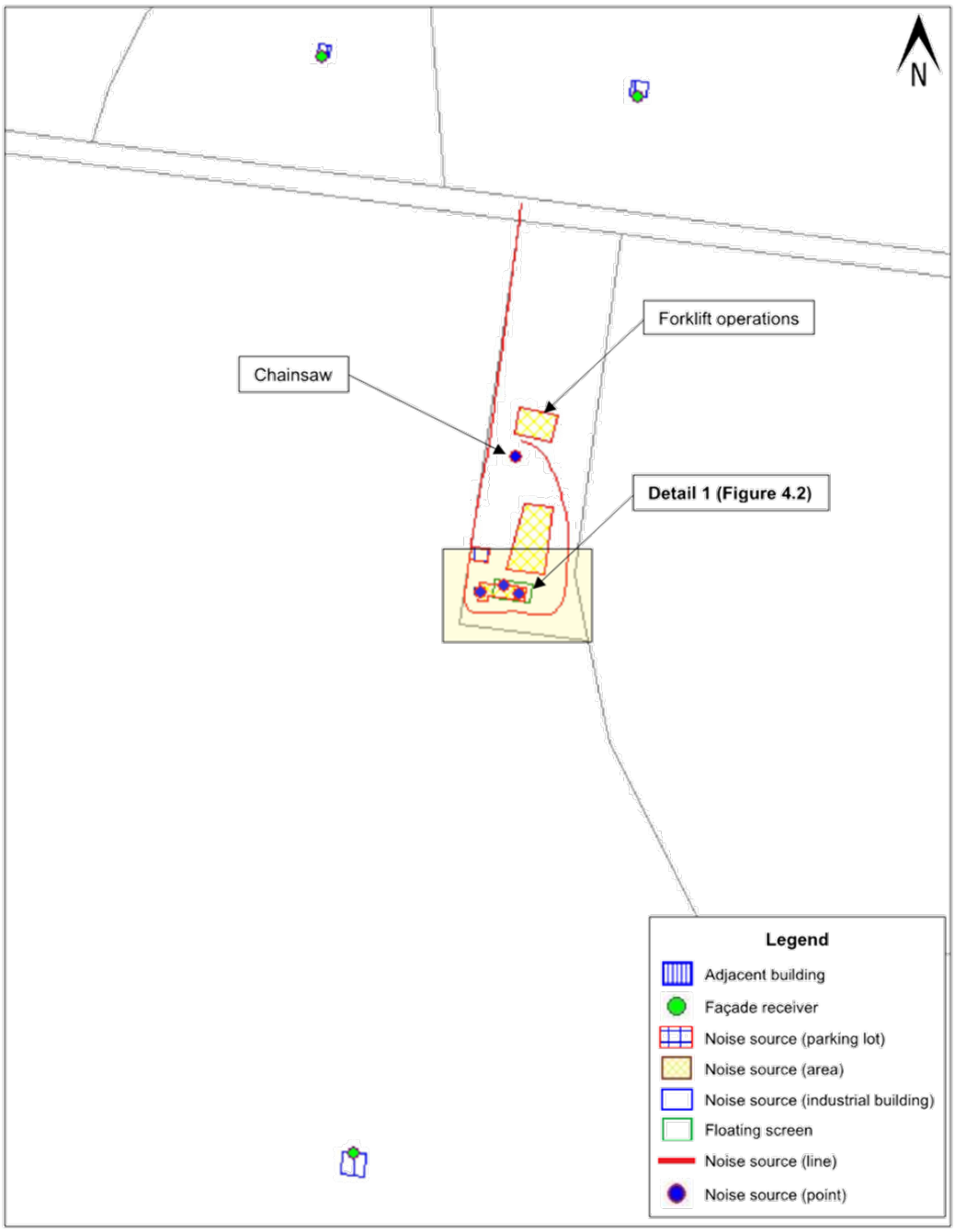



Figure 4.1 SoundPLAN operational noise model – Overview

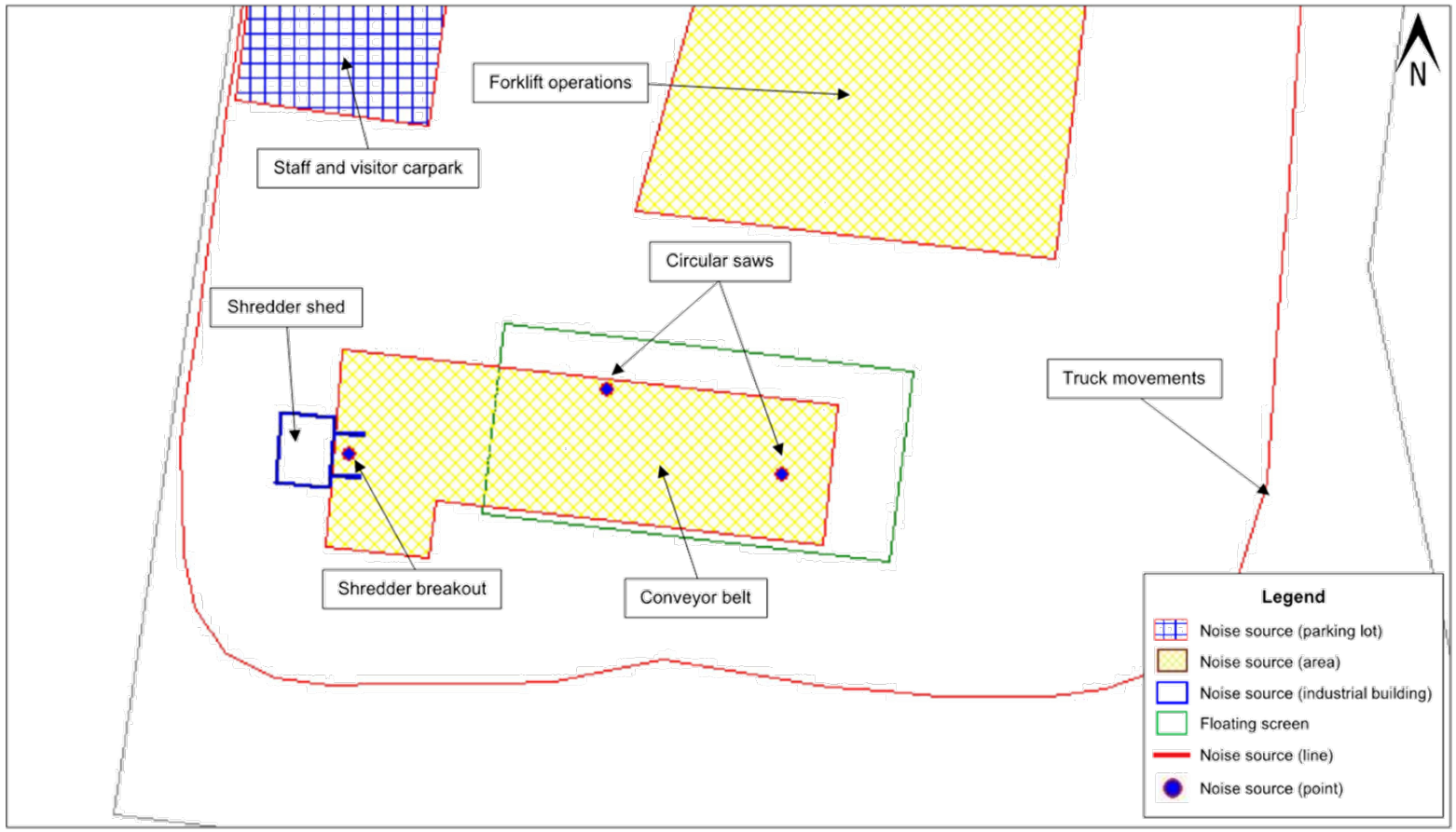



Figure 4.2 SoundPLAN operational noise model – Detail 1

## 4.3 Operational Noise Calculation Results

### 4.3.1 Acoustic Quality Objectives

Summary of the highest calculated noise levels for time interval T = 1hr at the nearest noise sensitive places, relative to the acoustic quality objectives, are presented in Table 4.4.

Table 4.4 Operational noise levels – Acoustic quality objectives

| Location | Calculated noise levels | | | | | | | | | Complies with noise criteria? |
|---|---|---|---|---|---|---|---|---|---|---|
| | $L_{eq,adj,1hr}$ day dB(A) | $L_{eq,adj,1hr}$ evening dB(A) | $L_{eq,adj,1hr}$ night dB(A) | $L_{10,adj,1hr}$ day dB(A) | $L_{10,adj,1hr}$ evening dB(A) | $L_{10,adj,1hr}$ night dB(A) | $L_{01,adj,1hr}$ day dB(A) | $L_{01,adj,1hr}$ evening dB(A) | $L_{01,adj,1hr}$ night dB(A) | |
| *EP Noise 2019 acoustic quality objectives (external criteria) for residences:* | 50 | 50 | 37 | 55 | 55 | 42 | 65 | 65 | 47 | |
| No. 156 Boonenne Road | 44 | - | 37 | 46 | - | 39 | 52 | - | 45 | Yes |
| No. 169 Boonenne Road | 39 | - | 35 | 41 | - | 37 | 47 | - | 43 | Yes |
| No. 186 Boonenne Road | 42 | - | 35 | 44 | - | 37 | 50 | - | 43 | Yes |

### 4.3.2 Background Creep

Summary of the highest calculated noise levels for the time interval T = 11hr, 4hr and 9hr at the nearest noise sensitive places, relative to the background creep criteria, are presented in Table 4.5.

Table 4.5 Operational noise levels – Background creep

| Location | Calculated noise levels | | | Complies with noise criteria? |
|---|---|---|---|---|
| | $L_{eq,adj,11hr}$ Day dB(A) | $L_{eq,adj,4hr}$ Evening dB(A) | $L_{eq,adj,9hr}$ Night dB(A) | |
| *EP Noise Policy 2008* background creep (external criteria): | | | | |
| Continuous noise | 35 | 26 | 25 | |
| Variable noise | 40 | 31 | 30 | |
| No. 156 Boonenne Road | 40 | - | 28 | Yes |
| No. 169 Boonenne Road | 36 | - | 26 | Yes |
| No. 186 Boonenne Road | 38 | - | 26 | Yes |

SoundPLAN tabulated noise levels (cumulative noise impacts) are presented in Appendix E.

Separate acoustic impacts of the individual noise sources considered in the SoundPLAN model, and the noise propagation modelling factors as per International Standard ISO9613 (*Acoustics – Attenuation of sound during propagation outdoors*) calculation method are also presented in Appendix E.

Noise propagation modelling contour maps are presented in Appendix F.

## 5. Discussion and Recommendations

Detailed noise propagation modelling was carried out considering all potential noise emissions from the operation of the existing timber milling and woodchipping facility at 157 Boonenne Road in Goodger to determine the potential noise impact on the nearest noise sensitive places.

The noise sources and operational scenarios included in this report have been considered based on the scale and intensity of the operations at the existing timber milling and woodchipping facility, because no changes are expected to the noise sources at 157 Boonenne Road in Goodger. The dominant noise sources are located at the covered work area, and these include noise from the circular saw and shredder. Other noise sources include delivery and dispatch of materials (truck movements), forklifts and staff and visitor parking.

The relevant noise criteria from the *Environmental Protection (Noise) Policy 2019* and the relevant general development provisions in accordance with the *South Burnett Regional Council Planning Scheme* were considered in this assessment.

The nearest noise sensitive residential receptors to the site are the low-set dwellings along Boonenne Road. However, it is to be noted that the dwellings are mostly used in association with rural activities or for commercial operations, rather than as Dwellings.

The results of the conservative noise propagation modelling indicate that there will be no noise impacts on the nearest noise sensitive land uses, mainly because the most dominant noise sources are located at the covered area, which is at the back of the development, approximately 330 metres from Boonenne Road and approximately 450 metres from the nearest noise sensitive use at 156 Boonenne Road.

### 5.1 Noise Mitigation Measures

To ensure ongoing compliance with the noise criteria at the nearest noise sensitive receptors, the following mitigation measures are recommended for the establishment of the existing development:

- Acoustic screen in a form of industrial PVC – Strip curtains such as *Flexishield* or similar are required for the openings (end of the conveyor belt course) on the eastern façade of the shredder shed to prevent noise impact on the nearest noise sensitive places. The alignment of the acoustic screen is presented in Figure 5.1.


Figure 5.1 Alignment of acoustic screen (shredder shed)

- The acoustic screens (curtains) should be minimum 4mm thick and with 100 to 120mm overlaps. The weighted sound reduction index should be minimum $R_w$ 18. Examples of the acoustic screens (curtains) are presented in Appendix G.
- The chainsaws should not be used during night time (6:00am to 7:00am).
- Maintenance of the blades of the circular saws should be done regularly to maintain good cutting conditions and reduce noise generated by damaged equipment.
- Mobile plant to be fitted with broadband reversing beepers. All reversing beepers should meet the relevant occupational safety requirements. This should be implemented for plant operating during night-time hours where reasonable and practicable.
- Use mufflers and engine covers/screens where appropriate for generators and mobile plant.
- Care should be taken to reduce noise when loading or unloading vehicles or moving materials wtc. Minimise drop height of materials when transferring (e.g loading and unloading vehicles and storage areas).

Provided the recommendations of this report are fully implemented, there are no further acoustic constraints on the operation of the existing timber milling and woodchipping facility at 157 Boonenne Road in Goodger.

## 6. References


- Australian Standard *AS 1055:2018 (Acoustics – Description and Measurement of Environmental Noise)*
- Australian Standard *AS/NZS IEC 61672.1-2019* (*Electroacoustics – Sound level meters – Specifications*)
- South Burnett Regional Council, Planning Scheme Version 1.4, 2017
- Department of Environment and Science (DES), *Guideline: Environmental Protection Act 1994, Application requirements for activities with noise impacts*, 3 February 2020.
- Department of Environment and Science (DES), *Noise Measurement Manual v. 4.1*, 10 March 2020
- International Standard ISO 9613 (*Acoustics – Attenuation of sound during propagation outdoors*)
- Queensland Government, *Environmental Protection Act 1994*
- Queensland Government, *Environmental Protection (Noise) Policy 2019*
- Queensland Government, *Environmental Protection Regulation 2019*

## 7. Appendices

Appendix A – Site Layout
Appendix B – Site Photos
Appendix C – Meteorological Data
Appendix D – Background Noise Measurement Results
Appendix E – Operational Noise Level
Appendix F – Noise Contour Maps
Appendix G – Acoustic Screening (Curtains)

# Appendix A – Site Layout


A Residence
B Shed (not associated with Residence)
C Sawdust stockpile
D Shredded log yard waste
E Firewood stockpile
F Equipment laydown areas
G Sawn timber load-out area
H Log yard
I Mobile machinery parking area
J Water tank, toilet and bunded diesel AST
K Sawdust from Sawmill
L Sawmill (includes workshop, sawroom & chainsaw shed
M Chipper
N Office
O Transformer
P Sawn timber storage
Q Entry/exit to sawmill
R Entry/exit to residence
S Sediment basin

Diagram 4: Site infrastructure identified (base figure Qld Globe, November 2022).

## Appendix B – Site Photos

Photo 1: Background noise monitoring location – view due north

Photo 2: Noise measurement (Front-end loader) – view due west

Client: IMEMS Pty Ltd
Doc No.: ATP230421-R-NIA-01
Doc Title: Noise Impact Assessment

# Appendix C – Meteorological Data

# Kingaroy, Queensland
# June 2023 Daily Weather Observations

Australian Government
Bureau of Meteorology

| Date | Day | Temps | | Rain | Evap | Sun | Max wind gust | | | 9am | | | | | | 3pm | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Min | Max | | | | Dirn | Spd | Time | Temp | RH | Cld | Dirn | Spd | MSLP | Temp | RH | Cld | Dirn | Spd | MSLP |
| | | °C | °C | mm | mm | hours | | km/h | local | °C | % | eighths | | km/h | hPa | °C | % | eighths | | km/h | hPa |
| 1 | Th | 1.9 | 23.7 | 0 | | | NW | 24 | 10:25 | 14.1 | 67 | | | Calm | 1023.0 | 23.1 | 30 | | SW | 9 | 1019.3 |
| 2 | Fr | 3.2 | 24.2 | 0 | | | E | 20 | 10:15 | 14.5 | 65 | | | Calm | 1024.4 | 23.6 | 37 | | E | 11 | 1021.7 |
| 3 | Sa | 10.4 | 22.2 | 0 | | | ESE | 24 | 10:53 | 15.8 | 96 | | SSE | 13 | 1026.9 | 21.4 | 51 | | ENE | 9 | 1023.8 |
| 4 | Su | 12.4 | 19.1 | 0.8 | | | ESE | 33 | 18:35 | 16.3 | 100 | | ESE | 9 | 1027.4 | 18.7 | 90 | | ESE | 15 | 1024.5 |
| 5 | Mo | 13.5 | 17.9 | 1.8 | | | SE | 39 | 14:47 | 15.5 | 99 | | ESE | 17 | 1027.4 | 14.8 | 99 | | ESE | 19 | 1024.6 |
| 6 | Tu | 12.0 | 20.8 | 0.2 | | | ESE | 39 | 09:06 | 15.1 | 85 | | ESE | 17 | 1027.9 | 19.3 | 56 | | ESE | 15 | 1024.4 |
| 7 | We | 7.2 | 21.2 | 0 | | | E | 39 | 11:03 | 14.4 | 94 | | ESE | 11 | 1027.1 | 19.3 | 51 | | E | 13 | 1023.0 |
| 8 | Th | 6.0 | 22.4 | 0.4 | | | | | | 14.5 | 100 | | SSE | 4 | 1023.2 | 20.8 | 54 | | NNW | 11 | 1017.9 |
| 9 | Fr | 8.9 | | | | | | | | 12.3 | 100 | | | Calm | 1019.6 | 20.3 | 38 | | WSW | 13 | 1018.0 |
| 10 | Sa | -1.0 | 21.2 | | | | E | 22 | 11:03 | 13.0 | 61 | | S | 13 | 1023.5 | 20.7 | 31 | | ENE | 7 | 1020.2 |
| 11 | Su | 3.2 | 21.5 | 0 | | | E | 30 | 10:28 | 15.0 | 85 | | ESE | 13 | 1025.0 | 20.3 | 49 | | SE | 15 | 1021.1 |
| 12 | Mo | 5.4 | 21.5 | 0 | | | SSE | 30 | 14:16 | 13.2 | 100 | | S | 11 | 1023.7 | 19.0 | 60 | | ESE | 15 | 1019.4 |
| 13 | Tu | 11.1 | 24.3 | 0 | | | WNW | 41 | 11:46 | 12.6 | 100 | | S | 6 | 1020.2 | 22.9 | 38 | | SW | 19 | 1015.3 |
| 14 | We | 2.6 | 22.7 | 0 | | | W | 46 | 11:34 | 13.4 | 70 | | | Calm | 1018.6 | 21.5 | 25 | | WSW | 19 | 1016.0 |
| 15 | Th | -2.3 | 20.7 | 0 | | | SSE | 35 | 08:40 | 12.1 | 52 | | SSE | 20 | 1019.6 | 19.9 | 25 | | WSW | 15 | 1015.6 |
| 16 | Fr | -2.4 | 19.6 | 0 | | | S | 30 | 09:37 | 10.3 | 68 | | WNW | 7 | 1021.9 | 19.5 | 21 | | SSW | 15 | 1018.5 |
| 17 | Sa | -1.5 | 21.0 | 0 | | | ESE | 20 | 10:14 | 12.0 | 73 | | | Calm | 1023.2 | 20.1 | 31 | | NNW | 13 | 1018.9 |
| 18 | Su | 1.9 | 23.1 | 0 | | | SW | 31 | 22:17 | 10.5 | 94 | | | Calm | 1020.9 | 22.4 | 31 | | W | 13 | 1015.9 |
| 19 | Mo | 0.5 | 22.0 | 0 | | | WSW | 35 | 13:44 | 12.6 | 57 | | SSW | 7 | 1020.0 | 20.8 | 26 | | WSW | 19 | 1016.3 |
| 20 | Tu | -2.3 | 19.2 | 0 | | | SSW | 41 | 08:29 | 12.2 | 43 | | S | 24 | 1021.1 | 18.5 | 26 | | SSW | 17 | 1018.3 |
| 21 | We | -0.7 | 20.6 | 0 | | | E | 26 | 09:52 | 13.4 | 54 | | | Calm | 1023.3 | 20.2 | 30 | | N | 7 | 1019.6 |
| 22 | Th | 4.6 | 21.9 | 0 | | | NNW | 31 | 11:29 | 14.3 | 68 | | E | 7 | 1021.5 | 20.7 | 40 | | N | 13 | 1016.6 |
| 23 | Fr | 9.2 | 23.8 | 0 | | | WNW | 43 | 11:43 | 16.6 | 83 | | NNW | 20 | 1017.1 | 23.0 | 45 | | W | 22 | 1014.4 |
| 24 | Sa | 0.9 | 24.7 | 0 | | | W | 37 | 13:34 | 10.8 | 75 | | | Calm | 1019.3 | 24.0 | 23 | | W | 15 | 1015.7 |
| 25 | Su | 1.9 | 27.7 | 0 | | | WSW | 46 | 13:48 | 13.6 | 53 | | | Calm | 1020.1 | 26.4 | 24 | | WSW | 28 | 1016.3 |
| 26 | Mo | 6.6 | 24.4 | 0 | | | WSW | 35 | 13:26 | 17.3 | 44 | | | Calm | 1020.6 | 22.7 | 23 | | SW | 19 | 1018.0 |
| 27 | Tu | 2.8 | 24.0 | 0 | | | S | 35 | 09:42 | 15.6 | 27 | | S | 20 | 1022.1 | 23.7 | 11 | | SSE | 7 | 1019.0 |
| 28 | We | 6.4 | 26.9 | 0 | | | SW | 39 | 22:12 | 15.3 | 54 | | NW | 9 | 1020.9 | 25.5 | 31 | | NW | 20 | 1014.8 |
| 29 | Th | 12.8 | 17.3 | 0 | | | SW | 46 | 05:13 | 13.7 | 76 | | SW | 17 | 1017.4 | 15.1 | 56 | | WSW | 20 | 1017.0 |
| 30 | Fr | -0.1 | 18.1 | 0 | | | SSW | 31 | 00:01 | 8.4 | 60 | | WNW | 6 | 1022.4 | 16.8 | 25 | | SSW | 19 | 1018.9 |
| **Statistics for June 2023** | | | | | | | | | | | | | | | | | | | | | |
| Mean | | 4.5 | 22.0 | | | | | | | 13.6 | 73 | | | 8 | 1022.3 | 20.8 | 39 | | | 15 | 1018.8 |
| Lowest | | -2.4 | 17.3 | | | | | | | 8.4 | 27 | | | Calm | 1017.1 | 14.8 | 11 | | # | 7 | 1014.4 |
| Highest | | 13.5 | 27.7 | 1.8 | | | # | 46 | | 17.3 | 100 | | S | 24 | 1027.9 | 26.4 | 99 | | WSW | 28 | 1024.6 |
| Total | | | | 3.2 | | | | | | | | | | | | | | | | | |

Observations were drawn from Kingaroy Airport (station 040922)

IDCJDW4069.202306 Prepared at 13:01 UTC on 2 Jul 2023



ument Set ID: 3111589
ion: 1, Version Date: 21/12/2023

## Appendix D – Background Noise Measurement Results

Client: IMEMS Pty Ltd
Doc No.: ATP230421-R-NIA-01
Doc Title: Noise Impact Assessment

## Unattended Noise Measurements
## Boonenne Timbers

Environmental Noise Levels Day, Evening and Night

**Logger Location - Southern boundary of Lot 3 on RP15595**

| | |
|---|---|
| ARL Environmental Noise Logger | |
| Logger Serial Number | 8780D2 |
| Measurement Title | 20230621_130816 |
| Measurement started at | 21/06 13:15 |
| Measurement stopped at | 02/07 12:45 |
| Frequency Weighting | A |
| Time Averaging | Fast |
| Statistical Interval | 15 min |
| Pre-measurement Ref. | 94.0 |
| Post-measurement Ref. | 93.9 |
| Engineering Units | dB SPL |

| | | $L_{Aeq,T}$ dB(A) | | | $L_{A01,T}$ dB(A) | | | $L_{A10,T}$ dB(A) | | | $L_{A90,T}$ dB(A) | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Date** | **Day** | **D** | **E** | **N** | **D** | **E** | **N** | **D** | **E** | **N** | **D** | **E** | **N** |
| 21/06/2023 | Wednesday | — | 32 | 30 | — | 41 | 38 | — | 35 | 32 | — | 26 | 24 |
| 22/06/2023 | Thursday | 48 | 35 | 33 | 60 | 43 | 42 | 48 | 38 | 35 | 35 | 30 | 27 |
| 23/06/2023 | Friday | 47 | 33 | 27 | 57 | 40 | 36 | 48 | 35 | 29 | 38 | 26 | 22 |
| 24/06/2023 | Saturday | 45 | 28 | 29 | 56 | 36 | 38 | 46 | 30 | 30 | 35 | 22 | 22 |
| 25/06/2023 | Sunday | 45 | 30 | 28 | 55 | 37 | 36 | 47 | 32 | 29 | 35 | 25 | 23 |
| 26/06/2023 | Monday | 46 | 28 | 28 | 58 | 36 | 35 | 47 | 31 | 28 | 37 | 22 | 23 |
| 27/06/2023 | Tuesday | 43 | 36 | 31 | 55 | 46 | 40 | 42 | 35 | 33 | 33 | 25 | 24 |
| 28/06/2023 | Wednesday | 44 | 36 | 38 | 55 | 43 | 45 | 45 | 38 | 40 | 36 | 30 | 32 |
| 29/06/2023 | Thursday | 47 | 35 | 32 | 57 | 43 | 38 | 47 | 37 | 33 | 39 | 29 | 26 |
| 30/06/2023 | Friday | 45 | 30 | 27 | 57 | 38 | 35 | 45 | 31 | 29 | 34 | 23 | 22 |
| 1/07/2023 | Saturday | 44 | 28 | 31 | 57 | 35 | 38 | 43 | 30 | 33 | 29 | 22 | 25 |
| **Average** | | **45** | **32** | **30** | **57** | **40** | **38** | **46** | **34** | **32** | **35** | **26** | **25** |

***Note***

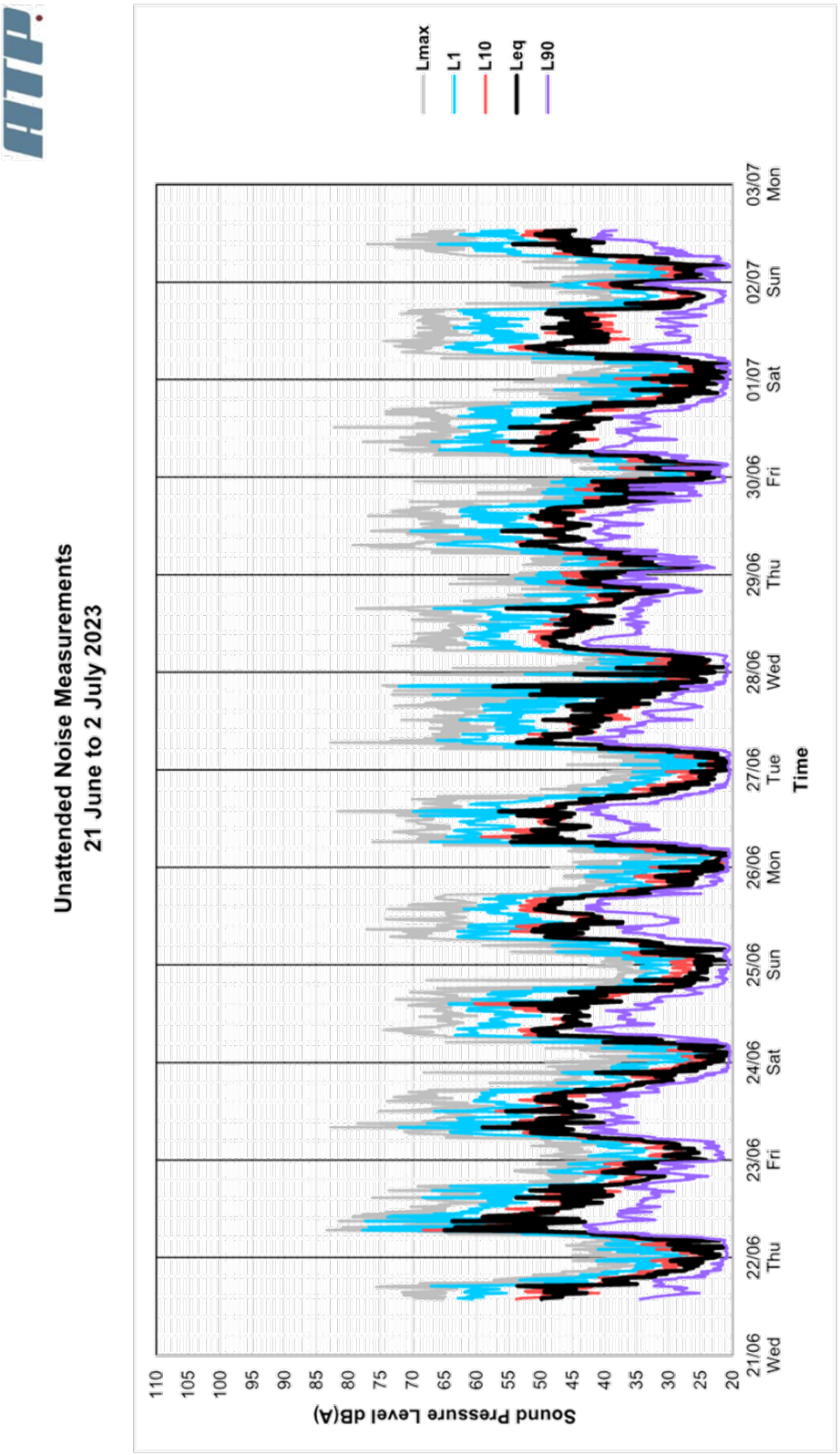
— No noise data available

Day (D): 7:00am to 6:00pm

Evening (E): 6:00pm to 10:00pm

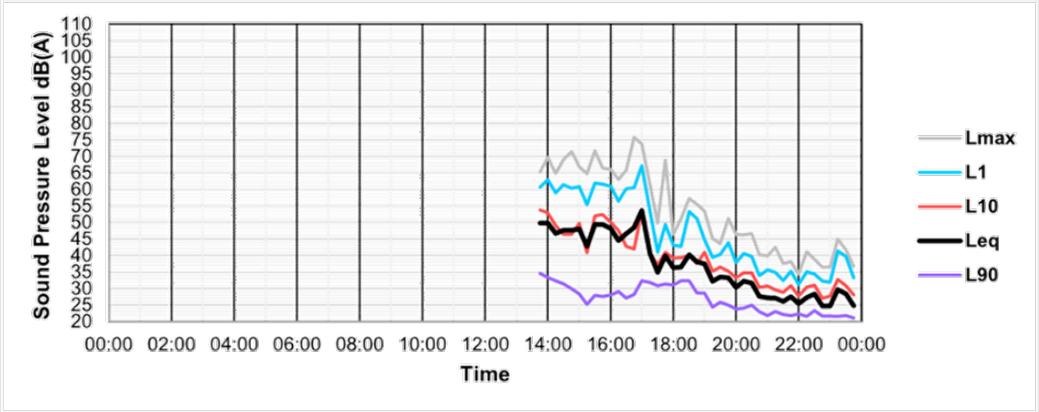
Night (N): 10:00pm to 7:00am

Rainfall recorded on this day

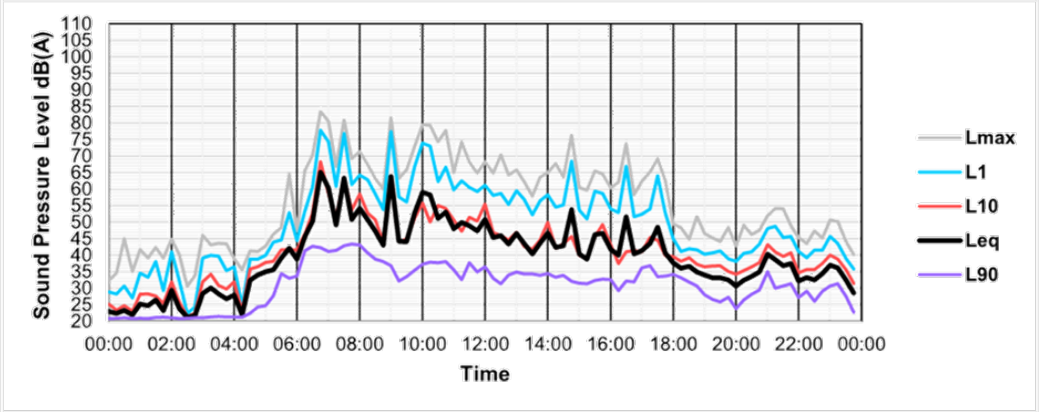



ument Set ID: 3111589
ion: 1, Version Date: 21/12/2023

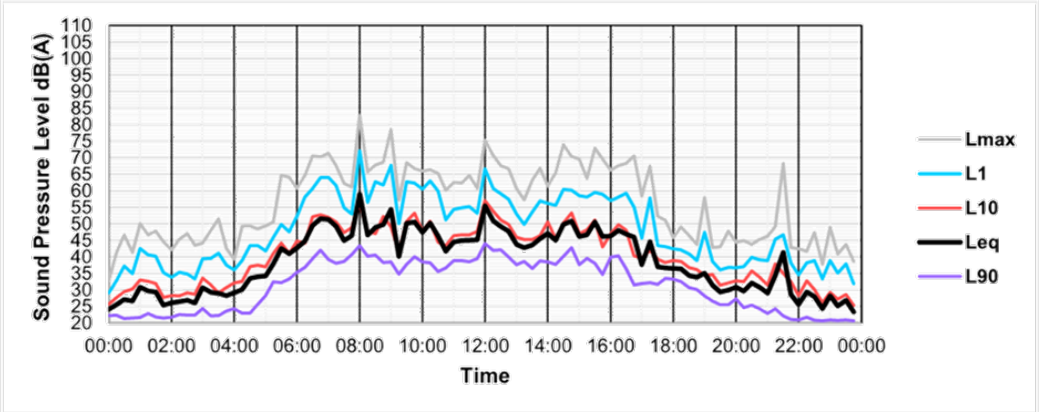
**Unattended Noise Measurements**
**Wednesday 21 June 2023**



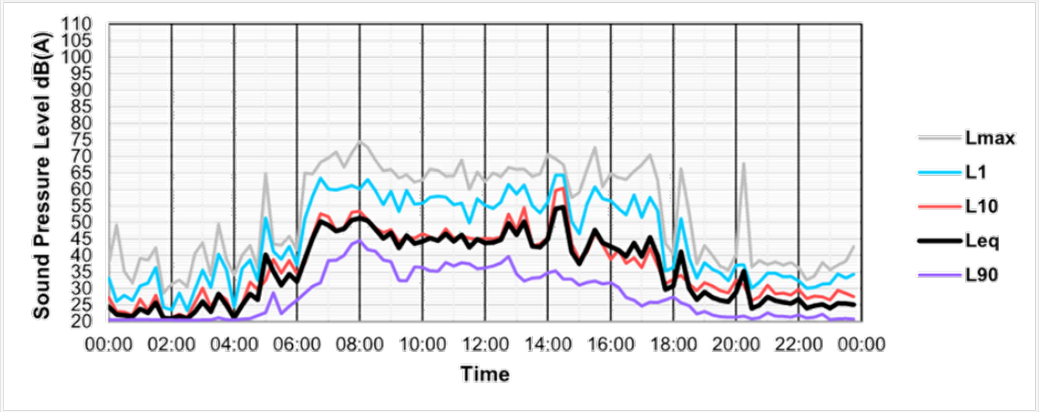

**Unattended Noise Measurements**
**Thursday 22 June 2023**



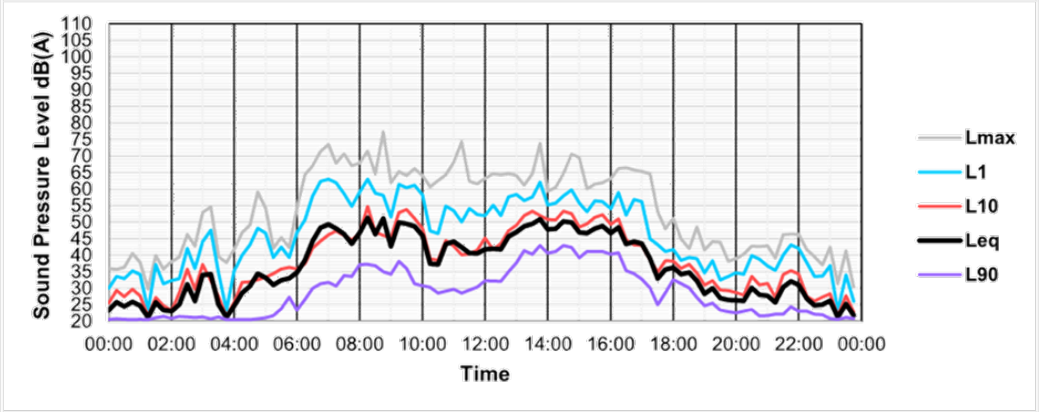

**Unattended Noise Measurements**
**Friday 23 June 2023**



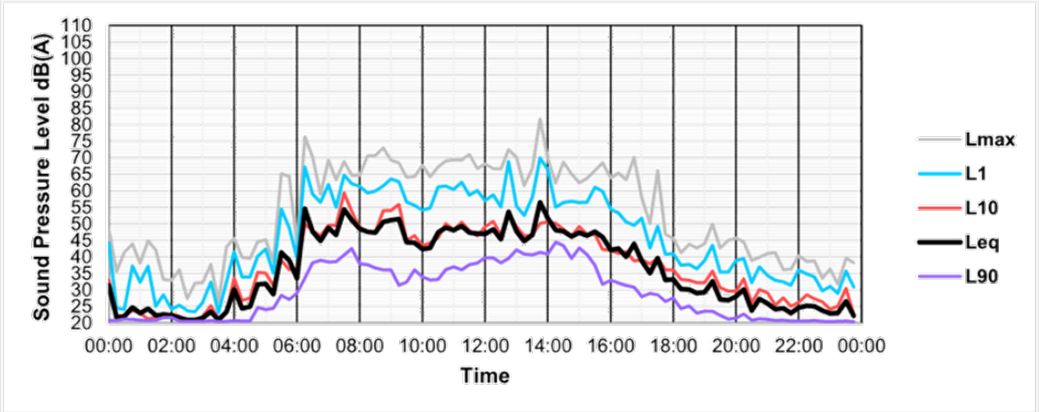
**Unattended Noise Measurements**
**Saturday 24 June 2023**



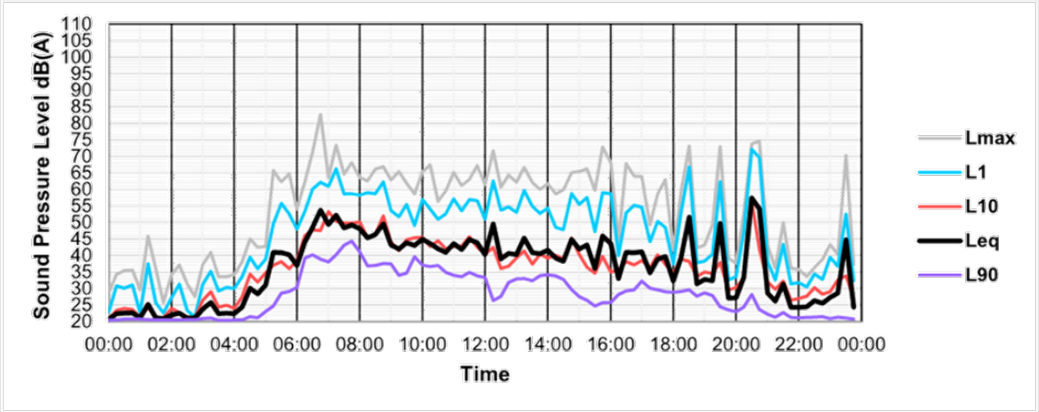

**Unattended Noise Measurements**
**Sunday 25 June 2023**



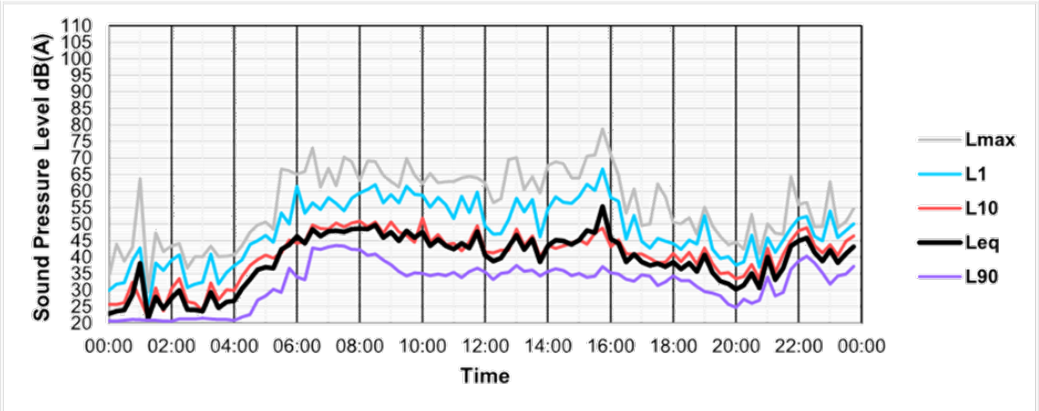

**Unattended Noise Measurements**
**Monday 26 June 2023**



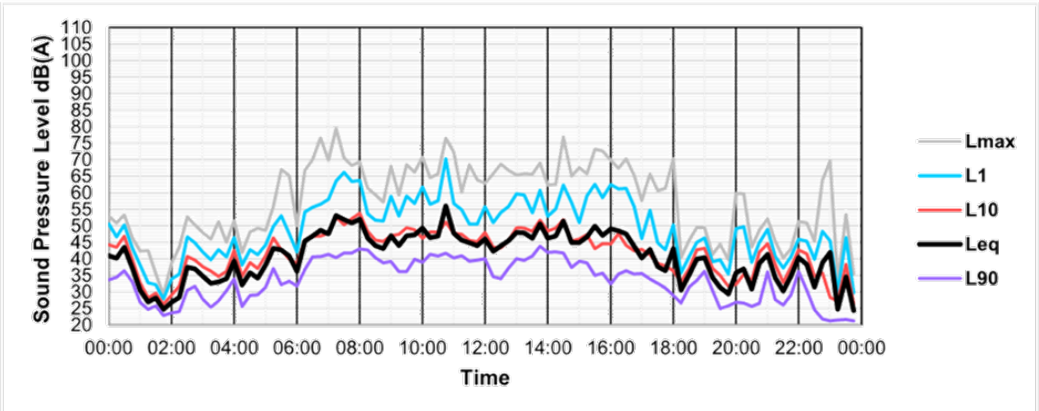
**Unattended Noise Measurements**
**Tuesday 27 June 2023**



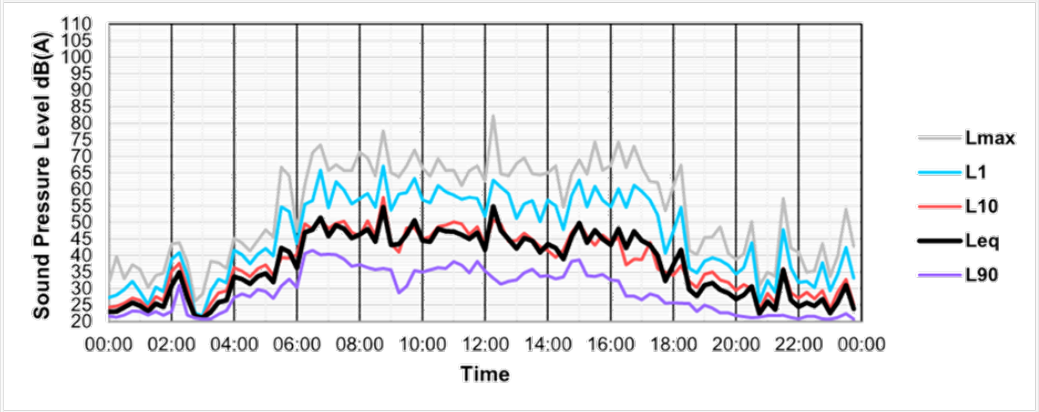

**Unattended Noise Measurements**
**Wednesday 28 June 2023**



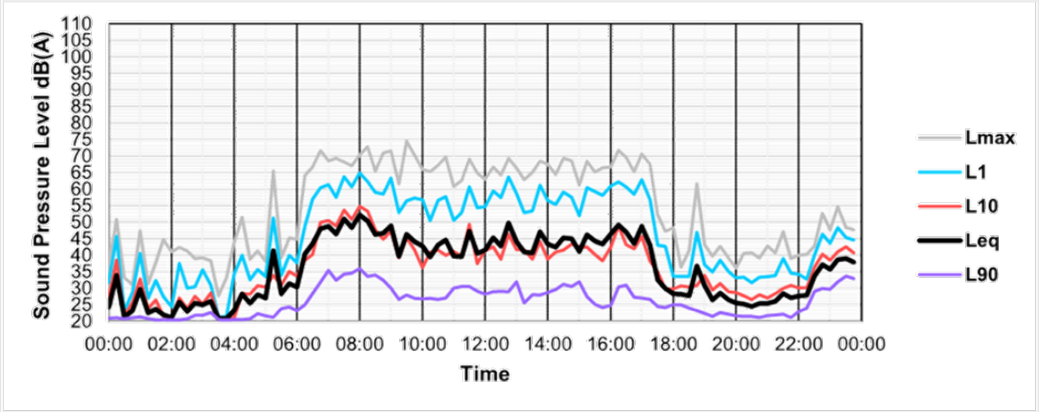

**Unattended Noise Measurements**
**Thursday 29 June 2023**



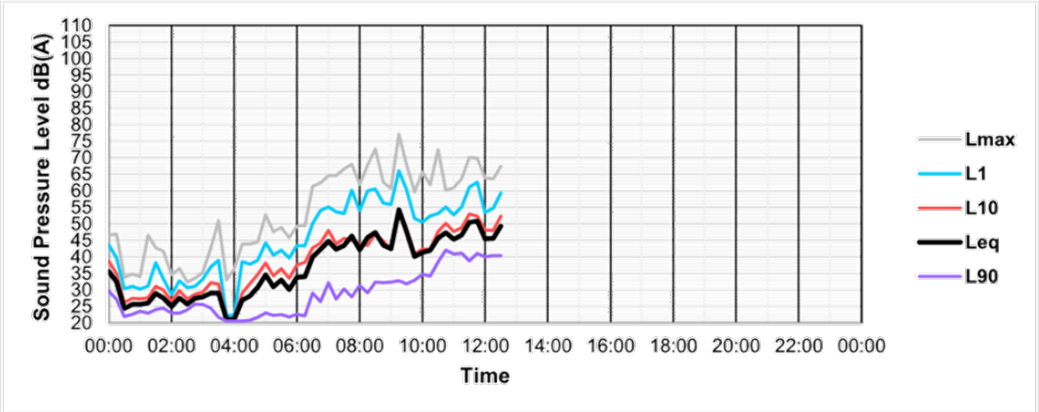
**Unattended Noise Measurements**
**Friday 30 June 2023**




**Unattended Noise Measurements**
**Saturday 1 July 2023**




**Unattended Noise Measurements**
**Sunday 2 July 2023**



## Appendix E – Operational Noise Level

Client: IMEMS Pty Ltd
Doc No.: ATP230421-R-NIA-01
Doc Title: Noise Impact Assessment

Boonenne Timbers
ISO9613 Calculation Method
Predicted Operational Noise Levels at Adjacent Uses
From Activities at Proposed Development

**Legend**

| | | |
|---|---|---|
| Source | | Name of source |
| Source type | | Type of source (point, line, area) |
| time slice | | Name of time slice |
| Li | dB(A) | Level inside |
| R'w | dB | Rated transmission loss |
| L'w | dB(A) | Sound power per m, m² |
| Lw | dB(A) | Sound power per unit |
| l or A | m,m² | Size of source (Length or area) |
| KI | dB | Correction for source impulsiveness |
| KT | dB | Correction for source tonality |
| Ko | dB | Correction for propagation in limited spacial angle |
| S | m | Distance source - receiver |
| Adiv | dB | Mean attenuation due to geometrical spreading |
| Agr | dB | Mean attenuation due to ground effect |
| Abar | dB | Mean attenuation due to screening |
| Aatm | dB | Mean attenuation due to air absorption |
| Amisc | dB | Mean attenuation due to foliage, industrial areas and building areas |
| ADI | dB | Mean directivity correction |
| dLrefl | dB(A) | Level increase due to reflections |
| Ls | dB(A) | Unassessed sound pressure level at receiver Ls=Lw+Ko+ADI+Adiv+Agr+Abar+Aatm+Afol_site_house+Awind+dLrefl |
| dLw | dB | Correction due to source operation time |
| Cmet | dB | Meteorological correction |
| ZR | dB | Correction for rest periods |
| Lr | dB(A) | Assessed level of time slice |

# Boonenne Timbers
## ISO9613 Calculation Method
## Predicted Operational Noise Levels at Adjacent Uses
## From Activities at Proposed Development

| Source | Source type | time slice | Li | R'w | L'w | Lw | l or A | KI | KT | Ko | S | Adiv | Agr | Abar | Aatm | Amisc | ADI | dLrefl | Ls | dLw | Cmet | ZR | Lr |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | B(A | dB | dB(A) | dB(A) | m,m² | dB | dB | dB | m | dB | dB | dB | dB | dB | dB | dB(A) | dB(A) | dB | dB | dB | dB(A) |
| Receiver 156 Boonenne Road FI GF Dir S | Lr,lim dB(A) | Leq,15min 44 dB(A) | | | Lr,lim dB(A) | | Lr,lim dB(A) | | Lr,lim dB(A) | | Lr,lim dB(A) | Leq,adj,1h dB(A) | | | Leq,adj,1h 37 dB(A) | | Leq,adj,11 40 dB(A) | | Leq,adj,4h dB(A) | | Leq,adj,9h 28 dB(A) | | |
| Chainsaw | Point | Leq,adj,1h | | | 114.0 | 114.0 | | 0.0 | 5.0 | 0 | 331.31 | -61.4 | -1.3 | -4.0 | -4.6 | | 0.0 | 0.0 | 42.7 | -4.8 | 0.0 | 0.0 | 42.9 |
| Chainsaw | Point | Leq,adj,1h | | | 114.0 | 114.0 | | 0.0 | 5.0 | 0 | 331.31 | -61.4 | -1.3 | -4.0 | -4.6 | | 0.0 | 0.0 | 42.7 | | | | |
| Chainsaw | Point | Leq,adj,1h | | | 114.0 | 114.0 | | 0.0 | 5.0 | 0 | 331.31 | -61.4 | -1.3 | -4.0 | -4.6 | | 0.0 | 0.0 | 42.7 | | 0.0 | | |
| Chainsaw | Point | Leq,adj,11 | | | 114.0 | 114.0 | | 0.0 | 5.0 | 0 | 331.31 | -61.4 | -1.3 | -4.0 | -4.6 | | 0.0 | 0.0 | 42.7 | -10.4 | 0.0 | 0.0 | 37.3 |
| Chainsaw | Point | Leq,adj,4h | | | 114.0 | 114.0 | | 0.0 | 5.0 | 0 | 331.31 | -61.4 | -1.3 | -4.0 | -4.6 | | 0.0 | 0.0 | 42.7 | | 0.0 | | |
| Chainsaw | Point | Leq,adj,9h | | | 114.0 | 114.0 | | 0.0 | 5.0 | 0 | 331.31 | -61.4 | -1.3 | -4.0 | -4.6 | | 0.0 | 0.0 | 42.7 | | 0.0 | | |
| Circular Saw_1 | Point | Leq,adj,1h | | | 99.4 | 99.4 | | 0.0 | 5.0 | 0 | 445.73 | -64.0 | -1.3 | -2.5 | -4.9 | | 0.0 | 0.0 | 26.7 | 0.0 | 0.0 | 0.0 | 31.7 |
| Circular Saw_1 | Point | Leq,adj,1h | | | 99.4 | 99.4 | | 0.0 | 5.0 | 0 | 445.73 | -64.0 | -1.3 | -2.5 | -4.9 | | 0.0 | 0.0 | 26.7 | | | | |
| Circular Saw_1 | Point | Leq,adj,1h | | | 99.4 | 99.4 | | 0.0 | 5.0 | 0 | 445.73 | -64.0 | -1.3 | -2.5 | -4.9 | | 0.0 | 0.0 | 26.7 | -3.0 | 0.0 | 0.0 | 28.7 |
| Circular Saw_1 | Point | Leq,adj,11 | | | 99.4 | 99.4 | | 0.0 | 5.0 | 0 | 445.73 | -64.0 | -1.3 | -2.5 | -4.9 | | 0.0 | 0.0 | 26.7 | -1.4 | 0.0 | 0.0 | 30.3 |
| Circular Saw_1 | Point | Leq,adj,4h | | | 99.4 | 99.4 | | 0.0 | 5.0 | 0 | 445.73 | -64.0 | -1.3 | -2.5 | -4.9 | | 0.0 | 0.0 | 26.7 | | 0.0 | | |
| Circular Saw_1 | Point | Leq,adj,9h | | | 99.4 | 99.4 | | 0.0 | 5.0 | 0 | 445.73 | -64.0 | -1.3 | -2.5 | -4.9 | | 0.0 | 0.0 | 26.7 | -12.6 | 0.0 | 0.0 | 19.1 |
| Circular Saw_2 | Point | Leq,adj,1h | | | 99.4 | 99.4 | | 0.0 | 5.0 | 0 | 442.66 | -63.9 | -1.3 | -3.1 | -4.6 | | 0.0 | 0.0 | 26.4 | 0.0 | 0.0 | 0.0 | 31.4 |
| Circular Saw_2 | Point | Leq,adj,1h | | | 99.4 | 99.4 | | 0.0 | 5.0 | 0 | 442.66 | -63.9 | -1.3 | -3.1 | -4.6 | | 0.0 | 0.0 | 26.4 | | | | |
| Circular Saw_2 | Point | Leq,adj,1h | | | 99.4 | 99.4 | | 0.0 | 5.0 | 0 | 442.66 | -63.9 | -1.3 | -3.1 | -4.6 | | 0.0 | 0.0 | 26.4 | -3.0 | 0.0 | 0.0 | 28.4 |
| Circular Saw_2 | Point | Leq,adj,11 | | | 99.4 | 99.4 | | 0.0 | 5.0 | 0 | 442.66 | -63.9 | -1.3 | -3.1 | -4.6 | | 0.0 | 0.0 | 26.4 | -1.4 | 0.0 | 0.0 | 30.0 |
| Circular Saw_2 | Point | Leq,adj,4h | | | 99.4 | 99.4 | | 0.0 | 5.0 | 0 | 442.66 | -63.9 | -1.3 | -3.1 | -4.6 | | 0.0 | 0.0 | 26.4 | | 0.0 | | |
| Circular Saw_2 | Point | Leq,adj,9h | | | 99.4 | 99.4 | | 0.0 | 5.0 | 0 | 442.66 | -63.9 | -1.3 | -3.1 | -4.6 | | 0.0 | 0.0 | 26.4 | -12.6 | 0.0 | 0.0 | 18.9 |
| Conveyor Belt | Area | Leq,adj,1h | | | 61.4 | 88.3 | 487.2 | 0.0 | 5.0 | 0 | 448.28 | -64.0 | -0.1 | -3.3 | -1.4 | | 0.0 | 0.0 | 19.4 | 0.0 | 0.0 | 0.0 | 24.4 |
| Conveyor Belt | Area | Leq,adj,1h | | | 61.4 | 88.3 | 487.2 | 0.0 | 5.0 | 0 | 448.28 | -64.0 | -0.1 | -3.3 | -1.4 | | 0.0 | 0.0 | 19.4 | | | | |
| Conveyor Belt | Area | Leq,adj,1h | | | 61.4 | 88.3 | 487.2 | 0.0 | 5.0 | 0 | 448.28 | -64.0 | -0.1 | -3.3 | -1.4 | | 0.0 | 0.0 | 19.4 | 0.0 | 0.0 | 0.0 | 24.4 |
| Conveyor Belt | Area | Leq,adj,11 | | | 61.4 | 88.3 | 487.2 | 0.0 | 5.0 | 0 | 448.28 | -64.0 | -0.1 | -3.3 | -1.4 | | 0.0 | 0.0 | 19.4 | -1.4 | 0.0 | 0.0 | 23.1 |
| Conveyor Belt | Area | Leq,adj,4h | | | 61.4 | 88.3 | 487.2 | 0.0 | 5.0 | 0 | 448.28 | -64.0 | -0.1 | -3.3 | -1.4 | | 0.0 | 0.0 | 19.4 | | 0.0 | | |
| Conveyor Belt | Area | Leq,adj,9h | | | 61.4 | 88.3 | 487.2 | 0.0 | 5.0 | 0 | 448.28 | -64.0 | -0.1 | -3.3 | -1.4 | | 0.0 | 0.0 | 19.4 | -9.5 | 0.0 | 0.0 | 14.9 |
| Forklift_North | Area | Leq,adj,1h | | | 63.2 | 92.0 | 768.7 | 0.0 | 5.0 | 0 | 299.98 | -60.5 | -1.2 | -4.0 | -4.3 | | 0.0 | 0.0 | 22.0 | 0.0 | 0.0 | 0.0 | 27.0 |
| Forklift_North | Area | Leq,adj,1h | | | 63.2 | 92.0 | 768.7 | 0.0 | 5.0 | 0 | 299.98 | -60.5 | -1.2 | -4.0 | -4.3 | | 0.0 | 0.0 | 22.0 | | | | |
| Forklift_North | Area | Leq,adj,1h | | | 63.2 | 92.0 | 768.7 | 0.0 | 5.0 | 0 | 299.98 | -60.5 | -1.2 | -4.0 | -4.3 | | 0.0 | 0.0 | 22.0 | 0.0 | 0.0 | 0.0 | 27.0 |
| Forklift_North | Area | Leq,adj,11 | | | 63.2 | 92.0 | 768.7 | 0.0 | 5.0 | 0 | 299.98 | -60.5 | -1.2 | -4.0 | -4.3 | | 0.0 | 0.0 | 22.0 | -1.4 | 0.0 | 0.0 | 25.6 |
| Forklift_North | Area | Leq,adj,4h | | | 63.2 | 92.0 | 768.7 | 0.0 | 5.0 | 0 | 299.98 | -60.5 | -1.2 | -4.0 | -4.3 | | 0.0 | 0.0 | 22.0 | | 0.0 | | |
| Forklift_North | Area | Leq,adj,9h | | | 63.2 | 92.0 | 768.7 | 0.0 | 5.0 | 0 | 299.98 | -60.5 | -1.2 | -4.0 | -4.3 | | 0.0 | 0.0 | 22.0 | -9.5 | 0.0 | 0.0 | 17.5 |
| Forklift_South | Area | Leq,adj,1h | | | 59.7 | 92.0 | 1721.7 | 0.0 | 5.0 | 0 | 396.82 | -63.0 | -1.3 | -3.4 | -5.4 | | 0.0 | 0.0 | 18.9 | 0.0 | 0.0 | 0.0 | 23.9 |

Boonenne Timbers
ISO9613 Calculation Method
Predicted Operational Noise Levels at Adjacent Uses
From Activities at Proposed Development

| Source | Source type | time slice | Li | R'w | L'w | Lw | l or A | Kl | KT | Ko | S | Adiv | Agr | Abar | Aatm | Amisc | ADI | dLrefl | Ls | dLw | Cmet | ZR | Lr |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | B(A | dB | dB(A) | dB(A) | m,m² | dB | dB | dB | m | dB | dB | dB | dB | dB | dB | dB(A) | dB(A) | dB | dB | dB | dB(A) |
| Forklift_South | Area | Leq,adj,1h | | | 59.7 | 92.0 | 1721.7 | 0.0 | 5.0 | 0 | 396.82 | -63.0 | -1.3 | -3.4 | -5.4 | | 0.0 | 0.0 | 18.9 | | | | |
| Forklift_South | Area | Leq,adj,1h | | | 59.7 | 92.0 | 1721.7 | 0.0 | 5.0 | 0 | 396.82 | -63.0 | -1.3 | -3.4 | -5.4 | | 0.0 | 0.0 | 18.9 | 0.0 | 0.0 | 0.0 | 23.9 |
| Forklift_South | Area | Leq,adj,1l | | | 59.7 | 92.0 | 1721.7 | 0.0 | 5.0 | 0 | 396.82 | -63.0 | -1.3 | -3.4 | -5.4 | | 0.0 | 0.0 | 18.9 | -1.4 | 0.0 | 0.0 | 22.5 |
| Forklift_South | Area | Leq,adj,4h | | | 59.7 | 92.0 | 1721.7 | 0.0 | 5.0 | 0 | 396.82 | -63.0 | -1.3 | -3.4 | -5.4 | | 0.0 | 0.0 | 18.9 | | 0.0 | | |
| Forklift_South | Area | Leq,adj,9h | | | 59.7 | 92.0 | 1721.7 | 0.0 | 5.0 | 0 | 396.82 | -63.0 | -1.3 | -3.4 | -5.4 | | 0.0 | 0.0 | 18.9 | -9.5 | 0.0 | 0.0 | 14.4 |
| North Flexi Wall-Breakout North Flexishield | Area | Leq,adj,1h | | | 76.0 | 82.7 | 4.6 | 0.0 | 0.0 | 3 | 451.77 | -64.1 | -4.8 | -1.8 | -0.8 | | 0.0 | 0.0 | 14.2 | 0.0 | 0.0 | 0.0 | 14.2 |
| North Flexi Wall-Breakout North Flexishield | Area | Leq,adj,1h | | | 76.0 | 82.7 | 4.6 | 0.0 | 0.0 | 3 | 451.77 | -64.1 | -4.8 | -1.8 | -0.8 | | 0.0 | 0.0 | 14.2 | | | | |
| North Flexi Wall-Breakout North Flexishield | Area | Leq,adj,1h | | | 76.0 | 82.7 | 4.6 | 0.0 | 0.0 | 3 | 451.77 | -64.1 | -4.8 | -1.8 | -0.8 | | 0.0 | 0.0 | 14.2 | -3.0 | 0.0 | 0.0 | 11.2 |
| North Flexi Wall-Breakout North Flexishield | Area | Leq,adj,11 | | | 76.0 | 82.7 | 4.6 | 0.0 | 0.0 | 3 | 451.77 | -64.1 | -4.8 | -1.8 | -0.8 | | 0.0 | 0.0 | 14.2 | -1.4 | 0.0 | 0.0 | 12.8 |
| North Flexi Wall-Breakout North Flexishield | Area | Leq,adj,4h | | | 76.0 | 82.7 | 4.6 | 0.0 | 0.0 | 3 | 451.77 | -64.1 | -4.8 | -1.8 | -0.8 | | 0.0 | 0.0 | 14.2 | | 0.0 | | |
| North Flexi Wall-Breakout North Flexishield | Area | Leq,adj,9h | | | 76.0 | 82.7 | 4.6 | 0.0 | 0.0 | 3 | 451.77 | -64.1 | -4.8 | -1.8 | -0.8 | | 0.0 | 0.0 | 14.2 | -12.6 | 0.0 | 0.0 | 1.6 |
| Shredder Breakout | Point | Leq,adj,1h | | | 100.2 | 100.2 | | 0.0 | 5.0 | 0 | 453.48 | -64.1 | -2.5 | -12.8 | -0.8 | | 0.0 | 7.7 | 27.7 | 0.0 | 0.0 | 0.0 | 32.7 |
| Shredder Breakout | Point | Leq,adj,1h | | | 100.2 | 100.2 | | 0.0 | 5.0 | 0 | 453.48 | -64.1 | -2.5 | -12.8 | -0.8 | | 0.0 | 7.7 | 27.7 | | | | |
| Shredder Breakout | Point | Leq,adj,1h | | | 100.2 | 100.2 | | 0.0 | 5.0 | 0 | 453.48 | -64.1 | -2.5 | -12.8 | -0.8 | | 0.0 | 7.7 | 27.7 | -3.0 | 0.0 | 0.0 | 29.7 |
| Shredder Breakout | Point | Leq,adj,11 | | | 100.2 | 100.2 | | 0.0 | 5.0 | 0 | 453.48 | -64.1 | -2.5 | -12.8 | -0.8 | | 0.0 | 7.7 | 27.7 | -1.4 | 0.0 | 0.0 | 31.3 |
| Shredder Breakout | Point | Leq,adj,4h | | | 100.2 | 100.2 | | 0.0 | 5.0 | 0 | 453.48 | -64.1 | -2.5 | -12.8 | -0.8 | | 0.0 | 7.7 | 27.7 | | 0.0 | | |
| Shredder Breakout | Point | Leq,adj,9h | | | 100.2 | 100.2 | | 0.0 | 5.0 | 0 | 453.48 | -64.1 | -2.5 | -12.8 | -0.8 | | 0.0 | 7.7 | 27.7 | -12.6 | 0.0 | 0.0 | 20.1 |
| Shredder Shed_Eastern Facade | Area | Leq,adj,1h | | | 78.7 | 91.0 | 17.0 | 5.0 | 0.0 | 3 | 453.71 | -64.1 | -4.5 | -2.3 | -0.5 | | 0.0 | 0.2 | 22.8 | 0.0 | 0.0 | 0.0 | 27.8 |
| Shredder Shed_Eastern Facade | Area | Leq,adj,1h | | | 78.7 | 91.0 | 17.0 | 5.0 | 0.0 | 3 | 453.71 | -64.1 | -4.5 | -2.3 | -0.5 | | 0.0 | 0.2 | 22.8 | | | | |
| Shredder Shed_Eastern Facade | Area | Leq,adj,11 | | | 78.7 | 91.0 | 17.0 | 5.0 | 0.0 | 3 | 453.71 | -64.1 | -4.5 | -2.3 | -0.5 | | 0.0 | 0.2 | 22.8 | 0.0 | 0.0 | 0.0 | 27.8 |
| Shredder Shed_Eastern Facade | Area | Leq,adj,4h | | | 78.7 | 91.0 | 17.0 | 5.0 | 0.0 | 3 | 453.71 | -64.1 | -4.5 | -2.3 | -0.5 | | 0.0 | 0.2 | 22.8 | -1.4 | 0.0 | 0.0 | 26.4 |
| Shredder Shed_Eastern Facade | Area | Leq,adj,9h | | | 78.7 | 91.0 | 17.0 | 5.0 | 0.0 | 3 | 453.71 | -64.1 | -4.5 | -2.3 | -0.5 | | 0.0 | 0.2 | 22.8 | | 0.0 | | |
| Shredder Shed_Northern Facade | Area | Leq,adj,1h | | | 78.7 | 89.9 | 13.1 | 5.0 | 0.0 | 3 | 451.38 | -64.1 | -4.5 | -1.7 | -0.6 | | 0.0 | 0.0 | 22.0 | -9.5 | 0.0 | 0.0 | 18.3 |
| Shredder Shed_Northern Facade | Area | Leq,adj,1h | | | 78.7 | 89.9 | 13.1 | 5.0 | 0.0 | 3 | 451.38 | -64.1 | -4.5 | -1.7 | -0.6 | | 0.0 | 0.0 | 22.0 | 0.0 | 0.0 | 0.0 | 27.0 |
| Shredder Shed_Northern Facade | Area | Leq,adj,1h | | | 78.7 | 89.9 | 13.1 | 5.0 | 0.0 | 3 | 451.38 | -64.1 | -4.5 | -1.7 | -0.6 | | 0.0 | 0.0 | 22.0 | 0.0 | 0.0 | 0.0 | 27.0 |
| Shredder Shed_Northern Facade | Area | Leq,adj,11 | | | 78.7 | 89.9 | 13.1 | 5.0 | 0.0 | 3 | 451.38 | -64.1 | -4.5 | -1.7 | -0.6 | | 0.0 | 0.0 | 22.0 | -1.4 | 0.0 | 0.0 | 25.6 |
| Shredder Shed_Northern Facade | Area | Leq,adj,4h | | | 78.7 | 89.9 | 13.1 | 5.0 | 0.0 | 3 | 451.38 | -64.1 | -4.5 | -1.7 | -0.6 | | 0.0 | 0.0 | 22.0 | | 0.0 | | |
| Shredder Shed_Northern Facade | Area | Leq,adj,9h | | | 78.7 | 89.9 | 13.1 | 5.0 | 0.0 | 3 | 451.38 | -64.1 | -4.5 | -1.7 | -0.6 | | 0.0 | 0.0 | 22.0 | -9.5 | 0.0 | 0.0 | 17.4 |
| Shredder Shed_Roof | Area | Leq,adj,1h | | | 78.7 | 92.6 | 24.7 | 5.0 | 0.0 | 0 | 454.09 | -64.1 | -3.9 | -1.6 | -0.6 | | 0.0 | 0.0 | 22.4 | 0.0 | 0.0 | 0.0 | 27.4 |
| Shredder Shed_Roof | Area | Leq,adj,1h | | | 78.7 | 92.6 | 24.7 | 5.0 | 0.0 | 0 | 454.09 | -64.1 | -3.9 | -1.6 | -0.6 | | 0.0 | 0.0 | 22.4 | | | | |
| Shredder Shed_Roof | Area | Leq,adj,11 | | | 78.7 | 92.6 | 24.7 | 5.0 | 0.0 | 0 | 454.09 | -64.1 | -3.9 | -1.6 | -0.6 | | 0.0 | 0.0 | 22.4 | 0.0 | 0.0 | 0.0 | 27.4 |
| Shredder Shed_Roof | Area | Leq,adj,11 | | | 78.7 | 92.6 | 24.7 | 5.0 | 0.0 | 0 | 454.09 | -64.1 | -3.9 | -1.6 | -0.6 | | 0.0 | 0.0 | 22.4 | -1.4 | 0.0 | 0.0 | 26.0 |

ATP Consulting Engineers

3

SoundPLAN 8.2

ument Set ID: 3111589
sion: 1, Version Date: 21/12/2023

Boonenne Timbers
ISO9613 Calculation Method
Predicted Operational Noise Levels at Adjacent Uses
From Activities at Proposed Development

| Source | Source type | time slice | Li | R'w | L'w | Lw | l or A | Kl | KT | Ko | S | Adiv | Agr | Abar | Aatm | Amisc | ADI | dLrefl | Ls | dLw | Cmet | ZR | Lr |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | B/ft² | dB | dB(A) | dB(A) | m,m² | dB | dB | dB | m | dB | dB | dB | dB | dB | dB | dB(A) | dB(A) | dB | dB | dB | dB(A) |
| Shredder Shed_Roof | Area | Leq,adj,4h | | | 78.7 | 92.6 | 24.7 | 5.0 | 0.0 | 0 | 454.09 | -64.1 | -3.9 | -1.6 | -0.6 | | 0.0 | 0.0 | 22.4 | | 0.0 | 0.0 | |
| Shredder Shed_Roof | Area | Leq,adj,9h | | | 78.7 | 92.6 | 24.7 | 5.0 | 0.0 | 0 | 454.09 | -64.1 | -3.9 | -1.6 | -0.6 | | 0.0 | 0.0 | 22.4 | -9.5 | 0.0 | 0.0 | 17.8 |
| Shredder Shed_Western Facade | Area | Leq,adj,1h | | | 78.7 | 91.0 | 17.0 | 5.0 | 0.0 | 3 | 454.58 | -64.1 | -4.6 | -7.4 | -0.3 | | 0.0 | 0.0 | 17.6 | 0.0 | 0.0 | 0.0 | 22.6 |
| Shredder Shed_Western Facade | Area | Leq,adj,1h | | | 78.7 | 91.0 | 17.0 | 5.0 | 0.0 | 3 | 454.58 | -64.1 | -4.6 | -7.4 | -0.3 | | 0.0 | 0.0 | 17.6 | | | | |
| Shredder Shed_Western Facade | Area | Leq,adj,1h | | | 78.7 | 91.0 | 17.0 | 5.0 | 0.0 | 3 | 454.58 | -64.1 | -4.6 | -7.4 | -0.3 | | 0.0 | 0.0 | 17.6 | 0.0 | 0.0 | 0.0 | 22.6 |
| Shredder Shed_Western Facade | Area | Leq,adj,11 | | | 78.7 | 91.0 | 17.0 | 5.0 | 0.0 | 3 | 454.58 | -64.1 | -4.6 | -7.4 | -0.3 | | 0.0 | 0.0 | 17.6 | -1.4 | 0.0 | 0.0 | 21.2 |
| Shredder Shed_Western Facade | Area | Leq,adj,4h | | | 78.7 | 91.0 | 17.0 | 5.0 | 0.0 | 3 | 454.58 | -64.1 | -4.6 | -7.4 | -0.3 | | 0.0 | 0.0 | 17.6 | | 0.0 | | |
| Shredder Shed_Western Facade | Area | Leq,adj,9h | | | 78.7 | 91.0 | 17.0 | 5.0 | 0.0 | 3 | 454.58 | -64.1 | -4.6 | -7.4 | -0.3 | | 0.0 | 0.0 | 17.6 | -9.5 | 0.0 | 0.0 | 13.1 |
| Shredderr Shed_Southern Facade | Area | Leq,adj,1h | | | 78.7 | 89.9 | 13.0 | 5.0 | 0.0 | 3 | 456.93 | -64.2 | -4.6 | -7.3 | -0.2 | | 0.0 | 0.0 | 16.6 | 0.0 | 0.0 | 0.0 | 21.6 |
| Shredderr Shed_Southern Facade | Area | Leq,adj,1h | | | 78.7 | 89.9 | 13.0 | 5.0 | 0.0 | 3 | 456.93 | -64.2 | -4.6 | -7.3 | -0.2 | | 0.0 | 0.0 | 16.6 | | | | |
| Shredderr Shed_Southern Facade | Area | Leq,adj,1h | | | 78.7 | 89.9 | 13.0 | 5.0 | 0.0 | 3 | 456.93 | -64.2 | -4.6 | -7.3 | -0.2 | | 0.0 | 0.0 | 16.6 | 0.0 | 0.0 | 0.0 | 21.6 |
| Shredderr Shed_Southern Facade | Area | Leq,adj,11 | | | 78.7 | 89.9 | 13.0 | 5.0 | 0.0 | 3 | 456.93 | -64.2 | -4.6 | -7.3 | -0.2 | | 0.0 | 0.0 | 16.6 | -1.4 | 0.0 | 0.0 | 20.2 |
| Shredderr Shed_Southern Facade | Area | Leq,adj,4h | | | 78.7 | 89.9 | 13.0 | 5.0 | 0.0 | 3 | 456.93 | -64.2 | -4.6 | -7.3 | -0.2 | | 0.0 | 0.0 | 16.6 | | 0.0 | | |
| Shredderr Shed_Southern Facade | Area | Leq,adj,9h | | | 78.7 | 89.9 | 13.0 | 5.0 | 0.0 | 3 | 456.93 | -64.2 | -4.6 | -7.3 | -0.2 | | 0.0 | 0.0 | 16.6 | -9.5 | 0.0 | 0.0 | 12.1 |
| South Flexishield-Breakout South Flexishield | Area | Leq,adj,1h | | | 76.0 | 82.7 | 4.6 | 0.0 | 0.0 | 3 | 455.17 | -64.2 | -4.8 | -7.7 | -0.3 | | 0.0 | 0.0 | 8.6 | 0.0 | 0.0 | 0.0 | 8.6 |
| South Flexishield-Breakout South Flexishield | Area | Leq,adj,1h | | | 76.0 | 82.7 | 4.6 | 0.0 | 0.0 | 3 | 455.17 | -64.2 | -4.8 | -7.7 | -0.3 | | 0.0 | 0.0 | 8.6 | | | | |
| South Flexishield-Breakout South Flexishield | Area | Leq,adj,1h | | | 76.0 | 82.7 | 4.6 | 0.0 | 0.0 | 3 | 455.17 | -64.2 | -4.8 | -7.7 | -0.3 | | 0.0 | 0.0 | 8.6 | -3.0 | 0.0 | 0.0 | 5.6 |
| South Flexishield-Breakout South Flexishield | Area | Leq,adj,11 | | | 76.0 | 82.7 | 4.6 | 0.0 | 0.0 | 3 | 455.17 | -64.2 | -4.8 | -7.7 | -0.3 | | 0.0 | 0.0 | 8.6 | -1.4 | 0.0 | 0.0 | 7.2 |
| South Flexishield-Breakout South Flexishield | Area | Leq,adj,4h | | | 76.0 | 82.7 | 4.6 | 0.0 | 0.0 | 3 | 455.17 | -64.2 | -4.8 | -7.7 | -0.3 | | 0.0 | 0.0 | 8.6 | | 0.0 | | |
| South Flexishield-Breakout South Flexishield | Area | Leq,adj,9h | | | 76.0 | 82.7 | 4.6 | 0.0 | 0.0 | 3 | 455.17 | -64.2 | -4.8 | -7.7 | -0.3 | | 0.0 | 0.0 | 8.6 | -12.6 | 0.0 | 0.0 | -3.9 |
| Truck movements | Line | Leq,adj,1h | | | 42.9 | 70.7 | 605.6 | 0.0 | 5.0 | 0 | 286.64 | -60.1 | -2.6 | -1.8 | -1.3 | | 0.0 | 0.0 | 4.8 | 0.0 | 0.0 | 0.0 | 9.8 |
| Truck movements | Line | Leq,adj,1h | | | 42.9 | 70.7 | 605.6 | 0.0 | 5.0 | 0 | 286.64 | -60.1 | -2.6 | -1.8 | -1.3 | | 0.0 | 0.0 | 4.8 | | | | |
| Truck movements | Line | Leq,adj,1h | | | 42.9 | 70.7 | 605.6 | 0.0 | 5.0 | 0 | 286.64 | -60.1 | -2.6 | -1.8 | -1.3 | | 0.0 | 0.0 | 4.8 | 0.0 | 0.0 | 0.0 | 9.8 |
| Truck movements | Line | Leq,adj,11 | | | 42.9 | 70.7 | 605.6 | 0.0 | 5.0 | 0 | 286.64 | -60.1 | -2.6 | -1.8 | -1.3 | | 0.0 | 0.0 | 4.8 | -1.4 | 0.0 | 0.0 | 8.5 |
| Truck movements | Line | Leq,adj,4h | | | 42.9 | 70.7 | 605.6 | 0.0 | 5.0 | 0 | 286.64 | -60.1 | -2.6 | -1.8 | -1.3 | | 0.0 | 0.0 | 4.8 | | 0.0 | | |
| Truck movements | Line | Leq,adj,9h | | | 42.9 | 70.7 | 605.6 | 0.0 | 5.0 | 0 | 286.64 | -60.1 | -2.6 | -1.8 | -1.3 | | 0.0 | 0.0 | 4.8 | -9.5 | 0.0 | 0.0 | 0.3 |
| Carpark | PLot | Leq,adj,1h | | | 61.0 | 83.2 | 167.8 | 0.0 | 0.0 | 0 | 422.73 | -63.5 | -2.6 | 0.0 | -2.6 | | 0.0 | 0.0 | 14.5 | -3.0 | 0.0 | 0.0 | 11.5 |

ATP Consulting Engineers

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SoundPLAN 8.2

ument Set ID: 3111589
sion: 1, Version Date: 21/12/2023

Boonenne Timbers
ISO9613 Calculation Method
Predicted Operational Noise Levels at Adjacent Uses
From Activities at Proposed Development

| Source | Source type | time slice | Li | R'w | L'w | Lw | l or A | KI | KT | Ko | S | Adiv | Agr | Abar | Aatm | Amisc | ADI | dLrefl | Ls | dLw | Cmet | ZR | Lr |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | B(A | dB | dB(A) | dB(A) | m,m² | dB | dB | dB | m | dB | dB | dB | dB | dB | dB | dB(A) | dB(A) | dB | dB | dB | dB(A) |
| Carpark | PLot | Leq,adj,1h | | | 61.0 | 83.2 | 167.8 | 0.0 | 0.0 | 0 | 422.73 | -63.5 | -2.6 | 0.0 | -2.6 | | 0.0 | 0.0 | 14.5 | | | | |
| Carpark | PLot | Leq,adj,1h | | | 61.0 | 83.2 | 167.8 | 0.0 | 0.0 | 0 | 422.73 | -63.5 | -2.6 | 0.0 | -2.6 | | 0.0 | 0.0 | 14.5 | 0.0 | 0.0 | 0.0 | 14.5 |
| Carpark | PLot | Leq,adj,11 | | | 61.0 | 83.2 | 167.8 | 0.0 | 0.0 | 0 | 422.73 | -63.5 | -2.6 | 0.0 | -2.6 | | 0.0 | 0.0 | 14.5 | -3.0 | 0.0 | 0.0 | 11.5 |
| Carpark | PLot | Leq,adj,4h | | | 61.0 | 83.2 | 167.8 | 0.0 | 0.0 | 0 | 422.73 | -63.5 | -2.6 | 0.0 | -2.6 | | 0.0 | 0.0 | 14.5 | | 0.0 | | |
| Carpark | PLot | Leq,adj,9h | | | 61.0 | 83.2 | 167.8 | 0.0 | 0.0 | 0 | 422.73 | -63.5 | -2.6 | 0.0 | -2.6 | | 0.0 | 0.0 | 14.5 | -9.5 | 0.0 | 0.0 | 4.9 |

Boonenne Timbers
ISO9613 Calculation Method
Predicted Operational Noise Levels at Adjacent Uses
From Activities at Proposed Development

| Source | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Fl | GF | Dir | N | Source type | time slice | Li | R'w | L'w | Lw | l or A | KI | Lr,lim | KT | Lr,lim | Ko | S | Adiv | Agr | Abar | Aatm | Amisc | ADII | dLrefl | Ls | dLw | Cmet | ZR | Lr |
| | | | | | | | B(f) | dB | dB(A) | dB(A) | m,m² | dB | dB(A) | dB | dB(A) | dB | m | dB | dB | dB | dB | dB | dB | dB(A) | dB(A) | dB | dB | dB | dB(A) |
| Receiver 169 Boonenne Road | | | | | Lr,lim dB(A) | Leq,15min | 39 | dB(A) | Lr,lim | dB(A) | Lr,lim | dB(A) | Lr,lim | dB(A) | Lr,lim | dB(A) | | Leq,adj,1h | dB(A) | Leq,adj,1h | 35 | dB(A) | Leq,adj,11 | 36 | dB(A) | Leq,adj,4h | dB(A) | Leq,adj,9h | 26 | dB(A) | | |
| Chainsaw | | | | | Point | Leq,adj,1h | | | 114.0 | 114.0 | | | 0.0 | | 5.0 | 0 | 625.14 | -66.9 | -1.4 | -4.1 | -6.7 | | 0.0 | 0.0 | 34.9 | -4.8 | 0.0 | 0.0 | | 35.1 |
| Chainsaw | | | | | Point | Leq,adj,1h | | | 114.0 | 114.0 | | | 0.0 | | 5.0 | 0 | 625.14 | -66.9 | -1.4 | -4.1 | -6.7 | | 0.0 | 0.0 | 34.9 | | | | | |
| Chainsaw | | | | | Point | Leq,adj,1h | | | 114.0 | 114.0 | | | 0.0 | | 5.0 | 0 | 625.14 | -66.9 | -1.4 | -4.1 | -6.7 | | 0.0 | 0.0 | 34.9 | | 0.0 | | | |
| Chainsaw | | | | | Point | Leq,adj,11 | | | 114.0 | 114.0 | | | 0.0 | | 5.0 | 0 | 625.14 | -66.9 | -1.4 | -4.1 | -6.7 | | 0.0 | 0.0 | 34.9 | -10.4 | 0.0 | 0.0 | | 29.5 |
| Chainsaw | | | | | Point | Leq,adj,4h | | | 114.0 | 114.0 | | | 0.0 | | 5.0 | 0 | 625.14 | -66.9 | -1.4 | -4.1 | -6.7 | | 0.0 | 0.0 | 34.9 | | 0.0 | | | |
| Chainsaw | | | | | Point | Leq,adj,9h | | | 114.0 | 114.0 | | | 0.0 | | 5.0 | 0 | 625.14 | -66.9 | -1.4 | -4.1 | -6.7 | | 0.0 | 0.0 | 34.9 | | 0.0 | | | |
| Circular Saw_1 | | | | | Point | Leq,adj,1h | | | 99.4 | 99.4 | | | 0.0 | | 5.0 | 0 | 510.11 | -65.1 | -1.3 | -4.0 | -4.8 | | 0.0 | 0.0 | 24.1 | | 0.0 | 0.0 | | 29.1 |
| Circular Saw_1 | | | | | Point | Leq,adj,1h | | | 99.4 | 99.4 | | | 0.0 | | 5.0 | 0 | 510.11 | -65.1 | -1.3 | -4.0 | -4.8 | | 0.0 | 0.0 | 24.1 | | | | | |
| Circular Saw_1 | | | | | Point | Leq,adj,1h | | | 99.4 | 99.4 | | | 0.0 | | 5.0 | 0 | 510.11 | -65.1 | -1.3 | -4.0 | -4.8 | | 0.0 | 0.0 | 24.1 | -3.0 | 0.0 | 0.0 | | 26.1 |
| Circular Saw_1 | | | | | Point | Leq,adj,11 | | | 99.4 | 99.4 | | | 0.0 | | 5.0 | 0 | 510.11 | -65.1 | -1.3 | -4.0 | -4.8 | | 0.0 | 0.0 | 24.1 | -1.4 | 0.0 | 0.0 | | 27.7 |
| Circular Saw_1 | | | | | Point | Leq,adj,4h | | | 99.4 | 99.4 | | | 0.0 | | 5.0 | 0 | 510.11 | -65.1 | -1.3 | -4.0 | -4.8 | | 0.0 | 0.0 | 24.1 | | 0.0 | | | |
| Circular Saw_1 | | | | | Point | Leq,adj,9h | | | 99.4 | 99.4 | | | 0.0 | | 5.0 | 0 | 510.11 | -65.1 | -1.3 | -4.0 | -4.8 | | 0.0 | 0.0 | 24.1 | -12.6 | 0.0 | 0.0 | | 16.5 |
| Circular Saw_2 | | | | | Point | Leq,adj,1h | | | 99.4 | 99.4 | | | 0.0 | | 5.0 | 0 | 512.83 | -65.2 | -1.3 | -4.0 | -4.8 | | 0.0 | 0.0 | 24.0 | 0.0 | 0.0 | 0.0 | | 29.0 |
| Circular Saw_2 | | | | | Point | Leq,adj,1h | | | 99.4 | 99.4 | | | 0.0 | | 5.0 | 0 | 512.83 | -65.2 | -1.3 | -4.0 | -4.8 | | 0.0 | 0.0 | 24.0 | | | | | |
| Circular Saw_2 | | | | | Point | Leq,adj,1h | | | 99.4 | 99.4 | | | 0.0 | | 5.0 | 0 | 512.83 | -65.2 | -1.3 | -4.0 | -4.8 | | 0.0 | 0.0 | 24.0 | -3.0 | 0.0 | 0.0 | | 26.0 |
| Circular Saw_2 | | | | | Point | Leq,adj,11 | | | 99.4 | 99.4 | | | 0.0 | | 5.0 | 0 | 512.83 | -65.2 | -1.3 | -4.0 | -4.8 | | 0.0 | 0.0 | 24.0 | -1.4 | 0.0 | 0.0 | | 27.6 |
| Circular Saw_2 | | | | | Point | Leq,adj,4h | | | 99.4 | 99.4 | | | 0.0 | | 5.0 | 0 | 512.83 | -65.2 | -1.3 | -4.0 | -4.8 | | 0.0 | 0.0 | 24.0 | | 0.0 | | | |
| Circular Saw_2 | | | | | Point | Leq,adj,9h | | | 99.4 | 99.4 | | | 0.0 | | 5.0 | 0 | 512.83 | -65.2 | -1.3 | -4.0 | -4.8 | | 0.0 | 0.0 | 24.0 | -12.6 | 0.0 | 0.0 | | 16.5 |
| Conveyor Belt | | | | | Area | Leq,adj,1h | | | 61.4 | 88.3 | 487.2 | | 0.0 | | 5.0 | 0 | 507.22 | -65.1 | -0.1 | -4.1 | -1.3 | | 0.0 | 0.0 | 17.7 | 0.0 | 0.0 | 0.0 | | 22.7 |
| Conveyor Belt | | | | | Area | Leq,adj,1h | | | 61.4 | 88.3 | 487.2 | | 0.0 | | 5.0 | 0 | 507.22 | -65.1 | -0.1 | -4.1 | -1.3 | | 0.0 | 0.0 | 17.7 | | | | | |
| Conveyor Belt | | | | | Area | Leq,adj,1h | | | 61.4 | 88.3 | 487.2 | | 0.0 | | 5.0 | 0 | 507.22 | -65.1 | -0.1 | -4.1 | -1.3 | | 0.0 | 0.0 | 17.7 | 0.0 | 0.0 | 0.0 | | 22.7 |
| Conveyor Belt | | | | | Area | Leq,adj,11 | | | 61.4 | 88.3 | 487.2 | | 0.0 | | 5.0 | 0 | 507.22 | -65.1 | -0.1 | -4.1 | -1.3 | | 0.0 | 0.0 | 17.7 | -1.4 | 0.0 | 0.0 | | 21.3 |
| Conveyor Belt | | | | | Area | Leq,adj,4h | | | 61.4 | 88.3 | 487.2 | | 0.0 | | 5.0 | 0 | 507.22 | -65.1 | -0.1 | -4.1 | -1.3 | | 0.0 | 0.0 | 17.7 | | 0.0 | | | |
| Conveyor Belt | | | | | Area | Leq,adj,9h | | | 61.4 | 88.3 | 487.2 | | 0.0 | | 5.0 | 0 | 507.22 | -65.1 | -0.1 | -4.1 | -1.3 | | 0.0 | 0.0 | 17.7 | -9.5 | 0.0 | 0.0 | | 13.2 |
| Forklift_North | | | | | Area | Leq,adj,1h | | | 63.2 | 92.0 | 768.7 | | 0.0 | | 5.0 | 0 | 656.05 | -67.3 | -1.3 | -4.0 | -6.7 | | 0.0 | 0.0 | 12.7 | 0.0 | 0.0 | 0.0 | | 17.7 |
| Forklift_North | | | | | Area | Leq,adj,1h | | | 63.2 | 92.0 | 768.7 | | 0.0 | | 5.0 | 0 | 656.05 | -67.3 | -1.3 | -4.0 | -6.7 | | 0.0 | 0.0 | 12.7 | | 0.0 | | | |
| Forklift_North | | | | | Area | Leq,adj,1h | | | 63.2 | 92.0 | 768.7 | | 0.0 | | 5.0 | 0 | 656.05 | -67.3 | -1.3 | -4.0 | -6.7 | | 0.0 | 0.0 | 12.7 | 0.0 | 0.0 | 0.0 | | 17.7 |
| Forklift_North | | | | | Area | Leq,adj,11 | | | 63.2 | 92.0 | 768.7 | | 0.0 | | 5.0 | 0 | 656.05 | -67.3 | -1.3 | -4.0 | -6.7 | | 0.0 | 0.0 | 12.7 | -1.4 | 0.0 | 0.0 | | 16.3 |
| Forklift_North | | | | | Area | Leq,adj,4h | | | 63.2 | 92.0 | 768.7 | | 0.0 | | 5.0 | 0 | 656.05 | -67.3 | -1.3 | -4.0 | -6.7 | | 0.0 | 0.0 | 12.7 | | 0.0 | | | |
| Forklift_North | | | | | Area | Leq,adj,9h | | | 63.2 | 92.0 | 768.7 | | 0.0 | | 5.0 | 0 | 656.05 | -67.3 | -1.3 | -4.0 | -6.7 | | 0.0 | 0.0 | 12.7 | -9.5 | 0.0 | 0.0 | | 8.1 |
| Forklift_South | | | | | Area | Leq,adj,1h | | | 59.7 | 92.0 | 1721.7 | | 0.0 | | 5.0 | 0 | 556.96 | -65.9 | -1.3 | -4.0 | -6.2 | | 0.0 | 0.0 | 14.6 | 0.0 | 0.0 | 0.0 | | 19.6 |

Boonenne Timbers
ISO9613 Calculation Method
Predicted Operational Noise Levels at Adjacent Uses
From Activities at Proposed Development

| Source | Source type | time slice | Li | R'w | L'w | Lw | l or A | Kl | KT | Ko | S | Adiv | Agr | Abar | Aatm | Amisc | ADil | dLrefl | Ls | dLw | Cmet | ZR | Lr |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | B(A | dB | dB(A) | dB(A) | m,m² | dB | dB | dB | m | dB | dB | dB | dB | dB | dB | dB(A) | dB(A) | dB | dB | dB | dB(A) |
| Forklift_South | Area | Leq,adj,1h | | | 59.7 | 92.0 | 1721.7 | 0.0 | 5.0 | 0 | 556.96 | -65.9 | -1.3 | -4.0 | -6.2 | | 0.0 | 0.0 | 14.6 | | | | |
| Forklift_South | Area | Leq,adj,1h | | | 59.7 | 92.0 | 1721.7 | 0.0 | 5.0 | 0 | 556.96 | -65.9 | -1.3 | -4.0 | -6.2 | | 0.0 | 0.0 | 14.6 | 0.0 | 0.0 | 0.0 | 19.6 |
| Forklift_South | Area | Leq,adj,11 | | | 59.7 | 92.0 | 1721.7 | 0.0 | 5.0 | 0 | 556.96 | -65.9 | -1.3 | -4.0 | -6.2 | | 0.0 | 0.0 | 14.6 | -1.4 | 0.0 | 0.0 | 18.2 |
| Forklift_South | Area | Leq,adj,4h | | | 59.7 | 92.0 | 1721.7 | 0.0 | 5.0 | 0 | 556.96 | -65.9 | -1.3 | -4.0 | -6.2 | | 0.0 | 0.0 | 14.6 | | 0.0 | | |
| Forklift_South | Area | Leq,adj,9h | | | 59.7 | 92.0 | 1721.7 | 0.0 | 5.0 | 0 | 556.96 | -65.9 | -1.3 | -4.0 | -6.2 | | 0.0 | 0.0 | 14.6 | -9.5 | 0.0 | 0.0 | 10.0 |
| North Flexi Wall-Breakout North Flexishield | Area | Leq,adj,1h | | | 76.0 | 82.7 | 4.6 | 0.0 | 0.0 | 3 | 504.64 | -65.1 | -5.3 | -5.7 | -0.4 | | 0.0 | 0.0 | 9.2 | 0.0 | 0.0 | 0.0 | 9.2 |
| North Flexi Wall-Breakout North Flexishield | Area | Leq,adj,1h | | | 76.0 | 82.7 | 4.6 | 0.0 | 0.0 | 3 | 504.64 | -65.1 | -5.3 | -5.7 | -0.4 | | 0.0 | 0.0 | 9.2 | | | | |
| North Flexi Wall-Breakout North Flexishield | Area | Leq,adj,1h | | | 76.0 | 82.7 | 4.6 | 0.0 | 0.0 | 3 | 504.64 | -65.1 | -5.3 | -5.7 | -0.4 | | 0.0 | 0.0 | 9.2 | -3.0 | 0.0 | 0.0 | 6.2 |
| North Flexi Wall-Breakout North Flexishield | Area | Leq,adj,11 | | | 76.0 | 82.7 | 4.6 | 0.0 | 0.0 | 3 | 504.64 | -65.1 | -5.3 | -5.7 | -0.4 | | 0.0 | 0.0 | 9.2 | -1.4 | 0.0 | 0.0 | 7.8 |
| North Flexi Wall-Breakout North Flexishield | Area | Leq,adj,4h | | | 76.0 | 82.7 | 4.6 | 0.0 | 0.0 | 3 | 504.64 | -65.1 | -5.3 | -5.7 | -0.4 | | 0.0 | 0.0 | 9.2 | | 0.0 | | |
| North Flexi Wall-Breakout North Flexishield | Area | Leq,adj,9h | | | 76.0 | 82.7 | 4.6 | 0.0 | 0.0 | 3 | 504.64 | -65.1 | -5.3 | -5.7 | -0.4 | | 0.0 | 0.0 | 9.2 | -12.6 | 0.0 | 0.0 | -3.4 |
| Shredder Breakout | Point | Leq,adj,1h | | | 100.2 | 100.2 | | 0.0 | 5.0 | 0 | 502.90 | -65.0 | -2.6 | -11.3 | -1.3 | | 0.0 | 5.3 | 25.2 | 0.0 | 0.0 | 0.0 | 30.2 |
| Shredder Breakout | Point | Leq,adj,1h | | | 100.2 | 100.2 | | 0.0 | 5.0 | 0 | 502.90 | -65.0 | -2.6 | -11.3 | -1.3 | | 0.0 | 5.3 | 25.2 | | | | |
| Shredder Breakout | Point | Leq,adj,1h | | | 100.2 | 100.2 | | 0.0 | 5.0 | 0 | 502.90 | -65.0 | -2.6 | -11.3 | -1.3 | | 0.0 | 5.3 | 25.2 | -3.0 | 0.0 | 0.0 | 27.2 |
| Shredder Breakout | Point | Leq,adj,11 | | | 100.2 | 100.2 | | 0.0 | 5.0 | 0 | 502.90 | -65.0 | -2.6 | -11.3 | -1.3 | | 0.0 | 5.3 | 25.2 | -1.4 | 0.0 | 0.0 | 28.8 |
| Shredder Breakout | Point | Leq,adj,4h | | | 100.2 | 100.2 | | 0.0 | 5.0 | 0 | 502.90 | -65.0 | -2.6 | -11.3 | -1.3 | | 0.0 | 5.3 | 25.2 | | 0.0 | | |
| Shredder Breakout | Point | Leq,adj,9h | | | 100.2 | 100.2 | | 0.0 | 5.0 | 0 | 502.90 | -65.0 | -2.6 | -11.3 | -1.3 | | 0.0 | 5.3 | 25.2 | -12.6 | 0.0 | 0.0 | 17.6 |
| Shredder Shed_Eastern Facade | Area | Leq,adj,1h | | | 78.7 | 91.0 | 17.0 | 5.0 | 0.0 | 3 | 502.76 | -65.0 | -5.0 | -4.8 | -0.4 | | 0.0 | 0.0 | 18.8 | 0.0 | 0.0 | 0.0 | 23.8 |
| Shredder Shed_Eastern Facade | Area | Leq,adj,1h | | | 78.7 | 91.0 | 17.0 | 5.0 | 0.0 | 3 | 502.76 | -65.0 | -5.0 | -4.8 | -0.4 | | 0.0 | 0.0 | 18.8 | 0.0 | 0.0 | 0.0 | 23.8 |
| Shredder Shed_Eastern Facade | Area | Leq,adj,11 | | | 78.7 | 91.0 | 17.0 | 5.0 | 0.0 | 3 | 502.76 | -65.0 | -5.0 | -4.8 | -0.4 | | 0.0 | 0.0 | 18.8 | -1.4 | 0.0 | 0.0 | 22.4 |
| Shredder Shed_Eastern Facade | Area | Leq,adj,4h | | | 78.7 | 91.0 | 17.0 | 5.0 | 0.0 | 3 | 502.76 | -65.0 | -5.0 | -4.8 | -0.4 | | 0.0 | 0.0 | 18.8 | | 0.0 | | |
| Shredder Shed_Eastern Facade | Area | Leq,adj,9h | | | 78.7 | 91.0 | 17.0 | 5.0 | 0.0 | 3 | 502.76 | -65.0 | -5.0 | -4.8 | -0.4 | | 0.0 | 0.0 | 18.8 | -9.5 | 0.0 | 0.0 | 14.3 |
| Shredder Shed_Northern Facade | Area | Leq,adj,1h | | | 78.7 | 89.9 | 13.1 | 5.0 | 0.0 | 3 | 505.38 | -65.1 | -5.0 | -5.0 | -0.3 | | 0.0 | 0.0 | 17.5 | 0.0 | 0.0 | 0.0 | 22.5 |
| Shredder Shed_Northern Facade | Area | Leq,adj,1h | | | 78.7 | 89.9 | 13.1 | 5.0 | 0.0 | 3 | 505.38 | -65.1 | -5.0 | -5.0 | -0.3 | | 0.0 | 0.0 | 17.5 | | | | |
| Shredder Shed_Northern Facade | Area | Leq,adj,1h | | | 78.7 | 89.9 | 13.1 | 5.0 | 0.0 | 3 | 505.38 | -65.1 | -5.0 | -5.0 | -0.3 | | 0.0 | 0.0 | 17.5 | 0.0 | 0.0 | 0.0 | 22.5 |
| Shredder Shed_Northern Facade | Area | Leq,adj,11 | | | 78.7 | 89.9 | 13.1 | 5.0 | 0.0 | 3 | 505.38 | -65.1 | -5.0 | -5.0 | -0.3 | | 0.0 | 0.0 | 17.5 | -1.4 | 0.0 | 0.0 | 21.2 |
| Shredder Shed_Northern Facade | Area | Leq,adj,4h | | | 78.7 | 89.9 | 13.1 | 5.0 | 0.0 | 3 | 505.38 | -65.1 | -5.0 | -5.0 | -0.3 | | 0.0 | 0.0 | 17.5 | | 0.0 | | |
| Shredder Shed_Northern Facade | Area | Leq,adj,9h | | | 78.7 | 89.9 | 13.1 | 5.0 | 0.0 | 3 | 505.38 | -65.1 | -5.0 | -5.0 | -0.3 | | 0.0 | 0.0 | 17.5 | -9.5 | 0.0 | 0.0 | 13.0 |
| Shredder Shed_Roof | Area | Leq,adj,1h | | | 78.7 | 92.6 | 24.7 | 5.0 | 0.0 | 0 | 502.67 | -65.0 | -4.5 | -1.9 | -0.7 | | 0.0 | 0.0 | 20.5 | 0.0 | 0.0 | 0.0 | 25.5 |
| Shredder Shed_Roof | Area | Leq,adj,1h | | | 78.7 | 92.6 | 24.7 | 5.0 | 0.0 | 0 | 502.67 | -65.0 | -4.5 | -1.9 | -0.7 | | 0.0 | 0.0 | 20.5 | 0.0 | 0.0 | 0.0 | 25.5 |
| Shredder Shed_Roof | Area | Leq,adj,11 | | | 78.7 | 92.6 | 24.7 | 5.0 | 0.0 | 0 | 502.67 | -65.0 | -4.5 | -1.9 | -0.7 | | 0.0 | 0.0 | 20.5 | -1.4 | 0.0 | 0.0 | 24.1 |

ATP Consulting Engineers

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SoundPLAN 8.2

ument Set ID: 3111589
sion: 1, Version Date: 21/12/2023

Boonenne Timbers
ISO9613 Calculation Method
Predicted Operational Noise Levels at Adjacent Uses
From Activities at Proposed Development

| Source | Source type | time slice | Li | R'w | L'w | Lw | l or A | Kl | KT | Ko | S | Adiv | Agr | Abar | Aatm | Amisc | ADIl | dLrefl | Ls | dLw | Cmet | ZR | Lr |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | B/ft² | dB | dB(A) | dB(A) | m,m² | dB | dB | dB | m | dB | dB | dB | dB | dB | dB | dB(A) | dB(A) | dB | dB | dB | dB(A) |
| Shredder Shed_Roof | Area | Leq,adj,4h | | | 78.7 | 92.6 | 24.7 | 5.0 | 0.0 | 0 | 502.67 | -65.0 | -4.5 | -1.9 | -0.7 | | 0.0 | 0.0 | 20.5 | | 0.0 | 0.0 | 16.0 |
| Shredder Shed_Roof | Area | Leq,adj,9h | | | 78.7 | 92.6 | 24.7 | 5.0 | 0.0 | 0 | 502.67 | -65.0 | -4.5 | -1.9 | -0.7 | | 0.0 | 0.0 | 20.5 | -9.5 | 0.0 | 0.0 | 26.5 |
| Shredder Shed_Western Facade | Area | Leq,adj,1h | | | 78.7 | 91.0 | 17.0 | 5.0 | 0.0 | 3 | 502.32 | -65.0 | -4.9 | -1.9 | -0.7 | | 0.0 | 0.0 | 21.5 | 0.0 | 0.0 | 0.0 | |
| Shredder Shed_Western Facade | Area | Leq,adj,1h | | | 78.7 | 91.0 | 17.0 | 5.0 | 0.0 | 3 | 502.32 | -65.0 | -4.9 | -1.9 | -0.7 | | 0.0 | 0.0 | 21.5 | 0.0 | 0.0 | 0.0 | 26.5 |
| Shredder Shed_Western Facade | Area | Leq,adj,1h | | | 78.7 | 91.0 | 17.0 | 5.0 | 0.0 | 3 | 502.32 | -65.0 | -4.9 | -1.9 | -0.7 | | 0.0 | 0.0 | 21.5 | 0.0 | 0.0 | 0.0 | 25.1 |
| Shredder Shed_Western Facade | Area | Leq,adj,11 | | | 78.7 | 91.0 | 17.0 | 5.0 | 0.0 | 3 | 502.32 | -65.0 | -4.9 | -1.9 | -0.7 | | 0.0 | 0.0 | 21.5 | -1.4 | 0.0 | 0.0 | |
| Shredder Shed_Western Facade | Area | Leq,adj,4h | | | 78.7 | 91.0 | 17.0 | 5.0 | 0.0 | 3 | 502.32 | -65.0 | -4.9 | -1.9 | -0.7 | | 0.0 | 0.0 | 21.5 | | 0.0 | | |
| Shredder Shed_Western Facade | Area | Leq,adj,9h | | | 78.7 | 91.0 | 17.0 | 5.0 | 0.0 | 3 | 502.32 | -65.0 | -4.9 | -1.9 | -0.7 | | 0.0 | 0.0 | 21.5 | -9.5 | 0.0 | 0.0 | 16.9 |
| Shredderr Shed_Southern Facade | Area | Leq,adj,1h | | | 78.7 | 89.9 | 13.0 | 5.0 | 0.0 | 3 | 499.73 | -65.0 | -4.9 | -1.9 | -0.7 | | 0.0 | 0.0 | 20.4 | 0.0 | 0.0 | 0.0 | 25.4 |
| Shredderr Shed_Southern Facade | Area | Leq,adj,1h | | | 78.7 | 89.9 | 13.0 | 5.0 | 0.0 | 3 | 499.73 | -65.0 | -4.9 | -1.9 | -0.7 | | 0.0 | 0.0 | 20.4 | | | | |
| Shredderr Shed_Southern Facade | Area | Leq,adj,1h | | | 78.7 | 89.9 | 13.0 | 5.0 | 0.0 | 3 | 499.73 | -65.0 | -4.9 | -1.9 | -0.7 | | 0.0 | 0.0 | 20.4 | 0.0 | 0.0 | 0.0 | 25.4 |
| Shredderr Shed_Southern Facade | Area | Leq,adj,11 | | | 78.7 | 89.9 | 13.0 | 5.0 | 0.0 | 3 | 499.73 | -65.0 | -4.9 | -1.9 | -0.7 | | 0.0 | 0.0 | 20.4 | -1.4 | 0.0 | 0.0 | 24.0 |
| Shredderr Shed_Southern Facade | Area | Leq,adj,4h | | | 78.7 | 89.9 | 13.0 | 5.0 | 0.0 | 3 | 499.73 | -65.0 | -4.9 | -1.9 | -0.7 | | 0.0 | 0.0 | 20.4 | | 0.0 | | |
| Shredderr Shed_Southern Facade | Area | Leq,adj,9h | | | 78.7 | 89.9 | 13.0 | 5.0 | 0.0 | 3 | 499.73 | -65.0 | -4.9 | -1.9 | -0.7 | | 0.0 | 0.0 | 20.4 | -9.5 | 0.0 | 0.0 | 15.8 |
| South Flexishield-Breakout South Flexishield | Area | Leq,adj,1h | | | 76.0 | 82.7 | 4.6 | 0.0 | 0.0 | 3 | 501.19 | -65.0 | -5.3 | -1.8 | -1.0 | | 0.0 | 0.0 | 12.7 | 0.0 | 0.0 | 0.0 | 12.7 |
| South Flexishield-Breakout South Flexishield | Area | Leq,adj,1h | | | 76.0 | 82.7 | 4.6 | 0.0 | 0.0 | 3 | 501.19 | -65.0 | -5.3 | -1.8 | -1.0 | | 0.0 | 0.0 | 12.7 | | | | |
| South Flexishield-Breakout South Flexishield | Area | Leq,adj,1h | | | 76.0 | 82.7 | 4.6 | 0.0 | 0.0 | 3 | 501.19 | -65.0 | -5.3 | -1.8 | -1.0 | | 0.0 | 0.0 | 12.7 | -3.0 | 0.0 | 0.0 | 9.6 |
| South Flexishield-Breakout South Flexishield | Area | Leq,adj,11 | | | 76.0 | 82.7 | 4.6 | 0.0 | 0.0 | 3 | 501.19 | -65.0 | -5.3 | -1.8 | -1.0 | | 0.0 | 0.0 | 12.7 | -1.4 | 0.0 | 0.0 | 11.3 |
| South Flexishield-Breakout South Flexishield | Area | Leq,adj,4h | | | 76.0 | 82.7 | 4.6 | 0.0 | 0.0 | 3 | 501.19 | -65.0 | -5.3 | -1.8 | -1.0 | | 0.0 | 0.0 | 12.7 | | 0.0 | | |
| South Flexishield-Breakout South Flexishield | Area | Leq,adj,9h | | | 76.0 | 82.7 | 4.6 | 0.0 | 0.0 | 3 | 501.19 | -65.0 | -5.3 | -1.8 | -1.0 | | 0.0 | 0.0 | 12.7 | -12.6 | 0.0 | 0.0 | 0.1 |
| Truck movements | Line | Leq,adj,1h | | | 42.9 | 70.7 | 605.6 | 0.0 | 5.0 | 0 | 595.66 | -66.5 | -2.5 | -2.6 | -2.3 | | 0.0 | 0.0 | -3.1 | 0.0 | 0.0 | 0.0 | 1.9 |
| Truck movements | Line | Leq,adj,1h | | | 42.9 | 70.7 | 605.6 | 0.0 | 5.0 | 0 | 595.66 | -66.5 | -2.5 | -2.6 | -2.3 | | 0.0 | 0.0 | -3.1 | | | | |
| Truck movements | Line | Leq,adj,1h | | | 42.9 | 70.7 | 605.6 | 0.0 | 5.0 | 0 | 595.66 | -66.5 | -2.5 | -2.6 | -2.3 | | 0.0 | 0.0 | -3.1 | 0.0 | 0.0 | 0.0 | 1.9 |
| Truck movements | Line | Leq,adj,11 | | | 42.9 | 70.7 | 605.6 | 0.0 | 5.0 | 0 | 595.66 | -66.5 | -2.5 | -2.6 | -2.3 | | 0.0 | 0.0 | -3.1 | -1.4 | 0.0 | 0.0 | 0.5 |
| Truck movements | Line | Leq,adj,4h | | | 42.9 | 70.7 | 605.6 | 0.0 | 5.0 | 0 | 595.66 | -66.5 | -2.5 | -2.6 | -2.3 | | 0.0 | 0.0 | -3.1 | | 0.0 | | |
| Truck movements | Line | Leq,adj,9h | | | 42.9 | 70.7 | 605.6 | 0.0 | 5.0 | 0 | 595.66 | -66.5 | -2.5 | -2.6 | -2.3 | | 0.0 | 0.0 | -3.1 | -9.5 | 0.0 | 0.0 | -7.7 |
| Carpark | PLot | Leq,adj,1h | | | 61.0 | 83.2 | 167.8 | 0.0 | 0.0 | 0 | 534.67 | -65.6 | -2.8 | -0.6 | -3.2 | | 0.0 | 0.0 | 11.1 | -3.0 | 0.0 | 0.0 | 8.1 |

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SoundPLAN 8.2

ument Set ID: 3111589
sion: 1, Version Date: 21/12/2023

Boonenne Timbers
ISO9613 Calculation Method
Predicted Operational Noise Levels at Adjacent Uses
From Activities at Proposed Development

| Source | Source type | time slice | Li | R'w | L'w | Lw | l or A | KI | KT | Ko | S | Adiv | Agr | Abar | Aatm | Amisc | ADI | dLrefl | Ls | dLw | Cmet | ZR | Lr |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | B(A | dB | dB(A) | dB(A) | m,m² | dB | dB | dB | m | dB | dB | dB | dB | dB | dB | dB(A) | dB(A) | dB | dB | dB | dB(A) |
| Carpark | PLot | Leq,adj,1h | | | 61.0 | 83.2 | 167.8 | 0.0 | 0.0 | 0 | 534.67 | -65.6 | -2.8 | -0.6 | -3.2 | | 0.0 | 0.0 | 11.1 | | | | |
| Carpark | PLot | Leq,adj,1h | | | 61.0 | 83.2 | 167.8 | 0.0 | 0.0 | 0 | 534.67 | -65.6 | -2.8 | -0.6 | -3.2 | | 0.0 | 0.0 | 11.1 | 0.0 | 0.0 | 0.0 | 11.1 |
| Carpark | PLot | Leq,adj,11 | | | 61.0 | 83.2 | 167.8 | 0.0 | 0.0 | 0 | 534.67 | -65.6 | -2.8 | -0.6 | -3.2 | | 0.0 | 0.0 | 11.1 | -3.0 | 0.0 | 0.0 | 8.1 |
| Carpark | PLot | Leq,adj,4h | | | 61.0 | 83.2 | 167.8 | 0.0 | 0.0 | 0 | 534.67 | -65.6 | -2.8 | -0.6 | -3.2 | | 0.0 | 0.0 | 11.1 | | 0.0 | | |
| Carpark | PLot | Leq,adj,9h | | | 61.0 | 83.2 | 167.8 | 0.0 | 0.0 | 0 | 534.67 | -65.6 | -2.8 | -0.6 | -3.2 | | 0.0 | 0.0 | 11.1 | -9.5 | 0.0 | 0.0 | 1.5 |

# Boonenne Timbers
## ISO9613 Calculation Method
## Predicted Operational Noise Levels at Adjacent Uses
## From Activities at Proposed Development

| Source | Source type | time slice | Li | R'w | L'w | Lw | l or A | KI | KT | Ko | S | Adiv | Agr | Abar | Aatm | Amisc | ADI | dLrefl | Ls | dLw | Cmet | ZR | Lr |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | B(A | dB | dB(A) | dB(A) | m,m² | dB | dB | dB | m | dB | dB | dB | dB | dB | dB | dB(A) | dB(A) | dB | dB | dB | dB(A) |
| Receiver 186 Boonenne Road FI GF Dir S | Lr,lim dB(A) | Leq,15min 42 dB(A) | | | Lr,lim dB(A) | | Lr,lim dB(A) | | Lr,lim dB(A) | | Lr,lim dB(A) | Leq,adj,1h dB(A) | | | Leq,adj,1h 35 dB(A) | | Leq,adj,11 38 dB(A) | | Leq,adj,4h dB(A) | | Leq,adj,9h 26 dB(A) | | |
| Chainsaw | Point | Leq,adj,1h | | | 114.0 | 114.0 | | 0.0 | 5.0 | 0 | 388.05 | -62.8 | -1.3 | -4.1 | -5.1 | | 0.0 | 0.0 | 40.7 | -4.8 | 0.0 | 0.0 | 40.9 |
| Chainsaw | Point | Leq,adj,1h | | | 114.0 | 114.0 | | 0.0 | 5.0 | 0 | 388.05 | -62.8 | -1.3 | -4.1 | -5.1 | | 0.0 | 0.0 | 40.7 | | | | |
| Chainsaw | Point | Leq,adj,1h | | | 114.0 | 114.0 | | 0.0 | 5.0 | 0 | 388.05 | -62.8 | -1.3 | -4.1 | -5.1 | | 0.0 | 0.0 | 40.7 | | 0.0 | | |
| Chainsaw | Point | Leq,adj,11 | | | 114.0 | 114.0 | | 0.0 | 5.0 | 0 | 388.05 | -62.8 | -1.3 | -4.1 | -5.1 | | 0.0 | 0.0 | 40.7 | -10.4 | 0.0 | 0.0 | 35.3 |
| Chainsaw | Point | Leq,adj,4h | | | 114.0 | 114.0 | | 0.0 | 5.0 | 0 | 388.05 | -62.8 | -1.3 | -4.1 | -5.1 | | 0.0 | 0.0 | 40.7 | | 0.0 | | |
| Chainsaw | Point | Leq,adj,9h | | | 114.0 | 114.0 | | 0.0 | 5.0 | 0 | 388.05 | -62.8 | -1.3 | -4.1 | -5.1 | | 0.0 | 0.0 | 40.7 | | 0.0 | | |
| Circular Saw_1 | Point | Leq,adj,1h | | | 99.4 | 99.4 | | 0.0 | 5.0 | 0 | 499.45 | -65.0 | -1.3 | -4.0 | -4.7 | | 0.0 | 0.0 | 24.4 | 0.0 | 0.0 | 0.0 | 29.4 |
| Circular Saw_1 | Point | Leq,adj,1h | | | 99.4 | 99.4 | | 0.0 | 5.0 | 0 | 499.45 | -65.0 | -1.3 | -4.0 | -4.7 | | 0.0 | 0.0 | 24.4 | | | | |
| Circular Saw_1 | Point | Leq,adj,1h | | | 99.4 | 99.4 | | 0.0 | 5.0 | 0 | 499.45 | -65.0 | -1.3 | -4.0 | -4.7 | | 0.0 | 0.0 | 24.4 | -3.0 | 0.0 | 0.0 | 26.4 |
| Circular Saw_1 | Point | Leq,adj,11 | | | 99.4 | 99.4 | | 0.0 | 5.0 | 0 | 499.45 | -65.0 | -1.3 | -4.0 | -4.7 | | 0.0 | 0.0 | 24.4 | -1.4 | 0.0 | 0.0 | 28.0 |
| Circular Saw_1 | Point | Leq,adj,4h | | | 99.4 | 99.4 | | 0.0 | 5.0 | 0 | 499.45 | -65.0 | -1.3 | -4.0 | -4.7 | | 0.0 | 0.0 | 24.4 | | 0.0 | | |
| Circular Saw_1 | Point | Leq,adj,9h | | | 99.4 | 99.4 | | 0.0 | 5.0 | 0 | 499.45 | -65.0 | -1.3 | -4.0 | -4.7 | | 0.0 | 0.0 | 24.4 | -12.6 | 0.0 | 0.0 | 16.8 |
| Circular Saw_2 | Point | Leq,adj,1h | | | 99.4 | 99.4 | | 0.0 | 5.0 | 0 | 488.38 | -64.8 | -1.3 | -4.3 | -4.5 | | 0.0 | 0.0 | 24.4 | 0.0 | 0.0 | 0.0 | 29.4 |
| Circular Saw_2 | Point | Leq,adj,1h | | | 99.4 | 99.4 | | 0.0 | 5.0 | 0 | 488.38 | -64.8 | -1.3 | -4.3 | -4.5 | | 0.0 | 0.0 | 24.4 | | | | |
| Circular Saw_2 | Point | Leq,adj,1h | | | 99.4 | 99.4 | | 0.0 | 5.0 | 0 | 488.38 | -64.8 | -1.3 | -4.3 | -4.5 | | 0.0 | 0.0 | 24.4 | -3.0 | 0.0 | 0.0 | 26.4 |
| Circular Saw_2 | Point | Leq,adj,11 | | | 99.4 | 99.4 | | 0.0 | 5.0 | 0 | 488.38 | -64.8 | -1.3 | -4.3 | -4.5 | | 0.0 | 0.0 | 24.4 | -1.4 | 0.0 | 0.0 | 28.1 |
| Circular Saw_2 | Point | Leq,adj,4h | | | 99.4 | 99.4 | | 0.0 | 5.0 | 0 | 488.38 | -64.8 | -1.3 | -4.3 | -4.5 | | 0.0 | 0.0 | 24.4 | | 0.0 | | |
| Circular Saw_2 | Point | Leq,adj,9h | | | 99.4 | 99.4 | | 0.0 | 5.0 | 0 | 488.38 | -64.8 | -1.3 | -4.3 | -4.5 | | 0.0 | 0.0 | 24.4 | -12.6 | 0.0 | 0.0 | 16.9 |
| Conveyor Belt | Area | Leq,adj,1h | | | 61.4 | 88.3 | 487.2 | 0.0 | 5.0 | 0 | 492.27 | -64.8 | -0.1 | -4.1 | -1.1 | | 0.0 | 0.0 | 18.2 | 0.0 | 0.0 | 0.0 | 23.2 |
| Conveyor Belt | Area | Leq,adj,1h | | | 61.4 | 88.3 | 487.2 | 0.0 | 5.0 | 0 | 492.27 | -64.8 | -0.1 | -4.1 | -1.1 | | 0.0 | 0.0 | 18.2 | | | | |
| Conveyor Belt | Area | Leq,adj,1h | | | 61.4 | 88.3 | 487.2 | 0.0 | 5.0 | 0 | 492.27 | -64.8 | -0.1 | -4.1 | -1.1 | | 0.0 | 0.0 | 18.2 | 0.0 | 0.0 | 0.0 | 23.2 |
| Conveyor Belt | Area | Leq,adj,11 | | | 61.4 | 88.3 | 487.2 | 0.0 | 5.0 | 0 | 492.27 | -64.8 | -0.1 | -4.1 | -1.1 | | 0.0 | 0.0 | 18.2 | -1.4 | 0.0 | 0.0 | 21.8 |
| Conveyor Belt | Area | Leq,adj,4h | | | 61.4 | 88.3 | 487.2 | 0.0 | 5.0 | 0 | 492.27 | -64.8 | -0.1 | -4.1 | -1.1 | | 0.0 | 0.0 | 18.2 | | 0.0 | | |
| Conveyor Belt | Area | Leq,adj,9h | | | 61.4 | 88.3 | 487.2 | 0.0 | 5.0 | 0 | 492.27 | -64.8 | -0.1 | -4.1 | -1.1 | | 0.0 | 0.0 | 18.2 | -9.5 | 0.0 | 0.0 | 13.6 |
| Forklift_North | Area | Leq,adj,1h | | | 63.2 | 92.0 | 768.7 | 0.0 | 5.0 | 0 | 370.99 | -62.4 | -1.3 | -4.0 | -4.9 | | 0.0 | 0.0 | 19.5 | 0.0 | 0.0 | 0.0 | 24.5 |
| Forklift_North | Area | Leq,adj,1h | | | 63.2 | 92.0 | 768.7 | 0.0 | 5.0 | 0 | 370.99 | -62.4 | -1.3 | -4.0 | -4.9 | | 0.0 | 0.0 | 19.5 | | | | |
| Forklift_North | Area | Leq,adj,1h | | | 63.2 | 92.0 | 768.7 | 0.0 | 5.0 | 0 | 370.99 | -62.4 | -1.3 | -4.0 | -4.9 | | 0.0 | 0.0 | 19.5 | 0.0 | 0.0 | 0.0 | 24.5 |
| Forklift_North | Area | Leq,adj,11 | | | 63.2 | 92.0 | 768.7 | 0.0 | 5.0 | 0 | 370.99 | -62.4 | -1.3 | -4.0 | -4.9 | | 0.0 | 0.0 | 19.5 | -1.4 | 0.0 | 0.0 | 23.1 |
| Forklift_North | Area | Leq,adj,4h | | | 63.2 | 92.0 | 768.7 | 0.0 | 5.0 | 0 | 370.99 | -62.4 | -1.3 | -4.0 | -4.9 | | 0.0 | 0.0 | 19.5 | | 0.0 | | |
| Forklift_North | Area | Leq,adj,9h | | | 63.2 | 92.0 | 768.7 | 0.0 | 5.0 | 0 | 370.99 | -62.4 | -1.3 | -4.0 | -4.9 | | 0.0 | 0.0 | 19.5 | -9.5 | 0.0 | 0.0 | 14.9 |
| Forklift_South | Area | Leq,adj,1h | | | 59.7 | 92.0 | 1721.7 | 0.0 | 5.0 | 0 | 459.86 | -64.2 | -1.3 | -4.4 | -5.4 | | 0.0 | 0.0 | 16.6 | 0.0 | 0.0 | 0.0 | 21.6 |

Boonenne Timbers
ISO9613 Calculation Method
Predicted Operational Noise Levels at Adjacent Uses
From Activities at Proposed Development

| Source | Source type | time slice | Li | R'w | L'w | Lw | l or A | Kl | KT | Ko | S | Adiv | Agr | Abar | Aatm | Amisc | ADil | dLrefl | Ls | dLw | Cmet | ZR | Lr |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | B(A) | dB | dB(A) | dB(A) | m,m² | dB | dB | dB | m | dB | dB | dB | dB | dB | dB | dB(A) | dB(A) | dB | dB | dB | dB(A) |
| Forklift_South | Area | Leq,adj,1h | | | 59.7 | 92.0 | 1721.7 | 0.0 | 5.0 | 0 | 459.86 | -64.2 | -1.3 | -4.4 | -5.4 | | 0.0 | 0.0 | 16.6 | | | | |
| Forklift_South | Area | Leq,adj,1h | | | 59.7 | 92.0 | 1721.7 | 0.0 | 5.0 | 0 | 459.86 | -64.2 | -1.3 | -4.4 | -5.4 | | 0.0 | 0.0 | 16.6 | 0.0 | 0.0 | 0.0 | 21.6 |
| Forklift_South | Area | Leq,adj,11 | | | 59.7 | 92.0 | 1721.7 | 0.0 | 5.0 | 0 | 459.86 | -64.2 | -1.3 | -4.4 | -5.4 | | 0.0 | 0.0 | 16.6 | -1.4 | 0.0 | 0.0 | 20.2 |
| Forklift_South | Area | Leq,adj,4h | | | 59.7 | 92.0 | 1721.7 | 0.0 | 5.0 | 0 | 459.86 | -64.2 | -1.3 | -4.4 | -5.4 | | 0.0 | 0.0 | 16.6 | | 0.0 | | |
| Forklift_South | Area | Leq,adj,9h | | | 59.7 | 92.0 | 1721.7 | 0.0 | 5.0 | 0 | 459.86 | -64.2 | -1.3 | -4.4 | -5.4 | | 0.0 | 0.0 | 16.6 | -9.5 | 0.0 | 0.0 | 12.1 |
| North Flexi Wall-Breakout North Flexishield | Area | Leq,adj,1h | | | 76.0 | 82.7 | 4.6 | 0.0 | 0.0 | 3 | 485.40 | -64.7 | -5.2 | -2.3 | -0.8 | | 0.0 | 0.0 | 12.6 | 0.0 | 0.0 | 0.0 | 12.6 |
| North Flexi Wall-Breakout North Flexishield | Area | Leq,adj,1h | | | 76.0 | 82.7 | 4.6 | 0.0 | 0.0 | 3 | 485.40 | -64.7 | -5.2 | -2.3 | -0.8 | | 0.0 | 0.0 | 12.6 | | | | |
| North Flexi Wall-Breakout North Flexishield | Area | Leq,adj,1h | | | 76.0 | 82.7 | 4.6 | 0.0 | 0.0 | 3 | 485.40 | -64.7 | -5.2 | -2.3 | -0.8 | | 0.0 | 0.0 | 12.6 | -3.0 | 0.0 | 0.0 | 9.6 |
| North Flexi Wall-Breakout North Flexishield | Area | Leq,adj,11 | | | 76.0 | 82.7 | 4.6 | 0.0 | 0.0 | 3 | 485.40 | -64.7 | -5.2 | -2.3 | -0.8 | | 0.0 | 0.0 | 12.6 | -1.4 | 0.0 | 0.0 | 11.3 |
| North Flexi Wall-Breakout North Flexishield | Area | Leq,adj,4h | | | 76.0 | 82.7 | 4.6 | 0.0 | 0.0 | 3 | 485.40 | -64.7 | -5.2 | -2.3 | -0.8 | | 0.0 | 0.0 | 12.6 | | 0.0 | | |
| North Flexi Wall-Breakout North Flexishield | Area | Leq,adj,9h | | | 76.0 | 82.7 | 4.6 | 0.0 | 0.0 | 3 | 485.40 | -64.7 | -5.2 | -2.3 | -0.8 | | 0.0 | 0.0 | 12.6 | -12.6 | 0.0 | 0.0 | 0.1 |
| Shredder Breakout | Point | Leq,adj,1h | | | 100.2 | 100.2 | | 0.0 | 5.0 | 0 | 487.11 | -64.7 | -2.6 | -13.3 | -0.9 | | 0.0 | 1.8 | 20.5 | 0.0 | 0.0 | 0.0 | 25.5 |
| Shredder Breakout | Point | Leq,adj,1h | | | 100.2 | 100.2 | | 0.0 | 5.0 | 0 | 487.11 | -64.7 | -2.6 | -13.3 | -0.9 | | 0.0 | 1.8 | 20.5 | | | | |
| Shredder Breakout | Point | Leq,adj,1h | | | 100.2 | 100.2 | | 0.0 | 5.0 | 0 | 487.11 | -64.7 | -2.6 | -13.3 | -0.9 | | 0.0 | 1.8 | 20.5 | -3.0 | 0.0 | 0.0 | 22.5 |
| Shredder Breakout | Point | Leq,adj,11 | | | 100.2 | 100.2 | | 0.0 | 5.0 | 0 | 487.11 | -64.7 | -2.6 | -13.3 | -0.9 | | 0.0 | 1.8 | 20.5 | -1.4 | 0.0 | 0.0 | 24.1 |
| Shredder Breakout | Point | Leq,adj,4h | | | 100.2 | 100.2 | | 0.0 | 5.0 | 0 | 487.11 | -64.7 | -2.6 | -13.3 | -0.9 | | 0.0 | 1.8 | 20.5 | | 0.0 | | |
| Shredder Breakout | Point | Leq,adj,9h | | | 100.2 | 100.2 | | 0.0 | 5.0 | 0 | 487.11 | -64.7 | -2.6 | -13.3 | -0.9 | | 0.0 | 1.8 | 20.5 | -12.6 | 0.0 | 0.0 | 13.0 |
| Shredder Shed_Eastern Facade | Area | Leq,adj,1h | | | 78.7 | 91.0 | 17.0 | 5.0 | 0.0 | 3 | 486.50 | -64.7 | -4.9 | -5.5 | -0.3 | | 0.0 | 0.0 | 18.6 | 0.0 | 0.0 | 0.0 | 23.6 |
| Shredder Shed_Eastern Facade | Area | Leq,adj,1h | | | 78.7 | 91.0 | 17.0 | 5.0 | 0.0 | 3 | 486.50 | -64.7 | -4.9 | -5.5 | -0.3 | | 0.0 | 0.0 | 18.6 | | | | |
| Shredder Shed_Eastern Facade | Area | Leq,adj,11 | | | 78.7 | 91.0 | 17.0 | 5.0 | 0.0 | 3 | 486.50 | -64.7 | -4.9 | -5.5 | -0.3 | | 0.0 | 0.0 | 18.6 | 0.0 | 0.0 | 0.0 | 23.6 |
| Shredder Shed_Eastern Facade | Area | Leq,adj,4h | | | 78.7 | 91.0 | 17.0 | 5.0 | 0.0 | 3 | 486.50 | -64.7 | -4.9 | -5.5 | -0.3 | | 0.0 | 0.0 | 18.6 | -1.4 | 0.0 | 0.0 | 22.2 |
| Shredder Shed_Eastern Facade | Area | Leq,adj,9h | | | 78.7 | 91.0 | 17.0 | 5.0 | 0.0 | 3 | 486.50 | -64.7 | -4.9 | -5.5 | -0.3 | | 0.0 | 0.0 | 18.6 | | 0.0 | | |
| Shredder Shed_Northern Facade | Area | Leq,adj,1h | | | 78.7 | 89.9 | 13.1 | 5.0 | 0.0 | 3 | 483.02 | -64.7 | -4.8 | -1.9 | -0.6 | | 0.0 | 0.0 | 20.8 | -9.5 | 0.0 | 0.0 | 14.1 |
| Shredder Shed_Northern Facade | Area | Leq,adj,1h | | | 78.7 | 89.9 | 13.1 | 5.0 | 0.0 | 3 | 483.02 | -64.7 | -4.8 | -1.9 | -0.6 | | 0.0 | 0.0 | 20.8 | 0.0 | 0.0 | 0.0 | 25.8 |
| Shredder Shed_Northern Facade | Area | Leq,adj,1h | | | 78.7 | 89.9 | 13.1 | 5.0 | 0.0 | 3 | 483.02 | -64.7 | -4.8 | -1.9 | -0.6 | | 0.0 | 0.0 | 20.8 | 0.0 | 0.0 | 0.0 | 25.8 |
| Shredder Shed_Northern Facade | Area | Leq,adj,11 | | | 78.7 | 89.9 | 13.1 | 5.0 | 0.0 | 3 | 483.02 | -64.7 | -4.8 | -1.9 | -0.6 | | 0.0 | 0.0 | 20.8 | -1.4 | 0.0 | 0.0 | 24.5 |
| Shredder Shed_Northern Facade | Area | Leq,adj,4h | | | 78.7 | 89.9 | 13.1 | 5.0 | 0.0 | 3 | 483.02 | -64.7 | -4.8 | -1.9 | -0.6 | | 0.0 | 0.0 | 20.8 | | 0.0 | | |
| Shredder Shed_Northern Facade | Area | Leq,adj,9h | | | 78.7 | 89.9 | 13.1 | 5.0 | 0.0 | 3 | 483.02 | -64.7 | -4.8 | -1.9 | -0.6 | | 0.0 | 0.0 | 20.8 | -9.5 | 0.0 | 0.0 | 16.3 |
| Shredder Shed_Roof | Area | Leq,adj,1h | | | 78.7 | 92.6 | 24.7 | 5.0 | 0.0 | 0 | 485.66 | -64.7 | -4.4 | -1.9 | -0.7 | | 0.0 | 0.0 | 20.9 | 0.0 | 0.0 | 0.0 | 25.9 |
| Shredder Shed_Roof | Area | Leq,adj,1h | | | 78.7 | 92.6 | 24.7 | 5.0 | 0.0 | 0 | 485.66 | -64.7 | -4.4 | -1.9 | -0.7 | | 0.0 | 0.0 | 20.9 | 0.0 | 0.0 | 0.0 | 25.9 |
| Shredder Shed_Roof | Area | Leq,adj,11 | | | 78.7 | 92.6 | 24.7 | 5.0 | 0.0 | 0 | 485.66 | -64.7 | -4.4 | -1.9 | -0.7 | | 0.0 | 0.0 | 20.9 | -1.4 | 0.0 | 0.0 | 24.5 |

ATP Consulting Engineers

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SoundPLAN 8.2

ument Set ID: 3111589
sion: 1, Version Date: 21/12/2023

Boonenne Timbers
ISO9613 Calculation Method
Predicted Operational Noise Levels at Adjacent Uses
From Activities at Proposed Development

| Source | Source type | time slice | Li | R'w | L'w | Lw | l or A | Kl | KT | Ko | S | Adiv | Agr | Abar | Aatm | Amisc | ADI | dLrefl | Ls | dLw | Cmet | ZR | Lr |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | B/m² | dB | dB(A) | dB(A) | m,m² | dB | dB | dB | m | dB | dB | dB | dB | dB | dB | dB(A) | dB(A) | dB | dB | dB | dB(A) |
| Shredder Shed_Roof | Area | Leq,adj,4h | | | 78.7 | 92.6 | 24.7 | 5.0 | 0.0 | 0 | 485.66 | -64.7 | -4.4 | -1.9 | -0.7 | | 0.0 | 0.0 | 20.9 | | 0.0 | | |
| Shredder Shed_Roof | Area | Leq,adj,9h | | | 78.7 | 92.6 | 24.7 | 5.0 | 0.0 | 0 | 485.66 | -64.7 | -4.4 | -1.9 | -0.7 | | 0.0 | 0.0 | 20.9 | -9.5 | 0.0 | 0.0 | 16.4 |
| Shredder Shed_Western Facade | Area | Leq,adj,1h | | | 78.7 | 91.0 | 17.0 | 5.0 | 0.0 | 3 | 484.83 | -64.7 | -4.9 | -2.2 | -0.6 | | 0.0 | 0.0 | 21.7 | 0.0 | 0.0 | 0.0 | 26.7 |
| Shredder Shed_Western Facade | Area | Leq,adj,1h | | | 78.7 | 91.0 | 17.0 | 5.0 | 0.0 | 3 | 484.83 | -64.7 | -4.9 | -2.2 | -0.6 | | 0.0 | 0.0 | 21.7 | | | | |
| Shredder Shed_Western Facade | Area | Leq,adj,1h | | | 78.7 | 91.0 | 17.0 | 5.0 | 0.0 | 3 | 484.83 | -64.7 | -4.9 | -2.2 | -0.6 | | 0.0 | 0.0 | 21.7 | 0.0 | 0.0 | 0.0 | 26.7 |
| Shredder Shed_Western Facade | Area | Leq,adj,11 | | | 78.7 | 91.0 | 17.0 | 5.0 | 0.0 | 3 | 484.83 | -64.7 | -4.9 | -2.2 | -0.6 | | 0.0 | 0.0 | 21.7 | -1.4 | 0.0 | 0.0 | 25.3 |
| Shredder Shed_Western Facade | Area | Leq,adj,4h | | | 78.7 | 91.0 | 17.0 | 5.0 | 0.0 | 3 | 484.83 | -64.7 | -4.9 | -2.2 | -0.6 | | 0.0 | 0.0 | 21.7 | | 0.0 | | |
| Shredder Shed_Western Facade | Area | Leq,adj,9h | | | 78.7 | 91.0 | 17.0 | 5.0 | 0.0 | 3 | 484.83 | -64.7 | -4.9 | -2.2 | -0.6 | | 0.0 | 0.0 | 21.7 | -9.5 | 0.0 | 0.0 | 17.1 |
| Shredderr Shed_Southern Facade | Area | Leq,adj,1h | | | 78.7 | 89.9 | 13.0 | 5.0 | 0.0 | 3 | 488.33 | -64.8 | -4.9 | -5.5 | -0.3 | | 0.0 | 0.0 | 17.4 | 0.0 | 0.0 | 0.0 | 22.4 |
| Shredderr Shed_Southern Facade | Area | Leq,adj,1h | | | 78.7 | 89.9 | 13.0 | 5.0 | 0.0 | 3 | 488.33 | -64.8 | -4.9 | -5.5 | -0.3 | | 0.0 | 0.0 | 17.4 | | | | |
| Shredderr Shed_Southern Facade | Area | Leq,adj,1h | | | 78.7 | 89.9 | 13.0 | 5.0 | 0.0 | 3 | 488.33 | -64.8 | -4.9 | -5.5 | -0.3 | | 0.0 | 0.0 | 17.4 | 0.0 | 0.0 | 0.0 | 22.4 |
| Shredderr Shed_Southern Facade | Area | Leq,adj,11 | | | 78.7 | 89.9 | 13.0 | 5.0 | 0.0 | 3 | 488.33 | -64.8 | -4.9 | -5.5 | -0.3 | | 0.0 | 0.0 | 17.4 | -1.4 | 0.0 | 0.0 | 21.0 |
| Shredderr Shed_Southern Facade | Area | Leq,adj,4h | | | 78.7 | 89.9 | 13.0 | 5.0 | 0.0 | 3 | 488.33 | -64.8 | -4.9 | -5.5 | -0.3 | | 0.0 | 0.0 | 17.4 | | 0.0 | | |
| Shredderr Shed_Southern Facade | Area | Leq,adj,9h | | | 78.7 | 89.9 | 13.0 | 5.0 | 0.0 | 3 | 488.33 | -64.8 | -4.9 | -5.5 | -0.3 | | 0.0 | 0.0 | 17.4 | -9.5 | 0.0 | 0.0 | 12.9 |
| South Flexishield-Breakout South Flexishield | Area | Leq,adj,1h | | | 76.0 | 82.7 | 4.6 | 0.0 | 0.0 | 3 | 488.64 | -64.8 | -5.2 | -7.1 | -0.3 | | 0.0 | 0.0 | 8.2 | 0.0 | 0.0 | 0.0 | 8.2 |
| South Flexishield-Breakout South Flexishield | Area | Leq,adj,1h | | | 76.0 | 82.7 | 4.6 | 0.0 | 0.0 | 3 | 488.64 | -64.8 | -5.2 | -7.1 | -0.3 | | 0.0 | 0.0 | 8.2 | | | | |
| South Flexishield-Breakout South Flexishield | Area | Leq,adj,1h | | | 76.0 | 82.7 | 4.6 | 0.0 | 0.0 | 3 | 488.64 | -64.8 | -5.2 | -7.1 | -0.3 | | 0.0 | 0.0 | 8.2 | -3.0 | 0.0 | 0.0 | 5.2 |
| South Flexishield-Breakout South Flexishield | Area | Leq,adj,11 | | | 76.0 | 82.7 | 4.6 | 0.0 | 0.0 | 3 | 488.64 | -64.8 | -5.2 | -7.1 | -0.3 | | 0.0 | 0.0 | 8.2 | -1.4 | 0.0 | 0.0 | 6.8 |
| South Flexishield-Breakout South Flexishield | Area | Leq,adj,4h | | | 76.0 | 82.7 | 4.6 | 0.0 | 0.0 | 3 | 488.64 | -64.8 | -5.2 | -7.1 | -0.3 | | 0.0 | 0.0 | 8.2 | | 0.0 | | |
| South Flexishield-Breakout South Flexishield | Area | Leq,adj,9h | | | 76.0 | 82.7 | 4.6 | 0.0 | 0.0 | 3 | 488.64 | -64.8 | -5.2 | -7.1 | -0.3 | | 0.0 | 0.0 | 8.2 | -12.6 | 0.0 | 0.0 | -4.3 |
| Truck movements | Line | Leq,adj,1h | | | 42.9 | 70.7 | 605.6 | 0.0 | 5.0 | 0 | 356.34 | -62.0 | -2.6 | -2.5 | -1.5 | | 0.0 | 0.0 | 2.1 | 0.0 | 0.0 | 0.0 | 7.1 |
| Truck movements | Line | Leq,adj,1h | | | 42.9 | 70.7 | 605.6 | 0.0 | 5.0 | 0 | 356.34 | -62.0 | -2.6 | -2.5 | -1.5 | | 0.0 | 0.0 | 2.1 | | | | |
| Truck movements | Line | Leq,adj,1h | | | 42.9 | 70.7 | 605.6 | 0.0 | 5.0 | 0 | 356.34 | -62.0 | -2.6 | -2.5 | -1.5 | | 0.0 | 0.0 | 2.1 | 0.0 | 0.0 | 0.0 | 7.1 |
| Truck movements | Line | Leq,adj,11 | | | 42.9 | 70.7 | 605.6 | 0.0 | 5.0 | 0 | 356.34 | -62.0 | -2.6 | -2.5 | -1.5 | | 0.0 | 0.0 | 2.1 | -1.4 | 0.0 | 0.0 | 5.7 |
| Truck movements | Line | Leq,adj,4h | | | 42.9 | 70.7 | 605.6 | 0.0 | 5.0 | 0 | 356.34 | -62.0 | -2.6 | -2.5 | -1.5 | | 0.0 | 0.0 | 2.1 | | 0.0 | | |
| Truck movements | Line | Leq,adj,9h | | | 42.9 | 70.7 | 605.6 | 0.0 | 5.0 | 0 | 356.34 | -62.0 | -2.6 | -2.5 | -1.5 | | 0.0 | 0.0 | 2.1 | -9.5 | 0.0 | 0.0 | -2.5 |
| Carpark | PLot | Leq,adj,1h | | | 61.0 | 83.2 | 167.8 | 0.0 | 0.0 | 0 | 455.59 | -64.2 | -2.7 | 0.0 | -2.8 | | 0.0 | 0.0 | 13.6 | -3.0 | 0.0 | 0.0 | 10.6 |