#A2024/3002 BSC File No. GMB\SEC x 182270 x 70.2023.332.1

19 January 2024

Mr R L Larkin 135 Blindmouth Road MAIN ARM NSW 2482 BYRON SHIRE

Email: larkinross@hotmail.com

Dear Mr Larkin

# **ONSITE SEWAGE MANAGEMENT SYSTEM (OSMS)**

<b>Application Number</b>	70.2023.332.1			
<b>Activity Description</b>	Installation for Two Bedroom Dual Occupancy Dwelling (Detached)			
Parcel Number	182270			
Property	LOT: 7 DP: 260707			
Description	135 Blindmouth Road MAIN ARM			
Structures Connected to OSMS	Nil			
Structures Proposed to be Connected to OSMS	Two Bedroom Dual Occupancy Dwelling (Detached)			

Approval for your OSMS is attached.

Please be aware that other development and /or construction approvals may be required for this development.

A copy of this approval, including the conditions and stamped plans must be kept onsite to ensure works are carried out in accordance with the approval.

#### **BOOKING INSPECTIONS**

Inspections with Council's Building Certifiers, Local Approval Officers and Engineers must be made using the Inspection Booking Form at <a href="https://www.byron.nsw.gov.au/inspectionbookings">www.byron.nsw.gov.au/inspectionbookings</a>. You will need to provide:

- Date of inspection before 12pm the day before you would like your inspection
- Type of inspection (see below)
- Name and contact phone number
- · Address of property to be inspected
- Relevant application number.

If you have any questions in relation to inspections, please contact Building Services on 6626 7050.

Yours sincerely

Anne Wilson

Administration Supervisor

Apre Wisa

**Public and Environmental Services** 

#A2024/3002 BSC File No. GMB\SEC x 182270 x 70.2023.332.1 Contact: Mr S Collyer

19 January 2024

Mr R L Larkin 135 Blindmouth Road MAIN ARM NSW 2482



Dear Mr Larkin

# APPROVAL TO INSTALL ON-SITE SEWAGE MANAGEMENT SYSTEM (OSMS) AND ASSOCIATED PLUMBING WORKS

Approval No.	70.2023.332.1				
Parcel No.	182270				
<b>Property Description</b>	LOT: 7 DP: 260707				
	135 Blindmouth Road MAIN ARM				
Owner	Mr R L Larkin				
Applicant	Mr R L Larkin				
Proposal	Installation for Two Bedroom Dual Occupancy Dwelling (Detached)				
<b>Structures Connected to</b>	Nil				
OSMS					
Structures Proposed to	Two Bedroom Dual Occupancy Dwelling (Detached)				
be Connected to OSMS					
Proposed System	Install and connect drainage to Sewage Management Facility				
·	comprising of:				
	Treatment 1	3000 L Septic Tank			
	Treatment 2	Subsurface Flow Wetland of 7.2m <sup>2</sup>			
	Disposal Type	1 x ETA bed 19.85m (L) x 1.6m (W) x 0.45m (D)			

**Determination Date: 19 January 2024** 

**NOTE: Rights of Appeal** 

You are advised of your rights to request a review of Council's determination pursuant to Section 100 of Local Government Act 1993. Such a request must be made within 28 days of the date of determination. A fee is payable in respect to this request.

Mr S Collyer
Environmental Health Officer

19 January 2024

Date of Endorsement

Attachment: Conditions of Approval

**APPLICATION APPROVED:** Approvals are granted subject to the conditions **attached** to this notice (LGA Section 94).

**LAPSING OF APPROVAL:** This approval will lapse in 5 (five) years after the date from which it operates.

**REVIEW OF APPROVAL:** An applicant may request the Council to review a determination within twenty eight (28) days of the date of determination (in accordance with Section 100, Local Government Act 1993).

**APPEAL PROVISIONS:** An applicant who is dissatisfied with the determination of a Council may appeal to the Land and Environment Court within twelve months from approval (Section 176, Local Government Act 1993).

If you have any questions regarding this Notice, please contact the Council's Environmental Health Unit (02) 6626 7107 or alternatively PES@byron.nsw.gov.au.

# **Conditions of Approval**

#### Notes:

- It is the applicant's responsibility to obtain consent for any building or subdivision works. This consent does not imply approval of any future building or subdivision works.
- Consent will be required to connect all plumbing and drainage associated with future building works to the approved sewage management facility.
- Unless tree removal is depicted on the approved plans or identified in the application, this approval does not give consent to the removal of trees or vegetation protected by the Byron Shire Council Tree Preservation Order.
- It is the applicant's responsibility to obtain consent for any dwelling/shed. This consent does not imply approval of any future dwellings/sheds.
- Consent will be required to connect all plumbing and drainage associated with future dwellings to the approved sewage management facility.
- 1. This Section 68 application to Install an On-Site Sewage Management System is approved on the condition that DA No. 10.2023.332.1 (to which this is a concurrent application) is approved.
- 2. The applicant shall install a Sewage Management Facility comprising the following:

Treatment 1	3000 L Septic Tank
Treatment 2	Subsurface Flow Wetland of 7.2m2
Disposal Type	1 x ETA bed 19.85m (L) x 1.6m (W) x 0.45m (D)

Note: All Waste Treatment Devices must be accredited by NSW Health. Tanks must bear the standard mark (AS1546-1990).

3. The proposed wastewater system shall be constructed generally in accordance with:

Plan/Report No.	Description	Prepared by	Dated:	Council Record
Guidance Document	NSW Environment and Health Protection	NSW State Government Agencies	Jan 1998	N/A
os-	Council specifications attached	Byron Shire Council	N/A	N/A
Approval No	70.2023.332.1 and 10.2023.332.1	Byron Shire Council	Date of S68 approval.	N/A
Report	Report No. 16244_ww_do	Report author.  Greg Alderson Associates	Report date. 31st Aug 2023	Council record No. E2023/94241
Stamped Plans	70.2023.332.1 and notations (IN RED).	Byron Shire Council	Date of S68 approval.	Council record No. E2024/6101

- 4. **Prior to work commencing** on construction of the on-site sewage management system the following is required:
  - a) A licensed plumber is to be engaged to carry out the work. The plumber is to obtain a permit from Byron Council prior to commencing any work and must lodge a completed Notice of Work (<u>NSW Fair Trading Notice of Work</u>). If there is more than 1 plumber carrying out works then separate permits will have to be lodged stating specifically the works that are to be carried out.
- 5. The proposed on-site sewage management system has been designed for treatment of a wastewater loading of 345 L/Day (3 persons / 2 bedrooms).
- 6. The OSMS is currently approved to connect to a Two Bedroom Dual Occupancy Dwelling (Detached).
- 7. The on-site sewage management system is to be installed by a licensed tradesman in accordance with approved plans, specifications and conditions of approval and the requirements of the NSW Code of practice and AS/NZS 3500 must be adhered to.
- 8. The sewage management system shall not be used until such time as it is completed, inspected and approval for use issued by Council. The owner is required to maintain the system in accordance with the approved plans, specifications and conditions of approval.
- 9. A user operation and maintenance manual shall be provided on completion of the system and prior to commissioning.
- 10. The following inspection/s will be required for the Water and Sewage Work:
  - a) Internal drainage;
  - b) External drainage & Irrigation area;
  - c) Rough in / Stack (if applicable)
  - d) Final Completion A licensee is required to provide to Council and owner of the property after completion of the work and within 48 hours:
    - i. a Compliance Certificate; and
    - ii. Sewer Services Diagram/ Works as Executed drawings.

**Note 1:** Council will send each plumber proformas of these documents when the Notice of Work permit has been issued by Council to allow the plumber to commence work.

**Note 2**:: Inspections will not take place unless the plumber or the plumber's representative is onsite. Re-inspection fees will apply to plumbers not on-site for inspections. Fees will be charged for all inspections.

## **Plumbing Works Related Conditions**

#### 1. Prior to commencement of works

In accordance with the Local Government Act and the NSW Code of Practice for Plumbing and Drainage your Plumber must obtain a <u>Plumbing Permit</u> at least two (2) working days prior to commencing work. Please forward this to your plumber to complete and to return to Council prior to commencement of work. All work is to be completed by a suitably qualified person licensed for the purpose by the NSW Department of Fair Trading. If the property is to be connected to council water mains, no internal sewer inspections shall take place until a water meter is installed. Drawing off of the council water main without a meter will result in a fine and possibly a stop works notice.

#### 2. **During Construction**

Plumbing, Water Supply and Sewerage works shall be installed in accordance with the Local Government Act 1993, Plumbers Code of Australia and AS/NZS 3500 Parts 0-5, the approved plans (any notations on those plans) and the approved specifications. The changes made are from Plumbers and Drainage Regulation 2012 NSW Government

a) The licensee is to provide 24 hours notice and attend the site for the following **INSPECTIONS**, prior to covering of work. Inspections will be carried out a mutually convenient time for any works that fall under the following descriptions for inspections. (If there are no applicable works, for example, a new water supply with no sewer services, then an inspection for "external drainage" will not be required)

# Required Inspections are as follows:

## <u>Inspections for structures</u>

EG Dwellings, sheds, studios etc with plumbing and drainage, up to the connection point of the OSMS.

Typical inspections **for Structures** that must be booked in include but are not limited to the following:

- Internal Drainage External Drainage
- Sewer connection to the OSMS
- Water Rough In (including any in ground water supply lines from water tanks or other buildings);
- Stack work/elevated drainage;
- Final all work completed\*. Note below.

# **Inspections for OSMS**

Typical inspections **for OSMS** that must be booked in include but are not limited to the following:

- External Drainage (between components of the systems, for example, between Septic tanks and ETA beds)
- Pump lines between system components (for example; sewer pump lines must be inspected prior to covering)
- ETA Beds or trenches prior to back fill.
- Final all work completed\*. Note below.

\*Prior to booking a final inspection, a licensee is required to provide to Council and owner of the property a Compliance Certificate (COC), Sewer Services Diagram (SSD) and/or Works as Executed drawings (WAE).

<u>SSD</u> is development drainage up to the boundary shaft or Inspection Opening. See link below: <a href="https://www.fairtrading.nsw.gov.au/trades-and-businesses/construction-and-trade-essentials/plumbers-and-drainers/plumbing-inspection-documents#sewer\_service\_diagram">https://www.fairtrading.nsw.gov.au/trades-and-businesses/construction-and-trade-essentials/plumbers-and-drainers/plumbing-inspection-documents#sewer\_service\_diagram</a>

<u>WAE</u> is the OSMS up to the boundary shaft or Inspection opening being the connection point of the dwelling/building.

WAE Plans require additional detail to that of the standard SSD for NSW fair trading as adopted by this Council:

- 1. Plans shall be done in BLACK PEN only, using a ruler. No freehand.
- 2. The plan must have dimensions and volumes for all components, Septic, Trenches etc.
- 3. The plan must include distance measurements to the nearest boundary and the location of the tank and trenches relative to the house (or other such building) i.e. the plans shall include the outline of the buildings and boundaries.
- 4. COC No. is the "70.20XX.XXX.X" number of the job.
- 5. Plan must show locations of all Inspection openings to surface.
- 6. Trenches shall show internal pipe layout
- 7. Plans shall accurately reflect the installation and be to the nominated scale in order to assess buffer offsets.

#### **AOS-ETA**

#### **EVAPOTRANSPIRATION/ABSORPTION BEDS**

#### **OPERATION REQUIREMENTS**

The evapotranspiration area (ETA) has been designed and constructed to have a limited hydraulic capacity. Where usage exceeds design capacity a public health risk or environmental harm may occur.

Effluent from the approved wastewater treatment system is designed to be evenly dispersed into each ETA field, ensuring the maximum opportunity for effluent to be taken up by the environment. The ETA provides the best opportunity for plant nutrient uptake and evaporation / transpiration.

ETA should be completely flat and level.

The characteristics of the natural soil are an important part of the functioning of ETA. In our climate of regular and heavy rainfall, ETA can be damaged by surface water flows. Diversion drainage or berms should be maintained to prevent 'water logging' of the ETA. Roof waters and rain water tank overflows should be piped away from the ETA.

ETA should be operated and maintained strictly in accordance with manufacturer's instructions and regular maintenance and attention is required. Effluent from the approved treatment system shall be dispersed into each ETA bed field.

There are minimal maintenance requirements for ETA. The area should be protected from vehicle traffic, heavy stock grazing and large tree / root invasion. The best environment to support long term success of any ETA is a well maintained surface with even plant coverage and maximum sun. Bare or wet areas within such an area might indicate a point of failure.

#### MAINTENANCE REQUIREMENTS

- The system operator should maintain the ETA in regard to adequate cover, elimination of weeds, maintenance of plants and shrubs. If surcharging effluent is observed or other signs of field malfunction are found, the system operator should contact their service provider or a licensed plumbing contractor to investigate.
  - NOTE: Any alteration, extension or construction associated with your on-site sewage management system requires the prior approval of Council.
- 2. At least once each year a service should be carried out by a service provider of licensed plumbing contractor particularly for service of any associated pressure dosing systems.
- A service report sheet shall be completed for every service. Operators should maintain records
  of all service inspections and pumpouts performed whilst the sewage management facility
  continues to operate. Each year a copy of the service report should be provided to
  Council.
- 4. Check for system failures which are generally indicated by:
  - a. Effluent on the surface of the land application area.
  - b. Surcharge of effluent from the land application area. Dead vegetation or excessively luxuriant growth of vegetation leading away from the land application area/s.
  - c. Foul odours emanating from the land application area.
  - d. Overflow at the septic tank or household plumbing fixtures.

#### **AOS-ST**

#### **SEPTIC AND SULLAGE TANKS**

#### **OPERATIONAL REQUIREMENTS**

The septic tank installed on the property is limited in the design of connected fixtures and maximum capacity of the system.

- 1. Minimise water usage in the building to reduce the volume of wastewater (hydraulic load) required to be stored and treated by the system. Overloading the system should be avoided.
- 2. Minimise biological and chemical substances entering the system by choosing to use a kitchen sink strainer, and minimising the use of laundry and general cleaning chemicals. Biologically harmful chemicals such as bleach and disinfectants should be used sparingly in any fixtures connected to the system.
- 3. Do not discharge grease, oil, paint, pesticides, chemicals or medications. The system does not have the complexity to properly decompose large quantities or complex organic compounds arising from such sources. The best option is to prevent such products from entering the system. Insoluble plastics and materials should not be added to the system.
- 4. Ensure that the septic tank is not connected to roof stormwater pipes or water tank overflow pipes. It is also important that the top of the tank is maintained sealed so as to prevent water entering the tank and overloading the system.
- 5. The septic tank will gradually fill with insoluble soil and materials over time through the process of storing and treating your wastewater. This reduction in the capacity of the tank is best managed by 'pumping out' the insoluble sludge at least every five years (more frequently if monitoring indicates that it is necessary). Licensed contractors can be found in the local "Yellow Pages" to perform this routine service. The use of unlicensed contractors may result in damage to the tank fittings.

Failure to regularly pump out your septic tank may result in costly failure of your land application area, and public health and environmental impacts on the land.

6. Protect the septic tank (and connecting pipes) from damage by vehicles, heavy animals such as cattle and horses, or large trees / roots.

# **MAINTENANCE REQUIREMENTS**

- 1. Check sludge and scum depth at least annually. Pump out sludge every 3-5 years.
- 2. If an outlet filter is installed in the septic tank, clean as per manufacturer's instructions, and replace. Ensure that contaminated filter material is returned to the septic tank.
- 3. Check for system failures which are generally indicated by:
  - (a) Plumbing fixtures and fitting not draining properly indicate a damaged or blocked pipe or possible septic tank failure.
  - (b) Surcharge of effluent at ground level either around the tank, or down the slope at the land application area/s.
  - (c) Foul odour emanating from the tank or land application area/s.

    Call a licensed plumber if you have concerns that your system is failing.

#### **OS-WL**

#### SUB-SURFACE FLOW WETLANDS

## **SPECIFICATION**

#### **DESIGN REQUIREMENTS**

- 1. A minimum buffer of 10 metres to residential buildings is recommended.
- 2. The outlet and inlet devices shall be accessible to allow for maintenance and operation inspections.
- 3. The outlet device shall be adjustable to allow for the effluent level in the wetland to be varied to suit vegetation and operational requirements.
- 4. Approved lining materials are as follows:
  - a) Stainless Steel
  - b) Polyethylene Water Troughs
  - c) "Canvacon" and similar rubberised dam liners. Plastic liners are not acceptable
  - d) Brick and Concrete
  - e) Fibreglass
  - f) Geomembrane liners (Kays, 1996)

#### INSTALLATION REQUIREMENTS

- 1. All pipework and fittings shall comply with relevant Australian Standards.
- 2. All materials shall be durable and of non-corrosive components with an expected operating life of at least 15 years.
- 3. Planting with species such as Phragmites australis or other suitable local species.

#### **OPERATION REQUIREMENTS**

All wastewater treatment systems have a limited hydraulic capacity where usage exceeds design capacity a health risk or pollution incident may occur.

# **MAINTENANCE REQUIREMENTS**

- 1. Quarterly maintenance check of the wetland area including checking of water level, cleaning of drains and elimination of weeds
- 2. The wetland plantings should generally be thinned or harvested annually to maintain the nutrient removal capacity of the system.
  - Reference: Constructed Wetland Manual, Department of Land and Water Conservation. NSW. 1998.
- 3. Effluent quality exiting the wetland must be tested for total N, total P, BOD and suspended solids quarterly over the first 12 months of operation by a service contractor authorised by Council. Council may require adjustments to be made to the wetland design and land application area should the effluent quality fail to achieve its design target expectations.

These conditions have been imposed to ensure the effective operation of the sewage management facility for the protection of public health and the environment surrounding the installation site.

The application is determined in accordance with the above recommendation under delegated authority.