

**BLAND SHIRE**  
**SEWER BUSINESS UNIT**

**SEWER**  
**MANAGEMENT (BUSINESS)**  
**PLAN**

(September 2015)

(Revision September 2022)

(NB Revision of the included "Pollution Response Management Plan" is 28 May, 2018)

## **1. INTRODUCTION**

The NSW State Government has delegated to Local Government the responsibility for provision of sewerage within Bland Shire. The statutory framework for provision of these services by Council is provided by the Local Government Act 1993. Besides the Local Government Act 1993, there are a number of other Acts that affect the running of a sewer system and the main ones are listed in Addendum 1.

Bland Shire Council has created a "Sewer Business Unit" to provide a high quality and reliable service at the most reasonable cost /benefit ratio of cost of supply to return, in order to operate a standalone business that will operate now and into the future on a zero based budget principle i.e. not at a loss.

The Sewer Business Unit's principle objectives are:

- To comply with license requirements regarding the system operations including discharge quality;
- To comply with all State and Federal Government requirements;
- In West Wyalong/Wyalong to supply council's wetlands and in Ungarie to supply council's showground, with all effluent discharge at a set cost of disposal as per the agreement between the Sewerage Business Unit and Council;
- To provide a quality service to the community within the parameter of a reasonable cost/ benefit ratio;
- To respond to blockages in the shortest possible time.

From this the Mission Statement for the Sewer Business Unit is:

**"To provide a cost effective sewerage service to West Wyalong/Wyalong, Ungarie and Barmedman and to discharge the effluent to council's West Wyalong wetlands and Ungarie showgrounds, at a set cost of disposal, and which satisfies all statutory requirements. The service will be environmentally sensitive and will protect public health."**

## **LOCATIONS**

Bland Shire has three sewer treatment plants located at West Wyalong/Wyalong, Ungarie, and Barmedman.

### **West Wyalong**

The sewer treatment plant is located at Lot 2 off Neeld Street (Newell Highway) half way between West Wyalong and Wyalong. Location and survey plans are located in Appendix 1. It is accessed by a right of way over council's wetlands.

### **Ungarie**

The sewer treatment plant is located at Lot 2 off the road to the showground which is off Crown Camp Road. Location and survey plans are located in Appendix 1.

### **Barmedman**

The sewer treatment plant is located at Lot 1 on Camp Street. Location and survey plans are located in Appendix 1.

## **FACILITIES**

### **Wyalong/West Wyalong**

The sewer treatment plant consists of two 2000 EP Pasveer channels, pumping station, screens, and administration building. The effluent is discharged under agreement to council's wetlands. A telemetry system back to council chambers also exists.

### **Ungarie**

The sewer treatment works consist of one 600EP Pasveer channel and drying beds. The effluent is discharged under agreement to council's dam for use on the Ungarie showgrounds.

### **Barmedman**

The sewer treatment works consist of 2 Oxidation Ponds, 1 Maturation Pond and 1 Evaporation Basin.

## Pump Stations and Pipework outside Sewer Treatment Plants

There exists at:

West Wyalong/ Wyalong a system consisting of 8 pumps, 48,000 metres of sewerage gravity pipe lines, and 2,296 metres of rising mains. The layout map for these facilities is located in Appendix 2.

Ungarie has a system consisting of 1 pump, 4457 metres of sewerage gravity pipe lines, and 607metres of rising main. The layout map for these facilities is located in Appendix 3.

Barmedman has a system consisting of pump, 3845 metres of sewerage gravity pipe lines, and 582 metres of rising main. The layout map for these facilities is located in Appendix 4.

### **SERVICE**

#### West Wyalong/Wyalong

The sewerage system services approximately 1,785 dwellings.

The current two Pasveer channels are at a 75% capacity. In other words if one channel broke down the other would handle 50% of the current load. The current future forecast for population growth is that the population numbers will remain static. Therefore the current system is considered suitable for future loads and no augmentation is planned.

#### Ungarie

The sewerage system service approximately 137 dwellings.

The current Pasveer channel is at 75% capacity. The current future forecast for population growth is that the population numbers will either remain static or have a slight decrease. Therefore the current system is considered suitable for future loads and no augmentation is planned.

#### Barmedman

The sewerage system service approximately 117 dwellings.

The current system is considered satisfactory for the current load. The current future forecast for population growth is that the population numbers will either remain static or have a slight decrease. Therefore the system is considered suitable for future loads.

### Staffing

There exists one permanent Supervisor and one trainee/apprentice (depending on circumstance this position is not always filled) who are housed at the West Wyalong/ Wyalong Sewerage Treatment Works. Two other council workers are made available to the Sewer Business Unit (at a rate set in the agreement between the Sewer Business Unit and Council) to aid the Supervisor in the case of incidents such as blocked sewer pipes and for stand in relief during annual leave and rostered days off. All workers who work at, or are available to the Sewer Business Unit, are to be trained in all aspects of the sewer operations. The aim being that that if the Sewer supervisor were to leave then there would be at least one person within council that would be qualified to be able to take over their position. The staff are required to maintain the sewerage system to the standard levels of service set by the Sewer Business Unit. These are shown in Addendum 2.

It is not envisaged, in the foreseeable future, to change the service delivery being provided by the Sewer Business Unit through its personnel.

### Maintenance

The Sewer Business Unit mainly performs condition based and breakdown maintenance. The maintenance regime is enclosed at Addendum 3.

## **REPORTING**

Council participates in the annual water utilities benchmarking program carried out by the relevant NSW Department (see addendum 4). The information supplied is a combination of facts on the wastewater network, the population served, and the volumes treated. In addition, the indicators also provide performance measures which could be used to drive the operation and maintenance, renewals, augmentation and new works.

The performance monitoring report by the current NSW department on sewer matters enables comparison of trends in performance between all wastewater utilities in their performance and demonstrates public accountability.

Benchmarking indicators relative to levels of customer service, environmental performance and system realisably are also monitored.

### **BEST PRACTISE**

The Sewer Business Unit endeavours to apply all its applications under the framework of the NSW Governments "Best-Practice Management of Water Supply and Sewerage – Guidelines". The Unit is achieving highly in regards to the Guidelines but every effort is being made to perform better within its budget. For a more detailed outline see Addendum 5. The Sewer Business Unit also endeavours to adhere to the NSW Water and Sewerage Strategic Business Planning Guidelines.

### **ASSET RECORD**

The Sewer Business Unit keeps a schedule of all its assets for future planning, asset costs and depreciation purposes. The non-pipe assets are condition rated on an annual basis and the pipe work assets are condition rated on the basis of monies available with an aim of completing the whole system every 10 years. Funding is based on a cost recovery basis from the users as allowed by the NSW State Government.

This schedule is shown in Appendix 5.

### **INCIDENT PLANNING**

#### **West Wyalong/ Wyalong sewerage treatment plant**

If for some reason the plants workings are compromised the Incident Response plan takes effect (see Appendix 6). In general, the worst scenario is that raw sewage is discharged to Council's wetlands. The discharge will occur according to the agreement between the Sewerage Business Unit and Council, where the Sewerage Business Unit pays the Council's wetlands a rate to handle the raw sewage overflow.

### Ungarie sewerage treatment plant

If for some reason the plants workings are compromised the Incident Response plan takes effect (see Appendix 6). In general, the worst scenario is that raw sewage is discharged to the Humbug creek via overland flow over council's Ungarie Landfill area.

### Ungarie sewerage treatment plant

If for some reason the plants workings are compromised the Incident Response plan takes effect (see Appendix 6). In general, the worst scenario is that raw sewage is discharged over the adjoining farm holdings.

### Pump Stations and Pipework outside sewer treatment plants

If for some reason the workings are compromised the Incident Response plan takes effect (see Appendix 6). In general, the blockage/breach/overflow is to be responded to as soon as possible within the staffing constraint at the time.

## **FUTURE PLANNING**

Council has a whole of life plan consisting of repeating 10 year financial plans (See Appendix 7).

The main anticipated works expected are:

West Wyalong – Re-lining each Pasveer channel every 20 years.

Ungarie – To investigate and implement actions to flood proof, as much as possible, the sewerage pumping system and pipelines.

- Re-line the Pasveer channel every 20 years.

Pipelines – Reline/reconstruct as indentified within Council asset planning and as funds permit.

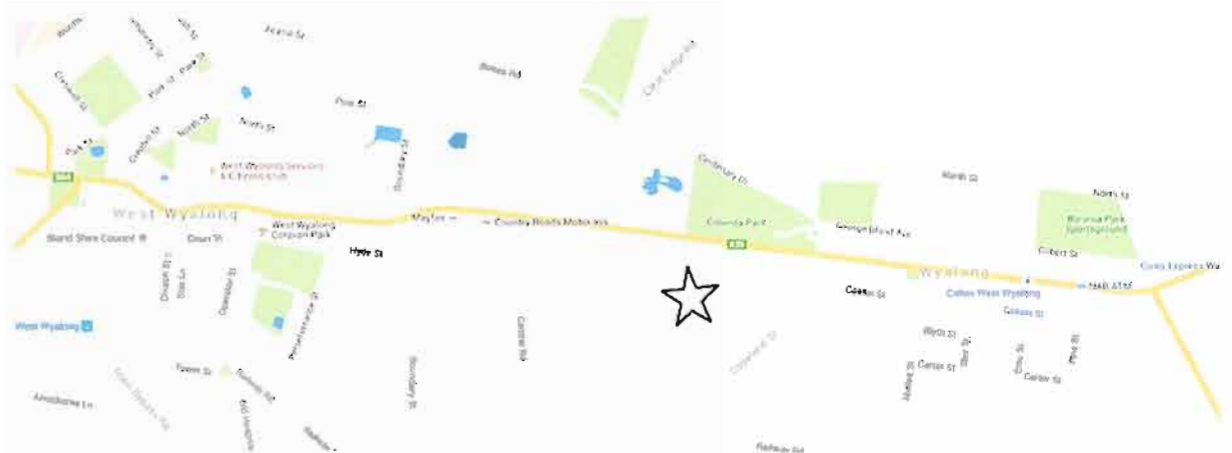
Overall – Work on a joint program with REROC councils and Goldfields Water to produce a regional Integrated Water Cycle Management Strategy.

**APPENDIX 1**

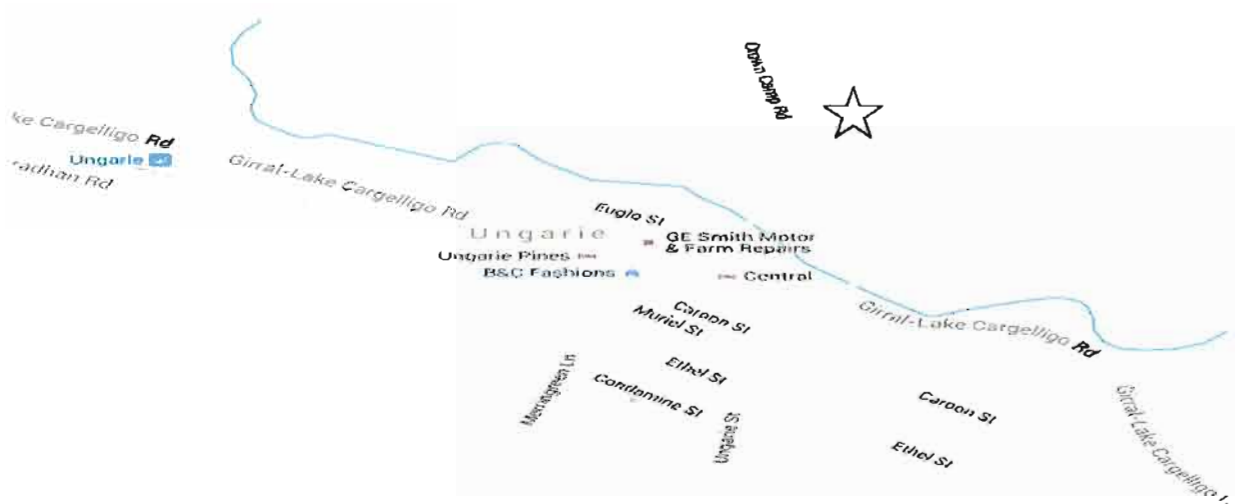
**West Wyalong/Wyalong, Ungarie and Barmedman Location and  
Survey Plans**



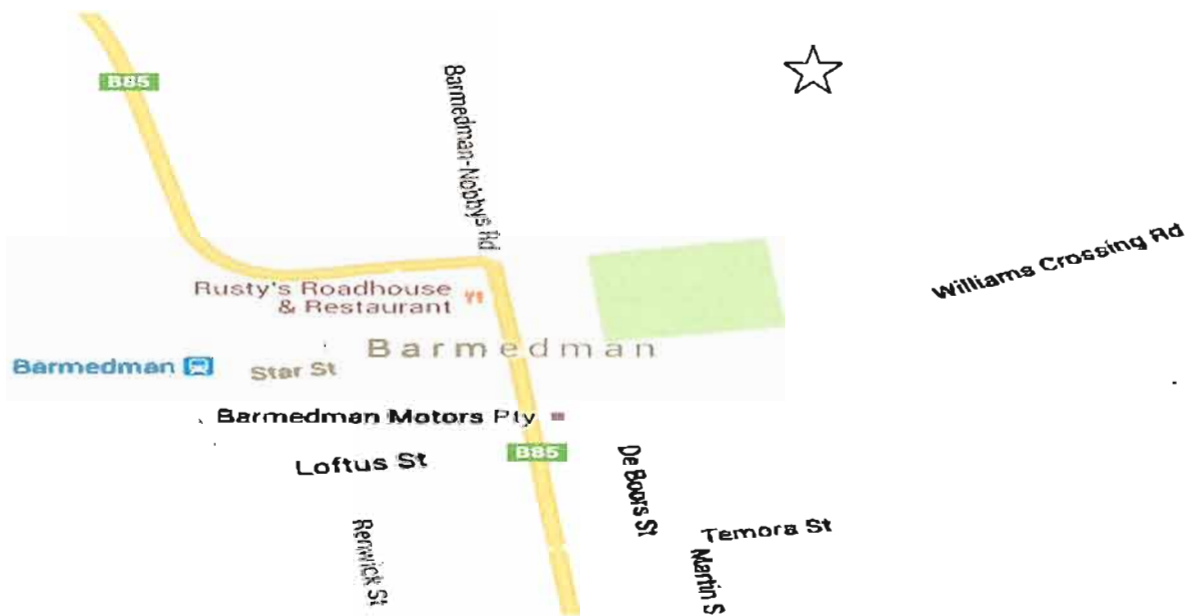
## WEST WYALONG



## UNGARIE



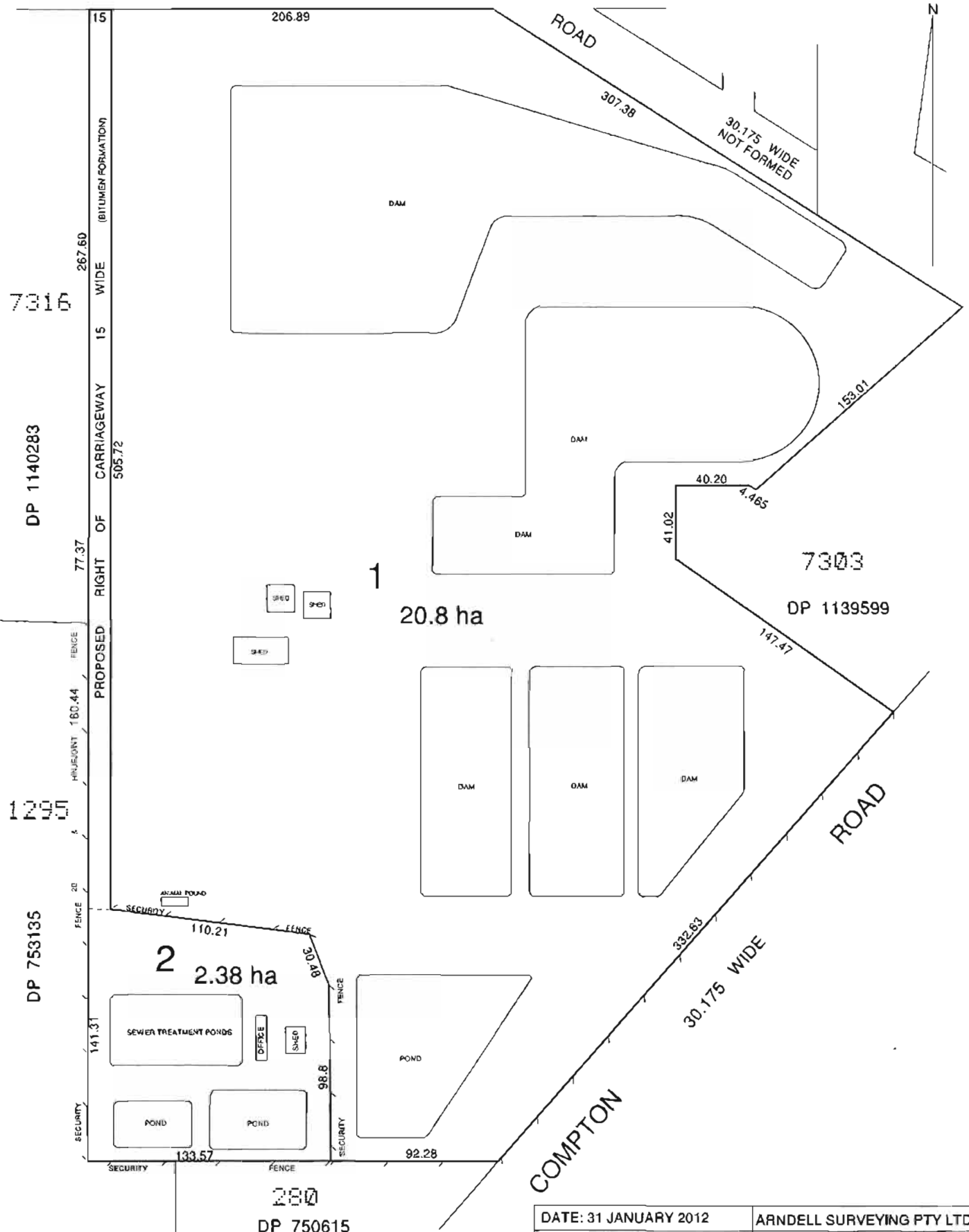
## BARMEDMAN



# PLAN FOR COUNCIL APPROVAL SHOWING PROPOSED SUBDIVISION OF LOTS 30 & 266 DP 750615

LGA: BLAND PARISH: WYALONG  
 LOCALITY: WYALONG COUNTY: BLAND

NEELD 30.175 WIDE STREET

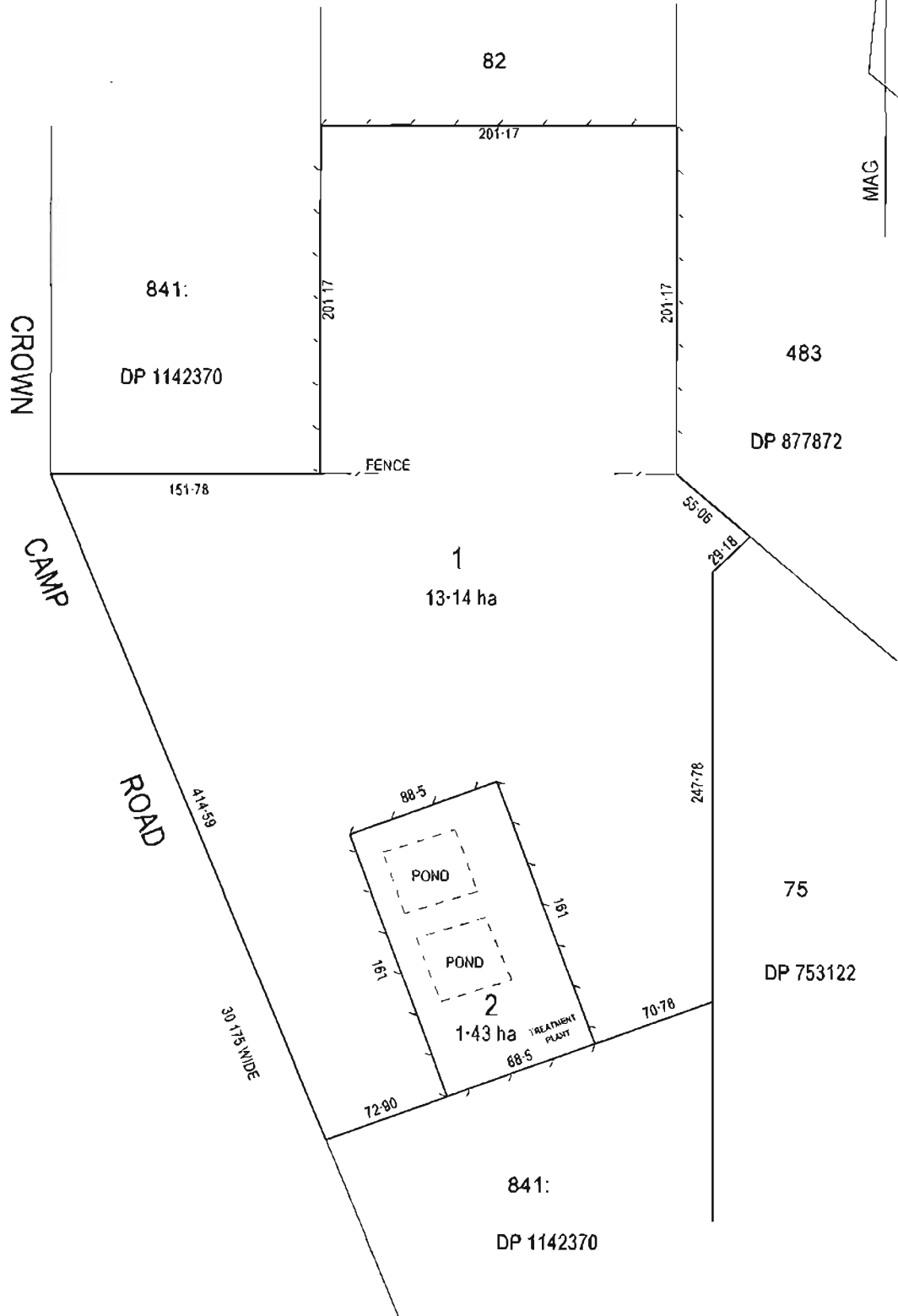


ALL DIMENSIONS ARE SUBJECT TO SURVEY

DATE: 31 JANUARY 2012	ARNDSELL SURVEYING PTY LTD
REF: 10709	REGISTERED SURVEYORS
REDUCTION RATIO 1 :2000	48 REID STREET
EMAIL: arndsell@ix.net.au	PARKES NSW 2870

# PLAN FOR COUNCIL APPROVAL SHOWING SUBDIVISION OF LOTS 1 & 2 DP 1171401 & LOT 59 DP 753122

LGA: BLAND                      PARISH: UNGARIE  
 LOCALITY: UNGARIE        COUNTY: GIPPS

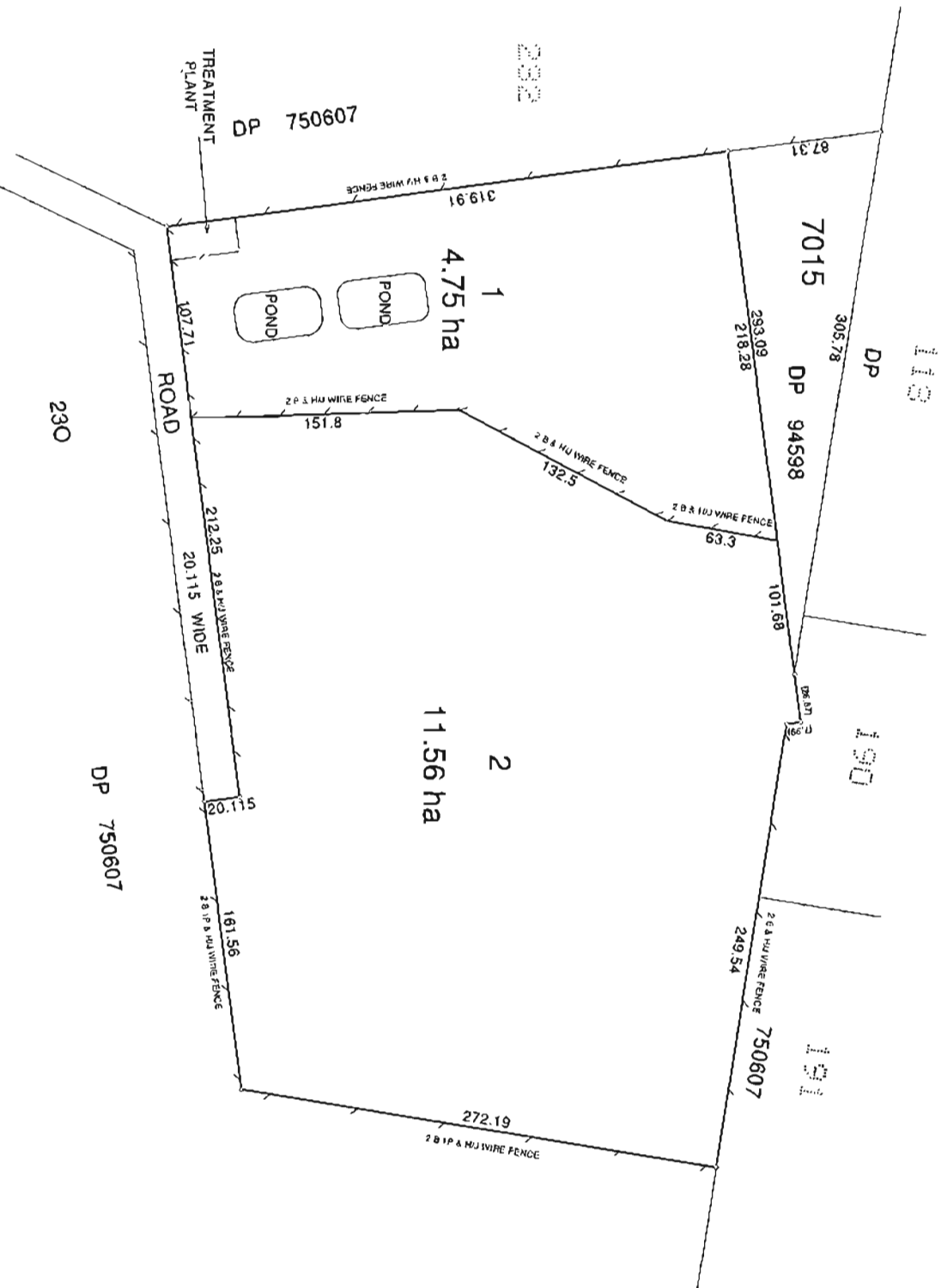


ALL DIMENSIONS ARE SUBJECT TO SURVEY

EBUF;133!GFCVBSZ!3123	BSOEFM!TVSWFZ.JH!QUZ!MJE
SFG;121831	SFHJUF!SFE!TVSWFZP!ST
SFEVDL!P OISBL!P!121;3611	59!SF.E!TUSFFU
FNB.M!bæef m jy/of ubv	QBSLFT!OTX !3981

# PLAN FOR COUNCIL APPROVAL SHOWING PROPOSED SUBDIVISION OF LOTS 117 & 228 DP 750607

LGA: BLAND PARISH: MANDAMAH  
LOCALITY: BARMEDMAN COUNTY: BLAND



ALL DIMENSIONS ARE SUBJECT TO SURVEY

DATE: 21 FEBRUARY 2012	ARNDELL SURVEYING PTY LTD
REF: 10721	REGISTERED SURVEYORS
REDUCTION RATIO: 1:2500	48 REID STREET
EMAIL: arndell@k.nsl.au	PARKES NSW 2870

## **APPENDIX 2**

### **West Wyalong/Wyalong System**



## **APPENDIX 3**

### **Ungarie System**





## **APPENDIX 4**

### **Barmedman System**



**APPENDIX 5**

**Asset Schedule**

The Asset Schedule is a living document that lies within Bland Shire Council's main computer control system Tech 1.

It can be found under Assets – Sewer

The sewerage system (except buildings and facilities) is listed as:

SW followed by 5 digit numbers

Sewer buildings and facilities are listed as buildings under

BD followed by 5 digit numbers.

**APPENDIX 6**

**Incident Response Plan**



## PROCEDURE

### ENVIRONMENTAL HEALTH AND SAFETY

# POLLUTION INCIDENT RESPONSE MANAGEMENT PLAN (Version 2)

PROCEDURE ADOPTED: 28<sup>th</sup> May 2015

---

## 1 PURPOSE

- 1.1 The purpose of this procedure is to provide guidelines of how to effectively manage pollution incident responses within the Bland Shire Council as per the *Protection of the Environment Legislation Amendment Act 2011* (POELA Act) as required by The Environmental Protection Authority (EPA) of New South Wales.

## 2 SCOPE

- 2.1 This procedure applies to all Sewerage Treatment Works (STW) and Landfill staff of Bland Shire Council at the licensed premises in West Wyalong through the EPA.

## 3 DEFINITIONS

### 3.1 Pollution Incident

A *pollution incident* means an incident or set of circumstances during or as a consequence of which there is or is likely to be a leak, spill or other escape or deposit of a substance, as a result of which pollution has occurred, is occurring or is likely to occur. It includes an incident or set of circumstances in which a substance has been placed or disposed of on premises, but it does not include an incident or set of circumstances involving only the emission of any noise.

A pollution incident is required to be notified if there is a risk of 'material harm to the environment', which is defined in section 147 of the POEO Act as:

(a) harm to the environment is material if:

- (i) it involves actual or potential harm to the health or safety of human beings or to ecosystems that is not trivial, or
- (ii) it results in actual or potential loss or property damage of an amount, or amounts in aggregate, exceeding \$10,000 (or such other amount as is prescribed by the regulations), and

(b) loss includes the reasonable costs and expenses that would be incurred in taking all reasonable and practicable measures to prevent, mitigate or make good harm to the environment.

## **4 LIKELY HAZARDS FOR BLAND SHIRE COUNCIL**

### **4.1 Landfill**

- Illegal dumping of pollutants by customers
- Oil spills
- Mixture of reactive chemicals
- Flood
- Fire
- Dust storm
- Spontaneous Combustion of green waste
- Pests, vermin and weeds

### **4.2 Sewerage Treatment Works**

- Chemical spill
- Equipment failure
- Raw sewerage escape
- Flood
- Mixture of storm water and raw sewerage escape.
- Sabotage or deliberate contamination by a member of the public
- Pests, vermin and weeds

## **5 RISK MITIGATION OF POLLUTION INCIDENTS**

### **5.1 Landfill**

- Secure grounds and gates to control unauthorised entry to landfill sites
- Screening of customers and loads at gate by trained personnel.
- Separation of non-compatible materials, tyres, batteries and empty drums
- Prohibit liquid waste disposal
- Closures on days of high temperatures (>42<sup>o</sup>) or high winds (>100kph)
- Water truck to be utilised on windy days to reduce dust
- Monitor temperatures of green waste knolls
- Baiting program for pests and vermin
- Eliminate noxious weeds as per Councils Noxious Weeds Procedure.

### **5.2 Sewerage Treatment works**

- Secure grounds and gates to control unauthorised entry to STW
- Screening/authorisation of visitors by trained personnel.
- Segregation and safe storage of chemical and hazardous materials
- Train staff to handle and store chemicals and hazardous materials
- Train staff regarding raw sewage and flood water escape and controls
- Baiting program for pests and vermin
- Eliminate noxious weeds as per Councils Noxious Weeds Procedure.

## **6 INVENTORY OF POLLUTANTS FOR BLAND SHIRE COUNCIL**

- Materials Safety Data Sheets (MSDS.com)
- Chemical Register on site

## **7 SAFETY EQUIPMENT**

- Mobile phones
- Spill Kits and mobile spill kits in vehicles
- Respiration equipment (STW)
- Personal Protective Equipment
- Training for all relevant staff

## **8 EMERGENCY PLANNING COMMITTEE**

- 8.1 The Bland Shire Council Emergency Planning Committee for Pollution Incidents shall be; The Director of Engineering Services, The Senior Town & Village Coordinator, The Environmental Officer, The Operations Coordinator, The Local Emergency Management Officer (LEMO), and the OHS/Risk Management Advisor.
- 8.2 The Emergency Planning Committee shall meet **annually** or within **1 month** of any pollution incident to:
  - 8.2.1 Review Emergency Environmental Response Plan
  - 8.2.2 Determine the number of Emergency Response Team personnel consistent with the nature of the operations.
  - 8.2.3 Arrange the replacement of Emergency Response Team personnel who are no longer available and nominate suitable persons to cover short-term absences.
  - 8.2.4 Ensure that personnel are appointed to all positions on the Emergency Response Team.
  - 8.2.5 Arrange for the training of Emergency Response Team personnel in consultation with Human Resources.
  - 8.2.6 Arrange for conduct of evacuation exercise.
  - 8.2.7 Arrange and review the effectiveness of evacuation exercises and recommend Emergency Response and Evacuation Procedure improvements.

## **9 EMERGENCY RESPONSE TEAM**

- 9.1 The Emergency Response Team shall be appropriate to the Operations.
- 9.2 The primary role of members of the Emergency Response Team is to ensure life safety and containment of a pollution incident takes precedence over asset protection.
- 9.3 The Bland Shire Council Emergency Response Team will consist of the following:
  - 9.3.1 Chief Emergency Response Officer
  - 9.3.2 Deputy Chief Response Officer
  - 9.3.3 Emergency Response Officers
- 9.4 An up-to-date register of all Emergency Response Team personnel shall be kept readily available and displayed in a location for all staff to see.
- 9.5 The Emergency Response Team and its individual members are required for any incident involving a pollution incident.

## **10 IDENTIFICATION**

- 10.1 Identification shall be consistent throughout the Council. The following coloured helmets/caps shall be used for identification:
  - 10.1.1 Chief Emergency Response Officer White
  - 10.1.2 Deputy Chief Response Officer White
  - 10.1.3 Emergency Response Officers (ERO) Red

## **11 EMERGENCY PREPARATIONS**

- 11.1 Matters to Report
  - Employees who encounter any of the situations described below must notify their Supervisor or the Chief Emergency Response Officer immediately:



- a) Any medical emergency
- b) An uncontrolled escape, spillage or leakage of a substance
- c) An uncontrolled escape of Gas or Steam
- d) An uncontrolled escape of a pressurised substance

## 12 EMERGENCY RESPONSE PROCEDURE

### On discovery of an incident/accident:

- 1 Remain calm. Check for any medical emergencies (refer below)
- 2 Announce a warning over UHF radio system, air horn and instruct all employees to evacuate from immediate danger area via closest safe exit point.
- 3 Notify your Supervisor of the location and status of the emergency. If the Supervisor can not be contacted, notify the Chief Emergency Response Officer by mobile phone.
- 4 When clear of potential hazard Call 000 or 112 (mobile phone) for Emergency Services to notify them of the emergency. Be prepared with the following information required by the emergency services:
  - a) Your name
  - b) The location of the emergency (this is especially important when calling from a mobile)
  - c) Your phone number
  - d) The problem
- 5 Follow the instructions of the Supervisor, Emergency Response Team or Emergency Services personnel.
- 6 Do not re-enter the site unless advised it is safe to do so by the Chief Emergency Response Officer.

### Emergency Response Responsibilities:

- Chief Emergency Response Officer (Chief ERP)**  
*In the Chief Emergency Response Officer's absence, the Deputy Chief Emergency Response Officer shall be required to assume the responsibilities normally carried out by the Chief.*
- 1 On hearing or receiving advice of an emergency, collect hat and ascertain the nature of the emergency and determine appropriate action.
  - 2 Ensure that all ERP not directly involved in the emergency are advised of the situation.
  - 3 If necessary initiate evacuation procedures (if not already being undertaken)
  - 4 Nominate a control person on site if no ERP are on site.
  - 5 Ensure that the appropriate Emergency Service has been notified by dialling 0 – 000 (0 for outside line) or 112 (mobile phone).
  - 6 Until Emergency Services personnel arrive, ERP or on-site Supervisor is to nominate responsible staff members to guard the entrances to the site to prevent entry by employees, contractors, volunteers or members of the public.
  - 7 ERP or the on-site supervisor will brief the Emergency Service personnel upon arrival of the type, scope and location of the emergency and be prepared to act upon Emergency Service personnel instructions.
  - 8 Advise the Emergency Service personnel of any missing workers who may be still on site and their possible location.
  - 9 Following confirmation from emergency service personnel, advise members of the staff and public when it is safe to re-enter the site following an emergency evacuation or emergency evacuation drill.

- 10 Assess the damage, collate reports and complete the Site Evacuation Report (Appendix A)

#### **Emergency Response Officers (ERP) or On-Site Supervisor**

1. On hearing or receiving advice of an emergency, collect hat
2. Commence evacuation of area, using the safest exit:
  - a) Search work area to ensure everyone has evacuated.
  - b) Ensure the orderly flow of persons through their area of responsibility
  - c) Act as leaders of groups moving to nominated Evacuation Area.
  - d) Ensure that all essential records and monies are safeguarded, without risk to life, during evacuation or during evacuation drills and collect attendance records prior to leaving the site
  - e) Perform a roll call at the Evacuation Area and report to Chief ERP
  - f) Advise the Chief ERP that the evacuation of the area is complete and of any missing persons/remaining occupants.
  - g) Meet occupants at the designated assembly area and remain with the group. DO NOT allow anyone to re-enter the danger zone until advised it is safe to do so by Chief ERP.
  - h) Do not allow anyone to wander off from the Evacuation Area until the emergency is declared over, or a Senior Management person has authorized the departure.
3. Operate fire-fighting equipment e.g. Portable fire extinguishers and hose reels, without risk to life if requested.

#### **Employees (including contractors & visitors)**

1. If advised by a Supervisor or ERP to evacuate, follow directions and move in an orderly fashion to the closest, safe exit.
2. Assemble in the designated Evacuation Area, ensure you are accounted for and remain there until the authorised person (Chief ERP) advises you that it is safe to re-enter the site.
3. All contractors to advise their own Supervisor/Manager of situation.

### **13 MEDICAL EMERGENCY**

#### **In the event of a medical emergency:**

1. In the event of a medical emergency, the first action is, if appropriate, to remove any persistent threat to the injured person. This will, of course, depend upon the nature of the event. Do not move injured person/s unless exposed to life threatening situation.
2. Contact the nearest Nominated First Aid Officer. If a Nominated First Aid Officer is not available, or if an ambulance is required, call 000 or 112 (Mobile phone) and explain the type of emergency, the location of the victim, the condition of the victim, your name and contact number.
3. Do not hang up unless told to do so by the dispatcher.
4. Do not give injured person/s anything to eat or drink.

5. In all cases stay with the injured person/s until assistance arrives.
6. Preserve the site  
In the event of any of the above the site **must** be preserved unless there is a prescribed reason being:
  - To assist an injured person.
  - To remove a deceased person.
  - To make the site safe or to minimise the risk of a further accident/incident.
  - Authorised by Police, WorkCover or Emergency Services.
  - Authorised by the OHS/RM Advisor.

#### **First Aid Officer**

1. On becoming aware of a medical emergency, collect the closest first aid kit, attend to the injured person and administer first aid if safe to do so.
2. If an ambulance is required, contact Emergency Services on 000 or 112 (mobile phone). You will be required explain the type of emergency, the location of the injured person, the condition of the injured person, your name and contact number.
3. Arrange for a person to meet the ambulance at the nearest entry point to direct the Emergency Personnel to where the injured person is located.
4. If further medical assistance is deemed necessary by the First Aid Officer but the injured person is unwilling to be attended to by ambulance staff, the First Aid Officer should advise the injured person to seek further medical attention. If necessary and safe to do so send the injured person via taxi to a medical clinic or local hospital emergency department.

## **14 POST POLLUTION INCIDENT**

### **14.1 De-Briefing**

All emergency pollution incidents or evacuation drills will be followed by a de-briefing session that includes all the members of the Emergency Planning Committee. The de-briefing is to be held within 1 month of the event.

The overall goal of the de-briefing is to ascertain what happened, who was involved, determine if policies and procedures were followed and what could possibly be implemented to avoid another similar incident/accident.

### **14.2 Counselling**

The Chief Emergency Response Officer shall assume full responsibility for coordination and response of any emergency situation. The Chief Emergency Response Officer and OHS/RM Advisor will also ensure that any employees involved in a threatening situation are provided with the option of counselling and debriefing within 48 hours of the event through the Councils EAP program.

### **14.3 Health monitoring and surveillance**

Health monitoring and surveillance will be conducted as per the Councils *Health Monitoring, Immunisation & Infection Control Procedure* which covers all relevant staff associated with this procedure.

## 15 CONTACT INFORMATION

### Bland Shire Council

<b>Address</b>	6 Shire Street, West Wyalong NSW 2671
<b>Postal Address</b>	PO Box 21 West Wyalong NSW 2671
<b>Phone</b>	(02) 6972 2266
<b>Fax</b>	(02) 6972 2145
<b>After Hours</b>	0418 402 350
<b>Website</b>	<a href="http://www.blandshire.nsw.gov.au/">http://www.blandshire.nsw.gov.au/</a>

### Other Agencies

<b>EPA</b>	(02) 9995 5000
<b>WorkCover NSW</b>	13 10 50
<b>Fire &amp; Rescue NSW</b>	000 or (02) 6972 3120 (West Wyalong Station)
<b>NSW Ministry of Health</b>	(02) 9391 9000
<b>Rural Fire Service</b>	000 or 1800 679 737

## 16 NOTIFICATION AND COMMUNICATION WITH THE COMMUNITY

All test results of Council's licensed Sewerage Treatment Works are placed on the Bland Shire Council Website. <http://www.blandshire.nsw.gov.au/> under the Environmental Services heading.

Members of the community that may be affected by a pollution incident related to council will be notified in writing.

## 17 MAPS

Please refer to Appendix B for detailed aerial map of Council's licensed landfill and STW locations

## 18 REFERENCES & RELATED DOCUMENTS

Protection of the Environment Legislation Amendment Act 2011  
Work Health and Safety Act 2011  
Work Health and Safety Regulations 2011  
OHS Management System  
Health Monitoring, Immunisation and Infection Control Procedure  
Mine Safety Management Plan  
First Aid Procedure  
Return to Work and Injury Management Procedure  
Environment Protection Licence (No: 11344)



Appendix B – Map of locations



Map of West Wyalong NSW.

**Authorisation:**

<b>Status</b>	<b>Committee</b>	N/A	
	<b>Manex</b>	N/A	
<b>Owner</b>	<b>Director of Asset &amp; Engineering Services</b>		
<b>EDRMS Doc. ID</b>	365926		
<b>Superseded Procedure</b>			
<b>Date of Adoption/ Amendment</b>	<b>Revision Number</b>	<b>Minute Number</b>	<b>Review Date</b>
28 May 2015	0		28 May 2018
<b>Reviewed By:</b>			
<b>Name</b>	<b>Signed</b>	<b>Position</b>	<b>Date</b>
Wayne Broad		Senior Coordinator Urban	
Will Marsh		Director Assets & Engineering Services	
<b>Related Council Policy / Procedure</b>			

## **APPENDIX 7**

### **Whole of Life Cost Based on a 10 Year Rolling Plan**



**SEWERAGE SYSTEMS 10 YEAR PLAN 2013-2022**

<u>YEAR</u>	<u>TYPE</u>	<u>WEST WYALONG</u>	<u>BARMEDMAN</u>	<u>UNGARIE</u>	<u>REPAIR/RELINE</u>	<u>TOTALS</u>
		\$	\$	\$	\$	\$
2012-2013	Maintenance Costs					\$600,000
	Capital	Aeration	Infrastructure	Pump		\$70,000
	Reserve				\$10,000	\$7,000
	Misc				\$1,000	\$4,000
	Emergency				\$1,000	\$15,000
	Pay for water removal				\$5,000	\$14,000
					\$400,000	\$400,000
2013-2014	Maintenance Costs					\$600,000
	Capital	Pump	Infrastructure	Nil		\$2,000
	Reserve				\$0	\$7,000
	Misc				\$1,000	\$4,000
	Emergency				\$1,000	\$15,000
	Pay for water removal				\$5,000	\$14,000
					\$430,000	\$430,000
2014-2015	Maintenance Costs					\$600,000
	Capital	Nil	Nil	Infrastructure		\$20,000
	Reserve				\$1,000	\$7,000
	Misc				\$1,000	\$4,000
	Emergency				\$5,000	\$15,000
	Pay for water removal				\$14,000	\$14,000
					\$400,000	\$400,000
2015-2016	Maintenance Costs					\$600,000
	Capital	Pump	Nil	Infrastructure		\$27,000
	Reserve				\$25,000	\$7,000
	Misc				\$1,000	\$4,000
	Emergency				\$1,000	\$15,000
	Pay for water removal				\$5,000	\$14,000
					\$400,000	\$400,000





## **ADDENDUM 1**

### **Other Main Acts**

Independent Pricing and Regulatory Tribunal Act 1992

Protection of the Environment Operations Act 1997

Public Health Act 2010

Waste Avoidance and Resource Recovery Act 2001

Waste Management Act 2000

## ADDENDUM 2

### Standard Levels of Service

#### Availability of Service

Connections for domestic sewage will be provided for the townships of West Wyalong/ Wyalong, Ungarie, and Barmedman, as long as the cost benefit ratio of providing the service to rates recouped is reasonable. The populace in the other Bland Shire villages are too small to maintain active sewerage systems.

Commercial and industrial waste is accepted as long as they comply with the conditions of discharge set by the Sewer Business Unit and Bland Shire Council.

#### Systems Failures

- Due to excessive rainfall
  - Private Property - Not more than once in every 100 allotments
  - Public Property - Not more than once a year on average
- Due to blockages
  - No blockage will occur in the same spot more than three times within a three month period, on average, without an investigation occurring to ascertain if there is an inherent problem that needs rectifying.

#### Response Times

Response time defined as time to have staff on site to commence rectification of problem after notification by public or own staff.

Priority 1 – Failure that allows sewage to enter habitable areas of dwellings

West Wyalong/ Wyalong – 2 hours (working hours) and 4 hours (after hours) and Ungarie and Barmedman – 4 hours (working hours) and next day (after hours)

(NB In the case of the many failures being caused by an unprecedented incident, only the first reported incident will be completed within the response time and the others will be completed in the order the complaints were received as soon as practicably possible)

Priority 2 – Failure of a minor nature to contain sewage within the sewer pipe system or any problem affecting a critical user at a non-critical time.

West Wyalong/ Wyalong – 3 hours (working hours) and next day (after hours) and Ungarie and Barmedman – 5 hours (working hours) and next day (after hours)

(NB In the case of the many failures being caused by an unprecedented incident, Priority 1 failures will take precedent if any are reported or only the first reported incident will be completed within the response time, and the others will be completed in the order the complaints were received complaint as soon as practicably possible)

Priority 3 – Failure of a minor nature to contain sewage affecting single properties or as bad odours.

West Wyalong/ Wyalong, Ungarie, and Barmedman – next day

(NB In the case of the many failures being caused by an unprecedented incident, Priority 1 and Priority 2 failures will take precedent.)

#### Response Times to Customer Complaints and Inquiries of a General Nature

Defined as a minor operational system, complaint, or inquiry, which can be dealt with at a time convenient to the customer and the authority.

Response time to comply with Bland Shire Council's adopted protocols.

#### Odours

No more than 2 incidents per year that result in complaints

#### Impact of Sewerage Treatment Works on Surrounding Residents.

The maximum level of noise shall not be more than 5 dB above the background noise level.

Odour shall not be detectable outside a 100m perimeter around the treatment works.

## Effluent Discharge/ Biosolids Management

The minimum performance standards for effluent discharge and biosolids management are set by statutory requirements and regulations.

## **ADDENDUM 3**

### **Maintenance Regime**

#### **Fixed Maintenance**

##### **Lubrication Schedule**

#### **Twice weekly**

##### **Sludge Pumps – Rotor Bearings**

The bearings of the aerator rotors are greased using the grease nipples twice per week. It is important to turn off the power to the rotors before lubricating.

The seals around the bearings are checked to ensure that the proper amount of grease is added. If too much grease is added the seals can be damaged. If not enough grease is added the bearings will wear out sooner and will have to be replaced causing a disruption of plant operation.

#### **Monthly**

Every month the Decanter grease nipple is completed using the same grease as the rotor bearings and recorded on the monthly checklist.

#### **Yearly**

Once a year (or every 2500 hours of operation) the oil in each Rotor Gearbox is drained and replaced. At each oil change, the gearbox is thoroughly flushed with light spindle oil.

The wire ropes and wheels that support the decanter are oiled

#### **Three Yearly**

Every three years the battery in the Programmable Logic Controller shall be replaced.

#### **Condition Maintenance**

##### **Bar Rack and Grate**

Every day the bar rack in front of the sludge pump is checked and cleaned if necessary.



The grate in front of the discharge pipe in the outlet box is checked daily and cleaned as required.

### **Equipment Maintenance**

Every week the operator walks around the plant and checks for unusual noises or vibrations in each piece of equipment. The operator is accustomed to the noises, vibrations and “look” of each piece of equipment. If there is anything that does not seem normal, that piece of equipment is carefully inspected to determine what might be causing the odd noise or vibration.

### **Sludge Pumps**

Several times each week the sludge pumps are checked, to ensure that they are running properly. The first check is to ensure that there is not an alarm light on the Programmable Logic Controller (PLC) or a warning triangle on the Operator Interface Screen (OIS) for each channel. The second check is to make sure the sludge pump is primed. This is done by opening the tap to make sure that the water is flowing out of the recirculation pipe.

To ensure that the sludge pump pipes have not become clogged or blocked, the splitter box is checked a few times each week to ensure that the overflow from the sludge dams is running back to the splitter box. This check can only be done when the sludge dams are full. When the sludge dams are below the overflow pipe, there will be no overflow back to the splitter box.

Clogging around the sludge pump screen cage is checked monthly. (In trying to get the best treatment in the Pasveer Channels it is important to be able to maintain the proper concentration of MLSS in each channel. The MLSS is controlled in part by the sludge pump. If the sludge pump is not pumping consistently the MLSS may vary more than expected. One way that the sludge pumping rate may be reduced, is when the screen around the sludge pump becomes clogged and the sludge cannot pass easily through.)

### **Rotor Gearbox**

Every week the dipstick on each rotor gearbox is checked to ensure that the oil levels are adequate. The seals are checked to see if there are any leaks. If one of the rotors gear box seems to need more oil than the others, it should be carefully inspected because it is likely that there is a leak.

## **Sludge Pumps**

Sludge Pumps bearings are checked every month and greased as necessary

The motors on the decanter winch, the rotors and the sludge pumps are checked monthly and greased as necessary. Operators are careful not to pack too much grease into the motor housing.

## **Check on supply of lubricants and other consumables**

At the end of every month a check is made to ensure that the supply of all the materials is adequate. If there is anything that is in less than two months supply it is ordered so that there is no concern about running out. Items to be checked include:

Grease for lubricating the rotor bearings

Oil for lubricating the rotor motors and decanter gearbox

Glass fibre filters for doing suspended solids analysis

## **Yearly Checks**

The covers for the aerator rotors are checked to ensure they have not become loose due to vibration. If they have become loose, the bolts are retightened.

The rotor bearings are visually checked for wear on the rotor sleeve. If the sleeve is getting too loose it is replaced.

Rotor bushings are checked every year and anytime that there is an opportunity when the rotors are disassembled and access is available. It is most likely that the most wear will be on the bottom bushing.

The oil in the decanter gearbox is checked once a year, and the gearbox is checked at the same time for any sign wear.

## **Structural Maintenance**

### **Metals Corrosion**

In general, the materials used at the plant are resistant to corrosion by sewage. Yearly checks are made for corrosion around any metal parts that are in contact with the sewage and also with the air.

Areas of the channel and around equipment where solids accumulate are hosed down to prevent corrosion.

### **Concrete Cracking**

Concerns have been raised in the past about the treatment plant being constructed on poor soil that has had a tendency to settle causing cracking of concrete structures. Several of the cracks have been repaired.

Concerns continue to exist regarding water seeping through the cracks and causing instability behind the concrete structures. Existing cracks and new cracks are checked regularly (minimum once a year) and repaired as necessary.

### **Breakdown maintenance**

Reserved for less critical components where if it breaks down it does not compromise the system unduly. These will be repaired when they break down.

Emergency Breakdown - If a critical element breaks down then it will be immediately (or as soon as possible) be repaired under the Sewer Incident Response Plan (Appendix 6).

### **Essential Spare Parts**

Bruce Broadhurst of Leichhardt Engineering (02 9829 3556) reports that there are no essential spare parts that must be stored at the Treatment Plant.

Rotor Shafts are difficult to damage and it is the policy of Leichhardt Engineering to always keep 4 shafts in stock in their Ingleburn Shop. If a shaft is damaged, the channel can be run with three shafts until the damaged shaft can be transported to West Wyalong and installed.

Similarly, if the motor and / or coupling for the rotor fails, Leichhardt Engineering has a service exchange policy and keep at least four units on site in their Ingleburn Shop. The damaged unit must be returned to Leichhardt Engineering or the cost will increase to more than four times the cost without the damaged unit returned.

The decanters are kept in stock at the Leichhardt Engineering, Ingleburn Shop and can be shipped to West Wyalong in a few days on a service exchange basis.

The motor and gears for the decanters are also available on a service exchange basis.

The rubber seals for the decanters usually last about 10 years, in place, because they are underwater. If they are stored on-site out of the water, (but in the dark) they may become brittle and crack in less than 10 years, meaning that the replacement seal may not be in good condition when it is needed. The rubber seals are also unlikely to undergo a sudden failure. When they start to fail, the water leaking in can be clearly heard so that replacement seals can be arranged before the decanter needs to be taken out of service.

The submersible sludge pump is not a difficult item to purchase or have repaired in the West Wyalong region. Even if the exact same pump cannot be purchased there are similar pumps that will be adequate. They may require a change in the pumping time, if the new pump has a greater or lesser capacity than the existing pump that it has replaced.

Rotor bushings can be purchased through Leichhardt Engineering.

The large black steel spring that locks the rotor shaft to the rotor gearbox can sometimes break so a few spare springs should be kept on site. Extra springs can be purchased from Leichhardt Engineering.

Many Electrical Spare parts can be purchased through Shead and Nicholson (Forbes) (02 68511 444).

The following products are available through NHP Electrical Engineering Products, 30-40 Day Street North, Silverwater, NSW 2141, Phone: 02 9748 3444, Fax: 02 9648 4353

#### Relays

Pushbutton - Sprecher & Schuh, Category Number DT3D-MB-149-10M, Part Number 23321

Fuse Links - Sprecher & Schuh, Category Number V4-1F(1A), Part Number 19644

## **ADDENDUM 4**

### **Relevant NSW Department**

Current at 1 November, 2012.

NSW Office of Water

which is part of

NSW Department of Primary Industries

which is part of

NSW Department of Trade and Investment, Regional Infrastructure and Services.

## ADDENDUM 5

### Best Practise Outline

#### Status at 2012

Sewer Management (Business) Plan

This plan

#### Pricing

- Full cost recovery without significant Cross subsidies. Comply
- Complying residential charges, independent of land value. Comply
- Complying non-residential charges Comply
- Developer charges Comply
- Complying trade waste fees and charges Comply
- Complying trade waste policy and approval for all dischargers. Comply

Performance Monitoring

Comply annually

#### Water Re-Cycling

- West Wyalong/Wyalong N/A - grey water used on grassed area
- Ungarie N/A
- Barmedman Insufficient flow, drying beds used