



Stormwater Management Plan

Kingaroy Concrete Batching Plant

Quarry Assets Pty Ltd

Prepared by:

SLR Consulting Australia

Level 16, 175 Eagle Street, Brisbane QLD 4000,
Australia

SLR Project No.: 625.010554.00001

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Making Sustainability Happen

Revision Record

Revision	Date	Prepared By	Checked By	Authorised By
01	22 May 2026	Hugo O'Brien	Mark Folker	Mark Folker

Basis of Report

This report has been prepared by SLR Consulting Australia Pty Ltd. (SLR) with all reasonable skill, care and diligence, and taking account of the timescale and resources allocated to it by agreement with Quarry Assets Pty Ltd (the Client). Information reported herein is based on the interpretation of data collected, which has been accepted in good faith as being accurate and valid.

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Acronyms and Abbreviations

ARI	Annual Recurrence Interval
AHD	Australian Height Datum
DETSI	Department of Environment, Tourism, Science, and Innovation
DP	Development Permit
EA	Environmental Authority
ERA	Environmentally Relevant Activity
ESC	Erosion and Sediment Control
SMP	Stormwater Management Plan
TPA	Tonnes per Annum
WQOs	Water Quality Objectives



1.0 Introduction

1.1 Project Overview and Site Location

SLR Consulting Australia Pty Ltd (SLR) has been engaged by Quarry Assets Pty Ltd ('the client') to prepare a Stormwater Management Plan (SMP) for a development application to South Burnett Regional Council ('Council') at land on River Road, Kingaroy QLD 4610, properly described as Lot 102 on SP349662.

The development application comprises a Material Change of Use ('MCU') –High Impact Industry (Concrete Batching Plant).

1.2 Purpose of this Report

The scope of this SMP includes the following:

- Details of stormwater quality management system to adequately manage runoff quality for the concrete batching plant including retaining the 'first flush' rainfall event; and
- Implementation and maintenance strategy for stormwater management measures and systems.

This SMP outlines the engineering design details and operational management procedures that are to be maintained and/or adopted, in order to integrate stormwater management into the daily operations.

1.3 Site Details

The site is located within the South Burnett Regional Council local government area in Kingaroy. It is understood that a two (2) stage subdivision for the previous land parcel description (Lot 200 SP303240) has been undertaken creating Lot 102 on SP349662. The Concrete Batching Plant is proposed on the new Lot 102 on SP349662.

The location details of the site are summarised in **Table 1-1 Summary of Land**.

Table 1-1 Summary of Land

Property Description	Lot 102 on SP349662
Address	River Road, Kingaroy QLD 4610
Property Size	1.5 ha
Local Government	South Burnett Regional Council
Aspects of Development	Material Change of Use – High Impact Industry (Concrete Batching Plant)

2.0 Stormwater Management

2.1 Stormwater Hydrology

Refer to **Table 2-1 Site Catchment Areas** and **Figure 1** for details of the site catchments and associated surface gradings.



Table 2-1 Site Catchment Areas

Catchment ID	Description	Catchment Area (m ²)	Discharge Location
C1	Clean	4123	Bio-retention / detention basin
C2	Contaminated	565	First Flush Tank (FF1)
C3	Dirty	147	Wedge Pit (WP1)

The “Dirty” area of the site (Catchment C3) is defined as the delineated area which has the potential for general activities and raw material deliveries that contain non-cementitious materials such as sand and aggregates, as well as potential for dust (generated by vehicle movements). Stormwater runoff in this catchment is limited only to pavement areas exposed to aggregate and sand materials, thus generating possible suspended solids, however this area is not affected by pH contaminated materials associated with the concrete batching process.

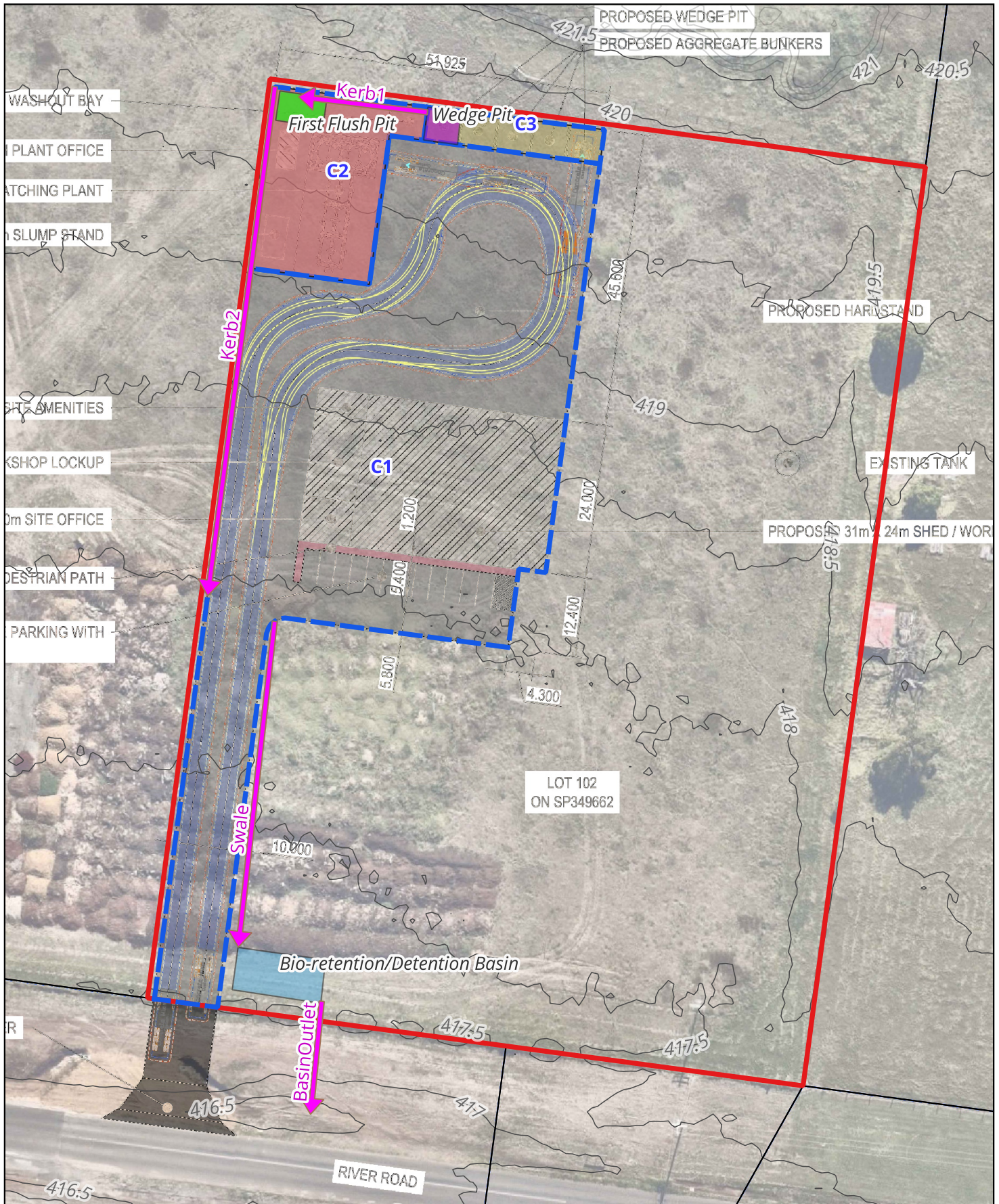
The “Contaminated” area of the site (Catchment C2) is defined as having potential for general activities, cement deliveries, potential spillage and any washdown waters that contain cementitious material, dust, fly ash or other materials used in the concrete batching process. The areas are exclusively defined where stormwater runoff is affected by increased pH, associated with the concrete batching process.

As a conservative measure, the First Flush Tank (FF1) will be sized to capture runoff from both catchment C2 and C3.

2.2 Lawful point of discharge

The lawful point of discharge for the site is the existing table drain system along River Road, located south of the site. Discharge will be directed to the existing council drainage provided.





0 10 20 m

Coordinate System: GDA94 MGA zone 56

Scale: 1:800 at A4

Project Number: 625.010554.00001

Date: 22-May-2026

Drawn by: HO



LEGEND

- Flow paths
- Contours (m AHD)
- Bioretention/Detention Basin
- First Flush Pit
- Wedge Pit
- Cadastre
- Site Boundary

Kingaroy Concrete Batching Plan

Stormwater Management Plan
Layout

FIGURE 1

2.3 Stormwater Quality Management

As identified in **Table 2-1 Site Catchment Areas**, it is anticipated that approximately 712 m² of surface area will be contaminated by surface water, based on the proposed concrete batching activities within Catchments C2 and the dirty catchment runoff from C3 which flows to C2 (refer to **Figure 1**).

In accordance with the Queensland Government Department of Environment, Tourism, Science and Innovation (DETSI) General environmental duty: Code of practice for the concrete batching industry, the first flush of contaminated water must be collected in in-ground pits, or tanks. The required minimum first flush capture capacity is equivalent to 0.02 m (20 mm) of runoff capture.

It is generally an accepted design consideration in the regulation of the concrete batching industry that once the first flush volume has been captured, subsequent rainwater impacting the contaminated area is deemed to be clean and can be discharged off site (Cement Concrete & Aggregates Australia (CCAA) Environmental Management Guideline for Concrete Batch Plants). Based on the industry standards and the DETSI Code of Practice, a total first flush storage of 15 kL would be required to cover Catchment C2 and C3 (712 m² x 0.02 = 14.24 m³).

It is noted however that the proposed concrete batching plant intends to capture and harvest as much surface water as possible for re-use in the concrete batching processes. Thus, the proposed development plans to retain a larger volume than the required industry standard of 20mm.

The proposed retention storage is achieved through the stormwater treatment system that comprises one settling / wedge pit as well as one in-ground tank and the stormwater treatment system (including the first flush tank). Refer to **Figure 1** and **Section 3 – Stormwater Quality Management** for details of the proposed First Flush Tank freeboard, available retention volumes, and operating levels for each of these structures. A volume of 30kL has been proposed for the first flush tank, which is considerably larger than the minimum requirement and harvested surface water will be recycled into the plant batching processes.

2.4 Stormwater Quantity Management

Hydrologic modelling was undertaken using DRAINS (Watercom) to simulate site runoff under pre- and post-development conditions across a range of design storm events. The post-developed DRAINS schematic is shown in **Figure 2 Drains schematic**.

Site-based rainfall polynomial coefficients were obtained using the Intensity-Frequency-Duration ('IFD') generation tool, available on the Bureau of Meteorology's ('BOM') website. The IFD data is shown below in **Table 2-2 IFD data**.

Table 2-2 IFD data (mm)

Duration of Rainfall	Annual Exceedance Probability ('AEP') / Exceedances per Year ('EY')							
	63.20%	50%	0.5 EY	20%	10%	5%	2%	1%
5 min	8.3	9.6	10.6	13.7	16.0	18.4	21.5	23.7
10 min	13.6	15.7	17.4	22.5	26.2	30.1	35.1	38.8
15 min	17.3	19.9	22.1	28.6	33.3	38.3	44.6	49.4
20 min	20.0	23.1	25.6	33.1	38.6	44.4	51.9	57.4
25 min	22.1	25.5	28.3	36.7	42.7	49.2	57.5	63.7

Duration of Rainfall	Annual Exceedance Probability ('AEP') / Exceedances per Year ('EY')							
	63.20%	50%	0.5 EY	20%	10%	5%	2%	1%
30 min	23.8	27.5	30.5	39.5	46.1	53.1	62.1	68.9
45 min	27.6	31.8	35.3	45.6	53.2	61.4	72.0	79.9
1 hour	30.2	34.7	38.6	49.7	58.0	67.0	78.6	87.2
1.5 hour	33.8	38.7	43.0	55.1	64.3	74.2	87.2	96.7
2 hour	36.4	41.5	46.1	58.8	68.5	79.1	92.8	103.0

2.4.1 Peak Discharge Estimations

The pre-development and post-development model scenarios were simulated for a range of design storm events (1% AEP – 0.5 EY). To mitigate post-development impacts on peak flows, a detention basin has been incorporated into the stormwater system upstream of the lawful point of discharge to the existing table drain along River Road.

The detention basin is designed to attenuate peak flows such that post-development discharge does not exceed pre-development flows for all modelled design storm events. The detention basin has a volume of 100 m³. A spillway has been sized to handle 1% AEP outlet discharges from the basin (detailed in Section 2.4.2) prior to discharge to the road table drain.

A comparison of pre- and post-development peak flows at the basin outlet is provided in **Table 2-3 Pre- vs Post-development peak flows**.

Table 2-3 Pre- vs Post-development peak flows

AEP	Pre-development peak flow (m ³ /s)	Post-development peak flow (unmitigated) (m ³ /s)	Post-development peak flow (mitigated) (m ³ /s)
63.2%	0.05	0.10	0.03
50%	0.06	0.12	0.04
0.5 EY	0.07	0.13	0.05
20%	0.11	0.17	0.08
10%	0.14	0.21	0.11
5%	0.17	0.24	0.13
2%	0.21	0.26	0.17
1%	0.23	0.29	0.19

2.4.2 Spillway Sizing

The spillway was designed to safely convey the 1% AEP peak discharge from the detention basin, assuming the basin commences the design event at full capacity. The spillway cross-section was shaped to accommodate the peak outflow while maintaining safe flow velocities and depths. The spillway is proposed to be vegetated.

The spillway has a base width of 3 m and a total depth of 1 m. The side batters are graded at 3H:1V on both sides resulting in a top width of 9 m.

The spillway hydraulic performance for the critical 1% AEP design event is summarised in **Table 2-4 Spillway hydraulic performance – 1% AEP**.

Table 2-4 Spillway hydraulic performance – 1% AEP

Parameter	Value
Maximum flow	0.254 m ³ /s
Maximum velocity	0.6 m/s
Maximum depth	0.119 m
Maximum width	3.7 m
Maximum D x V	0.08 m ² /s

2.4.3 First Flush Simulation

The 0.5 EY for a 10-minute duration was selected to simulate the ‘first flush’ since it yields a total rainfall of 17.4 mm, which was modelled in order to demonstrate retention performance of the proposed first flush system.

Results of the ‘first flush’ simulation are shown in **Figure 3 DRAINS ‘first flush’ simulation results**, and confirm there is no overflow (zero discharge) between FF1 (first flush water tank) and C1, demonstrating that the designed tank has enough capacity to store the first 17.4 mm of rainfall needed for the first flush.

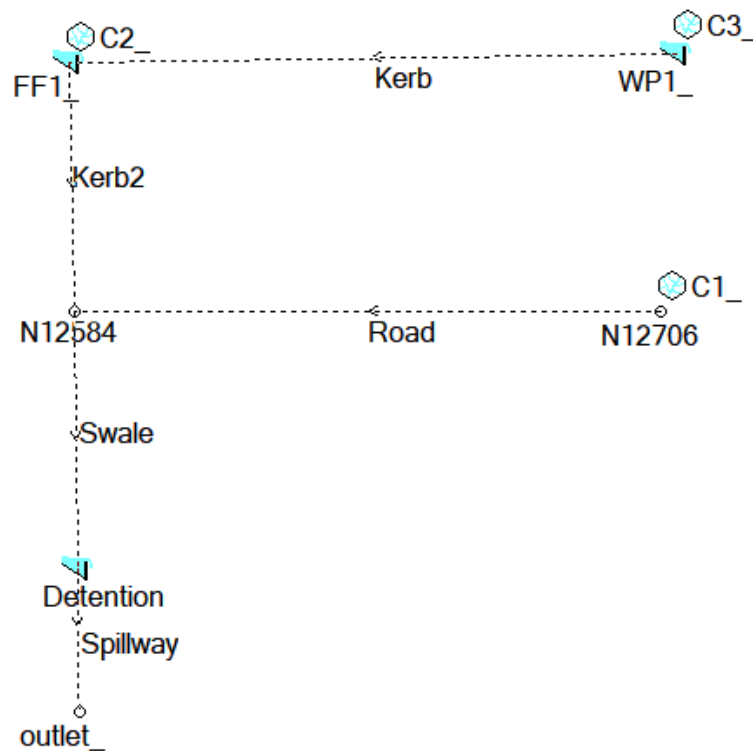


Figure 2 Drains schematic – post-development

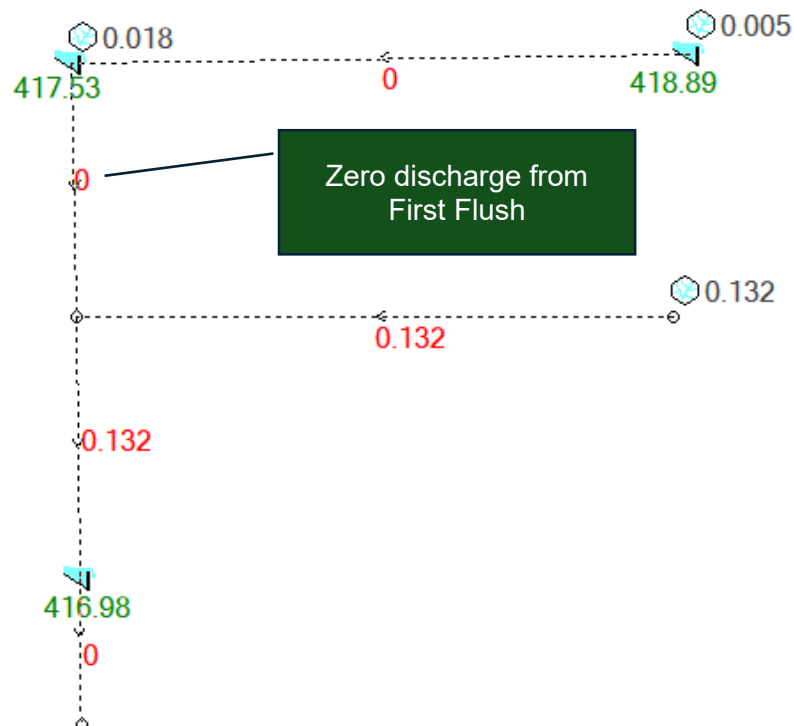


Figure 3 DRAINS 'first flush' simulation results (0.5EY, 10 min)

3.0 Stormwater Quality Management

3.1 Stormwater Quality Objectives

The following load-reduction targets, specified in Table 8.4.4 of the South Burnett Regional Council Planning Scheme (2017 v2.0), must be achieved when assessing the post-developed site treatment train (comparison of unmitigated developed case versus developed mitigated case):

- 85% for Total Suspended Solids ('TSS')
- 60% for Total Phosphorous ('TP')
- 45% for Total Nitrogen ('TN')
- 90% for Gross Pollutants ('GP').

Achieving the above Water Quality Objectives ('WQO's) for the site will ensure the environmental values of the downstream urban receiving waters are maintained for the operational phase of the development.

3.2 Stormwater Quality Modelling Approach

3.2.1 MUSIC Model

Water quality modelling has been undertaken for the operational phase using the *Model for Urban Stormwater Improvement Conceptualisation* ('MUSIC') software Version 6.3. A Stormwater Quality Interceptor Device ('SQID') treatment system has been designed and modelled to demonstrate the system effectiveness in achieving the target WQOs.

3.2.2 Rainfall and Evapotranspiration Data

MUSIC modelling was based on six (6) minute interval data obtained from BOM for rainfall station 'Kingaroy Prince Street' (0040112), as summarised in **Table 3-1 Meteorological and Rainfall Runoff Data Reporting Table**.

Table 3-1 Meteorological and Rainfall Runoff Data Reporting Table

Input	Data Used in Modelling
Rainfall Station	Kingaroy Prince Street (0040112)
Time Step	6 minutes
Modelling Period	11/04/2011 to 07/04/2021
Rainfall Runoff Parameters	Urban (Industrial)
Pollutant Export Parameters	Urban (Industrial)

3.2.2 MUSIC Model Catchment Parameters

The site has been modelled as “Urban (Industrial)” for the purposes of MUSIC modelling as detailed in **Table 3-2 Catchment Definition Reporting Table**

Table 3-2 Catchment Definition Reporting Table

Catchment ID	Area (ha)	Land Use	Total Impervious Area (%)
Catchment C1 (Clean)	0.412	Urban Industrial	100
Catchment C2 (Contaminated)	0.056	Urban Industrial	100
Catchment C3 (Dirty)	0.015	Urban Industrial	100

3.2.3 Model Parameter Definition

The MUSIC modelling algorithm used to generate urban runoff is based on the data from the MUSIC Modelling Guidelines, Version 1.0 (Water by Design, 2010). The relevant Urban (Industrial) parameters are summarised in **Table 3-3 Rainfall Runoff Reporting** and **Table 3-4 Pollutant Export Parameters for Urban Industrial Land Use**.

Table 3-3 Rainfall Runoff Reporting

Parameter	All Nodes
Land Use	Urban (Industrial)
Rainfall Threshold (mm)	1
Soil Storage Capacity (mm)	18
Initial Storage (% Capacity)	10
Field Capacity (mm)	80
Infiltration Capacity Coefficient a	243
Infiltration Capacity Exponent b	0.6
Initial Depth (mm)	50
Daily Recharge Rate (%)	0
Daily Baseflow Rate (%)	31
Daily Seepage Rate (%)	0

Table 3-4 Pollutant Export Parameters for Urban Industrial Land Use

Flow Type	TSS log ¹⁰ Values		TP log ¹⁰ Values		TN log ¹⁰ Values	
	Mean	Standard Deviation	Mean	Standard Deviation	Mean	Standard Deviation
Baseflow Parameters	0.78	0.45	-1.11	0.48	0.14	0.20

Flow Type	TSS log ¹⁰ Values		TP log ¹⁰ Values		TN log ¹⁰ Values	
	Mean	Standard Deviation	Mean	Standard Deviation	Mean	Standard Deviation
Stormflow Parameters	1.92	0.44	-0.59	0.36	0.25	0.32

3.3 Stormwater Quality Improvement Device (SQID) Treatment System Details

A series of treatment devices (comprising the first flush tank, a wedge pit, a swale, and a bioretention basin) are proposed to meet the WQOs applicable for the site. The MUSIC Model Schematic in **Figure 4** details the catchment routing to the lawful point of discharge.

3.3.1 Stormwater Retention Onsite Reuse Demand

Table 3-5 First Flush Tank Parameters summarises the input parameters applied to the MUSIC model for the proposed Water Storage Tank system for the first flush. These details will be confirmed during the detailed design phase of the proposed development.

The CBP is expected to produce up to approximately 100,000 tonnes of concrete per year. The plant proposes to operate 6 days per week, which equates to about 312 operating days annually, resulting in a daily production rate of roughly 320 tonnes per day. Typical batching water requirements for concrete are in the order of 50–75 litres per tonne, depending on mix design, workability, and material properties.

Applying this range to daily production yields an estimated water demand of approximately 16–24 kL per day, with a mid-range value of around 19 kL/day being representative for standard structural concrete. For planning and operational resilience, it is reasonable to allow 20–25 kL/day to accommodate variability in mix requirements and additional uses such as plant washdown and dust suppression.

Table 3-5 First Flush Tank Parameters

Design Properties	Water Storage Tank
Volume below overflow pipe (kL)	30
Depth above overflow pipe (mm)	200
Surface Area (m ²)	150
Stored water used for irrigation and other purposes (Y/N)	Yes
Distribution	
Daily Demand (kL/day)	20
Monthly distribution of daily demand (kL/day)	N/A

Table 3-6 Wedge Pit Parameters outlines the input parameters used for the proposed wedge pit which receives flows from the aggregate bays. No discharge from the first flush tank is assumed, based on analysis of the tank capacity and the proposed site grading.

Table 3-6 Wedge Pit Parameters

Design Properties	Wedge Pit (WP1)
Surface Area (m ²)	25
Extended detention (m)	0.5
Permanent Pool Volume (m ³)	12.5
Initial Volume (m ³)	12.5
Exfiltration Rate (mm/hr)	0.0

3.3.2 Swale Properties

In addition to the first flush tank and wedge pit, a swale was proposed as treatment system for the runoff captured prior to the bioretention basin. Swale properties are listed in **Table 3-7 Design Swale properties**.

Table 3-7 Design Swale properties

Design Properties	Swale
Length (m)	51
Bed Slope (%)	2
Base width (m)	3.0
Top width (m)	6.0
Depth (m)	0.3
Vegetation height (m)	0.1
Exfiltration Rate (mm/hr)	0

3.3.3 Bioretention Properties

A bioretention basin was proposed to capture runoff prior to leaving the site. The outlet of the bioretention basin discharges into the table drain along River Road. Bioretention properties are listed in **Table 3-8 Bioretention properties**.

Table 3-8 Bioretention properties

Design Properties	Bioretention
Surface / Filter Area (m ²)	20
Extended Detention Depth (m)	0.2
Filter Depth (m)	0.4
Overflow Weir Width (m)	2.0
Exfiltration Rate (mm/hr)	0.0
Vegetation height (m)	0.1
Exfiltration Rate (mm/hr)	0

3.4 MUSIC Modelling Results

3.4.1 Treatment Train Effectives

Based on the site characteristics and the proposed SQIDs, this assessment has developed an overall concept that will satisfy the requirements of downstream environmental protection. **Figure 4 Treatment Train Layout** shows a schematic representation of the proposed treatment train elements, while their location within the proposed development is illustrated on the drawings included in **Figure 1**.

The results of the MUSIC modelling for the treatment train effectiveness are summarised in **Table 3-9 Treatment Train Effectiveness**. These results indicate reduction targets for TSS, TP, TN and gross pollutants respectively, are all achieved for the rainfall data set simulated.

Table 3-9 Treatment Train Effectiveness

Catchment ID	Pollutant	Inflows (kg/yr)	Residual Load (kg/yr)	Reduction Achieved (%)	Water Quality Objective (%)
Site	TSS	386	43	89	85
	TP	1.0	0.4	66	60
	TN	6.8	3.7	45	45
	GP	83.8	0.0	100	90

Note: All simulations have been run with pollutant export estimation set to "stochastic generation".

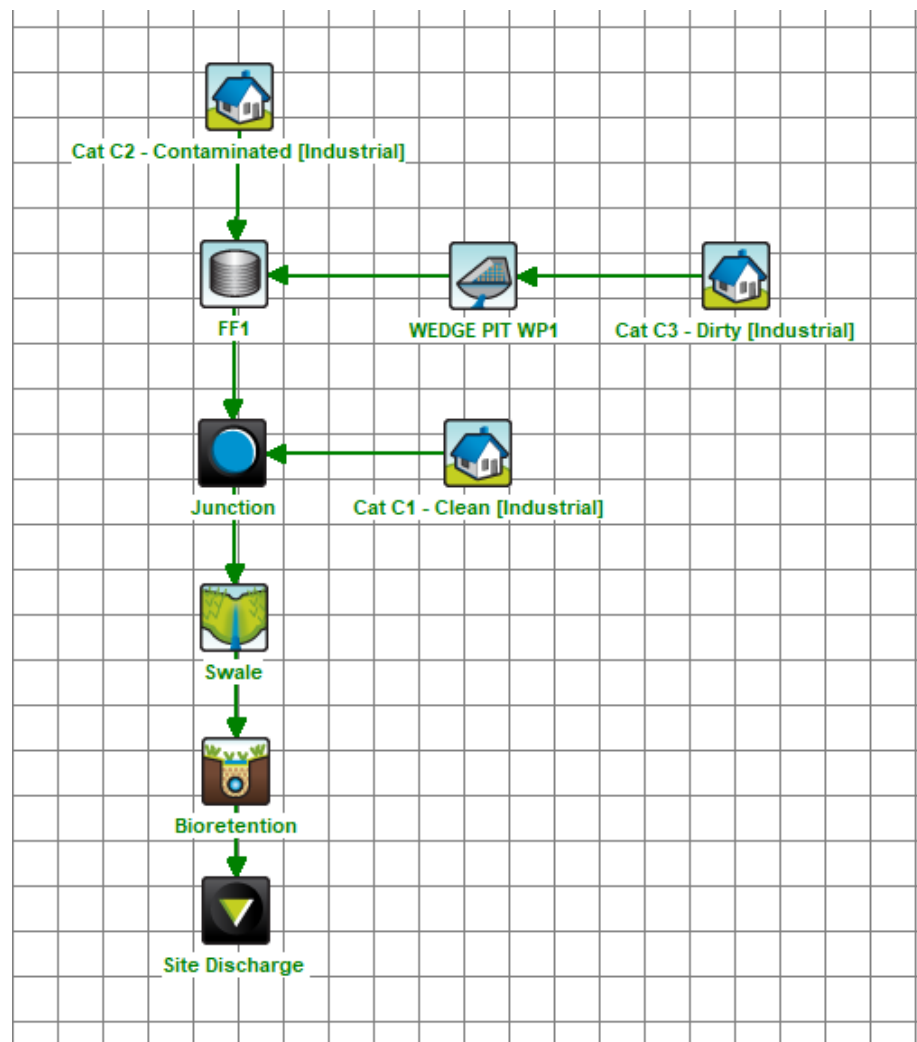


Figure 4 Treatment Train Layout

4.0 Operational Procedures

An overview of the Operational Procedures for implementation at the site are summarised below.

Aspect	Details
Purpose	The Operational Procedures have been prepared to manage potential environmental impacts that may result from the operation in relation to stormwater management.
Risk Sources and Potential Impacts	Adverse impacts resulting from current and future operations may include the following: • Contaminated surface water from concrete plant operations • Overland flows from storage and handling areas of oils, greases and other chemicals • Hydrocarbons and chemicals • Construction and maintenance of carpark, roads and hard-stands • Spillage during handling of materials • Use and storage of oils, greases and other chemicals.
Performance Targets	The site is to comply with the relevant council development conditions.
Responsibilities	The Site Manager will be primarily responsible for the implementation of this SMP.
Strategies/mitigation measures	<u>Oil separators, and Bunding of Fuels and Chemicals</u> Clearly designate storage areas and do not deviate from assigned bunded areas for storage of chemicals and fuels unless a suitable secondary bund is provided. Oil separators to be provided where necessary. Storing and handling of hazardous chemicals, corrosive substances, toxic substances, gases, dangerous goods, flammable and combustible liquids in accordance with the relevant legislative requirements and Australian Standards including, but not limited to the provisions of: • AS 1692:2006 – Steel tanks for flammable and combustible liquids • AS 3780:2008 – The storage and handling of corrosive substances • AS 1940:2004 – The storage and handling of flammable and combustible liquid • AS 3833:2007 – Storage and handling of mixed classes of dangerous goods in packaged and intermediate bulk containers Spillage of hydrocarbons and/or oils are to be managed in accordance with Site Emergency Management Plan.

Aspect	Details
	All refuelling onsite is to be undertaken within Catchment C2 (refer Figure 1), which has 50kL of first flush storage available within the First Flush Tank FF1 as an emergency contingency. Ensure appropriate spill kits and processes are in place to contain any potential spills onsite. <u>First Flush Tank & Containment of contaminated surface water</u> Operate the site and maintain the first flush tank and associated water treatment system in accordance with Figure 1 Details of wedge pits, treatment tanks and required freeboard must be noted and maintained.
Auditing	Stormwater management reviews are required to be carried out on a periodic bases to assess the implementation of the management strategies.
Identification of Incident or Failure	Non-compliance with the performance criteria herein will be identified by: - Stormwater in treatment system exceeds capacity after rainfall event due to insufficient freeboard - Release of contaminants from the site - Poorly maintained, damaged or failed stormwater management devices.
Corrective Action	The authorised representative shall be responsible for identification of incident or failure and completion of corrective actions. Following identification of incident or failure, the source/cause is to be immediately identified and rectified with records kept preventing future incidents occurring.
Internal Reporting	A copy of all incidents and complaints will be stored at the site within the incident and complaint register.
External Reporting	Reporting of non-compliance events including discharge of contaminants from the site are to be reported, in accordance with Council requirements.

An inspection and maintenance program should be implemented as detailed in **Table 4-1 Inspections and Maintenance of Stormwater Treatment Devices**. A summary schedule of the various inspections, performance criteria and responses that shall be performed on site is outlined below.

Table 4-1 Inspections and Maintenance of Stormwater Treatment Devices

Device	Minimum Frequency	Performance Criteria	Required Actions
First Flush Tank	Prior to forecast rainfall event,	Adequate freeboard volume available, tank in satisfactory condition, no leaking or damage	Volume to be restored immediately (either re-used in operations or

Device	Minimum Frequency	Performance Criteria	Required Actions
	following each rainfall event, and every 2 weeks		removed from site via trade waste facilities) - Any identified damage to be repaired - Maintain pump system
Wedge Pit	Prior to forecast rainfall event, following each rainfall event, and every 2 weeks	- At least 70% available storage volume available - Adequate volume available, all pits in satisfactory condition, no leaking or damage	Desilt periodically as needed to restore retention volumes
Waste containers	Weekly	- Waste is stored in appropriate containers - Waste receptacles labelled	Ensure waste material is stored and disposed of properly and in accordance with conditions of approval
Spill response stations	Weekly and following use	Equipment is properly maintained	- Maintain equipment - Replace used equipment
Maintenance / refuelling area / general hydrocarbon and oil spills	Weekly	Fuel, oil spills	- Manage all hydrocarbon and oil spills in accordance with Site Management Plan. Ensure all refuelling occurs within Catchment C4 which has 50kL of first flush storage available as emergency contingency. - Clean up fuel spills and investigate source
		Equipment maintenance	Maintain equipment maintenance records
		Fuel storage integrity maintained	Investigate and repair potential leaks

5.0 Responsibilities

5.1 Monitoring Management Measures

The following management measures will be implemented during facility operations:

- The Site Manager or authorised representative is to regularly inspect the stormwater management system, particularly prior to forecasted wet weather and following major rainfall events to ensure that these devices are in good working order.
- A surface water quality monitoring program may be implemented to assess performance from time to time. Any sampling conducted shall be undertaken by a suitability qualified person.

5.2 Responsibility

The following details the responsibilities with regard to the ongoing management of stormwater at the site:

- The Site Manager will be responsible for the implementation of this SMP and for training of site personnel in their responsibilities in relation to this SMP.
- The Site Manager will be responsible for ensuring that all stormwater devices constructed on the site have adequate free water storage capacity.
- All complaints pertaining to water quality received will be recorded in the complaints register/log to be maintained on-site.
- The Site Manager or a suitably qualified consultant will prepare water monitoring records if, and when required by the regulatory authority.
- Records, including results of any monitoring program undertaken on-site, complaints or incidents will be kept on-site for a minimum of five (5) years.

5.3 Identification of Incident or Failure

An incident or failure may include, but not be limited to:

- Deterioration in surface water quality within waters discharged from site.
- Receipt of a stormwater quality release complaint.
- Not maintaining on-site stormwater controls or treatment devices.

Any identification of incident or failure will be recorded on site.

6.0 Environmental Incidents

The **Site Manager** will be responsible for ensuring that all employees at the site are familiar with the procedure for incidents recording. Any employee becoming aware of an incident with actual or potential environmental implications, shall be reported to the **Site Manager**, or delegate immediately.

The **Site Manager** will notify upper management regarding any environmental incident. An Environmental Incident Report must be completed for all incidents.

Should reporting of an **environmental incident** to the relevant regulatory authority be required, this will be undertaken in accordance with the following.

When an environmental incident occurs, the **Site Manager** will notify administering authority via telephone and in writing.

The contact details of the administering authority are as follows:

Department of Environment, Tourism, Science and Innovation

Phone: 1300 130 372

Email: PollutionHotline@des.qld.gov.au

Following notification against this condition, an investigation and further reporting will be required, as per Section 6.1 and 6.2 below.

6.1 Investigation

All incidents should be investigated. The investigations should include:

- Determining what activities were being carried out at the time of the complaint/incident and any equipment involved.
- Identifying whether equipment or activities on-site were the cause of the incident or complaint.
- Determining what potential actions may be carried out to resolve the matter and/or minimize the likelihood of further impacts.

An assessment is to be conducted to determine what corrective actions are to be taken to remedy the matter and/or prevent a similar incident from occurring in the future. If monitoring is to be undertaken to investigate an incident or complaint these results should be supplied with the final report to the administering authority.

6.2 Responsibility

A written notice detailing the following information may need to be provided to the administering authority, following the initial notification. General information likely to be required for any further reporting to the administering authority may include the following:

- The name of the operator.
- The name and telephone number of a designated contact person.
- A description of the event.
- The results of any monitoring performed in relation to the event.
- Actions taken to mitigate any environmental harm caused by the event.
- Proposed actions to prevent a recurrence of the event.

7.0 Conclusion

This SMP outlines the appropriate treatment measures and operational procedures to be adopted to integrate adequate stormwater management into daily operations and site activity. Specifically, this document has prepared to support operations in implementing appropriate measures to meet the requirements of the site approval conditions and to support the proposed development.

Operational procedures outlined in this SMP will assist to ensure compliance as a minimum standard.

8.0 References

1. International Erosion Control Association, Best Practice Erosion and Sediment Control: Book 2 and Book 4, 2008.
2. Landcom (2004) Managing Urban Stormwater – Soils and Construction. Volume 1
3. DECC (2008) Managing Urban Stormwater - Soils and Construction. Volume 2E Mines and Quarries



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