

Caloundra South

2015/2016 Annual Compliance Report - EPBC 2011/5987

Prepared for: Stockland Development Pty Ltd
Date: 23 March 2016



TABLE OF CONTENTS

1. INTRODUCTION	1
1.1 Reporting Period	1
1.2 EPBC Approval	1
1.3 Location of the project	1
1.4 Overview of Key Activities and Achievements	1
2. CURRENT STATUS OF THE PROJECT	5
2.1 State Approval status	5
2.2 Project Delivery	6
2.3 Green Star Communities	6
2.4 Frog Ponds Creation	6
2.5 Community Stewardship Program	9
2.6 High Efficiency Sediment Basins	10
2.7 Project Launch	12
3. APPROVED DOCUMENTS	13
4. EPBC CONDITIONS AND THE COMPLIANCE TABLE	15

APPENDIX A – REQUIREMENTS OF APPROVED PLANS

APPENDIX B – MAP 2.2D WALLUM SEDGE FROG HABITAT TO BE REMOVED

APPENDIX C – LEDGER OF WALLUM SEDGE FROG HABITAT RETAINED, CREATED AND REMOVED DURING THE REPORTING PERIOD

TABLE OF FIGURES

Figure 1: Regional Context of Caloundra South (EPBC Referral Area).....	3
Figure 2: Illustrated Master Plan	4
Figure 3: Current Precincts	5
Figure 4: Created Wallum Sedge Frog Ponds in Area A in Precinct 2	7
Figure 5 Location of Created Frog Ponds.....	8
Figure 6: High Efficiency Sediment Basin Installed as Part of Precinct 1 Works.....	10
Figure 7 Location of High Efficiency Sediment Basins Installed and Operating	11
Figure 8: Aura Fly-through – Potential Environmental Education Centre (subject to further approvals)	12

1. INTRODUCTION

This Annual Compliance Report (ACR) has been prepared in accordance with the requirements of EPBC 2011/5987 Condition 14. This requires Stockland to prepare and publish an ACR:

'Within three (3) months of every twelve (12) month anniversary of commencement of the action (and until 12 months after the cessation of the action), the person undertaking the action must public a report on their website, for the duration of the project, addressing compliance with the conditions of this approval over the previous twelve (12) months, including implementation of any management plans, reports, strategies and methods as specified in the conditions.'

1.1 Reporting Period

This ACR addresses the status and compliance of the Project against the conditions referred to in EPBC 2011/5987 for works carried out during the reporting period 15 January 2015 to 14 January 2016.

1.2 EPBC Approval

Stockland Development Pty Ltd (ACN 000 064 835) (Stockland), as the Proponent for the Caloundra South Master Planned Community (the Project), was issued with EPBC 2011/5987 on 6 June 2013. EPBC 2011/5987 was subsequently amended by variations to Conditions 3, 8 and 10 made pursuant to section 143 of the EPBC Act and will be referred to collectively as EPBC 2011/5987.

1.3 Location of the project

Caloundra South is an approved master planned community on Queensland's Sunshine Coast. The approximately 2,400ha site is located 3km from the Caloundra Major Activity Centre, 16km south of Maroochydore, the Sunshine Coast's Principal Activity Centre, and approximately 100km north of Brisbane. The majority of the site sits between Pelican Waters and the Bruce Highway, with a small portion of the site lying to the west of the highway.

The site and its regional context is illustrated in Figure 1, with the illustrated Master Plan included as Figure 2.

1.4 Overview of Key Activities and Achievements

During this first year of construction and compliance reporting, numerous development and environmental management activities have commenced including:

- Achieving a 6 Star Green Star Communities Rating from the Green Building Council of Australia
- Initial construction and monitoring of frog habitat ponds in Precinct 2
- Monitoring of wallum sedge frog populations

- Environmental management initiatives under the Community Stewardship Program, including rehabilitation trials and community fauna monitoring in the Environmental Protection Zone
- Ongoing water quality monitoring on and off site
- Implementation of approved construction environmental management plans (CEMPs) for Precinct 1 and 2
- Construction and monitoring of high efficiency sediment basins for works in Precinct 1 and 2
- Commencement of bulk earthworks in Precinct 1 and Precinct 2, temporary access tracks and borrow site
- Commencement of the East West Link Bridge over Lamerough Creek
- Bells Creek Arterial entrance to the Caloundra South site.

Stockland, its contractors and consultants have worked with the Commonwealth, State and Local governments during this inaugural period to implement procedures to take this project forward over the longer term. With a development timeline of up to 30 years, Stockland is committed to maintaining the project's excellent environmental record for the duration of the development process, whilst actively encouraging a sense of environmental stewardship and pride within the emerging community.



Figure 1: Regional Context of Caloundra South (EPBC Referral Area)



Figure 2: Illustrated Master Plan

(not to scale)

2. CURRENT STATUS OF THE PROJECT

2.1 State Approval status

A site-wide Master Plan was approved by the then Urban Land Development Authority (now Economic Development Queensland) in June 2012. Given the size and duration of the project, the project was divided into 19 Precincts.

Precinct 1 was granted approval for a Reconfiguration of a Lot from 1 into 344 Residential Lots, park, roads and drainage in July 2014. Bulk earthworks associated with Precinct 1 commenced on 15th January 2015, triggering the formal “commencement of the action” under the EPBC Approval.

Precinct 2 was granted approval for a Reconfiguration of a Lot from 2 Lots into 1560 Lots, 1 Mixed Use Lot, 2 District Centre Lots, Educational Establishment Lots, Community Centre Lots, Tourist Attraction, Parks and new roads. Bulk earthworks associated with Precinct 2 commenced in November 2015.

Precincts 3-5 were granted approval for Business and Industry in May 2015. No construction works have commenced under this approval as yet.

An application for the Town Centre (Precincts 6-10) has been submitted to Economic Development Queensland for assessment and is yet to receive a decision.

The locations of Precincts are illustrated in Figure 3.

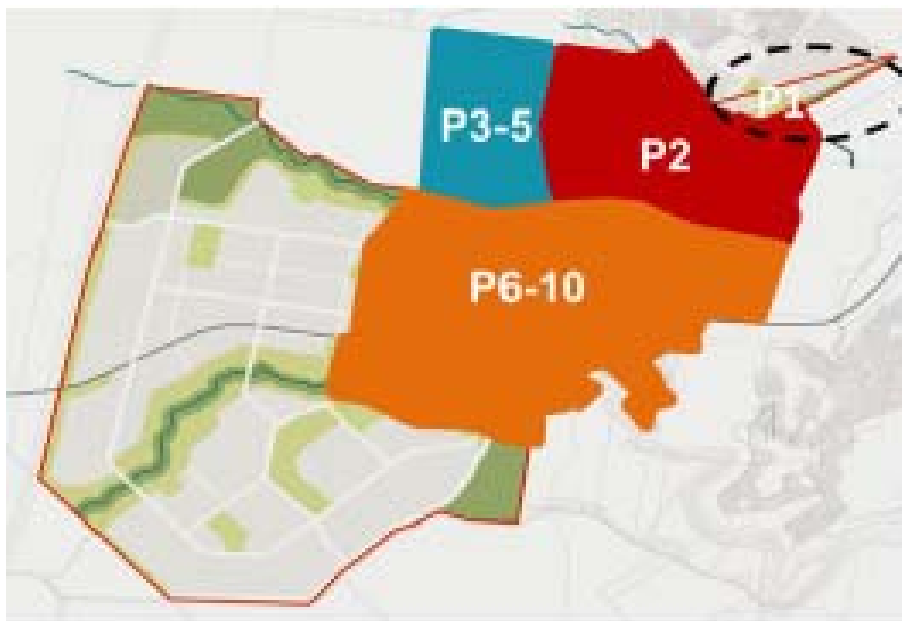


Figure 3: Current Precincts

2.2 Project Delivery

During the reporting period (15 January 2015 – 14 January 2016), the following construction activities were undertaken:

- **Precinct 1** - Bulk earthworks were commenced and completed, and the civil stage works progressed to approximately 50% complete (stages 21-26 and Stage 35). The remainder of the civil works (stages 27-34) will be completed during the next reporting period.
- **Precinct 2** – Bulk earthworks commenced in November 2015.
- **Lamerough Creek East-West Link Road Bridge** – construction of the embankment works and bridge commenced in November 2015.
- **Bells Creek Arterial Entrance to Caloundra South** – construction commenced in November 2015.

The Bells Creek Arterial Project was the subject of EPBC 2013/7067, which was determined as "not a controlled action". This ACR will report on activities within the Caloundra South development boundary that are associated with the construction of the Bells Creek Arterial entrance to the Caloundra South site.

The Construction Contractor has prepared a Construction Environmental Management Plan (CEMP) for each work package which includes the relevant requirements of the EPBC conditions of approval and approved plans, as well the Construction Contractor's proposed approach to manage other environmental aspects on site during construction.

The Construction Contractor completes daily and weekly environmental checklists to assist in implementation of the CEMPs and the results are reported in the Monthly Environment Report, which the Superintendent provides to Stockland as part of the Superintendent's Monthly Construction Report.

2.3 Green Star Communities

The Caloundra South Project was awarded a 6 Star Green Star Communities Rating from the Green Building Council of Australia in 2015. This places the Caloundra South project on the world leadership stage in terms of liveability and sustainability.

"Stockland's 6 Star Green Star rating for Caloundra South demonstrates that it is possible to undertake a development of unprecedented scale and achieve world class environmental and social outcomes." Romilly Madew, Chief Executive Officer, Green Building Council of Australia.

2.4 Frog Ponds Creation

Wallum Sedge Frog ponds have been created in Precinct 2 and were completed in June 2015, prior to the commencement of construction of the development in this Precinct (Figures 4 and 5). Frog ponds were established in the Frog Zone along the 'northern corridor' providing Wallum Sedge Frog movement along Lamerough Creek. Frog ponds were constructed in accordance with the Wallum Sedge Frog Management Plan, and further information about the implementation of this plan is provided in Section 3 and Appendix A.



Figure 4: Created Wallum Sedge Frog Ponds in Area A in Precinct 2



2.5 Community Stewardship Program

Stockland established the Community Stewardship Program in 2014, which is coordinated by SEQ Catchments Ltd. Members meet on a quarterly basis to review research, land care and rehabilitation opportunities within the conservation areas of Caloundra South. Over 18 community interest groups are represented, including representation from government and industry.

As part of the Community Stewardship Program, World Wetlands Day 2015 activities included community participation in planting at the frog ponds within the Environmental Protection Zone, which has delivered early rehabilitation of land adjacent to Bells Creek.

The Community Stewardship Program is intended to evolve into a Landcare group once there is a sufficient resident population at Caloundra South.

Rehabilitation and conservation projects described in Table 1 and shown on Figure 6 have commenced onsite, under the Community Stewardship Program, and with the support of Stockland.

Table 1: Community Stewardship Program Activities

Activity	Outcome
National Tree Day (24 July 2015)	Community Education and planting of 600 trees in a degraded area of Bells Creek north as part of National Tree Day (July) involving students from Unity College and members of the Community Stewardship Program.
World Wetland Day (2 February 2015)	Community education and planting of the created frog ponds.
Little Italy (50ha)	Members of the Community Stewardship Program engage with community groups to trial different rehabilitation techniques, including fire management. Community based fauna monitoring has also been established with the assistance of Fauna Watch. An advanced Wallum Sedge Frog Offsets site has also been established at Little Italy.
Stock Exclusion Fencing	The majority of the Environmental Protection Zone (EPZ) and the 'Little Italy' area have been fenced to limit cattle intrusion into the EPZ to enable early rehabilitation of future conservation areas to occur. By the end of 2015 up to 12km of stock exclusion fencing has been erected to protect the EPZ.

2.6 High Efficiency Sediment Basins

A total of three High Efficiency Sediment basins were installed and operating during the first year of construction, with an additional basin (Precinct 2 - Area 2 North Basin) under construction (Figure 6 and Figure 7). High efficiency sediment basins are capable of treating three times as much runoff as current best practice sediment basins. They are also capable of treating runoff continuously through rainfall events rather than capturing a portion of the rainfall for treatment after the rainfall event. During construction, all captured runoff has been treated to meet the nominated water quality performance criteria outlined in the Water Quality Management Plan.



Figure 6: High Efficiency Sediment Basin Installed as Part of Precinct 1 Works



REV	DATE	REVISION DETAILS	APPROVED

A3 THE SCALE SHOWN IS ORIGINAL DRAWING SCALE

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DRAWN	KR	CLIENT	STOCKLAND
DESIGNED	KR	PROJECT	AURA
APPROVED	KR		
DATE	03/03/16		
RPEQ NO.	N/A		
GRID REF.	N/A		

TITLE	HIGH EFFICIENCY SEDIMENT BASINS
	LOCATION PLAN
DRAWING NO.	SC14-0063:300
REV.	-

2.7 Project Launch

The Caloundra South Project was publicly launched as 'Aura – City of Colour' on 1 October 2015. Key community and environmental stakeholders attended the launch. The project website was also launched - <http://cityofcolour.com>



Figure 8: Aura Fly-through – Potential Environmental Education Centre (subject to further approvals)

3. APPROVED DOCUMENTS

The Conditions of the EPBC Approval required the submission and approval of a number of Management Plans and Strategies.

Documents listed in Table 2 have been submitted to and/or approved by the Minister administering the EPBC Act, in accordance with EPBC 2011/5987.

All approved EPBC documents are available from <http://cityofcolour.com/latest/resources>

Table 2: Approved Documents

Condition	Document	Status	Compliance assessment
1	Environmental Management Plan	Approved 26 November 2013	The Environmental Management Plan comprises three documents: Environmental Management Plan – See Appendix A (Precinct Construction Environmental Management plans) Environmental Engagement Plan – See Appendix A Vegetation Management and Rehabilitation Plan – See Appendix A
7	Wallum Sedge Frog Management Plan	Revision A (December 2013) - Approved 10 December 2013 (now superseded)	See Appendix A
		Revision C (April 2015) - Approved 22 April 2015 (now superseded)	
		Revision D (December 2015) - Approved 23 December 2015	
4	Water Quality Management Plan	Revision 3 (February 2014) - Approved 25 March 2014 (now superseded)	See Appendix A
		Revision 4 (November 2015) Approved 24	

		December 2015	
2	Environmental Protection Plan 14 July 2015	Approved 21 August 2015	Refer to Section 4
3	Precinct 1/ Part Precinct 3/4 and Associated Works Construction Environmental Management Plan 23 June 2014	Approved 4 July 2014	See Appendix A
3	Precinct 2/ Part Precinct 3/4 and Associated Works Construction Environmental Management Plan May 2015	Approved 25 August 2015	See Appendix A
9	Wallum Sedge Frog Contingency and Offset Strategy	Submitted to DotE 15 December 2015. Awaiting response from DotE	Not applicable

4. EPBC CONDITIONS AND THE COMPLIANCE TABLE

Table 3 documents the compliance with the conditions of EPBC 2011/5987 for the reporting period from 15 January 2015 to 14 January 2016. Evidence of compliance with the requirement of Approved Plans prepared under the EPBC conditions of approval is provided in **Appendix A**.

Table 3: Compliance Audit of EPBC 2011/5987 Conditions

Condition Number/ Reference	Condition	Is the project compliant with this condition?	Evidence/Comments
1	<p>Prior to the commencement of the action, the person undertaking the action must submit to the Minister for approval a detailed Environmental Management Plan for the proposed action. The Environmental Management Plan must be submitted to Minister at least three (3) months prior to the commencement of the action. The Environmental Management Plan must be a standalone document that incorporates specific management actions required to protect matters of national environmental significance. The Environmental Management Plan must include:</p> <ul style="list-style-type: none"> a) potential impacts to matters of national environmental significance b) management and mitigation measures to manage: <ul style="list-style-type: none"> I. acid sulphate soils; II. sediment and erosion controls; and III. pests and weeds. c) detail of the objectives, methods, parameters and monitoring strategies to be used; d) performance criteria for each set of parameters at which point Corrective actions are required to be implemented; e) corrective actions, and/or mechanisms for developing 	Compliant	<p>Stockland submitted the Environmental Management Plan to DotE on 6 November 2013, prior to commencement of the action on 15 January 2015.</p> <p>DotE provided a letter to Stockland on the 26 November, 2013 approving the plan, stating that it meets the requirements of Condition 1.</p> <p>The requirements of the Environmental Management Plan have been incorporated into each Precinct Construction Environmental Management Plan (CEMP) prepared to date. Refer EPBC Condition 3 for assessment of compliance.</p> <p>Appendix A, Table A1 lists all the requirements of the Environmental Engagement Plan and states how the requirements have been met.</p> <p>Appendix A, Table A2 lists all of the requirements of the Environmental Rehabilitation Plan and states how the requirements have been met.</p>

Condition Number/ Reference	Condition	Is the project compliant with this condition?	Evidence/Comments
	<p>Corrective actions, and the parties responsible for implementing Corrective actions.</p> <ul style="list-style-type: none"> f) a vegetation management and rehabilitation plan/strategy g) an environmental engagement strategy/plan for identifying communication and engagement mechanisms for ensuring community engagement with management practices required to protect matters of national environmental significance; <p>The commencement of the action must not occur until the Environmental Management Plan has been approved by the Minister. The approved Environmental Management Plan must be reviewed by the person undertaking the action within six (6) months of an audit undertaken in accordance with Condition 13. If the Environmental Management Plan is amended following the review, the amended plan must be submitted to the Minister for approval. The approved Environmental Management Plan must be implemented.</p>		<p>The first audit required under Condition 13 is due in 2018, and consequently the Environmental Management Plan was not reviewed during this reporting period.</p>
2	<p>Within six (6) months of the commencement of the action, the person undertaking the action must submit to the Minister for approval a detailed Environmental Protection Plan which outlines the actions that will be taken to implement legally binding mechanisms to ensure the protection of the Environmental Protection Zone and Buffer Zones.</p>	Compliant	<p>Stockland submitted the Environmental Protection Plan to DotE on 14 June 2015, within 6 months of commencement of the action on 15 January, 2015.</p> <p>DotE reviewed the Environmental Protection Plan, as updated following discussion and consultation, and issued a letter to Stockland on 21 August 2015 approving the July 2015 version of the plan.</p>

Condition Number/ Reference	Condition	Is the project compliant with this condition?	Evidence/Comments
			<p>An Infrastructure Agreement between Sunshine Coast Regional Council, Stockland and the Queensland State Government was executed by all parties on 2nd November, 2015.</p> <p>This included a Conservation Infrastructure Agreement reflecting the relevant provisions from the Environmental Protection Plan, including confirmation that conservation areas identified within the Environmental Protection Plan will be accepted by Sunshine Coast Regional Council once relevant performance objectives have been met. During the reporting period, no areas have been handed over to Sunshine Coast Regional Council.</p>
3	<p>Prior to the Commencement of the action within each Precinct, the person undertaking the Action must submit to the Minister for approval a detailed Precinct Construction Environmental Management Plan (PCEMP). Each PCEMP must be submitted to the Minister at least three (3) months prior to the Commencement of the action within each Precinct. Each PCEMP must be a standalone document that incorporates specific management actions required for that Precinct, and any Incidental or Associated Works, unless those works are addressed in another PCEMP. Each PCEMP must include:</p> <ul style="list-style-type: none"> a) Details of the timing of construction works including (consistent with the requirements under Condition 7) any compensatory habitat works; b) Current and detailed maps of the locations of: 	Compliant	<p>Stockland submitted the Precinct 1 Part Precinct 3/4 and Associated Works CEMP to DotE on 12 March 2014. DotE reviewed the CEMP, as updated following discussion and consultation, and provided a letter to Stockland on 21 August 2014 approving the version of the plan dated 23 June 2014.</p> <p>Appendix A, Table A3 lists all the requirements of the Precinct 1 Part Precinct 3/4 and Associated Works CEMP and states how the requirements have been met.</p> <p>Stockland submitted the Precinct 2 Part Precinct 3/4 and Associated Works CEMP to DotE on 26 March, 2015, prior to commencement of the action within Precinct 2 in December 2015.</p>

Condition Number/ Reference	Condition	Is the project compliant with this condition?	Evidence/Comments
	<ul style="list-style-type: none"> I. Environmental Protection Zones, no go areas/protected areas where only habitat creation, weed management or rehabilitation will occur; II. Sediment and erosion treatment and prevention devices; III. Prescribed Buffer Zones; IV. Development and construction zones; V. Essential services and easements; VI. Roads; and VII. Fauna protection devices and road crossings/underpasses. <ul style="list-style-type: none"> c) Potential impacts to Matters of National Environmental Significance; d) Management and mitigation actions required for acid sulphate soils, surface and ground water quality, sediment and erosion controls, vegetation management, and pest and weed management to protect Matters of National Environmental significance; e) The objectives, methods, parameters and monitoring strategies to be used; f) Performance criteria for each set of parameters at which point Corrective actions are required to be implemented; g) Corrective actions, and/or mechanisms for developing Corrective actions, and the parties responsible for implementing Corrective actions. <p>The Commencement of the action in a Precinct must not occur until the PCEMP for the relevant Precinct has been approved by</p>		<p>DotE provided a letter to Stockland on 25 August 2015 approving the plan, stating that it meets the requirements of Condition 3.</p> <p>Appendix A, Table A4 lists all the requirements of the Precinct 2 Part 3/4 and Associated Works CEMP and states how the requirements have been met.</p>

Condition Number/ Reference	Condition	Is the project compliant with this condition?	Evidence/Comments
	<p>the Minister, or another PCEMP approved by the Minister includes the proposed works. Approved MCEMPs must be implemented.</p> <p>For incidental or Associated Works, measures necessary to protect Matters of National Environmental Significance must be employed, such as erosion and sediment control and the re-establishment of vegetation, in accordance with the approved PCEMP.</p> <p>Note: For clarification Preliminary Works may occur prior to the approval of each PCEMP.</p>		
4	<p>Prior to the commencement of the action, the person undertaking the action must submit to the Minister for approval a Water Quality Management Plan. The Water Quality Management Plan must address the management and monitoring of both groundwater and surface water and must:</p> <ul style="list-style-type: none"> a) Outline the baseline water quality data; b) Set out water quality performance objectives and parameters; c) Set monitoring and reporting periods; d) Set out scientifically robust methods for sampling and data collection; e) Include a risk assessment of any modelling, assumptions and predications used; f) Identify readily measurable performance indicators and goals and identify performance indicators at which point corrective actions will be taken; 	Compliant	<p>Stockland submitted the Water Quality Management Plan to DotE on 12 March 2014, prior to commencement of the action on 15 January 2015.</p> <p>DotE provided a letter to Stockland on 25 March 2014 approving the plan, stating that it meets the requirements of Condition 4.</p> <p>Following discussion and consultation with DotE, the Water Quality Management Plan was revised, and DotE issued a letter to Stockland on 24 December 2015 approving Version 4 of the plan.</p> <p>Appendix A, Table A5 lists all the requirements of the Water Quality Management Plan and states how the requirements have been met. This ACR reports on</p>

Condition Number/ Reference	Condition	Is the project compliant with this condition?	Evidence/Comments
	<p>g) Corrective actions, and/or mechanisms for developing corrective actions, and the parties responsible for implementing corrective actions;</p> <p>h) Include scientifically robust methods for detecting a 10% change in water quality parameters in Bell's Creek and 5% change in water quality in Pumicestone Passage unless an alternate is approved by the Minister; and</p> <p>i) Demonstrate adaptive management mechanisms reflecting contemporary industry best practice are being implemented throughout the period of this approval.</p> <p>The action must not commence until the Water Quality Management Plan is approved by the Minister. The approved Water Quality Management Plan must be reviewed by the person undertaking the action within six months of an audit undertaken in accordance with Condition 13. If the Water Quality Management Plan is amended following the review, the amended plan must be submitted to the Minister for approval. The person undertaking the action must demonstrate that the water quality performance objectives of the Water Quality Management Plan would result in an equivalent or improved environmental outcome over the life of this approval.</p>		<p>implementation of the requirements of Revision 3 of the Water Quality Management Plan which covered the ACR reporting period from 15 January 2015 to 22 December 2015. Compliance with the requirements of Revision 4 are reported on by exception, where they differ from the requirements of Revision 3, and only for the period from 23 December 2015 to the end of the ACR reporting period on 14 January 2016.</p>
	<p>The approved Water Quality Management Plan must be implemented.</p> <p>Note: For clarification Preliminary Works may occur prior to approval of the Water Quality Management Plan.</p>	Non-compliant	<p>The approved Water Quality Management Plan has been implemented in full, with the exception of the following three instances:</p> <ul style="list-style-type: none"> - Monthly construction based groundwater monitoring did not occur between 25 February 2015 and 6 May 2015.

Condition Number/ Reference	Condition	Is the project compliant with this condition?	Evidence/Comments
			<ul style="list-style-type: none"> - Iron and aluminium were not sampled for a single event based monitoring event in August 2015, collected as part of baseline monitoring in the Bells Creek catchment. - Biannual monitoring was scheduled to occur in January 2016, but was postponed to February due to insufficient rainfall occurring for the monitoring results to properly reflect wet season conditions. <p>These omissions were identified by SMEC during a regular project compliance review and Stockland notified DotE in accordance with Condition 14. The reported matters are minor and administrative in nature and there is no evidence that they have resulted in, or are likely to result in, an impact on Matters of National Environmental Significance on site. DotE reviewed the matters and advised Stockland that no further action was required.</p> <p>Further detail of these instances and the management response is provided in Appendix A, Table 8.</p>

Condition Number/ Reference	Condition	Is the project compliant with this condition?	Evidence/Comments
5	Prior to commencement of the action, the person undertaking the action must provide a detailed map to the Department that identifies areas of Wallum Sedge Frog (<i>Litoria olongburensis</i>) habitat that will be destroyed or removed on the subject site.	Compliant	<p>Stockland submitted the Wallum Sedge Frog Management Plan to DotE on 6 December 2013, prior to commencement of the action on 15 January 2015.</p> <p>Figure 2.2d of the Wallum Sedge Frog Management Plan includes a map showing the area of wallum sedge frog habitat to be destroyed or removed from the subject site.</p> <p>DotE issued a letter to Stockland on 10 December 2013 confirming that Condition 5 of the approval has been satisfied.</p> <p>An updated version of Figure 2.2d was included in Revision D of the Wallum Sedge Frog Management Plan, approved by DotE on 23 December 2015 (refer comments in relation to Condition 8 below).</p> <p>The latest version of Figure 2.2d is provided in Appendix B.</p>
6	The Person undertaking the action must not destroy or remove more than 152 ha of Wallum Sedge Frog habitat on the subject site as set out in the map provided in Condition 5 of this approval.	Compliant	11.7ha of Wallum Sedge Frog habitat has been removed. A summary of wallum sedge frog habitat created, retained and removed is provided in Appendix C .
7	To minimise and compensate for the loss of a maximum 152ha Wallum Sedge Frog (<i>Litoria olongburensis</i>) habitat at the subject site, the person undertaking the action must establish created	Compliant	A pre-construction wallum sedge frog habitat survey has been undertaken, in accordance with the methods outlined in the Wallum Sedge Frog Management Plan, Box 1,

Condition Number/ Reference	Condition	Is the project compliant with this condition?	Evidence/Comments
	<p>compensatory habitat for the Wallum Sedge Frog within the subject site in accordance with the Wallum Sedge Frog Management Plan. The created compensatory habitat must be established in stages, commensurate with the area of habitat destroyed or removed through the construction of precincts and must reach a minimum of 152 ha, prior to completion of construction of the Development.</p>		<p>Page 52, to confirm the extent of wallum sedge frog habitat within Precincts 1, 2, and Part 3 and Part 4.</p> <p>A summary of wallum sedge frog habitat removed, retained and created in each precinct during the 2015/2016 compliance reporting period is provided in Appendix C.</p> <p>Wallum sedge frog ponds have been created in the frog zone of Precinct 2 in advance of construction of the development in Precinct 2. Photos of the completed frog ponds are provided in Figure 4.</p>
8	<p>Prior to the commencement of the action the person undertaking the action must develop and submit to the Minister for approval a Wallum Sedge Frog Management Plan to monitor and manage the Wallum Sedge Frog (<i>Litoria olongburensis</i>) population at the Subject Site including its use of the Created Compensatory Habitat within the Subject Site. The Wallum Sedge Frog Management Plan must be developed by an Appropriately Qualified Ecologist. The Wallum Sedge Frog Management Plan must include:</p> <ol style="list-style-type: none"> a review of the existing baseline <i>L.olongburensis</i> population and distribution within the Subject Site; a scientifically robust methodology for monitoring <i>L.olongburensis</i> population and Created Compensatory Habitat success within the Subject Site; commitment to the construction of habitat ponds for the <i>L.olongburensis</i> concurrent with the commencement of 	Compliant	<p>Stockland submitted the Wallum Sedge Frog Management Plan to DotE on 6 December 2013, prior to commencement of the action on 15 January 2015.</p> <p>DotE issued Stockland a letter on 10 December 2013 approving revision B of the plan, stating that it meets the requirements of Condition 8.</p> <p>The Wallum Sedge Frog Management Plan has subsequently undergone two revisions.</p> <p>The Wallum Sedge Frog Management Plan, revision C, was approved by DotE on 26 February 2015.</p> <p>The Wallum Sedge Frog Management Plan, revision D, was approved by DotE on 23 December 2015.</p>

Condition Number/ Reference	Condition	Is the project compliant with this condition?	Evidence/Comments
	<p>works within each precinct;</p> <ul style="list-style-type: none"> d) a <i>L.olongburensis</i> population and Created Compensatory Habitat monitoring program with readily measurable objectives, performance indicators and scientifically robust Success Criteria; e) timeframes for reporting and implementation; f) Corrective Actions, and/or mechanisms for developing Corrective Actions, and the parties responsible for implementing Corrective Actions; g) a requirement for pre-construction surveying of the Subject Site by an Appropriately Qualified Ecologist immediately prior to the removal of any identified area/s of <i>L.olongburensis</i> habitat to record the size of the area to be destroyed/removed by the proposed action. This information must be included as a reporting requirement of the Wallum Sedge Frog Plan; h) an outline of the measures that will be undertaken to ensure that the Created Compensatory Habitat will be protected in perpetuity; i) funding to at least \$0.5 million (2013 dollars, indexed to the Consumer Price Index and excluding GST) over 10 years from the Commencement of the Action, for priority actions identified in the Wallum Sedge Frog Management Plan. <p>The action must not commence until the Wallum Sedge Frog Management Plan is approved by the Minister. The approved Wallum Sedge Frog Management Plan must be reviewed by the person undertaking the action within six (6) months of an audit undertaken in accordance with Condition 13. If the Wallum</p>		<p>The first audit required under Condition 13 is due in 2018. The Wallum Sedge Frog Management Plan will be reviewed within 6 months of completion of the audit.</p> <p>Appendix A, Table A6 lists the requirements of the Wallum Sedge Frog Management Plan and states how the requirements have been met.</p>

Condition Number/ Reference	Condition	Is the project compliant with this condition?	Evidence/Comments
	<p>Sedge Frog Management Plan is amended following the review, the amended plan must be submitted to the Minister for approval. The approved Wallum Sedge Frog Management Plan must be implemented.</p> <p>Note: For clarification Preliminary Works may occur prior to approval of the Wallum Sedge Frog Management Plan.</p>		
9	<p>Within one (1) year of the commencement of the action, the person undertaking the action must prepare and submit a detailed <i>L.olongburensis</i> Contingency and Offset Strategy (including offsets in accordance with the department's Environmental Offset Policy) that will be implemented if the created compensatory habitat does not meet the defined success criteria.</p>	Compliant	<p>Stockland submitted the <i>L.olongburensis</i> Contingency and Offset Strategy to DotE on 15 December 2015, within one year of commencement of the action on 15 January 2015.</p> <p>At the end of this reporting period (to 14 January 2016) no response has been received from DotE.</p>
10	<p>The person undertaking the action must implement the following buffer zones at the subject site:</p> <ul style="list-style-type: none"> a) the Riparian Corridor; b) the Frog Zone; c) the Frog Buffer; and d) the Lifestyle Buffer. <p>Activities in accordance with table 2.4 of the approved Wallum Sedge Frog Management Plan, required under condition 8, are permitted in the Buffer Zones.</p>	Compliant	<p>The buffer zones listed have been implemented as shown on the drawings provided in Appendix B of the Precinct 1, Part Precinct 3/4 CEMP and the Precinct 2 Part Precinct 2/4 CEMP.</p> <p>Bulk earthworks and civil construction are still occurring, therefore no approved activities (as listed in Table 2.4 of the approved Wallum Sedge Frog Management Plan) have occurred within the buffer zones to date.</p>
11	<p>The person undertaking the action must not provide creek access within the Riparian Corridor.</p>	Compliant	<p>No creek access has been provided or is provided for under the master plan layout.</p>

Condition Number/ Reference	Condition	Is the project compliant with this condition?	Evidence/Comments
12	<p>If the person undertaking the action wishes to carry out any activity otherwise than in accordance with approved management plans, reports, strategies and methods as specified in the conditions, the person undertaking the action must submit to the Department for the Minister's written approval a revised version of that management plan, report, strategy and method. The varied activity shall not commence until the Minister has approved the varied management plan, report, strategy and method unless the revised management plan, report, strategy and method would result in an equivalent or improved environmental outcome over time. If the Minister approved the revised management plan, report, strategy and method, that management plan, report, strategy or method must be implemented in place of the management plan, report, strategy and methods originally approved.</p>	Compliant	<p>All required Management Plans, Reports, Strategies and methods have been approved by DotE under the Conditions of Approval. Revisions to the Water Quality Management Plan and Wallum Sedge Frog Management Plan have been prepared and approved by the Minister as outlined above (refer Conditions 4, 5 and 8).</p>
13	<p>Unless otherwise agreed to in writing by the Minister, within three (3) months of every three (3) year anniversary of the commencement of the action, for the first nine (9) years from the commencement of the action and then within three (3) months of every five (5) year anniversary thereafter until the cessation of the action, the person undertaking the action must ensure that an independent audit of compliance with the conditions of approval and all management plans, reports, strategies and methods is conducted. For each independent audit, the independent auditor must be approved by the Minister and the audit criteria must be agreed to by the Minister prior to the commencement of the audit. The person undertaking the action must submit an audit report to the Minister for approval within</p>	Not applicable	<p>The action commenced on 15 January, 2015. The first three (3) year anniversary of the commencement of the action is 15 April, 2018.</p>

Condition Number/ Reference	Condition	Is the project compliant with this condition?	Evidence/Comments
	three (3) months of the date of completion of the audit, identifying any remedial actions that have been taken in response to recommendations identified by the independent auditor, with any proposed changes to any management plan, report, strategy or method to be included.		
14	Within three (3) months of every twelve (12) month anniversary of the commencement of the action (and until 12 months after the cessation of the action), the person undertaking the action must publish a report on their website, for the duration of the project, addressing compliance with the conditions of this approval over the previous twelve (12) months, including implementation of any management plans, reports, strategies and methods as specified in the conditions. Within five (5) days after publication, the person undertaking the action must provide the Minister with a copy of the report. Non-compliance with any of the condition of this approval must be reported to the Minister within two (2) business days of becoming aware of the non-compliance.	Compliant	The first Annual Compliance Report (ACR) is due to be submitted to DotE before 15 April, 2015. This is the subject of this Report.
15	If, at any time after five (5) years from the date of this approval, the person undertaking the action has not commenced the action, then the person undertaking the action must not commence the action without the written agreement of the Minister.	Not applicable	The action commenced on 15 th January 2015, and this condition is therefore not triggered.
16	Within ten (10) days of the commencement of the action, the person undertaking the action must advise the Department in writing of the actual date of commencement.	Compliant	Stockland issued a letter to DotE on 18 December 2014 advising that the commencement of the action occurred on 15 December 2014.

Condition Number/ Reference	Condition	Is the project compliant with this condition?	Evidence/Comments
			<p>Stockland issued subsequent advice to DotE on 16 November 2015 notifying that after a review of the December/January construction program and reporting, it was found that rain and the Christmas shut down period delayed the actual commencement of construction until 15th January, 2015.</p> <p>DotE have acknowledged and confirmed the revised commencement date in email correspondence dated 17 November, 2015, and have consequently adjusted the due date of subsequent approved reports/plans.</p>
17	<p>Unless otherwise agreed in writing by the Minister, the person undertaking the action must publish all management plans, reports, strategies and methods referred to in these conditions of approval on their website. Each management plan, report, strategy and method must be published on the website within one (1) month of being approved.</p>	Compliant	<p>All approved plans and documents have been published on Stockland's website (http://cityofcolour.com/latest/resources) within 1 month of being approved, including approved revisions to documents.</p>
18	<p>The person undertaking the action must maintain accurate records substantiating all activities associated with or relevant to the conditions of approval, including measures taken to implement the management plans, reports, and strategy required by this approval, and make them available upon request to the Department. Such records may be subject to audit by the Department or an independent auditor in accordance with section 458 of the EPBC Act, or used to verify compliance with the conditions of approval. Summaries of audits will be posted</p>	Compliant	<p>The Caloundra South (Aura) project maintains a robust document management system that provides a controlled and secure repository for all Project documentation. No requests were made by DotE during the compliance reporting period for records substantiating activities associated with or relevant to the conditions of approval.</p>

Condition Number/ Reference	Condition	Is the project compliant with this condition?	Evidence/Comments
	on the Department's website. The results of audits may also be publicised through the general media.		
19	If the Minister believes that it is necessary or convenient for the better protection of wetlands of international importance, threatened species and communities and migratory species to do so, the Minister may request that the person undertaking the action make revisions to the management plans, reports, strategies and methods specified in the conditions and submit the revised management plans, reports, strategies and methods for the Minister's written approval. The person undertaking the action must comply with any such request. The revised approved management plans, reports, strategies and methods must be implemented. Unless the Minister has approved the revised management plan, reports, strategies and methods then the person undertaking the action must continue to implement the management plans, reports, strategies and methods originally approved, as specified in the conditions.	Not applicable	No revisions were requested by DotE during the reporting period.

APPENDIX A: REQUIREMENTS OF APPROVED PLANS

Environmental Engagement Plan

The Environmental Engagement Plan outlines measures to communicate and engage with the community on management practices to protect matters of national environmental significance. The Environmental Engagement Plan seeks to achieve on-going participation in and ownership of the project's environmental objectives and obligations through two primary methods:

1. Establishment of an independent community group such as a Landcare Group; and
2. Provision of an Environmental Education Centre and Programs.

The Environmental Engagement Plan recognises that the capacity of stakeholders to engage, invest and contribute to the project will increase over the expected 30 year timeframe until the development is complete. As such the plan will be delivered in five key stages which span the life of the project. This ACR extends the period of both the Mobilisation and Launch Phase (0-2 years) and Acceleration Phase (2-4 years). The official launch of the Caloundra South project as "Aura – City of Colour", in October, 2015, marks the commencement of the Acceleration Phase.

The Environmental Engagement Plan contains an Environmental Engagement Action Plan for the Acceleration Phase, and the focus of reporting for this ACR is to provide an update on the progress of the action plan.

Table 4: Compliance Assessment of the environmental Engagement Plan (Revision 6, November 2013)

Section	Id.	Commitment	Is the project compliant with this commitment?	Evidence/Comments
Table B1.7	EEP-1	Establish the Caloundra South Landcare Group or similar community organisation, within 12 months of approval of the action.	Compliant	<p>The Caloundra South Community Advisory Group was established in 2014, and involves a number of community organisations that work together to identify and optimise community land care opportunities within Caloundra South.</p> <p>The Caloundra South Community Advisory Group has quarterly meetings and has undertaken the following initiatives throughout the reporting period:</p>

				<p>- Three community awareness-raising events have been held, involving students from Unity College and members from groups in the Community Advisory Group. The events were scheduled around National Tree Day (July 2014 and 2015) and World Wetlands Day (February 2015) and involved tree planting and educational talks.</p> <p>- The group has identified and implemented a number of measures on site to facilitate environmental restoration including obtaining funding to install fencing around rehabilitation areas to exclude cattle to assist with weed management. The group also obtained funding from the Australian Government Green Army program and seed collection for propagation.</p> <p>A formal local Landcare group will be established once there is a sufficient resident population.</p>
Table B1.7	EEP-2	Develop a public annual report that monitors performance against all key environmental indicators required to protect MNES as conditioned in the Caloundra South EPBC approval	Compliant	The Annual Compliance Report (ACR) (this report) satisfies this requirement.
Table B1.7	EEP-3	Provide the environment report to DOE and publish online	Compliant	The ACR (this report) satisfies this requirement.
Table B1.7	EEP-4	Once the development commences, hold a public forum annually outlining intended activities and mitigation measures for protecting environmental values and community safety and amenity.	Compliant	Development updates are provided quarterly at the Community Reference Group meetings. Stockland will present the findings of this ACR in a public forum in advance of public notification via the website.
Table B1.7	EEP-5	Engage key collaborators, funding partners and government agencies to seek input to planning, sustainable design, governance and funding of the Environmental Education Centre	Compliant	Stockland has prepared draft concepts of the proposed facility prepared by Local Architects. These have been presented to the Community Reference Group/ Scoping work is underway to research business success factors to ensure viability.

Table B1.7	EEP-6	Host a public forum and community feedback process to seek input to planning and design of the Environmental Education Centre	Not applicable	Stockland have engaged with the Caloundra South Community Reference Group to seek feedback on the draft concept design of the Environment Education Centre and will continue to consult the group throughout the development process for this Centre.
Table B1.7	EEP-7	Delivery of the programs under the Environmental Education Centre including: (i) living sustainably at Caloundra South (ii) enriching school based education (iii) community development programs (iv) skilling and employment opportunities for school leavers, long term unemployed and persons returning to the workforce (v) higher education learning, teaching and research opportunities	Not applicable	This requirement will be implemented once the Environmental Education Centre is established.
Table B1.7	EEP-8	Establish a resident education and awareness raising program which can also assist in promoting sustainable lifestyles and community wellbeing.	Compliant	<p>The recent launch of Caloundra South as "Aura - City of Colour" has included community information about the purpose of the Environmental Protection Zone, and various recreational areas across the site. A video is also available on the Stockland website providing an overview of the environmental features of the area.</p> <p>Stockland is preparing a welcome pack for new residents who will arrive from mid-2016, and it will include information on the environment of the site.</p> <p>The Living Sustainably Program will be further developed once there is a sufficient resident population.</p>
Table B1.7	EEP-9	In consultation with SEWPaC and relevant research institutions, develop research priorities for MNES with a focus on Wallum Sedge Frog	Compliant	In consultation with Queensland University of Technology, University of Queensland, Healthy Waterways and Australian Wetlands Consulting, Stockland has prepared a research proposal for the wallum sedge frog and this was endorsed by DotE on 30/10/2015. Refer Appendix A, Table A6 below.

Table B1.7	EEP-10	Seek research proposals from SEQ based universities which includes provision for regular updates of research progress to the local community	Compliant	<p>Stockland are currently working with the following universities and research organisations:</p> <ul style="list-style-type: none"> -Sunshine Coast University on trialling fire management techniques for rehabilitation. - Griffith University and Healthy Waterways on conducting research on the performance of water sensitive urban design basins (rain gardens) in removal of pollutants to protect downstream water quality - Queensland University of Technology, University of Queensland, Griffith University, Healthy Waterways and Australian Wetlands on wallum sedge frog research (refer to Appendix A, Table A6 for further information on the wallum sedge frog research proposal)
Table B1.7	EEP-11	Maintain the commitment to Healthy Waterways working with Health Waterways including funding of two additional monitoring sites in Bells Creek for the duration of the project.	Compliant	Stockland has continued to provide funding to Healthy Waterways to undertake water quality monitoring at two locations within Bells Creek downstream of the development.
Table B1.7	EEP-12	Continue involvement in Pumicestone Passage Forum Groups managed by Council assisting with strategies to improve catchment management practices internal to the site and beyond	Compliant	Stockland maintains a membership position within the Pumicestone Passage Forum Group, and has assisted with strategies on community education, Water Sensitive Urban Design and best practice erosion and sediment management. Stockland also communicates the results of water quality monitoring in Bells Creek to Healthy Waterways.
Table B1.7	EEP-13	Develop a monitoring and evaluation program for the EEP to monitor actions from this plan against the objectives of the EEP to be reported annually in the Annual Environment Report.	Compliant	<p>Progress on achieving the actions of the Environmental Engagement Plan is reported in this ACR and associated community presentation.</p> <p>An evaluation program is being prepared by SEQ Catchments (this will be Survey Monkey or similar).</p>

Vegetation Management and Rehabilitation Plan

The Vegetation Management and Rehabilitation Plan outlines the overarching rehabilitation and enhancement strategy for the Environmental Protection Zone and riparian zones across the site. The Vegetation Management and Rehabilitation Plan identifies Habitat Management Units (HMUs) across the site and prescribes broad treatments types, within a strategic and site wide context, intended to achieve the overall objectives of the plan. Further detail of the treatment types is provided in precinct level Environment Rehabilitation Plans, which are prepared prior to the commencement of subdivision works in each precinct. This ACR documents how the Vegetation Management and Rehabilitation Plan has been implemented during the reporting period.

Table 5: Compliance Assessment of the Vegetation Management and Rehabilitation Plan (Revision 6, November 2013)

Section	Id.	Commitment	Is the project compliant with this commitment?	Evidence/Comments
All	VM-1	<p>Environmental Rehabilitation Plans will be prepared to further detail rehabilitation requirements in each Precinct, and will be developed in accordance with, and to achieve the objectives and performance indicators outlined in, the Vegetation Management and Rehabilitation Plan.</p> <p>Environmental Rehabilitation Plans will be prepared prior to commencement of subdivision works in each precinct.</p>	Compliant	<p>The requirement to prepare and implement an Environmental Rehabilitation Plan for each Precinct is secured in the State Reconfiguration of a Lot approval. Environmental Rehabilitation Plans are required to be prepared in accordance with, and to achieve the objectives and performance indicators outlined in, the Vegetation Management and Rehabilitation Plan.</p> <p>Precinct 1 The Precinct 1 Environmental Rehabilitation Plan was approved under Compliance Assessment by the Minister for Economic Development Queensland on 2 June 2015, and civil subdivision works commenced in Precinct 1 on 1 September 2015.</p> <p>The Vegetation Management and Rehabilitation Plan identified three (3) HMU's in Precinct 1, namely HMU 1, 3 and 5 (as shown in Figure 1 of the plan), and the Precinct 1 Environmental Rehabilitation Plan outlines HMU specific details for these areas. The Precinct 1 Environmental Rehabilitation Plan provides for the management and monitoring of 6.201ha. Baseline studies</p>

				<p>undertaken during preparation of the Environmental Rehabilitation Plan found that all HMU's in Precinct 1 have been assessed to be in remnant condition and therefore the relevant treatment applied is remnant enhancement. Efforts will largely focus on maintaining the remnant condition, primarily through weed management, and monitoring the quality of the acid frog habitat.</p> <p>As there is no assisted regeneration or habitat creation activities required in Precinct 1, the On Maintenance period will commence at a time appropriate to the overall rehabilitation program of the 'northern corridor' along Lamerough Creek, and in line with the requirements of the Environmental Protection Plan. Monitoring and reporting requirements will commence during the On Maintenance period, as per the requirements of the Environmental Rehabilitation Plan.</p> <p>Precinct 2 The Precinct 2 Environmental Rehabilitation Plan is currently being prepared. Civil subdivision works in Precinct 2 have not yet commenced.</p>
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Precinct 1 and Part Precinct 3/4 CEMP

The Precinct 1 and Part Precinct 3/4 CEMP (2014) is a standalone document that details precinct specific actions to manage environmental aspects and risks associated with the construction of Precinct 1 and associated fill material sourced from Precinct 3 and 4. This ACR will report on how the performance criteria, management measures, monitoring, corrective action and reporting requirements of the CEMP have been complied with during the reporting period.

Table 6: Compliance Assessment of the Precinct 1 and Part Precinct 3/4 CEMP (Revision 1, June 2014)

Section	Id.	Commitment	Is the project compliant with this commitment?	Evidence/Comments
Erosion and Sediment Control	P1-ESC 1	The following water quality performance criteria will be achieved prior to the dewatering or surcharging of sediment basins: »pH 6.5 to 8.5; » Total Suspended Solids (TSS) less than 50 mg/L; »Nutrients (nitrogen and phosphorus) to be managed through normal erosion and sediment control practices; »Capture first 15mm/day of runoff; and »Discharge turbidity offsite to be less than 10% above background values of water quality entering the site via Bells Creek North and South at the Bruce Highway culverts for any events up to and including the design rainfall event. »Release treated (flocculated) waters within 3 days of cessation of rainfall event, where practical.	Compliant	Prior to the dewatering of sediment basins, all captured runoff was treated to meet the nominated water quality performance criteria. Water quality monitoring results are provided in the Construction Contractor's Monthly Environment Reports. No works occurred in the Bells Creek catchment during the reporting period.
	P1-ESC 2	Design erosion and sediment controls in accordance with the Soil Erosion and Sediment Control Engineering Guidelines for Queensland Construction Sites (Engineers Australia, Queensland Division) and Manual for Erosion and Sediment Control Version 1.2 (Sunshine Coast Regional Council 2008).	Compliant	The Soil Erosion and Sediment Control Engineering Guidelines for Queensland Construction Sites (Engineers Australia, Queensland Division) is superseded by the International Erosion Control Association Manual. Therefore, Erosion and Sediment Control Plans have been prepared in accordance with the IECA Manual

				and the Sunshine Coast Regional Council Manual for Erosion and Sediment Control Version 1.2.
	P1-ESC 3	Temporary erosion and sediment control measures will remain in place until greater than 70% groundcover has been achieved.	Compliant	This requirement is included in Erosion and Sediment Control Plans. Groundcover is monitored through the Construction Contractor's Weekly Environment Checklists and reported in the Monthly Environment Reports. Erosion and sediment controls have continued to remain in place until 70% groundcover has been achieved.
	P1-ESC 4	Construction areas and conservation areas are clearly identified.	Compliant	As reported in the Superintendent Monthly Progress Reports and Construction Contractor's Monthly Environment Reports, the clearing area was surveyed and all protected vegetation and conservation areas were demarcated with flagging tape and "no go" signage prior to commencement of clearing. There are no known instances of unplanned clearing in conservation areas.
	P1-ESC 5	Minimise areas of disturbance.	Compliant	This requirement is noted in the Construction Contractor's CEMP. Construction sequencing has been planned to minimise the area of disturbance.
	P1-ESC 6	Progressively stabilise works areas.	Compliant	Stabilisation works and monitoring of groundcover are reported in the Construction Contractor's Monthly Environment Reports. Disturbed areas have been stabilised with the required treatment within 5 days of completion of work in an area.
	P1-ESC 7	Divert clean flows around works areas and divert dirty flows for treatment prior to discharge.	Compliant	Clean water drains around disturbed areas and dirty water drains directing flows to sediment basins for treatment have been constructed in accordance with the Erosion and Sediment Control Plans. All releases from sediment basins have met the nominated water quality criteria prior to discharge.

	P1-ESC 8	Stockpiles are located within the area of disturbance, and away from any waterways or drainage channels with appropriate erosion and sediment control measures installed and maintained. Stockpile batter will be maintained at a slope of no greater than 1:1 and the height should be no greater than 2m.	Compliant	This requirement is noted in the Construction Contractor's CEMP. Stockpiles on site have been in accordance with these requirements.
	P1-ESC 9	Sediment fences will be installed to provide further protection and retention of runoff from disturbed areas. These will be strategically placed along contours and will include overflow weirs to prevent both scour and failure of the devices.	Compliant	Sediment fences have been installed in accordance with Erosion and Sediment Control Plans.
	P1-ESC 10	High Efficiency and traditional sediment basins will be installed on site to capture all runoff from disturbed areas throughout construction. Captured runoff will then be treated and discharged into downstream, stabilised areas. The design of the sediment basins will be in accordance with the Manual for Erosion and Sediment Control (SCRC 2008). Design rainfall depth of 125mm to be adopted for all sediment basin design. Sediment basins will be situated outside of retained habitat areas (frog conservation zone, waterway buffer zone and EPZ) and will not be permitted to flow into or through retained conservation zones. The use of high efficiency sediment basins vs. traditional sediment basins will be used in areas of greater continual disturbance, i.e. Precinct 1.	Compliant	High efficiency and traditional sediment basins have been installed in accordance with Erosion and Sediment Control Plans.
	P1-ESC 11	Regular monitoring off all erosion and sediment control measures will be undertaken by the Principal Contractor and Superintendent including: <ul style="list-style-type: none"> » Daily inspections of all ESC measures; » Daily inspection of the road network for evidence of sediment being deposited external to the site; » Inspection of all ESC control measures after major 	Compliant	The Construction Contractor completes environment checklists to record the effectiveness of erosion and sediment controls on a daily and weekly basis and after major rainfall events. The site is also regularly audited by a Certified Professional in Erosion and Sediment Control (O2 Consulting) that is external to the Construction Contractor. Monitoring results are

		<p>rain events (greater than 25mm in 24 hours);</p> <ul style="list-style-type: none"> » Daily measurement of sediment basin turbidity, pH, Electrical Conductivity (EC) and Dissolved Oxygen (DO) within sediment basins; » Weekly measurements of TSS and nutrients at the primary discharge points » Rainfall will be recorded at 9am each working day; and » Real time turbidity monitoring. 		<p>recorded in the Construction Contractor's Monthly Environment Report. All water released from sediment basins has met the nominated water quality criteria prior to discharge.</p>
	P1-ESC 12	<p>The Principal Contractor shall inspect all temporary erosion and sedimentation control works prior to, during and after each rain period and during periods of prolonged rainfall. Any defects revealed by such inspections shall be rectified immediately and these works shall be cleaned, repaired and augmented as required, to ensure effective erosion and sedimentation control thereafter.</p>	Compliant	<p>The Construction Contractor completes daily and weekly environment checklists to record the effectiveness of erosion and sediment controls, and the results are included in the Monthly Environment Report. Any defects in control measures recorded have been rectified and were closed out in a timely manner.</p>
	P1-ESC 13	<p>Reporting</p> <p>Onsite documentation must be held whereby a record of daily inspection documentation is kept, including but not limited to:</p> <ul style="list-style-type: none"> » Monthly environmental compliance reports (ECR) to address erosion and sediment control measures and events resulting from significant rainfall (see above). » A log of the effectiveness of the erosion and sediment control measures will be maintained. » Daily inspections of all erosion and sediment control measures; » Rectification of defect items; » Onsite water quality testing results; and » Real time turbidity monitoring documentation. 	Compliant	<p>All environmental reporting requirements are included in the Construction Contractor's Monthly Environment Report.</p>

Groundwater	P1-GW 1	Discharges of surface water from the site (that could be groundwater affected) are managed and released in accordance with surface water quality discharge standards;	Compliant	All releases from sediment basins have met the nominated water quality criteria.
	P1-GW 2	Acidity and/or dissolved metals are not to be conveyed off of the site through groundwater as a result of the development above what is considered to be natural variability; and	Compliant	Groundwater monitoring conducted in accordance with the requirements of the WQMP has not indicated that construction related impacts on groundwater.
	P1-GW 3	Spills or other contaminant releases that could affect groundwater quality are avoided or otherwise treated immediately.	Compliant	The Construction Contractor's CEMP outlines spill response procedures and provides control measures, monitoring and reporting requirements for the use of hazardous chemical on site. Large spills (greater than 20L) are reported through the incident report form and included in the Monthly Environment Report. During the reporting period there were no large spills recorded.
Acid Sulfate Soils	P1-ASS 1	Management and testing of ASS are to be in accordance with the State Planning Policy Guidance on Acid Sulphate Soils December 2013 or the most recent version.	Not applicable	ASS sampling undertaken prior to commencement of bulk earthworks indicated a low ASS risk in the areas being worked (Douglas Partners, 2014). The Construction Contractor's CEMP includes the requirement for ASS to be monitored daily and in conjunction with any excavation works. There have been no reports of ASS being encountered during construction to date.
	P1-ASS 2	Minimise areas of excavation under RL 5.0 m (AHD) where greater concentrations of acid sulfate soils could be present.	Compliant	The extent of excavation below the 5m AHD contour has been minimised. Areas of cut have been (up to 4m deep) located between RL 20m to RL14m.

P1-ASS 3	During construction, where acid sulfate soils are expected to be encountered, progressive testing of soils to determine if acid sulfates are present in the soils. Testing to be completed by an appropriately qualified geotechnical engineer. Remediation of acid sulfate soils to be determined by a qualified geotechnical engineer and in accordance with the State Planning Policy Guidance on Acid Sulphate Soils December 2013 or the most recent version.	Not applicable	ASS sampling undertaken prior to commencement of bulk earthworks indicated a low ASS risk in the areas being worked (Douglas Partners, 2014). The Construction Contractors CEMP includes the requirement for ASS to be monitored daily and in conjunction with any excavation works. There have been no reports of ASS being encountered during construction to date.
P1-ASS 4	When hot spots of acid sulfate soils are encountered, ensure suitable buffer zones are allowed for between frog habitats and overland flow areas for lime dosing or other treatment measures, including on site storage. In accordance with State Planning Policy Guidance on Acid Sulphate Soils December 2013 or the most recent version.	Not applicable	ASS sampling undertaken prior to commencement of bulk earthworks indicated a low ASS risk in the areas being worked (Douglas Partners, 2014). The Construction Contractor's CEMP includes the requirement for ASS to be monitored daily and in conjunction with any excavation works. There have been no reports of ASS being encountered during construction to date.
P1-ASS 5	Monitoring actions: » Acid sulphate testing to be completed on areas identified on any hotspots expected to contain ASS; » Treatment and monitoring of stockpiled material and treated soils during construction to ensure treatment and containment is achieved; and » Completion of pH testing of site water and sediment pond water to ensure no downstream impact.	Not applicable	ASS sampling undertaken prior to commencement of bulk earthworks indicated a low ASS risk in the areas being worked (Douglas Partners, 2014). The Construction Contractor's CEMP includes the requirement for ASS to be monitored daily and in conjunction with any excavation works. There have been no reports of ASS being encountered during construction to date.
P1-ASS 6	Corrective actions following the detection of an acid sulphate soils may include: » Isolation and separation of effected stockpile material. Ensuring that protection against overland flows and containment of stockpile runoff is achieved; and » Treatment of fill or trench material to be determined by and appropriately qualified geotechnical engineer.	Not applicable	ASS sampling undertaken prior to commencement of bulk earthworks indicated a low ASS risk in the areas being worked (Douglas Partners, 2014). The Construction Contractor's CEMP includes the requirement for ASS to be monitored daily and in conjunction with any excavation works. There have been no reports of ASS being encountered during construction to date.

	P1-ASS 7	Regular reports will be provided to the relevant authority and community as required by the Development Approval. These reports will outline: » Completion of an ASS management plan to be produced in compliance with the approved PER EMP; and » Documentation of onsite testing and any corrective actions that have been required as a result of the monitoring.	Compliant	ASS sampling undertaken prior to commencement of bulk earthworks indicated a low ASS risk in the areas being worked (Douglas Partners, 2014). ASS management measures are included in the Construction Contractors CEMP, and include requirements for ASS to be monitored daily and in conjunction with any excavation works. Documentation of onsite testing is held by the Construction Contractor. There have been no reports of ASS being encountered during construction to date.
Wallum Sedge Frog	P1-WSF 1	Partial retention of existing Wallum Sedgefrog habitat (polygon 80, Figure B.2) located within the EPZ;	Compliant	A total of 1.18 ha of habitat patch 80 has been retained and 0.6ha has been removed.
	P1-WSF 2	Provision of buffer between retained Wallum Sedgefrog habitat (polygon 80), earthworks and other development-related threats, located within the stormwater conveyance zone for up to 50 m around retained habitat (polygon 80);	Compliant	A drainage channel and bund has been constructed in the stormwater conveyance zone to direct stormwater away from retained wallum sedge frog habitat in Precinct 1 and buffer other development related threats.
	P1-WSF 3	The buffer is to be planted with semi-erect semi-aquatic emergent vegetation consistent with species common in existing habitats on site.	Compliant	Landscaping of the buffer area between retained wallum sedge frog habitat will be undertaken during the 2016 reporting period. The area will be planted in accordance with the Environmental Rehabilitation Plan and Landscape Documentation.
	P1-WSF 4	All stormwater runoff from the road and adjacent development within the conveyance zone must not be allowed to enter any portion of the retained WSF habitat within the EPZ.	Compliant	A drainage channel and bund has been constructed in the stormwater conveyance zone to direct stormwater away from retained wallum sedge frog habitat in Precinct 1.
	P1-WSF 5	Culverts, open drains and overland flow pathways for all sized ARI events need to be directed around the retained WSF habitat (to maintain pH, ensure habitat stability and limit introduction of competitor/predatory species);		A drainage channel and bund has been constructed in the stormwater conveyance zone to direct stormwater away from retained wallum sedge frog habitat in Precinct 1 and buffer other development related threats. The drainage channel has been designed to convey a

				design flow of a 100 year ARI event. The adopted design criteria is considered to provide a high level of protection to retained wallum sedge frog habitat as it is the smaller rain events (i.e. 2 and 3 year ARI events) that are more likely to impact on retained habitat, as they occur more regularly, as opposed to larger rain events that happen less frequently.
	P1-WSF 6	Construction and maintenance of silt fencing, bunding and detention basins for containing and treating silt laden run-off, must be directed away from frog habitat to be retained in the EPZ (polygon 80, Figure B.2);	Compliant	Silt laden runoff has been directed to sediment basins, and treated to meet the required water quality objectives prior to release away from the retained wallum sedge frog habitat in the Environmental Protection Zone (i.e. habitat patch 80).
	P1-WSF 7	Maintaining natural groundwater hydroperiod and other water chemistry aspects (particularly pH and tannin levels) of retained habitat areas;	Compliant	Monitoring of retained habitat areas has been conducted in accordance with the requirements of the Wallum Sedge Frog Management Plan (2015). Water quality and water depth of retained habitat areas was monitored on 9 th October 2015. Results found that water chemistry and depth are indicative of wallum habitat, as defined in the Draft referral guidelines for the vulnerable wallum sedge frog, <i>Litoria olongburensis</i> (2011, SEWPAC).
	P1-WSF 8	Maintaining vegetation communities within retained habitat areas through weed management;	Compliant	Retained habitat areas are maintained in accordance with the approved Environmental Rehabilitation Plan, which includes weed management requirements.
	P1-WSF 9	Deter inappropriate recreational activities in retained frog habitat through signage, vegetation planting and physical barriers	Not applicable	Residents have not commenced living on the site. The design of planned recreational areas is in accordance with the requirements of the Wallum Sedge Frog Management Plan.
	P1-WSF 10	Taking practical measures to reduce lighting in proximity to areas of retained Wallum Sedgefrog habitat where possible	Compliant	During construction, light exposure in close proximity to retained wallum sedge frog habitat is minimal. There is no construction works on site after 6pm and site compounds are not located in close proximity to

				retained habitat. Planning for Open Space Areas is in accordance with the requirements of the Wallum Sedge Frog Management Plan which provides for lighting to be reduced in areas in close proximity to wallum sedge frog habitat. .
	P1-WSF 11	Until the off-maintenance period, monitoring will be undertaken in accordance with the Wallum Sedgefrog Management Plan.	Not applicable	No areas have commenced On-Maintenance.
	P1-WSF 12	If clearing occurs outside the delineated, approved areas, cease all work in the area affected and advise the Superintendent (and regulatory agencies if protected communities/ species). » Instigate rehabilitation efforts immediately at any area accidentally cleared in accordance with directions from the Superintendent. » Specific corrective actions associated with the retained WSF habitat in Precinct 1 are to be implemented in accordance the requirements of the Wallum Sedgefrog Management Plan.	Compliant	As reported in the Superintendents Monthly Progress Reports and Construction Contractor's Monthly Environment Reports, the clearing area was surveyed and all protected vegetation and conservation areas were demarcated with flagging tape and "no go" signage prior to commencement of clearing. There are no known instances of unplanned clearing in conservation areas.
	P1-WSF 13	Six monthly reporting will be undertaken of all monitoring activities for WSF.	Compliant	Six Monthly reporting has been undertaken as set out in the Wallum Sedge Frog Management Plan. Refer to Wallum Sedge Frog Management Plan, Table A6, Item Id. WSF-26 for a summary of monitoring undertaken and key findings.

Vegetation Management	P1-VM 1	Within Precinct 1, the area of EPZ to be conserved and rehabilitated must not be adversely affected by the works as identified on construction plans, marked and protected through the use of barrier fencing protection.	Compliant	Construction was in accordance with the Precinct 1 Part Precinct 3/4 and Associated Areas CEMP, which was developed so that the area of the EPZ within Precinct 1 would not be adversely affected by the works.
	P1-VM 2	Activities such as storage of materials, parking, liquid disposal, refuelling activities, construction site office or shed, combustion, stockpiling of soil, any filling or excavation activity (unless approved by the Construction Superintendent or Proponent) and use of unauthorised chemicals will be prohibited within the EPZ.	Compliant	As reported in the Superintendents Monthly Progress Reports and Construction Contractor's Monthly Environment Reports, all protected vegetation and conservation areas (including the Environmental Protection Zone) are demarcated with flagging tape and "no go" signage. No prohibited activities have occurred within the EPZ.
	P1-VM 3	Retained trees shall not have their crown removed. The contractor is to take all reasonable care to ensure that no branches and trunks are damaged during the construction.	Compliant	This requirement is noted in the Construction Contractor's CEMP. There have been no instances recorded of vegetation removal contrary to these requirements.
	P1-VM 4	All staff involved in construction are made aware of the defined significant and protected vegetation areas, including all personnel engaged in preconstruction works.	Compliant	All persons working on site are required to attend the Construction Contractor's Project Induction, which includes information on the location and importance of conservation areas on site. The Construction Contractor's Monthly Environment Report notes that regular toolbox meetings are also held on environment matters, including the extent and significance of protected vegetation areas on site.
	P1-VM 5	All tree roots that are damaged during excavations and related activities are to be saw cut to a clean surface and are to be treated with a fungicidal solution prior to backfilling or within 24 hours of the damage to the root occurring.	Compliant	The Construction Contractor's CEMP adopts this requirement and there are no instances reported that are contrary to these requirements.

	P1-VM 6	All construction traffic will be confined to designated access roadways to prevent soil compaction. No heavy machinery is to be driven under canopies of significant vegetation nominated for retention.	Compliant	The Construction Contractor's CEMP adopts the required specifications. There are no instances reported that are contrary to these requirements.
	P1-VM 7	Livestock and the general public will be excluded from HMUs undergoing ecological enhancement, unless temporary crash grazing is being used to control exotic pasture grasses.	Compliant	Residents have not commenced living on the site. Fencing has been installed to exclude public access and cattle from entering Precincts under construction. 'No go' signs have been installed around the EPZ and Conservation Zones, as per the Environmental Rehabilitation Plan.
	P1-VM 8	Rehabilitation within HMU's in the EPZ in Precinct will be implemented in accordance with an Environmental Rehabilitation Plan.	Compliant	Rehabilitation in Habitat Management Units is in accordance with the Environmental Rehabilitation Plan.
	P1-VM 9	Visual and photographic monitoring will be conducted to evaluate the effectiveness of the enhancement strategies within HMU's in the EPZ.	Compliant	Monitoring of rehabilitation of Habitat Management Units will be undertaken in accordance with the Environmental Rehabilitation Plan.
	P1-VM 10	The following corrective actions are required if vegetation clearing occurs outside the delineated, approved areas: » Cease all work in the area affected and advise Superintendent (and regulatory agencies if protected vegetation). » Instigate rehabilitation efforts immediately at any area accidentally cleared in accordance with directions from the Superintendent. » In relation to the success of rehabilitation works, an adaptive management approach will be taken and outlined in the Precinct 1 Environmental Rehabilitation Plan. Whilst not expected on the basis of previous surveys	Not applicable	There are no known instances of clearing outside the delineated approved areas; therefore corrective actions have not been triggered.

		(as discussed in Table 3-1), if any Listed Threatened MNES vegetation species are identified during construction, the contractor will adopt the following corrective actions: » Confirm the identity of the species found with the assistance of a qualified ecologist; and » If confirmed as a Listed Threatened Species, undertake transplanting of the plant(s) into an appropriate location in the Environmental Protection Zone where it will be protected.		
	P1-VM 11	Any vegetation compliance issues must be incorporated into the regular environmental reporting required by the contractor to the Superintendent. A report will be produced annually for the duration of the ecological enhancement program (which may extend beyond the construction program for the rest of the development in Precinct 1).	Not applicable	No areas of ecological enhancements have commenced in accordance with Environmental Rehabilitation Plans.
Pest Management	P1-P 1	Permanent and semi-permanent structures established during construction should be designed to minimise harbourage and roosting opportunities for pest species including mosquitos and biting midges.	Compliant	The Construction Contractor's site compound contains a number of commercial grade buildings and storage areas. There has been no evidence of pest species using these facilities for harbourage or roosting.
	P1-P 2	Identification of measures using a combination of fencing, natural vegetative barriers and signage will be implemented to deter the bringing in or movement of domestic animals into the EPZ and other conservation areas.	Compliant	No residents were living on site during the reporting period and domestic animals are prohibited on site during construction. Boundary fencing has been installed around Precincts areas currently under construction. 'No go' signs have been installed around the EPZ and Conservations Areas, as per the Environmental Rehabilitation Plan.

	P1-P 3	The construction crew and visitors to site will not be permitted to bring domestic animals to the construction works site or in conservation areas of the project site.	Compliant	This commitment has been included in Construction Contractor's CEMP. The Construction Contractors Monthly Environment Reports confirms that there have been no incidents of domestic animals brought to site.
	P1-P 4	Putrescible waste are managed and transported off the site for disposal.	Compliant	This commitment has been included in Construction Contractor's CEMP. Putrescible wastes are contained and disposed of in a lawful manner. The Construction Contractor maintains appropriate waste records.
	P1-P 5	Regular checking of the performance criteria will be undertaken by the contractor and the Superintendent.	Compliant	The Construction Contractor assesses achievement of the Pest Management Performance Criteria as detailed in the approved CEMP.
	P1-P 6	Regular checking is required to identify if fish predators (in particular mosquito fish <i>Gambusia holbrooki</i>) are located within retained WSF breeding habitat.	Compliant	Monitoring of fish predators is conducted as part of presence/absence surveys for wallum sedge frog, as set out in the Wallum Sedge Frog Management Plan.
	P1-P 7	Corrective action is to be undertaken where non-compliance of the performance criteria is observed.	Not applicable	There are no known instances of clearing outside the delineated approved areas; therefore no corrective action rehabilitation works have been triggered.
	P1-P 8	Any pest control measures implemented must be incorporated into the regular weekly/monthly environmental report required by the contractor to the Superintendent.	Compliant	The Construction Contractor provides details of pest control measures undertaken as part of the Monthly Environment Report.
Weed Management	P1-W 1	Implement the following weed management measures: <ul style="list-style-type: none"> - Treatment of existing weeds within the construction site. - Limiting machinery access near retained vegetation, Wallum Sedgefrog retained habitat and the EPZ. - Wash-down facilities are provided on site. - Certification of the origin of construction material is required to manage the importation of weed species onto site. 	Compliant	The following weed management measures have been implemented: <ul style="list-style-type: none"> - The Construction Contractor undertakes regular inspections and removal of weeds from within the construction site. - Machinery is not permitted to enter conservation areas, unless instructed by the Superintendent and in accordance with the EPBC Conditions of Approval. - A vehicle washdown facility is located at the

		» Mechanical removal (by hand or machine) will be required for the removal of larger plants such as pine and lantana. In the area of Wallum Sedgefrog habitat within the EPZ (polygon 80, see Section 4), chemical spot spraying will be unsuitable, and mechanical or hand removal of pasture grasses will be required.		Racecourse Road site access. - All fill material has been sourced from within the site.
	P1-W 2	Edge planting is to be undertaken to prevent weed species from penetrating high conservation areas which in Precinct 1 is the EPZ and retained Wallum Sedgefrog habitat contained within. These areas of edge planting are to be at least 5 metres in width.	Compliant	Landscaping of the buffer area between retained wallum sedge frog habitat will be undertaken during the 2016 reporting period. The area will be planted in accordance with the Environmental Rehabilitation Plan and Landscape Documentation.
	P1-W 3	Green waste handling, stockpiling and disposal procedures will be developed and implemented on the site.	Compliant	No green waste has been generated. Topsoil has been re-used onsite.
	P1-W 4	Plant material will be removed from site in a manner which reduces disturbance and is to be disposed of at an approved green waste disposal facility or mulched on-site for landscaping purposes.	Compliant	No green waste has been generated. Topsoil has been re-used onsite.
	P1-W 5	Machinery used for earth-moving and vegetation-clearing will be cleaned and inspected prior to the commencement of work to identify any attached material that needs to be removed to avoid the spread of weeds.	Compliant	The Construction Contractor requires a Vehicle Inspection Checklist Form to be provided for all machinery that enters the site.
	P1-W 6	Retained and buffer Wallum Sedgefrog habitat is 100% free of <i>Baccharis halimifolia</i> and <i>Pinus elliottii</i> and all Class 1 and 2 declared plants of Queensland.	Compliant	Weed management is undertaken in accordance with the Environmental Management and Rehabilitation Plan and Approved Environmental Rehabilitation Plan. Regular weed monitoring and removal is undertaken in habitat patch 80.

	P1-W 7	During rehabilitation within each HMU in the EPZ, measures will be required in place to prevent the spread of weed seeds and diseases such as Phytophthora, Myrtle Rust and Chytrid fungus.	Compliant	Rehabilitation works will be undertaken in accordance with the Vegetation Management and Rehabilitation Plan and the Environmental Rehabilitation Plan.
	P1-W 8	Any requirements for fire management within HMU's 1, 3 and 5 will be outlined in detail in the Environmental Rehabilitation Plan for this area.	Compliant	The Environmental Rehabilitation Plan does not recommend a fire management regime for Habitat Management Units in Precinct 1.
	P1-W 9	Regular monitoring of weeds at all disturbed areas and adjacent vehicle access points will be undertaken by the contractor, reporting to the Superintendent.	Complaint	Weed monitoring is reported in the Construction Contractors Monthly Environmental Report.
	P1-W 10	Corrective action is to be undertaken where non-compliance of the performance criteria is observed.	Compliant	As reported in the Construction Contractor's Monthly Environment Report, weed management performance criteria have been achieved throughout the reporting period.
	P1-W 11	Any weed control measures implemented and non-compliance must be incorporated into the regular environmental reporting required by the contractor to the Superintendent.	Compliant	Weed management measures and compliance with the performance criteria are reported in the Construction Contractor's Monthly Environment Report.
Auditing, Reporting and Revisions	P1-A 1	Biannual systems audit of CEMP and OEMP to review environmental issues onsite and the effectiveness of these systems in managing these. The audit will consist of a document review or desktop audit conducted in conjunction with a technical or operational audit.	Compliant	An audit of onsite environmental management practices, including implementation of the CEMP and audit of environmental management documentation, was carried out by the Construction Contractor in September 2015 and January 2016. No non-conformances were found during the audits.
	P1-A 2	Annual external independent audit- Systems audit of CEMP and OEMP to assess the current compliance status of the site against Environmental Authority requirements and other pertinent legislation.	Compliant	An audit of the CEMP has been undertaken by SMEC and the findings documented in this ACR.

	P1-A 3	<p>Audits will to be entered into an audit schedule. The minimum content of the schedule is to be;</p> <ul style="list-style-type: none"> » Type of audit i.e.: Sediment Control Audit. » Date of audit, start and completion times. » The personnel involved in the audit. » Audit Scope – predetermined prior to audit date. » Audit findings. » Audit Recommendations. » Corrective and Preventative Action. » Audit Review. 	Compliant	<p>The Construction Contractor completed an audit of the CEMP in September 2015 and January 2016. An audit of the CEMP was also completed by SMEC as part of preparation of this ACR. The audit schedule is recorded in the Construction Contractors Monthly Environment Report.</p>
	P1-A 4	<p>This CEMP will be reviewed on an annual basis, or as the need for review is identified.</p> <p>The review will be scheduled by the Proponent, and be inclusive of the Principal Contractor, Construction Superintendent and other interested parties and stakeholders.</p> <p>All personnel involved with the Environmental Management of the Project are required to attend the review.</p> <p>The Proponent will assess the results of this review and make amendments to this CEMP as required.</p>	Compliant	<p>The CEMP has been reviewed as part of preparation of this ACR.</p>

Precinct 2 and Part Precinct 3/4 CEMP

The Precinct 2 and Part Precinct 3/4 CEMP (2015) is a standalone document that details precinct specific actions to manage environmental aspects and risks associated with the construction of Precinct 2 and associated fill material sourced from Precinct 3 and 4. This ACR will report on how the performance criteria, management measures, monitoring, corrective action and reporting requirements of the CEMP have been complied with during the reporting period. Construction under the Precinct 2 and Part Precinct 3/4 CEMP commenced in November 2015.

Table 7: Compliance Assessment of the Precinct 2 and Part Precinct 3/4 CEMP (Revision B, May 2015)

Section	Id.	Commitment	Is the project compliant with this commitment?	Evidence/Comments
Erosion and Sediment Control	P2-ESC 1	<p>The following water quality performance criteria will be achieved prior to the dewatering or surcharging of sediment basins:</p> <ul style="list-style-type: none"> »pH 6.5 to 8.5, if groundwater is passed through the sediment basins, then the pH of the discharged water can be less than 6.5, providing it is within the range from that reported within the Wallum Sedge Frog Management Plan (2015) – a pH range of between 4 and 5 »Dissolved Oxygen (DO) > 80% saturation; »Total Suspended Solids (TSS) less than 50 mg/L, or the equivalent turbidity; »Nutrients (nitrogen and phosphorus) to be managed through normal erosion and sediment control practices; »Capture first 15mm/day of runoff; and »Discharge turbidity offsite to be less than 10% above background values of water quality entering the site via Bells Creek North and South at the Bruce Highway culverts for any events up to and including the design rainfall event. 	Compliant	<p>Prior to the dewatering of sediment basins, all captured runoff was treated to meet the nominated water quality performance criteria.</p> <p>Water quality monitoring results are provided in the Construction Contractor's Monthly Environment Report.</p> <p>No works occurred in the Bells Creek catchment during the reporting period.</p>

P2-ESC 2	Design erosion and sediment controls in accordance the Best Practice Erosion and Sediment Control Guidelines (IECA, 2008) with guidance from the Manual for Erosion and Sediment Control Version 1.2 (Sunshine Coast Regional Council 2008).	Compliant	Erosion and Sediment Control Plans have been prepared in accordance with the IECA manual and the Sunshine Coast Regional Council Manual for Erosion and Sediment Control.
P2-ESC 3	Construction areas and conservation areas are clearly identified.	Compliant	As reported in the Superintendent Monthly Progress Reports and Construction Contractor's Monthly Environment Reports, the clearing area was surveyed and all protected vegetation and conservation areas were demarcated with flagging tape and "no go" signage prior to commencement of clearing. There are no known instances of unplanned clearing in conservation areas.
P2-ESC 4	Minimise areas of disturbance.	Compliant	This requirement is noted in the Construction Contractor's CEMPs. Construction sequencing has been planned to minimise the area of disturbance.
P2-ESC 5	Progressively stabilise works areas.	Compliant	Stabilisation works and monitoring of groundcover are reported in the Construction Contractors Monthly Environment Reports. Disturbed areas have been stabilised with the required treatment within 5 days of completion of work in an area.
P2-ESC 6	Temporary erosion and sediment control measures will remain in place until greater than 70% groundcover has been achieved.	Compliant	This requirement is included in Construction Contractor's Erosion and Sediment Control Plans and CEMPs. Groundcover is monitored through Shadforths Weekly Environment Checklists and reported in Shadforths Monthly Environment Reports. Erosion and sediment controls have continued to remain in place until 70% groundcover has been achieved.
P2-ESC 7	Divert clean flows around works areas and divert dirty flows for treatment prior to discharge.	Compliant	Clean water drains have been constructed around disturbed areas and dirty water drains directing flows to sediment basins for treatment. All releases from sediment basins have met the nominated water quality criteria prior

				to discharge.
P2-ESC 8	Stockpiles are located within the area of disturbance, and away from any waterways or drainage channels with appropriate erosion and sediment control measures installed and maintained. Stockpile batter will be maintained at a slope of no greater than 1:1 and the height should be no greater than 2m.	Compliant		This requirement is noted in the Construction Contractor's CEMPs. Stockpiles on site have been in accordance with these requirements.
P2-ESC 9	Sediment fences will be installed to provide further protection and retention of runoff from disturbed areas. These will be strategically placed along contours and will include overflow weirs to prevent both scour and failure of the devices.	Compliant		Sediment fences have been installed in accordance with the Erosion and Sediment Control Plans.
P2-ESC 10	High Efficiency and traditional sediment basins will be installed on site to capture all runoff from disturbed areas throughout construction. The design of the sediment basins will be in accordance with the Manual for Erosion and Sediment Control (SCRC 2008). Design rainfall depth of 125mm to be adopted for all sediment basin design.	Compliant		High Efficiency and traditional sediment basins have been installed as per the Erosion and Sediment Control Plans.
P2-ESC 11	Regular monitoring of all erosion and sediment control measures will be undertaken by the Principal Contractor and Superintendent including: <ul style="list-style-type: none"> » Daily inspections of all ESC measures; » Daily inspection of the road network for evidence of sediment being deposited external to the site; » Inspection of all ESC control measures after 	Compliant		The Construction Contractor completes environment checklists to record the effectiveness of erosion and sediment controls on a daily and weekly basis and after major rain events. Monitoring results are recorded in the Construction Contractor's Monthly Environment Report. All water released from sediment basins has met the nominated water quality criteria prior to discharge.

	<p>major rain events (greater than 25mm in 24 hours);</p> <ul style="list-style-type: none"> » Daily measurement of sediment basin turbidity, pH, Electrical Conductivity (EC) and Dissolved Oxygen (DO) within sediment basins; » Weekly measurements of TSS and nutrients at the primary discharge points » Rainfall will be recorded at 9am each working day; and » Real time turbidity monitoring at basin outlet. 		
P2-ESC 12	<p>The Principal Contractor shall inspect all temporary erosion and sedimentation control works prior to, during and after each rain period and during periods of prolonged rainfall. Any defects revealed by such inspections shall be rectified immediately and these works shall be cleaned, repaired and augmented as required, to ensure effective erosion and sedimentation control thereafter.</p>	Compliant	<p>The Construction Contractor inspects erosion and sediment controls daily, weekly, prior to rainfall and following rainfall of >25mm/24 hrs. Inspection checklists are included in the Construction Contractor's Monthly Environment Report.</p>
P2-ESC 13	<p>Reporting</p> <p>Onsite documentation must be held whereby a record of daily inspection documentation is kept, including but not limited to:</p> <ul style="list-style-type: none"> » Monthly environmental compliance reports (ECR) to address erosion and sediment control measures and events resulting from significant rainfall (see above). » A log of the effectiveness of the erosion and sediment control measures will be maintained. » Daily inspections of all erosion and sediment control measures; » Rectification of defect items; » Onsite water quality testing results; and » Real time turbidity monitoring documentation. 	Compliant	<p>All environmental reporting requirements are included in the Construction Contractor's Monthly Environment Report.</p>

Groundwater	P2-GW 1	Discharges of surface water from the site (that could be groundwater affected) are managed and released in accordance with surface water quality discharge standards;	Compliant	Prior to the dewatering of sediment basins, all captured runoff was treated to meet the nominated water quality performance criteria.
	P2-GW 2	Acidity and/or dissolved metals are not to be conveyed off of the site through groundwater as a result of the development above what is considered to be natural variability; and	Compliant	Groundwater monitoring is conducted in accordance with the requirements of the Water Quality Management Plan. Groundwater results have not indicated that construction related impacts on groundwater have occurred.
	P2-GW 3	Spills or other contaminant releases that could affect groundwater quality are avoided or otherwise treated immediately.	Compliant	The Construction Contractor's CEMP outlines spill response procedures and provides control measures, monitoring and reporting requirements for the use of hazardous chemical on site. Large spills (greater than 20L) are reported through the incident report form and included in the Construction Contractors Monthly Environment Report. During the reporting period there were no large spills recorded.
Acid Sulfate Soils	P2-ASS 1	Management and testing of ASS are to be in accordance with the State Planning Policy Guidance on Acid Sulphate Soils December 2013 or the most recent version.	Compliant	ASS sampling undertaken prior to commencement of bulk earthworks indicated a low ASS risk in the areas being worked (Douglas Partners, 2014). The Construction Contractor's CEMPs include the requirement for ASS to be monitored daily and in conjunction with any excavation works. There have been no reports of ASS being encountered during construction to date.
	P2-ASS 2	Minimise areas of excavation under RL 5.0 m (AHD) where greater concentrations of acid sulfate soils could be present.	Compliant	The extent of excavation below the 5m AHD contour has been minimised, as evidenced in the Precinct 2/Part Precinct 3/4 and Associated Works CEMP (Calibre Consulting, 2015). Areas of cut will occur from approximately RL 12m to RL 10m in Precinct 2 and RL 18 m to RL 10 m in Precinct 3. Exportation of this material will be used to form filling for Precinct 2.

P2-ASS 3	During construction, where acid sulfate soils are expected to be encountered, progressive testing of soils to determine if presents of acid sulfates are present in the soils. Testing to be completed by an appropriately qualified geotechnical engineer. Remediation of acid sulfate soils to be determined by a qualified geotechnical engineer and in accordance with the State Planning Policy Guidance on Acid Sulphate Soils December 2013 or the most recent version.	Not applicable	ASS sampling undertaken prior to commencement of bulk earthworks indicated a low ASS risk in the areas being worked (Douglas Partners, 2014). The Construction Contractor's CEMPs includes the requirement for ASS to be monitored daily and in conjunction with any excavation works. There have been no reports of ASS being encountered during construction to date.
P2-ASS 4	When hot spots of acid sulfate soils are encountered, ensure suitable buffer zones are allowed for between frog habitats and overland flow areas for lime dosing or other treatment measures, including on site storage. In accordance with State Planning Policy Guidance on Acid Sulphate Soils December 2013 or the most recent version.	Not applicable	ASS sampling undertaken prior to commencement of bulk earthworks indicated a low ASS risk in the areas being worked (Douglas Partners, 2014). The Construction Contractor's CEMPs includes the requirement for ASS to be monitored daily and in conjunction with any excavation works. There have been no reports of ASS being encountered during construction to date.
P2-ASS 5	Monitoring actions: » Acid sulphate testing to be completed on areas identified on any hotspots expected to contain ASS; » Treatment and monitoring of stockpiled material and treated soils during construction to ensure treatment and containment is achieved; and » Completion of pH testing of site water and sediment pond water to ensure no downstream impact.	Not applicable	ASS sampling undertaken prior to commencement of bulk earthworks indicated a low ASS risk in the areas being worked (Douglas Partners, 2014). The Construction Contractors CEMPs includes the requirement for ASS to be monitored daily and in conjunction with any excavation works. There have been no reports of ASS being encountered during construction to date.
P2-ASS 6	Corrective actions following the detection of an acid sulphate soils may include: » Isolation and separation of effected stockpile material. Ensuring that protection against overland flows and	Not applicable	ASS sampling undertaken prior to commencement of bulk earthworks indicated a low ASS risk in the areas being worked (Douglas Partners, 2014). The Construction Contractor's CEMPs includes the requirement for ASS to be monitored daily and in conjunction with any excavation

Wallum Sedge Frog		containment of stockpile runoff is achieved; and » Treatment of fill or trench material to be determined by and appropriately qualified geotechnical engineer.		works. There have been no reports of ASS being encountered during construction to date.
	P2-ASS 7	Regular reports will be provided to the relevant authority and community as required by the Development Approval. These reports will outline: » Completion of an ASS management plan to be produced in compliance with the approved PER EMP; and » Documentation of onsite testing and any corrective actions that have been required as a result of the monitoring.	Not applicable	ASS sampling undertaken prior to commencement of bulk earthworks indicated a low ASS risk in the areas being worked (Douglas Partners, 2014). The Construction Contractor's CEMPs includes the requirement for ASS to be monitored daily and in conjunction with any excavation works. There have been no reports of ASS being encountered during construction to date
	P2-WSF 1	Either full or partial retention of existing Wallum Sedgefrog habitat (polygon 44, 45 and 49 Figure B.2) located within the EPZ;	Compliant	As shown in Figure B1 of the Precinct 2/Part Precinct 3/4 and Associated Works CEMP (Calibre, 2015), polygon 44, 45 and 49 have been partially retained. Refer to Appendix C for areas of habitat retained, removed and created.
	P2-WSF 2	Provision of WSF movement corridor along the southern Lamerough Creek, incorporating recreation of WSF breeding, foraging and movement habitat.	Compliant	As shown in Figure B1 of the Precinct 2/Part Precinct 3/4 and Associated Works CEMP (Calibre, 2015), the 'northern corridor' will be established along Lamerough Creek and will incorporate recreation of WSF breeding, foraging and movement habitat.
	P2-WSF 3	Provision of a buffer between recreated and retained Wallum Sedgefrog breeding habitats (within polygons 44, 45 and 49), earthworks and other development-related threats, located within the stormwater conveyance zone for up to 50m around retained breeding habitat; Where this buffer cannot be achieved, then	Compliant	As shown in Fig 2.2d provided in Appendix C , the lifestyle buffer separates retained wallum sedge frog habitat (including breeding habitats) from the development area. A bund and swale drain has been constructed around High Efficiency Sediment basins in Precinct 2 to direct stormwater away from wallum sedge frog breeding habitat. No stormwater is permitted to enter wallum sedge

		physical separation from development associated stormwater discharge and WSF Breeding habitat must be demonstrated. This can be achieved via the creation of swale drains and bunds to ensure no interaction with discharge waters and WSF breeding habitat. Additionally, when this buffer cannot be achieved, the pH of waters within the swale drains must be less than 6, preferably within a range between 4-5.		frog breeding habitat.
P2-WSF 4	The buffer is to be planted with semi-erect semi-aquatic emergent vegetation consistent with species common in existing habitats on site.	Not applicable	Landscape details for Precinct 2 have not been developed and the Environmental Rehabilitation Plan for Precinct 2 is still being finalised. It is anticipated that landscape details will be finalised for these areas during the 2016 reporting period.	
P2-WSF 5	All stormwater runoff from the road and adjacent development within the conveyance zone must not be allowed to enter any portion of the retained WSF habitat within the EPZ.	Not applicable	Civil and drainage design details for Area 1 (the first stage) of Precinct 1 will be finalised in 2016. Drainage will be designed so that stormwater will not enter wallum sedge frog breeding habitat.	
P2-WSF 6	Culverts, open drains and overland flow pathways for all sized ARI events need to be directed around the retained WSF breeding habitat (to maintain pH, ensure habitat stability and limit introduction of competitor/predatory species);	Not applicable	Civil and drainage design details for Area 1 (the first stage) of Precinct 1 will be finalised in 2016. Drainage will be designed to direct stormwater away from wallum sedge frog breeding habitat.	
P2-WSF 7	Construction and maintenance of silt fencing, bunding and detention basins for containing and treating silt laden run-off, must be directed away from frog habitat to be retained in the EPZ (polygon 9 and 44, Figure B.2);	Compliant	As shown on the Erosion and Sediment Control Plans, silt laden runoff is directed to sediment basins and treated to meet the required water quality objectives before it is pumped to an area away from the retained wallum frog habitat in the EPZ (polygon 80, Figure B.2).	

P2-WSF 8	Maintaining natural groundwater hydroperiod and other water chemistry aspects (particularly pH and tannin levels) of retained habitat areas;	Compliant	Monitoring of retained habitat areas has been conducted in accordance with the requirements of the Wallum Sedge Frog Management Plan (2015). Water quality and water depth of retained habitat areas was monitored during wet weather assessment undertaken on the 30th October 2015. Results found that water chemistry and depth are indicative of wallum habitat, as defined in the Draft referral guidelines for the vulnerable wallum sedge frog, <i>Litoria olongburensis</i> (2011, SEWPAC).
P1-WSF 9	Maintaining vegetation communities within retained habitat areas through weed management;	Compliant	Retained habitat areas are maintained in accordance with the Environmental Rehabilitation Plan, which includes weed management requirements.
P2-WSF 10	Deter inappropriate recreational activities in retained frog habitat through signage, vegetation planting and physical barriers; and	Compliant	Residents have not commenced living on the site. Fencing has been installed to secure the site during construction.
P2-WSF 11	Taking practical measures to reduce lighting in proximity to areas of retained Wallum Sedgefrog habitat where possible	Compliant	During construction, light exposure in close proximity to retained wallum sedge frog habitat is minimal. There is no construction works on site after 6pm and site compounds are not located in close proximity to retained habitat.
P2-WSF 12	Until the off-maintenance period, monitoring will be undertaken in accordance with the Wallum Sedgefrog Management Plan.	Compliant	On-maintenance monitoring of existing and created wallum sedge frog habitat has been undertaken in accordance with the requirements of the Wallum Sedge Frog Management Plan. Refer to Table A6, Item WSF-26 for monitoring results.
P2-WSF 13	If clearing occurs outside the delineated, approved areas, cease all work in the area affected and advise the Superintendent (and regulatory agencies if protected communities/species). » Instigate rehabilitation efforts immediately at any area accidentally cleared in accordance with directions from the Superintendent.	Compliant	As reported in the Superintendents Monthly Progress Reports and Construction Contractor's Monthly Environment Reports, the clearing area was surveyed and all protected vegetation and conservation areas were demarcated with flagging tape and "no go" signage prior to commencement of clearing. There are no known instances of unplanned clearing in conservation areas.

Vegetation Management		» Specific corrective actions associated with the retained WSF habitat in Precinct 1 are to be implemented in accordance the requirements of the Wallum Sedgefrog Management Plan.		
	P2-WSF 14	Six monthly reporting will be undertaken of all monitoring activities for WSF.	Compliant	Six Monthly reporting has been undertaken as set out in the Wallum Sedge Frog Management Plan. Refer to Table A6, Item Id. WSF-26 for a summary of monitoring undertaken and key findings.
	P2-VM 1	Within Precinct 2, the area of EPZ to be conserved and rehabilitated must not be adversely affected by the works as identified on construction plans, marked and protected through the use of barrier fencing protection.	Compliant	As reported in the Superintendents Monthly Progress Reports and Construction Contractor's Monthly Environment Reports, all protected vegetation and conservation areas (including the EPZ) are demarcated with flagging tape and "no go" signage. There are no known instances of clearing outside the delineated approved areas.
	P2-VM 2	Activities such as storage of materials, parking, liquid disposal, refuelling activities, construction site office or shed, combustion, stockpiling of soil, any filling or excavation activity (unless approved by the Construction Superintendent or Proponent) and use of unauthorised chemicals will be prohibited within the EPZ.	Compliant	As reported in the Superintendents Monthly Progress Reports and Construction Contractor's Monthly Environment Reports, all protected vegetation and conservation areas (including the EPZ) are demarcated with flagging tape and "no go" signage. No prohibited activities have occurred within the EPZ.
	P2-VM 3	Retained trees shall not have their crown removed. The contractor is to take all reasonable care to ensure that no branches and trunks are damaged during the construction.	Compliant	This requirement is noted in the Construction Contract's CEMP. There have been no instances recorded of vegetation removal contrary to these requirements.

	P2-VM 4	All staff involved in construction are made aware of the defined significant and protected vegetation areas including all personnel engaged in preconstruction works.	Compliant	All persons working on site are required to attend the Construction Contractors Project Induction, which includes information on the location and importance of conservation areas on site. The Construction Contractor's Monthly Environment Report notes that regular toolbox meetings are also held on environment matters, including the extent and significance of protected vegetation areas on site.
	P2-VM 5	All tree roots that are damaged during excavations and related activities are to be saw cut to a clean surface and are to be treated with a fungicidal solution prior to backfilling or within 24 hours of the damage to the root occurring.	Compliant	The Construction Contractors CEMP adopts this requirement and there are no instances reported that are contrary to these requirements.
	P2-VM 6	All construction traffic will be confined to designated access roadways to prevent soil compaction. No heavy machinery is to be driven under canopies of significant vegetation nominated for retention.	Compliant	The Construction Contractors CEMP adopts the specified haul road locations, and this has been implemented on site.
	P2-VM 7	Livestock and the general public will be excluded from HMUs undergoing ecological enhancement, unless temporary crash grazing is being used to control exotic pasture grasses.	Compliant	Residents have not commenced living on the site. Fencing has been installed to exclude public access and cattle from entering the construction area.
	P2-VM 8	Rehabilitation within HMU's in the EPZ in Precinct 2 will be implemented in accordance with an Environmental Rehabilitation Plan.	Compliant	The Precinct 2 Environmental Rehabilitation Plan is currently being prepared.
	P2-VM 9	Visual and photographic monitoring will be conducted to evaluate the effectiveness of the enhancement strategies within HMU's in the EPZ.	Compliant	The Precinct 2 Environmental Rehabilitation Plan is currently being prepared. Monitoring will be conducted in accordance with the plan once approved.

	P2-VM 10	<p>Implement corrective actions if vegetation clearing occurs outside the delineated, approved areas:</p> <ul style="list-style-type: none"> » Cease all work in the area affected and advise Superintendent (and regulatory agencies if protected vegetation). » Instigate rehabilitation efforts immediately at any area accidentally cleared in accordance with directions from the Superintendent. » In relation to the success of rehabilitation works, an adaptive management approach will be taken and outlined in the Precinct 1 Environmental Rehabilitation Plan. <p>Whilst not expected on the basis of previous surveys (as discussed in Table 3-1), if any Listed Threatened MNES vegetation species are identified during construction, the contractor will adopt the following corrective actions:</p> <ul style="list-style-type: none"> » Confirm the identity of the species found with the assistance of a qualified ecologist; and » If confirmed as a Listed Threatened Species, undertake transplanting of the plant(s) into an appropriate location in the Environmental Protection Zone where it will be protected. 	Not applicable	There are no known instances of clearing outside the delineated approved areas, therefore corrective actions have not been triggered.
	P2-VM 11	<p>Any vegetation compliance issues must be incorporated into the regular environmental reporting required by the contractor to the Superintendent.</p> <p>A report will be produced annually for the duration of the ecological enhancement program (which may extend beyond the construction program for the rest of the development in Precinct 1).</p>	Compliant	<p>This requirement is noted in the Construction Contractors CEMP. There have been no instances recorded of vegetation removal contrary to these requirements.</p> <p>Monitoring and reporting requirements for the ecological enhancement program are outlined in the Wallum Sedge Frog Management Plan and Precinct Environmental Rehabilitation Plans. Reporting requirements under these plans have been implemented.</p>

Pest Management	P2-P 1	Permanent and semi-permanent structures established during construction should be designed to minimise harbourage and roosting opportunities for pest species including mosquitos and biting midges.	Compliant	The Construction Contractors site compound contains a number of commercial grade buildings and storage areas. There has been no evidence of pest species using these facilities for harbourage or roosting.
	P2-P 2	Identification of measures using a combination of fencing, natural vegetative barriers and signage will be implemented to deter the bringing in or movement of domestic animals into the EPZ and other conservation areas.	Compliant	No residents were living on site during the reporting period and domestic animals are prohibited on site during construction. Boundary fencing has been installed around Precincts areas currently under construction. 'No go' signs have been installed around the EPZ and Conservations Areas, as per the Environmental Rehabilitation Plan.
	P2-P 3	The construction crew and visitors to site will not be permitted to bring domestic animals to the construction works site or in conservation areas of the project site.	Compliant	This commitment has been included in Construction Contractor's CEMP. The Construction Contractors Monthly Environment Reports confirms that there have been no incidents of domestic animals brought to site.
	P2-P 4	Putrescible waste are managed and transported off the site for disposal.	Compliant	This commitment has been included in Construction Contractor's CEMP. Putrescible wastes are contained and disposed of in a lawful manner. The Construction Contractor maintains appropriate waste records.
	P2-P 5	Regular checking of the performance criteria will be undertaken by the contractor and the Superintendent.	Compliant	The Construction Contractor assesses achievement of the Pest Management Performance Criteria on a monthly basis and reports this to the Superintendent in the Monthly Environment Report.
	P1-P 6	Regular checking is required to identify if fish predators (in particular mosquito fish <i>Gambusia holbrooki</i>) are located within retained WSF breeding habitat.	Compliant	Monitoring of fish predators is conducted as part of presence/absence surveys for wallum sedge frog, as set out in the Wallum Sedge Frog Management Plan.

Weed Management	P2-P 7	Corrective action is to be undertaken where non-compliance of the performance criteria is observed.	Not applicable	There are no known instances of clearing outside the delineated approved areas; therefore no corrective action rehabilitation works have been triggered. Refer to the Wallum Sedge Frog Management Plan, Table A6, Item WSF-27, for specific corrective actions associated with wallum sedge frog habitat.
	P2-P 8	Any pest control measures implemented must be incorporated into the regular weekly/monthly environmental report required by the contractor to the Superintendent.	Compliant	The Construction Contractor records details of pest control measures undertaken as part of the Monthly Environment Report.
	P2-W 1	Implement the following weed management measures: »Treatment of existing weeds within the construction site. »Limiting machinery access near retained vegetation, Wallum Sedgefrog retained habitat and the EPZ. »Wash-down facilities are provided on site. »Certification of the origin of construction material is required to manage the importation of weed species onto site. » Mechanical removal (by hand or machine) will be required for the removal of larger plants such as pine and lantana. In the area of Wallum Sedgefrog habitat within the EPZ (polygon 80, see Section 4), chemical spot spraying will be unsuitable, and mechanical or hand removal of pasture grasses will be required.	Compliant	The following weed management measures have been implemented: - The Construction Contractor undertakes regular inspections and removal of weeds from within the construction site. - Machinery is not permitted to enter conservation areas, unless instructed by the Superintendent and in accordance with the EPBC Conditions of Approval. - A vehicle washdown facility is located at the Racecourse Road site access. - All fill material has been sourced from within the site.
	P2-W 2	Edge planting is to be undertaken to prevent weed species from penetrating high conservation areas which in Precinct 1 is the EPZ and retained Wallum Sedgefrog habitat contained within. These areas of edge planting	Not applicable	Landscape details for Precinct 2 have not been developed and the Environmental Rehabilitation Plan for Precinct 2 is still being finalised. It is anticipated that landscape details will be finalised for these Areas during the 2016 reporting period.

		are to be at least 5 metres in width.		
	P2-W 3	Green waste handling, stockpiling and disposal procedures will be developed and implemented on the site.	Compliant	No Green Waste has been generated. Topsoil has been re-used onsite.
	P2-W 4	Plant material will be removed from site in a manner which reduces disturbance and is to be disposed of at an approved green waste disposal facility or mulched on-site for landscaping purposes.	Compliant	No Green Waste has been generated. Topsoil has been re-used onsite.
	P2-W 5	Machinery used for earth-moving and vegetation-clearing will be cleaned and inspected prior to the commencement of work to identify any attached material that needs to be removed to avoid the spread of weeds.	Compliant	The Construction Contractor requires a Vehicle Inspection Checklist Form to be provided for all machinery that enters the site.
	P2-W 6	Retained and buffer Wallum Sedgefrog habitat is 100% free of <i>Baccharis halimifolia</i> and <i>Pinus elliotii</i> and all Class 1 and 2 declared plants of Queensland.	Compliant	Weed management is undertaken in accordance with the Environmental Management and Rehabilitation Plan and Approved Environmental Rehabilitation Plan, Regular weed monitoring and removal is undertaken in created and retained habitats throughout Precinct 2.
	P2-W 7	During rehabilitation within each HMU in the EPZ, measures will be required in place to prevent the spread of weed seeds and diseases such as Phytophthora, Myrtle Rust and Chytrid fungus.	Compliant	Rehabilitation works will be undertaken in accordance with the Vegetation Management and Rehabilitation Plan and the Environmental Rehabilitation Plan (once approved).
	P2-W 8	Any requirements for fire management within HMU's 1, 3 and 5 will be outlined in detail in the Environmental Rehabilitation Plan for this area.	Not applicable	The Environmental Rehabilitation Plan for Precinct 2 is expected to be finalised in 2016.

Auditing, Reporting and Revisions	P2-W 9	Regular monitoring of weeds at all disturbed areas and adjacent vehicle access points will be undertaken by the contractor, reporting to the Superintendent.	Complaint	Regular weed monitoring and removal is undertaken throughout the construction area and is reported in the Construction Contractor's Monthly Environmental Report.
	P2-W 10	Corrective action is to be undertaken where non-compliance of the performance criteria is observed.	Compliant	As reported in the Construction Contractors Monthly Environment Report, weed management performance criteria have been achieved throughout the reporting period.
	P2-W 11	Any weed control measures implemented and non-compliance must be incorporated into the regular environmental reporting required by the contractor to the Superintendent.	Compliant	Weed management measures and compliance with the performance criteria are reported in the Construction Contractor's Monthly Environment Report.
	P2-A 1	Biannual systems audit of CEMP and OEMP to review environmental issues onsite and the effectiveness of these systems in managing these. The audit will consist of a document review or desktop audit conducted in conjunction with a technical or operational audit.	Compliant	Earthworks commenced in Precinct 2 in late November 2015. The first bi-annual audit will be completed in the coming months as construction commences in earnest.
	P2-A 2	Annual external independent audit- Systems audit of CEMP and OEMP to assess the current compliance status of the site against Environmental Authority requirements and other pertinent legislation.	Compliant	An audit of the CEMP has been undertaken by SMEC and the findings documented in this ACR.
	P2-A 3	Audits will to be entered into an audit schedule. The minimum content of the schedule is to be; <ul style="list-style-type: none"> » Type of audit i.e.: Sediment Control Audit. » Date of audit, start and completion times. » The personnel involved in the audit. » Audit Scope – predetermined prior to audit date. » Audit findings. 	Compliant	An audit of the CEMP has been undertaken by SMEC and the findings documented in this ACR. The Construction Contractor is scheduled to complete an audit of the CEMP in April 2016. The audit schedule is recorded in the Construction Contractors Monthly Environment Report.

		<ul style="list-style-type: none"> » Audit Recommendations. » Corrective and Preventative Action. » Audit Review. 		
	P2-A 4	<p>This CEMP will be reviewed on an annual basis, or as the need for review is identified. The review will be scheduled by the Proponent, and be inclusive of the Principal Contractor, Construction Superintendent and other interested parties and stakeholders. All personnel involved with the Environmental Management of the Project are required to attend the review. The Proponent will assess the results of this review and make amendments to this CEMP as required.</p>	Compliant	The CEMP has been reviewed as part of preparation of this ACR.

Water Quality Management Plan

The Water Quality Management Plan outlines the management and monitoring requirements for surface water and groundwater on and adjacent to the Caloundra South site. This ACR reports on implementation of the requirements of Revision 3 of the Water Quality Management Plan, which covered the ACR reporting period from 15 January 2015 to 22 December 2015. Compliance with the requirements of Revision 4 are reported on by exception, where they differ from the requirements of Revision 3, and only for the period from 23 December 2015 to 14 January 2016 (the end of the ACR reporting period).

Table 8: Compliance Assessment of the Water Quality Management Plan (Revision 3, February 2014)

Section	Id	Commitment	Is the project compliant with this commitment?	Evidence/Comments
Section 5.1.2	WQMP-1	Monthly monitoring of ambient water quality is to occur at eight locations within the site, three each respectively on Bells Creek North and Bells Creek South and two on Lamerough Creek. Ensure that this six month period encompasses a suitable range of wet and dry weather conditions, with special emphasis on wet conditions when any potential impacts from the site will be most noticeable. Analyse samples for water the parameters listed in Section 5.1.9.	Compliant	Monthly ambient surface water monitoring commenced at two locations on Lamerough Creek and at three location in Bells Creek north in February 2014. Construction in the Lamerough Creek catchment commenced in January 2015 while no construction has commenced within the Bells Creek north catchment during the reporting period. Therefore the duration of pre-construction monitoring undertaken exceeds the required minimum 6 month requirement. All parameters outlined in Section 5.1.2 were sampled on a monthly basis.

<p>Section 5.1.3</p>	<p>WQMP-2</p>	<p>Event based water quality samplers to be installed on Bells Creek North and South at the upper and lower boundaries of the Caloundra South site. Ensure that this six month period encompasses a suitable range of wet and dry weather conditions, with special emphasis on wet conditions when any potential impacts from the site will be most noticeable.</p>	<p>Compliant</p>	<p>Event based water quality monitoring stations were installed at the upstream and downstream site boundaries of Bells Creek North in February 2014. No construction commenced within the Bells Creek north catchment during the reporting period. Therefore the duration of pre-construction monitoring undertaken exceeds the minimum 6 months requirement.</p>
		<p>These samples will be analysed for the following parameters:</p> <ul style="list-style-type: none"> » Flow » Total Suspended Solids; » Total Nitrogen; » Total Phosphorus; and » Iron and Aluminium (dissolved) (Removed from version 4 of the Water Quality Monitoring Plan) 	<p>Non-compliant</p>	<p>Event based water quality samplers will be installed in Bells Creek south a minimum of 6 months ahead of any development works occurring within the catchment.</p> <p>During the 2015/2016 compliance reporting period, a total of six events have been recorded. Event based monitoring samples were analysed for the parameters listed in Section 5.1.3, with the exception of a single baseline monitoring event in Bells Creek North in August 2015 where iron and aluminium were not sampled.</p> <p>This sampling discrepancy was identified during a regular project compliance review by SMEC, and Stockland subsequently notified DotE on the 24 September 2015. The reported matter is minor and administrative in nature and there is no evidence it has resulted in, or is likely to result in, an impact on Matters of National Environmental Significance on site. DotE investigated the matter and advised Stockland that no further action was required.</p> <p>The reason for the removal of iron and aluminium from this single sampling event was to align the monitoring requirements of the federally approved version of the Caloundra South Water Quality Management Plan with the Queensland State Government approved plan.</p> <p>Iron and aluminium were removed from the State approved Caloundra South Water Quality Management Plan because:</p> <ul style="list-style-type: none"> - these parameters are tested as part of the monthly ambient monitoring; - Event based monitoring of iron and aluminium is not a good indicator of poor acid sulfate management as this would be observed during low flow conditions and therefore monitoring of

				<p>these parameters during stormwater runoff event is not a scientifically justifiable indicator of poor acid sulfate soil management.</p> <p>- For analysis of dissolved metals, samples need to be filtered immediately (within 30 mins) in the field. This is highly impracticable with event based samples where one sample is collected every few hours over a number of days and would lead to inaccurate and misleading information.</p> <p>-It is unsafe for personnel to be working in and near waterways during flood conditions.</p> <p>For the reasons outlined above, Stockland submitted a revision of the Water Quality Management Plan to remove the requirement for monitoring iron and aluminium for event based sampling, which was approved by DotE on 23 December 2015.</p>
Section 5.1.3	WQMP-3	<p>At each of the monitoring sites listed above (WQMP-2), additional event based water quality samplers are to be deployed midway along Bells Creek North and South before substantial urban land development works are to commence in the areas upstream of these locations.</p> <p>These samplers will be triggered by flows in either of the creeks, and will collect composited, flow proportional samples from significant runoff events. Analyse samples for the following parameters:</p> <ul style="list-style-type: none"> » flow » Total Suspended Solids » Total Nitrogen » Total Phosphorus; and » Iron and Aluminium (dissolved) (Removed from version 4 of the Water Quality Monitoring Plan) 	Compliant	<p>An additional event based water quality sampler was deployed midway along Bells Creek North in August 2015. No construction commenced within the Bells Creek north or south catchments during the reporting period. All samples have been analysed for the parameters listed in Section 5.1.3.</p>

Section 5.1.4	WQMP-4	Establishment and continuation of Ecosystem Health Monitoring Program (EHMP) for two sites within Bells Creek downstream of the development	Complaint	Since October 2013, Healthy Waterways has undertaken monthly ambient water quality monitoring at two locations within Bells Creek downstream of the development. This monitoring is undertaken as part of the Ecosystem Health Monitoring Program (EHMP), which is a multi-agency funded (led by the Queensland Government) regional environmental monitoring program. Data collected from monitoring is reported through the Healthy Waterways Report Card, a web based platform designed to communicate the condition of south east Queensland waterways.
Section 5.1.5	WQMP-5	Establish real time turbidity monitoring stations to be established at the following locations a minimum of 6 months before development starts in a catchment: »Bells Creek North and South at the lower boundary of the Caloundra South site »Bells Creek North and South at the upper boundary of the Caloundra South site; and »The downstream extent of the development footprint within the Lamerough Creek Catchment.	Compliant	Three real time turbidity monitoring stations were installed in February 2014, two on Bells Creek north (upstream and downstream) and one on Lamerough Creek (downstream). Construction in the Lamerough Creek catchment commenced in January 2015 and no construction in Bells Creek north has commenced. The duration of pre-construction monitoring undertaken exceeds the minimum 6 months duration outlined in Section 5.1.5.
Section 5.1.6	WQMP-6	Two load based monitoring sites will be established within the ultimate development footprint. Data will be collected for a two year period to quantify the quality of run-off from the site, commencing within one year of construction starting elsewhere on the site.	Compliant	Two load based monitoring sites have been established in the Bells Creek Catchment and will collect data for a two year period.

Section 5.1.6	WQMP-7	At each of the two load based monitoring sites listed above (WQMP-6), an event-based stormwater sampler is to be installed and stormwater flow and quality data collected from at least 20 representative storms over a two year period. Samples collected will be composited and event mean concentrations for each storm event derived.	Compliant	Event-based stormwater samplers have been installed at load based monitoring sites in the Bells Creek Catchment.
Section 5.1.7	WQMP-8	Monitoring is to occur for one representative established bioretention system and one representative established wetland system.	Not applicable	Bulk earthworks and civil construction is still occurring in the northern residential and northern employment precincts. Bioretention and wetland systems have not yet been constructed, therefore treatment device monitoring has not yet commenced.
Section 5.1.7	WQMP-9	At each of the representative systems listed above (WQ-8) event-based stormwater samplers are to be installed upstream and downstream of these devices and stormwater flow and quality data collected from 10 representative storms. Samples collected will be composited and the event mean concentration for each upstream and downstream sampling site derived such that load reductions can be calculated.	Not applicable	Bulk earthworks and civil construction is still occurring in the northern residential and northern employment precincts. Bioretention and wetland systems have not yet been constructed, therefore treatment device monitoring has not yet commenced.
Section 5.1.8	WQMP-10	Construction stage water quality - the following surface water monitoring regime is to be integrated into each Precinct-based WQMP: »Regular (daily and after major rain events) site inspections of all erosion and sediment control measures. »Regular (daily and after major rain events) inspections of areas surrounding construction site to detect and manage any occurrence of sediment deposition off-site. »Rainfall will be recorded at 9am each working	Compliant	Surface water monitoring requirements have been incorporated into Section 5.1.4 of each Precinct CEMP.

		<p>day from an installed rain gauge.</p> <p>»All construction activities will be monitored daily for compliance with erosion and sediment control measures.</p> <p>»Within sediment basins, turbidity, pH, electrical conductivity (EC) and dissolved oxygen (DO) will be measured daily within each precinct.</p>		
Section 7.1	WQMP-11	<p>Construction stage water quality - All discharge from site sedimentation basins is to meet:</p> <p>»pH 6.5 to 8.5.</p> <p>»Discharge turbidity offsite (as measured by the downstream automated turbidity monitor) to be less than 10% above background with background being the quality of water entering the site via the culverts where Bells Creek North and South pass under the Bruce Highway for any events up to and including the design rainfall event as specified below.</p> <p>»Nutrients (nitrogen and phosphorus) to be managed through normal erosion and sediment control practices.</p>	Compliant	<p>Monitoring of sediment basins has been conducted at all times prior to discharge and the results reported in the Construction Contractors Monthly Environment Report. Prior to the dewatering of sediment basins, all captured runoff was treated to meet the nominated water quality performance criteria. No construction has occurred within the Bells Creek North and therefore data collected to date constitutes baseline.</p>
Section 8.1	WQMP-12	<p>Construction stage water quality - Implement corrective actions each time there is either a significant (i.e. greater than 25%) exceedance of the performance standards (refer to WQMP 7.1 Water Quality - Construction Stage) for discharges from site sediment basins or if there are similar triggers of the automatic turbidity monitoring infrastructure. If lesser exceedances are observed (e.g. between 15 and 25%) then</p>	Compliant	<p>Prior to the dewatering of sediment basins, all captured runoff was treated to meet the nominated water quality performance criteria, therefore corrective actions have not been triggered.</p>

		initial surveillance assessments will be triggered that may identify areas that could be better managed, thereby reducing off site export of sediments.		
Section 8.1	WQMP-13	<p>Construction stage water quality - Implement the following corrective actions (as part of the Precinct-based CEMPs) where performance criteria are not being met:</p> <ul style="list-style-type: none"> »Contractor to amend erosion and sediment control measures as required in consultation with the Superintendent to address deficiencies through regular monitoring and inspections and in consultation with relevant regulatory agencies. »Erosion and sediment control devices to be cleaned, repaired or replaced whenever inspections show signs of noncompliance or ineffective capability/capacity. »Works to cease and/or other corrective actions taken (e.g. not allowing release of water from sedimentation basins) where erosion and sediment control devices are found not to be in accordance with the management and mitigation actions outlined in the WQMP or otherwise the performance requirements outlined above. »Areas of exposed soils and extensive scour or erosion to be rehabilitated as soon as practicable after detection. 	Compliant	Prior to the dewatering of sediment basins, all captured runoff was treated to meet the nominated water quality performance criteria, therefore corrective actions have not been triggered.

Section 7.2	WQMP-14	Operational stage water quality – Assess receiving water quality in Pumicestone Passage, Bells Creek using the methods described in Section 7.2	Not applicable	Bulk earthworks and civil construction is still continuing, and therefore construction stage water quality performance indicators and goals apply.
Section 8.1	WQMP-15	Operational stage water quality – Implement the following corrective actions where trigger values are exceeded: »Review of existing data sets to examine trends and spatial context of any failures of WQOs; »Identification of the source of the outliers (chronic or acute failure); »Where sources are identified, investigate implementation of water quality management measures in these locations to ensure that they are established appropriately and functioning as designed. Specific rectification measures will be identified as part of the design process for each treatment measure; »Investigation into potential spills/contamination event; and »Examination of the load based monitoring and automated turbidity monitoring to determine if any trends are consistent with the changes in ambient water quality occurring in the operational phase.	Compliant	Bulk earthworks and civil construction is still continuing in precincts 1, 2 and part 3/4, therefore operational phase water quality monitoring requirements have not commenced.

Section 5.2.2	WQMP-16	Groundwater Pre-construction Baseline Monitoring: A surveillance baseline groundwater monitoring event will be carried out within 6 months of commencing work for both groundwater level and chemistry. Analyse samples for the parameters listed in Section 5.2.4.	Compliant	Surveillance baseline monitoring has been undertaken in accordance with the requirements of the Water Quality Management Plan. In September 2014, all bores in the monitoring network shown on Figure 5-3 were sampled and tested for the field and analytical parameters listed in Section 5.2.2. Following this, active construction in the Lamerough Creek catchment commenced on the 15th January, 2015. Surveillance baseline monitoring of bores in the Bells Creek north catchment was conducted in October, 2015. No construction has occurred within the Bells Creek North catchment within the reporting period.
Section 5.2	WQMP-17	Groundwater Construction Phase Bi-annual Monitoring: »All bores within the site will be sampled on a biannual basis, up to and for 12 months after active development works are completed in respective catchments. Analyse samples for the parameters listed in Section 5.2.4.	Non-compliant	<p>Biannual groundwater monitoring of all bores within the site occurred in September 2015. The biannual sampling scheduled to occur during the wet season in January 2016 was postponed until February 2016, due to insufficient rainfall (and has now been completed). Significant rain was predicted (and occurred) in late January. The sampling results obtained in February 2016 provide wet season data to accompany the dry season data obtained in September 2015. All samples were analysed for the parameters listed in Section 5.2.4.</p> <p>Stockland notified DotE on 19 February 2016 of the delay in undertaking bi-annual monitoring. The reported matter is minor and administrative in nature and there is no evidence it has resulted in, or is likely to result in, an impact on Matters of National Environmental Significance on site. DotE reviewed the matter and advised Stockland that no further action was required.</p>
Section 5.2	WQMP-18	Groundwater Construction Phase Monthly Monitoring: »Those bores within catchments where there are construction activities occurring, but which are not in close proximity to areas of active construction works, will be sampled on an annual basis (by 'active' construction we refer to those works associated with land forming	Non-compliant	Cut to fill operations in the Lamerough Creek catchment commenced on the 25 February 2015. Monthly monitoring of groundwater bores within the Lamerough Creek catchment, within 500m of active construction works, commenced on the 6 May, 2015. Monthly construction based groundwater monitoring inadvertently did not occur between 25 February 2015 and 6 May 2015. Monthly construction groundwater monitoring has continued in the Lamerough Creek catchment since May 2015. All samples

		<p>and bulk excavation and filling works, not house construction works which will follow this phase); and</p> <p>»Those bores within catchments where there are construction activities occurring and which are in close proximity (i.e. within 500m) to areas of active construction works will be sampled on a monthly basis.</p> <p>Analyse samples for the parameters listed in Section 5.2.4.</p>	<p>have been analysed for the parameters listed in Section 5.2.4.</p> <p>The delay to the commencement of construction phase monthly monitoring in the Lamerough Creek Catchment was identified by SMEC during a voluntary compliance review. Stockland notified DotE on 24 September 2015. The reported matter is minor and administrative in nature and there is no evidence it has resulted in, or is likely to result in, an impact on Matters of National Environmental Significance on site. DotE reviewed the matter and advised Stockland that no further action was required.</p> <p>To further improve compliance, Stockland implemented the following corrective actions:</p> <ul style="list-style-type: none"> -An external consultant has been engaged to review the status of compliance with EPBC conditions on a monthly basis -EPBC Act compliance training has been delivered to the construction contractors, superintendents and Stockland Project Manager to equip key personnel with a clear understanding of commitments made in approved documents and plans. -An EPBC Act Compliance Training Manual has been prepared and distributed to Stockland project team members and includes a copy of the EPBC Approval and Approved documents and plans; -A Surface Water and Groundwater Communication and Reporting Procedure has been developed and distributed to Stockland project team members, consultants and construction contractors. -A single consultant, BMT WBM, is now responsible for managing both the surface water and groundwater monitoring program, rather than separate consultants responsible for different aspects of the monitoring program. <p>Construction in the Bells Creek north catchment is yet to commence.</p>
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Section 5.2.3	WQMP-19	<p>Additional shallow groundwater bores are to be installed and included in the overall groundwater monitoring program. These additional monitoring sites have been selected on the basis of their proximity to:</p> <ul style="list-style-type: none"> »Frog conservation zones and associated Wallum sedgefrog habitat that is to be retained or enhanced on site; »Upland (control) sites for groundwater levels outside of retained frog habitat areas; and »The downstream reaches of Bells Creek North, Bells Creek South and Lamerough Creek (related to confirming no transport of acidity, dissolved metals or other contaminants off site via groundwater processes). 	Compliant	<p>All bores shown on Figure 5-3 of the Water Quality Management Plan (Revision 3, 2014) were installed prior to commencement of construction and monitored. Some bores have been subsequently relocated or decommissioned as construction has progressed. Additional bores will be installed as shown on Figure 5-3 of the Water Quality Management Plan (Revision 4, 2015) in March/April 2016.</p>
Section 8.2.3	WQMP-20	<p>Corrective actions following a detection of an exceedance of a groundwater trigger levels may include the following:</p> <ul style="list-style-type: none"> »The review of site construction management practices; »Localised filling or excavation works to adjust land elevations; »Changes to proposed re-vegetation and ecological enhancement strategies; »Review of site surface water management devices (WSUD) and stormwater harvesting practices; »Detection and remediation of spills or other contaminant releases (if groundwater quality is detected as being affected); or »Review and amendment of acid sulphate soil management practices in the context of unusually low groundwater pH or the presence of dissolved metals at downstream monitoring locations. 	Compliant	<p>During the reporting period there have been no exceedances of groundwater performance criteria that have resulted in the requirement for corrective actions to be implemented.</p>

Wallum Sedge Frog Management Plan

The Wallum Sedge Frog Management Plan provides the overarching strategy to mitigate impacts of the development on the wallum sedge frog, and protect and create wallum sedge frog habitat and movement opportunities throughout the Caloundra South site. The overarching strategy of the Wallum Sedge Frog Management Plan is built upon through development of a detailed mitigation strategy for each precinct that documents how wallum sedge frog habitat will be conserved and re-created. This ACR will report on progress made in implementing the commitments made in the Wallum Sedge Frog Management Plan, including an update on the results of monitoring of existing and created habitat across the site. The ACR will report on Revision D of the plan, dated December 2015 as only minor amendments were made between Revision C and Revision D to remove inconsistencies with other approved plans.

Table 9: Compliance Assessment of the Wallum Sedge Frog Management Plan (Revision D, December 2015)

Section	Id.	Requirement	Is the project compliant?	Evidence/Comments
Section 3.2	WSF-1	Establish frog habitat conservation areas and land use zones. Activities (i.e. pedestrian paths, boardwalk etc.) must be compatible with conservation and other zones as outlined in Table 2.4.	Compliant	<p>Frog habitat conservation areas are shown on the Caloundra South Master Plan, as approved by Economic Development Queensland, the State Government agency charged with planning responsibility for the site. Bulk earthworks and civil construction are still occurring, therefore no approved activities (as listed in Table 2.4) have occurred within frog conservation zones.</p> <p>Rehabilitation of the frog habitat conservation areas has informally commenced with areas being fenced and allowed to regenerate. Formal rehabilitation is expected to commence in 2016 and will be completed progressively with development, in accordance with the Environmental Protection Plan.</p>

Section 3.5	WSF-2	<p>Implement the following location specific management and mitigation commitments for wallum sedge frog into the development, as detailed in Table 3.5b.</p> <p>Northern development zone commitments include:</p> <ul style="list-style-type: none"> »inclusion of frog friendly underpasses/crossings across existing sedge habitats associated with habitat patch 44 »wallum sedge frog fauna friendly crossings and frog movement barriers at Bellvista Boulevard. <p>Central development zone commitments include:</p> <ul style="list-style-type: none"> »Partial retention of habitat patches 36 and 39 where not impacted by the developable footprint, and complete retention of patch 71. »Retention of possible drought refugia in habitat patch 36. »Frog friendly creek structures and frog movement barriers, and an additional frog dedicated underpass at each of the three road crossing the realigned Bells Creek north movement corridor. <p>Southern development zone commitments include:</p> <ul style="list-style-type: none"> »Retention of habitat patches 75, 76 and 78 in their entirety. »Partial retention of habitat patches 79, 72, 3 and 1. »Retention of likely drought refugia within habitat patches 91, 76, 75, 72 and 3. »Frog friendly creek crossing structures and movement barriers, and an additional frog 	Compliant	<p>Northern Development Zone To facilitate frog passage through habitat patch 44, the design of the East West Link bridge includes a dedicated frog crossing on the southern approach to the bridge over Lamerough Creek.</p> <p>The design has been undertaken in accordance with the specifications outlined in Table 3.5b The crossing consists of a 3000X1500mm reinforced concrete box culvert, which exceeds the minimum height requirements (i.e. 900mm) outlined in the Wallum Sedge Frog Management Plan, and Queensland Government fauna sensitive road guidelines (TMR, 2010). The culvert design includes a natural floor and appropriate verge plantings.</p> <p>Construction of the East West Link Bridge commenced in November 2015. Clearing in the vicinity of Lamerough Creek has been minimised to that necessary for bridge construction. Pre-fabricated girders and deck units have been used to minimise the duration of works in the waterway.</p> <p>Installation of movement barriers (i.e. frog proof fencing to 'funnel' frog movement under bridge crossings and culvert underpasses) is expected to occur in 2016.</p> <p>Central and Southern Development Zones No works have occurred to date in the central or southern development zones.</p>
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		<p>dedicated underpass at the four road crossings over the Bells Creek South corridor.</p> <p>Site wide and location specific specifications for road, creek crossing and barrier design are outlined in Table 3.5a. In addition the QLD Fauna Sensitive Road Design Guidelines can be referred to.</p>		
Section 3.6	WSF-3	During construction exclusion fencing will be established around the frog buffer and frog zone.	Compliant	The Precinct 1 and Precinct 2 CEMPs include the requirement for exclusion fencing to be installed around the frog buffer and frog zone. Flagging tape and "No Go" signage was installed around the frog zone and frog buffer prior to commencement of works in each Precinct. The daily construction checklist includes a requirement to check that all works are occurring within the designated works area.
Section 3.6	WSF-4	Temporary stormwater treatment devices will be designed so as to avoid directing run off into or across areas of identified (breeding) habitat.	Compliant	Erosion and Sediment Control Plans have been prepared to avoid directing run-off into identified wallum frog breeding habitat. Prior to commencement of works, a senior ecologist reviews the Erosion and Sediment Control Plans and conducts a site inspection to check the suitability of proposed discharge locations and confirm that there will be no direct discharge of sediment laden construction run-off into wallum frog breeding habitat.
Section 3.6	WSF-5	Construction of some ponds particularly along Bells Creek North should proceed ahead of the development front to maintain continuity of habitat connectivity	Compliant	Wallum sedge frog ponds have been created in advance of construction of the development in Precinct 2. Frog ponds have been created in the Frog Zone along the 'northern corridor' providing wallum sedge frog movement along Lamerough Creek. Photos of the completed frog ponds are provided in Figure 3.
Section 3.6	WSF-6	During construction, only appropriately trained personnel should undertake the removal of native fauna. A licensed spotter and catcher must be on-call for the duration of bulk earthworks and clearing activities and will conduct a visual inspection of the site for	Compliant	<p>This commitment has been included in Precinct CEMPs and was implemented. The appropriately licensed fauna spotter-catcher/s supervised all clearing activities and is available on-call for the duration of bulk earthworks.</p> <p>During clearing activities, the licensed fauna spotter-catcher/s:</p>

		animals immediately prior to and during vegetation clearance works.		<ul style="list-style-type: none"> - Identified the presence of any fauna or associated habitat / breeding places; - Managed the relocation of any displaced fauna to appropriate retained habitat or appropriately licensed wildlife facilities as necessary; - Managed the relocation of habitat features when appropriate; and - Documented all incidences of disturbance / destruction of animal breeding places and interference with wildlife.
Section 3.6	WSF-7	During construction, in stream works should be completed as quickly as possible to minimise disturbance to aquatic species	Compliant	This commitment has been included in Precinct CEMPs. Construction activities have been programmed to minimise the duration of in-stream works. Bridge deck units have been manufactured off site to reduce the construction time of the East West Link Road Bridge.
Section 3.6	WSF-8	During construction, fauna fencing and wildlife structures installed during construction and maintained during the operational stage should be designed to minimise harbourage and roosting opportunities for pest species.	Compliant	No fencing has been installed which is to be maintained through the Operational Phase. Construction of 'No go' zones and Fauna Friendly fencing is design to allow fauna movements.
Section 3.6	WSF-9	Induction training for wildlife management for contractor staff and other personnel that enter the construction site.	Compliant	This requirement has been included in Precinct CEMPs. All contractor staff and other personnel that enter the construction site attend induction training for wildlife management.
Section 3.6	WSF-10	Construction crew will not be permitted to bring domestic animals to the project area.	Compliant	This requirement has been included in Precinct CEMPs. As documented in the Construction Contractors Monthly Reports and regular site audits, there has been evidence of domestic animals being brought to site.
Section 3.6	WSF-11	Putrescible waste generated during construction will be stored in contained on site to limit access by scavenger animals, and will be transported off site for disposal.	Compliant	This commitment has been included in Precinct CEMPs. Putrescible wastes are contained and is regularly removed and disposed of at a registered waste facility.

Section 3.6	WSF-12	Fill material used in close proximity to retained habitats should have low clay content, and be free of monomeric aluminium.		On ground investigations were undertaken (refer Section 5.4 of the Wallum Sedge Frog Management Plan) in regards to soil conditions within the Frog Zone of Precinct 2 for the creation of wallum sedge frog habitat Ponds. Where results indicated poor soil texture (clay loam instead of sandy loam), fill material was used for the creation of frog habitat ponds. This fill material was assessed for texture and organic matter content prior to use to confirm compliance with soil taken from existing wallum sedge frog habitat areas
Section 3.6	WSF-13	Construction and maintenance of temporary drains and or bunding diverting sediment-laden runoff away from areas of frog (breeding) habitat and construction and maintenance of silt traps/fencing upslope of creek lines and areas of frog habitat.	Compliant	Sediment and erosion control plans have been prepared for Precincts where construction is occurring, and have been certified by a Chartered Professional in Erosion and Sediment Control. Sediment and erosion controls have been designed to capture and treat sediment laden runoff from disturbed areas, and to divert clean water around the construction area. A range of sediment control measures have been used to capture and treat sediment laden runoff and prevent it from entering waterways and frog habitats, including: sediment fences, mulch berms, sediment traps, sediment trenches, sediment weirs, rock filter dam, filter tube dams and sediment basins.
Section 3.6	WSF-14	The temporary use of sterile sorghum to stabilise loose fill in proximity to areas of Wallum Sedgefrog habitat. Sorghum should be used as a temporary stabilising agent. Slower native vegetation should replace, or be used in preference to sorghum where ongoing soil disturbance would not occur.	Compliant	Where possible, areas in close proximity to the wallum sedge frog habitat have been stabilised by re-spreading top soil that was stripped from the area of disturbance and allowing natural regeneration of the seed bank present. Where this has not been possible, areas have been stabilised using a sterile grass seed appropriate to the growing season.
Section 3.7	WSF-15	Retention, or partial retention, of existing Wallum Sedgefrog habitats within and adjacent to movement corridors along Lamerough Creek, Bells Creek North and Bells Creek South in perpetuity.	Compliant	The Environmental Protection Plan outlines the legal mechanisms which will protect created and retained wallum sedge frog habitat in perpetuity. The latest version of Map 2.2d showing areas of wallum sedge frog habitat retained and created is provided in Appendix B.
Section 3.7	WSF-16	Creation of artificial Wallum Sedgefrog habitat in areas above Q5 in the Frog Zone	Compliant	Wallum sedge frog ponds have been created in Precinct 2 in areas above Q5 in the Frog Zone. Created frog ponds have been designed

		(and not existing Wallum Sedgefrog habitat) with a maximum distance between breeding opportunities being less than 400m.		to be a maximum distance of 300m from the nearest retained or constructed wallum sedge frog pond, in accordance with the Habitat Connectivity success criteria contained in Table 6.2a of the Wallum Sedge Frog Management Plan.
Section 3.7	WSF-17	Provision of frog buffers between retained and re-created Wallum Sedgefrog habitat and earthworks and other development-related threats (refer Figure 3.1).	Compliant	During construction 'no go' fencing and signage has been installed around the frog zone and frog buffer zone.
Section 3.7	WSF-18	Revegetation and rehabilitation of waterway movement corridors using flora species that will extend the extent of existing ecosystems and enhance habitat for Wallum Sedgefrog.	Compliant	Rehabilitation of the site commenced in 2015 with the "Little Italy" project. An Environmental Rehabilitation Plan has been prepared to guide rehabilitation works in Precinct 1. Rehabilitation of the 'northern corridor' is expected to commence in 2016, and will enhance habitat for wallum sedge frog and provide movement opportunities along Lamerough Creek.
Section 3.7	WSF-19	Installation of movement barriers (i.e. frog proof fencing to 'funnel' frog movement under bridge crossings and culvert underpasses.	Not applicable	No underpasses have been constructed during the reporting period. These works will occur in 2016.
Section 3.7	WSF-20	Ongoing land management to support existing habitats in undeveloped portions of the site	Compliant	Regular weed inspection occurs across the site and weed removal occurs in accordance with the Queensland Government Land Protection (Pest and Stock Route) Act 2002. Chopper rolling activities occur where required to maintain pine tree regrowth and support existing habitats in undeveloped portions of the site.
Section 3.7	WSF-21	Periodic slashing and/or pruning of vegetation adjacent to frog barriers.	Compliant	Permanent frog barriers will be installed as the civil construction program progresses. Temporary frog barriers have been installed around retained frog habitat where construction is occurring in adjacent areas. Construction contractors conduct daily inspections of temporary frog barriers and undertake maintenance works as required.

Section 3.7	WSF-22	Construction and maintenance of silt fencing, bunding and detention basins for containing and treating silt laden runoff, away from areas of sensitive frog habitat.	Complaint	Erosion and Sediment Control Plans have been prepared to avoid directing run-off into identified wallum frog breeding habitat. Prior to commencement of works, a senior ecologist reviews the Erosion and Sediment Control Plans and conducts a site inspection to check the suitability of proposed discharge locations and confirms that there will be no direct discharge of sediment laden construction run-off into wallum frog breeding habitat.
Section 3.8	WSF-23	Stockland has committed (EPBC Act condition 8) to funding of \$0.5M over ten years for priority actions identified in the WSFMP. The priority actions are outlined in section 3.8 and include (i) studies identified in the national recovery plan for WSF and other studies (ii) impact of noise and light on WSF behaviour and breeding (iii) monitoring frog populations adjacent to the development.	Compliant	<p>Stockland has prepared a research strategy that is consistent with the priority actions outlined in section 3.8 and the National Recovery Plan for the Wallum Sedge Frog. In consultation with the Queensland University of Technology, University of Queensland, Healthy Waterways and Australian Wetlands Consulting, the research aims to leverage Australian Research council funding with the collective investment of all parties. The proposed research is designed to monitor the success of mitigation measures identified in Section 3.8. Research will be conducted by:</p> <ul style="list-style-type: none"> - Monitoring presence and re-colonisation patterns of wallum sedge frogs in re-created and retained habitat - Species specific acoustic monitoring protocols will be developed for the wallum sedge frog that will aid in future identification of the presence and habitat usage of wallum frogs. <p>DotE endorsed the research proposal approach on 30/10/2015.</p>
Section 3.9	WSF-24	Rehabilitation of an HMU including creating compensatory WSF habitat must commence within 5 years of commencement of civil (subdivision) works within a development stage or precinct that adjoins an HMU as outlined in Figure 3.9b. A minimum handover of 5ha is required for each stage of rehabilitation. It must also be completed five years prior to finalisation of the development (refer also to the EPP).	Complaint	<p>An Environmental Protection Plan (RPS, 2015) has been prepared to satisfy the requirements of EPBC Condition 2, and outlines how the conservation areas at Caloundra South will be rehabilitated and protected in perpetuity. The Environmental Protection Plan commits to commencing rehabilitation within 12 months of the registration of the first Plan of Subdivision for the first Precinct in a Habitat Management Unit Precinct Stage. It also states that the Habitat Management Unit will reach On Maintenance within 2 years after the final Plan of Subdivision for the last Precinct identified in the Habitat Management Unit Precinct Stage.</p> <p>The commitments made in the Environmental Protection Plan have</p>

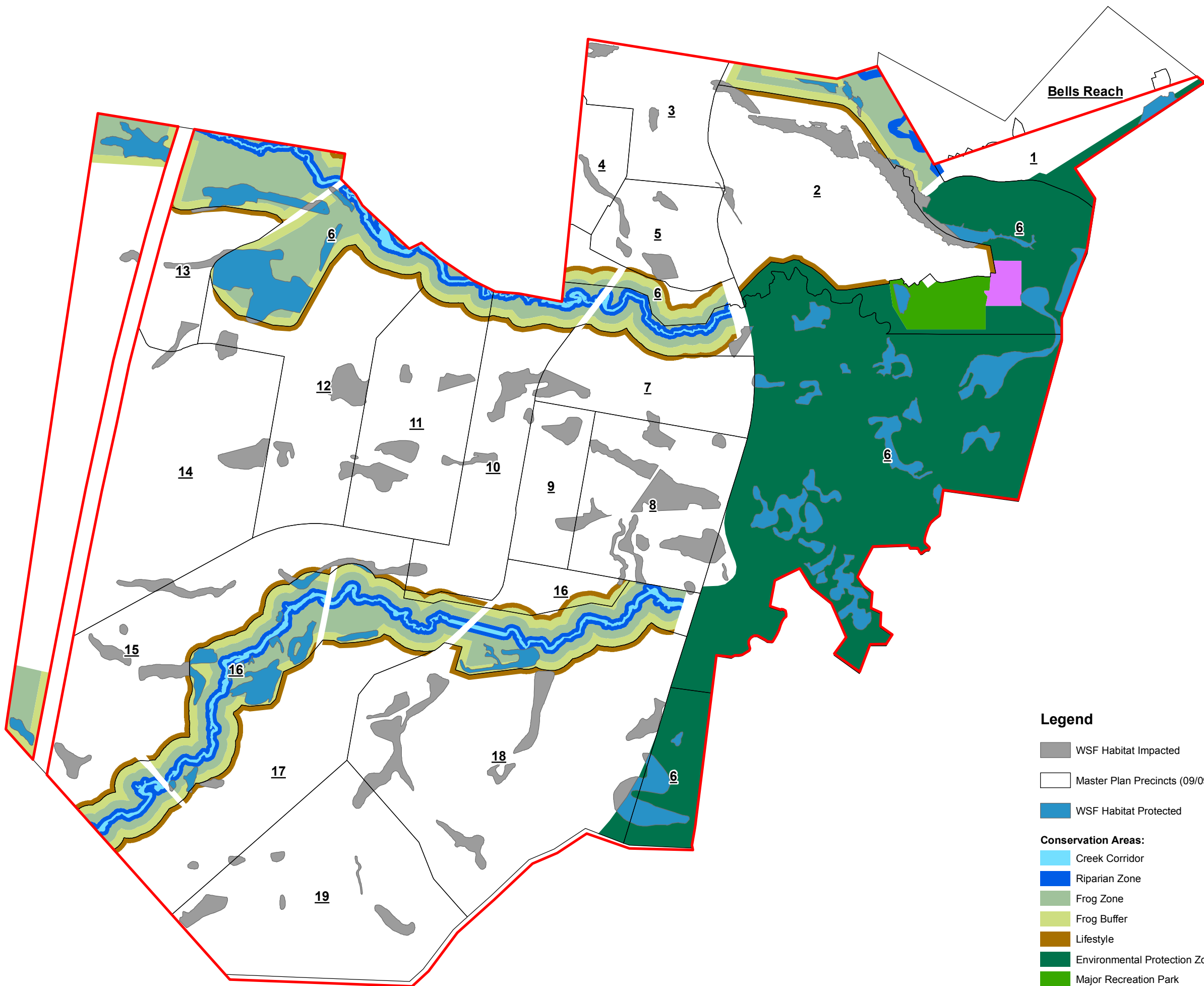
				<p>expedited the timeframe for commencement of rehabilitation of a Habitat Management Unit from that stated in the Wallum Sedge Frog Management Plan.</p> <p>Civil (subdivision) works in Precinct 1 commenced on 1 of September 2015. An Environmental Rehabilitation Plan has been prepared to guide rehabilitation works in Precinct 1. As there is no assisted regeneration or habitat creation activities required in Precinct 1, the On Maintenance period will commence at a time appropriate to the overall rehabilitation program of the 'northern corridor' along Lamerough Creek, and in line with the requirements of the Environmental Protection Plan.</p> <p>Civil sub-division works in Precinct 2 have not yet commenced. It is anticipated that rehabilitation works in Precinct 2 will commence in 2016.</p>
Section 5.5	WSF-25	Specific construction techniques and methods to be used within the Frog Zone and Buffer Zone will be reported within the Construction Environmental Management Plan (CEMP) for the release area, and will also include a detailed Construction Technical Specification.	Compliant	A Technical Specification was prepared to guide construction of the frog ponds in Precinct 2 (AWC, 2014) and the relevant aspects of the specification were included in the Precinct 2 Part 3/4 and Associated Works CEMP.
Section 6 and 7	WSF-26	<p>Section 6 outlines the success criteria to be applied to all conservation and open space areas containing wallum sedge frog habitat being claimed for compensation. Monitoring tasks will be applied to measure success criteria.</p> <p>The WSF population and created compensatory habitat monitoring program is detailed in Section 7 (and summarised in Section 8) and includes monitoring during Pre-construction (confirm habitat to be</p>	Compliant	<p>Monitoring has been conducted by Australian Wetlands Consulting (AWC) and Ecosmart Ecology in accordance with the requirements of the Wallum Sedge Frog Management Plan.</p> <p>Pre-construction Monitoring A pre-construction wallum sedge frog habitat survey has been undertaken, in accordance with the methods outlined in the Wallum Sedge Frog Management Plan, Box 1, Page 52, to determine the extent of wallum sedge frog habitat in Precincts 1, 2 and Part 3/4. The results of the pre-construction survey were reported in each Precinct CEMP.</p>

	<p>removed / retained), On Maintenance (Confirm successful establishment and colonisation) and Off Maintenance (Confirm habitat use and corridor function).</p> <p>Table 6.2a outlines the success criteria that aim to ensure that created and retained habitat is maintained in such a way as to safeguard wallum sedge frog habitat and connectivity corridors.</p>	<p>On-Maintenance Monitoring</p> <p>Monitoring of wallum sedge frog presence and habitat has been undertaken during the establishment of the frog zone and frog buffers, including retained and created wallum sedge frog habitat. Monitoring effort has been restricted to Precinct 1 and 2, where construction is occurring. While construction occurred in part precincts 3/4, no wallum sedge frog habitat mapped will be retained in these areas. Approximately 6 months of monitoring has been completed, following establishment of the created frog ponds in Precinct 2 in June 2015. The following monitoring has been undertaken and a summary of the findings provided below:</p> <ol style="list-style-type: none"> 1. Vegetation Monitoring - Completed 10 November 2015 2. Presence/Abundance wallum sedge frog – Completed 24 and 28 Nov 2015 3. Pond Water Quality and Hydroperiod – Completed 9 October 4. Wet Weather Assessments – Completed 30 October 2015 and 6 January 2016 <p>1. Vegetation Monitoring</p> <p>Plantings at most constructed ponds have been completed and are generally in good condition. Plantings within the frog zone (eastern portion) were also in good condition and generally appeared healthy. The majority of the frog zone in the east comprised bare soil and was generally weed free, with the exception of isolated occurrences of grasses and herbs. While not yet compliant with the stated KPIs within the Wallum Sedge Frog Management Plan, regeneration is progressing well with no indications of identified threats to achieving the KPIs within the on maintenance period. At this stage, it appears that these areas, if maintained adequately should regenerate and establish so that native vegetation cover achieves the identified performance criteria, and which is consistent with REs 12.2.12, 12.2.15 (not 12.2.15a) and 12.2.7.</p> <p>2. Presence/Abundance Wallum Sedge Frog</p>
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			<p>Created Habitats While wallum sedge frogs were not recorded in Area A, however further growth of sedges and vegetation within this area will likely facilitate colonisation. At the time of assessment the Area B ponds did not support an acid frog population. Continued monitoring is required and possible corrective actions may be needed to address high pH issues within the ponds. This appears to be favouring frog species other than the acid frogs.</p> <p>Retained Habitat Acid frog species were recorded from all retained areas of habitat with the exception of two locations, of which one location contained no surface water and is unlikely to provide breeding habitat for frog species except under exceptionally wet years.</p> <p style="text-align: center;">3. Pond Water Quality and Hydroperiod</p> <p>Created Habitats The Water quality of Area A ponds comply with Wallum Sedge Frog Management Plan and Key Performance Indicators for the created compensatory habitat.</p> <p>The Water quality of Area B ponds does not yet comply with the Wallum Sedge Frog Management Plan and Key Performance Indicators for the created compensatory habitat. Further monitoring is being undertaken and refinements to the pond design may be undertaken depending on the results of additional monitoring. Additional on-ground monitoring is proposed and possible corrective actions pending the results of these monitoring actions.</p> <p>The wetting and drying regime of ponds in both areas appear to be sufficient to facilitate breeding, however it is too early to fully assess the compliance of ponds against the Key Performance Indicators.</p> <p>Retained Habitat Monitoring results of water quality and water depth of retained habitat areas show that water chemistry and depth are indicative of</p>
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				<p>wallum habitat, as defined in the Draft referral guidelines for the vulnerable wallum sedge frog, <i>Litoria olongburensis</i> (2011, SEWPAC).</p> <p>4. Wet Weather Assessments The wet weather assessments found that all retained and created habitat is protected from stormwater runoff.</p> <p>Off Maintenance No areas have reached Off Maintenance.</p>
Section 7	WSF-27	Corrective actions (as outlined in Table 7.2) will be implemented to address risks to the successful establish of Wallum Sedgefrog habitat ponds, preservation of the northern Wallum Sedgefrog habitat corridor and the successful achievement of meeting all proposed success criteria.	Not applicable	To date no corrective actions have been required based on monitoring results.

APPENDIX B MAP 2.2D WALLUM SEDGE FROG HABITAT TO BE REMOVED



Bells Reach

Legend

- WSF Habitat Impacted
- Master Plan Precincts (09/09/2015)
- WSF Habitat Protected
- Conservation Areas:**
- Creek Corridor
- Riparian Zone
- Frog Zone
- Frog Buffer
- Lifestyle
- Environmental Protection Zone
- Major Recreation Park
- Environmental Education Facility

~280 ha Frog Conservation (ex EPZ)
 - Includes Riparian, Frog zones, Frog buffers.
 - Excludes areas of mapped WSF habitat.

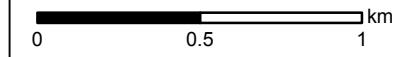
Combined pre-construction mapped WSF habitat
 ~95ha protected
 ~126ha impacted

EPZ (including major recreational park and frog buffers) ~ 435ha

Area and calculations for the WSF habitat based on:

- Polygons shown in Precincts 4-19 were mapped in 2012 as part of the Coloundra South Public Environmental Report (Stockland 2012). This survey was undertaken in February 2012 under extremely wet conditions (>85%ile rainfall over three months leading up to survey)
- Polygons shown in Precincts 2 and 3 were undertaken by AWC in December 2014, as part of the preparation of the Precinct 2 / part 3 Construction Environmental Management Plan (REF). Dry weather survey methodology used as low rainfall conditions throughout 2014 resulting in the ponding of surface water within habitat/s across the site.

21	15/12/2015	GJK	MD	MD
Issue	Date	By	Chkd	Appd



ARUP

Level 4, 108 Wickham Street
 Fortitude Valley, QLD 4006
 Tel +61 (7)3023 6000 Fax +61 (7)3023 6023
 www.arup.com

Client
Stockland

Job Title
Aura

Drawing Title
Wallum Sedgefrog (and Acid Frog) habitat to be removed

Scale at A3 1:23,276	Drawing Status For Information
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Coordinate System
GDA 1994 MGA Zone 56

Job No 222431-00	Drawing No 2.2d
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APPENDIX C LEDGER OF WALLUM SEDGE FROG HABITAT RETAINED, CREATED AND REMOVED DURING THE REPORTING PERIOD

Master Plan Precinct	Existing WSF Habitat Impacted (ha)	WSF Habitat in Frog Zone, Frog Buffer and Riparian Zone (ha)		
		Existing Habitat Protected	Created Compensatory Habitat On Maintenance*	Created Compensatory Habitat Off maintenance*
1	0.60	1.18	NA	NA
2	9.30	5.50	16.02	0.00
3	1.80	0.00	NA	NA
TOTAL	11.70	6.68	16.02	0.00

NA = Not Applicable - Compensatory habitat will not be created in the Precinct

*The area of compensatory habitat that is 'On Maintenance' and 'Off Maintenance' has been determined as per the success criteria outlined in the Wallum Sedge Frog Management Plan. Note that the use of these terms are not related to the 'On Maintenance' and 'Off Maintenance' handover processes as outlined in the Environmental Protection Plan.