

Caloundra South

2016/2017 Annual Compliance Report - EPBC 2011/5987

Prepared for: Stockland Development Pty Ltd
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Artist's impression only

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1. INTRODUCTION

This Annual Compliance Report (ACR) has been prepared in accordance with the requirements of the Caloundra South Master Planned Community EPBC Act approval 2011/5987. Condition 14 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 from 15 January 2016 to 14 January 2017.

1.2 EPBC Approval

Stockland Development Pty Ltd (ACN 000 064 835) (Stockland), as the Proponent for the Caloundra South Master Planned Community, was issued with EPBC 2011/5987 on 6 June 2013. EPBC 2011/5987 was subsequently amended by variations to Conditions 3, 8, 10 and 12 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 are shown in Figure 1, and the illustrated Master Plan is included as Figure 2.

1.4 Overview of Key Activities and Achievements

Numerous development and environmental management activities have been achieved on the Project to date, including:

- Construction and monitoring of 32 Wallum Sedge Frog breeding ponds within the Frog Zone and Frog Buffer adjacent to Precincts 2, 4 and 5.
- Creation of 16.4 ha of compensatory habitat for Wallum Sedge Frog.
- Creation of a dedicated frog underpass and separate fauna underpass at the Bellvista Boulevard Bridge over Lamerough Creek.
- Monitoring of Wallum Sedge Frog populations on and off the site.

- Ongoing water quality monitoring on and off site.
- Environmental management initiatives under the Community Stewardship Program, including: installation of fencing to exclude cattle from the entire Bells Creek North riparian zone; tree planting and community flora and fauna monitoring in the Environmental Protection Zone.
- Certification of the project as achieving a 6 Star Green Star Communities Rating from the Green Building Council of Australia and implementation of requirements.
- Implementation of approved Construction Environmental Management Plans (CEMPs) for Precinct 1 and 2.
- Commencement of implementation of Environmental Rehabilitation Plans for Precincts 1 and 2.
- Construction and monitoring of sediment basins for works in Precinct 1 and 2.
- Completion of Precinct 1 bulk earthworks and civil construction.
- Continuation of bulk earthworks and civil construction in Precinct 2.
- Completion of the East West Link Bridge over Lamerough Creek.
- Completion of construction of the Bells Creek Arterial entrance to the Caloundra South site.
- State finalist in the Queensland Urban Development Institute of Australia (UDIA) awards for the continuing work relating to the Community Stewardship program
- Instigation of training of Aboriginal youth and local rural fire brigades in traditional bushfire management techniques to promote ecological rehabilitation of conservation land.
- Successful running of local events celebrating World Wetlands Day and National Tree Day, educating local school children on local environmental values including tree planting.
- Continued implementation of the Community Stewardship Program which includes quarterly meetings and project updates.
- Presentation of the 2015/16 Annual Compliance Report to the community including site tour of construction activities.

Stockland, its contractors and consultants have worked with the Commonwealth, State and Local governments 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 Approvals

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.

Precinct 2 was granted approval for a Reconfiguration of a Lot from 2 Lots into 1585 Lots, 1 Mixed Use Lot, 2 District Centre Lots, Educational Establishment Lots, Community Centre Lots, Tourist Attraction, Parks and new roads.

Precincts 3-5 were granted approval for a Reconfiguration of a Lot from 1 Lot into 184 Business and Industry Lots, 3 Showroom Lots, Open Space, Roads and Drainage in May 2015.

Town Centre (Precincts 7-10) was granted approval for a Reconfiguration of a Lot with a Plan of Development in November 2016. The Plan of Development permits 5000 dwellings provided through a combination of standard and multiple residential lots, retail, commercial, community, education, parks and drainage.

The locations of Precincts are illustrated in Figure 3.



Figure 3: Current Precincts with Development Approvals

2.2 Bulk Earthworks and Civil Construction

During the reporting period (15 January 2016 – 14 January 2017), the following construction activities were undertaken:

- **Precinct 1** – Civil construction reached Practical Completion in April 2016.
- **Precinct 2** – Bulk earthworks commenced in November 2015.
- **Bellvista Boulevard Bridge over Lamerough Creek**– Practical Completion achieved in November 2016
- **Bells Creek Arterial Entrance to Caloundra South** – construction commenced in November 2015 and it is anticipated that the road will be open for traffic in early 2017.

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.

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 March 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 Pond Creation

During the reporting period, nine additional Wallum Sedge Frog ponds were created in adjacent to Precincts 4 and 5, and were completed in November 2016 (Figure 4). Construction activities in these Precincts commenced after completion of the frog ponds. The nine ponds were constructed within the Frog Zone and Frog Buffer along the 'central corridor' providing habitat connectivity for the Wallum Sedge Frog along Bells Creek North. Site selection was based on extensive field work and analysis to determine the most suitable pond locations. Frog ponds were constructed in accordance with the Wallum Sedge Frog Management Plan. Further information about the implementation of this plan is provided in Section 3 and Appendix A.

Frog ponds within the northern movement corridor (Precinct 2, Lamerough Creek) were created during the 2015/2016 reporting period. These were subject to biannual monitoring, with some ponds supporting the successful breeding of the Wallum Froglet – one of the three key Acid Frog Species across the site (Figure 5). Several Precinct 2 ponds required corrective actions, in response to high pH and low tannin staining water quality results. Corrective actions were completed in June 2016, with initial signs of success (lower pH in water), however limited rain occurred during the 2016-2017 reporting period to enable assessment of the results. Monitoring of Success Criteria and implementation of corrective actions will continue in accordance with the Wallum Sedge Frog Management Plan.



Figure 4: Construction of Wallum Sedge Frog Ponds in Precincts 4 and 5

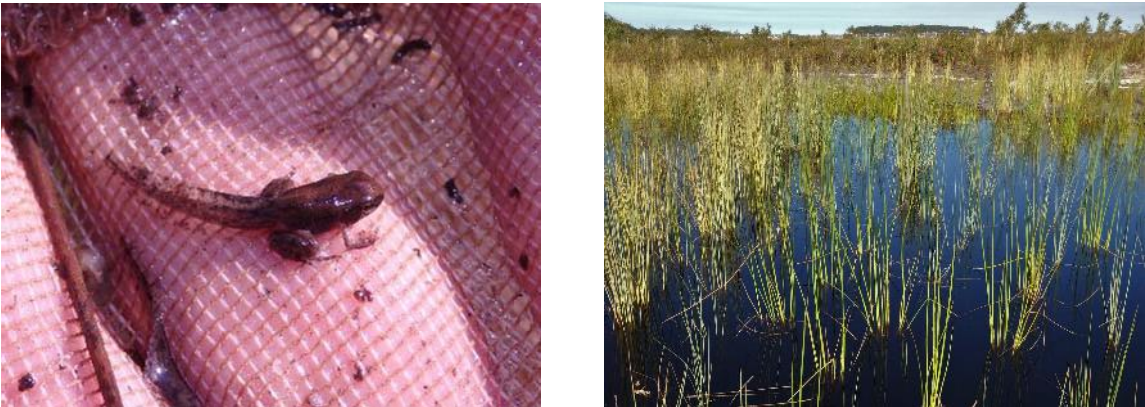


Figure 5: Wallum Froglet and Created Wallum Sedge Frog Ponds in Precinct 2

2.5 Wallum Sedge Frog Research

During the reporting period, Stockland Development Pty Ltd has provided \$50,000 funding to The University of Queensland (UQ) to support research on the Wallum Sedge Frog and other wallum-dependent frog species. This funding is being used to develop and trial acoustic monitoring techniques for assessing the presence/absence and relative abundance of Wallum Sedge Frog and other frog species (including other threatened wallum frog species and potential competitor species such as the Common Sedge Frog (*Litoria fallax*) and Striped Rocketfrog (*Litoria nasuta*). These techniques will provide a cost-effective method for long-term monitoring of Wallum Sedge Frog populations in areas of intact, disturbed and rehabilitated/improved habitat across the species' range (including remote and difficult-to-access sites where the status of Wallum Sedge Frog and other wallum frogs is poorly known). The techniques being developed will also be used to monitor presence/absence and relative abundance of potential competitor species at disturbed and undisturbed sites helping clarify the threat posed by invasive competitor species to Wallum Sedge Frog and other wallum frog species.

Research undertaken by UQ (and funded by Stockland) will support a number of actions identified in the 'National Recovery Plan for the Wallum Sedge Frog and other wallum-dependent frog species', including:

- Action 3: Acquiring additional information on threats (including competition from invading species); and
- Action 6: Monitoring wallum frog numbers and distribution.

Work on developing acoustic monitoring techniques completed to date includes:

- Deployment of passive acoustic recorders within areas of intact disturbed and Wallum Sedge Frog habitat (including sites with various relative abundances of competitor species).
- Successful development and calibration of recognition software for the detection of Wallum Sedge Frog, Common Sedge Frog, Striped Rocket Frog and Wallum Froglet.
- Preliminary analysis of call data collected during 2016.

Results so far show that the techniques being developed by UQ researchers can be used successfully to address the recovery actions mentioned above. Research results have also been used to support funding applications to further the scope of Wallum Sedge Frog research related to recovery of the Wallum Sedge Frog including these and other actions identified in the National Recovery Plan for the Wallum Sedge Frog.

2.6 Community Stewardship Program

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

As part of the Community Stewardship Program, World Wetlands Day 2016 activities included lectures to 200 school children by Dr Ed Myer. This was followed by a field trip to site where students learnt about water quality and ecology conducting fish surveys.



Figure 6: World Wetlands Day 2016

A similar event was held for National Tree Day 2016 where students learnt from the Kabi Kabi First Nation People, traditional uses for flora as food, medicinal and functional living purposes. This was followed by the planting a ‘bush tucker’ garden at the local school.

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

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

Table 1: Community Stewardship Program Activities

Activity	Outcome
World Wetland Day (2 February 2016)	Engagement and education of Unity College students on aquatic environments with a talk from frog expert Dr Ed Meyer followed by a field visit to practice water quality monitoring and macroinvertebrate surveys.
National Tree Day (29 July 2016)	Community Education of bush foods used by the Kabi Kabi First nation People and the planting of a native ‘bush tucker’ garden at the local Unity College.
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

Activity	Outcome
	Sedge Frog Offsets site has also been established at Little Italy.
Training rural fire brigade on traditional bush fire methods	<p>For the first time since traditional times, Kabi Kabi people backed by the local Rural Fire Brigades, burnt part of the future conservation land at Aura (Caloundra South) according to cultural principles and practices. This was conducted on degraded former pine plantation and cattle grazing land as part of rehabilitation activities. A video was produced as part of the training.</p> <p>https://vimeo.com/183412469?ref=em-share</p>
Stock Exclusion Fencing	In 2015 cattle exclusion fencing was installed around the Environmental Protection Zone, and in 2016 this was expanded to exclude cattle from the Bells Creek North riparian zone. Exclusion of cattle from future conservation areas will enable early natural regeneration to commence.

2.7 Sediment Basins and Construction Management

During construction water quality has been managed through a combination of traditional sediment basins and high efficiency sediment basins, with all captured runoff treated to meet the nominated water quality performance criteria outlined in the Water Quality Management Plan.

A total of seven sediment basins (both high efficiency and traditional sediment basins) were installed and operating during the reporting period.

The design and operation of high efficiency sediment basins is continually being improved to adapt to local soil conditions and construction activities. A hybrid design of high efficiency sediment basin has been developed and implemented on site, which is capable of treating runoff continuously during a rainfall event, as well as capturing and storing runoff for treatment following cessation of the rainfall event, as per the design of a traditional sediment basin.

This hybrid design has been implemented to address site specific conditions, particularly the presence of low pH surface runoff, which typically requires additional treatment and retention time to ensure downstream discharge requirements are achieved. During these early phases of the project the hybrid design offers an increased level of protection to sensitive receiving environments and provides the flexibility to refine the operation of the high efficiency sediment basins. High efficiency sediment basins have also been designed to have a kidney shape to accommodate a wetland function following completion of construction.



Figure 7: Hybrid Design High Efficiency Sediment Basin with Kidney Shape and Increased Storage Capacity Installed in Precinct 2.



Figure 8: High Efficiency Sediment Basin Installed as Part of Precinct 2 Works



REVISION	DESCRIPTION	APPROVED BY	DATE
A	ORIGINAL ISSUE	KR	25/02/17



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KR	KR	25/02/17
REQ / SIGNATURE (IF REQUIRED)		
KYE ROBSON		
CPESC: 5395		

PROJECT	AURA	
DRAWING TITLE	SEDIMENT BASIN LOCATION PLAN	
PROJECT No	DRAWING No	REVISION
17-0012	D100	A

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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 and were in effect during the reporting period. Compliance with the approved documents is reported on within the ACR

Current approved EPBC documents are available from <https://www.stockland.com.au/residential/qld/aura/resources>

Table 2: Approved Documents in effect during the Reporting Period

Condition	Document Name	Revision	Applicable Reporting Period	Compliance Assessment
1	Environmental Management Plan	Revision 6 (November 2013) - Approved by DotEE on 26 November 2013	Entire reporting period: 15 Jan 2016 – 14 Jan 2017	The Environmental Management Plan comprises three documents: <ul style="list-style-type: none"> • 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 D (December 2015) - Approved by DotEE on 23 December 2015 (now superseded)	15 Jan 2016 - 17 Aug 2016	See Appendix A
		Revision E (August 2016) – Issued to DotEE on 12 August 2016 under 'revised management plan condition' 12 of the EPBC approval and approved 18 th August 2016	18 Aug 2016 – 14 Jan 2017	
4	Water Quality Management	Revision 4 (November 2015) - Approved by DotEE on 24	15 Jan 2016 – 17 Aug 2016	See Appendix A

Condition	Document Name	Revision	Applicable Reporting Period	Compliance Assessment
	Plan	December 2015		
		Revision 5, June 2016 – Issued to DotEE on 10 August 2016 under ‘revised management plan condition’ 12 of the EPBC approval and approved 18 August 2016	18 Aug 2016 – 14 Jan 2017	
2	Environmental Protection Plan 14 July 2015	Revision 2 (July 2015) - Approved by DotEE on 21 August 2015	Entire reporting period: 15 Jan 2016 – 14 Jan 2017	Refer to Section 4
3	Precinct 1/ Part Precinct 3/4 and Associated Works Construction Environmental Management Plan 23 June 2014	Revision 1 (June 2014) - Approved by DotEE on 4 July 2014. Bulk earthworks and civil construction was completed in April 2016, signally the closure of the Precinct 1/ Part Precinct 3/4 and Associated Works Construction Environmental Management Plan.	14 Jan 2016 – 30 April 2016	See Appendix A
3	Precinct 2/ Part Precinct 3/4 and Associated Works Construction Environmental Management Plan May 2015	Revision B (May 2015) - Approved by DotEE on 25 August 2015. Revision C (May 2016) – Approved by DotEE on 8 June 2016. Revision D (August 2016) – Issued to DotEE on 10 August 2016 under ‘revised management plan condition’ 12 of the EPBC approval and approved 18 August 2016	15 Jan 2016 – 7 June 2016 8 June 2016 – 17 Aug 2016 18 Aug 2016 – 14 Jan 2017	See Appendix A
9	Wallum Sedge Frog Contingency and Offset Strategy	Submitted to DotEE 15 December 2015 and was accepted on 8 June 2016.	8 June 2016 – 14 Jan 2017	See Appendix A

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 Corrective actions, and the parties responsible for 	Compliant	<p>Stockland submitted the Environmental Management Plan to DotEE on 6 November 2013, prior to commencement of the action on 15 January 2015.</p> <p>DotEE 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 to EPBC Condition 3).</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> <p>The first audit required under Condition 13 is due in 2018.</p>

Condition Number/ Reference	Condition	Is the project compliant with this condition?	Evidence/Comments
	<p>implementing Corrective actions.</p> <p>f) a vegetation management and rehabilitation plan/strategy</p> <p>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> <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 Environmental Management Plan will be reviewed within 6 months of completion of the audit.</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 DotEE on 14 June 2015, within 6 months of commencement of the action on 15 January, 2015.</p> <p>DotEE 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>
3	<p>Prior to the Commencement of the action within each Precinct, the person undertaking the Action must submit to the Minister for</p>	Compliant	<p>Stockland submitted the Precinct 1 Part Precinct 3/4 and Associated Works CEMP to DotEE on 12 March 2014.</p>

Condition Number/ Reference	Condition	Is the project compliant with this condition?	Evidence/Comments
	<p>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: <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. 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, 		<p>DotEE 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 DotEE on 26 March, 2015, prior to commencement of the action within Precinct 2 in December 2015.</p> <p>DotEE provided a letter to Stockland on 25 August 2015 approving Revision B of the plan dated May 2015.</p> <p>The current version of the Precinct 2 Part Precinct 3/4 and Associated Works CEMP is Revision C dated May 2016, which was approved by DotEE on 8 June 2016.</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>and pest and weed management to protect Matters of National Environmental significance;</p> <p>e) The objectives, methods, parameters and monitoring strategies to be used;</p> <p>f) Performance criteria for each set of parameters at which point Corrective actions are required to be implemented;</p> <p>g) Corrective actions, and/or mechanisms for developing Corrective actions, and the parties responsible for implementing Corrective actions.</p> <p>The Commencement of the action in a Precinct must not occur until the PCEMP for the relevant Precinct has been approved by the Minister, or another PCEMP approved by the Minister includes the proposed works. Approved PCEMPs 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>	Compliant	<p>Stockland submitted the Water Quality Management Plan to DotEE on 12 March 2014, prior to commencement of the action on 15 January 2015.</p> <p>DotEE provided a letter to Stockland on 25 March 2014</p>

Condition Number/ Reference	Condition	Is the project compliant with this condition?	Evidence/Comments
	<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; g) Corrective actions, and/or mechanisms for developing corrective actions, and the parties responsible for implementing corrective actions; 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 i) Demonstrate adaptive management mechanisms reflecting contemporary industry best practice are being implemented throughout the period of this approval. <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</p>		<p>approving Revision 3 (February 2014) of the plan, stating that it meets the requirements of Condition 4.</p> <p>The current version of the Water Quality Management Plan is Revision 5 dated June 2016, which was approved by DotEE on 1 August 2016.</p> <p>Appendix A, Table A5 lists all the requirements of the Water Quality 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>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>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>		
5	<p>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.</p>	Compliant	<p>Stockland submitted the Wallum Sedge Frog Management Plan to DotEE 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>DotEE issued a letter to Stockland on 10 December 2013 confirming that Condition 5 of the approval has been satisfied.</p> <p>The latest version of Figure 2.2d is provided in Appendix B.</p>
6	<p>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.</p>	Compliant	<p>At the end of the ACR reporting period, 14.58 ha of Wallum Sedge Frog habitat has been removed. A summary of Wallum Sedge Frog habitat created, retained and removed is provided in Appendix C.</p>

Condition Number/ Reference	Condition	Is the project compliant with this condition?	Evidence/Comments
7	<p>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 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>	Compliant	<p>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 confirm the extent of Wallum Sedge Frog habitat within Precincts 1, 2, 3, 4 and 5.</p> <p>A summary of Wallum Sedge Frog habitat removed, retained and created in each precinct during the 2016/2017 compliance reporting period is provided in Appendix C.</p> <p>Wallum Sedge Frog ponds have been created in the Frog Zone and Frog Buffer adjacent to Precincts 2, 4, and 5 in advance of commencement of construction of the development in the relevant Precincts. Photos of the completed frog ponds in Precincts 3 and 4 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) a review of the existing baseline <i>L.olongburensis</i> population and distribution within the Subject Site; b) a scientifically robust methodology for monitoring 	Compliant	<p>Stockland submitted the Wallum Sedge Frog Management Plan to DotEE on 6 December 2013, prior to commencement of the action on 15 January 2015.</p> <p>DotEE 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 current version of the Wallum Sedge Frog Management Plan is Revision D dated August 2016, which was approved by DotEE on 10 August 2016.</p> <p>The first audit required under Condition 13 is due in 2018.</p>

Condition Number/ Reference	Condition	Is the project compliant with this condition?	Evidence/Comments
	<p><i>L.olongburensis</i> population and Created Compensatory Habitat success within the Subject Site;</p> <p>c) commitment to the construction of habitat ponds for the <i>L.olongburensis</i> concurrent with the commencement of works within each precinct;</p> <p>d) a <i>L.olongburensis</i> population and Created Compensatory Habitat monitoring program with readily measurable objectives, performance indicators and scientifically robust Success Criteria;</p> <p>e) timeframes for reporting and implementation;</p> <p>f) Corrective Actions, and/or mechanisms for developing Corrective Actions, and the parties responsible for implementing Corrective Actions;</p> <p>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;</p> <p>h) an outline of the measures that will be undertaken to ensure that the Created Compensatory Habitat will be protected in perpetuity;</p> <p>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> <p>The action must not commence until the Wallum Sedge Frog Management Plan is approved by the Minister. The approved</p>		<p>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>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 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 DotEE on 15 December 2015, within one year of commencement of the action on 15 January 2015.</p> <p>DotEE issued a letter to Stockland on 8 June 2016 stating that it meets the requirements of condition 9.</p> <p>Appendix A, Table A7 lists the requirements of the 'Wallum Sedge Frog (<i>L.olongburensis</i>) Contingency and Offset Strategy' and states how the requirements have been met.</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. 	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>

Condition Number/ Reference	Condition	Is the project compliant with this condition?	Evidence/Comments
	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.		
11	The person undertaking the action must not provide creek access within the Riparian Corridor.	Compliant	<p>No creek access has been provided or is provided for under the master plan layout.</p> <p>A number of measures have been undertaken as part of the landscape design in Precinct 1 and 2 to deter inappropriate activities or access to the Environmental Protection Zone, which includes the Riparian Corridor. These include:</p> <ul style="list-style-type: none"> • Dense planting with endemic species at the verge of the Environmental Protection Zone and the adjacent development to restrict access. • Signage in specific locations to educate the public on the importance of the conservation areas and to restrict access. • Fencing in specific locations to restrict access.
12a	<p>The person taking the action may choose to revise a management plan or program approved by the Minister under conditions 1, 3, 4 and 8 without submitting it for approval (including approval under section 143A of the Environment Protection and Biodiversity Conservation Act, 1999 (cth)), if the taking of the action in accordance with the revised plan or program would not reduce the ability to identify or measure any impact of the action and would not be likely to have a new or increased impact. If the person taking the action makes this choice they must:</p> <ol style="list-style-type: none"> I. Notify the Department in writing that the approved 	Compliant	<p>The following approved plans were revised under the superseded condition 12 requirements, which required that all amendments to approved plans are submitted to DotEE for review and approval:</p> <ul style="list-style-type: none"> • Precinct 2 Part Precinct 3/4 and Associated Works CEMP (Revision C, May 2016) – Approved by DotEE on 8 June 2016. <p>Condition 12 of the approval was amended and approved by DotEE on 5 August 2016. The following plans have been updated under the 'revised management plan</p>

Condition Number/ Reference	Condition	Is the project compliant with this condition?	Evidence/Comments
	<p>plan or program has been revised and provide the Department with:</p> <ol style="list-style-type: none"> i. An electronic copy of the revised pan or program; ii. an explanation of the differences between the revised plan or program and the approved plan or program; and iii. the reasons the person taking the action considers that taking the action in accordance with the revised plan or program would not be likely to have a new or increased impact. <p>II. Declare in writing a date on which the revised plan or program will first be implementation must be at least 28 days after sub-condition 12 a I. is satisfied unless a lesser period is approved by the Minister.</p>		<p>condition’.</p> <ul style="list-style-type: none"> • Wallum Sedge Frog Management Plan (Revision E, August 2016) – Issued to DotEE on 12 August 2016 • Precinct 2 Part Precinct 3/4 and Associated Works CEMP (Revision D, August 2016) – Issued to DotEE on 10 August 2016 • Water Quality Management Plan (Revision 5, 15 June 2016) – Issued to DotEE on 10 August 2016.
12b	<p>The person taking the action may revoke their choice under condition 12 a at any time by giving such notice, the person taking the action must implement the plan or program previously submitted for approval and approved by the Minister.</p>	Not applicable	No request has been made to revoke an approved plan.
12c	<p>If the Minister gives a notice to the person taking the action that the Minister is satisfied that the taking of the action in accordance with the revised plan or program would be likely to have a new or increased impact, then: Condition 12 a does not apply, or ceases to apply, in relation to the revised plan or program; and The person taking the action must implement the plan or program previously submitted for approval and approved by the Minister.</p>	Not applicable	No request has been made by the Minister under Condition 12c.

Condition Number/ Reference	Condition	Is the project compliant with this condition?	Evidence/Comments
	<p>To avoid doubt, this condition does not affect any operation of sub-conditions 12 a and 12 b in the period before the day the notice is given.</p> <p>At the time of giving the notice the Minister may also notify that, for a specified period of time, sub-condition 12 a does not apply for one or more specified plans or programs required under the approval.</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 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.</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 January 2018, with an independent audit to be carried out by 15 April 2018, and submitted by 15 July 2018.</p>
14	<p>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</p>	Compliant	<p>The 2015/2016 ACR was submitted to DotEE on 24 March 2015.</p>

Condition Number/ Reference	Condition	Is the project compliant with this condition?	Evidence/Comments
	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.		The 2016/2017 ACR 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, therefore this condition is not applicable.
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	<p>Stockland issued a letter to DotEE on 18 December 2014 advising that the commencement of the action occurred on 15 December 2014.</p> <p>Stockland issued subsequent advice to DotEE 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>DotEE have acknowledged and confirmed the revised commencement date in email correspondence dated 17 November, 2015, and have consequently adjusted the due</p>

Condition Number/ Reference	Condition	Is the project compliant with this condition?	Evidence/Comments
			date of subsequent approved reports/plans.
17	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.	Compliant	All approved plans and documents have been published on Stockland's website within 1 month of being approved, including approved revisions. https://www.stockland.com.au/residential/qld/aura/resources
18	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 on the Department's website. The results of audits may also be publicised through the general media.	Compliant	The Caloundra South project maintains a robust document management system that provides a controlled and secure repository for all project documentation. No requests were made by DotEE during the compliance reporting period for records substantiating activities associated with, or relevant to, the conditions of approval.
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	Not applicable	No revisions were requested by DotEE during the reporting period.

Condition Number/ Reference	Condition	Is the project compliant with this condition?	Evidence/Comments
	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.		

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 will report on works undertaken during the Acceleration Phase (2-4 years). The official launch of the Caloundra South project as "Aura – City of Colour", in October, 2015, marked 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 A1: 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 Stewardship 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 Stewardship Group has quarterly meetings and has undertaken the following initiatives throughout the reporting period:</p>

Section	Id.	Commitment	Is the project compliant with this commitment?	Evidence/Comments
				<ul style="list-style-type: none"> Two community awareness-raising events have been held, involving students from Unity College and members from groups in the Community Advisory Stewardship Group. The events were scheduled around World Wetlands Day (February 2016) and National Tree Day (July 2016) and involved tree planting and educational talks. The group has identified and implemented a number measures on site to facilitate environmental restoration including expanding stock exclusion fencing to now include the entire length of the Environmental Protection Zone and the Bells Creek north riparian zone. <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 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	<p>Stockland and its key consultants presented the findings of the 2015 ACR at a public forum in March 2016. The 2015 ACR was uploaded to Stockland's website and made available to the public on 24 March 2016.</p> <p>Development updates are provided quarterly at the Community Advisory Stewardship Group meetings.</p>

Section	Id.	Commitment	Is the project compliant with this commitment?	Evidence/Comments
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 continued engagement with the Community Stewardship Advisory Group relating to proposed uses for the Environmental Education Centre. Stockland has also worked with students from the University of the Sunshine Coast researching all aspects of the proposed facility including opportunities and constraints, commercial viability and master planning design. Stockland has also engaged an independent sustainability consultant to commence the preparation of a business plan for the centre.
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	Compliant	Stockland conducted a workshop through the Community Stewardship Program relating to proposed suitable uses. A community group survey was also conducted to obtain anonymous feedback into proposed uses that is being included within business planning for the 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	The Aura website includes a range of resources for new residents on the environmental values of the Aura site, and how to live sustainably at Aura. Stockland has prepared a "Welcome Pack" for new residents which is available on Stockland's website. The Aura Welcome Pack includes information about the history of the Aura site, fact sheets on being water, energy and waste smart, the Community Resilience Plan

Section	Id.	Commitment	Is the project compliant with this commitment?	Evidence/Comments
				and an emergency checklist. https://www.stockland.com.au/residential/qld/aura/resources A video is also available on the Stockland website providing an overview of the environmental features of the area. The Living Sustainably Program will be further developed once there is a sufficient resident population.
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 DotEE on 30/10/2015.
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	Stockland are currently working with the following universities and research organisations: - University of the Sunshine Coast on trialling fire management techniques for rehabilitation. - 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) -University of Sunshine Coast research into opportunities for the Environmental Education Centre through student participation
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 and Catchments to undertake water quality monitoring at two locations within Bells Creek downstream of the development.

Section	Id.	Commitment	Is the project compliant with this commitment?	Evidence/Comments
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.
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	Progress on achieving the actions of the Environmental Engagement Plan is reported in this ACR and associated community forum presentation. An on-line survey was conducted in June and July 2016 with members of the Aura Community Stewardship Advisory Group seeking anonymous feedback on the program including key activities, events and priorities for the group. Key insights are being used for the adaptation and development of next stages of the program.

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 have been implemented during the reporting period.

Table A2: 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. Civil subdivision works commenced in Precinct 1 on 1 September 2015 and the first plan subdivision was registered on 10 November 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 management details for these areas. The Precinct 1 Environmental Rehabilitation Plan</p>

Section	Id.	Commitment	Is the project compliant with this commitment?	Evidence/Comments
				<p>provides for the management and monitoring of 6.201ha. Baseline studies 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 Conservation Infrastructure Agreement entered into between Stockland, Sunshine Coast Council and Queensland State Government. Monitoring and reporting requirements will commence during the On Maintenance period, as per the requirements of the Conservation Infrastructure Agreement.</p> <p>Precinct 2 The Precinct 2 Environmental Rehabilitation Plan was submitted to the Economic Development Queensland on 26th March 2016 and was approved under Compliance Assessment on 27 May 2016. Civil subdivision works commenced in Precinct 2 on 18 May 2016, and the first plan of subdivision was registered on 12 October 2016. In accordance with the requirements of the Approved Environmental Protection Plan and Conservation Infrastructure Agreement, implementation of the Precinct 2 Environmental Rehabilitation Plan will commence within 12 months of registration of the first plan of subdivision.</p>

Section	Id.	Commitment	Is the project compliant with this commitment?	Evidence/Comments
				<p>The Precinct 2 Environmental Rehabilitation Plan outlines management and monitoring requirements for 14 HMU's encompassing 97.4 ha. Environmental rehabilitation treatments to be applied include remnant enhancement, assisted regeneration and reconstruction as well as the creation and augmentation of Wallum Sedge Frog habitat.</p> <p>As per the requirements of EPBC 2011/5987 Condition 7, Wallum Sedge Frog ponds were created in the frog zone of Precinct 2 in advance of commencement of construction of the development within this Precinct. At the end of the reporting period, a total of 16.4ha of Wallum Sedge Frog habitat has been created within the Frog Zone, Frog Buffer and Riparian Zone of Precinct 2.</p>

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. All bulk earthworks and civil construction activities under this Precinct CEMP were completed in April 2016, signifying the closure of the CEMP. Therefore this ACR reports on the period from 15 January 2016 to 30 April 2016.

Table A3: 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	<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; • 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	<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 Reports.</p> <p>Works associated with this CEMP are not within the Bells Creek catchment.</p>
	P1-ESC	Design erosion and sediment controls in accordance	Compliant	The Soil Erosion and Sediment Control Engineering

Section	Id.	Commitment	Is the project compliant with this commitment?	Evidence/Comments
	2	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).		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.

Section	Id.	Commitment	Is the project compliant with this commitment?	Evidence/Comments
	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.

Section	Id.	Commitment	Is the project compliant with this commitment?	Evidence/Comments
	P1-ESC 10	<p>High Efficiency and traditional sediment basins will be installed on site to capture all runoff from disturbed areas throughout construction.</p> <p>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).</p> <p>Design rainfall depth of 125mm to be adopted for all sediment basin design.</p> <p>Sediment basins will be situated outside of retained habitat areas (frog conservation zone, waterway buffer zone and Environmental Protection Zone (EPZ)) and will not be permitted to flow into or through retained conservation zones.</p> <p>The use of high efficiency sediment basins vs. traditional sediment basins will be used in areas of greater continual disturbance, i.e. Precinct 1.</p>	Compliant	High efficiency and traditional sediment basins have been installed in accordance with Erosion and Sediment Control Plans.
	P1-ESC 11	<p>Regular monitoring off all erosion and sediment control measures will be undertaken by the Principal Contractor and Superintendent including:</p> <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 rain events (greater than 25mm in 24 hours); • Daily measurement of sediment basin turbidity, pH, Electrical Conductivity (EC) and Dissolved Oxygen (DO) within sediment basins; • Weekly measurements of TSS and nutrients at 	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 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.

Section	Id.	Commitment	Is the project compliant with this commitment?	Evidence/Comments
		<ul style="list-style-type: none"> the primary discharge points Rainfall will be recorded at 9am each working day; and Real time turbidity monitoring. 		
	P1-ESC 12	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.	Compliant	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.
	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	All environmental reporting requirements are included in the Construction Contractor's Monthly Environment Report.

Section	Id.	Commitment	Is the project compliant with this commitment?	Evidence/Comments
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.

Section	Id.	Commitment	Is the project compliant with this commitment?	Evidence/Comments
	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: <ul style="list-style-type: none"> • 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.

Section	Id.	Commitment	Is the project compliant with this commitment?	Evidence/Comments
	P1-ASS 6	<p>Corrective actions following the detection of an acid sulphate soils may include:</p> <ul style="list-style-type: none"> 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	<p>Regular reports will be provided to the relevant authority and community as required by the Development Approval. These reports will outline:</p> <ul style="list-style-type: none"> 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	<p>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.</p> <p>Documentation of onsite testing is held by the Construction Contractor. There have been no reports of ASS being encountered during construction to date.</p>
Wallum Sedge Frog	P1-WSF 1	Partial retention of existing Wallum Sedge Frog habitat (polygon 80, Figure B.2) located within the EPZ;	Compliant	A total of 1.1 ha of habitat patch 80 has been retained and 0.6ha has been removed.
	P1-WSF 2	Provision of buffer between retained Wallum Sedge Frog 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.

Section	Id.	Commitment	Is the project compliant with this commitment?	Evidence/Comments
	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 and the adjacent development was undertaken in accordance with the Environmental Rehabilitation Plan and Landscape Design Documentation. Species used in revegetation comprise native and endemic species common in similar existing habitat on site.
	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 Wallum Sedge Frog 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 Wallum Sedge Frog 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).

Section	Id.	Commitment	Is the project compliant with this commitment?	Evidence/Comments
	P1-WSF 7	Maintain natural groundwater hydroperiod and other water chemistry aspects (particularly pH and tannin levels) of retained habitat areas;	Compliant	<p>Precinct 1 supports 1.1ha of retained Wallum Sedge Frog habitat. Monitoring of water quality and depth of retained habitat areas has been conducted in accordance with the requirements of the Wallum Sedge Frog Management Plan (2015).</p> <p>Monitoring of water quality and depth found that retained habitat in Precinct 1 showed elevated pH and low tannin staining. Further monitoring is required to assess whether there are any impacts to the Wallum Sedge Frog population in retained habitat in Precinct 1. However, notwithstanding initial results, proactive corrective actions were implemented and finalised by 29 January 2016 to further improve the separation between stormwater infrastructure and Wallum Sedge Frog habitat. Corrective actions involved the improved excavation of the drainage swale to increase drain depth and batter heights to reduce the hydraulic connection between the stormwater drainage swale and Wallum Sedge Frog habitat during times of high rainfall. Following implementation of corrective actions native sedges have colonised the drain well and drain embankment levels improved.</p> <p>Since the implementation of corrective actions, no Wallum Sedge Frog surveys have occurred across the site due to low rainfall conditions. Monitoring for the presence of the Wallum Sedge Frog and key habitat attributes (pH and other frog and aquatic species) will continue as per the approved WSFMP (August 2016), and the need for further corrective actions will be reviewed once more data is received.</p>

Section	Id.	Commitment	Is the project compliant with this commitment?	Evidence/Comments
	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	Compliant	<p>In Precinct 1, no recreational activities are permitted within the Environmental Protection Zone, which contains retained frog habitat.</p> <p>Following completion of construction, a number of measures have been undertaken as part of the landscape design to deter inappropriate activities or access to the Environmental Protection Zone. These include</p> <ul style="list-style-type: none"> • Dense planting with native and endemic species at the verge of the Environmental Protection Zone and the adjacent development to restrict access • Signage in specific locations to educate the public on the importance of the conservation areas and to restrict access. • Fencing in specific locations to restrict access..

Section	Id.	Commitment	Is the project compliant with this commitment?	Evidence/Comments
	P1-WSF 10	Taking practical measures to reduce lighting in proximity to areas of retained Wallum Sedge Frog habitat where possible	Compliant	<p>During construction, light exposure in close proximity to retained Wallum Sedge Frog habitat was minimal. No construction works were permitted on site after 6pm and site compounds were located away from retained habitat.</p> <p>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.</p> <p>During the reporting period, no lighting has been installed in close proximity to Wallum Sedge Frog habitat in public open space areas.</p> <p>Street lighting has been installed to meet required standards. LED streetlights have been used throughout the community, reducing light spill to areas outside of the road corridor.</p>
	P1-WSF 11	Until the off-maintenance period, monitoring will be undertaken in accordance with the Wallum Sedge Frog Management Plan.	Not applicable	No areas have commenced formal On-Maintenance as per the requirements of the Conservation Infrastructure Agreement.
	P1-WSF 12	<p>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).</p> <ul style="list-style-type: none"> Instigate rehabilitation efforts immediately at any area accidentally cleared in accordance 	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

Section	Id.	Commitment	Is the project compliant with this commitment?	Evidence/Comments
		<ul style="list-style-type: none"> with directions from the Superintendent. Specific corrective actions associated with the retained Wallum Sedge Frog habitat in Precinct 1 are to be implemented in accordance the requirements of the Wallum Sedge Frog Management Plan. 		no known instances of unplanned clearing in conservation areas.
	P1-WSF 13	Six monthly reporting will be undertaken of all monitoring activities for Wallum Sedge Frog.	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 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 Environmental Protection Zone 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 Environmental Protection Zone.

Section	Id.	Commitment	Is the project compliant with this commitment?	Evidence/Comments
	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 for traffic management. 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	The general public and livestock are not permitted to enter HMU's that are undergoing ecological enhancement in accordance with approved Environmental Rehabilitation Plans.

Section	Id.	Commitment	Is the project compliant with this commitment?	Evidence/Comments
				<p>During construction, fencing was installed to exclude public access and cattle from entering precincts under construction. 'No go' signs were installed around the Environmental Protection Zone and Conservation Zones.</p> <p>Following completion of construction, a number of measures have been undertaken as part of the landscape design to deter inappropriate activities or access to HMU's undergoing ecological enhancement. These include:</p> <ul style="list-style-type: none"> • Dense planting with native and endemic species at the verge of conservation zones and the adjacent development to restrict access • Signage in specific locations to educate the public on the importance of the conservation areas and to restrict access. • Fencing in specific locations to restrict access
	P1-VM 8	Rehabilitation within HMU's in the EPZ in Precinct 1 will be implemented in accordance with an Environmental Rehabilitation Plan.	Compliant	The Precinct 1 Environmental Rehabilitation Plan was approved under Compliance Assessment by the Minister for Economic Development Queensland on 2 June 2015. Implementation of the Environmental Rehabilitation Plan will be undertaken in accordance with the Environmental Protection Plan and the Conservation Infrastructure Agreement entered into between Stockland, Sunshine Coast Council and the Queensland State Government.

Section	Id.	Commitment	Is the project compliant with this commitment?	Evidence/Comments
	P1-VM 9	Visual and photographic monitoring will be conducted to evaluate the effectiveness of the enhancement strategies within HMU's in the EPZ.	Not Applicable	<p>In accordance with the Precinct 1 Environmental Rehabilitation Plan, monitoring of rehabilitation of Habitat Management Units will be undertaken during the three year on-maintenance period.</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 Conservation Infrastructure Agreement and Approved Environmental Protection Plan.</p>
	P1-VM 10	<p>The following corrective actions are required 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. • 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 	Not applicable	There are no known instances of clearing outside the delineated approved areas; therefore corrective actions have not been triggered.

Section	Id.	Commitment	Is the project compliant with this commitment?	Evidence/Comments
		<p>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. 		
	P1-VM 11	<p>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).</p>	Not applicable	<p>No areas have commenced formal On-Maintenance as per the requirements of the Conservation Infrastructure Agreement. Formal reporting will commence when the On-maintenance period has started as per the requirements of the Conservation Infrastructure Agreement.</p>
Pest Management	P1-P 1	<p>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.</p>	Compliant	<p>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.</p>
	P1-P 2	<p>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.</p>	Compliant	<p>During construction, domestic animals were prohibited from the construction work site. 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.</p> <p>Following completion of construction, a number of measures have been undertaken as part of the</p>

Section	Id.	Commitment	Is the project compliant with this commitment?	Evidence/Comments
				<p>landscape design to deter inappropriate activities or access to the Environmental Protection Zone. These include</p> <ul style="list-style-type: none"> Dense planting with native and endemic species at the verge of the Environmental Protection Zone and the adjacent development to restrict access Signage in specific locations to educate the public on the importance of the conservation areas and to restrict access. Fencing in specific locations to restrict access
	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 Wallum Sedge Frog 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.

Section	Id.	Commitment	Is the project compliant with this commitment?	Evidence/Comments
	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	<p>Implement the following weed management measures:</p> <ul style="list-style-type: none"> • Treatment of existing weeds within the construction site. • Limiting machinery access near retained vegetation, Wallum Sedge Frog 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 Sedge Frog 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	<p>The following weed management measures have been implemented:</p> <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 Racecourse Road site access. • All fill material has been sourced from within the site.

Section	Id.	Commitment	Is the project compliant with this commitment?	Evidence/Comments
	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 Sedge Frog habitat contained within. These areas of edge planting are to be at least 5 metres in width.	Compliant	In accordance with the Environmental Rehabilitation Plan and landscape documentation, a vegetative buffer has been planted at the verge of the Environmental Protection Zone and the adjacent development using native and endemic species.
	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 Sedge Frog 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 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 <i>Phytophthora</i> , 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.

Section	Id.	Commitment	Is the project compliant with this commitment?	Evidence/Comments
	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 May 2016 and found no non-conformances. Construction activities under this CEMP reached Practical Completion in April 2016, therefore no further bi-annual system audits were undertaken.
	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 table of the ACR.

Section	Id.	Commitment	Is the project compliant with this commitment?	Evidence/Comments
	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	The Construction Contractor completed an audit of the CEMP in April 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.
	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 need to review this CEMP was assessed following completion of the 2015 ACR. No amendments were made to the CEMP following the review.</p> <p>Construction activities in Precinct 1 reached Practical Completion in April 2016, which also signals completion of this CEMP. No further reviews of this CEMP were undertaken.</p>

Precinct 2 and Part Precinct 3/4 CEMP

The Precinct 2 and Part Precinct 3/4 CEMP 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.

This ACR reports on compliance with Revision D of the CEMP dated August 2016. Compliance with Revision B (May 2015) and Revision C (May 2016) are reported on by exception where relevant.

Table A4: Compliance Assessment of the Precinct 2 and Part Precinct 3/4 CEMP (Revision D, August 2016)

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 	Compliant	<p>Prior to the dewatering of sediment basins, all captured runoff was treated to meet the nominated water quality performance criteria for all rain events up to and including the relevant design rainfall event. Sediment basin water quality monitoring results are provided in the Construction Contractor's Monthly Environment Report.</p> <p>Turbidity at the downstream Bells Creek North site remained below the upstream site at all times during the reporting period, with the exception of 2 and 3 June. A site visit was undertaken on 3 June 2016 by BMT WBM to investigate the cause of the increased turbidity at the downstream site (BN1). This investigation found that turbid water was entering Bells Creek from a swampy area just upstream of the monitoring station, with relatively low turbidity in Bells Creek North upstream of this point. This indicated that construction activities further upstream in Bells Creek North catchment were not the cause of the turbid spike at the downstream site.</p>

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		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.		Result of turbidity monitoring in Bells Creek are reported on a monthly basis and compiled within the Annual Water Quality Monitoring Report.
	P2-ESC 3	If during a rain event, the above discharge criteria have been exceeded, and downstream water quality are within the required criteria, then no further corrective action is required. If performance criteria have been exceeded, then corrective actions are to be implemented refer section 5.1.5.	Compliant	Prior to the dewatering of sediment basins, all captured runoff was treated to meet the nominated water quality performance criteria. Sediment basin water quality monitoring results are provided in the Construction Contractor's Monthly Environment Report.
	P2-ESC 4	All testing is to be in accordance with the Water Quality Management Plan approved on the 25 March 2015, or latest approved version.	Compliant	All water quality testing has been undertaken in accordance with the Water Quality Management Plan.
	P2-ESC 5	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 6	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.

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	P2-ESC 7	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 8	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 9	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 the Construction Contractor's Monthly Environment Reports. Erosion and sediment controls have continued to remain in place until 70% groundcover has been achieved.
	P2-ESC 10	Divert clean flows around works areas and divert dirty flows for treatment prior to discharge.	Compliant	As per approved ESC plans, clean water flows are diverted away from the works zone via clean water drains and extremities bunds. Within the construction site, dirty water drains direct flows to sediment basins for treatment. All releases from sediment basins have met the nominated water quality criteria prior to discharge.
	P2-ESC 11	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.

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	P2-ESC 12	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.
	P2-ESC 13	<p>High efficiency and traditional sediment basins will be installed on site to capture all runoff from disturbed areas throughout construction.</p> <p>Traditional sediment basins will be designed in accordance with the Manual for Erosion and Sediment Control (SCRC 2008), and will have a design rainfall depth of 77mm over a 5 day period.</p> <p>High efficiency basins will be designed to treat storm events 0.5 times the peak 1 year ARI discharge.</p> <p>All captured runoff shall be treated.</p>	Compliant	<p>High efficiency and traditional sediment basins have been installed as per the Erosion and Sediment Control Plans.</p> <p>All high efficiency and traditional sediment basins have been designed and operated in accordance with the nominated requirements of the Approved CEMP in effect at the time the activity was undertaken.</p>
	P2-ESC 14	<p>Regular monitoring of all erosion and sediment control measures will be undertaken by the Principal Contractor and Superintendent including:</p> <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; 	Compliant	Construction Contractors complete 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.

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		<ul style="list-style-type: none"> ▪ Inspection of all ESC control measures after major rain events (greater than 25mm in 24 hours); ▪ 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. <p>At the cessation of use of temporary sediment control measures, natural runoff from the stabilised catchment is to be within the discharge limits specified in section 5.1.2 or, will not adversely impact the water quality in the receiving environment as confirmed by the relevant parties.</p>		
	P2-ESC 15	<p>If the performance Criteria are exceeded, the following corrective actions are required:</p> <ul style="list-style-type: none"> ▪ 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 	Compliant	Construction Contractors inspect 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.

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Groundwater		<p>thereafter.</p> <ul style="list-style-type: none"> The Principle Contactor shall review the erosion and sediment control strategy, identify opportunities for improvement and develop a strategy for ongoing development of the strategy. 		
	P2-ESC 16	<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	All environmental reporting requirements are included in the Construction Contractor's Monthly Environment Report.
	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	Sediment basins to be dewatered within 3 days	Compliant	Groundwater in sediment basins has been used for dust suppression or treated to meet the nominated water quality criteria. Where practicable sediment basins were dewatered within 3 days of cessation of the rain event.

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	P2-GW 3	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	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 4	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.
	P2-GW 4	No drainage of retained or created Wallum Sedge Frog breeding habitat	Compliant	There has been no drainage of any created or retained Wallum Sedge Frog breeding habitat. Monitoring of retained Wallum Sedge Frog habitat in Precinct 2 shows a variable water depth and hydroperiod indicative of Wallum Sedge Frog habitat as defined in the Draft referral guidelines for the vulnerable Wallum Sedge Frog <i>Litoria olongburensis</i> (2011, SEWPAC).
	P2-GW 5	To minimise potential negative impacts to groundwater quality, the following management structure will apply in order of preference: <ol style="list-style-type: none"> 1. Avoid 2. Reduce 3. Re-use 4. Treat 5. Dispose 	Compliant	Where possible, groundwater has been avoided by keeping excavations above the groundwater table. All groundwater encountered during construction works was managed in accordance with the groundwater management hierarchy and was re-used onsite for dust suppression or treated to meet the nominated water quality criteria and discharge from site.

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	P2-GW 6	All bores within catchments with active construction works will be sampled on a biannual basis, up to and for 12 months after active development works are completed in respective catchments.	Compliant	Biannual groundwater monitoring is conducted in accordance with the requirements of the Water Quality Management Plan and results are reported on an annual basis.
	P2-GW 7	All Sentinel and Control bores within catchments where there are active construction activities occurring will be sampled on a monthly basis.	Compliant	Monthly groundwater monitoring is conducted in accordance with the requirements of the Water Quality Management Plan and results are reported on a monthly basis and compiled within the Annual Water Quality Monitoring Report.
	P2-GW 8	Construction bores within catchments where construction activities are occurring and which are in close proximity (i.e. within 500m) to areas of active development works will be sampled on a monthly basis.	Compliant	Monthly groundwater monitoring is conducted in accordance with the requirements of the Water Quality Management Plan and results are reported on a monthly basis and compiled within the Annual Water Quality Monitoring Report.
	P2-GW 9	<p>Following the detection of an exceedance of a trigger level, corrective actions to be implemented may include:</p> <ul style="list-style-type: none"> ▪ Review of site construction management practices; ▪ Localised filling or excavation works to adjust land elevations; ▪ Changes to proposed re-vegetation and ecological enhancement strategies; ▪ 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 	Compliant	Groundwater results have not indicated that construction related impacts on groundwater have occurred requiring implementation of corrective actions.

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Acid Sulfate Soils		unusually low groundwater pH or the presence of dissolved metals at downstream monitoring locations.		
	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). 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.

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	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	Corrective actions following the detection of acid sulphate soils may include: <ul style="list-style-type: none"> ▪ 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: <ul style="list-style-type: none"> ▪ 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 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.

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Wallum Sedge Frog	P2-ASS 7	Regular reports will be provided to the relevant authority and community as required by the Development Approval. These reports will outline: <ul style="list-style-type: none"> 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	Avoid impacts of construction (both direct and indirect) on retained Wallum Sedge Frog habitat located in Precincts 2, 3 and 4 (if utilised for borrow material).	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 a buffer between retained frog habitat within the EPZ and the development, to provide suitable separation (in Precinct 2).	Compliant	As shown in Figure B1 of the Precinct 2/Part Precinct 3/4 and Associated Works CEMP (Calibre, 2015), the 'northern corridor' is being established along Lamerough Creek and incorporates created and retained wallum sedge frog breeding, foraging and movement habitat.
	P2-WSF 3	No direct construction related stormwater runoff if permitted to enter created or retained frog ponds	Compliant	Construction related stormwater is managed in accordance with the approved ESC plans which have been design to direct stormwater away from created and retained wallum sedge frog ponds. Prior to commencement of works, a senior ecologist reviews the ESC plans and conducts a site inspection to check the suitability of the proposed design with respect to the location of Wallum Sedge Frog habitat, to ensure that

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				<p>impacts are avoided or minimised and the required set back or physical separation is achieved.</p> <p>There have been no reported instances of construction related stormwater entering created or retained Wallum Sedge Frog breeding habitat.</p> <p>Construction related runoff events were assessed for two stormwater events in 2016, and results from both surveys indicated no construction water entering Wallum Sedge Frog breeding habitat in Precinct 2.</p>
	P2-WSF 4	Indirect discharge of construction related stormwater runoff is able to enter retained or created habitat (foraging habitat – not ponds) provided that prescribed water quality parameters (pH range 4-5, salinity range 8-77µS/cm, refer to section 4.3 of the WSFMP) are met,	Compliant	<p>Construction related stormwater is managed in accordance with the approved ESC plans. Stormwater runoff is directed away from created or retained habitat.</p> <p>Construction related runoff events were assessed for two stormwater events in 2016, which both indicated no construction water entering Wallum Sedge Frog breeding habitat in Precinct 2.</p>
	P2-WSF 5	Ensure that stormwater conveyance is not directed into retained Wallum Sedge Frog breeding habitat.	Compliant	<p>Construction related stormwater is managed in accordance with the approved ESC plans. Stormwater runoff is directed away from created and retained Wallum Sedge Frog ponds.</p> <p>Permanent drainage has been designed to ensure that the development is separated from Wallum Sedge Frog breeding habitat via a 50m setback or physical separation using bunds and/or swales.</p> <p>Prior to commencement of works, a senior ecologist reviews the ESC plans/ permanent drainage design and conducts a site inspection to check the suitability of the proposed design, with respect to the location of wallum</p>

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				<p>sedge frog habitat, to ensure that impacts are minimised or avoided and the required set back or physical separation is achieved.</p> <p>There have been no reported instances of stormwater entering created or retained frog breeding habitat. Construction related runoff events were assessed for two stormwater events in 2016, and results from both surveys indicated no construction water entering Wallum Sedge Frog breeding habitat in Precinct 2.</p>
	P2-WSF 6	Provision of a Wallum Sedge Frog movement corridor along the southern Lamerough Creek, incorporating recreation of Wallum Sedge Frog breeding, foraging and movement habitat.	Compliant	As shown in Figure B1 of the Precinct 2/Part Precinct 3/4 and Associated Works CEMP (Calibre, 2016), the 'northern corridor' will be established along Lamerough Creek and will incorporate recreation of Wallum Sedge Frog breeding, foraging and movement habitat.
	P2-WSF 7	Either full or partial retention of existing Wallum Sedge Frog habitat (polygon 44, 45 and 49 Figure B.2) located within the EPZ;	Compliant	As shown in Figure B2 of the Precinct 2/Part Precinct 3/4 and Associated Works CEMP (Calibre, 2016), polygon 49 will be fully retained and polygons 44 and 45 will be partially retained.
	P2-WSF 8	<p>Provision of a buffer between recreated and retained Wallum Sedge Frog 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;</p> <p>Where this buffer cannot be achieved, then physical separation from development associated stormwater discharge and Wallum Sedge Frog Breeding habitat must be</p>	Compliant	<p>Construction ESC plans and the permanent drainage design have been prepared to ensure that Wallum Sedge Frog breeding habitat is not adversely impacted by stormwater by adopting a 50m setback or physical separation using bunds and/or swales.</p> <p>A senior ecologist reviews the ESC plans and permanent drainage design and conducts a site inspection to check the suitability of the proposed design, with respect to the location of Wallum Sedge Frog habitat, to ensure that impacts are minimised and the required set back or</p>

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		demonstrated. This can be achieved via the creation of swale drains and bunds to ensure no interaction with discharge waters and Wallum Sedge Frog 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.		physical separation is achieved. During construction, all water released from sediment basins has met the nominated water quality criteria prior to discharge. Monitoring results are provided in the Construction Contractors Monthly Environment Report. During the reporting period, construction has not yet commenced on the swales and bunds required as part of the permanent drainage design. Construction related stormwater continues to be managed in accordance with ESC plans.
	P2-WSF 9	The buffer is to be planted with semi-erect semi-aquatic emergent vegetation consistent with species common in existing habitats on site.	Not Applicable	Rehabilitation works in the Frog Zone and Frog Buffer will be undertaken as part of implementation of the Precinct 2 Environmental Rehabilitation Plan.
	P2-WSF 10	All stormwater runoff from the road and adjacent development within the conveyance zone must not be allowed to enter any portion of the retained Wallum Sedge Frog breeding habitat within the EPZ.	Compliant	Permanent drainage has been designed to ensure that the development is separated from Wallum Sedge Frog breeding habitat via a 50m setback or physical separation using bunds and/or swales. A senior ecologist reviews the permanent drainage design and conducts a site inspection to check the suitability of the proposed design, with respect to the location of Wallum Sedge Frog habitat, to ensure that impacts are avoided or minimised and the required set back or physical separation is achieved.

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J,	P2-WSF 11	Culverts, open drains and overland flow pathways for all sized ARI events need to be directed around the retained Wallum Sedge Frog breeding habitat (to maintain pH, ensure habitat stability and limit introduction of competitor/predatory species);	Compliant	Flows from culverts, open drains and overland flow pathways from works areas are not directed towards retained Wallum Sedge Frog breeding habitat. Permanent drainage infrastructure has been designed to prevent development runoff up to and including the Q5 storm event, from entering areas of mapped (retained or constructed) frog habitat. For open drainage channels directly adjacent to mapped frog habitat, a 150mm freeboard has been provided above the Q5 flood level. The adopted design criteria are considered to provide a high level of protection to retained Wallum Sedge Frog habitat.
	P2-WSF 12	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 Environmental Protection Zone.
	P2-WSF 13	Maintaining natural groundwater hydroperiod and other water chemistry aspects (particularly pH and tannin levels) of retained habitat areas;	Compliant	Monitoring of water quality and depth of retained habitat areas has been conducted in accordance with the requirements of the Wallum Sedge Frog Management Plan (2015). Water quality and depth results recorded on 6 January and 5 May 2016 found that retained habitat in Precinct 2 shows a low pH, tannin staining and variable water depth and Hydroperiod that are indicative of wallum habitat as defined in the Draft referral guidelines for the vulnerable Wallum Sedge Frog, <i>Litoria olongburensis</i> (2011, SEWPAC).

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	P2-WSF14	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 15	Deter inappropriate recreational activities in retained frog habitat through signage, vegetation planting and physical barriers; and	Compliant	<p>The landscape design incorporates a number of measures to deter inappropriate activities or access. These include</p> <ul style="list-style-type: none"> • Dense planting along edges of linear parks to restrict movement into the frog habitat • Dense planting along pathway edges that pass through the frog buffer zones with limited turf areas • Signage in specific locations to educate the public on the importance of the areas and to restrict access to it. • Fencing in specific locations to restrict access.
	P2-WSF 16	Taking practical measures to reduce lighting in proximity to areas of retained Wallum Sedge Frog habitat where possible	Compliant	<p>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.</p> <p>During the reporting period, no lighting has been installed in close proximity to Wallum Sedge Frog habitat in public open space areas.</p> <p>Street lighting has been installed to meet required standards. LED streetlights have been used throughout the community, reducing light spill to areas outside of the road corridor.</p>

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	P2-WSF 17	Until the off-maintenance period, monitoring will be undertaken in accordance with the Wallum Sedge Frog 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 A9, Item WSF-26 for monitoring results.
	P2-WSF 18	<p>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).</p> <ul style="list-style-type: none"> • Instigate rehabilitation efforts immediately at any area accidentally cleared in accordance with directions from the Superintendent. • Specific corrective actions associated with the retained Wallum Sedge Frog habitat in Precinct 1 are to be implemented in accordance the requirements of the Wallum Sedge Frog Management Plan. 	Compliant	As reported in the Superintendent's 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-WSF 19	Six monthly reporting will be undertaken of all monitoring activities for Wallum Sedge Frog.	Compliant	Six Monthly reporting has been undertaken as set out in the Wallum Sedge Frog Management Plan. Refer to Table A9, Item WSF-26 for a summary of monitoring undertaken and key findings.

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Vegetation Management	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 Superintendent's 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. 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 Superintendent's 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 Environmental Protection Zone.
	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 Contractor'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 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.

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	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 Contractor's 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 Contractor's 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 did not commence living on site during the reporting period. 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.	Not Applicable	The Precinct 2 Environmental Rehabilitation Plan was approved under Compliance Assessment by the Minister for Economic Development Queensland on 27 May 2016. Implementation of the Precinct 2 Environmental Rehabilitation Plan is due to commence in 2017.
	P2-VM 9	Visual and photographic monitoring will be conducted to evaluate the effectiveness of the enhancement strategies within HMU's in the EPZ.	Not Applicable	Implementation of the Precinct 2 Environmental Rehabilitation Plan is due to commence in 2017. Monitoring will be undertaken during the three year on-maintenance period as per the requirements of the Precinct 2 Environmental Rehabilitation Plan.

Section	Id.	Commitment	Is the project compliant with this commitment?	Evidence/Comments
	P2-VM 10	<ul style="list-style-type: none"> Implement corrective actions 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. <p>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> <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	Any vegetation compliance issues must be incorporated into the regular environmental reporting required by the contractor to the Superintendent.	Compliant	This requirement is noted in the Construction Contractor's CEMP. There have been no instances recorded of vegetation removal contrary to these requirements.

Section	Id.	Commitment	Is the project compliant with this commitment?	Evidence/Comments
Pest Management		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).		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.
	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 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.
	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	A number of measures have been undertaken as part of the landscape design to deter inappropriate activities or access to the Environmental Protection Zone. These include <ul style="list-style-type: none"> Dense planting with native and endemic species at the verge of the Environmental Protection Zone and the adjacent development to restrict access Signage in specific locations to educate the public on the importance of the conservation areas and to restrict access.
	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 the 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 the Construction Contractor's CEMP. Putrescible wastes are contained and disposed of in a lawful manner. The Construction

Section	Id.	Commitment	Is the project compliant with this commitment?	Evidence/Comments
				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 Wallum Sedge Frog 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.
	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.

Section	Id.	Commitment	Is the project compliant with this commitment?	Evidence/Comments
Weed Management	P2-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 Sedge Frog 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 Sedge Frog 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: <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 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 2 is the EPZ and retained Wallum Sedge Frog habitat contained within. These areas of edge planting are to be at least 5 metres in width.	Compliant	Edge plantings to the EPZ and Wallum Sedge Frog habitat are greater than 5m and are contained in both the linear parklands and the EPZ itself. Species selected for edge planting are consistent with existing species present and/or the designated Regional Ecosystem as per the Precinct 2 Environmental Rehabilitation Plan.

Section	Id.	Commitment	Is the project compliant with this commitment?	Evidence/Comments
	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. All topsoil and mulched material 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. All topsoil and mulched material 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 Sedge Frog 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
	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.	Not Applicable	The Precinct 2 Environmental Rehabilitation Plan was approved under Compliance Assessment by the Minister for Economic Development Queensland on 27 May 2016. Implementation of the Precinct 2 Environmental Rehabilitation Plan is due to commence in 2017.
	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.	Compliant	The Approved Precinct 2 Environmental Rehabilitation Plan outlines fire management regimes for vegetation communities across the site.

Section	Id.	Commitment	Is the project compliant with this commitment?	Evidence/Comments
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.	Compliant	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 Contractor's 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	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 May and November 2016 and found no non-conformances.
	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 table of the ACR.

Section	Id.	Commitment	Is the project compliant with this commitment?	Evidence/Comments
	P2-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>An audit of the CEMP has been undertaken by SMEC and the findings documented in this ACR.</p> <p>The Construction Contractor is scheduled to complete the next audit of the CEMP in April 2017.</p> <p>The audit schedule is recorded in the Construction Contractor's Monthly Environment Report.</p>
	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	<p>The CEMP has been reviewed as part of preparation of this ACR.</p>

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 Aura site. The Water Quality Management Plan identifies measurable performance indicators and goals. It sets monitoring and reporting periods and methods for sampling and data collection. It includes methods for detecting relevant changes in surface water and groundwater and identifies corrective actions to be implemented.

This ACR reports on compliance with Revision 5 of the Water Quality Management Plan dated June 2016. Compliance with Revision 4 (November 2015) is reported on by exception where relevant.

Table A5: Compliance Assessment of the Water Quality Management Plan (Revision 5, June 2016)

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	<p>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 and construction in the Bells Creek north catchment commenced in March 2016.</p> <p>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	WQMP- 2	<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>These samples will be analysed for the following parameters:</p> <ul style="list-style-type: none"> • Flow • Total Suspended Solids; • Total Nitrogen; and • Total Phosphorus. 	Compliant	<p>Event based water quality monitoring stations were installed at the upstream and downstream site boundaries of Bells Creek North in February 2014. Construction in Bells Creek North commenced in March 2016 Therefore the duration of pre-construction monitoring undertaken exceeds the minimum 6 months requirement.</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 2016/2017 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.</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 	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 of the WQMP.</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 and Catchments have monitored ambient water quality 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	<p>Establish real time turbidity monitoring stations to be established at the following locations a minimum of 6 months before development starts in a catchment:</p> <ul style="list-style-type: none"> • 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 construction in Bells Creek north commenced in March 2016. The duration of pre-construction monitoring undertaken exceeds the minimum 6 months duration outlined in Section 5.1.5 of the WQMP.
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 in January 2016 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	In January 2016 event-based stormwater samplers were installed at two 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	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	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: <ul style="list-style-type: none"> • 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 	Compliant	Surface water monitoring requirements have been incorporated into Section 5.1.4 of each Precinct CEMP.

		<p>working day from an installed rain gauge.</p> <ul style="list-style-type: none"> All construction activities will be monitored daily for compliance with erosion and sediment control measures. Within sediment basins, turbidity, pH, electrical conductivity (EC) and dissolved oxygen (DO) will be measured daily within each precinct. 		
Section 7.1	WQMP-11	<p>Construction stage water quality - All discharge from site sedimentation basins is to meet:</p> <ul style="list-style-type: none"> pH 6.5 to 8.5. 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. Nutrients (nitrogen and phosphorus) to be managed through normal erosion and sediment control practices. 	Compliant	<p>Prior to the dewatering of sediment basins, all captured runoff was treated to meet the nominated water quality performance criteria for all rain events up to and including the relevant design rainfall event. Sediment basin water quality monitoring results are provided in the Construction Contractor's Monthly Environment Report.</p> <p>Turbidity at the downstream Bells Creek North site remained below the upstream site at all times during the reporting period, with the exception of 2 and 3 June. A site visit was undertaken on 3 June by BMT WBM to investigate the cause of the increased turbidity at the downstream site (BN1). This investigation found that turbid water was entering Bells Creek from a swampy area just upstream of the monitoring station, with relatively low turbidity in Bells Creek North upstream of this point. This indicated that construction activities further upstream in Bells Creek North catchment were not the cause of the turbid spike at the downstream site.</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</p>	Not Applicable	<p>Corrective actions have not been triggered. Prior to the dewatering of sediment basins, all captured runoff was treated to meet the nominated water quality performance criteria up to and including the design rainfall event.</p>

		<p>infrastructure. If lesser exceedances are observed (e.g. between 15 and 25%) then initial surveillance assessments will be triggered that may identify areas that could be better managed, thereby reducing off site export of sediments.</p>		
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. 	Not Applicable	Corrective actions have not been triggered. Prior to the dewatering of sediment basins, all captured runoff was treated to meet the nominated water quality performance criteria up to and including the design rainfall event.

Section 7.2	WQMP-14	Operational stage water quality – Assess receiving water quality in Pumicestone Passage and Bells Creek using the methods described in Section 7.2.	Compliant	Operational stage water quality monitoring found that there were no construction related water quality impacts in Bells Creek and Pumicestone Passage during the reporting period. Water quality monitoring results are reported in the Annual Water Quality Monitoring Report.
Section 8.1	WQMP-15	Operational stage water quality – Implement the following corrective actions where trigger values are exceeded: <ul style="list-style-type: none"> • 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. 	Not Applicable	There were no exceedances of corrective action trigger values during the reporting period.
Section 5.2.2	WQMP-16	Groundwater Pre-construction Baseline Monitoring: A surveillance baseline groundwater	Compliant	Surveillance baseline monitoring has been undertaken in accordance with the requirements of the approved revision of the

		<p>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.</p>		<p>Water Quality Management Plan in effect at the time of sampling.</p> <p>Surveillance baseline monitoring of bores in the Lamerough Creek catchment was conducted in September 2014, and active construction commenced in January 2015.</p> <p>Surveillance baseline monitoring of bores in the Bells Creek north catchment commenced in October, 2015 and continued until active construction commenced in March 2016.</p> <p>All sampled were tested for the field and analytical parameters listed in Section 5.2.2 of the WQMP.</p>
Section 5.2	WQMP-17	<p>Groundwater Construction Phase Bi-annual Monitoring:</p> <ul style="list-style-type: none"> 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. 	Compliant	<p>Biannual groundwater monitoring of all bores within the site (Figure 3-1) was undertaken in February and September 2016. All samples were analysed for the parameters listed in Section 5.2.4 of the WQMP.</p>
Section 5.2	WQMP-18	<p>Groundwater Construction Phase Monthly Monitoring:</p> <ul style="list-style-type: none"> 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 and bulk excavation and filling works, not house construction works which will follow this phase); and 	Compliant	<p>Monthly monitoring was undertaken for all Control bores and Sentinel Bores and Construction bores within 500m of construction works in the Lamerough Creek and Bells Creek North Catchment.</p> <p>All samples have been analysed for the parameters listed in Section 5.2.4 of the WQMP.</p>

		<ul style="list-style-type: none"> 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>Analyse samples for the parameters listed in Section 5.2.4.</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. 	Not Applicable	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.

Wallum Sedge Frog Management Plan

The Wallum Sedge Frog Management Plan (WSFMP) 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 WSFMP 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 E of the plan, dated August 2016. Compliance with revision D (December 2015) is reported on by exception where relevant.

Table A6: 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 of the WSFMP.	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. They are also shown on Map 2.2D of the Wallum Sedge Frog Management Plan.</p> <p>Prior to any works within the Frog Zone or Frog Buffer, a senior ecologist reviews the design drawings and conducts a site inspection to confirm that the design meets the requirements of the WSFMP and impacts to Wallum Sedge Frog are avoided or minimised.</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 of the WSFMP.</p> <p>Northern development zone commitments include:</p> <ul style="list-style-type: none"> inclusion of frog friendly 	Compliant	<p>Northern Development Zone</p> <p>To facilitate connectivity requirements, the Bellvista Boulevard bridge over Lamerough creek includes a dedicated frog crossing on the southern approach as well as a movement corridor underneath the bridge.</p> <p>The dedicated frog crossing has been designed in accordance with the specifications outlined in Table 3.5a of the WSFMP. The</p>

	<p>underpasses/crossings across existing sedge habitats associated with habitat patch 4</p> <ul style="list-style-type: none"> • 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 dedicated underpass at the four road crossings over the Bells Creek South corridor. 	<p>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 grasses and sedge planted at the mouth of the culvert.</p> <p>The area of the frog movement corridor underneath the bridge has been maximised by setting the bridge abutments high on the bank and is protected from all rainfall events up to and including the 5 year ARI event. The area has been revegetated using sedges and grasses and a Wallum Sedge Frog breeding pond has been constructed at both sides of the culvert to encourage movement.</p> <p>Construction of the Bellvisa Boulevard Bridge over Lamerough Creek commenced in November 2015, with practical completion in November 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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		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.		
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	ESC plans have been prepared to avoid directing run-off into identified Wallum Sedge Frog breeding habitat. Prior to commencement of works, a senior ecologist reviews the ESC 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 Sedge 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 breeding ponds have been created in advance of construction of the development. 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. In addition to these ponds, a series of 9 ponds have been created along the northern bank of Bells Creek North (complete November 2016) – extending from west from the proposed Bells Creek Arterial alignment to the extent to the project area.

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 animals immediately prior to and during vegetation clearance works.	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 was available on-call for the duration of bulk earthworks.</p> <p>During clearing activities, the licensed fauna spotter-catcher/s:</p> <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	<p>This commitment has been included in Precinct CEMPs. Construction activities have been programmed to minimise the duration of in-stream works.</p> <p>To minimise the duration of works in Lamerough Creek, pre-fabricated deck units were used during construction.</p>
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	All fauna fencing and structures have been designed to minimise harbourage and roosting opportunities for pest species.
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 WSFMP) in regards to soil conditions within the Frog Zone of Precinct 2 for the creation of Wallum Sedge Frog breeding 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. In addition to this, topsoil from impacted Wallum Sedge Frog habitat has been harvested and re-used to line drains, banks and areas within much of the Frog Zone of Precinct 2, particularly when areas are in close proximity to retained or created breeding habitat.
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	ESC 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 Sedge Frog habitat. Sorghum should	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

		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.		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 Sedge Frog 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 Sedge Frog habitat in areas above Q5 in the Frog Zone (and not existing Wallum Sedge Frog habitat) with a maximum distance between breeding opportunities being less than 400m.	Compliant	Wallum sedge frog ponds have been created in Precinct 2, 3 and 4 in areas above Q5 in the Frog Zone. Created frog ponds have been designed 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 Sedge Frog habitat and earthworks and other development-related threats (refer Figure 3.1).	Compliant	During construction 'no go' fencing or flagging 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 Sedge Frog.	Compliant	<p>Lamerough Creek movement Corridor Precinct 1</p> <p>An Environmental Rehabilitation Plan has been prepared to guide rehabilitation works in Precinct 1, however all retained vegetation within this precinct met the performance criteria, and no regeneration of habitat creation works were required.</p> <p>Precinct 2</p> <p>The Precinct 2 Environmental Rehabilitation Plan was submitted to the Economic Development Queensland and was approved under Compliance Assessment on 27 May 2016. Civil subdivision works commenced in Precinct 2 on 18 May 2016, and the first plan of subdivision was registered on 12 October 2016. In accordance with</p>

				<p>the requirements of the Approved Environmental Protection Plan and Conservation Infrastructure Agreement, implementation of the Precinct 2 Environmental Rehabilitation Plan will formally commence within 12 months of registration of the first plan of subdivision, on 12 October 2017.</p> <p>As per the requirements of EPBC 2011/5987 Condition 7, Wallum Sedge Frog ponds were created in the frog zone of Precinct 2 in advance of commencement of construction of the development within this Precinct. At the end of the reporting period, a total of 16.1ha of Wallum Sedge Frog habitat has been created within the Frog Zone, Frog Buffer and Riparian Zone of Precinct 2.</p>
Section 3.7	WSF-19	Installation of movement barriers (i.e. frog proof fencing to 'funnel' frog movement under bridge crossings and culvert underpasses.	Compliant	At the Bellvista Boulevard bridge over Lamerough Creek, the high batters of the bridge embankments form an effective barrier to funnel frog movement under the bridge or through the dedicated frog culvert.
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 <i>Land Protection (Pest and Stock Route) Act 2002</i> . The Queensland <i>Biosecurity Act 2014</i> commenced in July 2016, part way through the reporting period, with generally consistent weed management obligations for landowners. 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	ESC 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 Wallum Sedge Frog behaviour and breeding (iii) monitoring frog populations adjacent to the development.	Compliant	During the reporting period, Stockland Development Pty Ltd has provided \$50,000 funding to The University of Queensland (UQ) to support research on the Wallum Sedge Frog and other wallum-dependent frog species. This funding is being used to develop and trial acoustic monitoring techniques for assessing the presence/absence and relative abundance of Wallum Sedge Frog and other frog species (including other threatened wallum frog species and potential competitor species such as the Common Sedge Frog (<i>Litoria fallax</i>) and Striped Rocket Frog (<i>Litoria nasuta</i>). These techniques will provide a cost-effective method for long-term monitoring of Wallum Sedge Frog populations in areas of intact, disturbed and rehabilitated/improved habitat across the species' range (including remote and difficult-to-access sites where the status of Wallum Sedge Frog and other wallum frogs is poorly known). The techniques being developed will also be used to monitor presence/absence and relative abundance of potential competitor species at disturbed and undisturbed sites helping clarify the threat posed by invasive competitor species to Wallum Sedge Frog and other wallum frog species. The research proposal approach was endorsed by DotEE during the 2015/2016 reporting period.
Section 3.9	WSF-24	Rehabilitation of an HMU including creating compensatory Wallum Sedge Frog 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	Complaint	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

		<p>completed five years prior to finalisation of the development (refer also to the EPP).</p>		<p>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 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 subdivision works commenced in Precinct 2 on 18 May 2016, and the first plan of subdivision was registered on 12 October 2016. In accordance with the requirements of the Approved Environmental Protection Plan and Conservation Infrastructure Agreement, implementation of the Precinct 2 Environmental Rehabilitation Plan will formally commence within 12 months of registration of the first plan of subdivision, on 12 October 2017. Wallum Sedge Frog ponds were created in the frog zone of Precinct 2 in advance of commencement of construction of the development within this Precinct. At the end of the reporting period, a total of 16.4ha of Wallum Sedge Frog habitat has been created within the Frog Zone, Frog Buffer and Riparian Zone of Precinct 2.</p>
Section 5.5	WSF-25	<p>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.</p>	Compliant	<p>Detailed Technical Specifications have been developed to guide construction of frog ponds in the Frog Zone and Frog Buffer. General measures to minimise impacts to Wallum Sedge Frog habitat are contained within Precinct CEMPs.</p>

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 Wallum Sedge Frog 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 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>	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 During the reporting period, a pre-construction Wallum Sedge Frog habitat survey was undertaken, in accordance with the methods outlined in the Wallum Sedge Frog Management Plan, Box 1, Page 52, (August 2016) to determine the extent of Wallum Sedge Frog habitat in the undeveloped portions of Precincts 3, 4 and 5. Pre-construction monitoring of Wallum Sedge Frog habitat in Precinct 1 and 2 was undertaken and reported on in 2015/2016. The results of the pre-construction surveys are reported in each Precinct CEMP.</p> <p>On-Maintenance Monitoring During the establishment of the Frog Zone and Frog Buffers monitoring of Wallum Sedge Frog presence and habitat has been undertaken in both retained and created Wallum Sedge Frog habitat. During the reporting period, monitoring effort was focused on the Northern Frog Corridor along Lamerough Creek, as this is associated with Precinct 1 and 2 where construction is occurring. While construction occurred in part precincts 3 and 4, no mapped Wallum Sedge Frog habitat will be retained. In Precincts 4 and 5, Wallum Sedge Frog habitat was created after completion of pre-construction surveys. Therefore, monitoring of created habitat in Precincts 4 and 5 will commence in the 2017/2018 reporting period. Monitoring results are documented bi-annually. The following survey effort has been undertaken during the reporting period:</p> <ol style="list-style-type: none"> 1. Vegetation Monitoring - 28 April and 25 and 26 October 2016 2. Presence/Abundance Wallum Sedge Frog – 20 April 2016 3. Pond Water Quality and Hydroperiod – 5 May 2016 4. Wet Weather Runoff Assessments –17 June and 13 September 2016.
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			<p>1. Vegetation Monitoring</p> <p>Drier conditions are likely to have affected plant growth and condition during the reporting period. With the exception of one pond, none of the constructed Wallum Sedge Frog habitat ponds contained standing water during monitoring in November 2016. General observations throughout the Northern Corridor included:</p> <ul style="list-style-type: none"> • Created frog ponds in the eastern portion of the Frog Zone have had the hard compacted soil ripped and mulch added in June 2016 to encourage plant growth. • Plantings within frog ponds are in moderate condition, with slight decline in condition expected to be a result of the dry conditions. Very few weed species were observed in the western section, however weed species were more abundant in the frog zone to the east, where corrective actions were undertaken (June 2016). • Throughout the western area of the Frog Zone and Frog Buffer results indicate a range of native species occurring and very low presence of weed species. • In the eastern section of Frog Zone and Frog Buffer, vegetation composition was more variable with a greater presence of weeds in some areas. <p>2. Presence/Abundance Wallum Sedge Frog</p> <p>During the reporting period, weather conditions were not conducive for surveys of Wallum Sedge Frog with low rainfall experienced during the Wallum Sedge Frog breeding season (October – April). Consequently monitoring of the presence/absence and abundance of the Wallum Sedge Frog was limited to opportunistic observations undertaken on 28 April 2016. No surveys or opportunistic observations were completed during October – December, due to the unsuitability of weather conditions.</p> <p>Retained Habitats</p> <p>Wallum Sedge Frogs were heard calling from retained habitat in the eastern portion of the Frog Zone during the April 2016 survey.</p>
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			<p>Created habitats</p> <p>While the Wallum Sedge Frog was not detected within the Area A Ponds (located in the eastern portion of the Frog Zone) two individuals were heard calling from within the Frog Zone near the created ponds. Further growth of sedges and vegetation within this area is expected to encourage colonisation. Ongoing monitoring will be undertaken to confirm Wallum Sedge Frog presence within Area A of the created compensatory habitat area.</p> <p>Wallum Sedge Frog were not recorded within Area B ponds, however the low rainfall and unsuitable sampling conditions are likely to have influenced these results. Some newly constructed ponds within Area B were showing early signs of not meeting the required water quality success criteria and corrective actions were implemented in June 2016, as some newly constructed ponds within Area B were showing preliminary signs of not achieving the water quality success criteria. Since the corrective actions were implemented, opportunistic inspections have indicative positive results which are expected to be verified through monitoring in the next reporting period.</p> <p>3. Pond Water Quality and Hydroperiod</p> <p>Water quality monitoring of created and retained Wallum Sedge Frog Habitat was completed in May 2016 only. No water quality monitoring was possible during October –December 2016 due to low rainfall resulting in no ponded water across the survey area.</p> <p>Created Habitats</p> <p>Water quality of Area A ponds (located in the western portion of the Frog Zone) showed low pH and tannin stained waters which comply with the prescribed Success Criteria. Some Area B ponds are yet to demonstrate achievement of the prescribed Success Criteria for water quality, which has been attributed in part to the low rainfall during the reporting period. Corrective actions were implemented in June 2016 to improve water quality in Area B ponds with initial results looking positive and are to be validated during suitable</p>
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			<p>survey conditions during the next reporting period.</p> <p>Retained Habitat Retained habitat areas associated with Precinct 2 show a low pH and tannin stained waters which comply with the prescribed Success Criteria. Precinct 1 retained habitat shows elevated pH and low tannin staining. Continued monitoring is required to govern the temporal behaviour of water quality within the retained habitat of Precinct 1.</p> <p>4. Wet Weather Assessments</p> <p>Wet weather assessments were undertaken in retained habitat in Precinct 1 and 2. The results found that in Precinct 2 stormwater from construction and developed areas was not directly entering Wallum Sedge Frog breeding habitat.</p> <p>In Precinct 1, wet weather assessments found that further investigation is needed to determine if stormwater from the development is entering Wallum Sedge Frog breeding habitat. One of the stormwater drains in Precinct 1 is adjacent to retained Wallum Sedge Frog habitat, and the drain has been designed to direct stormwater away from retained Wallum Sedge Frog habitat. The stormwater drain flows to a low lying area which also receives inflows from a larger catchment extending from beyond the site boundary. Under some wet weather events this low lying area becomes inundated and may be impeding flow from the drain. A bund has been constructed between the stormwater channel and the retained habitat to provide further separation during high rainfall events. The bund was installed on 29th January 2016 as a corrective action measure. Further wet weather assessments are required to determine the source of flows and whether any additional works are required to improve protection of adjacent Wallum Sedge Frog habitats.</p> <p>Since the implementation of corrective actions, no Wallum Sedge Frog surveys have occurred across the site due to low rainfall</p>
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				<p>conditions. Monitoring for the presence of the Wallum Sedge Frog and key habitat attributes (pH and other frog and aquatic species) will continue as per the approved WSFMP (August 2016), and the need for further corrective actions will be reviewed once more data is received. The results of corrective actions will continue to be monitored in accordance with the WSFMP.</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 establishment of Wallum Sedge Frog habitat ponds, preservation of the northern Wallum Sedge Frog habitat corridor and the successful achievement of meeting all proposed success criteria.	Compliant	<p>To improve water quality in Area B ponds (located in the western portion of the Frog Zone), the following corrective actions were undertaken in June 2016.</p> <ul style="list-style-type: none"> • The entire surface top dressed with topsoil sourced from areas of Wallum Sedge Frog habitat within the development footprint; and/or • The entire surface top dressed with forest mulch. • The above recommendations were completed in June 2016, with little rain occurring since to gauge the success of the corrective actions. Further monitoring will be undertaken in accordance with the WSFMP.

Wallum Sedge Frog Offset and Contingency Strategy

The Wallum Sedge Frog Offset and Contingency Strategy outlines the approach to deliver compensatory habitat in the Environmental Protection Zone that can be used if patches of the 152ha of created compensatory habitat in the Frog Zone and Frog Buffer do not meet the key performance indicators as defined in the WSFMP. The plan outlines the triggers for offset implementation and timing and the mechanism for delivery.

Table A7: Compliance Assessment of the Wallum Sedge Frog Offset and Contingency Strategy (Revision 5, May 2016)

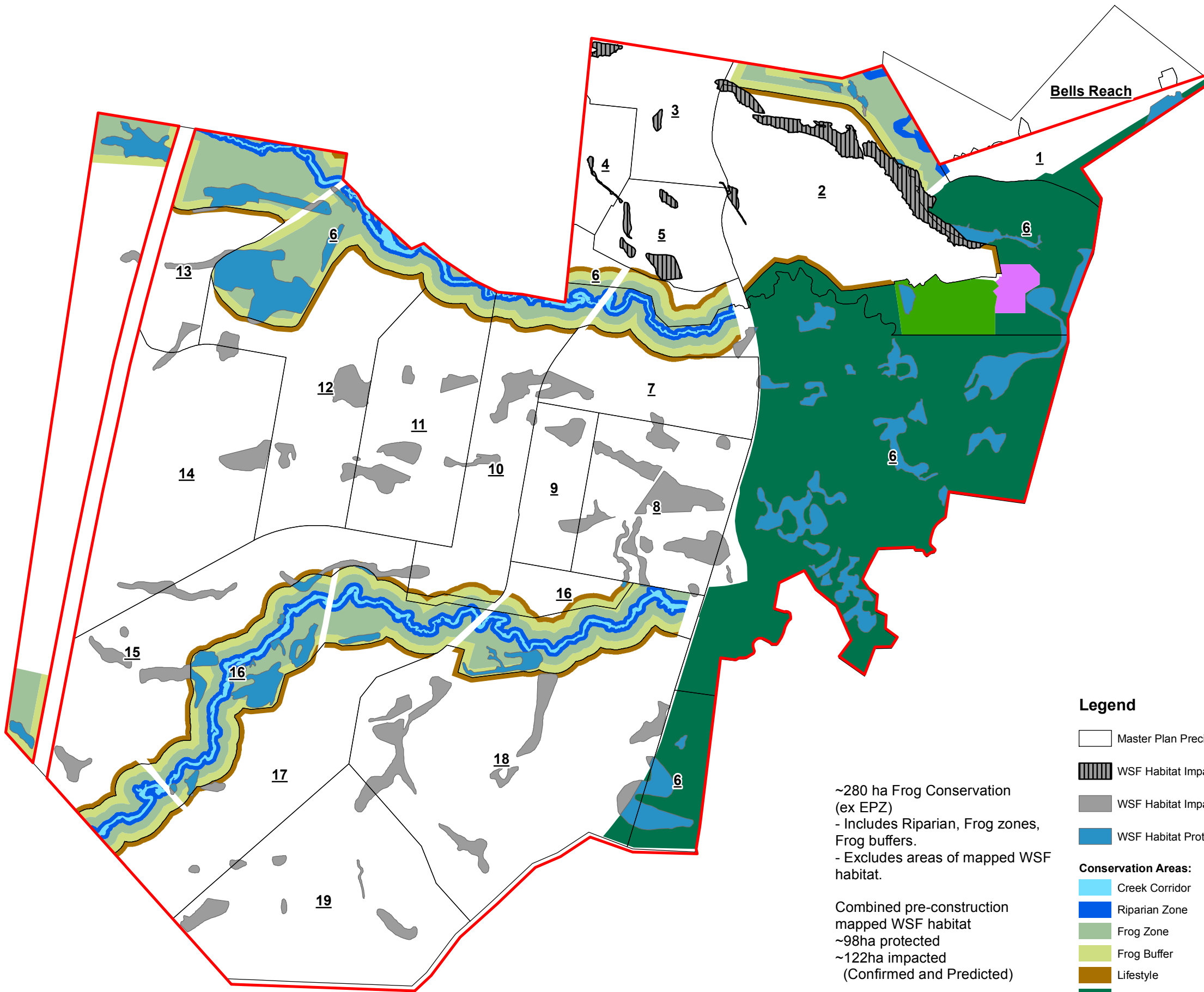
Section	Id.	Requirement	Is the project compliant?	Evidence/Comments
3.1	WSF OCS-1	Biannual monitoring of the key performance criteria in table 3 of the Wallum Sedge Frog Offset and Contingency Strategy (including success criteria in the WSFMP) for areas of created compensatory habitat for the 3 year 'on-maintenance period'.	Compliant	Habitat created in Precinct 2 is included in Biannual monitoring against the success criteria in the Wallum Sedge Frog Management Plan. Monitoring of habitat created in Precincts 4 and 5 will commence during the 2017/2018 reporting period.
3.1	WSF OCS-2	Key performance criteria are met for an area of created compensatory habitat after the 3 year 'on-maintenance period', meaning the applicable area of created compensatory habitat can be handed over in accordance with the Conservation Infrastructure Agreement.	Not applicable	Habitat creation in Precinct 2 was completed in November 2016, this criteria is not yet applicable.
3.1	WSF OCS-3	If the key performance criteria have not been met by the end of the 3 year 'on-maintenance period' triggering an additional nine years monitoring and application of corrective actions.	Not applicable	Habitat creation in Precinct 2 was completed in June 2015 and Precincts 4 and 5 were completed in November 2016. Areas of created compensatory habitat are currently on the initial 3 year maintenance period.

	WSF OCS-4	Bi-annual monitoring reports specify whether a particular parcel of compensatory habitat is successful and thus when a particular parcel of compensatory habitat can be taken 'off maintenance'.	Not applicable	Habitat creation in Precinct 2 was completed in June 2015 and Precincts 4 and 5 were completed in November 2016. Areas of created compensatory habitat are currently on the initial 3 year maintenance period.
3.1	WSF OCS-5	The preconstruction habitat survey area (including habitat quality rating) has been applied to determine area of failed created compensatory habitat to be offset, where the key performance criteria have not been met by the end of the 12 year 'on-maintenance period' (including the additional nine years monitoring and application of corrective actions).	Not applicable	Habitat creation in Precinct 2 was completed in June 2015 and Precincts 4 and 5 were completed in November 2016. Areas of created compensatory habitat are currently on the initial 3 year maintenance period. This requirement is therefore not applicable. Habitat quality scores have been calculated for all impacted Wallum Sedge Frog Habitat across Precincts 1-5 for future use in the delivery of the OSC Strategy.
5.2 (and 3.3)	WSF OCS-6	Status of compensatory habitat creation and offset delivery including: <ul style="list-style-type: none"> • Results of any pre-clearing Wallum Sedge Frog habitat surveys (including habitat score in accordance with table 5 of the WSF OCS) • Results of any Wallum Sedge Frog habitat condition surveys in the Environmental Protection Zone • A quantification of Wallum Sedge Frog habitat protected and Wallum Sedge Frog habitat removed or destroyed to tally to the allowed maximum of 152 ha impacted • Calculation of areas of created compensatory habitat and results of any maintenance monitoring • Calculation of areas of Wallum Sedge Frog Habitat created in the 	Compliant	Bi-annual monitoring reporting includes results of pre-clearing surveys and ongoing habitat conditions surveys in created habitat.

		<p>EPZ as offsets and results of any maintenance monitoring</p> <p>Calculation of areas of created or restored Wallum Sedge Frog habitat that has met the key performance indicators in both the compensatory habitat and offset areas.</p>		
3.3	WSF OCS-7	<p>The Wallum Sedge Frog Habitat map (Map 2.2d) is updated after each pre-construction survey to track the areas of Wallum Sedge Frog Habitat protected, created and removed.</p>	Compliant	<p>The latest version of Map 2.2d showing areas of Wallum Sedge Frog habitat retained and created is provided in Appendix B.</p>
4.2	WSF OCS-8	<p>Opportunities for improving existing Wallum Sedge Frog Habitat or creating new Wallum Sedge Frog Habitat are identified during the preparation of each Precinct's Environmental Rehabilitation Plan, including consideration of areas for delivery of offsets within the Environmental Protection Zone.</p> <p>The habitat quality of areas proposed as potential offsets (either enhancement of existing low quality Wallum Sedge Frog Habitat or for newly created habitat) will be assessed in accordance with the habitat score approach in table 5 of the WSF OCS and the results of the EPBC Act Offset Assessment Guide calculator.)</p>	Compliant	<p>The Precinct 2 Environmental Rehabilitation Plan identifies 8.4 ha for habitat enhancement works and 0.3 ha of habitat for reconstruction for Wallum Sedge Frog within the Environmental Protection Zone.</p>

4.2	WSF OCS-9	An area of created compensatory habitat that fails to meet the key performance indicators after the maximum total maintenance period of 12 years, is offset by the offset established in the Environmental Protection Zone. The actual area required to be covered by the offset contribution has been calculated based on the habitat quality scores and the results of the EPBC Act Offset Assessment Guide calculator.	Not applicable.	Implementation of the Precinct 2 Environmental Rehabilitation Plan will commence prior to October 2017. No areas of created compensatory habitat in the Environmental Protection Zone have commenced on maintenance.
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APPENDIX B MAP 2.2D WALLUM SEDGE FROG HABITAT TO BE REMOVED



Bells Reach

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

Combined pre-construction mapped WSF habitat
 ~98ha protected
 ~122ha impacted (Confirmed and Predicted)

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

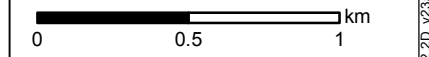
Legend

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

Area and calculations for the WSF habitat based on:

- Polygons shown in Precincts 6-19 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 on 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 lack of sufficient seasonal rainfall that would have resulted in the ponding of surface water within habitat/s across the site.
- Polygons shown in Precincts 4 and 5 were undertaken by AWC in September 2016, as part on the preparation of the Precincts 3, 4, 5, and part 6 Construction Environmental Management Plan (REF). Dry weather survey methodology was also used.

23a	15/12/2015	GJK	MD	MD
Issue	Date	By	Chkd	Appd



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Client
Stockland

Job Title
Aura

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

Scale at A3
1:25,000

Drawing Status
For Information

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	1.10	NA	NA
2	13.10	9.30	16.10	0.00
3	0.62	0.00	NA	NA
4 and 5	0.26	0.00	0.3	0.00
TOTAL	14.58	10.40	16.40	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.