

Nature Play

Natureplay Masterplan for Chapel Hill State School



Vision

Students at Chapel Hill State School have access to the best school grounds in Queensland. The expansive treed setting is full of engaging outdoor play spaces that help facilitate their growth and development.

Purpose

The purpose of this Masterplan is to:

- + Establish principles for natureplay at Chapel Hill State School
- + Guide the overall staging and implementation of natureplay elements at the school
- + Inform detailed designs for each of the key focal areas

- + Use natural materials
- + Contribute to rehabilitating the ecological values of the area
- + Solve drainage and erosion issues at the same time
- + Ensure the design is robust, resilient and able to be maintained by the school grounds staff

Approach to risk

Natureplay is fundamentally about embracing healthy and beneficial risk taking.

For Chapel Hill State School, this means minor cuts, scratches and bruises are okay, but the risk of major fractures and deep lacerations is to be minimised.

General design principles to minimise risk are:

- + Students to be educated about playing safely, and specific rules developed for any areas with atypical risks (e.g. where there are loose rocks or sticks)
- + Potential fall heights to be <1 metre unless further protective measures are implemented
- + Sharp edges to be minimised and all major timber to be debarked and have chamfered edges.

A detailed risk assessment in accordance with ISO91000 principles needs to be documented as part of the detailed design for each stage of work.

Background

In 2017 the P&C ran a survey to identify the preferred uses of funds it raises. Over 150 responses were received and by far the most popular project was to create Nature Play areas – playgrounds utilising natural elements around our school.

An open workshop was held in October 2017 to enable intersted people to contribute ideas. Students across the school were also invited to contribute ideas to the workshop.

This Masterplan builds on the ideas generated from that workshop and subsequent meetings held with the P&C and school staff.

Key principles

- + Embrace the school motto “Respect Self, Others and the Environment”.
- + Its okay for kids to get dirty
- + Encourage imaginative open-ended play
- + Allow kids to move things around



Prepared by: Alan Hoban
Tel 0400 742 836
alan.hoban@blightanner.com.au
BT Ref.: 2017.0343
V1.0 April 2018

Benefits of NaturePlay

Children Need “Vitamin G”

“Green environments are an essential component of a healthy human habitat” according to Frances Ming Kuo, a researcher documenting the positive link between nature and human health, and social and psychological functioning. Kou summarizes various research studies that show that humans benefit from exposure to green environments (parks, forests, gardens, etc.) and conversely, people with less access to green places report more medical symptoms and poorer health overall. Kuo uses the phrase “Vitamin G” (G for “green”) to capture nature’s role as a necessary ingredient for a healthy life. Evidence suggests that, like a vitamin, contact with nature and green environments is needed in frequent, regular doses.

Evidence in support of natureplay includes:

Supports multiple development domains. Nature is important to children’s development in every major way’ ”intellectually, emotionally, socially, spiritually and physically (Kellert, 2005).

Supports creativity and problem solving. Studies of children in schoolyards found that children engage in more creative forms of play in the green areas. They also played more cooperatively (Bell and Dymment, 2006). Play in nature is especially important for developing capacities for creativity, problem-solving, and intellectual development (Kellert, 2005).

Enhances cognitive abilities. Proximity to, views of, and daily exposure to natural settings increases children’s ability to focus and enhances cognitive abilities (Wells, 2000).

Improves academic performance. Studies in the US show that schools that use outdoor classrooms and other forms of nature-based experiential education support significant student gains in social studies, science, language arts, and math. Students in outdoor science programs improved their science testing scores by 27% (American Institutes for Research, 2005).

Reduces Attention Deficit Disorder (ADD)

symptoms. Contact with the natural world can significantly reduce symptoms of attention deficit disorder in children as young as five years old (Kuo and Taylor, 2004).

Increases physical activity. Children who experience school grounds with diverse natural settings are more physically active, more aware of nutrition, more civil to one another and more creative (Bell and Dymment, 2006).

Improves eyesight. More time spent outdoors is related to reduced rates of nearsightedness, also known as myopia, in children and adolescents (American Academy of Ophthalmology, 2011).

Improves social relations. Children will be smarter, better able to get along with others, healthier and happier when they have regular opportunities for free and unstructured play in the out-of-doors (Burdette and Whitaker, 2005).

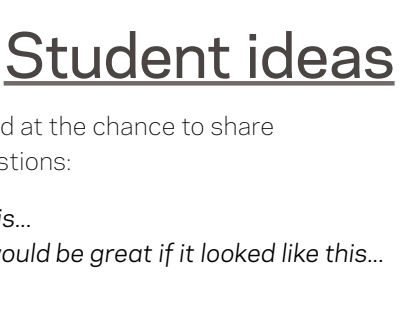
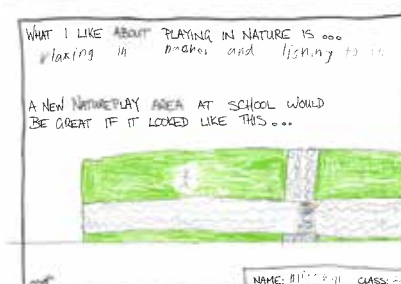
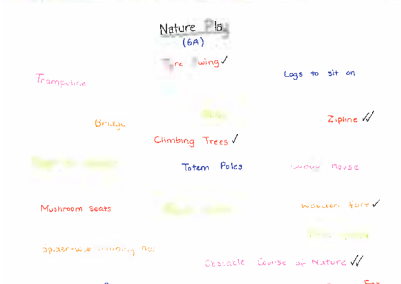
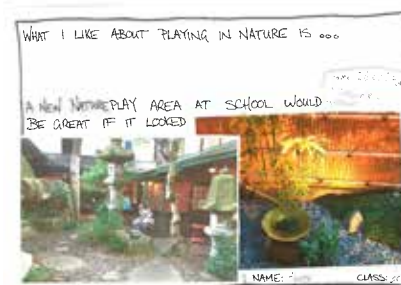
Improves self-discipline. Access to green spaces, and even a view of green settings, enhances peace, self-control and self-discipline within inner city youth, and particularly in girls (Taylor, Kuo and Sullivan, 2001).

Reduces stress. Green plants and vistas reduce stress among highly stressed children. Locations with greater number of plants, greener views, and access to natural play areas show more significant results (Wells and Evans, 2003).

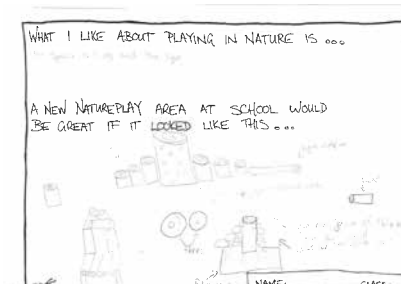
Sources:

The Natural Learning Initiative
<https://naturalearning.org/>

NaturePlay Queensland
<https://www.natureplayqld.org.au/>



A new Natureplay area at school would be great if it looked like this...





Site issues and considerations

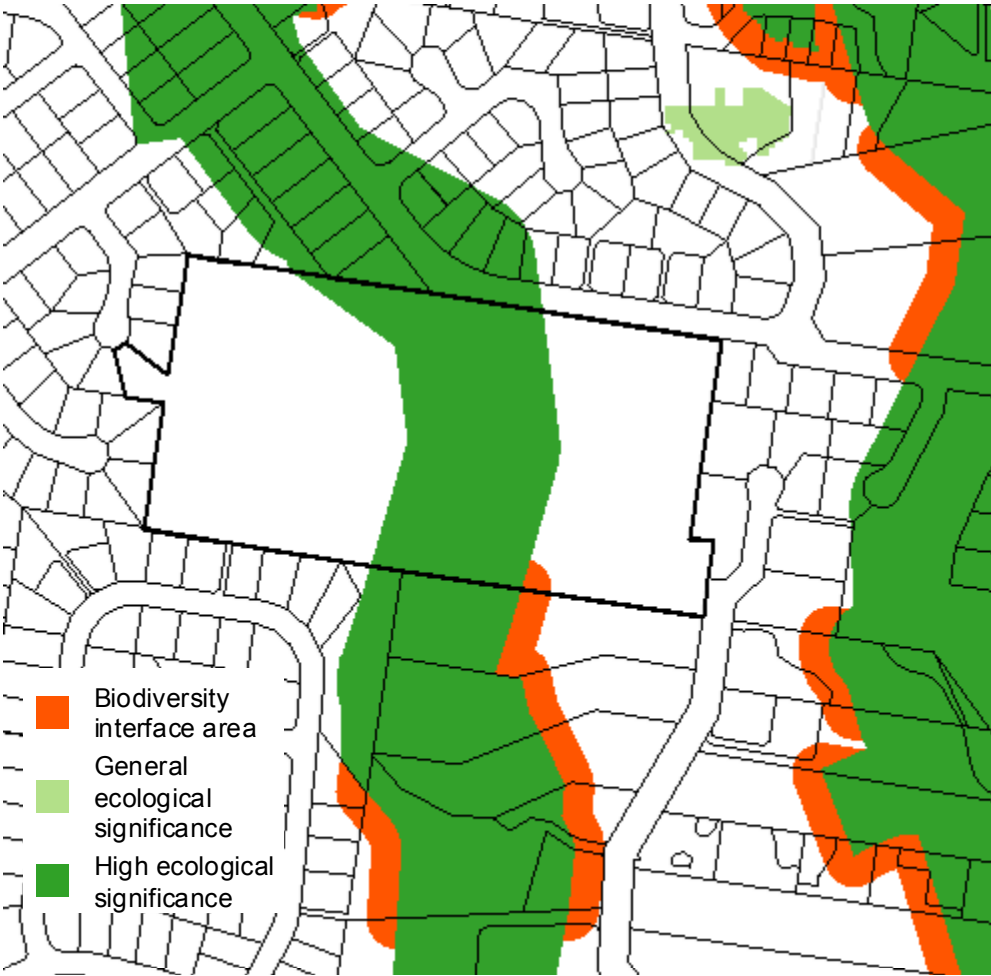


Regional context

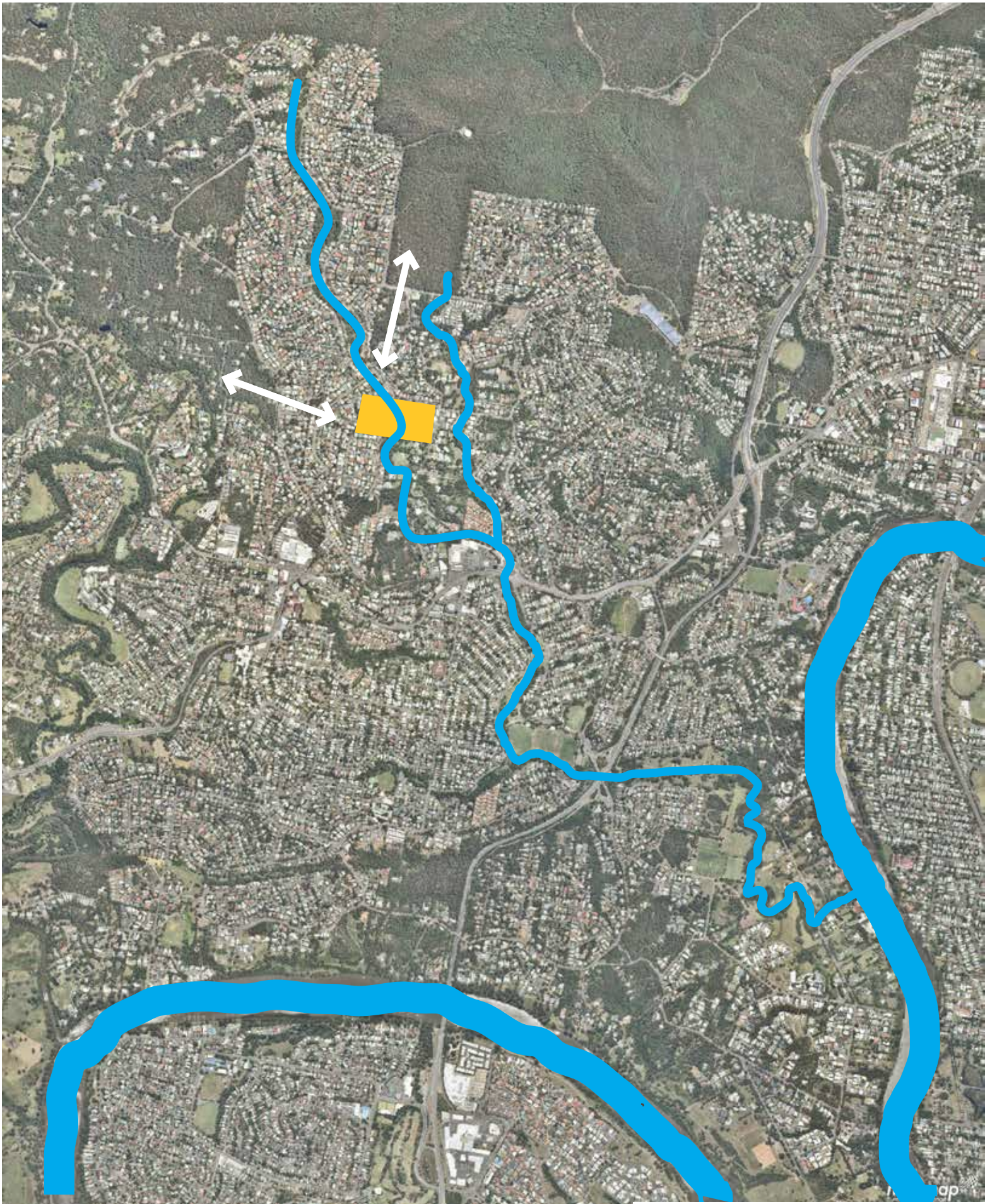
A near-continuous riparian corridor along Cubberla Creek connects the school to Mt Coot-tha Forest Park. This provides an opportunity for wildlife such as birds and reptiles to visit the school.

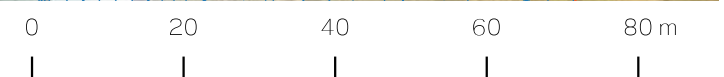
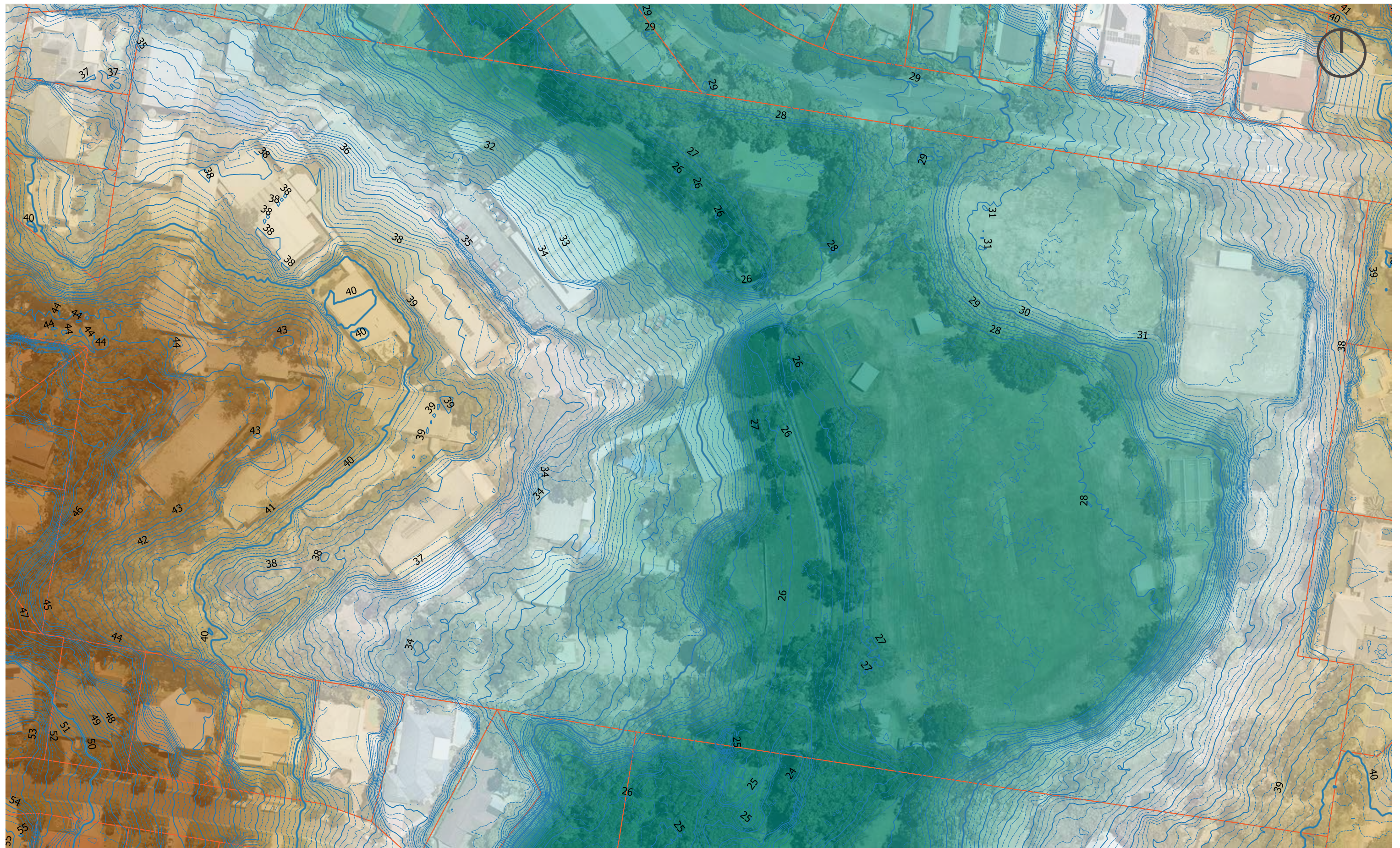
The section of waterway through the school is the only concrete-lined section of Cubberla Creek. If this was re-naturalised, there would be increased opportunity for fish and macro-invertebrates to move between the upper and lower sections of the creek, with good connectivity through to the Brisbane River.

Cubberla means 'Mountain Brushtail Possum'



Brisbane City Council CityPlan mapping showing the waterway as being of High Ecological Significance







Popular images

At the Natureplay community workshop held on 28th October 2017, participants were invited to vote for their favourite images. The above images all scored five or more votes.



Staging

Stage 1 starts at the highest point in the school so that the erosion issues are addressed from the source, ensuring downslope works are less likely to be covered in sediment and debris.

Stage 2 continues the rocky creek drainage line towards Cubberla Creek, and ensures an engaging play space for the junior students.

Stage 3 allows for senior students access to more adventurous parkour-style activities and makes use of an under-utilised part of the school grounds.

The prep playground is functional but ageing and has recently lost one of its feature trees, so **Stage 4** embellishes the playground with new age-appropriate natureplay features.

Stage 5 involves embracing and restoring Cubberla Creek, allowing kids a chance to benefit from a rich nature-play experience. Due to the flooding risks, there would need to be a demonstrated capacity for the school to educate students about how to play safely in natural environments. Prominent depth indicators would indicate when the creek is out-of-bounds.

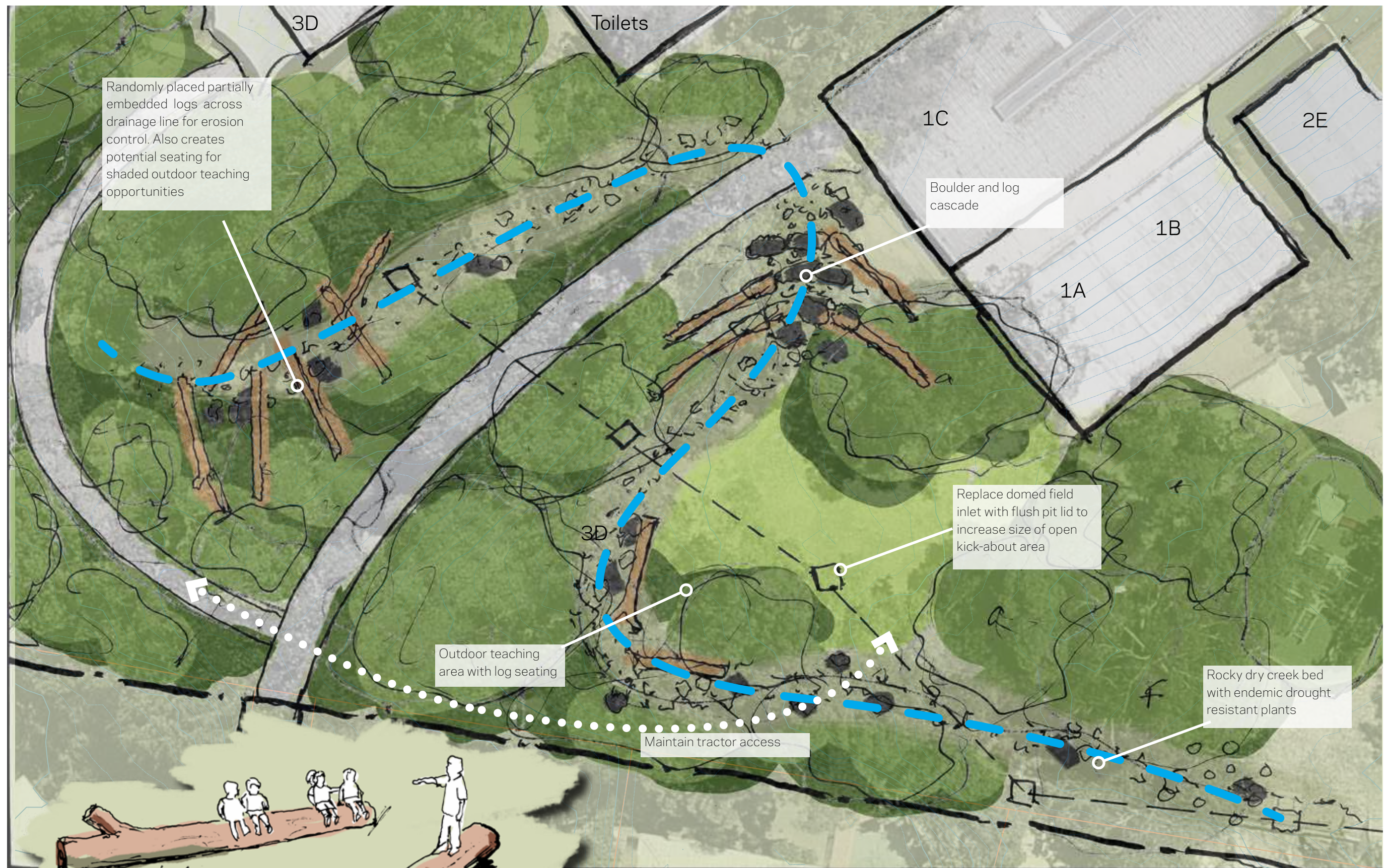




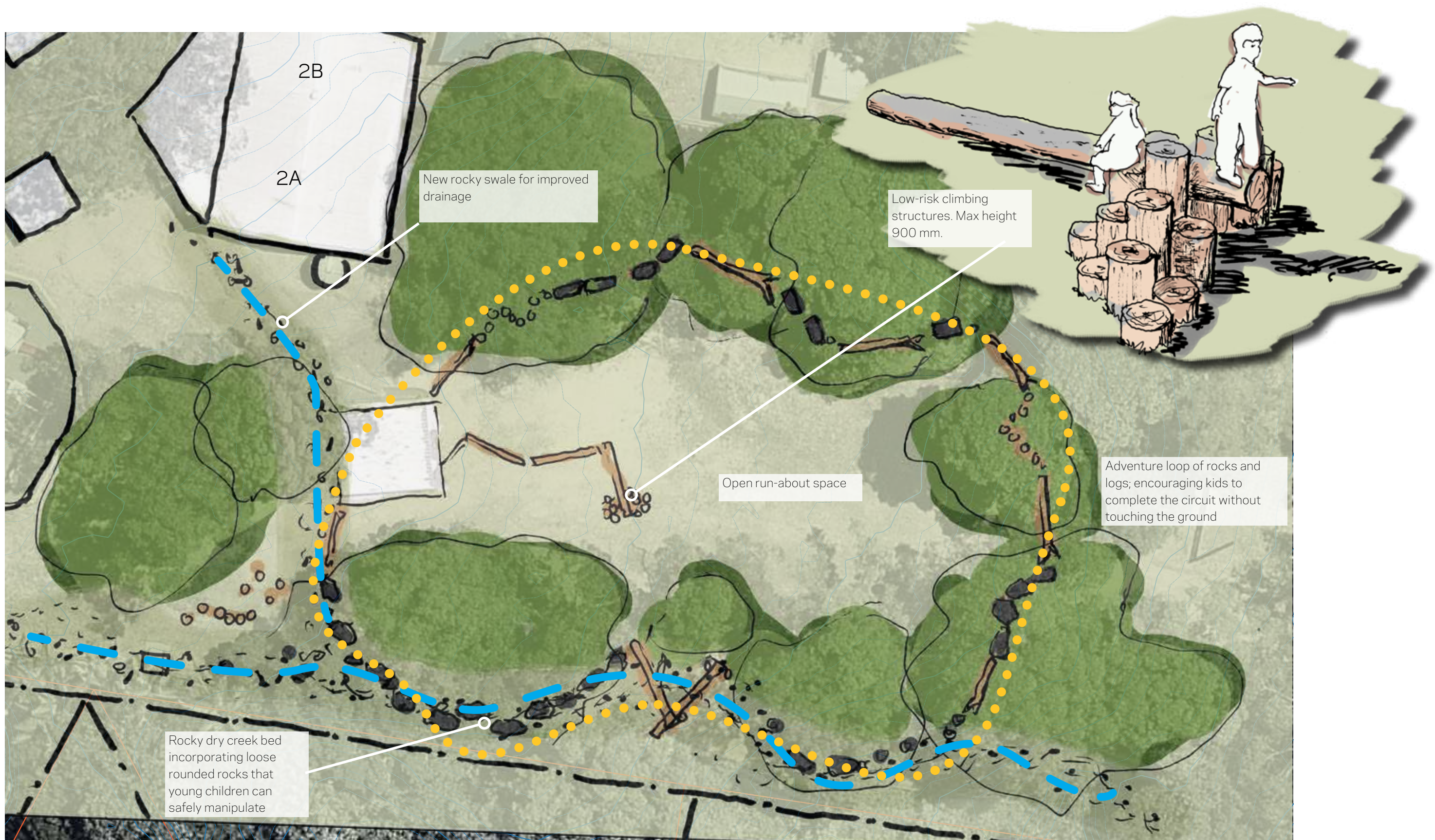
The cool shady upper-rainforest area provides an opportunity for creative and imaginative play for the Yrs 3 - 6 students, where they are able to interact with and manipulate their environment.

Concept Plan - Stage 1



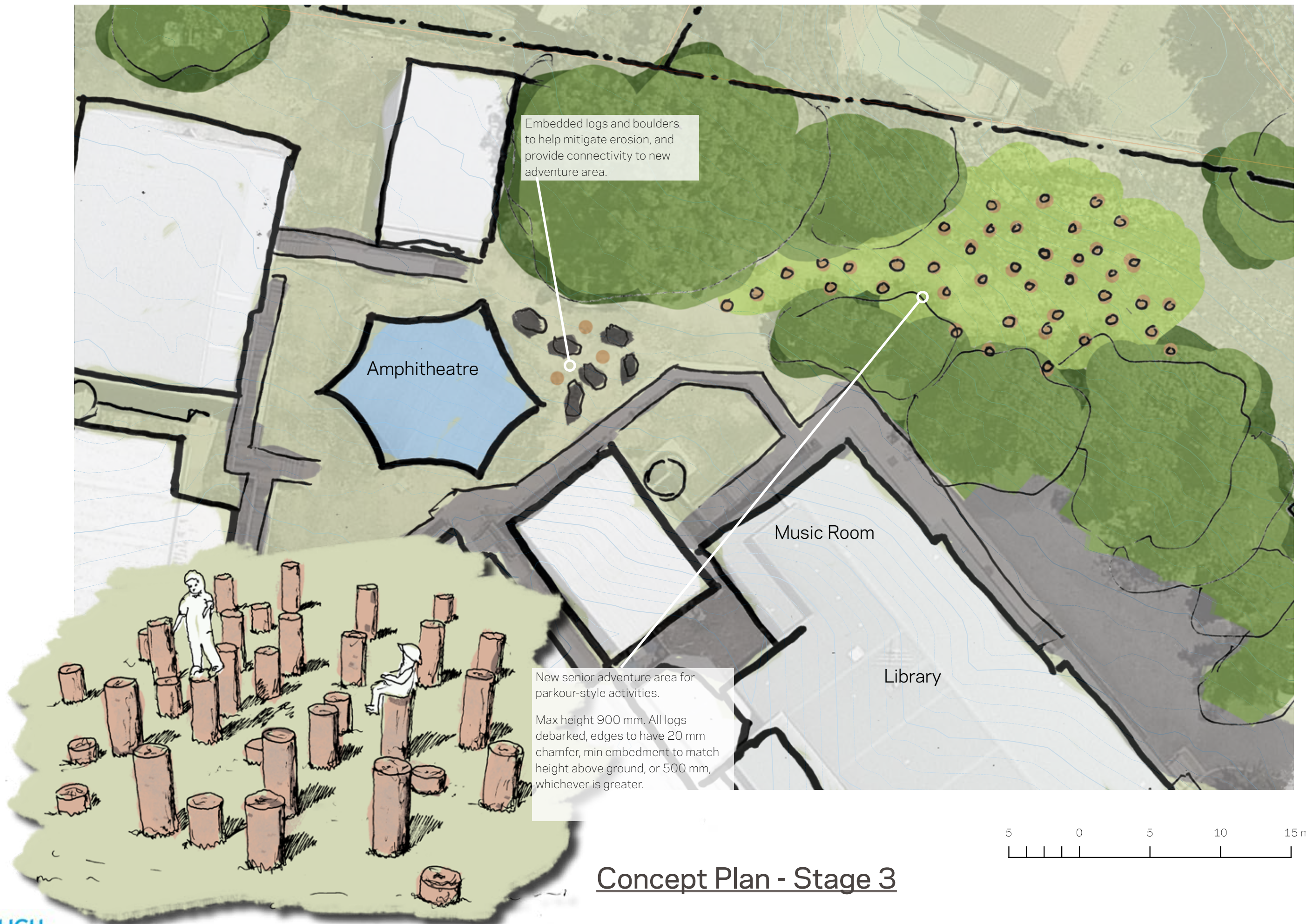


Concept Plan - Stage 1 (cont.)



Concept Plan - Stage 2





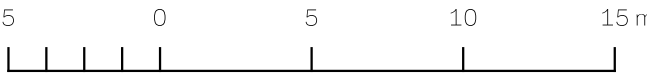
Embedded logs and boulders to help mitigate erosion, and provide connectivity to new adventure area.

Amphitheatre

Music Room

Library

New senior adventure area for parkour-style activities.
Max height 900 mm. All logs debarked, edges to have 20 mm chamfer, min embedment to match height above ground, or 500 mm, whichever is greater.



Concept Plan - Stage 3