



# ***GREENING THE HILL Mk2***

## ***Community-wide behavioural change in Broken Hill***

**Simon R Molesworth AO QC**  
President, Landcare Broken Hill



HORACE WEBBER

# *The* **Greening** *of the* **HILL**

**R**e-vegetation around  
Broken Hill in the  
1930s



Broken Hill  
Landcare

## GREENING THE HILL<sup>Mk.2</sup>

A community-wide initiative for all - to renew and  
re-green your home, your city, your life.

**Help make it happen - together we can do it!**



LandcareBrokenHill@gmail.com  
[www.facebook.com/LandcareBrokenHill/](http://www.facebook.com/LandcareBrokenHill/)



Keep Australia Beautiful NSW  
2020 SUSTAINABLE COMMUNITIES TIDY TOWNS AWARDS

**Environmental Communication  
Award**

Population Category D (12,001-23,000)

*Winner*

**GREENING THE HILL MK2 -  
THE CALL TO ACTION**

Landcare Broken Hill Inc. (Broken Hill)

November 2020



Keep Australia Beautiful NSW  
2020 SUSTAINABLE COMMUNITIES TIDY TOWNS AWARDS

**Community Spirit  
and Inclusion Award**

Population Category D (12,001-23,000)

*Winner*

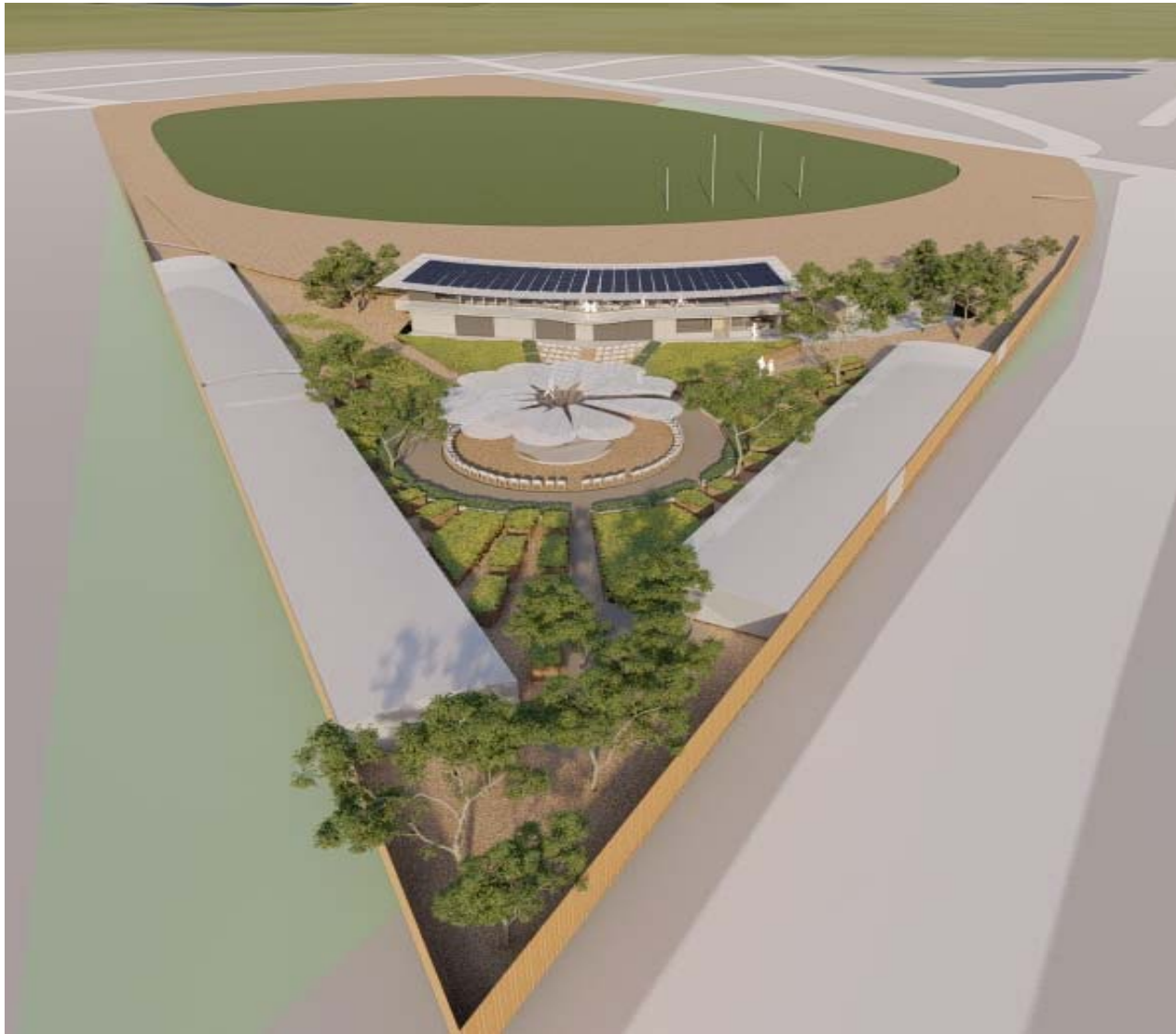
**GREENING THE HILL MK2 -  
A ROLE FOR EVERYONE**

Landcare Broken Hill Inc. (Broken Hill)

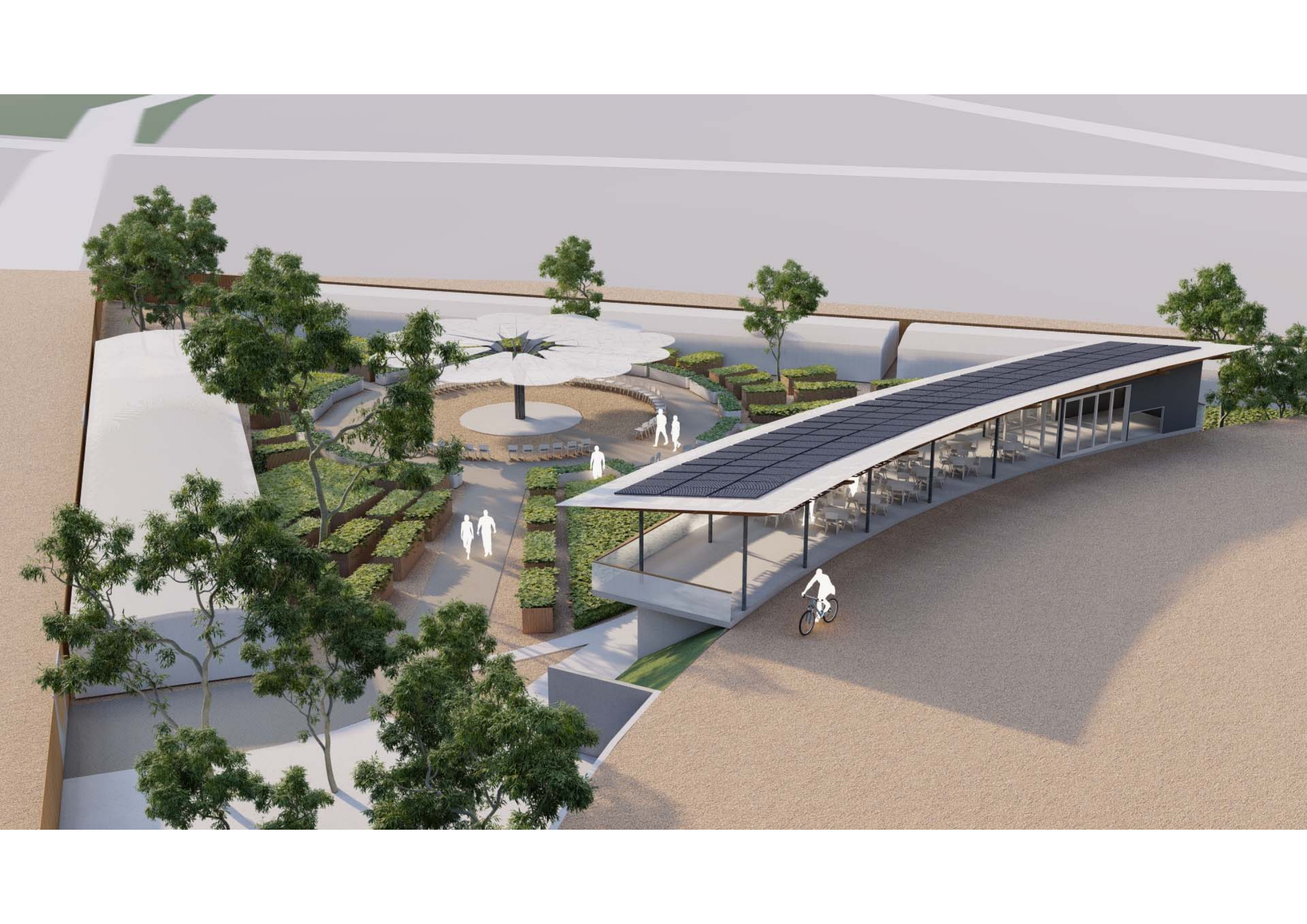
November 2020



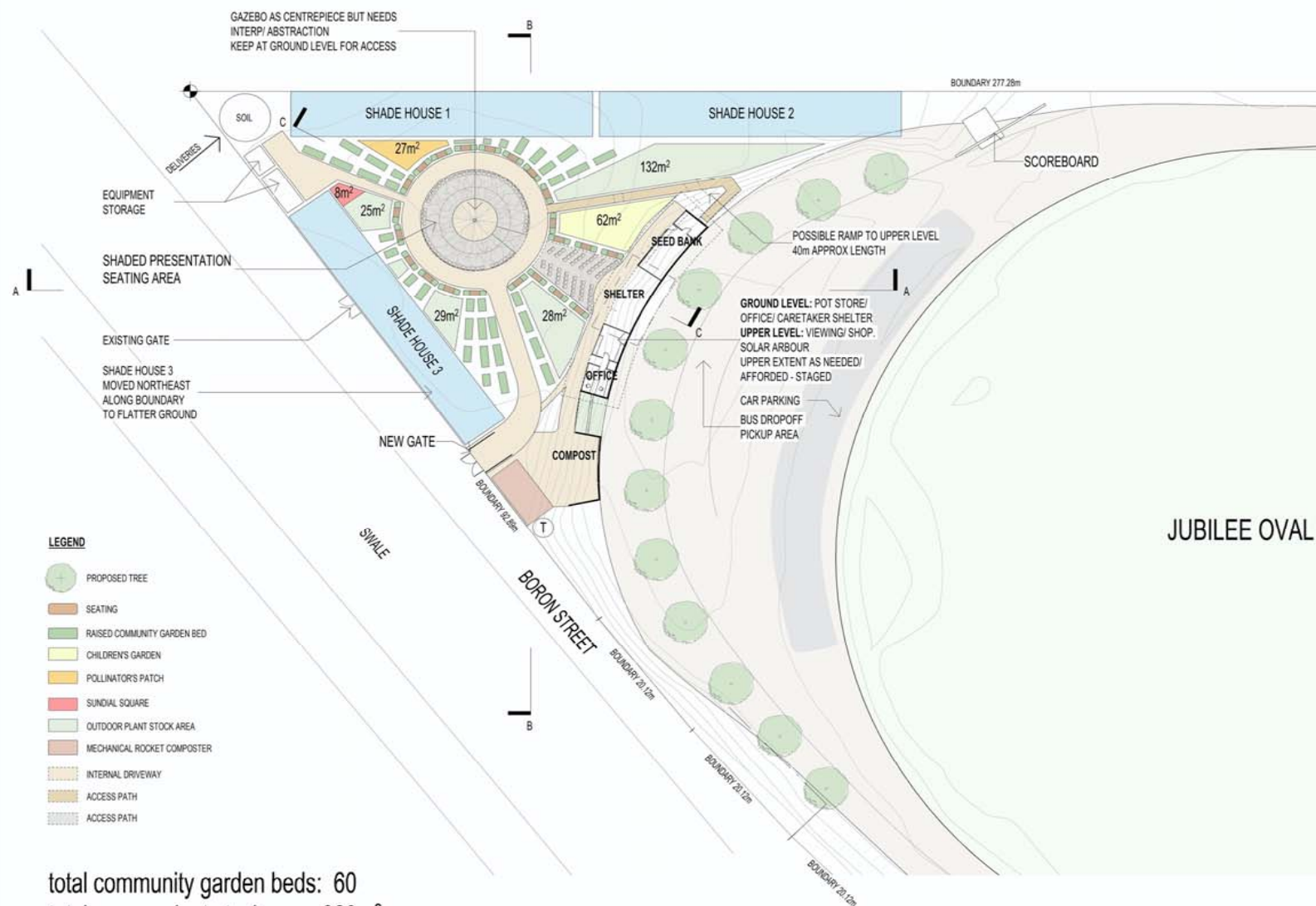












# Broken Hill Landcare Hub



**Native Plant Propagation Nursery** – up to 120 metres of shade houses, with a target production of 200,000 seedlings pa

**Regional-scale Seed Bank** – to sort, store & supply seed to all Western NSW, together with an associated 60ha irrigated SPA project

**Community Gardens** – 60 productive garden raised-beds for community health, engagement and practical learning

**Vocational Training Hub**, for primary, secondary & tertiary students

**Community Well-being Facility** to assist disadvantaged persons find inspiration and fulfilling experiences.

---





# Broken Hill Landcare Hub



**Eco-tourism Attraction** focussing on exemplary sustainable living practices & sustainable land management, demonstrating best practice in a diverse range of fields including:

Water-wise management & soil science ;

Renewable energy utilisation – solar, wind & battery storage;

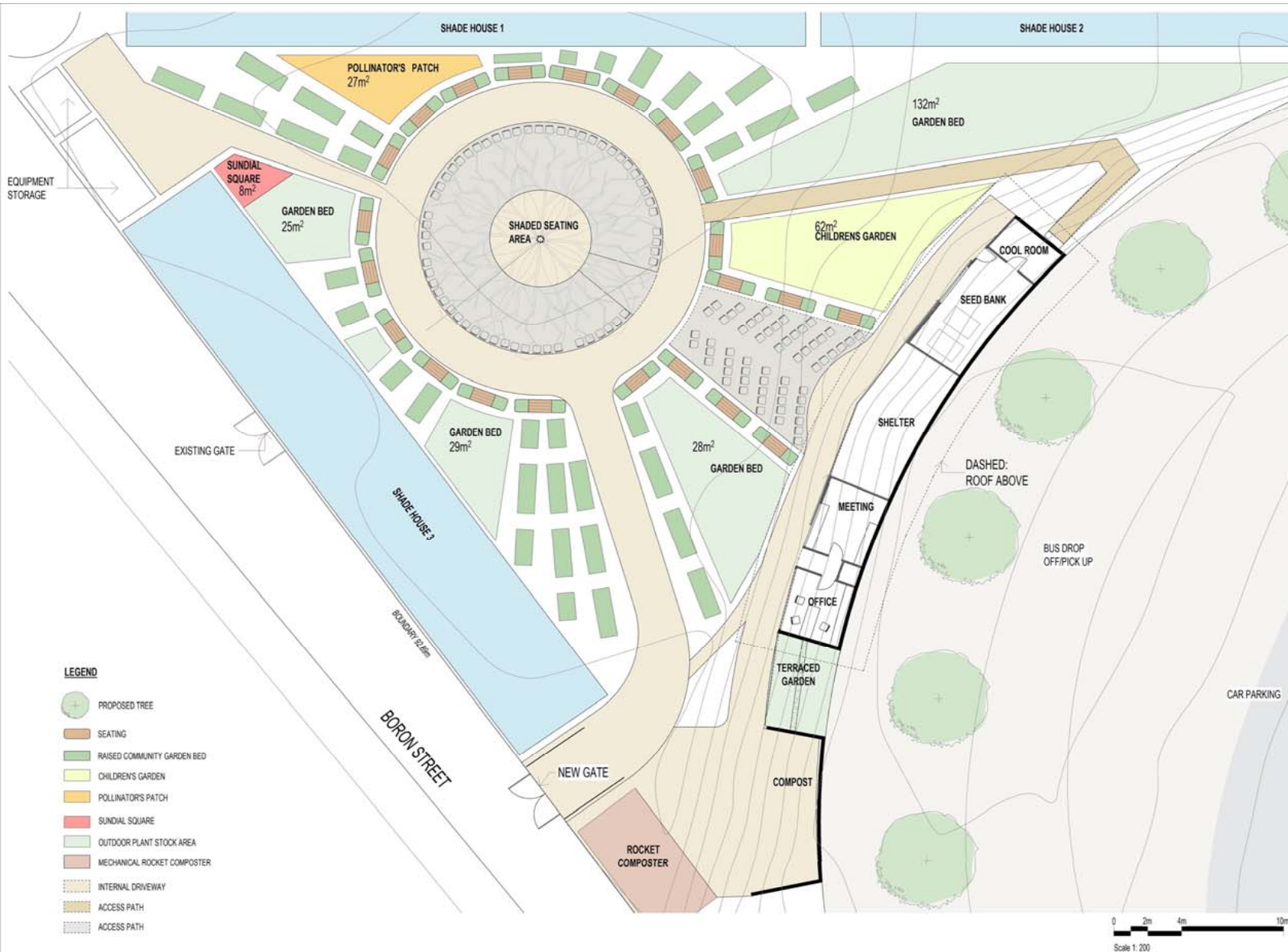
Waste management – including food waste processing, composting, vermiculture, mulching & recycling;

Arid Zone plant choice & garden design in 20 botanical display beds to showcase the most viable and best of the Far West's flora;

Art & sculpture within an environmental context, displayed through landscaping & internal exhibition spaces.

Citizen science displays, including Pollinators' Patch & Sundial Square





tropo

16.05.2021

NORTHERN BROKEN HILL LANDCARE HUB SITE PLAN DETAIL

3





# Landcare's current Centre for Community 24m shadehouse







The **NATIVE PLANT PROPAGATION NURSERY** will perform a critical ‘feeder function’ producing the plants required to underpin a multiplicity of **Greening the Hill Mk2** environmental management projects aimed at reinstating degraded areas in the Regeneration Reserve which rings the City, the Broken Hill Willyama Common, parks and reserves throughout the City.

Our plants will be used for **street tree planting throughout Broken Hill** and for landscaping projects aimed at re-greening community facilities. Sports grounds and fields, the grounds of community groups and clubs, and the grounds of the region’s schools will all benefit from the provision of Landcare-grown plants.

**CRITICAL OBJECTIVE:** The Hub with its Native Plant Propagation Nursery and Seed Bank will be established as the wholesale source of Far Western NSW native plants and seed for organisations **commissioning** Landcare Broken Hill to supply plants and seeds for their own revegetation & rehabilitation projects.

---

# LANDCARE HUB – SEED BANK COMPONENT



## *regional scale*

*Ensuring an assured supply of native plant seed for propagation*

Seed Bank Project - Stage Two.

**Stage Two will see the construction of a purpose-designed area for the Seed Bank within the Landcare Hub Community building, providing sufficient workspace and storage area to become the certified Seed Bank facility for the NSW Far West Region.**





# The Meeting Tree – for inspirational learning



Inspired by the universal cultural concepts of the Tree of Learning and the Tree of Life, the Landcare Meeting Tree is to be the core of the Hub

A stylistic tree designed to reflect the flower of the local Showy Daisy Bush, *Olearia pimeleoides*



Shaded seating capacity for 60 people, arranged to facilitate presentations ‘in-the-round’.

Linked via the open amphitheatre area to “The Shelter”, will offer seating for up to another 80, in total offering seating for up to 140.

Outer perimeter seating will comprise ‘Cool Seats’, the composting worm farm planter box seats designed by Michael Mobbs.

Upper surface of the Meeting Tree will be coated in flexible solar photovoltaic panels.

Under surface of the Meeting Tree will incorporate embedded LED screens for viewing instructional films and speaker presentations.

The under surface will incorporate LED downlights for evening events







# HUB – CLASSROOM-IN-THE-ROUND

## *GREEN SCHOOLS PROJECTS*





# LANDCARE HUB - *COMMUNITY GARDEN COMPONENT*



**60 Raised Garden Beds** Productively producing vegetables, herbs and fruit for and by the local community in the Community Garden. To be managed in accordance with sustainable horticultural principles, utilising green waste and vermiculture (worm farms) to produce compost and mulch, demonstrating best-practice soil and water-wise management.

# *Ecotourism Hub*

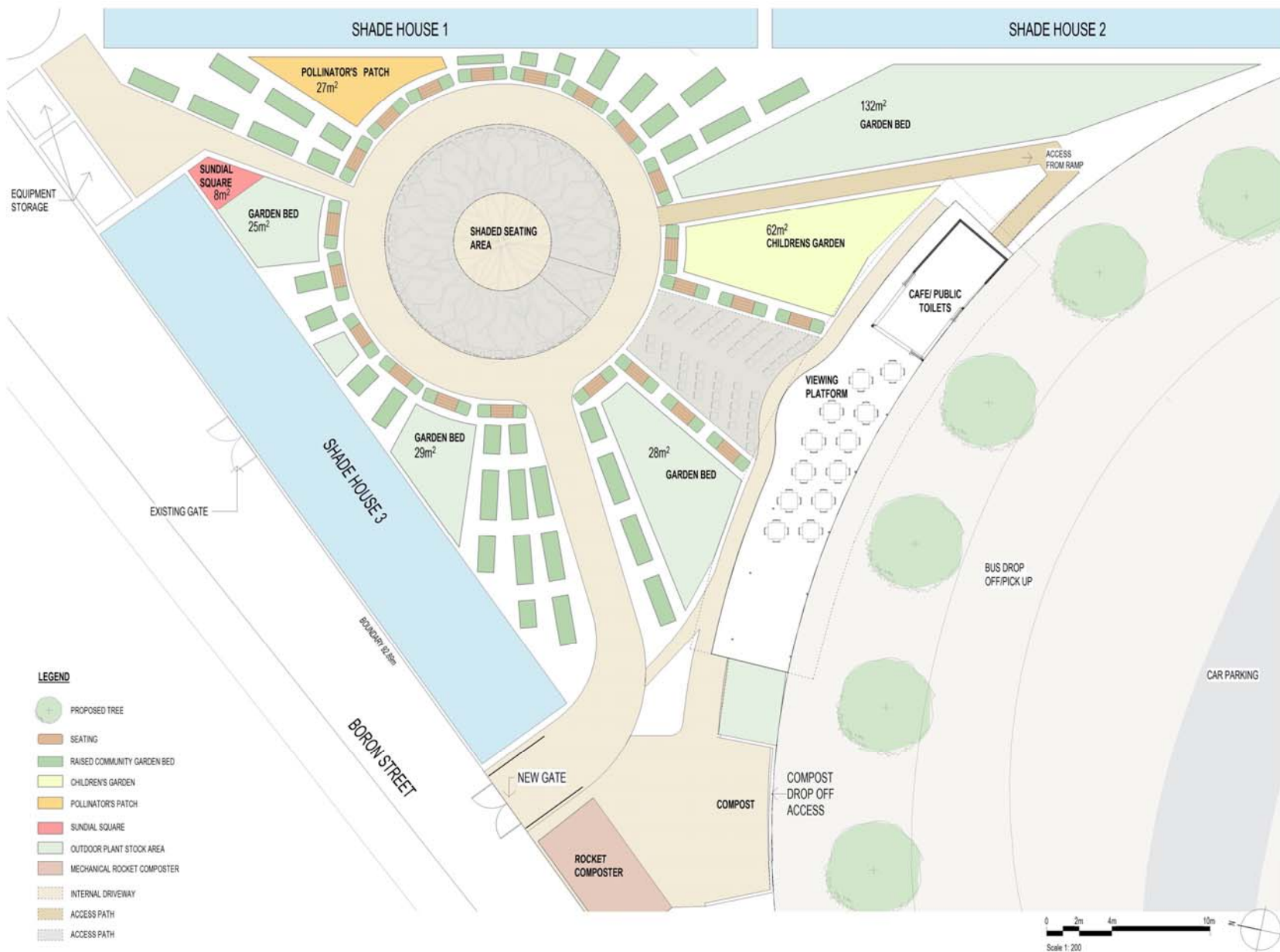


The **design concept vision** requires the Site to be developed so that it is an exciting, attractive and interesting place to visit, in order for it to become an **Eco-tourism attraction for Broken Hill and the region.**

The Hub will not only be a showcase for sustainable gardening and plant propagation practices, it is also to demonstrate the latest technology in small-scale renewable energy production and storage, together with best practices in sustainable living, including responsible waste management, recycling and water conservation.

*Inspiring good practice*





tropo

16.05.2021

NORTHERN BROKEN HILL LANDCARE HUB UPPER LEVEL PLAN

4



# Pollinator's Patch

A dedicated area (OHS secure) for apiarists to showcase the wonders of pollination. An 'apiarist's patch' displaying a variety of beehives and 'insect hotels', surrounded by hedging of bee-attracting plants, offset from a viewing area, incorporating attractive and informative display boards, for adults and children to be inspired & learn.





# Children's Garden – Inspiration & Care



## Children's Garden Goals

The overarching goal of the Children's Garden is to **inspire** young children with a **love of nature**, with a concurrent goal of providing a **safe** and **secure**, yet **fun**, environment ..... whilst their parents volunteer at the Hub or, if they are visitors, **providing their parents time to explore, and learn from, the Hub.**



The design of the garden will create a 'special kid's place', a glimpse into the wonders of Outback NSW. Incorporating safe native plants, red sand and habitat opportunities (like hollow logs and tree stumps), in a manner robust enough for interactive kid's fun. Highlighting natural processes with soil, water, plants, insects and animals, children will learn as they explore many interactive and educational elements.

# *Renewable Energy Hub*



It is proposed that the Landcare Hub be powered off-grid by incorporating arrays of solar photovoltaic panels, one or more small wind turbines and a battery power storage bank to ensure 24/7 power supply.

**An EV vehicle, with an associated multi-purpose trailer, designed to facilitate a range of horticultural and agricultural functions, will be displayed on-site with an assortment of cutting-edge equipment.**

***A bank of EV charging stations is also proposed for the upper level of the Hub.***





# *Composting the City's Food Waste*



It is intended to setup receiving bins for deliveries of organic food waste from the restaurants and hotels in Broken Hill together with some green waste from the Broken Hill community.

**This is a common and very successful practice observed at community gardens inspected in other parts of Australia in preparation for this Project.**

Desirably there will be acquired for the Hubb Project an **A900 Rocket Composter**, a food waste composter capable of continuously processing up to 1750 litres of food waste each week.

**Leading clubs & hotels will be invited to become Landcare partners and exemplary Broken Hill businesses providing food waste for reprocessing.**



# WATER WISE MANAGEMENT PRACTICES



An important design concept for the Hub is for it to demonstrate all modes of water conservation.

The design will ensure rainwater is to be harvested from all rooves; greywater storage and reuse will be incorporated; composting toilets are proposed and all water-saving methods for the watering of plants will be on display.

Hence many of the Hub's raised garden beds will be wicking beds.



# GREEN WASTE MANAGEMENT



The volunteer gardeners, under guidance from employed staff, who will be sustaining the Hub's community garden component, intend to produce compost, mulch and natural fertiliser (from worm farms) to provide a continual stream of valuable natural organic material for the garden beds.

**Australian Vermiculture has offered to partner with Landcare, along with Michael Mobbs and his 'Cool Seats'**

Included in the Hub Project, it is the intended to acquire a **professional-scale mobile mulcher/shredder to rove Broken Hill**. This will turn garden waste into compostable material for the community garden, supply Landcare members and assist the community.

# ***Environmental Art on display***



## **Partners: West Darling Arts & the Broken Hill Art Exchange**

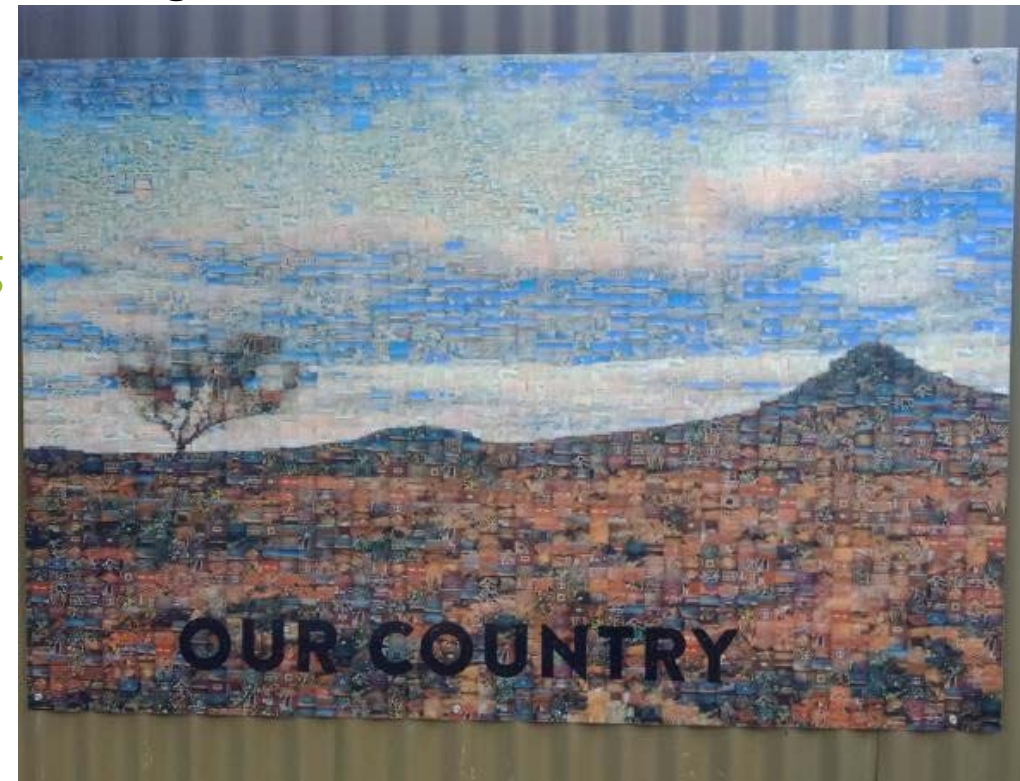
Some of the most successful and loved community gardens around Australia and globally incorporate public art into their design.

It is intended to incorporate sculptures into the Hub, with each sculpture to be an example of environmental art conveying thought-provoking messages which reflect on sustainability, biodiversity conservation and botany.

Surfaces at the Hub, like fences, which would be otherwise bare, will be adorned with artwork, similarly empathetic with environmental themes.

The ceiling panels in the Visitor Centre similarly offer display space.

**School children's mural at the Alma Public School adjoining the School's gardens.**













# **SATELLITE NURSERIES** – PLANTS TRADITIONALLY IMPORTANT TO ABORIGINAL COMMUNITIES FOR FOOD, MEDICINE & CRAFT.



# Satellite Nurseries

## *Supported by the Landcare Hub*



With inspirational vocational training to be gained at the Hub, we've accepted exciting and funded concept proposals to facilitate the creation of associated off-site Satellite Nurseries

- (1) **Correction Services NSW** at the Broken Hill Prison – already being built in the Female Prisoner facilities. They will be growing from Landcare supplied seed for *Greening the Hill Mk2* projects.
- (2) **Broken Hill PCYC** in Gypsum Street – at the rear of the riding training area, to be focussed on indigenous plants of traditional importance for their food, medicinal and craft properties.
- (3) **Mutawintji National Park** – in the management compound. Vocational training to cover seed collection and plant propagation. (Partners NPWS & Mutawintji Aboriginal Board of Management).





# ASSOCIATED HUB PROJECT

*to sustain the Hub's Seed Bank*



**Seed Production Area (SPA)  
Proposal for 60ha  
at the  
Broken Hill Regional Events Reserve**

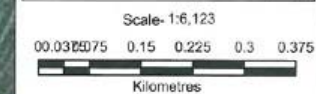
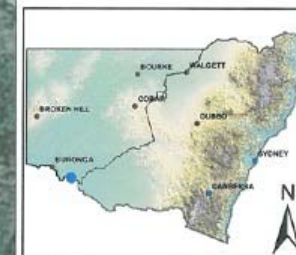
---



# **BROKEN HILL REGIONAL EVENTS RESERVE TRUST R630055**

## **Legend**

- R\_630055
- Lot-DP



Projection: GDA94 MGA Zone 54  
Image: SPOT 5  
Copyright: CNES 2012  
Distributed by: Raytheon Australia



Copyright NSW Trade and Investment (2013).  
This map is not guaranteed to be free from error or omission. The NSW Trade and Investment and its employees disclaim liability for any act done or omission made on the information in the map and any consequences of such acts or omissions.





# Broken Hill's Landcare Hub & Associated Projects



**GREENING  
THE HILL** Mk.2

A community-wide initiative for all - to renew and re-green your home, your city, your life.

**Help make it happen - together we can do it!**



LandcareBrokenHill@gmail.com  
[www.facebook.com/LandcareBrokenHill/](https://www.facebook.com/LandcareBrokenHill/)

**Initiatives for all of Broken Hill  
and the NSW Far West.**

**Future-building projects for all.**

**HELP MAKE IT HAPPEN –  
TOGETHER WE CAN DO IT!**