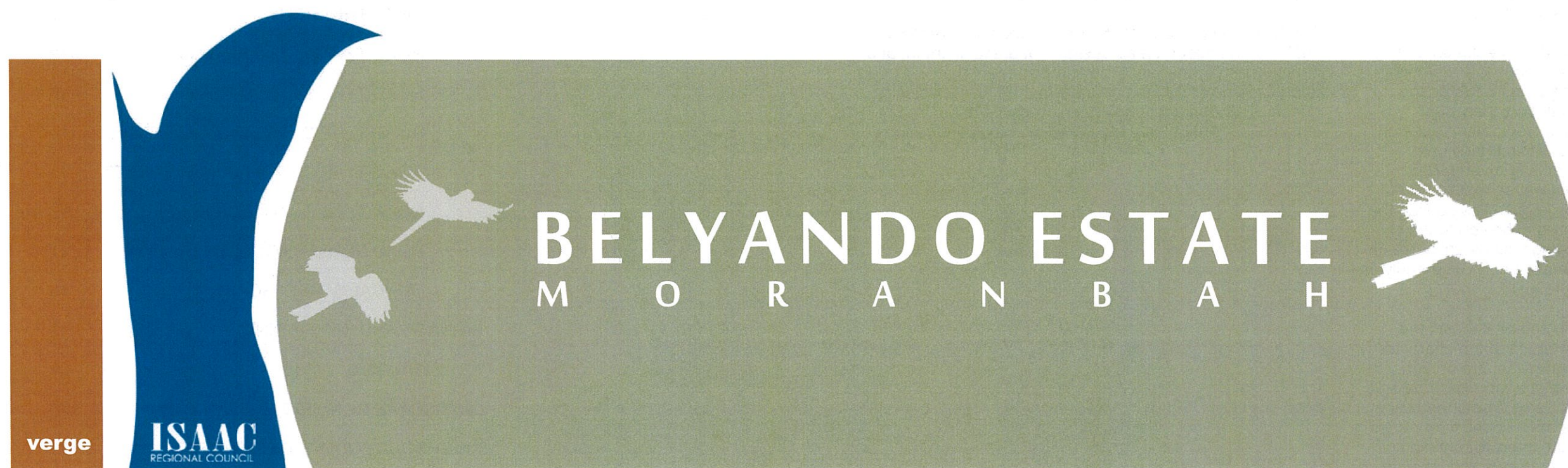


- 7 MAR 2014

MEDQ



LANDSCAPE MASTER PLAN STRATEGY
ISSUE B - 14 DECEMBER 2012

LANDSCAPE MASTER PLAN STRATEGY OUTLINE

The landscape master plan strategy has been prepared to provide a reference and direction for the design and overall character of the landscape for Belyando Estate. This includes diagrammatic layout of the creek parklands, the neighbourhood park, the courtyard park and an understanding of the streetscapes, entry features and artistic elements.

The first section of the Landscape Master Plan Strategy aims to explore and assess the existing facilities, parklands and iconic landmarks in order to generate an overview of the character and feel of the township of Moranbah. This research in conjunction with local feedback and consultation has facilitated in providing an outline of what recreational activities currently exists in the township and which are extensively used and what aspects are successful. This information can be viewed on pages two to six.

This initial research was followed by documentation of a site analysis and research into the remnant and regrowth vegetation and habitat. The analysis plan illustrates the challenges to the development with flood zones, dust exclusion zones and easements. The vegetation research has so far determined that one area within phase one may contain vegetation regrowth that is of an engaged status to the regional ecosystem. However, most of the significant regrowth and remnant vegetation lies outside the development boundary. This will need to be confirmed by an ecologist on site, and these drawings act as an indicator to the character of the existing vegetation only. The analysis plans can be seen on pages seven to eight.

The roads and street design has the potential to 'set the scene' for the development and contribute to the character and identity of the estate. Streetscapes that are of high amenity are thought to encourage neighbourhood pride and promote beautification of private property. The streetscape hierarchy intent is to emphasize the main connecting routes with planted boulevards, formalize the internal connecting streets and create informal residential streets and laneways. The suggested treatment for the medians of the boulevards is to mulch whether with bark or rocks and plant with Australian native, drought tolerant and where possible source endemic plants in order to reduce reliance on water and need for maintenance and mowing. At thresholds to the estate, and the residential roads, a change in surface treatment has been suggested to help indicate the presence of residents and children and prompt drivers to slow down. A diagram of the street hierarchy and associated plans and sections are shown on pages nine to eighteen. Following on from the road designs is the proposed signage and way finding strategy with image palates illustrating signage types, materials, design and art elements.

The concept designs for the neighbourhood, courtyard parks and the Grosvenor creek parkland are entirely conceptual and are to be developed in more detail as the project progresses. These concept drawings have taken in account the previous research and consultation and have included features such as, off street parking, stormwater treatment, areas for gathering and socializing, informal recreation areas, connecting pathways and natural and structured play equipment. A reference images of how these areas and facilities may look like contribute to creating the feel and potential character and identity of these parks. These images and drawings can be seen on pages twenty two to thirty. The plant palette concludes the strategy with an emphasis on Australian natives and drought tolerant species. All plants shown on these two pages are hardy and require minimal maintenance and care.

The landscape master plan strategy does not present a final detailed documented design, but a design intent and direction and further analysis and documentation will need to be carried out before commencing the detailed design phase. This document has been prepared to be read in conjunction with other consultants' drawings and reports.

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Urban footprint: 6 468 hectares

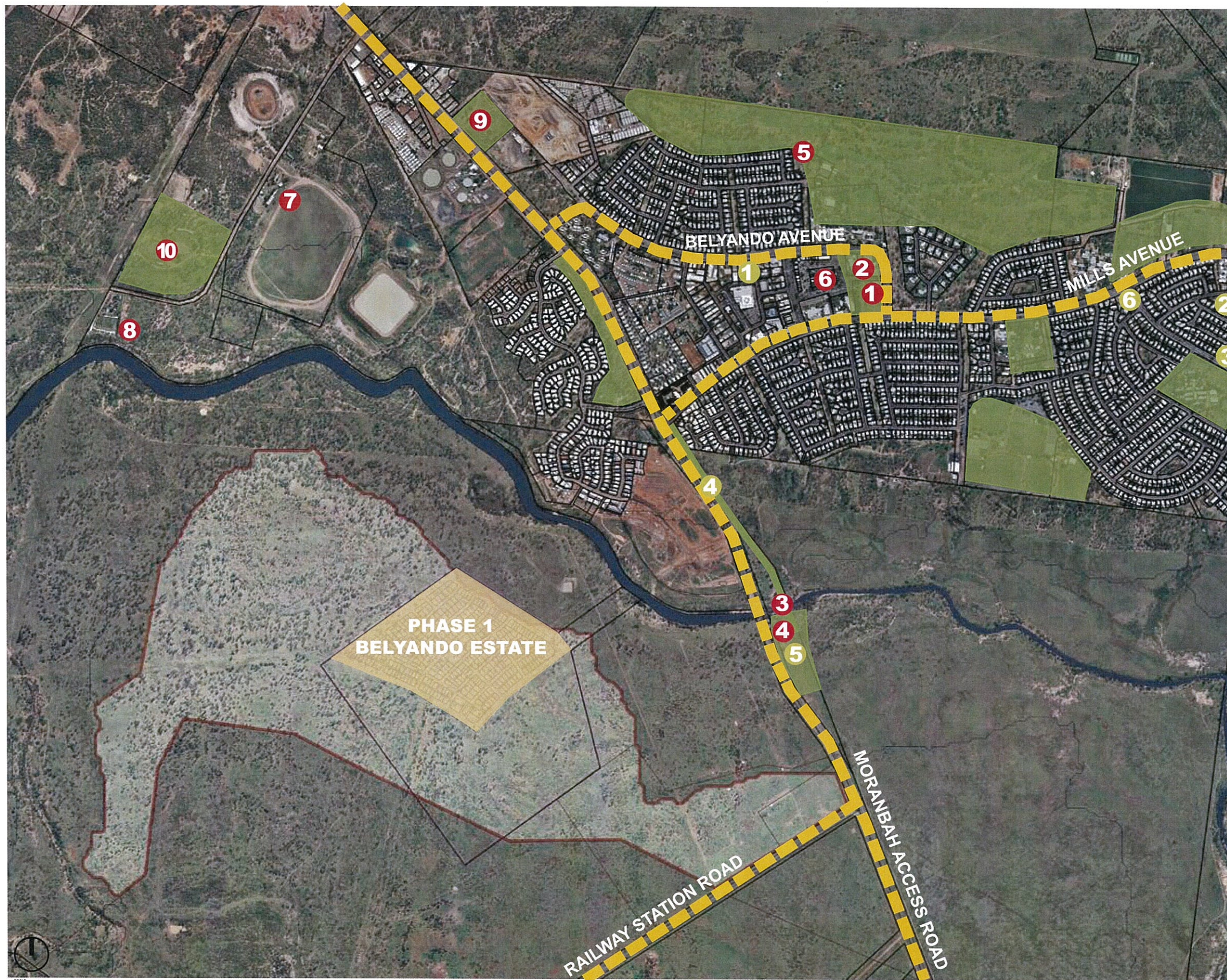
Rural Living Area: 251 hectares

Estimated population as at 2011: 23 000 people

Indicative planning population 2031: 37 000 people

Major regional centres: Moranbah

District rural activity centres: Clermont, Dysart, Middlemount, Glenden, Nebo



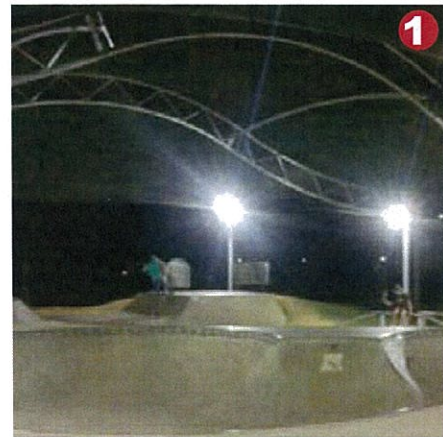
- LEGEND**
- EXISTING MAIN ROADS
 - # MORANBAH LOCAL ATTRACTIONS (refer to following pages for images)
 - # MORANBAH NEIGHBOURHOOD PARKS (refer to following pages for images)
 - GROSVENOR CREEK
 - PARKS AND RECREATION AREAS
 - UNCONSTRAINED AREA
 - PHASE 1 BELYANDO ESTATE

SCALE
0 100m 200m 300m 400m 500m



LOCAL ATTRACTIONS

1. Skate Park
2. Aquatic Centre and Playground
3. Local Waterhole
4. Entrance Landmark
5. Golf Course
6. Town Square
7. Moranbah Speedway
8. Shooting Range
9. Pony Club
10. Rodeo Grounds



1 SKATE PARK

Located on Appleton Street, Parella St, Mills Ave, beside the Moranbah Town Oval. The skate park provides a gathering space and activity for teenagers. The skate park is lighted for night time use and to provide surveillance in order to reduce vandalism.



2 AQUATIC CENTRE AND PLAYGROUND

Located on Belyando Avenue, beside the council chambers, the Greg Cruickshank aquatic centre has recently undergone an extensive \$6 million upgrade adding new shade structures and the aquatic play facilities as seen in the image below.



- Facilities include:
- Refurbished 6 lane 50m pool
 - Enclosed heated 25m pool
 - Children's water playground
 - Children's dry playground
 - Shaded BBQ and picnic areas
 - Café and eating area
 - Grandstand style seating
 - Male and female amenities
 - Swimming club and shop
 - Disables ramp access
 - Car parking



3 LOCAL WATERHOLE

The local waterhole is a well known swimming spot along the Grosvenor creek.



4 ENTRANCE LANDMARK

The infamous big red rhino bucket is located at the main entry in to Moranbah. It was part of a four-year community beautification project which commenced in 1997. The Big Red Bucket was purchased from Peak Downs Mine for \$1 in 1999. It is now iconic to Moranbah.



5 GOLF COURSE

The Moranbah Golf Course and Club are located on Leichhardt and is a semi-private 18 hole course. The course has it's own restaurant and electric cart hire facilities.



6 TOWN SQUARE

The Moranbah town square forms part of the retail hub and provides a landscaped plaza to which the shops face on to. The town square has an interactive water feature, blade walls and areas for seating and eating. The area is brightly lit for night time activities, dining and shopping.



7 MORANBAH SPEEDWAY

Speedway track and club that hosts local and regional events.



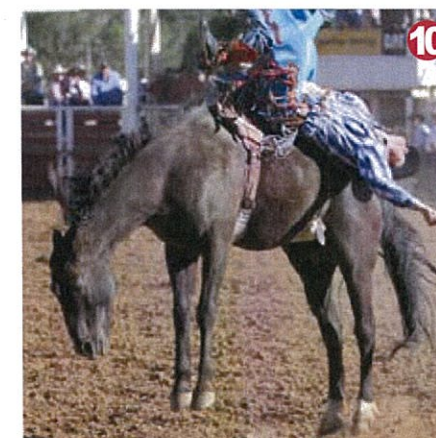
8 SHOOTING RANGE

Local shooting range and also the home to the Moranbah Pistol Club.



9 PONY CLUB

Club for learning to ride, train and care for horses as well as holding equestrian events and shows.

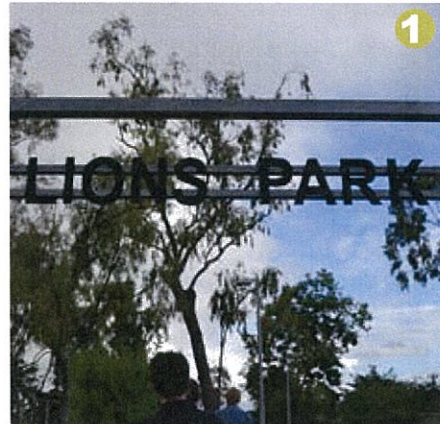


10 RODEO GROUNDS

Rodeo grounds that holds events and provides opportunity for social gathering.

NEIGHBOURHOOD PARKS

1. Lions Park
2. Bernborough Park
3. Nolan Park
4. Federation Walking Track
5. Grosvenor Creek Rest Area
6. Coughlan Park



1 LIONS PARK

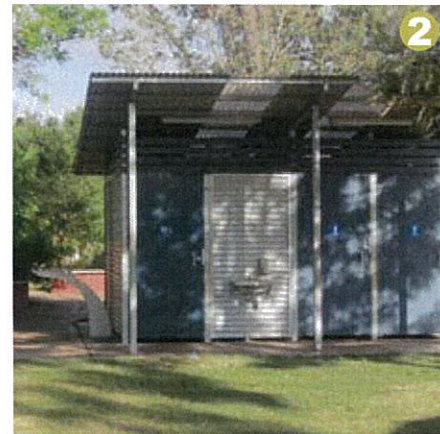
Lions park is a pocket park that links the grocery store to the main road. It is a well used thoroughfare which provides constant day time surveillance. The park is signed with a metal arch to the entrance and fencing is provided to the park perimeter which prevents vandalism and defines the park boundaries.



Modern shelters provide shade to picnic tables, BBQs, and seating areas. Rubbish bins and drinking fountains are also provided. Coloured concrete and coloured softfall have been used in hard stand areas. The hardstand area has allowed for children to draw with chalk and provided an unstructured opportunities for play.



Circular seating arrangement around a retained large tree. A coloured concrete insert brightens up the hardstand area. This area is also illuminated at night for safety and to deter vandals.



2 BERNBOUROUGH PARK

Bernborough park is a well utilized park especially on weekends. It provides for a play facilities for all age groups, as well as shelters, toilets, drinking fountains, bike racks, bbqs and safe nearby parking bays.



Obstacle course with stop and go signs. Currently used by scout group for bicycle safety.

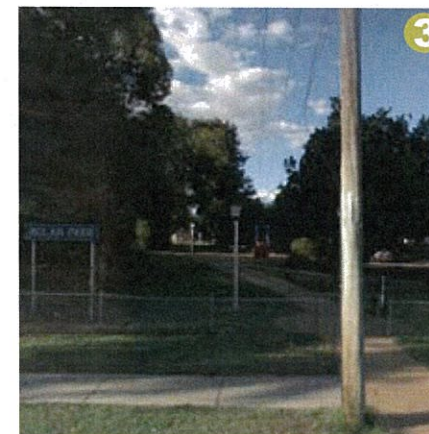


Space nets offer climbing challenges for older kids. A basketball net and junior play equipment are also provided.



Parking to front of park area is well used on weekends and for group park activities such as birthdays and functions. The addition of bollards, wheelstops and street trees soften the car parks.

Black fencing is provided to the park perimeter which prevents vandalism and defines the park boundaries.



3 NOLAN PARK

Nolan Park is a small highly vegetated pocket park that provides a pedestrian connection through to the next street. Nolan park has toilet facilities, a well light pedestrian pathway and opportunities for passive recreation.



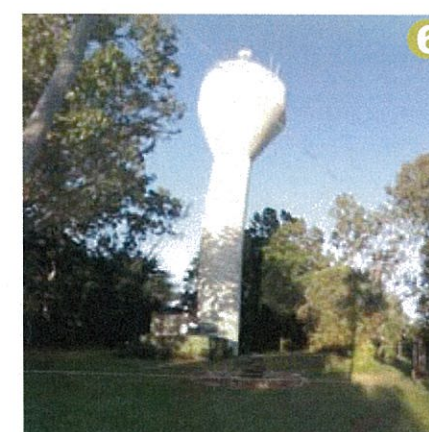
4 FEDERATION WALKING TRACK

Very popular walking track with exercise and fitness stations.



5 GROSVENOR CREEK REST AREA

The rest area is predominately used by travellers passing through Moranbah in which they are able to access information signage, toilets and picnic facilities. The rest area is beside popular waterhole where younger locals often gather and come for a swim.



6 COUGHLAN PARK

Coughlan park is a highly vegetated water tower reserve that provides opportunities for passive recreation.

LIST OF ALL PARKS AND PLAYGROUNDS IN MORANBAH

Moranbah Lions Park
12 Belyando Avenue

Binda Park
Grosvenor Drive

Bernborough Park
Bernborough Avenue

Apex Park
Moranbah Access Road, Goonyella Road

Gilchrist Park
Gilchrist Terrace

Koala Park
Koala Terrace

Nolan Park
Yeates Street

Brian Coughlan Park
Corner Clements Street and Mills Avenue

Ted Rolfe Oval
Mills Avenue

Flohr Park
Flohr Drive

Town Square Park
Town Square Avenue

Library Park
Batchelor Parade

WORKSHOP OUTCOMES

- Recognition that Moranbah is 'the new kid on the block' and as such is not tied to traditional country town design forms.
- The workshop attendees agreed that a contemporary landscape design approach is appropriate.
- The design approach will be drawn from Moranbah's natural landscape character.
- Family friendly landscape design is also appropriate.
- Creating safe, attractive and robust landscape features is important.
- Low key but innovative and visually striking approach to designed landscape features
- Cost effective and easily managed landscape maintenance is important.
- A street tree implementation strategy is important especially across the building phase of the development, and as a way of linking the township with the new estate.
- Bernborough Park and Lions Park are seen as good examples for new parks to follow.
- 'A right of passage' approach to nature based play elements within parks is important.



FAMILY FRIENDLY

Spaces for family and freinds to gather such as BBQs with shelters, shadey trees and picnic tables.



NATURE BASED PLAY

Durable
Low-maintenance
Sandstone blocks provide inventive play opportunities in combination with 'off the shelf items'.



COMMUNITY PLANTING DAYS

There is an opportunity to involve the community in planting days to foster ownership especially wihtin street trees.



CONTEMPORARY DESIGN

Timber or steel totems
Durable
Low-maintenance



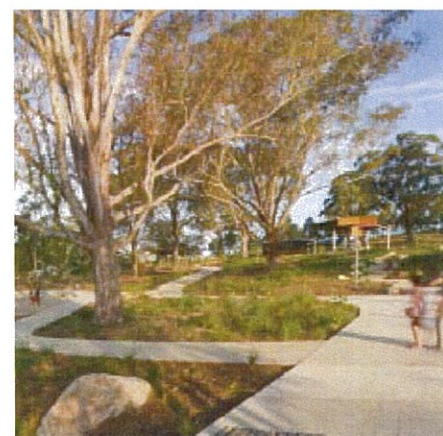
WAY FINDING DEVICES

Robust
Timber and steel markers
Durable
Low-maintenance



RECREATIONAL ACTIVITIES

There is an opportunity to link the estate with greater external recreational activities such as horse riding, walking and hiking trails.



WORKING WITH THE NATURAL BEAUTY OF THE LANDSCAPE

Make the most of existing features of the creek banks and reconnect to the natural beauty of the surrounding landscape.



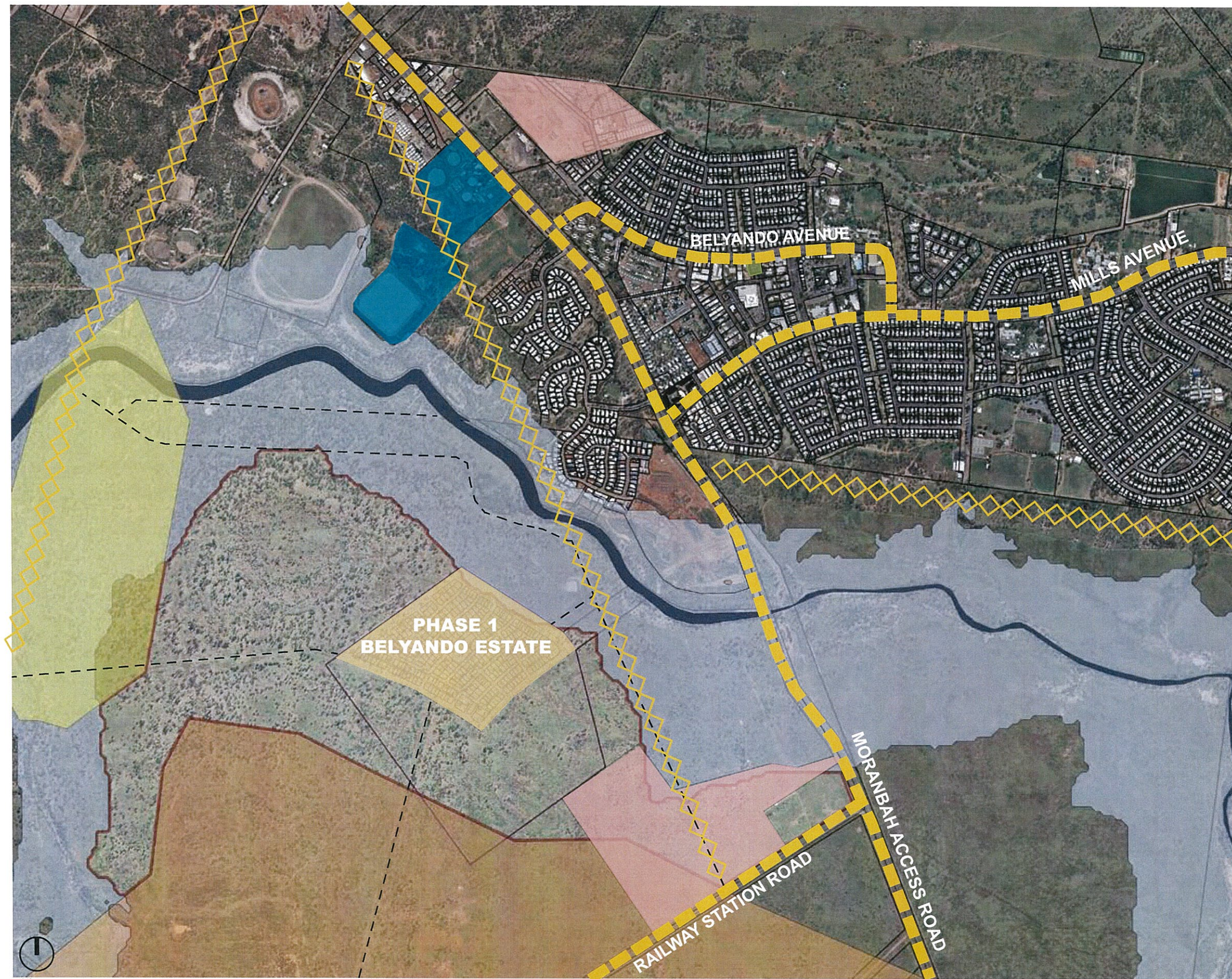
EXISTING MORANBAH MEDIANS

Maintenance intensive grassed median.
Healthy mix of Australian native and exotic tree species.
Devise a strategy to link elements of this treatment to the new Belyando Estate medians with cost effectiveness and low maintenance outcomes.

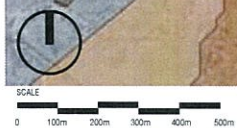


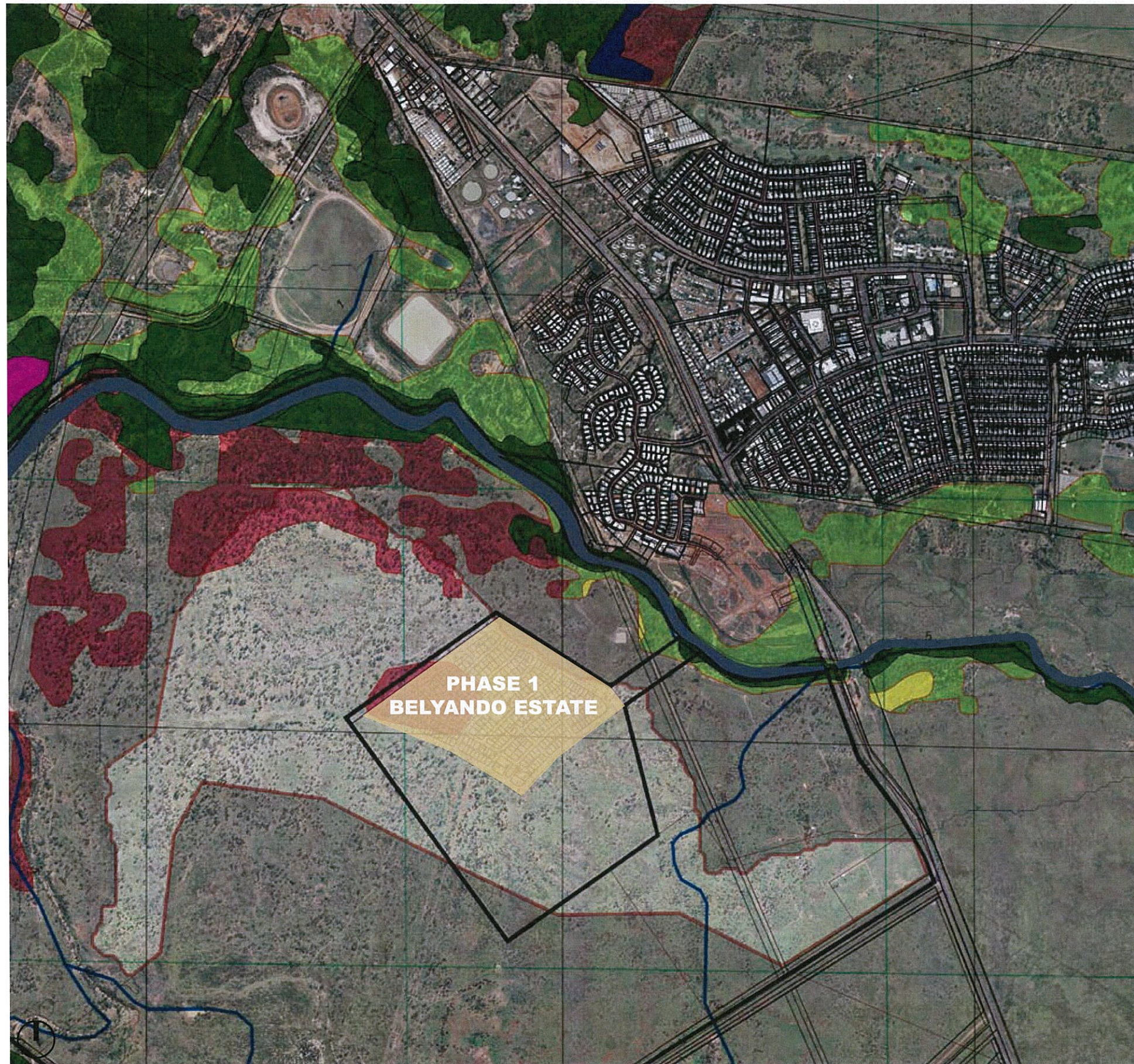
ATTRACTIVE, SAFE AND ROBUST

Threshold treatments to major and minor entrances into the estate and at laneways with planting and trees.



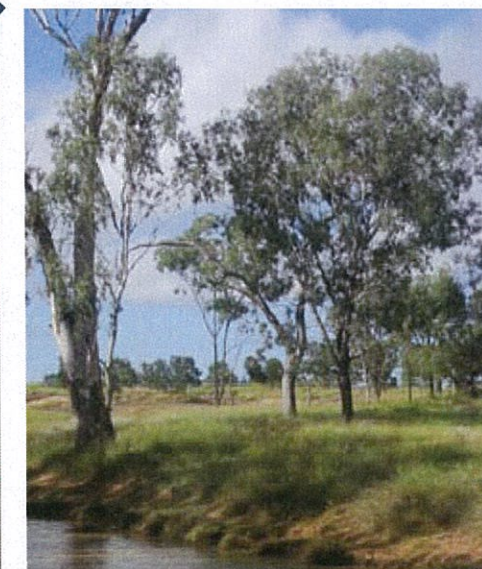
- LEGEND**
- EXISTING MAIN ROADS
 - GROSVENOR CREEK
 - 1 IN 100 FLOOD ZONE
 - UNCONSTRAINED AREA
 - PHASE 1 BELYANDO ESTATE
 - DUST EXCLUSION AREA
 - SHOOTING RANGE AND BUFFER
 - EASEMENTS
 - EXISTING AND PROPOSED MAC CAMPS
 - WATER TREATMENT AREA
 - FENCE LINE TO FARMING PADDOCKS (Approximate location only)





LEGEND

- UNCONSTRAINED AREA
- BELYANDO ESTATE
- PHASE 1 BELYANDO ESTATE
- GROSVENOR CREEK
- HIGH VALUE REGROWTH - ENDANGERED
Vegetation containing ENDANGERED regional ecosystems
- HIGH VALUE REGROWTH - OF CONCERN
Vegetation containing OF CONCERN regional ecosystems
- HIGH VALUE REGROWTH - LEAST CONCERN
Vegetation containing LEAST CONCERN regional ecosystem
- REMNANT VEGETATION - ENDANGERED
Vegetation containing ENDANGERED regional ecosystems
- REMNANT VEGETATION - OF CONCERN
Vegetation containing OF CONCERN regional ecosystems
- REMNANT VEGETATION - LEAST CONCERN
Vegetation containing LEAST CONCERN regional ecosystem



Photograph towards Belyando Estate
by Grosvenor Creek

SPECIES LIST (as per DERM regional ecosystem mapping):

Eucalyptus spp.,
Corymbia spp.,
Eucalyptus populnea,
Eucalyptus melanophloia,
Corymbia clarksoniana,
Eucalyptus crebra,
Acacia harpophylla,
Terminalia oblongata,
Eucalyptus moluccana,
Eucalyptus microcarpa.

SOIL TYPES (as per DERM regional ecosystem mapping):

Cainozoic sand plains,
Cainozoic clay plains,
Alluvial plains,
Margins of alluvial plains.