



Open Spaces Strategy

August 2017

Table of Contents

1. Introduction	3
2. Background	4
2.1 Policy Background	4
2.2 Precincts & Demographics	5
3. Standards	7
4. Open Spaces in Hay	8
4.1 Current Context	8
4.2 History	10
4.3 Legislative Context	15
5. Consultation & Community Input	16
6. Guidelines	17
6.1 Classifications	17
6.2 Design of Playgrounds	22
7. Proposals	27
7.1 West Hay Precinct	28
7.2 East Hay Precinct	32
7.3 Central Hay Precinct	34
7.4 South Hay Precinct	37
7.5 Booligal Village	39
7.6 Maude Village	39
7.7 General	40
9. Table of Recommendations	41
10. Sources and Further Reading	43

Photo credits: Margie McClelland, Hay Shire Council

1. Introduction

The urban areas of Hay provides the community opportunities to relax and enjoy the outdoors, and in this the open spaces contributes greatly. Open spaces don't only relate to playgrounds, they also include sporting grounds, dedicated areas for other uses (e.g. grassed areas with tables and chairs), spaces which contain walking tracks, artwork and facilities such as toilets and BBQ's, or just a natural space comprising of only grass and trees.

In the past the management of Hay's open spaces has been ad hoc, but with the development of the Hay Open Space Strategy we will attempt the following:

- To gauge the needs of the community
- To do a demographic analysis of different precincts in Hay
- To classify the open spaces in Hay for ease of planning and budgeting
- To provide guidelines for the standard of park development
- To prioritise the development of open spaces for the future

Due to Hay being so isolated, it is important we provide the community and tourists with adequate facilities. Council strives to accommodate the residents of Hay and we want the town to have a lasting impression on visitors as well. In a recent survey it was shown that the appearance of the town was the biggest attractor to visitors. Open Spaces provide many benefits to the town, such as:

- Providing suitable facilities for all ages and diversities
- Providing facilities that promote health and an active lifestyle
- Providing a resource for enjoyment and promoting interaction in the community
- Providing a positive visual impact

The process involved in developing the plan includes:

- Council adopted a recommendation to proceed with a Draft Open Spaces Strategy at its meeting held 28th April 2015.
- A Background Paper was produced and put on public exhibition, with comments closing 24th December 2015.
- An Open Day was held on 25th November 2015 at the Hay Park.
- A Draft Open Spaces Strategy was developed and went to Council at its meeting held 16th May 2017 where it was resolved to put it on public exhibition for two months.
- The Draft Strategy was on exhibition until 7th July 2017.
- Amend Open Spaces Strategy if required from comments received, and return to Council to adopt the Plan.



2. Background

2.1 Policy Background

2015-2019 Delivery Plan (Incorporating 2015/2016 Operation Plan):

The Hay community has a total population of 596 under the age of fourteen, the main users of the play equipment. The town has a total population of 2956 people who would use parks for other reasons such as general recreation and sporting activities. The Hay community enjoys a high standard of infrastructure and community amenities which they utilise on a regular basis. These amenities are an asset to the town and the sporting, cultural, tourism, recreation and economic opportunities are well received. The Hay community 'values its natural and built environments to support a sustainable environment,' therefore the parks play an important role in the growth and success of our town. The Hay community also 'values its safe, healthy lifestyle that cares for the welfare of others', which should be considered in planning open spaces. All playgrounds are inspected and maintained monthly to a standard consistent with the community's expectations.

Murrumbidgee River Master Plan 2013:

Within the Hay area the parks are vital to attract tourists and keep the community in town. There is a proposal for the Lions Park to be developed as it is the first attraction seen at the entrance to Hay. It is proposed that the park and the river to be integrated, with the possibility of creating a wharf with a small building. This location is proposed also to have kayaks for hire and also a small café/souvenir shop. Extra upgrades for this park include toilets, upgrade of play equipment and upgrade of furniture. Pocock Park is also proposed for an upgrade as it is in view from the Highway.

Pocock Park is suggested to be integrated with its surrounding areas including the natural areas, river, pub and holiday park to provide a visually pleasing entrance into town and entice travellers off the highway.

Hay Inclusion Action Plan (2015):

There are a range of issues in relation to disabled access to Hay's facilities and have been addressed with resolutions from council. The seating at Ashwill Park is not accessible for the disabled and therefore decreases the chances of them and their companions using the facility. Also the Ovals around town have had accessibility issues by the disabled in wet weather conditions and the Grand Stand is not accessible for them as longer steps are required. It has been noted that Hay is in need of a fenced in playground at the Hay Park due to safety, and a toddler play area for younger children has also been requested. The footpaths in the Hay park have also been seen as a tripping hazard and needs attention. Council is currently investigating these issues and working towards resolving them.

Community Strategic Plan 2013-2023:

The way in which Council operates is guided by a charter, one of the components considered is to promote, to provide and to plan for the needs of children. This is taken into consideration when planning for the construction of facilities around Hay. Due to nearly 600 children under the age

of fourteen currently residing in Hay, parks are an important aspect for Council. Hay is very well known for its excellent parks and sporting facilities. The community were surveyed regarding the best things about living in Hay, and this survey recognised the fourth best reason is the lifestyle opportunities from good social and recreational facilities and community infrastructure.

Making Hay: Community Development Plan 2012:

One of the major ways in which Council approaches the strengthening of tourism is through the maintenance of services that support the Shire's population, including high quality health, cultural and recreational services. The NSW State Plan focuses its efforts on five areas, the area specific to parks is 'Renovate Infrastructure'. Building the infrastructure that is enjoyed by the community of Hay has a major impact on both our economy and people's lives. Through a survey conducted with the Hay community it was recognised that one of the top five best things about living in the Hay shire is the 'Lifestyle opportunities from good social and recreational facilities and community infrastructure'.

2.2 Precincts & Demographics

The current ABS projections for Hay can be seen below:

Table 1: Estimated Resident Population Growth

Estimated Resident Population Growth			2013-2014 change		Area km2	Population Density 2015 persons/km2
Local Government Area	2013r no.	2014p no.	%	no.		
Hay (A)	2962	2989	0.9	27	11326.0	0.3

Source: Australian Bureau of Statistics, 3218.0 Regional Population Growth, Australia - Released 31/3/15

It is expected that Hay's population will show a gradual increase, or at least be stable.

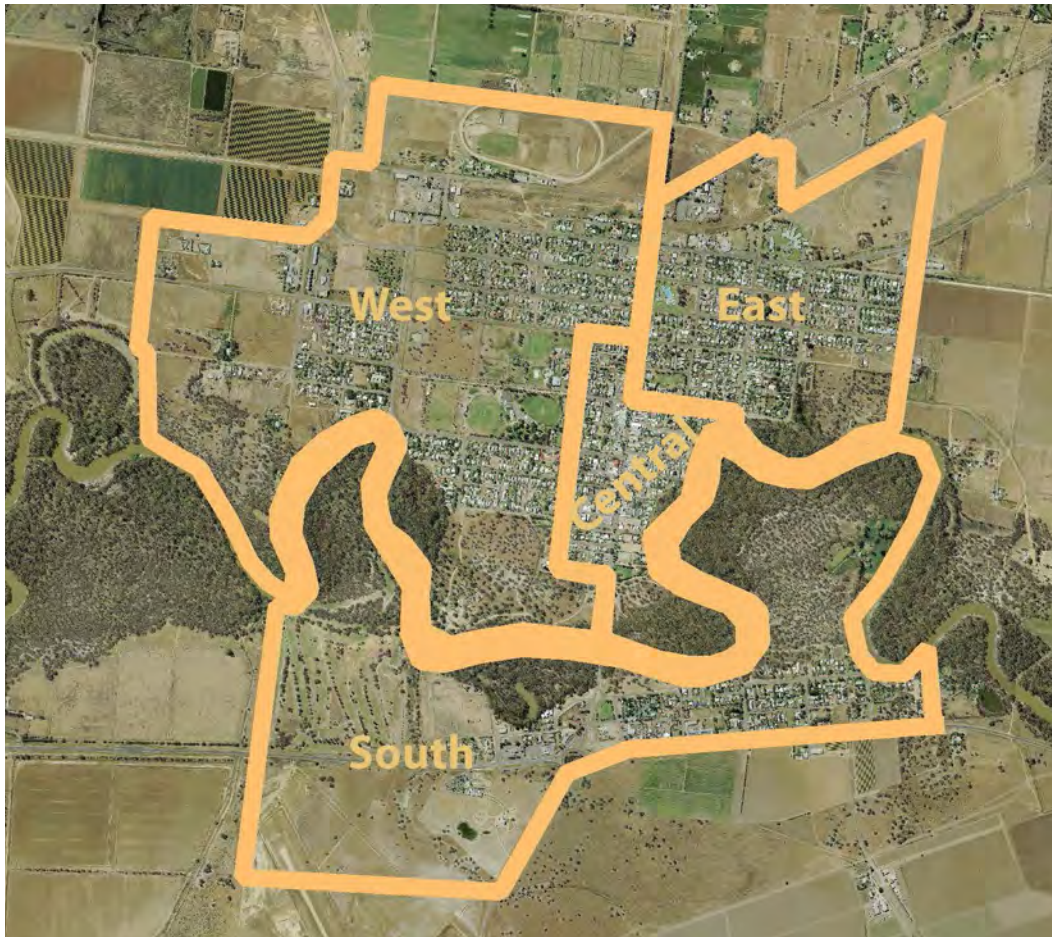
For ease of planning the open spaces in Hay LGA, it is advisable to do a spatial delineation of different precincts in the urban areas.

For the purpose of this strategy, the boundaries of predefined ABS precincts would be used, namely:

- East Hay
- Central Hay
- West Hay
- South Hay
- Maude Village
- Booligal Village



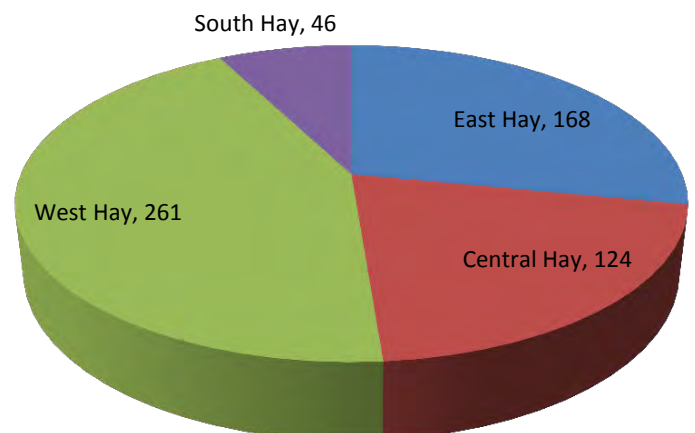
Hay Precincts are shown in the following map:



A demographic analysis of the youth (ages 0-19) in these precincts would be the following:

- East Hay - 168 youth
- Central Hay - 124 youth
- West Hay - 261 youth
- South Hay - 46 youth
- Maude Village - 161 (total population from 2006 Census)
- Booligal Village - 162 (total population from 2011 Census)

Youth Numbers per Precinct



3. Standards

Quality controls of the playgrounds are controlled by legislation and standards, and the following are relevant:

- Australian Standard 1158, 2005 – Lighting for Public Roads and Public Spaces
- Local Government Act 1993
- Australian Standard AS 4269 - 1995, Complaints Handling
- Engineering standard – GCC Engineering Guidelines for Subdivisions and Development Standards
- AS/NZS 4422:1996 - Playground surfacing - Specifications, requirements and test materials.
- AS 4422-1996/Amdt 1-1999 –Playground surfacing - Specifications, requirements and test method
- AS 2555-1982 – Supervised Adventure Playground(Guide to establishment and administration)
- AS 4685.1-2004 – Playground Equipment, Part 1: General safety requirements and test methods
- AS 4685.1-2004/Amdt 1-2006 - Playground equipment - General safety requirements and test methods
- AS 4685.1-2004/Amdt 2-2008 - Playground equipment - General safety requirements and test methods
- AS 4685.2-2004 - Playground equipment - Particular safety requirements and test methods for swings
- AS 4685.2-2004/Amdt 1-2006 - Playground equipment - Particular safety requirements and test methods for swings
- AS 4685.2-2004/Amdt 2-2008 - Playground equipment - Particular safety requirements and test methods for swings
- AS 4685.3-2004 - Playground equipment - Particular safety requirements and test methods for slides
- AS 4685.3-2004/Amdt 1-2006 - Playground equipment - Particular safety requirements and test methods for slides
- AS 4685.4-2004 - Playground equipment - Particular safety requirements and test methods for runways
- AS 4685.5-2004 - Playground equipment - Particular safety requirements and test methods for carousels
- AS 4685.6-2004 – Particular Safety Requirements and Test Methods for Rocking Equipment.
- AS 4685 (Set)-2004 - Playground Equipment Safety Set
- AS/NZS 4486.1-1997 - Playgrounds and playground equipment, Part 1: Development, installation, inspection, maintenance and operation
- AS 4422-1996 – Playground surfacing – Specifications, requirements and test method
- AS 2342 -1992 – Development, testing and implementation of information and safety symbols and symbolic signs
- Signs As Remote Supervision (Statewide) Version 3
- Australian Standard 1158, 2005 – Lighting for Public Roads and Public Spaces
- AS/NZS-4360:2004 Risk Management – Playgrounds
- AS 1428-1992 – Design for Access and Mobility



4. Open Spaces in Hay

4.1 Current Context

Below are the existing Open Spaces in the Hay Shire:

Table 2: Existing Open Spaces

Park	Address	Precinct	Area (ha)	Assets
Apex Park	355 Church Street	East Hay	0.21	2 x metal benches, 1 x wooden table & chairs, 2 x metal table & chairs on concrete slab, 1 x play equipment, swing set, 1 x bin, signage
Ashwill Park	409 Moppett Street	Central Hay	0.084	Play equipment (stepping blocks and peak-a-boo sign), 4 x picnic settings
Bill Moorhouse Park	Lang Street	South Hay	3.04	Nil
Booligal Gymkhana	Lachlan Valley Highway	Booligal	24.15	Shed and toilets
Booligal Recreation Reserve	Lachlan Street	Booligal	2.51	Playground, BBQ area, shade shelters, concrete cricket pitch, toilet block, signage
Brewery Park	Moppett Street	West Hay	0.31	2 x table & chairs, bin, signage,
Bushy Bend Reserve	Lachlan Street	Central Hay	16.3	7 x picnic settings, 1 x wooden table & chair, 6 x sculptures, BMX track, old bridge turntable & chain mesh fence, crushed rock pathway, footbridge, signage, 6 x bollards, 3 x bins, 12 x metal bollard & chain fence, 15 x plastic bollards, 2 x interpretive signs & 9 plaque stands, Aboriginal sites/trees, Aboriginal painting on main bridge pylons, 3 x exercise equipment stations
Cemetery Bend	Underwood Road	East Hay	19.32	Sign, canoe trees, pit toilet
Dal Wright Park	Water Street	West Hay	0.53	1 x table & chair, 1 x picnic setting, metal windmill, cement road sign, swing set, signage
Halse Park	Lang Street	South Hay	0.12	Picnic setting, swing set, slide, signage, 4 x log seats, 1 x bin, 3 x bollards on levee bank

Park	Address	Precinct & Park Classification	Area (ha)	Assets
Hay Park	Moppett Street	West Hay	13.5	26 x wood and cement leg chairs, 2 x aluminium chairs, 2 x metal picnic shelters, 20m metal perimeter seating around No.2 oval, 2 x sheltered players seating, 10 x wood and metal table & chairs, 3 x wood table & chairs, 1 x covered metal table & chairs, 6 x metal/wood free standing grandstands, Boer War Memorial, score board No1 oval, 900m metal chain link fence, 4 x cement oval lights on No1 oval, 1 x wooden grandstand, fountain & rose garden bed, old town water tank & tower, shelter over sandpit, cement skate ramp, 1 x cement netball court, 2 x asphalt netball courts, 12m metal open sided shed with seating, 4 x metal light grandstands, 10 light stands for netball court lighting, metal shelter with announcers box on top, freestanding metal grandstand, 3 x cement shot put and discus areas, 2 x metal mesh barriers, 2 x electric BBQs with metal shelter, park lighting, No.2 Oval scorers shed, 2 x play equipment, swing set, exercise equipment, 30 x bins, signage
Hay Showground	Showground Road	West Hay	28.5	Showground Facilities
John Houston Memorial Swimming Pool Park	Lachlan Street	East Hay	0.6	3 x table & chairs, 1 x covered table & chairs, light post, hang glider stand, play equipment, signage, bin
Lions Park	Lachlan Street	Central Hay	0.81	6 x table & chairs, 1 x covered seating area with table & chairs, covered BBQ area (3 BBQ's & sink), rose garden bed, toilet block, play equipment, signage, 3 x bins
Madmans Reserve	Leonard Street	East Hay	1.46	Sign
Maude Park	Yang Yang Street	Maude	0.37	Nil
Maude Recreation Reserve	Yang Yang Street	Maude	4.62	Tennis courts & shelter, old Maude school, toilet block, shed, playground
Murray Street Park	Murray Street	East Hay	0.39	Welcome to Hay sign, RV sign
Pal Richards Park	Keble Street	West Hay	0.28	1 x table & chair, play equipment & swings, signage, bin, sewer intersection point in a 8m high chain linked fence

Park	Address	Precinct & Park Classification	Area (ha)	Assets
Pocock Park	Cobb Highway	South Hay	0.76	1 x aluminium chair, 1 x covered table & chairs, 1 x table & chairs, play equipment, pump, metal cage, signage, 3 x flag poles, 2 x bins
Sandy Point Reserve	Water Street	West Hay	37.31	13 x covered metal table & chairs, 1 x concrete table & chair, old sewer works, walk bridge, brick wood burning BBQ & 2 x electric BBQ's in sheltered area, boat ramp, shower/wash area, toilet block, sink, lighting, signage, 8 x bins, Aboriginal sites/trees. Skate Park - 3 x signs, 2 x bins, 3 x metal table and chairs, cement skatepark
Soapworks Beach	Jackson Street	West Hay	17.54	2 x signs, concrete boat ramp, 2 x toilets, wooden table & chairs
Sturt Park	Lachlan Street	Central Hay	0.1	2 x aluminium chairs, Sturt Commemorative Monument, 3 x rose gardens brick, signage, bin, Lions Building
Toby Brown Park	Leonard Street	Central Hay	0.21	1 x bench chairs on concrete slab, 1 x covered table & chairs on concrete slab, bin, signage
Wharf Reserve	Wharf Reserve	Central Hay	0.17	Nil

4.2 History

Before European settlement began in the 1840's, the Nari Nari Aborigines inhabited the area where Hay now stands. The noted explorer, Charles Sturt passed through the area during his exploration of the Murray and Murrumbidgee Rivers in 1829-30.

The present site of Hay was located at the junction of four large 'squatter' properties, one of which was occupied by the Lang Brothers where an important river crossing was located. Stockmen would frequently camp at the site before crossing the river with their stock and even now the area is known as Langs Crossing.

In 1858, river steamer Captain Francis Cadell built a store at the crossing, which was soon followed in 1859 by a punt service and hotel built by American Henry Leonard.

The township of Hay was named after Sir John Hay, a local pastoralist and Member of Parliament, after the town was gazetted in 1859.

Development of the town progressed with the original courthouse (the site of the present post office) built in 1860. Soon after, Cobb & Co. made Hay the headquarters for their Victoria and Riverina operations and then set up a coach factory at the corner of Lachlan and Randall Streets which became the largest coach factory in Australia outside Sydney.

The population of the town grew from 300 to 3000 over the years, then in 1914, at the beginning of World War I, virtually every eligible male, some 641 in all, enlisted for active service. 134 of them didn't return.

The Hay War Memorial High School was opened on ANZAC Day 1923, as a living memorial to the men and women of WWI who fought for their country.

At the beginning of World War II in 1940, internment camps were constructed around the town, which housed almost three thousand German and Austrian internees from England where they would become famous as the ‘Dunera Boys’.

The camps operated for six years, with the thousands more internees and prisoners of war doubling the town’s population.

Hay’s 1859 Plan (figure 1) shows a town that has its core to the north of Madman’s Bend, centred around the Church Street area. As per the town designs of that era, there are limited public parks, except for a “square” to the north of the current township, between Piper and Coke Streets. There are a number of reserves in the 1859 Plan, including reserves for public buildings, a market, churches, wharves, “Pasturage and Public Recreation”, and “Access to Water and other Public Purposes”.

Hay’s 1901 Plan shows significant changes to the 1859 Plan, with the town resembling the Hay of today, with Lachlan Street becoming the centre, the development of South Hay, and the bridge connecting the South and North being close to its current location. Regarding open spaces the following can be noted:

- Hay Park has been dedicated to “Public Recreation”, “Athletics Sports Ground”, “Oval”, and “Duck Pond”.
- Showgrounds are designated.
- There are more areas reserved for public recreation and public buildings, but still no parks in the residential areas.

In Hay’s 1972 Plan the formalisation of the current open spaces can be seen.



Figure 1: Town of Hay Map 1859

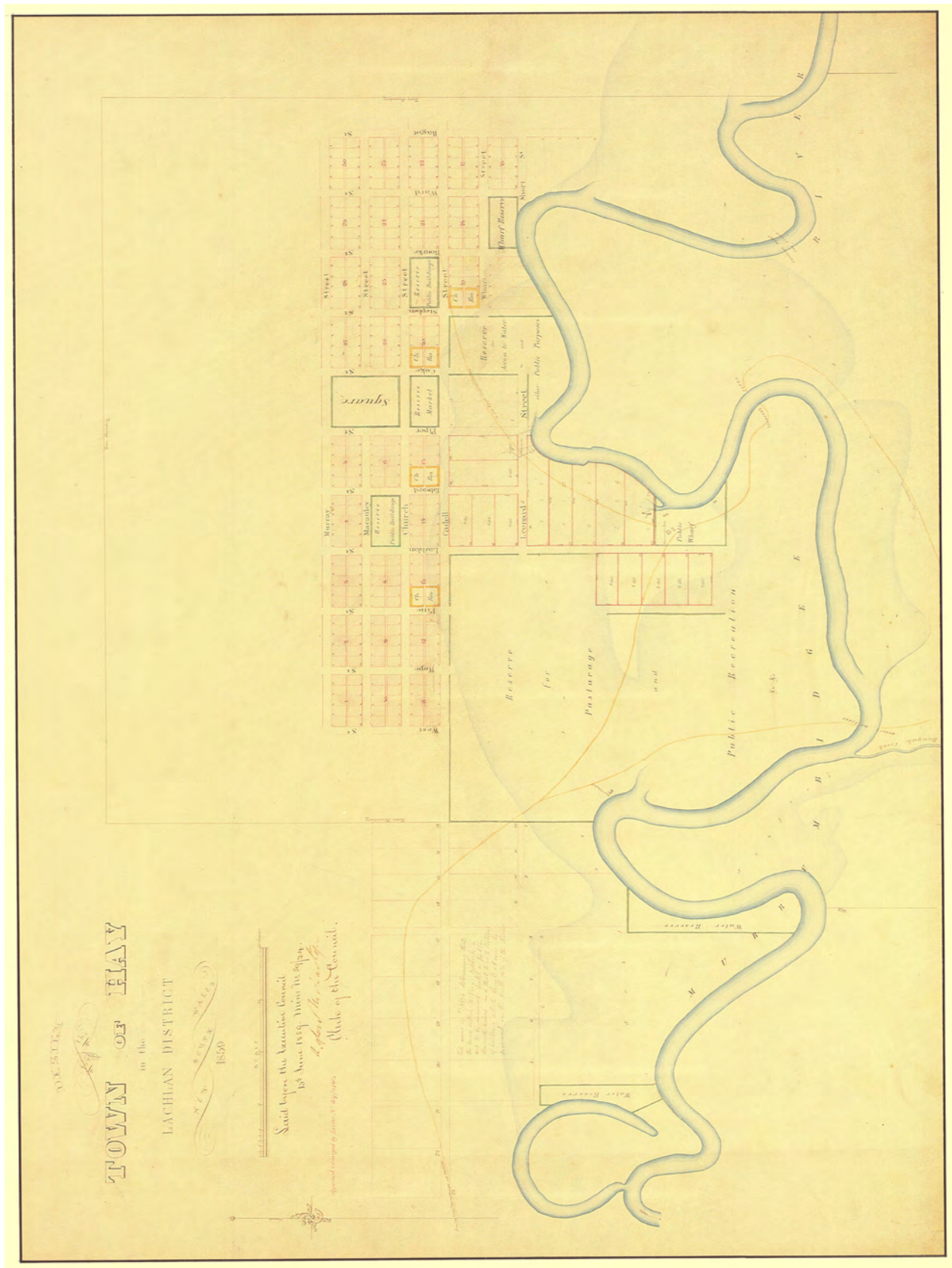


Figure 2: Map of Hay from mid 1900's



Below outlines the history of each “Open Space” in the Hay Shire which depicted how they got their name:

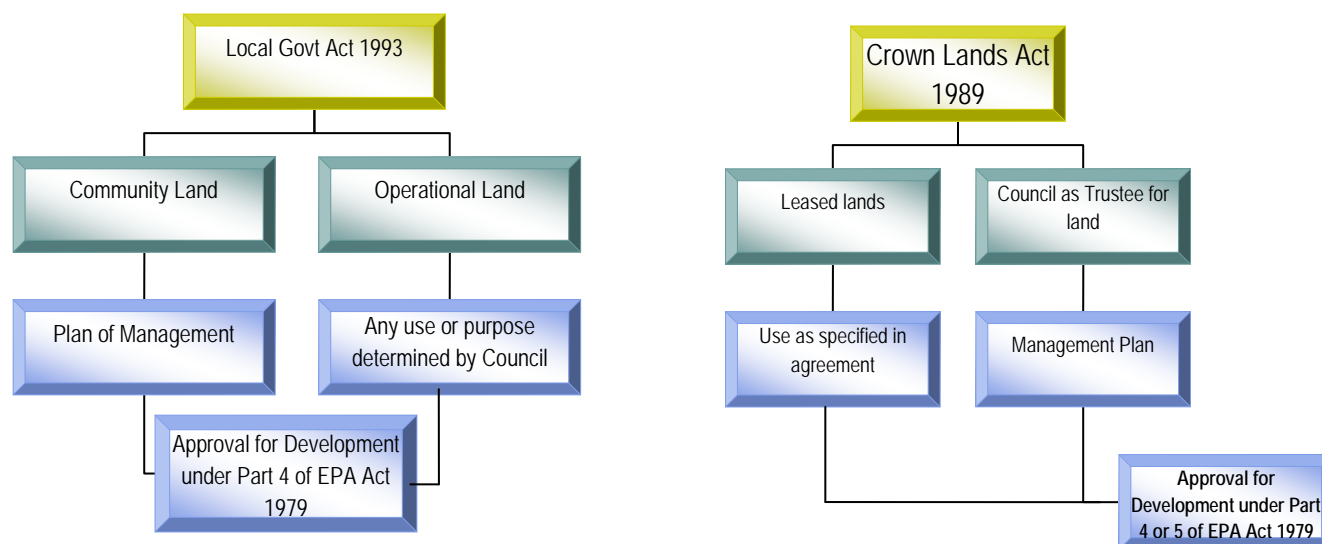
Table 3: History of Open Spaces in Hay

Park	Address	History
Apex Park	355 Church Street	Created by the Hay Apex Group in the late 1970's
Ashwill Park	409 Moppett Street	Council purchased property and demolished house known as Ashwill in 2013
Bill Moorhouse Park	Lang Street	Named after Bill Moorhouse, long serving member of the Hay Lions Club and long term resident of Lang Street, South Hay.
Booligal Recreation Reserve	Lachlan Street	Booligal Sports Ground
Brewery Park	Moppett Street	Named after former Red Lion Brewery opened in 1869
Bushy Bend Reserve	Lachlan Street	Historical name through local usage
Cemetery Bend	Underwood Road	Located adjacent to the Hay Cemetery
Dal Wright Park	Water Street	Named after Dal Wright who created it in 1975
Halse Park	Lang Street	Named after Bishop Halse, Bishop of Riverina 1926-1943
Hay Park	Moppett Street	Made into a public recreation in 1880, park pond was created by excavation from dirt in the streets
Hay Showground	Showground Road	Dedicated in 1892 as a racecourse and showground
John Houston Memorial Swimming Pool Park	Lachlan Street	Named in 1991 after John Houston who had been President of the Hay Swimming Pool Committee for whole 11 years of existence
Lions Park	Lachlan Street	Established in 1982 by Lions Club of Hay
Maude Park	Yang Yang Street	Located in the village of Maude
Maude Recreation Reserve	Yang Yang Street	The recreational reserve for Maude
Murray Street Park	Murray Street	Located in Murray Street, Hay
Pal Richards Park	Keble Street	In Memory of former Municipal Council Alderman, R Richards in 1978
Pocock Park	Cobb Highway	Established in 1982, named after the family of the last bridge care taker (Bob Pocock)
Sandy Point Reserve	Water Street	Historical name through local usage
Soapworks Beach	Jackson Street	Soapworks Factory was located there
Sturt Park	Lachlan Street	Commemorates the passing of Captain Charles Sturt
Toby Brown Park	Leonard Street	Named after longtime resident (across the road)
Wharf Reserve	Wharf Reserve	There used to be a wharf located there

4.3 Legislative Context

Hay Shire Council operates and manages playground parks under several Acts. These include:

1. The Local Government Act 1993. This act provides the primary guidance for Council for the care, control and management of Parks under its control. The act includes provisions for funding, acquisition of land, classification of land, and the preparation of Plans of Management for land classified as Community Land under the act.
2. The Crown Lands Act 1989. Council frequently acts as Trustee for Crown Reserves. This act provides guidance for the Crown and Council in the care control and management of Crown lands including those lands held in trusteeship by Councils. The procedure for the preparation of Management Plans covering Crown lands is set out in this act.
3. The Environmental Planning and Assessment Act 1979. This act relates to planning of lands under the control of Councils. It allows Council to zone certain lands for recreation purposes or for special purposes and to apply restrictions to the use of such land or to guide the acquisition or transfer to Council of such lands.



Most of the parklands identified in this Strategy as playgrounds are either Lands owned by Council, classified as Community land and identified for playground purposes, or land held by Council as trustees and identified as land for recreation or public purposes under the Crown Lands Act 1989.



5. Consultation & Community Input

Hay Shire Council is committed to listen to its community and gaining public input before planning and implementing. A Background Paper was developed for the community to comment on, as well as an open day being held on 25th November 2015, at the Hay Park. Comments received over the exhibition period are shown below:

HAY PARK

- Fence and Pond to be removed at Hay Park
- Remove fence around pond
- Remove fence around pond and have a footpath/cycleway around it
- Keep pond, refurbish
- Make use of duck pond, somehow
- Remove 'No Cycling' signs
- Update the kids equipment
- Congratulations on new Hay Park fence
- New path along duck pond
- The borders around the hill at the Hay Park near the pond, are deteriorating
- Take down 'No Bikes' signs in Hay Park
- Pond area – No fence and less trees, grass and picnic area around it
- New path alongside pond, currently too close to the fence
- Fountain of Reflection at Duck Pond

LIONS PARK

- Make City Park
- Make the "big" park
- More covered seating
- Access – Footpath between Bushy Bend and town

SANDY POINT

- Expand it
- Nothing more

POCOCK PARK

- Big "in your face" playground equipment
- More play equipment

BREWERY PARK

- Keep natural (x3)

POOL

- Water play area
- More BBQ's

DAL WRIGHT PARK

- Helps as fire break, need to keep as park
- Keep natural

ASHWILL

- More playground equipment (x2)
- Coffee Shop

APEX PARK

- Dangerous trees

GENERAL

- Gardens are showing a big improvement
- Playgrounds are high priority
- Rationalise parks
- Look at old trees in parks, showing signs of wear and tear
- Inclusion of wheelchair suitable swings
- More art installed around Bushy Bend, so it becomes a regional art space
- Park space in the West Murray/Macauley area - this is an area where children seem to roam and their homes would be more than the 750m suggested in the Plan
- Open up a pathway/walkway through from Lachlan Street to the main Hay Park to draw people to the public space



6. Guidelines

6.1 Classifications

6.1.1 Town Park

This park will be the major park in the Hay LGA. The park will be on a large scale, and of a high level of design. It will cater for a large variety of users, such as:

- Youth - Through good playground design
- Toddlers - Featuring toddler friendly features
- Sporting and Fitness Groups - Incorporating fitness equipment and upgrading sporting facilities
- Seniors - Contemplative areas
- Disabled - Good all-weather access to facilities

The Town Park must be as central as possible, and access to it must be convenient, with good car, bicycle and pedestrian access.

A Town Park should have play and associated equipment to an approximate value of \$500,000 or more. Together with landscaping and softfall, the total cost of a Town Park should be \$700,000 or more. See an example of a park in this price range below:





6.1.2 Precinct Parks

Precinct Parks are medium parks with limited pieces of equipment. They are easily accessible to the rest of the precinct, and preferably centrally located. There must preferably be a Precinct Park within a 750m radius of every house in Hay.

A Precinct Park should have play and associated equipment to an approximate value of \$60,000 or more. Together with landscaping and softfall, the total cost of a Precinct Park should be \$100,000 or more. See an example of a park in this price range below:





6.1.3 Neighbourhood Parks

This is a lower level of design and maintenance than a Precinct Park, that may include play equipment, but will mostly be passive recreational areas.

A Neighbourhood Park should have play and associated equipment to an approximate value of \$35,000 or more. Together with landscaping and softfall, the total cost of a Neighbourhood Park should be \$70,000 or more. See an example of a park in this price range below:





6.1.4 Village Parks

Village Parks will be those in the villages of Maude and Booligal. There parks will be designed according to the site and the population at the time.

A Village Park should have play and associated equipment to an approximate value of \$40,000 or more. Together with landscaping and softfall, the total cost of a Village Park should be \$75,000 or more. See an example of a park in this price range below:





6.1.5 Reserves

Reserves are areas where recreational opportunities would be limited or spontaneous. These areas will have a lower design format, with limited landscaping, no equipment, and limited furniture. There are different types of reserves, such as natural reserves and road reserves, and future design and maintenance will be done on a case-by-case basis.



6.2 Design of Playgrounds

Existing Playgrounds within the LGA display quite limited variation in either design or content. There is noticeable uniformity of design and types of facilities provided. This may be seen as required or desirable, or it may be seen as restrictive and lacking in imagination.

The following design principles must be followed:

1. Playgrounds must be well located
2. Playgrounds must make use of the natural elements
3. Playgrounds must provide a wide range of play experiences
4. Playgrounds must be all abilities accessible
5. Playgrounds must meet community needs
6. Playgrounds must allow children of different ages to play together and interact
7. Playgrounds need built-in opportunities to experience risk and challenge
8. The playground design must allow for change and evolution
9. The design must allow children's imagination to reach it's full potential
10. Playground design must be evaluated for ongoing replacement and maintenance costs.

Some Design Themes

1. **Playground Park** – Simple and somewhat stereotyped design. Provides manufactured play equipment such as swings, slides, poles, climbers etc. Sand or soft fall area. Natural shade from mature trees. Could also include artificial shade structures if desired.
2. **Natural Park** – Simple 'relaxed' design. Uses natural materials, plants and structures. Not adventure type, but allows for kids to play free in soils, trees, pathways etc. Must be safe with open appearance but allow hide-and-seek type play activities. This type can have unstructured play, see Appendix A.
3. **Activity Park** – Landscaped parklands with clear play areas separated by trees. Allows groups to play in different areas with a feel of isolation from other activities. May include play structures such as slides, climbers etc.
4. **Water Play Park** – Could be very attractive for Hay during the summer months. Provides safe, sprayed and running water for play. Requires small treatment plant for healthy, safe water. Allows kids (and parents) to enjoy water without fear. Regular daily maintenance required to prevent algae build up, more expensive.
5. **Feature Park** – A small park that provides a special feature in pleasant, relaxed environment. Sculptures, ponds, fountains or the like. Requires good landscaping and vandal resistant design of the feature. Allows quieter play and contemplation.



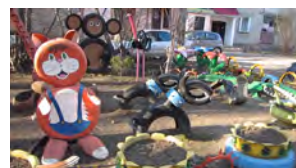
6. **Landscape Park** – Relies on special landscaping effects to create attractive environment for play. Similar to the natural park but more formalised in design and provides more constrained play opportunities.



7. **Adventure Play Park** – Not so popular as it used to be due to the potential for dangerous activities and need for closer supervision. Provides resources that allow kids to experiment with sticks, branches, timber, stone, water and other natural elements and to 'build' shelters, bush camps, barricades, water dams etc. Can become unsightly and unattractive but certainly allow kids to develop imagination and to understand natural resources. Can be an insurance concern.



8. **Eco Park** - Park made partially or in its entirety from recycled materials.



9. **Pet Park** - Under the Companion Animals Act 1998, dog owners have a number of responsibilities when taking their dog(s) into a public place:



- Dogs must be under effective control by means of a chain, cord or leash that is being held by (or secured to) the person unless in a designated off leash exercise area; and
- Dogs are prohibited in the following places (whether they are leashed or otherwise controlled):
 - Within 10 metres of any playing apparatus provided in a public place or part for the use of children;
 - In a public place that is used for public bathing or public recreation, in which Council has ordered dogs prohibited, e.g. between the flags at the beach
 - Within a public place provided or set aside by Council for public recreation or the playing of organised games in which Council has ordered dogs prohibited;
 - A public place set apart by Council for the protection of wildlife and in which the Council has ordered that dogs are prohibited, e.g. COSS lands.

Design for Maintenance

Once a park is developed, the greatest cost component is that of on-going maintenance. Typical maintenance for playground-type parks may include any or all of the following;

- Regular mowing – up to twice a week in summer and fortnightly in winter
- Regular watering – determined according to soil moisture levels, rainfall, landscaping and usage patterns
- Regular weed control – monthly inspection followed by scheduled treatment as required.



- Turf rejuvenation – determined by soil types, usage and other factors. 6 monthly inspections and scheduling when required.
- Garden weeding – to suit garden type and weed growth evident
- Rubbish collection and disposal – regular inspection and pick-up of rubbish plus weekly collection and disposal to waste
- Vandalism repairs – identified by regular inspection or public notification. Immediate action required to make safe and schedule repair within shortest time possible.
- General maintenance of playground or park equipment – scheduled according to the needs of each individual playground.

Each of these costs may be minimised if some thought is given to the design and layout of each playground park. For example, lawn and garden areas can be designed to minimise turns and corners so that mowing is straight forward and watering requires a minimum of sprinkler outlets.

Table 4 below sets out some design components that must be considered so that ongoing maintenance costs are kept to a minimum.

Table 4 - Design Components, Problems and Solutions

Design Component	Maintenance Problems	Design Solutions
Grassed areas	<ul style="list-style-type: none"> • Time consuming to mow • Difficult or tight curves, corners, obstacles etc • Small or isolated areas 	<ul style="list-style-type: none"> • Easy and quick to mow; • Uniform grassed surface; • No wet, dry or bare areas. • Free from tight corners. • Borders and edging should be designed to promote clear easy mowing pattern without small areas left over • Avoid sharp corners that cannot be negotiated by the mowing units • Ensure obstacles such as taps, fountains, seats etc 'fit' with the mowing pattern.
Footpaths and hard surfaces	<ul style="list-style-type: none"> • Extra activity and plant required for edging; • Alignment of pathways and hard areas not consistent with constraints of mowing equipment. • Low wet areas make for messy mowing and damage to grassed surfaces 	<ul style="list-style-type: none"> • Minimise length and complexity of edges, curves, blind areas and severance of areas that require mowing or other types of maintenance. • Free draining with no low points that hold water; • Smooth alignment with no tendency for pedestrians to depart from pathways and damage grassed areas; • Consistent with irrigation pattern to avoid waste of water or dry spots

Trees and shrubs	<ul style="list-style-type: none"> • Drought and salinity can cause died off. • Heat stress in summer. • Leaf fall increases maintenance 	<ul style="list-style-type: none"> • Obtain details of soil types, depth to water table, groundwater quality etc for each and every playground site. • Careful selection of trees and shrubs suitable for each location. • Use salinity tolerant species where appropriate. • Avoid use of deciduous trees and shrubs.
Garden plots	<ul style="list-style-type: none"> • Require regular maintenance for control of weeds and replacement of annuals or dead plants 	<ul style="list-style-type: none"> • Use quality, sterile soil mix for establishment of gardens. • Adopt strict schedule for weeding and replacement of annuals and dead plants. • Select plants that will 'survive' the Hay environment.
Irrigation systems	<ul style="list-style-type: none"> • Badly designed systems leave dry or wet spots that cause other problems. • Blockage or failure of cheap units • Low water pressure 	<ul style="list-style-type: none"> • Check water pressure (static and dynamic) prior to design. • System should be professionally designed including sprinkler types, connection size, need for pressure booster pumps etc. • Include good quality filter in delivery line. • Do not use cheap units or supply lines that have proved unsatisfactory before.
Play items	<ul style="list-style-type: none"> • Some items may be inappropriate for the local population age mix or culture. • Vandalism can cause significant maintenance costs. • Some lines of equipment look drab and unattractive after a short period of time. 	<ul style="list-style-type: none"> • Complete a population and social profile prior to design. Identify any special constraints or requirements. • Select only quality equipment that has been proved as vandal resistant. • Choose only quality equipment that has stood the test of time.
Soft fall areas	<ul style="list-style-type: none"> • Some soft fall materials can be easily spread from one end of the park to the other. • Some soft fall materials encourage use by animals and can cause health problems due to animal faeces. • Badly designed edges can allow vandalism and damage to material. 	<ul style="list-style-type: none"> • Select soft fall that is appropriate for the proposed use and is stable in the Hay Climate. • Ensure the manufacturer's instructions are followed for laying and edge protection of soft fall materials. • Should meet certification for soft fall.

Waste collection	<ul style="list-style-type: none"> Waste bins that are too small or too large for a particular playground can encourage vandalism, throwing of rubbish etc. Vandalism of rubbish bins increases maintenance costs 	<ul style="list-style-type: none"> Ensure the waste bin design is suitable for the location. Design waste bins to be as vandal proof as possible. Adopt a uniform design where appropriate Schedule regular inspections and collection of rubbish to ensure bin capacity is not exceeded.
Ease of Inspection	<ul style="list-style-type: none"> Obscure corners, hidden areas etc make easy inspection difficult. 	<ul style="list-style-type: none"> Design layout and landscape so that the entire park is visible from the inspection point. Avoid isolated or hidden areas that can be used for unsocial activities or vandalism.
Vandalism	<ul style="list-style-type: none"> Regular vandalism of a park quickly leads to a degraded facility. Poor quality equipment can be easily vandalised 	<ul style="list-style-type: none"> Repair vandalised items or materials as quickly as possible and preferably within one or two days. Avoid temporary or 'make-do' repairs. Avoid use of items or materials that have a history of damage or vandalism. Use only quality items that are not subject to vandalism.

Landscaping the Playground

Landscaping is a significant component of any playground or reserve design. There are numerous landscape ideas that can be considered for a playground or reserve.

In each case, the landscape design should reflect or enhance the play design for the site and should be as low maintenance as possible.

Professional landscaping is preferred; however, individual small reserves may not offer opportunity for anything more than a couple of trees.

The landscape design for each playground or reserve should be appropriate for the size and complexity of the site, and it must not be too restrictive for other activities (such as ball sports), if the parks shape and size permits.

Public art must be incorporated as much as possible in Hay's parks. The art must always be relevant to the context, and must be designed and built sensitive to the history and landscape.

Outline Process for Playground Design

The following steps provide an outline of a process that may be followed to develop a playground of good design. It should not be seen as proscriptive but rather as a guide for the development of a process designed specifically for each playground, small reserve or pathway.

Step 1 – Determine Need – other parks and recreation facilities nearby; population served;

Step 2 – Selection of Location – has it been fixed by others? (ie developer's subdivision); access routes; distances;

Step 3 – Select or Confirm Theme

Step 4 – Concept Design – primary purpose of the playground or reserve; size; pedestrian access and pathways; maintenance constraints; soil, climate and other constraints; interaction between landscaping and structures

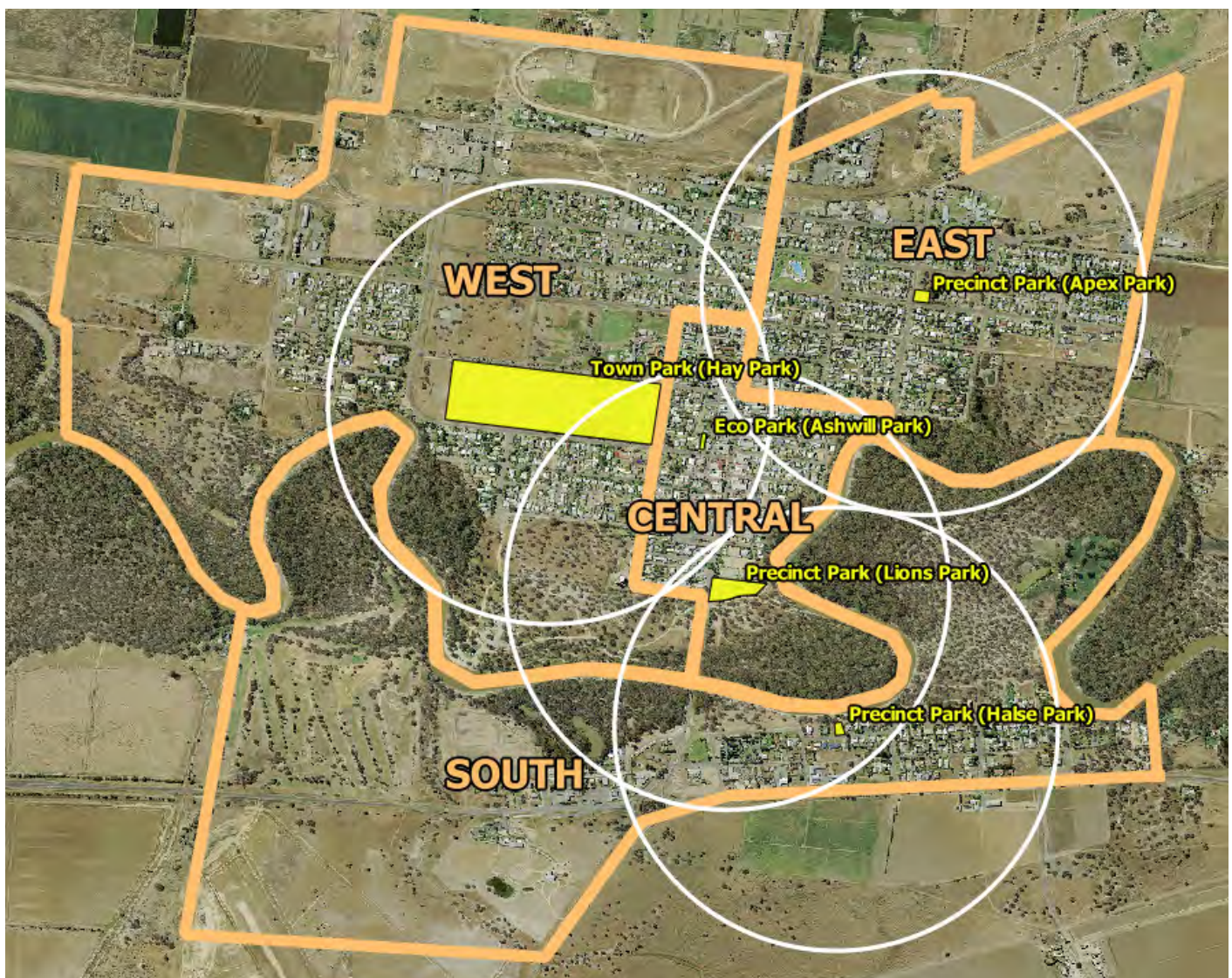
Step 5 – Design for Maintenance – Check against options; modify concept to achieve acceptable maintenance profile; calculate annual maintenance costs

Step 6 – Landscape Details – Check species selected for compatibility in Hay climate; check

Step 7 – Detailed design and construction plans; tenders; contractors etc

Step 8 – Proceed to construction.

7. Proposals



7.1 West Hay Precinct

The West Hay Precinct have the largest number of youth in Hay. The Precinct also contains two schools, sporting facilities, paid and free camping and industrial areas.

7.1.1 Hay Park

Hay Park contains the majority of Hay's recreational facilities, and is probably the most historic of all the parks in Hay.

During the community consultation, the main issue that was raised was the Duck Pond. It was also clear that the park elicited more response than any other.

It is recommended that the Hay Park be classified as the "Town Park", thus being the major park in the Hay LGA. This recommendation is based on the following:

- The heritage of the park, as being the first planned park
- The accessibility of the park in relation to residential areas, and the proximity to schools
- The amount of community events being had in the park
- The majority of the youth in Hay residing in the West Hay Precinct

Some general recommendation for Hay Park are:

- Removal of surplus signs
- Need interconnecting footpaths
- Needs solar lighting
- Make it more bike friendly
- Follow safety-by-design principles in all design and maintenance facets

Specific recommendations for the park are:

Duck Pond:

- Provide 5:1 batter for pond
- Include nature play
- Provide features such as artwork and decking around pond, and try to integrate it into the design of the pond
- Have an all-weather footpath around the pond
- BBQ area

Boer War Memorial Area and Playground (Pine Street frontage):

- Repair Boer War Memorial
- Remove playground (after playground at Water Tower has been developed)
- Create a Garden of Remembrance, with benches, suitable trees, and passive elements, that can be integrated with the Duck Pond
- Remove diseased trees



Water Tower and BBQ Area:

- Restore water tower. Remove screens, provide decking, seating and interpretive signage
- Clean up parking area
- Provide playground here with commercial equipment and natural play

Community Building Area:

- Remove playground
- Re-use old netball courts as a community events area, providing seating, shade, additional BBQ's and fireplaces

Other:

- Create entrance signage for the park
- Investigate new lights for No.2 Oval
- Replace fences around ovals
- Investigate grandstand for No.2 Oval

Location of new
playground equipment



7.1.2 Brewery Park

There has been proposals for park furniture to be upgraded in the park, and signage to depict its history. As the park has limited active recreational uses, and is also technically a road reserve, it is proposed that this area stay a passive reserve.



7.1.3 Dal Wright Park

With the proximity of Hay and Lions Parks, it is recommended that the park become a passive reserve, and that the non-compliant swing set be removed.



7.1.4 Hay Showground

There needs to be compliant amenities and it is proposed that old amenities be upgraded.



7.1.5 Pal Richards Park

Pal Richards Park should be classified as a neighbourhood park. As the park services an area that is removed from the rest of the town, it is recommended that the playground equipment and park furniture be upgraded.



7.1.6 Sandy Point Reserve

The current use and status of Sandy Point Reserve needs to be kept. The completion of the walking tracks should be a priority, as well as utilising the former Sewer Treatment Plant as an attraction.



7.1.7 Soapworks Bend Reserve

The pit toilets need to be removed. Look at linking walkways from town, and signage on its history.



7.2 East Hay Precinct

7.2.1 Apex Park

It is recommended that Apex Park become the Precinct Park for the East Hay area, for the following reasons:

- It is located across from a daycare and a preschool
- It is located next to a tourist attraction (the Hay Gaol)
- It is central to the East Hay Precinct, and connected by bicycle path

The specific recommendations for the park are:

- Remove unhealthy trees, and plant new ones
- Upgrade play equipment
- Provide a pedestrian gate between the Gaol and the park to make access to toilets easier



7.2.2 Cemetery Bend Reserve

Keep status quo. The pit toilets need to be removed.



7.2.3 John Houston Memorial Swimming Pool and Park

Keep as Neighbourhood Park. Incorporate water play in the swimming pool complex. The change rooms should be upgraded.



7.2.4 Madmans Reserve

Keep status quo as a reserve.



7.2.5 Murray Street Park

Keep status quo.



7.3 Central Hay Precinct

The Central Hay Precinct consists mostly of the business core of the town. It also contains the busiest entrance to the business strip, the entrance across the bridge from the Sturt Highway.

7.3.1 Lions Park

It is recommended that Lions Park be designated as a Precinct Park, for the following reasons:

- The development of the park can provide economic benefits in providing an attractive entrance to town
- The park has its amenities upgraded already

Recommendation for Lions Park would be:

- Upgrade play equipment, so that it makes an entrance statement to the retail strip. As it is an entrance to Hay, it should be of a higher order park
- Upgrade BBQ and picnic shelter
- Upgrade fencing, and provide fence to function as a barrier between playground and road
- Create access path on the Lachlan Street frontage, to provide good access between Bushy Bend Reserve and the town
- Provide more covered seating
- Include wheelchair accessible equipment



7.3.2 Ashwill Park

Ashwill Park can be classified as a Neighbourhood Park. It's location - central, next to the Visitors Information Centre, used for events - lends itself to be a showcase park of the Hay area.

It has limited play equipment at present, with limited shade.

The following is proposed for the park:

- Provide shade (trees or shade sail)
- Remove old picket fence (if required, replace with white recycled plastic fence)
- Develop an eco-park with recycled materials
- Integrate landscaping with that of the Visitors Information Centre
- Provide signage



7.3.3 Bushy Bend Reserve

Bushy Bend Reserve's current use and status as a Reserve to be continued. The walking tracks need to be completed, and there is room for additional fitness stations.

The artwork under the bridge needs to be restored, it needs to be made accessible, and interpretive signage needs to be installed.



7.3.4 Sturt Park

Sturt Park is in reality only a road reserve, and should be classified as such. The reserve is recommended to stay the same in function and items. The Sturt Memorial needs to be restored.



7.3.5 Toby Brown Park

The status quo to be kept.



7.3.6 Wharf Reserve

The status quo to be kept.



7.4 South Hay Precinct

South Hay has the least amount of youth in the Hay township (46 youth), and is a precinct with only a bridge access to the towns facilities.

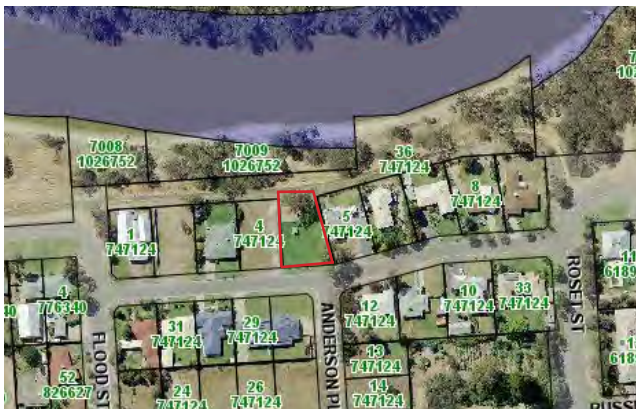
7.4.1 Halse Park

Halse Park is recommended to be designated to be a Precinct Park for South Hay, for the following reasons:

- The park is the most centrally located for the population of South Hay
- It is the only park that is within a 750m radius of the residences in the South Hay Precinct

It is recommended that Halse Park be upgraded with:

- More shading (trees or shade sails)
- Better play equipment



7.4.2 Bill Moorhouse Park

Bill Moorhouse Park is located below the levee, and there are no improvements. It is recommended that it be classified as a reserve.



7.4.3 Pocock Park

Pocock Park is as the southern entrance of Hay, and as such needs to be kept as a well kept park.

The Park can be redeveloped as a Pet Friendly Park. The following actions need to be followed:

- Investigating the designation of Pocock Park as a leash free area
- Remove playground equipment (under the Companion Animals Act 1998, dogs cannot be leash free within 10m of any play equipment)
- Install platforms and dog exercise equipment
- Ensure secure fencing and gates
- Provide plastic bags and adequate bins
- Provide water point and trough
- Provide information signage in this park to entice visitors to cross the bridge into Hay's retail strip.

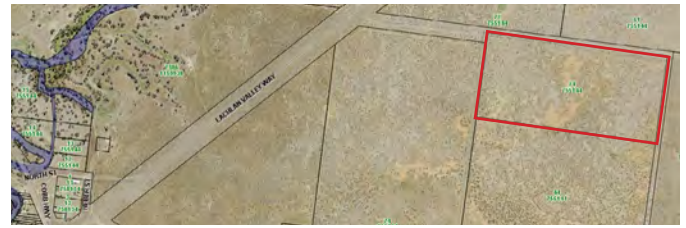
**Pictures consist of the existing park, and ideas for a Pet Park*



7.5 Booligal Village

7.5.1 Booligal Gymkhana

The status quo to be kept.



7.5.2 Booligal Recreation Reserve

The following is recommended for the Booligal Recreational Reserve:

- Replacement of toilet block
- Replacement of play equipment



7.6 Maude Village

Maude has limited recreational facilities. The best tourism facility is the Maude Weir, which has been closed for a number of years. It is recommended that Council lobby for its opening.

7.6.1 Maude Park

Maude Park is a road reserve, and will be used in the bridge replacement.



7.6.2 Maude Recreational Reserve

The Maude Recreational Reserve contains tennis courts and shelters, toilets, and a playground.



It is recommended that the play equipment in the reserve be removed, and playground equipment and toilet block be placed in the reserve across from the shop and pub. This will be of more economic and social benefit to the township. The final alignment of the Mathews Bridge replacement will dictate the exact location of the play equipment.



7.7 General

7.7.1 Park Furniture

There is a variety of park furniture in the public spaces in Hay. It is recommended that park furniture be standardised to provide consistency and simplify maintenance. It is recommended that Council uses the following two types of park furniture:

- (a) Powdercoated green furniture - Heritage Green, locally manufactured, to be used in Central Precinct, Town and Precinct Parks, consistent with the furniture currently in Lachlan Street, Lions Park and Apex Park.
- (b) Recycled plastic furniture - Low conductor of heat and durable, require minimum maintenance, to be used in reserves, sporting areas, and neighbourhood parks.

9. Table of Recommendations

Please note that with the limited funding available through the General Fund of Hay Shire Council, that the majority of funding needs to be from external sources.

Park	Precinct	Actions	Costs	Year
Hay Park	West	Remove surplus signs	\$200	2017
		Need interconnecting footpaths	\$8,000	2018
		Needs solar lighting	\$6,000	2017
		Provide 5:1 batter for pond	-	Completed
		Include nature play at pond	\$10,000	2017
		Provide features such as artwork and decking around pond and BBQ	-	In process
		Have an all-weather footpath around the pond	-	In process
		Repair Boer War Memorial	\$5,000	2020
		Provide new playground near water tower with commercial equipment and natural play	\$760,000	2017
		Remove two existing playgrounds (once new one is in)	\$15,000	2017
		Create a Garden of Remembrance, with benches, suitable trees, and passive elements that can be integrated with the pond	\$40,000	2018
		Remove diseased trees	\$15,000	2018
		Restore water tower (remove screens, provide decking, seating and interpretive signage)	\$15,000	2018
		Clean up parking area	\$8,000	2018
		Re-use old netball courts adjacent to the Community Building as a community events area, providing seating, shade, additional BBQ's and fireplaces		
		Create entrance signage for the park	\$15,000	2018
		Investigate new lights for No.2 Oval	-	-
		Investigate grandstand for No.2 Oval	-	Dependant on external funding
		Replace fences around ovals	-	-
Brewery Park	West	Signage to depict history	\$5,000	2018
Dal Wright Park	West	Remove swing set	\$2,000	2018

Park	Precinct	Actions	Costs	Year
Hay Showground	West	Upgrade amenities	-	Dependant on external funding
Pal Richards Park	West	Play equipment and furniture be upgraded	\$70,000	2023
Sandy Point	West	Complete walking tracks	-	In Process
		Utilise former Sewer Treatment Plant as an attraction	\$98,000	Dependant on external funding
Soapworks Bend	West	Pit toilets to be removed	\$5,000	2017
		Link walkway/cycleway from town	-	Dependant on external funding
		Signage to depict history	\$5,000	2020
Apex	East	Remove unhealthy trees and replace with new ones	\$10,000	2020
		Upgrade play equipment	\$100,000	2020
		Provide a pedestrian gate between Gaol and the park to make access to toilets easier	\$1,000	2020
Cemetery Bend	East	Pit toilets to be removed	\$5,000	2017
John Houston Memorial Swimming Pool and Park	East	Incorporate water play in the swimming pool complex	\$250,000	2021
		Upgrade change rooms	\$100,000	Dependant on external funding
Lions Park	Central	Upgrade play equipment, making an entrance statement to the retail strip	\$200,000	2019
		Upgrade BBQ and picnic shelter	\$5,000	2019
		Upgrade fencing and provide fence to function as a barrier between playground and road	\$8,000	2019
		Create access path on the Lachlan Street frontage, to provide good access between Bushy Bend and town	\$15,000	2019
		Provide more covered seating	\$10,000	2019
		Include wheelchair accessible equipment	\$25,000	2019

Park	Precinct	Actions	Costs	Year
Ashwill Park	Central	Provide shade (trees or shade sail)	\$8,000	Dependant on external funding
		Remove old picket fence (if required, replace with white recycled plastic fence)	\$10,000	Dependant on external funding
		Develop an eco-park with recycled materials	\$35,000	Dependant on external funding
Bushy Bend	Central	Walking tracks to be completed	-	In process
		Possibly additional fitness stations	\$10,000	-
		Artwork under bridge to be restored, made accessible and interpretive signage installed	-	In process
Sturt Park	Central	Sturt Memorial to be restored	-	In process
Halse Park	South	More shading (trees or shade sails)	\$8,000	2022
		Better play equipment	\$100,000	2022
Pocock Park	South	Redeveloped as a Pet Friendly Park	\$25,000	2026
Booligal Recreation Reserve	Booligal	Replacement of toilet block	\$45,000	Dependant on external funding
		Replacement of play equipment	\$75,000	2024
Maude Recreation Reserve	Maude	Move play equipment to a reserve across from the shop and pub	\$75,000	2025
		Replacement of toilet block	\$45,000	Dependant on external funding



10. Sources and Further Reading

- American Planning Association 2006, Planning and Urban Design Standards, Second Edition, John Wiley and Sons Inc, New Jersey.
- Beckwith, J. Date unknown. No More Cookie Cutter Parks. Viewed 9/12/2009 <<http://bpfp.org/PlaygroundDesign/NoMoreCookieCutter.php>>
- Brecknock Consulting. 2003. City of Casey: Playground Strategy.
- Garvin, A. 2000. Parks, Recreation and Open Space: A Twenty-First Century Agenda. American Planning Association, Chicago.
- Christensen, KM. Date unknown. Creating Inclusive Outdoor Play Environments; Designing for Ability rather than Disability. Unpublished paper.
- City of Burnside, 2007. Playground Strategy.
- City of Canada Bay Council. 2008. Let's Play: Providing Outdoor Playgrounds for Families in the City of Canada Bay.
- City of Greater Dandenong, 2004. Playground Strategy and Action Plan.
- Gosford City Council, 2008. Draft Gosford City Playground Strategy.
- Gosford City Council, 2012. Dogs in Open Spaces Strategy.
- Greater London Authority, 2005. Guide to Preparing Play Strategies.
- Harford, Tim. 2016. Messy: How to be a Creative and Resilient in a Tidy-Minded World. Little, Brown, London.
- Local Government and Shires Associations of NSW, 1998. Planning Benchmarks and Standards.
- Mary Jeavons Landscape Architect, 2005. City of Boroondara Playgrounds Development Strategy.
- Schackell, A et al, 2008. Design for Play: A guide to creating successful play spaces. Play England, London.
- Zelinka, A and Brennan, D, 2001. SafeScape: Creating Safer, More Liveable Communities Through Planning and Design. American Planning Association, Chicago.

Appendix A

Extract from Tim Harford's book 'Messy':

“ Carl Theodor Sorensen, a landscape architect, designed playgrounds in Denmark in the 1930s. He had a problem: he noticed that while the adults who commissioned and paid for the playgrounds were perfectly satisfied with them, the local children didn't seem to like them very much. Quickly tiring of swings and slides, they would endlessly be tempted to sneak into local building sites instead.

Sorensen decided that he would build a playground that was a building site, all sand and gravel, hammers and nails. It was an enormous hit with the children, who started to build dens and other structures, before tearing them down to build something else.

Sorensen's playground opened in 1943 in Emdrup, a district of Copenhagen, at a time when Denmark was occupied by Nazi Germany. Grown-ups had bigger problems to worry about than whether young Tomas accidentally nailed himself to the ramparts of his own fortified castle. But slowly, tentatively, the idea spread.

A similar playground, The Yard in Minneapolis, set up in 1949, initially seemed doomed, as children stashed the tools away, trying to monopolise them in the race to build the most spectacular structure. For a while it seemed like the adults would have to step in and tidy up both the playground and the rules of engagement; yet eventually that proved unnecessary. There was no *Lord of the Flies* descent into brutality. The children came together to figure out their own rules. What was at first an opportunity for creative expression became a catalyst for learning how to work together as a community.

The same benefits come from playing messy, informal games (a kickabout in the park, with sweaters for goalposts) as formal ones (a timed game on a marked pitch with a referee). In fact the informal game may be far superior in ways that we tend not to appreciate. Recent research has found a correlation between playing informal games as a child and being creative as an adult; the opposite was true of the time spent playing formal, organised games.

Peter Gray, a psychologist at Boston College, points out that in an informal game, everyone must be kept happy: if enough players stop wanting to play, the game will end. That implies the need to compromise, to empathise and to accommodate younger, weaker and less skillful playmates; no such need arises in formal games, where those who are having a miserable time on the losing team are obliged to keep going until the final whistle blows. As different children arrive and leave, people must switch sides to keep things interesting, evening up the numbers and the skills levels: 'them and us' is alien to informal play. No wonder the skills we learn from informal games stand us in better stead for many real-life situations than the skills we learn from formal ones.

The Yard and Emdrup are venerable examples of playground success, but another mess-pit of a playground, The Land in North Wales, is just a few years old. It embraces similar principles with similar results and has become famous thanks to a documentary produced by Erin Davis and a feature article in *The Atlantic* by Hanna Rosin.

It is hard to exaggerate quite what a mess The Land is. It is a muddy scrap of ground with a few trees, most grass long since trampled into the muck. A waterlogged ditch runs through the middle of it. There's a trash can over there; three tyres piled together next to it; beside that, an abandoned bike with stabilisers, lying on its side. There's an overturned chair, a large wooden spindle that looks like it once held industrial cable; another tyre filled with indeterminate rubbish. And that's just a random area of flat ground - the ditch is far worse, filled with assorted junk - a bike wheel, another tyre, some kind of stool, bits of plastic and pipework. It quite literally looks as though someone took an undistinguished patch of scrubland, backed a truck into it, emptied a skip loaded with scrap metal and plastic, and then drove off before anyone called the police.

There is no sign that this is a playground: no bright colours, no shiny slide, no rubberised matting. There is a swing, of sorts - a large green segment of plastic pipe slung from a tree. It seems likely that the children made it themselves, as they made the trampoline built from grimy mattresses, the scrappy fortress made from wooden pallets and the fire in the oil drum. Fire is a commonplace here - as are saws and nails and mad spinning rope swings. Nor are they part of some carefully supervised craft activity. There are adults at The Land, but they rarely intervene. One of the ten-year-old boy saws with frantic abandon at a heavy-duty piece of cardboard. His fingers are exposed; the saw slips and bends; he has no workbench or firm mounting; he's in too much of a hurry to take care. It's awful to watch, like the ominous opening to some gruesome public

safety film. Nevertheless his fingers survive intact and the cardboard becomes part of an extended polearm which he uses to swat at snowballs.

Writes Rosin: “These playgrounds are so out of sync with affluent and middle-class parenting that when I showed fellow parents back home a video of kids crouched in the dark lighting fires, the most common sentence I heard from them was “This is insane.”

But is it? It is surprisingly hard to prove that places like The Land are any more likely to lead to grievous injuries than the sterile, indentikit play spaces defined by the abbreviation KFC - Kit, Fence, Carpet - that schools and municipalities nowadays install in the hopes of minimising mishaps, and the lawsuits that might result. Tim Gill, a researcher and writer on childhood, estimates that the rubbery surface that has become standard in most playgrounds makes up to 40 per cent of the entire cost of the playground. Yet it’s unclear that these expensive KFC playgrounds play host to fewer accidents. David Ball, a professor of risk management at Middlesex University, has been unable to find any indication that injury rates are falling in these sanitised playgrounds in either the US or the UK.

Recently, a team of fifteen academics tried to systematically review all the data they could find about risky outdoor play. The categories of risk were a catalogue of parental nightmares: great heights; high speeds; dangerous tools such as knives and axes; dangerous elements such as fire and water; rough play such as fighting; and the risk of getting lost. And yet, the researchers concluded, such play offers benefits: more exercise, improved social skills, reduced aggression and reduced injuries. The researchers were cautious: not many good studies have been conducted and so it is hard to draw firm conclusions. But it is quite possible that a space where children clumsily wield saws and set fire to things is just as safe as a space carefully designed by experts.

How could it possibly be that allowing children to play on a building site is as safe as - maybe safer than - letting them play on approved equipment with rubber matted floors and carefully padded climbing apparatus? Hammers and hoists and open fires and trees and all the rest can actually be dangerous, after all. But it turns out that children adjust for risk: if the ground is harder, the play equipment sharp-edged, the spaces and structures uneven, they will be more careful.

Indeed, some play experts argue that standardising playgrounds encourages children to become careless and may make them more likely to have accidents in other environments. Helle Nebelong, an award-winning playground architect, says: ‘When the distance between all the rungs in a climbing net or a ladder is exactly the same, the child has no need to concentrate on where he puts his feet. Standardisation is dangerous because play becomes simplified and the child does not have to worry about his movements. This lesson cannot be carried over to all the knobbly and asymmetrical forms with which one is confronted throughout life.’

Learning to be alert to risk is a better preparation for self-preservation outside the playground than bouncing around like a pinball in a padded funhouse.

The benefits of messy play don’t end there. Grant Schofield, a professor of public health at Auckland University of Technology, has been running a research project in which schools opened up nearby wasteland for primary age children to roam free in during breaks. There were no more serious injuries than when

the children played in their conventional playgrounds - indeed, there were fewer. And other results were dramatic: when they returned to the classroom from their feral wanderings, their behaviour was better. They paid attention in class. Bullying fell to the extent that the school abolished a 'time out' room and halved the number of teachers on duty at playtime.

Jared Diamond, author of *The World Until Yesterday*, makes much the same point about the hunter-gatherer societies he studied in New Guinea, who 'consider young children to be autonomous individuals whose desires should not be thwarted, and who are allowed to play with dangerous objects such as sharp knives, hot pots, and fires.' Though plenty of these kids grow up with physical scars, argues Diamond, they are the opposite of being emotionally scarred. Their 'emotional security, self-confidence, curiosity, and autonomy' sets them apart from children brought up by cautious Westerners.

When we overprotect our children, denying them the opportunity to practice their own skills, learn to make wise and foolish choices, to experience pain and loss, and generally make an almighty mess, we believe we're treating them with love - but we may also be limiting their scope to become fully human.

James Scott, author of *Two Cheers for Anarchy*, points out that Emdrup's playground was open and accommodating to the 'purposes and talents' of the people who used it. Its designer, Carl Theodor Sorensen, was strikingly modest about how much he really understood about what children might choose to do. Whatever that might be, and however messy, the playground was open to the possibility. Jane Jacobs pointed out that only an arrogant man would try to anticipate all the uses to which a building might be put; the same thing is true of a playground.

