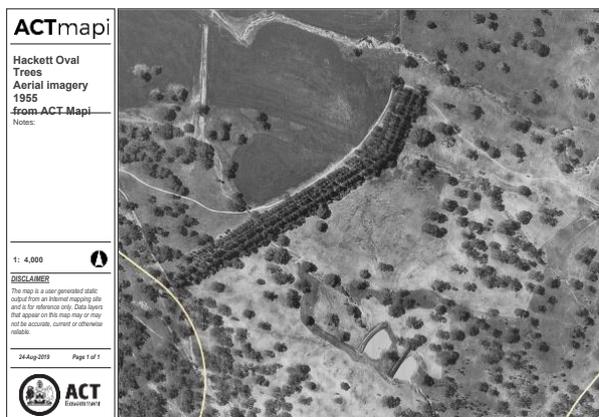


Bragg Street park, Hackett

About the park

Hackett was named in 1960 and was largely developed from 1962-64, with the medium density houses on the north side of Grayson Street built in 1966-68. The Bragg Street Park is the second largest park (0.89ha) in Hackett and has numerous old eucalypts – the big dead one in the centre of the park was probably over 350 years old when it died in the 1980s. There are some Claret ash near the swings. In 2016, residents put stakes next to the many young saplings that had self-sown but were being damaged by mowers. After 5 years, many of these are almost 2 metres high. The ground cover consists of native and exotic herbaceous and grass species, some of which are considered weeds e.g. serrated tussock, capeweed and plantago.

It is not known why they did not build houses on the block. As shown in this 1955 aerial photo (the row of trees is on the eastern side of the Hackett oval), the area was open with numerous large, scattered eucalypts. The sides of the block slope into the middle of the park and as such water tends to run down the middle – it may have been considered an area subject to minor flooding?



While the grass is mowed by Urban Parks, the park is largely natural, with slight similarities to the nearby Mount Majura Nature Reserve. The swings and slippery dip provide entertainment for children.

Following requests by the Volunteers Group to provide nature play elements, in 2019 Urban Parks provided 12 large rocks and 6 logs near the swings – these have been very popular and are in keeping with the general natural feel of the park. Urban Parks also provided a picnic table in 2020.



Logs and rocks provided in 2019

Bragg Street Park Volunteers Group

To get more local interest in the park, we formed a group of volunteers in 2016 which is registered with the Urban Parks [Volunteers'](#) program. The group now has around 40 residents as members. New members are always welcome.

Planting additional plants

In September 2019, Urban Parks provided about 60 native plants including *Bulbines*, *Hardenbergias*, *Dianellas*, *Indigoferas* and *Daviesia* shrubs, which the volunteers planted near the table. This area is a 'no mow' zone so that these plants can become established.

In a bushfire zone

The park is in a bushfire zone, given its proximity to the nature reserves. As such, Urban Parks do not want to have dense shrubs and tree cover across the whole park – such cover would increase the risk of fires spreading into adjacent houses in the event of an extreme bushfire. For example, we do not plant climbers close to trees and tall shrubs.

Capturing water

In 2020-21, the Volunteers Group received a grant of \$9,100 under the *Nature in the City* [program](#) to construct swales in the park. Swales are mounds of soil (approximately 1m high) built across a slope with the aim of capturing water and directing it into the sub-soil, rather than letting it run across the surface.

Why did the park need swales?

Much of the park has very poor grass cover, with some areas just hard, bare earth. During heavy rain events, water rushes down through the park taking with it soil and debris (see photos on page 3). There is a stormwater drain that runs through the middle of the park from Mackenzie St, to the back of 31 Bragg St. From there the drain goes below backyards of several houses in Bragg and Brennan Streets. Several times over the past decade this stormwater drain has blocked and overflowed. This resulted in several gardens and garages in these streets getting flooded. While the ACT Government has flushed out this drain several times in recent years, it is possible that the pipe may not be large enough to handle large amounts of water, particularly when it is blocked (it is only 30cm diameter). Capturing water in the swales will reduce the amount of water entering the drain, but increase the ground water in the park which will benefit the plants.

How were they built?

Initial design advice was provided by Paul Barnett Design [Group](#). The swales were built by Paul Totterdell (Sustainable Organic Solutions), a water harvesting and water recycling consultant, and Jonathon Totterdell (JT4 Garden [Services](#)). They have built swales at Majura Primary School, Downer Microforest, Orana Primary School and Aranda Primary School.

Seven swales (15-35 metres long, 1-3m wide, by 1 metre high), were built 5-11 August 2021 using a tractor – see swale locations marked on aerial photo page 3. Topsoil was first moved to form the shape. Channels about 40cm wide by 70cm deep, were dug along the lower part of each swale and then filled with sand to improve the infiltration of water entering the ground. Soil from the channels was used to create the walls (berms). Rocks, provided free of charge by ACT Government, about 3-6 times the size of a football were placed on top of 3-4 sand ‘plugs’ placed along each swale. Topsoil was then back-filled over the sand.



Sand place in channel of swale no. 3

Have they been effective?

Following completion of the swales in early August 2021, the ACT went into a lockdown due to Covid and as such, the volunteers could not get together as a group. Some residents worked individually building a rock garden and rock stepping formation using left over rocks. Individual residents have also been removing weeds like capeweed and plantago. Since their completion, the area has received around 370 mm of steady rain to the end of November. The swales collect water whilst very little water has entered the stormwater drain. Within a week much of the water has gone - see photos on page 4.

Planting the swales

The ACT Government provided a range of native plants for the volunteers to put in the swales. Noting the water collecting in the swales, the location of these plants was adjusted to avoid the plants sitting for several weeks in water. The Government has also provided wood chips for the group to place in the swales to a depth of around 10cm. The group also bought plants with its own funds. The group will maintain the plants and remove weeds and undertake further plantings as required.

As the first urban space in Canberra, where swales have been built, the park will be a valuable educational resource to help understand how to enhance such spaces.



Aerial photo showing location of swales



Middle of park with swings on right hand side, looking towards top of Bragg St. Two swales (5 & 6) built in this area. Run-off during rain event 16 January 2020 following a prolonged drought. Very poor grass cover in park, led to fast water runoff.



The same area 10 February 2020.



Pre-swales July 2021- looking towards 15 Brennan St. Same area post-construction, August 2021. swale No. 5



Swale No. 5 post rain 30 September 2021 Swale No.5 after planting and mulching 28 November 2021



Swale No. 6 - 30 September 2021 after 100mm rain over 5 weeks. Swale No. 6 - 10 October 2021

Prepared by the Bragg Street Park Volunteer Group, December 2021. It will be updated from time to time to reflect future activities. The Hackett Community Association managed the grant. <https://hackett.asn.au>

