A history of the development of Sweetwater Creek Nature Reserve

Part 4

Warwick Exton

BRIDGES BUILT IN THE RESERVE

ROTARACT BRIDGE

The first bridge built in the reserve was the Rotaract Bridge constructed in 1979 near the Melbourne Water sewerage pumping station off Baden Powell Drive near the roundabout at Brighton Street. Finance was provided by the Council and labour by Rotaract. 2005, because the foundations of the old bridge were being undermined by the creek, Council had a completely new structure erected.



CENTENARY BRIDGE

In 1988, as part of the Frankston Centenary celebrations, the Council built a steel bridge over the creek at the rear of 12 Fenton Crescent. This facility gave Reserve users access along the lower section of the creek which had been virtually impassable prior to that time.

The photo below was taken at the official opening by the then Mayor, Cr.Garry Burleigh . He is second from the left on the bridge with the then ASC President David Lambie at far left of the group.



As a result of serious floods in December 1988, the foundations of the bridge on the east bank were almost completely washed away. Fortunately they were able to be repaired before the bridge collapsed. The photo shows the seriousness of the flood damage to the bridge.



BEATTIE BRIDGE

In 1986, ASC received a grant to build a wooden bridge on the site of an early log crossing called Beattie bridge and named after a well-known local family who lived quite near it.

The location was some 100 metres north of the Parkside entrance.



Unfortunately, in December 1988 a massive flood demolished the structure and the group received additional funds to reconstruct the bridge in 1990.

GRANGE BRIDGE

In 1992, ASC applied for a grant from the Victorian Dept. of Planning and Housing to build a bridge over the creek at a well-used crossing spot at the end of Bembridge Gully. The structure was built by David Lambie, son of one of ASC"s founders & was opened by local State member, Jane Hill in October 1992.

This photo shows Jane Hill opening this bridge with Warwick Exton, the then ASC President.



GRANITES BRIDGE

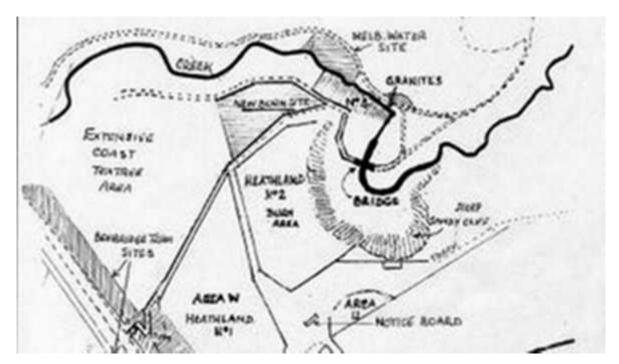
After the major works rerouting the creek west of the Granites in 2000, the Council decided to erect a bridge in place of the old ford crossing. The design was discussed with the ASC committee, which decided to opt for a suspension bridge. So, in 2001, a contractor was employed by Council to erect a steel suspension bridge 30 meters west of the Granites.

Because of the nature of the structure, Melbourne Water required that the footbridge had to meet a 100 year flood level standard, and the height of the pylons had to be increased by an extra foot. This alteration raised the height of the footbridge at its north end to about 4 feet above ground level which necessitated the construction of a

40 meter boardwalk from the bridge to ground at the same level further on.

This new bridge is quite an impressive structure and has become one of the main features in the reserve.

The map at Fig.8 shows the position of the bridge.



The next photo shows the bridge's western aspect.



TRACK CONSTRUCTION

Apart from tracks built by the Council in earlier years, one from the Liddesdale entrance to the entrance of the two tunnels below 10 Fenton Cres., and another called the Fire Track from Hoadley through to Parkside, the tracks in the reserve had been established by people habitually taking the same path over many years and using logs for creek crossings.

In 1990, after Council had completed Centenary Bridge, paths and steps were constructed south of the bridge past the rear of the first few houses in Fenton Crescent as the old track was extremely difficult. The creek bank here was quite precipitous and there was very little space between the back fences and the banks of the creek.

Early in 1991, at the request of the ASC committee, the reserve ranger, David Skvor, built a wide track all the way down Bembridge Gully. The reason for the request was that the lower end of the gully was completely impassable in winter because of deep mud.

This track was ultimately continued down to Grange Bridge when it was completed in 1992.

In June 1991, Council built a retaining wall at the end of the gully to help control sand movement caused by underground water flow, and this made it possible to get rid of holes and improve the track surface.

In the same year, a 30 meter section of new track, including steps & bridgework was constructed at the rear of 22A Fenton on a muddy site subject to extensive clay slippage.

In October & November 1993, a 120 meter section of 1.8 M wide track was constructed some 20 M west of Fenton Cres, following the line of the street and running from No.26 Fenton through to the

track down from Hoadley. Some 100 M of the track was cut into the sloping bank which was retained with tea-tree logs held up by star pickets wired in place.

About one year later, as a result of serious surface erosion, about 10 M of this track south of the Fire track collapsed and Mark Doyle and Dave Stewart built a series of red gum terraces to retain a new section of track. They also ran a section of 150 mm plastic pipe under the track right down to the creek to alleviate surface run off and the ASC work group planted the whole area below this new track, including the terraces, as part of its anti-erosion program mentioned previously. The information in this paragraph has been mentioned previously in the section on erosion.

In 1997, as part of a Melbourne Parks and Waterways grant, a 50 meter section of track and steps was built by Mark Doyle's group on the west side of the knoll going down to the Granites. The last 20 meters of this track was subsequently closed off when the Granites ford crossing was discontinued in 2000.

In 1998, a group of men working under a Work for Dole program, completed a 50 meter section of excellent steps leading down to the east end of Grange bridge during May and June.

Below is shown the location of these steps, and the photo shows what they look like.





In 2000, a major track reconstruction was carried by contractors for the Council along the rear of Fleetwood south from the top of the track up from Beattie Bridge along to last house before the playground, No.91.

The new track some 300 meters long followed the rear fence line of the properties & in one section, because of an eroded gully around a major street drain and pits, the contractor had to repair the site with anchored gabbion baskets to retain the fill for the base for the new section of track.

At the rear of No. 91, a set of steps took the path along the fence up to Fleetwood enabling discontinuation of a dangerous section in the steep gully where a number of Fleetwood Street drains discharge.

In 2003, the section of tracks, steps and bridgework behind Nos. 12 and 14 Fenton Cres was completely rebuilt by Council. One long run of 36 steps had not met the planning guidelines, & the next photo shows the very poor condition of these steps.



The new track used bridgework to avoid the need for such a long flight of steps. The next photo shows what this section of the track looks like today,

BOARDWALK

In 2005, in conjunction with a major wetlands project financed by a number of Melbourne Water grants, a long 1.8 M wide boardwalk was built by Frankston City Council running basically along the creek line from Rotaract Bridge to Beattie Bridge. This was completed in May 2006. This photo shows what it looked like in March 2007.

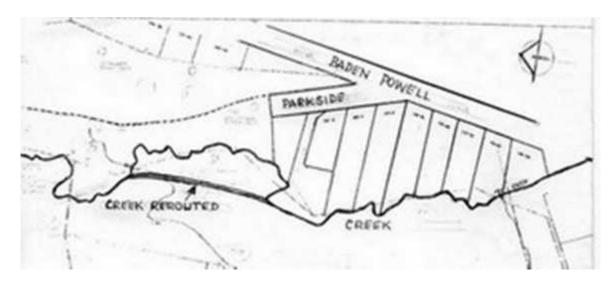


The completion of this boardwalk along the creek gave Reserve walkers something they had requested for many years – the opportunity to use a creek side track right through the reserve instead of having to cross the creek at Rotoract Bridge and use the footpath along Baden Powell & Parkside to the Fire track.

MAJOR EROSION CONTROL WORKS

In 1988, as a result of complaints by residents of Parkside Grove about their Properties being undermined by the creek, Frankston Council approached Dandenong Valley Authority, the body then responsible for the management of the bed and banks of the stream, about dealing with this problem. A decision was made to reroute the creek and a new, straighter bed some 150 meters long was cut to the east of the old bed. This was lined with lava boulders and continued to a point some 50 meters north of Beattie Bridge.

Here is a map of the area, followed by a photo showing the site immediately after completion of the works.





The next project dealt with erosion of the bed and banks more generally.

At the prompting of ASC, which was very concerned about what was happening to the creek at the end of Grange Road and how close the creek had moved to the sewer line, in 1993, Melbourne Water began a major erosion control program. This program involved the construction of seven small dams with rock outfalls to help reduce erosion by cutting down the kinetic energy of the stream, and major repair of the bed and banks between Whale Rock and the end of Grange Road.

The extent of this particular project may be gauged from this next photo taken below the end of Grange Road.



This photo shows the last and largest of these dams being built close to the tunnels north of Centenary Bridge.

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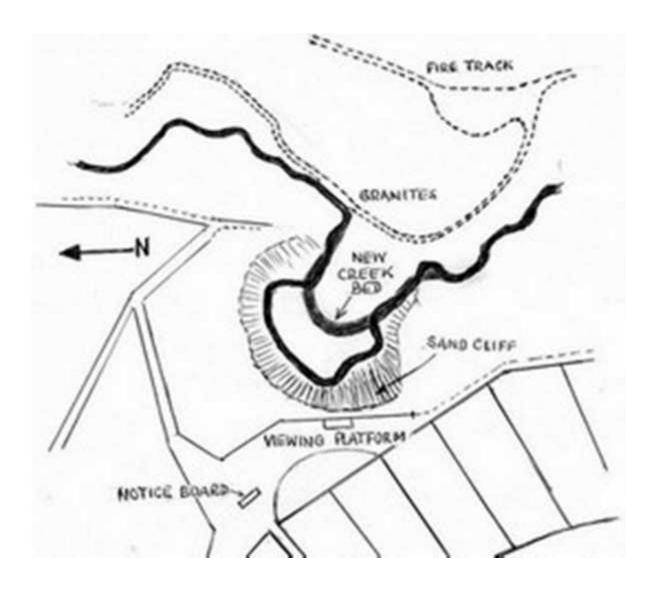
At the site, between Whale Rock and Grange bridge, where the bottom and banks had been severely eroded, the engineers built the bed up with half a meter of granite boulders as well as lining the banks particularly on the west side.

Unfortunately this work had to be repeated the next year because the rockwork on the Grange side had not been extended far enough to sufficiently protect the sewer line.

In 1988, Melbourne Water again carried out a major project by rerouting and straightening the creek between the pipes under Baden Powell Drive and the end of the 1988 DVA works.

Here we see a map of this construction site. In 2000, Melbourne Water decided to carry out a very large engineering project rerouting the creek near the rear of No. 49 Fleetwood Cres.

As the following map shows, about 100 meters of creek bed was completely rebuilt and a large irregular bend modified to take the creek away from a dangerous sand cliff.



The purpose here was twofold, first to protect the main sewer line situated near the top of the cliff, and to alter the cliff face to deter children from digging dangerous holes in it. This picture shows what the sand cliff looked like.



The next photo shows what the stream looked like some 40 meters south of the cliff

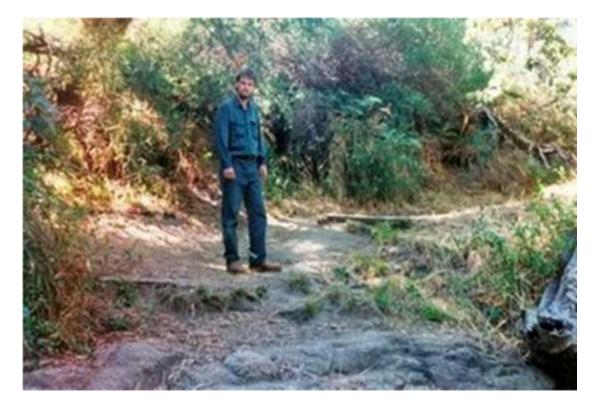


Next one shows what that area and the cliff looked like after the project had been completed.



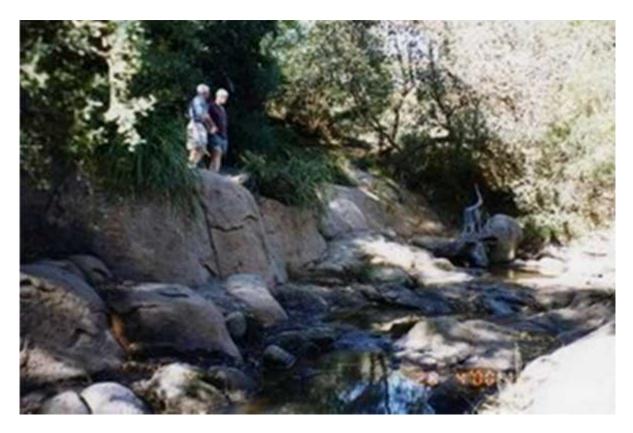
As part of this project, Melbourne Water kindly rebuilt some 15 meters of the east bank of the Granites which, over the years had been badly eroded by the stream when in flood.

The next photo shows the parlous state of this path prior to the Granites repair and Mark Doyle in the foreground.



A specialist concrete engineer pumped in a base and then, using crushed granodiorite from the site, crafted the surface of the concrete so that it closely resembled the rocks in the area.

This photo shows the completed work on the site.



SWEETWATERCREEK MANAGEMENT PLANS

As stated previously, the first management plan developed for the area was prepared by local landscape architect, Grace Fraser` F.A.I.L.A. in association with Plant Ecologist, Winty Calder, M.Sc. and assisted by Paule Jardine.

In 1975, the group was able to employ Grace to carry out his task using a Federal

Government grant obtained under the Regional Employment Development Scheme.

Grace's report covered four main areas:-

- 1. A general statement on the existing uses, features & infrastructure of the area,.
- 2. A description of the natural systems of the area,
- 3. Proposals for the development of the site,
- 4. Recommendations for rehabilitation works

Council maps were used by Winty Calder to identify plant community areas

In 1991, the group applied for another Federal grant from Australian Parks & Wildlife- Save the Bush organization and this was grant was used to employ a botanist – Kathie Strickland, B.Sc.Hons (Botany) – to prepare a detailed vegetation management plan.

This plan, published in May 1992, laid out a detailed record of the indigenous plants and weed species then in the Reserve, split into alphabetically designated areas.

It then set forth steps to return the vegetation to a condition as close its original as possible.

This plan has been used since then as the basis for remedial works carried out in the Reserve.

In 1999, Council employed a Land Management Planning consultant - Terra Forma Pty.Ltd. to carry out an even more detailed description of the areas of both the Upper and Lower reaches of the creek, although most of the report, in fact, refers to the Lower section of the Reserve.

This plan covers the following items:-

- 1. Reserve description
- 2. Management directions uses, goals, works programs
- 3. Resource Conservation -hydrology, erosion control, vegetation management, etc. Including detailed statements of goals, objectives, and action plans

An appendix covers detailed budgeting of the action plans. Copies of this plan may be seen at Frankston City Library.

THE RESERVE AND COOPERATIVE EFFORT AND PERFORMANCE

The current condition of this reserve as a passive recreation area reviewed against the way in which it was established and its original objectives, could be

Considered a credit to the joint efforts and the excellent cooperation of :-

- 1. Action Sweetwater Creek Inc.
- 2. Frankston City Council, --- particularly the Natural Reserve rangers, and
- 3. Melbourne Water Corporation..

Site work, apart from infrastructure such as major tracks, steps, bridges, and the boardwalk, has been carried out over the years by the ASC work group and FCC parks and recreation people in the friendliest manner possible, and the Council itself has been generous in budgeting for the capital and the maintenance works.

Melbourne Water Corporation must also take great credit for the extensive anti- erosion works carried out on the bed and banks of the creek between Baden Powell Drive and the

Nepean Highway. Not only were the works carried out to a very high standard professionally, but the engineers always paid particular attention to making sure that the natural beauty of the area was not impaired in order perhaps to simplify engineering design.

At this point of time, to conclude this short history of this Reserve, and keeping in mind that a great deal more work needs to be done, I feel we should reflect for a moment about the beginning of this association.

Looking back and I quote from the words of one of the early members "Action Sweetwater Creek has benefitted from long-serving, committed and sometimes visionary members including in the early years:-

Lucy Henty, Keith Henderson, Margaret Clark, Charles Losewitz, Andrew and Anthea Gooding, Gladys Buckland, Judd and Flora Douglas, Brian and Lois Dixon-Ward, Robert Lambie, John Tadish, Ailsa Spicer, Brian Murphy, Peg Thompson, Alan Good and Alison Walker."

There are other members who have made long term and valuable contributions whose names should be inscribed:-

Stan Chapman, Ole and Muriel Petersen,

Some of these founders are no longer with us, but I hope that they, in particulars would have been well pleased with the way in which their hopes and aspirations have been put into effect, and that the others are.

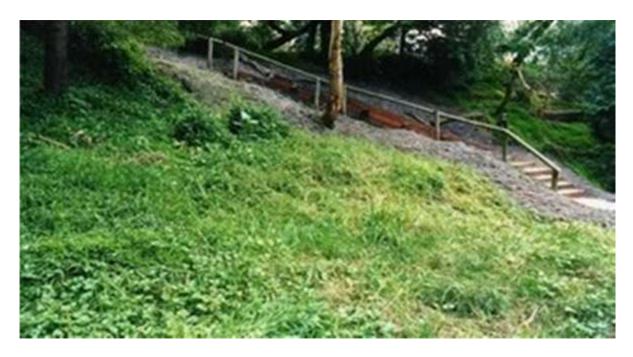
I sincerely hope so.

Warwick Exton

BEMBRIDGE ENTRANCE & GULLY WEEDING & REGENERATION.

As part of a group policy to improve the appearance of the entrances of the reserve, ASC had applied for two grants prior to 1999 aimed at beautifying the entrance at the end of Bembridge Ave..

This photo taken in February 1999 shows part of the site with a new set of steps replacing older ones destroyed by severe street flooding two weeks previously.



Because both these applications had not been granted, the group decided to start a project there on its own and consequently in March 1999, weeding of the steep slope was commenced.

Over the rest of the year, the area was cleared of weeds, the slope terraced with tea- tree logs and 500 trees, shrubs, sedges and grasses planted.

The next photo shows the terracing and matting work in progress.



While this was a good start, further work was required, and in 2002, the group applied for a National Heritage grant to improve the entrance site and extend the work further down the gully.

And so, in January 2003, the group received \$3200 to carry out this task and most of the gully below the steps was weeded and terraced to prepare for the planting.

This photo shows some of the terracing and planting work completed at the bottom end of the gully with Mark Doyle inspecting it



This work continued through the rest of the year and into 2004.

In the course of the project, a long spell of hot, dry weather occurred and the group had to use its portable fire equipment on a number of occasions to pump creek water to the site to keep the plantings alive.

While the general area of the gully has been greatly improved, the east bank remains a continuing problem primarily because of the immense Radiata pines that have been there for many years.