G. BASE PLANS

Base Plans | 285284 | Chain of Ponds
DESIGN CONCEPT

The Moonee Ponds Creek has undergone significant modification over the last one hundred and eighty years, resulting in a hybrid waterway that is equal part nature and artifice. This project acknowledges this altered ‘nature’ of the creek and seeks to reconfigure the creek to operate more effectively with the natural and biological processes at work within the urban environment. It respects the strong community aspiration to dramatically improve the creek’s health and to create a linear park along the creek that connects the inner and outer suburbs of Melbourne for people, animals and plants.

This project recognises that the creek can become the catalyst for a new type of urbanism that is more responsive to natural processes by reorganising infrastructure to support rather than deny these processes. The project works across multiple scales, reconnecting the creek with its regional and ecological context. It opens our minds to powerful and rich possibilities for the city, a liquid and biotic urbanism where the creek and the linear park become critical components within a more sustainable and functional city.

Incremental Change Over Time

According to landscape architect James Corner, ecology “becomes an extremely useful lens through which to analyse and project alternative urban futures. The lessons of ecology show how life on the planet is deeply bound into dynamic relationships. The complexity of interaction between elements within ecological systems is such that linear, mechanistic models prove to be markedly inadequate to describe them. Rather the discipline of ecology suggests that individual agents acting across a broad field of operation produce incremental and cumulative effects that continually evolve to shape the environment over time.”

Consequently, this plan is not an over arching master plan, but rather a collection of actions that offer many possible futures. In combination, they provide clues to the reinvention of our lives within a carbon neutral city. Importantly, it is not about recreating nature, an impossible task, but rather urban reinvention. The project identifies changes which can be incrementally implemented throughout the catchment, reducing, slowing and cleaning stormwater discharges into the creek. Over time, this will liberate more and more opportunities to remove concrete channel and restore functioning natural processes along the creek.

The recommendations, tools and components described here represent a staged ‘road map’ of possibilities that can be deployed with increasing intensity as time goes by. The potential to improve the creek rests with the ability to implement as many of these tools as possible. The cumulative effect of multiple tools in combination far outweigh the benefits of singular options, and the sooner these options are deployed, the greater the benefits.

Making The Creek Visible

Making the Moonee Ponds Creek visible once more in the landscape through the reinstatement of the ‘chain of ponds’ is central to the success of this plan. The ponds signify the reclaiming of the creek by people, animals and plants. Rather than draining water away from the city as quickly as possible, hidden within pipes and channels, the chain of ponds represents the emergence of a new ecological urbanism where water is valued. Water is slowed, cleaned, and allowed to pond along the creek, providing the ‘stepping stones’ for movement and diverse life along the creek.
These base plans are a visual representation of where the master plan ideas may be implemented across the Moonee Ponds Creek Linear Park. They are diagrammatic only and are designed to show the wide range of opportunities to reconfigure the creek to achieve the objectives of the project.

The base plans show many options overlain together. In reality it is unlikely that all these options will be implemented. The plans are designed to promote discussion about the relative priority of different options. In this way, the plans do not represent the final form or configuration of the creek, which will be subject to extensive detailed design work in the future.
The proposal for this part of the Moonee Ponds Creek and Travancore Park, where the concrete channel is removed and replaced with a reconstructed and rehabilitated creek with plantings, rockwork and access to the water. The concrete channel along Delhi Reserve is retained. A land bridge is proposed over the freeway to link the creek with Royal Park, reuniting the creek with the park. Expand open space opportunities along Mooltan Avenue and Delhi Court.
The proposal for this part of the Moonee Ponds Creek Linear Park focuses on the opportunity to lower the sport fields in Ormond Park and Holbrook Reserve, thereby reclaiming the floodplain and expanding flood capacity (Tool 29). This allows for the removal of concrete channel south in Travancore Park. The Union Road embankment provides space to remove concrete by widening the creek with pools and riffles, flood terraces and meanders (Tool 27). Further north at Denzil Don Reserve the creek is again widened to create ponds and wetlands. Expand open space opportunities along Pattison Street.
This section of the Moonee Ponds Creek is heavily constrained by limited space within the creek corridor. Consequently, most of the concrete channel is retained by necessity, except at Fanny Reserve where a short section of channel is removed and wetlands and ponds reinstated. At Fraser Reserve (where the Melville Road Main Drain discharges into the creek) there is an important opportunity to ‘daylight’ the drain and create a series of wetland detention ponds that help clean stormwater prior to discharge into the creek. An elevated bridge near Sandburg Road is proposed to connect the pathway along the creek. Expand pen space opportunities along Montague Street, Salisbury Street, Lawson Street, Waxman Parade and Turnbull Court.
The proposal for the part of the Moonee Ponds Creek Linear Park focuses on enhancing opportunities at Five Mile Creek reserve (where the Main Drain enters the creek) and Cross Keys Reserve. At Cross Keys, the sports fields are lowered, recognizing the floodplain and expanding flood storage capacity. This allows for the removal of concrete channel downstream at Five Mile Creek Reserve, where new ponds and wetlands are installed along the creek. The section of creek south of here is one of the few sections that retain original bathymetry and geology. An elevated bridge over the channel connects the path along the creek north of Vanberg Road. Expand open space opportunities adjacent to Fitzgerald Road, Princes Parade, Tennyson Street, Moreland Road and Lawson Street.
The proposal for this part of the Moonee Ponds Creek Linear Park focuses on mitigating the negative impact of the freeway on the creek corridor through open space expansion and revegetation. Opportunities include the removal of concrete channel from the creek adjacent to Strathmore Secondary College and the creation of meanders, pools and riffles. Storm water (swtreams entering the creek is diverted through pre-treatment wetlands and detention ponds, helping improve water quality and reduce peak flows. Expand open space opportunities along Talbot Street and Wallace Crescent.
The proposal for this part of the Moonee Ponds Creek Linear Park focuses on flood mitigation through the lowering of sports fields at Lebanon Reserve and Oak Park Reserve. Adjacent streets will be converted to Creek Streets, creating a cool, shaded environment that signals the entry to the linear park, as well as treats and slows storm water runoff from adjacent streets. The concrete channel is removed from Esslemont reserve, as well as from Lebanon Reserve, allowing the creek embankments to be reprofiled and revegetated. Expand open space opportunities adjacent to Pascoe Vale Road, Gaffney Street, Main Street and Park Street.
North of Lebanon Reserve, the creek corridor widens, allowing significantly greater opportunities to implement Water Investigation and Linear Park ideas. The proposal for this part of the Moonee Ponds Creek Linear Park focuses on the removal of the significant length of existing concrete channel north to Margaret Street. This was the last section of channel installed in the early 1980s and its removal would be a symbolic step forward highlighting the renewal of the creek. Flood mitigation will be achieved by lowering adjacent sports fields to expand floodplain capacity. Expand open space opportunities adjacent to Main Street, Gregory Street and Ethel Street.
AREA 08 DESIGN SUMMARY

Many of the opportunities to remove concrete channel in the southern sections of creek will be reliant on expansion of flood plain capacity in the northern sections where the creek corridor widens significantly. As such, the proposal for this part of the Moonee Ponds Creek Linear Park focuses on the lowering of sports fields at JP Fawkner and Strathnaver Reserves. There are significant opportunities to introduce greater variation in the creek channel form through meanders, pools and riffles. The linear park will build upon significant remnant vegetation at Strathnaver Grasslands, as well as important revegetation works undertaken in the last twenty years. Expand open space opportunities along Mascoma Street, Sylvester Street and John Street.
AREA 09 DESIGN SUMMARY

The proposal for this part of the Moonee Ponds Creek Linear Park focuses on the creation of additional floodplain capacity that will help mitigate flooding further south, and allow for the removal of sections of concrete channel. This will be achieved through the lowering of sports fields at Boeing Reserve where there is significant available space. The linear park will build upon the significant revegetation works already undertaken. A variety of meanders, pools/riffles and flood terraces will be added to the creek form, creating greater habitat diversity within the creek.