

---

## **PART 3A APPLICATION FOR WET'N'WILD DEVELOPMENT AT PROSPECT SERVICING REPORT BY BROWN CONSULTING**

### **Introduction**

Brown Consulting have been engaged to provide professional advice on providing essential services to the site for the proposed development of the Wet'n'Wild Theme Park on Lot 1 DP 1045771, Reservoir Road at Prospect.

The services required include water and sewer reticulation, electricity supply, telecommunications and gas. The methodology for the investigations includes reviewing all available background information, evaluating servicing quantities, liaison with the various Authorities involved and planning best routes for the trunk services to the subject site.

As a result of the above investigations Brown Consulting have prepared the accompanying plan (Ref ????) showing suggested routes for the planned service infrastructure to the site.

### **1. Water Supply**

Based on previous information regarding potable water supply demand for the proposed development, the existing DN100 watermain fronting the site in Reservoir Road does not have sufficient capacity and a new DN250 watermain is required to serve the development. The new main would be extended from an existing DN300 main located in Reservoir Road approximately 310 metres east of the south east corner of the site at the corner of WatchHouse Road. The new DN250 main would be laid within Reservoir Road and there are no easement requirements.

In order to avoid a connection to the site through environmentally sensitive bushland at the south eastern corner, an additional 50 metres of new main has been allowed for in order to avoid this area giving a total of approximately 360 metres of new construction.

There is no recycled water supply in the area and this service has not been considered for the site. Sydney Water have been consulted in regard to the water infrastructure requirements under their reference Major Project 10\_0190.

### **2. Sewerage**

The whole of the site will drain by gravity to the north, following the line of Blacktown Creek. The nearest sewer available for connection is a DN300 sewer located at Norman Street, approximately 70 metres east of Desley Crescent, Prospect. This point is north of the M4 Motorway and the Great Western Highway and would require the provision of approximately 810

metres of DN225 gravity sewer (including horizontal bores under the Highway and Motorway) to serve the site.

The estimated construction cost of the new sewer is \$750,000, but part of this cost would be shared by Sydney Water or developers of land served by the new sewer. There are no easements required for a gravity main of this size, but standard Sydney Water Permission to Enter requirements would need to be satisfied during the design and construction phases of the work.

Due to discussion in previous reports on the site regarding restriction of sewerage flows, the capacity of the existing DN300 sewer downstream of Norman Street has been analysed and found to have 27l/sec. spare capacity after allowance for the existing properties draining into it and also allowance for the remainder of the catchment area (including the site) as Industrial zoning. If the expected discharge to the sewer is 56ML per annum, this represents a flow of less than 2l/sec. and we cannot see a need for detention storage of sewage on the site.

Sydney Water have been consulted in regard to the sewer infrastructure requirements under their reference Major Project 10\_0190.

### **3. Electricity Supply**

Estate Power Design Pty Limited have completed the investigations as to the best supply point, the practicality of the reticulation route to the site and the liaison with Integral Energy who have confirmed that sufficient spare capacity is available for use of this development.

The planned infrastructure route has been shown on the accompanying services plan. The supply point is the Quarries Zone Substation located to the south-east of the development site with reticulation of three 11kv cables proposed along the road reserves of Picrite Close and Reservoir Road.

### **4. Communications**

The request to Telstra for communication services for the development has been registered with them under reference 12043824.

Telstra report as follows in correspondence dated 22 November 2010 :

"Telstra maintains existing network throughout the land marked for development. This network is currently not sufficient to meet the likely demand of this development. Telstra has no objection to the development of this land.

To accommodate the proposed development, the telecommunications network would require upgrade. To achieve this, Telstra may require:

- Either augment our network from the Blacktown exchange
- Change the exchange boundary and extend a new service from our Pendle Hill exchange"

In summary, although the subject site has a fibre optic connection available at the south-east corner Telstra require augmentation of their infrastructure to service the development. Telstra confirm they have no objection to the development proceeding.

#### **5. Gas**

Jemena Gas Networks (NSW) Limited have confirmed there is no existing reticulation available in Reservoir Road. The connection to the north shown on the services plan only has a limited supply available which may not be sufficient for the proposed Theme Park demands.

An alternate option that is being investigated is the set up of an onsite LPG facility to service the development demands.

#### **6. Summary**

All essential services can practically be provided for the development with the considered best options for the infrastructure shown on the services plan.

Should you wish to discuss any of the above please do not hesitate to call me on 8808 5000.

Yours sincerely

**BROWN CONSULTING (NSW) PTY LTD**



**PETER FAGAN**

Senior Project Manager