

**7 AVON ROAD PYMBLE – PROJECT NO: 09071**

**HYDRAULIC SERVICES**

**EA SUBMISSION NOTES**

**BY: MICHAEL FROST**

**DATE: 26.10.09**

### **SEWER DRAINAGE**

The site is located on the south side of the northern railway line with a constant fall from the railway corridor to the south down to Arilla Road.

Sewer mains run from the northern side of the railway line under the railway line and down through the centre of the proposed development in 225 dia V.C. Pipe at a depth of 2.0 metres approx with 150 dia V.C. pipe branch lines out to the east and west to service surrounding private homes.

The proposed development will be adequately serviced via the existing sewer and will be confirmed by a Section 73 application to the SWC.

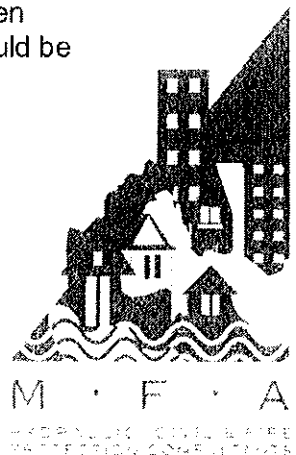
Based on the current design we have identified three (3) areas where diversions will be necessary to achieve the proposed development and these are shown on SK01.

### **WATER SERVICES**

The site have entrances from Avon Road, Arilla Road and Beechworth Road and within each of these streets are SWC water mains ranging in size from 100 to 1200mm dia. Refer SK01.

The mains which be best to service this site is the 150mm main in Avon Road which is nearest Stage 1. This main is fed off a 1200 dia main trunk main which would indicate there should not be any flow problems.

At the time of writing this report the flows and pressures had not yet been confirmed however we are of the opinion as noted above the flows should be sufficient and should the pressures be low this can be overcome by the installation of pumps.





bka

## BRIAN KNIGHT & ASSOCIATES

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27<sup>th</sup> October, 2009

**Energy Australia**  
**51-59 Bridge Road,**  
**HORNSBY N.S.W. 2077**

Attention: Jonathan Hopson.  
<jhopson@energy.com.au>

Dear Jonathan,

**Re: REQUEST FOR ADVICE**  
**MULTI UNIT HOUSING**  
**N<sup>o</sup>s 1, 1A & 5 AVON ROAD PYMBLE**  
**Bounded by Arilla Rd., Avon Rd., and Northern Railway Line**

We have been engaged by the Owner / Developer for the early planning stages of the above project, namely the Environmental Assessment stage, which is equivalent to local government DA / development consent stage.

The purpose of this correspondence is to confirm the availability of power from the surrounding Energy Australia street H.V. network via new on site kiosks substation(s).

### Development

Attached is the initial concept drawings by Architects Ancher Mortlock & Woolley showing five(5) residential buildings arranged as stages 1 to 5. Depending on the apartment configuration of each building the number of apartments will be per stage with underground / basement car parking as follows.

		UNITS	
		MIN	MAX
Stage 1	_____	29	58
Stage 2	_____	22	44
Stage 3	_____	50	100
Stage 4	_____	60	120
Stage 5	_____	42	84
Total		203	406

The minimum configuration will comprise 203, 3 bed air conditioned units with central gas hot water & the maximum configuration of 406, 1 to 2 bed units. We believe the final configuration will be in the order of 300 units of 1, 2 & 3 bedroom arrangements.

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Maximum Demand

Based on 300 units, the total development in accordance with AS3000 will result in 1200kVA demand. We attach 'Site Services Network & Lead-in HV sketch SK-E01 which shows the position of an initial kiosk and H.V. underground lead in from Avon Road for stages 1 to 3 & a second kiosk location as needed to serve stages 4 & 5. Internal road access from Avon road will suit heavy trucks such as Energy Australia truck hoists, Fire Brigade & garbage collection. Access from Beechworth Road would be more difficult with restricted manoeuvring.

Request for Advice

At this stage, we would appreciate a statement from Energy Australia acknowledging the proposed building planning as attached and that power will be available to the development via on site kiosk substation(s) subject to future 'Application for Supply' details.

Yours faithfully

*Brian Knight*

Brian Knight

Attached : Architecturals SK001, 6, 7, 8, 9, 12, 13, 14, 15.  
Site Electrical Services, Network & Lead-in HV SK-E01