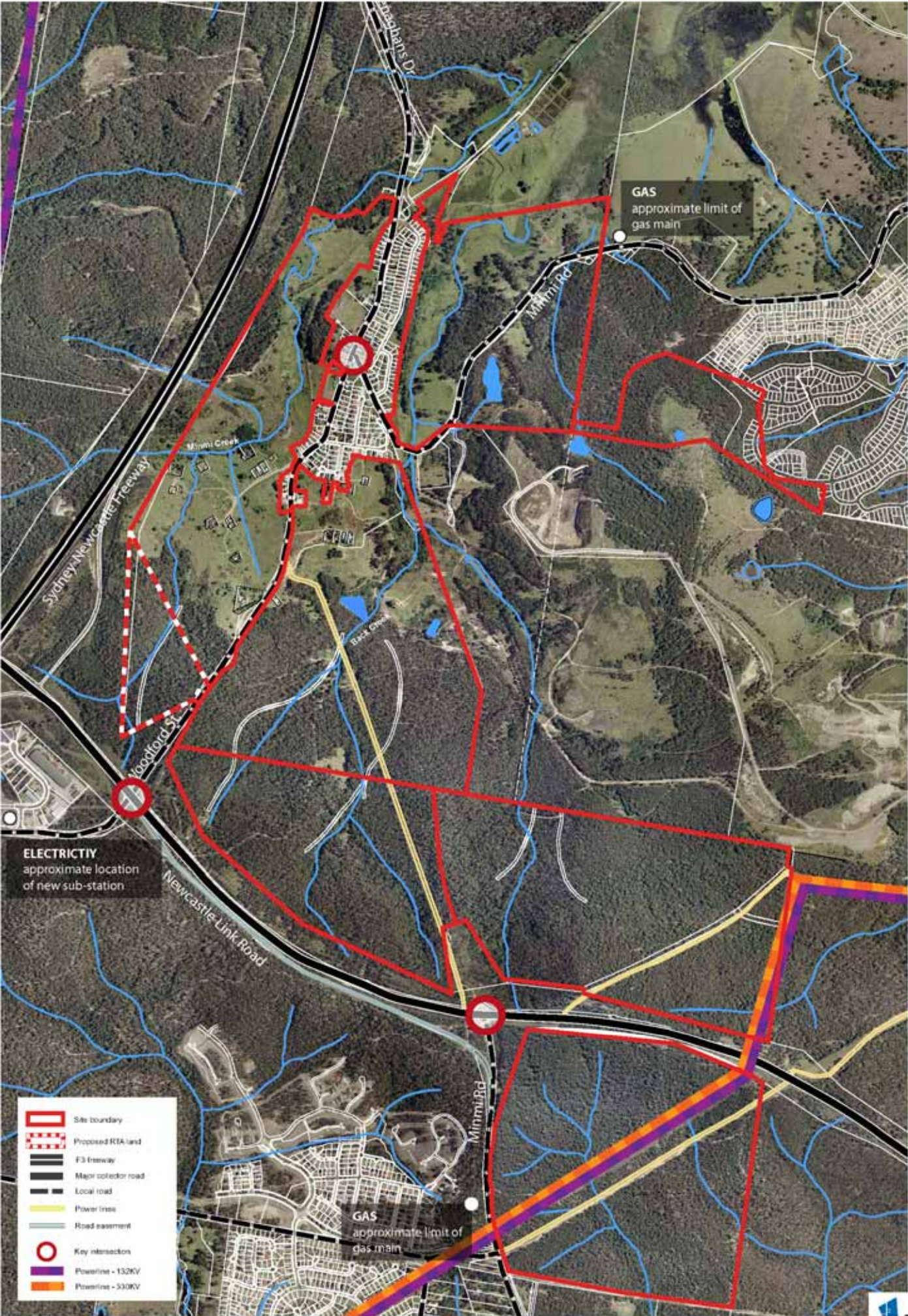
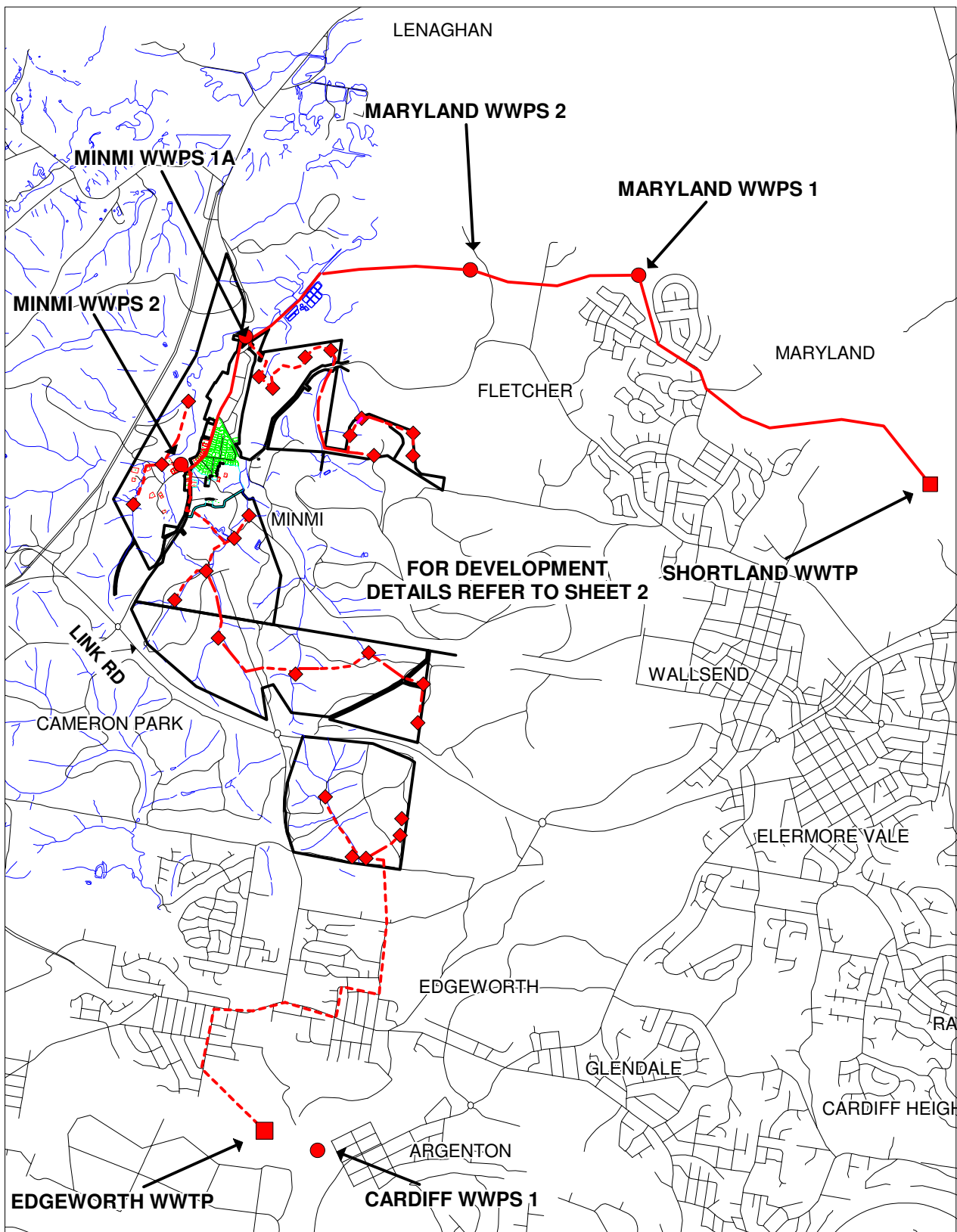

APPENDIX A

EXISTING INFRASTRUCTURE MAP



APPENDIX B

PROPOSED INFRASTRUCTURE DRAWINGS



MINMI/LINK RD PROPOSED DEVELOPMENT SEWER PLAN (COAL AND ALLIED)

LEGEND:

- EXISTING RISING SEWER MAIN
- - - PROPOSED RISING SEWER MAIN
- - - PROPOSED GRAVITY SEWER MAIN

- ◆ PROPOSED WASTE WATER PUMPING STATION
- EXISTING WASTE WATER PUMPING STATION
- EXISTING WASTE WATER TREATMENT PLANT

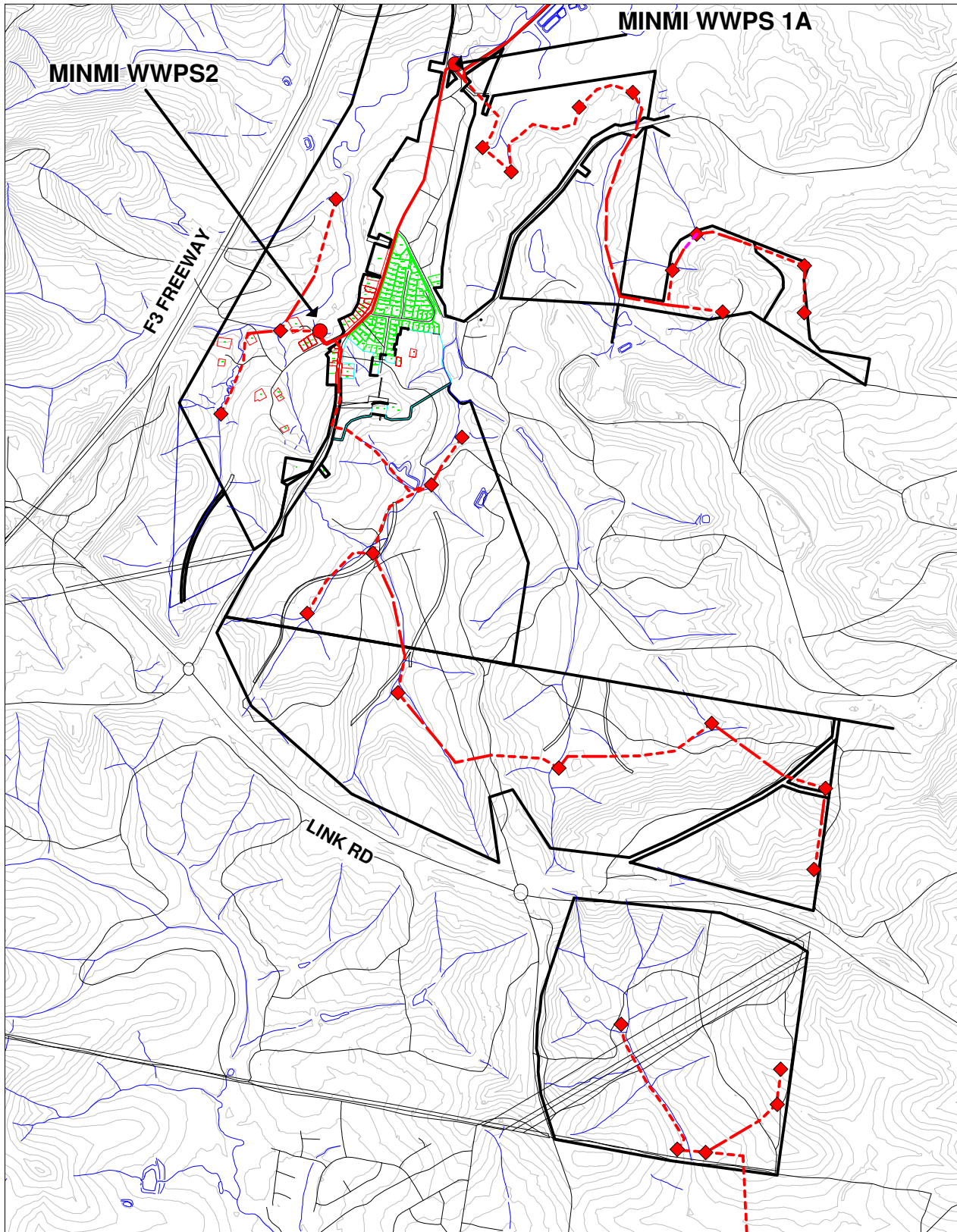
SHEET 1 OF 2



Issue: 2
Date: 31/03/2008



TO SHORTLAND WWTP



TO EDGEWORTH WWTP

MINMI/LINK RD PROPOSED DEVELOPMENT SEWER PLAN (COAL AND ALLIED)

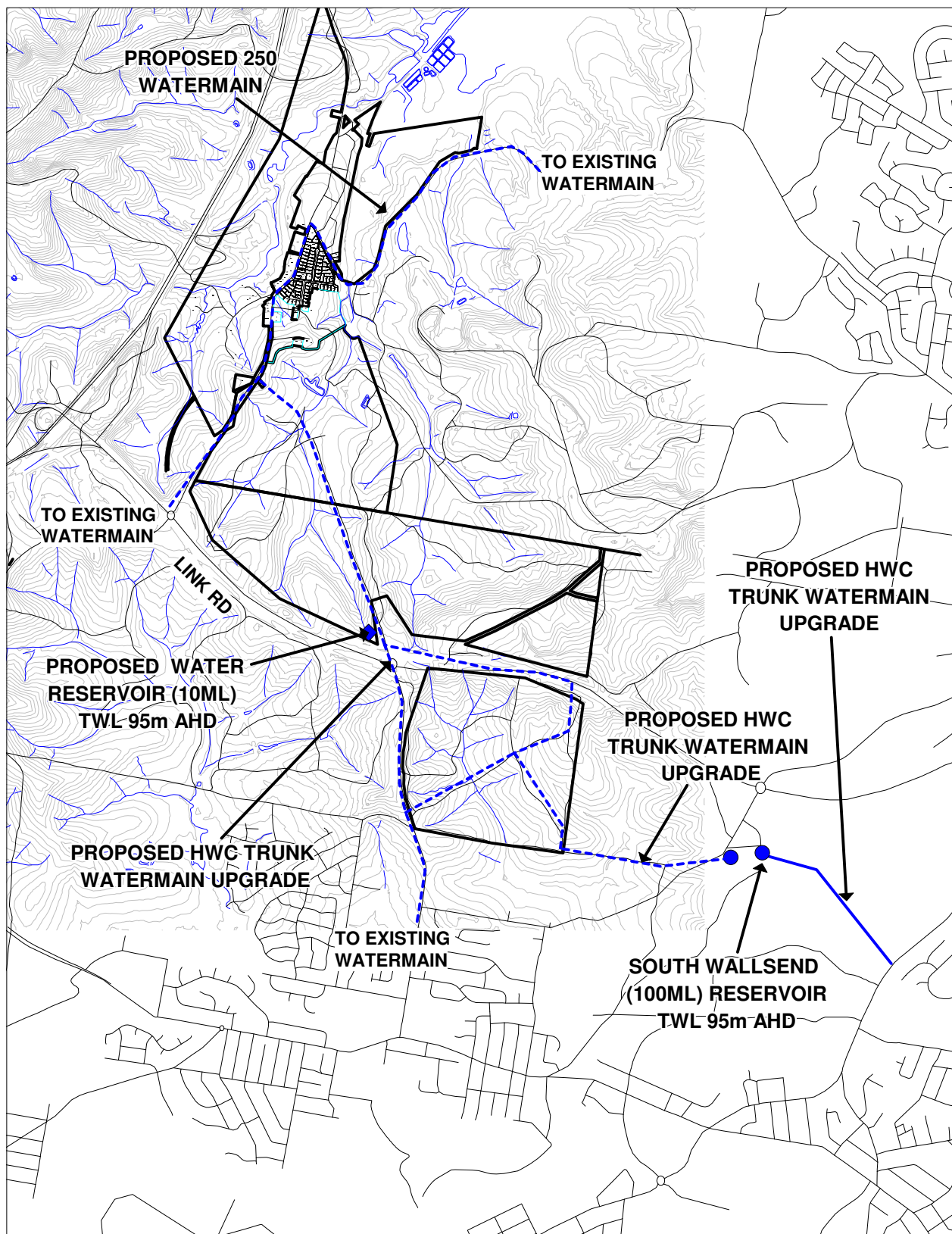
LEGEND:

- EXISTING RISING SEWER MAIN
- - - PROPOSED RISING SEWER MAIN
- - - PROPOSED GRAVITY SEWER MAIN
- ◆ PROPOSED WASTE WATER PUMPING STATION
- EXISTING WASTE WATER PUMPING STATION
- EXISTING WASTE WATER TREATMENT PLANT

SHEET 2 OF 2



Issue: 2
Date: 31/03/2008



MINMI/LINK RD PROPOSED DEVELOPMENT WATER PLAN (COAL AND ALLIED)

LEGEND:

- PROPOSED WATER MAIN
- EXISTING WATER MAIN
- ◆ PROPOSED WATER RESERVOIR
- EXISTING WATER RESERVOIR



Issue: 3
Date: 10/10/2008

APPENDIX C

HUNTER WATER'S 'INDICATIVE REQUIREMENTS FOR PROPOSED DEVELOPMENT



09 November 2007

Coal & Allied Operations Pty Ltd
C/- Cardno Young
P O Box 6951
Baulkham Hills BC NSW 2153

File No:	274002-3/12.
Date:	11/11/08
S.A.	

Ref:2007-845

Dear Sir/Madam

RE INDICATIVE REQUIREMENTS FOR PROPOSED DEVELOPMENT

Hunter Water has considered your request for our requirements for the provision of water and sewerage facilities to the preliminary servicing enquiry at Lot 71 DP1065169, Lot35 DP 1044574, Lot 6 DP 1044574, Lots 2&3 DP877349 - Minmi

As the development is subject to rezoning and approval by the relevant Determining Authority, the information offered by Hunter Water at this point is indicative only and maybe subject to significant change prior to your development proceeding.

General information on water, recycled water and wastewater issues relevant to the proposal is included in this correspondence. These indicative requirements are not commitments by Hunter Water.

The information is based on Hunter Water's knowledge of its system performance and other potential development in the area at the present time. As you will appreciate, there may be significant changes that occur by the time the development proceeds to the lodging of a Development Application and therefore these indicative requirements may be different to the **Notice of Formal Requirements** provided in the future.

Once rezoning has been approved and the decision is made to proceed with the development application you will need to lodge a further Application with Hunter Water to then determine the formal requirements that shall apply. Hunter Water will then issue a **Notice of Formal Requirements**. You will need to comply with each of the requirements in this Notice for the issue of a Section 50 Compliance Certificate for the specific development.

In this instance, Hunter Water's indicative requirements are:

1 Applicable developer charges

The indicative developer charges based on the combined water and sewer charges for development in the development areas would be in the order of \$4000 for each residential lot created. (Refer page 5 of the attached guide).

Indicative developer charges for recycled water in this area are not available at this time as they are dependent on lot yield, treatment works upgrade costs and transportation infrastructure. However, to assist, indicative charges for recycled water schemes in the Thornton North and Gillieston Heights release areas are in the order of \$5000 residential lot.

Developer charges are subject to annual CPI adjustments and a formal review once

each five-year period; and

- 2 Construct **Major Works**, (refer to page 7 of the attached guide) on behalf of Hunter Water, to connect each of the lots to the existing water and sewer system(s) of Hunter Water.

A Major Works assessment/administration fee of \$2 071 should be paid when designs are submitted; and

Water Supply

The proposed development is located within both South Wallsend and Minmi/Maryland Water Supply Systems. Hunter Water's regional strategies for these systems has not identified development of the scale proposed, hence demand estimates for these strategies are significantly lower than those estimated from the proposed development.

You will be required to prepare a detailed Water Servicing Strategy for the site, which is to be compatible with the current regional strategies, i.e. the *South Wallsend Water Supply System Strategy and Minmi/Maryland Water Supply System Strategy*. Model files may be provided by Hunter Water to assist in the development of a servicing strategy.

Given the scale of the development and the linkages between supply systems the strategy will need to be prepared in close consultation with Hunter Water

The strategy is to be prepared by an accredited consultant in accordance with the attached *Guidelines for the Preparation of Strategy Studies*. The water system is then to be designed and constructed in accordance with the approved strategy. A strategy review fee should be paid when the strategy is submitted. Please refer to the attached schedule of rates. You are advised to contact Hunter Water prior to commencement of the Water Servicing Strategy.

Recycled Water

Hunter Water is currently investigating the potential for supply of recycled water from a number of its WWTW. Given the size of the proposed development and proximity to a wastewater treatment works it is likely that the treatment and supply of recycled water will be viable for this development. You will therefore be required to investigate the use of dual reticulation supply of recycled water to the development.

The supply of recycled water is likely to only be available from Edgeworth WWTW.

You will be required to prepare a detailed Recycled Water Servicing Strategy for the site to determine the optimal servicing arrangements for the site, including an investigation of the feasibility of augmenting Hunter Water's existing sewer system to accommodate future development of the site.

The strategy will need to identify demands from this and surrounding developments, identify how the full development area will be serviced and NPV's of servicing options including capital and operating costs.

The strategy is to be prepared by an accredited consultant in accordance with the attached *Guidelines for the Preparation of Strategy Studies*. The recycled water system is then to be designed and constructed in accordance with the approved strategy.

You are requested to liaise closely with Hunter Water regarding the proposed scope and timing of development to provide assistance in the planning of regional wastewater transportation system works.

A strategy review fee should be paid when the strategy is submitted

Wastewater Transportation

The proposed development sites are located within both the Shortland and Edgeworth WWTW catchments. Portions of the development near Minmi have been included in the Shortland WWTW Servicing Strategy, however on a whole the demand estimates used in this strategy were significantly lower than the proposed development.

Hence existing infrastructure has not been designed to cater for loads from this development. Therefore there will need to be significant upgrades of existing assets and/or construction of new WWPS and transportation system into either of the WWTW's

You will be required to prepare a detailed Sewer Servicing Strategy for the site to determine the optimal servicing arrangements for the site, including an investigation of the feasibility of augmenting Hunter Water's existing sewer system to accommodate future development of the site.

The strategy will need to identify loads from this and surrounding developments, identify how the full development area will be serviced and NPV's of servicing options including capital and operating costs.

The strategy is to be prepared by an accredited consultant in accordance with the attached *Guidelines for the Preparation of Strategy Studies*. The sewer system is then to be designed and constructed in accordance with the approved strategy.

You are requested to liaise closely with Hunter Water regarding the proposed scope and timing of development to provide assistance in the planning of regional wastewater transportation system works.

A strategy review fee should be paid when the strategy is submitted. Please refer to the attached schedule of rates.

Wastewater Treatment

This development will likely be partly served by Edgeworth WWTW and Shortland WWTW. An upgrade of the Shortland WWT is programmed to be completed in 2013 and an upgrade of the Edgeworth WWTW in 2010. A large development such as this will have a significant impact on the capacity that Hunter Water provides in these next upgrades to cater for this development and other developments likely to occur within the same catchments.

Please note that it generally takes in the order of 5 years to plan and construct upgrades at wastewater treatment facilities. This is quite often due to the many environmental studies which need to be undertaken to justify capacity increases and/or load discharge increases.

Whether capacity is available at the time of commencement of your development will depend on connections from other development made in the intervening period. Hunter Water will formally advise of available capacity upon lodgement of an Application with Hunter Water to determine the formal requirements. You are advised to liaise closely with Hunter Water on the proposed timing and staging of the development to ensure there is treatment capacity available for your development.

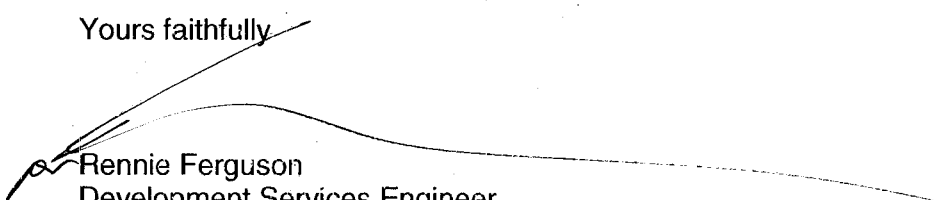
- 3 Prior to providing final approval of designs, Hunter Water may require a Review of Environmental Factors (REF) to be submitted (refer Section 1 of Hunter Water's Water and Sewer Design Manual). A REF considers the likely impacts a development may have on the environment. At all times, methods for preventing or reducing adverse environmental impacts should be considered and where appropriate, incorporated into the project design. Hunter Water, where appropriate, may make a determination in accordance with Part 5 of the EP& A Act 1979; and
- 4 Depending on the system connection points, a reimbursement payment towards the cost of constructing water and sewer infrastructure constructed by third party developers may be payable. Reimbursements will be determined when water and sewer design plans are assessed and approved.

Construction costs, when available, will be used as the basis for the final calculation of reimbursements (Refer page 9 of the attached guide); and

- 5 Please note that Hunter Water requires 3 copies of the final plan of subdivision; and

These indicative requirements are not commitments by Hunter Water and maybe subject to significant change prior to this development proceeding.

Yours faithfully



Rennie Ferguson
Development Services Engineer
Sales and Business Development

Enquiries: Barry Calderwood
Email: barry.calderwood@hunterwater.com.au
Tel: 1300 657 657

APPENDIX D

PROPOSED SUBDIVISION PLAN

