

Department of Planning and other government requirements for the project

The Department of Planning (DoP) stipulated in its review of the *Queanbeyan Residential and Economic Strategy 2031* that the Googong development is required to meet certain goals in regard to provision of water services at Googong (DoP, 2007). These requirements include:

- Demonstration that the approved residential development will meet the minimum water targets in BASIX and investigate and confirm commitment of higher water savings of up to 70 per cent. This requirement has been met by CIC and authorised by Queanbeyan City Council (September 2008).
- Demonstration that there are satisfactory arrangements in place for potable water.

Arrangements for potable water are being made through the cross-border working group involving the ACT Chief Ministers Department and the NSW DoP, and are nearing completion.

The proposal incorporates integrated water cycle management as a means to conserve potable water use and minimise environmental impacts from the development. This approach is consistent with the best practice recommended by the Department of Water and Energy (DWE).

1.2 Purpose of this report

This preliminary environmental assessment (PEA) has been prepared to support CIC's application for the development of the water cycle infrastructure for the new town of Googong, which is two-fold. It is an application for:

- Approval of a concept plan for a project, the project being the development of the water cycle infrastructure for Googong (the Googong water cycle project).
- Approval to carry out part of that project – the development of the water cycle infrastructure required for NH1A.

The approval of a concept plan for a project is made under section 75M of the EP&A Act. To this end, this PEA sets out the scope of the concept plan and the staging of the water cycle infrastructure for Googong.

The approval to carry out part of a project – NH1A water cycle infrastructure – is made under section 75E, in accordance with section 75M, of the EP&A Act. For the purpose of this project approval, the PEA contains:

- A description of the relevant part of the project.
- The proposed environmental planning pathway for assessment of the project.
- The findings of the preliminary environmental assessment.
- A range of proposed broad environmental management measures for the project.
- The proposed scope of the ensuing environmental assessment for both concept plan and part of project applications.

This report identifies potential key environmental issues associated with the project, and the first stage of the project, for the Department of Planning's consideration, especially in the issuing of Director-General's requirements for an environmental assessment in accordance with sections 75F(2) and 75P of the EP&A Act.

CIC seeks the minister's confirmation that a concept plan application can be made for this project along with a part of project application for the first stage. Additionally, CIC seeks the Director-General requirements specific to this joint application.

It is noted that requirements specified by the Director-General under Division 2 and Division 3 of the EP&A Act may be combined in relation to this application.

More detail relating to planning considerations associated with the concept and part of project applications is provided in section 3.

1.3 Strategic context

The new town development at Googong supports a number of important urban planning strategies and policies for NSW and the ACT. The relevant strategies and government policy are described herein.

Queanbeyan Residential and Economic Strategy 2031

This 25 year residential and employment lands strategy was prepared in order to resolve the issue of land releases in the Queanbeyan area. The document draws on the principles of the memoranda of understanding between Commonwealth, NSW and ACT governments on water supply and settlement. The 2031 strategy identifies that over the next 25 years, an additional 10,000 dwellings and 100 hectares of employment lands need to be accommodated in Queanbeyan (DoP, 2007). Thus, the report makes recommendations for a balance between new affordable residential development and affordable supporting infrastructure for roads, community facilities and water supply.

Queanbeyan City Council (QCC) recommended that the Googong development be considered as necessary to provide 5,500 dwellings in the strategy, which equates to 55 per cent of total dwellings projected for this strategy.

Sydney to Canberra corridor regional strategy

Regional strategies are currently being developed for high priority areas within NSW. The *Sydney–Canberra Corridor Regional Strategy 2007–31* (DoP, 2008) applies to the local government areas of Wingecarribee, Goulburn Mulwaree, Upper Lachlan, Yass Valley, Palerang and Queanbeyan. The strategy builds on previous planning work, including the 1995 Sydney–Canberra corridor strategy, as well as the ACT and subregion planning strategy.

The Sydney to Canberra corridor regional strategy aims to:

- Provide up to 25,200 new homes for the 46,350 additional people expected to be living in the region by 2031.
- Increase the amount of housing within existing centres and the choice of housing for smaller households and an ageing population.
- Manage the environmental impact of settlement by focusing new urban development in the major regional centres of Bowral, Goulburn and Queanbeyan.
- Ensure an adequate supply of land to support economic growth and provide for the projected 27,800 new jobs that will be needed, particularly in the areas of manufacturing, transport and logistics, business services, health, aged care and tourism.
- Protect important primary industry resources, water resources, environmental diversity, scenery and heritage, which give the region its character and potential.

In accordance with the recently signed and interlinked memoranda of understanding (MoU) on water resources and settlement, the strategy recognises the importance of working cooperatively with the ACT and represents the NSW Government's position on settlement within the cross-border region (Government of ACT, Government of NSW, Government of Australia, 2006).

The strategy recognises the need to provide an added 10,000 dwellings in the Queanbeyan area over the next 25 years. The Googong development is explicitly indicated as one of the key greenfield developments to deliver these dwellings and accounts for 22 per cent of total dwellings projected for the Sydney–Canberra corridor regional strategy.

ACT–NSW cross border settlement and water resources strategy

Future development must observe the provisions of the MoU between Commonwealth, NSW and ACT governments on cross border settlement and water supply. At the local level, cross-border administrative issues are posed by the ACT Government's control of access to the supply of potable water within the ACT and Greater Queanbeyan City LGA. Land use change for the Googong new town development will need to adequately address cross border administrative issues with the ACT Government. These relate to the supply of potable water and the provision of any planned road access off Googong Dam Road.

The *Memorandum of Understanding on ACT and NSW Cross Border Water Resources* contains principles stating that parties must share water within resource limits, to enable suitable urban development in the cross border region (Government of ACT, Government of NSW, Government of Australia, 2006). This MoU outlines an agreement between the NSW, ACT and Commonwealth Governments that, congruous with section 12(2) of the *Canberra Water Supply (Googong Dam) Act 1974*, allows for the supply of ACT water to NSW in order to service population growth in this region (Willana, 2007). The supply of water will be directed to development areas that are consistent with a secondary settlement MoU signed by both ACT and NSW governments.

The *Memorandum of Understanding on ACT and NSW Cross Border Region Settlement* comprises an agreement that indicates equal weighting of the two governments' interests and the concentration of development in areas that fulfil the long-term benefits for the region (Government of ACT, Government of NSW, 2006). In reference to this MoU, both governments aim to advance economic and employment growth that considers key regional infrastructure, avoids land use issues and complements the efficient urban system. In conjunction with the MoU on water resources, this MoU aims to develop the sustainable management of water resources. Provided both parties agree to the principles discussed in the MoUs, water may be supplied to any settlement (Willana, 2007). These principles state that:

- Development should maximise use of existing infrastructure and services and be complimentary to and integrated with existing cross border uses.
- Current land use, road connections and service ties must support future development.
- Residential growth should be primarily concentrated in existing urban areas. Greenfield development must show a high degree of urban consolidation or should be consistent with existing urban settlements.
- Rural industry and agricultural landscapes would be preserved by reducing any activities and development (eg rural residential subdivision) that do not support the agricultural use of land.

Economic development should be supported by the provision of employment lands. Land use should not negate the functions of key infrastructure assets.

1.4 Stakeholder and community consultation

Consultation approach

CIC and the project team developed and delivered a comprehensive consultation process to engage the local community and key stakeholders around the Googong development and the planning process.

A project control group (PCG) was established in 2002 as a mechanism to regularly engage with QCC. Various one-on-one stakeholder meetings were held with key community groups.

During preparation of the local environmental study and draft local environmental plan (LEP) (2003–5), Willana Associates conducted consultation prior to the statutory exhibition period for these documents.

Stakeholder analysis

Liaison with aboriginal stakeholders will form part of the broad community engagement and stakeholder management plan for the project, especially in relation to the consideration of aboriginal cultural heritage.

Key regulatory stakeholders have been identified and include QCC, DoP, DWE, ActewAGL, NSW Department of Environment and Climate Change (DECC), Environment ACT and NSW Health. Inputs have also been sought from the ACT's Territory and Municipal Services (the department responsible for the management of the Googong Foreshores), NSW National Parks and Wildlife and others. The development of the water cycle management strategy has been carried out in parallel with the local environment study, and many of these and the other stakeholders have had significant involvement in providing information and assistance for the initial concepts of Googong new town.

Key community stakeholders include Ngunnawal Land Council, Jerrabomberra Residents Association, Fernleigh Park Estate Community Group, Queanbeyan Business Council, Queanbeyan Landcare Inc., Molonglo Catchment Group and Friends of Googong Parkcare/Foreshores.

In parallel, CIC undertook specific community and stakeholder consultation for its draft master plan during 2007 and 2008. The main purposes were to:

- Illustrate the type of development that could be delivered at Googong under the local environmental plan provisions.
- Provide accurate and timely information about the concept plan to stakeholders, including community members, to create, maintain and/or increase stakeholder awareness of the proposal.
- Provide a means by which stakeholders could comment on the proposed master plan.
- Provide the project team with the opportunity to incorporate stakeholder feedback into the planning and development process.
- Minimise the opportunity for speculation and misinformation about the planning and development process by ensuring that there were no information gaps regarding both the plans and the development process.

The key components of the community consultation process and their purposes are detailed in the table below (Table 1).

Table 1 Community consultation process

Community consultation process	Purposes
Stakeholder briefing sessions	<ul style="list-style-type: none"> • Key stakeholders (i.e. landowners, community, indigenous and environmental groups) were invited to attend one-on-one briefing sessions with members of the project team on 6–7 December 2007. • The sessions were intended to allow stakeholders more time to view, discuss and to ask detailed questions to the project team and to listen to their views about the draft concept plan. • A total of 10 briefing sessions were conducted.
Community information and feedback sessions	<ul style="list-style-type: none"> • Two community information and feedback sessions were held on Wednesday 12 December 2007 and Saturday 9 February 2008. • The purpose of these sessions was to provide open access to information about the project, enabling residents and other stakeholders to discuss the proposal in an informal atmosphere with project team members. Information was presented through a series of storyboards. • 63 people were recorded as having attended the first session and 15 people for the second session.
Christmas display	<ul style="list-style-type: none"> • A public display of the storyboards was organised between 20 December 2007 and 16 January 2008 at the Queanbeyan Visitors Information Centre. • The purpose of the Christmas display was to enable the wider community to view the storyboards at a time convenient to them.
Project website	<ul style="list-style-type: none"> • Established in 2005 (www.googong.net), it is intended to provide clear and accurate information to the wider public. • It informed a wider audience of the community information and feedback sessions and allowed web user access to the storyboards used at these sessions. • People could also provide comments on the consultation material in an electronic feedback form.
Outcomes report	<ul style="list-style-type: none"> • A consultation outcomes report was produced after the consultation process. • The purpose of the report was to explain the consultation process, detail all feedback generated from the consultations and summarise the key issues. • The report also included CIC's response to issues raised during the consultation.

A total of eight written feedback forms were received either by mail, fax or electronically. Two public workshops for local resident, landowners and other stakeholders were held in November and December 2003. Workshop participants raised several issues about the entire Googong new town development.

Consultations during the Land Release Inquiry involved public hearings at which public authorities, landowners and members of the community were consulted. In response to hearings, public authorities, companies, landowners and individuals made submissions focussed on regional planning, water availability, infrastructure, housing, aircraft noise, conservation and land management.

Issues on water availability focussed on the need to recognise that there is adequate water available to supply the existing and projected population for 30 years. As well as this, it was recognised that water efficiency measures included in the proposed development at Googong would reduce demand for

potable water supply. It was also noted that the MoU on water resources lacks the certainty needed to guarantee the supply of the available water to new settlements in Queanbeyan.

1.5 The proponent

CIC, a publicly listed property development corporation specialising in residential projects across Australia, is the proponent of the Googong new town development (including the subdivision and water cycle components).

CIC is based in Canberra, and also has offices in Adelaide and Darwin. CIC projects are spread across the ACT, southern NSW, South Australia, the Northern Territory and Western Australia.

Significant developments undertaken by CIC in the region include the Jerrabomberra Park development adjacent to Queanbeyan, the Forde development to the north of Canberra (1,100 dwellings) joint venture with Delfine and ACT government. CIC is also the joint venture partner for the new ACT suburb of Crace (1,100 dwellings) currently undergoing stage 1 design.

2 Project description

2.1 Study area

Googong water cycle project (concept plan)

The Googong development area comprises 780 hectares of land located 8 kilometres south of the Queanbeyan central business district on Old Cooma Road. Old Cooma Road extends north-south along the western border of the study area, while Googong Dam Road forms the northern boundary for the core site. The Commonwealth-owned Googong Dam Area (including the dam and the foreshores) limits any further development to the east.

At ultimate development, Googong is proposed to consist of at least 5,500 dwellings and have over 15,000 residents supported by retail, commercial and community services. The proposed water cycle infrastructure under this concept plan will constitute the sole provision of water and wastewater services to this community.

Pastoral land occupies the majority of the development area and is characterised by grassy plains and rolling hills that have been extensively cleared for grazing and, to a lesser extent, cropping. Existing improvements within the pastoral areas include a number of houses, farm buildings, farm dams and dirt tracks and roads (Willana, 2007).

Areas of denser vegetation and woodland are generally confined to the steeper and least accessible portions of the site. Steep gullies to the north, west and east margins of the study area generally have more significant environmental hazards (Willana, 2007).

The ephemeral creeks proposed as options for discharge of excess recycled water are located in the northern parts of the development area adjacent to the proposed water recycling plant location. Both creeks eventually discharge to the Queanbeyan River below Googong Dam to the north of the Googong Dam Road causeway.

No development will occur in the Googong Dam catchment.

Part of project application (NH1A)

NH1A lies to the immediate south of Googong Dam Road as indicated in Figure 3. The NH1A development area comprises 120 hectares and is anticipated to support development of approximately 1,200 dwellings and a population of 3,400 people. Supporting services will include retail and commercial services located in a village centre together with schools and active and passive open space areas.

The proposed water cycle infrastructure under this project application will provide complete water and wastewater services to the NH1A development.

2.2 General description

Concept plan

Concept approval is sought for the infrastructure facilities as detailed in Figures 3 and 4, for water and wastewater management respectively.

Figure 3: Concept plan for Googong water and recycled water management

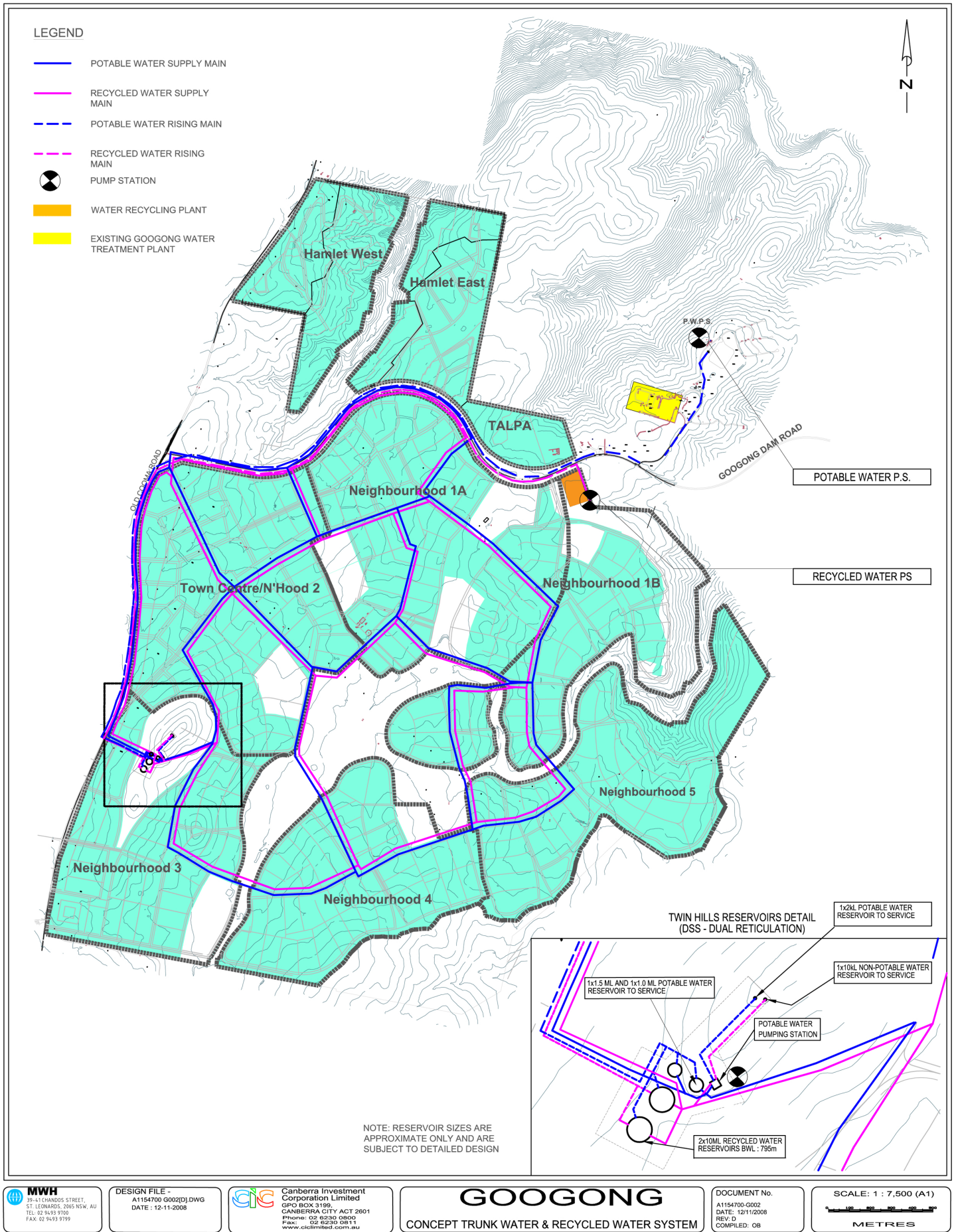
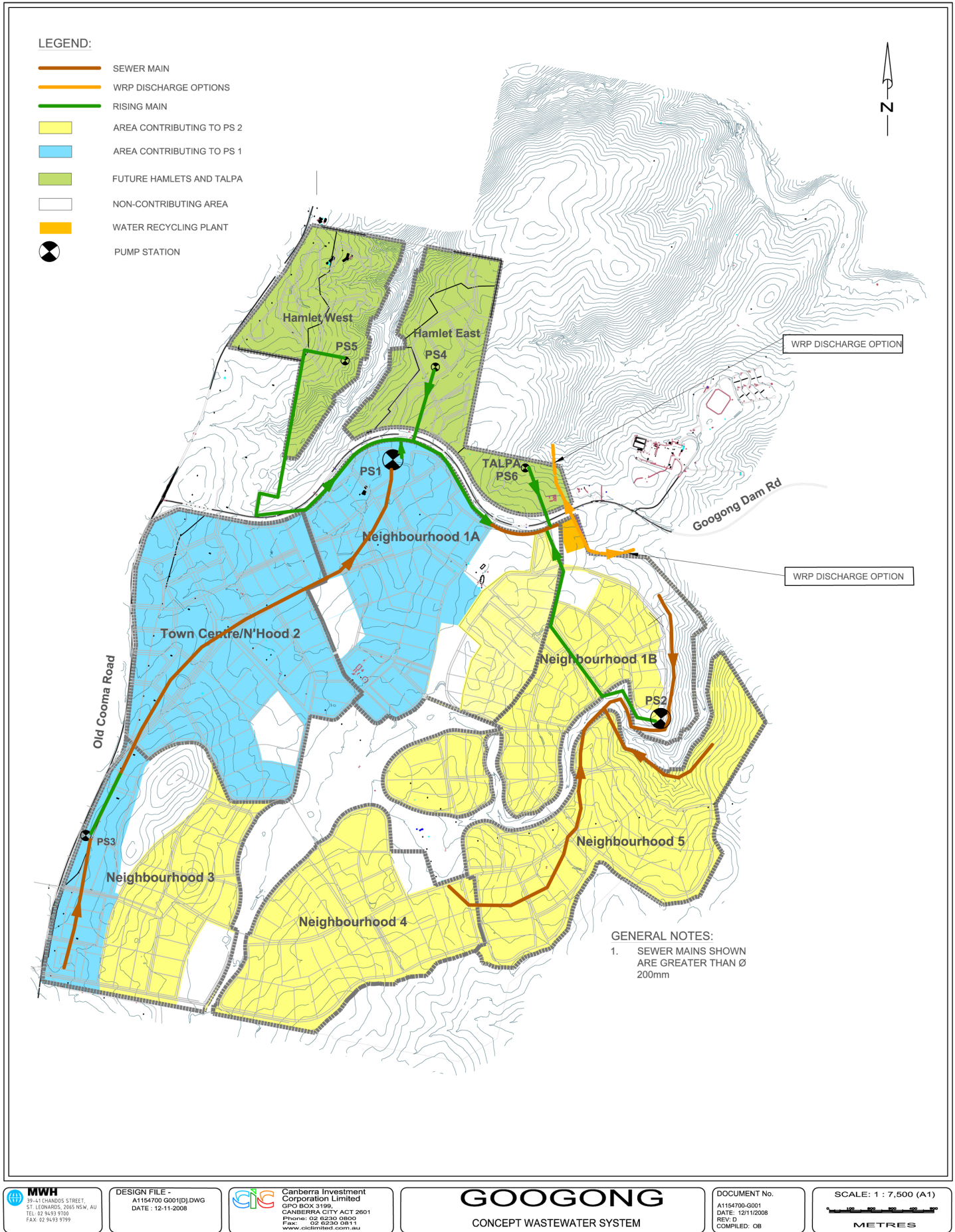


Figure 4: Concept plan for Googong wastewater management



This proposed recycled water and wastewater system is required to service the anticipated population of Googong at ultimate development. CIC envisage that completion of the final stages of the system will not occur for approximately 25 years depending on the growth rate of the development.

A number of scenarios have been considered for the complete integrated water cycle management of Googong new town. For each scenario, the potential savings in potable water demands was a key factor influencing the selection of the preferred scenario. The preferred scenario was selected with consideration of the following project objectives and water sustainability criteria:

Project objectives

- Achieve at least a 50 per cent reduction in potable water demand and target up to 70 per cent reduction.
- Gain stakeholder endorsement.
- Protection of Googong Dam.
- Be economically feasible.

Sustainability criteria

- Environmental.
- Reduce surface water extractions.
- Reduce energy use/greenhouse gases.
- Protect aquatic ecosystems.
- Social outcomes.
- Reliability/maturity of technology.
- Protect public health.
- Community acceptance.
- Economic outcomes.
- Manageable capital cost.
- Low operating and maintenance costs for operating authority.
- Low operation and maintenance cost for residents.

The preferred option

At a workshop convened by CIC with a range of stakeholders, eight scenarios were considered against the above criteria with scenario six being selected as the preferred option. The preferred option incorporated the following features:

- Mandated low flow showerheads.
- Mandated flow controls on taps.
- Landscaping controls.
- Mandated water efficient clothes washers.
- Rainwater tanks for all residential development.
- Rainwater tanks for all non-residential development.