JOINT REGIONAL PLANNING PANEL (Southern Region)

JRPP No	JRPP Reference Number 2012STH023
DA Number	DA 233-2012
Local Government Area	Queanbeyan City Council
Proposed Development	Staged Development for Subdivision Creating 508 Lots and Associated Works
Street Address	140 Googong Road, Googong
Applicant/Owner	Googong Township Pty Ltd ATF Googong / Googong Township Pty Ltd
Number of Submissions	Nil Public Submissions and Four (4) Government Agency Submissions
Recommendation	Approval with Conditions/Deferred
Report by	Katrena Browne, Queanbeyan City Council

Assessment Report and Recommendation

Executive Summary

During the assessment of this application concurrent negotiations were being undertaken with the proponent over the final design of the Water Recycling Plant (WRP) which will treat sewage generated by the development. During these discussions it became clear that the odour buffer proposed around the WRP did not reflect the potential impacts of any changes to the design of the WRP. Council's Infrastructure Group have therefore required that residential development be restricted within a 250m buffer of the boundaries of the proposed WRP. Once the WRP is operational and real impacts can be quantified residential development within the buffer area can be revisited.

As a result the assessment has recommended that 54 of the proposed residential allotments located within the revised 250m WRP buffer zone as shown in the original development application should be excluded from the consent. Therefore, if approval is granted the affected allotments will be excluded from the consent pursuant to section 80(4) of the *Environmental Planning and Assessment Act 1979*. The proponents have agreed to this course of action. A plan showing the excluded lots is shown in Attachment A of this Report.

Recognising the above exclusions the development application therefore seeks approval for subdivision and associated works as follows:

The development application seeks approval to:

- Create 12 development lots which will be further subdivided. This includes one lot for the proposed Neighbourhood Centre 1A (proposed Stage 6) and two future development lots in Stage 3 to be the subject of further applications for subdivision. An additional residual lot will need to be created to encompass the land excluded within the buffer zone of the WRP. Two previously approved lots remain for the retention of the existing Googong homestead (Lot 13) and the future state school (Lot 4). These lots remain although encircled by the proposed development.
- The remaining development lots will be further subdivided to create a Torrens title subdivision for Neighbourhood 1A Stages 3, 4 and 5. These stages include one lot for an Anglican K-12 school, one sportsfield, four local parks and two drainage reserves. The remaining land will be subdivided to create 442 residential lots within the subdivision
- Undertake all subdivision works within stages 3, 4 and 5 comprising site preparation and grading, tree removal, utilities augmentation, drainage and road construction.
- Undertake soft and hard landscaping works to embellish sportsfield 2 and four local parks as well as street landscaping.
- Undertake intersection works on Googong Road.
- Construct and use temporary construction compound and site access roads.
- Future dwellings, subdivision of further development lots in Stage 3 and the Anglican School will be the subject of separate applications. For information there is the potential to create approximately 76 additional residential lots within the 2 development lots in Stage 3, but these will be the subject of a separate and future development application.

The Queanbeyan Local Environmental Plan 2012 (QLEP 2012) was gazetted on 23 November 2012 and now applies. This development application was lodged on 2 October 2012. As such, Clause 1.8A applies. This clause provides a savings provision, where as this application was lodged prior to the gazettal of QLEP 2012, the plan is considered as a draft instrument only and the provisions of Queanbeyan Local Environmental Plan (Googong) 2009 apply to the development.

The subject site for development is zoned R1 – General Residential under Queanbeyan Local Environmental Plan (Googong) 2009. The proposed development is permissible with consent within this zone.

The capital investment value (CIV) of the proposed development is \$50m. In accordance with the provisions of State Environmental Planning Policy (State and Regional Development) 2011 and Schedule 4A of the Environmental Planning and Assessment Act 1979, the CIV exceeds the maximum of \$20 million and as such the determining authority is the Southern Joint Regional Planning Panel.

In accordance with Schedule 3 of State Environmental Planning Policy (Infrastructure) 2007 the application was referred to the NSW Roads and Maritime Services as traffic generating development. They have provided comment which indicates that the intersection of Googong Dam Road / Old Cooma Road may require upgrading to cater for the additional right turn movement for traffic exiting the subdivision. RMS has concurred to the imposition of conditions requiring a traffic sensitivity analysis to be completed to determine the appropriate timing for upgrade and for the future upgrade design and construction.

A Part 3A application for the Googong Township Integrated Water Cycle (IWC) Project was approved by the NSW Planning Assessment Commission on 24 November 2011. The Part 3A approval for the IWC project includes:

- Water Recycling Plant to treat sewage to a standard suitable for non potable urban re-use and discharge to the environment.
- Provides reservoirs for recycled and potable water.
- Provides pumping stations.
- Rising and distribution mains for sewage, recycled water and potable water.

Council resolved on 27 July 2011 the Googong Urban Development Land Planning Agreement (LPA) be executed as a Deed. The LPA relates to community facilities; open space provision and embellishment; roads, water and sewer infrastructure; affordable housing; water and energy savings initiatives; monetary contributions; ecological offsets and administration.

A State Developer Agreement (SDA) has been prepared. The Hon Brad Hazzard MP, Minister of Planning and Infrastructure advised Council on 15 September 2011 of the execution of the Googong Planning Agreement. The Planning Agreement provides that the developer will make monetary contributions of 75% of \$4,296.71 per developable hectare (subject to indexation) towards the costs of acquisition of land for the purposes of:

- a fire station (being a 2,000m² site);
- two (2) primary schools (one site being 2.81ha and the other 3ha in size); and
- a high school (being a 6ha site).

Alternatively the developer may elect to dedicate all 12.01ha of land for the sites. The NSW Department of Planning and Infrastructure has advised that it has now received all the documentation necessary to issue the satisfactory arrangements certificate. However, at the time of preparing this Report the certificate had not been finalised. The Department advised that is was likely the certificate would be available prior to JRPP's consideration of the matter and Panel members will be advised when the certificate has been received.

To service urban development at Googong, Council has completed road construction works on Edwin Land Parkway. The road links Old Cooma Road to Lanyon Drive which gives access to the Monaro Highway in the Australian Capital Territory.

Stage 1 of the Old Cooma Road upgrade has commenced. Stage 1 of the upgrade will see the section of road near the Cooma Road Quarry replaced with a straighter and wider section of road making for much safer travel and improved traffic flow between

Queanbeyan and Googong. The completion of these works is estimated to be late October 2013.

Stage 2 of the duplication of Old Cooma Road from Edwin Land Parkway to Googong will involve a distance of 4.5kms. This will deliver a four lane dual carriageway for the full length of the duplication. Completion is not scheduled until the Googong township is substantially underway.

The development was advertised and notified to adjoining and surrounding property owners as development in the public interest from 8 October 2012 to 26 October 2012. During this period no submissions were received. Government Agency submissions were received outside this period from NSW Department of Planning and Infrastructure, NSW Department of Roads and Maritime Services, Federal Department of Finance and Deregulation and NSW Police.

An assessment under Section 79C of the *Environmental Planning and Assessment Act* 1979 has been undertaken and the application is recommended for approval subject to the imposition of conditions.

Background

Googong will be a new township comprising approximately 790ha of land currently zoned for urban development. Planning for the urban development of the site was identified for future residential development in the Queanbeyan Land Release Enquiry (2006) and Queanbeyan Residential and Economic Strategy 2031 and the Googong Urban Investigation Area – Local Environmental Study 2004 prepared by Willana Associates. The Queanbeyan Local Environmental Plan (Googong) 2009 was gazetted on 24 December 2009 to enable the township to develop.

The development of the site is required to meet part of the future demand for new housing for Queanbeyan. The Googong Master Plan broadly sets out the ultimate development outcomes for Googong which will eventually include some 5,550 homes, accommodating a population of approximately 15,700 people as well as provide for businesses opportunities, significant open space and community facilities over the next 25 years. An area of 166ha representing 21% of the total area is to be set aside for open space.

The development site is located in the northern portion of the site adjoining the first development of 337 lots (referred to as DA#1). It is located to the east and south east of the subdivision currently under construction. It proposes to be a compact neighbourhood integrating a range of housing types, passive and active open space including the sports field and local parks, community facilities and school sites.

Site and Surrounds

Figure 1 - Locality Plan shows the site of the Googong Township 8km south of the Queanbeyan CBD and 16kms south east of Parliament House, Canberra. The surrounding area is characterised by a variety of land uses including, nature reserves, low intensity forestry, rural residential, cattle and sheep grazing and recreation. Googong Dam and the Googong Foreshores (owned by the Commonwealth Government and leased to the Australian Capital Territory Government) is immediately east of the site and an operating quarry is located north west of the site on the western side of Old Cooma Road.



Figure 1 – Locality Plan

The principal infrastructure and landscape features of Stages 1 - 5 are set out as follows and shown in *Figure 2 – Aerial Photograph of Site* below:

- The site has extensive frontage to Googong Road.
- It is bound by Googong Road to the north and farmland to the west, east and south.
- Access to the site is from Googong Road which connects to Old Cooma Road.
- Most of the site comprises heavily degraded pasture used for mixed sheep and cattle grazing. Occasional eucalypt trees and tree clumps are scattered throughout the site and there are also a small number of farm dams and dry drainage lines.
- The landform consists of gently undulating terrain with two drainage lines. Googong Creek in the west part of the site is a bifurcated watercourse that converges into one toward Googong Road. Montgomery Creek runs through the east of the site. Both drainage line runs under Googong Road northwards towards the Queanbeyan River. Neither of the main channels for these creeks are located on the development site.
- The remains of a small 19th century hut structure identified as having heritage value is located in the west portion of the site.
- A dwelling and outbuildings are located in the east portion of the site.
- A cottage is located in the north western portion of the site.



Figure 2 – Aerial Photograph of Site

Proposed Development

The proposal involves the following development:

(i) <u>Subdivision</u>

- Lots 12 and 14 DP 1164687 and Lot 6 DP 255492, will be re-subdivided to create the following:
 - Creation of 12 Torrens Title development lots based on the proposed staging plan. These lots form the basis of the completion of Neighbourhood 1A. Please note that the proposed residential allotments shown within the heavy black line fall within the 250m WRP buffer and will be excluded from this consent. A residual allotment will need to be created to incorporate this area. A condition of consent to this effect is proposed. (Refer to Figure 3 Below).



Figure 3 – Plan Showing Staging of Development – Each Colour Represents a Different Stage (Residential lots within heavy black line to be excluded from consent)



ш	Previous DA - Stages 1 & 2
	This DA - Stages 3, 4 & 5
	Future DA - Stage 6
	Residential Lots Excluded from this consent
	Stage Boundaries in this DA

Figure 4 – Plan Showing Neighbourhood 1A and the relationship of this DA to existing and proposed stages (Residential lots within heavy black line to be excluded from consent)

Stages 3A, 3B, 4A, 4B, 4C, 4D, 4E, 5A and 5B

Stage 3A Subdivision

- Proposed Lots include:
 - Residential Housing Lots 601 682.
 - A future stage development parcel being residue Lot 683.
 - A future Anglican School parcel being residue Lot 684.
 - New roads to be dedicated.
 - Proposed laneway to rear of lots 609 612, 613 616, 648 651 and 652 655.

Stage 3B Subdivision

- Proposed Lot 686 is to be further subdivided creating the following:
 - Public open space Lots 775 and 780 to be dedicated. Lot 775 being Local Park 4 and Lot 780 being Local Park 2.
 - Residential housing Lots 701 765, 767 774, 776- 779 and 781 792.
 - A future stage development parcel being residue Lot 766.
 - New roads to be dedicated.

Stage 4A Subdivision

- Proposed Lot 687 is to be further subdivided creating the following:
 - Residential Housing Lots 802 844 and lots 846 858 (Note: Proposed lots 801, 845 & 859-870 inclusive fall within the WRP buffer and are excluded from this consent).
 - New roads to be dedicated.

Stage 4B Subdivision

- Proposed Lot 688 is to be further subdivided creating the following:
 - Residential Housing Lots 901 953 and Lots 957 to 961 (Note: Proposed lots 954 - 956 inclusive fall within the WRP buffer and are excluded from this consent).
 - New roads to be dedicated.

Stage 4C Subdivision

- Proposed Lot 689 is to be further subdivided creating the following:
 - Residential Housing Lots 1031 1039 and Lots 1044 1058 (Note: Proposed lots 1001 - 1030 & 1040 - 1043 inclusive fall within the WRP buffer and are excluded from this consent).
 - New roads to be dedicated.

Stage 4D Subdivision

- Proposed Lot 691 is to be further subdivided creating the following:
 - Public open space Lots 1201 and 1202 to be dedicated. Lot 1201 being a drainage reserve and Lot 1202 being Sportsfield 2.
 - New roads to be dedicated.

Stage 4E Subdivision

• Proposed Lot 690 will remain as a residual lot as it is contained wholly within the WRP buffer area. (Note: Proposed Lots 1301 - 1303 inclusive fall within the WRP buffer and are excluded from this consent).

Stage 5A Subdivision

- Proposed Lot 692 is to be further subdivided creating the following:
 - Residential Housing Lots 1101 1167.
 - Public open space Lot 1168 to be dedicated. Being Local Park 6 and Drainage Reserve 5.
 - New roads to be dedicated.

Stage 5B Subdivision

- Proposed Lot 693 is to be further subdivided creating the following:
 - Residential Housing Lots 1201 1267.
 - Public open space Lot 1268 to be dedicated. Being Local Park 5.
 - New roads to be dedicated.
 - Proposed laneway to rear of lots 1207 1210.

A total of 442 residential lots are proposed to be created with all stages. The following is a breakdown of lot sizes proposed:

- Creation of 287 lots which are equal to or greater than 468m².
- Creation of 155 lots which are less than 468m².
- Residual development lots 683 and 766 have the potential for a future 76 allotments all of which will be less than 468m².

Construction stages are likely to vary from the stages shown. Lots 683 and 766 will be the subject of a further development application for subdivision.

(ii) <u>Construction Works</u>

- Undertake all subdivision works within Stages 3 to 5 comprising site preparation and grading, tree removal, utilities augmentation, drainage, road construction and landscaping.
- Undertake planting and intersection works on Googong Road.
- Construct and use a temporary construction compound and site access roads.

(iii) Integrated Water Cycle System

The Googong township is designed with an Integrated Water Cycle system (IWC), with a dedicated sewage treatment and water recycling plant. A Part 3A approval has been granted by the NSW Planning Assessment Commission relating to potable water, recycled water and sewage system required to serve the township. The Part 3A approval includes approval for Stage 1 of the Googong water cycle project, which is the water cycle infrastructure required for the lots created by the first development application.

Negotiations between the developer, Council and various state agencies are still underway about the final design of the water recycling plant (WRP). As a consequence construction of the plant has not commenced. Depending on the time taken to finalise the design there is a concern that some of the allotments in Stages 3, 4 and 5 may be ready for release prior to the WRP being commissioned. This would be unsatisfactory as homes in Stages 3, 4 and 5 will not be able to be connected to sewer.

Council believes that it is unlikely homes could be built on an allotment and occupied within three months of a subdivision certificate being issued given the time taken for registration of title, approval of a DA/Construction/Complying Development Certificate and construction.

It is therefore proposed that a condition will be imposed that requires that a subdivision certificate for any lot proposed in any stage of this development may only be issued where Council is satisfied that the WRP will be commissioned within three months of that subdivision certificate being released. This is to ensure that properties are not released until there is some confidence that the construction of the WRP will be completed to an extent that it can service the proposed development.

(iv) **Open Space Facilities**

The proposed subdivision will also deliver and dedicate to Council open space:

- Sports Field 2 (two irrigated fields containing flood lighting, an amenities building and practice nets).
- Local Parks 2, 4, 5 and 6.
- Drainage Reserves 4 and 5.
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Figure 5 – Stages 3-5 Open Space Facilities

The following reports have accompanied the development application and were used throughout the planning assessment:

- Volume 01 Statement of Environmental Effects prepared by Elton Consulting September 2012.
- Volume 02 Plans for approval prepared by Elton Consulting September 2012.
- Volume 03 Supporting documents prepared by Elton Consulting September 2012.
- Applicant's written response to additional information matters raised received 12 December 2012.
- Applicant's written response to matters raised by the Roads and Maritime Services dated 13 December 2012.
- Applicant's written response to matters raised by NSW Police dated 27 November 2012.
- Applicant's written response to matters raised by Roads and Maritime Services dated 18 December 2012 (SIDRA Analysis provided via email on 13 December 2012
- Applicant's response and amended staging plan showing excluded lots dated 21 December 2012.

Statutory Assessment

The following planning instruments have been considered in the planning assessment of the subject Development Application:

- State Environmental Planning Policy No 55 Remediation of Land.
- State Environmental Planning Policy (Infrastructure) 2007.
- State Environmental Planning Policy (State and Regional Development) 2011.
- Queanbeyan Local Environmental Plan (Googong) 2009.
- Draft Queanbeyan Local Environmental Plan 2012.
- Googong Development Control Plan 2010.

1. <u>Section 79C(1)(a)(i) – Any Environmental Planning Instrument</u>

(a) State Environmental Planning Policy No 55 – Remediation of Land

The objectives of SEPP 55 are:

- To provide for a state wide planning approach to the remediation of contaminated land.
- To promote the remediation of contaminated land for the purpose of reducing the risk of harm to human health or any other aspect of the environment.

Pursuant to the above SEPP, Council must consider:

- Whether the land is contaminated.
- If the land is contaminated, whether it is satisfied that the land is suitable in its contaminated state (or will be suitable, after remediation) for the proposed use.

A Contamination Survey prepared by Agsol Pty Ltd, August 2009 carried out for Stages 3-5 identified three areas of environmental concern within the development area. The three areas of concern were nominated as follows:

- AEC 2 An area associated with a large agricultural machinery shed associated with the original homestead on the site. At the time of the report this area was unable to be tested because it was still in use. However, because of the existing activities in the shed further investigations would be required.
- AEC 3 An area associated with disposal of waste materials associated with the rural activities on the site.
- Site 3 An area previously used for sheep and cattle yards which showed potential for contamination from hydrocarbon products. At the time of this report the site was still in use and it was recommended that further investigation be carried out in future.

It was also recommended that a NSW accredited site auditor be appointed to oversee the remediation activities if required.

Subsequently, Rod Harwood of Environmental Strategies was appointed as the site auditor and provided the following interim advice (referred to as Interim Advice #2) as part of the statement of environmental effects.

Firstly, the advice confirms that the outcome of appointing the site auditor will be a site audit statement (SAS) and site audit report (SAR). Certainly, Council would expect that both these documents are completed and submitted prior to the commencement of any construction work on the site. However, this does not mean that approving the application cannot be considered without these documents.

Further the auditor was requested to give advice on whether the proposed Sampling, Analysis and Quality Plan (SAQP) was suitable to proceed to the next stage of investigation. The interim advice indicates that "the site may be made suitable if the contaminants of concern as detailed in the SAQP referenced above are identified within the anticipated levels". While this advice provides some surety that the auditor supports the remediation process Council considered that it was insufficient for it to be satisfied that the land was suitable for residential development and advised the applicant as such.

In response the applicant advised that since submission of the development application further investigation of the areas of environmental concern had been conducted. A draft copy of the contamination assessment and validation report for sites AEC 2, AEC 3 and site 3 was provided to the site auditor who subsequently provided the following further interim advice (referred to as Interim Advice #3) as follows.

"Since our last interim advice the following achievements have resulted from the combined assessment and validation which has resulted in some parts of the Areas of Environmental Concern now being suitable for residential landuse:

- The UST [underground storage tank] and AST [aboveground storage tank] area being validated;
- The majority of the farm shed area (AEC 2) has now been validated as suitable for residential landuse with one remaining section on the eastern boundary not validated. This is the former workshop area which contains a below ground concrete pit which apparently was used for vehicle servicing;
- Area AEC 3 has been shown not to contain any chemical or asbestos contamination and the final validation will be only from visual inspection from Geotechnique to ensure that all building and demolition material has been appropriately removed to an approved landfill.
- Site 3, the area of the former dip and farm sheds... has shown to have no contaminants of concern exceeding appropriate landuse criteria".

The interim advice then goes on to list a number of matters which need to be finalised as part of the formal assessment and validation report before it can be considered by the auditor in order to issue the SAS and SAR. Many of these are administrative in nature although the final remediation of part of AEC 2 still requires completion. In conclusion the auditor's interim advice states that:

"The auditor is satisfied that the site may be made suitable for the appropriate landuse and that this Interim Advice is an appropriate mechanism for a planning authority to provide approval for a construction certificate to allow the remaining remedial measure to be completed. The auditor considers this process to be more cost effective than relying on a site audit statement which has been completed as a Section B Audit. The ultimate outcome from the auditor's perspective is to produce a Section A Site Audit Statement which states that the land is suitable for the proposed landuse. In this case having to provide two audit statements (Section A and Section B) is counterproductive and will result in unnecessary delay in costs"

Given the above it is considered that the consent authority can be satisfied that the land can be remediated so that it is suitable for the proposed residential land use. However, should approval be granted, a condition of consent should be included requiring that the Site Auditor's Statement and Site Auditor's Report should be provided to Council prior to the issue of a construction certificate (subdivision) for any work covered by this application other than works required to undertake remediation works on the site.

(b) State Environmental Planning Policy (Infrastructure) 2007

State Environmental Planning Policy (Infrastructure) 2007 provides relevant public authorities direction with the opportunity to be made aware of proposed development listed in the schedules and any representation in respect to proposed development.

Clause 104 of the SEPP provides for traffic generating development and provides in part as:

"104 – Traffic-generating development

- (1) This clause applies to development specified in Column 1 of the Table to Schedule 3 that involves:
 - (a) New premises of the relevant size or capacity, or
 - (b) An enlargement or extension of existing premises, being an alteration or addition of the relevant size or capacity.

As a result the proposal was referred to the NSW Department of Roads and Maritime Services for comment. Council received advice on the proposed development from the RMS that it concurs to recommended conditions of consent requiring –

- A traffic sensitivity analysis (SIDRA) to be completed to determine the appropriate timing for upgrade of the Googong Dam Road / Old Cooma Road intersection to cater for traffic generated by the development prior to issue of any Construction Certificate Subdivision;
- RMS approval of the future design of the intersection upgrade; and
- Construction of the intersection upgrade at the appropriate time.

As well as considering the RMS advice the SEPP also requires consideration of the accessibility of the site concerned and any potential traffic safety, road congestion or parking implications of the development. These matters have been considered and form part of the Development Engineers assessment. Refer to section 1(d) of this report.

(c) State Environmental Planning Policy (State and Regional Development) 2011

State Environmental Planning Policy (State and Regional Development) 2011 identifies development for which Joint Regional Planning Panels are to exercise specified consent authority functions.

The capital investment value (CIV) of the proposed development is \$50 million. Clause 20 of the State Environmental Planning Policy (State and Regional Development) 2011, references Schedule 4A of the Environmental Planning and Assessment Act 1979, which states that where the capital investment value of the development exceeds \$20 million and the proposed development must be determined by the Joint Regional Planning Panel – Southern.

(d) Queanbeyan Local Environmental Plan (Googong) 2009

Part 1 Preliminary

<u>Aims of the Plan</u>

The aims of the plan relevant to the proposal are:

- (a) to facilitate the orderly growth of the urban release area in Googong in a staged manner that promotes a high level of residential amenity and the timely provision of physical and social infrastructure through appropriate phasing of the development of land.
- (b) to identify, protect and manage environmentally and culturally sensitive areas within Googong including but not limited to waterways and riparian corridors, habitat corridors, native vegetation and associated buffers, and heritage items.
- (c) To provide appropriate residential densities and a range of housing opportunities consistent with the environmental capacity of the land.

It is considered the proposal is consistent with the above aims. It enables orderly land release in a staged manner, promoting good residential amenity and timely provision of physical and social infrastructure. The proposal identifies, protects and manages environmentally and culturally sensitive areas and provides appropriate residential densities and potential for a range of housing opportunities.

Part 2 – Permitted or Prohibited Development

Zone Objectives and the Landuse Table

Clause 2.3 requires the consent authority to have regard to the objectives for the development in a zone when determining a development application.

Objectives of the Zone

The land is zoned R1 – General Residential. The relevant objectives of the zone are:

- To provide for the housing needs of the community.
- To provide for a variety of housing types and densities.
- To enable other land uses that provide facilities or services to meet the day to day needs of residents.
- To ensure development conforms to the principles of sustainable development.

The development provides for housing needs of the Queanbeyan community through provision of much needed lot releases. The varying lot sizes will provide for a variety of housing types and densities, community facilities will be provided by way of a sportsfield, and local parks. The development conforms to principles of sustainable development by incorporating recycled water infrastructure to reduce demands on potable water supply, satisfactory solar orientation and minimal environmental impacts.

Subdivision Consent Requirements

Clause 2.6 specifies land may only be subdivided with consent.

Part 4 – Principal Development Standards

Minimum Subdivision Lot Size

Clause 4.1 specifies a number of objectives to be satisfied and that the proposed lots comply with the Lot Size Map being $330m^2$. The minimum lot size proposed in the development is $334m^2$. The subdivision has been assessed against the objectives. Generally the proposal has had due regard to the environmental constraints on the land, the safety and functions of main roads is not compromised, lot sizes and dimensions are appropriate for siting of structures, the lots can be adequately serviced and the proposal is compatible with the desired future character of the locality.

The only significant environmental constraint results from the imposition of the buffer zone around the WRP. This constraint has been mitigated by removing any residential allotments from within the buffer zone.

Part 5 – Miscellaneous Provisions

Preservation of Trees or Vegetation

Clause 5.9 specifies the objective of this clause is to preserve the amenity of the area through the preservation of trees and other vegetation. The clause only applies where the kinds of trees or other vegetation are identified by a development control plan. The Googong Development Control Plan does not prescribe kinds of trees or other vegetation.

Most of the development site is grazing land. There are only occasional eucalypt trees and tree clumps scattered throughout the site. The tree quality of the site is poor. High quality trees identified in the Tree Assessment Report will be preserved where appropriate. All other scattered vegetation is proposed to be removed.

The proposal seeks to retain one high quality tree. However, this tree is located in a position that would warrant its removal for the erection of a dwelling house. As such it is considered acceptable that this be removed as part of the construction works. The landscaping plans propose the planting of a significant number of trees during the landscaping of the site.

Heritage Conservation

Clause 5.10 - objectives of this clause relevant to the proposal are:

- (a) to conserve the environmental heritage of Googong.
- (b) to conserve archaeological sites.
- (c) to conserve places of Aboriginal heritage significance.

Heritage items, heritage conservation areas and archaeological sites are shown on the Local Environmental Plan Heritage Map. None of these sites are impacted by the proposal.

Clause 5.10(7) requires the consent authority, before granting consent, to carry out development on an archaeological site to:

- (a) notify the Heritage Council of its intention to grant consent, and
- (b) take into consideration any response received from the Heritage Council within 28 days after the notice is sent.

The settlers hut formed part of the first development application (DA#1). This development does not contain any archaeological sites.

Clause 5.10(8) requires the consent authority, before granting consent, to carry out development in a place of Aboriginal heritage significance to:

- (a) consider the effect of the proposed development on the heritage significance of the place and any Aboriginal object known or reasonably likely to be located at the place, and
- (b) notify the local Aboriginal communities (in such way as it thinks appropriate) about the application and take into consideration any response received within 28 days after the notice is sent.

A number of Aboriginal objects have been identified within "Neighbourhood 1A" (which includes the proposed development site) by an Aboriginal Archaeological Report prepared by Navin Officer Heritage consultants, February 2010. The local Aboriginal communities were notified as part of this work. An Aboriginal Heritage Impact Permit (AHIP) No: 1116438 AHIMS No: 3299 has been issued to the applicants by NSW Government Office of Environment and Heritage (formerly Department of Environment, Climate Change and Water) dated 13 July 2010. A permit has been issued to disturb or move on the land Aboriginal objects identified in the AHIP. The permit has been issued pursuant to Section 87 of the *National Parks and Wildlife Act 1974*.

The Office of Environment and Heritage (OEH) further advise there are another 17 recorded Aboriginal sites elsewhere within the Googong New Town development area (outside Neighbourhood 1A) for which no AHIP has been issued by OEH. An AHIP must be obtained by the proponent before any of these Aboriginal objects can be harmed. Further archaeological assessment of eight of the 17 sites is required before OEH can determine whether a AHIP should be issued.

The AHIP for the development of Neighbourhood 1A enables the development to proceed under the *National Parks and Wildlife Act 1974* subject to a number of conditions. Surface salvage (collection) of the sites within the area approved under the AHIP was undertaken in February and July 2012. The AHIP gave approval to salvage visible artefacts and destroy all other objects.



Figure 6 – Heritage Constraints and Limit of Civil works

Part 6 – Urban Release Areas

Arrangements for Designated State and Territory Public Infrastructure

The Clause 6.1 objective requires satisfactory arrangements to be made for the provision of designated State and Territory public infrastructure before the subdivision of land in an urban release area. The Director General's Certificate – Satisfactory Arrangements for Designated State and Territory Public Infrastructure is expected to be submitted prior to consideration of this Report at the JRPP meeting.

Public Utility Infrastructure

Clause 6.2 requires that development consent must not be granted for development on land in an urban release area unless Council is satisfied that any public utility infrastructure that is essential for the development is available or that adequate arrangements have been made to make that infrastructure available when it is required.

Council's Senior Engineer Development advises:

The subject application is the second subdivision release area of the Googong development and is a greenfield site. The development will require the provision of service infrastructure and roads as discussed below -

Sewer

The development site is remote from the Queanbeyan sewerage network and the developer's Part 3A Water Cycle Project provides for the following –

- *installation of a standalone wastewater recycling plant (WRP),*
- *installation of sewer pump stations (SPSs), and*
- installation of sewer rising mains.

The subdivision release will be dependent on the provision of the WRP, SPS1, SPS2 and rising mains. These facilities are currently being designed in consultation with Council. The WRP will require a buffer zone to ameliorate odour nuisance to future dwellings. Initial design calculations place a 250m buffer zone from the perimeter of the WRP site, which excludes Lots 801, 845, 859-870 (Stage 4A), Lots 954-956 (Stage 4B, Lots 1001-1030 and Lots 1040-1043 (Stage 4C) & Lots 1301-1303 (Stage 4E) from being developed at present. These lots will need to be reserved from development at present and placed into a superlot (for future DA consideration) Odour monitoring and assessment may provide for the buffer zone to be reduced in the future. If this is the case these lots could then be considered for development as part of a subsequent DA. The reticulation within the subdivision itself forms part of this DA and will comprise a gravity sewer system to provide individual service connections (junctions) to each proposed lot. The system proposed is a Low Infiltration Sewerage System utilising PVC-U pipe and fittings that will be compliant with Council's adopted engineering standards for this stage of Googong. The western part of the network will connect to mains within Stage 1 that are currently under construction. The eastern part of the network primarily will drain to SPS2. The north-east corner of the site drains toward Googong Dam Road and can be gravity fed directly to the WRP.

Drinking Water Supply

The development is remote from the existing Queanbeyan water supply network. The developer has submitted a Part 3A application to DOP for the construction of lead-in water supply and sewerage infrastructure. For this release area potable water supply will comprise –

- an off take on the Googong Stromlo water supply trunk main near the Googong water treatment plant;
- the provision of a trunk rising main from the off take to a temporary potable water reservoir site (Hill 765) adjacent Old Cooma Road south of Googong Dam Road,
- *a temporary potable water reservoir at Hill 765; and*
- *a trunk gravity fed water main from the reservoir site to the Stage 1 supply point near the Day 1 entry of the first stage subdivision (DA41-2011)*

The Part 3A Googong Water Cycle Project was approved on 24 November 2011. Servicing of this DA is dependent on this lead in infrastructure. The temporary reservoir site is proposed to service an equivalent population of 3,600 and therefore is capable of supplying the entire Neighbourhood 1A area.

The reticulation within the subdivision itself forms part of this DA. The draft engineering plans submitted as part of the DA information provide a network and accompanying analysis for a typical standard looped system comprising 150 mm / 100 mm diameter mains with service connections to all lots. The reticulation will be an extension of the network currently being constructed as part of the Stage 1 subdivision (DA41-2011). The layout is based on design demand assumptions previously discussed with Council staff, Water Services Association of Australia (WSAA) codes and Council's adopted engineering standards for Googong. The design is considered satisfactory, subject to full design detail being provided as part of the Construction Certificate – Subdivision. Temporary end caps with associated hydrants and stop valves will be provided where mains will be extended in future subdivisions.

The mains in Streets 52 & 65 should be constructed full length to provide twoway supply, even though for part of their length there will be no lots to service, given they will pass through the WRP buffer zone.

Non-Drinking Water Supply

The applicant's water cycle management strategy is in part dependent on the installation of a non-potable (recycled) water supply, where treated sewer effluent is provided to each lot via a separate water supply network to the potable drinking water. To achieve this aim the developer's Part 3A Water Cycle Project provides for the following –

- *the STP to be capable of supplying effluent to a standard suitable for reuse,*
- the provision of a trunk rising main from the STP to a temporary non-drinking water reservoir site (also to be located at Hill 765),
- the temporary non-drinking water reservoir; and
- *a trunk gravity fed non-drinking water main from the above reservoir to the Stage 1 supply point near the Day 1 entry.*

Servicing of the proposed non-drinking water network in this DA is similarly dependent on this lead in infrastructure forming part of the Part 3A approval.

The non-drinking water reticulation within the subdivision itself forms part of this DA. The draft engineering plans submitted as part of the DA information provide a network and accompanying analysis for a typical standard looped system comprising 200 mm /150 mm / 100 mm diameter mains with service connections to all lots. As for the potable system, the reticulation will be an extension of the network currently being constructed as part of the Stage 1 subdivision (DA#1). The layout is based on design demand assumptions previously discussed with Council staff, Water Services Association of Australia (WSAA) codes and Council's adopted engineering standards for Googong. The design is considered satisfactory, subject to full design detail being provided as part of the Construction Certificate – Subdivision. Temporary end caps with associated hydrants and stop valves will be provided where mains will be extended in future subdivisions. Stub mains will also be provided to service future subdivisions on the north side of Googong Road. The mains and the service connections will be labelled in accordance with WSAA standards to delineate them from the potable supply. Fire fighting requirements will be met utilising the nondrinking water reticulation – Council is currently finalising a Memorandum of Understanding with Fire & Rescue NSW in this regard.

As for the drinking water supply, the mains in Streets 52 & 65 should be constructed full length to provide two-way supply, even though for part of their length there will be no lots to service, given they will pass through the WRP buffer zone.

Road Network

The development is situated on the south side of Googong Dam Road and it is proposed that the access to this road will be via an extension of Street 4 to enable access via the Day 1 Entry (approved as part of Stage 1) and via a further entry at the Street 5 intersection (referred to as the Eastern Access).

The new intersection will be located at a site that has Safe Intersection Sight Distance (SISD) for an 80 kph design speed on Googong Dam Road. The applicant proposes the construction of a basic right turn (BAR) for traffic travelling east. This is requested on the basis of traffic volumes and that the main traffic flow will be towards Old Cooma Road in the a.m. peak, with little traffic turning into Street 5 or right out of Street 5. Similarly, in the p.m. peak the right turn into Street 5 will be the predominant movement.

The applicant proposes no change to the intersection arrangements at the Googong Road / Old Cooma Road intersection on the basis that the intersection has adequate capacity and SISD for the development. The proposed access arrangements were considered by Roads and Maritime Services (RMS) and it was recommended that the developer provide a traffic analysis of the intersection using SIDRA. The modelling results will need to confirm when the intersection performance becomes unsatisfactory.

Streets 4 & 5 will act as the collector roads for the proposed subdivision and will continue in this capacity for future subdivision stages until other road links are provided that lead toward the town centre. All other streets in the development will be local streets with low to moderate traffic volumes.

The Googong DCP adopts various street types for the development area, with pavement widths and verge widths dependent on traffic volumes, pedestrian use and services. The applicant has requested street widths as discussed in the following assessment:

- *S* treets 1a & 1b are proposed to have the street form of a Local Arterial Road with a central landscape median / drainage swale. This is consistent with the adopted street width in Googong DCP. Each side of the median ill need to be signposted to enforce the one-way movement of traffic on each leg.
 - S

treet 4 (Beltana Avenue) south of Stage 1 will continue as to a two way street with a 6.5m lane width and parking lanes as approved in Stage 1.

S

A

treets 5, 25, 51 & 86 are proposed as Local Street 2 in compliance with the Googong DCP.

ll other streets with lot frontages each side will be Local Street 3 that Googong

DCP specifies an 8.0m wide carriageway. The applicant has submitted preliminary plans with 7.5m wide carriageway in keeping with similar streets approved in Stage 1 and this is considered acceptable.

treets with lot frontage on one side only are termed Open Space Drives in Googong DCP. DR1 is requested to be reduced in carriageway width from 8.0m to 7.5m in keeping with those approved in Stage 1 while DR2 streets are proposed as 6.0m width in accordance with the DCP.

S treet 63 from Street 5 to Street 64 is proposed to have a raised carriageway to promote pedestrian connectivity between Local Parks 2 & 5. Street 63 will act as the main egress street for lots in the north-east corner of the subdivision. As a result, the raised threshold is not supported and the street section should be provided with a standard kerb / pavement.

-Lanes1-3, 19 and an unnumbered lane (at the rear of Lots 609-612) are proposed as public roads (as opposed to private laneways) and will have a 3m carriageway width and 7 m reserve width. The reserve width allows for vehicular entry into a garage with 2.4m door width provided there is no obstruction to the vehicle turn path. Detailed design of the laneway at Construction Certificate stage will be required to ensure all future garages can be accessed. The laneways will need to be signposted as one-way, with travel direction from east to west to accommodate garbage pick up at the rear of the lots facing Streets 1a & 94.

iscussions with the applicant have been held on the variation requests and are supported in this low density area comprising Development Types 1 and 2 with moderate traffic volumes. The lesser widths will reduce construction cost for the developer but will also reduce maintenance costs for Council while still providing appropriate road safety standards.

- S treets 4 (Beltana Avenue), 34, 5, 57, 49, 63, 5, 36 & 33(Kerry Street) will provide a temporary bus route in the proposed subdivision that links with that approved in Stage 1.
 - S treets 52 & 65 should be constructed full length to provide an adequate street network and to avoid the need for temporary dead ends, even though for part of their length there will be no lots to service, given they will pass through the WRP buffer zone.

Pathways / Cycleways

Googong DCP adopted an indicative bicycle path / major path network. For Stages 3, 4 & 5 a 2.0m wide key path should be provided in Street 4, Street 5, Street 8, Street 51(from the west boundary of the stage to Street 8) & Street 53. A 1.5m wide path will be provided on one side of all other streets.

D

The pavement width of Streets 1a & 1b will be constructed to allow for dedicated onroad cycle lanes to be linemarked once these streets are extended in future subdivisions.

Access

All residential lots will have non-trafficable slope face kerb along their frontage. At driveway locations vehicle kerb crossings (VKCs) will be provided as part of the subdivision works. Residential lots facing Street 1a will have vehicular access provided via rear lane access. The applicant will need to prepare a plan for submission with the CC to ensure that the VKCs are located in their correct location. This will avoid requests for their subsequent relocation to suit an alternative house design.

Emergency Access

The bushfire assessment report accompanying the Stage 1 DA recommended the provision of an emergency access to Old Cooma Road and this is being constructed as part of the current works taking place on the site. The emergency access road will generally follow the alignment of future Street 2 and will exit to Old Cooma Road at the same location as the proposed access to the temporary water reservoir sites.

Street 5 will provide an additional access point to Googong Dam Road.

<u>Stormwater</u>

The stormwater system will be a major/minor system, in accordance with the submitted Stormwater Management and Drainage Analysis design report and the Googong Creek Catchment Stormwater Strategy report prepared for the development site. Pipework will accept the minor flows and overland flow will take place in road and reserve areas. Stormwater detention and peak flow attenuation will be achieved by the establishment of stormwater detention basins along Googong Creek within the Stage 1 development site, a detention basin in the drainage reserve directly south of the STP site and a wetland pond in the drainage reserve south of Sportsfield 2. Together with on-site detention facilities (rain water tanks etc) discharge north of Googong Road will be reduced.

The basins will also form part of the water quality treatment train that also includes other Water Sensitive Urban Design (WSUD) devices such as GPTs, bioretention basins, ponds and swales. In keeping with discussions with the applicant, WSUD has been applied at suitable locations, such as adjacent reserves and in the central swale of avenues. In most streets traditional kerb and gutter and pipe drainage will be utilised, with rain gardens utilised at a small number of appropriate locations in conjunction with street tree planting.

The treatment train has been modelled using Model for Urban Stormwater Improvement Conceptualisation (MUSIC) model, which is a program recognised as being appropriate for this purpose. The MUSIC model results indicate that the proposed treatment train will provide reductions in pollutant loads in keeping with the requirements of Council's adopted Googong Engineering Specifications. A surface water quality modelling program is proposed during the construction period to ensure predicted levels of capture are achieved.

Irrigation Strategy

The irrigation strategy report accompanying the DA indicates that future irrigation needs of parks and reserves will generally be satisfied by the non-drinking water supply. However, this supply will need to be supplemented by raw water supplied from dams on the site and/or potable water supply.

The irrigation strategy is supported in principle but will require detail in regard to pipe sizes, pumps, alignment, management and operation period as part of the CC application

Utilities

The applicant has indicated that arrangements are in place for the supply of natural gas, electricity and telecommunication services. Natural gas supply will be an extension of the current Queanbeyan network, utilising a shared services trench to be established in conjunction with the upgrade of Old Cooma Road, to provide a supply line capable of servicing the entire Googong development. Similarly, telecommunications supply will be extended from Queanbeyan utilising the same service trench.

Existing electricity overhead supply lines will be diverted, with all electricity supply in the development to be underground. Street lighting shall be provided in accordance with AS/NZS 1158 and shall utilise best practice energy efficient globes approved by Integral Energy.

Given the comments from Council's Development Engineer there appears to be no impediment to approval based on infrastructure issues.

Development Control Plan

The Clause 6.3 objective is to ensure the development on land in an urban release area occurs in a logical and cost effective manner, in accordance with a staging plan and only after a development control plan that includes specific controls has been prepared for the land.

Development consent must not be granted for development on land in an urban release area unless a development control plan that provides for matters specified in the clause has been prepared. Googong Development Control Plan 2010 came into effect on 10 November 2010. Refer to the Development Control section of this Report for further commentary.

Part 7 – Additional Local Provisions

Earthworks

Clause 7 relevant objective is:

(a) to ensure that any earthworks will not have a detrimental impact on environmental functions and processes, neighbouring uses or heritage items and features of the surrounding land.

Earthworks will be associated with site preparation and grading, infrastructure and community facility construction works. Proposed site preparation and earthworks are detailed in a Geotechnical Assessment prepared by Brown Consulting (ACT) Pty Ltd, August 2009.

Before granting development consent for earthworks the consent authority must consider the following matters:

- (a) the likely disruption of, or any detrimental effect on, existing drainage patterns and soil stability in the locality.
- (b) the effect of the proposed development on the likely future use or redevelopment of the land.
- (c) the quality of the fill or of the soil to be excavated, or both.
- (d) the effect of the proposed development on the existing and likely amenity of adjoining properties.
- (e) the source of any fill material or the destination of any excavated material.
- (f) the likelihood of disturbing Aboriginal objects or other relics.
- (g) proximity to and potential for adverse impacts on any watercourse, drinking water catchment or environmentally sensitive area.

Having regard to the above:

(a) slopes are between 5-10% and the proposed site preparation and earthworks will not have an adverse impact on soil stability.

A Stormwater Management and Drainage Analysis prepared by Brown Consulting, September 2012 advises "the hydrological and hydraulic modelling has shown that the proposed residential subdivision and supporting roads can be constructed while meeting Queanbeyan Council, requirements for stormwater quantity and quality management. The objectives and performance targets (quantity and quality) are met using a mix of water sensitive urban design (WSUD) components throughout the subdivision, not limited to bio-retention basins, wetland ponds and detention storage". Conditions of consent will ensure protection of drainage patterns.

- (b) the proposal is in keeping with the identified future urban use of the land.
- (c) the quality of the fill or the soil to be excavated has been identified by the Geotechnical Consultant as satisfactory. The recommendations of the Report will need to be adhered to and will form a condition of consent.
- (d) the site works are unlikely to impact on the existing and likely amenity of adjoining rural properties.

- (e) the source or destination of any fill material will need to be considered at the final engineering design stage.
- (f) the site works will disturb existing Aboriginal objects. Refer to previous commentary on this matter (pages 14 16).
- (g) groundwater was not encountered during the field investigations by Brown Consulting. As stated above the Brown consulting Stormwater Management and Drainage Analysis Report advises the development can meet standard stormwater quantity and quality management guidelines to ensure no adverse impacts will occur on any watercourse, drinking water catchment or environmentally sensitive area.

Having regard to the above requirement, the earthworks will not have any detrimental impact on environmental functions and processes, neighbouring uses or heritage items and features of the surrounding land.

(e) Queanbeyan Local Environmental Plan 2012

The Queanbeyan Local Environmental Plan (QLEP) 2012 was gazetted on 23 November 2012. Clause 1.8A - *Savings provision relating to development applications* states that if a development application has been made before the commencement of the QLEP 2012 but not been finally determined before that commencement, then the application must be determined as if the QLEP 2012 had not commenced. The subject application was lodged on 2 October 2012. Therefore, it has been assessed against the relevant provisions of the Queanbeyan Local Environmental Plan (Googong) 2009 with the QLEP 2012 considered only as a draft instrument.

The subject site is proposed to be zoned R1 – General Residential under QLEP 2012. Subdivision is permitted with consent in accordance with Clause 4.1. The minimum lot size is $330m^2$. The provisions of Queanbeyan Local Environmental Plan (Googong) 2009 have been substantially maintained in the Queanbeyan Local Environmental Plan 2012 as they relate to this development application and does not raise any additional matters to consider.

2. <u>Section 79C(1)(a)(ii) – Any Draft Environmental Planning Instruments</u>

Please see the comments above in 1(e) in relation to the Queanbeyan Local Environmental Plan 2012. This plan is considered a draft in accordance with Clause 1.8A.

3. Section 79C(1)(a)(iii) – Any Development Control Plan

Googong Development Control Plan 2010 (DCP) applies to the development. The purpose of this DCP is to provide background objectives and controls, and design criteria to achieve desirable development outcomes in line with Council's vision for the new town of Googong. The following specific controls have been considered in detail in the assessment:

RELEVANT STANDARDS	COMMENTS
Clause 3.0 – The Master Plan	
Controls Development is to be generally in accordance with the Master Plan and other controls in this DCP.	The development is consistent with the neighbourhood structure plan in the DCP
demonstrate that it is consistent with the vision and the applicable objectives of this DCP and can only be amended as part of a neighbourhood structure plan.	
 Staged Release of Land It is recommended that the land be generally developed in accordance with the sequence recommended in the Googong Urban Release Staging Plan. That is: Stages 1-5 being the first five stages 	The development satisfies the sequence of the Googong Urban Release staging plan.
Clause 4.0 - Subdivision Controls	
4.1 – General Objectives	
 (a) Create a legible subdivision pattern that maximises the 'sense of neighbourhood' and promotes walking and cycling over private car uses. (b) To set up a neighbourhood pattern that utilises the residential development areas efficiently, optimises the natural attributes 	 The subdivision pattern creates a 'sense of neighbourhood' and promotes walking and cycling. The neighbourhood pattern utilises the residential development areas efficiently, promotes natural attributes and clearly defines public domain.
 of the site and clearly defines and reinforces the public domain. (c) Optimise views and the amenity of residential allotments in regards to views, solar access and proximity to community facilities, open space and public transport (d) Ensure each neighbourhood within the 	 Lots are oriented to achieve views. Orientation of lots achieves good solar access. Residential precincts are in good proximity to services and community facilities. A variety of lot sizes are proposed to provide
 township has a range of densities and housing choices to cater for the various needs of the community (e) Provide good solar access opportunities for future dwellings and residents and ensure that the lot layout responds to and optimizes solar access. 	 choice of densities and housing choice. A 70% target is achieved for lots with preferred orientation.

Gene	ral Controls	
I. II. III. IV. V. VI. VII.	Subdivision design shall be generally in accordance with the Neighbourhood Structure Plan. Subdivision lot sizes shall comply with the minimum lot sizes as specified in the GLEP (refer to GLEP Lot Size Map). Neighbourhoods are to be centred on a focal point of a town or neighbourhood centre with retail, commercial or community facilities that are generally within a 5 – 10 minute walk from all dwellings. Neighbourhood pattern is to create a legible and permeable street hierarchy that responds to the natural site topography, the location of existing significant trees and solar design principles. Pedestrian and bicycle connectivity within each residential neighbourhood is to be provided between the residential areas and public open space areas, public transport nodes, education and community / recreation facilities. Street blocks are to be generally a maximum of 250m long by 70m wide. Block lengths and widths in excess of 250m may be considered by council where connectivity objectives are achieved. Each new allotment has sufficient building area on it, being land with a slope of lase than 2006	 Design is in accordance with neighbourhood structure plan. The GLEP minimum lot size is 330m². Proposed minimum is 334m². A Neighbourhood Centre is proposed at a future stage to service daily needs of residents within easy walking distance. A satisfactory street hierarchy is proposed responding to topography and maximising solar access to lots. All streets are designed for cyclists and pedestrians that link to bus stops, school community facilities and public reserves. Street block dimensions are generally satisfied. All lots are designed with slopes less 20%.
4.2 -]	Lot Orientation	
I. II.	A minimum of 70% of lots in each neighbourhood are to achieve solar efficiency. Consideration should be given to	 Orientation of lots achieves target. Varying lot dimensions are provided. Lot orientation, size and dimensions generally in N S or E W orientation
	different lot dimensions depending on the lot orientation	III IN-S OF E-W OTHERMALION.
III.	Lot orientation, size and dimensions should enable dwellings to be generally sited either on an NS or FW	 Different for depuis and widths are provided to increase streetscape variety. Wider lots generally provided for E-W
IV. V.	orientation. Allowances are to be made for different lot depths and widths, depending on orientation, which may also result in increased variety to the streetscape frontage pattern. Where E-W oriented lots are proposed lots should be wider to support solar	 oriented lots. Shorter depth lots generally sited N-S on north side of streets and deeper allotments sited N-S south side street generally provided.
VI.	access. Design for deeper N-S lots on the southern side of roads, particularly if two storey dwellings are envisaged, to allow for solar access to private open space at	

 the rear. VII. N-S oriented lots on the northern side of an E-W road can be less deep than N-S lots on the southern side of the same road. A wider southern lot allows for a central courtyard, which may gain greater solar penetration. Lot Size and Layout Objectives (a) Encourage a variety of lot sizes across the site to promote housing choice and create varied streetscapes. (b) Smaller lot sizes are to be located within easy walking distance of a neighbourhood centre or the town centre. (c) Promote generally rectangular street blocks 	 Variety of lot sizes provided (334m² – 1.18 ha) Smaller lots will be located closer to the Neighbourhood Centre for future stages. The street pattern is generally of rectangular street blocks.
and lots to maximise efficiency.	
 Lot Size and Layout Controls Minimum lot size is to be in accordance with the GLEP Lot Size Map and the lot dimensions are to be in accordance with the Table below. Residential lot size must be capable of accommodating a dwelling, private open space and at least one under cover car parking space. Lot size and layout are to take into account the slope of the land, any environmental constraints and any significant natural features to create a legible and permeable neighbourhood pattern. Lot should be generally rectangular in shape and orientated to allow future dwellings to gain access off streets and where possible, public open spaces. 	 Lot sizes and layout controls are satisfied. Environmental constraints and natural features have been taken into account in the subdivision design. Lots generally rectangular with satisfactory access and frontages.
Clause 5.0 – Design Guidelines and Controls for	· Public Domain
5.2 – Urban Water Management	
Objectives	
 (a) To minimise the discharge of water from the site. (b) To protect downstream properties from stormwater inundation due to upstream development. (c) To manage runoff from impermeable surfaces. (d) To maximise the conservation of drinking water. (e) To re-use non-drinking on the site for nonpotable purposes. (f) To prevent pollution of a public water supply or any surface or underground water resources. 	 A detailed Stormwater Management Strategy has been prepared by the applicant's consulting engineers to: Alleviate storm flows to pre-development flow levels. Protect assets from flooding. Meet requirements for stormwater quantity and quality by Water Sensitive Urban Design (WSUD) into elements of the subdivision. Gross pollutant traps will be used prior to discharge into a bioretention basin. A separate Part 3A approval has been obtained for a potable water, recycled water and sewerage system. Proposed to reduce potable water use by
	 Proposed to reduce potable water use by 60%.

 It is anticipated that the entire town will be serviced by a recycled water plant therefore all measures shall be undertaken to support this endeavour. II. Investigation, treatment and re-use options of 'recycled' for non-drinking purposes shall be part of every development. II. Waste water treatment on site is encouraged but is to be constructed and operated so as to promote efficient water use, taking into account site constraints and hazards present on the site to prevent adverse impacts on water table levels and soil salinity, satisfy public health requirements. IV. Water collection and direction is to be integrated into the public domain so that it provides both an aesthetic and functional response to the management of stormwater water. V. Include water sensitive urban design elements such as vegetated swales, minor creek lines, passive irrigation and detention ponds or treatment basins. VI. Water efficient landscaping of the public domains or hat it provides both an aesthetic and functional through design, choice of plants and watering systems is required. Street Network Street Network Controls A development application must demonstrate that the proposed streets are appropriate for their role in the street network. Al new streets are to comply with the design and engineering pequirements applicable to roads and streets, crossings, footpaths, cycle ways, bus shellers and the like in QCC Engineering Design Specification – Googong. Matter safety of pedestrians is provided. Adequate safety of pedestrians is provided. Adequate safety of pedestrians is provided. Adequate safety of pedestrians is provided. Adaguate safety of pedestrians is provided. Adequate safety of pedestrians is provided. Adequate safet	T T T T T T T T T T	
 Street Network Controls Streets are to be designed in accordance with the Master Plan, Council's adopted Engineering Design Specification – Googong, Control Diagrams and numeric controls in the Tables, as identified herein. Streets have been designed to ensure they a appropriate for their intended role. Streets meet Council's design and engineering requirements as propriate for their role in the street network. III. All new streets are to comply with the design and engineering requirements applicable to roads and streets, crossings, footpaths, cycle ways, bus shelters and the like in QCC Engineering Design Specification – Googong. Streets are designed to satisfy street network controls. Streets have been designed to ensure they a appropriate for their intended role. Streets meet Council's design and engineering requirements as specified. Refer Development Engineer's advice provid under 1(e) of this report. Stormwater drainage facilities and WSU controls are proposed. Adequate safety of pedestrians is provided. A satisfactory Traffic Engineering Assessment has been submitted and meets the Roads a Maritime Services and Council requirements 	 It is anticipated that the entire town will be serviced by a recycled water plant therefore all measures shall be undertaken to support this endeavour. Investigation, treatment and re-use options of 'recycled' for non-drinking purposes shall be part of every development. Waste water treatment on site is encouraged but is to be constructed and operated so as to promote efficient water use, taking into account site constraints and hazards present on the site to prevent adverse impacts on water table levels and soil salinity, satisfy public health requirements. Water collection and direction is to be integrated into the public domain so that it provides both an aesthetic and functional response to the management of stormwater water. Include water sensitive urban design elements such as vegetated swales, minor creek lines, passive irrigation and detention ponds or treatment basins. Water efficient landscaping of the public domain through design, choice of plants and watering systems is required. 	 A water recycling plant will operate to service the subdivision and Googong. Non potable water is to be used for toilet flushing, garden watering and washing machines. Waste water on site treatment will be a consideration for development of individual lots. Water Sensitive Urban Design (WSUD) measures are integrated into the public domain. A detention system is to be integrated within open space areas. WSUD are integrated into both urban and the landscape form within the streets and public reserves. Water efficient landscaping is proposed.
 Controls Streets are to be designed in accordance with the Master Plan, Council's adopted Engineering Design Specification – Googong, Control Diagrams and numeric controls in the Tables, as identified herein. A development application must demonstrate that the proposed streets are appropriate for their role in the street network. III. All new streets are to comply with the design and engineering requirements applicable to roads and streets, crossings, footpaths, cycle ways, bus shelters and the like in QCC Engineering Design Specification – Googong. W Streets are to include a stormwater 	Street Network	
 I. Streets are to be designed in accordance with the Master Plan, Council's adopted Engineering Design Specification – Googong, Control Diagrams and numeric controls in the Tables, as identified herein. II. A development application must demonstrate that the proposed streets are appropriate for their role in the street network. III. All new streets are to comply with the design and engineering requirements applicable to roads and streets, crossings, footpaths, cycle ways, bus shelters and the like in QCC Engineering Design Specification – Googong. IV Streets are to include a stormwater II. Streets are to include a stormwater Streets are designed to satisfy street network. Streets have been designed to ensure they a appropriate for their intended role. Streets meet Council's design and engineeri requirements as specified. Refer Development Engineer's advice provid under 1(e) of this report. Stormwater drainage facilities and WSU controls are proposed. Adequate safety of pedestrians is provided. A satisfactory Traffic Engineering Assessment has been submitted and meets the Roads a Maritime Services and Council requirements. 	Controls	
 drainage facilities as required. WSUD controls should be provided where possible in central medians. V. Subdivisions are to be designed to provide adequate safety for pedestrians using the street verge. VI. Applications for subdivision shall be accompanied by a traffic engineering 	Controls	
Clause 5.4 – Public Open Spaces and Landscape	ing	
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 Design Objectives (a) Provide a mix of passive, active, formal and informal public open spaces and play opportunities. (b) Provide open space areas which are distinctive in character and provide safe and secure access for all users. (c) Establish attractive walking and cycling links throughout. (d) Create attractive landscapes that are durable and generally low maintenance. (e) Integrate the principles of Water Sensitive Urban Design (WSUD) into the street and landscape design. (f) Landscaping of public open space shall be generally in accordance with the Landscape and Open Space Strategy and Schedule 1 in the local Voluntary Planning Agreement. 	 A mix of passive, active, formal and informal public open spaces and play opportunities are proposed with the development application. A neighbourhood park, sports field and local park are proposed. Effective walking and cycling links are proposed. The landscaping is proposed to suit all conditions experienced at the site and comply with the VPA. WSUD principles are included into street and landscape design. Attractive landscapes are proposed of generally low maintenance. 	
 Neighbourhood Parks Be located so that a park is generally within 800m from dwellings. Have a minimum area of 3000m². Be located with drainage lines or ridgelines to accommodate stormwater management and views respectively. Provide areas and facilities for both active and passive recreation. Provide one large play area with adequate shade facility and fencing/planting to define the play zone. Provide a large shelter facility with BBQ facility with seating and tables Provide entry and signage (park name) elements. 	 The neighbourhood park for Neighbourhood 1A was approved as part of the first development application. The requirements outlined for neighbourhood parks are generally satisfied. Development of the parks is to be in accordance with the Council approved VPA. 	
 Local Parks Local Parks shall: Have a minimum area of 1000m² and be linked to a larger open space network. Be generally within 200m of most residents (unless that resident is within 400m of a neighbourhood park). Allow for passive and / or active recreation. Provide seating and pathways for circulation. Incorporate small children's play facilities as set out in Schedule 1 of the voluntary planning agreement. Provide entry and signage elements. Integrate open space with stormwater management and environmental strategies Optimise ecological functionality through planting of endemic species. 	 Local Parks 3, 4, 5 and 6 are proposed for the subdivision. The location and size of the parks meet the required standards. The park will be embellished with seating, pathways etc and comply with the requirements outlined in the VPA. The landscaping will incorporate some endemic species. Entry and signage elements are to be provided. 	

 Linear Parks and Drainage Reserves Maximise ecological function through the planting of endemic species. Link neighbourhood and local parks and other key community focal points into the continuous open space network. III. Facilitate overland flow requirements. IV. Integrate non-vehicular circulation within footpaths and cycleways to increase safety and connectivity. V. Include water sensitive urban design elements such as weir structures to control water flow around drainage lines. 	 Appropriate landscape plantings are proposed. A continuous open space network is proposed with integrated footpaths and cycle system. WSUD elements are proposed. Overland flow requirements will be met. Footpaths/cycle ways will be provided having regard to safety and connectivity.
Clause 5.5 – Landscaping in the Public Domain	
Main access roads and boulevards are to incorporate WSUD bio retention elements where appropriate Gateways to the site along Old Cooma Road and Googong Road are to include feature planting to establish a visual identity and include exotic species.	 WSUD elements are to be provided. Refer to Street Tree Master Plan and Landscape Management Plan for gateway treatments. To be conditioned with consent.
Construction Construction of landscaping is to be in accordance with the site analysis plan and landscape plan.	 A condition of consent will ensure landscaping is carried out in accordance with the Landscape Management Plan. A further condition will be included which requires that the street trees are species that Council have agreed to prior to their installation.
Clause 8.0 – Environmental Management	
 8.2 - Soils and Salinity Objectives (a) To minimise erosion and sediment loss during and after construction. (b) To minimise water pollution due to erosion, siltation and sedimentation. (c) To ensure development will not significantly increase the salt load in existing watercourses within the site. (d) To ensure measures are implemented as part of the development to prevent any degradation of the existing soil and groundwater environment. (e) To minimise the damage caused to property and vegetation by existing saline soils, or processes that may create saline soils. 	 A Soil, Water and Vegetation Management Plan has been submitted with the application. Temporary sediment basins will be constructed. Conditions will be imposed on consent to minimise impacts. If the treated recycled water has relatively high salinity levels there will be risks of salt accumulation in waterways. The Part 3A approval for the Integrated Water Cycle System included an assessment of the potential impacts of salinity and also commitments by the developer to a number of management and mitigation measures (refer to chapter 9 and 18 of the Environmental Assessment). Provided the commitments of the Part 3A approval are adhered to, the development will not significantly increase salt load and will minimise damage by saline soils.

Controls	
 I. All development must incorporate soil conservation measures to minimise soil erosion and siltation during construction and following completion of development. II. All sediment and erosion controls are to be installed prior to the commencement of any construction works and maintained throughout the course of construction. III. Unless provided at the neighbourhood structure plan stage each subdivision application is to be accompanied by a salinity report prepared by a suitably qualified consultant. 	 Conditions of consent to be imposed to ensure erosion and sediment controls are in place and maintained in accordance with the approved Soil, Water and Vegetation Management Plan. Salinity investigations were undertaken by suitably qualified consultants as part of the Part 3A approval for the Integrated Water Cycle System and covered the whole township site including the land subject to this development application. The reports are included in the Environmental Assessment for the Part 3A application.
8.3 – Cut and Fill	
Objectives	
(a) Minimise the extent of excavation and fill.(b) Ensure that the built form responds to the topographical constraints of the Googong site.	 A consultant's report satisfactorily addresses the extent of cut and fill site grading.
Controls	
I. To ensure that that batters can be maintained to limit failure and soil erosion.	 The applicant's geotechnical engineer's report satisfactorily addresses this issue.
8.4 – Stormwater Management and Flooding	
Objectives	
 (a) Ensure that all development within Googong incorporates stormwater reuse, retention and detention strategies to limit the changes to the hydrological regime of the receiving waterways. (b) To minimise the impacts of development and associated infrastructure on the health and amenity of natural waterways. (c) Treat run-off from development such that it does not adversely impact on downstream flora and fauna during construction and post development phases. (d) Incorporate Water Sensitive Urban Design (WSUD) in the planning of the site layout and design of all development to promote sustainable and integrated management of land and water resources incorporating best practice stormwater management, water conservation and environmental protection. (e) Integrate Water Sensitive Urban Design (WSUD) into all development to collect and treat runoff from waterborne pollutants prior to discharge to receiving areas and waters. (f) The design of the stormwater management 	 Stormwater reuse measures are incorporated within the development. Hydrological and hydraulic modelling has been carried out to demonstrate the development can be constructed without impacting on stormwater quality and quantity and flora and fauna. WSUD measures are incorporated into the site layout and design. The WSUD measures will be integrated into the development to collect and treat runoff. The stormwater management system is integrated into the site layout and design.
systems shall be integrated with the planning of the site layout and design.	

Controls

- I. All Development Applications shall include a Stormwater Drainage Analysis, addressing the management of water quality and quantity.
- II. Existing natural drainage lines shall form part of a stormwater and runoff drainage management system utilising soil conservation measures (including detention basins and or wetlands) to alleviate stormwater peaks and retain sediments and pollutants.

III. Stormwater management strategies shall be adopted to maximize the efficient use of land and facilitate adequate allocation of land for these purposes.

IV. Stormwater management strategies shall be developed and implemented in a manner which addresses potential salinity hazards.

V. Stormwater treatments are to be designed to meet the minimum level of performance which is a reduction in the stormwater peak run off flows to predevelopment levels for the range of storms from the 1 year ARI to the 100 year ARI event.

VI. Stormwater management design is to maintain the existing hydrological regime for stream forming flows, with respect to peak flows and duration of flow.

- VII. WSUD elements shall be incorporated into the design of all development.
- VIII. A Development Application shall include a WSUD assessment that addresses:
 - the relevant site characteristics and constraints,
 - stormwater management strategies, including treatment measures, reuse and maintenance requirements,
 - a rationale for the proposed strategies, and
 - evidence of stormwater modelling is to accompany all development applications for all proposed development except those for less than 10 dwellings.

- A satisfactory stormwater drainage analysis prepared by Brown Consulting is included with the application.
- Natural drainage lines are incorporated in the stormwater and runoff drainage management system.
- Satisfactory stormwater management strategies form part of the application as referred to in the Brown Consulting report.
- The Brown Consulting report addresses potential salinity hazards. Adequate flushing of the stormwater system is identified to minimise hazard. A flushing frequency may need to be investigated at a future stage.
- Stormwater treatments include extended detention requirements identified in the Brown Consulting report.
- The subdivision design will maintain the existing hydrological regime for stream forming flows, with respect to peak flows and duration of flow.
- WSUD elements are incorporated in the design.
- WSUD assessment addressed by the stormwater management and drainage analysis by Brown Consulting.

 8.5 – Bushfire Management Objectives (a) Consider bushfire protection and management issues in land use planning and development decisions, to provide a safer environment for the community. 	 The land is not identified on the Queanbeyan Bushfire Prone Land Map. The areas of Googong identified on the bushfire prone land map are outside the development site.
 Controls I. A Bushfire Threat Assessment report must form part of all development applications for lands identified as 'bush fire prone' on the Bush Fire Prone Lands Maps. II. Assessment of bushfire threat must examine impacts on the proposed development from fire both on and approaching the site. III. The recommendations of the Assessment report must be incorporated into the design of the proposed development. 	 A bushfire assessment report has been undertaken for the development site. The bushfire assessment report identifies measures for fire mitigation. The following recommendations have been included in the report: No tree or tree canopy is to occur within 2m of future dwelling rooflines. The presence of a few shrubs or trees in the APZ is acceptable provided that they:

 8.6 – Aboriginal Heritage Objectives (a) To ensure that any Aboriginal heritage significance is appropriately incorporated into the redevelopment of the precinct. 	 The development has satisfactorily taken into account aboriginal heritage.
 Controls I. Areas containing potential indigenous sites are identified at the Archaeological (indigenous and European) Map contained within Appendix 2. Development shall not proceed within these areas without appropriate investigation and consultation with the relevant local Aboriginal groups. II. Where development impacts upon an identified Aboriginal site, Consent to Destroy Permits will need to be sought under Section 90 of the NSW Parks and Wildlife Act 1974. 	 The development application is accompanied by an Aboriginal Cultural Heritage Assessment that has been prepared with the appropriate investigations and in consultation with local Aboriginal groups consistent with Clause 5.10(8) of the Googong Local Environmental Plan. A Section 90 permit has recently been granted by Office of Environment and Heritage to undertake works to the identified aboriginal heritage site. The Office of Environment and Heritage Interim Guidelines for Aboriginal community consultation were implemented for this project and five Aboriginal organisations participated in the fieldwork component of the program which was conducted over a seven week period from 30 March 2009 to 13 May 2009. The program was conducted in accordance with Office of Environment and Heritage AHIP. Areas containing indigenous sites identified on the Archaeological (Indigenous and European) Map have been considered as part of the above mentioned investigations.
 8.7 – European Archaeological Heritage Objectives (a) To protect the recognised European archaeological significance of the precinct. (b) To ensure that information regarding the archaeological heritage significance of the precinct is incorporated into the development of the precinct. 	 One European Historical site is recorded in the first development site. There are no archaeological sites in the proposed development site.
 8.8 - Tree Retention and Biodiversity Objectives (a) Development should minimise the loss of trees to protect scenic values, habitat and biodiversity. (b) Development should retain existing site trees that enhance natural or scenic values, control sunlight, or provide shade, shelter, habitat or screening. 	 The development site is predominantly grazing land with few remnant tree species. The remaining trees are of poor quality. High quality trees identified in the Tree Assessment report will be preserved where appropriate. High quality trees located within a lot which will be developed for residential purposes are recommended for removal as they fail to comply with Council's Tree Preservation Order, that is they will be within 6m of a dwelling house.

 Controls I. Development must provide filter and protection strips to natural drainage lines, watercourses, streams, foreshores of constructed drainage corridors. II. All high recovery potential vegetation is to be retained within open space. III. Existing significant trees, in particular large hollow bearing trees, are to be retained wherever possible 	 Riparian zones will be planted out to protect drainage systems. Vegetation will be protected and enhanced where appropriate. Tree quality at the site is poor. There are no hollow bearing trees identified.
8.9 – Land Contamination Management	
 (a) To minimise the risks to human health and the environment from the development of potentially contaminated land. (b) To ensure that potential site contamination issues are adequately addressed at the subdivision stages. 	 Potential contamination areas have been considered as part of the development application preparation. Refer to assessment under SEPP 55.
Controls	
 Controls I. Development applications for development in Areas of Environmental Concern (AEC) as identified within Appendix 2 shall be accompanied by a Stage 2 Detailed Site Investigation prepared in accordance with Council's Policy – Management of Contaminated Lands. A Remediation Action Plan (RAP) will be required for areas identified as contaminated land in the Stage 2 Site Investigation. II. Prior to granting development consent, Council must be satisfied that the site is suitable, or can be made suitable for the proposed use. Remediation works identified in any RAP will require Council consent prior to the works commencing. 	 Areas of potential contamination have been identified in the Contamination Report submitted with the application. Further investigations have been undertaken to determine the extent of the contamination. A draft copy of the contamination assessment and validation report for sites AEC 2, AEC 3 and site 3 was provided to the site auditor who subsequently provided the following further interim advice as follows: <i>"Since our last interim advice the following achievements have resulted from the combined assessment and validation which has resulted in some parts of the Area of Environmental Concern now being suitable for residential landuse:</i> <i>The UST [underground storage tank] and AST [aboveground storage tank] area being validated;</i> <i>The majority of the farm shed area (AEC 2) has now been validated as suitable for residential landuse with one remaining section on the eastern boundary not validated. This is the former workshop area which contains a below ground concrete pit which apparently was used for vehicle servicing;</i> <i>Area AEC 3 has been shown not to contain any chemical or asbestos contamination</i>

visual inspection from Geotechnique to ensure that all building and demolition material has been appropriately removed to an approved landfill.
• Site 3, the area of the former dip and farm sheds has shown to have no contaminants of concern exceeding appropriate landuse criteria".
 In conclusion the auditor's interim advice states that:
"The auditor is satisfied that the site may be made suitable for the appropriate landuse and that this Interim Advice is an appropriate mechanism for a planning authority to provide approval for a construction certificate to allow the remaining remedial measure to be completed. The auditor considers this process to be more cost effective than relying on a site audit statement which has been completed as a Section B Audit. The ultimate outcome from the auditor's perspective is to produce a Section A Site Audit Statement which states that the land is suitable for the proposed landuse. In this case having to provide two audit statements (Section A and Section B) is counterproductive and will result in unnecessary delay in costs"
 Given the above it is considered that the consent authority can be satisfied that the land can be remediated so that it is suitable for the proposed residential land use. However, should approval be granted, a condition of consent should be included requiring that the Site Auditor's Statement and Site Auditor's Report should be provided to Council prior to the issue of a construction certificate (subdivision) for any work covered by this application other than works on the site

 8.10 - Odour Objectives (a) To ensure appropriate levels of odour amenity for future residents near the sewerage treatment plant. 	 A buffer zone of 200m has been nominated as the required distance for separation of dwellings from the treatment plant.
Controls If an odour impact assessment was not prepared as part of the Neighbourhood Structure Plan stage any residential development within 400 metres of the proposed or operating sewerage treatment plant is to be accompanied by a Level 3 Odour Impact Assessment (using the dispersion-modelling program CALPUFF) to verify the actual nuisance levels of odour generated by the sewerage treatment plant. The assessment is to be undertaken in accordance with the DECCW "Approved Methods for modelling and assessment of air pollutants in NSW" 1985. 	 The proposed development contains lots that are within 400 metres from the proposed sewerage treatment plant. A level 3 odour impact assessment has not been submitted with the application. <i>GTPL has allowed a 200m radius odour buffer zone, measured from the proposed location of the odour control vent stack.</i> The buffer zone radius was developed based on CLPUFF air dispersion modelling, with the assessment criteria being 2 OU at one second averaging condition on a 99% basis. This is consistent with the requirement of NSW Office of Environment and Heritage. The Odour Assessment report which detailed the outcomes of this air dispersion modelling formed part of the Environmental Assessment, prepared under Part 3A of the NSW Environmental Planning and Infrastructure on 24 November 2011. A copy of the odour assessment made in support of the application is available on the DPI website. <i>GTPL's approach to odour management has been in line with the NSW Department of Planning document "Guidelines for buffer areas around sewage treatment (water pollution control) plants.</i> The assessment raises two significant concerns with the approach used by the developer. Firstly, the 200m radius was taken from the centre of the allotment not the boundary. The explanation was that this represented the position of the odour stack on site. However, Council was concerned that during periods of maintenance odour may result from other sources on site and determined that any buffer measurement should be taken from the site boundary. Secondly, the final design of the plant and equipment to be used is still under negotiation. As such it was difficult to assess whether the odour outcomes would be satisfied by the proposed 200m buffer.

	proponent and various state agencies (principally the Office of Water) and determined that until the plant is commissioned and odour impacts can be quantified under operational conditions, the buffer should be set at 250m.
	 The consequence is that 54 of the proposed residential allotments now fall within the buffer zone. Following negotiations with the proponent it has been agreed that these should be excluded from the consent and the land incorporated into a residual allotment that may be reconsidered for subdivision in a future consent once the plant is operational and its odour impacts better known. An odour assessment has been undertaken with the Part 3A application the conditions of which will need to be complied with.
8.11 – Construction Waste	
I. A Waste Management Plan must be provided for all development requiring construction works on site. The level of detail in the plan will reflect the scale of development being undertaken.	 A Waste Management Plan will be required as a condition of consent.

Other Development Control Plans applicable to the development include:

DCP No 41 – Soil, Water and Vegetation Management Plan (SWVMP)		
DCP 41 requires implementation of erosion and sediment control measures in accordance with the relevant provisions of DCP 41.	• To be conditioned with consent.	
DCP No 42 – Landscape Policy		
DCP 42 requires the proposed development to be supported by a 'Category 2' landscape plans satisfy Council's DCP	• The development is supported by a satisfactory Category 2 Landscape Plan prepared by appropriately qualified consultants.	

DCP No 52 – Safe Design Guidelines for the Cit Queanbeyan	y of
 Council's DCP requires: Subdivision lots to be designed to allow the entrances of houses to face the street. Encourage variety of lot sizes to encourage a mix of family types and income groups. Illuminate access points to open spaces and pathways. Ensure lighting is vandal resistant. Clearly define and locate pedestrian routes. Ensure safe design of pedestrian routes. Ensure effective lighting of pedestrian routes. Ensure safe cycle routes. 	 The proposed development is considered generally satisfactory with respect to the relevant provisions of DCP 52. Conditions will apply where appropriate. The proposal has been referred to NSW Police for comment. The response indicates that the "majority of the application has addressed CPTED principles" but expresses concern about the design of some of the pathways and laneways. Refer to section 8(a) of this report.

4. <u>Section 79C(1)(a)(iiia) – Any Planning Agreement</u>

Council at its meeting on 23 March 2011 resolved the draft Googong Urban Development Voluntary Planning Agreement be executed. As a result of further negotiations between Council and the developer some further changes were made to the VPA. Council further resolved on 27 July 2011 that the Googong Urban Deed of Guarantee be executed as a Deed. On 23 November 2011 Council further considered and adopted minor amendments to the VPA. The VPA requires the following deliveries for the development:

- Sports field No 2 (4486th equivalent persons). Containing a double soccer field, irrigation, flood lighting and practice nets. Amenities building with public toilets, spectator seating and car parking.
- Local Park No 2 (2416th equivalent persons). Containing hard landscaping to include entry arts element with signage, pedestrian access paths with pedestrian lighting, bicycle racks, wayfinding signage and minor arts element, benches, water bubbler and bins. Three (3) small sized shelters 1 barbecue, one interpretive sign. Soft landscaping to include feature planting at entries and general landscaping.
- Local Park No 4 (4832th equivalent persons). Containing hard landscaping to include pedestrian access paths with pedestrian lighting, bicycle racks, wayfinding signage and minor arts element, benches, water bubbler and bins. One (1) small shelter. Soft landscaping to include feature planting at entries and general landscaping.
- Local Park No 5 (6040th equivalent persons). Containing hard landscaping to include pedestrian access paths with pedestrian lighting, bicycle racks, wayfinding signage and minor arts element, benches, water bubbler and bins. One (1) small shelter. Soft landscaping to include feature planting at entries and general landscaping.
- Local Park No 6 (7248th equivalent persons). Containing hard landscaping to include pedestrian access paths with pedestrian lighting, bicycle racks, wayfinding signage and minor arts element, benches, water bubbler and bins.

One (1) small shelter. Soft landscaping to include feature planting at entries and general landscaping.

- Embellishment of local open space drainage reserves and bushland revegetation. Provided progressively.
- Maintenance of open space.
- Monetary contributions towards future cultural centre.
- Dedicate local roads to the public. Progressive dedication.
- Design and construction of on-site local roads. Provided prior to issue of the Subdivision Certificate.
- Supply and installation of bus shelter and signage.
- Monetary contributions per dwelling (lot) towards off site local roads.
- Dedication of land for drainage and stormwater.
- To complete works to meet stormwater management needs of the development.
- Completion and dedication of works to meet water supply and sewage treatment needs of subdivision.
- Sewer, potable water and recycled water infrastructure. Provided in phases prior to issue of the Subdivision Certificate.
- Monetary contributions towards VPA administration. Paid on a per dwelling basis.
- Monetary contributions on per dwelling (lot) basis towards ecological offsets for works on Old Cooma Road and Ellerton Drive.

Appropriate conditions will apply to the consent in accordance with the VPA.

5. <u>Section 79C(1)(a)(iv) – The Regulations</u>

No matters prescribed in the Regulation are relevant in the consideration of this application.

6. <u>Section 79C(1)(b) – The Likely Impacts of the Development</u>

Context and Setting

The Googong township rezoning took place in 2009. Stages 3-5 form the second part of the subdivision to be undertaken for the township.

The development is designed to complement the scenic qualities and landscape features of the locality.

There will be minimal impacts on adjoining land use activities. The proposal is not considered to be out of context with surrounding rural land which will also eventually form part of the township.

Access, Transport and Traffic

The proposed development's impact in relation to access, transport and traffic has been adequately addressed by the applicant. The Roads and Maritime Services and Council's Senior Development Engineer are satisfied with access and traffic arrangements for the development. Appropriate conditions are recommended to ensure satisfactory provision is made for access, transport and traffic.

Public Domain

The development will provide for adequate recreational opportunities for future residents of the proposal.

The proposal and subsequent development stages will have an impact on the Googong Foreshores recreational areas. Whilst the Googong Dam's primary function is for urban water supply, its foreshores are open to the public for recreational use (i.e. picnicking, boating and fishing). The development is likely to result in increased human use of the foreshores.

The Googong Development Corporation is committed to making a financial contribution towards the capital and recurrent costs associated with the implementation of the Googong Foreshores Plan of Management. The Corporation is also committed to undertaking a sustainability education program to educate residents on the biodiversity values of the Googong Foreshores. This will apply to future development stages.

The Australian Government Department of Sustainability, Environment, Water, Population and Communities in their EPBC Approval 2011/5829 requires the development of a Googong Foreshores Interface Management Strategy to implement proposed mitigation measures and financial commitments of Commonwealth land. The completion of the strategy will be implemented at a future date. The land to which this refers is outside the development site.

Utilities

Council's Senior Engineer Development is satisfied with arrangements to service the land. The integrated water cycle system, with a dedicated water treatment and recycling plant has been approved by the NSW Planning Assessment Commission (PAC). During the initial stages of housing sewage will be transferred to a sewer pump station and sewage would be transported off site by tankers to an approved treatment facility. Initially, as part of the Part 3A submission, the applicant sought approval for this temporary arrangement until the equivalent population (EP) reached 150 persons. Council is currently liaising with the developer on this issue and it is likely that the anticipated EP that can utilise the temporary facility will be a higher value (377 EP is currently being investigated). The Water Recycling Plant (WRP) will then become operational. Should the land be available prior to the water recycling plant, any subdivision certificates will not be issued until the plant is able to adequately treat the effluent from the dwellings on the site.

Heritage

The Office of Environment and Heritage (OEH) have issued an Aboriginal Heritage Impact Permit (AHIP) to disturb or move on the land Aboriginal objects identified in the AHIP.

The OEH have also granted an excavation permit enabling an archaeological salvage excavation (Historic hut/home site GH14) and relocate defined elements of the site to a new location in nearby open space.

There are no known sites that have not been previously identified within this site.

Other Land Resources

The proposal will not adversely impact on valuable land resources for productive agriculture land and mineral and extractive resources.

Soils

A geotechnical engineer's report submitted by the applicant confirms soils are appropriate for the development.

Water

The proposed development is sited within the Googong Creek catchment. A stormwater strategy has been prepared by Brown Consulting. Detention areas and stormwater harvesting have been designed to limit post development changes in flow rate and flow duration for the protection of receiving environments.

Modelling of water quality measures as part of the integrated water management for Googong within Googong Creek catchment indicates the design achieves the pollutant removal targets with the inclusion of recycled water from the Googong Water Recycling Plant.

The integrated water cycle project will include a reduction in potable water use of 60% compared to the BASIX 40% requirement. The water cycle infrastructure is integrated with the stormwater and irrigation management proposed for the township.

Air and Microclimate

The construction stage of development will likely cause the emission of dust from earthworks. Management of this issue is to be addressed by the submission of a Construction Management Plan prior to issue of a Construction Certificate (Subdivision).

Flora and Fauna

A Flora and Fauna Assessment submitted by the applicant concludes the proposal will not result in a significant impact to any threatened flora and fauna species. A Flora and Fauna Management Plan is to be prepared and submitted to Council prior to commencement of works.

A controlled action approval under the *Environment Protection and Biodiversity Conservation Act 1999* has been granted for the Googong township subdivision and urban works.

Waste

A Waste Management Plan will need to be submitted and approved prior to the issue of a Construction Certificate (Subdivision).

Hazards

Potential bushfire risk to the development will be generated by vegetation on land to the north west, north and north east of Googong Road.

The mitigation of this risk will be provided by an Asset Protection Zone (APZ) which includes the width of Googong Road and building line setbacks along Googong Road.

The dwellings located on the edge of the development site will need to be surrounded by a 50m APZ. This APZ will minimise any grass fire impact on the development.

The site contains identified contamination. As detailed earlier in this Report the Site Auditor has provided interim advice that the land is likely to be suitable for residential development pending some minor remediation works. The consent authority can be satisfied that the contamination issues can be resolved but should ensure that the final Site Auditor's Statement is received prior to a construction certificate for subdivision being released.

The potential hazards from salinity have been considered under the clause 8 of the Googong DCP. Refer to section 3 of this report. There are no other hazards affecting the development site.

Social and Economic Impact in the Locality

The proposal is not expected to pose any negative social or economic impacts to the locality. There will be local economic benefits through employment opportunities during construction and provision of added housing stock opportunities and choice for the City to meet regional and local demands.

Site Design

The development is well designed in an environmentally sensitive manner. The size, shape and design of allotments and roads take into account solar energy requirements and energy efficiency.

Construction

The construction stage of the proposed development will have the potential to impact on adjoining properties and the environment for a short period of time. Any approval will be conditioned to ensure construction activities do not unreasonably impact on the adjoining properties and the environment by way of noise, erosion, dust and the like. These conditions are standard Council conditions of development consent. In addition it is recommended that a Construction Management Plan which specifically addresses the generation of dust and noise during both stages of the development be required to be submitted to Council for approval prior to the issuing of a Construction Certificate (Subdivision).

Cumulative Impacts

Cumulative impacts relate to the small impacts of developments in an area that when considered in unison can result in detrimental impact on the natural or built environment. It is considered that with adherence to recommended conditions of consent that the proposal will not give rise to any adverse cumulative impacts.

7. <u>Section 79C(1)(c) – The Suitability of the Site for the Development</u>

There are no physical constraints, heritage, threatened species, agricultural or mineral and extractive resource constraints impacting on the development.

The development will not give rise to unmanageable transport demands, adequate recreational opportunities will be provided, all services will be available and there will be acceptable impacts on adjoining land owners.

8. <u>Section 79C(1)(d) – Any Submissions made in relation to the Development</u>

(a) External Referrals

Written responses were received from:

• The Australian Government Department of Finance and Deregulation.

Comment: Finance is responsible for adjacent Commonwealth land encompassing Googong Dam and will therefore have an ongoing interest in ensuring that the development in the Googong Township does not have an adverse cumulative or downstream environmental impact on the Googong Foreshores. Under the EPBC approval, construction of neighbourhoods 1B, 4 and 5 cannot commence, until the Commonwealth Environment Minister has approved the strategy. This proposal is in neighbourhood 1A and as such is not impacted by the Commonwealth requirements.

NSW Roads and Maritime Services.

Comment: In accordance with Schedule 3 of State Environmental Planning Policy (Infrastructure) 2007 the application was referred to the NSW Roads and Maritime Services as traffic generating development. They have provided comment which indicates that the intersection of Googong Dam Road / Old Cooma Road may require upgrading to cater for the additional right turn movement for traffic exiting the subdivision. RMS has concurred to the imposition of conditions requiring a traffic sensitivity analysis to be completed to determine the appropriate timing for upgrade and for the future upgrade design and construction.

Council's Senior Engineer Development is satisfied that local road junctions are adequate to cater for the volume of traffic likely to be generated by the development.

NSW Police

Comment: Crime Prevention Through Environmental Design (CPTED) is a crime prevention strategy that focuses on the planning, design and structure of cities and neighbourhoods. Council has adopted the principles of CPTED through DCP 52. In keeping with these principles this major development proposal was forwarded to the Crime Prevention Officer at the Monaro Local Area Command for comment.

The response indicates that the "...majority of the application has addressed CPTED principles" but expresses concern about the design of some of the pathways and laneways. The concern is that these areas can be targeted for break and enter offences, malicious damage, stealing, robbery and sexual assault offences. In particular the response refers to the indicative drawings provided in Figures 17 and 18 of section 5 of the Design Plan Report. These generic drawings form part of the Neighbourhood 1A Masterplan and Elements.

In relation to the issue of pathways between buildings, there are none included in this proposal. Those referred to by the Police in figure 18 are spaces on private property providing a separation between buildings, not a pathway.

The major concern therefore relates to the offsets in the laneways. This was an issue discussed early in the development of the Googong DCP. Concern was expressed by Council about other developments where long linear laneways with continuous frontages of garages were unattractive, uncared for and generally resulted in many of the concerns indicated by the Police coming to fruition. The solution was to create offsets in laneways to provide articulation, variety and opportunity for some landscaping. The developer went to some lengths to develop these alternative arrangements including ensuring the inclusion of studio apartments to provide passive surveillance opportunities.

The comments from the Police are mainly directed at the proposed laneways numbered 4, 5 and 7 which are in fact on the proposed future development lots which will be subject to a future DA for small lot development. As such there will be opportunities before then to address the concerns of the Police.

The proposal before the Panel includes laneways 1, 2, 3, 19 and an unnumbered lane however, these are relatively short and only provide access to groups of 4 lots with a minimum area of $337m^2$. As such the concerns indicated by the Police are significantly mitigated.

Notwithstanding the above the issue will become more significant when the DAs for the subdivision of the two proposed development lots in Stage 3 comprising allotments down to $170m^2$ are received in the future. Comments from the Police have been included in the consent as advisory notes.

After conducting the CPTED process the NSW Police have has identified the development as having a moderate crime risk.

NSW Department Planning and Infrastructure

The Clause 6.1 objective requires satisfactory arrangements to be made for the provision of designated State and Territory public infrastructure before the subdivision of land in an urban release area. The Director General's Certificate – Satisfactory Arrangements for designated State and Territory Public Infrastructure are expected to be available prior to consideration of this Report at the JRPP meeting.

(b) Internal Referrals

Building Surveyor

Council's Building Surveyor raises no objections.

Development Engineer

In addition to previous comments, Council's Senior Engineer Development advises the design and construction will need to comply with the adopted Googong engineering specifications and the Googong DCP.

Section 64 Headworks Contributions

The *Googong Urban Development Local Planning Agreement* provides for the developer to construct all water and sewer infrastructure to service the development, which is remote from Council's existing infrastructure. The resultant works in kind for the lead in infrastructure for water and sewer mean that S64 contributions should not be sought for the development.

Section 94 Contributions

The *Googong Urban Development Local Planning Agreement* provides for the developer to make contributions toward the upgrading of the road network that will service the development, to provide community facilities within the development and to provide contributions towards off site facilities. Therefore, S94 contributions should not be sought for the development.

Environmental Health

Contamination issues have been satisfactorily addressed as indicated earlier in this Report.

The precautionary approach taken with the buffer zone around the WRP is supported as is the suggestion of limiting land releases until the time frame for commissioning of the WRP has greater certainty.

Amenity issues such as noise, dust and erosion control can all be dealt with by way of conditions of consent.

Parks and Recreation

The street tree species proposed as part of the landscaping plans, prepared by AECOM do not align with Council's requirements for Street Tree Planting. The trees including the Claret Ash and Eucalypts are not acceptable. As a result, a condition is recommended that seeks amended landscaping plans being submitted to Council to the satisfaction of Council's Manager of Parks and Recreation, prior to release of any Construction Certificate.

(c) Community Consultation

The application was publicly notified and exhibited as development in the public interest from 8 October 2012 to 26 October 2012. No written public submissions were received during this period.

9. <u>Section 79C(1)(e) – The Public Interest</u>

All relevant federal, state and local and community interests have been taken into consideration. Approval of the development is considered to be in the public interest.

10. <u>Section 80 – Determination</u>

The proposed development has been undergoing extensive discussions between the NSW Office of Water, Council and other various agencies who all have an interest in the erection and operation of the Water Recycling Plant (WRP). While these negotiations have centred primarily around the final design of the processes, plant, and equipment to be used in the treatment of sewage, one of the outcomes has been that the proposed buffer zone around the plant has been determined as being insufficient and should be set at 250m from the boundary of the allotment on which the WRP will be built.

This has an impact on 54 proposed dwelling allotments that fall within the buffer area. As such, to ensure that any buffer zone is factored into the proposed development and to ensure that the final design of the WRP has an adequate odour buffer area from residential dwellings, the assessment indicates that those allotments within the buffer should be excluded from the consent to ensure the subdivision of residential allotments does not occur inside the buffer area.

The provisions of Clause 80(4) of the *Environmental Planning and Assessment Act*, 1979 enable the consent authority to issue a partial consent for development. Section 80(4) states:

A development consent may be granted:

- (a) for the development for which the consent is sought, or
- *(b) for that development, except for a specified part or aspect of that development, or*
- (c) or a specified part or aspect of that development.

It is intended that should the application be approved it will be pursuant to subclause (b) and will specifically exclude the nominated lots proposed within the buffer area. A condition will be applied requiring the excluded areas to be incorporated into a residual lot which can be reconsidered for development at a future time when the realistic impacts of odours from a fully operational WRP can be quantified.

Conclusion

The proposed development satisfies all relevant statutory and local planning controls. It will have an acceptable impact on the site, local environment and neighbouring properties. There are no significant public interest concerns resulting from the development.

The development is recommended for conditional approval.

Recommendations

1. That pursuant to Section 80(4)(b) of the *Environmental Planning and Assessment Act 1979* consent not be granted for the subdivision of the following proposed residential allotments specified in Development Application 233-2012 as they are located within the buffer zone of the proposed water recycling plant and have the potential to be impacted by odours from the plant.

Excluded Lots	
Proposed Stage 4A	Lots 801, 845 and 859-870 inclusive
Proposed Stage 4B	Lots 954-956 inclusive
Proposed Stage 4C	Lots 1001-1030 inclusive and 1040- 1043 inclusive
Proposed Stage 4E	Lots 1301-1303 inclusive

2. That Development Application 233-2012 which proposes Subdivision of Lots 12-14 DP 1164687 and Lot 6 DP 255492 into 12 proposed development lots and subdivision of proposed 442 residential lots (which excluding those lots listed in Recommendation 1 above) and associated public space works and related construction works at 140 Googong Road, Googong be granted consent subject to the following conditions.

Standard Conditions

CONDITIONS TO BE COMPLIED WITH PRIOR TO ISSUE OF CONSTRUCTION CERTIFICATE (SUBDIVISION)

1. Fees and Charges

Long Service Levy

In accordance with Section 109F of the *Environmental Planning and Assessment Act 1979* a Construction Certificate (Subdivision) will not be issued for any Stage of the development with respect to the plans and specifications for construction works until any Long Service Levy payable under Section 34 of the *Building and Construction Industry Long Service Payments Act 1986* has been paid. Currently this rate is 0.35% of the cost of the construction works costing \$25,000 or more.

<u>**REASON</u>**: To satisfy relevant provisions of the *Environmental Planning* and Assessment Act 1979.</u>

2. Construction Management Plan

Prior to release of the Construction Certificate (Subdivision) a Construction Management Plan (CMP) must be submitted to Council and approved by Principal Certifying Authority for the proposed construction works or, if the proposed works are staged, for each stage of the proposed construction works. The plan must:

- (a) describe the proposed construction works;
- (b) outline the proposed construction program;
- (c) set standards and performance criteria for each of the relevant environmental issues [see (f) below];
- (d) describe what actions and measures would be implemented to ensure that these works comply with the specified standards and performance measures;
- (e) describe how the effectiveness of these actions and measures would be monitored during the proposed works;
- (f) include a detailed:
 - Soil and Water Management Plan, prepared in accordance with Development Control Plan No. 41 Soil, Water and Vegetation Management Plans;
 - Waste Management Plan;
 - A Waste Management Plan (WMP) must be completed to identify the type of waste that will be generated by the development and method of disposal to be utilised. Applicants should consider whether it is possible to re-use materials either on-site or off-site;
 - Noise Management Plan;
 - Dust Management Plan;
 - Traffic Management Plan prepared in accordance with the requirements of Council's Engineering and Recreational Services Division;
 - Construction Staging Plan;
- (g) describe what procedures would be implemented to receive, register, report and respond to any complaints during the construction works; and
- (h) identify the key personnel who would be involved in the construction works, and provide contact numbers for this personnel.

The approved CMP is to be adhered to at all times during construction works of each stage.

<u>REASON:</u> To ensure satisfactory environmental management of the site. (46.07)

3. Intersection Analysis

A SIDRA analysis of the intersection of Old Cooma Road and Googong Road shall be undertaken and approved by Council and the NSW Roads and Maritime Services prior to the issue of any Construction Certificate – Subdivision. The SIDRA analysis shall incorporate a sensitivity analysis to determine at what traffic volume the Level of Service (LOS) for the right turn from Googong Road into Old Cooma Road reaches LOS's D and E.

<u>**REASON**</u>: To determine appropriate timing for the upgrade of the intersection.

4. Intersection Design

A design for the upgrade of the Old Cooma Road / Googong Road intersection (based on the approved SIDRA analysis) shall be undertaken by the applicant and approved by Council and the NSW Roads and Maritime Services prior to the issue of any Construction Certificate – Subdivision that will create lots that generate traffic movements such that the intersection reaches LOS D.

<u>**REASON:</u>** To provide for upgrade of the intersection to accommodate future traffic generation.</u>

5. <u>Construction Certificate (Subdivision)</u>

A Construction Certificate (Subdivision) and accompanying engineering design plans and Certification Report shall be submitted to Council prior to the commencement of any works for a subdivision stage. Works associated with the subdivision stage shall subsequently be carried out in accordance with the detailed design drawings and specifications the subject of the Construction Certificate (Subdivision).

The engineering plans must comply with the requirements of Council's *Development Design Specification – Googong* (Version 1, dated June 2011) and include the following where applicable to a subdivision stage –

- A Certification Report in accordance with Clause DQS.04;
- This general note All work must be constructed in accordance with the requirements of Queanbeyan City Council's Development Construction Specification (Version 3.1, dated June 2011).;
- Design of a stormwater network, including a major/minor street stormwater system, any required interallotment drainage lines, any required detention basins, water quality ponds and/or gross pollutant traps and Water Sensitive Urban Design devices;

- Design of a dual water supply network (drinking water and nondrinking water) linking to infrastructure to be constructed in accordance with Major Project Application 08_0236;
- Design of a sewerage network linking to infrastructure to be constructed in accordance with Major Project Application 08_0236;
- Design of the roads in the subdivision to the following standards (as defined in Schedule 4)
 - Streets Pt 1a & Pt 1b as a Local Sub-Arterial Road,
 - o Street 4 (Beltana Avenue) as a Collector Street (ST1),
 - o Street Pt 5, 25, 51 & 86 as a Local Street 2 (ST2),
 - Streets 8, 15, 16, 30, 32, 33 (Bonarba Link), 34, 36, 40 (Insley Street), 41, 44, 45, 46, 48, 50, 52, Pt 53, Pt 54, 57, 58, 60, 61, Pt 63, Pt 64, Pt 65, 68, & 88, 89, 94, 95, 96, 97 as a Local Street 3 (ST3),
 - Streets 22 (Hearne Street), 35 (Alchin Street), Pt 53, Pt 54 & Pt 63 as an Open Space Drive 1 (DR1),
 - Streets Pt 64, Pt 65, 87 & 98 as an Open Space Drive 2 (DR2),
 - Laneways 1, 2, 3, 19 & unnamed (from Street 15 to Street 22 as one-way public laneways with a travel direction from east to west
- Road pavements designed as flexible pavements with a primer seal plus Asphaltic Concrete (AC10) nominated as the wearing surface;
- Driveways designed as rigid concrete pavements:
- Where barrier kerb is used the location of vehicle kerb crossings must be indicated;
- Googong Dam Road shall be provided with a basic right turn (BAR) for eastbound traffic at its intersection with Street 5;
- Provision of a temporary bus route, bus stops in Streets 4 (Beltana Avenue), 34, 5, 57, 49, 63, 5, 36 & 33(Kerry Street);
- Provision of 2.0 m wide key paths in Streets 4, 5, 8, 51(from the west boundary of the stage to Street 8) & Street 53 and a 1.5 m wide path on one side of all other streets;
- Design of retaining walls greater than 1.0 metres in height;
- Landscape plan for reserves and street tree planting;
- Irrigation supply (permanent and temporary);
- Site works including bulk earthworks, dams water quality ponds and retarding basin construction;
- Vegetation management plan;
- Soil and water management plans including erosion control measures;
- Construction compound and site amenities;
- Street and public open space lighting to current best practice energy efficiency standards and
- A Traffic Control Devices (TCD) Plan for each subdivision stage that includes line-marking, sign-posting and Local Area Traffic Management

<u>**REASON**</u>: To provide design certification of the subdivision works. (46.11)

6. Prior to the issue of construction certificate (subdivision) the applicant shall ensure that a site audit statement (SAS) and site audit report (SAR) are prepared by an accredited site auditor and submitted to Council. The SAS should state that the site has been remediated and validated to permit the use of the site for residential landuse. Any recommendations or conditions contained within the statement are to be implemented by the applicant.

<u>**REASON</u>**: To ensure construction works only proceed after a site audit statement has been received confirming that the site is capable of being remediated for a future commercial use.</u>

7. Prior to the issue of construction certificate (subdivision) a revised subdivision and staging plan shall be submitted to Council to reflect the changes to subdivision and stage boundaries resulting from lots within the buffer area to the Water Recycling Plant being excluded from this consent as per Condition 14 of this consent.

<u>REASON</u>: To ensure a correct subdivision and staging plan are submitted to Council to reflect changes caused by the exclusion of 54 residential allotments form the consent.

8. Prior to the issue of the construction certificate (subdivision) and amended landscaping plan showing the use of tree species consistent with Council's Street Tree Planting requirements.

<u>**REASON</u>**: To ensure inappropriate species of trees are not planted in public areas which will require future maintenance by Council.</u>

PRIOR TO COMMENCEMENT OF WORKS

9. A Notice to Commence Subdivision Works must be submitted to Council two (2) days prior to commencing work on each subdivision stage and must nominate Council as the Principal Certifying Authority.

<u>REASON:</u> To ensure the provisions of the *Environmental Planning and* Assessment Act 1979 are satisfied. (47.03)

10. Council must be appointed as the Principal Certifying Authority for the subdivision works, with such appointment to be made prior to the commencement of the subdivision application works. Please contact Council for a Notice to Commence Subdivision works form to complete to comply with these requirements. Alternatively the form is available from Council or downloadable from www.qcc.nsw.gov.au.

<u>NOTE:</u> A quotation for Council to perform the duties of Principal Certifying Authority for the subdivision works will be provided upon submission of the Construction Certificate (subdivision) to Council.

<u>**REASON**</u>: To provide for supervision of the subdivision works. (47.09)

- **11.** A sign must be erected in a prominent position on the work site prior to the commencement of works:
 - (a) stating that unauthorised entry to the work site is prohibited,
 - (b) showing the name of the person in charge of the work site, and
 - (c) advising telephone numbers at which that person may be contacted during work hours and outside work hours
 - (d) showing the name of the principal certifying authority and contact details.

The sign is to be removed when the work has been completed.

<u>**REASON:</u>** To provide notification of the work site and site supervisor to the general public in emergency situations. (47.10)</u>

12. Toilet facilities must be provided at or in the vicinity of the work site at the rate of one toilet for every 20 persons or part of 20 persons employed at the work site.

Each toilet provided:

- (a) must be a standard flushing toilet, and
- (b) must be connected:
 - (i) to a public sewer, or
 - (ii) if connection to a public sewer is not practicable, to an accredited sewage treatment facility approved by Council, or
 - (iii) if connection to a public sewer or an accredited sewage management facility is not practicable, to some other sewage management facility approved by Council.

The provision of toilet facilities in accordance with this clause must be completed prior to commencement of any work on the site.

<u>**REASON:**</u> To provide adequate and hygienic amenities for people working on the site. (47.11)

13. Flora and Fauna Management Plan

A Flora and Fauna Management Plan (FFMP) is to be prepared at the applicant's cost and submitted to Council prior to commencement of works. The recommendations of the FFMP are to be implemented during the pre-construction, construction and post construction phases.

This Plan should detail the impact avoidance and mitigation measures that would be implemented to reduce adverse impacts on flora and fauna during tree removal and clearing, excavation of trenches, rehabilitation of disturbed areas after disturbances and activities such as weed management and re-establishment of native vegetation by revegetation.

The Plan should also include a monitoring and review program.

Key elements of the FFMP are to include the following as outlined in the Googong NH1A Subdivision Ecological Assessments – Terrestrial Flora and Fauna Report, July 2009 prepared by Ecowise Environmental and BIOSIS Research:

- Removal of significant trees.
- Habitat protection and flora management.
- Managing invasive species.
- Managing roadside vegetation.
- Managing impacts during construction.
- Fauna management.
- Managing impacts on Commonwealth land.

<u>REASON</u>: To minimise any impacts on flora and fauna.

GENERAL

14. Development in Accordance with Plans

The development shall be in accordance with development application No 233-2012 submitted by the applicant on 2 October 2012, the amended staging plan (DA2 - amended Dec 2012) submitted on 21 December 2012 and any plans approved in response to Condition 7 and Condition 8 of this consent and in accordance with the following plans and documentation except where those plans reference the following excluded lots:

Excluded Lots			
Proposed Stage 4A		Lots 801, 845 and 859-870 inclusive	
Proposed Stage 4B		Lots 954-956 inclusive	
Proposed Stage 4C		Lots 1001-1030 inclusive and 1040- 1043 inclusive	
Proposed Stage 4E		Lots 1301-1303 inclusive	
Documentation: Plans:	 Volume 1 – S prepared by F Volume 2 – Elton Consult Volume 3 – S Elton Consult DP Stage 34 	 Volume 1 – Statement of Environmental Effects prepared by Elton Consulting September 2012 Volume 2 – Plans for approval prepared by Elton Consulting September 2012 Volume 3 – Supporting documents prepared by Elton Consulting September 2012 DP Stage 3A prepared by Michael Stapleton 	
	 dated 31 Octo DP Stage 3I dated 31 Octo DP Stage 4A dated 31 Octo DP Stage 4A dated 31 Octo DP Stage 40 dated 31 Octo DP Stage 40 dated 31 Octo DP Stage 41 dated 31 Octo DP Stage 44 dated 31 Octo DP Stage 54 dated 31 Octo 	 bber 2012 B prepared by Michael Stapleton bber 2012 A prepared by Michael Stapleton bber 2012 (except excluded lots) B prepared by Michael Stapleton bber 2012 (except excluded lots) C prepared by Michael Stapleton bber 2012 (except excluded lots) C prepared by Michael Stapleton bber 2012 (except excluded lots) D prepared by Michael Stapleton bber 2012 E prepared by Michael Stapleton bber 2012 (except excluded lots) D prepared by Michael Stapleton bber 2012 E prepared by Michael Stapleton bber 2012 (except excluded lots) A prepared by Michael Stapleton bber 2012 B prepared by Michael Stapleton bber 2012 Th Staging Plan – VE prepared by and dated 28 August 2012 rth Lot Mix and Staging Plan – VE 	

prepared by Roberts Day dated 20 September 2012

Landscaping

Plans:

- Cover Sheet dated 6 September 2012
- Googong North Tree Retention Masterplan dated 6 September 2012
- Googong North Landscape Masterplan dated 6 September 2012
- Googong North Streetscape Concept dated 6 September 2012
- Googong North Street Tree Masterplan dated 6 September 2012
- Googong North Local Park 2 dated 6 September 2012
- Googong North Local Park 2 Details dated 6 September 2012
- Googong North Local Park 4 dated 6 September 2012
- Googong North Local Park 4 Details dated 6 September 2012
- Googong North Sportsfield 2 dated 6 September 2012
- Googong North Sportsfield 2 Details dated 6 September 2012
- Googong North Drainage Reserve 4 dated 6 September 2012
- Googong North Drainage Reserve 4 Details dated 6 September 2012
- Googong North Local Park 6 and Drainage Reserve 5 dated 6 September 2012
- Googong North Local Park 6 and Drainage Reserve 5 Schedules dated 6 September 2012
- Googong North Local Park 6 and Drainage Reserve 5 Details dated 6 September 2012
- Googong North Local Park 5 dated 6 September 2012
- Googong North Local Park 5 Details dated 6 September 2012

All plans prepared by AECOM Australia Pty Ltd.

<u>**REASON</u>**: To ensure the development is completed in accordance with the approved plans. (22.10)</u>

15. Inconsistency Between Documents

In the event of any inconsistency between conditions of this consent and the drawings/documents referred to above, the conditions of this consent prevail.

REASON: To ensure conditions of consent are adhered to.

16. The applicant is advised that prior to commencement of future development of those parts of Googong that are outside the boundary of Stages 1-5 an application is to be submitted to the Office of Environment and Heritage (OEH) for an Aboriginal Heritage Impact Permit (AHIP) to harm any Aboriginal objects.

<u>**REASON</u>**: To comply with the requirements of the Office of Environment and Heritage.</u>

17. Googong Urban Development Planning Agreement

The applicant shall comply with the *Googong Urban Development Local Planning Agreement*.

<u>**REASON</u>**: To ensure satisfactory provision of services, amenities, works and monetary contributions for the development.</u>

18. Separate development consent of Council is required for the erection of any signage relating to land sales.

<u>REASON</u>: To satisfy the requirements of Council's Local Environmental Plan.

DURING CONSTRUCTION

19. Aboriginal Heritage

All earthmoving contractors and operators must be instructed that, in the event of any bone or stone artefacts, or discrete distributions of shell being unearthed during earthmoving, work should cease immediately in the affected area and the Ngambri Local Aboriginal Land Council and officers of the Office of Environment and Heritage (Queanbeyan Office), informed of the discovery. Work must not recommence until the material has been inspected by those officials and permission has been given to proceed. Those failing to report a discovery and those responsible for the damage or destruction occasioned by unauthorised removal or alteration to a site or to archaeological material may be prosecuted under the National Parks and Wildlife Act 1974, as amended.

<u>REASON</u>: To ensure adequate procedures are in place should significant items of Aboriginal Heritage be discovered. (22.06)

- **20.** In the event that object(s) which are suspected of being Aboriginal object(s) or relic(s) are encountered during development works, then the following protocol will be followed:
 - (a) Cease any further excavation or ground disturbance, in the area of the find(s).
 - (i) The discoverer of the find(s) will notify machinery operators in the immediate vicinity of the find(s) so that work can be temporarily halted, and
 - (ii) The site supervisor and the Principal will be informed of the find(s).
 - (b) Do not remove any find(s) or unnecessarily disturb the area of the find(s).
 - (c) Ensure that the area of the find(s) is adequately marked as a no-go area for machinery or further disturbance, and that the potential for accidental impact is avoided.
 - (d) Note the location and nature of the find(s) and report the find(s) to:
 - (i) Relevant project personnel responsible for project and construction direction and management;
 - (ii) With regard to suspected Aboriginal objects, report the find to the Office of Environment and Heritage, and
 - (iii) With regard to suspected (non-Aboriginal) relics the Office of Environment and Heritage.
 - (e) Where feasible, ensure that any excavation remains open so that the finds can be recorded and verified. An excavation may be backfilled if this is necessary to comply with work safety requirements and where this action has been approved by The Office of Environment and Heritage. An excavation that remains open should only be left unattended if it is safe and adequate protective fencing is installed around it.
 - (f) Following consultation with the relevant statutory authority (Office of Environment and Heritage) and where advised, any other relevant stakeholder groups, the significance of the finds should be assessed and an appropriate management strategy followed. Depending on project resources and the nature of the find(s), this process may require input from a consulting heritage specialist.
 - (g) Development works in the area of the find(s) may recommence with approval of the relevant statutory authority.

<u>REASON</u>: To ensure adequate procedures are in place should significant items of Aboriginal Heritage be discovered. (22.07)

21. Construction Management

Any works associated with the construction and/or establishment of this development must ONLY be carried out between the following hours:

Weekdays:	7.00am to 6.00pm
Saturdays:	8.00am to 4.00pm
Sundays/Public Holidays	NO WORK

The applicant is responsible to instruct and control subcontractors regarding hours of work.

Note: To undertake works involving the use of equipment which creates an offensive noise is a breach of the provisions of the Protection of the Environment Operations Act 1997 and Regulations thereunder.

<u>**REASON:</u>** To ensure a noise problem does not result from the development and the impact on the local amenity is minimised. (26.07)</u>

22. The applicant must ensure that noise generated by the development does not exceed the criteria set by the Office of Environment and Heritage. This is generally a level of 5dB above background noise level.

This is measured by monitoring the level of noise from any activity within the development represent by the L_{aeq} descriptor, measured over a 15 minute period. This measurement must not exceed the background level at that time of day by more than 5dB.

<u>**REASON:</u>** To minimise the impact of noise generated by the development on surrounding residential areas. (30.05)</u>

23. Environmental Management

Waste Disposal

All construction or the like waste shall not be stored or stockpiled on the site and must be disposed of to an approved waste facility.

Land Contamination

Clean up equipment including suitable absorbent material shall be available on site to effectively deal with liquid contaminates such as oils and chemical spills.

Revegetation of disturbed areas

All disturbed and exposed areas shall be revegetated. Revegetation of such areas shall be implemented as soon as construction works end in each area of the development.

Dust Suppression

Adequate measures shall be taken to prevent dust from affecting the amenity of the surrounding rural neighbourhood.

A water tank designed to suppress dust from exposed surfaces and access roads shall be available on the site or in the immediate vicinity during construction works. Exposed surfaces and access pads shall be regularly wetted to suppress dust generation until such time that construction is completed and areas have been revegetated. All disturbed areas shall be revegetated immediately after completion of works.

Air Pollution

No burning of cleared vegetation or other waste material shall occur on this site prior to or during the construction phase of the development.

All vegetation material is to be chipped and used in landscaping unless it is not possible due to size, non suitability of the material or some other limitation, in which case the material will be disposed of at an approved landfill site.

Excavation

Materials resulting from excavation of the site must be stored wholly within the property boundaries unless written authority from adjoining property owner/s is first obtained for the storage of the excavation material on the adjoining site subject to erosion controls being put in place. All excess excavation material must be removed from the site and disposed of at an approved landfill site. The site is also to be rehabilitated to existing surface levels and regrassed.

Construction Access

Any construction access to the site shall have a shake down grid(s) or equivalent installed to minimise transportation of material onto the road network via vehicular movements from the site.

<u>**REASON</u>**: To prevent and/or minimise potential environmental harm to the environment that may result from the construction and rehabilitation works.</u>

24. Trees nominated to be retained on the approved plans must be protected by temporary fencing that must be erected prior to commencement of work, extend to at least the drip line of the tree and must remain in place until practical completion of works is reached on the subdivision stage. Any tree proposed to be located within 6m of a building must be removed to comply with Council's Tree Preservation Order.

<u>**REASON</u>**: To offer protection to trees to be retained in accordance with the approved plans. (28.08)</u>

- **25.** Run-off and erosion and sediment controls must be installed onsite to prevent soil erosion, water pollution or the discharge of loose sediment on surrounding land by:-
 - (a) diverting uncontaminated run-off around cleared or disturbed areas;
 - (b) erecting silt fencing in accordance with the requirements of Council's DCP No 41 Soil, Water and Vegetation Management Plans;
 - (c) preventing tracking of sediment by vehicles onto roads;
 - (d) stockpiling topsoil, excavated material, construction and landscaping supplies and debris within the site;
 - (e) where any material is stockpiled onsite erosion control and siltation fencing must be installed adjacent to the toe of the mound;
 - (f) removal or disturbance of vegetation and top soil is confined to within 3m of each area under construction; and
 - (g) the erosion and sediment control measures must be maintained in a good order until the excess excavation materials have been removed from the site.

REASON: To prevent soil erosion and water pollution. (26.03)

26. <u>Civil Requirements</u>

In the event of any damage being caused to any existing Council infrastructure (such as road pavement, kerb, guttering, stormwater pit, footpath trees and/or footpath) during construction, the applicant must repair or reimburse Council for the full cost of restoration.

<u>**REASON</u>**: To prevent damage to Council's public footway area and require payment to Council where damage occurs. (26.10)</u>
- **27.** The Subdividor shall adhere to the following guidelines with respect to the provision of services within the development.
 - (a) Preliminary Design:- In planning the subdivision layout the Subdividor shall examine all utility master plans to ascertain the impact of the proposed development on each Utility Authority's existing and future infrastructure.
 - (b) Liaison with Utility Authorities:- The Subdividor shall confirm with each Utility Authority for water, sewer, electricity, gas and telecommunications services, of their individual requirements for the provision of servicing of the subdivision layout. Each utility shall be provided underground.
 - (i) Confirmation for the provision of installation of the following is required:
 - street lighting;
 - electricity reticulation;
 - water reticulation;
 - sewer reticulation;
 - gas reticulation;
 - telecommunications reticulation; and
 - under road conduits.
 - (ii) The Subdividor shall confirm design and construction phase requirements in order to enable an agreed development program to be established between each Utility Authority and the Subdividor prior to construction.
 - (c) Construction Program: The Subdividor shall liaise with each Utility Authority to confirm the following construction program:
 - (i) Project scope;
 - Construction sequences and timing;
 - Responsibilities of all parties involved;
 - Project contact officers and principal contractors;
 - Site servicing requirements (including construction documentation and commissioning requirements);
 - Standards, specification and procedures applicable to the project; and
 - Utility resource availability and response times.
 - (d) Access by Others: The Subdividor shall permit access to the site by each Utility Authority for the purpose of carrying out works additional to that required to be undertaken by the Subdividor.

<u>**REASON:</u>** To ensure services have been provided in accordance with Council and Utility Authority requirements. (41.11)</u>

- **28.** Inspections must be performed by the Water and Sewer Authority (Queanbeyan City Council) when works reach the following stages:
 - (a) immediately prior to connection of new sewer pipes to the sewerage infrastructure to be constructed in accordance with Major Project Application 08_0236;
 - (b) immediately prior to connection of new water pipes to the water reticulation infrastructure to be constructed in accordance with Major Project Application 08_0236;and
 - (c) immediately prior to the backfilling of sewer drainage trenches.

Council's City Infrastructure Group must be given 24 hours notice of the need for these inspections.

<u>NOTE:</u> Any inspections carried out by Council do not imply Council approval or acceptance of the works, and do not relieve the Developer from the requirements to provide a Project Quality Plan in accordance with Council's *Development Construction Specification* (Version 3.1, dated June 2011), Part CQS and a Work-as-Executed Certification Report in accordance with Council's *Development Construction Specification* (Version 3.1, dated June 2011), Part CQS and a Work-as-Executed Certification Report in accordance with Council's *Development Construction Specification* (Version 3.1, dated June 2011), Part C101.

<u>**REASON:</u>** To ensure that hydraulic services are constructed in accordance with Council requirements. (41.12)</u>

29. Certification of the completed water reticulation (drinking water and nondrinking water) and sewerage system works within each subdivision stage and works as executed documentation for the subdivision stage must be included in a Project Quality Plan and submitted to Council in accordance with Council's *Development Construction Specification* (Version 3.1, dated June 2011), Part C101.

<u>REASON:</u> To ensure that hydraulic services are constructed in accordance with Council requirements. (41.13)

30. All construction and restoration work must be carried out strictly in accordance with the approved drawings and Council's *Development Construction Specification* (Version 3.1, dated June 2011).

The construction works shall be carried out, monitored and inspected in accordance with Specification CQS - Quality System Requirements

<u>**REASON:</u>** To ensure construction and restoration work is in accordance with Council's requirements.(41.15)</u>

31. The Subdividor will be responsible for all public utilities and services in the area of work and as such must notify all relevant Authorities and bear all costs associated with any repairs and/or adjustments as those Authorities deem necessary.

<u>REASON:</u> To ensure compliance with Utility Authorities' requirements. (41.17)

32. Lighting, fencing, traffic control advanced warning signs must be provided for the protection of works and for the safety and convenience of the public, in accordance with Council's *Development Construction Specification* (Version 3.1, dated June 2011). Traffic movement in both directions on public roads and vehicular access to private properties must be maintained at all times, during the currency of the works.

<u>**REASON:</u>** To ensure an adequate level of public safety and convenience during construction. (41.18)</u>

33. Land dedicated to Council for public recreation purposes is to meet the requirements of the *Googong Urban Development Local Planning Agreement*.

<u>**REASON:</u>** To ensure areas to be handed over to Council for public recreation are functional and in a reasonable state. (41.19)</u>

34. All fill imported on to the site must be validated to ensure the imported fill is suitable for the proposed land use from a contamination perspective. Fill imported on to the site must also be compatible with the existing soil characteristic for site drainage purposes.

Council may require details of appropriate validation of imported fill material to be submitted with any application for future development of the site. Hence all fill imported onto the site shall be validated by either one or both of the following methods during remediation works:

- Imported fill should be accompanied by documentation from the supplier which certifies that the material is not contaminated based upon analyses of the material or the known past history of the site where the material is obtained; and/or
- Sampling and analysis of the fill material should be conducted in accordance with the EPA Sampling Design Guidelines (1995) to ensure that the material is not contaminated.

REASON: To ensure fill material is within acceptable standards. (49.13)

35. Filling must be undertaken in accordance with the approved plans and in such a manner that the new drainage pattern does not environmentally affect adjoining properties. Those filled and/or regraded allotments must be compacted to 95% maximum modified dry density. The applicant's Geotechnical Engineer must supervise the placement of fill material and certify with test results that the work has been carried out to level 1 responsibility in accordance with Appendix B of AS3798-1990.

<u>**REASON**</u>: To ensure satisfactory compaction of fill to standards. (49.18)

36. Certification from a suitably qualified and practising Geotechnical Engineer must be submitted for each subdivision stage verifying that the works detailed and recommended in the geotechnical report have been undertaken under supervision, that satisfactory completion to standards has been achieved and that the assumptions relating to site conditions made in the report were validated during construction.

<u>**REASON</u>**: To ensure works are undertaken in accordance with geotechnical recommendations. (49.20)</u>

PRIOR TO RELEASE OF SUBDIVISION CERTIFICATE

37. Application for Subdivision Certificate

A completed Subdivision Certificate application form accompanied by final plans of subdivision for each stage and a Schedule of Compliance detailing how each condition of consent has been complied with, together with the requisite processing fee, payment of contribution charges, any Council bonds and authorities from other service agencies that their requirements have been satisfied shall be submitted to Council for approval at each Stage. This application shall not be lodged until all consent conditions pertaining to the Stage have been complied with.

<u>**REASON</u>**: To comply with the *Environmental Planning and Assessment Act 1979*.</u>

- **38.** An application to obtain a Subdivision Certificate from Council must be supported with the following documentation:
 - A final survey plan of subdivision and six copies including an electronic copy in the format of digital vector to the projection of MGA (GDA 94) with boundaries and other line work to be insitu to projection. This should be accompanied with an application for a subdivision certificate to be submitted to Council. Where approved drawings provide survey coordinates of structures, the final survey plan should include a schedule of the set out centreline coordinates of all listed structures as constructed in accordance with approved plans. The schedule should include type of structure, finished cover & invert levels of structures.

Note: Marks are available from Crown lands Office and from Queanbeyan City Council.

<u>REASON:</u> To ensure works are completed in accordance with the requirements of the Council, statutory bodies and the true location of assets supplied are appropriately coordinated and documented and to comply with Section 109 Environmental Planning and Assessment Act 1979. (41.01)

39. Commissioning of Water Recycling Plant

No subdivision certificate for any residential allotment approved by this consent shall be issued until such time as Council is satisfied that the Water Recycling Plant is capable of being commissioned for operation within three months of the date of issue of the subdivision certificate or such other time as agreed to by Council in writing.

<u>REASON</u>: To ensure that adequate provision is made for the servicing of residential allotments prior to the issue of a subdivision certificate and subsequent erection of buildings.

40. Civil Requirements

Submission to the Principal Certifying Authority of a statement prepared by a registered surveyor, stating that all water, sewer and stormwater pipelines constructed within proposed lots or other privately owned land are completely located within proposed easements indicated on the plan of subdivision or existing easements.

The statement must be submitted upon completion of the subdivision works and prior to the issue of the Subdivision Certificate for each subdivision stage. <u>**REASON</u>**: To ensure works are completed in accordance with Council's requirements. (41.03)</u>

41. Submission of an application for a Final Compliance Certificate under Section 307 of the Water Management Act 2000 for each subdivision stage prior to the issue of a Subdivision Certificate for that subdivision stage.

<u>**REASON</u>**: To ensure compliance with the statutory requirements of the Environmental Planning and Assessment Act 1979. (41.05)</u>

42. A geotechnical report must be submitted to Council detailing the classification of soil type generally found within each subdivision stage. A general classification for each lot within the subdivision stage must be provided and such classifications must be made by a Geotechnical Engineer in accordance with the provisions of AS 2870 "Residential Slabs and Footings". The classification reports must be submitted to Council prior to the release of the Subdivision Certificate for that subdivision stage.

<u>**REASON</u>**: To ensure works are undertaken in accordance with geotechnical recommendations. (41.07)</u>

43. Written evidence from the relevant service authority or a suitably certified or accredited person that satisfactory arrangements have been made for the supply of reticulated electricity, telephone services and natural gas to each lot shall be submitted to Council. All services are to be provided underground.

<u>REASON</u>: To satisfy relevant utility authority requirements. (41.08)

44. Provision of a separate sewer connection, stormwater drainage connection, water services (drinking water and non-drinking water), electricity supply, gas and communication service to each residential, school and open space allotment within the subdivision stage at the Subdividor's expense.

<u>**REASON**</u>: To provide access to services for each allotment. (41.10)

45. Intersection Construction

The Old Cooma Road / Googong Dam Road intersection shall be upgraded in accordance with the approved design prior to the issue of any Subdivision Certificate that will create lots that generate traffic movements such that the unimproved intersection would reach LOS E.

<u>**REASON:</u>** To provide traffic safety and adequate traffic movement at the intersection.</u>

46. Maintenance of the completed subdivision works within a subdivision stage by the Subdividor at his own expense, for a period of six (6) months after the date of the issue of the Subdivision Certificate for that stage by Council.

The subdividor must lodge a cash bond with regard to such maintenance in an amount as calculated from fees set by Council's Management Plan and current at the time of issue of each Subdivision Certificate.

In that period the applicant will be liable for any part of the work which fails to perform to the requirements specified in Council's *Development Design Specification – Googong* (Version 1, dated June 2011), and *Development Construction Specification* (Version 3.1, dated June 2011) (or as would reasonably be expected under the design conditions).

The subdividor must provide Council with written authorisation, that in the event of any defect work not being rectified to the required standards specified and within the period specified, to enter upon the subject land and undertake such remedial work as necessary to comply with the required standards and to deduct the cost thereof from such Bond monies held by Council and to refund the balance, if any, to the subdividor.

<u>**REASON</u>**: To ensure works are completed in accordance with Council's requirements. (41.20)</u>

47. Submission of an application for a Compliance Certificate under Section 307 of the Water Management Act 2000 for each subdivision stage to the Water and Sewer Authority (Queanbeyan City Council). The application must be accompanied by the relevant fee and four copies of the Civil Engineering plans for the design of the water reticulation and sewerage systems, drawn in accordance with Council's *Development Design Specification – Googong* (Version 1, dated June 2011), for assessment and approval by Council.

Upon approval of the hydraulic design a Compliance Certificate in accordance with section 307 of the Water Management Act 2000, will be issued by Council. The Compliance Certificate must be obtained prior to the issue of a Construction Certificate (Subdivision).

<u>REASON:</u> To ensure that hydraulic design is in accordance with Council requirements. (46.13)

48. Traffic Control Devices

Traffic Control Devices (TCD) for each subdivision stage that includes line-marking, sign-posting and Local Area Traffic Management works, as approved by the Local Traffic Committee, shall be installed prior to release of the Subdivision Certificate.

<u>REASON</u>: To provide traffic facilities. (41.24)

49. Landscape Works

Completion of all landscaping works in accordance with the Googong Township Landscape Management Plan (GTLMP) – Stages 1-5 prepared by AECOM Australia Pty Ltd, 2 June 2010 and any amendments as identified by relevant drawings as described in Condition 14. The works are to be implemented by a suitably experienced and qualified Landscape Management Contractor in accordance with the GTLMP.

<u>REASON</u>: To ensure satisfactory completion of landscape works.

50. The landscape works are to be monitored and maintained by the applicant in accordance with the *Googong Urban Development Local Planning Agreement*. Monitoring and reporting is to be carried out in accordance with the GTLMP.

During the maintenance period all landscape elements are to be managed such that they are resistant to erosion, with management strategies including:

- Planting areas are to be managed such that minimal exposed bare soil is visible.
- All surfaces are to be maintained such that they have a dense plant cover.
- Drainage lines are to be inspected regularly for signs of erosion.
- Where erosion occurs to landscape drainage line elements e.g. scour after a storm event, the damaged area is to be quickly stabilised and reinstated to the specified treatment.
- The drainage line formation is to remain as specified in the engineering and landscape drawings.

All landscape drainage line elements are to be managed for the removal of sediment with strategies to include:

- Regular inspection of bio-retention, wetland and pond sediment forebays.
- Sediment to be removed from:
 - bio-retention system forebays (bio-retention ponds and street bio-pods) when visible.
 - sedimentation basins when at 50% of capacity.
- Regular inspection of swales with prompt removal of sediment when observed.
- Sediment that passes through forebays and is deposited within the:
 - bio-retention systems and constructed wetlands is to be removed when observed.
 - \circ pond is to be removed when it reduces the pond depth by 20%.
- Manage weed cover at no greater than 5%, and
- Manage planting associations for ongoing seeding and self perpetuation thereby increasingly minimising opportunities for weed colonisation.

<u>REASON</u>: To ensure landscape works are monitored and maintained.

51. <u>Road Naming</u>

Submission to Council for approval of street names for the proposed subdivision roads, with the names as approved to be indicated on the subdivision survey plan and provided on road name plates to be installed at the road intersections.

<u>NOTE:</u> Council has a list of approved names for subdivision roads which can be obtained by contacting Council's Sustainability and Better Living section. Any other names will require a written submission to be lodged with Council detailing the origin of the name and the reasons for selection. Proposed names must also comply with the document *Guidelines for Road Naming* prepared by the Geographical Names Board.

<u>**REASON:**</u> To provide street addressing. (41.25)

52. Bushfire Management

The following conditions for bushfire management are imposed:

- (a) A temporary 100m wide APZ shall be provided and maintained along the eastern, western and southern sides of the subdivision by the applicant, with accumulated combustible material to be removed and the maximum height of grass kept at 150 mm during any declared "Bushfire Prone Period".
- (b) The emergency access track from Streets 2 & 3 to Old Cooma Road shall be maintained in a trafficable condition at all times by the applicant until such time as a suitable alternative public road access is provided.

<u>REASON:</u> To ensure compliance with the recommendations of the applicant's Bushfire Management Report. (50.01)

- 53. Public Transport Planning
 - (a) Prior to the issue of a Subdivision Certificate for Stages 2-5 or any part thereof, of the development, the applicant is to submit evidence of consultation with NSW Transport regarding the provision of public transport services to service the development.
 - (b) Preparation of a *'Travel Access Guide'* (TAG) to be provided to all new residents to inform them of their transport options.

<u>**REASON**</u>: To satisfy the requirements of NSW Transport.

54. Easements and Restrictions

Pursuant to Section 88B of the Conveyancing Act 1919 easements and restrictions as to use shall be created to achieve the following purposes:

- easements to drain water, including inter-allotment drainage;
- easements to drain sewer;
- easements for water supply;
- easements for irrigation water supply
- easements which Council may require to provide or maintain other services.

All easements specified above and contained in the subdivision must benefit Council as well as particular lots.

<u>**REASON</u>**: To ensure public utility services, access and restrictions are legalised over the land. (39.01)</u>

55. Dedication of Drainage Reserves

Dedication to Council, free of cost on the survey plans, all drainage reserves and sewerage pump station sites.

<u>**REASON</u>**: To permit Council to adequately manage drainage and utility services. (39.03)</u>

56. Dedication of Subdivision Roads

The subdivision roads for each subdivision stage are to be dedicated as public roads on the subdivision linen plan. Each subdivision stage must provide dedicated public road access to all lots within the subdivision stage.

<u>**REASON:**</u> To provide legal access to all lots within the subdivision. (41.26)

ADVISORY MATTERS

1. <u>CPTED Issues Raised by the NSW Police</u>

The referral to the NSW Police raised several issues in relation to safe design of laneways and pathways within this and future subdivisions within Neighbourhood 1A. These comments are provided in Attachment B to this consent.

Prior to considering subdivision of the future development lots in Stage 3 of this consent it is recommended that consultation between the applicant, Police Liaison and Council officers take place to review CPTED principles in the design of laneways and footways.

2. Disability Discrimination Act

The applicant's attention is drawn to the provision of the *Disability Discrimination Act 1992* which creates an offence for discriminating against any person in relation to access facilities, employment and other matters. The applicant is advised to investigate any liability that may apply under the *Act*. (43.03)

3. Shared Trenching

Queanbeyan City Council promotes the provision of services via the use of shared trenching to enable rationalisation of trenching and construction practices. (43.05)

4. Definitions

Principal Certifying Authority (PCA) - is the person responsible for ensuring compliance with a construction certificate by carrying out inspections under the Environmental Planning and Assessment Act, 1979.

Construction Certificate (subdivision) – a certificate to the effect that work completed to approved plans for civil engineering works will comply with Council's adopted specifications, standards & guidelines.

Subdivision Certificate – a certificate that authorises registration of a plan of subdivision under Division 3 of Part 23 of the *Conveyancing Act 1919*. (44.01)

5. Protection of the Environment

The development is to be operated in accordance with the provisions of the *Protection of the Environment Operations Act 1997* as it applies to issues of air quality, noise generation, water and wastewater quality.

6. Noise Control

Use of the premises/services/equipment/ancillary fittings shall not give rise to an "offensive noise" as defined under the provisions of the *Protection of the Environment Operations Act 1997.*

7. WorkCover Requirements

The subdivision shall be constructed in accordance with the requirements of the WorkCover Authority.

8. <u>Wastewater Management Advice</u>

All work carried out in connection with this approval must comply with any applicable standard established by the *Local Government (Approvals) Regulation 1993*, the *Local Government (Water, Sewerage and Drainage)* Regulation 1993, or by or under the *Act*.

9. Garbage Servicing

Garbage servicing to all lots shall be kerbside except for the following lots where service will be provided in the rear lane -

- Lots 609-616 inclusive;
- Lots 648-655 inclusive
- Lots 1207-1210 inclusive



Attachment A – Revised Plan Showing Excluded Lots

Attachment B – NSW Police CPTED Comments

The following is a summary of comments made by NSW Police as part of their CPTED assessment of the application.

- 1. Consideration should be given to pathways which lead from a main road between homes to a rear lane way being aligned to provide clear line of site to maximise opportunities for surveillance. Shrubs at the end of pathways are discouraged to minimise opportunities for concealment. Pathways should be constructed and landscaped to have 3-5 metres of clear space either side with vegetation stepped back in height to maximise sight lines.
- 2. Lane ways with continuous garages along the rear which are detached from houses provide limited natural supervision of the rear fence line and lane way. In addition there is no effective supervision or guardianship of laneways. Studio apartments with windows overlooking offset lane ways are encouraged to maximise surveillance. Other options to improve surveillance include mixing up house design and vehicle entry points which introduce a variety of activities and connection with main roads and lane ways.
- 3. It has been shown that a grid layout for road and lane ways correlates with social surveillance, community bonds and the reduction of potential crimes and robberies.
- 4. Materials used for fence lines, garages and other structures along pathways and rear lanes should be constructed from graffiti resistant materials. A maintenance policy should be incorporated into the maintenance plan for the development. Research has shown that the most effective strategy for reducing graffiti attacks is the quick removal of such material, generally within a 48 hours period.
- 5. A safety convention for landscaping is that lower tree limbs should be above average head height and shrubs should not provide easy concealment (i.e. keep under 700mm high).
- 6. A lighting maintenance policy needs to be established for the development in relation to the use of lighting in pathways and rear lane ways.

Road Type ⁽¹⁸⁾	Maximum Traffic Volume (vpd) ⁽¹⁾	Maximum Speed ⁽²⁾ (km/h)	Minimum Carriageway Width (m) ⁽³⁾	Minimum Verge Width (m) ⁽⁶⁾	Kerbing ^{(4) (23)}	Parking Provisions Within Road Reserve ⁽²⁴⁾	Footpath Requirement ⁽¹⁷⁾	Bicycle Path Requirement ⁽¹⁷⁾
Local Sub- Arterial Road	6,000	50 ⁽¹¹⁾	2 x 7.1	5.0	Barrier	Parking only permitted on carriageway where indented bays are provided ⁽¹²⁾	1.5m wide footpath both sides	2 x 1.5m wide bicyc lanes marked on carriageway ⁽¹³⁾
Collector Street 1 (ST 1)	3,000	50 ⁽⁸⁾	10.5 (10)	5.0 ⁽¹⁴⁾	Barrier with VKCs at driveway locations	As above	1.5m wide footpath both sides	No
								1m gap in protubera required for cyclists
Local Street 2 – (ST 2)	2,000	40	9.7	5.0	As above	Within carriageway	1.5m wide footpath on one verge only ⁽⁷⁾	Nil
Local Street 3 (ST 3)	2,000	40	7.5	1 x 5.0	Barrier with VKCs at driveway locations	As above	As above	Nil
Local Street Boulevard (ST 4)	3,000	40	2 x 5.5 (with central median)	5.0	Barrier with VKCs at driveway locations on property side. Flush kerb or roll form on median side	As above	1.5m wide footpath both sides	Nil
Open Space Drive 1 (DR 1)	1,000	40	7.5 ⁽⁵⁾	1 x 5.0 1 x 2.5 1 x 4.5	Barrier with VKCs at driveway locations on property side. Flush kerb or roll form on reserve side	As above	1.5m wide footpath on the verge on the lot side of the street	Nil
Open Space	500	25	6.0	1 x 2.5	As above	As above	1.5m wide footpath	Nil

Attachment C - SCHEDULE 4 – GOOGONG STAGE 1 ROAD STANDARDS

Drive 2							on the verge on the			
(DR 2)							lot side of the street			
Source: 2011)	e: Amended from Queanbeyan City Council Development Design Specification D1 – Geometric Road Design – Googong (Version 1, June									

NOTES:

- (1) For single dwelling allotments apply traffic generation rate of 10 vehicles per day (vpd)/allotment (equivalent to approximately one vehicle per hour (vph) in the peak hour) unless a lower rate can be demonstrated. Lower rates can be applied to multi-unit dwellings based on rates provided in the RTA *Guide to Traffic Generating Developments*.
- (2) See **Design Speed** and **Horizontal Curves and Tangent Lengths** on designing for specific operating speeds.
- (3) Widening required at bends to allow for wider vehicle paths (using AUSTROADS AP-G34 Design vehicles and turning path templates).
- (4) Where kerbing is not required a flush pavement edge treatment can be used. Maximum carriageway widths required if barrier kerbing used.
- (5) Carriageway width may be reduced where parking is provided by indented parallel bays in the verge
- (6) Additional width may be required to provide for pedestrians, services, drainage, landscape and preservation of existing trees. Add additional width on one side for future widening of carriageway to 5.0 m if required. For two lane carriageway design, no provision for widening required. Where the verge is adjacent to open space the width of the verge may be reduced to 2.5 m.
- (7) One footpath on one side of the street to be constructed initially with provision to construct a second footpath if required in the future.
- (8) Reduced speeds are required at designated pedestrian/bicycle crossing. A speed of 20 km/h is desirable, achieved by the road design principles outlined in the source document.
- (9) Not applicable
- (10) Where the road forms part of the on road bicycle network, a bicycle lane is required adjacent the kerb.
- (11) Speed on local sub-arterial road not to exceed legal limit.
- (12) If parking is allowed, it is to be provided by widening the verge and constructing parking spaces as an extension of the road pavement.
- (13) Required only if part of a pedestrian/bicycle network.
- (14) Provide adequate road reserve width for widening of carriageway for future bus route if required.
- (15) Not applicable.
- (16) Where services are to be provided in the verge, the verge must be widened to accommodate the service in the road reserve.
- (17) Notwithstanding the requirements specified for a road type, roads forming part of the major pedestrian network will require a 2.0 m wide footpath on one side of the street. The proposed path network for Googong is detailed in the Googong DCP.
- (18) A Level of Service C must be provided in all streets, which may require road types and/or lane widths to be adjusted to accommodate the traffic volumes derived during traffic modelling of a subdivision release.
- (19) Not applicable.
- (20) Not applicable.
- (21) Not applicable.
- (22) Not applicable.
- (23) Pram crossings must be provided in the kerb at path crossing locations in accordance with ACT TAMS standard drawing DS3-02.
- (24) Parallel parking is the preferred method of on-street parking in public roads. Angle parking is generally not supported by Council in public roads and is subject to approval by the Local Traffic Committee. Use should be limited to streets with traffic volumes <2,000 vpd. For traffic volumes >500 vpd an auxiliary lane should be provided between the travel lane and the angle parking spaces.

* Many elements are inter-related. Therefore variations from any particular recommended characteristic may require changes to others. (Derived from AMCORD)