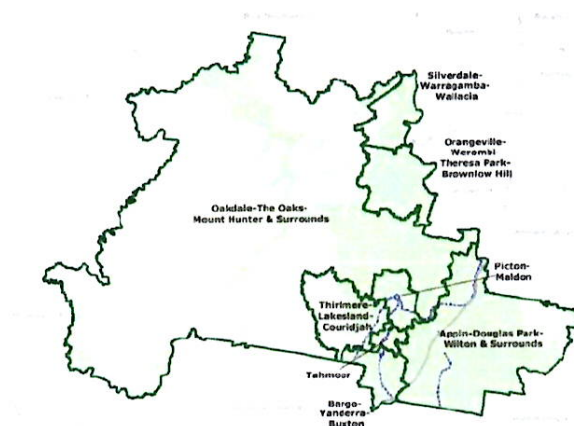


Picton Tahmoor Thirlmere New Urban Lands



Infrastructure Investigations

Prepared for Wollondilly Shire Council



Land Area 2,556.65 km² | 255,665 hectares Density 0.14 people per hectare (2001)

Source: Wollondilly Shire Council

January 2007

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Date: 10 January 2007

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1 Executive Summary

The Wollondilly Shire is located at the south western fringe of the Sydney metropolitan area and includes thirty three (33) townships and rural localities, including Picton, Tahmoor and Thirlmere. Uniquely situated, Wollondilly Shire lies in proximity to the cities of Sydney and Canberra and the beaches of Wollongong. It boasts the advantage of the rural character of its location, and is also able to offer a wide range of housing options including rural residential living, mid-range and executive homes, and newly established housing estates. The suburbs of Wollondilly are designed to encourage community belonging and identity. The towns of Picton and Tahmoor are serviced in facilities such as public, private, primary and secondary education; a number of national parks and sporting and recreational outlets; commercial and retail facilities; industry; road and rail links and health facilities.

It can therefore be expected that the location and opportunities offered by the Wollondilly Shire make it capable of accommodating expansion for residential and business purposes. It is no surprise then that the Department of Planning formulated a projected population increase of 40.2% (15,460) for the Shire between 2001 and 2031 (DIPNR Population Projections: 2001-2031). In response to the PTT Urban Lands Strategy, Wollondilly Shire Council (the "Council") has received a number of rezoning applications within the PTT locality. This report relates to these proposed rezonings and release of land for residential purposes in the Picton, Tahmoor and Thirlmere areas. It is anticipated that this rezoning and release of land will meet the future housing needs for the changing community and offer adequate infrastructure to support the increased populations in these areas.

Aims of this report:

This report has been prepared for Wollondilly Council for the purpose of investigating the need for expanded or additional infrastructure and any potential need for an infrastructure levy associated with the additional demands of the potential expanded population associated with the rezoning of six (6) new urban precincts in the Picton Tahmoor Thirlmere (PTT) localities.

In 1997 Council adopted the PTT Strategy. There were a number of documents that followed the PTT Strategy and contributed to the definition of the future of the Wollondilly Shire. These documents include the draft Local Environmental Study (LES) for PTT prepared by GHD and exhibited in 2001-2002; the PTT Masterplan prepared by Humphrey and Associates in 2002; the PTT Urban Area Implementation Strategy and the Wollondilly Vision 2025, which was prepared in 2003. The PTT Urban Masterplan identifies some 1392 additional lots in seven (7) new urban area precincts of the PTT localities that would be suitable for accommodating residential lot sizes, subject to the upgrade of the Picton Regional Sewerage Scheme. These include land located at West Picton, North Thirlmere, East Thirlmere, South Thirlmere, South West Tahmoor, Macquarie Place and East Tahmoor.

As a result of this anticipated direction for the Wollondilly Shire, in late 2005 and 2006 rezoning applications were submitted to Council for six (6) of the new urban land precincts (or part thereof). Paramount to the rezoning proposal is the need for Sydney Water to modify its current approvals/licences to allow the Picton Regional Sewerage Scheme to accept and treat sewerage from future urban areas.

This infrastructure investigation report has been prepared for Wollondilly Council as the initial stage of investigations into the feasibility of rezoning the six (6) precincts in the PTT locality.

Rezoning Applications:

The six (6) rezoning applications received by Council relate to six (6) of the seven (7) new urban land precincts, which were initially identified in the PTT Masterplan and are as follows:

1. West Picton (Rumker Street);
2. East Tahmoor (includes Progress Street, Greenacre Drive, Tahmoor Road, Myrtle Creek Road, Cross Street, River Road);
3. West Tahmoor (Macquarie Place precinct)
4. South Tahmoor (Bronzewing Street);
5. East Thirlmere (Marion Estate);
6. South Thirlmere (Antill Street);

Council has not yet received the rezoning application for the North Thirlmere precinct and the application received for West Picton relates only to the southern portion of the new urban land originally identified in the Masterplan. The rezoning applications relate to a total of 130.7 hectares of land, with a potential lot yield of 1,265 – 1,350 based on a lot size of approximately 700m² – 900m².

Statutory Framework

The rezoning applications have been reviewed and placed within the context of existing statutory framework, including the Metropolitan Strategy – City of Cities; Section 117 (2) Ministerial Directions; Wollondilly LEP 1991; PTT Urban Area Implementation Strategy and the Wollondilly Vision 2025.

Population Projections

In 2001 the Wollondilly Shire had a population of 36,610 persons, with the Picton Tahmoor Thirlmere area having a total population of 9954. Based on an average growth rate of 2.1% and utilising a medium occupancy scenario of 2.7 persons per household the following growth trends are estimated for the years 2006 to 2012 (Table 1A):

Table 1A: Estimated Growth Trends PTT 2006-2012

	Expected Population Increase	Expected dwelling demand	Average Increase in dwellings per annum
Picton	791	293	27-30
Tahmoor	1058	392	36-40
Thirlmere	706	261	24-26
PTT Total	2556	946	86-95

Department of Planning Consultation

As discussed in section 6, Council liaised with the Department of Planning following preparation of the earlier PTT strategies. The most recent advice from the Department indicates that only one Local Environmental Study would be accepted, which incorporated all seven (as then proposed) rezonings. In addition, Council is required to demonstrate compliance with the Sydney Metropolitan Strategy City of Cities, particularly having regard to accommodating population growth and satisfying Sustainability Criteria. As this report demonstrates in Section 10, the proposed PTT rezonings are consistent with the Metropolitan Strategy.

Government Agency Consultation

Council's brief required further discussion with government agencies, which Council commenced early in 2006. Accordingly, these agencies were contacted for further clarification of their infrastructure requirements associated with the PTT New Urban Lands. The outcome of the consultation is discussed in Section 7.

Existing Infrastructure

Following from the government agency consultation, a further analysis of the existing and required future infrastructure is contained in Section 8.

Funding Mechanisms

Methods by which to fund the required future infrastructure have been considered in Section 9. Having regard to the 2005 Environmental Planning and Assessment Act, 1979 amendments to infrastructure funding, it is recommended a combination of funding mechanisms (developer capital works payments, section 94 contributions and voluntary planning agreements) be pursued.

Implementation

The Department of Planning has advised that rezoning applications will not be considered unless they satisfy the Sustainability Criteria identified in the Metropolitan Strategy. These criteria relate to existing planning policies, environmental constraints, managing population growth, and ensuring access to transport and employment lands. Section 10 demonstrates that the proposed PTT rezonings are

consistent with the Sustainability Criteria identified in the plan. This section also contains recommendations regarding preparation of the Local Environmental Study (LES) and draft Local Environmental Plan (draft LEP), together with mechanisms for funding of the required planning investigations.

Recommendations

Government agencies, including Sydney Water have indicated an ability to service the PTT new urban lands, subject to some level of upgrading. Sydney Water has indicated a capacity to service all lots, should the current service boundary be extended following the preparation of an REF and the obtaining of Ministerial approval. The timing of the Stage 1 expansion of the Picton STP boundaries, is likely to coincide with Council's anticipated timing for the release of the PTT new urban lands.

Generally, the remaining government agencies did not provide a preference for staging or suggest a desired maximum annual allotment release. The method by which land release could be slowed or otherwise restricted, once rezoned, is questionable. Therefore, the Infrastructure Investigations reveal that there is no immediate need for staging of the six (6) precincts, with market forces to be the determining factor in terms of land releases. This will allow for the more efficient production of one Local Environmental Study and draft Local Environmental Plan.

This section of the report also details the recommends funding arrangements which include payments by the developers for major capital works at the development application stage, payment of contributions for local facilities under the *Wollondilly Development Contributions Plan 2005*, together with Local and State Voluntary Planning Agreements.

2 Aims of this Report

2.1 Study Background

In 1997 Wollondilly Council adopted the Picton Tahmoor Thirlmere (PTT) Strategy which was prepared as a strategic guide associated with future growth within the three townships. The exhibition of the draft Local Environmental Study for Picton Tahmoor and Thirlmere (GHD) followed in 2001-2002, with this document examining environmental and infrastructure constraints with the PTT area and making recommendations with regards to future urban and rural urban fringe areas.

In 2002 the PTT Masterplan was prepared for Council by Humphrey and Edwards Architects, with exhibition of this plan occurring in 2002 - 2003. The PTT Masterplan provided a visual representation of future development within the PTT area, with seven (7) new urban precincts identified. The seven (7) precincts identified in the Masterplan comprised a total land area of approximately 157.64 hectares and are located at West Picton, North Thirlmere, East Thirlmere, South Thirlmere, South West Tahmoor, Macquarie Place and East Tahmoor.

Following exhibition of the Masterplan, an Implementation Strategy was prepared as an alternative document that would facilitate the planned implementation of the Masterplan recommendations and the release of the new urban precincts. This change in direction from a masterplanning approach resulted in the preparation of the PTT Urban Area Implementation Strategy, which provides themes for future development and recognises opportunities for enhancement of urban areas and public spaces.

The future of the Wollondilly Shire was further defined in 2003 with the adoption of the Wollondilly Vision 2025 (Wollondilly Shire Council), which describes the future local identity and presents strategies for each of the towns within the Wollondilly Shire, including Picton, Tahmoor and Thirlmere.

As a result of the increasing significance of urban expansion in the PTT area as indicated in the various recent strategies, in late 2005 and early 2006 rezoning applications were submitted for six (6) of the new urban land precincts (or part thereof). Council then initiated discussions with the Department of Planning regarding consideration of the rezoning applications, with correspondence from the Department of Planning dated 6 January 2006 confirming:

"The department advises of the NSW government's intention to ensure that all new land releases are approved subject to meeting Sustainability Criteria and the application of an appropriate regional infrastructure contribution. This will complement the arrangements the Government has put in place for the bulk of all new metropolitan land releases in the North West and South West Growth Centres".

2.2 Study Brief

Following the advice from the Department of Planning dated 6 January 2006 Council sought to obtain information from relevant government departments and agencies regarding infrastructure requirements associated the rezoning of the six (6) new urban land precincts. This included a meeting with government agencies which was held on 23 March 2006. Following Council's initial consultations, TCG Planning was engaged to further consult with government agencies regarding potential infrastructure and funding mechanisms for the proposed PTT new urban lands.

Council's brief of September 2006 requires that the Infrastructure Investigations specifically address the following:

- a) *Extract and document the responses from the government departments and agencies to determine whether new, upgraded, expanded and/or increased works, assets and/or services shall be required as a direct result of the creation of new urban land in the PTT area.*
- b) *Liaise with Council and the Department of Planning to determine whether the responses gained from (i) above will require the creation of an Infrastructure Levy and document the outcomes.*
- c) *Undertake a preliminary review of the rezoning applications lodged with Council in light of (i) to (ii) above.*
- d) *Use the information gained from the background material and from (i) and (ii) and (iii) above to evaluate the potential rezoning of PTT new urban lands:*
 - o *in accordance with the Sustainability Criteria of the Sydney Metropolitan Strategy and;*
 - o *make informed comments on the practical provisions and any requirements for staging and the release of new urban land.*

Hence, this infrastructure investigation report has been prepared for Wollondilly Shire Council as the initial stage of investigations into the feasibility of rezoning six (6) new urban precincts in the Picton Tahmoor Thirlmere (PTT) locality. The land has been identified as "new urban land" in the PTT Urban Lands Implementation Strategy. In accordance with the Sustainability Criteria of the Sydney Metropolitan Strategy, Council must investigate the need for expanded or additional infrastructure and any potential need for an infrastructure levy associated with the additional demands of the expanded population. The outcomes of the investigations will also provide further information on the need for staging of the release of the six precincts.

Following the completion of investigations as detailed in Council's brief, a report will be prepared for an Ordinary meeting of Council seeking a resolution in accordance with Section 54 to the Environmental Planning and Assessment Act, 1979 on whether to proceed with the rezoning applications lodged for new urban land in the PTT locality. Following consideration of this report a submission to the Minister for Planning may be prepared in accordance with Section 54(4) of the Environmental Planning and Assessment Act, 1979 and Clause 9 of the Environmental Planning and Assessment Regulation, 2000.

3 Rezoning Applications

Wollondilly Council is in receipt of six (6) rezoning applications for proposed new urban lands within the Picton, Tahmoor and Thirlmere locality, as listed below.

1. West Picton (Rumker Street);
2. East Tahmoor (includes Progress Street, Greenacre Drive, Tahmoor Road, Myrtle Creek Road, Cross Street, River Drive);
3. West Tahmoor (Macquarie Place precinct)
4. South Tahmoor (Bronzewing Street);
5. East Thirlmere (Marion Estate);
6. South Thirlmere (Antill Street);

The rezoning applications comprise six (6) of the seven new urban land precincts which were initially identified in the PTT Masterplan. Council has not received the rezoning application for the North Thirlmere precinct. Further, the rezoning application for Rumker Street, Picton relates only to the southern portion of the land and not the land to the north of Connellan Street as originally identified in the Masterplan.

Table 1 provides a summary of the proposed rezoning applications with regards to the applicant, current zoning, site area and potential lot yield as proposed by each applicant. This table confirms that the rezoning applications relate to a total of 130.67 hectares of land, with a potential 1,265 – 1,350 lots based upon a lot size of approximately 700m² – 900m². The proposed lot yield is based upon concept plans for each of the subject precincts or indicative lot yields contained in the submitted rezoning reports. A copy of the submitted concept plans is contained in Appendix B. Section 3.1 to 3.7 of this report provides further information regarding each of the precincts which are included within the current rezoning proposal.

It is noted that in accordance with Council's Development Control Plan No. 50 – Residential Development – the minimum allowable allotment size within a sewerred residential area is 700m². However, the current rezoning schemes indicate an average density of 10 – 11 dwellings per hectare, with a suggested lot size of between 700m² and 900m². A limited number of integrated lots of approximately 450m² in area are also possible. It is acknowledged that should Council seek to provide a lot size of approximately 900m², that the number of lots achieved may be less than the anticipated lot yields of 10-11 lots per hectare, due to the quantity of land which may need to be allocated to roads, riparian areas, habitat corridors, shared pathways, buffers to adjoining uses and the like. Hence, the lot yields contained in Table 1 represent the maximum number of lots which are proposed within the precincts, with a lesser lot yield likely to be achieved, should a 900m² allotment size be provided. The estimated lot yields contained in Figure 1, which are based on lot sizes of 700-900m², are however considered appropriate for the purpose of determining infrastructure requirements.

Table 1: Summary of Rezoning Applications

Rezoning Project	Applicant	Current Land Use Zone	Proposed Land Use Zone	Total size rezoning area	No. Lots	Proposed Lot Size
West Picton (Rumker Street)	Hume Planning	Rural 1 (a2)	Residential	3.04ha	35-40	c. 900m ²
East Tahmoor (Progress, Greenacre, Tahmoor rd, myrtle creek, cross, river)	Hume Planning	Rural 1 (c1)(i)	Residential	72.3ha	750	c. 900m ²
West Tahmoor (Macquarie Place)	Manta Consulting	Rural 1 (c1)(i)	Residential	11.368 Ha	100-120	10 per Ha @ c. 700m ²
South Tahmoor (Bronzewing Street)	Corbett Court P/L	Rural 1 (c2)	Residential	c. 14.54 Ha	120	2 types; 'integrated' (450m ²) & 'traditional home' (size unknown) - c. 11 lots per Ha
East Thirlmere (Marion Estate)	Hume Planning	Rural 1 (c1)(i)	Residential	18.85ha	160-200	c. 900m ²
South Thirlmere (Antill Street)	Hume Planning and Site Plus	Rural 1 (c1)(i)	Residential	10.569ha	100-120	c. 900m ²
TOTAL				130.67 Ha	1,265 – 1,350	

Note: this lot yield is based on 900m² average as outlined in the rezoning applications, however it is acknowledged that the total number of allotments differs from the 900-1200 lot yield outlined by Council in the Strategy document.

FIGURE 3 – THIRLMERE MAP



3.6 South Thirlmere

The 'South Thirlmere Precinct' is bound by Antill, Bell, Dennis and Jarvis Streets, with Thirlmere Way traversing the precinct north to south (see aerial photo included as figure 3). The subject land has a combined area of 10.569Ha and includes eight individual allotments of varying size, which are identified as follows:

- Lots 88 - 92 DP751270;
- Lot 110 DP751270;
- Lot 138 DP751270; and
- Lot 139 DP751270.

The precinct forms an overall rectangular shape and directly abuts the existing Thirlmere village area. The subject land is currently zoned Rural 1(c1)(i) Small Holdings under the provisions of the Wollondilly LEP 1991). The majority of the properties within the precinct are used and occupied for rural residential purposes and contain dwellings and the associated outbuildings. In the past the land has been used for agricultural purposes of a less intensive nature, such as stock grazing.

The landowners seek to rezone this land to Residential 2(a), thereby allowing the pursuit of low-density urban residential development. It is proposed that should the rezoning be supported the land will be developed at a density of 10-11 dwellings per hectare. At this density the site could yield approximately 100-120 lots. The South Thirlmere precinct is predicted to offer various housing options including integrated and traditional housing development (see concept plan included in Appendix B).

The land is located within the suggested town boundary identified within Wollondilly Vision 2025. The total site is also identified as a new urban precinct within the PTT Masterplan.

4 Statutory Framework

4.1 Metropolitan Strategy – City of Cities

The Metropolitan Strategy, which was prepared by The Department of Planning in December 2005, is a broad strategic document that outlines a vision for Sydney over the next 25 years. The Metropolitan Strategy outlines various centres and corridors throughout Sydney in order to promote a greater range of activities near to one another to provide improved access to retail, office, health, education, leisure, entertainment and cultural facilities and community and personal services. There are 26 centres identified in the Metropolitan Strategy that cover a range of centre types, including Global Sydney; Regional Cities; Specialised Centres and Major Centres. These centres are outlined in Figure 4. From this figure it can be seen that the Wollondilly Shire is not specifically included in the South West Growth Centre and does not contain any ‘cities’ or ‘centres’ identified by the strategy. However, the area will benefit from increased facilities catered for in the Metropolitan Strategy.

The Sydney Metropolitan area includes over 10,000km² and is bordered by the Pacific Ocean to the east, the Blue Mountains to the west and includes the Central Coast in the north and the Wollondilly Shire in the south. Given this large and complex area, subregional planning has been proposed as an intermediate step in translating the Metropolitan Strategy into strategies for each grouping of local government areas. One such area is the Wollondilly Shire, which is included in the south west sub-region of Sydney. The Metropolitan Strategy outlines the projection of 100,000 new dwellings in the south west centre by the year 2031, and an additional 80,000 new jobs.

Council's Brief for the PTT New Urban Lands Infrastructure Investigations requires consideration of the PTT new urban lands in accordance with the Sustainability Criteria of the Sydney Metropolitan Strategy. This reflects the “Objectives and Actions” of the NSW Government's Metropolitan Strategy (City of Cities – A Plan for Sydney's Future, 2005) and advice from the Department of Planning which indicates that it is the “*NSW government's intention to ensure that all new land releases are approved subject to meeting Sustainability Criteria*”.

The objectives of the Metropolitan Strategy seek to improve state involvement in strategic place and projects, with action G2.3 specifically relating to Sydney's growth centres and greenfield release areas. This strategy/action confirms that sustainability criteria are to apply to proposed new greenfield land releases as shown in Table 6 of the strategy. Table 6 contains the threshold sustainability criteria for the listing of a site on the metropolitan development program. Whilst a number of the criteria will be further addressed at the Local Environmental Study stage, Section 10 of this report provides a discussion of the manner in which the proposed PTT new urban lands will satisfy the sustainability criteria with specific reference to infrastructure provision.

4.2 Section 117 Ministerial Directions

The NSW Government Department of Planning issued Ministerial Directions under Section 117 (2) of the Planning and Assessment Act 1979 on 30 September 2005 as a part of the NSW Planning reforms. In total there are 28 Directions that relate to various components of development and assessment. There are eleven directions for the rezoning proposals that have been received for the PTT localities, being directions 2, 5, 9, 11, 17, 18, 19, 20, 21, 22 and 26. Of particular relevance are Direction No. 21 – Residential Zones and Direction No. 22 – Rural Zones.

Direction No. 21 – Residential Zones applies when a council prepares a draft Local Environmental Plan that creates, removes or alters a Residential Zone boundary or a Residential Zone provision. This direction requires councils to ensure that draft LEPs contain a requirement that land is adequately serviced with water and sewerage before residential development is permitted. A draft LEP may be inconsistent with this direction only if Council can satisfy the Director-General that the rezoning is justified by an environmental study.

Direction No. 22 – Rural Zones applies when a council prepares a draft LEP that creates, removes or alters a Rural Zone boundary. This direction states that draft LEPs shall not rezone rural land for urban purposes, including residential, business or industrial purposes. A draft LEP may be inconsistent with this direction only if Council can satisfy the Director-General that the rezoning is justified by an environmental study.

These directions will allow the rural land contained in the rezoning applications to be rezoned for residential purposes only after an LES has been prepared and satisfies the Director-General that the rezoning is justified. When the land is rezoned, Council must prepare a draft LEP that will ensure that the land is adequately serviced with water and sewerage before residential development is permitted.

4.3 Wollondilly Local Environmental Plan 1991

Wollondilly Local Environmental Plan 1991, which was gazetted on 15 August 1991, applies to the whole of the land within the Shire of Wollondilly. Among other objectives, this plan aims to ensure that new development is undertaken in a manner that is sympathetic to and does not detract from the significance of heritage items and their settings, as well as the streetscapes and landscapes of Picton and Thirlmere and the distinctive character that they impart to the Shire of Wollondilly's environmental heritage.

In accordance with the Wollondilly LEP 1991, the lands that are the subject of the proposed rezonings are currently zoned Rural, including Rural 1 (a2) – Rural Zone or Rural 1 (c1)(i) – Rural Small Holdings Zone and Rural 1(c2) (as outlined in section 3 of this report). Rezoning of the lands to a

Residential 2(a) zone under Wollondilly LEP 1991, or comparable zone within the proposed comprehensive LEP, is proposed to allow for the future residential subdivision and development of the lands.

If land is rezoned, any future development on the sites will be subject to the provisions of Development Control Plan No. 50 (Residential Development) and any site-specific DCP which is adopted by Council.

4.4 PTT Urban Area Implementation Strategy

The PTT Urban Area Implementation Strategy was prepared following the exhibition of the Metropolitan Strategy – City of Cities. It is a guideline for Wollondilly Council and the community to achieve future changes that will improve the social, economic and environmental qualities of the PTT Urban area. Council demonstrated support for the PTT Urban Area Implementation Strategy through Resolution No. 226/2005 on 15 August 2005. The resolution determined that Council recognises the existence of interrelated themes for future residential development within the PTT Urban Area (as outlined in the Implementation Strategy) and that these themes are to be applied by a variety of processes including:

- Council's Strategic Framework;
- Local Environmental Studies (LES) for new urban precincts; and
- Continued development consistent with Wollondilly Vision 2025.

It is a document that encourages the rezoning and development of land within areas identified as “new urban precincts” (within which all of the rezoning applications are located) and was the catalyst for the landowners within the rezoning precincts to submit rezoning applications.

The PTT Urban Area Implementation Strategy includes various themes to guide future changes and major projects specific to the PTT Urban Area. These themes are listed below:

- **Theme 1:** Constraints to future development;
- **Theme 2:** Distinction between urban and non-urban lands;
- **Theme 3:** New urban precincts;
- **Theme 4:** Future urban investigation precincts;
- **Theme 5:** Medium density precincts and residential precincts;
- **Theme 6:** Consolidation and definition of commercial precincts and identification of potential future commercial land;
- **Theme 7:** Consolidation of civic precincts;
- **Theme 8:** Enhancement and development of Historic/Tourism precincts;

- **Theme 9:** *New roads and streets, open space, parks and recreation and other public facilities and public utilities;*
- **Theme 10:** *Town signature gateways, town nodes and street enhancement programs.*

The rezoning applications relate to land that is included within the boundaries of the “new urban precincts” as identified in the PTT Urban Area Implementation Strategy (see figure 5). Therefore themes 1, 2 and 3 as mentioned above are relevant to the rezoning proposals received by Council.

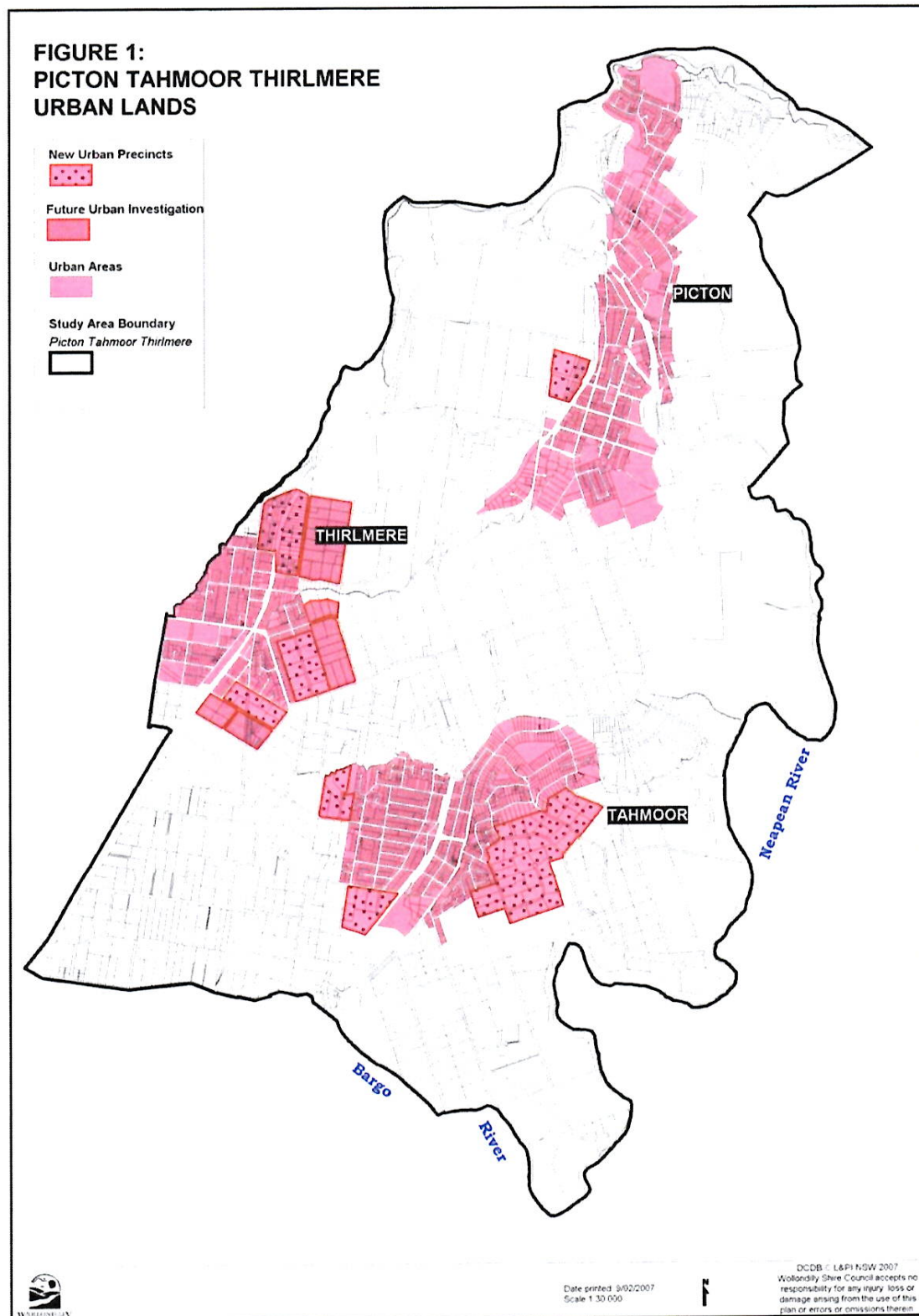
Theme 1 relates to the constraints to future development that are contained within the PTT study area. On a broad scale, the constraints to future development include management of traffic and transport; accessibility of services and facilities; accessibility of modes of transport and provision of services and facilities and integration with the existing infrastructure and land uses. This report forms an analysis of the existing infrastructure within the PTT area and outlines the infrastructure that will be required as a result of the population increase associated with the proposed rezoning applications. The constraints to future growth posed by infrastructure issues are investigated in section 8 of this report.

Theme 2 identifies a distinction that has been made between the urban and non-urban lands within the PTT Study area. Urban lands within the PTT area is defined as existing residential, commercial and industrial zoned land; land identified for “new urban precincts” and land nominated for “future urban investigation. These areas are indicated in figure 5. All six rezoning applications are located within the “new urban precincts” and are shown in figure 5 outlined in red.

Theme 3 relates to “new urban precincts”. New urban precincts are anticipated to provide new residential land and associated land uses including roads, footpaths and open space. Theme 3 in the PTT Urban Area Implementation Strategy encourages the landowners within the “new urban precincts” to participate in and contribute to rezoning applications for the area, working towards the preparation of a Local Environmental Study (LES) for each “new urban precinct”. The PTT Strategy requires that each new urban precinct be investigated as to their suitability and capacity for providing new urban land (the majority of which is expected to be for residential use). This investigation process is to take the form of an LES. The Department of Planning has since advised that rather than preparing an LES for each individual new urban precinct, they require one comprehensive LES, incorporating all the proposed land.

Five (5) of the rezoning applications relate to the exact land that has been identified by Council as “new urban precincts” (see figure 5). However, the West Picton application (Rumker Street) relates only to the southern portion of the land in Picton identified as “new urban precinct”.

PTT URBAN IMPLEMENTATION STRATEGY (FIGURE 5).



4.5 Wollondilly Vision 2025

The Wollondilly Vision 2025 document was adopted by Council on 17 November 2003 and was prepared to outline the local identity of the shire within a future context. The Vision document has the role of establishing the manner in which the community and Council envisage the future growth of the Wollondilly Shire. It was prepared following extensive community consultation and provides a shared view of the outcomes to be achieved in the shire over the next twenty (20) years. The Wollondilly Vision 2025 document contains nine (9) separate visions, which have been established in relation to the shire as a whole and incorporates all aspects of the Shire's future having regard to the lifestyle needs of the residents, through to the uniqueness of various towns. All nine visions relate to the consideration of rezoning of new urban lands.

4.5.1 Town Visions and Strategies:

The Wollondilly Vision 2025 also contains town visions and strategies, including a "*Vision and Strategy for Picton, Tahmoor and Thirlmere*". The Picton, Tahmoor and Thirlmere vision includes the following:

Integrated Communities:

A key objective is to ensure that the provision of an adequate level of community facilities and services to meet the changing needs of the community. District communities serving a population of 10,000 – 20,000 people generally identify the need for at least the following facilities and services:

- *a large multi-purpose neighbourhood or local community centre;*
- *a local shopping centre;*
- *a secondary school;*
- *a youth centre;*
- *out of hours school and vacation care;*
- *playing fields;*
- *pedestrian walkways and cycle ways.*

Picton:

Vision: To maintain the historic village and allow growth

Strategy: Generally, maintain existing town edge;
Increase density and diversity of use close to and in village centre;
Reinforce connective street pattern and protect views along streets to surrounding hills;
Create a rational connective structure to new subdivisions;
Provide new facilities and recreational corridors to encourage tourism.

Risk: Loss of individual villages in Picton, Tahmoor, Thirlmere;
Loss of bushland setting;
Loss of natural horizons.

Tahmoor:

Vision: Improved village centre with linear parks.

Strategy: Consolidate village centre – encourage shop top housing within expanded retail centre;
Encourage new retail /commercial away from highway – particularly edging the street to station;
Incorporate new linear park at a new light rail stop – improve existing linear park on the eastern edge of highway;
Create new rational connective subdivisions

Risk: Disfunctional village centre;
Loss of separation between Picton, Tahmoor and Thirlmere.

Thirlmere:

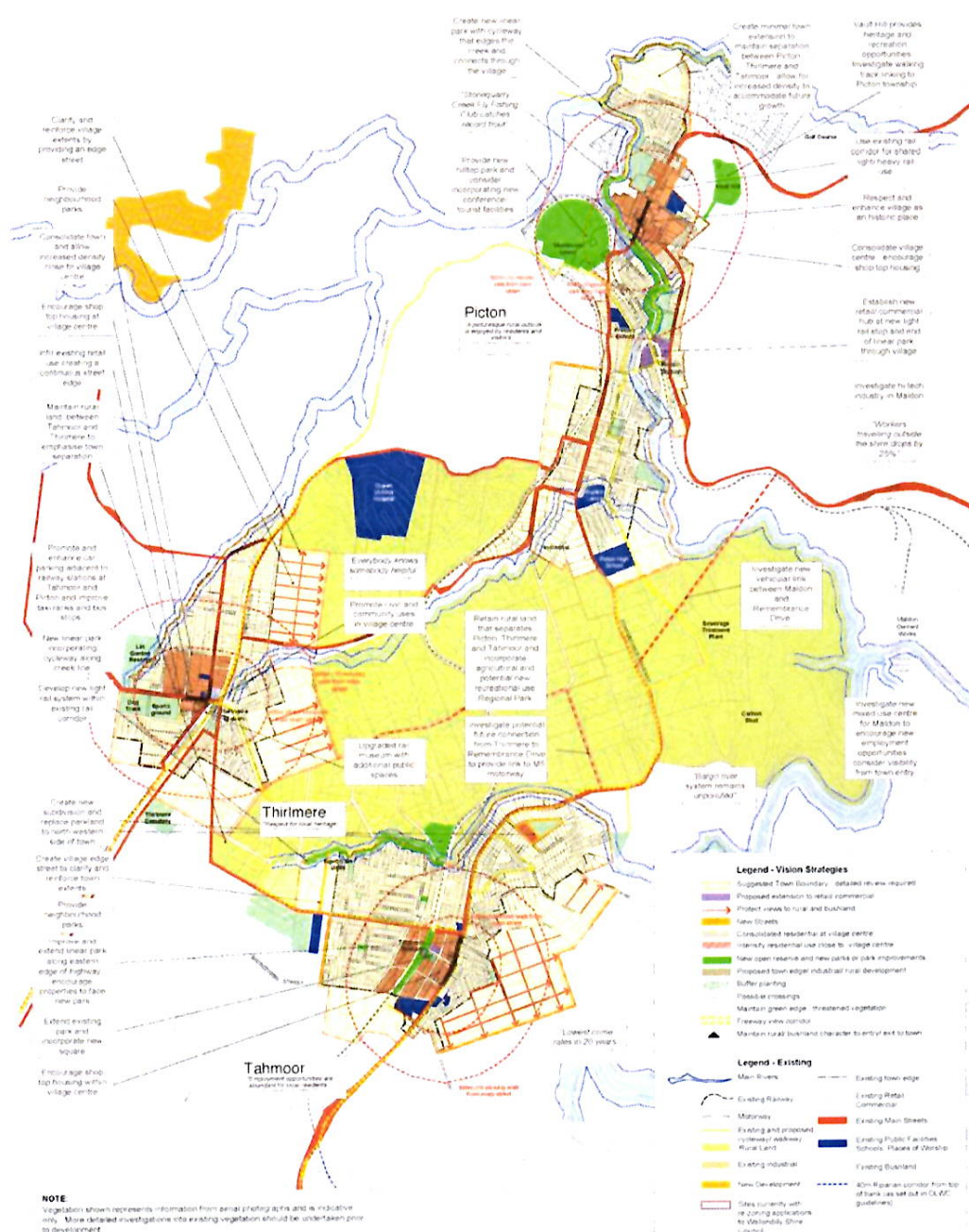
Vision: Enhance existing town character and structure

Strategy: Consolidate village centre;
Build on existing main street structure and create a more continuous retail strip;
Minimise village expansion by increasing density;
Create a rational connective structure to new subdivisions;
Clarify and reinforce village extents using edge streets and natural boundaries.

Risk: Loss of separation between Thirlmere, Picton and Tahmoor;
Loss of village character;
Loss of rural / bushland setting.

The land contained within the rezoning applications is within the identified “suggested town boundaries” (see figure 6) in the Picton, Tahmoor and Thirlmere localities. Residential development in these areas will not result in the loss of separation between the Picton, Tahmoor and Thirlmere villages, and will emphasise proximity to the existing PTT village centres. It is therefore believed that all six (6) rezoning applications will encourage the outcomes outlined in the PTT Vision document.

PTT vision map (figure 6)



Town Visions and Strategies for PICTON, TAHMOOR + THIRLMERE



DATE: January 2014
SCALE: 1:30,000 (H.A3)



WOLLONDILLY VISION 2025

5 Population Projections

5.1 Demographic Characteristics

In 2001 the Wollondilly Shire had a population of 36,610 persons, with the Picton Tahmoor Thirlmere area having a total population of 9954. The Picton Tahmoor Thirlmere Strategy, prepared by Wollondilly Shire Council in June 1998, indicated that between 1986 and 1991 the Shire experienced a growth rate of 4.3%, which was the second highest period of growth in the Sydney Metropolitan area for this timeframe. In comparison the growth rate for the Sydney Metropolitan area was 0.9%. Slowing of the growth rate has occurred since this time, with the 1991 to 2001 growth rate estimated at 2.1% per annum (Wollondilly Development Contributions Plan, Wollondilly Shire Council, 2005).

Within the towns of Picton Tahmoor and Thirlmere the overall population within the three towns has increased from 9226 in 1996 to 9954 in 2001. This population increase of 728 persons over this 5-year period equates to an average increase of 145 persons per year. Table 2A provides a breakdown of the 1996 and 2001 population and growth figures within the towns of Picton, Tahmoor and Thirlmere.

Table 2A: Picton Tahmoor Thirlmere Population Increase 1996 – 2001

Locality	*Population (1996 Census)	**Population (2001 Census)	***Estimated population (2004)	Total Numerical Increase (1996- 2001)	Average Annual Numerical Increase (1996- 2001)
Picton	2,989	3,081	3,413	92	18
Tahmoor	3,562	4,122	4,532	560	112
Thirlmere	2,675	2,751	2,941	76	15
PTT Total	9,226	9,954	10,886	728	145

Source: * Draft LES Picton, Tahmoor, Thirlmere (GHD, 2001)

** 2001 ABS Census of Population and Housing

*** Wollondilly Shire Development & Environment Division (from Development Contributions Plan, 2005)

Table 2A confirms that the greatest concentration of growth was in the Tahmoor locality, where an average population increase of 112 persons per year (1996-2001) was evident. Information from Council Development and Building records indicated that much of this growth was attributed to the introduction of the Sydney Regional Environmental Plan No.12, which facilitated the development of dual occupancies provided the minimum lot sizes were met. It is understood that the development of land for the purpose of dual occupancies was far greater in Tahmoor as the majority of dwellings in that locality were of older stock and were sited on larger blocks of land. Further to this, the Macquarie Grove Retirement Village contains approximately 32 dwellings, which would also have contributed to the higher than average annual population increases between 1996 and 2004. In comparison,

Thirlmere and Picton experienced an increase of only 15-18 persons per year respectively, with this growth primarily attributed to minor infill subdivisions.

Table 2B below provides comparative dwelling and population growth figures for the 2001 to 2006 period, with data provided from the NSW Department of Planning's Metropolitan Development Program. Table 2B confirms that growth remains relatively stable over the total PTT area, although a reduced growth rate in Tahmoor and increased growth rates in Picton and Thirlmere were evident. Thirlmere experienced the greatest numerical increase in the number of new dwellings between 2001 and 2006.

Table 2B: Picton Tahmoor Thirlmere Dwelling Increase 2001 – 2006

Established area	No. of new dwellings 2001-2006	Estimated Population Increase 2001-2006
Picton	104	281
Tahmoor	72	195
Thirlmere	110	297
Total PTT		773

Source: Metropolitan Development Program (NSW Dept of Planning, 2006)

To assess the impact of such population growth, coupled with growth within the proposed PTT new urban lands, an evaluation of occupancy rates has been undertaken, to determine the number of lots created. Information from the 2001 ABS Census figures confirms that the 9954 persons within the towns of Picton, Tahmoor and Thirlmere were contained within 3675 dwellings. This equates to an occupancy rate of 2.7 persons per dwelling as is shown in Table 3A below.

Table 3A: 2001 Picton Tahmoor Thirlmere Dwelling Occupancy

Locality	Population	No. Dwellings	Occupancy Rate (persons per dwelling)
Picton	3,081	1,178	2.6
Tahmoor	4,122	1,552	2.7
Thirlmere	2,751	945	2.9
PTT Total	9,954	3,675	2.7%

Ref: Wollondilly Shire Council: About Demographics from 2001 Census

5.2 Population Projections

The Department of Planning has advised that the proposed PTT new urban lands should contribute "*adequate land within the Shire to meet local needs*". This suggests that the Department would be unlikely to support a growth scenario that exceeds natural growth rates and contributes to broader metropolitan growth. To determine the likely number of lots that could be accommodated within the scope of existing growth rates, a projection of population and dwelling increase has been undertaken.

Tables 4 to 7 shows the projected population figures within Picton Tahmoor and Thirlmere based upon an annual growth rate of 2.1% per annum, which is equivalent to the population growth rate for the Shire between 1996 and 2001. This growth rate is also consistent with the 'medium' growth rate identified in Wollondilly Council's Development Contributions Plan, 2005, which is the document by which contributions for public amenities and services is levied. The Contributions Plan uses three annual average growth rate scenarios: 1.8%, 2.1% and 2.5% (low, medium and high scenarios). No definition of annual average growth is contained within the Contributions Plan, however it is understood this reflects net migration (population in and out of the Shire).

Table 7 shows the projected population figures for the combined PTT area, forecast to 2012, also utilising a 'medium' 2.1% annual average growth rate.

The tables also contain projections of dwelling numbers based upon three (3) occupancy scenarios. The occupancy rates are as follows:

- Low occupancy rate 2.5 persons per dwelling
- Medium occupancy rate 2.7 persons per dwelling
- High occupancy rate 3.0 persons per dwelling

The medium occupancy rate of 2.7 persons per dwelling appears to most accurately reflect the current occupancy rate within Wollondilly and is also comparable with the 2.75 occupancy rate utilised within Council's Development Contribution Plan (2005). A low and high occupancy rate has also been considered to provide a comparison of the impact that a varied occupancy rate would have on lot yield.

5.3 Projected Growth Levels to 2012 – Picton Tahmoor Thirlmere

To determine the demand for infrastructure in the Picton, Tahmoor and Thirlmere area, it is necessary to understand the likely future residential population based on past growth trends (excluding the proposed PTT rezoning population). Tables 4 - 7 have been prepared utilising an average growth rate of 2.1% per annum. Utilising a medium occupancy scenario of 2.7 persons per household the following growth trends are estimated within each suburb (Table 3B):

Table 3B: Estimated Growth Trends PTT 2006-2012

	Expected Population Increase	Expected dwelling demand	Average Increase in dwellings per annum
Picton	791	293	27-30
Tahmoor	1058	392	36-40
Thirlmere	706	261	24-26
PTT Total	2556	946	86-95

Hence, within Picton Tahmoor Thirlmere local growth levels to the period of 2012 are projected to result in an additional 86-95 dwellings per year. The proposed PTT new urban lands will primarily contribute towards this projected growth, with infill development also contributing to dwelling increases.