

# TRUGANINA SOUTH PRECINCT DEVELOPMENT CONTRIBUTIONS PLAN

AMENDED JULY 2017  
WCC FINAL EDIT





## **CONTENTS**

<b>1.0 INTRODUCTION.....</b>	<b>4</b>
<b>2.0 PURPOSES OF THIS DEVELOPMENT CONTRIBUTIONS PLAN (DCP) .....</b>	<b>6</b>
<b>PART A – DEVELOPMENT CONTRIBUTIONS .....</b>	<b>7</b>
<b>3.0 STRATEGIC CONTEXT AND PRINCIPLES.....</b>	<b>7</b>
3.1 INFRASTRUCTURE FINANCING IN WYNDHAM – WYNDHAM NORTH.....	7
3.2 APPLICATION AND APPORTIONMENT OF CONTRIBUTIONS.....	7
3.3 REVALUATIONS AND INDEXATION .....	8
3.3.1 LAND VALUES.....	8
3.3.2 ROADS AND RELATED COSTS.....	9
3.3.3 BUILDING COSTS.....	9
3.4 REVIEW AND RECORD KEEPING.....	9
3.5 TRANSITION TO REVALUATION AND INDEXATION UNDER THIS DCP .....	9
3.6 STATE DEVELOPMENT CONTRIBUTIONS .....	9
3.7 TRUGANINA SOUTH .....	10
3.8 COMPLIANCE WITH THE FOUNDATION PRINCIPLES FOR DC’S AND DCP’S .....	12
<b>4.0 METHODOLOGY FOR DEVELOPMENT CONTRIBUTIONS .....</b>	<b>12</b>
4.1 ARTERIAL ROAD AND MAJOR PATHWAY NETWORK .....	12
4.1.1 Road Construction Costs.....	12
4.1.2 Signalisation Costs .....	12
4.1.3 Road Standards.....	12
4.1.4 Land Acquisition Values.....	13
4.1.5 Arterial Road Intersections.....	13
4.1.6 Arterial Road Cost Summary .....	13
<b>COMMUNITY AND OTHER DEVELOPMENT INFRASTRUCTURE.....</b>	<b>15</b>
4.2 COMMUNITY INFRASTRUCTURE .....	15
4.2.1 Defining “Community Infrastructure” .....	15
4.2.2 Standards of Provision for Community Infrastructure .....	16
4.2.3 Costing Community Infrastructure .....	17
4.3 OTHER DEVELOPMENT INFRASTRUCTURE .....	18
4.3.1 Defining “Other Development Infrastructure” .....	18
4.3.2 Standards of Provision .....	18
4.3.3 Costing Other Development Infrastructure .....	19
4.4 OPEN SPACE CONTRIBUTION .....	20
4.5 NON-RESIDENTIAL USES & NON-SUBDIVIDED LAND .....	22
4.5.1 Non-Residential Development .....	22
4.5.2 Residential Uses that do not require Subdivision .....	23
4.6 DRAINAGE .....	24
<b>PART B – SUPPLEMENTARY INFRASTRUCTURE CONTRIBUTIONS FOR THE TRUGANINA SOUTH COMMUNITY .....</b>	<b>25</b>
<b>5.1 SUPPLEMENTARY CONTRIBUTIONS FOR TRUGANINA SOUTH .....</b>	<b>25</b>
5.1 FORSYTH ROAD WIDENING.....	25
5.2 COLLECTOR ROAD CROSSINGS .....	26
5.3 SHARED TRAIL NETWORK.....	27
5.4 GOLDEN SUN MOTH PROTECTION SITE – ROAD CROSSINGS & OFFSETS .....	27
5.5 PEDESTRIAN BRIDGES ACROSS DRAINAGE RESERVES.....	28
5.6 REVISED INTERSECTION COSTS .....	28
5.7 ACTIVE SPORTING RESERVE – LAND ACQUISITION .....	29
5.6 NEIGHBOURHOOD PARKS - BASIC DEVELOPMENT .....	29



<b>PART C – SEPARATE CONTRIBUTIONS FOR MARQUANDS ROAD .....</b>	<b>30</b>
<b>6.0 MARQUANDS ROAD .....</b>	<b>30</b>
6.1 PARTICIPATING AREA .....	30
6.3 COSTS FOR ROAD RECONSTRUCTION .....	30
6.4 CONTRIBUTIONS AND REIMBURSEMENT METHOD .....	30
<b>7.0 DEFINING “DEVELOPABLE” LAND .....</b>	<b>31</b>
<b>8.0 ADMINISTRATION OF THE DCP .....</b>	<b>31</b>
<b>9.0 TIMING OF INFRASTRUCTURE PROVISION .....</b>	<b>32</b>
<b>10.0 SUMMARY OF CONTRIBUTIONS .....</b>	<b>33</b>
10.1 DEVELOPMENT CONTRIBUTIONS (SUMMARY) .....	33
10.2 MARQUANDS ROAD CONTRIBUTIONS (DP05) .....	34
10.3 SUPPLEMENTARY INFRASTRUCTURE CONTRIBUTION (PSP) .....	34
10.3 OPEN SPACE REQUIREMENTS .....	36
<b>APPENDICES .....</b>	<b>42</b>

## **LIST OF FIGURES**

FIGURE 1: TRUGANINA SOUTH DEVELOPMENT CONTRIBUTIONS PLAN AREA .....	4
FIGURE 2: TRUGANINA SOUTH COMMUNITY PRECINCT URBAN STRUCTURE PLAN .....	10
FIGURE 3: WYNDHAM NORTH ROAD NETWORK, REVISED 2009 .....	13
FIGURE 4: MARQUANDS ROAD RECONSTRUCTION - DEVELOPMENT CONTRIBUTIONS PLAN AREA (DCPO5) .....	30
FIGURE 5: PROPERTY DETAILS – TRUGANINA SOUTH COMMUNITY AREA .....	37
FIGURE 6: CELL “C” DEVELOPMENT PLAN 2001 (STAGE 1) HIGHLIGHTING THE TRUGANINA SOUTH AREA (EASTERN HALF) .....	38
FIGURE 7: CELL “C” DEVELOPMENT PLAN 2001 (STAGE 1) HIGHLIGHTING THE TRUGANINA SOUTH AREA (THE EASTERN HALF) .....	39
FIGURE 8: FORSYTH ROAD – INDICATIVE CROSS-SECTION FOR 40 METRE CROSS-SECTION .....	40

## **APPENDICES**

APPENDIX A: 2007 DEVELOPMENT CONTRIBUTION CALCULATIONS FOR THE ARTERIAL ROAD NETWORK – NORTHERN GROWTH AREA .....	42
APPENDIX B: 2009REVISED DEVELOPMENT CONTRIBUTION CALCULATIONS FOR THE ARTERIAL ROAD NETWORK – NORTHERN GROWTH AREA .....	43
APPENDIX C: WYNDHAM NORTH – COMMUNITY INFRASTRUCTURE COSTINGS .....	45
APPENDIX D: TRUGANINA SOUTH – CULVERT & PEDESTRIAN BRIDGE CROSSINGS .....	53
APPENDIX E: GOLDEN SUN MOTH (GSM) PROTECTION SITE – COLLECTOR ROAD COSTINGS .....	59
APPENDIX F: GOLDEN SUN MOTH (GSM) PROTECTION SITE – OFFSETS .....	60
APPENDIX G: NEIGHBOURHOOD PARK – BASIC DEVELOPMENT COSTINGS .....	61
APPENDIX H – COMMUNITY CENTRE COSTING SHEET .....	63
APPENDIX I – COMPLIANCE WITH NEED, NEXUS, EQUITY AND ACCOUNTABILITY PRINCIPLES .....	64
APPENDIX J – SUMMARY OF TRUGANINA SOUTH SPECIFIC INFRASTRUCTURE COSTS .....	66
APPENDIX K – INTERSECTION WORKS – REVISED INTERSECTION COSTS .....	67
APPENDIX L – INTERSECTION COST SHEETS .....	69
APPENDIX M – SUMMARY OF INFRASTRUCTURE COSTS .....	75

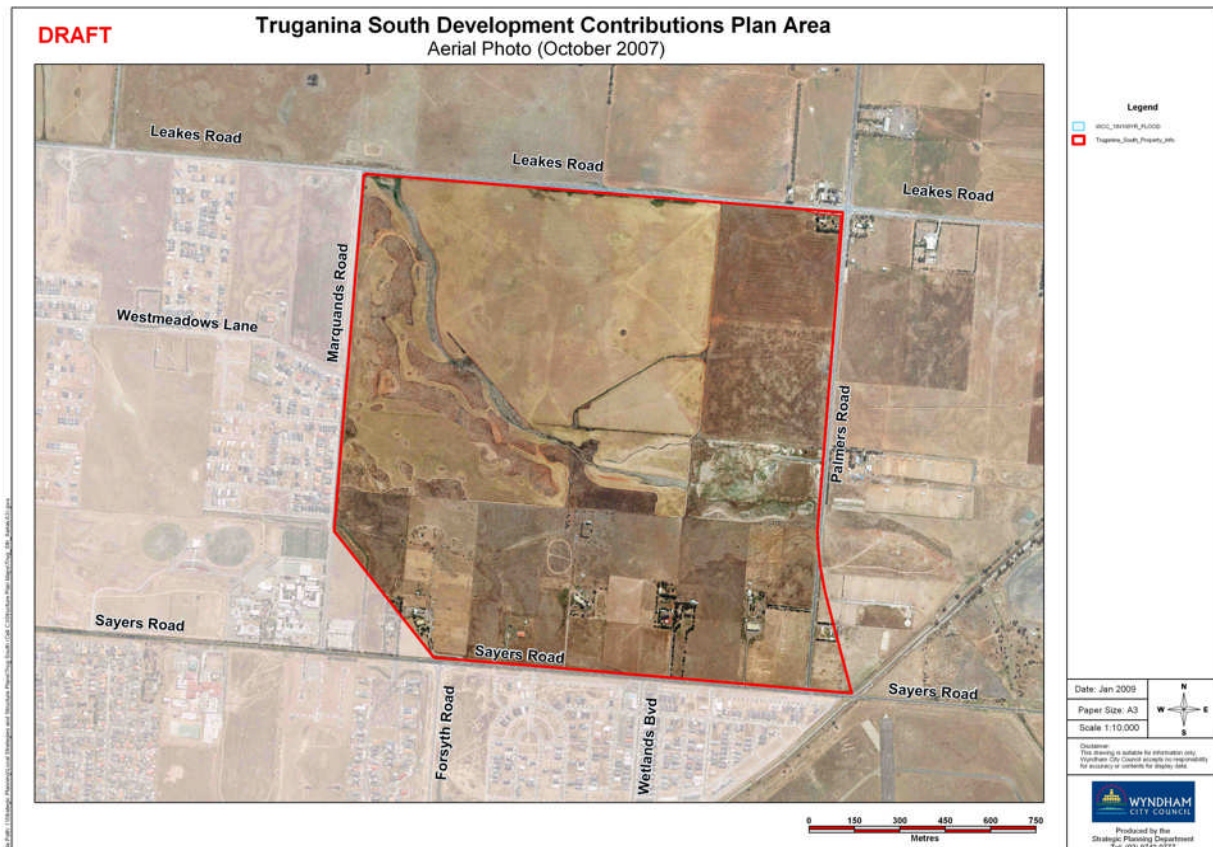






## 1.0 Introduction

The Truganina South Development Contributions Plan (DCP) applies to land in Truganina, in the City of Wyndham. The land included in the DCP is shown in **Figure 1**, below. Properties subject to the Truganina South Community DCP are identified in **Figure 5**, page 36.



**FIGURE 1: TRUGANINA SOUTH DEVELOPMENT CONTRIBUTIONS PLAN AREA**

There are three components to the DCP, as follows:

### PART A – DEVELOPMENT CONTRIBUTIONS

- A general DCP applies to the area of 250.25 hectares, which is bounded by Leakes Road to the north, Marquands Road to the west, Palmers Road to the east, including the future change in alignment to the east, and Sayers Road in the South. The DCP excludes the power substation and 7.08 hectares of residentially zoned land (R1Z) in the south-western corner of the Community.
- This area constitutes part of the Wyndham North Growth Front and requires contributions towards:
  - The arterial road and major pathway networks;
  - community infrastructure;
  - “other development” infrastructure; and,
  - open space contributions.



## **PART B – SUPPLEMENTARY CONTRIBUTIONS FOR THE TRUGANINA SOUTH COMMUNITY**

The Development Contributions Plan introduces seven items to supplement the standard contributions in Truganina South. The supplementary contributions are designed to provide funds to meet the costs of specific infrastructure upgrades for the Truganina South Community Precinct Structure Plan area, beyond those provided for in the Wyndham North Concept Plan.

These provide for:

1. A 40 metre road reservation width for Forsyth Road through the Community, in lieu of 32 metres;
2. The construction of four culverts for arterial and collector road crossings of Dohertys Creek and Cropleys Drain within the Community area;
3. Construction of shared trails along the major drainage channels through the community;
4. The construction of segments of the collector road network where these roads cross the conservation reserve, as well as associated native vegetation clearance offsets;
5. Land acquisition costs for the 8ha active sporting reserve in the centre of the community;
6. The costs of providing neighbourhood / local parks to a common cost and standard;
7. The costs of constructing three pedestrian bridges to connect the shared trail network across drainage reserves within the community.
8. Revised intersection costs, including splays.

## **PART C – SEPARATE CONTRIBUTION FOR MARQUANDS ROAD CONSTRUCTION**

A specific plan has been created for the reconstruction of Marquands Road north of the drainage channel. This is documented in the *Westmeadows Lane and Marquands Road Development Contributions Plan* (Wyndham City Council, 2008).



## 2.0 Purposes of this Development Contributions Plan (DCP)

### 2.1 *The General DCP*

New urban growth increases the need for a wide range of infrastructure. The attendant costs would place a heavy burden on the existing community if it had to meet them. Further, if infrastructure falls badly behind needs, new residents would face inadequate roads, sporting and recreation facilities and basic community facilities such as pre-schools.

The concept of development contributions was first introduced in growth areas in the 1980's and 90's. It is designed to ensure that:

- The infrastructure needs of new communities are defined as well as is practical,
- They are costed to sound, basic standards,
- The costs are equitably apportioned between developments whose future occupiers will generate the needs, and
- A transparent, effective system is created to collect contributions and ensure that they are expended on the types of infrastructure they are intended to fund, in the areas that will benefit from the contributions.

These principles, first set out by a forerunner of today's Victorian Civil and Administration Tribunal (VCAT), were foundations for new provisions for development contributions, included in the Planning and Environment Act in 1993.

As outlined below, Council first defined and costed the infrastructure needs of Wyndham North in 1996. The needs have been refined by several studies, especially on recreation and open space needs (1998 and 2004), community centres (2000 and 2006), libraries (2005) and community infrastructure, generally (2008 and 2009). The costs have since been updated and contributions by developers have begun to create the infrastructure they were designed to fund.

The general DCP provides for the Truganina South area to fund a share of the costs to deliver the above forms of infrastructure, commensurate with its share of the Wyndham North area. In fact, the contribution levels will not fully fund the defined infrastructure types. However, they will help ensure that reasonable levels of local infrastructure are provided as the community is established.

The Truganina South Community DCP area, as shown by **Figure 1**, page 4, occupies (about 13%) of the Wyndham North Growth Area.



## PART A – DEVELOPMENT CONTRIBUTIONS

### 3.0 Strategic Context and Principles

#### 3.1 Infrastructure Financing in Wyndham – Wyndham North

This plan has been guided by the State Planning Policy Framework, as well as Council's Municipal Strategic Statement and Local Planning Policy Framework. It has also been prepared in accordance with Sections 46H to 46Q of the *Planning and Environment Act 1987* and applies the principles of the State Government's *Development Contributions Guidelines* (2003).

The Wyndham Municipal Strategic Statement, *Wyndham's Urban Growth Framework* (Clause 21.03-2) and local policies of *Infrastructure Financing Policy* and *Open Space Policy* (Clauses 22.03 and 22.07) of the Wyndham Planning Scheme provide the broad strategic context for the development contributions plan.

The document, *A Policy Framework for Infrastructure Financing in the City of Wyndham* (1996) provides the basis upon which the rationale, methodology, need for infrastructure and apportionment are calculated in this Plan. The policy was prepared in 1996 and pre-dates the State Government's Review of Development Contributions, finalised in 2003.

For the purposes of calculating development contributions, Wyndham was divided into three growth fronts and concept plans prepared for each. These are broad, directional policy documents designed to meet needs, based on future residential growth for each of the growth fronts. Concept plans identify the infrastructure requirements for these large areas. Each growth front is anticipated to achieve a population in excess of 50,000 people upon completion.

The *Wyndham North Concept Plan* (April 1996) identifies costs and apportions specific local infrastructure required to be provided for the northern residential growth front of Wyndham. The growth front takes in the suburbs of Tarneit and Truganina.

Council later prepared detailed Development Plans for three neighbourhood cells - Cell A, Cell B and Cell C - within the Wyndham North growth front, on land to the east of Derrimut Road.

The infrastructure projects that flow from these plans, outlined in Section 5 of this DCP, all have the following characteristics:

- They are essential to the health, safety and well-being of the community, and;
- They will be used by a broad cross-section of the community.

#### 3.2 Application and Apportionment of Contributions

The Infrastructure Financing Policy and related Concept Plans apply a user-pays model based on that proposed by the State Government's *Development Contributions Guidelines*. However, the "small area" methodology proposed in those guidelines has not been used in attributing and apportioning the cost of infrastructure. Rather, for each of the three large growth fronts, the base level cost of the relevant infrastructure has been apportioned across all landholdings within those growth fronts.

In essence, the needs for arterial and sub-arterial roads, community and other "development" infrastructure are defined over the whole growth area, and costed. This cost is then divided by the net developable area of the Wyndham North growth front to arrive at road contributions, and by projected dwelling / lot numbers in the growth front for other forms of infrastructure.

This methodology is consistent with the Act, and conservative. For example, though growth front roads will be used by traffic from older areas, Wyndham North will impose somewhat greater demands on roads in established areas. The level of required contributions is therefore based on the needs of the whole Wyndham North growth



front. The costs are adjusted to allow for potential and likely contributions to construction costs by VicRoads and other State Agencies, where applicable. The net requirements are then apportioned to each property according to its net developable area.

While this approach tends to underestimate total costs, especially for the recreation and cultural facilities that largely constitute “community” and “other development” infrastructure, it avoids unrealistic definitions of exact locations and costs for infrastructure components that will clearly be required, but not necessarily for several years after a DCP is drafted.

A review of the existing Infrastructure Financing Policy was undertaken in 2002 and showed that the contributions being collected under the 1996 Policy were not providing sufficient funds for the intended works. Council has since endorsed a revised set of principles and an outline of the general scope and scale of revised contributions. As an interim step, the 2003 Interim Development Contributions Contribution was set for roads and major pathways, community and other infrastructure, as at the June Quarter 2003.

However, the 2003 Interim Development Contributions will not be sufficient to fund the full cost of all infrastructure it was designed to fund, partly due to net impacts beyond the defined Wyndham North growth area, rising construction costs, changes to the road network, better definition of needs, especially for community and recreation infrastructure, and increased construction. Substantial increases in land values since 2003 have been offset by ensuring that contribution and acquisition values are equal, where achievable.

The land values contained in the 2003 Interim Development Contributions have been reviewed and updated. In costing infrastructure projects to be funded by development contributions that involve land acquisition, a value of \$750,000 per ha has been set in the Truganina South DCP, and indexed in line with the CPI. See 3.3 re: ongoing updates to land values. Where land acquisition is required, the value to be allowed will also be set at \$750,000 per ha (as at March 2011) plus CPI indexation.

### **3.3 Revaluations and Indexation**

All valuations and costings in this DCP are at March 2010. All are to be updated to the date of each contribution as follows:

#### **3.3.1 Land Values**

Land values are:

- a. factored into contribution levels for each class of infrastructure in this DCP, where relevant; and
- b. the basis for all payments for land, in cash or kind.

Under this DCP, land values are to be the same when factored into:

- payment or allowances for land contributed

Land values are to be updated as follows:

- They are deemed to have been \$750,000 per hectare of gross developable land at March, 2011.
- They shall be indexed quarterly, via the Commonwealth Statistician's Consumer Price Index (All Groups) for Melbourne (CPI) until the next valuation review draft.
- The Council, as the Collection Agency, must commission revaluations by an independent valuer, (combined with a valuation undertaken or supervised by the Victorian Valuer General), at least every two years, and preferably at least each year. However when less than 3 landowners remain without agreements on the details of their properties' contributions, the Council may revert to valuations as needed.
- Between revaluations, all land costs and valuations are to be updated in accordance with the CPI.



### **3.3.2 Roads and Related Costs**

Road, car park, pathway and similar costs are to be indexed quarterly, from the March quarter, 2010, in line with the Commonwealth Statistician's Producer Price Index for General Construction (41) Victoria (Tables 15-16).

### **3.3.3 Building Costs**

Building Costs are to be indexed quarterly, from the March quarter, 2010, in line with the Commonwealth Statistician's Producer Price Index Australia, General Construction (41) Victoria (Table 15 and 16, output of the General Construction Industry Series 6427-0).

## **3.4 Review and Record Keeping**

This DCP will operate for 10 years, at which time it will be reviewed.

All transactions will be clearly identified in Council records and kept in accordance with the Local Government Act 1989.

## **3.5 Transition to Revaluation and Indexation under this DCP**

All historical and base level figures quoted are subject to indexation in line with the Commonwealth Statistician's Consumer Price Index (All Groups) for Melbourne (CPI) on a quarterly basis to the March quarter 2010, unless stated otherwise. However, from the March quarter 2010, all dollar values to be applied under this DCP will be updated in accordance with 3.3.

The Truganina South DCP will operate for a period of 10 years, at which time it will be reviewed. It is expected that most infrastructure projects in the current DCP will be rolled-out during this time.

All transactions will be clearly identified in Council records and kept in accordance with the *Local Government Act* 1989.

## **3.6 State Development Contributions**

The release of the State Government's *A Plan for Melbourne's Growth Areas* (DSE, 2005) flagged the introduction of development contributions for the provision of some State infrastructure in growth areas. The Growth Areas Infrastructure Charge (GAIC) came into effect on 1<sup>st</sup> July 2010. The legislation exempts areas that were inside the Urban Growth Boundary (UGB) before 2003. That applies to the entire Truganina South Precinct area.

While the State will continue to provide for most of the costs of State infrastructure, State development contributions may be used to support the provision of:

- transport (roads and public transport);
- environmental facilities (such as regional open space, trails and creek protection); and,
- State-supported community infrastructure (such as libraries, neighbourhood houses and major recreation facilities, to which partial contributions may be made).

Monies collected as State development contributions will generally fund different infrastructure from that funded by local Development Contributions Plans. Where there are potential overlaps, especially in the case of roads, Council's contributions are adjusted to defined components, where possible.

The State-initiated contributions for development contributions will remain separate from those levied by Council although they will be similarly applied through the *Planning and Environment Act 1987*.



### 3.7 Truganina South

The infrastructure projects contained in the Truganina South DCP relate to Truganina South's share of Wyndham North infrastructure needs, particularly the infrastructure items identified in the Truganina South Community Precinct Structure Plan (PSP). The PSP Map is shown in **Figure 2**, below.



**FIGURE 2: TRUGANINA SOUTH COMMUNITY PRECINCT URBAN STRUCTURE PLAN**

The *Truganina South Community Precinct Structure Plan (PSP)* provides the justification and general location for infrastructure relating to transport, community and recreation facilities and open space. The DCP area is also wholly contained within the Wyndham North Concept Plan area (See **Figure 6**, page 37) and occupies the eastern half of the former Cell C area, (See **Figure 7**, page 38).

The Truganina South Community DCP area is contiguous with the PSP. Concordant with the PSP, the power substation and a small triangle of residentially-zoned land (7.08 ha), situated in the south-west of the community, have been excluded from the DCP. This land was rezoned with the eastern half of the Cell C area (around Westmeadows Lane) in the early 1980s. Development contributions for this small area will be applied at the rates outlined for land in the *Westmeadows Lane and Marquands Road Development Contributions Plan, 2008*.

Excluding residentially-zone land, the DCP covers a gross area of 250.25 ha.




Table 1 shows that 17.35 ha of that area is allocated to transport, community, and government education requirements. A further 51.90 ha of land is encumbered as drainage land and the central conservation reserve (38.05 ha), and existing road reserves (0.63 ha), leaving 180.37 ha of gross developable land. This land is the basis on which public open space requirements (totalling 12.45 hectares) are based. That leaves a net developable area of 167.93 ha. This is the area that will be levied at the rates specified in the following sections (Section 4.2 to 4.6)

Based on a net developable area\* of 167.93 ha and removing the two activity centres (6.80 ha) and Catholic School (3.00 ha), there remains 159.12 ha for residential development. This provides the potential to create around 2,472 lots based on achieving housing densities of at least 15 - 20 lots/ha, with a future population of around 7,000 people, in the Truganina South DC Plan area.

The Truganina South DC Plan only applies contributions to the net developable area\* of land zoned as Urban Growth Zone, as shown in **Table 1**, below. The activity centre sites make minimal contributions to community and recreation facilities, as those contributions are based on dwelling numbers.

\*"Net developable area" is defined in 7.0, page 30.

**TABLE 1: LAND BUDGET OF TRUGANINA SOUTH**

	Truganina South Precinct Land Budget		
	Current at 12 May 2011		
DESCRIPTION	Precinct		
	Hectares	% of Total Prec	% of NDA
<b>TOTAL PRECINCT AREA (ha)</b>	<b>250.25</b>	<b>100.0%</b>	
<b>Transport</b>			
6 Lane Arterial Roads	4.49	1.79%	2.67%
4 Lane Arterial Roads	6.37	2.55%	3.80%
Connector Street within Conservation Reserve	0.79	0.32%	0.47%
<b>Sub-total</b>	<b>11.65</b>	<b>4.66%</b>	<b>6.94%</b>
<b>Community Facilities</b>			
Community Services Facilities	0.30	0.12%	0.18%
<b>Sub-total</b>	<b>0.30</b>	<b>0.12%</b>	<b>0.18%</b>
<b>Government Education</b>			
Government Schools	5.40	2.16%	3.21%
<b>Sub-total</b>	<b>5.40</b>	<b>2.16%</b>	<b>3.21%</b>
<b>Open Space</b>			
<b>Encumbered Land Available for Recreation</b>			
Waterway / Drainage Line / Wetland / retarding	13.85	5.53%	8.25%
Conservation	38.05	15.21%	22.66%
<b>Sub-total</b>	<b>51.90</b>	<b>20.74%</b>	<b>30.91%</b>
<b>Unencumbered Land Available for Recreation</b>			
Active Open Space	8.00	3.2%	4.76%
Passive Open Space	4.45	1.8%	2.65%
<b>Sub-total</b>	<b>12.45</b>	<b>5.0%</b>	<b>7.41%</b>
<b>TOTALS OPEN SPACE</b>	<b>12.45</b>	<b>5.0%</b>	<b>7.41%</b>
<b>Other</b>			
Existing Road Reserves	0.63	0.3%	0.38%
<b>Sub-total</b>	<b>0.63</b>	<b>0.3%</b>	<b>0.38%</b>
<b>NET DEVELOPABLE AREA (NDA) ha</b>	<b>167.925</b>	<b>67.10%</b>	

Individual property title details are shown in **Table 6**, page 40.



### **3.8 Compliance with the foundation principles for DC's and DCP's**

The requirement that DC's meet the foundation principles of need, nexus, equity and accountability is implicit in much of this DCP, and broadly addressed in **Appendix I. pages 58-59**

## **4.0 Methodology for development contributions**

### **4.1 Arterial Road and Major Pathway network**

The original road network for the Wyndham North Growth Area is contained in the *Wyndham North Concept Plan 1996* and costed in the *A Policy Framework for Infrastructure Financing in the City of Wyndham (1996)*.

A review of the road network contained in the Wyndham North Concept Plan 1996 was undertaken in 2003. The review was informed by forward planning for Wyndham North, based on existing and potential urban growth scenarios and knowledge of road improvements underway in the network. Traffic modelling prepared for the Growth Area Review report in 2003 by Nigel Ashton provides the basis for the future road network required. It is itemised in **Appendix A**, page 41.

As in the original 1996 Concept Plan, it has been recognized that the roads constructed in this plan area may go on to service new (or existing) communities outside the plan area. To ensure the road hierarchy is developed with capacity to service the expansion of the residential area; a road plan was identified with consideration for the road network required to accommodate the potential long term requirements of Wyndham North.

Some elements of the road network will be required to partially service the future population beyond the current plan area. However, apart from allowance for VicRoads expenditure, road contribution levels are not further discounted for this factor because the Wyndham North area will clearly generate greater external impacts on road networks.

#### **4.1.1 Road Construction Costs**

The 2003 review of the costs for the construction of the road network in the 1996 Plan included changes to the standard of the road network. In addition, the methodology for road costing took account of the multi-staged process of construction required for some of the roads in the plan area. In order to cost the construction of roads in stages over time, costs were developed on the following scenarios:

- Greenfield site to 4 lane urban
- Greenfield site to 2 lane urban
- 2 lane rural to 4 lane urban
- 2 lane rural road reconstruction to urban standard

#### **4.1.2 Signalisation Costs**

Detailed costings were also developed for construction of major signalised intersections. These were costed separately, rather than including this cost as an average per linear metre cost. As a result, these costs were able to sit disaggregated from the general construction costs of the road surface. Mid-block signals were substantially discounted except for the mid-block signal on Sayers Road, west of Marquands Road, which was included at the higher charge. This is because the highly constrained area in which it is sited will translate to higher construction costs.

#### **4.1.3 Road Standards**

The review identified that changes to road standards were required which meant that the original road reservations were, in some instances, insufficient. Where further road widening is required, it has been based on



the updated road network shown on **Figure 3**, page 13. The location of the additional road widening is based on road improvements currently underway, and on approved development plans in the Wyndham North area. These changes do not include the proposed widening of the Forsyth Road reservation to 40 metres, as outlined in Section 5.1, page 24

#### 4.1.4 Land Acquisition Values

Land values have substantially risen since 1996 and more particularly post 2003. The land values applied in this plan for arterial road widening were originally based on the 2006-07 land values of \$500,000 per ha (at December 2006) in lieu of \$100,000 per ha set in the 1996 Infrastructure Financing Policy and \$150,000 per ha set in the 2003 interim review. However, as outlined in Section 3.3, regular revaluations will now be used to update the land costs factored into this DCP, with indexation to the CPI between revaluations.

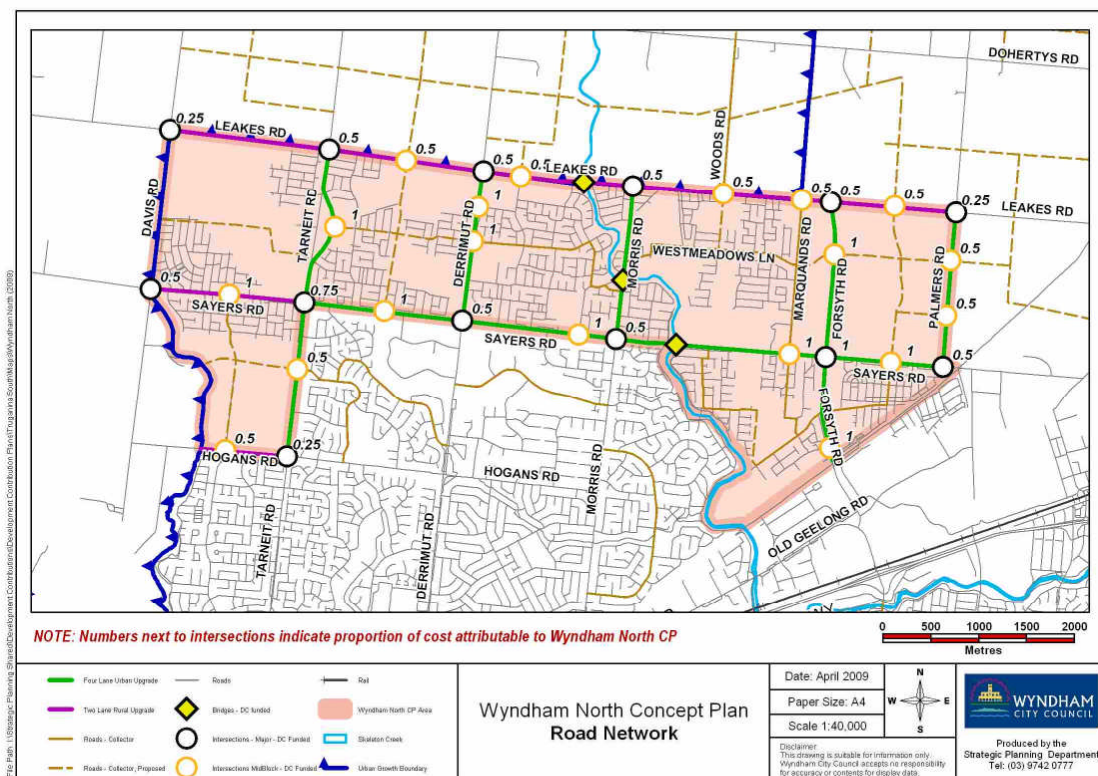
Where land acquisition is required for roads, the value of land will be offset against contributions at the same dollar values that are factored into DCP and updated as above. Reflecting this change, the land values costed into the Wyndham North arterial road network were updated in 2007. (See **Appendix A**, page 34).

#### 4.1.5 Arterial Road Intersections

The table in Appendix A was revised in 2009 to clarify the apportionment of costs of intersections across the Wyndham North growth front. This resulted in the revision of the total numbers of intersections required across the growth front area, with the net effect that three quarters of one major intersection has been replaced with one whole mid-block intersection. This equates to a net decrease in the overall total cost for the road network of \$8,212.21, or \$41.31 per net developable hectare, expressed in December 2006 terms. (See Appendix B, p. 42)

#### 4.1.6 Arterial Road Cost Summary

**Appendix B**, page 32, summarises the revised (2009) costings for the Wyndham North arterial road network. **Figure 3**, below, identifies the infrastructure items and their spatial apportionment across the Wyndham North growth front.



**FIGURE 3: WYNDHAM NORTH ROAD NETWORK, REVISED 2009**



Based on the December 2006 land values and the revised 2009 costings, the **Arterial Road and Major Pathway** contribution would have been set at **\$81,542.81 per hectare** in March 2010 terms. However, the proposal to create a Golden Sun Moth Protection Area, whose 38.05 ha includes about 30 hectares of net developable area, raises at least two issues:

- a. Is it essentially a Truganina South matter, which is considered to be the case; and
- b. What are the implications for the road network (and other forms of infrastructure)? In short this DCP adopts the view that:
  - (i) It is no longer possible to reassign costs or savings to or from the balance of Wyndham North;
  - (ii) Where infrastructure cost can be reduced as a consequence of the Protection Area, and the benefit assigned to Truganina South that should occur, but no significant gain is achievable for local arterial road responsibilities in Truganina South; and
  - (iii) Where costs remain unchanged or increase, Truganina South's share of costs should reflect that, and be divided by the reduced net developable area.

This results in the **Arterial Road and Major Pathway** contribution being set at **\$96,606.28** per hectare in March 2010 terms.

The Truganina South Arterial Roads and Major Pathway contributions are summarised in **Table 2**, below. Costs are for the March quarter 2010.

**TABLE 2: ARTERIAL ROADS AND MAJOR PATHWAY COSTS, TRUGANINA SOUTH**

	Unit Cost (Dec 2006, CPI 153.5)	Unit Cost (Mar 2010, CPI 168.5)	Units Required	Wyndham North Unit Cost (March 2010)	Truganina South Cost DIL (March 2010)	Truganina South Cost LAND (March 2010)	Truganina South Contribution Rate per ha. NDA without GSM Reserve (March 2010)	Truganina South Contribution Rate per ha. NDA with GSM Reserve (March 2010)
<b>WYNDHAM NORTH ITEMS</b>								
<b>Arterial Road Network</b>			(ha)					
Arterial Roads	\$93,772,736.00	\$102,936,195.54	1	\$102,936,195.54	\$13,127,004.32		\$65,984.74	\$78,174.16
Arterial Roads - Land	\$22,110,000.00	\$24,270,586.32	1.28	\$24,270,586.32		\$3,095,122.08	\$15,558.07	\$18,432.12
<b>CONTRIBUTIONS RATE - Wyndham North Items</b>				\$127,206,781.86	\$13,127,004.32	\$3,095,122.08	\$81,542.81	\$96,606.28
<b>PROPOSED CONTRIBUTIONS - Wyndham North Items</b>								\$16,222,126.40
								12.75%
Truganina South	198.94 ha (includes Activity Centres)							
with GSM Protection Zone	167.92 ha (includes Activity Centres)							
Wyndham North - Full Development	1,560 ha NDA							
Land Acquisition	\$750,000.00 per ha (March 2011)							



## COMMUNITY AND OTHER DEVELOPMENT INFRASTRUCTURE

The *Planning and Environment Act 1987* provides for development contributions to be raised for:

- **Development infrastructure**, including roads (as addressed above) and “other” development infrastructure, outlined at Section 4.3, p. 18

### **Variation to the Community Infrastructure Levy (CIL) payable under this Development Contributions Plan (DCP)**

If the maximum amount of the CIL which may be collected under an approved DCP is varied under section 46L of the *Planning and Environment Act 1987*, the collecting agency may adjust the amount of the CIL payable under this DCP in accordance with section 46L of the *Planning and Environment Act 1987*.

The collecting agency must publish the adjusted amount of the CIL payable under this DCP on its website.

In May, 2003, the Minister for Planning varied the grouping and definition of local infrastructure that could be funded by development contributions.

The two groups are:

- a. “Community infrastructure”, which includes:
  - Community meeting, activity and aquatic centres,
  - Libraries, and
  - High standard and specialised sporting facilities; and
- b. “Development infrastructure”, which includes:
  - Main roads (such as Leakes and Sayers Roads)
  - Other items such as pre-schools, standard playing fields on sporting reserves and other basic development of open space, and
  - Land for community centres.

In accordance with the *Planning and Environment Act (1987)* and the May 2003 *Ministerial Direction on Development Contributions*, the Truganina South DCP makes the distinction between “development” and “community” infrastructure.

## 4.2 Community Infrastructure

### 4.2.1 Defining “Community Infrastructure”

Following the May 2003 Direction by the Minister for Planning, the definition of “Community Infrastructure” was limited to items such as:

- Community meeting and activity centres (but not attached pre-schools or maternal or child health centres);
- Libraries;
- Other high standard (non-basic) sporting facilities, from special playing surfaces, pavilions and clubrooms for sports grounds, to specialised developments like:
  - Indoor leisure and recreation centres;
  - Swimming pools or aquatic centres; and
  - Lawn bowls and other more intensive recreation facilities;



## 4.2.2 Standards of Provision for Community Infrastructure

### (i) Community Centres

Council's Infrastructure Financing Policy (1996) called for multi-purpose community centres to serve catchments of about 5,000 people. On this basis, the *Wyndham North Concept Plan 1996* identified the need for a total of nine community centres to serve a population catchment of 50,000 people in the Wyndham North Growth Area.

However, the subsequent *2001 Wyndham Community Centres Policy* proposed much larger, multi-purpose centres, each servicing around 16,000 people. Smaller centres, serving about 8,000 people, could be used to supplement the larger centres, as required. On this basis, one multi-purpose centre would serve two neighbourhood cells, covering approximately one square mile each. Thus, 3 large, and 1 small community centres are required to adequately service a 56,000 strong Wyndham North community under the current (2001-8) standards.

Two large sites have been acquired in the central and eastern parts of the northern growth front. These are the community centre proposed within the "Arndell at Truganina" project, south of Sayers Road, and the Tarneit community centre already constructed in the Rose Grange residential area, west of Skeleton Creek. A third centre is proposed at Tarneit Gardens Estate near Tarneit Road, north of Sayers Road, and the final, "Children's Centre", is to be located in the Truganina South Community, as identified in the Truganina South PSP Plan (See **Figure 2**, page 10).

Council's base model for community centres includes a two-room pre-school and maternal and child health centre. The total cost for the three full and one half centres in Wyndham North is \$17.0m

When these are separated to isolate the components to be included in "other" development infrastructure contributions, the balance of the base model "community centre" in Wyndham is estimated to cost at least \$1.325m (in December 2010 terms).

Community centres without the "other development" infrastructure components therefore cost about \$535 per dwelling, if the minimum of three and a half are provided for 18,500 dwellings.

### (ii) Indoor Sport and Leisure Centres

Application of the provision standards as defined in *Planning for Community Infrastructure in Growth Areas* (ASR, 2008) to the Wyndham North Growth Front would suggest the need for one new aquatic centre, at an estimated cost of \$40,000,000, or \$441 per dwelling. Current upgrades to the two existing indoor recreation facilities to meet the municipal wide growth are equal to \$ 7.1 million dollars, \$78 per dwelling.

### (iii) Libraries

Libraries were not included at all in the 2003 costings, despite a recognised need, as there was no defined or costed strategy to provide additional libraries at that time.

The *2006 Library Facilities Strategy*, proposed three new branches, with one located in Wyndham North. The community site adjacent to the existing Tarneit Community Centre has since been earmarked for the new branch library. Combined with the community centre, the Library will complete the Tarneit Community Learning Centre by 2016.

The library is estimated to cost \$5,513,610 in March 2010 terms, or \$329 per dwelling. This includes the costs for design, construction, completion and fit out, but excluding land and book stock.

### (iv) Higher Standard Sport Ovals

Of the 28 ovals required to service the Wyndham North area, it is assumed that up to seven are in school grounds, and at least two will need to be of a higher standard; including a full-sized arena, fully drained and drip watered, with a turf cricket wicket and nets, fencing around the oval, substantial parking around the oval, a scoreboard, toilets, change rooms, umpires' room and ancillary facilities.

These high standard ovals are estimated to cost at least \$1.642m each (in December 2008 terms). If only 2 are provided in Wyndham North, the total would be \$1.015 million, or \$61 per dwelling (in March 2010 terms).

### (v) Other high cost or specialised community and recreation facilities

Specialised facilities for activities such as athletics and lawn bowls were not costed as community infrastructure because there are no defined strategies to provide for them at present. However, applying the provision ratios



defined by the ASR Community Infrastructure report, Wyndham North would require one Lawn Bowls centre at an estimated cost of \$500,000.00 (in December 2008).

### 4.2.3 Costing Community Infrastructure

The Truganina South community infrastructure contributions are summarised in **Table 3**, below. Costs are for the March quarter 2010.

**TABLE 3: COMMUNITY INFRASTRUCTURE COSTS, TRUGANINA SOUTH**

TRUGANINA SOUTH DCP						
<b>2. Community Infrastructure</b>						
(\$ March 2010)						
	Unit Cost (Dec 2008, CPI 163.5)	Unit Cost (Mar 2010, CPI 168.5)	Percentage attributed to Truganina South	Wyndham North Unit Cost (March 2010)	Truganina South Unit Cost (March 2010)	Contribution Rate per Item (March 2010)
<b>WYNDHAM NORTH ITEMS</b>						
<b>Community Centres</b>						
Arndell Park Community Centre and Pavillion	\$ 4,900,000.00	\$ 5,049,847.09	100.0%	\$2,550,172.78	\$375,633.56	\$151.96
Tarneit West Community Centre	\$ 4,900,000.00	\$ 5,049,847.09	100.0%	\$2,550,172.78	\$375,633.56	\$151.96
Truganina (South) Kindergarten / Children's Centre	\$ 2,700,000.00	\$ 3,073,355.00	100.0%	\$1,552,044.28	\$228,611.93	\$92.48
Tarneit Community Centre	\$ 4,500,000.00	\$ 4,637,614.68	100.0%	\$2,341,995.41	\$344,969.59	\$139.55
				<b>\$8,994,385.25</b>	<b>\$1,324,848.64</b>	<b>\$535.94</b>
<b>Libraries</b>						
Tarneit Library	\$ 5,350,000.00	\$ 5,513,608.56	100.0%	\$5,513,608.56	\$812,139.64	\$328.54
				<b>\$5,513,608.56</b>	<b>\$812,139.64</b>	<b>\$328.54</b>
<b>Indoor Recreation Facility</b>						
Wyndham Leisure and Events Centre - Upgrade		\$ 6,000,000.00	18.5%	\$1,110,000.00	\$163,500.00	\$66.14
				<b>\$1,110,000.00</b>	<b>\$163,500.00</b>	<b>\$66.14</b>
<b>Indoor Recreation Facility</b>						
Wyndham Indoor Recreation Facility - Upgrade		\$ 1,100,000.00	18.5%	\$203,500.00	\$29,975.00	\$12.13
				<b>\$203,500.00</b>	<b>\$29,975.00</b>	<b>\$12.13</b>
<b>Higher Standard Sports Ovals</b>						
Lawrie Emmins	\$ 1,641,976.76	\$ 1,692,190.12	30.0%	\$507,657.03	\$74,776.51	\$30.25
Tarneit West	\$ 1,641,976.76	\$ 1,692,190.12	30.0%	\$507,657.03	\$74,776.51	\$30.25
				<b>\$1,015,314.07</b>	<b>\$149,553.02</b>	<b>\$60.50</b>
<b>Lawn bowls / greens</b>						
Tarneit West		\$ 500,000.00	0.0%	\$0.00	\$0.00	\$0.00
				<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>
<b>Aquatic Centre</b>						
North-West Activity Precinct, Tarneit West		\$ 40,000,000.00	18.5%	\$7,400,000.00	\$1,090,000.00	\$440.94
				<b>\$7,400,000.00</b>	<b>\$1,090,000.00</b>	<b>\$440.94</b>
<b>TOTAL - Wyndham North items</b>						
<b>TOTAL - Truganina South</b>				<b>\$24,236,807.89</b>	<b>\$3,570,016.30</b>	<b>\$1,444.18</b>
<b>ALL ITEMS</b>						
<b>CONTRIBUTIONS RATE - Community Infrastructure - "Capped"</b>						<b>\$900.00</b>
<b>PROPOSED TOTAL CONTRIBUTIONS</b>						<b>\$2,224,800.00</b>
Truganina South PSP	2,472 dwellings	13.4%				
Wyndham North - Full Development	18,500 dwellings	18.50%				
Wyndham Total - Full Development (2006 UGB)	100,000 dwellings					

**Variation to the Community Infrastructure Levy (CIL) payable under this Development Contributions Plan (DCP)**



If the maximum amount of the CIL which may be collected under an approved DCP is varied under section 46L of the *Planning and Environment Act 1987*, the collecting agency may adjust the amount of the CIL payable under this DCP in accordance with section 46L of the *Planning and Environment Act 1987*.

The collecting agency must publish the adjusted amount of the CIL payable under this DCP on its website.

For developments that provide substantial indoor and outdoor recreation areas, as in the case of retirement villages, it is believed that there is a case to “cap” community infrastructure requirements at a realistic level. It is believed that such a cap should be at least \$13,500.00 per net developable hectare (subject to CPI indexation from December 2008 quarter), equivalent to the cost for 15 dwellings per hectare, subject to the conditions outlined at the end of **Section 4.5.2**, page 22.

### 4.3 Other Development Infrastructure

#### 4.3.1 Defining “Other Development Infrastructure”

Under the May 2003 Direction by the Minister for Planning, Other Development Infrastructure (excluding main roads and drains), includes:

- Land for community facilities;
- Basic improvements to public open space, including earthworks, landscaping, fencing, seating and playground equipment; and
- Buildings and works for:
  - Maternal and child health centres;
  - Child care centres;
  - Kindergartens;
  - And any of these in combination.

#### 4.3.2 Standards of Provision

As discussed in Section 4.1.6 (a) and (b) (Arterial Roads and Major Pathways), the Golden Sun Moth Protection Area makes too little difference to most forms of other development infrastructure (except neighbourhood parks, discussed below) to affect the levels of planned provision. This is reinforced by the fact that the numbers of playing fields, etc. will not change, and in any event fall short of the numbers needed to comply with the adopted ASR reports. This DCP therefore generally allocates the same share of other development infrastructure to Truganina South as it would without the Protection Area.

##### (i) Land for Community Facilities

As noted under “community infrastructure”, Council has acquired two parcels for community facilities and intends to purchase two more. The site in Truganina South will constitute the fourth, “half” centre. This will increase total acquisition costs for such land in Wyndham North to about \$2.025m in cash and kind, or \$120.66 per dwelling.

##### (ii) Community centres

The three full community centres in the area will each include maternal and child health centres and a two room pre-school. The half sized community centre in Truganina South will only provide a pre-school. As shown by **Table 4**, below, the pre-school components cost about \$7.523m, plus about \$1.149m for the maternal and child health components (in March 2010 terms).

Pre-school and health centre components for three full centres and one half centre will cost \$8.817m, or \$525.33 per dwelling.

##### (iii) Basic improvements to open space

The Wyndham North area will be served by over 100 hectares of public open space. Its development will include:

- Over 72 ha. of internal sporting reserves and a similar area in major active reserves just outside the community; and



- Development of at least 9 senior and junior ovals, in pairs where possible; 8 soccer fields, generally in threes; and four tennis / netball court complexes of at least eight courts, or four courts, respectively, each; plus basic access, parking, landscaping, change rooms and toilets.

These works would cost at least \$20.400 million for the ovals, \$9.185 million for the soccer fields, and \$5.106 million for the tennis / netball courts.

This is equivalent to \$1,215.58 per lot / dwelling for the football / cricket ovals, \$547.29 per lot / dwelling for the soccer fields, and \$304.27 per lot / dwelling for the tennis / netball courts.

Landscaping and paths for this infrastructure totals \$8.655 million or \$515.70 per lot dwelling.

### 4.3.3 Costing Other Development Infrastructure

The Truganina South other development infrastructure contributions are summarised in **Table 4**, below, as per the March quarter 2010.

**TABLE 4: OTHER DEVELOPMENT INFRASTRUCTURE COSTS, TRUGANINA SOUTH**



Truganina South Precinct Development Contributions Plan

### 3. Other Development Infrastructure

(\$ March 2010)

	Unit Cost (Dec 2008, CPI 163.5)	Unit Cost (Mar 2010, CPI 168.5)	Units Required	Wyndham North Unit Cost (March 2010)	Truganina South Unit Cost DIL (March 2010)	Truganina South Unit Cost LAND (March 2010)	Contribution Rate per Item (March 2010)
<b>WYNDHAM NORTH ITEMS</b>							
<b>Land for Community Centres</b>			(ha)				
Arndell Park Community Centre and Pavillion		\$ 750,000.00	0.7	\$525,000.00		\$77,331.08	\$31.28
Tarneit West Community Centre		\$ 750,000.00	0.7	\$525,000.00		\$77,331.08	\$31.28
Truganina (South) Kindergarten / Chidren's Centre		\$ 750,000.00	0.3	\$225,000.00		\$33,141.89	\$13.41
Tarneit Community Centre & Library		\$ 750,000.00	1	\$750,000.00		\$110,472.97	\$44.69
<b>Sub total - land for CCs</b>			<b>2.7</b>	<b>\$2,025,000.00</b>		<b>\$298,277.03</b>	<b>\$120.66</b>
<b>Pre-School Rooms</b>			(no.)				
Arndell Park Community Centre and Pavillion	\$ 4,900,000.00	\$ 5,049,847.09	1	\$2,105,786.24	\$310,176.62		\$125.48
Tarneit West Community Centre	\$ 4,900,000.00	\$ 5,049,847.09	1	\$2,105,786.24	\$310,176.62		\$125.48
Truganina (South) Kindergarten / Chidren's Centre	\$ 2,700,000.00	\$ 3,073,355.00	1	\$1,521,310.73	\$224,084.96		\$90.65
Tarneit Community Centre & Library	\$ 4,500,000.00	\$ 4,637,614.68	1	\$1,933,885.32	\$284,856.08		\$115.23
<b>Sub total - Pre-schools</b>			<b>4</b>	<b>\$7,666,768.52</b>	<b>\$1,129,294.28</b>		<b>\$456.83</b>
<b>Maternal &amp; Child Health Centre Rooms</b>			(no.)				
Arndell Park Community Centre and Pavillion	\$ 4,900,000.00	\$ 5,049,847.09	1	\$393,888.07	\$58,018.65		\$23.47
Tarneit West Community Centre	\$ 4,900,000.00	\$ 5,049,847.09	1	\$393,888.07	\$58,018.65		\$23.47
Tarneit Community Centre & Library	\$ 4,500,000.00	\$ 4,637,614.68	1	\$361,733.94	\$53,282.43		\$21.55
<b>Sub total - MCHs</b>			<b>3</b>	<b>\$1,149,510.09</b>	<b>\$169,319.73</b>		<b>\$68.50</b>
<b>Basic Improvements for Open Space</b>	Details in "Recreation Facilities - Details" Tab						
Football / Cricket Ovals - District	\$ 3,069,813.42		4	\$12,279,253.68	\$1,808,700.88		\$731.68
Football / Cricket Ovals - Local	\$ 1,456,106.71		1	\$1,456,106.71	\$214,480.58		\$86.76
Football / Cricket Pavillion - District	\$ 1,457,500.00		4	\$5,830,000.00	\$858,743.24		\$347.39
Football / Cricket Pavillion - Local	\$ 835,000.00		1	\$835,000.00	\$122,993.24		\$49.75
Soccer Fields - District	\$ 2,316,100.00		2	\$4,632,200.00	\$682,310.54		\$276.02
Soccer Fields - Local	\$ 1,445,000.00		1	\$1,445,000.00	\$212,844.59		\$86.10
Soccer Pavillion - District	\$ 1,197,500.00		2	\$2,395,000.00	\$352,777.03		\$142.71
Soccer Pavillion - Local	\$ 712,500.00		1	\$712,500.00	\$104,949.32		\$42.46
Tennis / Netball Courts - District	\$ 933,457.46		4	\$3,733,829.84	\$549,983.04		\$222.49
Tennis / Netball Pavillion - District	\$ 457,500.00		3	\$1,372,500.00	\$202,165.54		\$81.78
Landscaping for Active Open Space *	\$ 570,065.00		14	\$7,980,910.00	\$1,175,566.47		\$475.55
Paths for Active Open Space *	\$ 96,250.00		7	\$673,750.00	\$99,241.55		\$40.15
				<b>\$43,346,050.23</b>	<b>\$6,384,756.05</b>		<b>\$2,582.83</b>
<b>CONTRIBUTIONS RATE - Wyndham North Items</b>				<b>\$54,187,328.84</b>	<b>\$7,683,370.06</b>	<b>\$298,277.03</b>	<b>\$3,228.82</b>
<b>PROPOSED CONTRIBUTIONS - Wyndham North Items</b>							<b>\$7,981,647.09</b>
<b>Truganina South PSP</b>	2,472 dwellings						
<b>Land Acquisition (March 2011)</b>	\$750,000.00 per ha						

The **Other Development infrastructure** contribution is set at **\$3,228.82 per lot/dwelling** in March 2010 terms.

It is also proposed that uses that provide substantial on-site indoor and outdoor recreation areas, such as retirement villages, should be subject to a capped rate. This rate is set equivalent to 15 lots or \$48,432.32 per net developable hectare (subject to CPI indexation from March 2010 quarter). To qualify for the capped rate, these types of projects should supply at least 1 square metre per dwelling of indoor communal recreation space, and 12 square metres per dwelling of outdoor communal recreation space, the latter in areas of at least 500 square metres each.

## 4.4 Open Space Contribution

The contribution for open space within the Truganina South DCP area is in two parts. One part applies Wyndham City Council's open space requirements, as contained in the *Open Space Study – New Subdivisions; Part 2; Principles & Performance Criteria*. In 2008, the report, *Planning for Community Infrastructure in Growth Areas* (Australian Social Research P/L, 2008) was published. At densities around 15 households per hectare, this report is interpreted by Council (and the Department of Sport and Recreation) as requiring about 7.5% of gross



developable area as active open space, plus about 2.5% in neighbourhood parks. A further 1-4% may be required as additional passive open space, but part or all of that may be accepted as encumbered land, such as the Dohertys creek floodway.

It has been decided, in this case, to limit the total requirement of unencumbered open space to 7.5%, of which only approximately 5% or so is for sports, because:

- Truganina South is the last part of the Truganina – Williams Landing area to be developed,
- Other areas of Wyndham North have been required to contribute between about 5.4 and 7.5%; and
- The shortfall can be made up by utilising the sporting potential in Laurie Emmins Reserve, to the near south-east.

The total 7.5% open space contribution will be used towards neighbourhood parks and a local sports park to serve local community needs.

The *Truganina South Precinct Structure Plan* includes 4 neighbourhood parks and 2 Activity Centre based parks/plazas, located to be within a 400 metre walking distance of 95% of all dwellings as per the Growth Areas Authority Precinct Structure Planning Guidelines (2009). The Structure Plan also provides for an active sports reserve of 8.0 ha in size, co-located with a P9 (primary to year 9) school, within the plan area. (The 8.0 ha sports facility will be acquired by a development contributions charge. See Section 5.5., p.27).

This reflects 2005 changes in Council's standards of provision of Sporting/Active Open Space, but not the higher levels sought under the 2008 report on Community Infrastructure Needs. It is also well in excess of the 5ha open space specified in the Cell C plan for the Truganina South community; that would have been a substantial under provision.

With a 7.5% open space requirement within Truganina South, Council will not seek to apply the District Open Space contribution called for in the *Cell C Plan (Stage 1)*.

The *Truganina South Community Precinct Structure Plan* also directs that all land within the 1 in 100 year flood line be provided as part of a creek or drainage corridor. Encumbered land within the 1 in 100 year flood line is not included as part of a 7.5% public open space contribution required according to Council's Open Space Policy and as shown in the *Truganina South Community Precinct Structure Plan*. These floodway areas are capable of providing for shared pathways along their length, within the plan area.

The open space requirements for individual lots in Truganina South can be found in **Table 4**, page 35.

*"Where any lot is required to contribute more than 7.5% of its area as land for open space (generally as listed in Table 4), the Council must purchase the balance. The terms of such purchase should be defined in an agreement under Section 173 of the Planning and Environment Act 1987, and include matter such as:*

- *the date of settlement (generally on transfer of the land or by an agreed date or stage of development); and*
- *a price based on \$750,000.00 per hectare (\$75.00 per square meter) plus indexation in line with the CPI from the March 2011 quarter.*



## 4.5 Non-Residential Uses & Non-Subdivided Land

### 4.5.1 Non-Residential Development

#### (1) Community and Other Development Infrastructure (Except Roads)

Non-residential developments such as activity centres, local schools and parks do not normally generate demands on community and other development infrastructure. Thus, Council does not require them to contribute to such infrastructure. There may be exceptions, such as where an activity centre includes housing. In this case, the residential components will be required to contribute to community infrastructure at the per lot/dwelling rate.

#### (2) Roads & Travel Demand

All non-residential developments are serviced by roads and it is necessary to consider whether they should be subject to contributions. Important principles need to be applied in this instance:

(i) If these uses make a net contribution to the need for infrastructure, then that should be factored into assessment of needs and costs. In that case:

- They may be charged a share of the cost to provide the infrastructure, proportional to their estimated contribution to needs; or,
- They may not be required, or may be only partly required, to make contributions. In these cases, the value of contributions foregone cannot be redistributed amongst other contributors and will be borne by Council (and therefore by others in the Wyndham community).

(ii) If such uses do not make a net contribution to the need for infrastructure, they should not be charged. This is not the same as contributions foregone, as discussed in (i), but a simple statement that they are not relevant contributors.

The above principles are not as simply applied in practice, but the following interpretations are applied in this DCP:

- If a use does not contribute to travel demand, no requirement applies in any event, so the use does not result in contributions foregone. (**Examples:** floodways, local neighbourhood and passive parks.)
- If a use makes NO NET contribution to travel demand, no requirement should apply and this should not be treated as contributions foregone. (**Examples:** local sport reserves, community centres and local public schools.)

Some examples follow.

**Local Primary Schools** do attract substantial trip numbers, mainly in two short bursts, but:

- Local schools only exist to service residents, so residential demand creates the trips to schools (as in the other examples listed above).
- Introduction of local schools (and the other examples) into a community actually reduces average trip lengths to get to them.
- Local schools, especially local neighbourhood ones, draw most of their traffic through the local street network, which is rarely funded via development contributions.
- Aside from teacher and service trips (which only occur because of residents' needs), trips to local schools normally use quite short lengths of the arterial network, if they use it at all.

Therefore, the net contributions to arterial road demand by local schools and the other examples are considered to be nil.



(iii) If a use makes a NET contribution, but less than suggested by total traffic access, it should:

- be required to contribute according to its net contribution to road network costs; or
- if no contributions or reduced contributions apply, the reduction is for contributions foregone, so cannot be made up by charging other contributors.

(**Examples:** Activity centres, and private schools with extensive catchments.)

**Private Schools** are believed to lie between local schools and activity centres in their net impacts. Where Council has required road widening across the arterial road frontage of private schools, this has been assumed in the past to roughly reflect the schools' minimum net contribution. That approach is partly retained in this DCP, which requires the greater of:

- (a) a contribution per hectare of 50% of the residential rate per hectare for private schools, and 25% for Catholic Schools, as they more nearly resemble State schools in their catchment patterns, or
- (b) where the site fronts an arterial road, any road widening required under the Truganina South Precinct Structure Plan, valued for this purpose at the rate per hectare that is listed in part 9.1 of this DCP.

**Activity Centres** are normally the most intensive attractors of trips in residential areas. They should generally be located on arterial or sub-arterial roads, as they attract most of their traffic via those roads. However:

- they also primarily service the local community, especially at the neighbourhood level, so:
  - closer spacing reduces average trip lengths, though it may increase the frequency of trips, and
  - average trips on the arterial network are relatively short.

However, activity centres do attract passing trade and "comparison" trips (often influenced by prices or advertising) or trips to favourite businesses.

For activity centres it is therefore difficult to justify either an elevated contribution, based on traffic volumes, when most trips involve local residents, or little or no contribution, due to the passing trade and "comparison" component in trips.

**This DCP therefore applies the same contribution rates per hectare for roads to activity centres as it does to housing, as an intermediate requirement to approximate the net effect on road needs.**

Therefore, this DCP requires:

- no arterial road related contributions by local schools, community centres or parks;
- where needed, the greater of the cost in this DCP of land for widening of any arterial road fronted by private or Catholic schools, or 50% of the residential rate for private schools and 25% for Catholic Schools; and
- contributions for activity centres to the arterial road network at the residential development rate.

None are considered to constitute contributions foregone.

#### (4) Impact mitigation

Where a development imposes its own direct impacts on arterial roads (as most activity centres do), case-specific works may be required through the imposition of conditions of planning permits. However, such impact reduction works are not development contributions. The most common examples are turning lanes, traffic signals and other works at entry points.

### 4.5.2 Residential Uses that do not require Subdivision

Uses such as retirement villages and multi-dwelling projects may not require subdivision of land. However, their occupancy will still contribute to demands for a similar range of infrastructure as detached housing.



This DCP requires that residential developments that are not subdivided are still subject to the same rate of contributions per hectare, or per dwelling (or lot), as applicable, as subdivided residential development.

However, retirement villages typically provide on-site communal buildings and outdoor recreation areas. This should moderate, but not eliminate their occupants' demands on passive open space and indoor meeting and activity rooms. However, such on-site facilities would have less effect on residents' use of libraries, indoor aquatic and recreation facilities, and sporting facilities such as tennis and netball courts, and bowling greens.

This DCP therefore allows for that factor by "capping" contributions to community and other (non-road) development infrastructure, at the rates applied to projects with 15 dwellings per net developable hectare, on the conditions that those projects provide at least one (1) square metre of communal indoor recreation space per dwelling in the project, and at least twelve (12) square metres of outdoor recreation space per dwelling in the project, in areas of at least 500 square metres.

## **4.6 Drainage**

Development contributions for drainage are collected by Melbourne Water as part of its drainage schemes for the area:

- Dohertys Creek Drainage Scheme (4088); and
- Skeleton Creek Drainage Scheme (4070)



## PART B – SUPPLEMENTARY INFRASTRUCTURE CONTRIBUTIONS FOR THE TRUGANINA SOUTH COMMUNITY

### 5.1 Supplementary Contributions for Truganina South

This Development Contributions Plan introduces five items, to supplement the standard contributions in Truganina South.

These items relate to:

1. the costs of an increased road reservation width for Forsyth Road;
2. the costs of constructing four crossings for arterial and collector road across Dohertys Creek and Cropleys Drain;
3. the costs of constructing shared trails along the major drainage channels through the community;
4. the costs of constructing segments of the collector road network, including native vegetation clearance offsets, where these roads cross the central conservation reserve;
5. the cost of land acquisition to provide the 8 hectare active recreation reserve for the community;
6. the costs of providing neighbourhood/ local parks to a common standard;
7. the costs of constructing three pedestrian bridges to connect shared paths across drainage reserves;
8. improved intersection costings for arterial-to-arterial and arterial-to-collector intersections in the Precinct.

The contributions are designed to provide funds necessary to complete infrastructure projects in the Truganina South Community PSP beyond those provided for in the Wyndham North Concept Plan. The supplementary items were not costed into that plan.

The items funded by the supplementary contributions are designed specifically to service the needs of the Truganina South Community. They have been included in the DC Plan as they reflect local needs or improved standards. The imposition of contributions seeks to equitably apportion costs across land holdings in the plan area. Thus, the costs of providing the infrastructure have been spread across the net developable area for the Community. A summary table is provided at **Appendix J**, page 60.

#### 5.1 Forsyth Road Widening

Forsyth Road currently terminates in Truganina at Sayers Road. The Truganina South Community Precinct Structure Plan plans to extend this arterial road northwards to Leakes Road, reflecting the road network costed into the Wyndham North Concept Plan 1996. However, in that plan, Forsyth road was planned as a 32 metre reservation, two-lane road aligned parallel with Marquands Road. These specifications are listed in the costings provided in **Appendix B**, page 42.

The Truganina South Community Precinct Structure Plan requires an upgraded road reservation width for Forsyth Road of 40 metres. The eight metre increase in width is required to provide for adequate clear zones to roadside hazards. It also reflects a change in standards for centre medians, from six to seven metres, in line with VicRoads policies. An indicative cross-section for Forsyth Road is presented in **Figure 8**, page 39.

To acquire an extra eight metres of land in a north-south alignment through the Truganina South Community square mile (1.6 kilometres) between Sayers Road and Leakes Road equates to an additional 1.28 ha of land.



The total cost of this extra road reservation width will be spread across properties within the Truganina South Community as the community will benefit from the improved safety and amenity that is afforded by the increased width of the road reservation.

As stated earlier (in Section 4.1.4, page 13.), where land acquisition is required for roads, the value of land will be offset against contributions at \$750,000 per hectare (at March 2011), subject to revaluation and indexation according to Section 3.3., page 8.

For the 1.28 ha of land required for the widening of Forsyth Road reservation, this equates to \$960,000 in total cash and kind. This item supplements the Arterial Road and Major Pathway contribution category, again plus upgrading in accordance with Section 3.3.

Apportioning across the 167.92 ha of net developable area (including future Activity Centre land) in the Truganina South community, the **Forsyth Road Widening** contribution has been set at **\$5,717.01 per hectare in March 2010 terms**.

## 5.2 Collector Road Crossings

Wyndham City Council resolved in the Wyndham Transport Strategy (2 July, 2007) to adopt policy measures aimed at achieving the highest practicable degree of permeability in main road networks within new development areas within Wyndham. Key to this resolution is the provision of mid-block collector road networks that are as permeable as possible within each “square mile” cell.

To facilitate this aim, road networks are designed, where practicable, to include one mid-block collector road in each direction (typically North-South, East-West), across the centre of each cell. Further, where structure plans indicate that collector roads require bridges to cross rail lines, creeks and floodplains, or controlled intersections with the arterial road network; these are to be costed into Development Contributions Plans to equitably share the costs.

The Truganina South Community PSP proposes such a permeable mid-block collector road network.

Although the topography of Truganina South is relatively flat, a number of drainage channels span the Plan area. Most notably, Dohertys Creek bisects the plan area from the north-west to east. In addition, Cropleys Drain, a minor tributary, drains southwards into Dohertys Creek, from the north of the community.

Imposing the mid-block collector road network across the Plan area requires several creek crossings as well as controlled intersections (See the Truganina South Precinct Structure Plan, **Figure 2**, page 10). Costs for the controlled intersections are already factored in the 2007 Arterial Road Network (See **Appendix A**, page 41). However, the costs for culverts to provide creek crossings were not apportioned in this table.

A contribution will be charged to cover the cost of four creek crossings, in line with the proposals of the Wyndham Transport Strategy. This is further justified by the fact that the required crossings lie on the one property. The Collector Road Crossings Contribution will help to apportion these costs across all properties in the community as all properties in the community will benefit from their construction.

Four culverts are proposed for those points where the proposed arterial and collector road network for Truganina South Community crosses the Dohertys Creek drainage channel. These are:

1. The combined Forsyth Road and the Westmeadows Lane (extension) crossing of Dohertys Creek – Estimated cost \$981,514, at March 2010;
2. Wetlands Boulevard (extension) crossing of Dohertys Creek – Estimated cost \$615,555, at March 2010;
3. Westmeadows Lane (extension) crossing of Cropleys Drain – Estimated cost \$339,606, at March 2010.
4. Northern crossing of Cropleys Drain – Estimated cost \$192,055, at March 2010

The total cost of these four culverts is \$2,218,730 in March 2010. Costings are listed in **Appendix D**, pages 50-53.

As this infrastructure will enhance the functioning and amenity of the Truganina South Precinct, these will be costed and apportioned across the net developable area of the Truganina South Community to share the costs



more equitably across the development cell. This item supplements the Arterial Road and Major Pathway contribution category.

Apportioning across the 167.92 ha of net developable area (including future Activity Centre land) in the Truganina South community, the **Collector Road Crossings** contribution has been set at **\$12,677.05 per hectare** in March 2010 terms.

### 5.3 Shared Trail Network

Two major off-road shared trail networks are identified in the Truganina South Community PSP Plan (**Figure 2**, page 10). These paths broadly follow the entire length of the drainage channels for Dohertys Creek and its northern tributary, Cropleys Drain.

Paths will be located on future Melbourne Water / Council land set aside for drainage purposes and thus will not be constructed as a condition of subdivision by developers. They are an essential part of the Community's road and trail network for the community, providing key link to the Activity Centres and other community assets, as well as external links to the wider Wyndham trail network.

Melbourne Water's Shared Pathway guidelines (2009) advocate for the construction of 3m wide paths within dedicated drainage reserves capable of withstanding heavy (35-40 tonne) maintenance machinery. To construct 3m wide, 125mm deep shared trails costs \$300 per linear metre.

The total costs to provide off-road shared trail network along Dohertys Creek, Cropleys Drain and across the golden Sun Moth Protection Site is \$923,400.

This item supplements the Arterial Road and Major Pathway contribution category.

Apportioning across the 167.92 ha of net developable area (including future Activity Centre land) in the Truganina South community, the **Shared Trail Network** contribution has been set at **\$5,499.05 per hectare** in March 2010 terms.

### 5.4 Golden Sun Moth Protection Site – Road Crossings & Offsets

To maintain the permeability and connectedness of the road network in Truganina South, Forsyth Road, and the north-south and east-west collector roads, these roads will be constructed across the central grasslands conservation area.

While construction of collector roads remains the responsibility of each relevant developer, the benefits of these roads accrue to the entire precinct. Typically, developers are also able to benefit by developing housing along the road frontages, however this is not the case where the collector roads cross the GSM protection site. In these situations, each relevant developer is required to build a segment of road with no associated development benefits. In the two cases where this occurs for collector roads, the costs of each segment of road have been apportioned across the entire community.

As the construction of these roads will result in the clearing of small sections of grasslands within the GSM protection site, the costs of related native vegetation offsets are also shared among the beneficiaries, namely the entire community.

Per linear metre construction costs for the north-south and east-west collector roads are detailed in **Appendix E**, page 54. Native Vegetation offset costs are detailed in **Appendix F**, page 55.

In summary, the works required are:

1. Forsyth Road offset only:
  - a. Offset – 1.316 habitat hectares @ \$137,500 per hectare = \$180,950.00
2. East-West Collector Road crossing and offset:



- a. Roads section – 120 metres x \$1,403.83 per linear metre = \$168,459.60
- b. Offset – 0.234 habitat hectares @ \$137,500 per hectare = \$32,175.00

3. North-South Collector Road crossing and offset:

- a. Roads section – 180 metres x \$1,403.83 per linear metre = \$252,689.40
- b. Offset – 0.208 habitat hectares @ \$137,500 per hectare = \$28,600.00

Total crossing and offsets:

- a. Roads section = \$421,149.00
- b. Offsets = \$ 241,725
- TOTAL = \$662,874.00

Shared Pathway thru grasslands:

225 metres @ \$300.00 per linear metre = \$67,500.00

As a supplementary item in the Arterial Road and Major Pathway category, total costs are apportioned across the 167.92 hectares of net developable area for the Truganina South community. *The **Golden Sun Moth protection Site- Road Crossings & Offsets** contribution has thus been set at \$2,508.03 per hectare and \$1,439.52 per hectare, respectively, in March 2010 terms.*

*The **Golden Sun Moth protection Site- Shared Pathway network** contribution has thus been set at \$401.98 per hectare in March 2010 terms.*

## 5.5 Pedestrian Bridges across Drainage Reserves

A contribution will be charged to cover the cost of constructing two pedestrian bridges to link the shared path network across drainage reserves in the community. Both bridges lie on the one property and the community will benefit from their construction, so this contribution will be apportioned across all properties in the community.

The bridges are proposed for those points where the proposed shared path network crosses the Dohertys Creek and Cropleys Drain drainage channels. To comply with Melbourne Water standards, crossings are to be constructed for a 1 in 10 year ARI, 3 meters wide and constructed 5 m from top of bank.

Without knowing the 1 in 10 flood level or the top of bank at this stage, it was assumed that the crossings will span the entire length of the drainage reserve.

This gives an area of  $40 \times 3 = 120 \text{ m}^2$ . Using a rate of \$3,500 per square meter gives us a total cost of \$420,000 per crossing, at March 2010;

The total cost of these two bridges is \$288,000 in March 2010. Costings are listed in **Appendix D**, page 53.

This item supplements the Arterial Road and Major Pathway contribution category.

Apportioning across the 167.92 ha of net developable area (including future Activity Centre land) in the Truganina South community, *the **Pedestrian Bridges across Drainage Reserves** contribution has been set at \$2,572.65 per hectare in March 2010 terms.*

## 5.6 Revised intersection costs

Intersections identified in the Wyndham North Growth Front Arterial Road network are significantly under-costed in today's terms. To correct for this, a new set costings was commissioned in March 2011. Functional layout plans were prepared for each of the major intersections surrounding the Truganina South precinct, with associated costing sheets. These were the arterial-to-arterial and arterial-to-collector road intersections, including any extra land required to be purchased, as well as land acquisition. for splays.



The new (March 2011) costings have been subtracted from the Wyndham North Growth Front costings where there was duplication.

Apportioning across the 167.92 ha of net developable area (including future Activity Centre land) in the Truganina South community:

*The **Revised Intersection Costs – Intersection Works** contribution has been set at **\$40,170.51 per hectare** in March 2010 terms. See **Appendix K**.*

*The **Revised Intersection Costs – Land acquisition for splays** contribution has been set at **\$1,719.57 per hectare** in March 2010 terms. See **Appendix K**.*

## 5.7 Active Sporting Reserve – Land Acquisition

Truganina South will be served by one central, 8 hectare active recreation reserve. Land acquisition costs are typically covered by equalisation mechanisms relating to public open space contributions. In Truganina South, large discrepancies between the PSP POS apportionment and the open space contribution required of individual parcels are exacerbated by the siting of the 8ha sporting reserve on one parcel. To minimise the discrepancies, and ensure consistency with recent practice in other Growth Area PSPs, the cost of purchasing the land for the Active Sporting Reserve will be apportioned across all the parcels within the community.

As stated earlier (in Section 4.1.4, page 13.), land acquisition will be offset against contributions at \$750,000 per hectare (at March 2011), subject to revaluation and indexation according to Section 3.3., page 8. This item supplements the Other Development Infrastructure contribution category.

When apportioned across the 2,472 lots in the Truganina South community, *the **Active Sporting Reserve – Land Acquisition** contribution is **\$2,427.18 per lot / dwelling** in March 2010 terms.*

## 5.8 Neighbourhood Parks - Basic Development

Basic development of neighbourhood parks is typically borne by developers as a condition of permit. Nevertheless, the May 2003 *Ministerial Direction on Development Contributions* directs that planning authorities may collect infrastructure levies towards the funding of “basic improvements to public open space”.

Wyndham City's Recreation Department has decided to cost in the true cost of neighbourhood park development, rather than omit these costs. The cost for basic development of each neighbourhood park of 1 hectare is \$570,065 (March, 2011). The cost sheet is at Appendix G) p. 56 excludes a range of further, or better standard items that developers commonly provide. Such enhancements, though they require Council consent, are normally welcomed, if safe and not significantly more costly to maintain. However, expenditure above the cost for basic development generally cannot be offset against the DC's.

Costing neighbourhood parks up front better defines Wyndham's minimum standards for basic development of neighbourhood parks. Moreover, as neighbourhood parks are unevenly distributed across the Precinct, spreading the costs for park development across all landowners represents a more equitable method of cost apportionment (Section 5.5, above).

Truganina South will be served by four neighbourhood parks and two Activity Centre park/plazas (cost equivalent of one neighbourhood park). The total costs for basic development of these park to provide five parks at \$570,065 (March 2010) is \$2,565,292.50).

Apportioning across the 2,472 lots in the Truganina South community, *the **Neighbourhood Parks - Basic Development** contribution has been set at **\$1,037.74 per lot / dwelling** in March 2010 terms.*



## PART C – SEPARATE CONTRIBUTIONS FOR MARQUANDS ROAD

### 6.0 Marquands Road

#### 6.1 Participating Area

The Marquands Road Reconstruction contributions relate only to the 1177.70 metre length of Marquands Road between Leakes Road and the southern edge of the drainage reserve, adjacent to Westbourne Grammar.

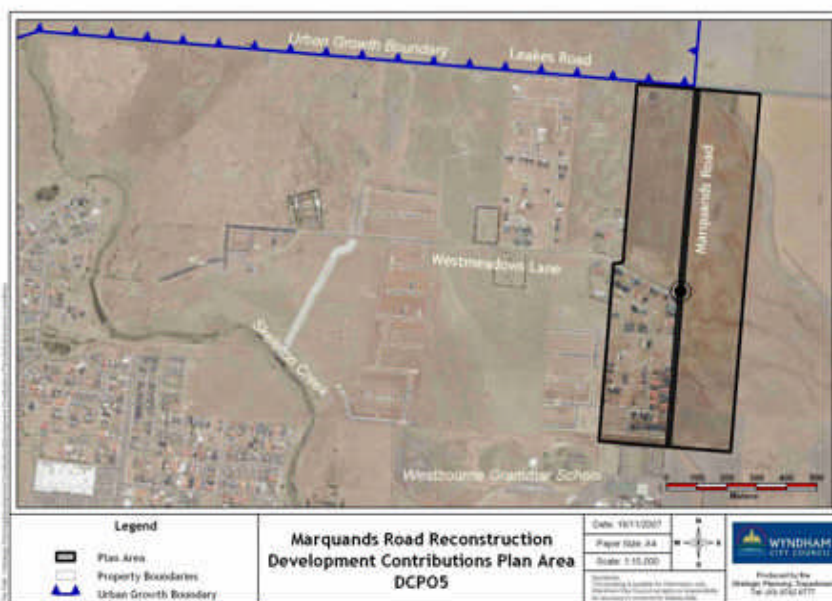


FIGURE 4: MARQUANDS ROAD RECONSTRUCTION - DEVELOPMENT CONTRIBUTIONS PLAN AREA (DCPO5)

#### 6.2 The Marquands Road Contribution

Marquands Road is collector road that will need to be upgraded from rural to urban standard. A separate contribution has been created to facilitate a fair and reasonable cost sharing to fund the upgrading of this road.

#### 6.3 Costs for Road Reconstruction

The total cost to upgrade and construct the 1177.70 metre length of Marquands Road is \$1,369,495 (as at December 2007), including 50% of the cost of the proposed roundabout at the junction of Westmeadows Lane and Marquands Road in Truganina South.

#### 6.4 Contributions and Reimbursement Method

Contributions for the Marquands Road DCP apply across the four properties serviced by Marquands Road, as shown in **Figure 4**, above. Contribution levels have been estimated to cover the entire cost of the road, north of the southern boundary of the Melbourne Water drainage channel, and seek to recover the entire costs of reconstruction of Marquands Road over the defined length.

Full details of the contribution levels for each property in the Plan area and the contribution method employed are set out in the *Westmeadows Lane and Marquands Road Development Contributions Plan 2008*.



## 7.0 Defining “developable” land

Development Contributions are payable on all developable land on any given development site. For the purposes of the Truganina South DCP, developable land is defined as follows:

**Gross Developable Area** is the total site area, minus arterial and sub-arterial road widenings and reserves, floodways in dedicated reservations, conservation reserves and school sites. Estate entry features, plantation and garden reserves and similar features are not omitted. Gross Developable Area is only used in the calculation of public open space requirements.

**Net Development Area** is the total site area, minus arterial and sub-arterial road widenings and reserves, floodways in dedicated reservations, school sites and [except in calculating public open space requirements] the open space required by Council. Estate entry features, plantation and garden reserves and similar features are not omitted.

The arterial roads in or adjacent to the Truganina South DCP area are Leakes, Palmers, Sayers and Forsyth Roads.

The amount of developable land on a given land parcel will be determined prior to the approval of an Alternative Plan for a given land parcel.

## 8.0 Administration of the DCP

- a. Development contributions are payable at the time of subdivision (or agreed stages thereof), prior to a *Statement of Compliance* being issued.
- b. In accordance with Section 46N of the *Planning and Environment Act 1987*, a Section 173 Agreement will be required for the payment of the contributions unless they are fully paid prior to issue of a *Statement of Compliance* on the first stage for release.
- c. For land identified in **Figure 4**, page 29, full payment of the contribution for the construction of Marquands Road is due at the time of the first subdivision of the land, prior to a *Statement of Compliance* being issued.
- d. Works may be constructed in lieu of a cash contribution on some projects but this must be negotiated with Council.
- e. Any temporary works undertaken by a developer will not be funded or be able to be offset against contributions, except to the extent that the Council may agree that any part of such works may be permanent.
- f. The administration of contributions made under the Truganina South DCP will be transparent and demonstrate:
  - o Amount and time of funds collected
  - o The source of funds collected
  - o Amount and time of expenditure
  - o The purpose for which the expenditure was made
  - o The account balances for individual infrastructure projects
- g. Subject to the following exceptions, cash contributions are not directed to defined projects, but divided into their separate categories, and pooled by category for the Wyndham North Growth Area. This facilitates funding of infrastructure projects as soon as reserves can be relied on to be available. The defined purpose exceptions are:
  - o Contributions of land under this DCP;
  - o Works in kind approved by the Council;
  - o Supplementary contributions under Part B of this DCP, which may be still pooled if appropriate, but shall only be expended within the Truganina South DCP area; and
  - o Contributions to Marquands Road under Part C of this DCP, which defers to the contributions and reimbursement method in the Westmeadows Lane and Marquands Road Development Contributions Plan 2008.



## 9.0 Timing of Infrastructure Provision

- a. Where contributions are directed to specific items, as in Parts B and C of this DCP, they will be assigned to those items as soon as practical, based on funding levels and sizes of cost increments.
- b. Where contributions include land, the land component(s) should be the first contributions where practical, unless otherwise agreed in writing.
- c. Timing of delivery of each other category of infrastructure funded by this DCP is primarily determined by:
  - emerging needs for the particular type and item of infrastructure in the overall Wyndham North Concept Plan area, using relevant measures such as traffic volume, populations in target ranges, urgency factors such as safety, immediacy of needs (eg. for services such as pre-schools), and distances of travel to alternatives;
  - the availability and practicality of alternatives in or near the sectors of Wyndham North that are under consideration for the next investments in that category;
  - availability of the required land and services to it;
  - available funds; and
  - practicality of the increment of infrastructure being considered.
- d. Agreements to works in kind need to reflect the above principles, but will also take account of:
  - the needs of the relevant project for access and services,
  - any preparedness or desire by the proponent to fund advancement of works ahead of needs, or to add value through higher standards of provision than funded by the DCP, and
  - the need to ensure that the proposed increment(s) of infrastructure are cost effective, and that costs associated with temporary works or their incremental nature are not allowed against contributions if they will dilute the overall value of the contributions.

All works are potential candidates for works in kind. Whether they will be approved as works in kind will depend on factors such as those listed under (c), above.

Council's templates for agreements include provision for works in kind, and a more specific form of "child" agreement is available, to subsequently define details such as tendering, agreed costs, supervision, etc.
- e. The Council may advance funds from other sources to bring forward projects to be funded by this DCP, and may recover such funds from later contributions.
- f. A greater degree of near-term certainty on timing of works is provided in Council capital works plans and budgets. Whilst this approach can see funds from Truganina South applied some kilometres to the west, it's worth noting that:
  - contributions from other parts of Wyndham North have already funded most of the cost of Leakes Road, the DCP's northern boundary, the Forsyth Road connection south to the Princes Freeway and Point Cook, and other roads and community facilities to the west; and
  - Truganina South's community centre and sports facilities are to be located well into the Lot 9 Leakes Road, so their timing will be influenced by factors that the Council can only partly control.



## 10.0 Summary of Contributions

The following sections summarise the contributions payable under the three components of this DCP.

### 10.1 Development Contributions (Summary)

Truganina South	Item	Cost	Comments
TRUGANINA SOUTH COMMUNITY DEVELOPMENT CONTRIBUTIONS PLAN	Arterial road and major pathway network	<b>\$96,606.28* per net developable hectare</b> *Based upon land value of \$750,000 per hectare in the March Quarter, 2011. Subject to CPI from March 2010 quarter.	Includes acquisition of land for widenings, construction of arterial roads, major pathways and intersection treatments in accordance with the Wyndham North Concept Plan (1996).
	Open space	<b>7.5% of gross developable area for residential development.</b> <b>5% gross developable area for Activity Centres.</b>	Will be required as land or cash in lieu as set out in Table 4, page 34
	Community infrastructure	<b>\$1,150.00* per lot/dwelling, or for retirement villages and similar developments that comply with the provisions of Section 4.3.2, \$13,500.00* per net developable hectare.</b>	Includes Community meeting, activity and aquatic centres, Libraries, and High standard and specialised sporting facilities; and other items listed in Section 4.2.1
	Other development infrastructure	<b>\$3,228.82 per lot/dwelling, or for retirement villages and similar developments that comply with the provisions of Section 4.3.3, \$48,432.32* per net developable hectare.</b> Subject to CPI from March 2010 quarter.	Includes maternal and child healthcare centres, kindergartens and development of sportsground facilities and other items in Section 4.3.1.



## 10.2 Marquands Road Contributions (DP05)

Item		Cost	Comments
<b>Marquands Road Reconstruction Development Contributions Plan</b>	The development contributions will only cover the 1177.70 metre length of Marquands Road between Leakes Road and the southern edge of the drainage reserve, adjacent to Westbourne Grammar School.	<b>See the <i>Westmeadows Lane and Marquands Road Development Contributions Plan (2008)</i> for Contributions applicable to each affected land holding.</b>	

## 10.3 Supplementary Infrastructure Contribution (PSP)

Item		Cost	Comments
<b>Truganina South Supplementary Development Contributions</b>	<b>1. Forsyth Road Widening</b>	<b>\$5,717.01 per * per net developable hectare,</b> including future Activity Centre land.  Subject to CPI from March 2010 quarter.	Supplement to the Arterial Road and Major Pathway network contribution
	<b>2. Collector Road Crossings - Culverts</b>	<b>\$12,677.05 per * per net developable hectare,</b> including future Activity Centre land.  Subject to CPI from March 2010 quarter.	Supplement to the Arterial Road and Major Pathway network contribution
	<b>3. Shared Trail Network</b>	<b>\$5,499.05 per * per net developable hectare,</b> including future Activity Centre land.  Subject to CPI from March 2010 quarter.	Supplement to the Arterial Road and Major Pathway network contribution
	<b>4. Conservation Area – Road and Path Crossings and Offsets</b>	<b>\$4,349.54 per * per net developable hectare,</b> including future Activity Centre land.  Subject to CPI from March 2010 quarter.	Supplement to the Arterial Road and Major Pathway network contribution




	<b>5. Pedestrian Bridges across Drainage Reserves</b>	<b>\$2,572.65 per * per net developable hectare,</b> including future Activity Centre land.  Subject to CPI from March 2010 quarter.	Supplement to the Arterial Road and Major Pathway network contribution
	<b>6. Revised Intersection Costs – New Intersection Costs</b>	<b>\$40,170.51 per * per net developable hectare,</b> including future Activity Centre land.  Subject to CPI from March 2010 quarter.	Supplement to the Arterial Road and Major Pathway network contribution
	<b>7. Revised Intersection Costs – Land acquisition for splays</b>	<b>\$1,719.57 per * per net developable hectare,</b> including future Activity Centre land.  Subject to CPI from March 2010 quarter.	Supplement to the Arterial Road and Major Pathway network contribution
	<b>8. Active Sporting Reserve – Land acquisition</b>	<b>\$2,427.18 per lot/dwelling, or for retirement villages and similar developments that comply with the provisions of Section 4.3.3, \$36,407.77* per net developable hectare.</b>  Subject to CPI from March 2010 quarter.	Supplement to Other Development Infrastructure contribution
	<b>9. Neighbourhood Parks – Basic Development</b>	<b>\$1,037.74 per lot/dwelling, or for retirement villages and similar developments that comply with the provisions of Section 4.3.3, \$15,566.10* per net developable hectare.</b>	Supplement to Other Development Infrastructure contribution



## 10.3 Open Space Requirements

**TABLE 5: OPEN SPACE REQUIREMENTS FOR INDIVIDUAL LOTS IN TRUGANINA SOUTH**

				
Property Number	Total Area (Ha)	Passive Open Space (Ha)	Total Net Developable Area (Ha)	Passive OS % nda
<b>Precinct</b>				
Property 1	124.44	1.20	76.65	1.57%
Property 2	15.65	0.20	14.48	1.38%
Property 3	16.04	0.25	14.59	1.71%
Property 4	12.01	1.00	7.92	12.63%
Property 5	7.14		6.57	0.00%
Property 6	11.69		7.60	0.00%
Property 7	11.97	0.50	7.23	6.92%
Property 8	11.97	0.50	11.47	4.36%
Property 9	12.02		8.24	0.00%
Property 10	11.99	0.80	5.48	14.60%
Property 11	11.99		6.94	0.00%
Property 12	2.54		1.66	0.00%
<b>Sub-total</b>	<b>249.45</b>	<b>4.45</b>	<b>168.83</b>	<b>2.64%</b>
Precinct road reserves	0.80	0.00	0.00	0.00%
<b>Sub-total</b>	<b>0.80</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00%</b>
<b>TOTAL PRECINCT</b>	<b>250.25</b>	<b>4.45</b>	<b>168.83</b>	<b>2.64%</b>
<b>TOTAL</b>	<b>250.25</b>	<b>4.45</b>	<b>168.83</b>	<b>2.64%</b>



GC75 Incorp Doc - Truganina South Precinct Development Contributions Plan, June 2011 (Amended July 2017) Approval Gazetted.doc

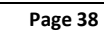




FIGURE 6: CELL “C” DEVELOPMENT PLAN 2001 (STAGE 1) HIGHLIGHTING THE TRUGANINA SOUTH AREA (EASTERN HALF)

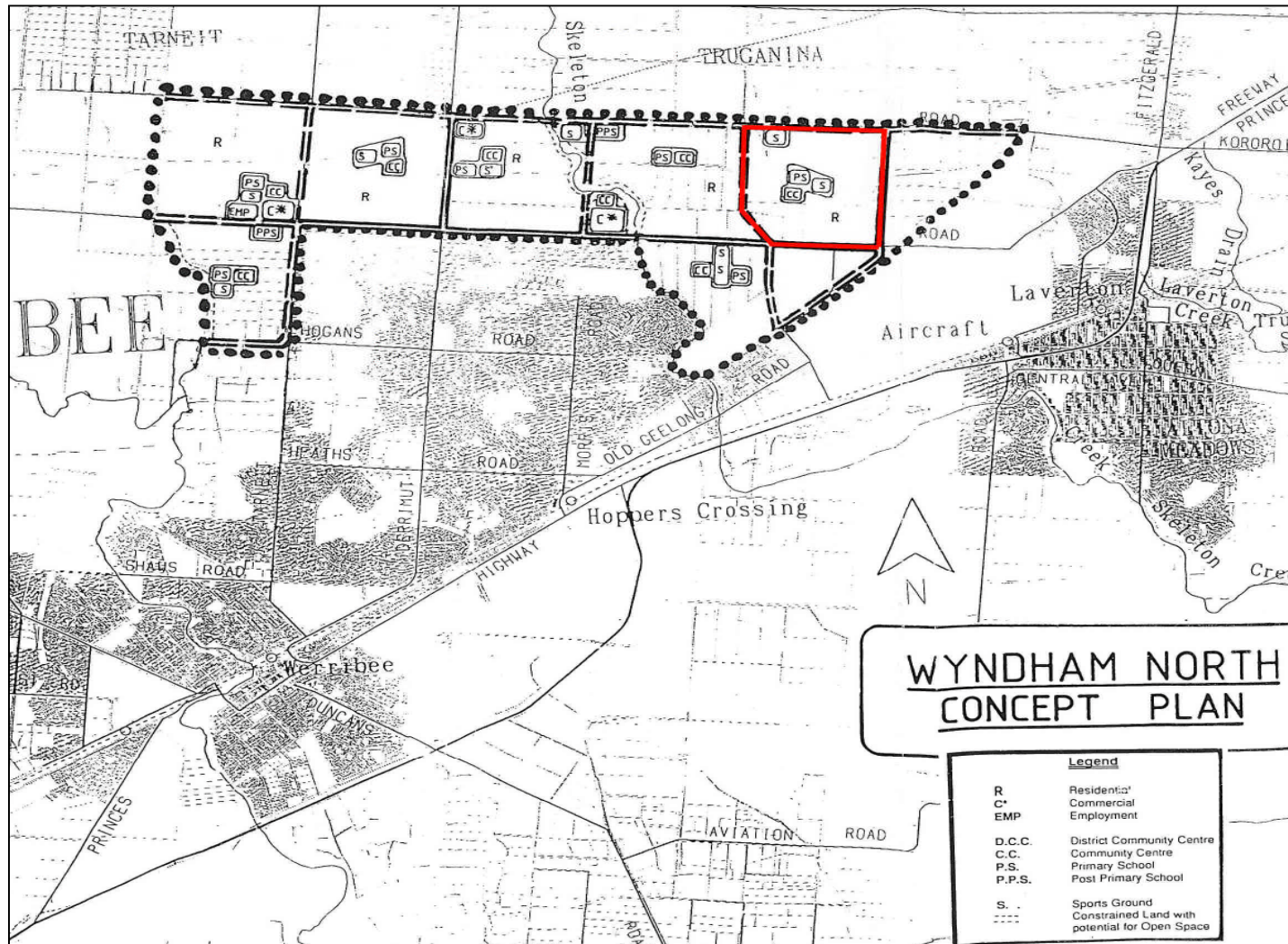
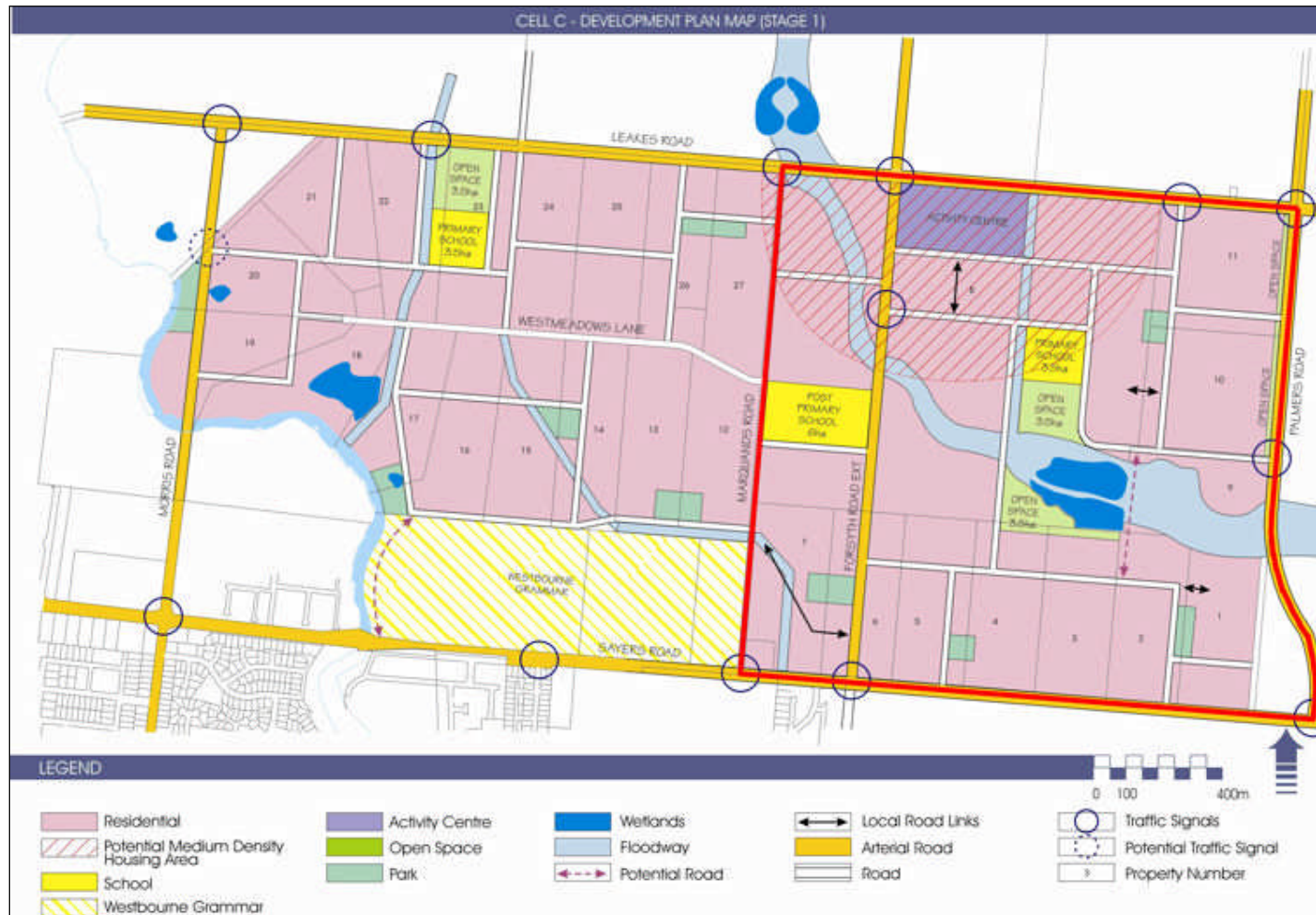


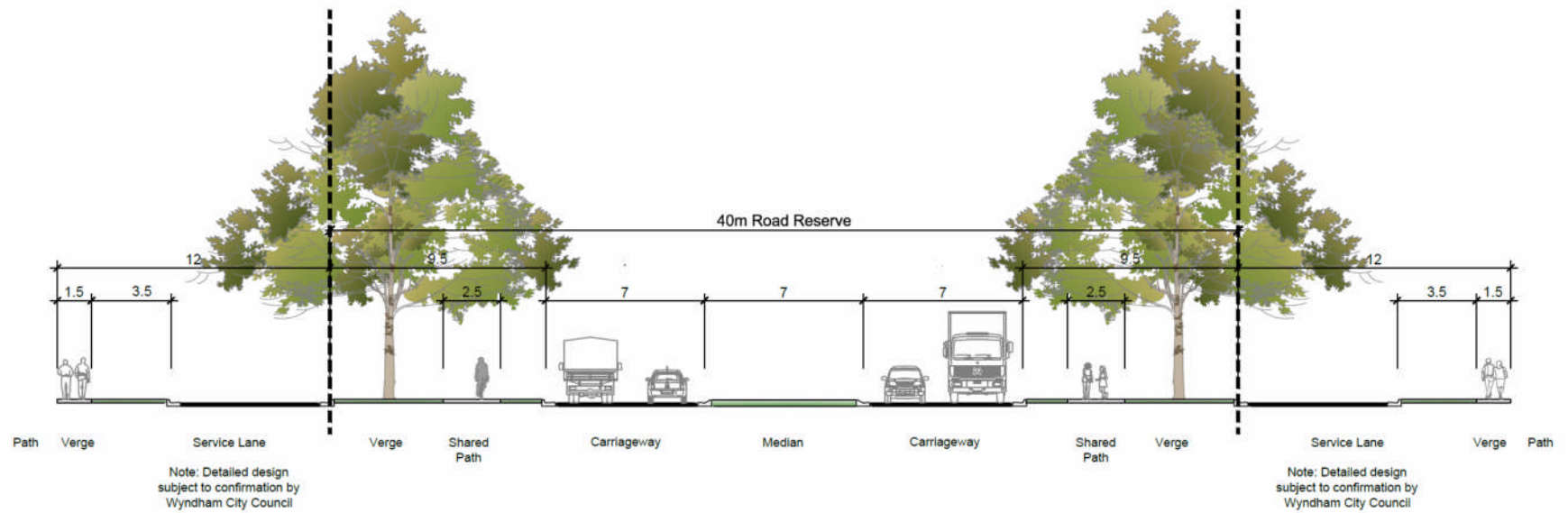


FIGURE 7: CELL “C” DEVELOPMENT PLAN 2001 (STAGE 1) HIGHLIGHTING THE TRUGANINA SOUTH AREA (THE EASTERN HALF)





**FIGURE 8: FORSYTH ROAD – INDICATIVE CROSS-SECTION FOR 40 METRE CROSS-SECTION**





**TABLE 6: TRUGANINA SOUTH COMMUNITY PRECINCT – LAND BUDGET**



## Truganina South Property Specific Land Budget-Draft

Current at 12 May 2011

Property Number	Total Area (Hectares)	Transport			Community				Unencumbered Land Available for Recreation		Other	Total Net Developable Area (Hectares)
		6 Lane Arterial Road / Widening	4 Lane Arterial Road / Widening	Connector Street within Conservation Reserve	Community Facilities	Government Education	Waterway / Drainage Line / Wetland / Retarding	Conservation	Active Open Space	Passive Open Space	Existing Road Reserves	
<b>Precinct</b>												
Property 1	124.44		4.24	0.32	0.30	5.40	11.20	17.58	8.00	1.20		76.21
Property 2	15.65	0.97								0.20		14.48
Property 3	16.04	1.19								0.25		14.60
Property 4	12.01	0.84					2.08	0.16				8.93
Property 5	7.14						0.57			1.00		5.57
Property 6	11.69		2.13					1.98				7.58
Property 7	11.97							4.24		0.50		7.23
Property 8	11.97									0.50		11.47
Property 9	12.02			0.47				3.77				7.78
Property 10	11.99							3.60		0.80		7.59
Property 11	11.99	0.43						6.72				4.84
Property 12	2.54	0.88										1.66
<b>Sub-total</b>	<b>249.45</b>	<b>4.32</b>	<b>6.37</b>	<b>0.79</b>	<b>0.30</b>	<b>5.40</b>	<b>13.85</b>	<b>38.05</b>	<b>8.00</b>	<b>4.45</b>		<b>167.92</b>
Precinct road reserves	0.80	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.63	0.00
<b>Sub-total</b>	<b>0.80</b>	<b>0.17</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.63</b>	<b>0.00</b>
<b>TOTAL PRECINCT</b>	<b>250.25</b>	<b>4.49</b>	<b>6.37</b>	<b>0.79</b>	<b>0.30</b>	<b>5.40</b>	<b>13.85</b>	<b>38.05</b>	<b>8.00</b>	<b>4.45</b>	<b>0.63</b>	<b>167.92</b>
<b>TOTAL</b>	<b>250.25</b>	<b>4.49</b>	<b>6.37</b>	<b>0.79</b>	<b>0.30</b>	<b>5.40</b>	<b>13.85</b>	<b>38.05</b>	<b>8.00</b>	<b>4.45</b>	<b>0.63</b>	<b>167.92</b>

*Note: Estimates only – Subject to change at Planning approval stage*



## APPENDICES

### APPENDIX A: 2007 DEVELOPMENT CONTRIBUTION CALCULATIONS FOR THE ARTERIAL ROAD NETWORK – NORTHERN GROWTH AREA



2007 Development Contributions - Northern Growth Front						
Leakes Road	Works	Amount	Unit	Rate	Cost	
Road Construction	Greenfield to 2 lane rural	83	100 L/Metre	\$134,228	\$11,140,924	
	2 lane rural to 2 lane urban upgrade	83	100 L/Metre	\$81,024	\$6,724,992	
Palmer's to Davis Bridges		1	number	\$1,033,000	\$1,033,000	
	Major Intersection	2.5	number	\$636,845	\$1,592,113	
Signalisation	Mid-block intersection	2.5	number	\$413,200	\$1,033,000	\$21,524,029
Sayers Road	Works	Amount	Unit	Rate	Cost	subtotal
Road Construction						
Stge 1 - Palmer's to Davis Rds	2 lane rural upgrade	83	100 L/Metre	\$155,621	\$12,916,543	
Stge 2 - Derrimut to Davis	2 lane rural to 4 lane urban	38	100 L/Metre	\$308,381	\$11,718,478	
	From Palmer's to Skeleton Creek. 20m X 2770m - south side	5.54	ha	\$500,000	\$2,770,000	
Land Acquisition	From Skeleton Creek to Tarnet Rd. 20m X 3830m - north side	7.66	ha	\$500,000	\$3,830,000	
	From Tarnet Rd to Davis Rd 12m X 1700m - north side.	2.04	ha	\$500,000	\$1,020,000	
Bridges		1	number	\$1,033,000	\$1,033,000	
Signalisation	Major Intersection	3.5	number	\$636,845	\$2,228,958	
	Mid-block intersection	6	number	\$413,200	\$2,479,200	\$37,996,179
Hogans Road	Works	Amount	Unit	Rate	Cost	
Road Construction	Greenfield to 2 lane rural (Tarnet Rd to Davis Creek)	9.5	100 L/Metre	\$134,228	\$1,275,166	
Land Acquisition	Tarnet Rd to Davis Creek 12m x 950 metres south side	1.14	ha	\$500,000	\$570,000	
	Major Intersection	0	number	\$636,845	\$0	
Signalisation	Mid-block intersection	0.5	number	\$413,200	\$206,600	\$2,051,766
Tarnet Road	Works	Amount	Unit	Rate	Cost	
Road Construction	2 lane rural to 4 lane urban	32	101 L/Metre	\$308,381	\$9,868,192	
	Hogans Rd to Leakes Rd 12m X 3,200m - west side	3.84	ha	\$500,000	\$1,920,000	
Land Acquisition	major intersection	0.25	number	\$636,845	\$159,211	
Signalisation	Mid-block intersection	1.5	number	\$413,200	\$619,800	\$12,567,203
Derrimut Road	Works	Amount	Unit	Rate	Cost	
Road Construction	2 lane rural to 4 lane urban	16	100 L/Metre	\$308,381	\$4,934,096	
	Sayers to Leakes Rds 20m X 1,600m - east side.	3.2	ha	\$500,000	\$1,600,000	
Land Acquisition	major intersection	0	number	\$636,845	\$0	
	Mid-block intersection	1	number	\$413,200	\$413,200	\$6,947,296
Morris Road	Works	Amount	Unit	Rate	Cost	
Road Construction	Greenfield to 4 lane urban	16	100 L/Metre	\$386,774	\$6,188,384	
	Sayers Rd to Leakes Rd 32m X 1,600m	5.12	ha	\$500,000	\$2,560,000	
Land Acquisition		1	number	\$1,033,000	\$1,033,000	\$9,781,384
Bridges						
Forsyth Road	Works	Amount	Unit	Rate	Cost	
Road Construction					\$0	
Stage 1	2 lane rural rd upgrade	34	100 L/Metre	\$155,621	\$5,291,114	
Stage 2	2 lane rural to 4 lane urban	34	100 L/Metre	\$308,381	\$10,484,954	
	Road extension to Leakes Road 32m X 3,400m	10.88	ha	\$500,000	\$5,440,000	
Land Acquisition	major intersection	1	number	\$636,845	\$636,845	
Signalisation	Mid-block intersection	1	number	\$413,200	\$413,200	\$22,266,113
Palmer's Road	Works	Amount	Unit	Rate	Cost	
	Sayers to Leakes Rds 30m X 1,600m - west side.	4.8	ha	\$500,000	\$2,400,000	
Land Acquisition	major intersection	0	number	\$636,845	\$0	
	Mid-block intersection	1	number	\$413,200	\$413,200	\$2,813,200
Net developable ha from Wyndham 11th Concept Plan		1560	ha		Total	\$115,947,169
DEVELOPMENT CONTRIBUTION LEVY PER NET DEVELOPABLE HECTARE						\$74,325.11
Construction costs adjusted by CPI from September 2005 to December 2006						

**APPENDIX B: 2009REVISED DEVELOPMENT CONTRIBUTION CALCULATIONS FOR THE ARTERIAL ROAD NETWORK – NORTHERN GROWTH AREA**



Development Contributions - Northern Growth Front (Revised 2009)							
Leakes Road	Works	Amount	Unit	Rate	Cost LAND	Cost ROAD	TOTAL
Road Construction	Greenfield to 2 lane rural	83	100 L/Metre	\$134,228	\$0	\$11,140,924	
	2 lane rural to 2 lane urban upgrade	83	100 L/Metre	\$81,024	\$0	\$6,724,992	
Palmer's to Davis		1	number	\$1,033,000	\$0	\$1,033,000	
Bridges	Major Intersection	2.5	number	\$636,845	\$0	\$1,592,113	
Signalisation	Mid-block intersection	2.5	number	\$413,200	\$0	\$1,033,000	
					\$0	\$21,524,029	\$21,524,029
Sayers Road	Works	Amount	Unit	Rate	Cost	Cost	subtotal
Road Construction							
Stage 1 - Palmer's to Davis Rds	2 lane rural upgrade	83	100 L/Metre	\$155,621	\$0	\$12,916,543	
Stage 2 - Derrimut to Davis	2 lane rural to 4 lane urban	38	100 L/Metre	\$308,381	\$0	\$11,718,478	
	From Palmer's to Skeleton Creek. 20m X 2770m - south side	5.54	ha	\$500,000	\$2,770,000	\$0	
Land Acquisition	From Skeleton Creek to Tarnet Rd. 20m X 3830m - north side	7.66	ha	\$500,000	\$3,830,000	\$0	
	From Tarnet Rd to Davis Rd 12m X 1700m - north side.	2.04	ha	\$500,000	\$1,020,000	\$0	
Bridges		1	number	\$1,033,000	\$0	\$1,033,000	
Signalisation	Major Intersection	3.75	number	\$636,845	\$0	\$2,388,169	
	Mid-block intersection	5	number	\$413,200	\$0	\$2,066,000	
					\$7,620,000	\$30,122,190	\$37,742,190
Hogans Road	Works	Amount	Unit	Rate	Cost	Cost	
Road Construction	Greenfield to 2 lane rural (Tarnet Rd to Davis Creek)	9.5	100 L/Metre	\$134,228	\$0	\$1,275,166	
	Tarnet Rd to Davis Creek 12m x 950 metres north side	1.14	ha	\$500,000	\$570,000	\$0	
Land Acquisition		0.25	number	\$636,845	\$0	\$159,211	
Signalisation	Major Intersection	0.5	number	\$413,200	\$0	\$206,600	
	Mid-block intersection				\$570,000	\$1,640,977	\$2,210,977
Tarnet Road	Works	Amount	Unit	Rate	Cost	Cost	
Road Construction	2 lane rural to 4 lane urban	32	101 L/Metre	\$308,381	\$0	\$9,868,192	
	Hogans Rd to Leakes Rd 12m X 3,200m - west side	3.84	ha	\$500,000	\$1,920,000	\$0	
Land Acquisition		0	number	\$636,845	\$0	\$0	
Signalisation	Major Intersection	1.5	number	\$413,200	\$0	\$619,800	
	Mid-block intersection				\$1,920,000	\$10,487,992	\$12,407,992
Derrimut Road	Works	Amount	Unit	Rate	Cost	Cost	
Road Construction	2 lane rural to 4 lane urban	16	100 L/Metre	\$308,381	\$0	\$4,934,096	
	Sayers to Leakes Rds 20m X 1,600m - east side.	3.2	ha	\$500,000	\$1,600,000	\$0	
Land Acquisition		0	number	\$636,845	\$0	\$0	
Signalisation	Major Intersection	2	number	\$413,200	\$0	\$826,400	
	Mid-block intersection				\$1,600,000	\$5,760,496	\$7,360,496
Morris Road	Works	Amount	Unit	Rate	Cost	Cost	
Road Construction	Greenfield to 4 lane urban	16	100 L/Metre	\$386,774	\$0	\$6,188,384	
	Sayers Rd to Leakes Rd 32m X 1,600m	5.12	ha	\$500,000	\$2,560,000	\$0	
Land Acquisition		1	number	\$1,033,000	\$0	\$1,033,000	
Bridges					\$2,560,000	\$7,221,384	\$9,781,384
Forsyth Road	Works	Amount	Unit	Rate	Cost	Cost	
Road Construction					\$0	\$0	
Stage 1	2 lane rural rd upgrade	34	100 L/Metre	\$155,621	\$0	\$5,291,114	
Stage 2	2 lane rural to 4 lane urban	34	100 L/Metre	\$308,381	\$0	\$10,484,954	
	Road extension to Leakes Road 32m X 3,400m	10.88	ha	\$500,000	\$5,440,000	\$0	
Land Acquisition		0	number	\$636,845	\$0	\$0	
Signalisation	Major Intersection	2	number	\$413,200	\$0	\$826,400	
	Mid-block intersection				\$5,440,000	\$16,602,468	\$22,042,468
Palmer's Road	Works	Amount	Unit	Rate	Cost	Cost	
	Sayers to Leakes Rds 30m X 1,600m - west side.	4.8	ha	\$500,000	\$2,400,000	\$0	
Land Acquisition		0	number	\$636,845	\$0	\$0	
Signalisation	Major Intersection	1	number	\$413,200	\$0	\$413,200	
	Mid-block intersection				\$2,400,000	\$413,200	\$2,813,200
Net developable ha from Wyndham Nth Concept Plan		1560	ha		\$22,110,000	\$93,772,736	\$115,882,736
Construction costs adjusted by CPI from September 2005 to December 2006							



## APPENDIX C: WYNDHAM NORTH – COMMUNITY INFRASTRUCTURE COSTINGS

Football/Cricket Pavilion - DISTRICT				
FACILITY COMPONENT	STANDARD	DISTRICT DETAILS		COST
Pavilion	District	Room Size	Cost per m2	Total per room
Change Rooms <i>Based on 25 people getting changed.</i>	70m <sup>2</sup> (Home: 35m <sup>2</sup> ; Away 35m <sup>2</sup> ). Where there are multiple playing fields, it will be necessary to provide one additional set of change rooms. Where there are more than 2 playing fields the design should be Master Planned to allow for an additional set of	140	\$3,000	\$420,000.00
First Aid	Home room to include First Aid Area (5m <sup>2</sup> ). May be a separate room.	5	\$5,000	\$25,000.00
Showers & Toilets <i>2 pans, 2 basins, 3 showers.</i>	44m <sup>2</sup> (Home: 22m <sup>2</sup> ; Away 22m <sup>2</sup> ). Where there are multiple playing fields, it will be necessary to provide one additional set of showers & toilets. Where there are more than 2 playing fields the design should be Master Planned to allow for an additional set of	88	\$5,000	\$440,000.00
Umpires Room <i>Includes showers and toilets.</i>	Main Oval: 15m <sup>2</sup> . An extra 5m <sup>2</sup> will be provided for each additional oval. Size allows for changing space, toilet and a cubicle shower / change area to allow	20	\$5,000	\$100,000.00
Public Toilets	25m <sup>2</sup> (Male: 10m <sup>2</sup> ; Female 10m <sup>2</sup> ; Disabled: 5m <sup>2</sup> ).	25	\$5,000	\$125,000.00
Kitchen/Kiosk <i>Designs will require approval from Council's Environmental Health Department.</i>	15m <sup>2</sup> . Council will only provide basic facilities to ensure that the kitchen/kiosk complies with Australian Standard 4674 Series, the Food Standards Code and Food Act 1984.	15	\$5,000	\$75,000.00
Storage	Main Oval: Total 15m <sup>2</sup> . An extra 5m <sup>2</sup> will be provided for each additional oval. One internal and one externally accessed storage area should be provided.	20	\$3,000	\$60,000.00
Social Area	50m <sup>2</sup> . The design for all pavilions should show social spaces having an outlook onto the playing area, and should be Master Planned to allow for future extension of social spaces.	50	\$3,000	\$150,000.00
External Covered Viewing Area	5m veranda.	25	\$2,500	\$62,500.00
<b>TOTAL</b>		<b>388</b>		<b>\$1,457,500.00</b>



Football/Cricket Pavilion - LOCAL				
FACILITY COMPONENT	STANDARD	LOCAL DETAILS (Level		COST
Pavilion	Local	Room Size	Cost per m2	Total per room
Change Rooms <i>Based on 25 people getting changed.</i>	70m <sup>2</sup> (Home: 35m <sup>2</sup> ; Away 35m <sup>2</sup> ). Where there are multiple playing fields, it will be necessary to provide one additional set of change rooms. Where there are more than 2 playing fields the design should be Master Planned to allow for an additional set of	70	\$3,000	\$210,000.00
First Aid	Home room to include First Aid Area (5m <sup>2</sup> ). May be a separate room.	5	\$5,000	\$25,000.00
Showers & Toilets <i>2 pans, 2 basins, 3 showers.</i>	44m <sup>2</sup> (Home: 22m <sup>2</sup> ; Away 22m <sup>2</sup> ). Where there are multiple playing fields, it will be necessary to provide one additional set of showers & toilets. Where there are more than 2 playing fields the design should be Master Planned to allow for an additional set of	44	\$5,000	\$220,000.00
Umpires Room <i>Includes showers and toilets.</i>	Main Oval: 15m <sup>2</sup> . An extra 5m <sup>2</sup> will be provided for each additional oval. Size allows for changing space, toilet and a cubicle shower / change area to allow	15	\$5,000	\$75,000.00
Public Toilets	25m <sup>2</sup> (Male: 10m <sup>2</sup> ; Female 10m <sup>2</sup> ; Disabled: 5m <sup>2</sup> ).	25	\$5,000	\$125,000.00
Kitchen/Kiosk <i>Designs will require approval from Council's Environmental Health Department.</i>	15m <sup>2</sup> . Council will only provide basic facilities to ensure that the kitchen/kiosk complies with Australian Standard 4674 Series, the Food Standards Code and Food Act 1984.	15	\$5,000	\$75,000.00
Storage	Main Oval: Total 15m <sup>2</sup> . An extra 5m <sup>2</sup> will be provided for each additional oval. One internal and one externally accessed storage area should be provided.	15	\$3,000	\$45,000.00
Social Area	50m <sup>2</sup> . The design for all pavilions should show social spaces having an outlook onto the playing area, and should be Master Planned to allow for future extension of social spaces.	20	\$3,000	\$60,000.00
External Covered Viewing Area	5m veranda.		\$2,500	\$0.00
<b>TOTAL</b>		<b>209</b>		<b>\$835,000.00</b>

Soccer Pavilion - DISTRICT				
FACILITY COMPONENT	STANDARD	DISTRICT DETAILS		COST
Pavilion	District	Room Size	Cost per m2	Total per room
Change Rooms <i>Based on 15 people getting changed.</i>	50m <sup>2</sup> (Home: 25m <sup>2</sup> ; Away 25m <sup>2</sup> ). Where there are multiple playing fields, it will be necessary to provide one additional set of change rooms. Where there are more than 2 playing fields the design should be Master Planned to allow for an additional set of change	100	\$3,000	\$300,000.00
First Aid	Home room to include First Aid Area (5m <sup>2</sup> ). May be a separate room.	5	\$5,000	\$25,000.00
Showers & Toilets <i>2 pans, 2 basins, 2 showers.</i>	30m <sup>2</sup> (Home: 15m <sup>2</sup> ; Away 15m <sup>2</sup> ). Where there are multiple playing fields, it will be necessary to provide one additional set of showers & toilets. Where there are more than 2 playing fields the design should be Master Planned to allow for an additional set of showers &	60	\$5,000	\$300,000.00
Referees Room <i>Includes showers and toilets.</i>	Main Field: 15m <sup>2</sup> . An extra 5m <sup>2</sup> will be provided for each additional field. Size allows for changing space, toilet and a cubicle shower / change area to allow mixed gender	20	\$5,000	\$100,000.00
Public Toilets	25m <sup>2</sup> (Male: 10m <sup>2</sup> ; Female 10m <sup>2</sup> ; Disabled:	25	\$5,000	\$125,000.00
Kitchen/Kiosk <i>Designs will require approval from Council's Environmental Health Department.</i>	15m <sup>2</sup> . Council will only provide basic facilities to ensure that the kitchen/kiosk complies with Australian Standard 4674 Series, the Food Standards Code and Food Act 1984.	15	\$5,000	\$75,000.00
Storage	Main Field: Total 15m <sup>2</sup> . An extra 5m <sup>2</sup> will be provided for each additional field. One internal and one externally accessed storage area should be provided.	20	\$3,000	\$60,000.00
Social Area	50m <sup>2</sup> . The design for all pavilions should show social spaces having an outlook onto the playing area, and should be Master Planned to allow for future extension of social	50	\$3,000	\$150,000.00
External Covered Viewing Area	5m veranda.	25	\$2,500	\$62,500.00
<b>Total</b>		<b>320</b>		<b>\$1,197,500.00</b>



Soccer Pavilion - LOCAL				
FACILITY COMPONENT	STANDARD	LOCAL DETAILS		COST
Pavilion	Local	Room Size	Cost per m2	Total per room
Change Rooms	50m <sup>2</sup> (Home: 25m <sup>2</sup> ; Away 25m <sup>2</sup> ). Where there are multiple playing fields, it will be necessary to provide one additional set of change rooms. Where there are more than 2 playing fields the design should be Master Planned to allow for an additional set of change	40	\$3,000	\$120,000.00
Based on 15 people getting changed.				
First Aid	Home room to include First Aid Area (5m <sup>2</sup> ). May be a separate room.	5	\$5,000	\$25,000.00
Showers & Toilets	30m <sup>2</sup> (Home: 15m <sup>2</sup> ; Away 15m <sup>2</sup> ). Where there are multiple playing fields, it will be necessary to provide one additional set of showers & toilets. Where there are more than 2 playing fields the design should be Master Planned to allow for an additional set of showers &	30	\$5,000	\$150,000.00
2 pans, 2 basins, 2 showers.				
Referees Room	Main Field: 15m <sup>2</sup> . An extra 5m <sup>2</sup> will be provided for each additional field. Size allows for changing space, toilet and a cubicle shower / change area to allow mixed gender	15	\$5,000	\$75,000.00
Includes showers and toilets.				
Public Toilets	25m <sup>2</sup> (Male: 10m <sup>2</sup> ; Female 10m <sup>2</sup> ; Disabled:	25	\$5,000	\$125,000.00
Kitchen/Kiosk	15m <sup>2</sup> . Council will only provide basic facilities to ensure that the kitchen/kiosk complies with Australian Standard 4674 Series, the Food Standards Code and Food Act 1984.	15	\$5,000	\$75,000.00
Designs will require approval from Council's Environmental Health Department.				
Storage	Main Field: Total 15m <sup>2</sup> . An extra 5m <sup>2</sup> will be provided for each additional field. One internal and one externally accessed storage area should be provided.	15	\$3,000	\$45,000.00
Social Area	50m <sup>2</sup> . The design for all pavilions should show social spaces having an outlook onto the playing area, and should be Master Planned to allow for future extension of social	20	\$3,000	\$60,000.00
External Covered Viewing Area	5m veranda.	15	\$2,500	\$37,500.00
Total		180		\$712,500.00

Football/Cricket Playing Surface - DISTRICT				
Costs reflect Featherbrook costs for oval, lighting and reserve construction				
FACILITY COMPONENT	STANDARD	DETAILS	DISTRICT COST (L1)	
Playing Surface				
Size (Playing Area)	Football: Preferred playing surface 165m x 135m. Boundary line of 4m minimum.	Oval playing surface: Santa Ana Couch		\$1,232,792.48
		Bulk Earth Works: (inc. surrounding landscape).		\$351,700.00
Irrigation	Automated irrigation system.	(exc. Reserve Landscaping)		\$381,502.10
Drainage	Surface Drainage ONLY	1:80 Grade		\$289,400.00
Other Infrastructure				
Car Parking	Sealed car parking 80 cars per oval.	\$3,500 per car including landscaping		\$280,000.00
Floodlights(Football)	Council to initially provide training standard lighting for the main oval. The provision of in-ground conduit to support training standard lighting will be considered for the 2 <sup>nd</sup> oval.	Lighting at 100lux excluding conduits.		\$197,316.80
Lighting to comply with Australian Standard 2560 Series.	The provision of competition standard lighting will be considered at grounds with access to recycled water or synthetic surfaces.	Conduits in ground Only:		\$11,016.80
Oval Fencing	1.1m high perimeter fence.	\$90Lm		\$77,977.24
Spectator Area	Some fixed seating around the ground (includes park furniture). granitic gravel path around circumference of oval concrete viewing around on west side of oval, maintenance vehicle access from car park and larger concrete path network around outer reserve.	Granitic Path 80Lm Concrete Path 140Lm Albert Park Bench \$2000		\$24,000.00
Synthetic Wicket	Recommended specifications for the concrete slab and synthetic surface are 28m x 3.05m which allow for sealed bowler's run-up and wicketkeeper areas.	An 'all-seasons' product will be used for synthetic wickets.		\$25,408.00
Practice Wickets/Nets	2 Practice wickets per oval. Practice wickets to be located off the ovals.			\$100,000.00
Water Tank	120,000L	105,000L Cost does not include supply of Class A Water		\$93,700.00
Power Cor	250 Amps/ Phase	Approx \$5,000 (90amp/phase) Council requires 110amps per phase if oval lighting is included and increase again to 250amps per phase for pavilion. It would be most economical to provide total supply up		\$5,000.00
CWW Water Tapping	100mm Potable Tapping	Varies depending on site pipe tapping. In general 50mm for pavilion on fire service/ 100mm		
Gas				
TOTAL				\$3,069,813.42



Football/Cricket Playing Surface - LOCAL			
Costs reflect Featherbrook costs for oval, lighting and reserve construction			
FACILITY COMPONENT	STANDARD	DETAILS	LOCAL COST (L2)
Playing Surface			
Size (Playing Area)	Football: Preferred playing surface 165m x 135m. Boundary line of 4m minimum.	Oval playing surface: Santa Ana Couch Bulk Earth Works: (inc. surrounding landscape).	\$616,396.24 \$175,850.00
Irrigation	Automated irrigation system.	(exc. Reserve Landscaping)	\$190,751.05
Drainage	Surface Drainage ONLY	1:80 Grade	\$144,700.00
Other Infrastructure			
Car Parking	Sealed car parking for 30 cars per oval.	\$3,500 per car including landscaping	\$105,000.00
Floodlights(Football)	Council to initially provide training standard lighting for the main oval. The provision of in-ground conduit to support training standard lighting will be considered for the 2 <sup>nd</sup> oval.	Lighting at 100lux excluding conduits:	
Lighting to comply with Australian Standard 2560 Series.	The provision of competition standard lighting will be considered at grounds with access to recycled water or synthetic surfaces.	Conduits in ground Only:	\$11,016.80
Oval Fencing	1.1m high perimeter fence.	\$90Lm	\$38,988.62
Spectator Area	Some fixed seating around the ground (includes park furniture). granitic gravel path around circumference of oval concrete viewing around on west side of oval, maintenance vehicle access from car park and larger concrete path network around outer reserve.	Granitic Path 80Lm Concrete Path 140Lm Albert Park Bench \$2000	\$12,000.00
Synthetic Wicket	Recommended specifications for the concrete slab and synthetic surface are 28m x 3.05m which allow for sealed bowler's run-up and wicketkeeper areas.	An 'all-seasons' product will be used for synthetic wickets.	\$12,704.00
Practice Wickets/Nets	2 Practice wickets per oval. Practice wickets to be located off the oval/s.		\$50,000.00
Water Tank	120,000L	105,000L Cost does not include supply of Class A Water	\$93,700.00
Power Cor	250 Amps/ Phase	Approx \$5,000 (90amp/phase) Council requires 110amps per phase if oval lighting is included and increase again to 250amps per phase for pavilion. It would be most economical to provide total supply up	\$5,000.00
CWW Water Tapping	100mm Potable Tapping	Varies depending on site pipe tapping. In general 50mm for pavilion on fire service/ 100mm	
Gas			
TOTAL			\$1,456,106.71

Soccer Playing Surface - DISTRICT			
Costs reflect Arndell Park cost estimates and Grange Reserve Synthetic Soccer Pitch			
FACILITY COMPONENT	STANDARD	DETAILS	COST
Turf Playing Surface	District 3 Turf Pitches		
	Build of 2 pitches		
No. of Fields	Minimum 3 fields. Synthetic surface/s may be considered at sites without access to recycled water and where the surface is likely to experience a very high level of usage (e.g. a large tenant club with multiple teams).	Earthworks	\$266,000.00
Size (Playing Area)	Main Field: Preferred playing surface 100m x 64m. Additional Fields: Preferred playing surface 100m x 64m. Minimum 75m x 55m. Distance between sidelines and fence minimum 9m.	Turf: Santa Anna Couch	\$665,000.00 \$0.00 \$0.00
Irrigation	Automated Irrigation system.		\$465,500.00
Drainage	Refer to Council specification		\$292,600.00
Sub TOTAL			\$1,689,100.00
Other Infrastructure			
Car Parking	Sealed car parking for 80 cars, including 3 designated D/S bays. (30 Car parks for Local) Maintenance Cross Over	\$3,500 per car including landscaping	\$280,000.00
Floodlights	Council to initially provide training standard lighting for the main field. The provision of in-ground conduit to support training standard lighting will be considered for	Lighting at 100lux excluding conduits:	\$255,000.00
Lighting to comply with Australian Standard 2560 Series.	The provision of competition standard lighting will be considered at grounds with access to recycled water or synthetic surfaces.	Conduits in ground Only:	
Field Fencing	1.1m high perimeter fence. Other Field/s: Optional perimeter fence.		\$50,000.00
Reserve Fencing	Council to assess on a case-by-case basis, however, as a basic Principle a barrier should only be considered where senior competition is played, there is a safety issue or there is a synthetic surface.	Bollard price	
Spectator Area	Some fixed seating around the ground (includes park furniture).	Granitic Path 80Lm Concrete Path 140Lm Albert Park Bench \$2000	\$12,000.00
Scoreboard	Club to provide to Council standards.		\$0.00
Coach/ Interchange Shelter	Main Field: Council to provide 2 x standard design coaches' boxes. Additional Fields: Club to provide to Council standards.		\$30,000.00
Sub TOTAL			\$627,000.00
TOTAL			\$2,316,100.00



Soccer Pavilion - LOCAL				
FACILITY COMPONENT	STANDARD	LOCAL DETAILS		COST
Pavilion	Local	Room Size	Cost per m2	Total per room
Change Rooms	50m <sup>2</sup> (Home: 25m <sup>2</sup> ; Away 25m <sup>2</sup> ). Where there are multiple playing fields, it will be necessary to provide one additional set of change rooms. Where there are more than 2 playing fields the design should be Master Planned to allow for an additional set of change	40	\$3,000	\$120,000.00
Based on 15 people getting changed.				
First Aid	Home room to include First Aid Area (5m <sup>2</sup> ). May be a separate room.	5	\$5,000	\$25,000.00
Showers & Toilets	30m <sup>2</sup> (Home: 15m <sup>2</sup> ; Away 15m <sup>2</sup> ). Where there are multiple playing fields, it will be necessary to provide one additional set of showers & toilets. Where there are more than 2 playing fields the design should be Master Planned to allow for an additional set of showers &	30	\$5,000	\$150,000.00
2 pans, 2 basins, 2 showers.				
Referees Room	Main Field: 15m <sup>2</sup> . An extra 5m <sup>2</sup> will be provided for each additional field. Size allows for changing space, toilet and a cubicle shower / change area to allow mixed gender	15	\$5,000	\$75,000.00
Includes showers and toilets.				
Public Toilets	25m <sup>2</sup> (Male: 10m <sup>2</sup> ; Female 10m <sup>2</sup> ; Disabled:	25	\$5,000	\$125,000.00
Kitchen/Kiosk	15m <sup>2</sup> . Council will only provide basic facilities to ensure that the kitchen/kiosk complies with Australian Standard 4674 Series, the Food Standards Code and Food Act 1984.	15	\$5,000	\$75,000.00
Designs will require approval from Council's Environmental Health Department.				
Storage	Main Field: Total 15m <sup>2</sup> . An extra 5m <sup>2</sup> will be provided for each additional field. One internal and one externally accessed storage area should be provided.	15	\$3,000	\$45,000.00
Social Area	50m <sup>2</sup> . The design for all pavilions should show social spaces having an outlook onto the playing area, and should be Master Planned to allow for future extension of social	20	\$3,000	\$60,000.00
External Covered Viewing Area	5m veranda.	15	\$2,500	\$37,500.00
Total		180		\$712,500.00

Tennis Pavilion - DISTRICT				
FACILITY COMPONENT	STANDARD	DETAILS		COST
Pavilion	District	Room Size	Cost per m2	Total per room
Size	114m <sup>2</sup> . No pavilion will be provided for where there are opportunities to co-locate with other clubs. It is assumed that some facility components (such as public toilets, kitchens and canteens, etc) will be provided within these pavilions and these should not be duplicated. NO PAVILION TO BE CONSTRUCTED FOR LOCAL LEVEL FACILITY			
Change Rooms	20m <sup>2</sup> (Male: 10m <sup>2</sup> ; Female: 10m <sup>2</sup> ).	20	\$3,000	\$60,000.00
Based on 6 people getting changed.				
Showers & Toilets	16m <sup>2</sup> (Male: 8m <sup>2</sup> ; Female: 8 <sup>2</sup> ). Single cubicle shower and toilet for each change room.	16	\$5,000	\$80,000.00
1 pan, 1 basin, 1				
Public Toilets	Disabled: 8m <sup>2</sup> . Includes a shower and doubles as a family change room.	8	\$5,000	\$40,000.00
Kitchen/Kiosk	15m <sup>2</sup> . Council will only provide basic facilities to ensure that the kitchen/kiosk complies with Australian Standard 4674 Series, the Food Standards Code and Food Act 1984.	15	\$5,000	\$75,000.00
Designs will require approval from Council's Environmental Health Department.				
Storage	Total 15m <sup>2</sup> . One internal and one externally accessed storage area should be provided.	15	\$3,000	\$45,000.00
Social Area	40m <sup>2</sup> . The design for all pavilions should show social spaces having an outlook onto the playing area, and should be Master Planned to allow for future extension of	40	\$3,000	\$120,000.00
External Covered Viewing Area	3m veranda.	15	\$2,500	\$37,500.00
TOTAL		129		\$457,500.00



### Tennis Playing Surface - DISTRICT

Approx. costs taken from Cambridge Reserve Tennis court extension, fencing form Price Reserve Court Fencing

FACILITY COMPONENT	STANDARD	DETAILS	DISTRICT DETAILS (L1)	
Playing Surface		Cost for 2 courts	Details for 6 Courts	
No. of Courts	Minimum 6 courts and no more than 16 courts. A minimum of 4 courts will be constructed in the first stage of all new facility developments. A Master Plan prepared for the site shall show the location of all planned courts for the facility, not just the courts being constructed in the first stage of the			
Playing Surface	Hard courts are preferred. Alternative surfaces may be considered at sites with access to recycled water and where the cost to install and maintain the surface is shared between Council and the Club. Same	\$184,685.82 (per two courts)	\$184,685.82	\$554,057.46
	*Singles - 23.77m long x 8.23m wide.			
	*Doubles - 23.77m long x 10.97m wide.			
	*Show Court - 6.4m back run and 3.66m from side fence.			
	*Standard Courts - 5.5m back run and 3.05m from side fence.			
	*Courts side by side to be separated by minimum 3.66m distance.			
Other Infrastructure				
Car Parking	Sealed car parking for 50 cars, including 3 designated D/S bay, for every 6 courts. Includes maintenance access gate and	\$175,000 (\$3,500 per car park including landscaping and lighting)	\$35,000.00	\$175,000.00
Floodlights	Competition standard lighting for 4 courts. The provision of in-ground conduit to support competition standard lighting for all other	Martin Butcher estimate 350lux		\$100,000.00
Lighting to comply with Australian Standard				
Court Fencing	All courts. 3.6m high; 3.15 Gauge 45mm Diamond Black PVC Coated Chain Wire.	\$28,000 per two courts	\$28,000.00	\$84,000.00
Spectator Area	Some fixed seating around the courts (includes park furniture).	\$2000 for supply and install per Albert Park Seat	\$4,000.00	\$12,000.00
		Concrete \$70 per square meter. Approx. concrete spectator area on one side of courts 40m x 3m		\$8,400.00
TOTAL			\$251,685.82	\$933,457.46



TRUGANINA SOUTH DCP					
<b>Recreation Facilities - Details</b>					
(\$ March 2010)					
			Wyndham North Costs	Truganina South Costs	Per lot / dwelling cost
<b>Wootten Road (8.5 ha)</b>					
* 2 Football / Cricket Ovals - District	\$ 3,069,813.42	1	\$ 3,069,813	\$ 452,175	\$ 182.92
* 1 Football / Cricket Pavillion - District	\$ 1,457,500.00	1	\$ 1,457,500	\$ 214,686	\$ 86.85
* 12 Tennis / Netball Courts - District	\$ 933,457.46	2	\$ 1,866,915	\$ 274,992	\$ 111.24
* 1 Tennis / Netball Pavillion - District	\$ 457,500.00	1	\$ 457,500	\$ 67,389	\$ 27.26
* Landscaping (2 ha.)	\$ 570,065.30	2	\$ 1,140,131	\$ 167,938	\$ 67.94
* Paths	\$ 96,250.00	1	\$ 96,250	\$ 14,177	\$ 5.74
			\$ 8,088,109	\$ 1,191,357	\$ 481.94
<b>Tarneit Rise (4.0 ha)</b>					
* 1 Football / Cricket Oval - Local	\$ 1,456,106.71	1	\$ 1,456,107	\$ 214,481	\$ 86.76
* 1 Football / Cricket Pavillion - Local	\$ 835,000.00	1	\$ 835,000	\$ 122,993	\$ 49.75
* Landscaping (1 ha.)	\$ 570,065.30	1	\$ 570,065	\$ 83,969	\$ 33.97
* Paths	\$ 96,250.00	0.5	\$ 48,125	\$ 7,089	\$ 2.87
			\$ 2,909,297	\$ 428,532	\$ 173.35
<b>Tarneit Gardens (8.6 ha)</b>					
* 2 Football / Cricket Ovals - District	\$ 3,069,813.42	1	\$ 3,069,813	\$ 452,175	\$ 182.92
* 1 Football / Cricket Pavillion - District	\$ 1,457,500.00	1	\$ 1,457,500	\$ 214,686	\$ 86.85
* Landscaping (2 ha.)	\$ 570,065.30	2	\$ 1,140,131	\$ 167,938	\$ 67.94
* Paths	\$ 96,250.00	1	\$ 96,250	\$ 14,177	\$ 5.74
			\$ 5,763,694	\$ 848,977	\$ 343.44
<b>Baden Powell (3.2 ha)</b>					
* 8 Tennis / Netball Courts - District	\$ 933,457.46	1	\$ 933,457	\$ 137,496	\$ 55.62
* 1 Tennis / Netball Pavillion - District	\$ 457,500.00	1	\$ 457,500	\$ 67,389	\$ 27.26
* Landscaping (1 ha.)	\$ 570,065.30	1	\$ 570,065	\$ 83,969	\$ 33.97
* Paths	\$ 96,250.00	0.5	\$ 48,125	\$ 7,089	\$ 2.87
			\$ 2,009,148	\$ 295,942	\$ 119.72
<b>Westmeadows Lane (Woods Road) (3.5 ha)</b>					
* 2 Soccer Fields - Local	\$ 1,445,000.00	1	\$ 1,445,000	\$ 212,845	\$ 86.10
* 1 Soccer Pavillion - Local	\$ 712,500.00	1	\$ 712,500	\$ 104,949	\$ 42.46
* Landscaping (1 ha.)	\$ 570,065.30	1	\$ 570,065	\$ 83,969	\$ 33.97
* Paths	\$ 96,250.00	0.5	\$ 48,125	\$ 7,089	\$ 2.87
			\$ 2,775,690	\$ 408,852	\$ 165.39
<b>Truganina South (8.0 ha)</b>					
* 2 Football / Cricket Ovals - District	\$ 3,069,813.42	1	\$ 3,069,813	\$ 452,175	\$ 182.92
* 1 Football / Cricket Pavillion - District	\$ 1,457,500.00	1	\$ 1,457,500	\$ 214,686	\$ 86.85
* 8 Tennis / Netball Courts - District	\$ 933,457.46	1	\$ 933,457	\$ 137,496	\$ 55.62
* 1 Tennis / Netball Pavillion - District	\$ 457,500.00	1	\$ 457,500	\$ 67,389	\$ 27.26
* Landscaping (2 ha.)	\$ 570,065.30	2	\$ 1,140,131	\$ 167,938	\$ 67.94
* Paths	\$ 96,250.00	1	\$ 96,250	\$ 14,177	\$ 5.74
			\$ 7,154,651	\$ 1,053,861	\$ 426.32
<b>Arndell Park (6.6 ha)</b>					
* 3 Soccer Fields - District	\$ 2,316,100.00	1	\$ 2,316,100	\$ 341,155	\$ 138.01
* 1 Soccer Pavillion - District	\$ 1,197,500.00	1	\$ 1,197,500	\$ 176,389	\$ 71.35
* Landscaping (2 ha.)	\$ 570,065.30	2	\$ 1,140,131	\$ 167,938	\$ 67.94
* Paths	\$ 96,250.00	1	\$ 96,250	\$ 14,177	\$ 5.74
			\$ 4,749,981	\$ 699,659	\$ 283.03
<b>Unallocated - Location to be confirmed (29.6 ha)</b>					
* 2 Football / Cricket Ovals - District	\$ 3,069,813.42	1	\$ 3,069,813	\$ 452,175	\$ 182.92
* 1 Football / Cricket Pavillion - District	\$ 1,457,500.00	1	\$ 1,457,500	\$ 214,686	\$ 86.85
* 2 Soccer Fields - District	\$ 2,316,100.00	1	\$ 2,316,100	\$ 341,155	\$ 138.01
* 1 Soccer Pavillion - District	\$ 1,197,500.00	1	\$ 1,197,500	\$ 176,389	\$ 71.35
* Landscaping (2 ha. & 1 ha.)	\$ 570,065.30	3	\$ 1,710,196	\$ 251,907	\$ 101.90
* Paths (1 & 1/2)	\$ 96,250.00	1.5	\$ 144,375	\$ 21,266	\$ 8.60
			\$ 9,895,484	\$ 1,457,578	\$ 589.64
<b>TOTAL</b>					
			\$ 43,346,054	\$ 6,384,757	\$ 2,582.83

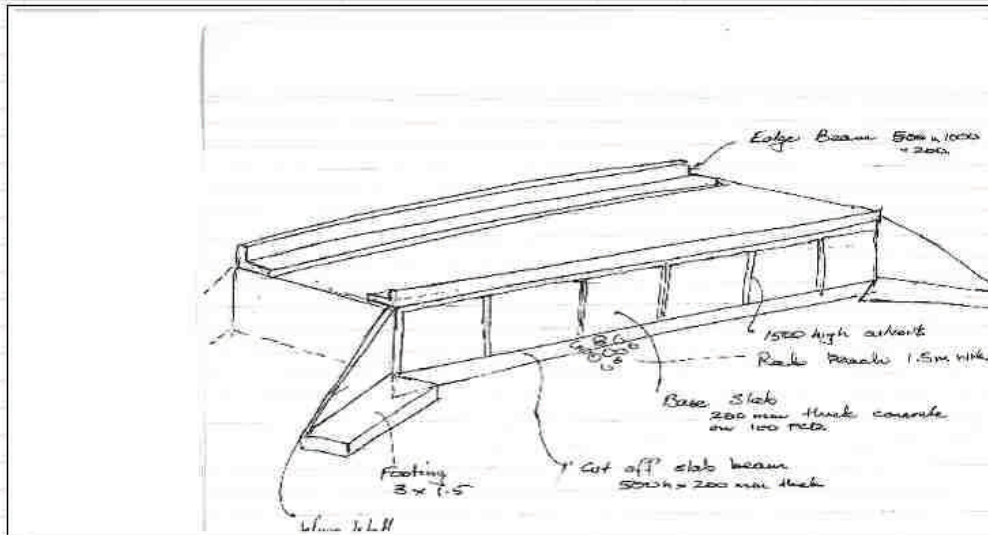


SUMMARY - Wyndham North Recreation Infrastructure			\$ - Per lot / dwelling		
8 Football / Cricket Ovals - District	\$ 3,069,813.42	4	\$ 12,279,254	\$ 1,808,701	\$ 731.68
1 Football / Cricket Ovals - Local	\$ 1,456,106.71	1	\$ 1,456,107	\$ 214,481	\$ 86.76
4 Football / Cricket Pavilion - District	\$ 1,457,500.00	4	\$ 5,830,000	\$ 858,743	\$ 347.39
1 Football / Cricket Pavilion - Local	\$ 835,000.00	1	\$ 835,000	\$ 122,993	\$ 49.75
FOOTBALL / CRICKET			\$ 20,400,360	\$ 3,004,918	\$ 1,215.58
3 Soccer Fields - District	\$ 2,316,100.00	2	\$ 4,632,200	\$ 682,311	\$ 276.02
1 Soccer Fields - Local	\$ 1,445,000.00	1	\$ 1,445,000	\$ 212,845	\$ 86.10
1 Soccer Pavilion - District	\$ 1,197,500.00	2	\$ 2,395,000	\$ 352,777	\$ 142.71
1 Soccer Pavilion - Local	\$ 712,500.00	1	\$ 712,500	\$ 104,949	\$ 42.46
SOCCER			\$ 9,184,700	\$ 1,352,881	\$ 547.28
28 Tennis / Netball Courts - District	\$ 933,457.46	4	\$ 3,733,830	\$ 549,983	\$ 222.49
3 Tennis / Netball Pavilion - District	\$ 457,500.00	3	\$ 1,372,500	\$ 202,166	\$ 81.78
TENNIS / NETBALL			\$ 5,106,330	\$ 752,149	\$ 304.27
Landscaping	\$ 570,065.30	14	\$ 7,980,914	\$ 1,175,567	\$ 475.55
Paths	\$ 96,250.00	7	\$ 673,750	\$ 99,242	\$ 40.15
LANDSCAPING & PATHS			\$ 8,654,664.20	\$ 1,274,809	\$ 515.70
TOTAL			\$ 43,346,054	\$ 6,384,757	\$ 2,582.83
Truganina South PSP			2,472 dwellings		



APPENDIX D: TRUGANINA SOUTH – CULVERT & PEDESTRIAN BRIDGE CROSSINGS

CULVERT COSTINGS USING RAWLINSON'S



Base Slab per square metre

Excavation	\$40/cum *0.3m	\$12
Crushed rock base & subgrade impro	100mm	\$30
Concrete base		
- 200 mm concrete		\$45
- Steel 2 * SL81		\$46
<b>TOTAL</b>		<b>\$133 per square metre</b>

Cut Off Beam

Excavation	500mm*200mm*\$410/m	\$41
Concrete	.5*\$529/sqm	\$265
		<b>\$306 per metre</b>

Edge Beam

.05 L 1.0	1.5sqm * \$529	800 per metre
-----------	----------------	---------------

Wing Wall

Walls	1.5sqm*\$530	\$795
Footing	4.5*0.3=1.35*\$529	\$714
		<b>1509</b>

Culverts 1200\*1200  
\$745/m

\$620 per square metre

Culvert placement (crane)

\$10,000 item

Structural Fill Against Walls

\$120 per metre width

Rock Beaching

\$150/sqm\*1.5 \$225 per metre length

Guard Fence

\$450 per metre length

Ordinary fill

\$20 per cum

Page 1



APPENDIX D: TRUGANINA SOUTH – CULVERT & PEDESTRIAN BRIDGE CROSSINGS (CONT'D)

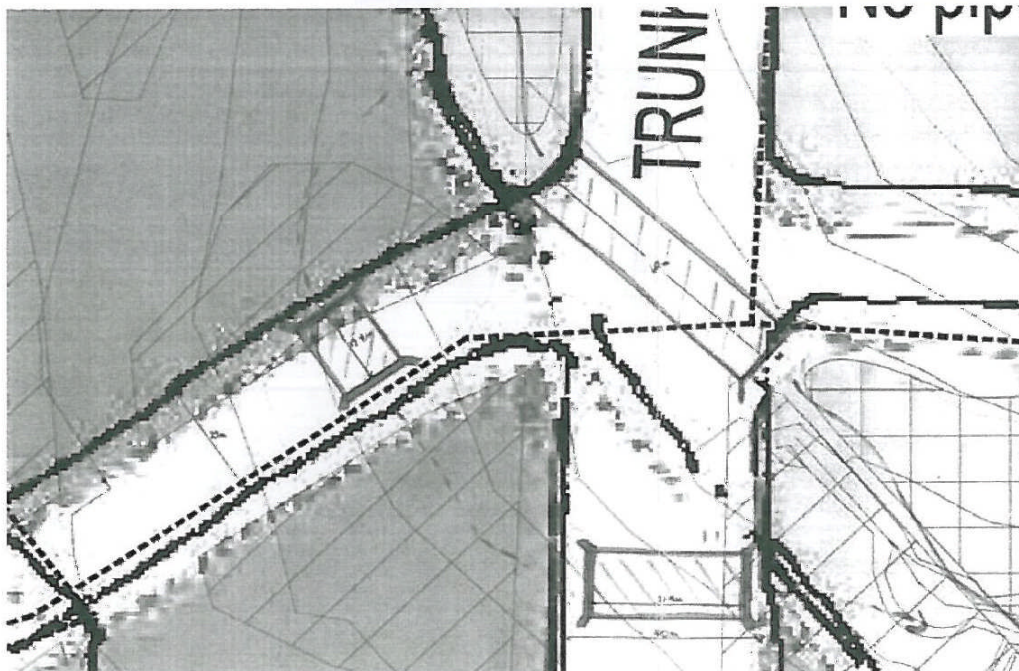
## CULVERTS 1 & 2



### Option 2

#### Forsyth/Westmeadonws Int / Doherty's Creek Crossing

		Qty	Unit	Rate	Amount
Base	14 x 60	840	m2	\$133	\$111,720
Culverts	14 x 60	840	m2	\$620	\$520,800
Culvert Placement		1	Item	\$10,000	\$10,000
Cut Off Beam	14 x 2	28	Lm	\$310	\$8,680
Edge Beam	14 x 2	28	Lm	\$800	\$22,400
Wing Wall		4	No.	\$2,500	\$10,000
Rock Beaching	14 x 1.5 x 2	42	m2	\$250	\$10,500
Structural Fill	2 x 60	120	Lm	\$200	\$24,000
Bulk Fill		190	m3	\$20	\$3,800
Guard Rail	2 x 60	120	Lm	\$450	\$54,000
Sub-Total					\$775,900
Contingency				15%	\$116,385
Sub-Total					\$892,285
Design, Supervision & PM				10%	\$89,229
				<b>Total</b>	<b>\$981,514</b>





**APPENDIX D: TRUGANINA SOUTH – CULVERT & PEDESTRIAN BRIDGE CROSSINGS (CONT'D)**



### 3. WETLANDS BLD / DOHERTY'S CREEK CROSSING

Road Reserve Width			26 metres
Width of Culvert	No	Width	
Guard Rail	2	0.5	1
Footpath (including edge & Services)	2	2.5	5
Services/ Lights	2	0.5	1
Bike Paths	2	1.7	3.4
Traffic lanes	2	3.5	7
Median	0		0
Total			17.4 metres

Length of Culvert	25 m		25 metres
Height of Culvert	1.0 m		1 metres
Flow rate	36.6 m <sup>3</sup> /s		
Velocity	1.50 m/s	Area	25 sq.m

#### Costings

Item		Quantity	Unit	Rate	Amount
Base	25 x 17.4	435	Square Metres	\$133	\$57,855
Culverts	25 x 17.4	435	Square Metres	\$620	\$269,700
Culvert placement		1	Item	\$10,000	\$10,000
Cut off beam	25 x 2	50	Linear metres	\$310	\$15,500
Edge beam	25 x 2	50	Linear metres	\$800	\$40,000
Wing Wall		4	No	\$2,500	\$10,000
Rock Beaching	25 x 1.5 x 2	75	Square Metres	\$250	\$18,750
Structural Fill	2 x 17.4	35	Linear metres	\$200	\$7,000
Bulk fill		190	Cubic metres	\$20	\$3,800
Guard Rail		120	Linear metres	\$450	\$54,000
Sub total					\$486,605
Contingency				15.00%	\$72,991
Subtotal					\$559,596
Design, Supervision and PM				10.00%	\$55,960
					\$615,555

### 4. WESTMEADOWS LANE / CROPLEYS DRAIN

Road Reserve Width			26 metres
Width of Culvert	No	Width	
Guard Rail	2	0.5	1
Footpath (including edge & Services)	2	2.5	5
Services/ Lights	2	0.5	1
Bike Paths	2	1.7	3.4
Traffic lanes	2	3.5	7
Median	0		0
Total			17.4 metres

Length of Culvert	15 m		15 metres
Height of Culvert	0.6 m		0.6 metres
Flow rate	20.1 m <sup>3</sup> /s		
Velocity	2.30 m/s	Area	9 sq.m

#### Costings

Item		Quantity	Unit	Rate	Amount
Base	15 x 17.4	261	Square Metres	\$133	\$34,713
Culverts	15 x 17.4	261	Square Metres	\$400	\$104,400
Culvert placement		1	Item	\$10,000	\$10,000
Cut off beam	15 x 2	30	Linear metres	\$310	\$9,300
Edge beam	15 x 2	30	Linear metres	\$800	\$24,000
Wing Wall		4	No	\$2,500	\$10,000
Rock Beaching	15 x 1.5 x 2	45	Square Metres	\$250	\$11,250
Structural Fill	2 x 17.4	35	Linear metres	\$200	\$7,000
Bulk fill		190	Cubic metres	\$20	\$3,800
Guard Rail		120	Linear metres	\$450	\$54,000
Sub total					\$268,463
Contingency				15.00%	\$40,269
Subtotal					\$308,732
Design, Supervision and PM				10.00%	\$30,873
					\$339,606



## APPENDIX D: TRUGANINA SOUTH – CULVERT & PEDESTRIAN BRIDGE CROSSINGS (CONT'D)

### 5. CROPLEY'S DRAIN

Road Reserve Width			26 metres
Width of Culvert	No	Width	
Guard Rail	2	0.5	1
Footpath (including edge & Services)	2	1.5	3
Services/ Lights	2	0.5	1
Bike Paths	Shared path		
Traffic lanes	2	3.5	7
Median			
Total			12 metres
Flow rate (m <sup>3</sup> /s)	21.1		
Velocity (m/s)	2.3	Area	9.2
Height of Culvert (m)			1
Length of Culvert			9.2

#### Costings

Item	Quantity	Unit	Rate	Amount
Base	110	Square Metres	\$133	\$14,642
Culverts	110	Square Metres	\$620	\$68,254
Culvert placement	1	Item	\$10,000	\$10,000
Cut off beam	18.3	Linear metres	\$310	\$5,688
Edge beam	18.3	Linear metres	\$800	\$14,678
Wing Wall	4	No	\$2,500	\$10,000
Rock Beaching	27.5	Square Metres	\$250	\$6,880
Structural Fill	24	Linear metres	\$200	\$4,800
Bulk fill	250	Cubic metres	\$20	\$5,000
Guard Rail	26.4	Linear metres	\$450	\$11,880
Sub total				\$151,822
Contingency			15.00%	\$22,773
Subtotal				\$174,595
Design, Supervision and PM			10.00%	\$17,460
				\$192,055

### PEDESTRIAN BRIDGE CROSSING

#### Melbourne Water requirements:

- Clear-span bridges are preferred, to avoid affecting flood levels or flow velocities
- Abutments must be offset least 5 meters from the top of bank.
- Bridges need to be at least 3 metres wide to provide for Melbourne Water maintenance vehicle crossings
- Bridges must be located outside the 1:10 year flood plain

#### Assumptions:

Flood levels and top of bank not know  
 Bridge will span full length of drainage reserve (40m)  
 Use rate of \$3,500 per meter squared

Bridge area is 40m x 3m = 120m<sup>2</sup>  
 Cost estimate is 120 x 3,500 = \$420,000 per crossing

Total of three crossings = 3 x \$420,000 = \$1,260,000







**APPENDIX E: GOLDEN SUN MOTH (GSM) PROTECTION SITE – COLLECTOR ROAD COSTINGS**

<b>Collector Road (10.4 m Pavement)</b>		Rate quoted around <b>April 07</b>	
		<b>rate(\$)</b>	<b>Lm(\$)/10.4m width</b>
<b>Pavement:</b>		<b>(from Clearwater Rise Stage 41)</b>	
40mm compacted depth of 14mm Type N Asphalt		\$12.50/sqm	\$ 155.00
10mm compacted depth of SAMI treatment		\$5.70/sqm	\$ 70.68
Prime		\$1.70/sqm	\$ 21.08
155mm compacted depth of 20mm Class 2 CR		\$11.50/sqm	\$ 142.60
100mm compacted depth of 20mm Class 3 CR		\$6.23/sqm	\$ 92.20
380mm compacted depth of 40mm NDCR		\$13.52/sqm	\$ 210.91
Total			\$ 692.48
<b>AG drain:</b>			
100mm class 400 AG		\$10.23/Lm	\$ 20.46
<b>Drainage:</b>			
Class 2 pipe - Class 3 crushed rock backfill		\$85.85/Lm	\$ 85.85
Grated Pit (900x600) include concrete surround & cover per 50m		\$1560.19/pit	\$ 31.20
<b>Kerb &amp; Channel:</b>			
SM2		\$27.36/Lm	\$ 54.72
<b>Footpath:</b>			
125mm depth F52 mesh 1.5m wide		\$41.05/Lm	\$ 82.10
<b>Public Lighting:</b>			\$ 70.00
<b>Linemarking &amp; Signage:</b>			\$ 15.00
<b>Earthworks:</b>			\$ 111.00
<b>Landscaping:</b>			\$ 50.00
<b>Contingency (5%):</b>			\$ 60.64
<b>Design Fee (7%):</b>			\$ 90.96
<b>Plan checking &amp; supervision (3.25%):</b>			\$ 39.42
<b>TOTAL per Lm:</b>			\$ 1,403.83
* Does not include Telecommunications, Electricity, Water or Gas Infrastructure			



## APPENDIX F: GOLDEN SUN MOTH (GSM) PROTECTION SITE – OFFSETS

Native Vegetation Offset costs for Road projects through Golden sun Moth Protection Site - Truganina South

Property Details	Road to be constructed	Lot Number	Habitat Zone	Ecological Vegetation Class (EVC) Description	Conservation Significance	Loss (Habitat Hectares to be Removed) #	Net Gain Multiplier	Gain Target (Habitat Hectares) Offset to be Achieved	Offset cost* (\$)
House Address	Project	Parcel Description	ID	No. and Initials	Low, High etc				\$44,000^ per hectare
250 Sayers Road	North- South Connector	5\LP 130043	HZ 4B	132_61 PG	Very High	0.104	2.5	0.260	\$ 11,440.00
Lot 9 Leakes Road	East- West Connector	9\LP 130043	HZ 15D	132_61 PG	Very High	0.117	2.5	0.293	\$ 11,700.00
Lot 9 Leakes Road	Forsyth Road	9\LP 130043	HZ 15E	132_61 PG	Very High	0.216	2.5	0.540	\$ 21,600.00
Lot 9 Leakes Road	Forsyth Road	9\LP 130043	HZ 15F	132_61 PG	Very High	0.131	2.5	0.328	\$ 13,100.00
Lot 9 Leakes Road	Forsyth Road	9\LP 130043	HZ 15L	132_61 PG	Very High	0.135	2.5	0.338	\$ 13,500.00
280 Sayers Road	Forsyth Road	2\LP130043	HZ 16B	132_61 PG	Very High	0.176	2.5	0.440	\$ 17,600.00
									<b>\$ 88,940.00</b>

# = Habitat hectares (habitat score/100 X area of native vegetation to be removed in zone[ha])

\* = Gain Target multiplied by \$ 44, 000 hectare.

^ = Cost of offset including GST



**APPENDIX G: NEIGHBOURHOOD PARK – BASIC DEVELOPMENT COSTINGS**



# Wyndham City Council's Required Scope of Works for a 1 Hectare Neighbourhood Park

N.B. These costs relate to the following types of park: neighbourhood park only, neighbourhood park associated with a sporting reserve, linear open space.

Item	Description	Unit	Qty	Rate	Amount
<b>1</b>	<b>General Conditions</b>				
	Works to include securing the site at all times, temporary fencing, setting out of works, liaison with Superintendent, preparation of site specific OH&S Plan and Environmental Management Plan, provision of contract insurances and all other costs necessary for the completion of the works.	item	1		\$ 10,183.55
<b>2</b>	<b>Earthworks</b>				
	Supply and installation of earthworks to proposed finished surface levels, inclusive of fine grade and trim and imported fill	item	1		\$ 18,252.00
<b>3</b>	<b>Drainage</b>				
	Supply and install all drainage pipes, grated trench pits and other drainage infrastructure as specified	lin.m			\$ 21,675.00
<b>4</b>	<b>Concrete works</b>				
	Supply and install retaining walls, steps, ramps, seating walls or other items as specified	lin.m	124	\$350	\$ 43,400.00
<b>5</b>	<b>Paving</b>				
	Supply and install coloured concrete pavers, coloured concrete paths	sq m	1020	\$108	\$ 110,160.00
<b>6</b>	<b>Edging</b>				
	Install timber edging to garden beds	lin.m	53	\$15	\$ 795.00
	Supply and install concrete edging to gravel paths, playground, garden beds	lin.m	713	\$45	\$ 32,085.00
<b>7</b>	<b>Park Furniture</b>				
	Supply and install park seats, picnic setting, bike racks, rubbish bin	item	11	av \$2400	\$ 26,400.00
<b>8</b>	<b>Play Equipment</b>				
	Supply and install playground units which offer a variety of experiences	item	5	\$3,790 - \$45,289	\$ 56,110.00
	Supply and install soft fall mulch	m3	68	\$70	\$ 4,760.00
<b>9</b>	<b>Shelter/Pergola Structure</b>				
	supply and install shelter	item	1	\$21,540	\$ 21,540.00
<b>10</b>	<b>Garden Bed Preparation</b>				
	Weed removal, preparation, and cultivation of garden bed areas	m2	1185	\$2	\$ 2,370.00
	Supply and install 200mm imported topsoil	m3	236	\$55	\$ 12,980.00
	Supply and install 100 mm deep mulch	m3	113	\$65	\$ 7,345.00
<b>11</b>	<b>Shrub/Groundcover Planting (4/m2)</b>				
	Supply and install 150mm pots	No.	4500	\$7.90	\$ 35,550.00
<b>12</b>	<b>Advanced Tree Planting</b>				
	Supply, transport and install 2.0m high trees, 40-50 litres, 30mm min. caliper. Installation includes preparation of tree holes, backfilling and topsoiling, mulching, hardwood stakes, rails, ties and associated works.	No.	91	\$187	\$ 17,017.00
<b>13</b>	<b>Grassing</b>				
	Undertake works to achieve an even grass cover including: weed removal, preparation, and cultivation, application of	m2	4665	\$1.15	\$5,364.75
	Supply and spread imported topsoil	m3	250	\$40	\$10,000
	Supply and install kikuyu turf	m2	4665	\$7.60	\$35,454.00
	<b>COST OF SCHEDULED WORKS</b>				\$ 488,987.30
<b>14</b>	<b>Construction Contingency Sum</b>				\$ 20,000.00
	<b>CONSTRUCTION TOTAL</b>				\$ 508,987.30
<b>15</b>	<b>Other Associated Costs</b>				
	Design Fees (9%)				\$ 45,808.00
	Contract administration (3%)				\$ 15,270.00
	<b>TOTAL COST FOR 1 HECTARE NEIGHBOURHOOD PARK</b>				\$ 570,065.30
	NB Costs of June 2010				
<b>16</b>	<b>Paths - for Active Open Space Development Only</b>				
	2.5 m wide path at \$70 per m <sup>2</sup>	lin. m	550	\$175	\$96,250.00



## APPENDIX H – COMMUNITY CENTRE COSTING SHEET

Two Room Kindergarten centre with 80 sqm Community Facility based on Arndell Pk. Centre Project.

29/10/2010

Arndell Park Community Centre/Pavilion

Pre-tender cost estimate for building works (excluding costs for design services, fit-out and project management services).

\$5,400,000

Total area of building envelope is 1696 sqm.

Construction rate cost \$5,400,000/1696

\$3,184 /m2

Allow for CPI 3%

Current cost rate/m2

\$3,280

\$3,280 /m2

Proposal

Two kindergarten centre with one (80 m2) community area with public amenities (40 m2) and Foyer with Airlock.

Total floor area (internal)

770 m2

Cost of building + carparking + immediate landscape + external children's play area (kinder)

\$2,525,600

Add all covered ext. Area + playgroup area

\$180,000

Design Services fees (6%)

\$162,336

Fit-out (kinda + community space)

\$160,000

Project Management fees (1.5%)

\$45,419

\$3,073,355

\$3.10 M

Carpark provisions for 36 spaces. All services are available to the site and no upgrade of services are required.



## APPENDIX I – COMPLIANCE WITH NEED, NEXUS, EQUITY AND ACCOUNTABILITY PRINCIPLES

### Need

The need for arterial roads was estimated by:

- Council transport planners formulating a draft arterial roads network plan, in consultation with its traffic consultants and VicRoads;
- Council supplying key input data such as projected lot yields and population from the Wyndham North Concept Plan and existing development in adjacent, established areas; and
- engaging transport consultants, Nigel Ashton and Associates, to test the draft network plan, and model future traffic volumes, as the primary basis for determining required numbers of traffic lanes and relocated factors.

The need for other community and (social) development infrastructure (defined below in Section 4) was determined through a number of internal and consultancy studies, partly defined in the Wyndham North Concept Plan, and (in 1008-9) updated through two major studies by Australian Social and Recreation Research P/L (ASR):

- 2

The need for public open space was defined and refined through studies by Jeavons and Jeavons (1999?); EDAW (2003?) and the above studies by ASR.

### Nexus

A new growth area's traffic impacts on the arterial road network include:

- a. impacts on its own internal and peripheral arterial roads; and
- b. impacts on arterial roads through nearby areas.
- c. Consequently, the new area's arterial roads are also traversed by externally generated, often through traffic.

For Wyndham North, it is assumed that its impacts on other areas of Wyndham (most of (b) above) resemble, or exceed external impacts from elsewhere in Wyndham ((c), above). This assumption is considered to be conservative, on observed and minimal traffic and modelling data. The assumption is reflected in:

- generally sharing Council's growth related arterial road costs on peripheral roads between Wyndham North and adjacent urban areas; and
- otherwise assigning all of Wyndham North's internal traffic network's growth related costs to this area.

VicRoads is seen to fund road space for the share of growth area traffic that is externally generated ((c), above). In Wyndham North, VicRoads' contribution is considered to be above external traffic's share of demands on that network.

This suggests a strong nexus between the Wyndham North Concept Plan Area and its assigned share of the cost to upgrade the Wyndham road network; and an element of conservation in the assigned cost share.

"Community Infrastructure" needs determined and reviewed as noted under "Need", above, have been planned through Wyndham North. The belief that there will not be cross-subsidies to (or form) existing areas is reinforced by the \$1,150 per dwelling "cap" on community infrastructure. This is less than 50% of the investment likely to be required of Council; comfortably meeting the "nexus" test. (see Section 4, esp. Table 2, which has major components that aren't costed in.)

"Other (Social and Recreation) Development Infrastructure" needs are similarly addressed to "community" infrastructure's. However, the lack of a "cap" increases the need to confirm the nexus. This is easier for Wyndham



North as a whole, as the costs of delivering that infrastructure to date have significantly exceeded available DC's and will continue to do so.

However, Stockland, in particular, has highlighted concerns about underfunding (a major issue, more broadly, in Council itself). As a consequence, this DCP more fully funds the "Other development Infrastructure" to be provided in its area. The nexus test is considered to be satisfied, because:

- the DC's to be contributed in Truganina South are estimated to be comparable to the cost of "Other Development Infrastructure" in the wider Precinct,
- cross-subsidies to other areas are avoided by reasonably compatible provisions in the two precincts to the immediate south; reinforced by commitments to substantial recreation development on Laurie Emmins Reserve, to the east.

Open Space requirements in Truganina South are below the ASR, council and Precinct Structure Plan Guidelines' standards for sporting open space, but otherwise in line with most. The Precinct's obligations reflect the needs it generates, with support from planned development at Laurie Emmins Reserve.

## Equity

Equity between contributors of DC's is achieved across Wyndham North by:

- sharing most costs across the whole growth front at an even rate per hectare, or per dwelling; except where costs have been updated; and
- where there are precinct specific costs, sharing those evenly between all benefiting areas in the Precinct.

The degree of even sharing across the Growth Front reflects the belief that the community's use of roads, community, and other development infrastructure, taken together, rarely varies so greatly as to warrant major "catchment" – based variations, as can arise under the DCP Guidelines. Sharp variations across the Wyndham North Concept Plan are considered to be more likely to cause inequity than solve it. That belief underlies the above focus (under "nexus") on ensuring that Truganina South, despite its later defined and higher DC's, is not called on to contribute more to "other development" infrastructure than available to it.

## Accountability

- All cash DC's in Wyndham are lodged in separate reserve accounts for each class of infrastructure, in each growth front. (They are generally not lodged in accounts for specific infrastructure items, or precincts, because that fragments reserves and restricts the capacity to prioritise works as needs evolve, and to complete whole projects on practical stages in good time. Truganina South, though underdeveloped, saw construction of Leakes Road from DC's by developers further west, due to that approach,)
- Priorities are reflected in Council's Capital Works Plan, which is updated annually and is open to public submissions.
- Council is working on improvements to its reporting methods, amongst other means of enhancing accountability on DC's, for implementation in 2010-11.



## APPENDIX J – SUMMARY OF TRUGANINA SOUTH SPECIFIC INFRASTRUCTURE COSTS

<b>TRUGANINA SOUTH ITEMS</b>				
<b>Forsyth Road Widening</b> (ha)				
Land acquisition for widening	\$750,000.00	1.28	\$960,000.00	\$5,717.01
			<b>\$960,000.00</b>	<b>\$5,717.01</b>
<b>Culvert Crossings</b> (no.)				
Collector Road Crossings	\$2,128,730.00	1	\$2,128,730.00	\$12,677.05
			<b>\$2,128,730.00</b>	<b>\$12,677.05</b>
<b>Shared Trail Network (linear metre)</b> (lin. metre)				
Dohertys Creek Trails	\$300.00	3078	\$923,400.00	\$5,499.05
			<b>\$923,400.00</b>	<b>\$5,499.05</b>
<b>GSM Protection Site (See below)</b> (no. / lin. metre)				
Road Costs	\$421,149.00	1	\$421,149.00	\$2,508.03
Offset Costs	\$241,725.00	1	\$241,725.00	\$1,439.52
Shared Pathway thru Grasslands	\$300.00	225	\$67,500.00	\$401.98
			<b>\$730,374.00</b>	<b>\$4,349.54</b>
<b>Pedestrian Bridges across Drainage Reserves (See below)</b> (no.)				
Bridge Structures	\$144,000.00	3	\$432,000.00	\$2,572.65
			<b>\$432,000.00</b>	<b>\$2,572.65</b>
<b>Revised Intersection Costs (See Sheet 1a. Intersection Works)</b> (no.)				
New Intersection Costs			\$9,735,769.22	\$57,978.62
(less) Road Overlaps			-\$2,990,336.59	-\$17,808.10
			<b>\$6,745,432.63</b>	<b>\$40,170.51</b>
<b>Revised Intersection Costs (See Sheet 1a. Intersection Works)</b> (ha)				
Splays	\$750,000.00	0.39	\$288,750.00	\$1,719.57
			<b>\$288,750.00</b>	<b>\$1,719.57</b>
<b>CONTRIBUTIONS RATE - Truganina South Items</b>			<b>\$10,959,936.63</b>	<b>\$1,248,750.00</b>
<b>PROPOSED CONTRIBUTIONS - Wyndham North Items</b>			<b>\$12,208,686.63</b>	<b>\$12,208,686.63</b>
<b>ALL ITEMS</b>				
<b>CONTRIBUTIONS RATE - All Items</b>				<b>\$169,311.65</b>
<b>PROPOSED TOTAL CONTRIBUTIONS</b>				<b>\$28,430,813.03</b>

Truganina South	198.94 ha (includes Activity Centres)
with GSM Protection Zone	167.92 ha (includes Activity Centres)
Wyndham North - Full Development	1,560 ha NDA
Land Acquisition	\$750,000.00 per ha (March 2011)
Grasslands Offsets (Habitat hectares, Hha)	\$137,500.00

<b>TRUGANINA SOUTH ITEMS - Details</b>		
<b>Culverts (\$ June 2010)</b>		
1. Forsyth Road / East-West Collector & Dohertys Creek		\$981,514.00
2. North-South Collector Rd & Dohertys Creek		\$615,555.00
3. East-West Collector & Cropleys Drain		\$339,606.00
4. Local Road across Cropleys Drain (North)		\$192,055.00
		<b>\$2,128,730.00</b>
<b>GSM Protection Sites - Collector Road Costs</b>		
1. East-West Collector Rd		\$168,460.00
2. North-South Collector Rd		\$252,689.00
		<b>\$421,149.00</b>
<b>GSM Protection Sites - Offset Costs (Hha)</b>		
	Hha	
1. Forsyth Road	1.316	\$180,950.00
2. East-West Collector Rd	0.234	\$32,175.00
3. North-South Collector Rd	0.208	\$28,600.00
		<b>\$241,725.00</b>
<b>Pedestrian Bridges</b>		
1. Dohertys Creek (West)		\$144,000.00
2. Dohertys Creek (North-west)		\$144,000.00
3. Cropleys Drain (South)		\$144,000.00
		<b>\$432,000.00</b>



**APPENDIX K – INTERSECTION WORKS – REVISED INTERSECTION COSTS**



## NEW INTERSECTION COSTS

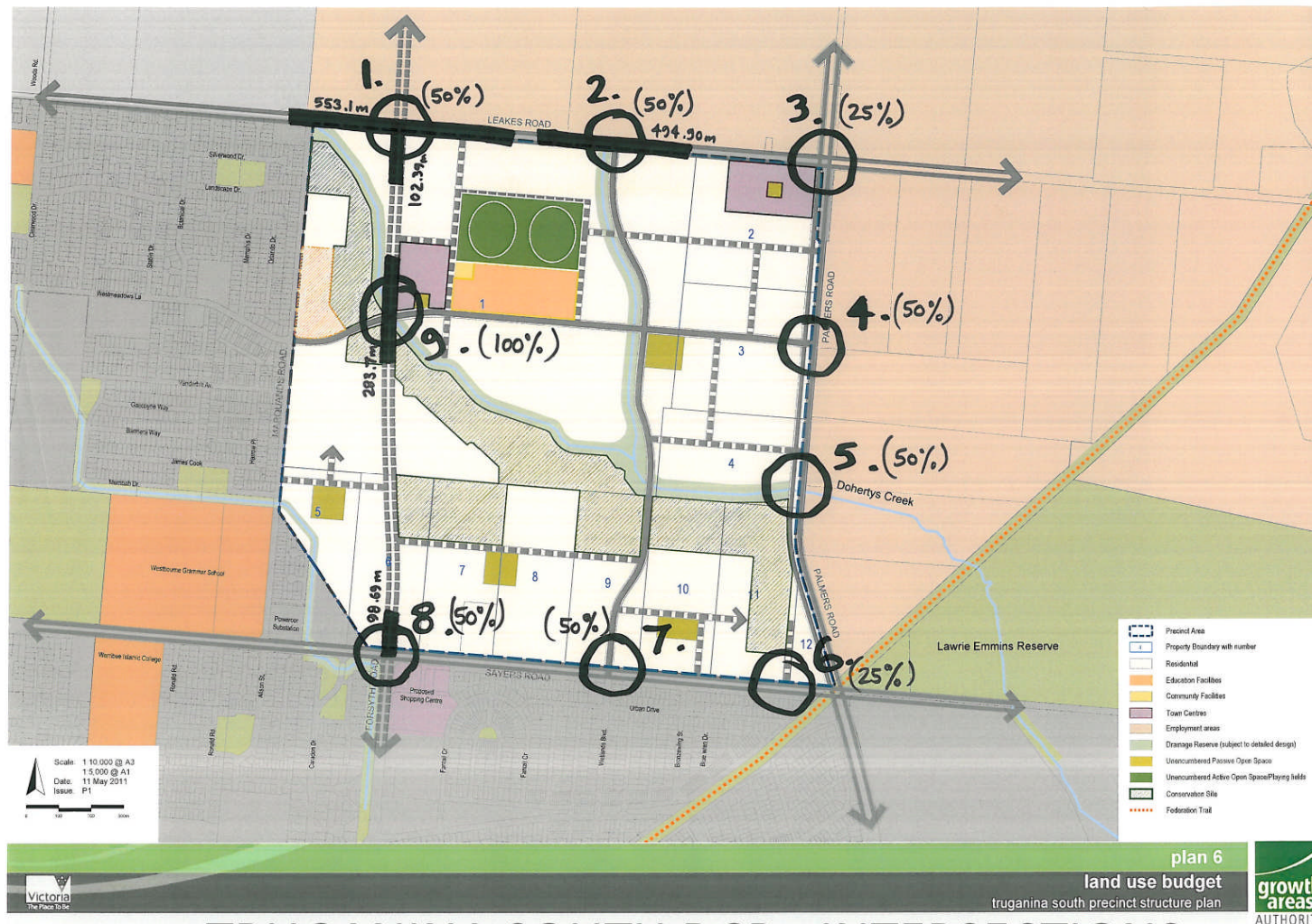
<u>Intersection Costs (March 2011 \$)</u>	<u>Apportioned to Trug South</u>	<u>Full Intersection Cost (\$ March 2011)</u>	<u>Infrastructure service relocation costs from Council Inspection (\$ March 2011)</u>	<u>Full Intersection Cost adjusted for Infrastructure service relocation (\$ March 2011)</u>	<u>Full Intersection Cost (Apportioned)</u>	<u>Truganina South (New) Intersection Cost (CPI \$ March 2010)</u>	<u>Northern Growth Front costs (\$ Sept 2009)</u>	<u>Northern Growth Front Intersection costs (Apportioned)</u>	<u>Northern Growth Front (Former) costs (CPI \$ March 2010)</u>	<u>NET New Intersection Costs (\$ March 2010)</u>	<u>Splays (m<sup>2</sup>) (Cardno Plans, Feb 2011)</u>
1. Arterial to Arterial - Leakes & Forsyth	0.5	\$3,907,893.00	-\$150,000.00	\$3,757,893.00	\$1,878,946.50	\$1,815,381.22	\$636,845.00	\$318,422.50	\$349,538.71	\$1,465,842.52	413
2. Collector to Arterial - Leakes & NS Collector	0.5	\$3,185,699.00	-\$175,000.00	\$3,010,699.00	\$1,505,349.50	\$1,454,423.11	\$431,200.00	\$215,600.00	\$236,668.40	\$1,217,754.71	566
3. Arterial to Arterial - Leakes & Palmers	0.25	\$723,555.49			\$180,888.87	\$174,769.35	\$636,845.00	\$159,211.25	\$174,769.35	\$0.00	0
4. Collector to Arterial - Palmers & EW Collector Nth	0.5	\$3,464,029.00	-\$150,000.00	\$3,314,029.00	\$1,657,014.50	\$1,600,957.24	\$431,200.00	\$215,600.00	\$236,668.40	\$1,364,288.84	316
5. Collector to Arterial - Palmers & EW Collector Sth	0.5	\$489,910.62		\$489,910.62	\$244,955.31	\$236,668.40	\$431,200.00	\$215,600.00	\$236,668.40	\$0.00	316
6. Arterial to Arterial - Palmers & Sayers	0.25	\$723,555.49			\$180,888.87	\$174,769.35	\$636,845.00	\$159,211.25	\$174,769.35	\$0.00	0
7. Collector to Arterial - Sayers & NS Collector	0.5	\$3,026,303.00	\$425,000.00	\$3,451,303.00	\$1,513,151.50	\$1,461,961.17	\$431,200.00	\$215,600.00	\$236,668.40	\$1,225,292.76	216
8. Arterial to Arterial - Sayers & Forsyth	0.5	\$4,085,925.00	\$550,000.00	\$4,635,925.00	\$2,317,962.50	\$2,239,545.19	\$636,845.00	\$318,422.50	\$349,538.71	\$1,890,006.49	709
9. Arterial to Arterial - Forsyth & EW Collector	1	\$3,386,218.00		\$3,386,218.00	\$3,386,218.00	\$3,271,661.31	\$636,845.00	\$636,845.00	\$699,077.41	\$2,572,583.90	1,314
		\$22,993,088.60	\$500,000.00	\$22,045,977.62	\$12,865,375.56	\$12,430,136.36	\$4,909,025.00	\$2,454,512.50	\$2,694,367.14	\$9,735,769.22	3,850

## ROAD OVERLAPS

<u>Road Costs</u>	<u>Length of Wyndham North roads within Truganina South (m)</u>	<u>Total road overlap from new intersections (m)</u>	<u>Road Construction Cost - Wyndham North (\$ lin m, Dec 2006)</u>	<u>Road Construction Cost (\$ March 2010)</u>	<u>Overlap sections of road (\$ March 2010)</u>
1 Leakes Road	1600	-1048	\$810.24	\$889.42	-\$932,108.54
2. Palmers Road (VicRoads)	1600	0	\$0.00	\$0.00	\$0.00
3. Sayers Road (VicRoads)	1600	0	\$0.00	\$0.00	\$0.00
4. Forsyth Road	1600	-484.78	\$3,867.74	\$4,245.70	-\$2,058,228.05
	6400	-1532.78			-\$2,990,336.59

CPI Dec 2006	153.5
CPI March 2010	168.5
CPI March 2011	174.4



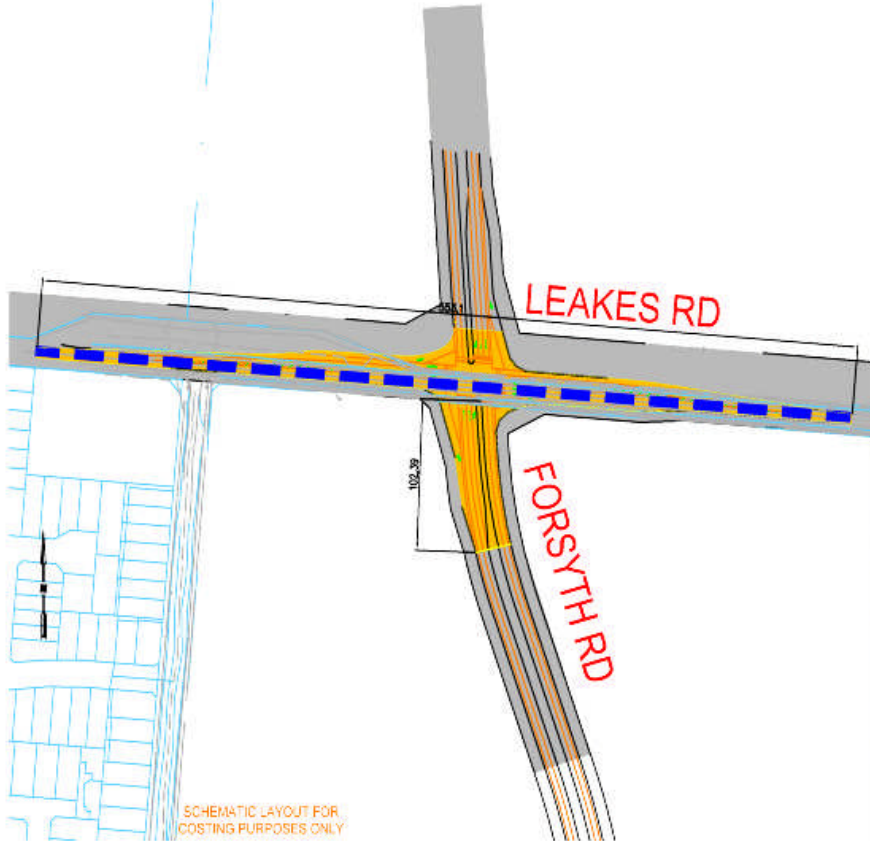


## TRUGANINA SOUTH DCP - INTERSECTIONS



## APPENDIX L – INTERSECTION COST SHEETS

1



## Truganina South Community DCP



## Truganina South Community DCP Roadworks Estimate

Road Name: T02DP Ultimate Leakes & Forsyth Rd Intersection

Limit of works: As shown on drawing road reserve and cross section vary

Length of Job: Intersection works only

**Notes:** Costs based on City of Wyndham for road construction & Cardno Grogan Richards intersection design

[illegible]

Estimate Prepared by: **CDCE** May-11

[illegible]





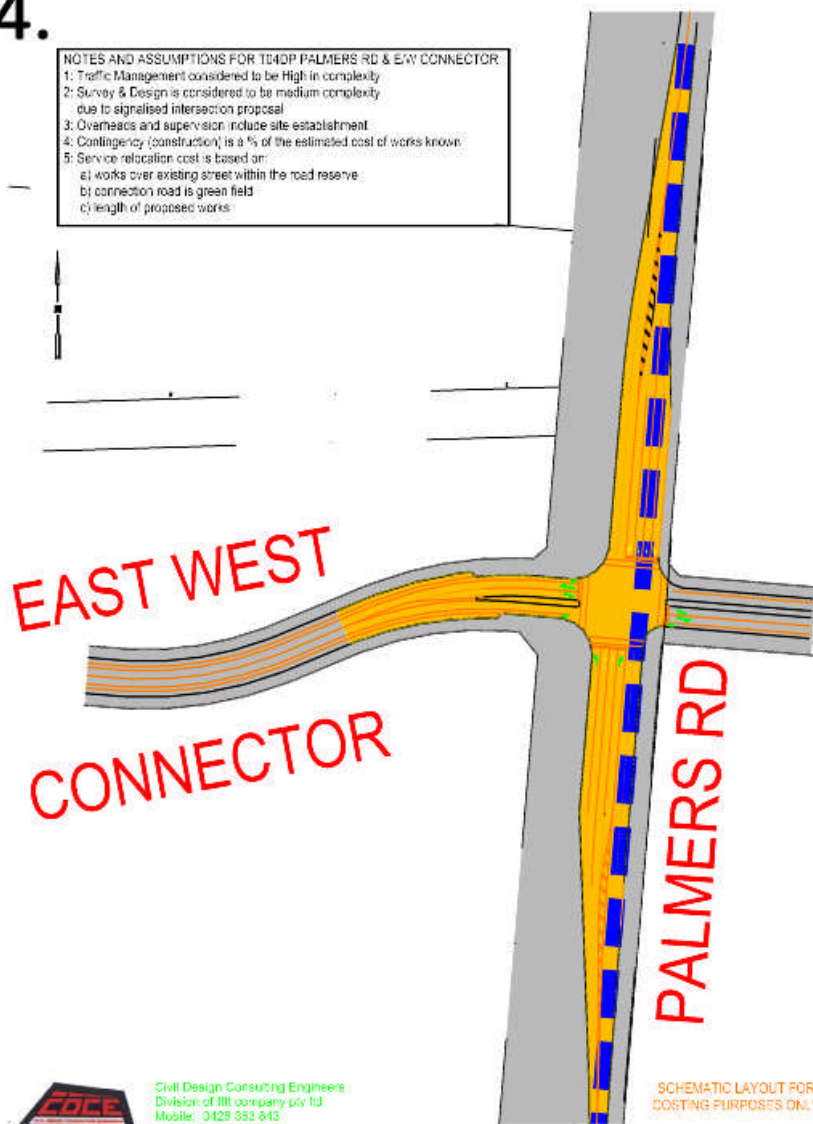






NOTES AND ASSUMPTIONS FOR T40P PALMERS RD & EWY CONNECTOR

1. Traffic Management considered to be High in complexity
2. Survey & Design is considered to be medium complexity due to signalised intersection proposal
3. Overruns and supervision include site establishment
4. Contingency (construction) is a % of the estimated cost of works known
5. Service relocation cost is based on:
  - a) works over existing street within the road reserve
  - b) connection road is green field
  - c) length of proposed works



## Truganinia South Community DCP

Truganina South Community DCP Roadworks Estimate

Road Name: T04DP Palmers &amp; East West Connector Intersection

Limit of works: As shown on drawing road reserve and cross section vary

**Length of Job:** Intersection works only

Notes: Costs based on City of Wyndham for road construction & Cardno Grogan Richards intersection design

Item	Unit	Rate	wide	units	cost/m	Unit cost	Quantity	subset	subtotal	Amount
			m		width		m <sup>2</sup>	cost		
<b>Roadworks</b>	subtotal					\$ 1,634,536	1 m		\$ 1,634,536.00	\$ 1,534,536.00
Bulk Earthworks	m <sup>3</sup>	\$ 40.00	3581	m <sup>2</sup>	\$ 40	\$ 143,240.00	m		\$ 143,240.00	\$ -
Pavement Urban	m <sup>2</sup>	\$ 91.50	5895	m <sup>2</sup>	\$ 92	\$ 548,712.50	m		\$ 548,712.50	\$ -
Pavement grading & no-sleeving	m <sup>2</sup>	\$ 32.00	3276	m <sup>2</sup>	\$ 32	\$ 85,820.00	m		\$ 85,820.00	\$ -
Kerb & Pavement Removal	m <sup>3</sup>	\$ 10.00	210	m <sup>2</sup>	\$ 10	\$ 2,100.00	m		\$ 2,100.00	\$ -
Kerb and Channel set low	m <sup>3</sup>	\$ 40.00	89	sides	\$ 40	\$ 3,560.00	m		\$ 3,560.00	\$ -
Kerb and Channel rollover	m <sup>3</sup>	\$ 45.00	1118	sides	\$ 45	\$ 80,220.00	m		\$ 80,220.00	\$ -
Wide entry side and drive S105	unit	\$ 2,000.00	12	internal metres	\$ 50	\$ 24,000.00	unit		\$ 24,000.00	\$ -
Bike path 2.5m wide conc?	m <sup>3</sup>	\$ 60.00		m <sup>2</sup>					\$ -	\$ -
Shoulder pathway 2.5m wide gravel	m <sup>3</sup>	\$ 30.00	0	m <sup>2</sup>	\$ -				\$ -	\$ -
Pedestrian Footpath	m <sup>3</sup>	\$ 60.00	4968	m <sup>2</sup>	\$ 60	\$ 298,080.00			\$ 298,080.00	\$ -
Pedestrian Footpath 1.5m gravel	m <sup>3</sup>	\$ 30.00	0	m <sup>2</sup>					\$ -	\$ -
Drainage, subgrade drain	m	\$ 14.70	1205	m	\$ 15	\$ 17,713.50	m		\$ 17,713.50	\$ -
Unsealing & Signage	m	\$ 25.00	3160	m <sup>2</sup>	\$ 25	\$ 75,000.00	m		\$ 75,000.00	\$ -
Landscape refer plantings	m	\$ 20.00	0	m <sup>2</sup>	\$ 20	\$ -			\$ -	\$ -
Concrete Island Infill	m <sup>3</sup>	\$ 45.00	70	m <sup>2</sup>	\$ 45	\$ 3,420.00	m		\$ 3,420.00	\$ -
Level / trim relative strip	m <sup>3</sup>	\$ -4.00	6000	m <sup>2</sup>	\$ -4	\$ 20,704.00	m		\$ 20,704.00	\$ -
as per standard drawings	unit								\$ -	\$ -
Tree Planting 7 - 2.5m tall	\$25/m-0.150/m <sup>2</sup>		74	tree	\$ 25	\$ 1,850.00	m		\$ 1,850.00	\$ -
Tube Stock Plantings	unit	\$0.27-\$0.78	0	m <sup>2</sup> metres wide	\$ 6	\$ -			\$ -	\$ -
as per draft tree strategy									\$ -	\$ -
as per draft tree strategy									\$ -	\$ -
optional as per design in respect of appropriate offset criteria									\$ -	\$ -
300mm dia conc drain Stormwater Co BF	per metre	\$102	372	metres		\$ 37,704.00			\$ 37,704.00	\$ -
325mm conc drain stormwater Co S4 B1	per metre	\$231	372	metres		\$ 85,932.00			\$ 85,932.00	\$ -
400mm conc drain stormwater Co BF	per metre	\$264	372	metres		\$ 106,368.00			\$ 106,368.00	\$ -
500mm conc drain stormwater Co BF	per metre	\$381	0	metres		\$ -			\$ -	\$ -
Traffic Signals	unit	\$ 410,000.00	4	No of intersection					\$ 410,000.00	\$ 410,000.00
Traffic Signal Consult subset	m	\$ 35.00	0	metres					\$ -	\$ -
Street Lighting	m	\$ 120.00	508	rows of lights		\$ 78,432.00	m		\$ 78,432.00	\$ -
Lighting control	m	\$ 50.00	508	No of runs/racks		\$ 36,400.00	m		\$ 36,400.00	\$ -
Subtotal						\$ 1,634,536			\$ 2,044,536.00	\$ -
estimated total									\$ 2,044,536.00	\$ 2,044,536.00
Traffic Management								10.0%	\$ 204,453.60	\$ 204,453.60
Contingency								20.0%	\$ 408,907.20	\$ 408,907.20
Total + contingencies									\$ 400,000.00	\$ 400,000.00
Services relocation Sec Poles, water fitting item								10%	\$ 204,453.60	\$ 204,453.60
Survey and Design								15%	\$ 306,680.40	\$ 306,680.40
Overheads (supervision etc)									\$ 3,569.03	\$ 3,569.03
Total excluding land cost									\$ -	\$ -
Land Acquisition	hectares	\$ -	-	hectares					\$ -	\$ -
Total Estimated Cost									\$ 3,969,033.00	\$ 3,969,033.00
Adopted Cost									\$ 3,969,033.00	\$ 3,969,033.00

Estimate Prepared by: **CDCE**

May-11

[illegible]







7.

NORTH SOUTH  
CONNECTOR  
SAYERS RD

BIO

Ro  
Limit  
Leng

EXISTING ROAD PAVEMENT  
ULTIMATE ROAD RESERVE  
COSTED INTERSECTION AREA

**Road Name:** T05DP Sayers Rd & North South Connector Intersection  
**Limit of works:** As shown on drawing road reserve and cross section vary  
**Length of Job:** Intersection works only  
**Notes:** Costs based on City of Wyndham for road construction & Cardno Grogan Richards intersection design

**NOTES AND ASSUMPTIONS FOR T50SP SAYERS RD. & N'S CONNECTOR**

1. Traffic Management considered to be high in complexity
2. Survey & Design is considered to be medium complexity due to signalised Intersection proposal
3. Overheads and supervision include site establishment
4. Contingency (construction) is a % of the estimated cost of works known
5. Service relocation cost is based on:
  - a) Intersection has one sided encroachment on existing services
  - b) connection road is greenfield
  - c) length of proposed works

[illegible]

CIVIL DESIGN CONSULTING ENGINEERS

Truganinia South Community DCP  
DEVELOPMENT CONTRIBUTIONS PLAN (DCP)  
SAYERS RD & NORTH SOUTH CONNECTOR  
T05DP INTERSECTION

DATE: 04/09/2011

10 119

SAVED 1 OF 1

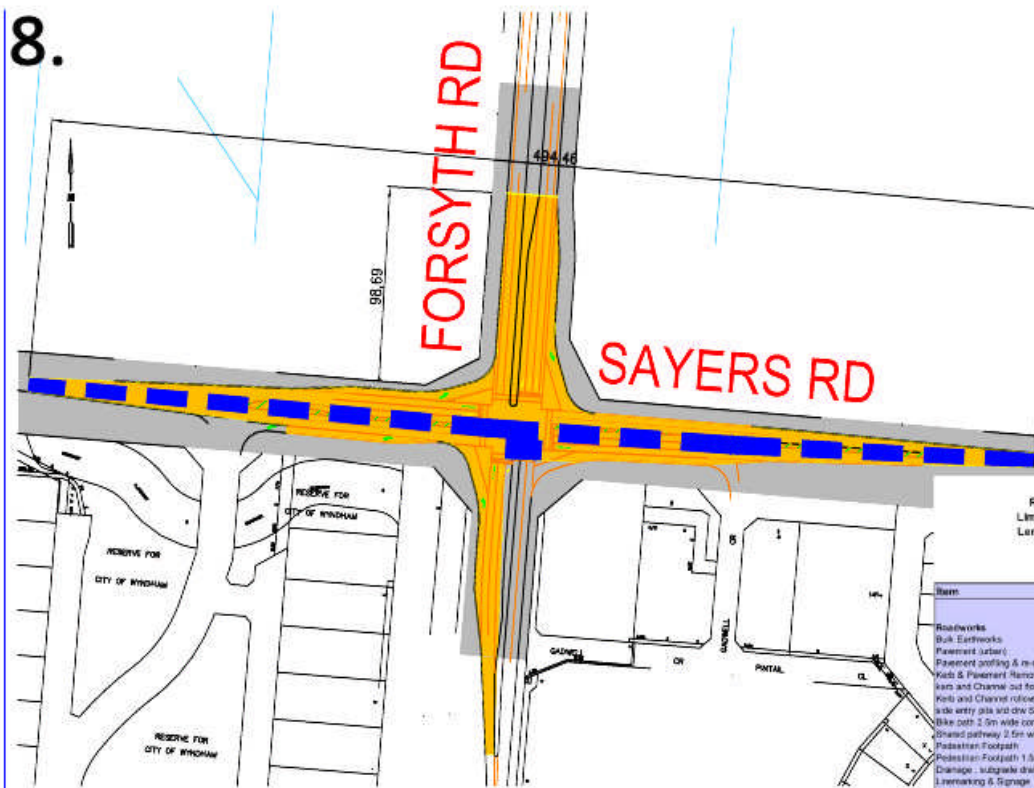
---







8.

SCHEMATIC LAYOUT FOR  
COSTING PURPOSES ONLY

NOTES AND ASSUMPTIONS FOR T06DP FORSYTH RD & SAYERS RD

1. Traffic Management considered to be high in complexity
2. Survey & Design is considered to be medium complexity due to signalled intersection proposal
3. Overheads and supervision include site establishment
4. Contingency (construction) is a % of the estimated cost of works known
5. Service relocation cost is based on:
  - a) intersection has one sided encroachment on existing services
  - b) connection road is greenfield
  - c) length of proposed works



Civil Design Consulting Engineers  
Division of ITH company pty ltd  
Mobile: 0428 353 843  
cdce@optusnet.com.au

## Truganina South Community DCP T06DP ULTIMATE INTERSECTION COSTS FORSYTH RD AND SAYERS RD

EXISTING ROAD PAVEMENT  
ULTIMATE ROAD RESERVE  
COSTED INTERSECTION AREA

### Truganina South Community DCP Roadworks Estimate

Road Name: T06DP Ultimate Sayers Rd & Forsyth Rd Intersection  
Limit of works: As shown on drawing road reserve and cross section vary  
Length of Job: Intersection works only

Notes: Costs based on City of Wyndham for road construction & Cardno Grogan Richards intersection on design

Item	Unit	Rate	wide	units	cost/m	Unit cost	Quantity	subest	subtotal	Amount
Roadworks	subest					\$	2,547.284			
Bulk Earthworks	m <sup>3</sup>	\$ 40.00	5258 metres		\$ 48	\$ 210,120.00			\$ 210,120.00	\$
Pavement (later)	m <sup>2</sup>	\$ 21.50	7771 metres		\$ 32	\$ 711,045.00			\$ 711,045.00	\$
Pavement profiling & re-shaping	m <sup>2</sup>	\$ 32.00	4132 metres		\$ 23	\$ 82,540.00			\$ 82,540.00	\$
Kerb & Pavement Ramp	m <sup>2</sup>	\$ 10.00	340 metres		\$	\$ 2,400.00			\$ 2,400.00	\$
Kerb and Channel out flow	m	\$ 40.00	445 sides		\$ 48	\$ 17,800.00			\$ 17,800.00	\$
Kerb and Channel roller	m	\$ 45.00	1316 sides		\$ 48	\$ 58,310.00			\$ 58,310.00	\$
Side entry pit and one 5305	unit	\$ 2,000.00	15 internal metres		\$ 30	\$ 20,000.00			\$ 20,000.00	\$
Blue coat 2.5m wide conc	m <sup>2</sup>	\$ 30.00	1 metres		\$	\$			\$	\$
Shared pathway 2.5m wide gravel	m <sup>2</sup>	\$ 30.00	0 metres		\$	\$			\$	\$
Pedestrian Footpath	m <sup>2</sup>	\$ 30.00	5751 metres		\$	\$ 345,060.00			\$ 345,060.00	\$
Pedestrian Footpath 1.5m gravel	m <sup>2</sup>	\$ 30.00	0 metres		\$	\$			\$	\$
Drainage - subsurface drain	m	\$ 14.50	1752		\$ 15	\$ 25,916.10			\$ 25,916.10	\$
Landscaping & Signage	m	\$ 25.00	5054 metres		\$ 23	\$ 81,350.00			\$ 81,350.00	\$
Landscaping refer plantings	m	\$ 20.00	0 metres		\$ 20	\$			\$	\$
Concrete island pit	m <sup>2</sup>	\$ 45.00	1280		\$ 48	\$ 57,736.00			\$ 57,736.00	\$
Isle / 15m nature strip	m <sup>2</sup>	\$ 4.00	7800 metres		\$ 4	\$ 31,608.00			\$ 31,608.00	\$
As per standard drawings										
Tree Planting 2 - 2.5m tall	unit	\$25/m-5/100tree	0 trees		\$ 25	\$			\$	\$
Tree 60cm Plantings	unit	\$5.27-85.78	0 metres wide		\$ 5	\$			\$	\$
As per draft tree strategy										
not factors										
300mm dia. conc. drain stormwater Cr 60	per metre	\$192	566 metres		\$	\$ 72,572.00			\$ 72,572.00	\$
200mm conc. drain stormwater Cr 60	per metre	\$231	566 metres		\$	\$ 81,418.00			\$ 81,418.00	\$
400mm conc. drain stormwater Cr 60	per metre	\$294	566 metres		\$	\$ 165,424.00			\$ 165,424.00	\$
200mm conc. drain stormwater Cr 60	per metre	\$231	0 metres		\$	\$			\$	\$
Traffic Signal	unit	\$ 102,500.00	4 No. of intersection		\$	\$ 410,000			\$ 410,000	\$
Traffic Signal Consult sublet	m	\$ 35.00	0 metres		\$	\$			\$	\$
Signal Lighting	m	\$ 120.00	504 rows of lights		\$	\$ 76,826.00			\$ 76,826.00	\$
Lighting consult	m	\$ 30.00	504 No. of signal boxes		\$	\$ 26,700.00			\$ 26,700.00	\$
Subtotal					\$	2,547.284			\$ 2,547.284	\$
not marked total										
Traffic Management										
Contingency										
Total - contingencies										
Services relocation Sec. Poles, water fit them										
Survey and Design										
Overheads (supervision etc)										
Total excluding land cost										
Land Acquisition										
Total Estimated Cost										
Adopted Cost										

Estimate Prepared by: CDCE May-11

LEGEND										AMENDMENTS									
PROPOSED DRAINAGE	SEE PLAN	1	THE PLAN	SEVERE DAMAGE	SEE PLAN	1	THE PLAN	SEVERE DAMAGE	SEE PLAN	1	THE PLAN	SEVERE DAMAGE	SEE PLAN	1	THE PLAN	SEVERE DAMAGE	SEE PLAN	1	THE PLAN
PROPOSED DRAINAGE	SEE PLAN	1	THE PLAN	SEVERE DAMAGE	SEE PLAN	1	THE PLAN	SEVERE DAMAGE	SEE PLAN	1	THE PLAN	SEVERE DAMAGE	SEE PLAN	1	THE PLAN	SEVERE DAMAGE	SEE PLAN	1	THE PLAN
PROPOSED DRAINAGE	SEE PLAN	1	THE PLAN	SEVERE DAMAGE	SEE PLAN	1	THE PLAN	SEVERE DAMAGE	SEE PLAN	1	THE PLAN	SEVERE DAMAGE	SEE PLAN	1	THE PLAN	SEVERE DAMAGE	SEE PLAN	1	THE PLAN
PROPOSED DRAINAGE	SEE PLAN	1	THE PLAN	SEVERE DAMAGE	SEE PLAN	1	THE PLAN	SEVERE DAMAGE	SEE PLAN	1	THE PLAN	SEVERE DAMAGE	SEE PLAN	1	THE PLAN	SEVERE DAMAGE	SEE PLAN	1	THE PLAN
PROPOSED DRAINAGE	SEE PLAN	1	THE PLAN	SEVERE DAMAGE	SEE PLAN	1	THE PLAN	SEVERE DAMAGE	SEE PLAN	1	THE PLAN	SEVERE DAMAGE	SEE PLAN	1	THE PLAN	SEVERE DAMAGE	SEE PLAN	1	THE PLAN
PROPOSED DRAINAGE	SEE PLAN	1	THE PLAN	SEVERE DAMAGE	SEE PLAN	1	THE PLAN	SEVERE DAMAGE	SEE PLAN	1	THE PLAN	SEVERE DAMAGE	SEE PLAN	1	THE PLAN	SEVERE DAMAGE	SEE PLAN	1	THE PLAN
PROPOSED DRAINAGE	SEE PLAN	1	THE PLAN	SEVERE DAMAGE	SEE PLAN	1	THE PLAN	SEVERE DAMAGE	SEE PLAN	1	THE PLAN	SEVERE DAMAGE	SEE PLAN	1	THE PLAN	SEVERE DAMAGE	SEE PLAN	1	THE PLAN
PROPOSED DRAINAGE	SEE PLAN	1	THE PLAN	SEVERE DAMAGE	SEE PLAN	1	THE PLAN	SEVERE DAMAGE	SEE PLAN	1	THE PLAN	SEVERE DAMAGE	SEE PLAN	1	THE PLAN	SEVERE DAMAGE	SEE PLAN	1	THE PLAN
PROPOSED DRAINAGE	SEE PLAN	1	THE PLAN	SEVERE DAMAGE	SEE PLAN	1	THE PLAN	SEVERE DAMAGE	SEE PLAN	1	THE PLAN	SEVERE DAMAGE	SEE PLAN	1	THE PLAN	SEVERE DAMAGE	SEE PLAN	1	THE PLAN

CIVIL DESIGN CONSULTING ENGINEERS  
Truganina South Community DCP  
DEVELOPMENT CONTRIBUTIONS PLAN (DCP)  
FORSYTH RD & SAYERS RD  
T06DP ULTIMATE INTERSECTION

10 119  
REVISED  
10 119









**NOTES AND ASSUMPTIONS FOR T37DP FORSYTH RD & E/W CONNECTOR**

1. Traffic Management considered to be low in complexity
2. Survey & Design is considered to be medium complexity due to signalised intersection proposal
3. Overheads and supervision include site establishment
4. Contingency (construction) is a 5% of the estimated cost of works known
5. Service relocation cost is based on:
  - a) all roads are green field

■ ■ ■ EXISTING ROAD PAVEMENT  
■ ULTIMATE ROAD RESERVE  
■ COSTED INTERSECTION AREA

**Notes:** Costs based on City of Wyndham for road construction & Cardno Grogan Richards intersection design

[illegible]

Truganina South Community DCP  
DEVELOPMENT CONTRIBUTIONS PLAN (DCP)  
FORSYTH RD & EAST WEST CONNECTOR  
T07DP ULTIMATE INTERSECTION

[illegible]







## APPENDIX M – SUMMARY OF INFRASTRUCTURE COSTS

### TRUGANINA SOUTH DCP

#### Development Contributions - Summary Page

(\$ March 2010)

Contribution Type	Contribution Rate per Hectare (March 2010)	Contribution Rate per Lot Dwelling (March 2010)	Total Contributions Wyndham North Items (March 2010)	Total Contributions Truganina South Items (March 2010)	Proportion of Wyndham North attributable Truganina South (March 2010)
<b>Wyndham North</b>					
1. Arterial Road and Major Path	\$96,606.28		\$127,206,781.86	\$16,222,126.40	12.75%
Infrastructure	\$78,174.16			\$13,127,004.32	
Land	\$18,432.12			\$3,095,122.08	
2. Community Infrastructure	\$13,500.00	\$900.00	\$24,236,807.89	\$2,224,800.00	9.18%
3. Other Development Infrastructure	\$48,432.32	\$3,228.82	\$52,162,328.84	\$7,981,647.09	15.30%
Infrastructure	\$46,622.39	\$3,108.16		\$7,683,370.06	
Land	\$1,809.93	\$120.66		\$298,277.03	
	<b>\$158,538.60</b>		<b>\$203,605,918.59</b>	<b>\$26,428,573.49</b>	<b>12.98%</b>
<b>Truganina South</b>					
1. Arterial Road and Major Path	\$72,705.38			\$12,208,686.63	100.00%
Infrastructure	\$65,268.80			\$10,959,936.63	
Land	\$7,436.58			\$1,248,750.00	
2. Community Infrastructure	\$0.00	\$0.00		\$0.00	
3. Other Development Infrastructure	\$51,973.86	\$3,464.92		\$8,565,292.50	100.00%
Infrastructure	\$15,566.10	\$1,037.74		\$2,565,292.50	
Land	\$36,407.77	\$2,427.18		\$6,000,000.00	
	<b>\$124,679.24</b>			<b>\$20,773,979.13</b>	
<b>TOTAL</b>					
1. Arterial Road and Major Path	\$169,311.65			\$28,430,813.03	
Infrastructure	\$143,442.95			\$24,086,940.95	
Land	\$25,868.70			\$4,343,872.08	
2. Community Infrastructure	\$13,500.00	\$900.00		\$2,224,800.00	
3. Other Development Infrastructure	\$100,406.19	\$6,693.75		\$16,546,939.59	
Infrastructure	\$62,188.49			\$10,248,662.56	
Land	\$38,217.70			\$6,298,277.03	
	<b>\$283,217.84</b>			<b>\$47,202,552.62</b>	

NDA (with GSM Protection Zone)	167.92 ha
Truganina South PSP	2,472 dwellings
Wyndham North	185,000 dwellings
Land Cost (March 2011)	\$750,000.00 per hectare NDA

### SUMMARY

Development Infrastructure (DIL)	\$205,631.44		\$34,335,603.51
Arterial Roads and Major Paths	\$143,442.95		\$24,086,940.95
Other Development Infrastructure	\$62,188.49		\$10,248,662.56
Community Infrastructure (CIL)	\$13,500.00		\$2,224,800.00
Land	\$64,086.40		\$10,642,149.11
	<b>\$283,217.84</b>		<b>\$47,202,552.62</b>