GLADSTONE
REGIONAL COUNCIL

MIRIAM VALE SHIRE COUNCIL

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26 October 2009)

Planning Scheme Policy 3 – Water Supply, Sewerage, Transport, Stormwater, & Public Parks and Community Land Infrastructure Contributions Policy

Document Control

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This is to certify that this is a true and correct copy of the Gladstone Regional Council's (former Miriam Vale Shire area) Planning Scheme Policy.

Graham Kanofski
Chief Executive Officer

Adopted: 20 October 2009
Took Effect: 26 October 2009

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1.0 Preliminary

1.1 Commencement

This Planning Scheme Policy No 3 – Water Supply, Sewerage, Transport, Stormwater, and Public Parks and Community Land Infrastructure Contributions Policy, has been adopted by Gladstone Regional Council (GRC) on 27 February 2009.

This Planning Scheme Policy has been prepared for the former Miriam Vale Shire area and replaces the existing Planning Scheme Policy 4.24 titled "*Determination of Water Supply & Sewerage Contributions on Development Applications*", Planning Scheme Policy 4.1 titled "*Park Contributions*" and Planning Scheme Policy titled "*Roadworks Contributions"*.

This policy has force and effect from 27 February 2009.

1.2 Position Statement

This policy has been developed in accordance with s6.1.20 of the Integrated Planning Act 1997 (and associated amendments). This policy will deliver infrastructure contributions in accordance with the Integrated Planning Act 1997 ('the Act') under the former Miriam Vale Shire Council's IPA planning scheme.

The provisions of this policy are subject to review by Gladstone Regional Council from time to time and the adoption of any revised policy will be in accordance with Schedule 3 of the Act.

1.3 Name of Plan

This document is to be known as *Planning Scheme Policy 3 – Water Supply, Sewerage, Transport, Stormwater, and Public Parks and Community Land Infrastructure Contributions Policy.*

1.4 Intent

The policy provides the method of calculating contributions to be paid to Council as a consequence of a development approval. The *Act*, Council policy and supporting documentation empowers Council to apply a condition to require an infrastructure contribution to be made by the applicant towards the provision of trunk Infrastructure.

1.5 Scope

The scope of this policy covers the following infrastructure networks:

Infrastructure Network	Establishment Cost	Existing Trunk Infrastructure Costs	Future Trunk Infrastructure Costs
Water Supply	Yes	Yes	Yes
Sewerage	Yes	Yes	Yes
Transport (Council roads, pedestrian and cycleways)	Yes	Yes	No
Public Parks and Community Land	Yes	Yes	No
Stormwater	Yes	Yes	No

Trunk infrastructure is defined in Section 2.0 *Definitions* by relevant network.

1.6 Application

This policy applies to all development applications for a Material Change of Use or for Reconfiguring a Lot on land:

- which is determined under this Planning Scheme Policy to be serviced with trunk infrastructure; and
- where an increased demand on the infrastructure network is determined.

Such a determination will be made by Council during the IDAS process and specified as a specific condition of a development permit made under the Act.

2.0 Definitions

The following terms are used frequently throughout this planning scheme policy and have definitions either defined under the Act or by Miriam Vale Shire Council.

Applicant – has the meaning defined by the *Integrated Planning Act* and the *Integrated Planning and Other Legislation Amendment Act.*

Capital works – infrastructure works that ensure land is suitably serviced for its intended development purpose.

Capital Works Program – means Council's schedule of works and capital costs outlined over a period of time, generally coinciding with the budget cycle, which plans out the implementation of trunk Infrastructure.

Contributions Catchment – a generic reference to water supply regions/zones, sewerage catchments, stormwater catchments, transport sectors and public parks and community land catchments over which the cost of infrastructure will be shared.

Deemed Trunk Infrastructure – infrastructure that is not currently part of the plans for trunk infrastructure but which Council may determine to be Trunk infrastructure based on meeting all of the following qualification criteria:

a) Meet the Desired Standards of Service within the planning scheme policy; and
b) Be generally planned ahead of detailed layout planning but is clarified/refined by the more detailed analysis; and
c) Be required by the overall planned demands including those partially generated by a development permit whether it is located within the site or external to the development site; and
d) Be shared by a number of users; and
e) Provide a system function that is generally trunk, which may not necessarily be related to its size or capacity.

Desired Standards of Service (DSS) – are a set of parameters referred to within the planning of infrastructure to guide the form and function of the infrastructure which is to be constructed.

Development – means any actual or anticipated lot, work or use resulting from 'development' as defined in the *Integrated Planning Act 1997* which creates a demand for infrastructure.

Equivalent Demand Unit (EDU) – the basic unit used to determine demand for infrastructure as a result of a proposed development. This unit is generally based on a comparison with the demand of one residential dwelling.

Equivalent Person (EP) – the basic unit or units used for determining the change in demand for water or sewerage services as a result of a proposed development. This unit is based on a comparison with the usage of a service by an average occupant of an average residential dwelling.

First Principles Assessment – is a process where the demand generated by undefined development (i.e not directly specified in any way by the tables in the policy) is assessed and determined case by case, based on research of similar known uses and demands. Where a development is a compilation of documented uses outlined in the policy the demand shall be assessed by aggregating the use demands for each component. First principles assessment is to be undertaken by suitably qualified professionals. Submissions shall include detailed research and methodology that is compliant with the averaged user pays method used in this planning scheme policy.

Infrastructure Agreement – has the meaning as defined in the *Integrated Planning Act 1997* and includes an agreement between Council and an applicant where:

- trunk infrastructure is being provided in lieu of an infrastructure contribution;
- trunk infrastructure is being provided at a different time to that stated in the capital works program;
- alternative trunk infrastructure is provided to meet the desired standards of service;
- trunk infrastructure (unplanned) is provided and is not identified in the capital works program;
- trunk infrastructure being provided is valued in excess of an infrastructure contribution;
- infrastructure contribution is made at a different time to that stated in the infrastructure condition and/or is proposed to be paid in instalments.

Infrastructure Contribution – a charge applied to development through the conditions of the development permit for the provision of trunk infrastructure that services, or is planned to service, the development.

Planned capacity – capacity within the existing and future defined network assets (which may supply current demand) to service future planned growth.

Plans for Trunk Infrastructure (PFTI) **–** trunk infrastructure that is included in Council's capital works program and contained in reports and strategies (PFTI) that is the subject of the contributions, as reviewed from time to time.

Planning Assumptions – are those statements within the planning scheme that outline the basis for planning, design and funding the networks of infrastructure that are to serve development undertaken in the community.

Public Parks and Community Land Trunk Infrastructure – Means all parks and associated embellishments (including, site preparation, infrastructure services, landscaping, sporting facilities and play equipment) within the network which provide a range of recreational and open space opportunities. The term also indicates any other works, structures or equipment that Council designates from time to time to be trunk infrastructure, and the land component only for community facilities such as libraries and community halls.

Stormwater Trunk Infrastructure – Means all infrastructure, land and equipment including constructed or enhanced underground pipes, channels or overland flow paths that are shared between developments, and is generally exclusive of minor drainage systems for roads and relief systems. The term also indicates any other works, structures or equipment that Council designates from time to time to be trunk infrastructure.

Transport Trunk Infrastructure – Means all infrastructure, land, equipment and other items identified in Council's adopted transport (roads, pedestrian and cycle ways) strategy as the trunk infrastructure used for the determination of the contributions. The term also indicates any other works, structures or equipment that Council designates from time to time to be trunk infrastructure.

The Act – is a reference to the *Integrated Planning Act* (as amended).

Unplanned Trunk Infrastructure – Trunk infrastructure that is not within Council's capital works program.

Water Supply & Sewerage Trunk Infrastructure – Means all infrastructure, equipment and other items identified in Council's adopted water supply and sewerage strategies as the trunk infrastructure used for the determination of the contributions. The term also indicates any other works, structures or equipment that Council designates from time to time to be trunk infrastructure.

3.0 Planning Assumptions

3.1 Overview

Planning Assumptions form a key part of trunk infrastructure planning, having a number of key roles including:

a) Linking demands for infrastructure to Zones within the planning scheme;

b) Determining the scale, form and intensity of demands associated with land uses; and

c) Determining the timing of infrastructure delivery.

The development of infrastructure contributions for the Water Supply and Sewerage Trunk infrastructure networks have been based on an assessment of the land use outcomes envisaged under the Miriam Vale planning scheme. The assumed development demands for different Zones and Uses are tabled in section 3.2 and in *Schedule 9*. The demands which are generated by both the existing developed areas and future development areas are combined and modelled to provide an indication of the scope and scale of trunk infrastructure required.

Infrastructure contributions for the Transport, Public Parks and Community Land and Stormwater networks are based on the demand rates identified in Schedule 13 Trunk Infrastructure Charge Rates of the *Integrated Planning Regulation 1998*. These regulated demand rates have been aligned with the various development types contained within the Miriam Vale planning scheme zones and defined uses – refer to *Schedule 9* of this Policy.

3.2 Residential and Non-residential Planning Assumptions

3.2.1 Residential Planning Scheme Provisions

Tables 1 and 2 *Residential Planning Assumptions* are based on the planning scheme requirements and defines the minimum lot/unit sizes and assumed density provisions to determine trunk infrastructure requirements to service Miriam Vale's future population.

Table 1: Residential Planning Assumptions[1] (Detached Dwellings)

User Group	Zone/Land Use Description	Density[2] (Dwellings/Ha)	Relevant Locality(s)*	Minimum Lot Size (sqm)	Average Lot Size (sqm)	Base Occupancy Rate (2006)	2021 Occupancy Rate
Residential	Low Density Residential	9	1,2,3,4,5	600	800	2.3	2.0
	Special Residential	3	1	2,500	2500	2.3	2.0
	Rural Character (with reticulated water)	2	1,3	4,000	4,000	2.3	2.0
	Rural Character (with no reticulated water)	0.4	1,3	20,000	20,000	2.3	2.0
Other	Rural	0.004	1,3,4,5 (Rosedale),7	2,000,000	2,000,000	2.3	2.0

Note:

Locality 1 = Agnes Water
Locality 2 = Seventeen Seventy
Locality 3 = Miriam Vale
Locality 4 = Turkey Beach
Locality 5 = Lowmead, Rosedale and Bororen (Rural Villages)
Locality 6 = Offshore Islands
Locality 7 = Rural

Table 2: Residential Planning Assumptions (Attached Dwellings)

User Group	Zoning/Land Use Description	Density (Dwellings/ Ha)	Relevant Locality(s)	Density (units per site area)	Maximum Site Cover (%)	Maximum Storeys	Base Occupancy Rate (2006)	2021 Occupancy Rate
Residential	Medium Density Residential	53	1,2	1 per 150sqm site area	50	3	1.7	1.4
	Medium Density Residential (Lots 1 & 3, SP130692)	32	1	1 per 250sqm site area	50	3	1.7	1.4
Commercial	Tourist Commercial (Residential Component)	53	1	NA	100*	2	1.7	1.4

*Site cover reduced if adjoining a Low Density Residential or Medium Density Residential area.

3.2.2 Non-residential Provisions

Schedule 9 outlines the assumed non-residential demands by Zones and Defined Uses that have been used as the basis for the future water supply and sewerage trunk infrastructure requirements.

[1] Residential planning assumptions have been generalized for the purpose of developing future population and dwelling forecasts only.
[2] Gross densities (which exclude 20% – 30% of land for services, roads, waterways and parks) have been applied for residential lots.

3.3 Projected Urban Growth

The adopted population projections in Table 3 **–** *Miriam Vale Population Projections 2006 to Ultimate* define projected growth for the Shire to the year 2026 and 'ultimate'. Forecasts are based on the Miriam Vale Shire population model, which is benchmarked against the State Government's Population Information Forecasting Unit's medium series population projection. An allowance has also been made for the Shire's tourist population, as they will create additional demand for accommodation and associated infrastructure.

Table 3: Miriam Vale Population Projections 2006 to Ultimate

	2006	2011	2016	2021	2026	Modelled Ultimate	Capacity 2006- Ultimate
PIFU Projections	***5,408***	***6,734***	***7,837***	***9,056***	***10,340***	-	-
Tourist Projections	***512***	***589***	***695***	***820***	***984***	-	-
Adjusted PIFU Projections	***5,920***	***7,323***	***8,532***	***9,876***	***11,324***	-	-
Localities							
Agnes Water	2270	3944	5140	6464	7487	12032	9762
Seventeen Seventy	563	585	596	603	607	595	32
Miriam Vale	410	397	401	413	472	793	383
Turkey Beach (Coastal Village)	395	395	395	395	433	597	202
Lowmead (Rural Village)	28	28	28	28	49	142	114
Rosedale (Rural Village)	90	90	90	90	144	382	292
Bororen (Rural Village)	179	160	156	155	172	248	69
Rural	1715	1712	1711	1709	1935	7881	6167
Total Modelled*	***5,920^***	***7,312***	***8,516***	***9,856***	***11,298***	***22,671***	***17,022***

(Source: Miriam Vale Shire Pop Model 2007 & PIFU, 2007)

*Differences between modelled projections and adjusted PIFU projections are a result of number rounding.
^ Total modelled 2006 population includes 271 people to calibrate with PIFU

For the purposes of infrastructure planning the population projections outlined in Table 3 and the non-residential demand as set out in *Schedule 9* have been aggregated to the respective infrastructure service catchments.

4.0 DESIRED STANDARD OF SERVICE

Desired Standards of Service (DSS) direct the form and scale of infrastructure networks to be constructed to service areas within the local government area. The performance of each network will vary over time. The DSS does not imply a guaranteed level of performance for the network.

DSS are expressed for each network in terms of planning and design criteria based on quantitative and qualitative standards.

- ***Planning*** based criteria are qualitative, specify the types of outcomes envisaged by the supply of the infrastructure (contained in Planning Scheme); these initially scope how the network is laid out to physically service development , this may include hierarchies of densities of provision.

- ***Design*** based criteria which are quantitative in nature and specify the size, capacity, operational performance (contained in the Network Design Documentation).

Schedule 12 defines the Desired Standards of Service for each Trunk Infrastructure Network.

5.0 Trunk Infrastructure

5.1 Trunk Infrastructure Items that will be funded

The infrastructure networks and items to be provided under this planning scheme policy are for the provision of existing and future trunk water supply and sewerage infrastructure; and provision of existing trunk transport (roads, pedestrian and cycle ways), stormwater, and public parks and community land infrastructure[3]. The scope of trunk infrastructure used in the development of the contribution is outlined in Schedule 11 of this planning scheme policy. The infrastructure is considered in three forms:

Catchment Works
Trunk infrastructure (including land) which serves the wider community including:

Water Supply and Sewerage

- Supply sources, treatment plants, major trunk mains, major pump stations and pressure mains, outfall/disposal infrastructure.

Transport

- Roads in Council ownership, whose primary function is the carriage of traffic between and across the local government area, serving two integral purposes of connectivity (between origin and destination); and performing a true network function (provides a variety or routes and connections). This includes road drainage and all forms of cross drainage.
- Selected components of the State road network, with a primary function of the carriage of traffic within and about the local government area (i.e. having a local function).
- Pedestrian and cycle way network consists of a series of on-road facilities for cycling (defined by signage and road markings) and off-road facilities with shared paths being the common form of infrastructure.

Stormwater

- Constructed underground pipes, channels or overland flow paths that are shared between developments. All road culverts and cross drainage for watercourses and overland flow paths are not included, generally being piped drainage for Q5 flows and above for residential and Q10 flows and above for commercial/industry.

Public Parks and Community Land

- Parks and associated embellishments (including, site preparation, infrastructure services, landscaping, sporting facilities and play equipment) within the network which provide a range of recreational and open space opportunities, and the land component only for local community facilities.

[3] As part of the development of its Priority Infrastructure Plan, Council is currently developing trunk infrastructure charges for transport, stormwater, and public parks and community land. In the interim the application of a contribution in accordance with rate set by the *Integrated Planning Amendment Regulation (No.3) 2008* is considered a fair and reasonable average minimum contribution.

Works External
Infrastructure (including land) that provides a link from the development site property boundary to the trunk infrastructure network. The applicant is responsible for all non-trunk works external.

If the works external is deemed trunk by Council, then Council may require the applicant to construct the works external to a larger capacity or to a greater extent than required to service the subject land and proposed development. Where works external are deemed to be trunk and required for the development to proceed, such shall be directed through the conditions of approval. Section 6.6 outlines the process for reimbursement of such trunk infrastructure costs against the applicant's infrastructure contribution.

This planning scheme policy may be amended from time to time to include any deemed trunk infrastructure in the trunk infrastructure schedules and maps. In such instances the relevant infrastructure contribution will be amended to reflect the cost inclusion of such deemed infrastructure.

Works Internal
Networks internal to premises are not trunk infrastructure and are to be provided by the applicant at the applicant's expense.

5.2 Key Reference Documents

A number of key reference documents have been used in the determination of existing and future infrastructure and existing and future demands. From these documents future capital works schedules and maps have been developed along with infrastructure contribution rates.

The table below identifies the current key reference documents.

Trunk Infrastructure Network	Key Reference Documents
Water Supply and Sewerage	• Coleridge Water Engineers (2008), Agnes Water & Seventeen Seventy Water Supply & Sewerage Infrastructure, A Summary • GHD (2008), Sewerage Planning Report for Agnes Water/Town of 1770 • GHD (2005), Report for 1770 Sewerage Scheme – Pressure Sewerage System • Parsons Brinkderhoff (2006), Agnes Water Desalination Project – Early Studies Investigations Final Report • Cardno (2006) Town of 1770 Water Supply Reticulation Planning Report. • Cardno (2006) Agnes Water-Town of 1770 Benaraby-Agnes Waer Pipeline Cost Report • Burns Bridge Transactions (2007), Engineering Estimates and Financial Implication of Pipeline and Desalination Options for Agnes Water and 1770 • Strategic Asset Management Plan • Total Asset Management Plan • Council Asset data and mapping

Trunk Infrastructure Network	Key Reference Documents
Transport	• Council Asset data and mapping • Miriam Vale Shire Council (2006), Pathways and Bikeways Management Plan
Stormwater	• Council Asset data and mapping
Public Parks and Community Land	• Council Asset data and mapping • Strategic Leisure Group (2008), Miriam Vale Shire Public Open Space and Recreation Plan

5.3 Proportion of Capital Costs funded through Infrastructure Contributions

Infrastructure contributions are levied on a full cost recovery basis[4]. Users shall contribute to the cost of existing and planned works in accordance with the estimated use of those works, as determined by Council. Where subsidies have been provided by other sources to fund the infrastructure these have been appropriately accounted for in the costs.

5.4 Establishment Cost of Trunk Infrastructure

Water Supply and Sewerage

Establishment costs for water supply and sewerage trunk Infrastructure comprise of:

(a) Value of planning, design, financing and construction costs of future trunk infrastructure including land acquisition;

(b) existing infrastructure (valued as the replacement cost using contemporary materials techniques and technologies);

(c) land for existing trunk infrastructure, acquired post 1st January 1990;

(d) ongoing administration costs of the Infrastructure Contributions Schedule.

Transport, Stormwater, and Public Parks and Community Land

Transport, stormwater and public parks and community land infrastructure contributions have been aligned with the charge rate defined in the *Integrated Planning Amendment Regulation (No.3) 2008*, made under *the Integrated Planning Act 2007*.

Despite other provisions of this planning scheme policy, contributions collected for the transport, stormwater and public parks and community land trunk infrastructure are for the purposes of existing trunk infrastructure and planning for future trunk infrastructure only.

[4] As part of the development of its Priority Infrastructure Plan, Council is currently developing trunk infrastructure charges for transport, stormwater, and public parks and community land. In the interim the application of a contribution in accordance with rate set by the *Integrated Planning Amendment Regulation (No.3) 2008* is considered a fair and reasonable average minimum contribution.

6.0 Infrastructure Contributions

6.1 Method of calculating the Contribution

The infrastructure contribution applicable to development for each trunk infrastructure network will be calculated in accordance with:

Water Supply:

WSIC = [(ED – PC) x CR] x I

Where

WSIC = Water Supply Infrastructure Contribution

ED = Equivalent Demand set out in *Schedule 9* for Water Supply

PC = recognised Previous Contributions in the form of previous approvals and as of right uses as determined by Council under Section 6.4 of this Policy set out as Equivalent Demand units;

CR = Contribution Rate as set out in *Schedule 10* for the Water Supply Contribution Catchment in which the land is situated; and

I = Indexed by the Infrastructure Indexation Unit Rate (IIUR) as determined in Section 6.1.2.

Sewerage:

SIC = [(ED – PC) x CR] x I

Where

SIC = Sewerage Infrastructure Contribution

ED = Equivalent Demand set out in *Schedule 9* for Sewerage

PC = recognised Previous Contributions in the form of previous approvals and as of right uses as determined by Council under Section 6.4 of this Policy set out as Equivalent Demand units;

CR = Contribution Rate as set out in *Schedule 10* for the Sewerage Contribution Catchment in which the land is situated; and

I = Indexed by the Infrastructure Indexation Unit Rate (IIUR) as determined in Section 6.1.2.

Transport:

TIC = (ED-PC) x CR

Where:

TIC = Transport Infrastructure Contribution;

ED = Equivalent Demand set out in *Schedule 9* for Transport;

PC = recognised Previous Contributions in the form of previous approvals and as of right uses as determined by Council under Section 6.4 of this policy set out as Equivalent Demand units; and

CR = Contribution Rate as set out in *Schedule 10* for the Transport Contribution Catchment in which the land is situated.

Note: Council may amend the contribution rate from time to time to align with Schedule 13 – Trunk Infrastructure Charges: Section 21 of the *Integrated Planning Amendment Regulation 1998*.

Stormwater:

SWIC = (ED-PC) x CR

Where:

SWIC = Stormwater Infrastructure Contribution;

ED = Equivalent Demand set out in *Schedule 9* for Stormwater;

PC = recognition of Previous Contributions in the form of previous approvals and as of right uses as determined by Council under Section 6.4 of this policy set out as Equivalent Demand units; and

CR = Contribution Rate as set out in *Schedule 10* for the Stormwater Contribution Catchment in which the land is situated.

Note: Council may amend the contribution rate from time to time to align with Schedule 13 – Trunk Infrastructure Charges: Section 21 of the *Integrated Planning Amendment Regulation 1998*.

Public Parks and Community Land:

PPCLIC = (ED – PC) x CR

Where:

PPCLIC = Public Parks and Community Land Infrastructure Contribution;

ED = Equivalent Demand set out in *Schedule 9* for Public Parks and Community Land;

PC = recognised Previous Contributions in the form of previous approvals and as of right uses as determined by Council under Section 6.4 of this Policy set out as Equivalent Demand units; and

CR = Contribution Rate as set out in Schedule 10 for the Public Parks and Community land Contribution Catchment in which the land is situated.

Note: Council may amend the contribution rate from time to time to align with Schedule 13 – Trunk Infrastructure Charges: Section 21 of the *Integrated Planning Amendment Regulation 1998*.

6.1.1 Contribution Rate

Council may from time to time review the infrastructure contribution rates specified in *Schedule 10*.

6.1.2 Infrastructure Indexation Unit Rate

The following formula is used to determine the 'Infrastructure Indexation Unit Rate' by which infrastructure contributions will be indexed quarterly to take into account inflation and other matters relevant to the capital costs of infrastructure. The *IIUR* is set from the base of June 2006 and adjusted quarterly in accordance with the following :

$$\text{Infrastructure Indexation Unit Rate} = 1 + \frac{\Delta \text{ Producer Price Index}}{}$$ [5]

Where: Δ Producer Price Index $= \dfrac{\text{Current PPI (INDEX)} - \text{Base PPI (INDEX)}}{\text{Base PPI (INDEX)}}$

[5] ABS Cat No 6427.0 Tables 15 and 16. Output of the General Construction Industry, Index Numbers and Percentage Changes (Road and Bridge Construction, 4121, Queensland)

6.2 Alternative Method of Calculation

In determining the demand for those applications not clearly documented within *Schedule 9*, or in determining the cost impact of inconsistent or out of sequence development, the **Council at its discretion** reserves the right for a 'first principles assessment' to be undertaken to assess demand, and to consider submissions (supported by appropriate research) made by a consultant on behalf of an applicant.

Prior to undertaking a first principles assessment, the applicant must seek approval from Council to undertake the assessment. As part of the process Council will consider the complexity and/or uniqueness of the development to determine if a first principle assessment is warranted. Council will not enter into a first principles assessment where an applicant disagrees with the defined demand rate, identified in *Schedule 9*, based on isolated observed use. The demand rates are determined by the methodologies of averaged consumption.[6]

For uses not specifically listed in *Schedule 9*, the development application is to be accompanied by a first principles assessment and/or appropriately documented research from other locations for Council consideration.

When determining demand on a first principles basis, Council will refer to relevant or equivalent levels of development noted within *Schedule 9*. Otherwise, demands are to be assessed on 'averaged demand' criteria as follows:

Water Supply
Estimate of mean day maximum month adjusted for local soil conditions; and
Calculate EP density as mean day maximum month demand / EP daily allocation of 450L/EP/day (mean day maximum month equals the average day demand measured over a minimum of 365 consecutive days multiplied by 1.5 for domestic purposes or 1.0 for other uses).

Sewerage
Estimate Average Dry Weather Flow to sewer, and calculate EP density as Average Dry Weather Flow / EP discharge of 250L/EP/day.

The demand determined from the above will then be multiplied by the contribution per EP specified in *Schedule 10* for the Catchment Area in which the land is situated.

Transport
'First principles' assessment basis to be based on relevant or equivalent levels of development noted within *Schedule 9* - Transport.

Stormwater
'First principles' assessment basis to be based on relevant or equivalent levels of development noted within *Schedule 9* - Stormwater.

Public Parks and Community Land
'First principles' assessment to be based on relevant or equivalent levels of development noted within *Schedule 9* – Public Parks and Community Land.

[6] This approach is supported by the Act and associated guidelines.

6.3 Payment of the contributions

Infrastructure contributions are required to be paid by the registered owners of property within the contribution catchments for Water Supply, Sewerage, Transport, Stormwater and Public Parks and Community Land specified in the attached Schedules in accordance with the conditions of development approval.

6.4 Recognition of Previous Approvals and 'As of Right' Uses

The demand determined in accordance with *Schedule 9* may be reduced by the greater of the following, if applicable:

(a) The demand applicable to the existing or last known lawful use of the land (demand for use in accordance *Schedule* 9); or
(b) The demand applicable to the existing or last known lawful use of the land based on records of past infrastructure contributions (indexed to current day prices using the recorded index documented in Council's Annual Fees and Charges); or
(c) The demand applicable to a self assessable residential use on that land permitted at the time of assessment (demand for use in accordance with *Schedule 9*); or
(d) For existing allotments that are vacant at the time of application, one (1) equivalent demand unit (EDU) per vacant allotment.

If the above exceeds the demand applicable to the proposed development, no monetary credit will be given. Further no offsets will be allowed against other required contributions or works, including between Water Supply, Sewerage, Transport, Stormwater, and Public Parks and Community Land.

6.5 Method and timing of payment

Unless otherwise specified by a condition of development approval or Infrastructure Agreement, payment of the infrastructure contribution (in full or unless agreed otherwise) shall be:

(a) for Reconfiguring a Lot, prior to Council approval of the Plan of Survey for registration; or
(b) for assessable Building Work, prior to the issue of a development permit; or
(c) for a Material Change of Use, prior to the change or commencement of the use.

6.6 Alternatives to Paying Contributions

6.6.1 Water Supply and Sewerage Infrastructure Contributions

Council may consider alternatives to paying water and sewerage infrastructure contributions including carrying out the capital works for which the infrastructure contribution was fixed, or dedication of land in exchange for a reduction in infrastructure contributions. Council in association with the applicant may consider the following options.

6.6.1.1 Construction of Trunk Infrastructure in Lieu of Contribution

Situation: *Trunk Infrastructure required to service development, but not yet available or unplanned in Council's Capital Works Program*.

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Council at its discretion may:

(a) include a condition to supply the required trunk infrastructure as part of the development approval; or
(b) enter into an infrastructure agreement with the applicant about supply and/or funding arrangements of the required trunk infrastructure.

Where the cost[7] of trunk infrastructure provision by the applicant is less than the applicable infrastructure contribution, then the balance of the infrastructure contribution will be in accordance with the relevant condition of development, or as stated in the relevant trunk infrastructure agreement.

Where the cost[6] of planned trunk infrastructure provision by the applicant is greater than the applicable infrastructure contribution the additional costs of construction may be, as determined by Council, reimbursed by one of the three methods noted below.

(a) For planned trunk infrastructure, Council will reimburse the balance of the prior agreed construction cost of Trunk Infrastructure at the time *when the infrastructure is constructed,*[8] where agreement is given by Council to accelerate its delivery within the capital works program;

or

(b) For planned trunk infrastructure, Council will reimburse the balance of the prior agreed construction cost of the Trunk Infrastructure at the time *when the infrastructure was budgeted for* in Council's capital works program.

or

(c) For planned trunk infrastructure, Council will determine infrastructure credits which will be redeemable for future stages of the same network and development.

For unplanned trunk infrastructure, Council may establish a refund agreement, as part of an infrastructure agreement, generally based on the relevant contributions catchment, for which an appropriate proportion of infrastructure contribution collected will be diverted to the refund agreement.

All trunk infrastructure works constructed must be consistent with the Plans for Trunk Infrastructure.

Prior to any commitments toward trunk infrastructure capital works being carried out by the applicant, the reimbursement option including a payment schedule, if any, shall be agreed and ratified in an Infrastructure Agreement between Council and the applicant.

6.6.1.2 Land Dedication in Lieu of Contribution

Situation: *Planned Trunk infrastructure includes land that is located on the site of a development application*.

[7] The determination of the value of trunk infrastructure can be agreed by Council review or through tendering in accordance with the Local Government procurement procedure.

[8] Suggested reimbursement may be made progressively in accordance with the actual contract payment at on-maintenance of the works and the actual residual contract payment upon off-maintenance of the works, or as decided with Council.

Council at its discretion may include a condition to supply the required trunk infrastructure (being land) as part of the development approval.

Where the cost[9] of land dedicated by the applicant, is less than the applicable infrastructure contribution, then the balance of the contribution will be in accordance with the relevant condition of development, or as stated in the relevant infrastructure agreement.

Where the cost[8] of planned trunk infrastructure, being land is dedicated by the applicant, is greater than the applicable infrastructure contribution then Council may enter into an infrastructure agreement with the applicant to offset the additional contribution by one of the three methods noted below:

(a) For planned trunk infrastructure that is land, Council will reimburse the balance of the prior agreed construction cost of Trunk Infrastructure at the time *when the infrastructure is constructed,*[10] where agreement is given by Council to accelerate its delivery within the capital works program;

or

(b) For planned trunk infrastructure that is land, Council will reimburse the balance of the prior agreed construction cost of the Trunk Infrastructure at the time *when the infrastructure was budgeted for* in Council's capital works program.

or

(c) For planned trunk infrastructure that is land, Council will determine infrastructure credits which will be redeemable for future stages of the same network and development.

For unplanned trunk infrastructure that is land, Council may establish a refund agreement, generally based on the relevant contributions catchment, for which an appropriate proportion of infrastructure contribution collected, will be diverted to the refund agreement.

6.6.2 Transport, Stormwater and Public Parks Infrastructure Contributions

Council will generally not consider alternatives to paying transport, stormwater and public parks and community land purposes infrastructure contributions. The development of these infrastructure schedules and contributions have not included the provision of future trunk infrastructure (i.e. works or land).

Where future transport, stormwater and public parks and community land purposes infrastructure is conditioned as part of the development approval and it is determined by Council that such infrastructure meets the criteria of "trunk infrastructure", then Council may at its discretion enter into an infrastructure agreement with the applicant at the applicant's expense. The purpose of the infrastructure agreement is to provide a framework to enable contribution offsets or refunding arrangements for that portion of trunk infrastructure which is in excess of the development's fair share contribution.

[9] Land cost will be valued in accordance with methodology set down in the Acquisition of Land Act 1967.

[10] Suggested reimbursement may be made progressively in accordance with the actual contract payment at on-maintenance of the works and the actual residual contract payment upon off-maintenance of the works, or as decided with Council.

7.0 Infrastructure Agreements

7.1 Situations where an Infrastructure Agreement may be struck

At the discretion of Council an infrastructure agreement with the applicant may be struck under the following situations and subject to the provisions as defined in Section 6.6 of this planning scheme policy:

- trunk infrastructure is being provided in lieu of an infrastructure contribution;
- trunk infrastructure is being provided at a different time to that stated in the capital works program;
- alternative trunk infrastructure is provided to meet the desired standards of service;
- trunk infrastructure (unplanned) is provided and is not identified in the capital works program;
- the value of trunk infrastructure being provided is in excess of an infrastructure contribution, resulting in reimbursement via a refund agreement between Council and the applicant; or
- infrastructure contribution is made at a different time to that stated in the infrastructure contributions condition and/or is proposed to be paid in instalments.

7.2 Infrastructure Agreement Preparation

Infrastructure agreements shall at a minimum address the following issues:

- The agreement must conform to the provisions of IPA and the contract laws applicable in the State of Queensland;
- Must state the applicable networks of trunk infrastructure;
- Must state the method used to calculate the 'construction value' of the trunk infrastructure and reporting methods and scope of all 'on-costs' to provide for the determination of the 'establishment cost'.
- Must state the calculated equivalent demand on the network from the proposed development;
- The required contributions or trunk infrastructure to be contributed for each component or hierarchy of the network in accordance with this policy;
- The general date the contributions or infrastructure are to be provided;
- The nature of any security to be lodged and the details of the use and release of such security;
- Details of the trunk infrastructure to be provided and the provision program;
- Details of the responsible entity for the funding, design and construction of the trunk infrastructure including land acquisition;
- Details of the charging credit/offset accrued to the development and that which is sought to be recouped above the applicable contribution or payment for the development;
- Provision for reimbursement to the applicant for the establishment of trunk infrastructure in excess of the contribution or payment in accordance with Section 6.6 of this Policy;
- Document any details and set out procedures for the reimbursement of the proponent for additional infrastructure contributions which arise from the provision of trunk infrastructure;

- Provision of the reimbursement of costs for works external or internal non-trunk infrastructure that is determined to constitute trunk infrastructure under the definitions contained within the Planning Scheme;
- Details of any approved temporary works and the costs associated with the operation and maintenance of these items for a period of five years;
- Any other details considered appropriate by the Council; and
- Provisions for unforseen delays and redundancy provisions where a development approval and trunk infrastructure construction activities are held in abeyance. Provisions for Council to revoke any previous Agreement and reinstate the contribution where an alternate party agrees to the construction of the same trunk infrastructure detailed in the agreement.

Infrastructure agreements will be in writing and prepared by the Council at the applicant's cost, subject to the satisfaction of the Council. Infrastructure agreements shall generally conform to the draft format determined for the agreements by Council from time to time.

8.0 Register of Infrastructure Contributions and Infrastructure Agreements

Council will maintain a register of infrastructure contributions and infrastructure agreements for public inspection. The register will contain the following:

- real property description of land to which the infrastructure contribution or infrastructure agreement applies;
- development approval reference number;
- the amount of the infrastructure contribution levied; and
- the amount of the infrastructure contribution unpaid.

9.0 Schedules of Demand

[Demand density in these schedules is for the purpose of infrastructure planning and provision only]

9.1 Schedule – Water Supply Equivalent Demand Units (EDUs) by Zone for Reconfiguring a Lot

Zone	Water Supply EDUs
Residential	
Low Density	1 EDU/lot or 9 EDU/hectare whichever is greater
Medium Density	1 EDU/lot or 53 EDU/hectare whichever is greater
Special Residential	1 EDU/lot or 3 EDU/hectare whichever is greater
Rural Character (with Reticulated Water)	1 EDU/lot or 2 EDU/hectare whichever is greater
Rural Character (with No Reticulated Water)	NA
Rural	NA
Tourist Commercial (Residential Component)	1 EDU/lot or 53 EDU/hectare whichever is greater
Retail/Commercial	
Local Business	1 EDU/lot or 17 EDU/hectare whichever is greater
District Business	1 EDU/lot or 35 EDU/hectare whichever is greater
Retail Showrooms	1 EDU/lot or 15 EDU/hectare whichever is greater
Commercial Services	1 EDU/lot or 17 EDU/hectare whichever is greater
Tourist Commercial (Commercial Component)	1 EDU/lot or 17 EDU/hectare whichever is greater
Industry	
Light Industry	1 EDU/lot or 10 EDU/hectare whichever is greater
General Industry	1 EDU/lot or 14 EDU/hectare whichever is greater
Other	
Special Use	First Principles Assessment

9.2 Schedule – Water Supply Equivalent Demand Units (EDUs) by Defined Use[11] for Material Change of Use

Defined Use	Water Supply EDUs
Residential	
Accommodation Building	
1 bedroom unit	0.43/Unit
2 bedroom unit	0.68/Unit
3 bedroom unit	1.00/Unit
Motel unit	0.28/Unit
Backpackers/hostel	0.39/Bed
Bed and Breakfast	0.82/Bedroom
Caravan Park (Hectare) or Caravan Park (Site)	47/Hectare, or 0.57/Site (whichever is greater)
Caretaker's Residence	1.00/Dwelling
Dual Occupancy	0.89/Dwelling
Dwelling House	1.00/Dwelling
Multiple Dwelling	
1 Bedroom	0.43/Dwelling
2 Bedroom	0.68/Dwelling

[11] **Definitions**

- 'Uses' are as defined in 'Part 1, Division 4 – Interpretation' in the Planning Scheme.

Defined Use	Water Supply EDUs
3 Bedroom	1.00/Dwelling
Multiple Rural Occupancy	1.00/Dwelling
Retirement Village	0.54/Unit
Rural Workers Accommodation	1/Dwelling
Commercial	
Car Park	NA
Catering Premises	
Restaurant/fast food	1.61/100sqm GFA
Catering business	1.07/100sqm GFA
Commercial Premises	
<400sqm GFA	0.36/100 sqm GFA
400-1000sqm GFA	0.61/100sqm GFA
>1000sqm GFA	0.89/100sqm GFA
Hotel	
Public Bar	1.36/100sqm GFA
Lounge/beer garden	1.257/100sqm GFA
Restaurant	1.61/100sqm GFA
Accommodation	0.57/room
Function room/nightclub	0.32/100sqm GFA
Local Shop	0.39/100sqm GFA
Medical Centre	0.39/100sqm GFA
Outdoor Sales Premises	
Principal use enclosed	0.14/100sqm GFA
Principal use outdoors	0.05/100sqm GFA
Shop	
Shopping Centre	0.50/100sqm NA
Single Shop	0.39/100sqm NA
Hairdresser/Beauty salon	0.71/100sqm GFA
Showroom	0.36/100sqm GFA
Storage Facility	First Principles Assessment
Tourist Facility	First Principles Assessment
Transport Terminal	First Principles Assessment
Veterinary Facility	0.42/100sqm GFA
Industrial	
Extractive Industry	First Principles Assessment
Light Industry	2.14/lot
General Industry	3.20/lot
Service Station	
Service Station	2.32/site
Food Preparation	1.32/100sqm NA
Special Industry	First Principles Assessment
Vehicle Workshop	0.28/100sqm GFA
Waste Facility	First Principles Assessment
Community	
Airport	First Principles Assessment
Cemetery	First Principles Assessment
Child Care Centre	0.07/Child
Community Facilities	First Principles Assessment
Educational Establishment	
Primary School	0.07/student
Secondary School	0.14/student
Boarding School	0.32/student
Hospital	0.93/bed
Institution	
Reformative	0.36/bed
General/nursing	0.71/bed
Nursing home	0.54/bedroom
Place of Worship	0.14/seat
Public Utility	First Principles Assessment
Special Use	First Principles Assessment

Defined Use	Water Supply EDUs
Telecommunication Facility	First Principles Assessment
Recreational	
Indoor Recreation	First Principles Assessment
Outdoor Recreation	First Principles Assessment
Park	First Principles Assessment
Rural	
Agriculture	First Principles Assessment
Forestry	First Principles Assessment
Grazing	First Principles Assessment
Intensive Animal Husbandry	First Principles Assessment
Major Aquaculture	First Principles Assessment
Minor Aquaculture	First Principles Assessment
Roadside Stall	First Principles Assessment
Rural Service Industry	First Principles Assessment
Stockyard	First Principles Assessment
Other	First Principles Assessment

9.3 Schedule – Sewerage Equivalent Demand Units (EDUs) by Zone for Reconfiguring a Lot

Zone	Sewerage EDUs
Residential	
Low Density	1 EDU/lot or 9 EDU/hectare whichever is greater
Medium Density	1 EDU/lot or 53 EDU/hectare whichever is greater
Special Residential	1 EDU/lot or 3 EDU/hectare whichever is greater
Rural Character (with Reticulated Water)	1 EDU/lot or 2 EDU/hectare whichever is greater
Rural Character (with No Reticulated Water)	NA
Rural	NA
Tourist Commercial (Residential Component)	1 EDU/lot or 53 EDU/hectare whichever is greater
Retail/Commercial	
Local Business	1 EDU/lot or 17 EDU/hectare whichever is greater
District Business	1 EDU/lot or 35 EDU/hectare whichever is greater
Retail Showrooms	1 EDU/lot or 15 EDU/hectare whichever is greater
Commercial Services	1 EDU/lot or 17 EDU/hectare whichever is greater
Tourist Commercial (Commercial Component)	1 EDU/lot or 17 EDU/hectare whichever is greater
Industry	
Light Industry	1 EDU/lot or 10 EDU/hectare whichever is greater
General Industry	1 EDU/lot or 14 EDU/hectare whichever is greater
Other	
Special Use	First Principles Assessment

9.4 Schedule – Sewerage Equivalent Demand Units (EDUs) by Defined Use[12] for Material Change of Use

Defined Use	Sewerage EDUs
Residential	
Accommodation Building	
1 bedroom unit	0.5/unit
2 bedroom unit	0.82/unit
3 bedroom unit	1/unit
Motel unit	0.28/unit
Backpackers/hostel	0.46/bed

[12] **Definitions**

- 'Uses' are as defined in 'Part 1, Division 4 – Interpretation' in the Planning Scheme.

Defined Use	Sewerage EDUs
Bed and Breakfast	0.82/Bedroom
Caravan Park	0.71/Site
Caretaker's Residence	1.00/Dwelling
Dual Occupancy	0.89/Dwelling
Dwelling House	1.00/Dwelling
Multiple Dwelling	
1 Bedroom	0.5/Dwelling
2 Bedroom	0.82/Dwelling
3 Bedroom	1.00/Dwelling
Multiple Rural Occupancy	1.00/Dwelling
Retirement Village	0.64/unit
Rural Workers Accommodation	1.00/dwelling
Commercial	
Car Park	NA
Catering Premises	
Restaurant/fast food	1.96/100sqm GFA
Catering business	1.43/100sqm GFA
Commercial Premises	
<400sqm GFA	0.45/100sqm GFA
400-1000sqm GFA	0.71/100sqm GFA
>1000sqm GFA	1.07/100sqm GFA
Hotel	
Public Bar	1.71/100sqm GFA
Lounge/beer garden	1.57/100sqm GFA
Restaurant	1.96/100sqm GFA
Accommodation	0.68/room
Function room/nightclub	0.54/100sqm GFA
Local Shop	0.46/100sqm GFA
Medical Centre	0.46/100sqm GFA
Outdoor Sales Premises	
Principal use enclosed	0.21/100sqm GFA
Principal use outdoors	0.07/100sqm GFA
Shop	
Shopping Centre	0.61/100sqm NA
Single Shop	0.46/100sqm NA
Hairdresser/Beauty salon	0.89/100sqm GFA
Showroom	0.43/100sqm GFA
Storage Facility	First Principles Assessment
Tourist Facility	First Principles Assessment
Transport Terminal	First Principles Assessment
Veterinary Facility	0.5/100sqm GFA
Industrial	
Extractive Industry	First Principles Assessment
Light Industry	2.50/lot
General Industry	3.93/lot
Service Station	
Service station	2.68/site
Food preparation	1.54/100sqm NA
Special Industry	First Principles Assessment
Vehicle Workshop	0.28/100sqm GFA
Waste Facility	First Principles Assessment
Community	
Airport	First Principles Assessment
Cemetery	First Principles Assessment
Child Care Centre	0.3/Child
Community Facilities	First Principles Assessment
Educational Establishment	
Primary School	0.09/student
Secondary School	0.18/student
Boarding School	0.39/student

Defined Use	Sewerage EDUs
Hospital	1.11/bed
Institution	
Reformative	0.36/bed
General/nursing	1.00/bed
Nursing home	0.54/bedroom
Place of Worship	0.21/seat
Public Utility	First Principles Assessment
Special Use	First Principles Assessment
Telecommunication Facility	First Principles Assessment
Recreational	
Indoor Recreation	First Principles Assessment
Outdoor Recreation	First Principles Assessment
Park	First Principles Assessment
Rural	
Agriculture	First Principles Assessment
Forestry	First Principles Assessment
Grazing	First Principles Assessment
Intensive Animal Husbandry	First Principles Assessment
Major Aquaculture	First Principles Assessment
Minor Aquaculture	First Principles Assessment
Roadside Stall	First Principles Assessment
Rural Service Industry	First Principles Assessment
Stockyard	First Principles Assessment
Other	First Principles Assessment

9.5 Schedule – Transport Equivalent Demand Units (EDUs) by Zone for Reconfiguring a Lot

Zone	Transport EDUs
Residential	
Low Density	1 EDU/Lot
Medium Density	1 EDU/Lot
Special Residential	1 EDU/Lot
Rural Character (with Reticulated Water)	1 EDU/Lot
Rural Character (with No Reticulated Water)	1 EDU/Lot
Rural	1 EDU/Lot
Tourist Commercial (Residential Component)	1 EDU/Lot
Retail/Commercial	
Local Business	1 EDU/Lot
District Business	1 EDU/Lot
Retail Showrooms	1 EDU/Lot
Commercial Services	1 EDU/Lot
Tourist Commercial (Commercial Component)	1 EDU/Lot
Industry	
Light Industry	1 EDU/Lot
General Industry	1 EDU/Lot
Other	
Special Use	First Principles Assessment

*A First Principles Assessment for Transport will be determined for those development types that do not relate directly to the development purposes listed in Schedule 13 – Trunk Infrastructure Charge Rates: Section 21, of the Integrated Planning Amendment Regulation. The EDUs will be determined by applying an identified demand rate of the closest equivalent development purpose(s) on a case by case basis.

9.6 Schedule – Transport Equivalent Demand Units (EDUs) by Defined Use[13] for Material Change of Use

Defined Use	Transport EDUs
Residential	
Accommodation Building	0.8/Dwelling
Bed and Breakfast	0.8/Dwelling
Caravan Park (Site)	0.8/Dwelling
Caretaker's Residence	0.8/Dwelling
Dual Occupancy	0.8/Dwelling
Dwelling House	1/Dwelling
Multiple Dwelling	
1 Bedroom	0.8/Dwelling
2 Bedroom	0.8/Dwelling
3 Bedroom	0.8/Dwelling
Multiple Rural Occupancy	0.8/Dwelling
Retirement Village	
1 Bedroom	0.8/Dwelling
2 Bedroom	0.8/Dwelling
3 Bedroom	0.8/Dwelling
Rural Workers Accommodation	0.8/Dwelling
Commercial	
Car Park	NA
Catering Premises	1/100sqm GFA
Commercial Premises	1/100sqm GFA
Hotel (Public Bar Area)	1/100sqm GFA
Local Shop	0.4/100sqm GFA
Medical Centre	0.4/100sqm GFA
Outdoor Sales Premises	
Vehicle Sales	0.4/100sqm GFA
Landscape Supplies	0.4/100sqm GFA
Other	First Principles Assessment
Shop	0.4/100sqm GFA
Showroom	0.4/100sqm GFA
Storage Facility	0.4/100sqm GFA
Tourist Facility	First Principles Assessment
Transport Terminal	First Principles Assessment
Veterinary Facility	1/100sqm GFA
Industrial	
Extractive Industry	First Principles Assessment
Industry	1/100sqm GFA
Service Station	1/100sqm GFA
Special Industry	1/100sqm GFA
Vehicle Workshop	1/100sqm GFA
Waste Facility	First Principles Assessment
Community	
Airport	First Principles Assessment
Cemetery	First Principles Assessment
Child Care Centre	First Principles Assessment
Community Facilities	First Principles Assessment
Educational Establishment	
Primary School	First Principles Assessment
High School	First Principles Assessment
Tertiary	First Principles Assessment
Hospital	First Principles Assessment
Institution	First Principles Assessment

[13] **Definitions**

- 'Uses' are as defined in 'Part 1, Division 4 – Interpretation' in the Planning Scheme.

Defined Use	Transport EDUs
Place of Worship	First Principles Assessment
Public Utility	First Principles Assessment
Special Use	First Principles Assessment
Telecommunication Facility	First Principles Assessment
Recreational	
Indoor Recreation	First Principles Assessment
Outdoor Recreation	First Principles Assessment
Park	First Principles Assessment
Rural	
Agriculture	First Principles Assessment
Forestry	First Principles Assessment
Grazing	First Principles Assessment
Intensive Animal Husbandry	First Principles Assessment
Major Aquaculture	First Principles Assessment
Minor Aquaculture	First Principles Assessment
Roadside Stall	First Principles Assessment
Rural Service Industry	First Principles Assessment
Stockyard	First Principles Assessment
Other	First Principles Assessment

*A First Principles Assessment for Transport will be determined for those development types that do not relate directly to the development purposes listed in Schedule 13 – Trunk Infrastructure Charge Rates: Section 21, of the Integrated Planning Amendment Regulation. The EDUs will be determined by applying an identified demand rate of the closest equivalent development purpose(s) on a case by case basis.

9.7 Schedule – Stormwater Equivalent Demand Units (EDUs) by Zone for Reconfiguring a Lot

Zone	Stormwater EDUs
Residential	
Low Density	1 EDU/Lot
Medium Density	1 EDU/Lot
Special Residential	1 EDU/Lot
Rural Character (with Reticulated Water)	NA
Rural Character (with No Reticulated Water)	NA
Rural	NA
Tourist Commercial (Residential Component)	1 EDU/Lot
Retail/Commercial	
Local Business	1 EDU/Lot
District Business	1 EDU/Lot
Retail Showrooms	1 EDU/Lot
Commercial Services	NA
Tourist Commercial (Commercial Component)	1 EDU/Lot
Industry	
Light Industry	1 EDU/Lot
General Industry	1 EDU/Lot
Other	
Special Use	First Principles Assessment

*A First Principles Assessment for Stormwater will be determined for those development types that do not relate directly to the development purposes listed in Schedule 13 – Trunk Infrastructure Charge Rates: Section 21, of the Integrated Planning Amendment Regulation. The EDUs will be determined by applying an identified demand rate of the closest equivalent development purpose(s) on a case by case basis.

9.8 Schedule – Stormwater Equivalent Demand Units (EDUs) by Defined Use[14] for Material Change of Use

Defined Use	Stormwater EDUs
Residential	
Accommodation Building	1 x (0.7 of site area/400m2)
Bed and Breakfast	1 x (0.7 of site area/400m2)
Caravan Park (Site)	First Principles Assessment
Caretaker's Residence	1 x (0.7 of site area/400m2)
Dual Occupancy	1 x (0.7 of site area/400m2)
Dwelling House	1/dwelling unit
Multiple Dwelling	
1 Bedroom	1 x (0.7 of site area/400m2)
2 Bedroom	1 x (0.7 of site area/400m2)
3 Bedroom	1 x (0.7 of site area/400m2)
Multiple Rural Occupancy	1 x (0.7 of site area/400m2)
Retirement Village	
1 Bedroom	1 x (0.7 of site area/400m2)
2 Bedroom	1 x (0.7 of site area/400m2)
3 Bedroom	1 x (0.7 of site area/400m2)
Rural Workers Accommodation	1 x (0.7 of site area/400m2)
Commercial	
Car Park	First Principles Assessment
Catering Premises	1.0 per 400sqm site area
Commercial Premises	1.0 per 400sqm site area
Hotel (Public Bar Area)	1.0 per 400sqm site area
Local Shop	1.0 per 400sqm site area
Medical Centre	1.0 per 400sqm site area
Outdoor Sales Premises	
Vehicle Sales	1.0 per 400sqm site area
Landscape Supplies	1.0 per 400sqm site area
Other	1.0 per 400sqm site area
Shop	1.0 per 400sqm site area
Showroom	1.0 per 400sqm site area
Storage Facility	1.0 per 400sqm site area
Tourist Facility	1.0 per 400sqm site area
Transport Terminal	First Principles Assessment
Veterinary Facility	1.0 per 400sqm site area
Industrial	
Extractive Industry	First Principles Assessment
Industry	1 x (0.9 of site area/400sqm)
Service Station	1 x (0.9 of site area/400sqm)
Special Industry	1 x (0.9 of site area/400sqm)
Vehicle Workshop	1 x (0.9 of site area/400sqm)
Waste Facility	First Principles Assessment
Community	
Airport	First Principles Assessment
Cemetery	First Principles Assessment
Child Care Centre	First Principles Assessment
Community Facilities	First Principles Assessment
Educational Establishment	
Primary School	First Principles Assessment
High School	First Principles Assessment
Tertiary	First Principles Assessment
Hospital	First Principles Assessment
Institution	First Principles Assessment

[14] **Definitions**

- 'Uses' are as defined in 'Part 1, Division 4 – Interpretation' in the Planning Scheme.

Defined Use	Stormwater EDUs
Place of Worship	First Principles Assessment
Public Utility	First Principles Assessment
Special Use	First Principles Assessment
Telecommunication Facility	First Principles Assessment
Recreational	
Indoor Recreation	First Principles Assessment
Outdoor Recreation	First Principles Assessment
Park	First Principles Assessment
Rural	
Agriculture	First Principles Assessment
Forestry	First Principles Assessment
Grazing	First Principles Assessment
Intensive Animal Husbandry	First Principles Assessment
Major Aquaculture	First Principles Assessment
Minor Aquaculture	First Principles Assessment
Roadside Stall	First Principles Assessment
Rural Service Industry	First Principles Assessment
Stockyard	First Principles Assessment
Other	First Principles Assessment

*A First Principles Assessment for Stormwater will be determined for those development types that do not relate directly to the development purposes listed in Schedule 13 – Trunk Infrastructure Charge Rates: Section 21, of the Integrated Planning Amendment Regulation. The EDUs will be determined by applying an identified demand rate of the closest equivalent development purpose(s) on a case by case basis.

9.9 Schedule – Public Parks and Community Land Equivalent Demand Units (EDUs) by Zone for Reconfiguring a Lot

Zone	Public Parks and Community Land EDUs
Residential	
Low Density	1 EDU/Lot
Medium Density	1 EDU/Lot
Special Residential	1 EDU/Lot
Rural Character (with Reticulated Water)	NA
Rural Character (with No Reticulated Water)	NA
Rural	NA
Tourist Commercial (Residential Component)	1 EDU/Lot
Retail/Commercial	
Local Business	NA
District Business	NA
Retail Showrooms	NA
Commercial Services	NA
Tourist Commercial (Commercial Component)	NA
Industry	
Light Industry	NA
General Industry	NA
Other	
Special Use	NA

*A First Principles Assessment for Public Parks and Community Land will be determined for those development types that do not relate directly to the development purposes listed in Schedule 13 – Trunk Infrastructure Charge Rates: Section 21, of the Integrated Planning Amendment Regulation. The EDUs will be determined by applying an identified demand rate of the closest equivalent development purpose(s) on a case by case basis.

9.10 Schedule – Public Parks and Community Land Equivalent Demand Units (EDUs) by Defined Use[15] for Material Change of Use

Defined Use	Public Parks and Community Land EDUs
Residential	
Accommodation Building	0.5/Dwelling
Bed and Breakfast	0.5/Dwelling
Caravan Park (Site)	0.5/Dwelling
Caretaker's Residence	0.5/Dwelling
Dual Occupancy	0.5/Dwelling
Dwelling House	1/Dwelling
Multiple Dwelling	
1 Bedroom	0.5/Dwelling
2 Bedroom	0.5/Dwelling
3 Bedroom	0.5/Dwelling
Multiple Rural Occupancy	0.5/Dwelling
Retirement Village	
1 Bedroom	0.5/Dwelling
2 Bedroom	0.5/Dwelling
3 Bedroom	0.5/Dwelling
Rural Workers Accommodation	NA
Commercial	
Car Park	NA
Catering Premises	NA
Commercial Premises	NA
Hotel (Public Bar Area)	NA
Local Shop	NA
Medical Centre	NA
Outdoor Sales Premises	NA
Vehicle Sales	NA
Landscape Supplies	NA
Other	NA
Shop	NA
Showroom	NA
Storage Facility	NA
Tourist Facility	NA
Transport Terminal	NA
Veterinary Facility	NA
Industrial	
Extractive Industry	NA
Industry	NA
Service Station	NA
Special Industry	NA
Vehicle Workshop	NA
Waste Facility	NA
Community	
Airport	NA
Cemetery	NA
Child Care Centre	NA
Community Facilities	NA
Educational Establishment	NA
Primary School	NA
High School	NA
Tertiary	NA
Hospital	NA
Institution	NA

[15] **Definitions**

- 'Uses' are as defined in 'Part 1, Division 4 – Interpretation' in the Planning Scheme.

Defined Use	Public Parks and Community Land EDUs
Place of Worship	NA
Public Utility	NA
Special Use	NA
Telecommunication Facility	NA
Recreational	
Indoor Recreation	NA
Outdoor Recreation	NA
Park	NA
Rural	
Agriculture	NA
Forestry	NA
Grazing	NA
Intensive Animal Husbandry	NA
Major Aquaculture	NA
Minor Aquaculture	NA
Roadside Stall	NA
Rural Service Industry	NA
Stockyard	NA
Other	First Principles Assessment

*A First Principles Assessment for Public Parks and Community Land will be determined for those development types that do not relate directly to the development purposes listed in Schedule 13 – Trunk Infrastructure Charge Rates: Section 21, of the Integrated Planning Amendment Regulation. The EDUs will be determined by applying an identified demand rate of the closest equivalent development purpose(s) on a case by case basis.

10.0 Schedule of Infrastructure Contributions

10.1 Infrastructure contributions – Water Supply

Contribution Catchment	Infrastructure Contribution Rate per EDU (2006)
Miriam Vale (W1)	**3,025**
Agnes Water (W2)	**7,946**
Seventeen Seventy (W3)	**8,340**
Bororen (W4)	**1,261**

10.2 Infrastructure contributions – Sewerage

Contribution Catchment	Infrastructure Contribution Rate per EDU (2006)
Seventeen Seventy (S1)	**8,780**
Agnes Water (S2)	**10,311**

10.3 Infrastructure contributions – Transport

Contribution Catchment	Infrastructure Contribution per EDU
Miriam Vale (TR1)	**$2000**

10.4 Infrastructure contributions – Stormwater

Contribution Catchment	Infrastructure Contribution per EDU
Miriam Vale (SW1)	**$2000**

10.5 Infrastructure contributions – Public Parks and Community Land

Contribution Catchment	Infrastructure Contribution per EDU
Miriam Vale (PCL1)	**$2000**

Note: Public Parks and Community Land infrastructure contributions are only applicable to all residential lots created or residential unit developments.

11.0 Schedule of Capital Works

[Schedule 15 shows the existing and planned future trunk network.]

Note: Miriam Vale Shire is currently investigating transport, stormwater and public parks and community land issues for the Shire. Until investigations and Plans for Trunk Infrastructure have been completed, Council will apply an infrastructure contribution based on the regulated infrastructure charge specified in the Act. This charge is considered fair and reasonable as it is the average minimum charge for the provision of trunk infrastructure under the Act.

12.0 Schedule - Desired Standards of Service

The following Desired Standards of Service are to be read in conjunction with Council's adopted technical standards including *PART 4: General Development Codes, Division 40, Reconfiguration of a Lot Code, and Division 41, Works, Services and Infrastructure Code.*

Desired Standards of Service

Water Supply - Planning Standard	**Community Outcome**
Ensure drinking water complies with the NHMRC Australian Drinking Water Guidelines for colour, turbidity and microbiology. >90% water test compliance for Agnes Water Miriam Vale, and Seventeen Seventy (1770). Bororen not a potable supply.	• Provides uniform quality of water monitored in relation to recognised standards. • Provide a safe and reliable water supply. • Safeguards community health.
Comply with Integrated Environmental Management Strategy and associated Environmental Management Plans and Department of Natural Resources planning guidelines for water supply and sewerage.	• Provides for system operation and monitoring in accordance with recognised standards. • Ensures environmental controls maintained. • Ensures potable water is provided in a manner consistent with environmental standards.
Reduce Non-Revenue Water.	• Extend asset life. • Defer system augmentation. • Improve environmental flows. • Reduced greenhouse gas emissions. • Reduce extraction of water from source. • Defer requirement for new water source.
Develop and maintain excellence in appropriate new technologies.	• Reduced cost of energy and chemicals. • Cost effective service for community. • Reduced greenhouse gas emissions. • Reduced environmental effects from chemical production.
Provide infrastructure which minimises whole of life costs.	• Cost effective service for community. • Reduced energy cost. • Reduced maintenance costs. • Reduced overall operation costs. • Reduced replacement costs. • Reduction in disposal of waste. • Reduced environmental effects from chemical production.
Water Supply - Design Standard	**Community Outcome**
Design water supply infrastructure to comply with: • Planning Scheme Policy No. 1 - Engineering Standards for Development Works; • Planning Scheme Policy No. 2 – Engineering Standards for Self Assessable Development; • Plans for Trunk Infrastructure – Water Supply • the Water Act 2000; • *Water Supply Code of Australia –WSA 03-2002 Version 2.3.*	• Provides uniform quality of water monitored in relation to recognised standards. • Provide a safe and reliable water supply. • Safeguards community health.
Sewerage - Planning Standard	**Community Outcome**
Ensure wastewater collection, transportation and treatment system remains effective.	• Reduced impact from blockages, overflows and spills. • Reduced impact on residents. • Minimises release of nitrogen and phosphorous to the environment. • Improved community health. • Reduced greenhouse gas emissions.

Provide infrastructure which minimises power usage.	• Reduced cost of energy. • Cost effective service for community. • Greenhouse gas reduction.
Provide infrastructure which minimises whole of life costs.	• Cost effective service for community. • Reduced energy cost. • Reduced maintenance costs. • Reduced overall operation costs. • Reduced replacement costs. • Reduction in disposal of waste. • Reduced greenhouse gas emissions. • Reduced environmental effects from chemical production.
Achieve excellence in appropriate new technologies.	• Reduced cost of energy and chemicals. • Cost effective service for community. • Reduced greenhouse gases. • Reduced environmental effects from chemical production.
Reuse effluent where possible.	• Beneficial use of reclaimed water and biosolids. • Opportunity for cost recovery for reclaimed water treatment. • Reduction in use of potable water supply and treatment. • Reduction in release of nitrogen and phosphorous to the environment. • Reduction of raw water extraction from source.
Sewerage - Design Standard	**Community Outcome**
Design wastewater infrastructure to comply with: • Planning Scheme Policy No. 1 - Engineering Standards for Development Works; • Planning Scheme Policy No. 2 – Engineering Standards for Self Assessable Development; • EPA requirements and guidelines; • Plans for Trunk Infrastructure – Sewerage; • Department of Natural Resources "Guidelines for Planning and Design of Sewerage Schemes"; • The Water Act 2000; • Standard Sewerage Law; and • The Sewerage Code of Australia.	• Noise control. • No adverse visual effect. • Control of overflows from system. • Improves community health. • Reduction in contaminated discharges. • Reduced discharge to environment.
Ensure infiltration and inflow in the sewerage collection and transportation system remains within industry acceptable limits (compliance with Environmental licences, IEMS and associated EMPs).	• Reduced cost of energy for effluent transport, treatment and disposal. • Minimise customer overflow issues. • Maximise life of system. • Reduced overflows to local waterways.
Transport - Planning Standard	**Community Outcome**
Road Network	
Define the road network as a functional Urban and Rural hierarchy and freight routes which supports the Local Government's urban and rural settlement patterns and commercial and economic activities.	• Protects the amenity of residential communities by removing non-local traffic. • Improves local safety by removing "through" traffic. • Maintains reliability of connectivity. • Reduces fuel consumption and emission levels by sustaining efficient operating speeds. • Maintains travel speeds in off-peak periods. • Reduces vehicle operating costs. • Improves public transport operation by improving travel speeds. • Supports economic growth by developing efficient and integrated transport networks. • Minimises through traffic and heavy vehicles in residential areas. • Limits community severance.

Bikeway and Footpath Network	
Provide safe and convenient walk/bikeway network in accordance with the local government's plans and strategies.	• Reduces fuel consumption and emission levels through the use of efficient transport modes. • Encouragement of cycling and walking has positive health outcomes. • Promotes health benefits. • Improves transport opportunities for local trips. • Ensures an acceptable level of amenity for users.
Design Standard	**Community Outcome**
Road Network	
Road network system is designed and provided in accordance with: • Planning Scheme Policy 1 – Engineering Standards for Development Works; • Planning Scheme Policy 2 – Engineering Standards for Self Assessable Development; and • Plans for Trunk Infrastructure – Road Network.	• Reduce delays during peak periods. • Improve safety by reducing vehicle speed differentials. • Supports efficient and integrated freight movement network.
Bikeway and Footpath Network	
Walk/Bikeway network is designed and provided in accordance with Plans for Trunk Infrastructure – Pathway, *AustRoads Guide to Traffic Engineering Practice, Part 13 – Pedestrians* and *Part 14 – Bicycles*, and Planning Scheme Policy 1 – Engineering Standards for Development Works.	• Encourage cycling and walking as acceptable alternatives. • Infrastructure provided meets recognised standards.
Stormwater - Planning Standard	**Community Outcome**
Provide system of shared stormwater infrastructure allowing free and safe drainage of urban land while maintaining or improving the quality of run-off.	• Minimises inundation of habitable areas. • Minimises the damage and risk associated with flooding. • Minimises the impact of development on the ecological health and water quality within waterway corridor.
Ensure the use of Water Sensitive Urban Design and other types of on-site infrastructure to minimise impact on trunk infrastructure	• Provides waterways infrastructure at least life cycle cost. • Reduces the scale of shared infrastructure by optimising on site solutions. • Improves water quality at the point of discharge to benefit the waterway corridor's health.
Ensure sufficient buffers from urban development along waterway corridors for ecological links (including rehabilitation of degraded waterway corridor banks, where required).	• Maintain or improves environment amenity such as scenic values and natural construction. • Erosion and sedimentation is minimised. • Negative impacts on adjoining and downstream properties are minimised. • Protects environmentally sensitive areas from development.
Ensure natural stream processes are maintained within waterway corridors.	• Reduces the need for costly structural treatments of waterway corridor banks. • Provides for natural processes of accretion, erosion and sedimentation and reduces environmental effects from pollution. • Increases regional water quality
Stormwater - Design Standard	**Community Outcome**
Design stormwater infrastructure to comply with: • Planning Scheme Policy 1 – Engineering Standards for Development Works; • Planning Scheme Policy 2 – Engineering Standards for Self Assessable Development;	• Free and safe drainage of urban land. • Maintain or improve water quality and ecological health.

• Queensland Urban Drainage Manual (QUDM); • EPA requirements and guidelines; and • Plans for Trunk Infrastructure – Stormwater.	
Implement Water Sensitive Urban Design principles to achieve maximum on site quantity and quality treatment and minimise offsite discharge.	• Maximise the water quality within the system. • Negative impacts on adjoining and downstream properties are minimised.
Implement regional and on-site detention facilities to minimise the impact of peak run-off for the full range of events (Q1 to Q100) from developments, taking into account safety and risk. Design detention basis to maintain pre-development peak flow levels from the development site for all flood events (Q1 to Q100) in accordance with Planning Scheme Policy 1 – Engineering Standards for Development Works. Design Detention Basins in the same catchment to ensure that the coincident peak discharge at downstream control points is not increased.	• Reduces the cumulative impact from existing and future developments on peak flow levels. • Reduces the need to increase the size of waterway corridors and underground drainage. • Increases active and passive recreation opportunities. • Minimises the impact on the environmental values of downstream waterway corridors by maintaining pre-development flows and velocities. • Reduces downstream erosion by slowing flow velocities.
Design bridges and culverts with appropriate flood immunity and capacity to convey floodwater, taking into account the Council road hierarchy Construction of bridges and culverts must not adversely impact on the natural environment, such as through the loss of vegetation and undesirable impacts on bio-diversity Design bridges and culverts to maintain fauna and recreational links	• Ensures road crossings operate safely in times of inundation. • Reduces the risk of flooding for upstream properties. • Provides opportunities for extended pedestrian and bicycle links. • Enhances ecological links.
Public Parks & Community Land - Planning Standard	**Community Outcome**
Provide a connected and accessible network of parks, open space, and community facilities that meets the needs of the Shire's residents and visitors.	• Provides opportunities for access and increased usage of open space, recreational and community facilities. • Provides for an appropriate balance of land uses and ensures high levels of amenity in the urban form. • Provides a basis for a healthy and active community.
Ensure strong linkages and where possible co-location of existing and future parks, open space and community facilities in accordance with the Council's Parks and Recreation Management Plan (to be completed).	• Ensures utilisation of existing and future assets while maintaining maximum access.
Provide embellishments to public parks, commensurate with the range of activities envisaged.	• Provides open space embellishments that meet the needs of the community by providing a range of facilities for social activities and/or fitness/recreational pursuits. • Ensures activities are met and contained within designated areas - reducing potential off site impacts to other more sensitive areas in the Shire.
Ensure that existing and future parks, open space and community facilities with significant environmental, waterway or cultural heritage value are managed appropriately.	• Protects and enhances items of cultural interest in the Shire for the benefit of current and future communities in the Shire. • Provides a basis for tourism opportunities. • Protection of the Natural landscape ensures maintenance of quality of air, water and land resources reducing negative impacts requiring amelioration.
Public Parks & Community Land - Design Standard	**Community Outcome**
Public parks and community facilities areas are provided in accordance with relevant standards of provision in Plans for Trunk Infrastructure – Public Parks and Community Land.	• Provides a standard of service for the Shire's communities as identified by Council's Parks and Recreation Management Plan • Land and facilities are developed to optimise layout and use.
Flood immunity for parks and community facilities are achieved in accordance with Council's Standards for Park and Open Space.	• Ensure adequate provision of safe, accessible and usable facilities.

Access to public parks and community facilities are to be in accordance with Council's Standards for Park and Open Space.	• Provides community access to a range of park, open space and community facilities.
Public park embellishments are provided in accordance with: • Council's Parks and Recreation Management Plan; and • Plans for Trunk Infrastructure – Public Parks and Community Land.	• Provides a range of park types that are suitability embellished to meeting their purpose within the park hierarchy.

13.0 Supporting Information

The following documentation has been used in preparing this planning scheme policy including determination of the scope of capital works and associated contributions:

- GHD (2008), Sewerage Planning Report for Agnes Water/Town of 1770
- Coleridge Water Engineers (2008), Agnes Water & Seventeen Seventy Water Supply & Sewerage Infrastructure, A Summary
- Former Planning Scheme Policy 4.24 ("*Determination of Water Supply & Sewerage Contributions On Development Applications*") and 4.1 ("*Park Contributions*")
- GHD (2008), Sewerage Planning Report for Agnes Water/Town of 1770
- GHD (2005), Report for 1770 Sewerage Scheme – Pressure Sewerage System
- Parsons Brinkderhoff (2006), Agnes Water Desalination Project – Early Studies Investigations Final Report
- Cardno (2006) Town of 1770 Water Supply Reticulation Planning Report.
- Cardno (2006) Agnes Water-Town of 1770 Benaraby-Agnes Waer Pipeline Cost Report
- Burns Bridge Transactions (2007), Engineering Estimates and Financial Implication of Pipeline and Desalination Options for Agnes Water and 1770
- Strategic Asset Management Plan
- Total Asset Management Plan
- GHD (2008) Miriam Vale Shire Council Traffic and Road Infrastructure PIP (Letter Advice)
- Miriam Vale Shire Council (2006), Pathways and Bikeways Management Plan
- URS (2008) Final Report – Concept Flood Storage and Conveyance Improvement Assessment at Agnes Water
- Strategic Leisure Group (2008), Miriam Vale Shire Public Open Space and Recreation Plan
- Council Asset data and mapping.

14.0 Schedule – Contribution Catchment Maps

15.0 Schedule – Plans for Trunk Infrastructure

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Amendment Table:

AMENDMENT DESCRIPTION	**DATE**
Amended to correct anomalies and errors	Adopted: 20 October 2009 Took Effect: 26 October 2009