Adopted Infrastructure Charges Resolution (No. 1) 2015

Mareeba Shire Council

Dated 17 June 2015

Acknowledgements

Council wishes to thank all contributors and stakeholders involved in the development of this document.

Contents

Part 1 Preliminary

1.1 Short title

The adopted infrastructure charges resolution may be cited as the:

Mareeba Council Adopted Infrastructure Charges Resolution (No. 1) 2015.

1.2 Commencement

The Resolution has effect on and from 1 July 2015.

1.3 Purpose of the resolution

The purpose of the resolution is to:

(a) adopt an infrastructure charge for funding part of the establishment cost of the following trunk infrastructure networks:

  (i) transport network;

  (ii) public parks and land for community facilities network;

  (iii) stormwater network;

  (iv) water supply network; and

  (v) sewerage network;

(b) stating other matters relevant to the adopted infrastructure charge;

(c) identifying unit rates for the calculation of offsets, refunds and conversions; and

(d) identifying trunk infrastructure.

Part 2 Relationship with State Planning Regulation

2.1 Relationship to the maximum adopted charge

(1) This resolution adopts a charge for particular development that is equal to or less than the maximum adopted charge and adopts different charges for particular development in different parts of the local government area.

(2) To enable the adopted infrastructure charges schedule identified in the State planning regulatory provision (adopted charges) to be applied to existing development use types, Table 2.2 below identifies the relationship between existing applicable local planning instruments use types and the classes of development to which the adopted infrastructure schedule apply.

2.2 Table – Comparison of Planning Scheme use Categories and SPRP Development Categories

Current planning scheme use categories *[This column is included as guidance for the non-SPA Planning Scheme].*	**SPRP development categories**	
	Adopted infrastructure charge category	**Queensland Planning Provision use**
Caretaker's residence, Dwelling House, Residential Units (including duplex), Worker's Cottage.	**Residential**	Caretaker's accommodation, Dual occupancy, Dwelling house, Dwelling unit, Multiple dwelling.
Accommodation Units, Caravan Park, Host Farm, Hotel (residential component), Motel, Motor Home Park.	**Accommodation (short term)**	Home based business, Nature based tourism, Non-residential workforce accommodation, Short term accommodation, Tourist park.
Retirement Village.	**Accommodation (long term)**	Community residence, Outstation, Relocatable home park, Residential care facility, Retirement facility, Rooming Accommodation, Rural workers' accommodation.
Community Facility, Place of Worship.	**Places of assembly**	Community use, Community care centre, Function facility, Funeral parlour, Place of worship.
Bulk Store, Motor Showroom - Light, Motor Showroom - Heavy.	**Commercial (bulk goods)**	Agricultural supplies store, Bulk landscape supplies, Garden centre, Hardware and trade supplies, Outdoor sales, Showroom.
Adult Product Shop, Business (service industries, bakeries), Drive Through Fast Food Outlet, Plant Nursery (retail), Restaurant, Shop, Service Station.	**Commercial (retail)**	Adult store, Bar, Food and drink outlet, Market, Resort Complex, Service industry, Service station, Shop, Shopping centre.
Business (office).	**Commercial (office)**	Office, Sales office.

Current planning scheme use categories *[This column is included as guidance for the non-SPA Planning Scheme].*	SPRP development categories	
	Adopted infrastructure charge category	**Queensland Planning Provision use**
Child Care Centre, Educational Establishment.	**Education facility**	Child care centre, Community care centre, Educational establishment, Environmental Facility.
Hotel (non-residential component).	**Entertainment**	Club, Hotel (non-residential component), Nightclub, Entertainment facility, Theatre.
Indoor Recreation Facility.	**Indoor sport and recreational facility**	Indoor sport and recreation.
Agribusiness, Freight Depot, Industry, Light Industry, Material Recycling Facility, Plant Hire Facility, Road Transport Terminal, Rural Industry, Transport Depot, Vehicle Repair Station, Warehouse.	**Industry**	Car Wash, Low impact industry, Medium impact industry, Marine industry, Research and technology industry, Warehouse, Transport depot.
Abattoir, Liquid Fuel Depot, Noxious, Offensive or Hazardous Industry, Sawmill.	**High impact industry**	High impact industry, Special industry.
Agriculture, Agriculture - Intensive, Animal Husbandry - General, Forestry, Wind Farm.	**Low impact rural**	Animal husbandry, Cropping (permanent plantations), Rural industry.
Animal Husbandry - Intensive, Aquaculture (Minor Impact), Aquaculture (Significant Impact), Plant Nursery (wholesale), Stock Selling Centre.	**High impact rural**	Aquaculture, Intensive animal industries, Intensive horticulture, Wholesale nursery, Winery.
Business (medical or dental practice), Hospital, Institution, Veterinary Clinic.	**Essential services**	Detention facility, Emergency services, Health care services, Hospital, Veterinary services.

Current planning scheme use categories *[This column is included as guidance for the non-SPA Planning Scheme].*	SPRP development categories	
	Adopted infrastructure charge category	**Queensland Planning Provision use**
Aircraft Facility, Car Park, Extractive Industry, Heliport, Outdoor Sport and Entertainment Facility, Passenger Transport Facility, Tourist Facility, Utility Installation, Waste Management Facility.	**Specialised uses**	Air services, Animal keeping, Cemetery, Crematorium, Extractive industry, Major electricity infrastructure, Major sport recreation and entertainment facility, Motor sport facility, Outdoor sport and recreation, Parking Station, Port services, Roadside stalls, Substation, Tourist attraction, Utility installation, Renewable energy facility.
Bed and Breakfast Accommodation, Communication Facility, Home Business, Home Occupation, Roadside Stall.	**Minor uses**	Advertising device, Landing, Telecommunication facility

Part 3 Adopted infrastructure charge

3.1 Power

This Resolution is made under Section 630 of the *SPA.*

3.2 Adoption

It is resolved to adopt the charges mentioned in Table 3.3, Columns 2 and 3 for development for a use mentioned in Column 1 for the part of the local government area identified in Column 4.

3.3 Table - Adopted Infrastructure Charges Schedule

Column 1	Column 2	Column 3	Column 4
Development for which an adopted infrastructure charge may apply	**Adopted infrastructure charges**		**Part of Local Government Area (LGA) applicable within a Priority Infrastructure Area (PIA)**
	Adopted infrastructure charge	**Adopted infrastructure charges for stormwater network**	
Residential	$11,478 per 1 or 2 bedroom dwelling, or $17,260 per 3 or more bedroom dwelling	N/A (Non-worsening)	All LGA within a PIA
Accommodation (short term)	For a tent or caravan in a tourist park: • $6,000 per 1 or 2 tent/caravan sites, or • $8,400 per 3 tent/caravan sites For a cabin in a tourist park: • $6,000 per 1 or 2 bedroom cabin, or • $8,400 per 3 or more bedroom cabin For a hotel or short-term accommodation: • $6,000 per suite (with 1 or 2 bedrooms), or • $8,4000 per suite (with 3 or more bedrooms), or • $6,000 per bedroom (for a bedroom that is not within a suite)	N/A (Non-worsening)	All LGA within a PIA

Column 1	Column 2	Column 3	Column 4
Development for which an adopted infrastructure charge may apply	**Adopted infrastructure charges**		**Part of Local Government Area (LGA) applicable within a Priority Infrastructure Area (PIA)**
	Adopted infrastructure charge	**Adopted infrastructure charges for stormwater network**	
Accommodation (long term)	For a relocatable home park: • $11,478 per 1 or 2 bedroom relocatable dwelling site, or • $17,260 per 3 or more bedroom relocatable dwelling site For a community residence, retirement facility or hostel: • $11,478 per suite (with 1 or 2 bedrooms), or • $17,260 per suite (with 3 or more bedrooms), or • $11,478 per bedroom (for a bedroom that is not within a suite)	N/A (Non-worsening)	All LGA within a PIA
Places of assembly	$42 per m^2 of GFA	N/A (Non-worsening)	All LGA within a PIA
Commercial (bulk goods)	$84 per m^2 of GFA	N/A (Non-worsening)	All LGA within a PIA
Commercial (retail)	$108 per m^2 of GFA	N/A (Non-worsening)	All LGA within a PIA
Commercial (office)	$84 per m^2 of GFA	N/A	All LGA within a PIA

Column 1	Column 2	Column 3	Column 4
Development for which an adopted infrastructure charge may apply	**Adopted infrastructure charges**		**Part of Local Government Area (LGA) applicable within a Priority Infrastructure Area (PIA)**
	Adopted infrastructure charge	**Adopted infrastructure charges for stormwater network**	
		(Non-worsening)	
Educational Facility (excluding Flying Start for QLD Children program)	$84 per m^2 of GFA	N/A (Non-worsening)	All LGA within a PIA
Entertainment	$120 per m^2 of GFA	N/A (Non-worsening)	All LGA within a PIA
Indoor sports and recreational facility	$120 per m^2 of GFA non-court areas and $12 per m^2 court area.	N/A (Non-worsening)	All LGA within a PIA
Industry (other than High impact industry)	$30 per m^2 of GFA	N/A (Non-worsening)	All LGA within a PIA
High impact industry	$42 per m^2 of GFA	N/A (Non-worsening)	All LGA within a PIA
Low impact rural	Nil charge		
High impact rural	$12 per m^2 of GFA for the high impact rural facility (e.g. washing, packaging, processing, refrigeration)	N/A (Non-worsening)	All LGA within a PIA
Essential services	$84 per m^2 of GFA	N/A (Non-worsening)	All LGA within a PIA
Specialised uses	The charge will be calculated by reference to the demand of a 3 bedroom dwelling as follows: The Charge = Highest number of equivalent dwelling houses x adopted charge for a 3 or more bedroom dwelling house. Highest number of equivalent dwelling houses is calculated as follows: • Applicants must provide estimates of likely demand on each of the		

Column 1	Column 2	Column 3	Column 4
Development for which an adopted infrastructure charge may apply	**Adopted infrastructure charges**		**Part of Local Government Area (LGA) applicable within a Priority Infrastructure Area (PIA)**
	Adopted infrastructure charge	**Adopted infrastructure charges for stormwater network**	
	trunk infrastructure networks. • Council will review the Applicant's estimates of demand and based on that review either adjust or maintain them. • Council will divide the demand it estimates for each network by the demand Council allows for a 3 bedroom dwelling on the respective network to determine the demand in number of equivalent dwelling houses for each network. • Council will select the highest number of equivalent dwelling houses from the previous calculation.		
Minor uses	Nil Charge		
Other uses	The maximum adopted charge is the charge (in column 2 and 3) for the charge category (in column 1) that the Council decides should apply for the use at the time of assessment.		

Note:

(1) For short-term accommodation the total charge shall not exceed the maximum calculated in accordance with Column 3, in Schedule 1 – Adopted infrastructure charges schedule of the State planning regulatory provision (adopted charges)

(2) Refer to Sections 8.1 and 8.2 of this resolution for definitions.

(3) If any of the above are calculated above the State Governments Maximum charge, then the maximum charge applies.

3.4 Priority infrastructure maps

The area in which the adopted infrastructure charges apply is identified as the priority infrastructure area on the priority infrastructure maps attached to this resolution.

3.5 Partial funding of trunk infrastructure networks

The adopted infrastructure charge partly funds the establishment cost of the identified trunk infrastructure networks.

3.6 Other legislative exclusions

The adopted infrastructure charge applies to the local government area other than for the following:

(a) work or use of land authorised under the *Mineral Resources Act 1989*, the *Petroleum Act 1923*, the *Petroleum and Gas (Production and Safety) Act 2004* or the *Greenhouse Gas Storage Act 2009*; or

(b) development in a priority development area under the *Economic Development Act 2012.*

Part 4 trunk infrastructure

4.1 Trunk Infrastructure

(1) Infrastructure identified in the maps or text of the plans for trunk infrastructure is trunk infrastructure, or

(2) Infrastructure described in Table 4.2

4.2 Table - Definition of Trunk Infrastructure

Infrastructure network	Trunk infrastructure	Non-trunk infrastructure
Water Supply	Land or works for: • Water treatment facilities • Water storage facilities (e.g. Reservoirs) • Water mains • Pumping Stations located on water mains • Pumping stations located on water mains • Chlorination equipment located on water mains • Meters, valves, control and monitoring systems located on water mains • Fire fighting devices located on water mains	Development infrastructure internal to a development or to connect a development to external infrastructure network
Sewerage	Land or work for: • Sewage treatment plant systems • Gravity sewers • Rising mains • Pumping stations • Emergency storage	Development infrastructure internal to a development or to connect a development to the external infrastructure network
Stormwater	Land or works for: • the following stormwater infrastructure — Bio- retention swale — Channel — Culvert — Pipe — Revegetation — Stormwater quality devices — Retention basin/wetland	Development infrastructure internal to a development or to connect a development to the external infrastructure network

	— Detention basin	
Transport	Land or works for: • Collector and higher order roads including associated intersections, traffic lights, roundabouts, bridges and culverts • Standard items associated with the road profile of a local government road, including kerb and channeling, lighting, signage, foot and cycle paths and basic verge plantings • Pedestrian and cycle paths with perform a city wide or district function • Bus stops constructed as part of a local government road specified above.	Development infrastructure internal to a development or to connect a development to the external infrastructure network
Public parks and land for community facilities	Land or works that ensure the land is suitable for public parks for: — local recreation park — district recreation park — Metropolitan recreation park — district sporting park — metropolitan sporting park Land, and works that ensure the land is suitable for development, for local community facilities such as community halls, public recreation centres and public libraries Embellishments, including footpath and cycle paths, necessary to make and the land useable and safe for the intended purpose.	Development infrastructure internal to a development or to connect a development to the external infrastructure network

4.3 Standard of Service

The standard of service for each network or network mentioned above is stated to be the standard set out in attachment 4.3.

4.4 Establishment cost

The establishment cost of future trunk infrastructure items is the cost shown in attachment 4.4.

Part 5 Calculation of Adopted Infrastructure Charge

5.1 Calculation

An infrastructure charge that is levied by Council is calculated as follows:

TC = [AC – C] x I

Where:

TC - is the total infrastructure charge that may be levied by Council.

AC – is the adopted charge as identified in 3.3 Table Adopted Charges.

C – is the credit calculated in accordance with section 5.2.

I – is the indexation rate calculated in accordance with section 5.3.

5.2 Additional Demand

(1) A credit is the amount to be applied for the purposes of calculating an infrastructure charge which takes into account the existing use of premises the subject of a development approval.

(2) The maximum value of a credit for a premises will not exceed the levied infrastructure charge for the approved development, so that for any development, if a credit is higher than the levied infrastructure charge, a refund will not occur.

(3) In accordance with s. 636 of the Sustainable Planning Act 2009, a credit will be applied for the following:

(a) an existing use on the premises if the use is lawful and already taking place on the premises;

(b) a previous use that is no longer taking place on the premises if the use was lawful at the time it was carried out; or

(c) other development on the premises if the development may be lawfully carried out without the need for a further development permit.

5.3 Indexing adopted charges

It is resolved to index the adopted charges by the Producer Price Index annually on 1 July. Indexation of adopted charges, between the levying and payment of the charge, cannot result in a charge which is greater than the maximum adopted charge in the SPRP (adopted charges); or result in a charge that is greater than the increase for the PPI index for the period starting on the day the charge was levied and ending on the day it is paid, adjusted by reference to the 3-yearly PPI index average.

Part 6 Establishment Cost

6.1 Method for recalculating the establishment cost

The process used to recalculate establishment cost when an application is made under section 657 of the SPA is:

(1) Where a notice is given by an applicant under s. 657 of the Sustainable Planning Act 2009 for the recalculation of the establishment cost for trunk infrastructure, the applicant must, at their own cost, provide Council with the following:

  (a) for trunk infrastructure that is works:

    (i) a bill of quantities for the design, construction and commissioning of the trunk infrastructure in accordance with a scope of works that is provided by Council; and

    (ii) a first principles estimate for the cost of designing, constructing and commissioning the trunk infrastructure specified in the bill of quantities.

  (b) for trunk infrastructure that is land, a valuation of the specified land undertaken by a certified practicing valuer.

(2) Council must give a notice to the applicant which states whether the bill of quantities and the cost estimate or the valuation are accepted.

(3) If Council accepts the bill of quantities and the cost estimate or the valuation, the cost estimate or valuation is the establishment cost of the infrastructure.

(4) If Council does not accept the bill of quantities and the cost estimate or the valuation, Council must, at its own cost:

  (a) for the bill of quantities and the cost estimate, have an assessment undertaken by an appropriately qualified person to:

    (i) determine whether the bill of quantities is in accordance with the scope of works provided by Council;

    (ii) determine whether the cost estimate is consistent with current market costs calculated by applying a first principles estimating approach to the bill of quantities; and

    (iii) provide a new cost estimate using a first principles approach.

  (b) for the valuation, have a valuation undertaken by a certified practicing valuer.

(5) If Council rejected the bill of quantities and the cost estimate or the valuation in accordance with section 6.1(4), it must provide the applicant with the following in writing:

  (a) reasons why it rejected the bill of quantities and the cost estimate or the valuation; and

  (b) the proposed new bill of quantities and cost estimate or the valuation as determined in accordance with section 6.1(4).

(6) Where written notice has been given by Council in accordance with section 6.1(5):

  (a) the applicant may negotiate and agree with Council regarding the cost estimate or valuation; and

  (b) the cost estimate or valuation agreed in accordance with section 6.1(6)(a) is the establishment cost of the infrastructure.

(7) If agreement in accordance with section 6.1(6)(a) cannot be reached, Council must:

  (a) for the bill of quantities and the cost estimate, refer the bill of quantities and the cost estimate to a suitably qualified expert agreed to by both the applicant and Council to:

(i) assess whether the bill of quantities is in accordance with the scope of works;

(ii) assess whether the cost estimate is consistent with current market costs calculated by applying a first principles estimating approach to the bill of quantities; and

(iii) provide an amended cost estimate using a first principles estimating approach.

(b) for the valuation, have a valuation undertaken by a certified practicing valuer agreed to by both the applicant and Council to assess the market value.

(8) The cost of the independent assessment carried out in accordance with section 6.1(7) must be shared equally between the applicant and Council.

(9) The amended cost estimate or valuation determined in accordance with 6.1(7) is the establishment cost of the infrastructure.

(10) If the applicant and Council cannot agree on the appointment of a suitably qualified expert or certified practicing valuer for the purposes of section 6.1(7), the establishment cost of the infrastructure is determined by calculating the average of the cost estimates or valuations prepared in accordance with sections 6.1(1) and 6.1(4).

Part 7 Conversion Criteria

7.1 Conversion criteria

(1) Each of the following criteria must be met for non-trunk infrastructure to be converted to trunk infrastructure:

(a) the infrastructure services development that is consistent with the assumptions about the type, scale, location or timing of future development stated in the PIP;

(b) the infrastructure is inconsistent with the requirements for non-trunk infrastructure stated in s. 665 of the *Sustainable Planning Act 2009*;

(c) the infrastructure is owned or will be owned by Council;

(d) the infrastructure is not temporary infrastructure;

(e) the infrastructure will be used by other development;

(f) the infrastructure has capacity significantly in excess of what is required to specifically service the approved development in order to service other development in the area;

(g) the type, capacity and function of the infrastructure is consistent with the trunk infrastructure identified in the PIP;

(h) the type, size and location of the infrastructure is the most cost effective option for servicing multiple developments in the area; and

(i) the infrastructure could have been planned by Council:

(i) without knowing the detailed layout of lot reconfigurations or the design details for material change of use applications in the area; and

(ii) during preparation of the PIP, using only the planned density assumptions stated in the PIP.

(2) For the purposes of section 7.1(1)(h), the most cost effective option for trunk infrastructure provision means the least cost option based on the life cycle cost of the infrastructure required to service future urban development in the area at the desired standard of service.

Part 8 Interpretation

8.1 interpretation

Words and terms used in this resolution have the meaning given in SPA or the Queensland Planning Provisions version 2.0.

If a word or term used in this resolution is not defined in SPA or the Queensland Planning Provision version 2.0, it has the meaning given in this section.

8.2 Dictionary

Applicable local planning instrument means the Mareeba Shire Council Planning Scheme:

Local government area means the local government area for the Mareeba Shire Council.

QPP means the Standard planning scheme provisions.

Resolution means the *Mareeba Shire Council Adopted Infrastructure Charges Resolution (No.1) 2015*, made under s 630 of the SPA.

SPA means the *Sustainable Planning Act 2009.*

PIP means the current draft or final Priority Infrastructure Plan prepared by the Mareeba Shire Council.

Part 9 Resolution attachments

Attachment 4.3 Desired Standards of Service (DSS)

(1) The desired standard of service details the standards that comprise an infrastructure network most suitable for the local context.

(2) The desired standard of service is supported by the more detailed network design standards included in planning scheme policies, legislation, statutory guidelines and other relevant controlled documents about design standards identified below.

4.3.1 Table Water supply network desired standards of service

Measure	Planning Criteria (qualitative standards)	Design Criteria (quantitative standards)
Reliability / Continuity of Supply	All development receive a reliable supply of potable water, with minimal interruptions to their service.	• All sections of the reticulation network shall receive a residual pressure of at least 22m during the 'maximum hour' demand, and the system should be capable of supplying water for six (6) consecutive 'maximum hours'. • The system should have sufficient capacity to refill all reservoirs from empty to full within 5 days of continuous operation during 'average day' demand conditions. • Each reservoir in the system should have a net positive inflow, and should be capable of continuous operation during 'mean day maximum month' demand conditions. • FNQROC Development Manual, as amended. • Wet Tropics Management Plan 1998.

Measure	Planning Criteria (qualitative standards)	Design Criteria (quantitative standards)
Adequacy of Supply	All development is provided with a water supply which is adequate for the intended use. Minimum static pressure (meters head) and/or flow (liters/second) at connection.	• The reticulation system should be capable of providing simultaneously a fire fighting flow of 30L/S for 4 hours in commercial areas and 15L/S for 2 hours in residential areas. • During fire fighting demands the residual pressure at any point in the reticulation network should not drop below 12m. • The Average Daily consumption and peaking factors for the design of Water Supply Schemes shall be as follows: ➢ Average Daily Consumption (AD) 500 litre/person/day ➢ Mean Day max Month (MDMM) 1.50 x AD ➢ Peak Day (PD) 2.25 x AD ➢ Peak Hour (PH) 1/12 x PD ➢ The Maximum head in the reticulation system should be limited to below 60 metres.
Quality of Supply	Provide a uniform water quality in accordance with recognised standards which safeguards community health and is free from objectionable taste and odour.	• National Health and Medical Research Local Government Australian Drinking Water Guidelines • Drinking water should be clear, colourless, adequately aerated and have no discernible taste or odour. It should be free from suspended matter or turbidity, pathogenic organisms and harmful chemical substances.
Environmental Impacts	The environmental impacts of the water supply network are minimised in accordance with community expectations.	• Compliance with all environmental licenses and environmental management plans under the *Water Act 2000* and the *Environmental Protection Act 1994.* • Wet Tropics Management Plan 1998.

Measure	Planning Criteria (qualitative standards)	Design Criteria (quantitative standards)
Pressure and Leakage Management	The water supply network is monitored and managed to maintain the reliability and adequacy of supply and to minimise environmental impacts.	• System Leakage Management Plan *(Chapter 3, Part 3, Division 1A Water Act 2000)* • A.S.C. System Loss Management Plan
Infrastructure Design / Planning Standards	Design of the water supply network will comply with established codes and standards	• Water Services Association of Australia – WSA 03 – 2002 – Water Supply Code of Australia • Australian Drinking Water Guidelines - National Health and Medical Research Council • Planning Guidelines for Water Supply and Sewerage - Department of Natural Resources and Water • FNQROC Development Manual, as amended.

4.3.2 Table Sewerage network desired standards of service

Measure	Planning Criteria (qualitative standards)	Design Criteria (quantitative standards)
Reliability	All lots have access to a reliable sewerage collection, conveyance, treatment and disposal system.	• The "average dry weather flow" (ADWF) shall be limited to 275 L / EP / day. • The design flow adopted shall be limited to (4xADWF). • The sewer capacity at design flow should not exceed 0.75 x diameter of sewer. • FNQROC Development Manual, as amended.
Quality of Treatment	Ensures the health of the community and the safe and appropriate level of treatment and disposal of treated effluent.	• Compliance with all environmental licenses and environmental management plans under the *Water Act 2000* and the *Environmental Protection (Water) Policy 1997* • Queensland *Water Quality* Guidelines 2006 – Environmental Protection Agency • National Water Quality Guidelines – National Water Quality Management Strategy.

Measure	Planning Criteria (qualitative standards)	Design Criteria (quantitative standards)
Environmental Impacts	The environmental impacts of the sewerage network are minimised in accordance with community expectations.	• Compliance with all environmental licenses and environmental management plans under the *Water Act 2000* and the *Environmental Protection (Water) Policy 1997*
Inflow / Infiltration	Ensure infiltration and inflow in the sewerage collection and transportation system remains within industry acceptable limits	• Compliance with all environmental licenses and environmental management plans under the *Water Act 2000* and the *Environmental Protection (Water) Policy 1997*
Effluent Re-use	Reuse effluent wherever possible.	• Compliance with all environmental licenses and environmental management plans under the *Water Act 2000* and the *Environmental Protection (Water) Policy 1997* • *Guidelines for Sewerage Systems – Reclaimed Water – February 2000* • *Queensland Water Recycling Guidelines – December 2005*
Infrastructure Design / Planning Standards	Design of the sewerage network will comply with established codes and standards	• Section D7 Sewerage System Design Guidelines of the Development Manual Planning Scheme Policy. • Department of Natural Resources Planning Guidelines for Water Supply and Sewerage • Water Services Association of Australia – WSA 02 – 2002 – Sewerage Code of Australia • Water Services Association of Australia – WSA 04 – 2005 – Sewerage Pumping Station Code of Australia • FNQROC Development Manual, as amended.

4.3.3 Table Stormwater network desired standards of service

Measure	Planning Criteria (qualitative standards)	Design Criteria (quantitative standards)
Quantity	Collect and convey the design storm event in natural and engineered channels, a piped drainage network and system of overland flow paths to a lawful point of discharge in a safe manner that minimises the inundation of habitable rooms and protects life.	• Department of Natural Resources and Water – *Queensland Urban Drainage Manual* • FNQROC Development Manual, • Australian Rainfall and Runoff, • Natural Channel Design Guidelines.
Quality	The water quality of urban catchments and waterways are managed to protect and enhance environmental values and pose no health risk to the community, and water quality of urban catchments and waterways consider provision of sufficient space in waterway corridors to accommodate wetlands and stormwater quality improvement devices.	• Provide sufficient space in waterway corridors to accommodate wetlands and stormwater quality improvement devices. • Design cross road structures to provide the appropriate level of flood immunity. • *Queensland Water Quality Guidelines 2006* – Environmental Protection Agency • Queensland Waterway Guideline • National Water Quality Guidelines – National Water Quality Management Strategy • *Fisheries Act 1994* and *Fisheries Regulation 2008*. • *Fish Habitat Guideline FHG 003* – Fisheries Guidelines for Fish Habitat Buffer Zones

Measure	Planning Criteria (qualitative standards)	Design Criteria (quantitative standards)
Environmental Impacts	Adopt water sensitive urban design practices and on site water quality management to achieve EPA water quality objectives	• Environmental Protection Agency requirements (section 42 Environmental Protection (Water) Policy 1997) • *Fisheries Act 1994*. • Queensland Waterway Guideline • Employ water sensitive urban design criteria to maximise on site quantity and quality treatment and limit discharges off site. • Employ (NO net-worsening) criteria on all new development or redevelopment site.
Infrastructure Design / Planning Standards	Design of the stormwater network will comply with established codes and standards	• FNQROC Development Design Standards • Design Guidelines set out in Sections D4 and D5 of the Development Manual Planning
		• Scheme Policy. • Queensland Urban Drainage Manual - Department of Natural Resources and Water • FNQROC Development Manual, • Australian Rainfall and Runoff, and • Natural Channel Design Guidelines requirements.

4.3.4 Table Transport network desired standards of service

Measure	Planning Criteria (qualitative standards)	Design Criteria (quantitative standards)
Road Network Design / Planning Standards	The road network provides a functional urban and rural hierarchy and freight routes which support settlement patterns and commercial and economic activities. Design of the road system will comply with established codes and standards	• FNQROC Development Manual • *Road Planning and Design Manual* - Department of Transport and Main Roads • Australian Standards • AUSTROADS guidelines

Measure	Planning Criteria (qualitative standards)	Design Criteria (quantitative standards)
Public Transport Design / Planning Standards	New urban development is designed to achieve safe walking distance to existing or potential bus stops or existing or proposed demand-responsive public transport routes.	• Design accords with the Performance Criteria set by Department of Transport and Main Roads • AUSTROADS guides for road-based public transport and high occupancy vehicles
Cycleways and Pathways Design / Planning Standards	Cycleways and pathways provide a safe and convenient network which encourages walking and cycling as acceptable alternatives. Design of the network will comply with established codes and standards.	• Australian Standards • 'AUSTROADS Guide to Road Design – Part 6A: Pedestrian and Cycle Paths' • Queensland Cycle Strategy 2011-2021 • 'Complete Streets'

4.3.5 Table Public parks and land for community facilities network desired standards of service

Measure	Planning Criteria (qualitative standards)	Design Criteria (quantitative standards)
Functional Network	A network of parks and community land is established to provide for the full range of recreational and sporting activities and pursuits.	• Parks and Community Land is provided at a Local, District and LGA Wide Level • Parks and community land addresses the needs of both recreation and sport. • Nature conservation is also provided for but not part of the charging regime.
Accessibility	Public parks will be located to ensure adequate pedestrian, cycle and vehicle access.	• Accessibility criteria are identified in **Table 0.18**.

Measure	Planning Criteria (qualitative standards)	Design Criteria (quantitative standards)
Land Quality / Suitability • **Area / 1000 persons** • **Minimum size** • **Maximum grade** • **Flood immunity**	Public parks will be provided to a standard which supports a diverse range of recreational, sporting and health promoting activities to meet community expectations. This includes ensuring land is of an appropriate size, configuration and slope and has an acceptable level of flood immunity.	• The rate of public park provision is identified in **Table 0.19.** • The size for public parks is identified in **Table 0.20** • The maximum gradient for public parks is identified in **Table 0.21.** • The minimum flood immunity for public parks is identified in **Table 0.22.**
Embellishments	Public parks contain a range of embellishments to complement the type and use of the park.	• Standard embellishments for each type of park are identified in **Table 0.23.**
Infrastructure Design / Performance Standards	Maximise opportunities to co-locate recreational parks in proximity to other community infrastructure, transport hubs and valued environmental and cultural assets.	• Australian Standards; • FNQROC Development Manual

Table 0.18: Accessibility standard

Infrastructure Type	Accessibility Standard		
	Local	District	Area of Planning Scheme
Recreation park	Park or node[1] within 500 m safe walking distance.	Park or node within 2-5 km.	Park/precinct based on specific feature or location – serves whole of planning scheme area.
Sport park	No formal provision	Sporting Park within 5-10 km of residential and village areas.	1-3 Parks serves whole of area for regional competition or is base for competition within area.

Table 0.19: Rate of land provision

Infrastructure Type	Rate of provision (Ha/1000 people)		
	Local	District	Area of Planning
Recreation park	1.5 Ha	1.0 Ha	0.5 Ha
Sport park	N/A	1.0 Ha	0.4 Ha

Table 0.20: Size of parks and community land

Infrastructure Type	Size (Ha)		
	Local	District	Area of Planning
Recreation park	1.5 Ha (2.0 Ha if a node)	2 Ha usable area	More than 5 Ha
Sport park	No formal provision	5 Ha minimum	5-10 Ha

Table 0.21: Maximum desired grade

Infrastructure Type	Maximum Gradient		
	Local	District	Area of Planning Scheme
Recreation park	1:20 for main use area 1:6 for remainder	1:20 for main use area, variable for remainder	1:20 for use areas variable for remainder
Sport park	N/A	1:50 for field and court areas 1:10 for remainder	1:50 for all playing surfaces

Table 0.22: Minimum desired flood immunity for parks

Infrastructure Type	Minimum flood immunity (%)								
	Local			District			Area of Planning Scheme		
Flood Immunity	>20% AEP	>2% AEP	>1% AEP	>20% AEP	>2% AEP	>1% AEP	>20% AEP	>2% AEP	>1% AEP
Recreation park	25%	75%	0%	0%	90%	10%	50%	40%	10%
Sport park	N/A	N/A	N/A	0%	90%	10%	50%	40%	10%

[1] Node is an area within a higher level park or within other open space (e.g. a waterway corridor) that is developed for play and picnic use.

Table 0.23: Standard facilities/embellishments for parks

Embellishment type	Recreation parks			Sport parks	
	Local	District	Area of Planning Scheme	District	Area of Planning Scheme
Internal Roads	N/A	N/A	If needed	N/A	Network as required
Parking	On street	Off street unless sufficient on-street available	Off street or dedicated on street parking, possibly in several locations	Off street parking provided as central hubs to facilities	Off street parking provided as central hubs to facilities
Fencing/Bollards	Bollards to prevent car access	Bollards to prevent car access	Range of fencing, boundary definition styles as appropriate to location	Bollards to prevent car access	Fencing and bollards to control access to site as well as limiting internal traffic access to fields and facilities.
Lighting	Safety lighting provided by street lights	For car park, toilets, youth space and picnic area	For car park, toilets, picnic areas and active recreation facilities	For car park, toilets, security lighting for buildings. Field lighting responsibility.	For car park, toilets, security lighting for buildings. Field lighting responsibility.
Toilet	Generally not provided	Usually provided	Provided	Provided if not being provided as part of club facilities	Provided by clubs as part of club facilities

Embellishment type	Recreation parks			Sport parks	
Paths (pedestrian/cycle)	On footpath and providing access to boundary	Paths and links to park and within park	Internal links to facilities	Bikeway links to park. Internal links to facilities	Internal links to facilities
Shade structures	Shade from trees or structures provided for play areas and picnic node	Built shade for play and picnic facilities if insufficient natural shade	Shade for picnic facilities and all use nodes. Combination of natural and built.	Perimeter shade from appropriate tree species.	Perimeter shade from appropriate tree species.
Seating, tables and BBQ	1-2 tables 2+ seats BBQ's normally not provided	2+ sheltered tables 4+ seats BBQ's usually provided	Multiple picnic nodes, BBQ's and shelters provided	Not provided except as recreation nodes. 2-4 perimeter seats	Not provided except as recreation nodes. 2 perimeter seats per field
Taps/irrigation	1-2 drinking taps/fountains	2+ drinking fountains for picnic areas. Taps near active recreation areas.	In ground irrigation for landscaped areas. Drinking fountains and taps provided at picnic and active nodes.	Taps located on built facilities and near fields.	In ground irrigation for fields. Taps located on built facilities and 1 per field
Bins	Provided	Provided	Provided	Provided	Provided
Landscaping (including earthworks, irrigation, and revegetation)	Ornamental plantings. Shade species. Buffer plantings with other nodes.	Enhancement plantings and shade plantings along with screening and buffers.	Significant works including plantings, features and public art.	Planted buffer areas adjacent to residential areas. Screening/buffer plantings for recreation nodes.	Planted buffer areas adjacent to residential areas. Screening/buffer plantings for recreation nodes.
Playgrounds	1 play event provided	Larger playground multiple play events provided.	Large playgrounds and possibly multiple locations.	Not provided except as part of recreation node.	Not provided except as part of recreation node.
Youth active and informal facilities		Youth active facilities provided - court, bike tracks, youth space etc.	Youth active facilities provided - court, bike tracks, youth space etc.	Not provided except as public access to sporting fields	Not provided except as public access to sporting fields or as dedicated facility (e.g. skate park)

Attachment 4.4 Establishment cost of future trunk infrastructure

This applies to all works

Design and Documentation	10% of project cost
Council/Consultant Project Management Approvals Tendering Process including assessment Contract Documentation Inspections at various hold points Contract administration	1% of project cost
Contractor Project Management/Preliminaries Management Plans QA Site Establishment Survey/As-constructed Drawings Site Maintenance Supervision Testing	2.5% of project cost
Contingencies	5% of project cost
TOTALS	18.5%

IDENTIFICATION OF WORKS	**UNIT**	**QTY**	**RATE**
Gravity Main			
Enter Pipe Diameter	150 mm		
Enter per meter supply and install rate	140 $/m		
Enter No of HCB per 100m	5		546 $/HCB
Restoration	30 $/m		
HCB as a percentage	20%		
Restoration as a percentage	21%		
Per Meter Rate	$197.05 $/m		

Enter Pipe Diameter	225 mm		
Enter per meter supply and install rate	177 $/m		
Enter No of HCB per 100m	5		546 $/HCB
Restoration	30 $/m		
HCB as a percentage	15%		
Restoration as a percentage	17%		
Per Meter Rate	$234.08 $/m		
Enter Pipe Diameter	250 mm		
Enter per meter supply	177 $/m		
Restoration	30 $/m		
Restoration as a percentage	17%		
Per Meter Rate	$206.77		
Enter Pipe Diameter	300 mm		
Enter per meter supply and install rate	225 $/m		
Restoration	30 $/m		
Restoration as a percentage	13%		
Per Meter Rate	$254.55 $/m		

Enter Pipe Diameter Enter per meter supply and install rate Restoration Restoration as a percentage Per Meter Rate	375 mm 276 $/m 30 $/m 11% $306.23 $/m		
Enter Pipe Diameter Enter per meter supply and install rate Enter No. of valves per 500m Valves as a percentage Per Meter Rate	100 mm 53 $/m 2 27% $67.89 $/m		3606 $/valve
Enter Pipe Diameter Enter per meter supply and install rate Enter No. of valves per 500m Valves as a percentage Per Meter Rate	150 mm 71 $/m 2 20% $85.71 $/m		3606 $/valve

Enter Pipe Diameter Enter per meter supply and install rate Enter No. of valves per 500m Valves as a percentage Per Meter Rate	200 mm 91 $/m 2 16% $105.91 $/m		3606 $/valve
Enter Pipe Diameter Enter per meter supply and install rate Enter No. of valves per 500 m Valves as a percentage Per Meter Rate	225 mm 115 $/m 2 13% $129.47 $/m		3606 $/valve
Water Main Enter Pipe Diameter Enter per meter supply and install rate Enter No. of valves per 500mm Enter No. of Hydrants per 500m Enter No. of bends/thrustblocks per 500m Valves and fittings as percentage Per Meter Rate	 100 mm 79.7 $/m 2 5 5 24% $99.08 $/m		 999 $/valve 115 $/hydrant 422 $/bend and thrust block

Enter Pipe Diameter	150mm		
Enter per meter supply and install rate	95.0 $/m		
Enter No. of valves per 500mm	2		1352 $/valve
Enter No. of Hydrants per 500m	5		1212 $/hydrant
Enter No. of bends/thrustblocks per 500m	5		470 $/bend and thrust block
Valves and fittings as percentage	23%		
Per Meter Rate	117.27 $/m		
Enter Pipe Diameter	200mm		
Enter per meter supply and install rate	146.5 $/m		
Enter No. of valves per 500mm	2		2547 $/valve
Enter No. of Hydrants per 500m	5		1842 $/hydrant
Enter No. of bends/thrustblocks per 500m	5		808 $/bend and thrust block
Valves and fittings as percentage	25%		
Per Meter Rate	183.16 $/m		
Enter Pipe Diameter	225 mm		
Enter per meter supply and install rate	141.3 $/m		
Enter No. of valves per 500mm	2		2476 $/valve
Enter No. of Hydrants per 500m	5		1103 $/bend and thrust block
Enter No. of bends/thrustblocks per 500m			
Valves and fittings as percentage	15%		
Per Meter Rate	$162.20		

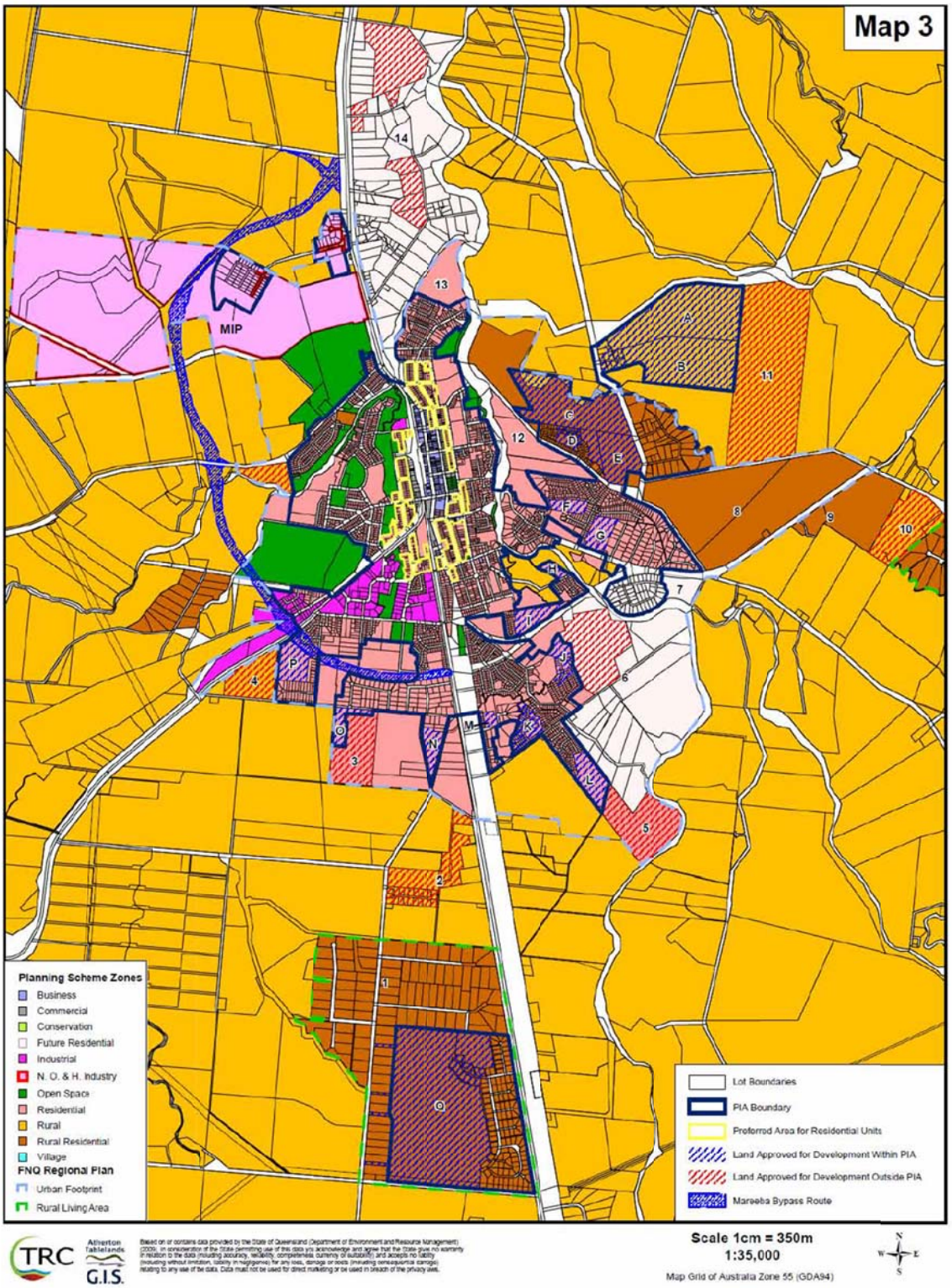
Enter Pipe Diameter	300 mm		
Enter per meter supply and install rate	288.1 $/m		
Enter No. of valves per 500mm	2		3500 $/valve
Enter No. of Hydrants per 500m	5		1500 $/bend and thrust block
Enter No. of bends/thrustblocks per 500m			
Valves and fittings as percentage	10%		
Per Meter Rate	317.11 $/m		
SITE ESTABLISHMENT	**ALLOWANCE**		
Bulk Earthworks:			
Cut to Fill	m3		$12.00
Cut to Spoil	m3		$9.00
Imported Fill	m3		$36.00
Drainage – Gabions			
6.0m x 2.0m x 300mm thick mattress basket	m		
Drainage – Pre Cast Box Culvert			
900x300mm	m2		$760.00
Drainage – Stormwater Pipelines			
150mm dia PVC	m		$99.00
225mm dia PVC	m		$240.00
300mm dia PVC	m		$112.00
450mm dia Black Max	m		$74.00
600mm dia Black Max	m		$120.00
450mm dia RC	m		$200.00
600mm dia RC	m		$273.00
Drainage – Pre cast Field Inlet Pit			
Type A	ea		$2,258.00
Type B	ea		$2,835.00

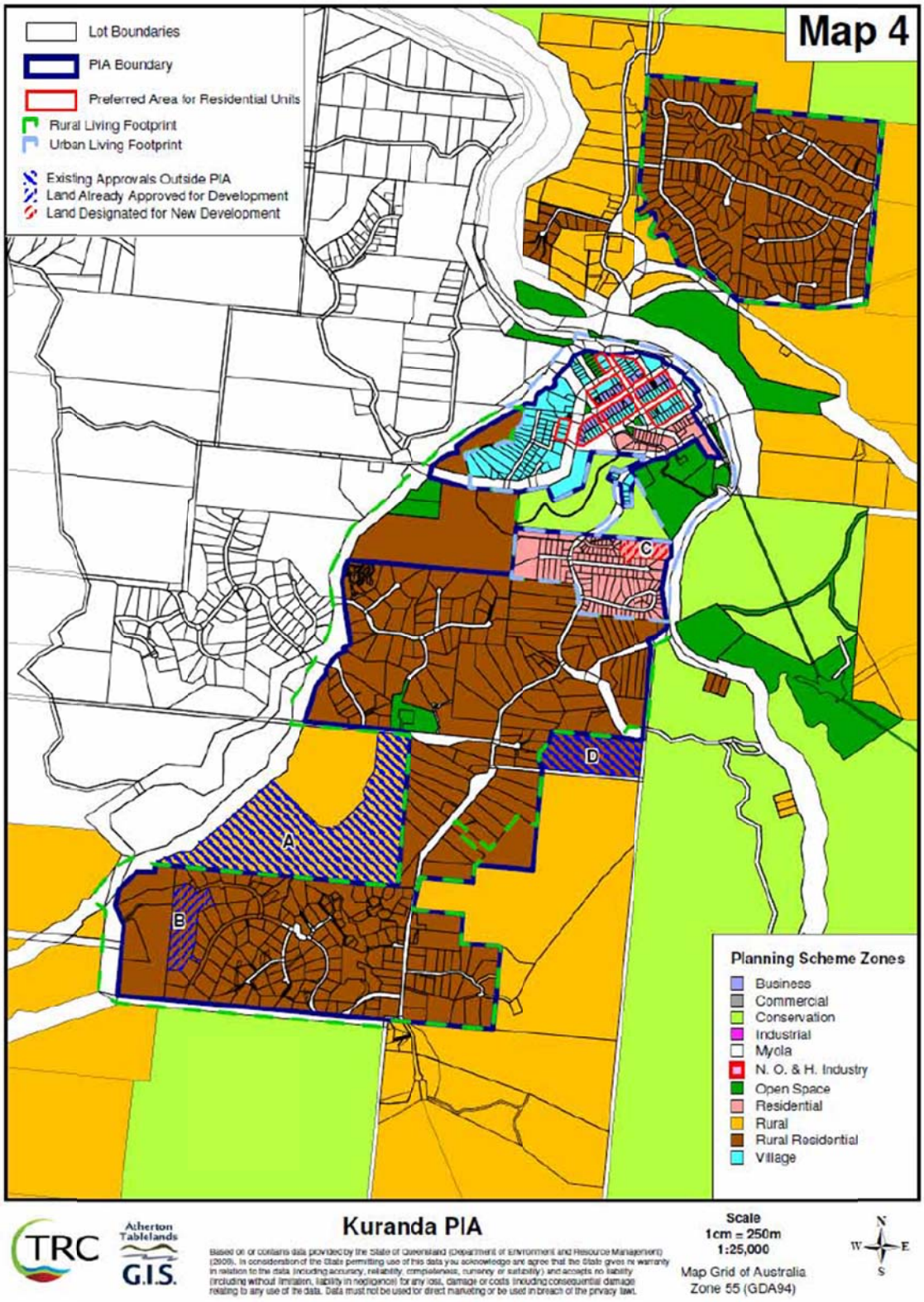
Drainage – Pre Cast Kerb Inlet Pit			
On Grade 2.4m lintel	ea		$3,675.00
Sag inlet 2.4m lintel	ea		$3,675.00
Drainage – Cast Insitu Manholes			
Standard Manhole	ea		$2,415.00
Drainage – Rock Protection			
Rock Rip Rap	m2		$72.00
Drainage – Shoring			
Sides of trench excavation to 3m deep in light soils	m2		$20.00
Footpaths – 2000mm wide			
100mm thick N25 with SL62 mesh Standard FNQROC	m2		$90.00
100mm thick N25 Fibrecrete	m2		$125.00
Roadworks			
Subgrade –Proof Roll	m2		$2.00
Base Course			
Type 2.1	m3		$136.00
Type 2.2	m3		$135.00
Roadwords – Reseal – Asphalt			
DB10 30mm thick	m2		$20.00
Roadworks – Reseal – Bitumen			
10mm precoat aggregate	m2		$8.00
14mm precoat aggregate	m2		$8.00
Roadworks - Linemarking	1m		$7.00
Bridges – Timber			
Single Lane 9m span	m2		$6,500.00
Bridges – Concrete			
Single Lane 9m Span	m2		$6,500.00
Bridges - Guardrail	1m		$270.00

Bridges – Sidetrack	m2		$120.00
Signage	Allowance		
Site Disestablishment	Allowance		

BASE BUILDING COST			
Traffic Control	Allowance		
Erosion & Sediment Control	Allowance		
Geotechnical Investigations	Allowance		
Materials Testing	Allowance		
Survey & Setout	Allowance		
Service Location	Allowance		
Revegetation	Allowance		
Sub Total – Construction Cost			
Staging Costs			
Design Contingency	10.00%		
Construction Contingency	30.00%		
Locality Allowance			
Variations – Approved			
Variation - Pending			
TOTAL BUILDING COST (TBC)			
Quality Assurance	Allowance		
WH&S / PLSL	0.53%		
Traffic Management Plan	Allowance		
Safety Management Plan	Allowance		
Environmental Management Plan	Allowance		
Internal Client Costs (Project Management)			
Other Costs & Charges			
TOTAL CONSTRUCTION COST (TCC)			
Professional Fees – Design	Allowance		
Professional Fees – Contract Administration	Allowance		
Professional Fees – Abortive work	Allowance		
TOTAL PROJECT COST (TPC)			
Cost Escalation			
To Tender			
To Completion			
TOTAL END COST (TEC)			
CAPITAL BUDGET			
SURPLUS/DEFICIT (PROJECT)			

Attachment Maps of Priority Infrastructure Areas




Map 4
Lot Boundaries
PIA Boundary
Preferred Area for Residential Units
Rural Living Footprint
Urban Living Footprint
Existing Approvals Outside PIA
Land Already Approved for Development
Land Designated for New Development
A
B
C
D
Planning Scheme Zones
Business
Commercial
Conservation
Industrial
Myola
N. O. & H. Industry
Open Space
Residential
Rural
Rural Residential
Village
Kuranda PIA
Scale
1cm = 250m
1:25,000
Map Grid of Australia
Zone 55 (GDA94)
N
W
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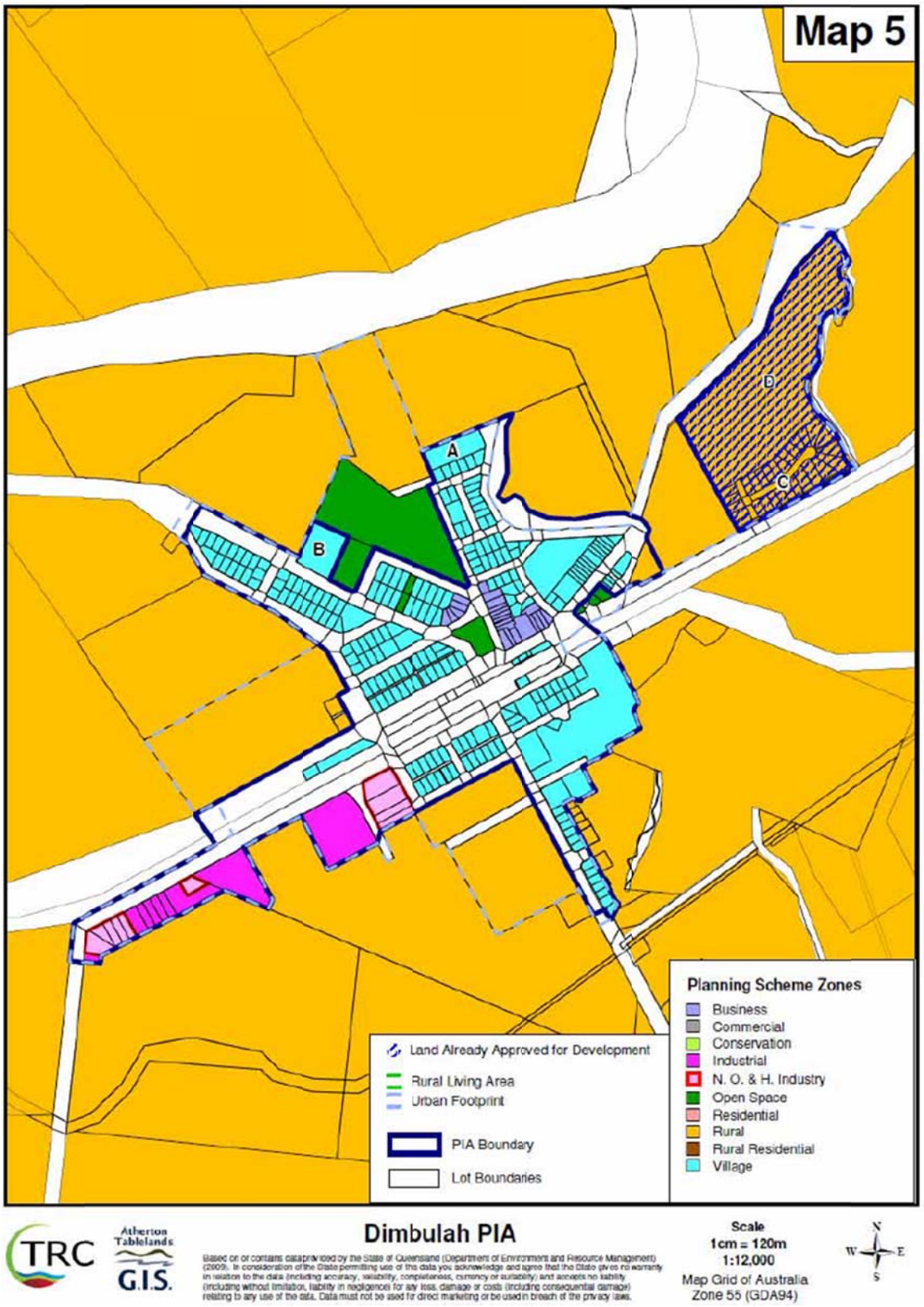
TRC
Atherton Tablelands
G.I.S.


Map 5
A
B
C
D
Land Already Approved for Development
Rural Living Area
Urban Footprint
PIA Boundary
Lot Boundaries
Planning Scheme Zones
Business
Commercial
Conservation
Industrial
N. O. & H. Industry
Open Space
Residential
Rural
Rural Residential
Village
TRC
Atherton Tablelands G.I.S.
Dimbulah PIA
Based on or contains data provided by the State of Queensland (Department of Environment and Resource Management) (2009). In consideration of the State permitting use of this data you acknowledge and agree that the State gives no warranty in relation to the data (including accuracy, reliability, completeness, currency or suitability) and accepts no liability (including without limitation, liability in negligence) for any loss, damage or costs (including consequential damage) relating to any use of the data. Data must not be used for direct marketing or be used in breach of the privacy laws.
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1cm = 120m
1:12,000
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Zone 55 (GDA94)
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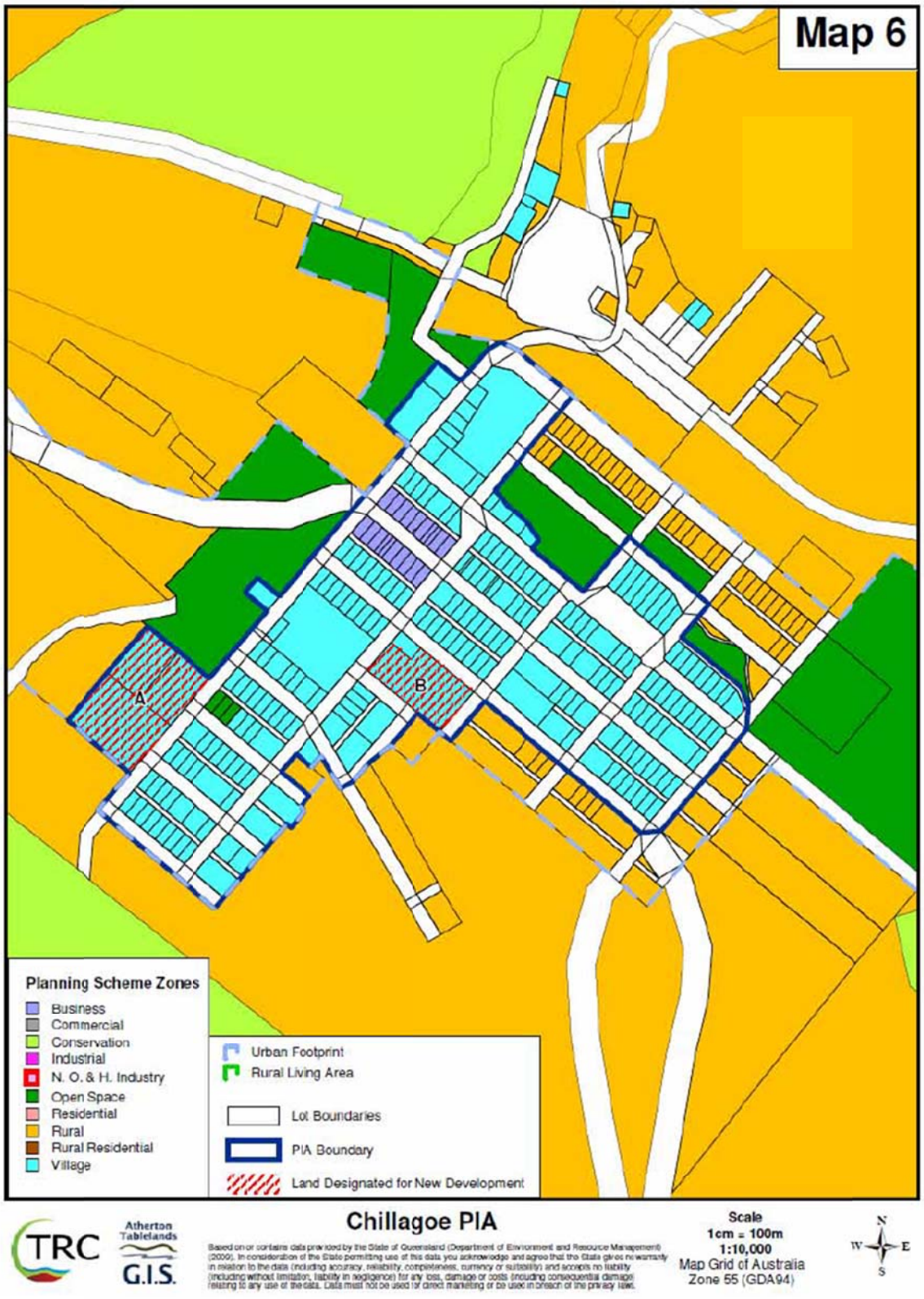
Map 6
A
B
Planning Scheme Zones
Business
Commercial
Conservation
Industrial
N. O. & H. Industry
Open Space
Residential
Rural
Rural Residential
Village
Urban Footprint
Rural Living Area
Lot Boundaries
PIA Boundary
Land Designated for New Development
TRC
Atherton Tablelands G.I.S.
Chillagoe PIA
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Scale
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