

# Part 7 Local government infrastructure plan

## 7.1 Preliminary

- (1) This local government infrastructure plan has been prepared in accordance with the requirements of the Planning Act 2016.
- (2) The purpose of the local government infrastructure plan is to:
  - integrate infrastructure planning with the land use planning identified in the planning scheme
  - provide transparency regarding a local government's intentions for the provision of trunk infrastructure
  - enable a local government to estimate the cost of infrastructure provision to assist its long term financial planning
  - ensure that trunk infrastructure is planned and provided in an efficient and orderly manner.
  - provide a basis for the imposition of conditions about infrastructure on development approvals.
- (3) The local government infrastructure plan:
  - (a) states in Section 7.2 (planning assumptions) the assumptions about future growth and urban development including the assumptions of demand for each trunk infrastructure network
  - (b) identifies in Section 7.3 (priority infrastructure area) the prioritised area to accommodate urban growth up to 2031
  - (c) states in Section 7.4 (desired standards of service) for each trunk infrastructure network the desired standard of performance
  - (d) identifies in Section 7.5 (plans for trunk infrastructure) the existing and future trunk infrastructure for the following networks:
    - (i) water supply
    - (ii) sewerage
    - (iii) stormwater
    - (iv) transport
    - (v) parks and land for community facilities

- (e) provides a list of supporting documents that assist in the interpretation of the local government infrastructure plan in the Editor’s note – Extrinsic material at the end of Part 7

## 7.2 Planning assumptions

- (1) The planning assumptions state the assumptions about:
  - (a) population and employment growth
  - (b) the type, scale, location and timing of development including the demand for each trunk infrastructure network
- (2) The planning assumptions together with the desired standards of service form a basis for the planning of the trunk infrastructure networks and the determination of the priority infrastructure area.
- (3) The planning assumptions have been prepared for:
  - (a) the base date (2016) and the following projection years to accord with future Australian Bureau of Statistics census years:
    - (i) 2021
    - (ii) 2026
    - (iii) 2031
    - (iv) 2036
  - (b) the LGIP development types in column 2 that include the uses in column 3 of Table .
  - (c) the projection areas identified on Local Government Infrastructure Plan Map LGIP-PIA 001-003 Priority Infrastructure Area Map in Schedule 5—Local government infrastructure plan mapping and tables.

**Table 7.2.1—Relationship between LGIP development categories, LGIP development types and uses**

<b>Column 1 LGIP development category</b>	<b>Column 2 LGIP development type</b>	<b>Column 3 Uses</b>
Residential development	Detached dwelling	Caretaker’s Residence Dwelling House
	Attached dwelling	Dual Occupancy Duplex Unit Multiple Unit Development Retirement Village
	Other Dwelling	Accommodation Building Bed and Breakfast

<b>Column 1 LGIP development category</b>	<b>Column 2 LGIP development type</b>	<b>Column 3 Uses</b>
		Caravan Park Home Occupation Host Farm Relatives' Apartment Rural Workers Camp Tourist Accommodation
Non-residential development	Commercial	Child Care Centre Commercial Premises Estate & Agency Office Funeral Premises Licensed Premises Local Surgery Medical Centre Motel Off Street Car Park Office Restaurant Veterinary Hospital
	Community purpose	Community Facilities Educational Establishment Hospital Institution Landing Place Park Place of Worship Public Purpose Telecommunications Facility
	Industry	Bulk Store Concrete Batching Plant Extractive Industry Fuel Depot General Industry Light Industry Noxious, Offensive or Hazardous Industry Road & Machinery Transport Depot Storage Depot Vehicle Repair Station
	Rural and Other	Agriculture Aquaculture Forestry Intensive Agriculture Intensive Animal Husbandry Kennels Marina Rural Activity Rural Industry Sport, Recreation and Entertainment

Column 1 LGIP development category	Column 2 LGIP development type	Column 3 Uses
		Stables Stock Sales Yard Tourist Facilities
	Retail	Fast Food Store Produce Store Roadside Stall Service Station Service Trades Shop Shopping Centre Vehicle and Machinery Sales

- (4) Details of the methodology used to prepare the planning assumptions are stated in the extrinsic material.

### 7.2.1 Population and employment growth

- (1) A summary of the assumptions about population and employment growth for the planning scheme area is stated in Table 7.2.2—Population and employment assumptions summary.

**Table 7.2.2—Population and employment assumptions summary**

Column 1 Description	Column 2 Assumptions					
	Base date 2016	2021	2026	2031	2036	Ultimate development
Population	18,708	19,005	19,383	19,716	19,986	30,398
Employment	7,648	7,773	7,932	8,072	8,186	12,568

- (2) Detailed assumptions about growth for each projection area and LGIP development type category are identified in the following tables in Schedule 5 Local government infrastructure plan mapping and tables:
- (a) for population, Table SC5.1.1—Existing and projected population
  - (b) for employment, Table SC5.1.2—Existing and projected employees

### 7.2.2 Development

- (1) The developable area is identified on Local Government Infrastructure Plan Map LGIP-PIA 1-3 Priority Infrastructure Area Map in Schedule 5—Local government infrastructure plan mapping and tables.
- (2) The planned density for future development is stated in SC5.1.3 in Schedule 5—Local government infrastructure plan mapping and tables.

- (3) A summary of the assumptions about future residential and non-residential development for the planning scheme area is stated in Table 7.2.3—Residential dwellings and non-residential floor space assumptions summary.

**Table 7.2.3—Residential dwellings and non-residential floor space assumptions summary**

Column 1 Description	Column 2 Assumptions					
	Base date 2016	2021	2026	2031	2036	Ultimate development
Residential dwellings	7,885	8,011	8,170	8,310	8,424	12,812
Non-residential floor space (m2 GFA)	346,529	352,196	359,420	365,776	370,933	569,776

- (4) Detailed assumptions about future development for each projection area and LGIP development type are identified in the following tables in Schedule 5 Local government infrastructure plan mapping and tables:
- (a) for residential development, SC5.1.4
  - (b) for non-residential development, SC5.1.5

### 7.2.3 Infrastructure demand

- (1) The demand generation rate for a trunk infrastructure network is stated in Column 4 of Table SC5.1.3 in Schedule 5 Local government infrastructure plan mapping and tables.
- (2) A summary of the projected infrastructure demand for each service catchment is stated in:
- (a) for the water supply network, Table SC5.1.6
  - (b) for the sewerage network, Table SC5.1.7
  - (c) for the stormwater network, Table SC5.1.8
  - (d) for the transport network, Table SC5.1.9
  - (e) for the parks and land for community facilities network, Table SC5.1.10

### 7.3 Priority infrastructure area

- (1) The priority infrastructure area identifies the area prioritised for the provision of trunk infrastructure to service the existing and assumed future urban development up to 2031.
- (2) The priority infrastructure area is identified on Local Government Infrastructure Plan Map LGIP-PIA 001-003 Priority Infrastructure Area Map.

## 7.4 Desired standards of service

- (1) This section states the key standards of performance for a trunk infrastructure network.
- (2) Details of the standard of service for a trunk infrastructure networks are identified in the extrinsic material.

### 7.4.1 Water supply network

**Table 7.4.1.1—Water supply network desired standards of service**

<b>Measure</b>	<b>Planning Criteria</b> (qualitative standards)	<b>Design Criteria</b> (quantitative standards)
<b>Reliability / Continuity of Supply</b>	All development within service area receive a reliable supply of potable water, with minimal interruptions to their service.	<ul style="list-style-type: none"> <li>• Standards in <i>Part 6: Codes of Burdekin planning scheme</i></li> <li>• Customer Service Standards</li> </ul>
<b>Adequacy of Supply</b>	All development is provided with a water supply which is adequate for the intended use.	<ul style="list-style-type: none"> <li>• Water Service Association of Australia Codes</li> <li>• IPWEA Standards</li> <li>• Standards in Burdekin planning scheme</li> <li>• Customer Service Standards</li> </ul>
<b>Quality of Supply</b>	Provide a uniform water quality in accordance with Burdekin Shire Council Drinking Water Quality Management Plan which safeguards community health and is free from objectionable taste and odour.	<ul style="list-style-type: none"> <li>• The <i>Australian Drinking Water Guidelines</i> developed by the National Health and Medical Research Council</li> </ul>
<b>Environmental Impacts</b>	The environmental impacts of the water supply network are minimised in accordance with community expectations.	<ul style="list-style-type: none"> <li>• Compliance with the requirements of the <i>Environmental Protection Act, 1994</i> and associated Regulations and Policies and the <i>Water Act, 2000</i>.</li> </ul>
<b>Pressure and Leakage Management</b>	The water supply network is monitored and managed to maintain the reliability and adequacy of supply and to minimise environmental impacts.	<ul style="list-style-type: none"> <li>• <i>Water Supply(Safety and Reliability) Act, 2008</i></li> </ul>
<b>Infrastructure Design / Planning Standards</b>	Design of the water supply network will comply with established codes and standards	<ul style="list-style-type: none"> <li>• Water Services Association of Australia – WSA 03 – 2011 – <i>Water Supply Code of Australia</i></li> <li>• <i>Australian Drinking Water Guidelines</i> - National Health and Medical Research Council</li> <li>• <i>Planning Guidelines for Water Supply and Sewerage 2010</i> - Department of Energy and Water Supply</li> <li>• <i>Burdekin Shire Council and Institute of Public Works Engineers Australia Queensland standard drawings</i></li> <li>• Standards in <i>Part 6: Codes of Burdekin planning scheme</i></li> </ul>

## 7.4.2 Sewerage network

Table 7.4.2.1—Sewerage network desired standards of service

Measure	Planning Criteria (qualitative standards)	Design Criteria (quantitative standards)
<b>Reliability</b>	All development within service area has access to a reliable sewerage collection, conveyance, treatment, and disposal system.	<ul style="list-style-type: none"> <li>• Standards in <i>Part 6: Codes of Burdekin planning scheme</i></li> <li>• Customer service standards</li> </ul>
<b>Quality of Treatment</b>	Ensures the health of the community and the safe and appropriate level of treatment and disposal of treated effluent.	<ul style="list-style-type: none"> <li>• Compliance with the Environmental Protection Act 1994 and associated Regulations and Policies</li> <li>• Local water quality guidelines prepared in accordance with the National Water Quality Management Strategy</li> <li>• <i>Queensland Water Quality Guidelines 2009</i> (where local guidelines do not exist)</li> <li>• <i>National Water Quality Guidelines – National Water Quality Management Strategy</i> (where local or regional guidelines do not exist)</li> <li>• <i>Department of Environment and Heritage Protection – Codes and guidelines</i></li> </ul>
<b>Environmental Impacts</b>	The environmental impacts of the sewerage network are minimised in accordance with community expectations.	<ul style="list-style-type: none"> <li>• Compliance with the Environmental Protection Act 1994 and associated Regulations and Policies</li> </ul>
<b>Effluent Re-use</b>	Reuse effluent wherever possible.	<ul style="list-style-type: none"> <li>• <i>Water quality guidelines for recycled water schemes, Department of Energy and Water Supply, 2008</i></li> </ul>
<b>Infrastructure Design / Planning Standards</b>	Design of the sewerage network will comply with established codes and standards.	<ul style="list-style-type: none"> <li>• <i>Planning Guidelines for Water Supply and Sewerage 2010 - Department of Energy and Water Supply</i></li> <li>• <i>Gravity Sewerage Code of Australia - Water Services Association of Australia - WSA 02 – 2014.</i></li> <li>• <i>Sewage Pumping Station Code of Australia- Water Services Association of Australia - WSA 04 – 2005.</i></li> <li>• Standards in <i>Part 6: Codes of Burdekin planning scheme</i></li> </ul>

### 7.4.3 Stormwater network

Table 7.4.3.1—Stormwater network desired standard of service

Measure	Planning Criteria (qualitative standards)	Design Criteria (quantitative standards)
<b>Quantity</b>	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.	<ul style="list-style-type: none"> <li>• <i>Queensland Urban Drainage Manual</i> - Department of Energy and Water Supply</li> <li>• Standards in <i>Part 6: Codes of Burdekin planning scheme</i></li> </ul>
<b>Quality</b>	The water quality of urban catchments and waterways are managed to protect and enhance environmental values and pose no health risk to the community.	<ul style="list-style-type: none"> <li>• Compliance with the Environmental Protection Act 1994 and associated Regulations and Policies</li> <li>• Local water quality guidelines prepared in accordance with the National Water Quality Management Strategy</li> <li>• <i>Queensland Water Quality Guidelines 2009</i> (where local guidelines do not exist)</li> <li>• <i>National Water Quality Guidelines – National Water Quality Management Strategy</i> (where local or regional guidelines do not exist)</li> <li>• <i>Department of Environment and Heritage Protection – Codes and guidelines</i></li> </ul>
<b>Environmental Impacts</b>	Adopt water sensitive urban design practices and on site water quality management to achieve EPA water quality objectives	<ul style="list-style-type: none"> <li>• Compliance with the Environmental Protection Act 1994 and associated Regulations and Policies</li> <li>• Standards in <i>Part 6: Codes of Burdekin planning scheme</i></li> </ul>
<b>Infrastructure Design / Planning Standards</b>	Design of the stormwater network will comply with established codes and standards	<ul style="list-style-type: none"> <li>• <i>Queensland Urban Drainage Manual</i> - Department of Energy and Water Supply</li> <li>• Standards in <i>Part 6: Codes of Burdekin planning scheme</i></li> </ul>

### 7.4.4 Transport network

Table 7.4.4.1—Transport network desired standard 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	<ul style="list-style-type: none"> <li>• Road Planning and Design Manual - Department of Transport and Main Roads</li> <li>• Australian Standards</li> <li>• AUSTRROADS guides</li> </ul>



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.	<ul style="list-style-type: none"> <li>• Design accords with the Performance Criteria set by Department of Transport and Main Roads</li> <li>• AUSTRROADS guides for road-based public transport and high occupancy vehicles</li> </ul>
Cycleways and Pathways Design / Planning Standards	<p>Cycleways and pathways provide a safe and convenient network which encourages walking and cycling as acceptable alternatives.</p> <p>Design of the network will comply with established codes and standards.</p>	<ul style="list-style-type: none"> <li>• Australian Standards</li> <li>• AUSTRROADS guides –Part 6A</li> <li>• Department of Transport and Main Roads technical notes and guidelines</li> </ul>

### 7.4.5 Public parks and land for community facilities network

**Table 7.4.5.1—Public parks and land for community facilities desired standard of service**

Measure	Planning Criteria (qualitative standards)	Design Criteria (quantitative standards)
<b>Functional Network</b>	A network of parks and community land is established to provide for the full range of recreational and sporting activities and pursuits.	<ul style="list-style-type: none"> <li>• Parks and Community Land is provided at a local, district and LGA-wide level</li> <li>• 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</li> </ul>
<b>Accessibility</b>	Public parks will be located to ensure adequate pedestrian, cycle and vehicle access.	<ul style="list-style-type: none"> <li>• Accessibility criteria are identified in Table 7.4.5.2.</li> <li>• Accessibility of land for community facilities will be determined at the time of assessment</li> </ul>
<b>Land Quality / Suitability</b> <ul style="list-style-type: none"> <li>• Area / 1000 persons</li> <li>• Minimum size</li> <li>• Maximum grade</li> <li>• Flood immunity</li> </ul>	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.	<ul style="list-style-type: none"> <li>• The rate of public park provision is identified in Table 7.4.5.3</li> <li>• The size for public parks is identified in Table 7.4.5.4.</li> <li>• The maximum gradient for public parks is identified in Table 7.4.5.5</li> <li>• The minimum flood immunity for public parks is identified in Table 7.4.5.6.</li> </ul>
<b>Embellishments</b>	Public parks contain a range of embellishments to complement the type and use of the park.	<ul style="list-style-type: none"> <li>• Standard embellishments for each type of park are identified in Table 7.4.5.7.</li> </ul>
<b>Infrastructure Design / Performance Standards</b>	Maximise opportunities to co-locate recreational parks in proximity to other community infrastructure, transport hubs and valued environmental and cultural assets.	<ul style="list-style-type: none"> <li>• Australian Standards</li> </ul>

**Table 7.4.5.2—Accessibility Standard**

Infrastructure Type	Accessibility Standard		
	Local	District	Area of Planning Scheme
Recreation park	Park or node <sup>1</sup> 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 7.4.5.3—Rate of park provision**

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

**Table 7.4.5.4—Size of parks**

Infrastructure Type	Size (Ha)		
	Local	District	Area of Planning Scheme
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 7.4.5.5—Maximum grade desired for parks**

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 7.4.5.6—Minimum desired flood immunity for parks**

Infrastructure Type	Minimum flood immunity (%)								
	Local			District			Area of Planning Scheme		
Flood Immunity	>Q5	>Q50	>Q100	>Q5	>Q50	>Q100	>Q5	>Q50	>Q100
Recreation park	50%	15%	0%	70%	30%	5%	90%	40%	10%
Sport park	N/A	N/A	N/A	70%	30%	5%	90%	40%	10%

Note—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 7.4.5.7—Standard 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
Parking	On street	Off street unless sufficient on-street available	Off street or dedicated on street parking,	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
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.	For car park, toilets, security lighting for buildings. Field lighting
Toilet	Generally not provided	Usually provided	Provided	Provided if not being provided as part of club	Provided by clubs as part of club facilities
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	Internal links to facilities
Shade structures	Shade from trees or structures provided for play areas and	Built shade for play and picnic facilities if insufficient natural shade	Shade for picnic facilities and all use nodes. Combination of	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 and features.	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 - bike tracks, youth space etc.	Youth "active facilities" provided -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)

## **7.5 Plans for trunk infrastructure**

- (1) The plans for trunk infrastructure identify the trunk infrastructure networks intended to service the existing and assumed future urban development at the desired standard of service up to 2031.

### **7.5.1 Plans for trunk infrastructure maps**

- (1) The existing and future trunk infrastructure networks are shown on the following maps in Schedule 5—Local government infrastructure plan mapping and tables:
  - (a) Local Government Infrastructure Plan Map LGIP-WS 001-006—Plans for Trunk Infrastructure – Water supply
  - (b) Local Government Infrastructure Plan Map LGIP-SEW 001-003— Plans for Trunk Infrastructure – Sewerage network
  - (c) Local Government Infrastructure Plan Map LGIP-SW 001-003— Plans for Trunk Infrastructure – Stormwater network
  - (d) Local Government Infrastructure Plan Map LGIP-TR 001-004— Plans for Trunk Infrastructure – Transport Roads
  - (e) Local Government Infrastructure Plan Map LGIP-PLCF 001-004— Plans for Trunk Infrastructure – Parks & land for community facilities
- (2) The State infrastructure forming part of transport trunk infrastructure network has been identified using information provided by the relevant State infrastructure supplier.

### **7.5.2 Schedules of works**

- (1) Details of the existing and future trunk infrastructure networks are identified in the electronic Excel schedule of works model which can be viewed here: [<insert link to the website where the file can be found>](#).
- (2) The future trunk infrastructure is identified in the following tables in Schedule 5—Local government infrastructure plan mapping and tables :
  - (a) for the water supply network, Table SC5.2.1
  - (b) for the sewerage network, Table SC5.2.2
  - (c) for the stormwater network, Table SC5.2.3
  - (d) for the transport network, Table SC5.2.4
  - (e) for the parks and land for community facilities network, , Table SC5.2.5

### Editors note – Extrinsic material

The below table identifies the documents that assist in the interpretation of the local government infrastructure plan and are extrinsic material under the *Statutory Instruments Act 1992*.

#### List of extrinsic material

Column 1 Title of document	Column 2 Date	Column 3 Author
Burdekin Shire Council - Extrinsic Material to the Local Government Infrastructure Plan	December 2017	Integran

### Schedule 1 –Dictionary

Column 1 Term	Column 2 Definition

## Schedule 5 – Local government infrastructure plan mapping and tables

### SC5.1 Planning assumption tables

Table SC5.1.1—Existing and projected population

Column 1 Projection area	Column 2 LGIP development type	Column 3 Existing and projected population					Ultimate development
		2016	2021	2026	2031	2036	
Ayr	Single Dwelling	7,601	7,853	8,173	8,455	8,512	10,026
	Multiple Dwelling	473	489	508	526	530	624
	Other Dwelling	343	355	369	382	384	453
	<b>Total</b>	<b>8,418</b>	<b>8,696</b>	<b>9,051</b>	<b>9,363</b>	<b>9,426</b>	<b>11,103</b>
Brandon	Single Dwelling	771	778	786	794	798	964
	Multiple Dwelling	48	48	49	49	50	60
	Other Dwelling	35	35	36	36	36	44
	<b>Total</b>	<b>854</b>	<b>861</b>	<b>871</b>	<b>879</b>	<b>884</b>	<b>1,067</b>
Home Hill	Single Dwelling	2,734	2,731	2,727	2,723	2,730	3,036
	Multiple Dwelling	170	170	170	169	170	189
	Other Dwelling	123	123	123	123	123	137
	<b>Total</b>	<b>3,027</b>	<b>3,024</b>	<b>3,019</b>	<b>3,016</b>	<b>3,024</b>	<b>3,362</b>
Inside priority infrastructure area (total)	Single Dwelling	11,106	11,361	11,686	11,973	12,041	14,026
	Multiple Dwelling	691	707	727	745	749	873
	Other Dwelling	502	513	528	541	544	633
	<b>Total</b>	<b>12,298</b>	<b>12,581</b>	<b>12,941</b>	<b>13,258</b>	<b>13,334</b>	<b>15,532</b>
Outside priority infrastructure area (total)	Single Dwelling	5,788	5,801	5,817	5,832	6,007	13,424
	Multiple Dwelling	360	361	362	363	374	835
	Other Dwelling	261	262	263	263	271	606
	<b>Total</b>	<b>6,410</b>	<b>6,424</b>	<b>6,442</b>	<b>6,458</b>	<b>6,652</b>	<b>14,866</b>
Burdekin Shire Council	Single Dwelling	16,894	17,162	17,504	17,804	18,048	27,450
	Multiple Dwelling	1,051	1,068	1,089	1,108	1,123	1,708
	Other Dwelling	763	775	790	804	815	1,240
	<b>Total</b>	<b>18,708</b>	<b>19,005</b>	<b>19,383</b>	<b>19,716</b>	<b>19,986</b>	<b>30,398</b>

**Table SC5.1.2—Existing and projected employees**

Column 1 Projection area	Column 2 LGIP development type	Column 3 Existing and projected employees					
		2016	2021	2026	2031	2036	Ultimate development
Ayr	Retail	354	366	382	395	398	471
	Commercial	733	758	791	819	825	977
	Industry	798	825	860	891	897	1,063
	Community Purposes	411	425	443	459	462	547
	Rural and Other Uses	588	609	634	657	662	784
	<b>Total</b>	<b>2,884</b>	<b>2,983</b>	<b>3,110</b>	<b>3,221</b>	<b>3,244</b>	<b>3,843</b>
Brandon	Retail	11	12	12	12	12	18
	Commercial	26	26	27	28	28	41
	Industry	105	105	106	107	108	128
	Community Purposes	21	21	21	22	22	30
	Rural and Other Uses	112	112	113	114	114	127
	<b>Total</b>	<b>275</b>	<b>277</b>	<b>280</b>	<b>283</b>	<b>284</b>	<b>343</b>
Home Hill	Retail	40	40	40	39	40	56
	Commercial	94	94	93	93	94	120
	Industry	353	353	353	352	353	385
	Community Purposes	72	72	72	72	72	86
	Rural and Other Uses	373	372	372	372	372	395
	<b>Total</b>	<b>932</b>	<b>931</b>	<b>930</b>	<b>929</b>	<b>931</b>	<b>1,042</b>
Inside priority infrastructure area (total)	Retail	405	418	433	447	450	545
	Commercial	853	879	911	940	947	1,138
	Industry	1,255	1,283	1,319	1,351	1,358	1,576
	Community Purposes	504	518	536	552	556	662
	Rural and Other Uses	1,073	1,093	1,120	1,143	1,148	1,306
	<b>Total</b>	<b>4,090</b>	<b>4,191</b>	<b>4,320</b>	<b>4,433</b>	<b>4,459</b>	<b>5,227</b>
Outside priority infrastructure area	Retail	464	465	465	466	474	826
	Commercial	916	918	921	923	941	1,712



**Table SC5.1.2—Existing and projected employees**

Column 1 Projection area	Column 2 LGIP development type	Column 3 Existing and projected employees					
		2016	2021	2026	2031	2036	Ultimate development
(total)	Industry	793	799	806	812	836	1,800
	Community Purposes	468	468	469	469	478	882
	Rural and Other Uses	915	931	952	970	997	2,121
	<b>Total</b>	<b>3,557</b>	<b>3,581</b>	<b>3,612</b>	<b>3,639</b>	<b>3,726</b>	<b>7,341</b>
	Burdekin Shire Council	Retail	870	882	899	913	924
	Commercial	1,769	1,797	1,832	1,863	1,887	2,849
	Industry	2,049	2,082	2,125	2,163	2,194	3,376
	Community Purposes	972	987	1,005	1,021	1,035	1,544
	Rural and Other Uses	1,988	2,025	2,071	2,112	2,145	3,427
	<b>Total</b>	<b>7,648</b>	<b>7,773</b>	<b>7,932</b>	<b>8,072</b>	<b>8,186</b>	<b>12,568</b>

**Table SC5.1.3—Planned density and demand generation rate for a trunk infrastructure network**

Column 1 Area classification	Column 2 LGIP development type	Column 3 Planned density		Column 4 Demand generation rate for a trunk infrastructure network				
		Non-residential plot ratio	Residential density (dwellings/dev ha)	Water supply network (EP/dev ha)	Sewerage network (EP/dev ha)	Transport network (trip/dev ha)	Parks and land for community facilities network (persons/dev ha)	Stormwater network (imp ha/dev ha)
<b>Residential development</b>								
Residential		-	11.8	29.3	29.3	117.5	29.3	0.4
Residential	Low Density	-	11.2	27.9	27.9	111.8	27.9	0.4
Rural		-	0.03	0.1	0.1	0.3	0.1	0
Rural	Nature Based Recreation	-	0.03	0.1	0.1	0.3	0.1	0
Rural	Settlement - Water Available	-	2.5	6.2	6.2	25.0	6.2	0.1
Rural	Settlement - Water not Available	-	1.0	2.5	2.5	10.0	2.5	0.1
Village	Sewered	-	10.0	24.9	24.9	100.0	24.9	0.35
Village	Unsewered	-	5.0	12.5	12.5	50.0	12.5	0.2
<b>Non-residential development and mixed development<sup>2</sup></b>								
Industrial		0.75	-	29.9	29.9	60	N/A	0.9
Industry	Extractive	0.75	-	2.5	2.5	10	N/A	0
Industry	Investigation	0.75	-	18.7	18.7	40	N/A	0.8
Open Space		0.4	-	0	0	0	N/A	0
Public Purposes		0.5	-	12.5	12.5	50	N/A	0.3
Retail and Commercial		1.5	18.0	43.6	43.6	300	N/A	0.9

Note—2. Table Mixed development is development that includes residential development and non-residential development.

**Table SC5.1.4—Existing and projected residential dwellings**

Column 1 Projection area	Column 2 LGIP development type	Column 3 Existing and projected residential dwellings					
		2016	2021	2026	2031	2036	Ultimate development
Ayr	Single Dwelling	3,051	3,151	3,280	3,393	3,416	4,024
	Multiple Dwelling	312	323	336	347	350	412
	Other	185	191	199	206	207	244
	<b>Total</b>	<b>3,548</b>	<b>3,665</b>	<b>3,815</b>	<b>3,947</b>	<b>3,973</b>	<b>4,680</b>
Brandon	Single Dwelling	309	312	316	319	320	387
	Multiple Dwelling	32	32	32	33	33	40
	Other	19	19	19	19	19	23
	<b>Total</b>	<b>360</b>	<b>363</b>	<b>367</b>	<b>371</b>	<b>372</b>	<b>450</b>
Home Hill	Single Dwelling	1,097	1,096	1,094	1,093	1,096	1,218
	Multiple Dwelling	112	112	112	112	112	125
	Other	67	67	66	66	67	74
	<b>Total</b>	<b>1,276</b>	<b>1,274</b>	<b>1,273</b>	<b>1,271</b>	<b>1,274</b>	<b>1,417</b>
Inside priority infrastructure area (total)	Single Dwelling	4,457	4,559	4,690	4,805	4,832	5,629
	Multiple Dwelling	456	467	480	492	495	576
	Other	271	277	285	292	293	342
	<b>Total</b>	<b>5,184</b>	<b>5,303</b>	<b>5,455</b>	<b>5,588</b>	<b>5,620</b>	<b>6,547</b>
Outside priority infrastructure area (total)	Single Dwelling	2,323	2,328	2,335	2,340	2,411	5,387
	Multiple Dwelling	238	238	239	240	247	551
	Other	141	141	142	142	146	327
	<b>Total</b>	<b>2,702</b>	<b>2,708</b>	<b>2,715</b>	<b>2,722</b>	<b>2,804</b>	<b>6,266</b>
Burdekin Shire Council	Single Dwelling	6,780	6,887	7,025	7,145	7,243	11,016
	Multiple Dwelling	694	705	719	731	741	1,128
	Other	412	418	426	434	440	669
	<b>Total</b>	<b>7,885</b>	<b>8,011</b>	<b>8,170</b>	<b>8,310</b>	<b>8,424</b>	<b>12,812</b>

**Table SC5.1.5—Existing and projected non-residential floor space**

Column 1 Projection area	Column 2 LGIP development type	Column 3 Existing and projected non-residential floor space (m <sup>2</sup> GFA)					
		2016	2021	2026	2031	2036	Ultimate development
Ayr	Retail	8,852	9,156	9,544	9,885	9,954	11,785
	Commercial	14,661	15,168	15,814	16,382	16,497	19,547
	Industry	87,729	90,757	94,618	98,014	98,702	116,938
	Community Purposes	10,266	10,620	11,071	11,467	11,548	13,677
	Rural and Other Uses	11,765	12,170	12,687	13,141	13,233	15,673
	<b>Total</b>	<b>133,273</b>	<b>137,871</b>	<b>143,733</b>	<b>148,889</b>	<b>149,934</b>	<b>177,621</b>
Brandon	Retail	285	291	298	304	307	445
	Commercial	518	529	542	554	560	815
	Industry	11,511	11,600	11,713	11,813	11,863	14,032
	Community Purposes	518	526	536	545	550	743
	Rural and Other Uses	2,238	2,249	2,262	2,274	2,280	2,542
	<b>Total</b>	<b>15,070</b>	<b>15,194</b>	<b>15,351</b>	<b>15,490</b>	<b>15,560</b>	<b>18,577</b>
Home Hill	Retail	999	995	990	986	995	1,393
	Commercial	1,880	1,875	1,868	1,862	1,875	2,394
	Industry	38,859	38,824	38,779	38,740	38,823	42,363
	Community Purposes	1,810	1,806	1,802	1,798	1,806	2,139
	Rural and Other Uses	7,454	7,450	7,444	7,439	7,450	7,909
	<b>Total</b>	<b>51,002</b>	<b>50,950</b>	<b>50,883</b>	<b>50,826</b>	<b>50,949</b>	<b>56,197</b>
Inside priority infrastructure area (total)	Retail	10,136	10,442	10,832	11,175	11,256	13,622
	Commercial	17,059	17,571	18,223	18,798	18,931	22,756
	Industry	138,099	141,182	145,111	148,568	149,389	173,333
	Community Purposes	12,594	12,952	13,409	13,811	13,903	16,560
	Rural and Other Uses	21,457	21,869	22,393	22,854	22,963	26,124
	<b>Total</b>	<b>199,345</b>	<b>204,015</b>	<b>209,968</b>	<b>215,205</b>	<b>216,443</b>	<b>252,395</b>
Outside priority infrastructure area (total)	Retail	11,604	11,617	11,633	11,647	11,855	20,659
	Commercial	18,329	18,366	18,412	18,453	18,819	34,232
	Industry	87,238	87,861	88,658	89,358	91,910	198,022

**Table SC5.1.5—Existing and projected non-residential floor space**

Column 1 Projection area	Column 2 LGIP development type	Column 3 Existing and projected non-residential floor space (m <sup>2</sup> GFA)					
		2016	2021	2026	2031	2036	Ultimate development
	Community Purposes	11,706	11,711	11,717	11,722	11,960	22,046
	Rural and Other Uses	18,306	18,625	19,033	19,391	19,947	42,422
	<b>Total</b>	<b>147,184</b>	<b>148,180</b>	<b>149,453</b>	<b>150,571</b>	<b>154,491</b>	<b>317,382</b>
Burdekin Shire Council	Retail	21,741	22,059	22,465	22,822	23,111	34,281
	Commercial	35,388	35,937	36,636	37,251	37,750	56,988
	Industry	225,337	229,043	233,768	237,926	241,299	371,354
	Community Purposes	24,300	24,663	25,126	25,533	25,864	38,606
	Rural and Other Uses	39,763	40,494	41,426	42,245	42,910	68,547
	<b>Total</b>	<b>346,529</b>	<b>352,196</b>	<b>359,420</b>	<b>365,776</b>	<b>370,933</b>	<b>569,776</b>

**Table SC5.1.6—Existing and projected demand for the water supply network**

<b>Column 1 Service catchment<sup>3</sup></b>	<b>Column 2 Existing and projected demand (EP)</b>					
	<b>2016</b>	<b>2021</b>	<b>2026</b>	<b>2031</b>	<b>2036</b>	<b>Ultimate development</b>
WS1 - Ayr/Brandon	12,242	12,714	13,316	13,846	14,086	19,225
WS2 - Home Hill	3,807	3,807	3,807	3,807	3,892	6,581
WS3 - Giru	445	446	446	446	447	548
WS4 - Mount Kelly	239	239	240	240	244	974

**Table SC5.1.7—Existing and projected demand for the sewerage network**

<b>Column 1 Service catchment<sup>4</sup></b>	<b>Column 2 Existing and projected demand (EP)</b>					
	<b>2016</b>	<b>2021</b>	<b>2026</b>	<b>2031</b>	<b>2036</b>	<b>Ultimate development</b>
SEW01 - Ayr	10,333	10,757	11,299	11,775	11,931	15,490
SEW02 – Brandon	1,049	1,070	1,096	1,119	1,133	1,498
SEW03 – Home Hill	3,752	3,752	3,752	3,752	3,829	6,312

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Note—3. Table SC5.1.6 Column 1 The service catchments for the water supply network are identified on Local Government Infrastructure Plan Map LGIP-WSC-001-004 (Catchment maps - Water supply) in Schedule 5 (local government infrastructure mapping and tables).

Note—4. Table SC5.1.7 Column 1 The service catchments for the sewerage network are identified on Local Government Infrastructure Plan Map LGIP-SEWC-001-003 (Catchment maps - Sewerage) in Schedule 5 (local government infrastructure mapping and tables).

**Table SC5.1.8—Existing and projected demand for the stormwater network**

<b>Column 1 Service catchment<sup>5</sup></b>	<b>Column 2 Existing and projected demand (imp ha)</b>					
	<b>2016</b>	<b>2021</b>	<b>2026</b>	<b>2031</b>	<b>2036</b>	<b>Ultimate development</b>
SW01 - Ayr	351	355	361	366	369	446
SW02 – Brandon	24	24	24	25	25	29
SW03 – Home Hill	77	78	78	79	79	96

**Table SC5.1.9—Existing and projected demand for the transport network**

<b>Column 1 Service catchment<sup>6</sup></b>	<b>Column 2 Existing and projected demand (trips)</b>					
	<b>2016</b>	<b>2021</b>	<b>2026</b>	<b>2031</b>	<b>2036</b>	<b>Ultimate development</b>
TR01 – Ayr	41,966	43,574	45,623	47,426	48,061	62,244
TR02 – Brandon	3,964	4,046	4,150	4,241	4,290	5,682
TR03 – Home Hill	15,032	15,032	15,032	15,032	15,142	19,757
TR04 – Remainder	55,406	56,174	57,154	58,016	59,418	115,162

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Note—5. Table SC5.1.8 Column 1 The service catchments for the stormwater network are identified on Local Government Infrastructure Plan Map LGIP-SWC-001-003 (Catchment maps – Stormwater Network) in Schedule 5 (local government infrastructure mapping and tables).

Note—6. Table SC5.1.9 Column 1 The service catchments for the transport network are identified on Local Government Infrastructure Plan Map LGIP-TRC-001-004 (Catchment maps – Transport Roads) in Schedule 5 (local government infrastructure mapping and tables).

**Table SC5.1.10—Existing and projected demand for the parks and land for community facilities network**

<b>Column 1 Service catchment<sup>7</sup></b>	<b>Column 2 Existing and projected demand (persons)</b>					
	<b>2016</b>	<b>2021</b>	<b>2026</b>	<b>2031</b>	<b>2036</b>	<b>Ultimate development</b>
PPCL01 – Ayr	8,443	8,721	9,076	9,389	9,454	11,168
PPCL01 – Brandon	854	861	871	879	884	1,067
PPCL01 – Home Hill	3,084	3,084	3,084	3,084	3,084	3,084
PPCL01 – Remainder	6,328	6,342	6,359	6,375	6,567	14,731

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Note—7. Table SC5.1.10 Column 1 The service catchments for the parks and land for community facilities network are identified on Local Government Infrastructure Plan Map LGIP-PLCFC-001-004 (Catchment Maps - Parks & land for community facilities) in Schedule 5 (local government infrastructure mapping and tables).



## SC5.2 Schedules of works

Table SC5.2.1—Water supply network schedule of works

Column 1 Map reference	Column 2 Trunk infrastructure	Column 3 Estimated timing	Column 4 Establishment cost <sup>8</sup>
WSF_01	Upgrade – South Ayr Sedimentation, filtration, aeration	2019	\$2,365,000
WMF_01	Water Main Upgrade – Beach Road (250dia, 106m)	2026	\$24,776
WMF_02	Water Main Upgrade - Beach Road (250dia, 106m)	2026	\$31,029
WMF_03	Water Main Upgrade - Gibson Street (250dia, 133m)	2026	\$16,424
WMF_04	Water Main Upgrade - Crofton Street (250dia, 70m)	2026	\$22,233
WMF_05	Water Main Upgrade - Burke Street (250dia, 95m)	2026	\$25,826
WMF_06	Water Main Upgrade - Chippendale Street (250dia, 111m)	2026	\$30,655
WMF_07	Water Main Upgrade - Chippendale Street (250dia, 131m)	2026	\$81,794
WMF_08	Water Main Upgrade - Chippendale Street (250dia, 351m)	2026	\$9,729
WMF_09	Water Main Upgrade - Chippendale Street (250dia, 42m)	2026	\$5,949
WMF_10	Water Main Upgrade - Chippendale Street (250dia, 26m)	2026	\$27,739
WMF_11	Water Main Upgrade - Lawson Street (250dia, 119m)	2026	\$9,402
WMF_12	Water Main Upgrade - Richard Street (250dia, 40m)	2026	\$11,572
WMF_13	Water Main Upgrade - Beach Road (250dia, 50m)	2026	\$32,405
WMF_14	Water Main Upgrade - Paine Street (250dia, 139m)	2026	\$59,304
WMF_15	Water Main Upgrade - Beach Road (250dia, 254m)	2026	\$3,220
<b>TOTAL</b>			<b>\$2,757,057</b>

Table SC5.2.2—Sewerage network schedule of works

Column 1 Map reference	Column 2 Trunk infrastructure	Column 3 Estimated timing	Column 4 Establishment cost <sup>9</sup>
No future infrastructure identified			
<b>TOTAL</b>			

Note—8. Table SC5.2.1 Column 4 The establishment cost is expressed in current cost terms as at the base date.

Note—9. Table SC5.2.2 Column 4 The establishment cost is expressed in current cost terms as at the base date.

**Table SC5.2.3—Stormwater network schedule of works**

<b>Column 1 Map reference</b>	<b>Column 2 Trunk infrastructure</b>	<b>Column 3 Estimated timing</b>	<b>Column 4 Establishment cost<sup>10</sup></b>
	No future infrastructure identified		
<b>TOTAL</b>			

**Table SC5.2.4—Transport network schedule of works**

<b>Column 1 Map reference</b>	<b>Column 2 Trunk infrastructure</b>	<b>Column 3 Estimated timing</b>	<b>Column 4 Establishment cost<sup>11</sup></b>
FI_01	Roundabout - Ivory/Kidd/Kelly/Five Ways Roads	2019	\$215,000
TRF_01	Road/Bridge Upgrade - Giddy Road	2021	\$913,750
<b>TOTAL</b>			<b>\$1,128,750</b>

**Table SC5.2.5—Parks and land for community facilities schedule of works**

<b>Column 1 Map reference</b>	<b>Column 2 Trunk infrastructure</b>	<b>Column 3 Estimated timing</b>	<b>Column 4 Establishment cost<sup>12</sup></b>
FP_01	Future Local Recreation Park – Ayr	2031	\$573,000
FP_02	Upgrade Giru Skate Park	2018	\$0
FP_03	Upgrade Home Hill Skate Park	2018	\$0
FP_04	Upgrade Plantation Park - Adventure Playground	2018	\$0
<b>TOTAL</b>			<b>\$573,000</b>

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Note—10. Table SC5.2.3 Column 4 The establishment cost is expressed in current cost terms as at the base date.

Note—11. Table SC5.2.4 Column 4 The establishment cost is expressed in current cost terms as at the base date.

Note—12. Table SC5.2.5 Column 4 The establishment cost is expressed in current cost terms as at the base date.

## **SC5.2 Local government infrastructure plan maps**

Local Government Infrastructure Plan Map LGIP-PIA 001-003 Priority Infrastructure Area Map

Local Government Infrastructure Plan Map LGIP-WS 001-006 Plans for Trunk Infrastructure – Water supply

Local Government Infrastructure Plan Map LGIP-SEW 001-003 Plans for Trunk Infrastructure – Sewerage network

Local Government Infrastructure Plan Map LGIP-SW 001-003 Plans for Trunk Infrastructure – Stormwater

Local Government Infrastructure Plan Map LGIP-TR 001-004 Plans for Trunk Infrastructure – Transport

Local Government Infrastructure Plan Map LGIP-PLCF 001-004 Plans for Trunk Infrastructure – Parks & Land for Community Facilities