

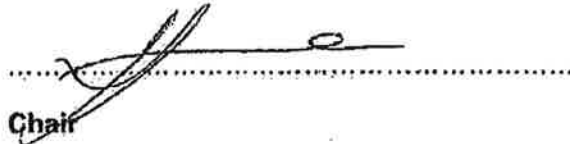
Singleton Local Emergency Management Plan

Part 1 – Administration

Authority

The Singleton Local Emergency Management Plan (EMPLAN) has been prepared by the Singleton Local Emergency Management Committee in compliance with the State Emergency & Rescue Management Act 1989.

APPROVED



Chair

Singleton Local Emergency Management Committee

Dated: 23/5/18

ENDORSED

M Mitchell APM
Assistant Commissioner
Northern Region



Chair

Hunter Central Coast Regional Emergency Management Committee

Dated: 1/8/18

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Purpose

The Singleton Emergency Management Plan details arrangements for, prevention of, preparation for, response to and recovery from emergencies within the Local Government Area covered by this plan.

It encompasses arrangements for:

- emergencies controlled by combat agencies;
- emergencies controlled by combat agencies and supported by the Local Emergency Operations Controller (LEOCON);
- emergency operations for which there is no combat agency; and
- circumstances where a combat agency has passed control to the LEOCON.

Objectives

The objectives of this plan are to:

- define participating organisation and Functional Area roles and responsibilities in preparation for, response to and recovery from emergencies;
- set out the control, co-ordination and liaison arrangements at the Local level;
- detail activation and alerting arrangements for involved agencies; and
- detail arrangements for the acquisition and co-ordination of resources.

Scope

The plan describes the arrangements at a Local level to prevent, prepare for, respond to and recover from emergencies and also provides policy direction for the preparation of Sub Plans and Supporting Plans:

- Arrangements detailed in this plan are based on the assumption that the resources upon which the plan relies are available when required; and
- The effectiveness of arrangements detailed in this plan are dependent upon all involved agencies preparing, testing and maintaining appropriate internal instructions, and/or standing operating procedures.

Principles

The following principles are applied in this plan:

- a) The Emergency Risk Management (ERM) process is to be used as the basis for emergency planning in New South Wales. This methodical approach to the planning process is to be applied by Emergency Management Committees at all levels.
- b) Responsibility for preparation, response and recovery rests initially at Local level. If Local agencies and available resources are not sufficient they are augmented by those at Regional level.
- c) Control of emergency response and recovery operations is conducted at the lowest effective level.
- d) Agencies may deploy their own resources from their own service from outside the affected Local area or Region if they are needed.
- e) The Local Emergency Operations Controller (LEOCON) is responsible, when requested by a combat agency, to co-ordinate the provision of resources support. EOCs would not normally assume control from a combat agency unless the situation can no longer be contained. Where necessary, this should only be done after consultation with the Regional Emergency Operations Controller (REOCON) and agreement of the combat agency and the appropriate level of control.
- f) Emergency preparation, response and recovery operations should be conducted with all agencies carrying out their normal functions wherever possible.
- g) Prevention measures remain the responsibility of authorities/agencies charged by statute with the responsibility.

Test and Review Process

The Singleton Local Emergency Management Committee (LEMC) will review this Plan every three (3) years, or following any:

- activation of the Plan in response to an emergency;
- legislative changes affecting the Plan; and
- exercises conducted to test all or part of the Plan.

Part 2 – Community Context

Annexure A – Community Profile

General

Singleton is a vibrant and diverse regional town, located at the centre of the Hunter Valley, 200km North West of Sydney, 75km from Newcastle via the Hunter Expressway and covers an area of 4,893 sq km's. With a population nearing 24,000, the local economy of Singleton is supported by a diverse industrial base, skilled labour force and industry access to vital infrastructure.

It includes the township of Singleton, as well as 74 localities. Some of these localities include Branxton, Broke, Bulga, Camberwell, Elderslie, Stanhope, Lambs Valley, Glendonbrook, Glennies Creek, Hermitage Road, Jerrys Plains, Kirkton/Lower Belford, Mirannie, Mitchells Flat, Mount Olive, Putty, Warkworth, Wattle Ponds and Whittingham. Appendix 9 shows a map of the localities and boundaries within the LGA boundaries.

Singleton is located in the heart of the Hunter Valley on the junction of the New England and Golden Highways and at the conclusion of the Hunter Expressway. As the gateway between the Upper and Lower Hunter, the newly opened Hunter Expressway has made Singleton even more accessible to the Port and coastal attractions of Newcastle, as well as an easy 2.5 hours' drive to Sydney. Rail and air transport links allow convenient access to major cities on the eastern seaboard and beyond.

The Wollemi and Yengo National Parks and Putty State Forest is to the South West of the LGA and Mount Royal National Park to the North. Situated at the foothills of the World Heritage Mount Royal National Park, Lake St Clair was formed in 1983 as a result of the construction of the Glennies Creek Dam. The dam has a capacity of 283,000 megalitres, about half that of Sydney Harbour. Glennies Creek Dam is a curved rock-fill embankment wall with a concrete slab on the upstream face. The wall is 535 metres long and 67 metres high.

The site is managed by Council by way of a Licence agreement with State Water for an area of about 135 hectares. Of this approximately 45 hectares is above the full water level and is useable for local based activities. About half of this is used for the Lake St Clair Recreation Ground. The water from the dam supplies irrigators in the region as well as potable water for the township of Singleton and forms part of the Hunter-Central Rivers Catchment. Lake St Clair has significance to both the Singleton LGA, and the Hunter region.

Landform, Topography and Heritage

Singleton, Muswellbrook and the Upper Hunter LGAs feature broad valley floor areas and alluvial soils with a long history of cropping and grazing.

The flood plain is generally comprised of cleared open grassland typical of regular cultivation and flora is generally non-native. Steeper topography north of Singleton contains a number of Endangered Ecological Communities (EECs) comprising primarily Central Hunter

Ironbark-Spotted Gum-Grey Box Forest, Central Hunter Grey Box-Ironbark Woodland and Swamp Oak Floodplain Forest. These EECs and other remnant vegetation also provide habitat for various threatened flora, avifauna, chiroptera and other mammals.

Numerous indigenous heritage artefacts have been recorded within the steeper topography north of Singleton. European heritage items including heritage listed buildings and cemeteries are also recorded in Singleton and on the Hunter River flood plain.

The Hunter River and its associated flood plains encircles the town of Singleton passing on the northern side. Singleton Flood Risk Management Study confirms that the town is affected by high hazard floodway's. Planning is ongoing for a road bypass which could provide opportunities to enhance current flood risk management by improving on existing evacuation routes and options.

Climate

Below is a table of Climate Statistics relating to Singleton from the Bureau of Meteorology.

Monthly Climate Statistics for 'SINGLETON STP' [061397]

Created on [31 Jan 2018 15:14:06 GMT+00:00]

061397 SINGLETON STP

Commenced: 2002

Last Record: 2018

Latitude: 32.59 Degrees South

Longitude: 151.17 Degrees East

Elevation: 45 m

State: NSW

Statistic Element	Annual
Mean maximum temperature (Degrees C) for years 2002 to 2017	25.1
Highest temperature (Degrees C) for years 2002 to 2017	47.2
Lowest maximum temperature (Degrees C) for years 2002 to 2017	11.3
Mean minimum temperature (Degrees C) for years 2002 to 2017	10.8
Lowest temperature (Degrees C) for years 2002 to 2017	-4.2
Highest minimum temperature (Degrees C) for years 2002 to 2017	28.2
Mean rainfall (mm) for years 2002 to 2018	658.6
Highest rainfall (mm) for years 2002 to 2018	899.3
Date of Highest rainfall for years 2002 to 2018	2015
Lowest rainfall (mm) for years 2002 to 2018	423.7
Date of Lowest rainfall for years 2002 to 2018	2006

The increasing global heat associated with climate change is now influencing all extreme weather events such as heatwaves, bushfires and coastal flooding are occurring more frequently and becoming more damaging. (Climate Council, 2017)

Locally, it has been reported there are regional impacts of climate change and variability on agricultural production including: increased risk of summer storms, less reliable water supplies, higher humidity, and a more variable temperature range (DPI, 2013). As well as this

the region is subjected to increased fire severity and prolonged fire seasons. (Climate Council, 2017)

Those climatic changes are predicted to cause increased heat stress in livestock, an increase in disease and pest outbreaks in hay and grape production and a downgrading of hay and grape quality. (DPI, 2013)

However, a warming climate may also increase fodder production in the region, particularly in the higher rainfall areas important for the agricultural industries that involve grazing and hay production. (DPI, 2013)

A key advantage of the region is the investment in irrigation which can provide an important buffer capacity against unseasonal conditions that is particularly important for the wine industry. As well, many farms have invested in on farm water storages to capture peak flows and have selected drought tolerant crops such as lucerne hay that can tolerate drier conditions. (DPI, 2013)

Flooding

Singleton is located on either side of the Hunter River and associated floodplain. The contributing catchment area to Singleton is some 16,000 square kilometres.

The original settlement of Singleton is on the floodplain of the Hunter River, whilst newer development is located on flood free land north of the Hunter River Floodplain. The town of Singleton is situated on relatively flat land while steeper topography lies to the north. The Hunter River divides the town and its flood plains encompass the Central Business District (CBD) forming a key constraint to development in the area.

Singleton Council is commencing to conduct another Floodplain Risk Management Study in 2018, due for completion in 2020, however flood studies have been undertaken over previous years. These have included;

- WBM, "Singleton Flood Study". 2002-2007
- Floodplain Risk Management Study prepared by Paterson Consultants Pty Ltd, "Singleton Council, Singleton Floodplain Risk Management Study.

The Singleton Floodplain Risk Management Study (Paterson Consultants Pty Ltd, 2011) shows that:

- Singleton is isolated in the 100-year event and submerged in the Probable Maximum Flood
- The New England Highway is cut to the south in events smaller than the 10-year event
- New England Highway is cut to the north in the 20 year (approximately) event
- Approximately 6,000 people require evacuation during a flood emergency with no road evacuation route for storm events greater than the 50-year event

The 2011 Flood Plain Risk Management Study noted that flood levels at Singleton are measured on the Hunter River at Dunolly Bridge to the north of Singleton on Dunolly Road, south west of the New England Highway Hunter River crossing. As flood waters rise they are initially contained within the Hunter River channel. However, on reaching 13.0m at Dunolly

Bridge, the flood waters break out and spread over the floodplain, north of Dunolly across Darlington Road and across the Putty Road towards Whittingham.

“Thus, significant increases in the total flood discharge in the Hunter River can occur, after the break-outs begin, which produce little increase in flood levels at the Dunolly gauge” (Sept 2011, Paterson Consultants Pty Limited)

In relation to the aforementioned proposed bypass as flooding is a significant issue for the town of Singleton, any effect resulting in increased flood levels due to road location, filling operations, and restriction of waterway area at bridge and culvert locations as part of the bypass will need to be considered in the designs.

The 2011 Flood Plain Risk Management Study inclusive of key recommendations are available on the Singleton Council website.

Hazard and Risk in Singleton LGA – Volume 2 of the Singleton LGA Flood Plan highlights specific risk areas subjected to flooding. These include, Singleton (Combo and Redbourneberry), Dunolly, Glenridding, Bulga and Broke

Land Use and Economy

The output generated by the Singleton economy is estimated at \$9.5 billion annually, with an annual Gross Regional Product of \$4.2 billion, Regional Exports from mining of \$5.8 billion and manufacturing \$343 million. Of the 15,521 jobs in the LGA, the mining industry employs the largest number of locals with 6094 employees (39%).

Singleton is the heart of the internationally renowned Hunter Valley Wine Country that attracts more than 1.2 million tourist visitors per year.

Singleton local government area receives 406,000 overnight and day trip visitors per year which in itself is a consideration for emergency management.

The visitor economy in Singleton supports 700 jobs with an output of \$133 million annually.

An economic impact assessment of the tourism and wine industries in Hunter Valley Wine Country found total output from tourism spending and industry investments in 2011 was \$520.6 million.

Coal mining in the Singleton local government area contributes more than half a billion dollars in mining royalties each year and is the major industry and employer.

Singleton is home to the Lone Pine Barracks and the School of Infantry. The School of Infantry is responsible for the arms training of all recruits into the Australian Army.

The base has approximately 500 permanent employees and up to 2,000 recruits pass through the school each year. The army has assisted local agencies on many occasions to assist during and following events.

Singleton has access to eight public schools, two private schools, a TAFE NSW Campus and a community college.

It also has generous sporting amenities, many shopping options and modern public amenities.

The healthy economy of Singleton is supported by a diverse range of other industries including viticulture, education, engineering, fabrication, trades services, tourism, hospitality, mining, defence, agriculture and retail. The power stations located adjoining LGA's supply up to 40 per cent of the state's power needs. In terms of agriculture the following indicates an active rural and agricultural base.

Industry of Employment – Proportion of Employed Persons % (2011 Census Data)

Agriculture, Forestry and Fishing (%)	3.9
Mining (%)	24.6
Manufacturing (%)	7
Electricity, Gas, Water & Waste Services (%)	2.3
Construction (%)	6.2
Wholesale trade (%)	3
Retail trade (%)	8.2
Accommodation and food services (%)	6.6
Transport, Postal and Warehousing (%)	3.2
Information media and telecommunications (%)	0.5
Financial and insurance services (%)	1.1
Rental, Hiring, & Real Estate Services (%)	1.6
Professional Scientific & Technical Services (%)	3.6
Administrative and support services (%)	3.5
Public administration and safety (%)	5.3
Education and training (%)	5
Health care and social assistance (%)	6.4
Arts and recreation services (%)	0.5
Other services (%)	5.2

Mining Operations

Coal mining and related industries have played a significant role in Singleton's history since the late 1800s. Singleton's local economy is predominantly driven by mining. Mining accounts for about one fifth of our resident labour force, directly employing about 2,800 workers. Many employees commute to Singleton every day to work in one of our 20 coal mines or their associated support industries.

The Department of Planning and Environment's Compliance team works across NSW to ensure projects, such as mines, industrial sites, major developments and infrastructure, are meeting the strict conditions included in their approvals. The team works closely with the community, local councils and other state and federal government agencies to investigate potential breaches and carry out enforcement where necessary. Enforcement can range from negotiating fixes, issuing penalty notices and in serious cases, criminal prosecutions.

Coal mining, particularly underground mining, is a hazardous industry. Some of these mines may have over 100 workers underground at any one time at depths of hundreds of metres below the surface, with workers travelling many kilometres of underground roadways from the mine entry point to reach the working areas within the mine. Most coal mines are in a continual process of managing methane or carbon dioxide emissions from the coal being extracted, with workers in confined working areas using various large diesel and electric powered equipment and vehicles. The NSW Resources Regulator from the Department of Planning & Environment is the regulator for health, safety and various mining laws that apply to mines. Unfortunately, the lessons from mining disasters around the world and in Australia show the impact such events can have on local communities and the mining industry.

Population and People

Population by Age Group (2016 Census Data)

Persons - 0-4 years	1619
Persons - 5-9 years	1841
Persons - 10-14 years	1602
Persons - 15-19 years	1742
Persons - 20-24 years	1597
Persons - 25-29 years	1538
Persons - 30-34 years	1518
Persons - 35-39 years	1461
Persons - 40-44 years	1679
Persons - 45-49 years	1723
Persons - 50-54 years	1668
Persons - 55-59 years	1527
Persons - 60-64 years	1207
Persons - 65-69 years	1020
Persons - 70-74 years	683
Persons - 75-79 years	486
Persons - 80-84 years	345
Persons - 85 and over	339
Persons - Total	23595

Population by Language Spoken at Home (%) (2016 Census Data)

Speaks English Only at Home	96.9
Speaks a Language Other Than English at Home - Proportion of total population	3.1

Methods of Travel to Work (no.) (2011 Census Data)

Used one method - Train or tram	11
Used one method - Bus	30
Used one method - Car (as driver or passenger)	8390
Used one method - Motor bike/scooter	87
Used one method - Bicycle	33
Used one method - Other (inc. taxis)	85
Used one method - Walked only	395
Total - used more than one method (no.)	109
Other - Worked from home	489
Other - Employed but did not go to work	1401
Other - Method of travel not stated	215
Total employed	11394

Home Ownership & Rentals (%)

Owned Outright	28.6
Owned with Mortgage	35.3
Rented	25.7
Being occupied rent free	1.1

Transport Routes and Facilities

Background

The New England Highway (NEH) forms part of the Sydney-Brisbane Corridor of the National Land Transport Network (NLTN). Roads identified as part of the NLTN are recognised for their strategic national importance to national and economic growth, development and connectivity. The NLTN is defined in the *Auslink (National Land Transport) Act National Land Transport Network Determination 2005 (No.1)*.

The New England Highway (NEH) is a State Road and is classified as an arterial road according to the Austroads Guide to Traffic Management (2009), with a peak average annual daily traffic (AADT) volume of 27,000 (15,000 northbound and 12,000 southbound) vehicles per day (vpd) within Singleton.

Within Singleton, the New England Highway forms the spine of the traffic network, providing direct access to the town centre and strategic trips through Singleton heading to Muswellbrook to the north, and Branxton to the south-east.

The section of the NEH through Singleton serves diverse purposes. Key road users include:

- Town centre shoppers and workers
- Singleton and Singleton Heights residents
- Mining staff driving to a number of mines located around Singleton
- Freight and construction vehicles servicing mines around Singleton
- Commercial and general public drivers using the New England Highway through Singleton to access locations along the Sydney-Brisbane corridor.

The New England Highway is connected to the Golden Highway and Putty Road. The Golden Highway is a rural highway that forms a link between Dubbo and Newcastle, which is used by approximately 5,000 vehicles per day southwest of Singleton. Several mines including Wambo Mine and Mount Thorley Warkworth are located along the Golden Highway and are easily accessible from Singleton.

Putty Road forms a link between the Golden Highway and the New England Highway and then onto Windsor to the south west of Singleton. The road is used by approximately 7,000 vehicles per day.

Growth rates in the study have varied significantly over the last ten years. From 2001 to 2007, the region experienced an average growth of 1-2 percent per annum. From 2007 to 2015, however, growth rates have exceeded these baselines. An increase of 6,000-7,000 vehicles occurred across the New England Highway through Singleton from 2007 to 2015. For the count site at Black Creek and Foy Brook Bridge, this was an increase of 49% and 63%, respectively over 2001 traffic.

Mining growth in the area is strongly correlated with traffic growth. Several major mining sites expanded their operations, and one new mine was opened to the northwest of Singleton over the last five years, which correlates with the increase of traffic. This shows that the 1-2% per

annum growth rate is typical for Singleton, and that the major growth is attributable to mining expansion.

The Origin Destination survey indicated that 20% to 40% of vehicles using the New England Highway performed bypass-like trips. 20% to 40% of vehicles using the New England Highway south of Singleton were found in the north during the survey time, and vice versa.

Key Transport Issues

1. Singleton By-Pass

In November 2014, NSW Roads and Maritime Services (RMS) started a route options assessment to identify a preferred corridor for the future bypass and secure the corridor in Singleton Council's Local Environmental Plan (LEP). The assessment identified options based on planning, environmental, engineering, socio-economic and existing infrastructure constraints in and around the town.

The key objectives of the by-pass project are to:

- Improve travel reliability on the New England Highway through Singleton, particularly for road freight supporting the Upper Hunter and the North West New England region
- Improve the town centre by removing freight traffic
- Improve road safety for through and local traffic in Singleton
- Provide best value for money
- Provide clarity for Singleton Council by including the corridor in the LEP
- Potentially provide improved flood amenity and/or evacuation routes for Singleton.

The preferred route involves building a new 8.9 kilometre long section of highway bypassing Singleton to the west as shown in Figure 2.1.

The proposed bypass departs the New England Highway near Newington Lane, heads west over the Main Northern Railway line and then across the floodplain, over Putty Road. It continues over the Hunter River, west of the town, before crossing the New England Highway west of Gowrie Gates and re-joining the highway north of McDougalls Hill. This route was referred to as Option B in the 2015 route option display and throughout this report.

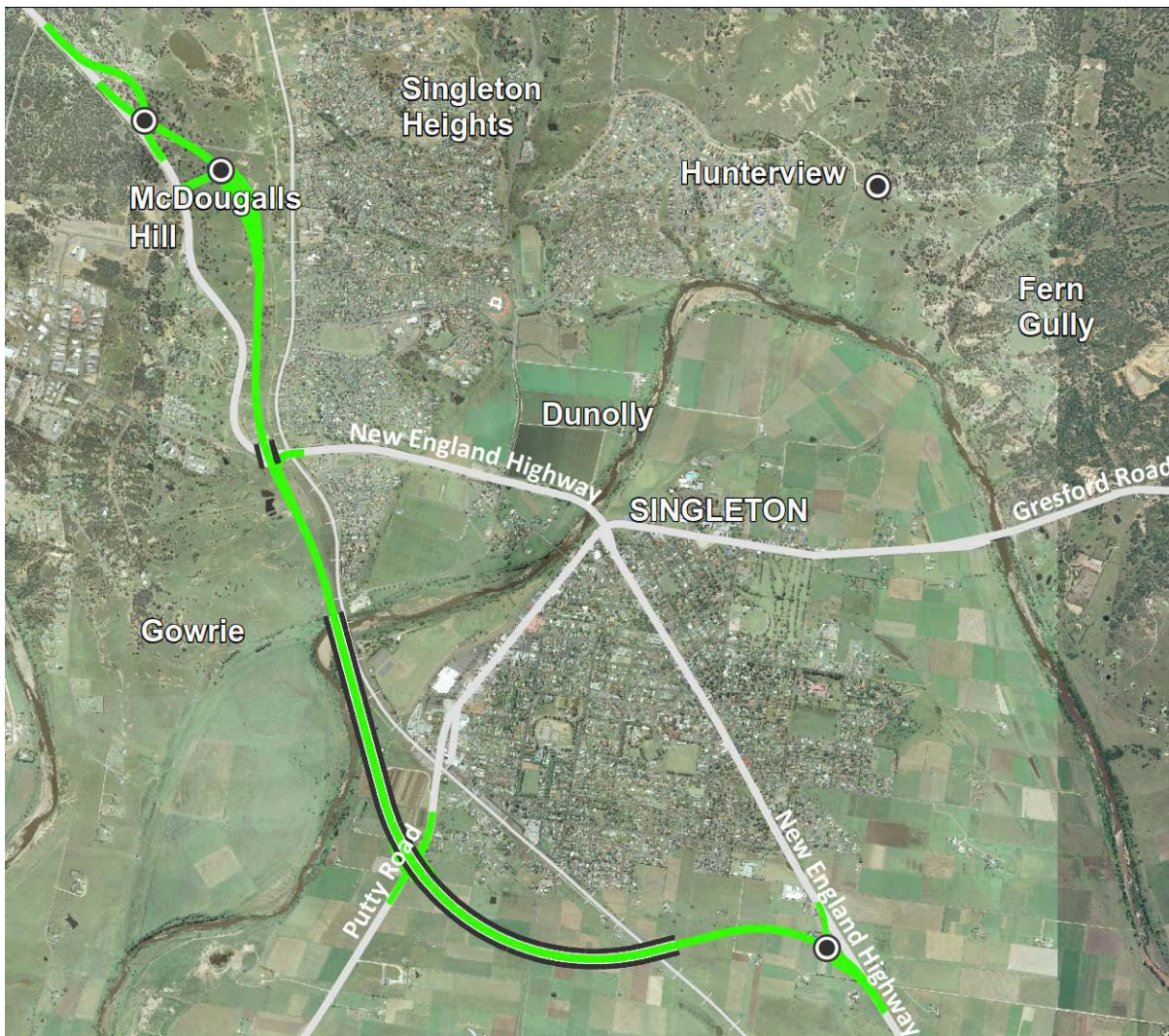


Fig 2.1 – Singleton By-Pass Option B

2. NEH – Upgrade between Belford and Golden Highway

The Golden Highway connects the New England Highway at Whittingham with Dubbo. These roads are used by heavy vehicles servicing industries in the Hunter Valley and Central West to access Newcastle. Around 22,000 vehicles use the New England Highway between Belford and the Golden Highway each day.

This section of the highway is currently two lanes westbound and one lane eastbound. It has a history of crashes, particularly near the Golden Highway intersection.

In May 2015 the NSW Government announced the preferred option for the proposed upgrade of the section of the NEH between Belford and Golden Highway.

Key features include:

- widening the New England Highway for around 3.2 kilometres to provide a divided road with two travel lanes in each direction between Belford and the Golden Highway

- replacing the existing right turn movement from the Golden Highway to the New England Highway with a right turn flyover
- removing the Whittingham rest area near the New England Highway and Golden Highway intersection

The preferred option for the upgrade was displayed by the RMS for comment in May 2015. Please see Fig 2.2 below showing proposed layouts for the flyover and overtaking lanes.

The timing of construction is not yet confirmed.



Fig 2.2 – Schematic diagrams showing Right turn flyover from the Golden Highway to the New England Highway and New England Highway, new divided road heading east towards Maitland

3. New England Highway and rail bridge upgrade at Gowrie Gates

Roads and Maritime Services together with the Australian Rail Track Corporation (ARTC) are progressing plans for an upgrade of the Singleton railway underpass refer Fig 2.3. The widened underpass would improve road and rail freight access through the Hunter Valley.



Fig 2.3 - Rail bridge over the New England Highway, Singleton

Roads and Maritime, together with ARTC, are progressing plans to replace the rail bridge to provide increased horizontal clearance to accommodate two travel lanes with wide sealed shoulders and facilities for pedestrians and cyclists.

The upgrade will provide for continued light and heavy vehicle access to Singleton. Freight access would still be required if a future bypass of the town is built.

Key features include:

- New rail bridge over the New England Highway providing a minimum 5.3 metre vertical clearance
- Rebuilding and widening about 260 metres of the New England Highway to provide two 3.5 metre lanes
- Providing three metre shoulders along the highway through this section to bring the road up to current road safety standards
- Relaying up to 200 metres of rail track.

Key Project objectives include:

- Improve access and travel times for over-dimension freight movements on the New England Highway
- Minimise disruptions to freight movements on the highway and the movement of bulk coal on the Main Northern Line
- Improve road safety for all road users.

ARTC and RMS will continue to keep stakeholders and the community informed as the project progresses.

Annexure B – Hazards and Risks Summary

A Local Emergency Risk Management (ERM) Study has been undertaken by the Singleton Local Emergency Management Committee identifying the following hazards as having risk of causing loss of life, property, utilities, services and/or the community's ability to function within its normal capacity. These hazards have been identified as having the potential to create an emergency. The Singleton Emergency Risk Management Study should be referenced to identify the complete list of consequences and risk descriptions.

Hazard	Risk Description	Likelihood Rating	Consequence Rating	Risk Priority	Combat / Responsible Agency
Agricultural Disease (Animal/Animal & Plant/Plant)	An agriculture/horticulture incident that results, or has potential to result, in the spread of a communicable disease or infestation.	Possible	Major	High	Department of Primary Industries
Bridge Collapse	Failure of a major bridge structure with or without warning owing to structural failure or as a result of external/ internal events or other hazards/ incidents.	Possible	Major	High	LEOCON/RMS
Building Collapse	Collapse of building owing to structural failure or impact from external/internal event of other hazards /incidents.	Possible	Major	Medium	FRNSW (USAR) LEOCON
Communicable Disease (Human/Animal)	Pandemic illness that affects, or has potential to affect, large portions of the human or animal population	Unlikely	Major	Medium	Department of Health

Hazard	Risk Description	Likelihood Rating	Consequence Rating	Risk Priority	Combat / Responsible Agency
Dam Failure	A dam is compromised that results in localised or widespread flooding. Either flooding, sunny day failure or earthquake failure.	Unlikely	Catastrophic	High	NSW SES
Earthquake	Earthquake of significant strength that results in localised or widespread damage.	Rare	Catastrophic	High	LEOCON
Fire (Bush or Grass)	Major fires in areas of bush or grasslands.	Almost Certain	Major	Extreme	NSW RFS
Fire (Industrial)	Serious industrial fire in office complexes and/or warehouses within industrial estates.	Possible	Major	High	FRNSW
Fire (Commercial)	Serious commercial fires in shopping centres, aged persons units, nursing homes and hospitals.	Possible	Major	High	FRNSW
Fire (Residential)	Serious residential fire in medium/high rise apartments.	Unlikely	Major	Medium	FRNSW
Flood (Flash)	Heavy rainfall causes excessive localised flooding with minimal warning time	Likely	Major	Extreme	NSW SES
Flood (Riverine)	River flows exceed the capacity of normal river systems resulting in flood waters escaping and inundating river plains	Almost Certain	Catastrophic	Extreme	NSW SES

Hazard	Risk Description	Likelihood Rating	Consequence Rating	Risk Priority	Combat / Responsible Agency
Hazardous Release	Hazardous material released as a result of an incident or accident.	Possible	Moderate	High	FRNSW
Heatwave	A sequence of abnormally hot conditions having the potential to affect a community adversely.	Likely	Major	Extreme	SEOCON
Landslip	Landslip/landslide resulting in localised or widespread damage.	Unlikely	Minor	Low	LEOCON
Storm	Severe storm with accompanying lightning, hail, wind, and/or rain that causes severe damage and/or localised flooding.(includes tornado).	Likely	Major	Extreme	NSW SES
Terrorist	The unlawful use or threatened use of force or violence against individuals or property in an attempt to coerce or intimidate governments or societies to achieve political, religious or ideological objectives	Rare	Catastrophic	Medium	LEOCON
Transport Emergency (Air)	Aircraft crashes in LGA resulting in large number of fatalities, injuries and/or damage to property.	Rare	Catastrophic	Medium	LEOCON

Hazard	Risk Description	Likelihood Rating	Consequence Rating	Risk Priority	Combat / Responsible Agency
Transport Emergency (Roads / Highways)	A major vehicle accident that disrupts one or more major transport routes that can result in risk to people trapped in traffic jams, restrict supply routes and/or protracted loss of access to or from the area.	Almost Certain	Major	High	LEOCON
Tsunami	A tsunami wave of magnitude that presents a risk to land and marine elements.	Rare	Minor	Low	NSW SES
Utilities Failure	Major failure of essential utility for unreasonable periods of time as a result of a natural or man-made occurrence.	Possible	Major	High	LEOCON
Mine Emergency	An emergency due to an actual or imminent occurrence (such as fire, explosion, accident or flooding) that has resulted in the death of, the injury to, a person or is endangering or is threatening to endanger the life or physical well-being of a person at a mine.	Possible	Major	High	LEOCON

Annexure C – Local Sub Plans, Supporting Plans and Policies

Responsibility for the preparation and maintenance of appropriate sub and supporting plans rest with the relevant Combat Agency Controller or the relevant Functional Area Coordinator.

The sub/supporting plans are developed in consultation with the Singleton LEMC and the community.

The plans listed below are supplementary to this EMPLAN. The sub/supporting plans have been endorsed by the LEMC and are determined as compliant and complimentary to the arrangements listed in this EMPLAN.

These plans are retained by the LEMO on behalf of the LEMC and public release versions are available on the Council Website.

Plan/Policy	Purpose	Combat / Responsible Agency
Drought Management and Emergency Response Plan	To provide guidance as to how Singleton Council will manage its water supply during periods of drought.	Singleton Council
NSW RFS – Operational Management Procedure	To outline the NSW Rural Fire Service's state-wide coordination and preparedness arrangements	NSW Rural Fire Service
Mine Sub Plan	The Mine Sub Plan details the control and coordination arrangements for the preparation for and response to an emergency at a mine including, but not limited to, rescues at a mine.	Local Emergency Operations Controller
Singleton Floodplain Risk Management Plan	To provide Council with a set of measures to improve floodplain management on the Hunter River at Singleton.	Singleton Council
Singleton SES – Local Flood Plan	This Plan covers preparedness measures, the conduct of response operations and the coordination of immediate recovery measures from flooding with the Singleton Council area. It covers operations for all levels of flooding within the Council area	NSW State Emergency Service

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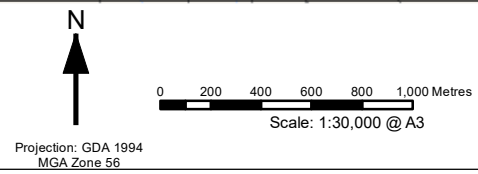
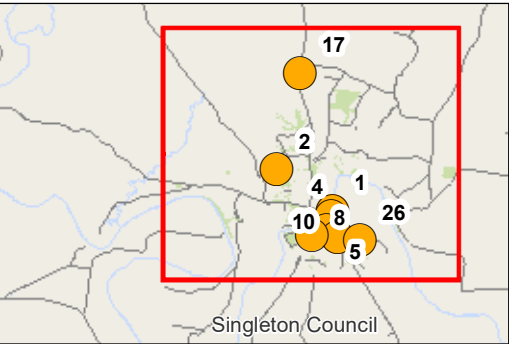
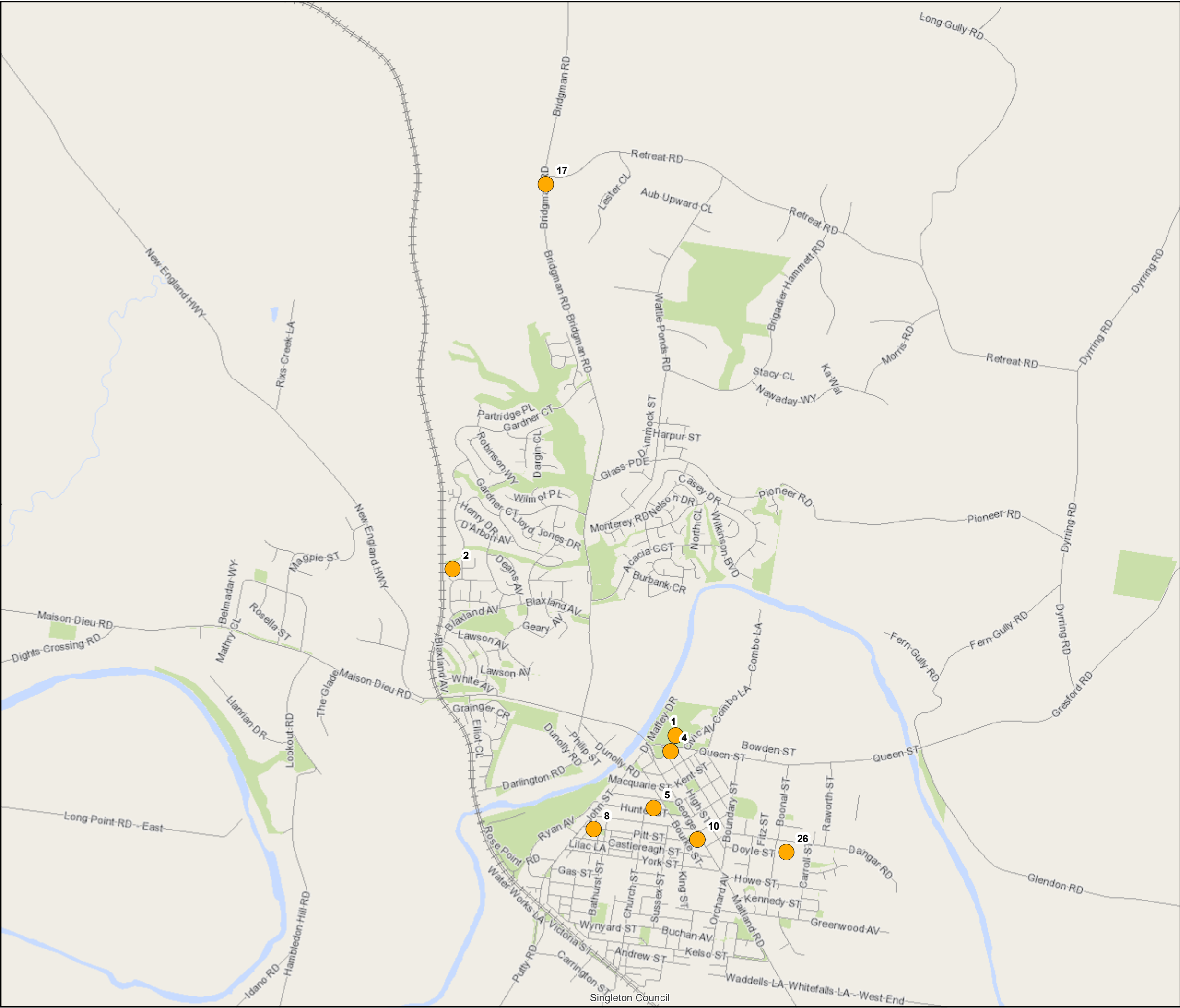


Local Emergency
Management Plan
**KEY RESOURCES
AND LOCATIONS**
Singleton
APPENDIX 1

Legend

 Key Resources and Locations

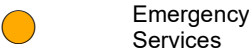
ID	Name
1	Singleton Council Administration Building
2	NSW Mines Rescue - Hunter Valley
4	State Emergency Service
5	Singleton Police Station
8	Singleton Fire Station
10	Singleton Ambulance Station
17	Darlington Rual Fire Brigade
26	Singleton Hospital





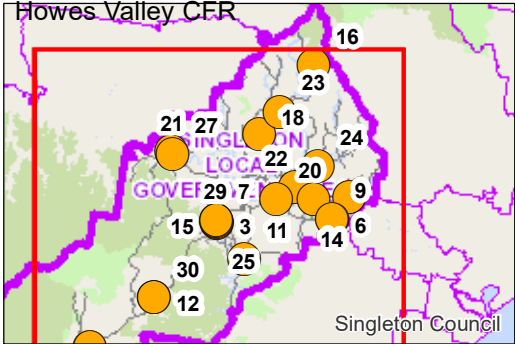
Local Emergency
Management Plan
**KEY RESOURCES
AND LOCATIONS**
LGA
APPENDIX 2

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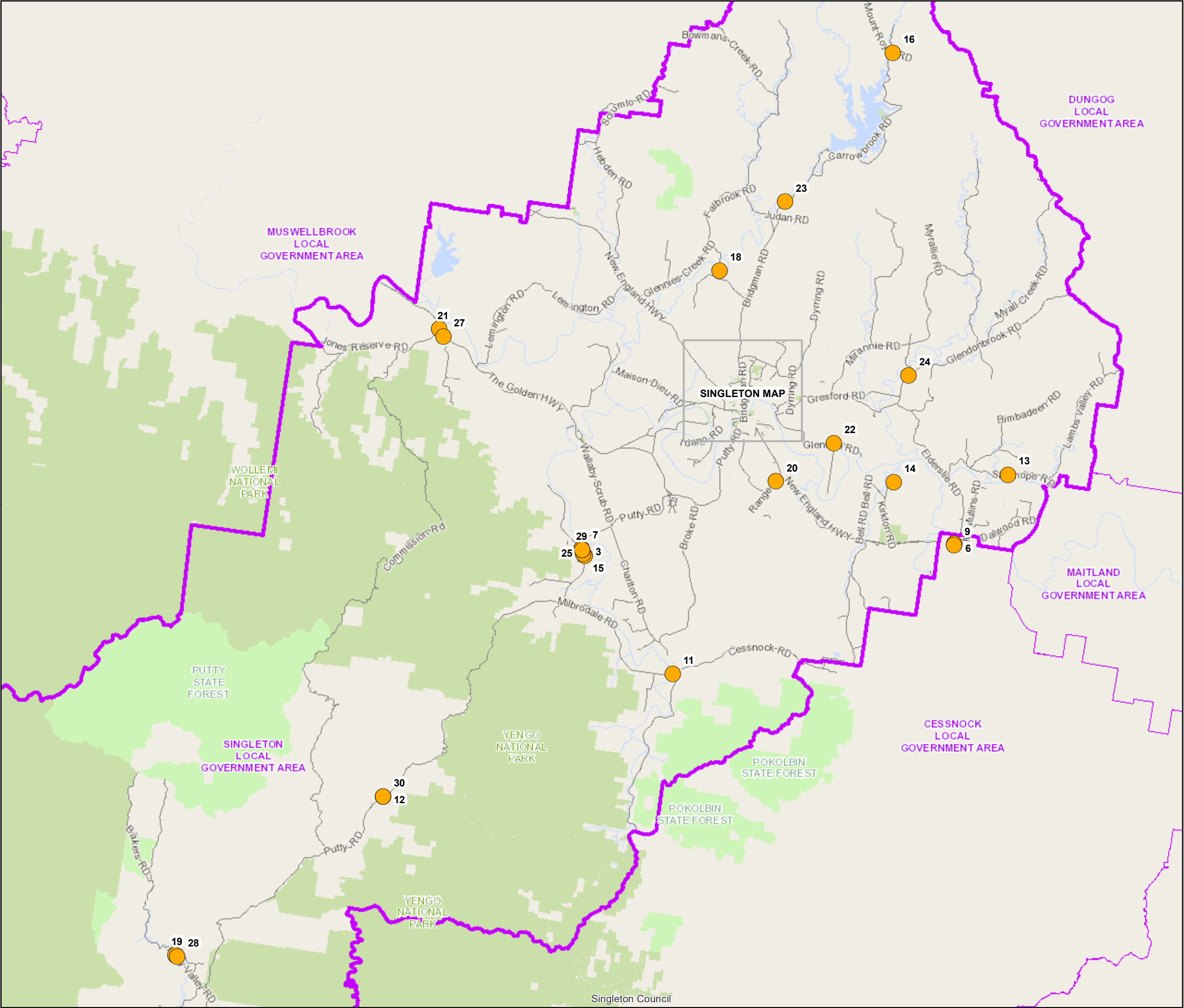
Emergency
Services

- ID Name
- 3 Rural Fire Services Fire Control Centre
 - 6 Branxton Police Station
 - 7 Bulga Police Station
 - 9 Branxton Fire Station
 - 11 Broke Rual Fire Brigade
 - 12 Howes Valley Rual Fire Brigade
 - 13 Stanhope Rual Fire Brigade
 - 14 Belford Bushfire Rual Fire Brigade
 - 15 Bulga Bushfire Rual Fire Brigade
 - 16 Carrowbrook Rual Fire Brigade
 - 18 Glennies Creek Rual Fire Brigade
 - 19 Putty Rual Fire Brigade
 - 20 Whittingham Rual Fire Brigade
 - 21 Jerrys Plains Rual Fire Brigade
 - 22 Scotts Flat Rual Fire Brigade
 - 23 Mount Olive Rual Fire Brigade
 - 24 Glendonbrook Rual Fire Brigade
 - 25 Bulga National Parks and Wildlife Services
 - 27 Jerrys Plains Police Station
 - 28 Putty CFR
 - 29 Bulga CFR
 - 30 Howes Valley CFR



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Scale: 1:300,000 @ A3

Projection: GDA 1994
MGA Zone 56
Document Name: Key Resources and Locations LGA (A3L)
Author:
Document Created By: mtrappel 28/03/2018 8:38:53 AM





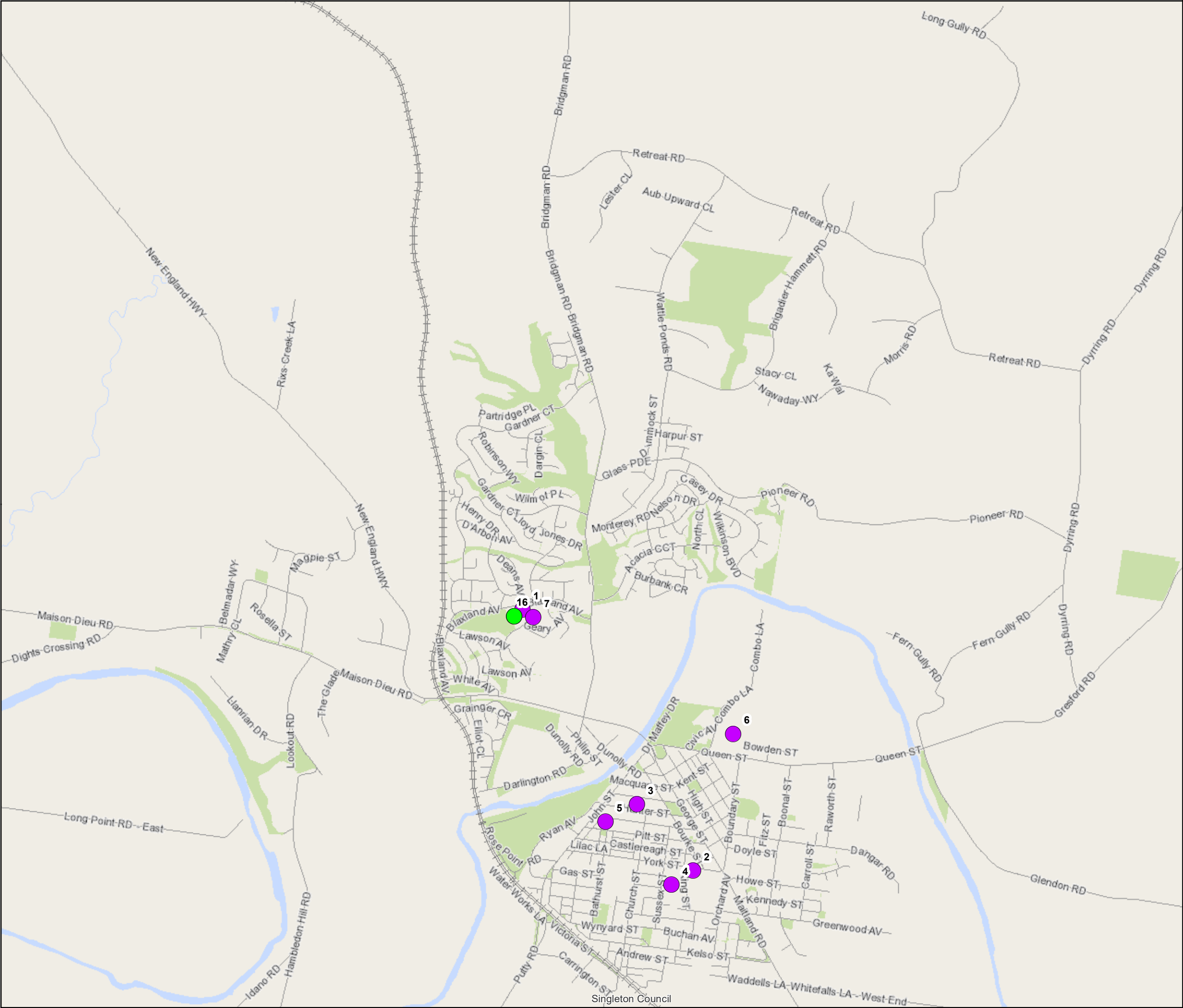
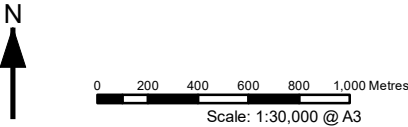
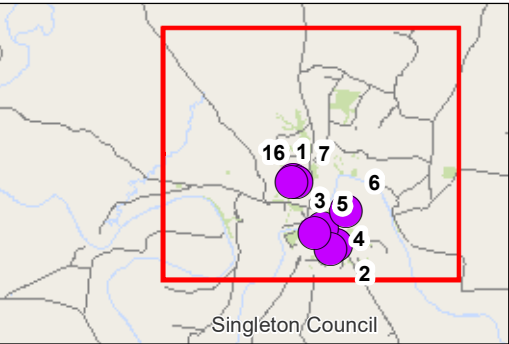
Local Emergency
Management Plan
EVACUATION CENTRES
Singleton
APPENDIX 3

Legend

Evacuation_Centres

- Evacuation_Centres
- Main Evacuation Centre

- ID Name
- 1 Singleton Heights Sports Centre
 - 2 Singleton High School
 - 3 Singleton Public School
 - 4 King Street Public School
 - 5 Singleton Senior Citizens Centre
 - 6 St Catherines Catholic College
 - 7 Singleton Heights Public School
 - 16 Singleton RSL






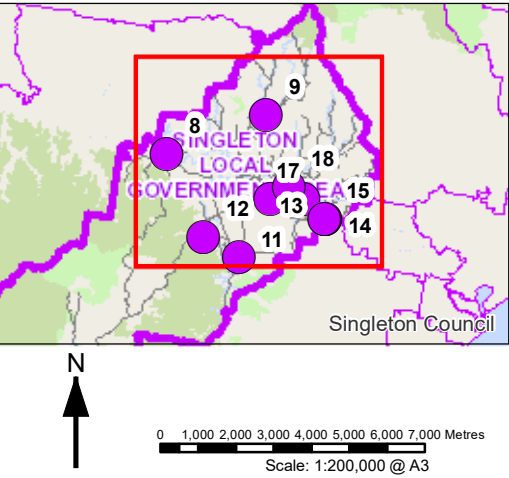
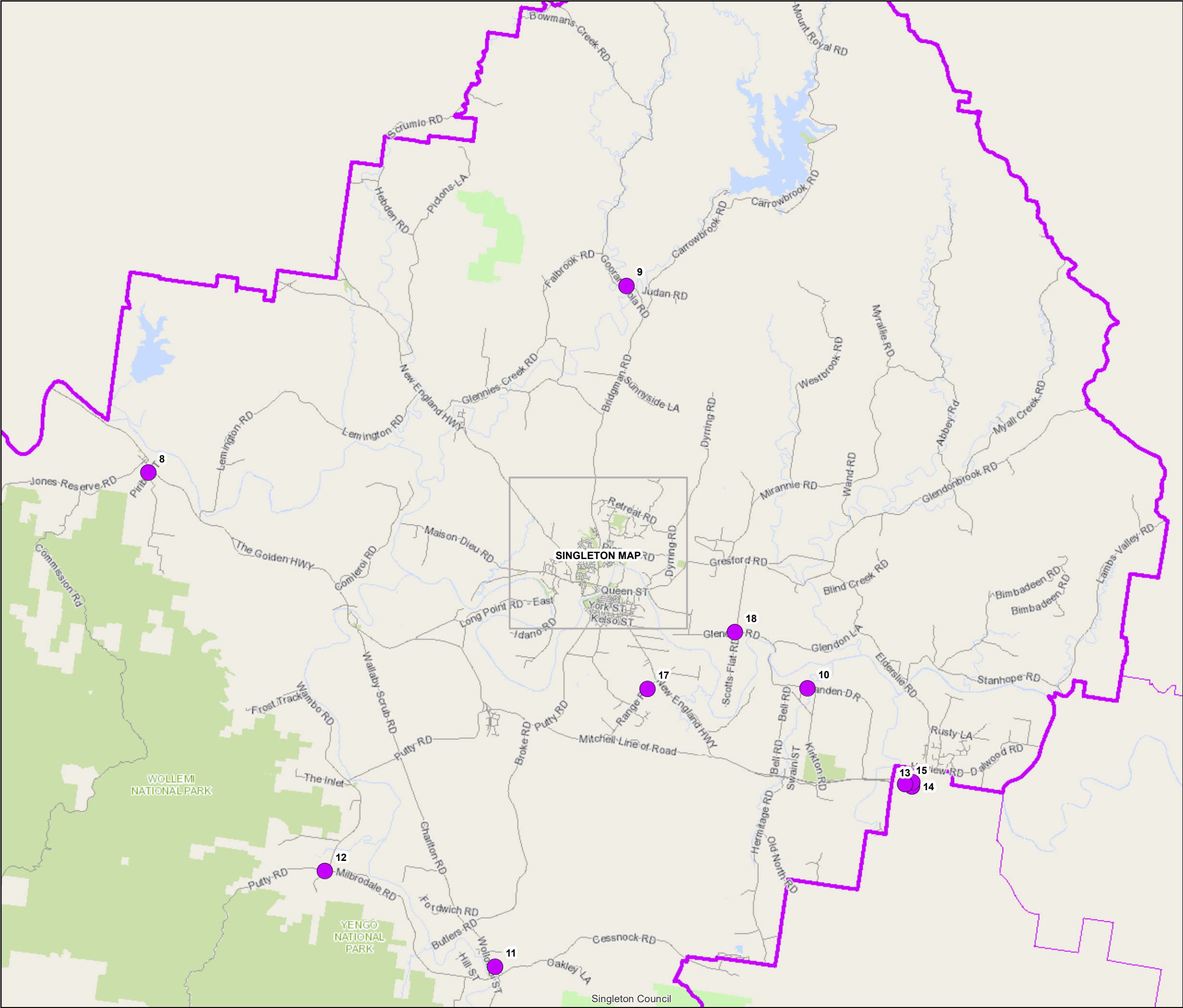
Local Emergency
Management Plan
EVACUATION CENTRES
LGA
APPENDIX 4

Legend

Evacuation_Centres

 Evacuation_Centres

ID	Name
8	Jerry Plains Public School
9	Mt Pleasant Public School
10	Kirkton Public School
11	Broke Public School
12	Milbrodale Public School
13	Branxton Public School
14	Branxton Community Hall
15	Rosary Place Catholic School
17	Whittingham Public Hall
18	Scotts Flat Rural Fire Brigade



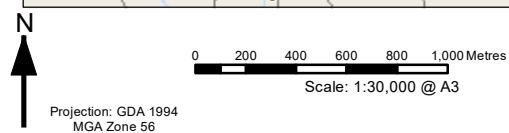
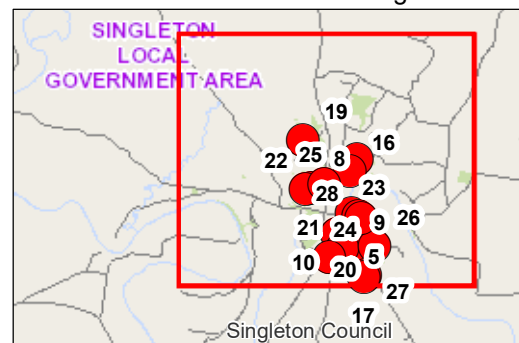
Local Emergency Management Plan VULNERABLE FACILITIES Singleton APPENDIX 5

Legend

Vulnerable Facilities

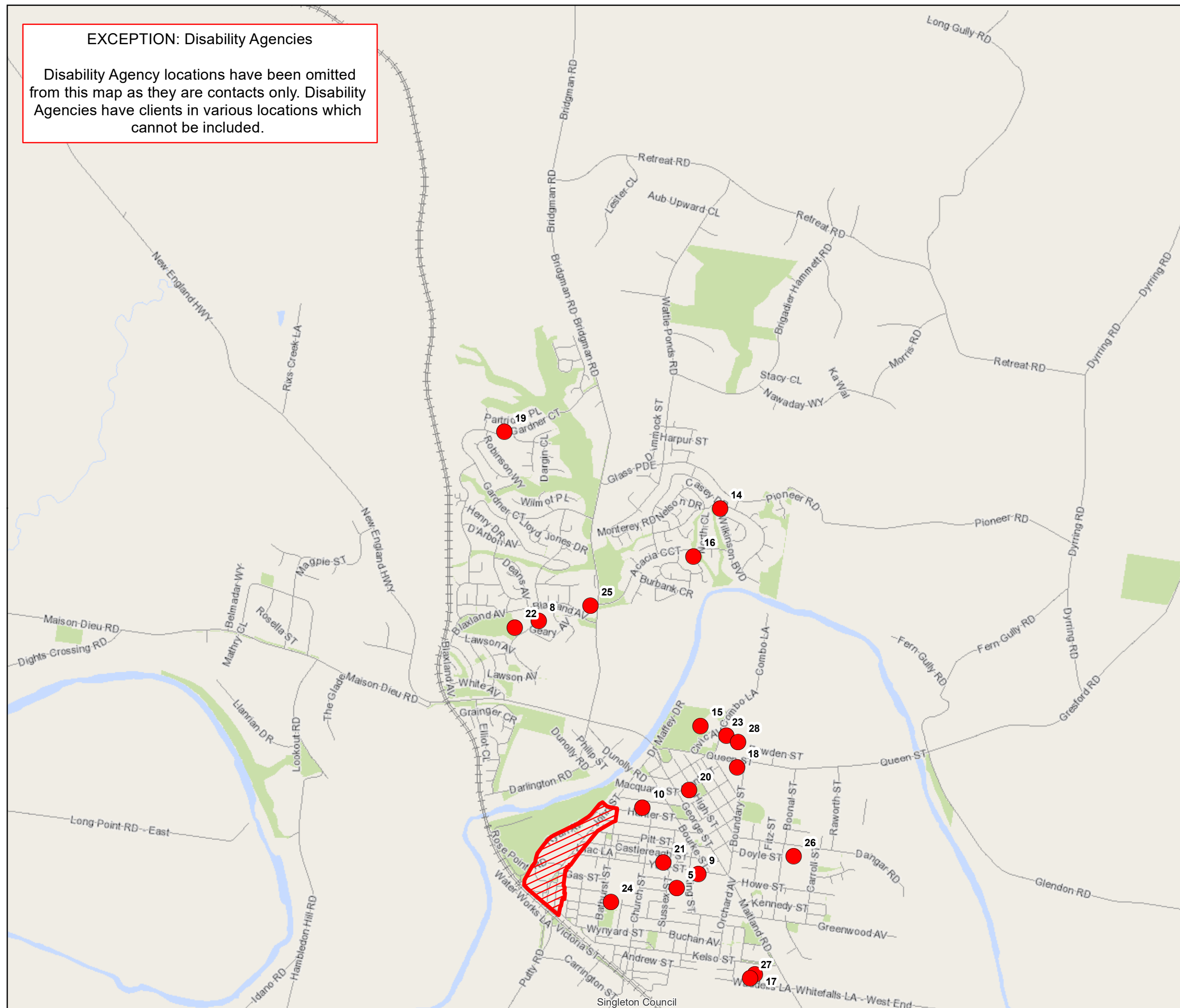
- Vulnerable Facilities
- CBD inclusive of shopping centres

ID	Name
5	King Street Public School
8	Singleton Heights Public School
9	Singleton High School
10	Singleton Public School
14	Tillys Play and Development Centre
15	Colleen Gale Children's Centre
16	Colleen Gale Children's Centre
17	Rainbow Early Learning Centre
18	St Nicholas Early Education Centre
19	Skallywags Pre-School
20	Singleton PCYC Kidzcare Child Care Centre
21	Singleton Preschool
22	Singleton Heights Preschool
23	Mercy Nursing Home
24	Calvary Cooida Retirement Community
25	Elizabeth Gates Nursing Home / Alroy House Hostel
26	Singleton District Hospital
27	Australian Christian College
28	St Catherines Catholic College



EXCEPTION: Disability Agencies

Disability Agency locations have been omitted from this map as they are contacts only. Disability Agencies have clients in various locations which cannot be included.





Local Emergency Management Plan

VULNERABLE FACILITIES

LGA

APPENDIX 6

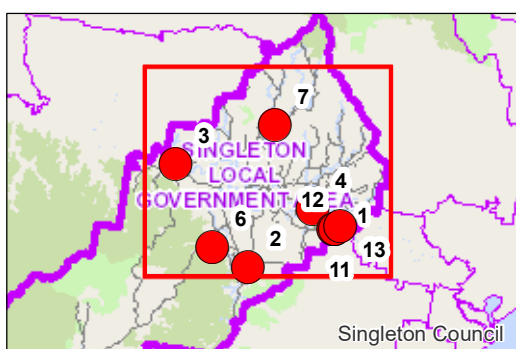
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Vulnerable Facilities

● Vulnerable Facilities

ID Name

- 1 Branxton Public School
- 2 Broke Public School
- 3 Jerry's Plains Public School
- 4 Kirkton Public School
- 6 Milbrodale Public School
- 7 Mt Pleasant Public School
- 11 Rosary Place Catholic School
- 12 Branxton Preschool
- 13 Bees Nees Early Learning

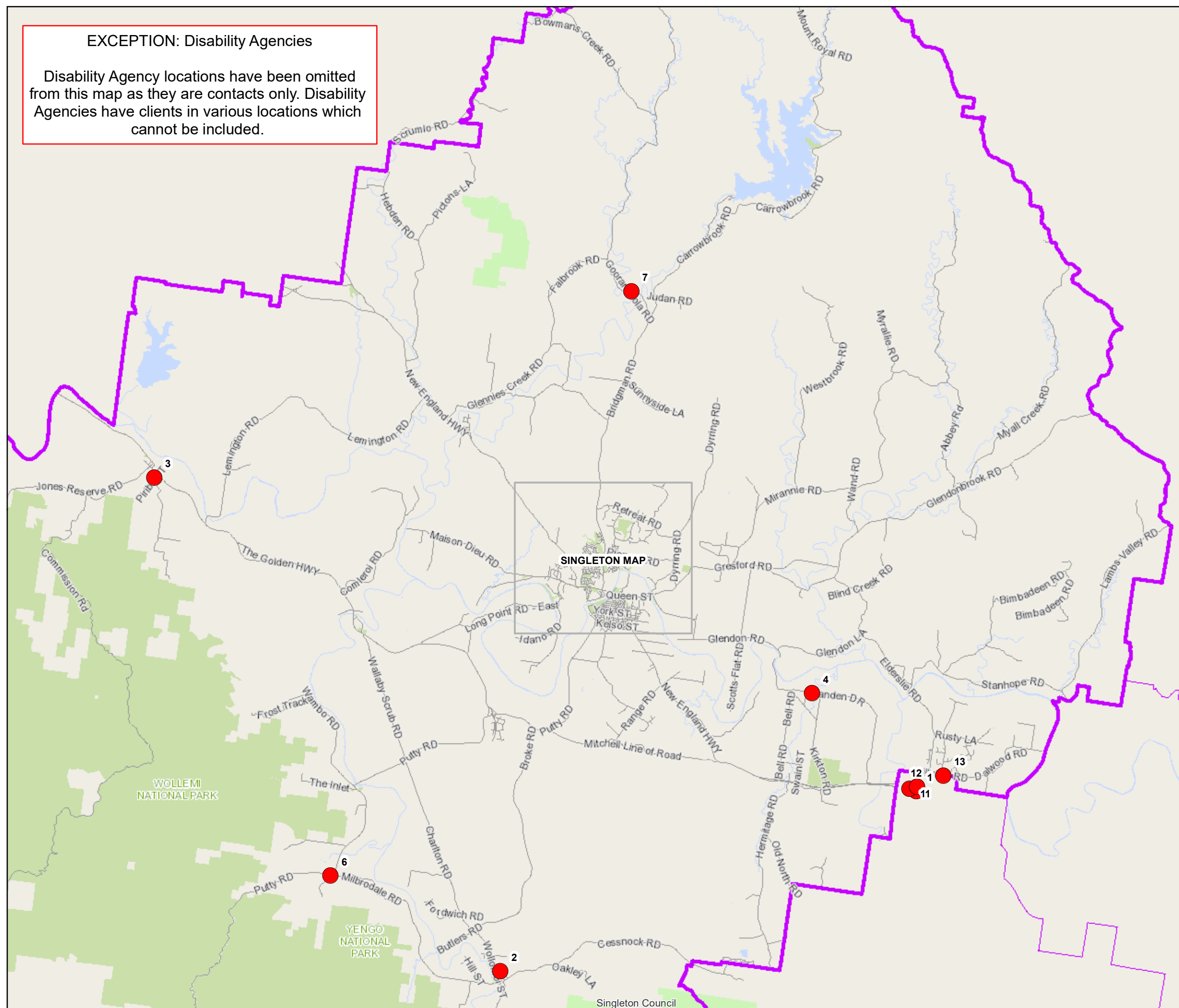


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Projection: GDA 1994
MGA Zone 56
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Author:
Document Created By: mtrappel 1/03/2018 11:54:16 AM

EXCEPTION: Disability Agencies

Disability Agency locations have been omitted from this map as they are contacts only. Disability Agencies have clients in various locations which cannot be included.



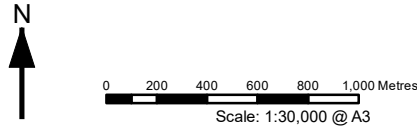
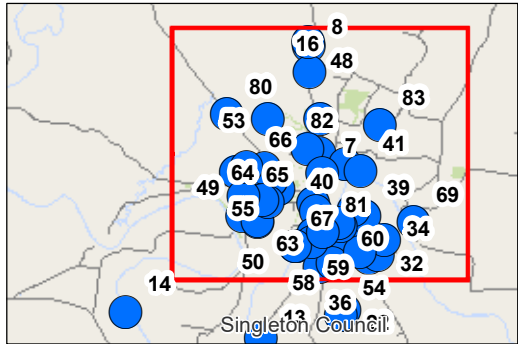


Local Emergency
Management Plan
KEY INFRASTRUCTURE
Singleton
APPENDIX 7

Legend

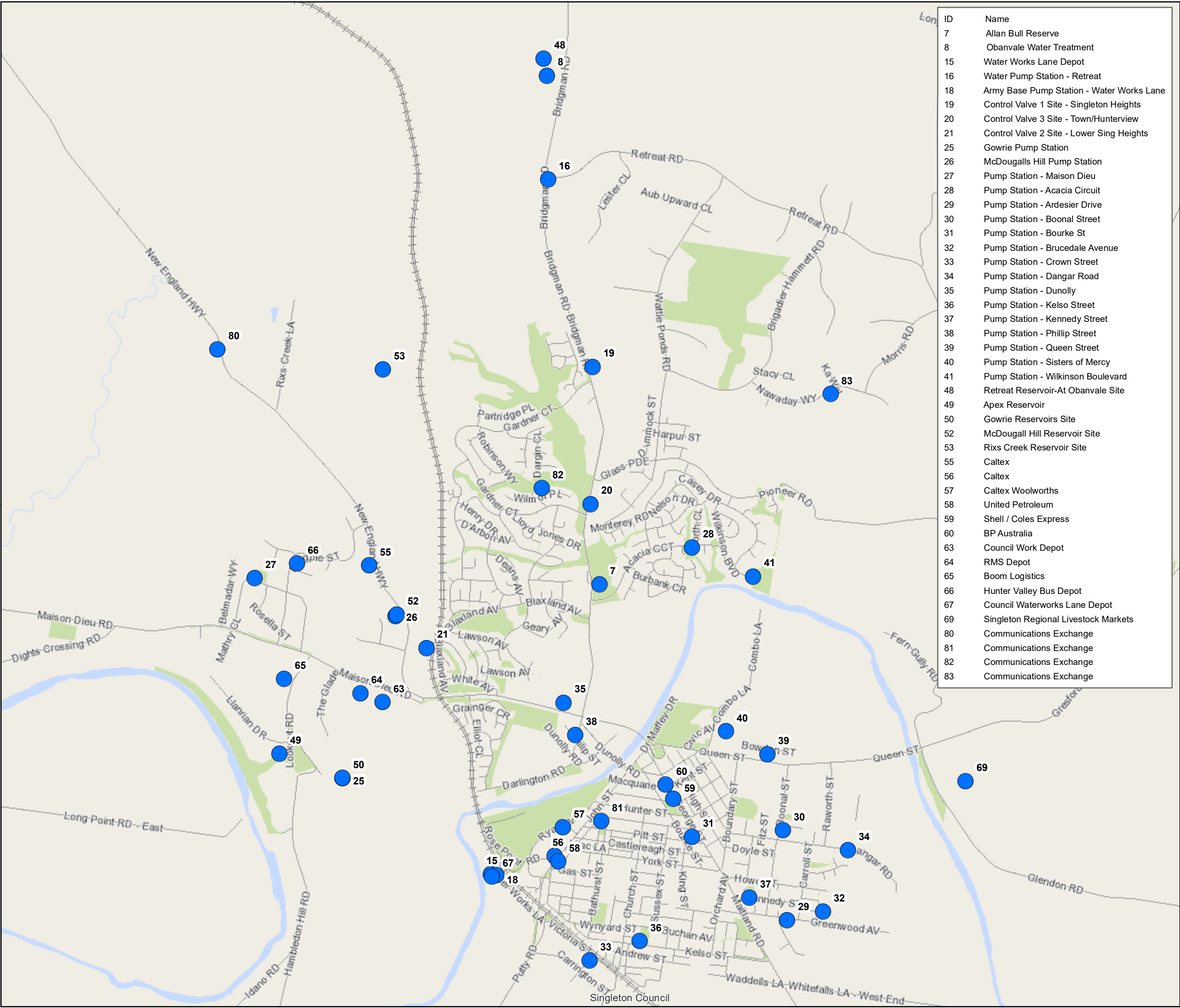
Key Infrastructure

● Key Infrastructure



Projection: GDA 1994
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Document Name: Key Infrastructure Singleton (A3L)
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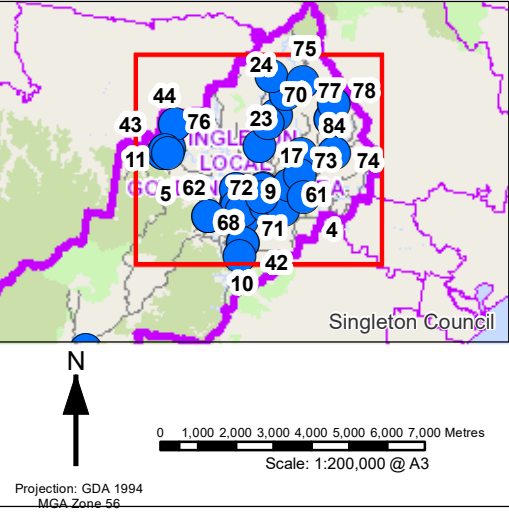
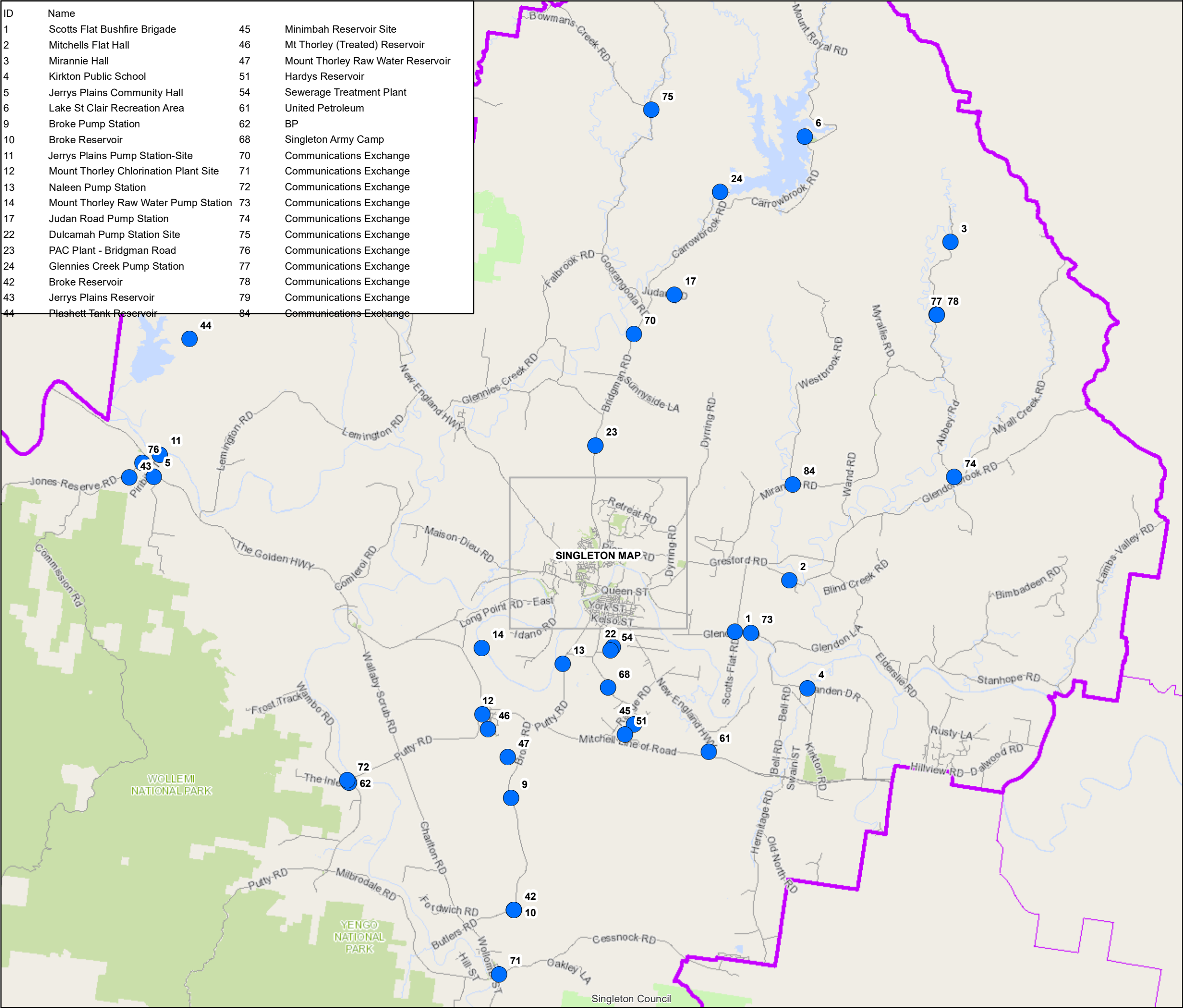
Local Emergency
Management Plan
KEY INFRASTRUCTURE
LGA
APPENDIX 8

Legend

Key Infrastructure

 Key Infrastructure

ID	Name	ID	Name
1	Scotts Flat Bushfire Brigade	45	Minimbah Reservoir Site
2	Mitchells Flat Hall	46	Mt Thorley (Treated) Reservoir
3	Mirannie Hall	47	Mount Thorley Raw Water Reservoir
4	Kirkton Public School	51	Hardys Reservoir
5	Jerrys Plains Community Hall	54	Sewerage Treatment Plant
6	Lake St Clair Recreation Area	61	United Petroleum
9	Broke Pump Station	62	BP
10	Broke Reservoir	68	Singleton Army Camp
11	Jerrys Plains Pump Station-Site	70	Communications Exchange
12	Mount Thorley Chlorination Plant Site	71	Communications Exchange
13	Naleen Pump Station	72	Communications Exchange
14	Mount Thorley Raw Water Pump Station	73	Communications Exchange
17	Judan Road Pump Station	74	Communications Exchange
22	Dulcamah Pump Station Site	75	Communications Exchange
23	PAC Plant - Bridgman Road	76	Communications Exchange
24	Glennies Creek Pump Station	77	Communications Exchange
42	Broke Reservoir	78	Communications Exchange
43	Jerrys Plains Reservoir	79	Communications Exchange
44	Plashett Tank Reservoir	84	Communications Exchange

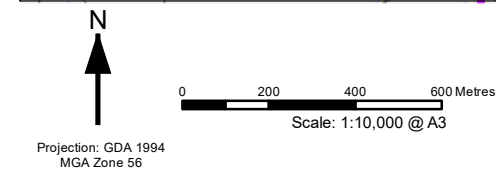
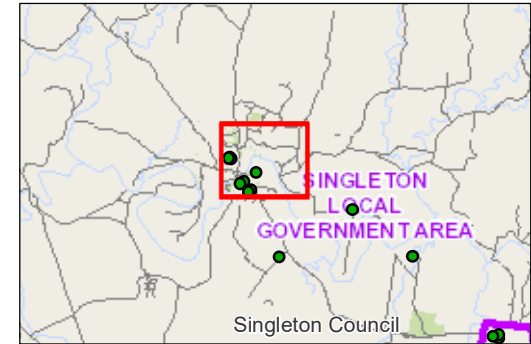




SINGLETON EVACUATION ROUTE APPENDIX 10

Legend

- Evacuation Centre
- Singleton Evacuation Route
- Parks and Reserves
- Waterbodies



Document Name: Singleton Evacuation Route
Author:
Document Created By: mtrappel 2/03/2018 11:11:08 AM

